IESO Prescriptive Measures and Assumptions List April 2021

Overview

The IESO Prescriptive Measures and Assumptions List ("MAL") is the collection of electricity conservation measures in the current Save on Energy programs, which present deemed energy and demand savings using prescriptive input assumptions (PIAs). It provides best available information and consistent conservation program assumptions needed to estimate potential gross energy and demand savings which may, in turn, serve as the basis for the design, implementation, and evaluation of conservation and demand side management programs.

Purpose and Scope

Information presented in the MAL is derived and gathered from various sources ranging from previous evaluation studies involving engineering calculations to in-situ (in its original place) metering studies. Data may also be based on studies undertaken in jurisdictions outside Ontario and updated to reflect Ontario conditions.

In addition to gross demand and energy savings, the MAL also includes other useful information about each measure, including effective useful life, and estimated incremental life cycle cost.

Updating the Prescriptive Measures and Assumptions List

Measure-level assumptions are reviewed on an annual basis or as new information becomes available. The IESO has adopted an open, transparent, and flexible approach for reviewing and maintaining its Measures and Assumptions List. Stakeholders and other interested parties may submit new measures or measure revisions to the IESO for considerations by sending an email to **retrofit@ieso.ca**.

Full substantiation of individual measures listed in this MAL can be requested by sending an e-mail to **evaluations@ieso.ca**.



Disclaimer

The IESO Prescriptive Measures and Assumptions List ("MAL") is provided solely for informational purposes and based on information currently available to the Independent Electricity System Operator ("IESO"). The IESO expressly disclaims any responsibility or liability for any other use of the information in the MAL or any methods or equipment described. In particular, the information in the MAL is not meant to be relied on to determine or project actual electricity or cost savings, or to calculate progress towards conservation and demand management targets set by the Ontario Energy Board. The IESO does not warrant the accuracy, reliability, completeness or timeliness of any of the information contained in the MAL, including any third party information, and undertakes no obligation to revise or update the MAL. Users of the MAL rely on the information contained therein at their own risk and remain responsible for seeking appropriate legal, technical or other professional advice with regard to their particular circumstances. The IESO and its respective officers, directors, employees, consultants, agents and subcontractors assume no liability or responsibility whatsoever to any person for damages of whatever kind and nature, which may occur or be suffered as a result of the use of the MAL or reliance on the information therein.

How to Use this Workbook

This workbook contains energy conservation measures found under two tabs: Measures - Consumer and Measures - Business.

Below is an explanation of the column headings used in the Worksheet.

Column Heading	Description
Sector	Indicates whether the conservation measure is applicable for the Consumer or Business sector.
Program	Shows the name of the Save on Energy Programs.
End-Use	Shows the general application of the conservation measure (e.g. lighting, space cooling, water heating, etc.).
Conservation Measure	This is the high efficiency measure that usually involves the installation of equipment or technology that is considered more energy efficient than existing base case installations.
Measure Description	Describes the energy efficient measure by indicating different sizes, capacities, types and efficiency levels available in the market.
Base Measure	Indicates the equipment or technology to be replaced or describes the baseline scenario.
Assumed Annual Operating Hours	Indicates the assumed annual operating hours for the estimation of energy savings.
Base Case kW	Shows the assumed connected demand wattage of the base case measure.
Base Case kWh	Indicates the assumed energy consumption of the base case measure. In general, this is estimated from the assumed wattage and annual operating hours.
Conservation Case kW	Shows the assumed connected demand wattage of the energy efficient measure.
Conservation Case kWh	Indicates the assumed energy consumption of the energy efficient measure. In general, this is estimated from the assumed wattage and annual operating hours.

Column Heading	Description
First Year Demand Savings (kW)	Indicates the difference in connected demand wattages of the base and efficient measures over a one year period.
First Year Energy Savings (kWh)	Indicates the difference in energy consumption of the base and efficient measures over a one year period.
Summer Peak Demand Savings (kW)	Indicates the demand savings occurring during summer peak from 1:00 pm to 7:00 pm, Monday to Friday, June, July and August.
Effective Useful Life (Year)	Shows the assumed effective useful life of the measure. For lighting, this is estimated based on the effective useful life of lamps and/or ballasts and the annual operating hours.
End Use Load Profile	Indicates the time-of-use pattern of equipment energy use over a year (8760 hours).
Incremental Life Cycle Cost (\$)	Indicates the price differential between the energy efficient measure and baseline measure over the measure's lifetime.



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Consumer	Home Assistance Program (HAP)	Controls for Space Cooling and Heating - Residential	PROGRAMMABLE THERMOSTAT	Baseboard Heaters - Detached Home	Non-programmable thermostats installed on baseboard heaters	-	-	-	-	-	-	100.0	0.001	11	EM&V-Residential- Electric_Heating	\$197.00
Consumer	Home Assistance Program (HAP)	Controls for Space Cooling and Heating - Residential	PROGRAMMABLE THERMOSTAT	Baseboard Heaters - Attached or Row House	Non-programmable thermostats installed on baseboard heaters	-	-	-	-	-	-	201.0	0.001	11	EM&V-Residential- Electric_Heating	\$197.00
Consumer	Home Assistance Program (HAP)	Controls for Space Cooling and Heating - Residential	PROGRAMMABLE THERMOSTAT	Baseboard Heaters - Apartment	Non-programmable thermostats installed on baseboard heaters	-	-	-	-	-	-	118.0	0.001	11	EM&V-Residential- Electric_Heating	\$197.00
Consumer	Home Assistance Program (HAP)	Controls for Space Cooling and Heating - Residential	LOW VOLTAGE SMART THERMOSTATS	Smart thermostat with WiFi two way communications and intelligent learning capability for electric heating and cooling	Conventional manual and programmable thermostat for electric heating and cooling	-	-	-	-	-	-	838.7	0.002	11	PSP-Consumer- Residential- Forced_Air_Central_H eating	\$342.00
Consumer	Home Assistance Program (HAP)	Controls for Space Cooling and Heating - Residential	LINE VOLTAGE SMART THERMOSTATS	Internet-connected and Wifi-enabled smart line-voltage thermostat for electric baseboard heating that has the ability of auto adjust temperature settings based on observed occupancy patterns.	Electric baseboard heating with non- programmable or programmable thermostats.	-	-	-	-	-	-	186.3	0.001	11	EM&V-Residential- Electric_Heating	\$195.00
Consumer	Home Assistance Program (HAP)	Household Appliances	ENERGY STAR® FREEZER	Freezer Replacement (ENERGY STAR Qualified 12-14.4 cu ft)	Standard Freezer	8760	0.056	492.4	0.044	387.6	0.012	104.9	0.014	12	PSP-Consumer- Residential-Freezers	\$747.00
Consumer	Home Assistance Program (HAP)	Household Appliances	ENERGY STAR® FREEZER	Freezer Replacement (ENERGY STAR Qualified 14.5 - 16.0 cu ft)	Standard Freezer	8760	0.056	490.1	0.044	387.1	0.012	103.0	0.014	12	PSP-Consumer- Residential-Freezers	\$1,015.19
Consumer	Home Assistance Program (HAP)	Household Appliances	ENERGY STAR® REFRIGERATOR	Refrigerator Replacement (ENERGY STAR Qualified 15.5 - 16.9 cu ft)	Standard Refrigerator	8760	0.069	606.8	0.046	401.7	0.023	205.1	0.026	12	PSP-Consumer- Residential- Refrigerators	\$900.00



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Consumer	Home Assistance Program (HAP)	Household Appliances	ENERGY STAR® REFRIGERATOR	Refrigerator Replacement (ENERGY STAR Qualified 17.0 - 18.4 cu ft)	Standard Refrigerator	8760	0.070	610.1	0.0	391.3	0.025	218.8	0.028	12	PSP-Consumer- Residential- Refrigerators	\$1,052.00
Consumer	Home Assistance Program (HAP)	Household Appliances	ENERGY STAR® REFRIGERATOR	Refrigerator Replacement (ENERGY STAR Qualified 10.0 - 12.5 cu ft)	Standard Refrigerator	8760	0.058	511.8	0.038	331.2	0.021	180.7	0.023	12	PSP-Consumer- Residential- Refrigerators	\$548.00
Consumer	Home Assistance Program (HAP)	Household Appliances	COMPACT CHEST FREEZER	Energy Star certified residential compact chest freezer	Existing standard residential compact freezer manufactured on or before September 15 2014	8760	-	283.0	-	227.0	0.006	56.0	0.008	11	PSP-Consumer- Residential-Freezers	\$48.00
Consumer	Home Assistance Program (HAP)	Lighting	≤11W ENERGY STAR® QUALIFIED LED A SHAPE (60W) (MINIMUM 600 LUMEN OUTPUT)	≤11W ENERGY STAR® Qualified LED A Shape (60W) (minimum 600 Lumen output)	Mixture of incandescent and halogen bulbs based on lumen equivalence.	1095	0.043	47.1	0.009	10.3	0.034	36.8	0.003	14	EM&V-Residential- Lighting_Interior	\$1.00
Consumer	Home Assistance Program (HAP)	Lighting	≤11W ENERGY STAR® QUALIFIED LED MR 16 (MINIMUM 400 LUMEN OUTPUT)	≤11W ENERGY STAR® Qualified LED MR 16 (minimum 400 Lumen output)	Mixture of incandescent and halogen bulbs based on lumen equivalence.	986	0.040	39.4	0.007	7.3	0.033	32.1	0.002	14	EM&V-Residential- Lighting_Interior	\$7.00
Consumer	Home Assistance Program (HAP)	Lighting	≤14W ENERGY STAR® QUALIFIED LED A SHAPE (75W) (MINIMUM 800 LUMEN OUTPUT)	≤14W ENERGY STAR® Qualified LED A Shape (75W) (minimum 800 Lumen output)	Mixture of incandescent and halogen bulbs based on lumen equivalence.	1095	0.043	47.1	0.010	10.7	0.033	36.4	0.003	14	EM&V-Residential- Lighting_Interior	\$6.00
Consumer	Home Assistance Program (HAP)	Lighting	≤16W ENERGY STAR® QUALIFIED LED PAR 20 (MINIMUM 600 LUMEN OUTPUT)	≤16W ENERGY STAR® Qualified LED PAR 20 (minimum 600 Lumen output)	Mixture of incandescent and halogen bulbs based on lumen equivalence.	986	0.050	49.3	0.008	8.0	0.042	41.3	0.003	14	EM&V-Residential- Lighting_Interior	\$10.00
Consumer	Home Assistance Program (HAP)	Lighting	≤16W ENERGY STAR® QUALIFIED LED PAR30 & PAR38 (MINIMUM 600 LUMEN OUTPUT)	≤16W ENERGY STAR® Qualified LED PAR30 & PAR38 (minimum 600 Lumen output)	Mixture of incandescent and halogen bulbs based on lumen equivalence.	986	0.065	64.1	0.014	13.3	0.051	50.7	0.004	14	EM&V-Residential- Lighting_Interior	\$6.00



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Consumer	Home Assistance Program (HAP)	Lighting	≤23W ENERGY STAR® QUALIFIED LED A SHAPE (100W) (MINIMUM 1600 LUMEN OUTPUT)	≤23W ENERGY STAR® Qualified LED A Shape (100W) (minimum 1600 Lumen output)	Mixture of incandescent and halogen bulbs based on lumen equivalence.	1095	0.072	78.8	0.016	17.5	0.056	61.3	0.004	14	EM&V-Residential- Lighting_Interior	\$5.00
Consumer	Home Assistance Program (HAP)	Lighting	≤23W ENERGY STAR® QUALIFIED LED PAR (MINIMUM 1100 LUMEN OUTPUT)	≤23W ENERGY STAR® Qualified LED PAR (minimum 1100 Lumen output)	Mixture of incandescent and halogen bulbs based on lumen equivalence.	986	0.065	64.1	0.017	16.6	0.048	47.5	0.003	14	EM&V-Residential- Lighting_Interior	\$15.00
Consumer	Home Assistance Program (HAP)	Lighting	≤6W ENERGY STAR® QUALIFIED LED MR 16 / PAR 16 (MINIMUM 250 LUMEN OUTPUT)	≤6W ENERGY STAR® Qualified LED MR 16 / PAR 16 (minimum 250 Lumen output)	Mixture of incandescent and halogen bulbs based on lumen equivalence.	986	0.040	39.4	0.006	5.5	0.034	33.9	0.002	14	EM&V-Residential- Lighting_Interior	\$9.00
Consumer	Home Assistance Program (HAP)	Lighting	ENERGY STAR® LED WET LOCATION RATED PAR LAMP ≤ 23 WATT (MINIMUM 1100 LUMEN OUTPUT)	ENERGY STAR® LED Wet Location Rated PAR lamp ≤ 23 Watt (minimum 1100 Lumen output)	Mixture of incandescent and halogen bulbs based on lumen equivalence.	986	0.065	64.1	0.016	16.2	0.049	47.9	0.003	14	EM&V-Residential- Lighting_Interior	\$45.00
Consumer	Home Assistance Program (HAP)	Lighting	LED DOWNLIGHT WITH LIGHT OUTPUT >600 AND <800 LUMENS (RETROFIT MEASURE LIST)	LED Downlight with Light Output >600 and <800 lumens (Retrofit Measure List)	Mixture of incandescent and halogen bulbs based on lumen equivalence.	986	0.045	44.3	0.009	9.4	0.036	35.0	0.002	14	EM&V-Residential- Lighting_Interior	\$14.00
Consumer	Home Assistance Program (HAP)	Lighting	LED DOWNLIGHT WITH LIGHT OUTPUT >800 LUMENS (RETROFIT MEASURE LIST)	LED Downlight with Light Output >800 lumens (Retrofit Measure List)	Mixture of incandescent and halogen bulbs based on lumen equivalence.	985.5	0.065	64.1	0.015	15.2	0.050	48.9	0.003	14	EM&V-Residential- Lighting_Interior	\$21.00
Consumer	Home Assistance Program (HAP)	Lighting	LED NIGHTLIGHT	LED Nightlight	Incandescent or halogen nightlight	4380	-	30.7	-	1.3	0.000	29.4	0.000	8	CUSTOM-Residential- Residential-Nightlight	\$0.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	INDOOR CLOTHES DRYING RACK, RETRACTABLE CLOTHESLINES OR DRYING RACK	Indoor Clothes Drying Rack, Retractable Clotheslines or Drying Rack (replacing 50 loads of dryer per year)	Clothes Dryer (238 loads/yr)	-	-	500.0	-	411.8	-	88.2	0.012	12	PSP-Consumer- Residential- Clothes_Dryers	\$39.00



