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HAWAII DEMAND-SIDE MANAGEMENT
RESOURCE ASSESSMENT

FINAL REPORT - REFERENCE VOLUME 2

Final Residential and Commercial Building
Prototypes and DOE-2.1E Developed UECs and EUIs

-PART 2 OF 3-

Prepared for:

State of Hawaii
Department of Business,
Economic Development & Tourism
Energy Division

April, 1995

Prepared by:

NEOS Corporation
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MASTER

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**HAWAII DEMAND-SIDE MANAGEMENT
RESOURCE ASSESSMENT**

FINAL REPORT

REFERENCE VOLUME 2

**Final Residential and Commercial Building
Prototypes and DOE-2.1E Developed UECs and EUIs**

-PART 2 OF 3-

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MEASURE IMPACTS DATABASE

- Single Family Residence
- Multi-Family Unit
- Large Office
- Small Office
- Large Retail
- Small Retail
- Fast Food Restaurant
- Sit Down Restaurant

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MEASURE IMPACTS DATABASE (Continued)

- Grocery
- Refrigerated Warehouse
- Non-Refrigerated Warehouse
- Hospital
- School
- College
- Oahu-Hotel
- Maui-Hotel

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-PART 3 OF 3-

MEASURE IMPACTS DATABASE (Continued)

- Kauai-Hotel
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- Hawaii-Resort
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DETAILED MEASURE IMPACTS-SUMMARY REPORTS

This section contains the detailed measure impact results and market segment data for each DSM case examined for this building type. A complete index of all base and measure cases defined for this building type is shown first. This index represents an expansion of the base and measure matrix presented in Table 1 (residential) or Table 2 (commercial) for the applicable sector. Following this index, a summary report sheet is provided for each DSM measure case in the order shown in the index. The summary report sheet contains a host of information and selected graphs which define and depict the measure impacts and outline the market segment data assumptions utilized for each case in the DBEDT DSM Forecasting models. The variables and figures included in the summary report sheet are described below.

Measure ID: The eight-character alpha-numeric code used to define the measure case. This ID is composed of the 2-letter building code + the 1-letter vintage code + the 1-letter water heater fuel type code + the 4-digit numeric code used to define the base or measure case.

Measure Description: A brief (no more than 38-character) definition of the DSM measure

Base ID: Similar to the Measure ID, this code denotes the base case to which the measure case is compared in order to estimate the measure impacts.

Base Description: Similar to the Measure Description, a brief description of the base case. This description helps to determine if a modified base case was defined to estimate measure impacts.

Market Segment. This section of the summary report sheet contains the market segment data defined for each measure. These are;

Building Type:	The building type to which this measure applies.
Vintage:	The vintage of the building (new or existing).
Floor Area (sf):	The gross floor area of the building in square feet.
Water Heater Fuel:	The fuel type utilized for domestic or service water heating (Gas, Electric, or Oil).
Cost Unit:	The unit of measure utilized to describe the measure cost.
First Cost (\$/unit):	The installed capital cost for the measure in dollars per Cost Unit (93 dollars).
Measure Life (Yrs):	The measure life in years.
Mutual Exclusivity:	A Yes/No entry which denotes if mutual exclusivity considerations apply to this measure. A Yes entry indicates that this measure is mutually exclusive with one or more measures pertaining to this building type, thereby modifying the potential market share available.
Potential Market:	The maximum market share available for this measure. This includes consideration of measure applicability, measure feasibility, and remaining market share for existing vintages.
Modified Market:	The maximum market share available for this measure accounting for mutual exclusivity.
Intra Action:	A Yes/No entry which denotes if intra active considerations apply to this measure. A Yes entry indicates that this measure is intra active with one or more measures if applied as a group to this building type. The total impact in a particular end-use for a group of measures with intra active effects is not the same as the summation of the individual measure impacts. An incremental measure impact reduction is implied, based on the measure loading order.

Annual Energy Impacts By End-Use. This section of the summary report contains the normalized measure impacts by end-use and for the total building by fuel type. Electricity impacts are shown in terms of kWh/square foot and as a percentage of the base case, while fossil fuel impacts are shown as kBtu/square foot and as a percentage of the base case for each end-use and for the total. The end-use impacts shown include:

Cooling (& Auxiliary) :	Space cooling and associated pumps and heat rejection energy (e.g., condensers or cooling tower).
Water Heating:	Storage or central domestic or service water heating system.
Misc. Equipment:	Miscellaneous equipment.
Ventilation:	Supply air fans for conditioning and exhaust air fans.
Indoor Lighting:	Interior lighting (not including EXIT signs).
Outdoor Lighting:	Exterior building lighting.
Central Refrigeration:	Commercial/Industrial refrigeration systems.
Total:	Total building energy use by fuel.

Total Building Peak Demand Impact: This section of the summary report provides peak demand impacts for each measure for selected peak events during the year. Three events are included, the maximum building peak demand impact, the minimum building peak demand impact, and a system coincident peak demand impact (set to December weekday at 4 to 5 PM). For each event the Month, Day Type, and Hour are shown, followed by the normalized total building peak demand impact in Watts/square foot and the percentage of the total base case represented by the impact.

Measure Impact Figures. Four figures are selected and included in each summary report to depict the impacts resulting from each measure. These are:

Monthly Total Electricity Impact: This figure shows the floor area normalized monthly electricity impacts associated with the measure in kWh/square foot.

Monthly Total Fossil Fuel Impact: This figure shows the floor area normalized monthly fossil fuel impacts associated with the measure in kBtu/square foot.

December Peak Day Demand Impact: This figure shows the (selected) system coincident peak day floor area normalized total building demand impact for the measure in Watts/square foot.

December Peak Day Demand Profile: This figure provides the daily total building load profile for the measure and base cases on the (selected) system coincident peak day in kW.

Commercial Grocery Measure Index Table

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Cases: 75

Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
GRXG7000	GRXG7000	Base Case-Standard	NA	23500
GRXE7000	GRXE7000	Base Case-Standard	NA	23500
GRNG7000	GRNG7000	Base Case-Standard	NA	23500
GRNE7000	GRNE7000	Base Case-Standard	NA	23500
GRXE7614	GRXE7614	Base Case for Clean Condenser Coils	NA	23500
GRXE7616	GRXE7616	Base Case for HVAC Time Clocks	NA	23500
GRXE7661	GRXE7661	Base Case for 4' Fluor. SMC Ballasts	NA	23500
GRXE7662	GRXE7662	Base Case for 8' Fluor. SMC Ballasts	NA	23500
GRXE8501	GRXE7000	4' Fluor. Energy Saver Lamps-F40T12ES	Inlights	23500
GRXE8502	GRXE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	23500
GRNE8502	GRNE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	23500
GRXE8503	GRXE7000	4' T8 Lamps And Electronic Ballasts	Inlights	23500
GRNE8503	GRNE7000	4' T8 Lamps And Electronic Ballasts	Inlights	23500
GRXE8504	GRXE7000	Window Film Retrofit	Cooling	23500
GRNE8505	GRNE7000	Double Pane Heat Mirror Glazing	Cooling	23500
GRXE8506	GRXE7000	Shade Screens	Cooling	23500
GRNE8506	GRNE7000	Shade Screens	Cooling	23500
GRXE8507	GRXE7000	Light Colored Roof	Cooling	23500
GRNE8507	GRNE7000	Light Colored Roof	Cooling	23500
GRXE8509	GRXE7000	High Pressure Sodium-100 Watts	Exlights	23500
GRNE8509	GRNE7000	High Pressure Sodium-100 Watts	Exlights	23500
GRXE8510	GRXE7000	High Pressure Sodium-250 Watts	Exlights	23500
GRXE8511	GRXE7000	HID Exterior Floods-70 Watts	Exlights	23500
GRNE8511	GRNE7000	HID Exterior Floods-70 Watts	Exlights	23500
GRXE8514	GRXE7614	Clean Condenser Coils	Cooling	23500
GRXE8516	GRXE7616	HVAC System Time Clocks	Cooling	23500
GRXE8518	GRXE7000	Duct Insulation Material	Cooling	23500
GRNE8518	GRNE7000	Duct Insulation Material	Cooling	23500
GRXG8520	GRXG7000	High Efficiency Gas Water Heater	Hotwater	23500
GRNG8520	GRNG7000	High Efficiency Gas Water Heater	Hotwater	23500
GRXG8521	GRXG7000	Point of Use Water Heating	Hotwater	23500
GRXE8521	GRXE7000	Point of Use Water Heating	Hotwater	23500
GRNG8521	GRNG7000	Point of Use Water Heating	Hotwater	23500
GRNE8521	GRNE7000	Point of Use Water Heating	Hotwater	23500
GRXG8523	GRXG7000	Tank Insulation-Fiber Blanket	Hotwater	23500
GRXE8523	GRXE7000	Tank Insulation-Fiber Blanket	Hotwater	23500
GRXE8525	GRXE7000	Electric Defrost Demand Control	C-Refrig	23500
GRNE8525	GRNE7000	Electric Defrost Demand Control	C-Refrig	23500
GRXE8526	GRXE7000	Parallel Unequal Compressor Rack	C-Refrig	23500
GRNE8526	GRNE7000	Parallel Unequal Compressor Rack	C-Refrig	23500
GRXE8527	GRXE7000	Refrigerator Case Glass Doors	C-Refrig	23500
GRNE8527	GRNE7000	Refrigerator Case Glass Doors	C-Refrig	23500
GRXE8528	GRXE7000	Refrigeration Equipment Maintenance	C-Refrig	23500
GRXE8529	GRXE7000	High Efficiency Refrig. Compressors	C-Refrig	23500
GRNE8529	GRNE7000	High Efficiency Refrig. Compressors	C-Refrig	23500
GRXE8531	GRXE7000	Remote Evaporative Subcooler	C-Refrig	23500
GRNE8531	GRNE7000	Remote Evaporative Subcooler	C-Refrig	23500
GRXE8532	GRXE7000	Hot Gas Defrost	C-Refrig	23500
GRNE8532	GRNE7000	Hot Gas Defrost	C-Refrig	23500
GRXE8533	GRXE7000	Low Head Pressure-Floating Head	C-Refrig	23500
GRNE8533	GRNE7000	Low Head Pressure-Floating Head	C-Refrig	23500
GRXE8534	GRXE7000	High Efficiency Evaporator Fan Motors	C-Refrig	23500
GRNE8534	GRNE7000	High Efficiency Evaporator Fan Motors	C-Refrig	23500
GRXE8535	GRXE7000	Coffin Display Case Night Covers	C-Refrig	23500
GRNE8535	GRNE7000	Coffin Display Case Night Covers	C-Refrig	23500
GRXE8536	GRXE7000	Variable Speed Refrig. Compressors	C-Refrig	23500
GRNE8536	GRNE7000	Variable Speed Refrig. Compressors	C-Refrig	23500
GRXE8540	GRXE7000	High Efficiency DX AC-COP 2.9	Cooling	23500

Commercial Grocery Measure Index Table

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Cases: 75

Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
GRXE8552	GRXE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	23500
GRNE8552	GRNE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	23500
GRXE8553	GRXE7000	LED Lamp EXIT Signs	Inlights	23500
GRNE8553	GRNE7000	LED Lamp EXIT Signs	Inlights	23500
GRXE8554	GRXE7000	Heat Pump Water Heater	Hotwater	23500
GRNE8554	GRNE7000	Heat Pump Water Heater	Hotwater	23500
GRXE8556	GRXE7000	High Efficiency DX AC-COP 3.2	Cooling	23500
GRNE8556	GRNE7000	High Efficiency DX AC-COP 3.2	Cooling	23500
GRXE8557	GRXE7000	Optical Reflectors-2X4 Recessed	Inlights	23500
GRNE8557	GRNE7000	Optical Reflectors-2X4 Recessed	Inlights	23500
GRXE8558	GRXE7000	8' Fluor. Energy Saver Lamps-F96T12ES	Inlights	23500
GRXE8559	GRXE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	23500
GRNE8559	GRNE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	23500
GRXE8560	GRXE7000	Optical Reflectors-1X8 Fixtures	Inlights	23500
GRNE8560	GRNE7000	Optical Reflectors-1X8 Fixtures	Inlights	23500
GRXE8561	GRXE7661	Electronic Ballasts-4' T12-Base SMC	Inlights	23500
GRXE8562	GRXE7662	Electronic Ballasts-8' T12-Base SMC	Inlights	23500

Measure ID	GRXE8501		4' Fluor. Energy Saver Lamps-F40T12ES		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage		Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0017	Measure Life (Yrs)	5	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.074	1.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.008	0.4			
Indoor Lighting	0.198	1.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.280	0.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	8 AM - 9 AM	0.04	0.6
Minimum Impact	April	Weekday	6 PM - 7 PM	0.02	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.03	0.5

Measure ID	GRXE8502		Electronic Ballasts→ T12-Base EEM		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0950	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.074	1.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.008	0.4			
Indoor Lighting	0.198	1.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.280	0.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	8 AM - 9 AM	0.04	0.6
Minimum Impact	April	Weekday	6 PM - 7 PM	0.02	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.03	0.5

Measure ID	GRNE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage		New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0651	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	±1.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.037	1.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.007	0.4			
Indoor Lighting	0.113	1.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.157	0.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	8 AM - 9 AM	0.02	0.4
Minimum Impact	May	Weekday	6 PM - 7 PM	0.01	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Monthly Total Electricity Impact
Electronic Ballasts-4' T12-Base EEM

December Peak Day Demand Impact
Electronic Ballasts-4' T12-Base EEM

Monthly Total Fossil Fuel Impact
Electronic Ballasts-4' T12-Base EEM

December Peak Day Demand Profile
Electronic Ballasts-4' T12-Base EEM

Measure ID	GRXE8503		4' T8 Lamps And Electronic Ballasts		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0974	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	kWh/sf	% of Base	End-Use	kBtu/sf	% of Base
Cooling & Auxiliary	0.140	2.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.015	0.8			
Indoor Lighting	0.375	3.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.529	1.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	8 AM - 9 AM	0.08	1.2
Minimum Impact	April	Weekday	6 PM - 7 PM	0.04	0.6
System Coincident	December	Weekday	4 PM - 5 PM	0.06	0.9

Measure ID	GRNE8503		4' T8 Lamps And Electronic Ballasts		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0659	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	+1.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.055	1.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.011	0.6			
Indoor Lighting	0.169	1.9			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.235	0.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	8 AM - 9 AM	0.04	0.6
Minimum Impact	May	Weekday	6 PM - 7 PM	0.02	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.03	0.5

Monthly Total Electricity Impact
4' T8 Lamps And Electronic Ballasts

December Peak Day Demand Impact
4' T8 Lamps And Electronic Ballasts

Monthly Total Fossil Fuel Impact
4' T8 Lamps And Electronic Ballasts

December Peak Day Demand Profile
4' T8 Lamps And Electronic Ballasts

Measure ID	GRXE8504		Window Film Retrofit		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0645	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	42.6%	Modified Market	11.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.048	0.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.006	0.3			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.054	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	2 PM - 3 PM	0.02	0.2
Minimum Impact	November	Weekday	7 AM - 8 AM	-0.00	-0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.1

Monthly Total Electricity Impact
Window Film Retrofit

December Peak Day Demand Impact
Window Film Retrofit

Monthly Total Fossil Fuel Impact
Window Film Retrofit

December Peak Day Demand Profile
Window Film Retrofit

Measure ID	GRNE8505		Double Pane Heat Mirror Glazing		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1320	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	50.9%	Modified Market	13.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.107	3.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.040	2.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.146	0.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	Noon - 1 PM	0.05	0.9
Minimum Impact	April	Weekday	4 AM - 5 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.4

Monthly Total Electricity Impact
Double Pane Heat Mirror Glazing

December Peak Day Demand Impact
Double Pane Heat Mirror Glazing

Monthly Total Fossil Fuel Impact
Double Pane Heat Mirror Glazing

December Peak Day Demand Profile
Double Pane Heat Mirror Glazing

Measure ID	GRXE8506		Shade Screens		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0885	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	42.6%	Modified Market	11.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.091	1.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.015	0.8			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.106	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	3 PM - 4 PM	0.03	0.5
Minimum Impact	September	Weekday	9 PM - 10 PM	0.01	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.2

Monthly Total Electricity Impact
Shade Screens

December Peak Day Demand Impact
Shade Screens

Monthly Total Fossil Fuel Impact
Shade Screens

December Peak Day Demand Profile
Shade Screens

Measure ID		GRNE8506		Shade Screens	
Base ID		GRNE7000		Base Case-Standard	
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0885	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	50.9%	Modified Market	13.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.073	2.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.021	1.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.095	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	3 PM - 4 PM	0.03	0.5
Minimum Impact	April	Weekday	4 AM - 5 AM	0.01	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Measure ID	GRXE8507		Light Colored Roof		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.6174	Measure Life (Yrs)	7	Mutual Exclusivity	No
Potential Market	+2.6%	Modified Market	+2.6%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.550	25.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.361	19.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	-0.000	-0.0			
Total	1.911	3.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	Noon - 1 PM	0.69	9.5
Minimum Impact	January	Weekday	7 AM - 8 AM	0.05	0.9
System Coincident	December	Weekday	4 PM - 5 PM	0.23	3.5

Monthly Total Electricity Impact
Light Colored Roof

December Peak Day Demand Impact
Light Colored Roof

Monthly Total Fossil Fuel Impact
Light Colored Roof

December Peak Day Demand Profile
Light Colored Roof

Measure ID	GRNE8507		Light Colored Roof		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	New	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.6174	Measure Life (Yrs)	7	Mutual Exclusivity	No
Potential Market	25.0%	Modified Market	25.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.323	9.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.115	6.4			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	-0.000	-0.0			
Total	0.437	0.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	7 AM - 8 AM	0.21	4.0
Minimum Impact	January	Weekday	7 AM - 8 AM	0.01	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.06	1.1

Measure ID	GRXE8509		High Pressure Sodium-100 Watts		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0106	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	kWh/sf	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.055	0.0			
Central Refrigeration	0.000	0.0			
Total	0.055	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	11 PM - Midnight	0.01	0.2
Minimum Impact	February	Weekday	1 PM - 2 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	GRNE8509		High Pressure Sodium-100 Watts		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage		New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0084	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.055	5.0			
Central Refrigeration	0.000	0.0			
Total	0.055	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	10 PM - 11 PM	0.01	0.2
Minimum Impact	July	Weekday	2 PM - 3 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
High Pressure Sodium-100 Watts

December Peak Day Demand Impact
High Pressure Sodium-100 Watts

Monthly Total Fossil Fuel Impact
High Pressure Sodium-100 Watts

December Peak Day Demand Profile
High Pressure Sodium-100 Watts

Measure ID	GRXE8510		High Pressure Sodium-250 Watts		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0384	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.274	19.9			
Central Refrigeration	0.000	0.0			
Total	0.274	0.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	10 PM - 11 PM	0.06	1.0
Minimum Impact	July	Weekday	6 PM - 7 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
High Pressure Sodium-250 Watts

December Peak Day Demand Impact
High Pressure Sodium-250 Watts

Monthly Total Fossil Fuel Impact
High Pressure Sodium-250 Watts

December Peak Day Demand Profile
High Pressure Sodium-250 Watts

Measure ID	GRXE8511		HID Exterior Floods-70 Watts		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0374	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.117	8.5			
Central Refrigeration	0.000	0.0			
Total	0.117	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	11 PM - Midnight	0.03	0.4
Minimum Impact	October	Weekday	5 PM - 6 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Impact
HID Exterior Floods-70 Watts

Monthly Total Fossil Fuel Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Profile
HID Exterior Floods-70 Watts

Measure ID	GRNE8511		HID Exterior Floods-70 Watts		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0318	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.117	10.6			
Central Refrigeration	0.000	0.0			
Total	0.117	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	7 PM - 8 PM	0.03	0.4
Minimum Impact	July	Weekday	Noon - 1 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Impact
HID Exterior Floods-70 Watts

Monthly Total Fossil Fuel Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Profile
HID Exterior Floods-70 Watts

Measure ID	GRXE8514			Clean Condenser Coils	
Base ID	GRXE7614			Base Case for Clean Condenser Coils	
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0086	Measure Life (Yrs)	1	Mutual Exclusivity	No
Potential Market	3.0%	Modified Market	3.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.528	20.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	1.528	2.7	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.48	6.0
Minimum Impact	April	Weekday	4 AM - 5 AM	0.02	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.19	2.9

Measure ID	GRXE8516		HVAC System Time Clocks		
Base ID	GRXE7616		Base Case for HVAC Time Clocks		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0166	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	59.0%	Modified Market	59.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.276	4.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.206	9.8			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	-0.001	-0.0			
Total	0.481	0.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum impact	September	Weekday	6 AM - 7 AM	0.49	7.8
Minimum Impact	September	Weekday	8 AM - 9 AM	-0.03	-0.4
System Coincident	December	Weekday	4 PM - 5 PM	-0.00	-0.0

Monthly Total Electricity Impact
HVAC System Time Clocks

December Peak Day Demand Impact
HVAC System Time Clocks

Monthly Total Fossil Fuel Impact
HVAC System Time Clocks

December Peak Day Demand Profile
HVAC System Time Clocks

Measure ID	GRXE8518		Duct Insulation Material		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0390	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	22.0%	Modified Market	22.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.002	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.005	0.0			
Total	0.007	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	11 PM - Midnight	0.00	0.0
Minimum Impact	August	Weekday	6 AM - 7 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
Duct Insulation Material

December Peak Day Demand Impact
Duct Insulation Material

Monthly Total Fossil Fuel Impact
Duct Insulation Material

December Peak Day Demand Profile
Duct Insulation Material

Measure ID	GRNE8518			Duct Insulation Material	
Base ID	GRNE7000			Base Case-Standard	
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0123	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	60.0%	Modified Market	60.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.002	0.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.004	0.0			
Total	0.006	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	Noon - 1 PM	0.00	0.0
Minimum Impact	August	Weekday	4 AM - 5 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	GRXG8520		High Efficiency Gas Water Heater		
Base ID	GRXG7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage		Existing
Floor Area (sf)	23500	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0447	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	40.0%	Modified Market	13.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.790	7.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.000	0.0	Total	0.789	7.5
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
High Efficiency Gas Water Heater

December Peak Day Demand Impact
High Efficiency Gas Water Heater

Monthly Total Fossil Fuel Impact
High Efficiency Gas Water Heater

December Peak Day Demand Profile
High Efficiency Gas Water Heater

Measure ID	GRNG8520		High Efficiency Gas Water Heater		
Base ID	GRNG7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	New	
Floor Area (sf)	23500	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0447	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	64.0%	Modified Market	21.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.236	2.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.000	0.0	Total	0.231	2.4
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
High Efficiency Gas Water Heater

December Peak Day Demand Impact
High Efficiency Gas Water Heater

Monthly Total Fossil Fuel Impact
High Efficiency Gas Water Heater

December Peak Day Demand Profile
High Efficiency Gas Water Heater

Measure ID	GRXG8521		Point of Use Water Heating		
Base ID	GRXG7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0512	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	33.8%	Modified Market	11.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-2.032	NA	Water Heating	10.528	100.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	-2.032	-3.8	Total	10.526	100.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	March	Weekday	6 PM - 7 PM	-0.48	-7.6
System Coincident	December	Weekday	4 PM - 5 PM	-0.47	-7.9

Measure ID	GRXE8521		Point of Use Water Heating		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0512	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	33.8%	Modified Market	11.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.110	5.1	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.110	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	6 PM - 7 PM	0.02	0.3
Minimum Impact	September	Weekday	5 AM - 6 AM	0.01	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Monthly Total Electricity Impact
Point of Use Water Heating

December Peak Day Demand Impact
Point of Use Water Heating

Monthly Total Fossil Fuel Impact
Point of Use Water Heating

December Peak Day Demand Profile
Point of Use Water Heating

Measure ID	GRNG8521		Point of Use Water Heating		
Base ID	GRNG7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	New	
Floor Area (sf)	23500	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0454	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	25.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-2.032	NA	Water Heating	9.439	100.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	-2.032	-4.5	Total	9.436	100.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	March	Weekday	5 PM - 6 PM	-0.48	-9.1
System Coincident	December	Weekday	4 PM - 5 PM	-0.47	-9.3

Monthly Total Electricity Impact
Point of Use Water Heating

December Peak Day Demand Impact
Point of Use Water Heating

Monthly Total Fossil Fuel Impact
Point of Use Water Heating

December Peak Day Demand Profile
Point of Use Water Heating

Measure ID	GRNE8521		Point of Use Water Heating		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0454	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	25.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.044	2.1	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.044	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	7 PM - 8 PM	0.01	0.1
Minimum Impact	August	Weekday	5 AM - 6 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.1

Monthly Total Electricity Impact
Point of Use Water Heating

December Peak Day Demand Impact
Point of Use Water Heating

Monthly Total Fossil Fuel Impact
Point of Use Water Heating

December Peak Day Demand Profile
Point of Use Water Heating

Measure ID		GRXG8523		Tank Insulation-Fiber Blanket	
Base ID		GRXG7000		Base Case-Standard	
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0053	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	6.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.670	6.4
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.000	0.0	Total	0.668	6.3
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
Tank Insulation-Fiber Blanket

December Peak Day Demand Impact
Tank Insulation-Fiber Blanket

Monthly Total Fossil Fuel Impact
Tank Insulation-Fiber Blanket

December Peak Day Demand Profile
Tank Insulation-Fiber Blanket

Measure ID	GRXE8523		Tank Insulation-Fiber Blanket		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0053	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	6.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.032	1.5	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.032	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	10 PM - 11 PM	0.00	0.1
Minimum Impact	September	Weekday	10 PM - 11 PM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Monthly Total Electricity Impact
Tank Insulation-Fiber Blanket

December Peak Day Demand Impact
Tank Insulation-Fiber Blanket

Monthly Total Fossil Fuel Impact
Tank Insulation-Fiber Blanket

December Peak Day Demand Profile
Tank Insulation-Fiber Blanket

Measure ID	GRXE8525		Electric Defrost Demana Control		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2349	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	48.0%	Modified Market	16.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.728	3.0			
Total	0.728	1.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	2 AM - 3 AM	0.15	2.6
Minimum Impact	March	Weekday	5 PM - 6 PM	-0.03	-0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.04	0.6

Monthly Total Electricity Impact
Electric Defrost Demand Control

December Peak Day Demand Impact
Electric Defrost Demand Control

Monthly Total Fossil Fuel Impact
Electric Defrost Demand Control

December Peak Day Demand Profile
Electric Defrost Demand Control

Measure ID	GRNE8525		Electric Defrost Demand Control		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2349	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	56.0%	Modified Market	19.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.536	2.4			
Total	0.536	1.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	2 AM - 3 AM	0.12	2.4
Minimum Impact	March	Weekday	3 PM - 4 PM	-0.05	-0.9
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.4

Measure ID	GRXE8526		Parallel Unequal Compressor Rack		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.6342	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	44.0%	Modified Market	8.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	3.733	15.2			
Total	3.733	6.7	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	5 PM - 6 PM	0.43	6.2
Minimum Impact	February	Weekday	Midnight - 1 AM	0.42	7.4
System Coincident	December	Weekday	4 PM - 5 PM	0.43	6.6

Monthly Total Electricity Impact
Parallel Unequal Compressor Rack

December Peak Day Demand Impact
Parallel Unequal Compressor Rack

Monthly Total Fossil Fuel Impact
Parallel Unequal Compressor Rack

December Peak Day Demand Profile
Parallel Unequal Compressor Rack

Measure ID	GRNE8526		Parallel Unequal Compressor Rack		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.6342	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	59.0%	Modified Market	11.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	kWh/sf	% of Base	End-Use	kBtu/sf	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	3.258	14.7			
Total	3.258	6.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 PM - 4 PM	0.38	6.3
Minimum Impact	February	Weekday	Midnight - 1 AM	0.37	7.3
System Coincident	December	Weekday	4 PM - 5 PM	0.37	6.7

Monthly Total Electricity Impact
Parallel Unequal Compressor Rack

December Peak Day Demand Impact
Parallel Unequal Compressor Rack

Monthly Total Fossil Fuel Impact
Parallel Unequal Compressor Rack

December Peak Day Demand Profile
Parallel Unequal Compressor Rack

Measure ID	GRXE8527		Refrigerator Case Glass Doors		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.9549	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	9.8%	Modified Market	4.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-0.037	-0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	-0.001	-0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	2.590	10.5			
Total	2.552	4.6	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	6 AM - 7 AM	0.29	5.1
Minimum Impact	March	Weekday	9 AM - 10 AM	0.29	4.2
System Coincident	December	Weekday	4 PM - 5 PM	0.29	4.5

Monthly Total Electricity Impact
Refrigerator Case Glass Doors

December Peak Day Demand Impact
Refrigerator Case Glass Doors

Monthly Total Fossil Fuel Impact
Refrigerator Case Glass Doors

December Peak Day Demand Profile
Refrigerator Case Glass Doors

Measure ID	GRNE8527		Refrigerator Case Glass Doors		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage		New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.4821	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	9.8%	Modified Market	-4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-0.026	-0.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	-0.001	-0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	2.250	10.1			
Total	2.223	4.7	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	4 AM - 5 AM	0.44	8.3
Minimum Impact	January	Weekday	1 AM - 2 AM	0.09	1.8
System Coincident	December	Weekday	4 PM - 5 PM	0.25	4.5

Monthly Total Electricity Impact
Refrigerator Case Glass Doors

December Peak Day Demand Impact
Refrigerator Case Glass Doors

Monthly Total Fossil Fuel Impact
Refrigerator Case Glass Doors

December Peak Day Demand Profile
Refrigerator Case Glass Doors

Measure ID	GRXE8528		Refrigeration Equipment Maintenance		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage		Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0705	Measure Life (Yrs)	1	Mutual Exclusivity	No
Potential Market	0.0%	Modified Market	0.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.697	6.9			
Total	1.697	3.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	5 PM - 6 PM	0.20	2.8
Minimum Impact	February	Weekday	2 AM - 3 AM	0.19	3.4
System Coincident	December	Weekday	4 PM - 5 PM	0.19	3.0

Measure ID	GRXE8529		High Efficiency Refrig. Compressors		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0934	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	78.4%	Modified Market	15.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	2.000	8.1			
Total	2.000	3.6	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	5 PM - 6 PM	0.23	3.3
Minimum Impact	February	Weekday	Midnight - 1 AM	0.23	3.9
System Coincident	December	Weekday	4 PM - 5 PM	0.23	3.5

Measure ID	GRNE8529		High Efficiency Refrig. Compressors		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0934	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	78.4%	Modified Market	15.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.745	7.9			
Total	1.745	3.7	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	5 PM - 6 PM	0.20	3.5
Minimum Impact	February	Weekday	2 AM - 3 AM	0.20	3.9
System Coincident	December	Weekday	4 PM - 5 PM	0.20	3.6

Monthly Total Electricity Impact
High Efficiency Refrig. Compressors

December Peak Day Demand Impact
High Efficiency Refrig. Compressors

Monthly Total Fossil Fuel Impact
High Efficiency Refrig. Compressors

December Peak Day Demand Profile
High Efficiency Refrig. Compressors

Measure ID	GRXE8531		Remote Evaporative Subcooler		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1042	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	98.0%	Modified Market	49.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.056	4.3			
Total	1.056	1.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	5 PM - 6 PM	0.12	1.8
Minimum Impact	February	Weekday	2 AM - 3 AM	0.12	2.1
System Coincident	December	Weekday	4 PM - 5 PM	0.12	1.9

Monthly Total Electricity Impact
Remote Evaporative Subcooler

December Peak Day Demand Impact
Remote Evaporative Subcooler

Monthly Total Fossil Fuel Impact
Remote Evaporative Subcooler

December Peak Day Demand Profile
Remote Evaporative Subcooler

Measure ID	GRNE8531		Remote Evaporative Subcooler		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1042	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	98.0%	Modified Market	49.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.922	4.2			
Total	0.922	1.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 PM - 4 PM	0.11	1.8
Minimum Impact	February	Weekday	1 AM - 2 AM	0.10	2.0
System Coincident	December	Weekday	4 PM - 5 PM	0.11	1.9

Monthly Total Electricity Impact
Remote Evaporative Subcooler

December Peak Day Demand Impact
Remote Evaporative Subcooler

Monthly Total Fossil Fuel Impact
Remote Evaporative Subcooler

December Peak Day Demand Profile
Remote Evaporative Subcooler

Measure ID	GRXE8532		Hot Gas Defrost		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2383	Measure Life (Yrs)	24	Mutual Exclusivity	Yes
Potential Market	29.4%	Modified Market	10.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	2.303	9.4			
Total	2.303	4.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	1 AM - 2 AM	0.29	4.8
Minimum Impact	March	Weekday	5 PM - 6 PM	0.22	3.2
System Coincident	December	Weekday	4 PM - 5 PM	0.25	3.8

Monthly Total Electricity Impact
Hot Gas Defrost

December Peak Day Demand Impact
Hot Gas Defrost

Monthly Total Fossil Fuel Impact
Hot Gas Defrost

December Peak Day Demand Profile
Hot Gas Defrost

Measure ID	GRNE8532		Hot Gas Defrost		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2383	Measure Life (Yrs)	24	Mutual Exclusivity	Yes
Potential Market	29.4%	Modified Market	10.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	2.229	10.0			
Total	2.229	4.7	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	2 AM - 3 AM	0.28	5.5
Minimum Impact	March	Weekday	3 PM - 4 PM	0.21	3.6
System Coincident	December	Weekday	4 PM - 5 PM	0.24	4.3

Monthly Total Electricity Impact
Hot Gas Defrost

December Peak Day Demand Impact
Hot Gas Defrost

Monthly Total Fossil Fuel Impact
Hot Gas Defrost

December Peak Day Demand Profile
Hot Gas Defrost

Measure ID	GRXE8533		Low Head Pressure-Floating Head		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0766	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	48.0%	Modified Market	48.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.584	6.4			
Total	1.584	2.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	5 PM - 6 PM	0.18	2.6
Minimum Impact	February	Weekday	1 AM - 2 AM	0.18	3.0
System Coincident	December	Weekday	4 PM - 5 PM	0.18	2.8

Monthly Total Electricity Impact
Low Head Pressure-Floating Head

December Peak Day Demand Impact
Low Head Pressure-Floating Head

Monthly Total Fossil Fuel Impact
Low Head Pressure-Floating Head

December Peak Day Demand Profile
Low Head Pressure-Floating Head

Measure ID	GRNE8533		Low Head Pressure-Floating Head		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage		New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0766	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	60.0%	Modified Market	60.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.382	6.2			
Total	1.382	2.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 PM - 4 PM	0.16	2.7
Minimum Impact	February	Weekday	Midnight - 1 AM	0.16	3.1
System Coincident	December	Weekday	4 PM - 5 PM	0.16	2.8

Monthly Total Electricity Impact
Low Head Pressure-Floating Head

December Peak Day Demand Impact
Low Head Pressure-Floating Head

Monthly Total Fossil Fuel Impact
Low Head Pressure-Floating Head

December Peak Day Demand Profile
Low Head Pressure-Floating Head

Measure ID	GRXE8534		High Efficiency Evaporator Fan Motors		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1571	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	93.1%	Modified Market	93.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.016	0.1			
Total	0.016	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	10 AM - 11 AM	0.00	0.0
Minimum Impact	February	Weekday	1 PM - 2 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	GRNE8534		High Efficiency Evaporator Fan Motors		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	New	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1571	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	93.1%	Modified Market	93.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.016	0.1			
Total	0.016	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	3 AM - 4 AM	0.00	0.0
Minimum Impact	July	Weekday	2 PM - 3 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
High Efficiency Evaporator Fan Motors

December Peak Day Demand Impact
High Efficiency Evaporator Fan Motors

Monthly Total Fossil Fuel Impact
High Efficiency Evaporator Fan Motors

December Peak Day Demand Profile
High Efficiency Evaporator Fan Motors

Measure ID	GRXE8535		Coffin Display Case Night Covers		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0362	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	88.2%	Modified Market	39.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-0.019	-0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	-0.001	-0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.190	4.8			
Total	1.171	2.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	Midnight - 1 AM	0.47	8.1
Minimum Impact	May	Weekday	9 AM - 10 AM	-0.02	-0.2
System Coincident	December	Weekday	4 PM - 5 PM	-0.00	-0.0

Measure ID	GRNE8535		Coffin Display Case Night Covers		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	New	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0362	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	88.2%	Modified Market	39.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-0.012	-0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	-0.001	-0.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.042	4.7			
Total	1.029	2.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	Midnight - 1 AM	0.41	8.0
Minimum Impact	March	Weekday	7 AM - 8 AM	-0.01	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	-0.00	-0.0

Measure ID	GRXE8536		Variable Speed Refrig. Compressors		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$1.1888	Measure Life (Yrs)	18	Mutual Exclusivity	Yes
Potential Market	88.1%	Modified Market	17.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	6.392	26.0			
Total	6.392	11.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	5 PM - 6 PM	0.74	10.7
Minimum Impact	February	Weekday	2 AM - 3 AM	0.72	12.6
System Coincident	December	Weekday	4 PM - 5 PM	0.73	11.3

Monthly Total Electricity Impact
Variable Speed Refrig. Compressors

December Peak Day Demand Impact
Variable Speed Refrig. Compressors

Monthly Total Fossil Fuel Impact
Variable Speed Refrig. Compressors

December Peak Day Demand Profile
Variable Speed Refrig. Compressors

Measure ID	GRNE8536		Variable Speed Refrig. Compressors		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$1.1888	Measure Life (Yrs)	18	Mutual Exclusivity	Yes
Potential Market	88.1%	Modified Market	17.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	5.579	25.2			
Total	5.579	11.8	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 PM - 4 PM	0.65	10.8
Minimum Impact	February	Weekday	Midnight - 1 AM	0.63	12.4
System Coincident	December	Weekday	4 PM - 5 PM	0.64	11.5

Monthly Total Electricity Impact
Variable Speed Refrig. Compressors

December Peak Day Demand Impact
Variable Speed Refrig. Compressors

Monthly Total Fossil Fuel Impact
Variable Speed Refrig. Compressors

December Peak Day Demand Profile
Variable Speed Refrig. Compressors

Measure ID	GRXE8540		High Efficiency DX AC-COP 2.9		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1308	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	66.0%	Modified Market	23.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.370	22.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	1.370	2.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.43	5.8
Minimum Impact	April	Weekday	4 AM - 5 AM	0.02	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.17	2.6

Monthly Total Electricity Impact
High Efficiency DX AC-COP 2.9

December Peak Day Demand Impact
High Efficiency DX AC-COP 2.9

Monthly Total Fossil Fuel Impact
High Efficiency DX AC-COP 2.9

December Peak Day Demand Profile
High Efficiency DX AC-COP 2.9

Measure ID	GRXE8552		Compact Fluorescent Lamp EXIT Signs		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0112	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.010	0.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.002	0.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.001	0.0			
Total	0.092	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	10 AM - 11 AM	0.01	0.2
Minimum Impact	September	Weekday	6 AM - 7 AM	0.01	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.2

Measure ID	GRNE8552			Compact Fluorescent Lamp EXIT Signs	
Base ID	GRNE7000			Base Case-Standard	
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0027	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	75.0%	Modified Market	75.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.008	0.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.002	0.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.001	0.0			
Total	0.091	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	Noon - 1 PM	0.01	0.2
Minimum Impact	June	Weekday	6 AM - 7 AM	0.01	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.2

Monthly Total Electricity Impact
Compact Fluorescent Lamp EXIT Signs

December Peak Day Demand Impact
Compact Fluorescent Lamp EXIT Signs

Monthly Total Fossil Fuel Impact
Compact Fluorescent Lamp EXIT Signs

December Peak Day Demand Profile
Compact Fluorescent Lamp EXIT Signs

Measure ID	GRXE8553		LED Lamp EXIT Signs		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0370	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	90.0%	Modified Market	49.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.015	0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.002	0.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.001	0.0			
Total	0.148	0.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	10 AM - 11 AM	0.02	0.2
Minimum Impact	September	Weekday	6 AM - 7 AM	0.02	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Measure ID	GRNE8553		LED Lamp EXIT Signs		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	New	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0193	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	±0.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.013	0.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.003	0.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.001	0.0			
Total	0.146	0.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	10 AM - 11 AM	0.02	0.3
Minimum Impact	June	Weekday	6 AM - 7 AM	0.02	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Monthly Total Electricity Impact
LED Lamp EXIT Signs

December Peak Day Demand Impact
LED Lamp EXIT Signs

Monthly Total Fossil Fuel Impact
LED Lamp EXIT Signs

December Peak Day Demand Profile
LED Lamp EXIT Signs

Measure ID	GRXE8554		Heat Pump Water Heater		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3574	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	45.0%	Modified Market	15.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	1.596	74.5	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	1.596	2.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 PM - 4 PM	0.38	5.2
Minimum Impact	November	Weekday	5 AM - 6 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.36	5.5

Measure ID	GRNE8554		Heat Pump Water Heater		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3574	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	50.0%	Modified Market	16.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	1.536	74.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	1.536	3.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 PM - 4 PM	0.37	6.2
Minimum Impact	November	Weekday	4 AM - 5 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.35	6.2

Monthly Total Electricity Impact
Heat Pump Water Heater

December Peak Day Demand Impact
Heat Pump Water Heater

Monthly Total Fossil Fuel Impact
Heat Pump Water Heater

December Peak Day Demand Profile
Heat Pump Water Heater

Measure ID	GRXE8556		High Efficiency DX AC-COP 3.2		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3258	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	66.0%	Modified Market	23.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.814	29.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	1.814	3.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.57	7.6
Minimum Impact	April	Weekday	4 AM - 5 AM	0.03	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.23	3.5

Monthly Total Electricity Impact
High Efficiency DX AC-COP 3.2

December Peak Day Demand Impact
High Efficiency DX AC-COP 3.2

Monthly Total Fossil Fuel Impact
High Efficiency DX AC-COP 3.2

December Peak Day Demand Profile
High Efficiency DX AC-COP 3.2

Measure ID	GRNE8556		High Efficiency DX AC-COP 3.2		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2359	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	3.0%	Modified Market	26.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.326	9.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.326	0.7	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.09	1.5
Minimum Impact	April	Weekday	4 AM - 5 AM	0.01	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.04	0.7

Monthly Total Electricity Impact
High Efficiency DX AC-COP 3.2

December Peak Day Demand Impact
High Efficiency DX AC-COP 3.2

Monthly Total Fossil Fuel Impact
High Efficiency DX AC-COP 3.2

December Peak Day Demand Profile
High Efficiency DX AC-COP 3.2

Measure ID	GRXE8557		Optical Reflectors-2X4 Recessed		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0511	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.154	2.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.017	0.9			
Indoor Lighting	0.413	3.6			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.584	1.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	8 AM - 9 AM	0.09	1.3
Minimum Impact	April	Weekday	6 PM - 7 PM	0.04	0.7
System Coincident	December	Weekday	4 PM - 5 PM	0.06	1.0

Monthly Total Electricity Impact
Optical Reflectors-2X4 Recessed

December Peak Day Demand Impact
Optical Reflectors-2X4 Recessed

Monthly Total Fossil Fuel Impact
Optical Reflectors-2X4 Recessed

December Peak Day Demand Profile
Optical Reflectors-2X4 Recessed

Measure ID	GRNE8557		Optical Reflectors-2X4 Recessed		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0511	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	kWh/sf	% of Base	End-Use	kBtu/sf	% of Base
Cooling & Auxiliary	0.113	3.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.022	1.2			
Indoor Lighting	0.347	3.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.481	1.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	W/sf	% of Base
Maximum Impact	September	Weekday	8 AM - 9 AM	0.07	1.3
Minimum Impact	May	Weekday	6 PM - 7 PM	0.04	0.7
System Coincident	December	Weekday	4 PM - 5 PM	0.05	1.0

Monthly Total Electricity Impact
Optical Reflectors-2X4 Recessed

December Peak Day Demand Impact
Optical Reflectors-2X4 Recessed

Monthly Total Fossil Fuel Impact
Optical Reflectors-2X4 Recessed

December Peak Day Demand Profile
Optical Reflectors-2X4 Recessed

Measure iD	GRXE8558		8' Fluor. Energy Saver Lamps-F96T12ES		
Base iD	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0113	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.092	1.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.014	0.7			
Indoor Lighting	2.328	20.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.028	0.1			
Total	2.462	4.4	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	9 AM - 10 AM	0.30	4.4
Minimum Impact	September	Weekday	6 AM - 7 AM	0.26	4.5
System Coincident	December	Weekday	4 PM - 5 PM	0.30	4.5

Monthly Total Electricity Impact
8' Fluor. Energy Saver Lamps-F96T12ES

December Peak Day Demand Impact
8' Fluor. Energy Saver Lamps-F96T12ES

Monthly Total Fossil Fuel Impact
8' Fluor. Energy Saver Lamps-F96T12ES

December Peak Day Demand Profile
8' Fluor. Energy Saver Lamps-F96T12ES

Measure ID	GRXE8559		Electronic Ballasts-8' T12-Base EEM		
Base ID	GRXE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.4260	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.072	1.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.011	0.6			
Indoor Lighting	1.824	15.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.022	0.1			
Total	1.929	3.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	9 AM - 10 AM	0.24	3.5
Minimum Impact	September	Weekday	6 AM - 7 AM	0.20	3.5
System Coincident	December	Weekday	4 PM - 5 PM	0.23	3.6

Monthly Total Electricity Impact
Electronic Ballasts-8' T12-Base EEM

December Peak Day Demand Impact
Electronic Ballasts-8' T12-Base EEM

Monthly Total Fossil Fuel Impact
Electronic Ballasts-8' T12-Base EEM

December Peak Day Demand Profile
Electronic Ballasts-8' T12-Base EEM

Measure ID	GRNE8559		Electronic Ballasts-8' T12-Base EEM		
Base ID	GRNE7000		Base Case-Standard		
Market Segment					
Building Type	Grocery		Vintage		New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1238	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.024	0.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.006	0.3			
Indoor Lighting	0.693	7.6			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.006	0.0			
Total	0.728	1.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	7 AM - 8 AM	0.27	5.1
Minimum Impact	June	Weekday	6 AM - 7 AM	0.08	1.5
System Coincident	December	Weekday	4 PM - 5 PM	0.09	1.6

Monthly Total Electricity Impact
Electronic Ballasts-8' T12-Base EEM

December Peak Day Demand Impact
Electronic Ballasts-8' T12-Base EEM

Monthly Total Fossil Fuel Impact
Electronic Ballasts-8' T12-Base EEM

December Peak Day Demand Profile
Electronic Ballasts-8' T12-Base EEM

Measure ID	GRXE8560			Optical Reflectors-1X8 Fixtures	
Base ID	GRXE7000			Base Case-Standard	
Market Segment					
Building Type	Grocery			Vintage	Existing
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2489	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.209	3.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.031	1.6			
Indoor Lighting	5.225	45.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.063	0.3			
Total	5.527	10.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	3 AM - 4 AM	0.80	13.5
Minimum Impact	September	Weekday	6 AM - 7 AM	0.58	10.1
System Coincident	December	Weekday	4 PM - 5 PM	0.66	10.2

Monthly Total Electricity Impact
Optical Reflectors-1X8 Fixtures

December Peak Day Demand Impact
Optical Reflectors-1X8 Fixtures

Monthly Total Fossil Fuel Impact
Optical Reflectors-1X8 Fixtures

December Peak Day Demand Profile
Optical Reflectors-1X8 Fixtures

Measure ID	GRNE8560			Optical Reflectors-1X8 Fixtures	
Base ID	GRNE7000			Base Case-Standard	
Market Segment					
Building Type	Grocery			Vintage	New
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2477	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.142	4.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.036	2.0			
Indoor Lighting	4.276	47.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.037	0.2			
Total	4.492	9.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	7 AM - 8 AM	0.67	12.6
Minimum Impact	December	Weekday	2 AM - 3 AM	0.30	6.0
System Coincident	December	Weekday	4 PM - 5 PM	0.54	9.7

Measure ID	GRXE8561		Electronic Ballasts-4' T12-Base SMC		
Base ID	GRXE7661		Base Case for 4' Fluor. SMC Ballasts		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0651	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.052	0.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.006	0.3			
Indoor Lighting	0.141	1.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.199	0.4	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	8 AM - 9 AM	0.03	0.4
Minimum Impact	April	Weekday	6 PM - 7 PM	0.02	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Monthly Total Electricity Impact
Electronic Ballasts-4' T12-Base SMC

December Peak Day Demand Impact
Electronic Ballasts-4' T12-Base SMC

Monthly Total Fossil Fuel Impact
Electronic Ballasts-4' T12-Base SMC

December Peak Day Demand Profile
Electronic Ballasts-4' T12-Base SMC

Measure ID	GRXE8562		Electronic Ballasts-8' T12-Base SMC		
Base ID	GRXE7662		Base Case for 8' Fluor. SMC Ballasts		
Market Segment					
Building Type	Grocery		Vintage	Existing	
Floor Area (sf)	23500	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3655	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	~0.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.034	0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.004	0.2			
Indoor Lighting	0.941	7.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.011	0.0			
Total	0.991	1.8	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	6 AM - 7 AM	0.40	6.5
Minimum Impact	May	Weekday	7 AM - 8 AM	-0.30	-5.1
System Coincident	December	Weekday	4 PM - 5 PM	0.12	1.8

DETAILED MEASURE IMPACTS-SUMMARY REPORTS

This section contains the detailed measure impact results and market segment data for each DSM case examined for this building type. A complete index of all base and measure cases defined for this building type is shown first. This index represents an expansion of the base and measure matrix presented in Table 1 (residential) or Table 2 (commercial) for the applicable sector. Following this index, a summary report sheet is provided for each DSM measure case in the order shown in the index. The summary report sheet contains a host of information and selected graphs which define and depict the measure impacts and outline the market segment data assumptions utilized for each case in the DBEDT DSM Forecasting models. The variables and figures included in the summary report sheet are described below.

Measure ID: The eight-character alpha-numeric code used to define the measure case. This ID is composed of the 2-letter building code + the 1-letter vintage code + the 1-letter water heater fuel type code + the 4-digit numeric code used to define the base or measure case.

Measure Description: A brief (no more than 38-character) definition of the DSM measure

Base ID: Similar to the Measure ID, this code denotes the base case to which the measure case is compared in order to estimate the measure impacts.

Base Description: Similar to the Measure Description, a brief description of the base case. This description helps to determine if a modified base case was defined to estimate measure impacts.

Market Segment. This section of the summary report sheet contains the market segment data defined for each measure. These are:

Building Type:	The building type to which this measure applies.
Vintage:	The vintage of the building (new or existing).
Floor Area (sf):	The gross floor area of the building in square feet.
Water Heater Fuel:	The fuel type utilized for domestic or service water heating (Gas, Electric, or Oil).
Cost Unit:	The unit of measure utilized to describe the measure cost.
First Cost (\$/unit):	The installed capital cost for the measure in dollars per Cost Unit (93 dollars).
Measure Life (Yrs):	The measure life in years.
Mutual Exclusivity:	A Yes/No entry which denotes if mutual exclusivity considerations apply to this measure. A Yes entry indicates that this measure is mutually exclusive with one or more measures pertaining to this building type, thereby modifying the potential market share available.
Potential Market:	The maximum market share available for this measure. This includes consideration of measure applicability, measure feasibility, and remaining market share for existing vintages.
Modified Market:	The maximum market share available for this measure accounting for mutual exclusivity.
Intra Action:	A Yes/No entry which denotes if intra active considerations apply to this measure. A Yes entry indicates that this measure is intra active with one or more measures if applied as a group to this building type. The total impact in a particular end-use for a group of measures with intra active effects is not the same as the summation of the individual measure impacts. An incremental measure impact reduction is implied, based on the measure loading order.

Annual Energy Impacts By End-Use. This section of the summary report contains the normalized measure impacts by end-use and for the total building by fuel type. Electricity impacts are shown in terms of kWh/square foot and as a percentage of the base case, while fossil fuel impacts are shown as kBtu/square foot and as a percentage of the base case for each end-use and for the total. The end-use impacts shown include:

Cooling (& Auxiliary) :	Space cooling and associated pumps and heat rejection energy (e.g., condensers or cooling tower).
Water Heating:	Storage or central domestic or service water heating system.
Misc. Equipment:	Miscellaneous equipment.
Ventilation:	Supply air fans for conditioning and exhaust air fans.
Indoor Lighting:	Interior lighting (not including EXIT signs).
Outdoor Lighting:	Exterior building lighting.
Central Refrigeration:	Commercial/Industrial refrigeration systems.
Total:	Total building energy use by fuel.

Total Building Peak Demand Impact: This section of the summary report provides peak demand impacts for each measure for selected peak events during the year. Three events are included, the maximum building peak demand impact, the minimum building peak demand impact, and a system coincident peak demand impact (set to December weekday at 4 to 5 PM). For each event the Month, Day Type, and Hour are shown, followed by the normalized total building peak demand impact in Watts/square foot and the percentage of the total base case represented by the impact.

Measure Impact Figures. Four figures are selected and included in each summary report to depict the impacts resulting from each measure. These are;

Monthly Total Electricity Impact: This figure shows the floor area normalized monthly electricity impacts associated with the measure in kWh/square foot.

Monthly Total Fossil Fuel Impact: This figure shows the floor area normalized monthly fossil fuel impacts associated with the measure in kBtu/square foot.

December Peak Day Demand Impact: This figure shows the (selected) system coincident peak day floor area normalized total building demand impact for the measure in Watts/square foot.

December Peak Day Demand Profile: This figure provides the daily total building load profile for the measure and base cases on the (selected) system coincident peak day in kW.

Commercial Refrigerated Warehouse Measure Index Table

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Cases: 62

Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
RWXG7000	RWXG7000	Base Case-Standard	NA	50000
RWXE7000	RWXE7000	Base Case-Standard	NA	50000
RWNG7000	RWNG7000	Base Case-Standard	NA	50000
RWNE7000	RWNE7000	Base Case-Standard	NA	50000
RWXE7614	RWXE7614	Base Case for Clean Condenser Coils	NA	50000
RWXE7616	RWXE7616	Base Case for HVAC Time Clocks	NA	50000
RWXE7661	RWXE7661	Base Case for 4' Fluor. SMC Ballasts	NA	50000
RWXE7662	RWXE7662	Base Case for 8' Fluor. SMC Ballasts	NA	50000
RWXE8501	RWXE7000	4' Fluor. Energy Saver Lamps-F40T12ES	Inlights	50000
RWXE8502	RWXE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	50000
RWNE8502	RWNE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	50000
RWXE8503	RWXE7000	4' T8 Lamps And Electronic Ballasts	Inlights	50000
RWNE8503	RWNE7000	4' T8 Lamps And Electronic Ballasts	Inlights	50000
RWNE8505	RWNE7000	Double Pane Heat Mirror Glazing	Cooling	50000
RWXE8507	RWXE7000	Light Colored Roof	Cooling	50000
RWNE8507	RWNE7000	Light Colored Roof	Cooling	50000
RWXE8509	RWXE7000	High Pressure Sodium-100 Watts	Exlights	50000
RWNE8509	RWNE7000	High Pressure Sodium-100 Watts	Exlights	50000
RWXE8511	RWXE7000	HID Exterior Floods-70 Watts	Exlights	50000
RWNE8511	RWNE7000	HID Exterior Floods-70 Watts	Exlights	50000
RWXE8514	RWXE7614	Clean Condenser Coils	Cooling	50000
RWXE8516	RWXE7616	HVAC System Time Clocks	Cooling	50000
RWXG8520	RWXG7000	High Efficiency Gas Water Heater	Hotwater	50000
RWNG8520	RWNG7000	High Efficiency Gas Water Heater	Hotwater	50000
RWXG8521	RWXG7000	Point of Use Water Heating	Hotwater	50000
RWXE8521	RWXE7000	Point of Use Water Heating	Hotwater	50000
RWNG8521	RWNG7000	Point of Use Water Heating	Hotwater	50000
RWNE8521	RWNE7000	Point of Use Water Heating	Hotwater	50000
RWXG8523	RWXG7000	Tank Insulation-Fiber Blanket	Hotwater	50000
RWXE8523	RWXE7000	Tank Insulation-Fiber Blanket	Hotwater	50000
RWXE8525	RWXE7000	Electric Defrost Demand Control	C-Refrig	50000
RWNE8525	RWNE7000	Electric Defrost Demand Control	C-Refrig	50000
RWXE8528	RWXE7000	Refrigeration Equipment Maintenance	C-Refrig	50000
RWXE8529	RWXE7000	High Efficiency Refrig. Compressors	C-Refrig	50000
RWNE8529	RWNE7000	High Efficiency Refrig. Compressors	C-Refrig	50000
RWXE8530	RWXE7000	Oversized Evaporative Condensers	C-Refrig	50000
RWNE8530	RWNE7000	Oversized Evaporative Condensers	C-Refrig	50000
RWXE8531	RWXE7000	Remote Evaporative Subcooler	C-Refrig	50000
RWNE8531	RWNE7000	Remote Evaporative Subcooler	C-Refrig	50000
RWXE8533	RWXE7000	Low Head Pressure-Floating Head	C-Refrig	50000
RWNE8533	RWNE7000	Low Head Pressure-Floating Head	C-Refrig	50000
RWXE8536	RWXE7000	Variable Speed Refrig. Compressors	C-Refrig	50000
RWNE8536	RWNE7000	Variable Speed Refrig. Compressors	C-Refrig	50000
RWXE8540	RWXE7000	High Efficiency DX AC-COP 2.9	Cooling	50000
RWXE8552	RWXE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	50000
RWNE8552	RWNE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	50000
RWXE8553	RWXE7000	LED Lamp EXIT Signs	Inlights	50000
RWNE8553	RWNE7000	LED Lamp EXIT Signs	Inlights	50000
RWXE8554	RWXE7000	Heat Pump Water Heater	Hotwater	50000
RWNE8554	RWNE7000	Heat Pump Water Heater	Hotwater	50000
RWXE8556	RWXE7000	High Efficiency DX AC-COP 3.2	Cooling	50000
RWNE8556	RWNE7000	High Efficiency DX AC-COP 3.2	Cooling	50000
RWXE8557	RWXE7000	Optical Reflectors-2X4 Recessed	Inlights	50000
RWNE8557	RWNE7000	Optical Reflectors-2X4 Recessed	Inlights	50000
RWXE8558	RWXE7000	8' Fluor. Energy Saver Lamps-F96T12ES	Inlights	50000
RWXE8559	RWXE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	50000
RWNE8559	RWNE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	50000
RWXE8560	RWXE7000	Optical Reflectors-1X8 Fixtures	Inlights	50000

Commercial Refrigerated Warehouse Measure Index Table

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			Cases:	62
Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
RWNE8560	RWNE7000	Optical Reflectors-1X8 Fixtures	Inlights	50000
RWXE8561	RWXE7661	Electronic Ballasts-4' T12-Base SMC	Inlights	50000
RWXE8562	RWXE7662	Electronic Ballasts-8' T12-Base SMC	Inlights	50000
RWXE8566	RWXE7000	Metal Halide Lamps-250W	Inlights	50000

Measure ID	RWXE8501		4' Fluor. Energy Saver Lamps-F40T12ES		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0002	Measure Life (Yrs)	5	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.007	7.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.001	1.0			
Indoor Lighting	0.015	0.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.022	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	11 AM - Noon	0.01	0.1
Minimum Impact	November	Weekday	11 PM - Midnight	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.1

Measure ID	RWXE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0132	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.007	7.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.001	4.0			
Indoor Lighting	0.015	0.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.022	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	11 AM - Noon	0.01	0.1
Minimum Impact	November	Weekday	11 PM - Midnight	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.1

Measure ID	RWNE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0091	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.003	6.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.001	3.0			
Indoor Lighting	0.009	0.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.012	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	9 AM - 10 AM	0.01	0.3
Minimum Impact	June	Weekday	2 AM - 3 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Monthly Total Electricity Impact
Electronic Ballasts-4' T12-Base EEM

December Peak Day Demand Impact
Electronic Ballasts-4' T12-Base EEM

Monthly Total Fossil Fuel Impact
Electronic Ballasts-4' T12-Base EEM

December Peak Day Demand Profile
Electronic Ballasts-4' T12-Base EEM

Measure ID	RWXE8503		4' T8 Lamps And Electronic Ballasts		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0136	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.012	14.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.001	3.0			
Indoor Lighting	0.028	0.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.041	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	8 AM - 9 AM	0.03	0.5
Minimum Impact	August	Weekday	11 PM - Midnight	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.2

Measure ID	RWNE8503		4' T8 Lamps And Electronic Ballasts		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0092	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.004	8.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.001	4.3			
Indoor Lighting	0.013	0.6			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.018	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	9 AM - 10 AM	0.01	0.3
Minimum Impact	September	Weekday	10 PM - 11 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.1

Measure ID	RWNE8505		Double Pane Heat Mirror Glazing		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0215	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	19.8%	Modified Market	19.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.024	46.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.005	26.9			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.029	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	9 AM - 10 AM	0.02	0.6
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.3

Measure ID	RWNE8507		Light Colored Roof		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0 - 300	Measure Life (Yrs)	7	Mutual Exclusivity	No
Potential Market	25.0%	Modified Market	25.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.290	1.2			
Total	0.290	1.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	4 PM - 5 PM	1.25	22.0
Minimum Impact	February	Weekday	8 AM - 9 AM	0.01	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.03	0.8

Monthly Total Electricity Impact
Light Colored Roof

December Peak Day Demand Impact
Light Colored Roof

Monthly Total Fossil Fuel Impact
Light Colored Roof

December Peak Day Demand Profile
Light Colored Roof

Measure ID	RWXE8507		Light Colored Roof		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.6300	Measure Life (Yrs)	7	Mutual Exclusivity	No
Potential Market	10.9%	Modified Market	10.9%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.372	0.9			
Total	0.372	0.8	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	8 PM - 9 PM	0.10	2.1
Minimum Impact	February	Weekday	8 AM - 9 AM	0.01	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.03	0.4

Monthly Total Electricity Impact
Light Colored Roof

December Peak Day Demand Impact
Light Colored Roof

Monthly Total Fossil Fuel Impact
Light Colored Roof

December Peak Day Demand Profile
Light Colored Roof

Measure ID	RWNE8509		High Pressure Sodium-100 Watts		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0118	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.077	18.7			
Central Refrigeration	0.000	0.0			
Total	0.077	0.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	11 PM - Midnight	0.02	0.6
Minimum Impact	July	Weekday	5 PM - 6 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	RWXE8509		High Pressure Sodium-100 Watts		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0150	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	~0.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.077	18.7			
Central Refrigeration	0.000	0.0			
Total	0.077	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	11 PM - Midnight	0.02	0.3
Minimum Impact	July	Weekday	6 PM - 7 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
High Pressure Sodium-100 Watts

December Peak Day Demand Impact
High Pressure Sodium-100 Watts

Monthly Total Fossil Fuel Impact
High Pressure Sodium-100 Watts

December Peak Day Demand Profile
High Pressure Sodium-100 Watts

Measure ID	RWNE8511		HID Exterior Floods-70 Watts		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0209	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.077	18.7			
Central Refrigeration	0.000	0.0			
Total	0.077	0.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	11 PM - Midnight	0.02	0.6
Minimum Impact	July	Weekday	5 PM - 6 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	RWXE8511		HID Exterior Floods-70 Watts		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0246	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	~0.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.077	18.7			
Central Refrigeration	0.000	0.0			
Total	0.077	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	11 PM - Midnight	0.02	0.3
Minimum Impact	July	Weekday	6 PM - 7 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Impact
HID Exterior Floods-70 Watts

Monthly Total Fossil Fuel Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Profile
HID Exterior Floods-70 Watts

Measure ID	RWXE8514		Clean Condenser Coils		
Base ID	RWXE7614		Base Case for Clean Condenser Coils		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0013	Measure Life (Yrs)	1	Mutual Exclusivity	No
Potential Market	0.5%	Modified Market	0.5%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.022	20.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.022	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.02	0.2
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.1

Measure ID	RWXE8516		HVAC System Time Clocks		
Base ID	RWXE7616		Base Case for HVAC Time Clocks		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0026	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	16.8%	Modified Market	16.8%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.004	4.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.031	64.9			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.036	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	6 AM - 7 AM	0.02	0.4
Minimum Impact	April	Weekday	7 AM - 8 AM	-0.00	-0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
HVAC System Time Clocks

December Peak Day Demand Impact
HVAC System Time Clocks

Monthly Total Fossil Fuel Impact
HVAC System Time Clocks

December Peak Day Demand Profile
HVAC System Time Clocks

Measure ID	RWNG8520		High Efficiency Gas Water Heater		
Base ID	RWNG7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	50.0030	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	64.0%	Modified Market	21.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.017	2.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.000	0.0	Total	0.016	2.3
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
High Efficiency Gas Water Heater

December Peak Day Demand Impact
High Efficiency Gas Water Heater

Monthly Total Fossil Fuel Impact
High Efficiency Gas Water Heater

December Peak Day Demand Profile
High Efficiency Gas Water Heater

Measure ID	RWXG8520		High Efficiency Gas Water Heater		
Base ID	RWXG7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage		Existing
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0030	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	+0.0%	Modified Market	13.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.074	7.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.000	0.0	Total	0.073	7.5
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
High Efficiency Gas Water Heater

December Peak Day Demand Impact
High Efficiency Gas Water Heater

Monthly Total Fossil Fuel Impact
High Efficiency Gas Water Heater

December Peak Day Demand Profile
High Efficiency Gas Water Heater

Measure ID	RWXE8521		Point of Use Water Heating		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0080	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	33.8%	Modified Market	11.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.028	20.8	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.028	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	11 AM - Noon	0.00	0.1
Minimum Impact	August	Weekday	11 PM - Midnight	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	RWXG8521		Point of Use Water Heating		
Base ID	RWXG7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0080	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	33.8%	Modified Market	11.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.106	NA	Water Heating	0.980	100.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	-0.106	-0.2	Total	0.980	100.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum impact	September	Weekday	11 PM - Midnight	-0.01	-0.1
Minimum Impact	March	Weekday	1 PM - 2 PM	-0.04	-0.6
System Coincident	December	Weekday	4 PM - 5 PM	-0.02	-0.3

Monthly Total Electricity Impact
Point of Use Water Heating

December Peak Day Demand Impact
Point of Use Water Heating

Monthly Total Fossil Fuel Impact
Point of Use Water Heating

December Peak Day Demand Profile
Point of Use Water Heating

Measure ID	RWNE8521		Point of Use Water Heating		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0071	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	25.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.013	11.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.013	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	1 PM - 2 PM	0.00	0.0
Minimum Impact	September	Weekday	10 PM - 11 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	RWNG8521		Point of Use Water Heating		
Base ID	RWNG7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	50.0071	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	25.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.106	NA	Water Heating	-0.697	100.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	-0.106	-0.4	Total	0.696	100.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	7 PM - 8 PM	-0.01	-0.2
Minimum Impact	March	Weekday	10 AM - 11 AM	-0.04	-1.0
System Coincident	December	Weekday	4 PM - 5 PM	-0.02	-0.5

Monthly Total Electricity Impact
Point of Use Water Heating

December Peak Day Demand Impact
Point of Use Water Heating

Monthly Total Fossil Fuel Impact
Point of Use Water Heating

December Peak Day Demand Profile
Point of Use Water Heating

Measure ID	RWXE8523		Tank Insulation-Fiber Blanket		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0005	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	6.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.012	9.2	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.012	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	4 PM - 5 PM	0.00	0.0
Minimum Impact	August	Weekday	11 PM - Midnight	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	RWXG8523		Tank Insulation-Fiber Blanket		
Base ID	RWXG7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	50.0005	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	6.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.245	25.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.000	0.0	Total	0.245	25.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
Tank Insulation-Fiber Blanket

December Peak Day Demand Impact
Tank Insulation-Fiber Blanket

Monthly Total Fossil Fuel Impact
Tank Insulation-Fiber Blanket

December Peak Day Demand Profile
Tank Insulation-Fiber Blanket

Measure ID	RWNE8525		Electric Defrost Demand Control		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	New	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$1.1247	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	45.0%	Modified Market	27.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.255	1.1			
Total	0.255	0.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	3 PM - 4 PM	1.22	21.5
Minimum Impact	February	Weekday	4 AM - 5 AM	0.02	0.7
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.4

Monthly Total Electricity Impact
Electric Defrost Demand Control

December Peak Day Demand Impact
Electric Defrost Demand Control

Monthly Total Fossil Fuel Impact
Electric Defrost Demand Control

December Peak Day Demand Profile
Electric Defrost Demand Control

Measure ID	RWXE8525		Electric Defrost Demand Control		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$1.1247	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	30.0%	Modified Market	18.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.472	1.2			
Total	0.472	1.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 AM - 2 AM	0.07	1.5
Minimum Impact	January	Weekday	10 PM - 11 PM	0.04	0.7
System Coincident	December	Weekday	4 PM - 5 PM	0.04	0.6