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Consumer	Home Assistance Program (HAP)	Miscellaneous	HEAVY DUTY PLUG-IN TIMERS	Car Block Heater Timer	No timer on the car block heater	-	0.511	377.3	0.511	138.2	0.000	239.1	0.000	15	EM&V-Residential- Car_Block_Heater_Nor th_Ontario	\$24.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	POWER BAR WITH INTEGRATED TIMER OR AUTO SHUT-OFF	Power Bar with Integrated Timer or Auto Shut-off	No Power Bar	-	-	36.0	-	32.4	-	3.6	0.000	7	PSP-Consumer- Residential-Power_Bar	\$16.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	EFFICIENT AERATORS	Bathroom - Flow Rate ≤ 3.8 L/min - Single Family	Aerator with Flow Rate = 8.3 L/min	-	-	62.0	-	28.2	-	33.8	0.003	10	PSP-Consumer- Residential- Domestic_Hot_Water	\$11.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	EFFICIENT AERATORS	Bathroom - Flow Rate ≤ 3.8 L/min - Multifamily	Aerator with Flow Rate = 8.3 L/min	-	-	96.0	-	43.6	-	52.4	0.005	10	PSP-Consumer- Residential- Domestic_Hot_Water	\$11.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	EFFICIENT AERATORS	Kitchen - Flow Rate ≤ 5.7 L/min - Single Family	Aerator with Flow Rate = 8.3 L/min	-	-	433.250	-	295.400	-	137.9	0.027	10	PSP-Consumer- Residential-Cooking	\$11.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	EFFICIENT AERATORS	Kitchen - Flow Rate ≤ 5.7 L/min - Multifamily	Aerator with Flow Rate = 8.3 L/min	-	-	355.4	-	242.3	-	113.1	0.022	10	PSP-Consumer- Residential-Cooking	\$11.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	EFFICIENT SHOWERHEAD (HANDHELD)	Flow Rate < 4.8 L/min - Single Family	Showerhead with Flow Rate = 7.57 L/min	-	-	555.1	-	346.9	-	208.2	0.019	10	PSP-Consumer- Residential- Domestic_Hot_Water	\$15.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	EFFICIENT SHOWERHEAD (STANDARD)	Flow Rate < 4.8 L/min - Single Family	Showerhead with Flow Rate = 7.57 L/min	-	-	555.1	-	416.3	-	138.8	0.013	10	PSP-Consumer- Residential- Domestic_Hot_Water	\$15.00



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Consumer	Home Assistance Program (HAP)	Miscellaneous	EFFICIENT SHOWERHEAD (HANDHELD)	Flow Rate < 4.8 L/min - Multifamily	Showerhead with Flow Rate = 7.57 L/min	-	-	626.9	-	391.8	-	235.1	0.021	10	PSP-Consumer- Residential- Domestic_Hot_Water	\$15.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	EFFICIENT SHOWERHEAD (STANDARD)	Flow Rate < 4.8 L/min - Multifamily	Showerhead with Flow Rate = 7.57 L/min	-	-	626.9	-	470.2	-	156.7	0.014	10	PSP-Consumer- Residential- Domestic_Hot_Water	\$15.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	TIER 2 ADVANCED POWER STRIP	Home entertainment and office equipment controlled with Tier 2 Advance Power Strips (APS)	Home entertainment and office equipment with no power strip (wall socket) or standard power strip	-	-	-	-	-	-	234.0	0.007	7	PSP-Consumer- Residential-Power_Bar	\$91.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	GENERAL PURPOSE TIMER	3 Prong Timer for indoor general purpose lighting	No controls	894	-	35.1	-	14.1	-	21.1	0.001	10	EM&V-Residential- Lighting_Interior	\$15.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	WEATHERSTRIPPING	Foam or V-strip weatherstripping	Mixture of no weatherstripping and weatherstripping to be replaced	-	-	-	-	-	-	36.7	0.011	13	EM&V-Residential- Electric_Heating_and_ Cooling	\$5.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	WEATHERSTRIPPING	Door frame weatherstripping - Triple Seal Door Sweep	Mixture of no weatherstripping and weatherstripping to be replaced	-	-	-	-	-	-	56.3	0.017	13	EM&V-Residential- Electric_Heating_and_ Cooling	\$21.00
Consumer	Home Assistance Program (HAP)	Miscellaneous	GENERAL PURPOSE TIMER	Shower timer to keep showers to a length of 5 minutes or less	No timer	-		317.6		235.8		81.8	0.007	2	PSP-Consumer- Residential- Domestic_Hot_Water	\$2.00
Consumer	Home Assistance Program (HAP)	Space Cooling and Heating	ENERGY STAR® DEHUMIDIFIER	Dehumidifier Replacement (ENERGY STAR Qualified 14.2 - 21.2 l/day)	Non-Energy Star® Dehumidifier	-	0.518	844.6	0.369	601.8	0.149	242.8	0.074	12	PSP-Consumer- Residential- Dehumidifiers	\$266.00



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Consumer	Home Assistance Program (HAP)	Space Cooling and Heating	ENERGY STAR® DEHUMIDIFIER	Dehumidifier Replacement (ENERGY STAR Qualified 21.3 - 25.4 l/day)	Non-Energy Star® Dehumidifier	-	0.608	992.4	0.486	793.9	0.122	198.5	0.061	12	PSP-Consumer- Residential- Dehumidifiers	\$281.00
Consumer	Home Assistance Program (HAP)	Space Cooling and Heating	ENERGY STAR® DEHUMIDIFIER	Dehumidifier Replacement (ENERGY STAR Qualified 25.5 - 35.5 l/day)	Non-Energy Star® Dehumidifier	-	0.748	1220.0	0.635	1037.0	0.113	183.0	0.056	12	PSP-Consumer- Residential- Dehumidifiers	\$386.00
Consumer	Home Assistance Program (HAP)	Space Cooling and Heating	ENERGY STAR® ROOM AIR CONDITIONER	Room Air Conditioner Replacement (ENERGY STAR Qualified 10,000 - 12,000 BTU/hr)	Non-Energy Star® Room Air Conditioner	-	1.394	319.4	1.059	242.7	0.335	76.7	0.047	12	EM&V-Residential- AC_Cooling	583
Consumer	Home Assistance Program (HAP)	Space Cooling and Heating	ENERGY STAR® ROOM AIR CONDITIONER	Room Air Conditioner Replacement (ENERGY STAR Qualified 6,000 - 7,999 BTU/hr)	Non-Energy Star® Room Air Conditioner	-	0.674	154.5	0.493	112.9	0.181	41.6	0.026	12	EM&V-Residential- AC_Cooling	373
Consumer	Home Assistance Program (HAP)	Space Cooling and Heating	ENERGY STAR® ROOM AIR CONDITIONER	Room Air Conditioner Replacement (ENERGY STAR Qualified 8,000 - 9,999 BTU/hr)	Non-Energy Star® Room Air Conditioner	-	1.039	238.4	0.786	179.5	0.253	58.9	0.036	12	EM&V-Residential- AC_Cooling	470
Consumer	Home Assistance Program (HAP)	Water Heating Residential	HOT WATER PIPE WRAP	Per 1' Pipe Wrap (1/2" Pipe)	No pipe insulation	8760	-	20.6	-	13.7	-	6.9	0.001	15	PSP-Consumer- Residential- Domestic_Hot_Water	4
Consumer	Home Assistance Program (HAP)	Water Heating Residential	HOT WATER PIPE WRAP	Per 1' Pipe Wrap (3/4" Pipe)	No pipe insulation	8760	-	30.8	-	16.0	-	14.8	0.001	15	PSP-Consumer- Residential- Domestic_Hot_Water	4
Consumer	Home Assistance Program (HAP)	Water Heating Residential	WATER HEATER BLANKET	Hot water tank wrap	Electric hot water heater without insulation blanket	8760	-	327.4	-	236.2	-	91.2	0.009	7	PSP-Consumer- Residential- Water_Heater_Blanket	138



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Consumer	Home Assistance Program (HAP)	Weatherization	AIR SEALING	Air leakage reduction after air sealing	Electrical heating and cooling home with air leakage	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating	\$0.71 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	AIR SEALING	Air leakage reduction after air sealing	Electrical heating and cooling home with air leakage	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating_and_ Cooling	\$0.71 per - sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	AIR SEALING	Air leakage reduction after air sealing	Electrical heating and cooling home with air leakage	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating_and_ Ventilation	\$0.71 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	AIR SEALING	Air leakage reduction after air sealing	Electrical heating and cooling home with air leakage	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Cooling_and_Gas_Hea ting	\$0.71 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	ATTIC INSULATION	Increase R-value from new attic insulation	Existing attic insulation	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating	\$1.92 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	ATTIC INSULATION	Increase R-value from new attic insulation	Existing attic insulation	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating_and_ Cooling	\$1.92 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	ATTIC INSULATION	Increase R-value from new attic insulation	Existing attic insulation	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating_and_ Ventilation	\$1.92 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	ATTIC INSULATION	Increase R-value from new attic insulation	Existing attic insulation	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Cooling_and_Gas_Hea ting	\$1.92 per sqft.



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Consumer	Home Assistance Program (HAP)	Weatherization	BASEMENT INSULATION	Increase R-value from new basement insulation	Existing basement insulation	-	-	-	1	-	1	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating	\$1.94 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	BASEMENT INSULATION	Increase R-value from new basement insulation	Existing basement insulation	-	-	-	•	-	1	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating_and_ Cooling	\$1.94 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	BASEMENT INSULATION	Increase R-value from new basement insulation	Existing basement insulation	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating_and_ Ventilation	\$1.94 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	BASEMENT INSULATION	Increase R-value from new basement insulation	Existing basement insulation	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Cooling_and_Gas_Hea ting	\$1.94 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	WALL INSULATION	Increase R-value from new wall insulation	Existing wall insulation	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating	\$2.62 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	WALL INSULATION	Increase R-value from new wall insulation	Existing wall insulation	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating_and_ Cooling	\$2.62 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	WALL INSULATION	Increase R-value from new wall insulation	Existing wall insulation	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Electric_Heating_and_ Ventilation	\$2.62 per sqft.
Consumer	Home Assistance Program (HAP)	Weatherization	WALL INSULATION	Increase R-value from new wall insulation	Existing wall insulation	-	-	-	-	-	-	HOT2000	ΔkWh*peak demand	20	EM&V-Residential- Cooling_and_Gas_Hea ting	\$2.62 per sqft.