Monthly Total Electricity Impact
Electric Defrost Demand Control

December Peak Day Demand Impact
Electric Defrost Demand Control

Monthly Total Fossil Fuel Impact
Electric Defrost Demand Control

December Peak Day Demand Profile
Electric Defrost Demand Control

Measure ID	RWXE8528		Refrigeration Equipment Maintenance		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1500	Measure Life (Yrs)	1	Mutual Exclusivity	No
Potential Market	0.0%	Modified Market	0.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.509	3.7			
Total	1.509	3.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	1 AM - 2 AM	0.19	4.0
Minimum Impact	March	Weekday	6 PM - 7 PM	0.15	3.1
System Coincident	December	Weekday	4 PM - 5 PM	0.18	2.7

Monthly Total Electricity Impact
Refrigeration Equipment Maintenance

December Peak Day Demand Impact
Refrigeration Equipment Maintenance

Monthly Total Fossil Fuel Impact
Refrigeration Equipment Maintenance

December Peak Day Demand Profile
Refrigeration Equipment Maintenance

Measure ID	RWXE8529		High Efficiency Refrig. Compressors		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1989	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	9.0%	Modified Market	3.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.803	4.5			
Total	1.803	3.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	4 PM - 5 PM	0.23	3.4
Minimum Impact	April	Weekday	5 AM - 6 AM	0.19	4.3
System Coincident	December	Weekday	4 PM - 5 PM	0.22	3.4

Measure ID	RWNE8529		High Efficiency Refrig. Compressors		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1989	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	8.0%	Modified Market	3.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	2.108	8.8			
Total	2.108	7.4	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	4 PM - 5 PM	0.40	7.0
Minimum Impact	April	Weekday	5 AM - 6 AM	0.23	8.3
System Coincident	December	Weekday	4 PM - 5 PM	0.26	6.1

Monthly Total Electricity Impact
High Efficiency Refrig. Compressors

December Peak Day Demand Impact
High Efficiency Refrig. Compressors

Monthly Total Fossil Fuel Impact
High Efficiency Refrig. Compressors

December Peak Day Demand Profile
High Efficiency Refrig. Compressors

Measure ID	RWXE8530		Oversized Evaporative Condensers		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.8965	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	5.0%	Modified Market	2.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	6.400	15.9			
Total	6.400	13.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	1 AM - 2 AM	0.79	16.4
Minimum Impact	March	Weekday	5 AM - 6 AM	0.67	14.9
System Coincident	December	Weekday	4 PM - 5 PM	0.77	11.6

Monthly Total Electricity Impact
Oversized Evaporative Condensers

December Peak Day Demand Impact
Oversized Evaporative Condensers

Monthly Total Fossil Fuel Impact
Oversized Evaporative Condensers

December Peak Day Demand Profile
Oversized Evaporative Condensers

Measure ID	RWNE8530		Oversized Evaporative Condensers		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.8965	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	5.0%	Modified Market	2.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.911	7.9			
Total	1.911	6.7	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	4 PM - 5 PM	1.44	25.2
Minimum Impact	March	Weekday	5 AM - 6 AM	0.19	6.9
System Coincident	December	Weekday	4 PM - 5 PM	0.22	5.2

Monthly Total Electricity Impact
Oversized Evaporative Condensers

December Peak Day Demand Impact
Oversized Evaporative Condensers

Monthly Total Fossil Fuel Impact
Oversized Evaporative Condensers

December Peak Day Demand Profile
Oversized Evaporative Condensers

Measure ID	RWXE8531		Remote Evaporative Subcooler		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2217	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	47.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	2.524	6.3			
Total	2.524	5.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	4 PM - 5 PM	0.33	4.8
Minimum Impact	April	Weekday	5 AM - 6 AM	0.26	6.0
System Coincident	December	Weekday	4 PM - 5 PM	0.31	4.7

Measure ID	RWNE8531		Remote Evaporative Subcooler		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2217	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	47.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.476	6.1			
Total	1.476	5.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	4 PM - 5 PM	0.28	4.9
Minimum Impact	April	Weekday	5 AM - 6 AM	0.16	5.8
System Coincident	December	Weekday	4 PM - 5 PM	0.18	4.3

Monthly Total Electricity Impact
Remote Evaporative Subcooler

December Peak Day Demand Impact
Remote Evaporative Subcooler

Monthly Total Fossil Fuel Impact
Remote Evaporative Subcooler

December Peak Day Demand Profile
Remote Evaporative Subcooler

Measure ID	RWXE8533		Low Head Pressure-Floating Head		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1630	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	32.4%	Modified Market	32.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	3.518	8.7			
Total	3.518	7.7	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	6 AM - 7 AM	0.53	8.5
Minimum Impact	March	Weekday	6 PM - 7 PM	0.20	3.9
System Coincident	December	Weekday	4 PM - 5 PM	0.34	5.1

Monthly Total Electricity Impact
Low Head Pressure-Floating Head

December Peak Day Demand Impact
Low Head Pressure-Floating Head

Monthly Total Fossil Fuel Impact
Low Head Pressure-Floating Head

December Peak Day Demand Profile
Low Head Pressure-Floating Head

Measure ID	RWNE8533		Low Head Pressure-Floating Head		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1630	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	36.0%	Modified Market	36.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	1.094	4.5			
Total	1.094	3.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	5 PM - 6 PM	1.29	23.0
Minimum Impact	March	Weekday	6 PM - 7 PM	0.05	1.8
System Coincident	December	Weekday	4 PM - 5 PM	0.10	2.3

Measure ID	RWXE8536			Variable Speed Refrig. Compressors	
Base ID	RWXE7000			Base Case-Standard	
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$2.5298	Measure Life (Yrs)	18	Mutual Exclusivity	Yes
Potential Market	90.0%	Modified Market	41.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	10.346	25.6			
Total	10.346	22.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	10 PM - 11 PM	1.25	25.7
Minimum Impact	August	Weekday	4 PM - 5 PM	1.06	15.4
System Coincident	December	Weekday	4 PM - 5 PM	1.15	17.4

Monthly Total Electricity Impact
Variable Speed Refrig. Compressors

December Peak Day Demand Impact
Variable Speed Refrig. Compressors

Monthly Total Fossil Fuel Impact
Variable Speed Refrig. Compressors

December Peak Day Demand Profile
Variable Speed Refrig. Compressors

Measure ID	RWNE8536		Variable Speed Refrig. Compressors		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$2.5298	Measure Life (Yrs)	18	Mutual Exclusivity	Yes
Potential Market	90.0%	Modified Market	±1.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	3.454	14.4			
Total	3.454	12.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	3 PM - 4 PM	0.77	13.6
Minimum Impact	July	Weekday	4 PM - 5 PM	-0.03	-0.6
System Coincident	December	Weekday	4 PM - 5 PM	0.16	3.7

Measure ID	RWXE8540		High Efficiency DX AC-COP 2.9		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0032	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	18.0%	Modified Market	3.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.019	22.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.019	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.01	0.2
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.1

Measure ID	RWXE8552		Compact Fluorescent Lamp EXIT Signs		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0109	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.001	0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.4			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.036	0.1			
Total	0.116	0.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	1 AM - 2 AM	0.02	0.3
Minimum Impact	December	Weekday	11 PM - Midnight	0.01	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.2

Measure ID	RWNE8552		Compact Fluorescent Lamp EXIT Signs		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	New	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0026	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	75.0%	Modified Market	75.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.3			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.030	0.1			
Total	0.109	0.4	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	9 AM - 10 AM	0.02	0.5
Minimum Impact	November	Weekday	5 AM - 6 AM	0.01	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.3

Measure ID	RWXE8553		LED Lamp EXIT Signs		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0362	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	90.0%	Modified Market	49.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.001	0.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.4			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.058	0.1			
Total	0.186	0.4	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	1 AM - 2 AM	0.02	0.5
Minimum Impact	September	Weekday	10 PM - 11 PM	0.02	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Measure ID	RWNE8553		LED Lamp EXIT Signs		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0189	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	40.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.001	1.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.3			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.052	0.2			
Total	0.180	0.6	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	9 AM - 10 AM	0.03	0.7
Minimum Impact	November	Weekday	5 AM - 6 AM	0.02	0.6
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.4

Monthly Total Electricity Impact
LED Lamp EXIT Signs

December Peak Day Demand Impact
LED Lamp EXIT Signs

Monthly Total Fossil Fuel Impact
LED Lamp EXIT Signs

December Peak Day Demand Profile
LED Lamp EXIT Signs

Measure ID	RWXE8554		Heat Pump Water Heater		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0720	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	45.0%	Modified Market	15.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.100	74.6	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.100	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	Noon - 1 PM	0.03	0.5
Minimum Impact	November	Weekday	5 AM - 6 AM	0.01	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Measure ID	RWNE8554		Heat Pump Water Heater		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	New	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0720	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	50.0%	Modified Market	16.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.089	74.2	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.089	0.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	Noon - 1 PM	0.03	0.7
Minimum Impact	November	Weekday	5 AM - 6 AM	0.00	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.4

Monthly Total Electricity Impact
Heat Pump Water Heater

December Peak Day Demand Impact
Heat Pump Water Heater

Monthly Total Fossil Fuel Impact
Heat Pump Water Heater

December Peak Day Demand Profile
Heat Pump Water Heater

Measure ID	RWXE8556		High Efficiency DX AC-COP 3.2		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0079	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	18.0%	Modified Market	8.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.026	29.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.026	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.02	0.3
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.1

Measure ID	RWNE8556		High Efficiency DX AC-COP 3.2		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0079	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	29.0%	Modified Market	12.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.005	9.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.005	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.00	0.1
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	RWXE8557		Optical Reflectors-2X4 Recessed		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0071	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.014	15.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.001	8.7			
Indoor Lighting	0.030	0.9			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.045	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	8 AM - 9 AM	0.03	0.5
Minimum Impact	November	Weekday	11 PM - Midnight	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.2

Measure ID	RWNE8557			Optical Reflectors-2X4 Recessed	
Base ID	RWNE7000			Base Case-Standard	
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0071	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.009	16.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.002	8.2			
Indoor Lighting	0.025	1.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.035	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	8 AM - 9 AM	0.02	0.5
Minimum Impact	December	Weekday	11 PM - Midnight	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.3

Measure ID	RWXE8558		8' Fluor. Energy Saver Lamps-F96T12ES		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0009	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	~0.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.074	2.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.024	0.1			
Total	0.098	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	5 PM - 6 PM	0.03	0.4
Minimum Impact	November	Weekday	5 AM - 6 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.03	0.4

Monthly Total Electricity Impact
8' Fluor. Energy Saver Lamps-F96T12ES

December Peak Day Demand Impact
8' Fluor. Energy Saver Lamps-F96T12ES

Monthly Total Fossil Fuel Impact
8' Fluor. Energy Saver Lamps-F96T12ES

December Peak Day Demand Profile
8' Fluor. Energy Saver Lamps-F96T12ES

Measure ID	RWXE8559		Electronic Ballasts-8' T12-Base EEM		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0329	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.058	1.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.019	0.0			
Total	0.077	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	5 PM - 6 PM	0.02	0.3
Minimum Impact	November	Weekday	5 AM - 6 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Monthly Total Electricity Impact
Electronic Ballasts-8' T12-Base EEM

December Peak Day Demand Impact
Electronic Ballasts-8' T12-Base EEM

Monthly Total Fossil Fuel Impact
Electronic Ballasts-8' T12-Base EEM

December Peak Day Demand Profile
Electronic Ballasts-8' T12-Base EEM

Measure ID	RWNE8559		Electronic Ballasts-8' T12-Base EEM		
Base ID	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0096	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.024	1.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.006	0.0			
Total	0.030	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	5 PM - 6 PM	0.01	0.2
Minimum Impact	November	Weekday	5 AM - 6 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.2

Measure ID	RWXE8560			Optical Reflectors-1X8 Fixtures	
Base ID	RWXE7000			Base Case-Standard	
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0192	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.166	4.9			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.054	0.1			
Total	0.220	0.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	5 PM - 6 PM	0.06	0.9
Minimum Impact	November	Weekday	5 AM - 6 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.06	0.9

Monthly Total Electricity Impact
Optical Reflectors-1X8 Fixtures

December Peak Day Demand Impact
Optical Reflectors-1X8 Fixtures

Monthly Total Fossil Fuel Impact
Optical Reflectors-1X8 Fixtures

December Peak Day Demand Profile
Optical Reflectors-1X8 Fixtures

Measure iD	RWNE8560		Optical Reflectors-1X8 Fixtures		
Base iD	RWNE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0192	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.137	6.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.034	0.1			
Total	0.172	0.6	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	4 PM - 5 PM	0.05	0.9
Minimum Impact	November	Weekday	5 AM - 6 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.05	1.2

Measure ID	RWXE8561		Electronic Ballasts-4' T12-Base SMC		
Base ID	RWXE7661		Base Case for 4' Fluor. SMC Ballasts		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0091	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.005	5.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	2.8			
Indoor Lighting	0.011	0.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	0.0			
Total	0.016	0.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	11 AM - Noon	0.01	0.1
Minimum Impact	July	Weekday	11 PM - Midnight	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	RWXE8562		Electronic Ballasts-8' T12-Base SMC		
Base ID	RWXE7662		Base Case for 8' Fluor. SMC Ballasts		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0282	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.029	0.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.009	0.0			
Total	0.038	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	4 PM - 5 PM	0.01	0.2
Minimum Impact	December	Weekday	5 AM - 6 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.2

Measure ID	RWXE8566		Metal Halide Lamps-250W		
Base ID	RWXE7000		Base Case-Standard		
Market Segment					
Building Type	Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2215	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	1.099	32.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.445	1.1			
Total	1.543	3.4	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	6 AM - 7 AM	0.42	6.8
Minimum Impact	April	Weekday	5 AM - 6 AM	0.04	1.0
System Coincident	December	Weekday	4 PM - 5 PM	0.41	6.1

Monthly Total Electricity Impact
Metal Halide Lamps-250W

December Peak Day Demand Impact
Metal Halide Lamps-250W

Monthly Total Fossil Fuel Impact
Metal Halide Lamps-250W

December Peak Day Demand Profile
Metal Halide Lamps-250W

DETAILED MEASURE IMPACTS-SUMMARY REPORTS

This section contains the detailed measure impact results and market segment data for each DSM case examined for this building type. A complete index of all base and measure cases defined for this building type is shown first. This index represents an expansion of the base and measure matrix presented in Table 1 (residential) or Table 2 (commercial) for the applicable sector. Following this index, a summary report sheet is provided for each DSM measure case in the order shown in the index. The summary report sheet contains a host of information and selected graphs which define and depict the measure impacts and outline the market segment data assumptions utilized for each case in the DBEDT DSM Forecasting models. The variables and figures included in the summary report sheet are described below.

Measure ID: The eight-character alpha-numeric code used to define the measure case. This ID is composed of the 2-letter building code + the 1-letter vintage code + the 1-letter water heater fuel type code + the 4-digit numeric code used to define the base or measure case.

Measure Description: A brief (no more than 38-character) definition of the DSM measure

Base ID: Similar to the Measure ID, this code denotes the base case to which the measure case is compared in order to estimate the measure impacts.

Base Description: Similar to the Measure Description, a brief description of the base case. This description helps to determine if a modified base case was defined to estimate measure impacts.

Market Segment. This section of the summary report sheet contains the market segment data defined for each measure. These are:

Building Type:	The building type to which this measure applies.
Vintage:	The vintage of the building (new or existing).
Floor Area (sf):	The gross floor area of the building in square feet.
Water Heater Fuel:	The fuel type utilized for domestic or service water heating (Gas, Electric, or Oil).
Cost Unit:	The unit of measure utilized to describe the measure cost.
First Cost (\$/unit):	The installed capital cost for the measure in dollars per Cost Unit (93 dollars).
Measure Life (Yrs):	The measure life in years.
Mutual Exclusivity:	A Yes/No entry which denotes if mutual exclusivity considerations apply to this measure. A Yes entry indicates that this measure is mutually exclusive with one or more measures pertaining to this building type, thereby modifying the potential market share available.
Potential Market:	The maximum market share available for this measure. This includes consideration of measure applicability, measure feasibility, and remaining market share for existing vintages.
Modified Market:	The maximum market share available for this measure accounting for mutual exclusivity.
Intra Action:	A Yes/No entry which denotes if intra active considerations apply to this measure. A Yes entry indicates that this measure is intra active with one or more measures if applied as a group to this building type. The total impact in a particular end-use for a group of measures with intra active effects is not the same as the summation of the individual measure impacts. An incremental measure impact reduction is implied, based on the measure loading order.

Annual Energy Impacts By End-Use. This section of the summary report contains the normalized measure impacts by end-use and for the total building by fuel type. Electricity impacts are shown in terms of kWh/square foot and as a percentage of the base case, while fossil fuel impacts are shown as kBtu/square foot and as a percentage of the base case for each end-use and for the total. The end-use impacts shown include:

Cooling (& Auxiliary) :	Space cooling and associated pumps and heat rejection energy (e.g., condensers or cooling tower).
Water Heating:	Storage or central domestic or service water heating system.
Misc. Equipment:	Miscellaneous equipment.
Ventilation:	Supply air fans for conditioning and exhaust air fans.
Indoor Lighting:	Interior lighting (not including EXIT signs).
Outdoor Lighting:	Exterior building lighting.
Central Refrigeration:	Commercial/Industrial refrigeration systems.
Total:	Total building energy use by fuel.

Total Building Peak Demand Impact: This section of the summary report provides peak demand impacts for each measure for selected peak events during the year. Three events are included, the maximum building peak demand impact, the minimum building peak demand impact, and a system coincident peak demand impact (set to December weekday at 4 to 5 PM). For each event the Month, Day Type, and Hour are shown, followed by the normalized total building peak demand impact in Watts/square foot and the percentage of the total base case represented by the impact.

Measure Impact Figures. Four figures are selected and included in each summary report to depict the impacts resulting from each measure. These are:

Monthly Total Electricity Impact: This figure shows the floor area normalized monthly electricity impacts associated with the measure in kWh/square foot.

Monthly Total Fossil Fuel Impact: This figure shows the floor area normalized monthly fossil fuel impacts associated with the measure in kBtu/square foot.

December Peak Day Demand Impact: This figure shows the (selected) system coincident peak day floor area normalized total building demand impact for the measure in Watts/square foot.

December Peak Day Demand Profile: This figure provides the daily total building load profile for the measure and base cases on the (selected) system coincident peak day in kW.

Commercial Non-Refrigerated Warehouse Measure Index Table

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Cases: 50

Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
NRXG7000	NRXG7000	Base Case-Standard	NA	70000
NRXE7000	NRXE7000	Base Case-Standard	NA	70000
NRNG7000	NRNG7000	Base Case-Standard	NA	70000
NRNE7000	NRNE7000	Base Case-Standard	NA	70000
NRXE7614	NRXE7614	Base Case for Clean Condenser Coils	NA	70000
NRXE7616	NRXE7616	Base Case for HVAC Time Clocks	NA	70000
NRXE7661	NRXE7661	Base Case for 4' Fluor. SMC Ballasts	NA	70000
NRXE7662	NRXE7662	Base Case for 8' Fluor. SMC Ballasts	NA	70000
NRXE8501	NRXE7000	4' Fluor. Energy Saver Lamps-F40T12ES	Inlights	70000
NRXE8502	NRXE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	70000
NRNE8502	NRNE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	70000
NRXE8503	NRXE7000	4' T8 Lamps And Electronic Ballasts	Inlights	70000
NRNE8503	NRNE7000	4' T8 Lamps And Electronic Ballasts	Inlights	70000
NRXE8504	NRXE7000	Window Film Retrofit	Cooling	70000
NRNE8505	NRNE7000	Double Pane Heat Mirror Glazing	Cooling	70000
NRXE8506	NRXE7000	Shade Screens	Cooling	70000
NRNE8506	NRNE7000	Shade Screens	Cooling	70000
NRXE8509	NRXE7000	High Pressure Sodium-100 Watts	Exlights	70000
NRNE8509	NRNE7000	High Pressure Sodium-100 Watts	Exlights	70000
NRXE8511	NRXE7000	HID Exterior Floods-70 Watts	Exlights	70000
NRNE8511	NRNE7000	HID Exterior Floods-70 Watts	Exlights	70000
NRXE8514	NRXE7614	Clean Condenser Coils	Cooling	70000
NRXE8516	NRXE7616	HVAC System Time Clocks	Cooling	70000
NRXG8520	NRXG7000	High Efficiency Gas Water Heater	Hotwater	70000
NRNG8520	NRNG7000	High Efficiency Gas Water Heater	Hotwater	70000
NRXG8521	NRXG7000	Point of Use Water Heating	Hotwater	70000
NRNE8521	NRNE7000	Point of Use Water Heating	Hotwater	70000
NRNG8521	NRNG7000	Point of Use Water Heating	Hotwater	70000
NRNE8521	NRNE7000	Point of Use Water Heating	Hotwater	70000
NRXG8523	NRXG7000	Tank Insulation-Fiber Blanket	Hotwater	70000
NRXE8523	NRXE7000	Tank Insulation-Fiber Blanket	Hotwater	70000
NRXE8540	NRXE7000	High Efficiency DX AC-COP 2.9	Cooling	70000
NRXE8552	NRXE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	70000
NRNE8552	NRNE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	70000
NRXE8553	NRXE7000	LED Lamp EXIT Signs	Inlights	70000
NRNE8553	NRNE7000	LED Lamp EXIT Signs	Inlights	70000
NRXE8554	NRXE7000	Heat Pump Water Heater	Hotwater	70000
NRNE8554	NRNE7000	Heat Pump Water Heater	Hotwater	70000
NRXE8556	NRXE7000	High Efficiency DX AC-COP 3.2	Cooling	70000
NRNE8556	NRNE7000	High Efficiency DX AC-COP 3.2	Cooling	70000
NRXE8557	NRXE7000	Optical Reflectors-2X4 Recessed	Inlights	70000
NRNE8557	NRNE7000	Optical Reflectors-2X4 Recessed	Inlights	70000
NRXE8558	NRXE7000	8' Fluor. Energy Saver Lamps-F96T12ES	Inlights	70000
NRXE8559	NRXE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	70000
NRNE8559	NRNE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	70000
NRXE8560	NRXE7000	Optical Reflectors-1X8 Fixtures	Inlights	70000
NRNE8560	NRNE7000	Optical Reflectors-1X8 Fixtures	Inlights	70000
NRXE8561	NRXE7661	Electronic Ballasts-4' T12-Base SMC	Inlights	70000
NRXE8562	NRXE7662	Electronic Ballasts-8' T12-Base SMC	Inlights	70000
NRXE8566	NRXE7000	Metal Halide Lamps-250W	Inlights	70000

Measure ID	NRXE8501		4' Fluor. Energy Saver Lamps-F40T12ES		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0012	Measure Life (Yrs)	5	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.018	5.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.003	5.4			
Indoor Lighting	0.055	2.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.075	1.4	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.03	2.5
Minimum Impact	October	Weekday	7 PM - 8 PM	0.00	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.03	2.4

Measure ID	NRXE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0673	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.018	5.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.003	5.4			
Indoor Lighting	0.055	2.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.075	1.4	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.03	2.5
Minimum Impact	October	Weekday	7 PM - 8 PM	0.00	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.03	2.4

Measure ID	NRNE8502			Electronic Ballasts-4' T12-Base EEM	
Base ID	NRNE7000			Base Case-Standard	
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0461	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.008	3.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.002	3.6			
Indoor Lighting	0.031	2.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.040	1.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	8 AM - 9 AM	0.03	4.7
Minimum Impact	September	Weekday	11 PM - Midnight	0.00	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.02	1.7

Measure ID	NRXE8503		4' T8 Lamps And Electronic Ballasts		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0690	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.033	9.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.005	9.8			
Indoor Lighting	0.100	4.6			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.138	2.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.06	4.5
Minimum Impact	October	Weekday	8 PM - 9 PM	0.00	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.05	4.3

Measure ID	NRNE8503			4' T8 Lamps And Electronic Ballasts	
Base ID	NRNE7000			Base Case-Standard	
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0467	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.053	22.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.011	20.7			
Indoor Lighting	1.375	93.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.439	34.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	11 AM - Noon	0.40	43.5
Minimum Impact	March	Weekday	7 AM - 8 AM	0.08	29.3
System Coincident	December	Weekday	4 PM - 5 PM	0.39	43.5

Measure ID	NRXE8504		Window Film Retrofit		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0054	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	9.4%	Modified Market	3.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.014	4.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.002	3.8			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.016	0.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	8 AM - 9 AM	0.01	1.0
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.5

Measure ID	NRNE8505		Double Pane Heat Mirror Glazing		
Base ID	NRNE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1638	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	16.2%	Modified Market	5.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.021	8.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.005	10.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.026	0.6	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	8 AM - 9 AM	0.02	4.0
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.01	1.1

Monthly Total Electricity Impact
Double Pane Heat Mirror Glazing

December Peak Day Demand Impact
Double Pane Heat Mirror Glazing

Monthly Total Fossil Fuel Impact
Double Pane Heat Mirror Glazing

December Peak Day Demand Profile
Double Pane Heat Mirror Glazing

Measure ID	NRXE8506		Shade Screens		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0074	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	9.4%	Modified Market	3.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.025	7.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.003	6.5			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.028	0.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	10 AM - 11 AM	0.02	1.5
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.9

Measure ID	NRNE8506		Shade Screens		
Base ID	NRNE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0074	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	16.2%	Modified Market	5.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.017	7.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.003	6.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.020	0.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	8 AM - 9 AM	0.02	3.9
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.01	1.0

Measure ID	NRXE8509		High Pressure Sodium-100 Watts		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0214	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.110	25.0			
Central Refrigeration	0.000	NA			
Total	0.110	2.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	11 PM - Midnight	0.02	5.5
Minimum Impact	November	Weekday	4 PM - 5 PM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	NRNE8509		High Pressure Sodium-100 Watts		
Base ID	NRNE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0169	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.110	25.0			
Central Refrigeration	0.000	NA			
Total	0.110	2.6	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	6 PM - 7 PM	0.02	5.9
Minimum Impact	May	Weekday	4 PM - 5 PM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	NRXE8511		HID Exterior Floods-70 Watts		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0151	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.047	10.7			
Central Refrigeration	0.000	NA			
Total	0.047	0.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	11 PM - Midnight	0.01	2.3
Minimum Impact	May	Weekday	8 AM - 9 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	NRNE8511		HID Exterior Floods-70 Watts		
Base ID	NRNE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0128	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.047	10.7			
Central Refrigeration	0.000	NA			
Total	0.047	1.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	5 PM - 6 PM	0.01	1.7
Minimum Impact	July	Weekday	7 AM - 8 AM	0.00	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	NRXE8514		Clean Condenser Coils		
Base ID	NRXE7614		Base Case for Clean Condenser Coils		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0010	Measure Life (Yrs)	1	Mutual Exclusivity	No
Potential Market	2.0%	Modified Market	2.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.089	20.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.089	1.6	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.05	3.8
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.03	2.8

Measure ID	NRXE8516		HVAC System Time Clocks		
Base ID	NRXE7616		Base Case for HVAC Time Clocks		
Market Segment					
Building Type	Non-Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0019	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	20.8%	Modified Market	20.8%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.001	0.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.115	70.7			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.116	2.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	8 PM - 9 PM	0.02	3.8
Minimum Impact	July	Weekday	9 AM - 10 AM	-0.00	-0.2
System Coincident	December	Weekday	4 PM - 5 PM	-0.00	-0.0

Monthly Total Electricity Impact
HVAC System Time Clocks

December Peak Day Demand Impact
HVAC System Time Clocks

Monthly Total Fossil Fuel Impact
HVAC System Time Clocks

December Peak Day Demand Profile
HVAC System Time Clocks

Measure ID	NRXG8520		High Efficiency Gas Water Heater		
Base ID	NRXG7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0015	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	40.0%	Modified Market	13.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.027	7.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.000	0.0	Total	0.028	7.7
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	NRNG8520		High Efficiency Gas Water Heater		
Base ID	NRNG7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0015	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	64.0%	Modified Market	21.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.005	2.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.000	0.0	Total	0.003	1.4
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	NRXG8521		Point of Use Water Heating		
Base ID	NRXG7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0057	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	33.8%	Modified Market	11.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.020	NA	Water Heating	0.361	100.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.020	-0.4	Total	0.362	100.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	March	Weekday	4 PM - 5 PM	-0.01	-0.6
System Coincident	December	Weekday	4 PM - 5 PM	-0.01	-0.6

Measure ID	NRXE8521		Point of Use Water Heating		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0057	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	33.8%	Modified Market	%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.016	43.6	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.016	0.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 PM - 4 PM	0.00	0.2
Minimum Impact	September	Weekday	5 AM - 6 AM	0.00	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.2

Measure ID	NRNG8521		Point of Use Water Heating		
Base ID	NRNG7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0051	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	25.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.020	NA	Water Heating	0.216	100.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.020	-0.5	Total	0.216	100.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	March	Weekday	3 PM - 4 PM	-0.01	-0.8
System Coincident	December	Weekday	4 PM - 5 PM	-0.01	-0.8

Measure ID	NRNE8521		Point of Use Water Heating		
Base ID	NRNE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0051	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	25.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.008	27.2	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.008	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	2 PM - 3 PM	0.00	0.1
Minimum Impact	September	Weekday	8 PM - 9 PM	0.00	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	NRXG8523		Tank Insulation-Fiber Blanket		
Base ID	NRXG7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0003	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	6.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.134	36.9
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.000	0.0	Total	0.134	37.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
Tank Insulation-Fiber Blanket

December Peak Day Demand Impact
Tank Insulation-Fiber Blanket

Monthly Total Fossil Fuel Impact
Tank Insulation-Fiber Blanket

December Peak Day Demand Profile
Tank Insulation-Fiber Blanket

Measure ID	NRXE8523		Tank Insulation-Fiber Blanket		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0003	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	6.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.008	20.9	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.008	0.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	5 PM - 6 PM	0.00	0.1
Minimum Impact	August	Weekday	4 PM - 5 PM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	NRXE8540		High Efficiency DX AC-COP 2.9		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0091	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	19.0%	Modified Market	7.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.080	22.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.080	1.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.05	3.6
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.03	2.5

Measure iD	NRXE8552		Compact Fluorescent Lamp EXIT Signs		
Base iD	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0047	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.001	0.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.035	0.6	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	8 AM - 9 AM	0.00	0.5
Minimum Impact	April	Weekday	8 PM - 9 PM	0.00	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.3

Measure ID	NRNE8552		Compact Fluorescent Lamp EXIT Signs		
Base ID	NRNE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0011	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	75.0%	Modified Market	75.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.001	0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.035	0.8	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	8 AM - 9 AM	0.03	4.3
Minimum Impact	September	Weekday	11 PM - Midnight	0.00	1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.5

Measure ID	NRXE8553		LED Lamp EXIT Signs		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0155	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	90.0%	Modified Market	49.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.001	0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.056	1.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	8 AM - 9 AM	0.01	0.8
Minimum Impact	June	Weekday	11 PM - Midnight	0.01	1.4
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.5

Measure ID	NRNE8553		LED Lamp EXIT Signs		
Base ID	NRNE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0081	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	40.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.001	0.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.056	1.3	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	8 AM - 9 AM	0.03	4.7
Minimum Impact	September	Weekday	11 PM - Midnight	0.01	1.7
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.8

Measure ID	NRXE8554		Heat Pump Water Heater		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0120	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	45.0%	Modified Market	15.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.027	74.6	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.027	0.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	Noon - 1 PM	0.01	0.6
Minimum Impact	November	Weekday	11 PM - Midnight	0.00	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.6

Measure ID	NRNE8554		Heat Pump Water Heater		
Base ID	NRNE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0120	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	50.0%	Modified Market	16.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.021	74.3	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.021	0.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	Noon - 1 PM	0.01	0.7
Minimum Impact	November	Weekday	5 AM - 6 AM	0.00	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.7

Measure iD	NRXE8556			High Efficiency DX AC-COP 3.2	
Base iD	NRXE7000			Base Case-Standard	
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0226	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	19.0%	Modified Market	7.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.106	29.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.106	2.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.06	4.7
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.04	3.4

Measure ID	NRNE8556		High Efficiency DX AC-COP 3.2		
Base ID	NRNE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0151	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	26.0%	Modified Market	10.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.022	9.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.022	0.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.01	1.2
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.9

Measure ID	NRXE8557		Optical Reflectors-2X4 Recessed		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0362	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.037	10.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.005	11.0			
Indoor Lighting	0.111	5.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.154	2.8	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.06	5.0
Minimum Impact	April	Weekday	8 PM - 9 PM	0.00	0.6
System Coincident	December	Weekday	4 PM - 5 PM	0.06	4.8

Measure ID	NRNE8557		Optical Reflectors-2X4 Recessed		
Base ID	NRNE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0362	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.023	9.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.006	10.7			
Indoor Lighting	0.092	6.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.121	2.9	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.05	5.2
Minimum Impact	March	Weekday	7 AM - 8 AM	0.00	0.9
System Coincident	December	Weekday	4 PM - 5 PM	0.05	5.1

Measure ID	NRXE8558		8' Fluor. Energy Saver Lamps-F96T12ES		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0004	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.027	1.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.027	0.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	10 AM - 11 AM	0.01	0.7
Minimum Impact	November	Weekday	8 PM - 9 PM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.7

Measure ID	NRXE8559		Electronic Ballasts-8' T12-Base EEM		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0161	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.022	1.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.022	0.4	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	8 AM - 9 AM	0.01	0.9
Minimum Impact	November	Weekday	11 PM - Midnight	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.6

Measure ID	NRNE8559			Electronic Ballasts-8' T12-Base EEM	
Base ID	NRNE7000			Base Case-Standard	
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0043	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.007	0.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.007	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	8 AM - 9 AM	0.00	0.4
Minimum Impact	September	Weekday	11 PM - Midnight	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.3

Measure ID	NRXE8560		Optical Reflectors-1X8 Fixtures		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0094	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.060	2.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.060	1.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	10 AM - 11 AM	0.02	1.7
Minimum Impact	April	Weekday	8 PM - 9 PM	0.00	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.02	1.7

Measure ID	NRNE8560			Optical Reflectors-1X8 Fixtures	
Base ID	NRNE7000			Base Case-Standard	
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	New
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0086	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.046	3.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.046	1.1	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	8 AM - 9 AM	0.02	2.5
Minimum Impact	November	Weekday	7 AM - 8 AM	0.00	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.02	1.7

Monthly Total Electricity Impact
Optical Reflectors-1X8 Fixtures

December Peak Day Demand Impact
Optical Reflectors-1X8 Fixtures

Monthly Total Fossil Fuel Impact
Optical Reflectors-1X8 Fixtures

December Peak Day Demand Profile
Optical Reflectors-1X8 Fixtures

Measure ID	NRXE8561		Electronic Ballasts-4' T12-Base SMC		
Base ID	NRXE7661		Base Case for 4' Fluor. SMC Ballasts		
Market Segment					
Building Type	Non-Refrigerated Warehouse		Vintage	Existing	
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0461	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.013	3.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.002	3.6			
Indoor Lighting	0.038	1.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.052	1.0	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.02	1.7
Minimum Impact	September	Weekday	6 PM - 7 PM	0.00	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.02	1.6

Measure ID	NRXE8562		Electronic Ballasts-8' T12-Base SMC		
Base ID	NRXE7662		Base Case for 8' Fluor. SMC Ballasts		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0138	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.010	0.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.010	0.2	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	4 PM - 5 PM	0.00	0.3
Minimum Impact	December	Weekday	6 PM - 7 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.3

Measure ID	NRXE8566		Metal Halide Lamps-250W		
Base ID	NRXE7000		Base Case-Standard		
Market Segment					
Building Type	Non-Refrigerated Warehouse			Vintage	Existing
Floor Area (sf)	70000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1087	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.003	0.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	NA
Ventilation	0.000	0.0			
Indoor Lighting	0.624	29.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.627	11.5	Total	0.000	NA
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	10 AM - 11 AM	0.16	12.9
Minimum Impact	January	Weekday	6 AM - 7 AM	0.04	9.3
System Coincident	December	Weekday	4 PM - 5 PM	0.15	12.6

DETAILED MEASURE IMPACTS-SUMMARY REPORTS

This section contains the detailed measure impact results and market segment data for each DSM case examined for this building type. A complete index of all base and measure cases defined for this building type is shown first. This index represents an expansion of the base and measure matrix presented in Table 1 (residential) or Table 2 (commercial) for the applicable sector. Following this index, a summary report sheet is provided for each DSM measure case in the order shown in the index. The summary report sheet contains a host of information and selected graphs which define and depict the measure impacts and outline the market segment data assumptions utilized for each case in the DBEDT DSM Forecasting models. The variables and figures included in the summary report sheet are described below.

Measure ID: The eight-character alpha-numeric code used to define the measure case. This ID is composed of the 2-letter building code + the 1-letter vintage code + the 1-letter water heater fuel type code + the 4-digit numeric code used to define the base or measure case.

Measure Description: A brief (no more than 38-character) definition of the DSM measure

Base ID: Similar to the Measure ID, this code denotes the base case to which the measure case is compared in order to estimate the measure impacts.

Base Description: Similar to the Measure Description, a brief description of the base case. This description helps to determine if a modified base case was defined to estimate measure impacts.

Market Segment. This section of the summary report sheet contains the market segment data defined for each measure. These are:

Building Type:	The building type to which this measure applies.
Vintage:	The vintage of the building (new or existing).
Floor Area (sf):	The gross floor area of the building in square feet.
Water Heater Fuel:	The fuel type utilized for domestic or service water heating (Gas, Electric, or Oil).
Cost Unit:	The unit of measure utilized to describe the measure cost.
First Cost (\$/unit):	The installed capital cost for the measure in dollars per Cost Unit (93 dollars).
Measure Life (Yrs):	The measure life in years.
Mutual Exclusivity:	A Yes/No entry which denotes if mutual exclusivity considerations apply to this measure. A Yes entry indicates that this measure is mutually exclusive with one or more measures pertaining to this building type, thereby modifying the potential market share available.
Potential Market:	The maximum market share available for this measure. This includes consideration of measure applicability, measure feasibility, and remaining market share for existing vintages.
Modified Market:	The maximum market share available for this measure accounting for mutual exclusivity.
Intra Action:	A Yes/No entry which denotes if intra active considerations apply to this measure. A Yes entry indicates that this measure is intra active with one or more measures if applied as a group to this building type. The total impact in a particular end-use for a group of measures with intra active effects is not the same as the summation of the individual measure impacts. An incremental measure impact reduction is implied, based on the measure loading order.

Annual Energy Impacts By End-Use. This section of the summary report contains the normalized measure impacts by end-use and for the total building by fuel type. Electricity impacts are shown in terms of kWh/square foot and as a percentage of the base case, while fossil fuel impacts are shown as kBtu/square foot and as a percentage of the base case for each end-use and for the total. The end-use impacts shown include:

Cooling (& Auxiliary) :	Space cooling and associated pumps and heat rejection energy (e.g., condensers or cooling tower).
Water Heating:	Storage or central domestic or service water heating system.
Misc. Equipment:	Miscellaneous equipment.
Ventilation:	Supply air fans for conditioning and exhaust air fans.
Indoor Lighting:	Interior lighting (not including EXIT signs).
Outdoor Lighting:	Exterior building lighting.
Central Refrigeration:	Commercial/Industrial refrigeration systems.
Total:	Total building energy use by fuel.

Total Building Peak Demand Impact: This section of the summary report provides peak demand impacts for each measure for selected peak events during the year. Three events are included, the maximum building peak demand impact, the minimum building peak demand impact, and a system coincident peak demand impact (set to December weekday at 4 to 5 PM). For each event the Month, Day Type, and Hour are shown, followed by the normalized total building peak demand impact in Watts/square foot and the percentage of the total base case represented by the impact.

Measure Impact Figures. Four figures are selected and included in each summary report to depict the impacts resulting from each measure. These are:

Monthly Total Electricity Impact: This figure shows the floor area normalized monthly electricity impacts associated with the measure in kWh/square foot.

Monthly Total Fossil Fuel Impact: This figure shows the floor area normalized monthly fossil fuel impacts associated with the measure in kBtu/square foot.

December Peak Day Demand Impact: This figure shows the (selected) system coincident peak day floor area normalized total building demand impact for the measure in Watts/square foot.

December Peak Day Demand Profile: This figure provides the daily total building load profile for the measure and base cases on the (selected) system coincident peak day in kW.

Commercial Hospital Measure Index Table

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Cases: 76

Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
HOXG7000	HOXG7000	Base Case-Standard	NA	258000
HOXE7000	HOXE7000	Base Case-Standard	NA	258000
HONG7000	HONG7000	Base Case-Standard	NA	258000
HONE7000	HONE7000	Base Case-Standard	NA	258000
HOXE7617	HOXE7617	Base Case For EMS	NA	258000
HONE7617	HONE7617	Base Case For EMS	NA	258000
HOXE7646	HOXE7646	Base Case for Chiller Optimizer	NA	258000
HONE7646	HONE7646	Base Case for Chiller Optimizer	NA	258000
HOXE7648	HOXE7648	Base Case For Cooling Tower Prop Fans	NA	258000
HONE7648	HONE7648	Base Case For Cooling Tower Prop Fans	NA	258000
HOXE7661	HOXE7661	Base Case for 4' Fluor. SMC Ballasts	NA	258000
HOXE7662	HOXE7662	Base Case for 8' Fluor. SMC Ballasts	NA	258000
HOXE8501	HOXE7000	4' Fluor. Energy Saver Lamps-F40T12ES	Inlights	258000
HOXE8502	HOXE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	258000
HONE8502	HONE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	258000
HOXE8503	HOXE7000	4' T8 Lamps And Electronic Ballasts	Inlights	258000
HONE8503	HONE7000	4' T8 Lamps And Electronic Ballasts	Inlights	258000
HOXE8504	HOXE7000	Window Film Retrofit	Cooling	258000
HONE8505	HONE7000	Double Pane Heat Mirror Glazing	Cooling	258000
HOXE8506	HOXE7000	Shade Screens	Cooling	258000
HONE8506	HONE7000	Shade Screens	Cooling	258000
HOXE8509	HOXE7000	High Pressure Sodium-100 Watts	Exlights	258000
HONE8509	HONE7000	High Pressure Sodium-100 Watts	Exlights	258000
HOXE8510	HOXE7000	High Pressure Sodium-250 Watts	Exlights	258000
HOXE8511	HOXE7000	HID Exterior Floods-70 Watts	Exlights	258000
HONE8511	HONE7000	HID Exterior Floods-70 Watts	Exlights	258000
HOXE8512	HOXE7000	Occupancy Sensor Pack-200 SF	Inlights	258000
HONE8512	HONE7000	Occupancy Sensor Pack-200 SF	Inlights	258000
HOXE8515	HOXE7000	VSD Chilled Water Loop Pump	Cooling	258000
HONE8515	HONE7000	VSD Chilled Water Loop Pump	Cooling	258000
HOXE8517	HOXE7617	Energy Management System	Cooling	258000
HONE8517	HONE7617	Energy Management System	Cooling	258000
HOXE8518	HOXE7000	Duct Insulation Material	Cooling	258000
HONE8518	HONE7000	Duct Insulation Material	Cooling	258000
HOXG8524	HOXG7000	Active Solar Water Heating	Hotwater	258000
HOXE8524	HOXE7000	Active Solar Water Heating	Hotwater	258000
HONG8524	HONG7000	Active Solar Water Heating	Hotwater	258000
HONE8524	HONE7000	Active Solar Water Heating	Hotwater	258000
HOXE8541	HOXE7000	High Efficiency Centrifugal Chiller	Cooling	258000
HONE8541	HONE7000	High Efficiency Centrifugal Chiller	Cooling	258000
HOXE8542	HOXE7000	VSD Centrifugal Chiller	Cooling	258000
HONE8542	HONE7000	VSD Centrifugal Chiller	Cooling	258000
HOXE8543	HOXE7000	Gas Absorption Chiller	Cooling	258000
HONE8543	HONE7000	Gas Absorption Chiller	Cooling	258000
HOXE8544	HOXE7000	Chiller Strainer Cycle	Cooling	258000
HONE8544	HONE7000	Chiller Strainer Cycle	Cooling	258000
HOXE8545	HOXE7000	Chilled Water Reset Controls	Cooling	258000
HOXE8546	HOXE7646	Chiller Optimizer Controls	Cooling	258000
HONE8546	HONE7646	Chiller Optimizer Controls	Cooling	258000
HOXE8547	HOXE7000	Thermal Energy Storage-Ice On Coil	Cooling	258000
HONE8547	HONE7000	Thermal Energy Storage-Ice On Coil	Cooling	258000
HOXE8548	HOXE7648	Cooling Tower Propeller Fans	Cooling	258000
HONE8548	HONE7648	Cooling Tower Propeller Fans	Cooling	258000
HOXE8549	HOXE7000	Two-Speed Cooling Tower Fans	Cooling	258000
HONE8549	HONE7000	Two-Speed Cooling Tower Fans	Cooling	258000
HOXE8550	HOXE7000	VSD Cooling Tower Fans	Cooling	258000
HONE8550	HONE7000	VSD Cooling Tower Fans	Cooling	258000
HOXE8551	HOXE7000	Waste Heat Recovery	Hotwater	258000

Commercial Hospital Measure Index Table

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Cases: 76

Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
HONE8551	HONE7000	Waste Heat Recovery	Hotwater	258000
HOXE8552	HOXE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	258000
HONE8552	HONE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	258000
HOXE8553	HOXE7000	LED Lamp EXIT Signs	Inlights	258000
HONE8553	HONE7000	LED Lamp EXIT Signs	Inlights	258000
HOXE8557	HOXE7000	Optical Reflectors-2X4 Recessed	Inlights	258000
HONE8557	HONE7000	Optical Reflectors-2X4 Recessed	Inlights	258000
HOXE8558	HOXE7000	8' Fluor. Energy Saver Lamps-F96T12ES	Inlights	258000
HOXE8559	HOXE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	258000
HONE8559	HONE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	258000
HOXE8560	HOXE7000	Optical Reflectors-1X8 Fixtures	Inlights	258000
HONE8560	HONE7000	Optical Reflectors-1X8 Fixtures	Inlights	258000
HOXE8561	HOXE7661	Electronic Ballasts-4' T12-Base SMC	Inlights	258000
HOXE8562	HOXE7662	Electronic Ballasts-8' T12-Base SMC	Inlights	258000
HOXE8563	HOXE7000	Compact Fluorescent Lamps-15W	Inlights	258000
HONE8563	HONE7000	Compact Fluorescent Lamps-15W	Inlights	258000
HOXE8564	HOXE7000	Compact Fluorescent Lamps-26W	Inlights	258000
HONE8564	HONE7000	Compact Fluorescent Lamps-26W	Inlights	258000

Measure ID	HOXE8501		4' Fluor. Energy Saver Lamps-F40T12ES		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0117	Measure Life (Yrs)	5	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.680	4.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.161	4.1			
Indoor Lighting	1.492	13.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.333	4.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	8 AM - 9 AM	0.41	6.0
Minimum Impact	April	Weekday	4 AM - 5 AM	0.18	4.9
System Coincident	December	Weekday	4 PM - 5 PM	0.30	4.3

Measure iD	HOXE8502		Electronic Ballasts-4' T12-Base EEM		
Base iD	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.6725	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.680	4.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.161	4.1			
Indoor Lighting	1.492	13.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.333	4.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	8 AM - 9 AM	0.41	6.0
Minimum Impact	April	Weekday	4 AM - 5 AM	0.18	4.9
System Coincident	December	Weekday	4 PM - 5 PM	0.30	4.3

Measure ID	H0NE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	H0NE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		V'ntage		New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.4419	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.288	2.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.090	2.6			
Indoor Lighting	0.822	9.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.200	2.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	8 PM - 9 PM	0.22	4.6
Minimum Impact	April	Weekday	4 AM - 5 AM	0.09	3.1
System Coincident	December	Weekday	4 PM - 5 PM	0.17	2.8

Measure ID	HOXE8503			4' T8 Lamps And Electronic Ballasts	
Base ID	HOXE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.6897	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.252	8.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.298	7.6			
Indoor Lighting	2.745	24.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	4.295	8.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.71	9.1
Minimum Impact	April	Weekday	4 AM - 5 AM	0.33	9.1
System Coincident	December	Weekday	4 PM - 5 PM	0.56	7.9

Measure ID	HONE8503		4' T8 Lamps And Electronic Ballasts		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.4471	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.431	4.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.136	3.9			
Indoor Lighting	1.221	13.9			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.788	4.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	8 PM - 9 PM	0.28	6.0
Minimum Impact	April	Weekday	4 AM - 5 AM	0.14	4.7
System Coincident	December	Weekday	4 PM - 5 PM	0.25	4.2

Measure ID	HOXE8504		Window Film Retrofit		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0338	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	1.8%	Modified Market	0.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.408	2.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.135	3.4			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.543	1.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	Midnight - 1 AM	0.16	3.6
Minimum Impact	January	Weekday	7 AM - 8 AM	0.03	0.6
Sysem Coincident	December	Weekday	4 PM - 5 PM	0.06	0.8

Measure ID	HONE8505		Double Pane Heat Mirror Glazing		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1373	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	2.4%	Modified Market	0.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.545	5.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.247	7.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.792	1.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	Noon - 1 PM	0.19	2.9
Minimum Impact	February	Weekday	6 PM - 7 PM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.08	1.4

Measure ID	HOXE8506		Shade Screens		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage	Existing	
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0464	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	1.8%	Modified Market	0.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.595	3.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.201	5.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.796	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	Midnight - 1 AM	0.19	4.3
Minimum Impact	January	Weekday	7 AM - 8 AM	0.04	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.08	1.2

Measure ID	HONE8506		Shade Screens		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage	New	
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0464	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	2.4%	Modified Market	0.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.359	3.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.162	4.6			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.521	1.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	Noon - 1 PM	0.14	2.1
Minimum Impact	April	Weekday	7 PM - 8 PM	-0.03	-0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.06	0.9

Measure ID	HOXE8509		High Pressure Sodium-100 Watts		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0097	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.050	9.0			
Central Refrigeration	0.000	NA			
Total	0.050	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	11 PM - Midnight	0.01	0.3
Minimum Impact	August	Weekday	5 PM - 6 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	H0NE8509		High Pressure Sodium-100 Watts		
Base ID	H0NE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage	New	
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0076	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.050	11.0			
Central Refrigeration	0.000	NA			
Total	0.050	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	6 PM - 7 PM	0.01	0.2
Minimum Impact	November	Weekday	10 AM - 11 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	HOXE8510			High Pressure Sodium-250 Watts	
Base ID	HOXE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0140	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.100	18.1			
Central Refrigeration	0.000	NA			
Total	0.100	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	10 PM - 11 PM	0.02	0.5
Minimum Impact	August	Weekday	5 PM - 6 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	HOXE8511		HID Exterior Floods-70 Watts		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage	Existing	
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0123	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.038	7.0			
Central Refrigeration	0.000	NA			
Total	0.038	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	11 PM - Midnight	0.01	0.2
Minimum Impact	January	Weekday	3 PM - 4 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	H0NE8511		HID Exterior Floods-70 Watts		
Base ID	H0NE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0104	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.038	8.5			
Central Refrigeration	0.000	NA			
Total	0.038	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	10 PM - 11 PM	0.01	0.2
Minimum Impact	April	Weekday	2 PM - 3 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	HOXE8512			Occupancy Sensor Pack-200 SF	
Base ID	HOXE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0642	Measure Life (Yrs)	8	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.205	1.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.055	1.4			
Indoor Lighting	0.563	5.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.824	1.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	Midnight - 1 AM	0.21	4.7
Minimum Impact	December	Weekday	5 PM - 6 PM	0.08	1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.08	1.1

Measure iD	HONE8512		Occupancy Sensor Pack-200 SF		
Base iD	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0642	Measure Life (Yrs)	8	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.087	0.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.038	1.1			
Indoor Lighting	0.145	1.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.271	0.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	Noon - 1 PM	0.07	1.0
Minimum Impact	January	Weekday	7 AM - 8 AM	0.01	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.05	0.9

Measure ID	HOXE8515		VSD Chilled Water Loop Pump		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0402	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	33.5%	Modified Market	33.5%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.647	10.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.647	3.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	9 PM - 10 PM	0.29	5.5
Minimum Impact	July	Weekday	1 PM - 2 PM	0.12	1.6
System Coincident	December	Weekday	4 PM - 5 PM	0.18	2.5

Measure ID	HONE8515		VSD Chilled Water Loop Pump		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0182	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	35.5%	Modified Market	35.5%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.642	6.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.642	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	7 AM - 8 AM	0.11	2.3
Minimum Impact	August	Weekday	9 PM - 10 PM	-0.03	-0.7
System Coincident	December	Weekday	4 PM - 5 PM	0.08	1.3

Measure ID	HOXE8517		Energy Management System		
Base ID	HOXE7617		Base Case For EMS		
Market Segment					
Building Type	Hospital		Vintage	Existing	
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$1.1600	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	47.9%	Modified Market	22.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	3.621	21.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	0.1			
Indoor Lighting	0.362	3.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	3.987	7.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.63	7.9
Minimum Impact	November	Weekday	4 PM - 5 PM	0.23	3.1
System Coincident	December	Weekday	4 PM - 5 PM	0.39	5.5

Measure ID	H0NE8517		Energy Management System		
Base ID	H0NE7617		Base Case For EMS		
Market Segment					
Building Type	Hospital		Vintage	New	
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.7500	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	50.6%	Modified Market	23.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	2.396	19.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.396	5.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.36	5.3
Minimum Impact	July	Weekday	10 PM - 11 PM	0.15	3.6
System Coincident	December	Weekday	4 PM - 5 PM	0.28	4.5

Measure ID	HOXE8518		Duct Insulation Material		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage	Existing	
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0289	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	22.0%	Modified Market	22.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.585	3.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.585	1.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	5 PM - 6 PM	0.17	2.4
Minimum Impact	January	Weekday	4 AM - 5 AM	0.02	0.6
System Coincident	December	Weekday	4 PM - 5 PM	0.07	1.1

Measure ID	HONE8518			Duct Insulation Material	
Base ID	HONE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0091	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	60.0%	Modified Market	60.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.063	0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.063	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	4 PM - 5 PM	0.03	0.5
Minimum Impact	October	Weekday	11 PM - Midnight	-0.10	-2.6
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Measure ID	HOXG8524			Active Solar Water Heating	
Base ID	HOXG7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$3.1008	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	30.0%	Modified Market	19.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.044	NA	Water Heating	17.578	56.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.041	-0.1	Total	17.577	55.5
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	1 AM - 2 AM	0.02	0.6
Minimum Impact	August	Weekday	4 PM - 5 PM	-0.02	-0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	HOXE8524		Active Solar Water Heating		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage	Existing	
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$3.1008	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	30.0%	Modified Market	19.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	4.171	65.4	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	4.175	8.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	6 AM - 7 AM	1.27	21.2
Minimum Impact	July	Weekday	2 AM - 3 AM	-0.09	-2.0
System Coincident	December	Weekday	4 PM - 5 PM	0.96	13.6

Measure ID	HONG8524		Active Solar Water Heating		
Base ID	HONG7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		New
Floor Area (sf)	258000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$3.1008	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	56.0%	Modified Market	36.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.044	NA	Water Heating	14.398	51.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.041	-0.1	Total	14.398	50.5
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	1 AM - 2 AM	0.02	0.6
Minimum Impact	August	Weekday	4 PM - 5 PM	-0.02	-0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	HONE8524		Active Solar Water Heating		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$3.1008	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	56.0%	Modified Market	36.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	3.994	64.4	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	3.997	9.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	6 AM - 7 AM	1.24	25.2
Minimum Impact	September	Weekday	7 AM - 8 AM	-0.10	-1.8
System Coincident	December	Weekday	4 PM - 5 PM	0.94	15.8

Measure ID	HOXE8541		High Efficiency Centrifugal Chiller		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0701	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	24.3%	Modified Market	4.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	2.686	17.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.686	5.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.62	7.7
Minimum Impact	April	Weekday	4 AM - 5 AM	0.15	4.2
System Coincident	December	Weekday	4 PM - 5 PM	0.34	4.8

Measure ID	HONE8541			High Efficiency Centrifugal Chiller	
Base ID	HONE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0641	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	63.9%	Modified Market	12.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.934	9.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.934	2.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.21	3.2
Minimum Impact	April	Weekday	4 AM - 5 AM	0.06	1.9
System Coincident	December	Weekday	4 PM - 5 PM	0.12	2.0

Measure ID	HOXE8542		VSD Centrifugal Chiller		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3983	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	13.5%	Modified Market	2.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.721	11.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.721	3.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	8 AM - 9 AM	0.32	4.6
Minimum Impact	September	Weekday	1 AM - 2 AM	0.07	1.5
System Coincident	December	Weekday	4 PM - 5 PM	0.31	4.3

Measure ID	HONE8542		VSD Centrifugal Chiller		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3643	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	5.5%	Modified Market	6.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.342	13.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.342	3.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	1 PM - 2 PM	0.23	4.0
Minimum Impact	October	Weekday	11 PM - Midnight	0.03	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.09	1.5

Measure ID	HOXE8543			Gas Absorption Chiller	
Base ID	HOXE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.6308	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	13.5%	Modified Market	2.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	10.714	69.1	Cooling	-172.923	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	10.714	21.7	Total	-172.923	-57655.8
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	2.48	31.0
Minimum Impact	April	Weekday	4 AM - 5 AM	0.60	16.5
System Coincident	December	Weekday	4 PM - 5 PM	1.35	19.1

Measure ID	HONE8543		Gas Absorption Chiller		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.5771	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	35.5%	Modified Market	6.7%	Intra Action	No
Annual Energy Impact by End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	6.279	61.4	Cooling	-123.040	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	6.279	15.3	Total	-123.040	-41023.9
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	1.45	22.4
Minimum Impact	April	Weekday	4 AM - 5 AM	0.37	12.3
System Coincident	December	Weekday	4 PM - 5 PM	0.69	11.7

Measure ID	HOXE8544		Chiller Strainer Cycle		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3298	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	10.8%	Modified Market	10.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	2.585	16.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.585	5.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.63	7.8
Minimum Impact	January	Weekday	7 AM - 8 AM	0.13	2.4
System Coincident	December	Weekday	4 PM - 5 PM	0.38	5.4

Measure ID	HONE8544		Chiller Strainer Cycle		
Base iD	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3017	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	8.5%	Modified Market	8.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.062	0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.062	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	HOXE8545		Chilled Water Reset Controls		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0018	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	10.8%	Modified Market	5.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	2.510	16.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.510	5.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.63	7.8
Minimum Impact	January	Weekday	7 AM - 8 AM	0.13	2.4
System Coincident	December	Weekday	4 PM - 5 PM	0.38	5.4

Measure ID	HOXE8546 Chiller Optimizer Controls				
Base ID	HOXE7646 Base Case for Chiller Optimizer				
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0593	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	10.8%	Modified Market	10.8%	Intra-Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	3.573	21.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	3.573	7.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.63	7.8
Minimum Impact	November	Weekday	4 PM - 5 PM	0.23	3.1
System Coincident	December	Weekday	4 PM - 5 PM	0.38	5.4

Measure ID	HONE8546		Chiller Optimizer Controls		
Base ID	HONE7646		Base Case for Chiller Optimizer		
Market Segment					
Building Type	Hospital		Vintage		New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0593	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	8.5%	Modified Market	8.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.384	11.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.384	3.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	7 AM - 8 AM	0.31	6.4
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.15	2.4

Measure ID	HOXE8547			Thermal Energy Storage-Ice On Coil	
Base ID	HOXE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$2.5200	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	45.0%	Modified Market	8.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.005	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.005	0.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	Noon - 1 PM	2.62	32.8
Minimum Impact	April	Weekday	4 AM - 5 AM	-1.59	-43.6
System Coincident	December	Weekday	4 PM - 5 PM	1.65	23.4

Measure ID	HONE8547		Thermal Energy Storage-Ice On Coil		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$2.5200	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	45.0%	Modified Market	8.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-5.957	-58.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-5.957	-14.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	1.81	28.0
Minimum Impact	January	Weekday	9 PM - 10 PM	-5.04	-129.4
System Coincident	December	Weekday	4 PM - 5 PM	0.97	16.4

Measure ID	HOXE8548			Cooling Tower Propeller Fans	
Base ID	HOXE7648			Base Case For Cooling Tower Prop Fans	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0006	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	9.5%	Modified Market	2.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.466	2.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.466	0.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.13	1.6
Minimum Impact	April	Weekday	4 AM - 5 AM	0.02	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.07	0.9

Measure ID	HONE8548		Cooling Tower Propeller Fans		
Base ID	HONE7648		Base Case For Cooling Tower Prop Fans		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0005	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	24.8%	Modified Market	6.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.364	3.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.364	0.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.12	1.8
Minimum Impact	April	Weekday	4 AM - 5 AM	0.01	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.04	0.6

Measure ID	HOXE8549		Two-Speed Cooling Tower Fans		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0092	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	9.5%	Modified Market	2.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.169	1.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.169	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	9 AM - 10 AM	0.03	0.5
Minimum Impact	July	Weekday	2 PM - 3 PM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.03	0.4

Measure ID	H0NE8549		Two-Speed Cooling Tower Fans		
Base ID	H0NE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0082	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	24.8%	Modified Market	6.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.146	1.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.146	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	11 PM - Midnight	0.03	0.8
Minimum Impact	July	Weekday	2 PM - 3 PM	0.01	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.4

Measure ID	HOXE8550			VSD Cooling Tower Fans	
Base ID	HOXE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.7449	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	9.5%	Modified Market	2.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.233	1.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.233	0.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	5 PM - 6 PM	0.04	0.6
Minimum Impact	April	Weekday	4 AM - 5 AM	0.01	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.04	0.6

Measure ID	H0NE8550		VSD Cooling Tower Fans		
Base ID	H0NE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.6660	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	24.8%	Modified Market	6.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.181	1.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.181	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	9 AM - 10 AM	0.04	0.6
Minimum Impact	April	Weekday	4 AM - 5 AM	0.01	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Measure iD	HOXE8551			Waste Heat Recovery	
Base iD	HOXE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.7965	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	15.0%	Modified Market	2.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-1.286	-8.3	Cooling	0.000	NA
Water Heating	4.207	66.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.920	5.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	6 AM - 7 AM	0.81	14.5
Minimum Impact	July	Weekday	2 AM - 3 AM	-0.10	-2.3
System Coincident	December	Weekday	4 PM - 5 PM	0.39	5.5

Measure ID	HONE8551		Waste Heat Recovery		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.7287	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	45.0%	Modified Market	8.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-2.061	-20.1	Cooling	0.000	NA
Water Heating	4.122	66.5	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.061	5.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	6 AM - 7 AM	0.71	14.2
Minimum Impact	January	Weekday	2 AM - 3 AM	-0.13	-4.5
System Coincident	December	Weekday	4 PM - 5 PM	0.45	7.7

Measure ID	HOXE8552		Compact Fluorescent Lamp EXIT Signs		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage	Existing	
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0219	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.075	0.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.017	0.4			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.250	0.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	Midnight - 1 AM	0.12	2.7
Minimum Impact	January	Weekday	7 AM - 8 AM	0.02	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.03	0.4

Measure ID	HONE8552		Compact Fluorescent Lamp EXIT Signs		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0053	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	75.0%	Modified Market	75.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.058	0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.017	0.5			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.233	0.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	8 PM - 9 PM	0.11	2.3
Minimum Impact	April	Weekday	4 AM - 5 AM	0.02	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.03	0.4

Measure ID	HOXE8553		LED Lamp EXIT Signs		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0724	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	90.0%	Modified Market	49.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.121	0.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.028	0.7			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.403	0.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	Midnight - 1 AM	0.14	3.2
Minimum Impact	January	Weekday	7 AM - 8 AM	0.04	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.04	0.6

Measure ID	H0NE8553		LED Lamp EXIT Signs		
Base ID	H0NE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0378	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	40.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.093	0.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.028	0.8			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.375	0.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	8 PM - 9 PM	0.13	2.7
Minimum Impact	April	Weekday	4 AM - 5 AM	0.04	1.3
System Coincident	December	Weekday	4 PM - 5 PM	0.04	0.7

Measure ID	HOXE8557			Optical Reflectors-2X4 Recessed	
Base ID	HOXE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3616	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.387	8.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.331	8.5			
Indoor Lighting	3.047	27.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	4.766	9.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.79	10.1
Minimum Impact	April	Weekday	4 AM - 5 AM	0.37	10.1
System Coincident	December	Weekday	4 PM - 5 PM	0.62	8.8

Measure ID	HONE8557			Optical Reflectors-2X4 Recessed	
Base ID	HONE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3466	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.857	8.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.269	7.7			
Indoor Lighting	2.431	27.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	3.558	8.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.56	8.9
Minimum Impact	April	Weekday	4 AM - 5 AM	0.28	9.4
System Coincident	December	Weekday	4 PM - 5 PM	0.50	8.4

Measure iD	HOXE8558			8' Fluor. Energy Saver Lamps-F96T12ES	
Base iD	HOXE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0014	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.102	0.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.032	0.8			
Indoor Lighting	0.269	2.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.403	0.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	8 AM - 9 AM	0.14	2.0
Minimum Impact	April	Weekday	4 AM - 5 AM	0.04	1.0
Systern Coincident	December	Weekday	4 PM - 5 PM	0.05	0.7

Measure ID	HOXE8559			Electronic Ballasts-8' T12-Base EEM	
Base ID	HOXE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0541	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.083	0.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.026	0.7			
Indoor Lighting	0.220	2.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.329	0.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	Midnight - 1 AM	0.13	3.0
Minimum Impact	April	Weekday	4 AM - 5 AM	0.03	0.9
System Coincident	December	Weekday	4 PM - 5 PM	0.04	0.6

Measure ID	HONE8559		Electronic Ballasts-8' T12-Base EEM		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0158	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.025	0.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.010	0.3			
Indoor Lighting	0.086	1.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.121	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.02	0.3
Minimum Impact	June	Weekday	1 AM - 2 AM	0.01	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Measure ID	HOXE8560		Optical Reflectors-1X8 Fixtures		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0316	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.231	1.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.073	1.9			
Indoor Lighting	0.611	5.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.916	1.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	8 AM - 9 AM	0.21	3.0
Minimum Impact	April	Weekday	4 AM - 5 AM	0.09	2.4
System Coincident	December	Weekday	4 PM - 5 PM	0.11	1.6

Measure ID	HONE8560		Optical Reflectors-1X8 Fixtures		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0317	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.150	1.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.061	1.7			
Indoor Lighting	0.501	5.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.712	1.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.11	1.7
Minimum Impact	January	Weekday	6 AM - 7 AM	0.07	1.5
System Coincident	December	Weekday	4 PM - 5 PM	0.09	1.6

Measure ID	HOXE8561		Electronic Ballasts-4' T12-Base SMC		
Base ID	HOXE7661		Base Case for 4' Fluor. SMC Ballasts		
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.4610	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.485	3.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.115	2.9			
Indoor Lighting	1.057	8.6			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.657	3.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	9 AM - 10 AM	0.31	4.5
Minimum Impact	April	Weekday	4 AM - 5 AM	0.13	3.4
System Coincident	December	Weekday	4 PM - 5 PM	0.22	3.0

Measure ID	HOXE8562			Electronic Ballasts-8' T12-Base SMC	
Base ID	HOXE7662			Base Case for 8' Fluor. SMC Ballasts	
Market Segment					
Building Type	Hospital			Vintage	Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0464	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.042	0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.013	0.3			
Indoor Lighting	0.110	1.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.165	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.03	0.3
Minimum Impact	April	Weekday	4 AM - 5 AM	0.02	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

Measure ID	HOXE8563		Compact Fluorescent Lamps-15W		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0137	Measure Life (Yrs)	2	Mutual Exclusivity	No
Potential Market	85.5%	Modified Market	85.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.077	0.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.003	0.1			
Indoor Lighting	0.244	2.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.324	0.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	Midnight - 1 AM	0.11	2.5
Minimum Impact	April	Weekday	4 AM - 5 AM	0.02	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.05	0.6

Measure ID	HONE8563		Compact Fluorescent Lamps-15W		
Base ID	HONE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0120	Measure Life (Yrs)	2	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.051	0.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.002	0.1			
Indoor Lighting	0.226	2.6			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.280	0.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	8 PM - 9 PM	0.12	2.6
Minimum Impact	April	Weekday	4 AM - 5 AM	0.02	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.04	0.7

Measure ID	HOXE8564		Compact Fluorescent Lamps-26W		
Base ID	HOXE7000		Base Case-Standard		
Market Segment					
Building Type	Hospital		Vintage		Existing
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0305	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	85.5%	Modified Market	85.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.082	0.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.003	0.1			
Indoor Lighting	0.263	2.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.349	0.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	Midnight - 1 AM	0.11	2.5
Minimum Impact	April	Weekday	4 AM - 5 AM	0.02	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.05	0.7

Measure ID	H0NE8564			Compact Fluorescent Lamps-26W	
Base ID	H0NE7000			Base Case-Standard	
Market Segment					
Building Type	Hospital			Vintage	New
Floor Area (sf)	258000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0115	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.026	0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.001	0.0			
Indoor Lighting	0.113	1.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.140	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	8 PM - 9 PM	0.10	2.2
Minimum Impact	April	Weekday	4 AM - 5 AM	0.01	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.3

DETAILED MEASURE IMPACTS-SUMMARY REPORTS

This section contains the detailed measure impact results and market segment data for each DSM case examined for this building type. A complete index of all base and measure cases defined for this building type is shown first. This index represents an expansion of the base and measure matrix presented in Table 1 (residential) or Table 2 (commercial) for the applicable sector. Following this index, a summary report sheet is provided for each DSM measure case in the order shown in the index. The summary report sheet contains a host of information and selected graphs which define and depict the measure impacts and outline the market segment data assumptions utilized for each case in the DBEDT DSM Forecasting models. The variables and figures included in the summary report sheet are described below.