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Agribusiness	DAIRY ENERGY STAR WATER HEATER	Energy Star electric hot water heater	Standard electric hot water heater	8760	1.722	15086.4	0.775	6788.9	0.947	8297.5	0.947	15	PSP-Industrial- Agriculture-Other	\$853
Business	Retrofit	Agribusiness	DAIRY PLATE COOLER	Plate cooler to pre-cool milk prior to refrigeration	No pre-cooling	-	-	-	-	-	2.570	7503.0	0.000	15	PSP-Industrial- Agriculture- Process_Cooling	\$3,098
Business	Retrofit	Agribusiness	DOUBLE CREEP HEAT PAD	Up to 200W maximum	2 x 175W Heat Lamps	6900	0.350	2415.0	0.169	1166.1	0.181	1248.9	0.000	10	EM&V-Commercial- Creep_Heat_Pad	\$95
Business	Retrofit	Agribusiness	DUAL AND NATURAL EXHAUST VENTILATION SYSTEM	Egg layers	Fans: 400W/1000 birds	5475 Base Case 2447 Conserv.	0.400	2190.0	0.179	1207.5	0.221	982.5	0.142	15	EM&V-Commercial- Dual_&_Natural_Venti lation_Fans_All_year	\$18,000
Business	Retrofit	Agribusiness	DUAL AND NATURAL EXHAUST VENTILATION SYSTEM	Chicken broilers	Fans: 340W/1000 birds	3000 Base Case 1341 Conserv.	0.340	1020.0	0.152	203.8	0.188	816.2	0.118	15	EM&V-Commercial- Dual_&_Natural_Venti lation_Fans_All_year	\$27,000
Business	Retrofit	Agribusiness	DUAL AND NATURAL EXHAUST VENTILATION SYSTEM	Turkeys	Fans: 1130W/1000 birds	6971 Base Case 3116 Conserv.	1.130	7876.8	0.505	1573.8	0.625	6302.9	0.908	15	EM&V-Commercial- Dual_&_Natural_Venti lation_Fans_All_year	\$15,000
Business	Retrofit	Agribusiness	DUAL AND NATURAL EXHAUST VENTILATION SYSTEM	Swine - breeding & gestation	Fans: 17W/sow	5864 Base Case 2621 Conserv.	0.015	99.7	0.008	19.9	0.007	79.8	0.011	15	EM&V-Commercial- Dual_&_Natural_Venti lation_Fans_All_year	\$5,500
Business	Retrofit	Agribusiness	DUAL AND NATURAL EXHAUST VENTILATION SYSTEM	Swine - growing & finishing	Fans: 5W/market- weight hog	8760 Base Case 3916 Conserv.	0.005	43.8	0.002	8.8	0.003	35.0	0.005	15	EM&V-Commercial- Dual_&_Natural_Venti lation_Fans_All_year	\$15,000
Business	Retrofit	Agribusiness	DUAL AND NATURAL EXHAUST VENTILATION SYSTEM	Dairy-tie stall, year round housing	Fans: 35W/cow	6548 Base Case 2927 Conserv.	0.035	229.2	0.016	45.8	0.019	183.4	0.000	15	EM&V-Commercial- Dual_&_Natural_Venti lation_Fans_Winter_O nly	\$12,000
Business	Retrofit	Agribusiness	DUAL AND NATURAL EXHAUST VENTILATION SYSTEM	Dairy-tie stall, outside in summer	50% in barn; 50% on pasture	5043 Base Case 2254 Conserv.	0.035	176.5	0.016	35.3	0.019	141.2	0.000	15	EM&V-Commercial- Dual_&_Natural_Venti lation_Fans_Winter_O nly	\$12,000



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Agribusiness	DUAL AND NATURAL EXHAUST VENTILATION SYSTEM	Greenhouse - Flowers	Fans: 1260W/1000 sq. meters	8760 Base Case 3916 Conserv.	1.260	11037.6	0.563	2205.4	0.697	8832.2	1.272	15	EM&V-Commercial- Dual_&_Natural_Venti lation_Fans_All_year	\$10,250
Business	Retrofit	Agribusiness	ENGINE BLOCK HEATER TIMER	Plug-in timer that operates the heater only when outdoor temp drops below -3.8C	Manual plug in block heater	+	-	-	-	-	0.000	632.4	0.000	3	EM&V-Residential- Car_Block_Heater_So uth_Ontario	\$14
Business	Retrofit	Agribusiness	HIGH EFFICIENCY VENTILATION EXHAUST FANS	≥18 to <24" Fan	Minimum fan grouping in category from BESS Laboratory ratings	4313	0.391	1687.7	0.290	1252.2	0.101	435.5	0.128	15	EM&V-Commercial- HE_Ventilation_Exhau st_Fans	\$202
Business	Retrofit	Agribusiness	HIGH EFFICIENCY VENTILATION EXHAUST FANS	≥24" to <36" Fans	Minimum fan grouping in category from BESS Laboratory ratings	4313	0.560	2416.1	0.410	1768.6	0.150	647.4	0.190	15	EM&V-Commercial- HE_Ventilation_Exhau st_Fans	\$202
Business	Retrofit	Agribusiness	HIGH EFFICIENCY VENTILATION EXHAUST FANS	≥36" to <48" Fans	Minimum fan grouping in category from BESS Laboratory ratings	4313	0.722	3116.0	0.564	2434.4	0.158	681.6	0.200	15	EM&V-Commercial- HE_Ventilation_Exhau st_Fans	\$202
Business	Retrofit	Agribusiness	HIGH EFFICIENCY VENTILATION EXHAUST FANS	≥48" Fans	Minimum fan grouping in category from BESS Laboratory ratings	4313	1.271	5482.4	0.997	4298.9	0.274	1183.4	0.347	15	EM&V-Commercial- HE_Ventilation_Exhau st_Fans	\$202
Business	Retrofit	Agribusiness	HIGH TEMPERATURE CUTOUT THERMOSTAT	Operating range 24 to 40 Celsius	Poorly Controlled Creep Heat Lamps	6900	-	10867.5	-	9872.1	-	995.4	0.816	10	PSP-Business- Commercial- HT_Cutout_Thermost at	\$124
Business	Retrofit	Agribusiness	HIGH VOLUME LOW SPEED FAN	≥10 ft to <11 ft, 1 HP	2 units Box fan, 1 HP	2124	2.506	5322.7	0.424	900.6	2.082	4422.2	1.510	15	EM&V-Commercial- HVLS_No_Summer_O peration	\$1,293
Business	Retrofit	Agribusiness	HIGH VOLUME LOW SPEED FAN	≥11 ft to <19 ft, 1.5 HP	4 units Box fan, 1 HP	2124	3.898	8279.4	0.659	1399.7	3.239	6879.6	2.350	15	EM&V-Commercial- HVLS_No_Summer_O peration	\$2,962
Business	Retrofit	Agribusiness	HIGH VOLUME LOW SPEED FAN	≥19 ft to ≤24 ft, 2 HP	4 units Box fan, 1 HP	2124	5.555	11798.8	0.940	1996.6	4.615	9802.3	3.348	15	EM&V-Commercial- HVLS_No_Summer_O peration	\$5,558



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Agribusiness	LOW ENERGY LIVESTOCK WATERERS	300W maximum	1500W (Max) electric heated Waterers	-	-	-	-	-	0.850	2383.0	0.000	10	PSP-Business- Commercial- Livestock_Waterer	\$920
Business	Retrofit	Agribusiness	MILK SCROLL COMPRESSOR	New scroll compressor for milk cooling with minimum EER of 12	Old Reciprocating Compressor	2920	-	-	-	-	2.314	6759.0	0.772	15	PSP-Industrial- Agriculture-Other	\$540
Business	Retrofit	Agribusiness	PHOTOCELL AND TIMER FOR LIGHTING CONTROL	Timer to regulate on-off lighting schedule	250W Metal Halide (Assume 4 Lamps per Photocell)	6205	1.152	7148.2	1.152	2852.4	0.000	4295.8	0.477	8	EM&V-Commercial- HVAC_Fans_Pumps	\$78
Business	Retrofit	Agribusiness	SINGLE CREEP HEAT PAD	Up to 100W maximum	175W Heat Lamp	6900	0.175	1207.5	0.085	586.5	0.090	621.0	0.069	10	EM&V-Commercial- HVAC_Fans_Pumps	\$70
Business	Retrofit	Agribusiness	SOLAR HOT WATER COLLECTOR FOR DAIRY FARMS	Solar hot water collector to be used with electric hot water heater	Standard electric hot water heater	-	-	-	-	-	-	9948.0	1.104	15	EM&V-Commercial- HVAC_Fans_Pumps	\$9,880
Business	Retrofit	Building Plug Load	BEVERAGE VENDING MACHINE CONTROLS	Power Sensor and/or Occupancy Control for Refrigerated Vending Machine	Standard beverage vending machines	8760	-	-	-	-	-	1612.9	0.195	5	PSP-Business- Commercial- Other_Plug_Loads	\$243
Business	Retrofit	Chillers	HVAC CHILLERS -AIR-COOLED CHILLER	≥50 to <150 Tons ≥16.440 EER IPLV.IP	≥50 to <150 Tons ≥13.700 EER IPLV.IP	-	-	-	-	-	1.263	851.8	0.625	20	EM&V-Commercial- Cooling	\$11,250
Business	Retrofit	Chillers	HVAC CHILLERS -AIR-COOLED CHILLER	≥150 Tons ≥16.800EER IPLV.IP	≥150 Tons ≥14.000 EER IPLV.IP	-	-	-	-	-	3.789	2503.9	1.836	20	EM&V-Commercial- Cooling	\$33,750
Business	Retrofit	Chillers	HVAC CHILLERS -WATER COOLED CENTRIFUGAL	≥50 to <75 Tons ≤0.440 kW/Ton IPLV.IP	≥50 to <75 Tons ≤0.550 kW/Ton IPLV.IP	-	-	-	-	-	4.894	3712.5	2.722	20	EM&V-Commercial- Cooling	\$30,000
Business	Retrofit	Chillers	HVAC CHILLERS -WATER COOLED CENTRIFUGAL	≥75 Tons to <150 Tons ≤0.440 kW/Ton IPLV.IP	≥75 Tons and <150s ≤0.550 kW/Ton IPLV.IP	-	-	-	-	-	9.338	10687.5	7.836	20	EM&V-Commercial- Cooling	\$45,000



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Chillers	HVAC CHILLERS -WATER COOLED CENTRIFUGAL	≥150 Tons to <300 Tons ≤0.420 kW/Ton IPLV.IP	≥150 Tons and <300 Tons ≤0.520 kW/Ton IPLV.IP	-	-	-	-	-	25.988	20475.0	15.013	20	EM&V-Commercial- Cooling	\$90,000
Business	Retrofit	Chillers	HVAC CHILLERS -WATER COOLED CENTRIFUGAL	≥300 Tons and <450 Tons ≤0.400 kW/Ton IPLV.IP	≥300 Tons and <450 Tons ≤0.500 kW/Ton IPLV.IP	-	-	-	-	-	42.938	33000.0	30.855	20	EM&V-Commercial- Cooling	\$150,000
Business	Retrofit	Chillers	HVAC CHILLERS -WATER COOLED CENTRIFUGAL	≥450 Tons and <600 Tons ≤0.400 kW/Ton IPLV.IP	≥450 Tons and <600 Tons ≤0.500 kW/Ton IPLV.IP	-	-	-	-	-	60.113	46200.0	43.196	20	EM&V-Commercial- Cooling	\$210,000
Business	Retrofit	Chillers	HVAC CHILLERS -WATER COOLED POSITIVE DISPLACEMENT	≤50 Tons to <75 Tons ≤0.480 kW/Ton IPLV.IP	≤50 Tons to <75 Tons ≤0.600 kW/Ton IPLV.IP	-	-	-	-	-	5.738	4125.0	3.025	20	EM&V-Commercial- Cooling	\$30,000
Business	Retrofit	Chillers	HVAC CHILLERS -WATER COOLED POSITIVE DISPLACEMENT	≥75 Tons to <150 Tons ≤0.450 kW/Ton IPLV.IP	≥75 Tons and <150 Tons ≤0.560 kW/Ton IPLV.IP	-	-	-	-	-	16.538	11812.5	8.661	20	EM&V-Commercial- Cooling	\$45,000
Business	Retrofit	Chillers	HVAC CHILLERS -WATER COOLED POSITIVE DISPLACEMENT	≥150 Tons to <300 Tons ≤0.430 kW/Ton IPLV.IP	≥150 Tons and <300 Tons ≤0.540 kW/Ton IPLV.IP	-	-	-	-	-	30.150	22050.0	16.168	20	EM&V-Commercial- Cooling	\$90,000
Business	Retrofit	Chillers	HVAC CHILLERS -WATER COOLED POSITIVE DISPLACEMENT	≥300 Tons and <450 Tons ≤0.420 kW/Ton IPLV.IP	≥300 Tons and <450 Tons ≤0.520 kW/Ton IPLV.IP	-	-	-	-	-	46.313	34875.0	32.608	20	EM&V-Commercial- Cooling	\$150,000
Business	Retrofit	Chillers	HVAC CHILLERS -WATER COOLED POSITIVE DISPLACEMENT	≥450 Tons and <600 Tons ≤0.420 kW/Ton IPLV.IP	≥450 Tons and <600 Tons ≤0.520 kW/Ton IPLV.IP	-	-	-	-	-	64.838	48825.0	45.651	20	EM&V-Commercial- Cooling	\$210,000
Business	Retrofit	Chillers	PROCESS CHILLERS - WATER COOLED CENTRIFUGAL	≥50 Tons and <75 Tons ≤0.490 kW/Ton FL	<75 Tons ≤0.610 kW/Ton FL	-	-	-	-	-	3.915	11737.4	8.606	20	EM&V-Commercial- Cooling	\$210,000
Business	Retrofit	Chillers	PROCESS CHILLERS - WATER COOLED CENTRIFUGAL	≥75 Tons and <150 Tons ≤0.490 kW/Ton FL	≥75 Tons and <150 Tons ≤0.610 kW/Ton FL	-	-	-	-	-	7.470	33789.6	24.775	20	EM&V-Commercial- Cooling	\$30,000



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Chillers	PROCESS CHILLERS - WATER COOLED CENTRIFUGAL	≥150 Tons and <300 Tons ≤0.450 kW/Ton FL	≥150 Tons and <300 Tons ≤0.560 kW/Ton FL	-	-		-	-	20.790	64733.8	47.465	20	EM&V-Commercial- Cooling	\$45,000
Business	Retrofit	Chillers	PROCESS CHILLERS - WATER COOLED CENTRIFUGAL	≥300 Tons and <450 Tons ≤0.450 kW/Ton FL	≥300 Tons and <450 Tons ≤0.560 kW/Ton FL	-	-	-	-	-	34.350	135751.2	126.925	20	EM&V-Commercial- Cooling	\$150,000
Business	Retrofit	Chillers	PROCESS CHILLERS - WATER COOLED CENTRIFUGAL	≥450 Tons and <600 Tons ≤0.450 kW/Ton FL	≥450 Tons and <600 Tons ≤0.560 kW/Ton FL	-	-	-	-	-	48.090	190051.7	177.696	20	EM&V-Commercial- Cooling	\$210,000
Business	Retrofit	Chillers	PROCESS CHILLERS - WATER COOLED POSITIVE DISPLACEMENT	≥50 Tons and <75 Tons ≤0.600 kW/Ton FL	<75 Tons ≤0.750 kW/Ton FL	-	-	-	-	-	4.590	13041.6	9.562	20	EM&V-Commercial- Cooling	\$30,000
Business	Retrofit	Chillers	PROCESS CHILLERS - WATER COOLED POSITIVE DISPLACEMENT	≥75 Tons and <150 Tons ≤0.580 kW/Ton FL	≥75 Tons and <150 Tons ≤0.720 kW/Ton FL	-	-	-	-	-	13.230	37346.4	27.383	20	EM&V-Commercial- Cooling	\$45,000
Business	Retrofit	Chillers	PROCESS CHILLERS - WATER COOLED POSITIVE DISPLACEMENT	≥150 Tons and <300 Tons ≤0.530 kW/Ton FL	≥150 Tons and <300 Tons ≤0.660 kW/Ton FL	-	-	-	-	-	24.120	69713.3	51.116	20	EM&V-Commercial- Cooling	\$90,000
Business	Retrofit	Chillers	PROCESS CHILLERS - WATER COOLED POSITIVE DISPLACEMENT	≥300 Tons and <450 Tons ≤0.490 kW/Ton FL	≥300 Tons and <450 Tons ≤0.610 kW/Ton FL	-	-	-	-	-	37.050	146421.6	136.902	20	EM&V-Commercial- Cooling	\$150,000
Business	Retrofit	Chillers	PROCESS CHILLERS - WATER COOLED POSITIVE DISPLACEMENT	≥450 Tons and <600 Tons ≤0.490 kW/Ton FL	≥450 Tons and <600 Tons ≤0.610 kW/Ton FL	-	-	-	-	-	51.870	204990.2	191.663	20	EM&V-Commercial- Cooling	\$210,000
Business	Retrofit	Compressed Air	COMPRESSED AIR LOW PRESSURE DROP FILTER	0 to <30 HP	Standard coalescing filter	5700	-	-	-	-	0.000	1771.8	0.202	7	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$591
Business	Retrofit	Compressed Air	COMPRESSED AIR LOW PRESSURE DROP FILTER	≥30 to <50 HP	Standard coalescing filter	5700	-	-	-	-	0.000	3543.5	0.405	7	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$591



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Compressed Air	COMPRESSED AIR LOW PRESSURE DROP FILTER	≥50 to <70 HP	Standard coalescing filter	5700	-	-	-	-	0.000	5315.3	0.607	7	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$591
Business	Retrofit	Compressed Air	COMPRESSED AIR LOW PRESSURE DROP FILTER	≥70 to <90 HP	Standard coalescing filter	5700	-	-	-	-	0.000	7087.0	0.809	7	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$591
Business	Retrofit	Compressed Air	COMPRESSED AIR LOW PRESSURE DROP FILTER	≥90 to <110 HP	Standard coalescing filter	5700	-	-	-	-	0.000	8858.8	1.012	7	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$591
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥10 HP	Fixed Speed Compressor ≥10 HP	5705	-	-	-	-	1.482	9493.8	1.084	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$3,531
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥15 HP	Fixed Speed Compressor ≥15 HP	5705	-	-	-	-	2.223	14240.7	1.626	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$4,356
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥20 HP	Fixed Speed Compressor ≥20 HP	5705	-	-	-	-	2.964	18987.7	2.169	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$5,182
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥25 HP	Fixed Speed Compressor ≥25 HP	5705	-	-	-	-	3.705	23734.6	2.711	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$6,007
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥30 HP	Fixed Speed Compressor ≥30 HP	5705	-	-	-	-	4.446	28481.5	3.253	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$6,833
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥40 HP	Fixed Speed Compressor ≥40 HP	5705	-	-	-	-	5.927	37975.3	4.337	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$8,484
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥50 HP	Fixed Speed Compressor ≥50 HP	5705	-	-	-	-	9.292	59528.9	6.799	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$10,135



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥60 HP	Fixed Speed Compressor ≥60 HP	5705	-	-	-	-	11.150	71434.7	8.159	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$11,786
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥75 HP	Fixed Speed Compressor ≥75 HP	5705	1	-	-	-	13.937	89293.3	10.199	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$14,262
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥100 H	Fixed Speed Compressor ≥100 HP	5705	-	-	-	-	18.583	119057.8	13.598	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$18,390
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥125 H	Fixed Speed Compressor ≥125 HP	5705	-	-	-	-	23.229	148822.2	16.998	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$22,517
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥150 H	Fixed Speed Compressor ≥150 HP	5705	-	-	-	-	27.875	178586.6	20.397	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$26,645
Business	Retrofit	Compressed Air	COMPRESSED AIR VD	Variable Displacement Compressor ≥200 H	Fixed Speed Compressor ≥200 HP	5705	-	-	-	-	37.166	238115.5	27.196	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$34,900
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥10 HP	Fixed Speed Compressor ≥10 HP	5705	-	-	-	-	1.185	7595.1	0.867	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$2,825
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥15 HP	Fixed Speed Compressor ≥15 HP	5705	-	-	-	-	1.778	11392.6	1.301	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$3,485
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥20 HP	Fixed Speed Compressor ≥20 HP	5705	-	-	-	-	2.371	15190.1	1.735	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$4,145
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥25 HP	Fixed Speed Compressor ≥25 HP	5705	-	-	-	-	2.964	18987.7	2.169	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$4,806



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥30 HP	Fixed Speed Compressor ≥30 HP	5705	-	-	-	-	3.556	22785.2	2.602	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$5,466
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥40 HP	Fixed Speed Compressor ≥40 HP	5705	-	-	-	-	4.742	30380.3	3.470	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$6,787
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥50 HP	Fixed Speed Compressor ≥50 HP	5705	-	-	-	-	7.433	47623.1	5.439	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$8,108
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥60 HP	Fixed Speed Compressor ≥60 HP	5705	-	-	-	-	8.920	57147.7	6.527	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$9,429
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥75 HP	Fixed Speed Compressor ≥75 HP	5705	-	-	-	-	11.150	71434.7	8.159	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$11,410
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥100 HP	Fixed Speed Compressor ≥100 HP	5705	-	-	-	-	14.867	95246.2	10.878	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$14,712
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥125 HP	Fixed Speed Compressor ≥125 HP	5705	-	-	-	-	18.583	119057.8	13.598	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$18,014
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥150 HP	Fixed Speed Compressor ≥150 HP	5705	-	-	-	-	22.300	142869.3	16.318	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$21,316
Business	Retrofit	Compressed Air	COMPRESSED AIR VSD	Variable Speed Drive Compressor ≥200 HP	Fixed Speed Compressor ≥200 HP	5705	-	-	-	-	29.733	190492.4	21.757	13	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$27,920
Business	Retrofit	Compressed Air	CYCLING OR THERMAL MASS REFRIGERATED DRYER	0 to <200 CFM	Non-Cycling Refrigerated Dryer	3920	-	-	-	-	0.000	994.8	0.114	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$1,110



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Compressed Air	CYCLING OR THERMAL MASS REFRIGERATED DRYER	≥200 to <400 CFM	Non-Cycling Refrigerated Dryer	3920	-	-	-	-	0.000	2487.1	0.284	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$2,775
Business	Retrofit	Compressed Air	CYCLING OR THERMAL MASS REFRIGERATED DRYER	≥400 to <750 CFM	Non-Cycling Refrigerated Dryer	3920	-	-	-	-	0.000	4974.2	0.568	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$5,550
Business	Retrofit	Compressed Air	ENGINEERED NOZZLE	1/16" Engineered Nozzle	Crimped Pipe or locally made nozzle	3920	-	-	-	-	0.028	109.4	0.012	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$18
Business	Retrofit	Compressed Air	ENGINEERED NOZZLE	1/8" Engineered Nozzle	Crimped Pipe or locally made nozzle	3920	-	-	-	-	0.110	431.2	0.049	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$53
Business	Retrofit	Compressed Air	ENGINEERED NOZZLE	1/4" Engineered Nozzle	Crimped Pipe or locally made nozzle	3920	-	-	-	-	0.440	1724.8	0.197	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$72
Business	Retrofit	Compressed Air	ENGINEERED NOZZLE	3/8" Engineered Nozzle	Crimped Pipe or locally made nozzle	3920	-	-	-	-	0.990	3880.8	0.443	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$143
Business	Retrofit	Compressed Air	PRIMARY AIR RECEIVER TANK	0 to <15 HP (0 to <240 USG)	Primary storage ratio of 1 USG/CFM of oil- flooded load/no load air compressor	-	-	-	-	-	0.000	4756.7	0.543	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$1,247
Business	Retrofit	Compressed Air	PRIMARY AIR RECEIVER TANK	≥15 to <25 HP (≥240 to <400 USG)	Primary storage ratio of 1 USG/CFM of oil- flooded load/no load air compressor	-	-	-	-	-	0.000	9513.3	1.087	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$2,495
Business	Retrofit	Compressed Air	PRIMARY AIR RECEIVER TANK	≥25 to <35 HP (≥400 to <660 USG)	Primary storage ratio of 1 USG/CFM of oil- flooded load/no load air compressor	-	-	-	-	-	0.000	14270.0	1.630	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$3,742
Business	Retrofit	Compressed Air	PRIMARY AIR RECEIVER TANK	≥35 to <45 HP (≥660 to <1060 USG)	Primary storage ratio of 1 USG/CFM of oil- flooded load/no load air compressor	-	-	-	-	-	0.000	19026.7	2.173	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$4,990



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Compressed Air	PRIMARY AIR RECEIVER TANK	≥45 to <55 HP (≥800 to <1060 USG)	Primary storage ratio of 1 USG/CFM of oil- flooded load/no load air compressor	-	-	-	-	-	0.000	18600.0	2.124	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$6,237
Business	Retrofit	Compressed Air	PRIMARY AIR RECEIVER TANK	≥55 to <125 HP (≥1060 to <2220 USG)	Primary storage ratio of 1 USG/CFM of oil- flooded load/no load air compressor	-	-	-	-	-	0.000	37200.0	4.249	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$12,474
Business	Retrofit	Compressed Air	PRIMARY AIR RECEIVER TANK	≥125 to <175 HP (≥2200 to <3150 USG)	Primary storage ratio of 1 USG/CFM of oil- flooded load/no load air compressor	-	-	1	-	-	0.000	55800.0	6.373	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$18,711
Business	Retrofit	Compressed Air	PRIMARY AIR RECEIVER TANK	≥175 to <225 HP (≥3150 to <4050 USG)	Primary storage ratio of 1 USG/CFM of oil- flooded load/no load air compressor	-	-	1	-	-	0.000	74400.0	8.498	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$24,948
Business	Retrofit	Compressed Air	REGENERATIVE DRYER WITH DEWPOINT CONTROL	0 to <200 CFM	Regenerative Dryer with Timer Controlled Regeneration	3920	-		-	-	0.000	6634.8	0.758	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$6,623
Business	Retrofit	Compressed Air	REGENERATIVE DRYER WITH DEWPOINT CONTROL	≥200 to <400 CFM	Regenerative Dryer with Timer Controlled Regeneration	3920	-	-	-	-	0.000	16587.0	1.894	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$6,623
Business	Retrofit	Compressed Air	REGENERATIVE DRYER WITH DEWPOINT CONTROL	≥400 to <750 CFM	Regenerative Dryer with Timer Controlled Regeneration	3920	-	-	-	-	0.000	33174.0	3.789	15	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$6,623
Business	Retrofit	Compressed Air	ZERO LOSS DRAIN	Zero Loss Drain	Time controlled moisture drain	3920	-	-	-	-	0.308	1206.0	0.138	10	PSP-Industrial- Miscellaneous_Industr ial-Compressed_Air	\$253
Business	Retrofit	Cooking - Commercial	DEMAND CONTROL KITCHEN VENTILATION	0 to ≤ 5000 CFM exhaust fan capacity	Constant volume exhaust fan	5840	-	8234.4	-	3460.0	-	4774.4	0.679	15	PSP-Business- Commercial-Cooking	\$4,766
Business	Retrofit	Cooking - Commercial	DEMAND CONTROL KITCHEN VENTILATION	>5,000 - ≤10,000 CFM exhaust fan capacity	Constant volume exhaust fan	5840	-	27389.6	-	11508.8	-	15880.8	2.258	15	PSP-Business- Commercial-Cooking	\$11,915