Measure ID: The eight-character alpha-numeric code used to define the measure case. This ID is composed of the 2-letter building code + the 1-letter vintage code + the 1-letter water heater fuel type code + the 4-digit numeric code used to define the base or measure case.

Measure Description: A brief (no more than 38-character) definition of the DSM measure

Base ID: Similar to the Measure ID, this code denotes the base case to which the measure case is compared in order to estimate the measure impacts.

Base Description: Similar to the Measure Description, a brief description of the base case. This description helps to determine if a modified base case was defined to estimate measure impacts.

Market Segment. This section of the summary report sheet contains the market segment data defined for each measure. These are:

Building Type:	The building type to which this measure applies.
Vintage:	The vintage of the building (new or existing).
Floor Area (sf):	The gross floor area of the building in square feet.
Water Heater Fuel:	The fuel type utilized for domestic or service water heating (Gas, Electric, or Oil).
Cost Unit:	The unit of measure utilized to describe the measure cost.
First Cost (\$/unit):	The installed capital cost for the measure in dollars per Cost Unit (93 dollars).
Measure Life (Yrs):	The measure life in years.
Mutual Exclusivity:	A Yes/No entry which denotes if mutual exclusivity considerations apply to this measure. A Yes entry indicates that this measure is mutually exclusive with one or more measures pertaining to this building type, thereby modifying the potential market share available.
Potential Market:	The maximum market share available for this measure. This includes consideration of measure applicability, measure feasibility, and remaining market share for existing vintages.
Modified Market:	The maximum market share available for this measure accounting for mutual exclusivity.
Intra Action:	A Yes/No entry which denotes if intra active considerations apply to this measure. A Yes entry indicates that this measure is intra active with one or more measures if applied as a group to this building type. The total impact in a particular end-use for a group of measures with intra active effects is not the same as the summation of the individual measure impacts. An incremental measure impact reduction is implied, based on the measure loading order.

Annual Energy Impacts By End-Use. This section of the summary report contains the normalized measure impacts by end-use and for the total building by fuel type. Electricity impacts are shown in terms of kWh/square foot and as a percentage of the base case, while fossil fuel impacts are shown as kBtu/square foot and as a percentage of the base case for each end-use and for the total. The end-use impacts shown include:

Cooling (& Auxiliary) :	Space cooling and associated pumps and heat rejection energy (e.g., condensers or cooling tower).
Water Heating:	Storage or central domestic or service water heating system.
Misc. Equipment:	Miscellaneous equipment.
Ventilation:	Supply air fans for conditioning and exhaust air fans.
Indoor Lighting:	Interior lighting (not including EXIT signs).
Outdoor Lighting:	Exterior building lighting.
Central Refrigeration:	Commercial/Industrial refrigeration systems.
Total:	Total building energy use by fuel.

Total Building Peak Demand Impact: This section of the summary report provides peak demand impacts for each measure for selected peak events during the year. Three events are included, the maximum building peak demand impact, the minimum building peak demand impact, and a system coincident peak demand impact (set to December weekday at 4 to 5 PM). For each event the Month, Day Type, and Hour are shown, followed by the normalized total building peak demand impact in Watts/square foot and the percentage of the total base case represented by the impact.

Measure Impact Figures. Four figures are selected and included in each summary report to depict the impacts resulting from each measure. These are;

Monthly Total Electricity Impact: This figure shows the floor area normalized monthly electricity impacts associated with the measure in kWh/square foot.

Monthly Total Fossil Fuel Impact: This figure shows the floor area normalized monthly fossil fuel impacts associated with the measure in kBtu/square foot.

December Peak Day Demand Impact: This figure shows the (selected) system coincident peak day floor area normalized total building demand impact for the measure in Watts/square foot.

December Peak Day Demand Profile: This figure provides the daily total building load profile for the measure and base cases on the (selected) system coincident peak day in kW.

Commercial School Measure Index Table

Created: 09/23/94, 02:38:58 PM			Cases:	51
Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
SCXG7000	SCXG7000	Base Case-Standard	NA	50000
SCXE7000	SCXE7000	Base Case-Standard	NA	50000
SCNG7000	SCNG7000	Base Case-Standard	NA	50000
SCNE7000	SCNE7000	Base Case-Standard	NA	50000
SCXE7614	SCXE7614	Base Case for Clean Condenser Coils	NA	50000
SCXE7616	SCXE7616	Base Case for HVAC Time Clocks	NA	50000
SCXE7661	SCXE7661	Base Case for 4' Fluor. SMC Ballasts	NA	50000
SCXE8501	SCXE7000	4' Fluor. Energy Saver Lamps-F40T12ES	Inlights	50000
SCXE8502	SCXE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	50000
SCNE8502	SCNE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	50000
SCXE8503	SCXE7000	4' T8 Lamps And Electronic Ballasts	Inlights	50000
SCNE8503	SCNE7000	4' T8 Lamps And Electronic Ballasts	Inlights	50000
SCXE8504	SCXE7000	Window Film Retrofit	Cooling	50000
SCNE8505	SCNE7000	Double Pane Heat Mirror Glazing	Cooling	50000
SCXE8507	SCXE7000	Light Colored Roof	Cooling	50000
SCNE8507	SCNE7000	Light Colored Roof	Cooling	50000
SCXE8509	SCXE7000	High Pressure Sodium-100 Watts	Exlights	50000
SCNE8509	SCNE7000	High Pressure Sodium-100 Watts	Exlights	50000
SCXE8511	SCXE7000	HID Exterior Floods-70 Watts	Exlights	50000
SCNE8511	SCNE7000	HID Exterior Floods-70 Watts	Exlights	50000
SCXE8514	SCXE7614	Clean Condenser Coils	Cooling	50000
SCXE8516	SCXE7616	HVAC System Time Clocks	Cooling	50000
SCXE8518	SCXE7000	Duct Insulation Material	Cooling	50000
SCNE8518	SCNE7000	Duct Insulation Material	Cooling	50000
SCXG8520	SCXG7000	High Efficiency Gas Water Heater	Hotwater	50000
SCNG8520	SCNG7000	High Efficiency Gas Water Heater	Hotwater	50000
SCXG8521	SCXG7000	Point of Use Water Heating	Hotwater	50000
SCXE8521	SCXE7000	Point of Use Water Heating	Hotwater	50000
SCNG8521	SCNG7000	Point of Use Water Heating	Hotwater	50000
SCNE8521	SCNE7000	Point of Use Water Heating	Hotwater	50000
SCXG8523	SCXG7000	Tank Insulation-Fiber Blanket	Hotwater	50000
SCXE8523	SCXE7000	Tank Insulation-Fiber Blanket	Hotwater	50000
SCXG8524	SCXG7000	Active Solar Water Heating	Hotwater	50000
SCXE8524	SCXE7000	Active Solar Water Heating	Hotwater	50000
SCNG8524	SCNG7000	Active Solar Water Heating	Hotwater	50000
SCNE8524	SCNE7000	Active Solar Water Heating	Hotwater	50000
SCXE8540	SCXE7000	High Efficiency DX AC-COP 2.9	Cooling	50000
SCXE8552	SCXE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	50000
SCNE8552	SCNE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	50000
SCXE8553	SCXE7000	LED Lamp EXIT Signs	Inlights	50000
SCNE8553	SCNE7000	LED Lamp EXIT Signs	Inlights	50000
SCXE8554	SCXE7000	Heat Pump Water Heater	Hotwater	50000
SCNE8554	SCNE7000	Heat Pump Water Heater	Hotwater	50000
SCXE8555	SCXE7000	Occupancy Sensor Pack-1000 SF	Inlights	50000
SCNE8555	SCNE7000	Occupancy Sensor Pack-1000 SF	Inlights	50000
SCXE8556	SCXE7000	High Efficiency DX AC-COP 3.2	Cooling	50000
SCNE8556	SCNE7000	High Efficiency DX AC-COP 3.2	Cooling	50000
SCXE8557	SCXE7000	Optical Reflectors-2X4 Recessed	Inlights	50000
SCNE8557	SCNE7000	Optical Reflectors-2X4 Recessed	Inlights	50000
SCXE8561	SCXE7661	Electronic Ballasts-4' T12-Base SMC	Inlights	50000
SCXE8566	SCXE7000	Metal Halide Lamps-250W	Inlights	50000

Measure ID	SCXE8501			4' Fluor. Energy Saver Lamps-F40T12ES	
Base ID	SCXE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0134	Measure Life (Yrs)	5	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.023	1.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	1.3			
Indoor Lighting	0.439	16.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.466	8.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	11 AM - Noon	0.21	9.0
Minimum Impact	December	Weekday	11 PM - Midnight	0.01	6.2
System Coincident	December	Weekday	4 PM - 5 PM	0.08	7.8

Measure ID	SCXE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	SCXE7000		Base Case-Standard		
Market Segment					
Building Type	School		Vintage		Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.7688	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.023	1.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	1.3			
Indoor Lighting	0.439	16.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.466	8.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	11 AM - Noon	0.21	9.0
Minimum Impact	December	Weekday	11 PM - Midnight	0.01	6.2
System Coincident	December	Weekday	4 PM - 5 PM	0.08	7.8

Measure ID	SCNE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	SCNE7000		Base Case-Standard		
Market Segment					
Building Type	School		Vintage	New	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.5259	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.011	1.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	1.1			
Indoor Lighting	0.251	11.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.266	5.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	1 PM - 2 PM	0.12	6.7
Minimum Impact	December	Weekday	11 PM - Midnight	0.01	3.9
System Coincident	December	Weekday	4 PM - 5 PM	0.05	5.2

Measure ID	SCXE8503		4' T8 Lamps And Electronic Ballasts		
Base ID	SCXE7000		Base Case-Standard		
Market Segment					
Building Type	School		Vintage		Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.7884	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.044	3.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.008	2.6			
Indoor Lighting	1.059	38.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.111	19.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	11 AM - Noon	0.50	21.3
Minimum Impact	November	Weekday	11 PM - Midnight	0.03	14.8
System Coincident	December	Weekday	4 PM - 5 PM	0.20	18.5

Measure ID	SCNE8503			4' T8 Lamps And Electronic Ballasts	
Base ID	SCNE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.5321	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.017	2.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.006	1.6			
Indoor Lighting	0.376	16.6			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.399	7.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	1 PM - 2 PM	0.18	10.0
Minimum Impact	December	Weekday	11 PM - Midnight	0.01	5.8
System Coincident	December	Weekday	4 PM - 5 PM	0.07	7.7

Measure ID	SCXE8504			Window Film Retrofit	
Base ID	SCXE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0050	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	42.6%	Modified Market	40.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.012	1.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.001	0.5			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.014	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	6 AM - 7 AM	0.01	1.0
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.3

Measure ID	SCNE8505		Double Pane Heat Mirror Glazing		
Base ID	SCNE7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3108	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	2.4%	Modified Market	2.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.022	2.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.005	1.4			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.027	0.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 PM - 2 PM	0.01	1.3
Minimum Impact	September	Weekday	6 PM - 7 PM	-0.00	-1.5
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.6

Measure ID	SCXE8507		Light Colored Roof		
Base ID	SCXE7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.6300	Measure Life (Yrs)	7	Mutual Exclusivity	No
Potential Market	42.6%	Modified Market	42.6%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.218	18.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.012	3.9			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.231	3.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	2 PM - 3 PM	0.12	6.1
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.07	6.3

Measure ID	SCNE8507			Light Colored Roof	
Base ID	SCNE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.6300	Measure Life (Yrs)	7	Mutual Exclusivity	No
Potential Market	25.0%	Modified Market	25.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.065	7.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.014	3.9			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.079	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	2 PM - 3 PM	0.04	2.1
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.02	2.2

Measure ID	SCXE8509		High Pressure Sodium-100 Watts		
Base ID	SCXE7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0025	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.013	12.7			
Central Refrigeration	0.000	NA			
Total	0.013	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	11 PM - Midnight	0.00	1.3
Minimum Impact	September	Weekday	2 PM - 3 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	SCNE8509		High Pressure Sodium-100 Watts		
Base ID	SCNE7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0020	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(Wh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.013	12.7			
Central Refrigeration	0.000	NA			
Total	0.013	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	11 PM - Midnight	0.00	1.4
Minimum Impact	March	Weekday	3 PM - 4 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure iD	SCXE8511		HID Exterior Floods-70 Watts		
Base iD	SCXE7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0070	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.022	21.8			
Central Refrigeration	0.000	NA			
Total	0.022	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	11 PM - Midnight	0.00	2.2
Minimum Impact	May	Weekday	9 AM - 10 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	SCNE8511			HID Exterior Floods-70 Watts	
Base ID	SCNE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0060	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.022	21.8			
Central Refrigeration	0.000	NA			
Total	0.022	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	6 AM - 7 AM	0.00	1.0
Minimum Impact	April	Weekday	2 PM - 3 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	SCXE8514		Clean Condenser Coils		
Base ID	SCXE7614		Base Case for Clean Condenser Coils		
Market Segment					
Building Type	School		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0013	Measure Life (Yrs)	1	Mutual Exclusivity	No
Potential Market	60.0%	Modified Market	60.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.240	17.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.240	3.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	1.12	8.6
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.06	5.4

Measure ID	SCXE8516		HVAC System Time Clocks		
Base ID	SCXE7616		Base Case for HVAC Time Clocks		
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0026	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	30.0%	Modified Market	30.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.089	7.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.339	52.5			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.428	6.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	6 AM - 7 AM	0.09	12.1
Minimum Impact	January	Weekday	7 AM - 8 AM	0.01	1.2
System Coincident	December	Weekday	4 PM - 5 PM	0.03	2.3

Measure ID	SCXE8518		Duct Insulation Material		
Base ID	SCXE7000		Base Case-Standard		
Market Segment					
Building Type	School		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0075	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	22.0%	Modified Market	22.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.010	0.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.010	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	6 AM - 7 AM	0.01	1.9
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.2

Measure ID	SCNE8518			Duct Insulation Material	
Base ID	SCNE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0024	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	60.0%	Modified Market	60.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.006	0.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	-0.000	-0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.006	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	6 AM - 7 AM	0.01	1.4
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.2

Measure ID	SCXG8520			High Efficiency Gas Water Heater	
Base ID	SCXG7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0150	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	40.0%	Modified Market	9.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.253	7.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.000	0.0	Total	0.251	7.3
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	SCNG8520			High Efficiency Gas Water Heater	
Base ID	SCNG7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0150	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	64.0%	Modified Market	15.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.056	2.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.000	0.0	Total	0.054	2.3
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	SCXG8521		Point of Use Water Heating		
Base ID	SCXG7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0241	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	33.8%	Modified Market	8.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.299	NA	Water Heating	3.368	100.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.299	-5.5	Total	3.368	97.9
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	March	Weekday	Noon - 1 PM	-0.32	-17.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	SCXE8521		Point of Use Water Heating		
Base ID	SCXE7000		Base Case-Standard		
Market Segment					
Building Type	School		Vintage	Existing	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0241	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	33.8%	Modified Market	8.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.100	25.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.099	1.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	Noon - 1 PM	0.02	0.9
Minimum Impact	September	Weekday	4 PM - 5 PM	0.01	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.01	1.0

Measure ID	SCNG8521			Point of Use Water Heating	
Base ID	SCNG7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0214	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	18.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.299	NA	Water Heating	2.252	100.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.299	-6.4	Total	2.250	96.9
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	March	Weekday	Noon - 1 PM	-0.32	-20.7
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	SCNE8521		Point of Use Water Heating		
Base ID	SCNE7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0214	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	18.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.047	13.6	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.047	0.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	Noon - 1 PM	0.01	0.4
Minimum Impact	September	Weekday	11 PM - Midnight	0.00	2.5
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.6

Measure ID	SCXG8523			Tank Insulation-Fiber Blanket	
Base ID	SCXG7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0020	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	4.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	1.174	34.9
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.000	0.0	Total	1.175	34.1
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
Sytem Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure iD	SCXE8523			Tank Insulation-Fiber Blanket	
Base iD	SCXE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0020	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	4.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000		Cooling	0.000	NA
Water Heating	0.061		Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equip	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.061	1.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	2 PM - 3 PM	0.01	0.3
Minimum Impact	September	Weekday	6 AM - 7 AM	0.01	1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.7

Monthly Total Electricity Impact
Tank Insulation-Fiber Blanket

December Peak Day Demand Impact
Tank Insulation-Fiber Blanket

Monthly Total Fossil Fuel Impact
Tank Insulation-Fiber Blanket

December Peak Day Demand Profile
Tank Insulation-Fiber Blanket

Measure ID	SCXG8524		Active Solar Water Heating		
Base ID	SCXG7000		Base Case-Standard		
Market Segment					
Building Type	School		Vintage		Existing
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2560	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	36.0%	Modified Market	8.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.004	NA	Water Heating	3.019	89.7
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.003	-0.1	Total	3.020	87.8
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	1 AM - 2 AM	0.00	0.4
Minimum Impact	November	Weekday	1 PM - 2 PM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	SCXE8524		Active Solar Water Heating		
Base ID	SCXE7000		Base Case-Standard		
Market Segment					
Building Type	School		Vintage		Existing
Floor Area (sf)	50000.	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2560	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	36.0%	Modified Market	8.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.353	88.5	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.353	6.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	Noon - 1 PM	0.34	15.3
Minimum Impact	August	Weekday	4 PM - 5 PM	0.01	1.0
System Coincident	December	Weekday	4 PM - 5 PM	0.01	1.0

Measure ID	SCNG8524		Active Solar Water Heating		
Base ID	SCNG7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2560	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	48.0%	Modified Market	11.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.004	NA	Water Heating	1.904	84.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.003	-0.1	Total	1.902	81.9
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	1 AM - 2 AM	0.00	0.4
Minimum Impact	October	Weekday	3 PM - 4 PM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	SCNE8524		Active Solar Water Heating		
Base ID	SCNE7000		Base Case-Standard		
Market Segment					
Building Type	School		Vintage	New	
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2560	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	48.0%	Modified Market	11.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.301	86.7	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.301	6.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	Noon - 1 PM	0.33	17.4
Minimum Impact	August	Weekday	4 PM - 5 PM	0.00	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.6

Measure ID	SCXE8540		High Efficiency DX AC-COP 2.9		
Base ID	SCXE7000		Base Case-Standard		
Market Segment					
Building Type	School		Vintage		Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0212	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	50.0%	Modified Market	17.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.216	18.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.216	3.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.11	8.5
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.05	5.1

Measure ID	SCXE8552			Compact Fluorescent Lamp EXIT Signs	
Base ID	SCXE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0223	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.006	0.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.164	2.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	6 AM - 7 AM	0.02	3.2
Minimum Impact	April	Weekday	5 PM - 6 PM	0.02	2.9
System Coincident	December	Weekday	4 PM - 5 PM	0.02	1.9

Measure ID	SCNE8552 Compact Fluorescent Lamp EXIT Signs				
Base ID	SCNE7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0054	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	75.0%	Modified Market	75.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.005	0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.002	0.5			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.165	3.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	6 PM - 7 PM	0.02	10.5
Minimum Impact	December	Weekday	5 PM - 6 PM	0.02	3.5
System Coincident	December	Weekday	4 PM - 5 PM	0.02	2.2

Measure ID	SCXE8553			LED Lamp EXIT Signs	
Base ID	SCXE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0738	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	90.0%	Modified Market	34.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.009	0.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.001	0.3			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.264	4.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	6 AM - 7 AM	0.03	5.2
Minimum Impact	June	Weekday	11 PM - Midnight	0.03	11.1
System Coincident	December	Weekday	4 PM - 5 PM	0.03	3.0

Measure ID	SCNE8553			LED Lamp EXIT Signs	
Base ID	SCNE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0386	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	28.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.008	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.003	0.8			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.265	5.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	9 AM - 10 AM	0.03	1.9
Minimum Impact	February	Weekday	5 PM - 6 PM	0.03	5.9
System Coincident	December	Weekday	4 PM - 5 PM	0.03	3.5

Measure ID	SCXE8554			Heat Pump Water Heater	
Base ID	SCXE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1200	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	45.0%	Modified Market	11.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.300	75.2	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.300	5.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	Noon - 1 PM	0.27	12.3
Minimum Impact	November	Weekday	5 AM - 6 AM	0.01	3.4
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.7

Measure ID	SCNE8554		Heat Pump Water Heater		
Base ID	SCNE7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1200	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	50.0%	Modified Market	12.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.259	74.9	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.259	5.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	Noon - 1 PM	0.26	13.7
Minimum Impact	November	Weekday	5 AM - 6 AM	0.00	1.8
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.4

Measure ID	SCXE8555			Occupancy Sensor Pack-1000 SF	
Base ID	SCXE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0950	Measure Life (Yrs)	8	Mutual Exclusivity	Yes
Potential Market	30.0%	Modified Market	11.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.046	3.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.008	2.6			
Indoor Lighting	0.891	32.6			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.945	16.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	2 PM - 3 PM	0.37	18.6
Minimum Impact	May	Weekday	6 PM - 7 PM	0.04	20.0
System Coincident	December	Weekday	4 PM - 5 PM	0.15	14.5

Measure ID	SCNE8555		Occupancy Sensor Pack-1000 SF		
Base ID	SCNE7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0950	Measure Life (Yrs)	8	Mutual Exclusivity	Yes
Potential Market	40.0%	Modified Market	15.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.033	3.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.010	2.8			
Indoor Lighting	0.740	32.6			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.782	15.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	2 PM - 3 PM	0.31	17.7
Minimum Impact	May	Weekday	11 PM - Midnight	0.03	16.5
System Coincident	December	Weekday	4 PM - 5 PM	0.13	13.9

Measure ID	SCXE8556			High Efficiency DX AC-COP 3.2	
Base ID	SCXE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0528	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	50.0%	Modified Market	17.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.286	24.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.286	4.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	2 PM - 3 PM	0.15	11.2
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.07	6.7

Measure ID	SCNE8556		High Efficiency DX AC-COP 3.2		
Base ID	SCNE7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0528	Measure Life (Yrs)	15	Mutual Exclusivity	Yes
Potential Market	54.0%	Modified Market	18.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.058	6.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.058	1.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	1 PM - 2 PM	0.03	1.6
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.01	1.6

Measure iD	SCXE8557		Optical Reflectors-2X4 Recessed		
Base iD	SCXE7000		Base Case-Standard		
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.4133	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.047	4.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.009	2.8			
Indoor Lighting	0.894	32.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.950	16.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	11 AM - Noon	0.43	18.3
Minimum Impact	December	Weekday	11 PM - Midnight	0.03	12.5
System Coincident	December	Weekday	4 PM - 5 PM	0.17	15.8

Measure ID	SCNE8557			Optical Reflectors-2X4 Recessed	
Base ID	SCNE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	New
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.4124	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.033	4.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.011	3.2			
Indoor Lighting	0.739	32.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.784	15.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	1 PM - 2 PM	0.35	19.7
Minimum Impact	May	Weekday	5 AM - 6 AM	0.02	12.8
System Coincident	December	Weekday	4 PM - 5 PM	0.14	15.2

Measure ID	SCXE8561			Electronic Ballasts-4' T12-Base SMC	
Base ID	SCXE7661			Base Case for 4' Fluor. SMC Ballasts	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.5270	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.017	1.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.003	0.9			
Indoor Lighting	0.314	10.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.333	5.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekdav	11 AM - Noon	0.15	6.0
Minimum Impact	March	Weekday	11 PM - Midnight	0.01	4.2
System Coincident	December	Weekdav	4 PM - 5 PM	0.06	5.3

Measure ID	SCXE8566			Metal Halide Lamps-250W	
Base ID	SCXE7000			Base Case-Standard	
Market Segment					
Building Type	School			Vintage	Existing
Floor Area (sf)	50000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0089	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.022	0.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.022	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	11 AM - Noon	0.01	0.4
Minimum Impact	April	Weekday	6 AM - 7 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.4

DETAILED MEASURE IMPACTS-SUMMARY REPORTS

This section contains the detailed measure impact results and market segment data for each DSM case examined for this building type. A complete index of all base and measure cases defined for this building type is shown first. This index represents an expansion of the base and measure matrix presented in Table 1 (residential) or Table 2 (commercial) for the applicable sector. Following this index, a summary report sheet is provided for each DSM measure case in the order shown in the index. The summary report sheet contains a host of information and selected graphs which define and depict the measure impacts and outline the market segment data assumptions utilized for each case in the DBEDT DSM Forecasting models. The variables and figures included in the summary report sheet are described below.

Measure ID: The eight-character alpha-numeric code used to define the measure case. This ID is composed of the 2-letter building code + the 1-letter vintage code + the 1-letter water heater fuel type code + the 4-digit numeric code used to define the base or measure case.

Measure Description: A brief (no more than 38-character) definition of the DSM measure

Base ID: Similar to the Measure ID, this code denotes the base case to which the measure case is compared in order to estimate the measure impacts.

Base Description: Similar to the Measure Description, a brief description of the base case. This description helps to determine if a modified base case was defined to estimate measure impacts.

Market Segment. This section of the summary report sheet contains the market segment data defined for each measure. These are:

Building Type:	The building type to which this measure applies.
Vintage:	The vintage of the building (new or existing).
Floor Area (sf):	The gross floor area of the building in square feet.
Water Heater Fuel:	The fuel type utilized for domestic or service water heating (Gas, Electric, or Oil).
Cost Unit:	The unit of measure utilized to describe the measure cost.
First Cost (\$/unit):	The installed capital cost for the measure in dollars per Cost Unit (93 dollars).
Measure Life (Yrs):	The measure life in years.
Mutual Exclusivity:	A Yes/No entry which denotes if mutual exclusivity considerations apply to this measure. A Yes entry indicates that this measure is mutually exclusive with one or more measures pertaining to this building type, thereby modifying the potential market share available.
Potential Market:	The maximum market share available for this measure. This includes consideration of measure applicability, measure feasibility, and remaining market share for existing vintages.
Modified Market:	The maximum market share available for this measure accounting for mutual exclusivity.
Intra Action:	A Yes/No entry which denotes if intra active considerations apply to this measure. A Yes entry indicates that this measure is intra active with one or more measures if applied as a group to this building type. The total impact in a particular end-use for a group of measures with intra active effects is not the same as the summation of the individual measure impacts. An incremental measure impact reduction is implied, based on the measure loading order.

Annual Energy Impacts By End-Use. This section of the summary report contains the normalized measure impacts by end-use and for the total building by fuel type. Electricity impacts are shown in terms of kWh/square foot and as a percentage of the base case, while fossil fuel impacts are shown as kBtu/square foot and as a percentage of the base case for each end-use and for the total. The end-use impacts shown include:

Cooling (& Auxiliary) :	Space cooling and associated pumps and heat rejection energy (e.g., condensers or cooling tower).
Water Heating:	Storage or central domestic or service water heating system.
Misc. Equipment:	Miscellaneous equipment.
Ventilation:	Supply air fans for conditioning and exhaust air fans.
Indoor Lighting:	Interior lighting (not including EXIT signs).
Outdoor Lighting:	Exterior building lighting.
Central Refrigeration:	Commercial/Industrial refrigeration systems.
Total:	Total building energy use by fuel.

Total Building Peak Demand Impact: This section of the summary report provides peak demand impacts for each measure for selected peak events during the year. Three events are included, the maximum building peak demand impact, the minimum building peak demand impact, and a system coincident peak demand impact (set to December weekday at 4 to 5 PM). For each event the Month, Day Type, and Hour are shown, followed by the normalized total building peak demand impact in Watts/square foot and the percentage of the total base case represented by the impact.

Measure Impact Figures. Four figures are selected and included in each summary report to depict the impacts resulting from each measure. These are:

Monthly Total Electricity Impact: This figure shows the floor area normalized monthly electricity impacts associated with the measure in kWh/square foot.

Monthly Total Fossil Fuel Impact: This figure shows the floor area normalized monthly fossil fuel impacts associated with the measure in kBtu/square foot.

December Peak Day Demand Impact: This figure shows the (selected) system coincident peak day floor area normalized total building demand impact for the measure in Watts/square foot.

December Peak Day Demand Profile: This figure provides the daily total building load profile for the measure and base cases on the (selected) system coincident peak day in kW.

Commercial College Measure Index Table

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Cases: 67

Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
COXG7000	COXG7000	Base Case-Standard	NA	300000
COXE7000	COXE7000	Base Case-Standard	NA	300000
CONG7000	CONG7000	Base Case-Standard	NA	300000
CONE7000	CONE7000	Base Case-Standard	NA	300000
COXE7617	COXE7617	Base Case For EMS	NA	300000
CONE7617	CONE7617	Base Case For EMS	NA	300000
COXE7646	COXE7646	Base Case for Chiller Optimizer	NA	300000
CONE7646	CONE7646	Base Case for Chiller Optimizer	NA	300000
COXE7661	COXE7661	Base Case for 4' Fluor. SMC Ballasts	NA	300000
COXE7662	COXE7662	Base Case for 8' Fluor. SMC Ballasts	NA	300000
COXE8501	COXE7000	4' Fluor. Energy Saver Lamps-F40T12ES	Inlights	300000
COXE8502	COXE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	300000
CONE8502	CONE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	300000
COXE8503	COXE7000	4' T8 Lamps And Electronic Ballasts	Inlights	300000
CONE8503	CONE7000	4' T8 Lamps And Electronic Ballasts	Inlights	300000
COXE8504	COXE7000	Window Film Retrofit	Cooling	300000
CONE8505	CONE7000	Double Pane Heat Mirror Glazing	Cooling	300000
COXE8509	COXE7000	High Pressure Sodium-100 Watts	Exlights	300000
CONE8509	CONE7000	High Pressure Sodium-100 Watts	Exlights	300000
COXE8510	COXE7000	High Pressure Sodium-250 Watts	Exlights	300000
COXE8511	COXE7000	HID Exterior Floods-70 Watts	Exlights	300000
CONE8511	CONE7000	HID Exterior Floods-70 Watts	Exlights	300000
COXE8513	COXE7000	Water Cooled Condensers	Cooling	300000
CONE8513	CONE7000	Water Cooled Condensers	Cooling	300000
COXE8515	COXE7000	VSD Chilled Water Loop Pump	Cooling	300000
CONE8515	CONE7000	VSD Chilled Water Loop Pump	Cooling	300000
COXE8517	COXE7617	Energy Management System	Cooling	300000
CONE8517	CONE7617	Energy Management System	Cooling	300000
COXE8518	COXE7000	Duct Insulation Material	Cooling	300000
CONE8518	CONE7000	Duct Insulation Material	Cooling	300000
COXE8519	COXE7000	Variable Air Volume Box	Cooling	300000
COXG8522	COXG7000	Hot Water Circulation Pump Timeclock	Hotwater	300000
COXE8522	COXE7000	Hot Water Circulation Pump Timeclock	Hotwater	300000
CONG8522	CONG7000	Hot Water Circulation Pump Timeclock	Hotwater	300000
CONE8522	CONE7000	Hot Water Circulation Pump Timeclock	Hotwater	300000
COXG8524	COXG7000	Active Solar Water Heating	Hotwater	300000
COXE8524	COXE7000	Active Solar Water Heating	Hotwater	300000
CONG8524	CONG7000	Active Solar Water Heating	Hotwater	300000
CONE8524	CONE7000	Active Solar Water Heating	Hotwater	300000
COXE8543	COXE7000	Gas Absorption Chiller	Cooling	300000
CONE8543	CONE7000	Gas Absorption Chiller	Cooling	300000
COXE8544	COXE7000	Chiller Strainer Cycle	Cooling	300000
CONE8544	CONE7000	Chiller Strainer Cycle	Cooling	300000
COXE8545	COXE7000	Chilled Water Reset Controls	Cooling	300000
COXE8546	COXE7646	Chiller Optimizer Controls	Cooling	300000
CONE8546	CONE7646	Chiller Optimizer Controls	Cooling	300000
COXE8547	COXE7000	Thermal Energy Storage-Ice On Coil	Cooling	300000
CONE8547	CONE7000	Thermal Energy Storage-Ice On Coil	Cooling	300000
COXE8552	COXE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	300000
CONE8552	CONE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	300000
COXE8553	COXE7000	LED Lamp EXIT Signs	Inlights	300000
CONE8553	CONE7000	LED Lamp EXIT Signs	Inlights	300000
COXE8555	COXE7000	Occupancy Sensor Pack-1000 SF	Inlights	300000
CONE8555	CONE7000	Occupancy Sensor Pack-1000 SF	Inlights	300000
COXE8557	COXE7000	Optical Reflectors-2X4 Recessed	Inlights	300000
CONE8557	CONE7000	Optical Reflectors-2X4 Recessed	Inlights	300000
COXE8558	COXE7000	8' Fluor. Energy Saver Lamps-F96T12ES	Inlights	300000
COXE8559	COXE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	300000

Commercial College Measure Index Table

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Cases: 67

Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
CONE8559	CONE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	300000
COXE8560	COXE7000	Optical Reflectors-1X8 Fixtures	Inlights	300000
CONE8560	CONE7000	Optical Reflectors-1X8 Fixtures	inlights	300000
COXE8561	COXE7661	Electronic Ballasts-4' T12-Base SMC	Inlights	300000
COXE8562	COXE7662	Electronic Ballasts-8' T12-Base SMC	Inlights	300000
COXE8563	COXE7000	Compact Fluorescent Lamps-15W	Inlights	300000
CONE8563	CONE7000	Compact Fluorescent Lamps-15W	Inlights	300000
COXE8567	COXE7000	High Efficiency Reciprocating Chiller	Cooling	300000
CONE8567	CONE7000	High Efficiency Reciprocating Chiller	Cooling	300000

Measure ID	COXE8501		4' Fluor. Energy Saver Lamps-F40T12ES		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0131	Measure Life (Yrs)	5	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.271	4.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.065	7.3			
Indoor Lighting	0.752	15.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.088	7.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	9 AM - 10 AM	0.45	15.0
Minimum Impact	June	Weekday	5 AM - 6 AM	0.04	7.9
System Coincident	December	Weekday	4 PM - 5 PM	0.26	8.3

Measure ID	COXE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage		Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.7503	Measure Life (Yrs)	1	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.271	4.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.065	7.3			
Indoor Lighting	0.752	15.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.088	7.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	9 AM - 10 AM	0.45	15.0
Minimum Impact	June	Weekday	5 AM - 6 AM	0.04	7.9
System Coincident	December	Weekday	4 PM - 5 PM	0.26	8.3

Measure ID	CONE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	New	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.5062	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	+1.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.100	2.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.005	0.7			
Indoor Lighting	0.400	10.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.505	4.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	5 PM - 6 PM	0.29	11.6
Minimum Impact	January	Weekday	6 AM - 7 AM	0.01	1.7
System Coincident	December	Weekday	4 PM - 5 PM	0.13	5.7

Measure ID	COXE8503			4' T8 Lamps And Electronic Ballasts	
Base ID	COXE7000			Base Case-Standard	
Market Segment					
Building Type	College			Vintage	Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.7694	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.494	7.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.119	13.4			
Indoor Lighting	1.371	28.6			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.984	13.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	4 PM - 5 PM	0.66	21.6
Minimum Impact	June	Weekday	2 AM - 3 AM	0.08	13.1
System Coincident	December	Weekday	4 PM - 5 PM	0.66	21.6

Measure ID	CONE8503			4' T8 Lamps And Electronic Ballasts	
Base ID	CONE7000			Base Case-Standard	
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.5122	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.145	3.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.006	0.8			
Indoor Lighting	0.579	15.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.730	6.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	5 PM - 6 PM	0.35	14.0
Minimum Impact	January	Weekday	6 AM - 7 AM	0.02	2.7
System Coincident	December	Weekday	4 PM - 5 PM	0.19	8.3

Monthly Total Electricity Impact
4' T8 Lamps And Electronic Ballasts

December Peak Day Demand Impact
4' T8 Lamps And Electronic Ballasts

Monthly Total Fossil Fuel Impact
4' T8 Lamps And Electronic Ballasts

December Peak Day Demand Profile
4' T8 Lamps And Electronic Ballasts

Measure ID	COXE8504			Window Film Retrofit	
Base ID	COXE7000			Base Case-Standard	
Market Segment					
Building Type	College			Vintage	Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0346	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	42.6%	Modified Market	40.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.178	2.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.006	0.7			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.184	1.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	8 AM - 4 PM	0.23	10.7
Minimum Impact	June	Weekday	10 PM - 11 PM	0.00	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.03	0.8

Measure ID	CONE8505		Double Pane Heat Mirror Glazing		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1417	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	2.4%	Modified Market	2.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.134	3.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.014	2.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.148	1.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	9 AM - 10 AM	0.06	2.3
Minimum Impact	March	Weekday	7 AM - 8 AM	-0.15	-9.7
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.8

Measure ID	COXE8509		High Pressure Sodium-100 Watts		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0038	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.019	8.3			
Central Refrigeration	0.000	NA			
Total	0.019	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	9 PM - 10 PM	0.00	0.2
Minimum Impact	April	Weekday	5 PM - 6 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	CONE8509		High Pressure Sodium-100 Watts		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0030	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.019	10.3			
Central Refrigeration	0.000	NA			
Total	0.019	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	2 AM - 3 AM	0.00	1.0
Minimum Impact	October	Weekday	5 PM - 6 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	COXE8510		High Pressure Sodium-250 Watts		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0060	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.043	18.5			
Central Refrigeration	0.000	NA			
Total	0.043	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	9 PM - 10 PM	0.01	0.4
Minimum Impact	April	Weekday	2 PM - 3 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	COXE8511		HID Exterior Floods-70 Watts		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0053	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.017	7.2			
Central Refrigeration	0.000	NA			
Total	0.017	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	9 PM - 10 PM	0.00	0.1
Minimum Impact	July	Weekday	11 AM - Noon	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	CONE8511		HID Exterior Floods-70 Watts		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage		New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0045	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.017	3.8			
Central Refrigeration	0.000	NA			
Total	0.017	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	11 PM - Midnight	0.00	0.8
Minimum Impact	June	Weekday	6 PM - 7 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	COXE8513		Water Cooled Condensers		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1863	Measure Life (Yrs)	10	Mutual Exclusivity	No
Potential Market	9.0%	Modified Market	9.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.994	15.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.994	6.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	2 PM - 3 PM	0.32	9.0
Minimum Impact	January	Weekday	7 PM - 8 PM	-0.02	-1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.19	6.1

Measure ID	CONE8513			Water Cooled Condensers	
Base ID	CONE7000			Base Case-Standard	
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1693	Measure Life (Yrs)	10	Mutual Exclusivity	No
Potential Market	15.0%	Modified Market	15.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.518	12.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.518	4.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	1 PM - 2 PM	0.19	6.8
Minimum Impact	January	Weekday	5 PM - 6 PM	-0.06	-2.3
System Coincident	December	Weekday	4 PM - 5 PM	0.07	3.2

Measure ID	COXE8515		VSD Chilled Water Loop Pump		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0208	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	26.0%	Modified Market	26.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.733	11.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.733	4.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	6 AM - 7 AM	0.32	18.6
Minimum Impact	March	Weekday	10 PM - 11 PM	0.03	4.0
System Coincident	December	Weekday	4 PM - 5 PM	0.12	3.8

Measure ID	CONE8515		VSD Chilled Water Loop Pump		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0094	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	30.0%	Modified Market	30.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.173	4.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.173	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	11 AM - Noon	0.04	2.2
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.04	1.7

Measure ID	COXE8517		Energy Management System		
Base ID	COXE7617		Base Case For EMS		
Market Segment					
Building Type	College			Vintage	Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$1.1600	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	30.0%	Modified Market	18.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.390	20.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.001	0.1	Misc. Equipment	0.000	0.0
Ventilation	0.003	0.4			
Indoor Lighting	0.309	6.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.703	11.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	6 AM - 7 AM	0.42	23.6
Minimum Impact	March	Weekday	11 PM - Midnight	0.07	12.1
System Coincident	December	Weekday	4 PM - 5 PM	0.30	9.8

Measure ID	CONE8517		Energy Management System		
Base ID	CONE7617		Base Case For EMS		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.7500	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	48.0%	Modified Market	29.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.753	15.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	-0.000	-0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.753	6.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	7 AM - 8 AM	0.26	14.1
Minimum Impact	July	Weekday	10 PM - 11 PM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.20	8.0

Measure ID	COXE8518		Duct Insulation Material		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage		Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0199	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	22.0%	Modified Market	22.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.362	5.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	-0.000	-0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.362	2.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	6 AM - 7 AM	0.25	14.1
Minimum Impact	July	Weekday	11 PM - Midnight	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.25	8.0

Measure ID	CONE8518			Duct Insulation Material	
Base ID	CONE7000			Base Case-Standard	
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0063	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	60.0%	Modified Market	60.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.085	2.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	-0.000	-0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.084	0.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	5 PM - 6 PM	0.17	6.8
Minimum Impact	September	Weekday	11 PM - Midnight	-0.00	-0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.6

Monthly Total Electricity Impact
Duct Insulation Material

December Peak Day Demand Impact
Duct Insulation Material

Monthly Total Fossil Fuel Impact
Duct Insulation Material

December Peak Day Demand Profile
Duct Insulation Material

Measure ID	COXE8519		Variable Air Volume Box		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square root
First Cost (\$/unit)	\$0.4065	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	33.8%	Modified Market	33.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.024	0.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.238	26.8			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.263	1.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	7 AM - 8 AM	0.05	2.2
Minimum Impact	June	Weekday	1 AM - 2 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.05	1.6

Measure ID	COXG8522		Hot Water Circulation Pump Timeclock		
Base ID	COXG7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	Existing
Floor Area (sf)	300000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0031	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	9.0%	Modified Market	4.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.038	0.6	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.352	5.8
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.038	0.3	Total	0.352	5.7
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	6 AM - 7 AM	0.01	1.0
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	COXE8522		Hot Water Circulation Pump Timeclock		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0031	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	9.0%	Modified Market	4.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.038	0.6	Cooling	0.000	NA
Water Heating	0.079	9.3	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.117	0.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 AM - 4 AM	0.04	7.4
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	CONG8522		Hot Water Circulation Pump Timeclock		
Base ID	CONG7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	New	
Floor Area (sf)	300000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0031	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	9.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.334	7.4
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.000	0.0	Total	0.333	7.3
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	CONE8522		Hot Water Circulation Pump Timeclock		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0031	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	9.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.077	9.7	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.077	0.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	5 AM - 6 AM	0.03	6.8
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	COXG8524			Active Solar Water Heating	
Base ID	COXG7000			Base Case-Standard	
Market Segment					
Building Type	College			Vintage	Existing
Floor Area (sf)	300000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2000	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	11.2%	Modified Market	5.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.003	NA	Water Heating	3.925	64.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.002	-0.0	Total	3.925	64.1
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	1 AM - 2 AM	0.00	0.6
Minimum Impact	August	Weekday	5 PM - 6 PM	-0.00	-0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	COXE8524		Active Solar Water Heating		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2000	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	11.2%	Modified Market	5.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.414	49.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.415	2.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	Noon - 1 PM	0.24	7.1
Minimum Impact	September	Weekday	5 AM - 6 AM	0.00	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.2

Measure ID	CONG8524		Active Solar Water Heating		
Base ID	CONG7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage		New
Floor Area (sf)	300000	Water Heater Fuel	Gas	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2000	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	37.5%	Modified Market	18.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.003	NA	Water Heating	2.355	52.2
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.003	-0.0	Total	2.355	51.8
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	1 AM - 2 AM	0.00	0.4
Minimum Impact	August	Weekday	4 PM - 5 PM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
Active Solar Water Heating

December Peak Day Demand Impact
Active Solar Water Heating

Monthly Total Fossil Fuel Impact
Active Solar Water Heating

December Peak Day Demand Profile
Active Solar Water Heating

Measure ID	CONE8524		Active Solar Water Heating		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	New	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2000	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	37.5%	Modified Market	18.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.359	45.4	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.359	3.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	Noon - 1 PM	0.23	8.8
Minimum Impact	September	Weekday	7 PM - 8 PM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	-0.00	-0.1

Measure ID	COXE8543		Gas Absorption Chiller		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2864	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	11.2%	Modified Market	4.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	4.232	65.4	Cooling	-46.861	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	4.232	28.3	Total	-46.861	-130241.4
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekdav	2 PM - 3 PM	1.25	35.0
Minimum Impact	NA	Weekdav	NA	0.00	NA
System Coincident	December	Weekdav	4 PM - 5 PM	0.89	29.0

Measure ID	CONE8543		Gas Absorption Chiller		
Base iD	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2534	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	36.0%	Modified Market	15.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	2.577	63.4	Cooling	-31.686	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.577	23.2	Total	-31.686	-88065.7
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	2 PM - 3 PM	0.87	30.9
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.42	18.2

Measure ID	COXE8544		Chiller Strainer Cycle		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1497	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	8.0%	Modified Market	8.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.030	15.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.030	6.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	7 PM - 8 PM	0.39	14.6
Minimum Impact	July	Weekday	10 PM - 11 PM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.29	9.5

Monthly Total Electricity Impact
Chiller Strainer Cycle

December Peak Day Demand Impact
Chiller Strainer Cycle

Monthly Total Fossil Fuel Impact
Chiller Strainer Cycle

December Peak Day Demand Profile
Chiller Strainer Cycle

Measure ID	CONE8544			Chiller Strainer Cycle	
Base ID	CONE7000			Base Case-Standard	
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1325	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	20.0%	Modified Market	20.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.006	0.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.006	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure iD	COXE8545		Chilled Water Reset Controls		
Base iD	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage		Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0015	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	0.0%	Modified Market	0.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.021	15.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.021	6.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	7 PM - 8 PM	0.39	14.6
Minimum Impact	July	Weekday	10 PM - 11 PM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.29	9.5

Measure ID	COXE8546		Chiller Optimizer Controls		
Base ID	COXE7646		Base Case for Chiller Optimizer		
Market Segment					
Building Type	College			Vintage	Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0510	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	34.0%	Modified Market	34.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.314	19.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.314	8.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	7 PM - 8 PM	0.39	14.6
Minimum Impact	July	Weekday	10 PM - 11 PM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.29	9.5

Measure ID	CONE8546			Chiller Optimizer Controls	
Base ID	CONE7646			Base Case for Chiller Optimizer	
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0510	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	45.0%	Modified Market	45.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.408	9.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.408	3.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	1 PM - 2 PM	0.16	6.3
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.15	6.0

**Monthly Total Electricity Impact
Chiller Optimizer Controls**

**December Peak Day Demand Impact
Chiller Optimizer Controls**

**Monthly Total Fossil Fuel Impact
Chiller Optimizer Controls**

**December Peak Day Demand Profile
Chiller Optimizer Controls**

Measure ID	COXE8547		Thermai Energy Storage-Ice On Coil		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage		Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$2.5200	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	14.4%	Modified Market	6.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.880	13.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.880	5.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	2 PM - 3 PM	1.43	40.0
Minimum Impact	October	Weekday	10 PM - 11 PM	-1.13	-176.3
System Coincident	December	Weekday	4 PM - 5 PM	0.97	31.4

Measure ID	CONE8547		Thermal Energy Storage-Ice On Coil		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$2.5200	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	25.0%	Modified Market	10.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-0.205	-5.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.205	-1.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	2 PM - 3 PM	1.00	35.7
Minimum Impact	March	Weekday	10 PM - 11 PM	-1.61	-335.2
System Coincident	December	Weekday	4 PM - 5 PM	0.52	22.9

Measure ID	COXE8552		Compact Fluorescent Lamp EXIT Signs		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0219	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.048	0.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.006	0.7			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.212	1.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	10 AM - 11 AM	0.07	1.9
Minimum Impact	January	Weekday	11 PM - Midnight	0.02	3.1
System Coincident	December	Weekday	4 PM - 5 PM	0.03	0.8

Monthly Total Electricity Impact
Compact Fluorescent Lamp EXIT Signs

December Peak Day Demand Impact
Compact Fluorescent Lamp EXIT Signs

Monthly Total Fossil Fuel Impact
Compact Fluorescent Lamp EXIT Signs

December Peak Day Demand Profile
Compact Fluorescent Lamp EXIT Signs

Measure ID	CONE8552		Compact Fluorescent Lamp EXIT Signs		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	New	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0053	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	75.0%	Modified Market	75.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.039	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.001	0.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.197	1.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	9 AM - 10 AM	0.04	1.6
Minimum Impact	February	Weekday	11 PM - Midnight	0.02	4.3
System Coincident	December	Weekday	4 PM - 5 PM	0.02	1.0

Monthly Total Electricity Impact
Compact Fluorescent Lamp EXIT Signs

December Peak Day Demand Impact
Compact Fluorescent Lamp EXIT Signs

Monthly Total Fossil Fuel Impact
Compact Fluorescent Lamp EXIT Signs

December Peak Day Demand Profile
Compact Fluorescent Lamp EXIT Signs

Measure ID	COXE8553		LED Lamp EXIT Signs		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0724	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	90.0%	Modified Market	34.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.079	1.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.010	1.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.344	2.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	7 AM - 8 AM	0.24	11.2
Minimum Impact	January	Weekday	11 PM - Midnight	0.03	5.0
System Coincident	December	Weekday	4 PM - 5 PM	0.04	1.4

Measure ID	CONE8553		LED Lamp EXIT Signs		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0378	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	28.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.062	1.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.001	0.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.317	2.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	10 AM - 11 AM	0.07	2.6
Minimum Impact	February	Weekday	11 PM - Midnight	0.03	6.9
System Coincident	December	Weekday	4 PM - 5 PM	0.04	1.7

Measure ID	COXE8555		Occupancy Sensor Pack-1000 SF		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0940	Measure Life (Yrs)	8	Mutual Exclusivity	Yes
Potential Market	30.0%	Modified Market	11.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.447	6.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.001	0.1	Misc. Equipment	0.000	0.0
Ventilation	0.110	12.4			
Indoor Lighting	1.269	26.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.827	12.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	9 AM - 10 AM	0.63	20.8
Minimum Impact	July	Weekday	11 PM - Midnight	0.08	13.0
System Coincident	December	Weekday	4 PM - 5 PM	0.63	20.5

Measure ID	CONE8555		Occupancy Sensor Pack-1000 SF		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0940	Measure Life (Yrs)	8	Mutual Exclusivity	Yes
Potential Market	40.0%	Modified Market	15.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.177	4.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	-0.010	-1.5			
Indoor Lighting	0.789	21.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.956	8.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	5 PM - 6 PM	0.47	18.7
Minimum Impact	July	Weekday	7 AM - 8 AM	-0.09	-6.8
System Coincident	December	Weekday	4 PM - 5 PM	0.31	13.5

Measure ID	COXE8557		Optical Reflectors-2X4 Recessed		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.4034	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.552	8.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.133	15.0			
Indoor Lighting	1.531	31.9			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.217	14.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	10 AM - 11 AM	0.73	23.2
Minimum Impact	August	Weekday	3 AM - 4 AM	0.08	14.7
System Coincident	December	Weekday	4 PM - 5 PM	0.72	23.3

Measure iD	CONE8557		Optical Reflectors-2X4 Recessed		
Base iD	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	New	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3970	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.295	7.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.001	0.2			
Indoor Lighting	1.180	31.9			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.477	13.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	5 PM - 6 PM	0.55	21.6
Minimum Impact	July	Weekday	7 AM - 8 AM	-0.05	-3.5
System Coincident	December	Weekday	4 PM - 5 PM	0.39	16.9

Measure ID	COXE8558		8' Fluor. Energy Saver Lamps-F96T12ES		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0003	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.003	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.023	0.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.026	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	9 AM - 10 AM	0.02	0.7
Minimum Impact	September	Weekday	10 PM - 11 PM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.2

Measure ID	COXE8559		Electronic Ballasts-8' T12-Base EEM		
Base iD	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0130	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.002	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.019	0.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.021	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	9 AM - 10 AM	0.02	0.6
Minimum Impact	February	Weekday	5 AM - 6 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.2

Measure ID	CONE8559		Electronic Ballasts-8' T12-Base EEM		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0038	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.001	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.007	0.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.007	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	9 AM - 10 AM	0.02	0.6
Minimum Impact	September	Weekday	10 PM - 11 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	COXE8560		Optical Reflectors-1X8 Fixtures		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0076	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.007	0.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.052	1.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.059	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	9 AM - 10 AM	0.03	0.9
Minimum Impact	September	Weekday	10 PM - 11 PM	0.00	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.5

Measure ID	CONE8560		Optical Reflectors-1X8 Fixtures		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0076	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.003	0.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.040	1.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.042	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	9 AM - 10 AM	0.03	1.1
Minimum Impact	December	Weekday	1 PM - 2 PM	-0.14	-6.1
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.6

Measure ID	COXE8561			Electronic Ballasts-4' T12-Base SMC	
Base ID	COXE7661			Base Case for 4' Fluor. SMC Ballasts	
Market Segment					
Building Type	College			Vintage	Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.5143	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.202	3.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.047	5.0			
Indoor Lighting	0.537	10.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.786	5.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	5 PM - 6 PM	0.38	11.7
Minimum Impact	June	Weekday	5 AM - 6 AM	0.03	5.4
System Coincident	December	Weekday	4 PM - 5 PM	0.18	5.6

Measure ID	COXE8562		Electronic Ballasts-8' T12-Base SMC		
Base ID	COXE7662		Base Case for 8' Fluor. SMC Ballasts		
Market Segment					
Building Type	College		Vintage		Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0112	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.001	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.009	0.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.011	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	5 PM - 6 PM	0.00	0.1
Minimum Impact	November	Weekday	11 PM - Midnight	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	COXE8563		Compact Fluorescent Lamps-15W		
Base ID	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	Existing
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0086	Measure Life (Yrs)	2	Mutual Exclusivity	No
Potential Market	85.5%	Modified Market	85.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.027	0.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.001	0.1			
Indoor Lighting	0.084	1.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.112	0.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	9 PM - 10 PM	0.03	1.2
Minimum Impact	Julv	Weekday	1 AM - 2 AM	0.00	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.5

Measure ID	CONE8563			Compact Fluorescent Lamps-15W	
Base ID	CONE7000			Base Case-Standard	
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0071	Measure Life (Yrs)	2	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.018	0.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.001	0.1			
Indoor Lighting	0.068	1.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.087	0.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	9 PM - 10 PM	0.02	1.3
Minimum Impact	August	Weekday	4 AM - 5 AM	0.00	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.6

Measure iD	COXE8567		High Efficiency Reciprocating Chiller		
Base iD	COXE7000		Base Case-Standard		
Market Segment					
Building Type	College		Vintage	Existing	
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0477	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	18.0%	Modified Market	18.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.875	13.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.875	5.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	2 PM - 3 PM	0.27	7.6
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.17	5.6

Measure ID	CONE8567		High Efficiency Reciprocating Chiller		
Base ID	CONE7000		Base Case-Standard		
Market Segment					
Building Type	College			Vintage	New
Floor Area (sf)	300000	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0422	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	35.0%	Modified Market	35.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.439	10.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.439	3.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	2 PM - 3 PM	0.15	5.3
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.08	3.4

DETAILED MEASURE IMPACTS-SUMMARY REPORTS

This section contains the detailed measure impact results and market segment data for each DSM case examined for this building type. A complete index of all base and measure cases defined for this building type is shown first. This index represents an expansion of the base and measure matrix presented in Table 1 (residential) or Table 2 (commercial) for the applicable sector. Following this index, a summary report sheet is provided for each DSM measure case in the order shown in the index. The summary report sheet contains a host of information and selected graphs which define and depict the measure impacts and outline the market segment data assumptions utilized for each case in the DBEDT DSM Forecasting models. The variables and figures included in the summary report sheet are described below.

Measure ID: The eight-character alpha-numeric code used to define the measure case. This ID is composed of the 2-letter building code + the 1-letter vintage code + the 1-letter water heater fuel type code + the 4-digit numeric code used to define the base or measure case.

Measure Description: A brief (no more than 38-character) definition of the DSM measure

Base ID: Similar to the Measure ID, this code denotes the base case to which the measure case is compared in order to estimate the measure impacts.

Base Description: Similar to the Measure Description, a brief description of the base case. This description helps to determine if a modified base case was defined to estimate measure impacts.

Market Segment. This section of the summary report sheet contains the market segment data defined for each measure. These are:

Building Type:	The building type to which this measure applies.
Vintage:	The vintage of the building (new or existing).
Floor Area (sf):	The gross floor area of the building in square feet.
Water Heater Fuel:	The fuel type utilized for domestic or service water heating (Gas, Electric, or Oil).
Cost Unit:	The unit of measure utilized to describe the measure cost.
First Cost (\$/unit):	The installed capital cost for the measure in dollars per Cost Unit (93 dollars).
Measure Life (Yrs):	The measure life in years.
Mutual Exclusivity:	A Yes/No entry which denotes if mutual exclusivity considerations apply to this measure. A Yes entry indicates that this measure is mutually exclusive with one or more measures pertaining to this building type, thereby modifying the potential market share available.
Potential Market:	The maximum market share available for this measure. This includes consideration of measure applicability, measure feasibility, and remaining market share for existing vintages.
Modified Market:	The maximum market share available for this measure accounting for mutual exclusivity.
Intra Action:	A Yes/No entry which denotes if intra active considerations apply to this measure. A Yes entry indicates that this measure is intra active with one or more measures if applied as a group to this building type. The total impact in a particular end-use for a group of measures with intra active effects is not the same as the summation of the individual measure impacts. An incremental measure impact reduction is implied, based on the measure loading order.

Annual Energy Impacts By End-Use. This section of the summary report contains the normalized measure impacts by end-use and for the total building by fuel type. Electricity impacts are shown in terms of kWh/square foot and as a percentage of the base case, while fossil fuel impacts are shown as kBtu/square foot and as a percentage of the base case for each end-use and for the total. The end-use impacts shown include:

Cooling (& Auxiliary) :	Space cooling and associated pumps and heat rejection energy (e.g., condensers or cooling tower).
Water Heating:	Storage or central domestic or service water heating system.
Misc. Equipment:	Miscellaneous equipment.
Ventilation:	Supply air fans for conditioning and exhaust air fans.
Indoor Lighting:	Interior lighting (not including EXIT signs).
Outdoor Lighting:	Exterior building lighting.
Central Refrigeration:	Commercial/Industrial refrigeration systems.
Total:	Total building energy use by fuel.

Total Building Peak Demand Impact: This section of the summary report provides peak demand impacts for each measure for selected peak events during the year. Three events are included, the maximum building peak demand impact, the minimum building peak demand impact, and a system coincident peak demand impact (set to December weekday at 4 to 5 PM). For each event the Month, Day Type, and Hour are shown, followed by the normalized total building peak demand impact in Watts/square foot and the percentage of the total base case represented by the impact.

Measure Impact Figures. Four figures are selected and included in each summary report to depict the impacts resulting from each measure. These are:

Monthly Total Electricity Impact: This figure shows the floor area normalized monthly electricity impacts associated with the measure in kWh/square foot.

Monthly Total Fossil Fuel Impact: This figure shows the floor area normalized monthly fossil fuel impacts associated with the measure in kBtu/square foot.

December Peak Day Demand Impact: This figure shows the (selected) system coincident peak day floor area normalized total building demand impact for the measure in Watts/square foot.

December Peak Day Demand Profile: This figure provides the daily total building load profile for the measure and base cases on the (selected) system coincident peak day in kW.

Commercial Maui-Hotel Measure Index Table

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Cases: 79

Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
MHXE7000	MHXE7000	Base Case-Standard	NA	537700
MHXO7000	MHXO7000	Base Case-Standard	NA	537700
MHNE7000	MHNE7000	Base Case-Standard	NA	537700
MHNO7000	MHNO7000	Base Case-Standard	NA	537700
MHXE7617	MHXE7617	Base Case For EMS	NA	537700
MHNE7617	MHNE7617	Base Case For EMS	NA	537700
MHXE7646	MHXE7646	Base Case for Chiller Optimizer	NA	537700
MHNE7646	MHNE7646	Base Case for Chiller Optimizer	NA	537700
MHXE7648	MHXE7648	Base Case For Cooling Tower Prop Fans	NA	537700
MHNE7648	MHNE7648	Base Case For Cooling Tower Prop Fans	NA	537700
MHXE7661	MHXE7661	Base Case for 4' Fluor. SMC Ballasts	NA	537700
MHXE7662	MHXE7662	Base Case for 8' Fluor. SMC Ballasts	NA	537700
MHXE8501	MHXE7000	4' Fluor. Energy Saver Lamps-F40T12ES	Inlights	537700
MHXE8502	MHXE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	537700
MHNE8502	MHNE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	537700
MHXE8503	MHXE7000	4' T8 Lamps And Electronic Ballasts	Inlights	537700
MHNE8503	MHNE7000	4' T8 Lamps And Electronic Ballasts	Inlights	537700
MHXE8504	MHXE7000	Window Film Retrofit	Cooling	537700
MHNE8505	MHNE7000	Double Pane Heat Mirror Glazing	Cooling	537700
MHXE8509	MHXE7000	High Pressure Sodium-100 Watts	Exlights	537700
MHNE8509	MHNE7000	High Pressure Sodium-100 Watts	Exlights	537700
MHXE8510	MHXE7000	High Pressure Sodium-250 Watts	Exlights	537700
MHXE8511	MHXE7000	HID Exterior Floods-70 Watts	Exlights	537700
MHNE8511	MHNE7000	HID Exterior Floods-70 Watts	Exlights	537700
MHXE8512	MHXE7000	Occupancy Sensor Pack-200 SF	Inlights	537700
MHNE8512	MHNE7000	Occupancy Sensor Pack-200 SF	Inlights	537700
MHXE8515	MHXE7000	VSD Chilled Water Loop Pump	Cooling	537700
MHNE8515	MHNE7000	VSD Chilled Water Loop Pump	Cooling	537700
MHXE8517	MHXE7617	Energy Management System	Cooling	537700
MHNE8517	MHNE7617	Energy Management System	Cooling	537700
MHXE8518	MHXE7000	Duct Insulation Material	Cooling	537700
MHNE8518	MHNE7000	Duct Insulation Material	Cooling	537700
MHXE8519	MHXE7000	Variable Air Volume Box	Cooling	537700
MHXE8522	MHXE7000	Hot Water Circulation Pump Timeclock	Hotwater	537700
MHXO8522	MHXO7000	Hot Water Circulation Pump Timeclock	Hotwater	537700
MHNE8522	MHNE7000	Hot Water Circulation Pump Timeclock	Hotwater	537700
MHNO8522	MHNO7000	Hot Water Circulation Pump Timeclock	Hotwater	537700
MHXE8524	MHXE7000	Active Solar Water Heating	Hotwater	537700
MHXO8524	MHXO7000	Active Solar Water Heating	Hotwater	537700
MHNE8524	MHNE7000	Active Solar Water Heating	Hotwater	537700
MHNO8524	MHNO7000	Active Solar Water Heating	Hotwater	537700
MHXE8541	MHXE7000	High Efficiency Centrifugal Chiller	Cooling	537700
MHNE8541	MHNE7000	High Efficiency Centrifugal Chiller	Cooling	537700
MHXE8542	MHXE7000	VSD Centrifugal Chiller	Cooling	537700
MHNE8542	MHNE7000	VSD Centrifugal Chiller	Cooling	537700
MHXE8544	MHXE7000	Chiller Strainer Cycle	Cooling	537700
MHNE8544	MHNE7000	Chiller Strainer Cycle	Cooling	537700
MHXE8545	MHXE7000	Chilled Water Reset Controls	Cooling	537700
MHXE8546	MHXE7646	Chiller Optimizer Controls	Cooling	537700
MHNE8546	MHNE7646	Chiller Optimizer Controls	Cooling	537700
MHXE8547	MHXE7000	Thermal Energy Storage-Ice On Coil	Cooling	537700
MHNE8547	MHNE7000	Thermal Energy Storage-Ice On Coil	Cooling	537700
MHXE8548	MHXE7648	Cooling Tower Propeller Fans	Cooling	537700
MHNE8548	MHNE7648	Cooling Tower Propeller Fans	Cooling	537700
MHXE8549	MHXE7000	Two-Speed Cooling Tower Fans	Cooling	537700
MHNE8549	MHNE7000	Two-Speed Cooling Tower Fans	Cooling	537700
MHXE8550	MHXE7000	VSD Cooling Tower Fans	Cooling	537700
MHNE8550	MHNE7000	VSD Cooling Tower Fans	Cooling	537700

Commercial Maui-Hotel Measure Index Table

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Cases: 79

Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
MHXE8551	MHNE7000	Waste Heat Recovery	Hotwater	537700
MHNE8551	MHNE7000	Waste Heat Recovery	Hotwater	537700
MHXE8552	MHNE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	537700
MHNE8552	MHNE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	537700
MHXE8553	MHNE7000	LED Lamp EXIT Signs	Inlights	537700
MHNE8553	MHNE7000	LED Lamp EXIT Signs	Inlights	537700
MHXE8557	MHNE7000	Optical Reflectors-2X4 Recessed	Inlights	537700
MHNE8557	MHNE7000	Optical Reflectors-2X4 Recessed	Inlights	537700
MHXE8558	MHNE7000	8' Fluor. Energy Saver Lamps-F96T12ES	Inlights	537700
MHXE8559	MHNE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	537700
MHNE8559	MHNE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	537700
MHXE8560	MHNE7000	Optical Reflectors-1X8 Fixtures	Inlights	537700
MHNE8560	MHNE7000	Optical Reflectors-1X8 Fixtures	Inlights	537700
MHXE8561	MHNE7661	Electronic Ballasts-4' T12-Base SMC	Inlights	537700
MHXE8562	MHNE7662	Electronic Ballasts-8' T12-Base SMC	Inlights	537700
MHXE8563	MHNE7000	Compact Fluorescent Lamps-15W	Inlights	537700
MHNE8563	MHNE7000	Compact Fluorescent Lamps-15W	Inlights	537700
MHXE8564	MHNE7000	Compact Fluorescent Lamps-26W	Inlights	537700
MHNE8564	MHNE7000	Compact Fluorescent Lamps-26W	Inlights	537700
MHXE8565	MHNE7000	HID Interior Spots-70W	Inlights	537700
MHNE8565	MHNE7000	HID Interior Spots-70W	Inlights	537700

Measure ID	MHXE8501		4' Fluor. Energy Saver Lamps-F40T12ES		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Mann-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0029	Measure Life (Yrs)	5	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	kWh/sf	% of Base	End-Use	kBtu/sf	% of Base
Cooling & Auxiliary	0.086	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.027	1.2			
Indoor Lighting	0.282	4.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.396	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	1 PM - 2 PM	0.11	3.5
Minimum Impact	January	Weekday	5 AM - 6 AM	0.02	1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.06	2.3

Monthly Total Electricity Impact
4' Fluor. Energy Saver Lamps-F40T12ES

December Peak Day Demand Impact
4' Fluor. Energy Saver Lamps-F40T12ES

Monthly Total Fossil Fuel Impact
4' Fluor. Energy Saver Lamps-F40T12ES

December Peak Day Demand Profile
4' Fluor. Energy Saver Lamps-F40T12ES

Measure ID	MHXE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Mau-Hotel			Vintage	Existing
Floor Area (sf)	557700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$51688	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	77.9%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.086	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.027	1.2			
Indoor Lighting	0.282	4.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.396	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	1 PM - 2 PM	0.11	3.5
Minimum Impact	January	Weekday	5 AM - 6 AM	0.02	1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.06	2.3