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Cooking - Commercial	DEMAND CONTROL KITCHEN VENTILATION	>10,000 - ≤15,000 CFM exhaust fan capacity	Constant volume exhaust fan	5840	-	48705.6	-	20465.6	-	28240.0	4.014	15	PSP-Business- Commercial-Cooking	\$19,859
Business	Retrofit	Demand Control Ventilation	DEMAND CONTROL VENTILATION - ENCLOSED PARKING GARAGES	>5 to ≤10 HP	Garage ventilation fans running continuously	8760	-	-	-	-	0.000	16588.7	1.894	10	PSP-Consumer- Residential- Ventilation_And_Circul ation	\$2,250
Business	Retrofit	Demand Control Ventilation	DEMAND CONTROL VENTILATION - ENCLOSED PARKING GARAGES	>10 to ≤25 HP	Garage ventilation fans running continuously	8760	-	-	-	-	0.000	41471.9	4.734	10	PSP-Consumer- Residential- Ventilation_And_Circul ation	\$4,500
Business	Retrofit	Demand Control Ventilation	DEMAND CONTROL VENTILATION - ENCLOSED PARKING GARAGES	>25 to ≤50 HP	Garage ventilation fans running continuously	8760	-	-	-	-	0.000	82943.7	9.468	10	PSP-Consumer- Residential- Ventilation_And_Circul ation	\$4,500
Business	Retrofit	Demand Control Ventilation	DEMAND CONTROL VENTILATION - ENCLOSED PARKING GARAGES	>50 to ≤75 HP	Garage ventilation fans running continuously	8760	-	-	-	-	0.000	124415.6	14.203	10	PSP-Consumer- Residential- Ventilation_And_Circul ation	\$9,000
Business	Retrofit	Demand Control Ventilation	DEMAND CONTROL VENTILATION - ENCLOSED PARKING GARAGES	>75 to ≤100 HP	Garage ventilation fans running continuously	8760	-	-	-	-	0.000	165887.4	18.937	10	PSP-Consumer- Residential- Ventilation_And_Circul ation	\$9,000
Business	Retrofit	Demand Control Ventilation	DEMAND CONTROL VENTILATION - INTERIOR CONDITIONED SPACES	50,000 to ≤ 100,000 SQ.FT.	Constant volume Ventilation System	8760	-	-	-	-	0.000	18675.0	2.132	10	PSP-Consumer- Residential- Ventilation_And_Circul ation	\$7,500
Business	Retrofit	Demand Control Ventilation	DEMAND CONTROL VENTILATION - INTERIOR CONDITIONED SPACES	>100,000 & ≤250,000 SQ.FT.	Constant volume Ventilation System	8760	-	-	-	-	0.000	43575.0	4.974	10	PSP-Consumer- Residential- Ventilation_And_Circul ation	\$17,500
Business	Retrofit	Demand Control Ventilation	DEMAND CONTROL VENTILATION - INTERIOR CONDITIONED SPACES	>250,000 & ≤500,000 SQ.FT.	Constant volume Ventilation System	8760	-	-	-	-	0.000	93375.0	10.659	10	PSP-Consumer- Residential- Ventilation_And_Circul ation	\$37,500
Business	Retrofit	Demand Control Ventilation	DEMAND CONTROL VENTILATION - INTERIOR CONDITIONED SPACES	>500,000 & ≤750,000 SQ.FT.	Constant volume Ventilation System	8760	-	-	-	-	0.000	155625.0	17.765	10	PSP-Consumer- Residential- Ventilation_And_Circul ation	\$62,500



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Demand Control Ventilation	DEMAND CONTROL VENTILATION - INTERIOR CONDITIONED SPACES	>750,000 to ≤1,000,000 SQ.FT.	Constant volume Ventilation System	8760	-	-	-	-	0.000	217875.0	24.872	10	PSP-Consumer- Residential- Ventilation_And_Circul ation	\$87,500
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 1 HP, 1200 RPM, 83.5%	ODP Motor, 1 HP, 1200 RPM, 82.5%	4000	0.678	2712.7	0.670	2680.2	0.008	32.5	0.004	15	EM&V-Commercial- HVAC_Fans_Pumps	\$421
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 1.5 HP, 1200 RPM, 87.5%	ODP Motor, 1.5 HP, 1200 RPM, 86.5%	4000	0.970	3880.9	0.959	3836.6	0.011	44.4	0.005	15	EM&V-Commercial- HVAC_Fans_Pumps	\$417
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 2 HP, 1200 RPM, 88.5%	ODP Motor, 2 HP, 1200 RPM, 87.5%	4000	1.279	5115.4	1.264	5057.6	0.014	57.8	0.006	15	EM&V-Commercial- HVAC_Fans_Pumps	\$494
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 3 HP, 1200 RPM, 89.5%	ODP Motor, 3 HP, 1200 RPM, 88.5%	4000	1.897	7586.4	1.875	7501.7	0.021	84.8	0.009	15	EM&V-Commercial- HVAC_Fans_Pumps	\$535
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 5 HP, 1200 RPM, 90.5%	ODP Motor, 5 HP, 1200 RPM, 89.5%	4000	3.126	12502.8	3.091	12364.6	0.035	138.2	0.015	15	EM&V-Commercial- HVAC_Fans_Pumps	\$556
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 7.5 HP, 1200 RPM, 91.2%	ODP Motor, 7.5 HP, 1200 RPM, 90.2%	4000	4.652	18608.6	4.601	18404.6	0.051	204.0	0.023	15	EM&V-Commercial- HVAC_Fans_Pumps	\$869
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 10 HP, 1200 RPM, 92.7%	ODP Motor, 10 HP, 1200 RPM, 91.7%	4000	6.101	24405.7	6.036	24142.4	0.066	263.3	0.029	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,006
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 15 HP, 1200 RPM, 92.7%	ODP Motor, 15 HP, 1200 RPM, 91.7%	4000	9.152	36608.5	9.053	36213.6	0.099	394.9	0.044	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,318
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 20 HP, 1200 RPM, 93.4%	ODP Motor, 20 HP, 1200 RPM, 92.4%	4000	12.110	48441.6	11.981	47922.9	0.130	518.6	0.058	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,607



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 25 HP, 1200 RPM, 94%	ODP Motor, 25 HP, 1200 RPM, 93%	4000	15.040	60161.3	14.880	59521.3	0.160	640.0	0.071	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,968
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 30 HP, 1200 RPM, 94.6%	ODP Motor, 30 HP, 1200 RPM, 93.6%	4000	17.933	71730.8	17.743	70972.5	0.190	758.3	0.084	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,195
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 40 HP, 1200 RPM, 95.1%	ODP Motor, 40 HP, 1200 RPM, 94.1%	4000	23.783	95132.8	23.533	94132.5	0.250	1000.3	0.111	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,834
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 50 HP, 1200 RPM, 95.1%	ODP Motor, 50 HP, 1200 RPM, 94.1%	4000	29.729	118916.0	29.416	117665.6	0.313	1250.4	0.139	15	EM&V-Commercial- HVAC_Fans_Pumps	\$3,201
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 60 HP, 1200 RPM, 95.5%	ODP Motor, 60 HP, 1200 RPM, 94.5%	4000	35.524	142095.2	35.152	140607.3	0.372	1487.9	0.165	15	EM&V-Commercial- HVAC_Fans_Pumps	\$4,286
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 75 HP, 1200 RPM, 95.5%	ODP Motor, 75 HP, 1200 RPM, 94.5%	4000	44.405	177619.0	43.940	175759.2	0.465	1859.9	0.206	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,068
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 100 HP, 1200 RPM, 96%	ODP Motor, 100 HP, 1200 RPM, 95%	4000	58.895	235578.9	58.281	233125.0	0.613	2453.9	0.272	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,956
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 125 HP, 1200 RPM, 96%	ODP Motor, 125 HP, 1200 RPM, 95%	4000	73.618	294473.7	72.852	291406.3	0.767	3067.4	0.341	15	EM&V-Commercial- HVAC_Fans_Pumps	\$7,689
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 150 HP, 1200 RPM, 96.4%	ODP Motor, 150 HP, 1200 RPM, 95.4%	4000	87.972	351886.8	87.059	348236.5	0.913	3650.3	0.405	15	EM&V-Commercial- HVAC_Fans_Pumps	\$8,023
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 200 HP, 1200 RPM, 96.4%	ODP Motor, 200 HP, 1200 RPM, 95.4%	4000	117.296	469182.4	116.079	464315.4	1.217	4867.0	0.540	15	EM&V-Commercial- HVAC_Fans_Pumps	\$9,924



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 1 HP, 1800 RPM, 86.5%	ODP Motor, 1 HP, 1800 RPM, 85.5%	4000	0.654	2617.5	0.647	2587.3	0.008	30.3	0.003	15	EM&V-Commercial- HVAC_Fans_Pumps	\$421
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 1.5 HP, 1800 RPM, 87.5%	ODP Motor, 1.5 HP, 1800 RPM, 86.5%	4000	0.970	3880.9	0.959	3836.6	0.011	44.4	0.005	15	EM&V-Commercial- HVAC_Fans_Pumps	\$417
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 2 HP, 1800 RPM, 87.5%	ODP Motor, 2 HP, 1800 RPM, 86.5%	4000	1.294	5174.6	1.279	5115.4	0.015	59.1	0.007	15	EM&V-Commercial- HVAC_Fans_Pumps	\$494
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 3 HP, 1800 RPM, 90.5%	ODP Motor, 3 HP, 1800 RPM, 89.5%	4000	1.875	7501.7	1.855	7418.8	0.021	82.9	0.009	15	EM&V-Commercial- HVAC_Fans_Pumps	\$535
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 5 HP, 1800 RPM, 90.5%	ODP Motor, 5 HP, 1800 RPM, 89.5%	4000	3.126	12502.8	3.091	12364.6	0.035	138.2	0.015	15	EM&V-Commercial- HVAC_Fans_Pumps	\$556
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 7.5 HP, 1800 RPM, 92%	ODP Motor, 7.5 HP, 1800 RPM, 91%	4000	4.611	18445.1	4.561	18244.6	0.050	200.5	0.022	15	EM&V-Commercial- HVAC_Fans_Pumps	\$869
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 10 HP, 1800 RPM, 92.7%	ODP Motor, 10 HP, 1800 RPM, 91.7%	4000	6.101	24405.7	6.036	24142.4	0.066	263.3	0.029	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,006
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 15 HP, 1800 RPM, 94%	ODP Motor, 15 HP, 1800 RPM, 93%	4000	9.024	36096.8	8.928	35712.8	0.096	384.0	0.043	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,318
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 20 HP, 1800 RPM, 94%	ODP Motor, 20 HP, 1800 RPM, 93%	4000	12.032	48129.0	11.904	47617.0	0.128	512.0	0.057	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,607
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 25 HP, 1800 RPM, 94.6%	ODP Motor, 25 HP, 1800 RPM, 93.6%	4000	14.944	59775.6	14.786	59143.8	0.158	631.9	0.070	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,968



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 30 HP, 1800 RPM, 95.1%	ODP Motor, 30 HP, 1800 RPM, 94.1%	4000	17.837	71349.6	17.650	70599.4	0.188	750.3	0.083	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,195
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 40 HP, 1800 RPM, 95.1%	ODP Motor, 40 HP, 1800 RPM, 94.1%	4000	23.783	95132.8	23.533	94132.5	0.250	1000.3	0.111	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,834
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 50 HP, 1800 RPM, 95.5%	ODP Motor, 50 HP, 1800 RPM, 94.5%	4000	29.603	118412.7	29.293	117172.8	0.310	1239.9	0.138	15	EM&V-Commercial- HVAC_Fans_Pumps	\$3,201
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 60 HP, 1800 RPM, 96%	ODP Motor, 60 HP, 1800 RPM, 95%	4000	35.337	141347.4	34.969	139875.0	0.368	1472.4	0.163	15	EM&V-Commercial- HVAC_Fans_Pumps	\$4,286
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 75 HP, 1800 RPM, 96%	ODP Motor, 75 HP, 1800 RPM, 95%	4000	44.171	176684.2	43.711	174843.8	0.460	1840.5	0.204	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,068
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 100 HP, 1800 RPM, 96.4%	ODP Motor, 100 HP, 1800 RPM, 95.4%	4000	58.648	234591.2	58.039	232157.7	0.608	2433.5	0.270	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,956
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 125 HP, 1800 RPM, 96.4%	ODP Motor, 125 HP, 1800 RPM, 95.4%	4000	73.310	293239.0	72.549	290197.1	0.760	3041.9	0.338	15	EM&V-Commercial- HVAC_Fans_Pumps	\$7,689
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 150 HP, 1800 RPM, 96.8%	ODP Motor, 150 HP, 1800 RPM, 95.8%	4000	87.604	350417.5	86.699	346797.5	0.905	3620.0	0.402	15	EM&V-Commercial- HVAC_Fans_Pumps	\$8,023
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 200 HP, 1800 RPM, 96.8%	ODP Motor, 200 HP, 1800 RPM, 95.8%	4000	116.806	467223.4	115.599	462396.7	1.207	4826.7	0.536	15	EM&V-Commercial- HVAC_Fans_Pumps	\$9,924
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 1 HP, 3600 RPM, 78%	ODP Motor, 1 HP, 3600 RPM, 77%	4000	0.727	2906.5	0.717	2869.2	0.009	37.3	0.004	15	EM&V-Commercial- HVAC_Fans_Pumps	\$421