Monthly Total Electricity Impact
Electronic Ballasts-4' T12-Base EEM

December Peak Day Demand Impact
Electronic Ballasts-4' T12-Base EEM

Monthly Total Fossil Fuel Impact
Electronic Ballasts-4' T12-Base EEM

December Peak Day Demand Profile
Electronic Ballasts-4' T12-Base EEM

Measure ID	MHNE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1161	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	±1.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.032	0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.008	0.7			
Indoor Lighting	0.154	3.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.194	1.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	2 PM - 3 PM	0.06	2.8
Minimum Impact	January	Weekday	5 AM - 6 AM	0.01	0.6
System Coincident	December	Weekday	4 PM - 5 PM	0.03	1.7

Monthly Total Electricity Impact
Electronic Ballasts-4' T12-Base EEM

December Peak Day Demand Impact
Electronic Ballasts-4' T12-Base EEM

Monthly Total Fossil Fuel Impact
Electronic Ballasts-4' T12-Base EEM

December Peak Day Demand Profile
Electronic Ballasts-4' T12-Base EEM

Measure ID	MHXE8503		4' T8 Lamps And Electronic Ballasts		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1731	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.162	1.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.050	2.3			
Indoor Lighting	0.534	9.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.746	3.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	1 PM - 2 PM	0.17	5.3
Minimum Impact	January	Weekday	5 AM - 6 AM	0.03	2.0
System Coincident	December	Weekday	4 PM - 5 PM	0.12	4.3

Monthly Total Electricity Impact
4' T8 Lamps And Electronic Ballasts

December Peak Day Demand Impact
4' T8 Lamps And Electronic Ballasts

Monthly Total Fossil Fuel Impact
4' T8 Lamps And Electronic Ballasts

December Peak Day Demand Profile
4' T8 Lamps And Electronic Ballasts

Measure ID	MHNE8503		4' T8 Lamps And Electronic Ballasts		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Mau-Hotel		Vintage		New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1175	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.051	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.012	1.0			
Indoor Lighting	0.252	6.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.315	1.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	2 PM - 3 PM	0.08	3.6
Minimum Impact	January	Weekday	5 AM - 6 AM	0.01	1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.05	2.6

Monthly Total Electricity Impact
4' T8 Lamps And Electronic Ballasts

December Peak Day Demand Impact
4' T8 Lamps And Electronic Ballasts

Monthly Total Fossil Fuel Impact
4' T8 Lamps And Electronic Ballasts

December Peak Day Demand Profile
4' T8 Lamps And Electronic Ballasts

Measure ID	MHXE8504		Window Film Retrofit		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0966	Measure Life (Yrs)	-	Mutual Exclusivity	Yes
Potential Market	21.6%	Modified Market	12.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.509	5.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.183	8.3			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.692	2.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	11 AM - Noon	0.42	12.6
Minimum Impact	January	Weekday	5 AM - 6 AM	0.05	2.9
System Coincident	December	Weekday	4 PM - 5 PM	0.08	2.8

Monthly Total Electricity Impact
Window Film Retrofit

December Peak Day Demand Impact
Window Film Retrofit

Monthly Total Fossil Fuel Impact
Window Film Retrofit

December Peak Day Demand Profile
Window Film Retrofit

Measure ID	MHNE8505		Double Pane Heat Mirror Glazing		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.4092	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	27.7%	Modified Market	15.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	kBtu/sf	% of Base
Cooling & Auxiliary	0.599	11.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.279	22.6			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.878	4.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	4 PM - 5 PM	0.25	10.8
Minimum Impact	August	Weekday	Midnight - 1 AM	0.06	4.2
System Coincident	December	Weekday	4 PM - 5 PM	0.09	4.4

Monthly Total Electricity Impact
Double Pane Heat Mirror Glazing

December Peak Day Demand Impact
Double Pane Heat Mirror Glazing

Monthly Total Fossil Fuel Impact
Double Pane Heat Mirror Glazing

December Peak Day Demand Profile
Double Pane Heat Mirror Glazing

Measure ID	MHXE8509		High Pressure Sodium-100 Watts		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square root
First Cost (\$/unit)	\$0.0070	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	~0.0%	Modified Market	~0.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.036	7.8			
Central Refrigeration	0.000	NA			
Total	0.036	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	8 PM - 9 PM	0.01	0.2
Minimum Impact	November	Weekday	3 PM - 4 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
High Pressure Sodium-100 Watts

December Peak Day Demand Impact
High Pressure Sodium-100 Watts

Monthly Total Fossil Fuel Impact
High Pressure Sodium-100 Watts

December Peak Day Demand Profile
High Pressure Sodium-100 Watts

Measure ID	MHNE8509			High Pressure Sodium-100 Watts	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0055	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	~0.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	kWh/sf	% of Base	End-Use	kBtu/sf	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.036	9.3			
Central Refrigeration	0.000	NA			
Total	0.036	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	9 PM - 10 PM	0.01	0.3
Minimum Impact	June	Weekday	11 AM - Noon	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
High Pressure Sodium-100 Watts

December Peak Day Demand Impact
High Pressure Sodium-100 Watts

Monthly Total Fossil Fuel Impact
High Pressure Sodium-100 Watts

December Peak Day Demand Profile
High Pressure Sodium-100 Watts

Measure ID	MHXE8510		High Pressure Sodium-250 Watts		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	557700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (unit)	\$0.0101	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.072	15.6			
Central Refrigeration	0.000	NA			
Total	0.072	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	8 PM - 9 PM	0.02	0.4
Minimum Impact	September	Weekday	8 AM - 9 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
High Pressure Sodium-250 Watts

December Peak Day Demand Impact
High Pressure Sodium-250 Watts

Monthly Total Fossil Fuel Impact
High Pressure Sodium-250 Watts

December Peak Day Demand Profile
High Pressure Sodium-250 Watts

Measure ID	MHXE8511		HID Exterior Floods-70 Watts		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Mau-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0098	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.031	6.7			
Central Refrigeration	0.000	NA			
Total	0.031	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	11 PM - Midnight	0.01	0.2
Minimum Impact	November	Weekday	5 PM - 6 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Impact
HID Exterior Floods-70 Watts

Monthly Total Fossil Fuel Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Profile
HID Exterior Floods-70 Watts

Measure ID	MHNE8511		HID Exterior Floods-70 Watts		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Mall-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0083	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	~0.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.031	7.9			
Central Refrigeration	0.000	NA			
Total	0.031	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	11 PM - Midnight	0.01	0.3
Minimum Impact	September	Weekday	5 PM - 6 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Impact
HID Exterior Floods-70 Watts

Monthly Total Fossil Fuel Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Profile
HID Exterior Floods-70 Watts

Measure ID	MHXE8512		Occupancy Sensor Pack-200 SF		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2831	Measure Life (Yrs)	8	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.172	2.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.001	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.015	0.7			
Indoor Lighting	0.620	10.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.808	3.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	7 AM - 8 AM	0.20	5.8
Minimum Impact	January	Weekday	5 AM - 6 AM	0.03	2.0
System Coincident	December	Weekday	4 PM - 5 PM	0.12	4.3

Monthly Total Electricity Impact
Occupancy Sensor Pack-200 SF

December Peak Day Demand Impact
Occupancy Sensor Pack-200 SF

Monthly Total Fossil Fuel Impact
Occupancy Sensor Pack-200 SF

December Peak Day Demand Profile
Occupancy Sensor Pack-200 SF

Measure ID	MHNE8512		Occupancy Sensor Pack-200 SF		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2831	Measure Life (Yrs)	8	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.068	1.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.008	0.7			
Indoor Lighting	0.337	8.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.414	2.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	1 PM - 2 PM	0.12	5.4
Minimum Impact	October	Weekday	1 AM - 2 AM	-0.02	-1.2
System Coincident	December	Weekday	4 PM - 5 PM	0.06	2.8

Monthly Total Electricity Impact
Occupancy Sensor Pack-200 SF

December Peak Day Demand Impact
Occupancy Sensor Pack-200 SF

Monthly Total Fossil Fuel Impact
Occupancy Sensor Pack-200 SF

December Peak Day Demand Profile
Occupancy Sensor Pack-200 SF

Measure ID	MHXE8515		VSD Chilled Water Loop Pump		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0386	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	26.0%	Modified Market	26.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.790	8.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.790	3.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 AM - 2 AM	0.15	7.2
Minimum Impact	March	Weekday	7 AM - 8 AM	0.04	1.3
System Coincident	December	Weekday	4 PM - 5 PM	0.08	3.0

Monthly Total Electricity Impact
VSD Chilled Water Loop Pump

December Peak Day Demand Impact
VSD Chilled Water Loop Pump

Monthly Total Fossil Fuel Impact
VSD Chilled Water Loop Pump

December Peak Day Demand Profile
VSD Chilled Water Loop Pump

Measure ID	MHNE8515		VSD Chilled Water Loop Pump		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Mau-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0153	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	29.5%	Modified Market	29.5%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.198	3.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.198	1.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	6 AM - 7 AM	0.04	2.0
Minimum Impact	August	Weekday	1 PM - 2 PM	-0.02	-0.7
System Coincident	December	Weekday	4 PM - 5 PM	0.03	1.3

Monthly Total Electricity Impact
VSD Chilled Water Loop Pump

December Peak Day Demand Impact
VSD Chilled Water Loop Pump

Monthly Total Fossil Fuel Impact
VSD Chilled Water Loop Pump

December Peak Day Demand Profile
VSD Chilled Water Loop Pump

Measure ID	MHXE8517		Energy Management System		
Base ID	MHXE7617		Base Case For EMS		
Market Segment					
Building Type	Maur-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square root
First Cost (\$/unit)	\$1 1600	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	72.7%	Modified Market	34.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	kWh/sf	% of Base	End-Use	kBtu/sf	% of Base
Cooling & Auxiliary	2.228	23.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.001	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.030	0.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.259	8.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	W/sf	% of Base
Maximum Impact	October	Weekday	9 AM - 10 AM	0.33	8.5
Minimum Impact	September	Weekday	3 PM - 4 PM	0.18	5.6
System Coincident	December	Weekday	4 PM - 5 PM	0.25	8.7

Monthly Total Electricity Impact
Energy Management System

December Peak Day Demand Impact
Energy Management System

Monthly Total Fossil Fuel Impact
Energy Management System

December Peak Day Demand Profile
Energy Management System

Measure ID	MHNE8517		Energy Management System		
Base ID	MHNE7617		Base Case For EMS		
Market Segment					
Building Type	Mau-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.7500	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	92.7%	Modified Market	98.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.014	16.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	-0.002	-0.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.012	5.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	8 PM - 9 PM	0.16	5.5
Minimum Impact	May	Weekday	2 PM - 3 PM	0.06	2.5
System Coincident	December	Weekday	4 PM - 5 PM	0.12	5.7

Monthly Total Electricity Impact
Energy Management System

December Peak Day Demand Impact
Energy Management System

Monthly Total Fossil Fuel Impact
Energy Management System

December Peak Day Demand Profile
Energy Management System

Measure ID	MHXE8518		Duct Insulation Material		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0065	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	22.0%	Modified Market	22.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.403	4.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.403	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 AM - 2 AM	0.11	5.1
Minimum Impact	March	Weekday	7 AM - 8 AM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.04	1.4

Monthly Total Electricity Impact
Duct Insulation Material

December Peak Day Demand Impact
Duct Insulation Material

Monthly Total Fossil Fuel Impact
Duct Insulation Material

December Peak Day Demand Profile
Duct Insulation Material

Measure ID	MHNE8518		Duct Insulation Material		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Mau-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0021	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	60.0%	Modified Market	60.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.051	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	-0.007	-0.6			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.043	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	Midnight - 1 AM	0.05	3.5
Minimum Impact	August	Weekday	9 AM - 10 AM	-0.04	-1.4
System Coincident	December	Weekday	4 PM - 5 PM	-0.01	-0.3

Monthly Total Electricity Impact
Duct Insulation Material

December Peak Day Demand Impact
Duct Insulation Material

Monthly Total Fossil Fuel Impact
Duct Insulation Material

December Peak Day Demand Profile
Duct Insulation Material

Measure ID	MHXE8519		Variable Air Volume Box		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1638	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	33.8%	Modified Market	33.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.611	6.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.611	2.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	7 AM - 8 AM	0.18	4.8
Minimum Impact	January	Weekday	5 AM - 6 AM	0.03	1.6
System Coincident	December	Weekday	4 PM - 5 PM	0.09	3.4

Measure ID	MHXE8522		Hot Water Circulation Pump Timeclock		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0011	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	9.0%	Modified Market	± 4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	kBtu/sf	% of Base
Cooling & Auxiliary	0.109	1.2	Cooling	0.000	NA
Water Heating	0.219	7.9	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.328	1.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 AM - 4 AM	0.16	8.5
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
Hot Water Circulation Pump Timeclock

December Peak Day Demand Impact
Hot Water Circulation Pump Timeclock

Monthly Total Fossil Fuel Impact
Hot Water Circulation Pump Timeclock

December Peak Day Demand Profile
Hot Water Circulation Pump Timeclock

Measure ID	MHXO8522			Hot Water Circulation Pump Timeclock	
Base ID	MHXO7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Oil	Cost Unit	Building square foot
First Cost (\$/unit)	NA	Measure Life (Yrs)	NA	Mutual Exclusivity	NA
Potential Market	NA	Modified Market	NA	Intra Action	NA
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.109	1.2	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.981	4.6
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.109	0.5	Total	0.981	4.5
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	5 AM - 6 AM	0.06	3.6
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
Hot Water Circulation Pump Timeclock

December Peak Day Demand Impact
Hot Water Circulation Pump Timeclock

Monthly Total Fossil Fuel Impact
Hot Water Circulation Pump Timeclock

December Peak Day Demand Profile
Hot Water Circulation Pump Timeclock

Measure ID	MHNE8522		Hot Water Circulation Pump Timeclock		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0011	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	9.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.109	2.1	Cooling	0.000	NA
Water Heating	0.215	8.4	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.324	1.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	4 AM - 5 AM	0.15	12.1
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
Hot Water Circulation Pump Timeclock

December Peak Day Demand Impact
Hot Water Circulation Pump Timeclock

Monthly Total Fossil Fuel Impact
Hot Water Circulation Pump Timeclock

December Peak Day Demand Profile
Hot Water Circulation Pump Timeclock

Measure ID	MHNO8522			Hot Water Circulation Pump Timeclock	
Base ID	MHNO7000			Base Case-Standard	
Market Segment					
Building Type	Maur-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Oil	Cost Unit	Building square foot
First Cost (\$/unit)	NA	Measure Life (Yrs)	NA	Mutual Exclusivity	NA
Potential Market	NA	Modified Market	NA	Intra Action	NA
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.109	2.1	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.931	6.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.109	0.7	Total	0.931	5.9
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	6 AM - 7 AM	0.06	3.5
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHXE8524		Active Solar Water Heating		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$1.1159	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	18.0%	Modified Market	3.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	1.614	58.3	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.616	6.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	6 PM - 7 PM	0.61	16.5
Minimum Impact	October	Weekday	5 AM - 6 AM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Monthly Total Electricity Impact
Active Solar Water Heating

December Peak Day Demand Impact
Active Solar Water Heating

Monthly Total Fossil Fuel Impact
Active Solar Water Heating

December Peak Day Demand Profile
Active Solar Water Heating

Measure ID	MHXO8524		Active Solar Water Heating		
Base ID	MHXO7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Oil	Cost Unit	Building square foot
First Cost (\$/unit)	NA	Measure Life (Yrs)	NA	Mutual Exclusivity	NA
Potential Market	NA	Modified Market	NA	Intra Action	NA
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.015	NA	Water Heating	14.937	69.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.014	-0.1	Total	14.937	68.1
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	1 AM - 2 AM	0.01	0.6
Minimum Impact	August	Weekday	4 PM - 5 PM	-0.01	-0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHNE8524		Active Solar Water Heating		
Base ID	MHNE000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$1.1159	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	-5.0%	Modified Market	22.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	kWh/sf	% of Base	End-Use	kBtu/sf	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	1.408	54.9	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.409	7.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	6 PM - 7 PM	0.58	20.8
Minimum Impact	October	Weekday	6 AM - 7 AM	-0.02	-1.0
System Coincident	December	Weekday	4 PM - 5 PM	-0.02	-1.0

Monthly Total Electricity Impact
Active Solar Water Heating

December Peak Day Demand Impact
Active Solar Water Heating

Monthly Total Fossil Fuel Impact
Active Solar Water Heating

December Peak Day Demand Profile
Active Solar Water Heating

Measure ID	OHXE8543		Gas Absorption Chiller		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3130	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	26.0%	Modified Market	4.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	5.461	59.9	Cooling	-88.075	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	5.461	21.5	Total	-88.074	-20279.3
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	9 AM - 10 AM	1.23	31.2
Minimum Impact	February	Weekday	10 AM - 11 AM	0.35	12.3
System Coincident	December	Weekday	4 PM - 5 PM	0.52	18.8

Measure ID	OHNE8543		Gas Absorption Chiller		
Base ID	OHNE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2047	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	29.5%	Modified Market	4.6%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	2.466	47.2	Cooling	-47.436	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.466	13.5	Total	-47.436	-10922.1
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	9 AM - 10 AM	0.59	21.1
Minimum Impact	December	Weekday	6 PM - 7 PM	0.14	5.3
System Coincident	December	Weekday	4 PM - 5 PM	0.19	9.5

Measure ID	OHXE8544		Chiller Strainer Cycle		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1636	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	20.8%	Modified Market	20.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.717	18.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.717	6.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	9 AM - 10 AM	0.35	9.0
Minimum Impact	February	Weekday	11 AM - Noon	0.09	3.2
System Coincident	December	Weekday	4 PM - 5 PM	0.16	5.6

Measure ID	OHNE8544		Chiller Strainer Cycle		
Base ID	OHNE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1070	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	15.3%	Modified Market	15.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.013	0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.013	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	NA	Weekday	NA	0.00	NA
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	OHXE8545		Chilled Water Reset Controls		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0009	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.8%	Modified Market	9.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.672	18.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.672	6.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	9 AM - 10 AM	0.35	9.0
Minimum Impact	February	Weekday	11 AM - Noon	0.09	3.2
System Coincident	December	Weekday	4 PM - 5 PM	0.16	5.6

Measure ID	OHXE8546		Chiller Optimizer Controls		
Base ID	OHXE7646		Base Case for Chiller Optimizer		
Market Segment					
Building Type	Oahu-Hotel		Vintage		Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0285	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	20.8%	Modified Market	20.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	2.141	22.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.141	8.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	9 AM - 10 AM	0.35	9.0
Minimum Impact	June	Weekday	4 PM - 5 PM	0.17	5.6
System Coincident	December	Weekday	4 PM - 5 PM	0.24	8.5

Measure ID	OHNE8546			Chiller Optimizer Controls	
Base ID	OHNE7646			Base Case for Chiller Optimizer	
Market Segment					
Building Type	Oahu-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0285	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	15.3%	Modified Market	15.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.453	8.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.453	2.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	5 PM - 6 PM	0.10	4.6
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.09	4.3

Measure ID	OHXE8547			Thermal Energy Storage-Ice On Coil	
Base ID	OHXE7000			Base Case-Standard	
Market Segment					
Building Type	Oahu-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$2.5200	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	37.5%	Modified Market	5.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-0.112	-1.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.112	-0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	2 PM - 3 PM	1.10	32.5
Minimum Impact	January	Weekday	3 AM - 4 AM	-0.67	-37.0
System Coincident	December	Weekday	4 PM - 5 PM	0.34	12.3

Measure ID	OHNE8547		Thermal Energy Storage-Ice On Coil		
Base ID	OHNE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$2.5200	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	37.5%	Modified Market	5.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-1.814	-34.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-1.814	-9.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	8 PM - 9 PM	0.70	24.8
Minimum Impact	November	Weekday	1 AM - 2 AM	-1.18	-90.1
System Coincident	December	Weekday	4 PM - 5 PM	0.24	11.8

Measure ID	OHXE8548		Cooling Tower Propeller Fans		
Base ID	OHXE7648		Base Case For Cooling Tower Prop Fans		
Market Segment					
Building Type	Oahu-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0003	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	18.2%	Modified Market	3.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.233	2.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.233	0.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	9 AM - 10 AM	0.06	1.6
Minimum Impact	December	Weekday	6 PM - 7 PM	0.01	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.6

Measure ID	OHNE8548		Cooling Tower Propeller Fans		
Base ID	OHNE7648		Base Case For Cooling Tower Prop Fans		
Market Segment					
Building Type	Oahu-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0002	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.7%	Modified Market	3.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.138	2.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.138	0.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	9 AM - 10 AM	0.04	1.5
Minimum Impact	December	Weekday	6 PM - 7 PM	0.00	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.4

Measure ID	OHXE8549		Two-Speed Cooling Tower Fans		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage		Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0046	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	18.2%	Modified Market	3.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.095	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.095	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	11 AM - Noon	0.02	0.6
Minimum Impact	July	Weekday	9 AM - 10 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.4

Measure ID	OHNE8549			Two-Speed Cooling Tower Fans	
Base ID	OHNE7000			Base Case-Standard	
Market Segment					
Building Type	Oahu-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0029	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.7%	Modified Market	3.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.059	1.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.059	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	10 AM - 11 AM	0.01	0.5
Minimum Impact	July	Weekday	9 AM - 10 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.3

Measure ID	OHXE8550			VSD Cooling Tower Fans	
Base ID	OHXE7000			Base Case-Standard	
Market Segment					
Building Type	Oahu-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3699	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	18.2%	Modified Market	3.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.122	1.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.122	0.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	7 AM - 8 AM	0.02	0.6
Minimum Impact	December	Weekday	6 PM - 7 PM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.3

Measure ID	OHNE8550		VSD Cooling Tower Fans		
Base ID	OHNE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2360	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.7%	Modified Market	3.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.071	1.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.071	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	6 AM - 7 AM	0.01	0.7
Minimum Impact	December	Weekday	6 PM - 7 PM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.2

Measure ID	OHXE8551		Waste Heat Recovery		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3952	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	15.0%	Modified Market	2.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-0.626	-6.9	Cooling	0.000	NA
Water Heating	1.623	59.6	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.998	3.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	7 AM - 8 AM	0.41	11.9
Minimum Impact	September	Weekday	1 AM - 2 AM	-0.06	-2.7
System Coincident	December	Weekday	4 PM - 5 PM	0.13	4.6

Measure ID	OHNE8551		Waste Heat Recovery		
Base ID	OHNE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2585	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	37.5%	Modified Market	5.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-0.655	-12.5	Cooling	0.000	NA
Water Heating	1.591	63.1	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.936	5.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	8 AM - 9 AM	0.39	14.3
Minimum Impact	January	Weekday	11 PM - Midnight	-0.06	-3.0
System Coincident	December	Weekday	4 PM - 5 PM	0.10	4.8

Measure ID	OHXE8552		Compact Fluorescent Lamp EXIT Signs		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0110	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.023	0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	0.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.106	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 AM - 4 AM	0.06	2.7
Minimum Impact	February	Weekday	11 AM - Noon	0.01	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.5

Measure ID	OHNE8552			Compact Fluorescent Lamp EXIT Signs	
Base ID	OHNE7000			Base Case-Standard	
Market Segment					
Building Type	Oahu-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0027	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	75.0%	Modified Market	75.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.015	0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.002	0.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.096	0.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	6 AM - 7 AM	0.04	2.0
Minimum Impact	February	Weekday	Noon - 1 PM	0.01	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.6

Measure ID	OHXE8553		LED Lamp EXIT Signs		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0364	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	90.0%	Modified Market	49.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.037	0.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.006	0.3			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.170	0.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 AM - 4 AM	0.06	3.1
Minimum Impact	February	Weekday	11 AM - Noon	0.02	0.6
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.7

Measure ID	OHNE8553			LED Lamp EXIT Signs	
Base ID	OHNE7000			Base Case-Standard	
Market Segment					
Building Type	Oahu-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0190	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	40.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.025	0.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	0.3			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.155	0.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	6 AM - 7 AM	0.05	2.3
Minimum Impact	December	Weekday	11 AM - Noon	0.02	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.9

Measure ID	OHXE8557			Optical Reflectors-2X4 Recessed	
Base ID	OHXE7000			Base Case-Standard	
Market Segment					
Building Type	Oahu-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0907	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.152	1.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.056	2.5			
Indoor Lighting	0.421	7.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.629	2.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	6 PM - 7 PM	0.16	4.0
Minimum Impact	November	Weekday	5 AM - 6 AM	0.01	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.11	4.0

Measure ID	OHNE8557			Optical Reflectors-2X4 Recessed	
Base ID	OHNE7000			Base Case-Standard	
Market Segment					
Building Type	Oahu-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0911	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.098	1.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.024	1.9			
Indoor Lighting	0.495	12.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.618	3.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	3 PM - 4 PM	0.13	6.0
Minimum Impact	May	Weekday	5 AM - 6 AM	0.02	2.1
System Coincident	December	Weekday	4 PM - 5 PM	0.10	5.1

Measure ID	OHXE8558			8' Fluor. Energy Saver Lamps-F96T12ES	
Base ID	OHXE7000			Base Case-Standard	
Market Segment					
Building Type	Oahu-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0002	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.009	0.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	0.2			
Indoor Lighting	0.023	0.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.036	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 AM - 4 AM	0.05	2.3
Minimum Impact	February	Weekday	11 PM - Midnight	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	OHXE8559		Electronic Ballasts-8' T12-Base EEM		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0065	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.007	0.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	0.2			
Indoor Lighting	0.019	0.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.029	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 AM - 4 AM	0.05	2.2
Minimum Impact	February	Weekday	11 PM - Midnight	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	OHNE8559		Electronic Ballasts-8' T12-Base EEM		
Base ID	OHNE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0019	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.002	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.001	0.1			
Indoor Lighting	0.007	0.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.009	0.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	2 PM - 3 PM	0.00	0.1
Minimum Impact	September	Weekday	2 AM - 3 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	OHXE8560		Optical Reflectors-1X8 Fixtures		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0038	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.020	0.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.010	0.4			
Indoor Lighting	0.051	0.9			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.082	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	6 AM - 7 AM	0.05	1.9
Minimum Impact	February	Weekday	11 PM - Midnight	0.01	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.3

Monthly Total Electricity Impact
Optical Reflectors-1X8 Fixtures

December Peak Day Demand Impact
Optical Reflectors-1X8 Fixtures

Monthly Total Fossil Fuel Impact
Optical Reflectors-1X8 Fixtures

December Peak Day Demand Profile
Optical Reflectors-1X8 Fixtures

Measure ID	OHNE8560		Optical Reflectors-1X8 Fixtures		
Base ID	OHNE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0038	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.010	0.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	0.3			
Indoor Lighting	0.039	1.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.052	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	6 AM - 7 AM	0.04	1.8
Minimum Impact	October	Weekday	5 AM - 6 AM	0.00	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.3

Monthly Total Electricity Impact
Optical Reflectors-1X8 Fixtures

December Peak Day Demand Impact
Optical Reflectors-1X8 Fixtures

Monthly Total Fossil Fuel Impact
Optical Reflectors-1X8 Fixtures

December Peak Day Demand Profile
Optical Reflectors-1X8 Fixtures

Measure ID	OHXE8561		Electronic Ballasts-4' T12-Base SMC		
Base ID	OHXE7661		Base Case for 4' Fluor. SMC Ballasts		
Market Segment					
Building Type	Oahu-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1157	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.064	0.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.019	0.8			
Indoor Lighting	0.215	3.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.299	1.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	6 PM - 7 PM	0.10	2.4
Minimum Impact	March	Weekday	5 AM - 6 AM	0.01	0.7
System Coincident	December	Weekday	4 PM - 5 PM	0.05	1.9

Measure ID	OHXE8562			Electronic Ballasts-8' T12-Base SMC	
Base ID	OHXE7662			Base Case for 8' Fluor. SMC Ballasts	
Market Segment					
Building Type	Oahu-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0056	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.004	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.002	0.1			
Indoor Lighting	0.009	0.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.015	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	9 AM - 10 AM	0.00	0.1
Minimum Impact	February	Weekday	11 PM - Midnight	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	OHXE8563		Compact Fluorescent Lamps-15W		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage		Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2132	Measure Life (Yrs)	2	Mutual Exclusivity	No
Potential Market	90.3%	Modified Market	90.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.609	6.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.034	1.5			
Indoor Lighting	2.125	35.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.769	10.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	7 PM - 8 PM	0.56	15.2
Minimum Impact	October	Weekday	1 AM - 2 AM	0.12	5.9
System Coincident	December	Weekday	4 PM - 5 PM	0.30	11.0

Measure ID	OHNE8563		Compact Fluorescent Lamps-15W		
Base ID	OHNE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0734	Measure Life (Yrs)	2	Mutual Exclusivity	No
Potential Market	95.0%	Modified Market	95.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.173	3.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.011	0.9			
Indoor Lighting	0.744	18.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.929	5.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	1 PM - 2 PM	0.18	7.9
Minimum Impact	March	Weekday	Midnight - 1 AM	0.02	1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.10	5.0

Measure ID	OHXE8564		Compact Fluorescent Lamps-26W		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0292	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	90.3%	Modified Market	90.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.058	0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.324	5.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.382	1.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	1 PM - 2 PM	0.10	2.8
Minimum Impact	December	Weekday	Noon - 1 PM	0.04	1.3
System Coincident	December	Weekday	4 PM - 5 PM	0.05	1.7

Measure ID	OHNE8564			Compact Fluorescent Lamps-26W	
Base ID	OHNE7000			Base Case-Standard	
Market Segment					
Building Type	Oahu-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0244	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	95.0%	Modified Market	95.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.034	0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	-0.000	-0.0			
Indoor Lighting	0.266	6.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.299	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	6 AM - 7 AM	0.06	3.2
Minimum Impact	March	Weekday	11 AM - Noon	0.03	1.4
System Coincident	December	Weekday	4 PM - 5 PM	0.03	1.6

Measure ID	OHXE8565		HID Interior Spots-70W		
Base ID	OHXE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0623	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.086	0.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.020	0.9			
Indoor Lighting	0.179	3.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.284	1.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 AM - 4 AM	0.07	3.3
Minimum Impact	June	Weekday	Midnight - 1 AM	0.02	1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.04	1.3

Measure ID	OHNE8565		HID Interior Spots-70W		
Base ID	OHNE7000		Base Case-Standard		
Market Segment					
Building Type	Oahu-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0623	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.034	0.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.006	0.5			
Indoor Lighting	0.108	2.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.149	0.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 AM - 2 AM	0.04	3.0
Minimum Impact	September	Weekday	3 AM - 4 AM	0.01	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.02	1.0

DETAILED MEASURE IMPACTS-SUMMARY REPORTS

This section contains the detailed measure impact results and market segment data for each DSM case examined for this building type. A complete index of all base and measure cases defined for this building type is shown first. This index represents an expansion of the base and measure matrix presented in Table 1 (residential) or Table 2 (commercial) for the applicable sector. Following this index, a summary report sheet is provided for each DSM measure case in the order shown in the index. The summary report sheet contains a host of information and selected graphs which define and depict the measure impacts and outline the market segment data assumptions utilized for each case in the DBEDT DSM Forecasting models. The variables and figures included in the summary report sheet are described below.

Measure ID: The eight-character alpha-numeric code used to define the measure case. This ID is composed of the 2-letter building code + the 1-letter vintage code + the 1-letter water heater fuel type code + the 4-digit numeric code used to define the base or measure case.

Measure Description: A brief (no more than 38-character) definition of the DSM measure

Base ID: Similar to the Measure ID, this code denotes the base case to which the measure case is compared in order to estimate the measure impacts.

Base Description: Similar to the Measure Description, a brief description of the base case. This description helps to determine if a modified base case was defined to estimate measure impacts.

Market Segment. This section of the summary report sheet contains the market segment data defined for each measure. These are;

Building Type:	The building type to which this measure applies.
Vintage:	The vintage of the building (new or existing).
Floor Area (sf):	The gross floor area of the building in square feet.
Water Heater Fuel:	The fuel type utilized for domestic or service water heating (Gas, Electric, or Oil).
Cost Unit:	The unit of measure utilized to describe the measure cost.
First Cost (\$/unit):	The installed capital cost for the measure in dollars per Cost Unit (93 dollars).
Measure Life (Yrs):	The measure life in years.
Mutual Exclusivity:	A Yes/No entry which denotes if mutual exclusivity considerations apply to this measure. A Yes entry indicates that this measure is mutually exclusive with one or more measures pertaining to this building type, thereby modifying the potential market share available.
Potential Market:	The maximum market share available for this measure. This includes consideration of measure applicability, measure feasibility, and remaining market share for existing vintages.
Modified Market:	The maximum market share available for this measure accounting for mutual exclusivity.
Intra Action:	A Yes/No entry which denotes if intra active considerations apply to this measure. A Yes entry indicates that this measure is intra active with one or more measures if applied as a group to this building type. The total impact in a particular end-use for a group of measures with intra active effects is not the same as the summation of the individual measure impacts. An incremental measure impact reduction is implied, based on the measure loading order.

Annual Energy Impacts By End-Use. This section of the summary report contains the normalized measure impacts by end-use and for the total building by fuel type. Electricity impacts are shown in terms of kWh/square foot and as a percentage of the base case, while fossil fuel impacts are shown as kBtu/square foot and as a percentage of the base case for each end-use and for the total. The end-use impacts shown include;

Cooling (& Auxiliary) :	Space cooling and associated pumps and heat rejection energy (e.g., condensers or cooling tower.
Water Heating:	Storage or central domestic or service water heating system.
Misc. Equipment:	Miscellaneous equipment.
Ventilation:	Supply air fans for conditioning and exhaust air fans.
Indoor Lighting:	Interior lighting (not including EXIT signs).
Outdoor Lighting:	Exterior building lighting.
Central Refrigeration:	Commercial/Industrial refrigeration systems.
Total:	Total building energy use by fuel.

Total Building Peak Demand Impact: This section of the summary report provides peak demand impacts for each measure for selected peak events during the year. Three events are included, the maximum building peak demand impact, the minimum building peak demand impact, and a system coincident peak demand impact (set to December weekday at 4 to 5 PM). For each event the Month, Day Type, and Hour are shown, followed by the normalized total building peak demand impact in Watts/square foot and the percentage of the total base case represented by the impact.

Measure Impact Figures. Four figures are selected and included in each summary report to depict the impacts resulting from each measure. These are;

Monthly Total Electricity Impact: This figure shows the floor area normalized monthly electricity impacts associated with the measure in kWh/square foot.

Monthly Total Fossil Fuel Impact: This figure shows the floor area normalized monthly fossil fuel impacts associated with the measure in kBtu/square foot.