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 1.5 HP, 3600 RPM, 85%	ODP Motor, 1.5 HP, 3600 RPM, 84%	4000	0.999	3996.4	0.987	3949.4	0.012	47.0	0.005	15	EM&V-Commercial- HVAC_Fans_Pumps	\$417
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 2 HP, 3600 RPM, 86.5%	ODP Motor, 2 HP, 3600 RPM, 85.5%	4000	1.309	5235.1	1.294	5174.6	0.015	60.5	0.007	15	EM&V-Commercial- HVAC_Fans_Pumps	\$494
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 3 HP, 3600 RPM, 86.5%	ODP Motor, 3 HP, 3600 RPM, 85.5%	4000	1.963	7852.6	1.940	7761.8	0.023	90.8	0.010	15	EM&V-Commercial- HVAC_Fans_Pumps	\$535
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 5 HP, 3600 RPM, 87.5%	ODP Motor, 5 HP, 3600 RPM, 86.5%	4000	3.234	12936.4	3.197	12788.6	0.037	147.8	0.016	15	EM&V-Commercial- HVAC_Fans_Pumps	\$556
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 7.5 HP, 3600 RPM, 89.5%	ODP Motor, 7.5 HP, 3600 RPM, 88.5%	4000	4.742	18966.1	4.689	18754.2	0.053	211.9	0.024	15	EM&V-Commercial- HVAC_Fans_Pumps	\$869
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 10 HP, 3600 RPM, 90.5%	ODP Motor, 10 HP, 3600 RPM, 89.5%	4000	6.251	25005.6	6.182	24729.3	0.069	276.3	0.031	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,006
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 15 HP, 3600 RPM, 91.2%	ODP Motor, 15 HP, 3600 RPM, 90.2%	4000	9.304	37217.3	9.202	36809.2	0.102	408.1	0.045	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,318
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 20 HP, 3600 RPM, 92%	ODP Motor, 20 HP, 3600 RPM, 91%	4000	12.297	49186.8	12.163	48652.2	0.134	534.6	0.059	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,607
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 25 HP, 3600 RPM, 92.7%	ODP Motor, 25 HP, 3600 RPM, 91.7%	4000	15.254	61014.2	15.089	60356.0	0.165	658.2	0.073	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,968
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 30 HP, 3600 RPM, 92.7%	ODP Motor, 30 HP, 3600 RPM, 91.7%	4000	18.304	73217.0	18.107	72427.2	0.197	789.8	0.088	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,195



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 40 HP, 3600 RPM, 93.4%	ODP Motor, 40 HP, 3600 RPM, 92.4%	4000	24.221	96883.1	23.961	95845.8	0.259	1037.3	0.115	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,834
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 50 HP, 3600 RPM, 94%	ODP Motor, 50 HP, 3600 RPM, 93%	4000	30.081	120322.6	29.761	119042.6	0.320	1280.0	0.142	15	EM&V-Commercial- HVAC_Fans_Pumps	\$3,201
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 60 HP, 3600 RPM, 94.6%	ODP Motor, 60 HP, 3600 RPM, 93.6%	4000	35.865	143461.5	35.486	141945.0	0.379	1516.5	0.168	15	EM&V-Commercial- HVAC_Fans_Pumps	\$4,286
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 75 HP, 3600 RPM, 94.6%	ODP Motor, 75 HP, 3600 RPM, 93.6%	4000	44.832	179326.9	44.358	177431.3	0.474	1895.6	0.210	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,068
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 100 HP, 3600 RPM, 94.6%	ODP Motor, 100 HP, 3600 RPM, 93.6%	4000	59.776	239102.6	59.144	236575.1	0.632	2527.5	0.281	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,956
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 125 HP, 3600 RPM, 95.1%	ODP Motor, 125 HP, 3600 RPM, 94.1%	4000	74.323	297290.1	73.541	294164.0	0.782	3126.1	0.347	15	EM&V-Commercial- HVAC_Fans_Pumps	\$7,689
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 150 HP, 3600 RPM, 95.1%	ODP Motor, 150 HP, 3600 RPM, 94.1%	4000	89.187	356748.1	88.249	352996.8	0.938	3751.3	0.416	15	EM&V-Commercial- HVAC_Fans_Pumps	\$8,023
Business	Retrofit	Electric Auxiliary	OPEN DRIP-PROOF (ODP) MOTORS	ODP Motor, 200 HP, 3600 RPM, 96%	ODP Motor, 200 HP, 3600 RPM, 95%	4000	117.789	471157.9	116.563	466250.0	1.227	4907.9	0.545	15	EM&V-Commercial- HVAC_Fans_Pumps	\$9,924
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 1 HP, 1200 RPM, 83.5%	TEFC Motor, 1 HP, 1200 RPM, 82.5%	4942	0.678	3351.6	0.670	3311.4	0.008	40.1	0.004	15	EM&V-Commercial- HVAC_Fans_Pumps	\$421
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 1.5 HP, 1200 RPM, 88.5%	TEFC Motor, 1.5 HP, 1200 RPM, 87.5%	4942	0.970	4794.9	0.959	4740.1	0.011	54.8	0.006	15	EM&V-Commercial- HVAC_Fans_Pumps	\$417



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 2 HP, 1200 RPM, 89.5%	TEFC Motor, 2 HP, 1200 RPM, 88.5%	4942	1.279	6320.1	1.264	6248.7	0.014	71.4	0.008	15	EM&V-Commercial- HVAC_Fans_Pumps	\$494
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 3 HP, 1200 RPM, 90.5%	TEFC Motor, 3 HP, 1200 RPM, 89.5%	4942	1.897	9373.0	1.875	9268.3	0.021	104.7	0.012	15	EM&V-Commercial- HVAC_Fans_Pumps	\$535
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 5 HP, 1200 RPM, 90.5%	TEFC Motor, 5 HP, 1200 RPM, 89.5%	4942	3.126	15447.2	3.091	15276.5	0.035	170.7	0.019	15	EM&V-Commercial- HVAC_Fans_Pumps	\$556
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 7.5 HP, 1200 RPM, 92.0%	TEFC Motor, 7.5 HP, 1200 RPM, 91%	4942	4.652	22991.0	4.601	22738.9	0.051	252.1	0.028	15	EM&V-Commercial- HVAC_Fans_Pumps	\$869
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 10 HP, 1200 RPM, 92.0%	TEFC Motor, 10 HP, 1200 RPM, 91%	4942	6.101	30153.2	6.036	29827.9	0.066	325.3	0.036	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,006
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 15 HP, 1200 RPM, 92.7%	TEFC Motor, 15 HP, 1200 RPM, 91.7%	4942	9.152	45229.8	9.053	44741.9	0.099	487.9	0.054	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,318
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 20 HP, 1200 RPM, 92.7%	TEFC Motor, 20 HP, 1200 RPM, 91.7%	4942	12.110	59849.5	11.981	59208.8	0.130	640.8	0.071	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,607
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 25 HP, 1200 RPM, 94%	TEFC Motor, 25 HP, 1200 RPM, 93%	4942	15.040	74329.3	14.880	73538.5	0.160	790.7	0.088	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,968
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 30 HP, 1200 RPM, 94%	TEFC Motor, 30 HP, 1200 RPM, 93%	4942	17.933	88623.4	17.743	87686.5	0.190	936.8	0.104	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,195
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 40 HP, 1200 RPM, 95.1%	TEFC Motor, 40 HP, 1200 RPM, 94.1%	4942	23.783	117536.6	23.533	116300.7	0.250	1235.9	0.137	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,834



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 50 HP, 1200 RPM, 95.1%	TEFC Motor, 50 HP, 1200 RPM, 94.1%	4942	29.729	146920.8	29.416	145375.9	0.313	1544.9	0.172	15	EM&V-Commercial- HVAC_Fans_Pumps	\$3,201
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 60 HP, 1200 RPM, 95.5%	TEFC Motor, 60 HP, 1200 RPM, 94.5%	4942	35.524	175558.7	35.152	173720.4	0.372	1838.3	0.204	15	EM&V-Commercial- HVAC_Fans_Pumps	\$4,286
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 75 HP, 1200 RPM, 95.5%	TEFC Motor, 75 HP, 1200 RPM, 94.5%	4942	44.405	219448.3	43.940	217150.4	0.465	2297.9	0.255	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,068
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 100 HP, 1200 RPM, 96%	TEFC Motor, 100 HP, 1200 RPM, 95%	4942	58.895	291057.8	58.281	288025.9	0.613	3031.9	0.337	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,956
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 125 HP, 1200 RPM, 96%	TEFC Motor, 125 HP, 1200 RPM, 95%	4942	73.618	363822.2	72.852	360032.4	0.767	3789.8	0.421	15	EM&V-Commercial- HVAC_Fans_Pumps	\$7,689
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 150 HP, 1200 RPM, 96.8%	TEFC Motor, 150 HP, 1200 RPM, 95.8%	4942	87.972	434756.1	87.059	430246.2	0.913	4509.9	0.501	15	EM&V-Commercial- HVAC_Fans_Pumps	\$8,023
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 200 HP, 1200 RPM, 96.8%	TEFC Motor, 200 HP, 1200 RPM, 95.8%	4942	117.296	579674.8	116.079	573661.6	1.217	6013.2	0.668	15	EM&V-Commercial- HVAC_Fans_Pumps	\$9,924
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 1 HP, 1800 RPM, 86.5%	TEFC Motor, 1 HP, 1800 RPM, 85.5%	4942	0.654	3234.0	0.647	3196.6	0.008	37.4	0.004	15	EM&V-Commercial- HVAC_Fans_Pumps	\$421
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 1.5 HP, 1800 RPM, 87.5%	TEFC Motor, 1.5 HP, 1800 RPM, 86.5%	4942	0.970	4794.9	0.959	4740.1	0.011	54.8	0.006	15	EM&V-Commercial- HVAC_Fans_Pumps	\$417
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 2 HP, 1800 RPM, 87.5%	TEFC Motor, 2 HP, 1800 RPM, 86.5%	4942	1.294	6393.2	1.279	6320.1	0.015	73.1	0.008	15	EM&V-Commercial- HVAC_Fans_Pumps	\$494



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 3 HP, 1800 RPM, 90.5%	TEFC Motor, 3 HP, 1800 RPM, 89.5%	4942	1.875	9268.3	1.855	9165.9	0.021	102.4	0.011	15	EM&V-Commercial- HVAC_Fans_Pumps	\$535
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 5 HP, 1800 RPM, 90.5%	TEFC Motor, 5 HP, 1800 RPM, 89.5%	4942	3.126	15447.2	3.091	15276.5	0.035	170.7	0.019	15	EM&V-Commercial- HVAC_Fans_Pumps	\$556
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 7.5 HP, 1800 RPM, 92.7%	TEFC Motor, 7.5 HP, 1800 RPM, 91.7%	4942	4.611	22788.9	4.561	22541.2	0.050	247.7	0.028	15	EM&V-Commercial- HVAC_Fans_Pumps	\$869
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 10 HP, 1800 RPM, 92.7%	TEFC Motor, 10 HP, 1800 RPM, 91.7%	4942	6.101	30153.2	6.036	29827.9	0.066	325.3	0.036	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,006
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 15 HP, 1800 RPM, 93.4%	TEFC Motor, 15 HP, 1800 RPM, 92.4%	4942	9.024	44597.6	8.928	44123.1	0.096	474.4	0.053	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,318
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 20 HP, 1800 RPM, 94%	TEFC Motor, 20 HP, 1800 RPM, 93%	4942	12.032	59463.4	11.904	58830.8	0.128	632.6	0.070	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,607
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 25 HP, 1800 RPM, 94.6%	TEFC Motor, 25 HP, 1800 RPM, 93.6%	4942	14.944	73852.8	14.786	73072.1	0.158	780.7	0.087	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,968
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 30 HP, 1800 RPM, 94.6%	TEFC Motor, 30 HP, 1800 RPM, 93.6%	4942	17.837	88152.5	17.650	87225.5	0.188	926.9	0.103	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,195
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 40 HP, 1800 RPM, 95.1%	TEFC Motor, 40 HP, 1800 RPM, 94.1%	4942	23.783	117536.6	23.533	116300.7	0.250	1235.9	0.137	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,834
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 50 HP, 1800 RPM, 95.5%	TEFC Motor, 50 HP, 1800 RPM, 94.5%	4942	29.603	146298.9	29.293	144767.0	0.310	1531.9	0.170	15	EM&V-Commercial- HVAC_Fans_Pumps	\$3,201



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 60 HP, 1800 RPM, 96%	TEFC Motor, 60 HP, 1800 RPM, 95%	4942	35.337	174634.7	34.969	172815.6	0.368	1819.1	0.202	15	EM&V-Commercial- HVAC_Fans_Pumps	\$4,286
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 75 HP, 1800 RPM, 96.4%	TEFC Motor, 75 HP, 1800 RPM, 95%	4942	44.171	218293.3	43.711	216019.5	0.460	2273.9	0.252	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,068
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 100 HP, 1800 RPM, 96.4%	TEFC Motor, 100 HP, 1800 RPM, 95.4%	4942	58.648	289837.4	58.039	286830.8	0.608	3006.6	0.334	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,956
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 125 HP, 1800 RPM, 96.4%	TEFC Motor, 125 HP, 1800 RPM, 95.4%	4942	73.310	362296.8	72.549	358538.5	0.760	3758.3	0.417	15	EM&V-Commercial- HVAC_Fans_Pumps	\$7,689
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 150 HP, 1800 RPM, 96.8%	TEFC Motor, 150 HP, 1800 RPM, 95.8%	4942	87.604	432940.9	86.699	428468.3	0.905	4472.5	0.497	15	EM&V-Commercial- HVAC_Fans_Pumps	\$8,023
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 200 HP, 1800 RPM, 97.2%	TEFC Motor, 200 HP, 1800 RPM, 96.2%	4942	116.806	577254.5	115.599	571291.1	1.207	5963.4	0.662	15	EM&V-Commercial- HVAC_Fans_Pumps	\$9,924
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 1 HP, 3600 RPM, 78%	TEFC Motor, 1 HP, 3600 RPM, 77%	4942	0.727	3591.0	0.717	3544.9	0.009	46.0	0.005	15	EM&V-Commercial- HVAC_Fans_Pumps	\$421
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 1.5 HP, 3600 RPM, 85%	TEFC Motor, 1.5 HP, 3600 RPM, 84%	4942	0.999	4937.6	0.987	4879.5	0.012	58.1	0.006	15	EM&V-Commercial- HVAC_Fans_Pumps	\$417
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 2 HP, 3600 RPM, 86.5%	TEFC Motor, 2 HP, 3600 RPM, 85.5%	4942	1.309	6468.0	1.294	6393.2	0.015	74.8	0.008	15	EM&V-Commercial- HVAC_Fans_Pumps	\$494
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 3 HP, 3600 RPM, 87.5%	TEFC Motor, 3 HP, 3600 RPM, 86.5%	4942	1.963	9701.9	1.940	9589.8	0.023	112.2	0.012	15	EM&V-Commercial- HVAC_Fans_Pumps	\$535



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 5 HP, 3600 RPM, 89.5%	TEFC Motor, 5 HP, 3600 RPM, 88.5%	4942	3.234	15982.9	3.197	15800.3	0.037	182.7	0.020	15	EM&V-Commercial- HVAC_Fans_Pumps	\$556
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 7.5 HP, 3600 RPM, 90.5%	TEFC Motor, 7.5 HP, 3600 RPM, 89.5%	4942	4.742	23432.6	4.689	23170.8	0.053	261.8	0.029	15	EM&V-Commercial- HVAC_Fans_Pumps	\$869
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 10 HP, 3600 RPM, 91.2%	TEFC Motor, 10 HP, 3600 RPM, 90.2%	4942	6.251	30894.4	6.182	30553.0	0.069	341.4	0.038	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,006
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 15 HP, 3600 RPM, 92.0%	TEFC Motor, 15 HP, 3600 RPM, 91%	4942	9.304	45982.0	9.202	45477.8	0.102	504.2	0.056	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,318
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 20 HP, 3600 RPM, 92%	TEFC Motor, 20 HP, 3600 RPM, 91%	4942	12.297	60770.3	12.163	60109.8	0.134	660.5	0.073	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,607
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 25 HP, 3600 RPM, 92.7%	TEFC Motor, 25 HP, 3600 RPM, 91.7%	4942	15.254	75383.0	15.089	74569.8	0.165	813.2	0.090	15	EM&V-Commercial- HVAC_Fans_Pumps	\$1,968
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 30 HP, 3600 RPM, 92.7%	TEFC Motor, 30 HP, 3600 RPM, 91.7%	4942	18.304	90459.6	18.107	89483.8	0.197	975.8	0.108	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,195
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 40 HP, 3600 RPM, 93.4%	TEFC Motor, 40 HP, 3600 RPM, 92.4%	4942	24.221	119699.1	23.961	118417.5	0.259	1281.6	0.142	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,834
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 50 HP, 3600 RPM, 94%	TEFC Motor, 50 HP, 3600 RPM, 93%	4942	30.081	148658.5	29.761	147077.1	0.320	1581.5	0.176	15	EM&V-Commercial- HVAC_Fans_Pumps	\$3,201
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 60 HP, 3600 RPM, 94.6%	TEFC Motor, 60 HP, 3600 RPM, 93.6%	4942	35.865	177246.7	35.486	175373.1	0.379	1873.6	0.208	15	EM&V-Commercial- HVAC_Fans_Pumps	\$4,286



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 75 HP, 3600 RPM, 94.6%	TEFC Motor, 75 HP, 3600 RPM, 93.6%	4942	44.832	221558.4	44.358	219216.4	0.474	2342.1	0.260	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,068
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 100 HP, 3600 RPM, 95.1%	TEFC Motor, 100 HP, 3600 RPM, 94.1%	4942	59.776	295411.2	59.144	292288.5	0.632	3122.7	0.347	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,956
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 125 HP, 3600 RPM, 96%	TEFC Motor, 125 HP, 3600 RPM, 95%	4942	74.323	367301.9	73.541	363439.7	0.782	3862.3	0.429	15	EM&V-Commercial- HVAC_Fans_Pumps	\$7,689
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 150 HP, 3600 RPM, 96%	TEFC Motor, 150 HP, 3600 RPM, 95%	4942	89.187	440762.3	88.249	436127.6	0.938	4634.7	0.515	15	EM&V-Commercial- HVAC_Fans_Pumps	\$8,023
Business	Retrofit	Electric Auxiliary	TOTALLY ENCLOSED FAN-COOLED (TEFC) MOTORS	TEFC Motor, 200 HP, 3600 RPM, 96.4%	TEFC Motor, 200 HP, 3600 RPM, 95.4%	4942	117.789	582115.6	116.563	576051.9	1.227	6063.7	0.673	15	EM&V-Commercial- HVAC_Fans_Pumps	\$9,924
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 1 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	0.250	1007.0	0.112	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,255
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 1.5 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	0.370	1493.0	0.166	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,294
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 2 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	0.500	1991.0	0.221	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,332
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 3 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	0.720	2887.0	0.321	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,409
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 5 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	1.200	4811.0	0.534	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,417



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 7.5 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	1	-	-	1.770	7098.0	0.788	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,755
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 10 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	2.350	9391.0	1.043	15	EM&V-Commercial- HVAC_Fans_Pumps	\$2,947
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 15 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	3.470	13890.0	1.542	15	EM&V-Commercial- HVAC_Fans_Pumps	\$3,335
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 20 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	4.630	18520.0	2.056	15	EM&V-Commercial- HVAC_Fans_Pumps	\$3,788
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 25 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	5.750	23002.0	2.554	15	EM&V-Commercial- HVAC_Fans_Pumps	\$4,242
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 30 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	6.860	27455.0	3.048	15	EM&V-Commercial- HVAC_Fans_Pumps	\$4,484
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 40 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	9.150	36607.0	4.064	15	EM&V-Commercial- HVAC_Fans_Pumps	\$5,252
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 50 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	11.390	45565.0	5.059	15	EM&V-Commercial- HVAC_Fans_Pumps	\$6,136
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 60 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	13.600	54390.0	6.039	15	EM&V-Commercial- HVAC_Fans_Pumps	\$6,789
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 75 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	17.000	67988.0	7.548	15	EM&V-Commercial- HVAC_Fans_Pumps	\$7,826



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 100 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	22.570	90271.0	10.022	15	EM&V-Commercial- HVAC_Fans_Pumps	\$9,863
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 125 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	28.210	112840.0	12.528	15	EM&V-Commercial- HVAC_Fans_Pumps	\$11,780
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 150 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	33.710	134840.0	14.970	15	EM&V-Commercial- HVAC_Fans_Pumps	\$13,700
Business	Retrofit	Electric Auxiliary	VARIABLE FREQUENCY DRIVE (VFD)	Motor Size: 200 HP, 66% Load Factor	No VFD installed, Motor is at 75% Load Factor	4000	-	-	-	-	44.950	179790.0	19.961	15	EM&V-Commercial- HVAC_Fans_Pumps	\$17,540
Business	Retrofit	Lighting	HORTICULTURAL INTER-LIGHTING LED GROW LIGHT FIXTURE	LED grow lights installed within the canopy illuminating a vertical growing surface.	Assumed 10 flourescent T8 provides the equivlent brightness at the same distance away from the		0.586	3122.9	0.096	510.6	0.490	2612.3	0.009	9	CUSTOM-Business- Other_Commercial_Bu ildings-CUSTOM- Industrial-Agriculture- Horticultural Lighting -	-\$361
Business	Retrofit	Lighting	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	3911	0.200	782.2	0.200	-	0.000	234.7	0.034	8	PSP-Business- Commercial- Lighting_Small Business	\$120
Business	Retrofit	Lighting	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	3911	0.030	117.3	0.030	-	0.000	48.1	0.007	8	PSP-Business- Commercial- Lighting_Small Business	\$148
Business	Retrofit	Lighting	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	3911	0.150	586.7	0.150	-	0.000	240.5	0.034	8	PSP-Business- Commercial- Lighting_Small Business	\$148
Business	Retrofit	Lighting	REFRIGERATED DISPLAY CASE LED FIXTURE HORIZONTAL (UNDERSHELF) INSTALLATION	<13W Nominal 24"-48"	Average of 2'-4' T8 (17W, 25W, 32W)	6074	0.026	157.9	0.012	72.9	0.014	85.0	0.016	8	PSP-Business- Commercial- Refrigerated_Display_ Case_Food Retail	\$176
Business	Retrofit	Lighting	REFRIGERATED DISPLAY CASE LED FIXTURE VERTICAL INSTALLATION	<30W Nominal 48"-72"	Average of 4'-6' T8 (32W, 40W, 44W, 46W, 55W, 66W)	6074	0.041	249.0	0.029	176.1	0.012	72.9	0.014	8	PSP-Business- Commercial- Refrigerated_Display_ Case_Food Retail	\$170



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Food Retail	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	6074	0.032	194.4	0.019	115.4	0.013	79.0	0.011	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$5
Business	Retrofit	Lighting - Food Retail	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	6074	0.061	370.5	0.028	170.1	0.033	200.4	0.028	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$1
Business	Retrofit	Lighting - Food Retail	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	6074	0.023	139.7	0.013	79.0	0.010	60.7	0.009	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	-\$2
Business	Retrofit	Lighting - Food Retail	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	6074	0.029	176.1	0.018	109.3	0.011	66.8	0.009	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$3
Business	Retrofit	Lighting - Food Retail	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	6074	0.075	455.6	0.038	229.0	0.037	226.6	0.032	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	-\$4
Business	Retrofit	Lighting - Food Retail	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	6074	0.066	400.9	0.039	236.9	0.027	164.0	0.023	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$62
Business	Retrofit	Lighting - Food Retail	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	6074	0.067	407.0	0.039	234.5	0.028	172.5	0.025	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$114
Business	Retrofit	Lighting - Food Retail	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	6074	0.096	583.1	0.055	334.1	0.041	249.0	0.035	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$117
Business	Retrofit	Lighting - Food Retail	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	6074	0.071	431.3	0.044	267.3	0.027	164.0	0.023	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$145
Business	Retrofit	Lighting - Food Retail	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	6074	0.122	741.0	0.093	564.9	0.029	176.1	0.025	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$167



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Food Retail	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	6074	0.066	400.9	0.032	194.4	0.034	206.5	0.029	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$39
Business	Retrofit	Lighting - Food Retail	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	6074	0.067	407.0	0.031	188.3	0.036	218.7	0.031	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$84
Business	Retrofit	Lighting - Food Retail	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	6074	0.096	583.1	0.042	255.1	0.054	328.0	0.047	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$104
Business	Retrofit	Lighting - Food Retail	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	6074	0.113	684.2	0.053	321.9	0.060	362.3	0.051	8	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$184
Business	Retrofit	Lighting - Food Retail	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	6074	0.017	100.2	0.009	57.1	0.007	43.1	0.006	7	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$16
Business	Retrofit	Lighting - Food Retail	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	6074	0.022	133.6	0.012	72.9	0.010	60.7	0.009	7	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$55
Business	Retrofit	Lighting - Food Retail	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	6074	0.026	157.9	0.015	92.9	0.011	65.0	0.009	7	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$56
Business	Retrofit	Lighting - Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	6074	0.028	167.0	0.006	36.4	0.022	130.6	0.019	4	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	-\$94
Business	Retrofit	Lighting - Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	6074	0.037	221.7	0.008	45.6	0.029	176.1	0.025	4	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	-\$55
Business	Retrofit	Lighting - Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	6074	0.041	246.0	0.011	66.8	0.030	179.2	0.025	4	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	-\$27