December Peak Day Demand Impact: This figure shows the (selected) system coincident peak day floor area normalized total building demand impact for the measure in Watts/square foot.

December Peak Day Demand Profile: This figure provides the daily total building load profile for the measure and base cases on the (selected) system coincident peak day in kW.

Commercial Maui-Hotel Measure Index Table

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Cases: 79

Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
MHXE7000	MHXE7000	Base Case-Standard	NA	537700
MHXO7000	MHXO7000	Base Case-Standard	NA	537700
MHNE7000	MHNE7000	Base Case-Standard	NA	537700
MHNO7000	MHNO7000	Base Case-Standard	NA	537700
MHXE7617	MHXE7617	Base Case For EMS	NA	537700
MHNE7617	MHNE7617	Base Case For EMS	NA	537700
MHXE7646	MHXE7646	Base Case for Chiller Optimizer	NA	537700
MHNE7646	MHNE7646	Base Case for Chiller Optimizer	NA	537700
MHXE7648	MHXE7648	Base Case For Cooling Tower Prop Fans	NA	537700
MHNE7648	MHNE7648	Base Case For Cooling Tower Prop Fans	NA	537700
MHXE7661	MHXE7661	Base Case for 4' Fluor. SMC Ballasts	NA	537700
MHXE7662	MHXE7662	Base Case for 8' Fluor. SMC Ballasts	NA	537700
MHXE8501	MHXE7000	4' Fluor. Energy Saver Lamps-F40T12ES	Inlights	537700
MHNE8502	MHNE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	537700
MHNE8502	MHNE7000	Electronic Ballasts-4' T12-Base EEM	Inlights	537700
MHXE8503	MHXE7000	4' T8 Lamps And Electronic Ballasts	Inlights	537700
MHNE8503	MHNE7000	4' T8 Lamps And Electronic Ballasts	Inlights	537700
MHXE8504	MHXE7000	Window Film Retrofit	Cooling	537700
MHNE8505	MHNE7000	Double Pane Heat Mirror Glazing	Cooling	537700
MHXE8509	MHXE7000	High Pressure Sodium-100 Watts	Exdights	537700
MHNE8509	MHNE7000	High Pressure Sodium-100 Watts	Exdights	537700
MHXE8510	MHXE7000	High Pressure Sodium-250 Watts	Exdights	537700
MHNE8511	MHNE7000	HID Exterior Floods-70 Watts	Exdights	537700
MHNE8511	MHNE7000	HID Exterior Floods-70 Watts	Exdights	537700
MHXE8512	MHXE7000	Occupancy Sensor Pack-200 SF	Inlights	537700
MHNE8512	MHNE7000	Occupancy Sensor Pack-200 SF	Inlights	537700
MHXE8515	MHXE7000	VSD Chilled Water Loop Pump	Cooling	537700
MHNE8515	MHNE7000	VSD Chilled Water Loop Pump	Cooling	537700
MHXE8517	MHXE7617	Energy Management System	Cooling	537700
MHNE8517	MHNE7617	Energy Management System	Cooling	537700
MHXE8518	MHXE7000	Duct Insulation Material	Cooling	537700
MHNE8518	MHNE7000	Duct Insulation Material	Cooling	537700
MHXE8519	MHXE7000	Variable Air Volume Box	Cooling	537700
MHXE8522	MHXE7000	Hot Water Circulation Pump Timeclock	Hotwater	537700
MHXO8522	MHXO7000	Hot Water Circulation Pump Timeclock	Hotwater	537700
MHNE8522	MHNE7000	Hot Water Circulation Pump Timeclock	Hotwater	537700
MHNO8522	MHNO7000	Hot Water Circulation Pump Timeclock	Hotwater	537700
MHXE8524	MHXE7000	Active Solar Water Heating	Hotwater	537700
MHXO8524	MHXO7000	Active Solar Water Heating	Hotwater	537700
MHNE8524	MHNE7000	Active Solar Water Heating	Hotwater	537700
MHNO8524	MHNO7000	Active Solar Water Heating	Hotwater	537700
MHXE8541	MHXE7000	High Efficiency Centrifugal Chiller	Cooling	537700
MHNE8541	MHNE7000	High Efficiency Centrifugal Chiller	Cooling	537700
MHXE8542	MHXE7000	VSD Centrifugal Chiller	Cooling	537700
MHNE8542	MHNE7000	VSD Centrifugal Chiller	Cooling	537700
MHXE8544	MHXE7000	Chiller Strainer Cycle	Cooling	537700
MHNE8544	MHNE7000	Chiller Strainer Cycle	Cooling	537700
MHXE8545	MHXE7000	Chilled Water Reset Controls	Cooling	537700
MHXE8546	MHXE7646	Chiller Optimizer Controls	Cooling	537700
MHNE8546	MHNE7646	Chiller Optimizer Controls	Cooling	537700
MHXE8547	MHXE7000	Thermal Energy Storage-Ice On Coil	Cooling	537700
MHNE8547	MHNE7000	Thermal Energy Storage-Ice On Coil	Cooling	537700
MHXE8548	MHXE7648	Cooling Tower Propeller Fans	Cooling	537700
MHNE8548	MHNE7648	Cooling Tower Propeller Fans	Cooling	537700
MHXE8549	MHXE7000	Two-Speed Cooling Tower Fans	Cooling	537700
MHNE8549	MHNE7000	Two-Speed Cooling Tower Fans	Cooling	537700
MHXE8550	MHXE7000	VSD Cooling Tower Fans	Cooling	537700
MHNE8550	MHNE7000	VSD Cooling Tower Fans	Cooling	537700

Commercial Maui-Hotel Measure Index Table

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Measure ID	Base ID	Measure Description	Primary End-Use	Floor Area
MHXE8551	MHNE7000	Waste Heat Recovery	Hotwater	537700
MHNE8551	MHNE7000	Waste Heat Recovery	Hotwater	537700
MHXE8552	MHNE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	537700
MHNE8552	MHNE7000	Compact Fluorescent Lamp EXIT Signs	Inlights	537700
MHXE8553	MHNE7000	LED Lamp EXIT Signs	Inlights	537700
MHNE8553	MHNE7000	LED Lamp EXIT Signs	Inlights	537700
MHXE8557	MHNE7000	Optical Reflectors-2X4 Recessed	Inlights	537700
MHNE8557	MHNE7000	Optical Reflectors-2X4 Recessed	Inlights	537700
MHXE8558	MHNE7000	8' Fluor. Energy Saver Lamps-F96T12ES	Inlights	537700
MHXE8559	MHNE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	537700
MHNE8559	MHNE7000	Electronic Ballasts-8' T12-Base EEM	Inlights	537700
MHXE8560	MHNE7000	Optical Reflectors-1X8 Fixtures	Inlights	537700
MHNE8560	MHNE7000	Optical Reflectors-1X8 Fixtures	Inlights	537700
MHXE8561	MHNE7661	Electronic Ballasts-4' T12-Base SMC	Inlights	537700
MHXE8562	MHNE7662	Electronic Ballasts-8' T12-Base SMC	Inlights	537700
MHXE8563	MHNE7000	Compact Fluorescent Lamps-15W	Inlights	537700
MHNE8563	MHNE7000	Compact Fluorescent Lamps-15W	Inlights	537700
MHXE8564	MHNE7000	Compact Fluorescent Lamps-26W	Inlights	537700
MHNE8564	MHNE7000	Compact Fluorescent Lamps-26W	Inlights	537700
MHXE8565	MHNE7000	HID Interior Spots-70W	Inlights	537700
MHNE8565	MHNE7000	HID Interior Spots-70W	Inlights	537700

Measure ID	MHXE8501			4' Fluor. Energy Saver Lamps-F40T12ES	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0029	Measure Life (Yrs)	5	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.086	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.027	1.2			
Indoor Lighting	0.282	4.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.396	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	1 PM - 2 PM	0.11	3.5
Minimum Impact	January	Weekday	5 AM - 6 AM	0.02	1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.06	2.3

Measure ID	MHXE8502			Electronic Ballasts-4' T12-Base EEM	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1688	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.086	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.027	1.2			
Indoor Lighting	0.282	4.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.396	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	1 PM - 2 PM	0.11	3.5
Minimum Impact	January	Weekday	5 AM - 6 AM	0.02	1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.06	2.3

Measure ID	MHNE8502		Electronic Ballasts-4' T12-Base EEM		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1161	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.032	0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.008	0.7			
Indoor Lighting	0.154	3.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.194	1.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	2 PM - 3 PM	0.06	2.8
Minimum Impact	January	Weekday	5 AM - 6 AM	0.01	0.6
System Coincident	December	Weekday	4 PM - 5 PM	0.03	1.7

Measure ID	MHXE8503		4' T8 Lamps And Electronic Ballasts		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1731	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.162	1.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.050	2.3			
Indoor Lighting	0.534	9.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.746	3.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	1 PM - 2 PM	0.17	5.3
Minimum Impact	January	Weekday	5 AM - 6 AM	0.03	2.0
System Coincident	December	Weekday	4 PM - 5 PM	0.12	4.3

Measure ID	MHNE8503		4' T8 Lamps And Electronic Ballasts		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	New	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1175	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.051	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.012	1.0			
Indoor Lighting	0.252	6.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.315	1.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	2 PM - 3 PM	0.08	3.6
Minimum Impact	January	Weekday	5 AM - 6 AM	0.01	1.1
System Coincident	December	Weekday	4 PM - 5 PM	0.05	2.6

Measure ID	MHXE8504		Window Film Retrofit		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0966	Measure Life (Yrs)	7	Mutual Exclusivity	Yes
Potential Market	21.6%	Modified Market	12.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.509	5.8	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.183	8.3			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.692	2.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	11 AM - Noon	0.42	12.6
Minimum Impact	January	Weekday	5 AM - 6 AM	0.05	2.9
System Coincident	December	Weekday	4 PM - 5 PM	0.08	2.8

Measure ID	MHNE8505		Double Pane Heat Mirror Glazing		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.4092	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	27.7%	Modified Market	15.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.599	11.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.279	22.6			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.878	4.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	4 PM - 5 PM	0.25	10.8
Minimum Impact	August	Weekday	Midnight - 1 AM	0.06	4.2
System Coincident	December	Weekday	4 PM - 5 PM	0.09	4.4

Measure ID	MHXE8509		High Pressure Sodium-100 Watts		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0070	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.036	7.8			
Central Refrigeration	0.000	NA			
Total	0.036	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	8 PM - 9 PM	0.01	0.2
Minimum Impact	November	Weekday	3 PM - 4 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHNE8509			High Pressure Sodium-100 Watts	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0055	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.036	9.3			
Central Refrigeration	0.000	NA			
Total	0.036	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	August	Weekday	9 PM - 10 PM	0.01	0.3
Minimum Impact	June	Weekday	11 AM - Noon	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHXE8510		High Pressure Sodium-250 Watts		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0101	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.072	15.6			
Central Refrigeration	0.000	NA			
Total	0.072	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	8 PM - 9 PM	0.02	0.4
Minimum Impact	September	Weekday	8 AM - 9 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHXE8511		HID Exterior Floods-70 Watts		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage		Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0098	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.031	6.7			
Central Refrigeration	0.000	NA			
Total	0.031	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	11 PM - Midnight	0.01	0.2
Minimum Impact	November	Weekday	5 PM - 6 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Impact
HID Exterior Floods-70 Watts

Monthly Total Fossil Fuel Impact
HID Exterior Floods-70 Watts

December Peak Day Demand Profile
HID Exterior Floods-70 Watts

Measure ID	MHNE8511		HID Exterior Floods-70 Watts		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0083	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.031	7.9			
Central Refrigeration	0.000	NA			
Total	0.031	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	11 PM - Midnight	0.01	0.3
Minimum Impact	September	Weekday	5 PM - 6 PM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHXE8512		Occupancy Sensor Pack-200 SF		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage		Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2831	Measure Life (Yrs)	8	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.172	2.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.001	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.015	0.7			
Indoor Lighting	0.620	10.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.808	3.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	7 AM - 8 AM	0.20	5.8
Minimum Impact	January	Weekday	5 AM - 6 AM	0.03	2.0
System Coincident	December	Weekday	4 PM - 5 PM	0.12	4.3

Measure ID	MHNE8512			Occupancy Sensor Pack-200 SF	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2831	Measure Life (Yrs)	8	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.068	1.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.008	0.7			
Indoor Lighting	0.337	8.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.414	2.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	1 PM - 2 PM	0.12	5.4
Minimum Impact	October	Weekday	1 AM - 2 AM	-0.02	-1.2
System Coincident	December	Weekday	4 PM - 5 PM	0.06	2.8

Measure ID	MHXE8515			VSD Chilled Water Loop Pump	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0386	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	26.0%	Modified Market	26.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.790	8.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.790	3.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 AM - 2 AM	0.15	7.2
Minimum Impact	March	Weekday	7 AM - 8 AM	0.04	1.3
System Coincident	December	Weekday	4 PM - 5 PM	0.08	3.0

Monthly Total Electricity Impact
VSD Chilled Water Loop Pump

December Peak Day Demand Impact
VSD Chilled Water Loop Pump

Monthly Total Fossil Fuel Impact
VSD Chilled Water Loop Pump

December Peak Day Demand Profile
VSD Chilled Water Loop Pump

Measure ID	MHNE8515			VSD Chilled Water Loop Pump	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0153	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	29.5%	Modified Market	29.5%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.198	3.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.198	1.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	6 AM - 7 AM	0.04	2.0
Minimum Impact	August	Weekday	1 PM - 2 PM	-0.02	-0.7
System Coincident	December	Weekday	4 PM - 5 PM	0.03	1.3

Measure ID	MHXE8517			Energy Management System	
Base ID	MHXE7617			Base Case For EMS	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$1.1600	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	72.7%	Modified Market	34.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	2.228	23.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.001	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.030	0.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.259	8.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	9 AM - 10 AM	0.33	8.5
Minimum Impact	September	Weekday	3 PM - 4 PM	0.18	5.6
System Coincident	December	Weekday	4 PM - 5 PM	0.25	8.7

Measure ID	MHNE8517			Energy Management System	
Base ID	MHNE7617			Base Case For EMS	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.7500	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	82.7%	Modified Market	38.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.014	16.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	-0.002	-0.1			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.012	5.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	8 PM - 9 PM	0.16	5.5
Minimum Impact	May	Weekday	2 PM - 3 PM	0.06	2.5
System Coincident	December	Weekday	4 PM - 5 PM	0.12	5.7

Measure ID	MHXE8518			Duct Insulation Material	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0065	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	22.0%	Modified Market	22.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.403	4.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.403	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 AM - 2 AM	0.11	5.1
Minimum Impact	March	Weekday	7 AM - 8 AM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.04	1.4

Measure ID	MHNE8518		Duct Insulation Material		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0021	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	60.0%	Modified Market	60.0%	Intra Action	Yes
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.051	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	-0.007	-0.6			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.043	0.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	Midnight - 1 AM	0.05	3.5
Minimum Impact	August	Weekday	9 AM - 10 AM	-0.04	-1.4
System Coincident	December	Weekday	4 PM - 5 PM	-0.01	-0.3

Measure ID	MHXE8519			Variable Air Volume Box	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1638	Measure Life (Yrs)	15	Mutual Exclusivity	No
Potential Market	33.8%	Modified Market	33.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.611	6.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.611	2.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	7 AM - 8 AM	0.18	4.8
Minimum Impact	January	Weekday	5 AM - 6 AM	0.03	1.6
System Coincident	December	Weekday	4 PM - 5 PM	0.09	3.4

Measure ID	MHXE8522		Hot Water Circulation Pump Timeclock		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0011	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	9.0%	Modified Market	4.4%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.109	1.2	Cooling	0.000	NA
Water Heating	0.219	7.9	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.328	1.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	3 AM - 4 AM	0.16	8.5
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHXO8522			Hot Water Circulation Pump Timeclock	
Base ID	MHXO7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Oil	Cost Unit	Building square foot
First Cost (\$/unit)	NA	Measure Life (Yrs)	NA	Mutual Exclusivity	NA
Potential Market	NA	Modified Market	NA	Intra Action	NA
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.109	1.2	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.981	4.6
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.109	0.5	Total	0.981	4.5
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	5 AM - 6 AM	0.06	3.6
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHNE8522			Hot Water Circulation Pump Timeclock	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0011	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.0%	Modified Market	9.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.109	2.1	Cooling	0.000	NA
Water Heating	0.215	8.4	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.324	1.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	4 AM - 5 AM	0.15	12.1
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHNO8522		Hot Water Circulation Pump Timeclock		
Base ID	MHNO7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Oil	Cost Unit	Building square foot
First Cost (\$/unit)	NA	Measure Life (Yrs)	NA	Mutual Exclusivity	NA
Potential Market	NA	Modified Market	NA	Intra Action	NA
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.109	2.1	Cooling	0.000	NA
Water Heating	0.000	NA	Water Heating	0.931	6.0
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.109	0.7	Total	0.931	5.9
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	6 AM - 7 AM	0.06	3.5
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Monthly Total Electricity Impact
Hot Water Circulation Pump Timeclock

December Peak Day Demand Impact
Hot Water Circulation Pump Timeclock

Monthly Total Fossil Fuel Impact
Hot Water Circulation Pump Timeclock

December Peak Day Demand Profile
Hot Water Circulation Pump Timeclock

Measure ID	MHXE8524		Active Solar Water Heating		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$1.1159	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	18.0%	Modified Market	8.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	1.614	58.3	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.616	6.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	6 PM - 7 PM	0.61	16.5
Minimum Impact	October	Weekday	5 AM - 6 AM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	MHXO8524		Active Solar Water Heating		
Base ID	MHXO7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Oil	Cost Unit	Building square foot
First Cost (\$/unit)	NA	Measure Life (Yrs)	NA	Mutual Exclusivity	NA
Potential Market	NA	Modified Market	NA	Intra Action	NA
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.015	NA	Water Heating	14.937	69.5
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.014	-0.1	Total	14.937	68.1
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	1 AM - 2 AM	0.01	0.6
Minimum Impact	August	Weekday	4 PM - 5 PM	-0.01	-0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHNE8524		Active Solar Water Heating		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$1.1159	Measure Life (Yrs)	14	Mutual Exclusivity	Yes
Potential Market	45.0%	Modified Market	22.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	1.408	54.9	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.409	7.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	6 PM - 7 PM	0.58	20.8
Minimum Impact	October	Weekday	6 AM - 7 AM	-0.02	-1.0
System Coincident	December	Weekday	4 PM - 5 PM	-0.02	-1.0

Measure ID	MHNO8524			Active Solar Water Heating	
Base ID	MHNO7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Oil	Cost Unit	Building square foot
First Cost (\$/unit)	NA	Measure Life (Yrs)	NA	Mutual Exclusivity	NA
Potential Market	NA	Modified Market	NA	Intra Action	NA
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.000	0.0	Cooling	0.000	NA
Water Heating	-0.015	NA	Water Heating	8.860	57.4
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.014	-0.1	Total	8.860	55.8
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	1 AM - 2 AM	0.01	0.6
Minimum Impact	August	Weekday	4 PM - 5 PM	-0.01	-0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHXE8541		High Efficiency Centrifugal Chiller		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0368	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	46.8%	Modified Market	8.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.317	14.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.317	5.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	9 AM - 10 AM	0.30	7.6
Minimum Impact	January	Weekday	5 AM - 6 AM	0.07	4.2
System Coincident	December	Weekday	4 PM - 5 PM	0.12	4.3

Measure ID	MHNE8541			High Efficiency Centrifugal Chiller	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0230	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	53.1%	Modified Market	10.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.345	6.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.345	1.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	8 PM - 9 PM	0.08	2.9
Minimum Impact	January	Weekday	5 AM - 6 AM	0.02	1.7
System Coincident	December	Weekday	4 PM - 5 PM	0.02	1.2

Measure ID	MHXE8542			VSD Centrifugal Chiller	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.2092	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	26.0%	Modified Market	4.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.840	9.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.840	3.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	6 AM - 7 AM	0.17	6.0
Minimum Impact	September	Weekday	6 PM - 7 PM	0.03	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.07	2.4

Measure ID	MHNE8542		VSD Centrifugal Chiller		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1306	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	29.5%	Modified Market	5.5%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.440	8.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.440	2.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	11 PM - Midnight	0.10	4.4
Minimum Impact	August	Weekday	1 PM - 2 PM	0.01	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.05	2.3

Measure ID	MHXE8544		Chiller Strainer Cycle		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage		Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1732	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	20.8%	Modified Market	20.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.631	18.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.631	6.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum impact	January	Weekday	6 AM - 7 AM	0.36	14.4
Minimum Impact	January	Weekday	1 AM - 2 AM	0.09	5.3
System Coincident	December	Weekday	4 PM - 5 PM	0.12	4.5

Measure ID	MHNE8544		Chiller Strainer Cycle		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1082	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	15.3%	Modified Market	15.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.018	0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.018	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	6 AM - 7 AM	0.16	8.5
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.0

Measure ID	MHXE8545			Chilled Water Reset Controls	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0009	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.8%	Modified Market	9.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	1.580	17.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.580	6.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	9 AM - 10 AM	0.33	8.5
Minimum Impact	January	Weekday	5 AM - 6 AM	0.05	2.9
System Coincident	December	Weekday	4 PM - 5 PM	0.12	4.5

Measure ID	MHXE8546			Chiller Optimizer Controls	
Base ID	MHXE7646			Base Case for Chiller Optimizer	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0285	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	20.8%	Modified Market	20.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	2.219	23.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.219	8.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	October	Weekday	9 AM - 10 AM	0.33	8.5
Minimum Impact	September	Weekday	3 PM - 4 PM	0.18	5.6
System Coincident	December	Weekday	4 PM - 5 PM	0.25	8.7

Measure ID	MHNE8546			Chiller Optimizer Controls	
Base ID	MHNE7646			Base Case for Chiller Optimizer	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0285	Measure Life (Yrs)	20	Mutual Exclusivity	No
Potential Market	15.3%	Modified Market	15.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.536	9.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.536	2.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	5 AM - 6 AM	0.12	9.7
Minimum Impact	NA	Weekday	NA	0.00	NA
System Coincident	December	Weekday	4 PM - 5 PM	0.10	4.8

Measure ID	MHXE8547		Thermal Energy Storage-Ice On Coil		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$2.5200	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	37.5%	Modified Market	7.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-0.233	-2.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-0.233	-0.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	8 PM - 9 PM	1.05	28.7
Minimum Impact	January	Weekday	4 AM - 5 AM	-0.75	-46.5
System Coincident	December	Weekday	4 PM - 5 PM	0.57	20.8

Measure ID	MHNE8547			Thermal Energy Storage-Ice On Coil	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$2.5200	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	37.5%	Modified Market	7.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-1.717	-33.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	-1.717	-9.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	8 PM - 9 PM	0.72	25.3
Minimum Impact	May	Weekday	Midnight - 1 AM	-1.09	-79.8
System Coincident	December	Weekday	4 PM - 5 PM	0.22	11.0

Measure ID	MHXE8548			Cooling Tower Propeller Fans	
Base ID	MHXE7648			Base Case For Cooling Tower Prop Fans	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0003	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	18.2%	Modified Market	3.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.236	2.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.236	0.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	9 AM - 10 AM	0.07	1.8
Minimum Impact	January	Weekday	5 AM - 6 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.03	1.1

Measure ID	MHNE8548			Cooling Tower Propeller Fans	
Base ID	MHNE7648			Base Case For Cooling Tower Prop Fans	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0002	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.7%	Modified Market	3.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.140	2.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.140	0.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	9 AM - 10 AM	0.05	1.6
Minimum Impact	January	Weekday	5 AM - 6 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.7

Measure ID	MHXE8549			Two-Speed Cooling Tower Fans	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0048	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	18.2%	Modified Market	3.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.098	1.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.098	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	1 AM - 2 AM	0.02	0.9
Minimum Impact	January	Weekday	5 AM - 6 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.6

Measure ID	MHNE8549			Two-Speed Cooling Tower Fans	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0029	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.7%	Modified Market	3.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.060	1.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.060	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	June	Weekday	Midnight - 1 AM	0.01	0.8
Minimum Impact	January	Weekday	5 AM - 6 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.4

Measure ID	MHXE8550		VSD Cooling Tower Fans		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage	Existing	
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.3918	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	18.2%	Modified Market	3.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.122	1.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.122	0.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	Midnight - 1 AM	0.02	1.1
Minimum Impact	January	Weekday	5 AM - 6 AM	0.00	0.1
Sysem Coincident	December	Weekday	4 PM - 5 PM	0.02	0.6

Measure ID	MHNE8550			VSD Cooling Tower Fans	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2391	Measure Life (Yrs)	20	Mutual Exclusivity	Yes
Potential Market	20.7%	Modified Market	3.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.071	1.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.071	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	9 AM - 10 AM	0.01	0.6
Minimum Impact	January	Weekday	5 AM - 6 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.4

Measure ID	MHXE8551			Waste Heat Recovery	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.4184	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	15.0%	Modified Market	2.8%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-0.620	-7.0	Cooling	0.000	NA
Water Heating	1.651	59.6	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	1.030	4.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	March	Weekday	7 AM - 8 AM	0.43	12.4
Minimum Impact	July	Weekday	1 AM - 2 AM	-0.06	-3.0
System Coincident	December	Weekday	4 PM - 5 PM	0.11	4.1

Measure ID	MHNE8551			Waste Heat Recovery	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.2613	Measure Life (Yrs)	10	Mutual Exclusivity	Yes
Potential Market	37.5%	Modified Market	7.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	-0.661	-12.9	Cooling	0.000	NA
Water Heating	1.617	63.1	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.956	5.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	April	Weekday	8 AM - 9 AM	0.40	14.3
Minimum Impact	January	Weekday	4 AM - 5 AM	-0.07	-6.4
System Coincident	December	Weekday	4 PM - 5 PM	0.10	4.8

Measure ID	MHXE8552		Compact Fluorescent Lamp EXIT Signs		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel		Vintage		Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0110	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	90.0%	Modified Market	90.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.023	0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	0.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.105	0.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 AM - 2 AM	0.06	2.8
Minimum Impact	April	Weekday	Noon - 1 PM	0.01	0.4
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.4

Measure ID	MHNE8552			Compact Fluorescent Lamp EXIT Signs	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0027	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	75.0%	Modified Market	75.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.016	0.3	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.002	0.2			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.097	0.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	2 PM - 3 PM	0.03	1.6
Minimum Impact	December	Weekday	1 PM - 2 PM	0.01	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.6

Measure ID	MHXE8553			LED Lamp EXIT Signs	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0364	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	90.0%	Modified Market	49.1%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.036	0.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.006	0.3			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.169	0.7	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 AM - 2 AM	0.07	3.1
Minimum Impact	April	Weekday	Noon - 1 PM	0.02	0.6
System Coincident	December	Weekday	4 PM - 5 PM	0.02	0.7

Measure ID	MHNE8553			LED Lamp EXIT Signs	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0190	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	75.0%	Modified Market	40.9%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.025	0.5	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	0.3			
Indoor Lighting	0.000	0.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.156	0.9	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	6 PM - 7 PM	0.05	1.7
Minimum Impact	December	Weekday	1 PM - 2 PM	0.02	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.02	1.0

Measure ID	MHXE8557			Optical Reflectors-2X4 Recessed	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0907	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.151	1.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.056	2.5			
Indoor Lighting	0.421	7.1			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.628	2.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	January	Weekday	1 PM - 2 PM	0.16	5.0
Minimum Impact	January	Weekday	5 AM - 6 AM	0.01	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.11	4.0

Measure iD	MHNE8557			Optical Reflectors-2X4 Recessed	
Base iD	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0911	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.103	2.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.025	2.0			
Indoor Lighting	0.495	12.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.623	3.4	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	3 PM - 4 PM	0.14	6.0
Minimum Impact	July	Weekday	Midnight - 1 AM	-0.00	-0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.10	5.1

Measure ID	MHXE8558			8' Fluor. Energy Saver Lamps-F96T12ES	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0002	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.009	0.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	0.2			
Indoor Lighting	0.023	0.4			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.036	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	Noon - 1 PM	0.01	0.2
Minimum Impact	January	Weekday	5 AM - 6 AM	0.00	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	MHXE8559		Electronic Ballasts-8' T12-Base EEM		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0065	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.008	0.1	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.004	0.2			
Indoor Lighting	0.019	0.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.030	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	Noon - 1 PM	0.01	0.2
Minimum Impact	January	Weekday	5 AM - 6 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	MHNE8559			Electronic Ballasts-8' T12-Base EEM	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0019	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	100.0%	Modified Market	41.7%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.002	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.001	0.1			
Indoor Lighting	0.007	0.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.009	0.0	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	8 AM - 9 AM	0.00	0.1
Minimum Impact	May	Weekday	3 AM - 4 AM	0.00	0.0
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	MHXE8560		Optical Reflectors-1X8 Fixtures		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0038	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	70.0%	Modified Market	70.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.021	0.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.010	0.4			
Indoor Lighting	0.051	0.9			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.082	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 AM - 2 AM	0.05	2.5
Minimum Impact	January	Weekday	5 AM - 6 AM	0.01	0.3
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.3

Measure ID	MHNE8560		Optical Reflectors-1X8 Fixtures		
Base ID	MHNE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0038	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	100.0%	Modified Market	100.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.011	0.2	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.003	0.2			
Indoor Lighting	0.039	1.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.052	0.3	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	December	Weekday	9 AM - 10 AM	0.04	1.6
Minimum Impact	January	Weekday	5 AM - 6 AM	0.00	0.2
System Coincident	December	Weekday	4 PM - 5 PM	0.01	0.3

Measure ID	MHXE8561			Electronic Ballasts-4' T12-Base SMC	
Base ID	MHXE7661			Base Case for 4' Fluor. SMC Ballasts	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.1157	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.065	0.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.019	0.9			
Indoor Lighting	0.215	3.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.300	1.2	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	September	Weekday	6 PM - 7 PM	0.09	2.4
Minimum Impact	January	Weekday	5 AM - 6 AM	0.01	0.8
System Coincident	December	Weekday	4 PM - 5 PM	0.05	1.7

Measure ID	MHXE8562			Electronic Ballasts-8' T12-Base SMC	
Base ID	MHXE7662			Base Case for 8' Fluor. SMC Ballasts	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0056	Measure Life (Yrs)	16	Mutual Exclusivity	Yes
Potential Market	70.0%	Modified Market	29.2%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.004	0.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.002	0.1			
Indoor Lighting	0.009	0.2			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.015	0.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	Noon - 1 PM	0.00	0.1
Minimum Impact	January	Weekday	5 AM - 6 AM	0.00	0.1
System Coincident	December	Weekday	4 PM - 5 PM	0.00	0.1

Measure ID	MHXE8563			Compact Fluorescent Lamps-15W	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.2132	Measure Life (Yrs)	2	Mutual Exclusivity	No
Potential Market	90.3%	Modified Market	90.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.614	6.9	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.035	1.6			
Indoor Lighting	2.125	35.8			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	2.774	11.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	November	Weekday	11 AM - Noon	0.63	18.8
Minimum Impact	January	Weekday	5 AM - 6 AM	0.11	7.2
System Coincident	December	Weekday	4 PM - 5 PM	0.31	11.2

Measure ID	MHNE8563			Compact Fluorescent Lamps-15W	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0734	Measure Life (Yrs)	2	Mutual Exclusivity	No
Potential Market	95.0%	Modified Market	95.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.172	3.4	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.012	0.9			
Indoor Lighting	0.744	18.3			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.928	5.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	6 PM - 7 PM	0.20	6.9
Minimum Impact	August	Weekday	5 AM - 6 AM	0.04	2.9
System Coincident	December	Weekday	4 PM - 5 PM	0.10	4.9

Measure ID	MHXE8564		Compact Fluorescent Lamps-26W		
Base ID	MHXE7000		Base Case-Standard		
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0292	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	90.3%	Modified Market	90.3%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.059	0.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.324	5.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.383	1.5	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	July	Weekday	1 AM - 2 AM	0.09	4.3
Minimum Impact	December	Weekday	Noon - 1 PM	0.04	1.3
System Coincident	December	Weekday	4 PM - 5 PM	0.04	1.6

Measure ID	MHNE8564			Compact Fluorescent Lamps-26W	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0244	Measure Life (Yrs)	5	Mutual Exclusivity	No
Potential Market	95.0%	Modified Market	95.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.033	0.6	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.000	0.0			
Indoor Lighting	0.266	6.5			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.299	1.6	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	6 PM - 7 PM	0.07	2.2
Minimum Impact	July	Weekday	10 AM - 11 AM	0.03	1.4
System Coincident	December	Weekday	4 PM - 5 PM	0.03	1.6

Measure ID	MHXE8565			HID Interior Spots-70W	
Base ID	MHXE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	Existing
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	50.0623	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.087	1.0	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.020	0.9			
Indoor Lighting	0.179	3.0			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.285	1.1	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	February	Weekday	7 AM - 8 AM	0.09	2.6
Minimum Impact	February	Weekday	8 AM - 9 AM	0.02	0.5
System Coincident	December	Weekday	4 PM - 5 PM	0.04	1.3

Measure ID	MHNE8565			HID Interior Spots-70W	
Base ID	MHNE7000			Base Case-Standard	
Market Segment					
Building Type	Maui-Hotel			Vintage	New
Floor Area (sf)	537700	Water Heater Fuel	Electric	Cost Unit	Building square foot
First Cost (\$/unit)	\$0.0623	Measure Life (Yrs)	16	Mutual Exclusivity	No
Potential Market	50.0%	Modified Market	50.0%	Intra Action	No
Annual Energy Impact By End-Use					
Electricity			Natural Gas/Oil		
End-Use	(kWh/sf)	% of Base	End-Use	(kBtu/sf)	% of Base
Cooling & Auxiliary	0.037	0.7	Cooling	0.000	NA
Water Heating	0.000	0.0	Water Heating	0.000	NA
Misc. Equipment	0.000	0.0	Misc. Equipment	0.000	0.0
Ventilation	0.006	0.5			
Indoor Lighting	0.108	2.7			
Outdoor Lighting	0.000	0.0			
Central Refrigeration	0.000	NA			
Total	0.152	0.8	Total	0.000	0.0
Total Building Peak Demand Impact					
Peak Event	Month	Day Type	Hour	(W/sf)	% of Base
Maximum Impact	May	Weekday	6 PM - 7 PM	0.05	1.8
Minimum Impact	January	Weekday	4 AM - 5 AM	0.01	0.9
System Coincident	December	Weekday	4 PM - 5 PM	0.02	1.0