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	6074	0.052	312.8	0.013	79.0	0.039	233.8	0.033	4	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	-\$38
Business	Retrofit	Lighting - Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	6074	0.070	425.2	0.018	106.3	0.053	318.9	0.045	4	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	-\$139
Business	Retrofit	Lighting - Food Retail	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	6074	0.200	1214.8	0.200	-	0.000	364.4	0.052	5	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$120
Business	Retrofit	Lighting - Food Retail	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	6074	0.300	1822.2	0.300	-	0.000	747.1	0.106	5	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$218
Business	Retrofit	Lighting - Food Retail	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	6074	0.150	911.1	0.150	-	0.000	373.6	0.053	5	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Food Retail	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	6074	0.030	182.2	0.030	-	0.000	74.7	0.011	5	PSP-Business- Food_Retail- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Greenhouses	LED GROW LIGHTS - CANNABIS GREENHOUSES	DLC Horticultural Lighting Program and QPL	Measure mix of HPS, MH and T5HO	2800	0.866	2462.0	0.488	1366.0	0.378	1096.0	0.005	18	CUSTOM-Business- Other_Commercial_Bu ildings-CUSTOM- Industrial-Agriculture- Horticultural_Lighting	\$104
Business	Retrofit	Lighting - Greenhouses	LED GROW LIGHTS - CANNABIS WAREHOUSES	DLC Horticultural Lighting Program and QPL	Measure mix of HPS, MH and T5HO	5800	0.748	4339.0	0.471	2732.0	0.277	1607.0	0.007	9	CUSTOM-Business- Other_Commercial_Bu ildings-CUSTOM- Industrial-Agriculture-	\$307
Business	Retrofit	Lighting - Greenhouses	LED GROW LIGHTS - VEGETABLE GREENHOUSES	DLC Horticultural Lighting Program and QPL	1000W High Intensity Discharge (HID)	2400	1.080	2592.0	0.540	1296.0	0.540	1296.0	0.005	21	Horticultural Lighting - CUSTOM-Business- Other_Commercial_Bu ildings-CUSTOM- Industrial-Agriculture- Horticultural Lighting -	\$580
Business	Retrofit	Lighting - Hospital	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	5182	0.032	165.8	0.019	98.5	0.013	67.4	0.009	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$5



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Hospital	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	5182	0.061	316.1	0.028	145.1	0.033	171.0	0.023	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$1
Business	Retrofit	Lighting - Hospital	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	5182	0.023	119.2	0.013	67.4	0.010	51.8	0.007	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	-\$2
Business	Retrofit	Lighting - Hospital	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	5182	0.029	150.3	0.018	93.3	0.011	57.0	0.008	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$3
Business	Retrofit	Lighting - Hospital	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	5182	0.075	388.7	0.038	195.4	0.037	193.3	0.026	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	-\$4
Business	Retrofit	Lighting - Hospital	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	5182	0.066	342.0	0.039	202.1	0.027	139.9	0.019	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$62
Business	Retrofit	Lighting - Hospital	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	5182	0.096	497.5	0.039	200.0	0.057	297.4	0.040	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$117
Business	Retrofit	Lighting - Hospital	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	5182	0.067	347.2	0.055	285.0	0.012	62.2	0.008	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$114
Business	Retrofit	Lighting - Hospital	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	5182	0.071	367.9	0.044	228.0	0.027	139.9	0.019	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$145
Business	Retrofit	Lighting - Hospital	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	5182	1.122	5814.2	1.093	5663.9	0.029	150.3	0.020	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$167
Business	Retrofit	Lighting - Hospital	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	5182	0.066	342.0	0.032	165.8	0.034	176.2	0.024	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$39



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Hospital	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	5182	0.067	347.2	0.031	160.6	0.036	186.6	0.025	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$84
Business	Retrofit	Lighting - Hospital	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	5182	0.096	497.5	0.042	217.6	0.054	279.8	0.037	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$104
Business	Retrofit	Lighting - Hospital	LED HIGH BAY FIXTURE	≤139W ≥8900 Lumens	250W Probe Start Metal Halide	5182	0.295	1528.7	0.139	720.3	0.156	808.4	0.108	14	PSP-Business-Hospital- Lighting_Interior_High _Bay	-\$449
Business	Retrofit	Lighting - Hospital	LED HIGH BAY FIXTURE	≤175W ≥15,000 Lumens	400W Probe Start Metal Halide	5182	0.458	2373.4	0.175	906.9	0.283	1466.5	0.196	14	PSP-Business-Hospital- Lighting_Interior_High _Bay	-\$136
Business	Retrofit	Lighting - Hospital	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	5182	0.113	583.7	0.053	274.6	0.060	309.1	0.041	10	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$184
Business	Retrofit	Lighting - Hospital	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	5182	0.017	85.5	0.009	48.7	0.007	36.8	0.005	8	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$16
Business	Retrofit	Lighting - Hospital	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	5182	0.022	114.0	0.012	62.2	0.010	51.8	0.007	8	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$55
Business	Retrofit	Lighting - Hospital	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	5182	0.026	134.7	0.015	79.3	0.011	55.4	0.007	8	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$56
Business	Retrofit	Lighting - Hospital	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	5182	0.028	142.5	0.006	31.1	0.022	111.4	0.015	5	PSP-Business-Hospital- Lighting_Interior_Gen eral	-\$94
Business	Retrofit	Lighting - Hospital	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	5182	0.037	189.1	0.008	38.9	0.029	150.3	0.020	5	PSP-Business-Hospital- Lighting_Interior_Gen eral	-\$55



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Hospital	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	5182	0.041	209.9	0.011	57.0	0.030	152.9	0.020	5	PSP-Business-Hospital- Lighting_Interior_Gen eral	-\$27
Business	Retrofit	Lighting - Hospital	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	5182	0.052	266.9	0.013	67.4	0.039	199.5	0.027	5	PSP-Business-Hospital- Lighting_Interior_Gen eral	-\$38
Business	Retrofit	Lighting - Hospital	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	5182	0.070	362.7	0.018	90.7	0.053	272.1	0.036	5	PSP-Business-Hospital- Lighting_Interior_Gen eral	-\$139
Business	Retrofit	Lighting - Hospital	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	5182	0.200	1036.4	0.200	-	0.000	310.9	0.042	6	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$120
Business	Retrofit	Lighting - Hospital	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	5182	0.300	1554.6	0.300	-	0.000	637.4	0.085	6	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$218
Business	Retrofit	Lighting - Hospital	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	5182	0.150	777.3	0.150	-	0.000	318.7	0.043	6	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Hospital	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	5182	0.030	155.5	0.030	-	0.000	63.7	0.009	6	PSP-Business-Hospital- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	7884	0.032	252.3	0.019	149.8	0.013	102.5	0.012	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$5
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	7884	0.061	480.9	0.028	220.8	0.033	260.2	0.031	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$1
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	7884	0.023	181.3	0.013	102.5	0.010	78.8	0.010	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	-\$2



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	7884	0.029	228.6	0.018	141.9	0.011	86.7	0.010	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$3
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	7884	0.075	591.3	0.038	297.2	0.037	294.1	0.036	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	-\$4
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	7884	0.066	520.3	0.039	307.5	0.027	212.9	0.026	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$62
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	7884	0.096	756.9	0.039	304.3	0.057	452.5	0.055	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$117
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	7884	0.067	528.2	0.055	433.6	0.012	94.6	0.011	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$114
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	7884	0.071	559.8	0.044	346.9	0.027	212.9	0.026	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$145
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	7884	2.122	16729.8	2.093	16501.2	0.029	228.6	0.028	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$167
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	7884	0.066	520.3	0.032	252.3	0.034	268.1	0.032	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$39
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	7884	0.067	528.2	0.031	244.4	0.036	283.8	0.034	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$84
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	7884	0.096	756.9	0.042	331.1	0.054	425.7	0.051	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$104



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	7884	0.113	888.1	0.053	417.9	0.060	470.2	0.057	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$184
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	7884	0.017	130.1	0.009	74.1	0.007	56.0	0.007	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$16
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	7884	0.022	173.4	0.012	94.6	0.010	78.8	0.010	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$55
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	7884	0.026	205.0	0.015	120.6	0.011	84.4	0.010	6	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$56
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	7884	0.028	216.8	0.006	47.3	0.022	169.5	0.020	3	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	-\$94
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	7884	0.037	287.8	0.008	59.1	0.029	228.6	0.028	3	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	-\$55
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	7884	0.041	319.3	0.011	86.7	0.030	232.6	0.028	3	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	-\$27
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	7884	0.052	406.0	0.013	102.5	0.039	303.5	0.037	3	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	-\$38
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	7884	0.070	551.9	0.018	138.0	0.053	413.9	0.050	3	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	-\$139
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	7884	0.200	1576.8	0.200	-	0.000	473.0	0.057	4	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$120



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	7884	0.300	2365.2	0.300	-	0.000	969.7	0.117	4	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$218
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	7884	0.150	1182.6	0.150	-	0.000	484.9	0.059	4	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Large Hotel (Corridor/Lobb y)	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	7884	0.030	236.5	0.030	-	0.000	97.0	0.012	4	PSP-Business- Large_Hotel- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Large Non- Food Retail	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	4089	0.032	130.8	0.019	77.7	0.013	53.2	0.008	12	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$5
Business	Retrofit	Lighting - Large Non- Food Retail	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	4089	0.061	249.4	0.028	114.5	0.033	134.9	0.020	12	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$1
Business	Retrofit	Lighting - Large Non- Food Retail	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	4089	0.023	94.0	0.013	53.2	0.010	40.9	0.006	12	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	-\$2
Business	Retrofit	Lighting - Large Non- Food Retail	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	4089	0.029	118.6	0.018	73.6	0.011	45.0	0.007	12	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen eral	\$3
Business	Retrofit	Lighting - Large Non- Food Retail	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	4089	0.075	306.7	0.038	154.2	0.037	152.5	0.023	12	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	-\$4
Business	Retrofit	Lighting - Large Non- Food Retail	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	4089	0.066	269.9	0.039	159.5	0.027	110.4	0.016	12	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$62
Business	Retrofit	Lighting - Large Non- Food Retail	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	4089	0.067	274.0	0.039	157.8	0.028	116.1	0.017	12	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen eral	\$114



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Large Non- Food Retail	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	4089	0.096	392.5	0.055	224.9	0.041	167.6	0.025	12	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$117
Business	Retrofit	Lighting - Large Non- Food Retail	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	4089	0.071	290.3	0.044	179.9	0.027	110.4	0.016	12	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$145
Business	Retrofit	Lighting - Large Non- Food Retail	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	4089	3.122	12765.9	3.093	12647.3	0.029	118.6	0.018	12	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$167
Business	Retrofit	Lighting - Large Non- Food Retail	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	4089	0.066	269.9	0.032	130.8	0.034	139.0	0.021	12	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$39
Business	Retrofit	Lighting - Large Non- Food Retail	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	4089	0.067	274.0	0.031	126.8	0.036	147.2	0.022	12	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$84
Business	Retrofit	Lighting - Large Non- Food Retail	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	4089	0.096	392.5	0.042	171.7	0.054	220.8	0.033	12	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$104
Business	Retrofit	Lighting - Large Non- Food Retail	LED HIGH BAY FIXTURE	≤139W ≥8900 Lumens	250W Probe Start Metal Halide	4089	0.295	1206.3	0.139	568.4	0.156	637.9	0.095	17	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_High Bay	-\$449
Business	Retrofit	Lighting - Large Non- Food Retail	LED HIGH BAY FIXTURE	≤175W ≥15,000 Lumens	400W Probe Start Metal Halide	4089	0.458	1872.8	0.175	715.6	0.283	1157.2	0.172	17	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_High	-\$136
Business	Retrofit	Lighting - Large Non- Food Retail	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	4089	0.113	460.6	0.053	216.7	0.060	243.9	0.036	12	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$184
Business	Retrofit	Lighting - Large Non- Food Retail	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	4089	0.017	67.5	0.009	38.4	0.007	29.0	0.004	11	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen eral	\$16



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Large Non- Food Retail	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	4089	0.022	90.0	0.012	49.1	0.010	40.9	0.006	11	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$55
Business	Retrofit	Lighting - Large Non- Food Retail	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	4089	0.026	106.3	0.015	62.6	0.011	43.8	0.006	11	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$56
Business	Retrofit	Lighting - Large Non- Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	4089	0.028	112.4	0.006	24.5	0.022	87.9	0.013	6	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	-\$94
Business	Retrofit	Lighting - Large Non- Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	4089	0.037	149.2	0.008	30.7	0.029	118.6	0.018	6	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	-\$55
Business	Retrofit	Lighting - Large Non- Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	4089	0.041	165.6	0.011	45.0	0.030	120.6	0.018	6	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	-\$27
Business	Retrofit	Lighting - Large Non- Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	4089	0.052	210.6	0.013	53.2	0.039	157.4	0.023	6	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	-\$38
Business	Retrofit	Lighting - Large Non- Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	4089	0.070	286.2	0.018	71.6	0.053	214.7	0.032	6	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen eral	-\$139
Business	Retrofit	Lighting - Large Non- Food Retail	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	4089	0.200	817.8	0.200	-	0.000	245.3	0.036	8	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$120
Business	Retrofit	Lighting - Large Non- Food Retail	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	4089	0.300	1226.7	0.300	-	0.000	502.9	0.075	8	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen	\$218
Business	Retrofit	Lighting - Large Non- Food Retail	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	4089	0.150	613.4	0.150	-	0.000	251.5	0.037	8	eral PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen eral	\$148



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Large Non- Food Retail	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	4089	0.030	122.7	0.030	-	0.000	50.3	0.007	8	PSP-Business- Large_Non_Food_Ret ail- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Large Office	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	3610	0.032	115.5	0.019	68.6	0.013	46.9	0.008	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$5
Business	Retrofit	Lighting - Large Office	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	3610	0.061	220.2	0.028	101.1	0.033	119.1	0.021	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$1
Business	Retrofit	Lighting - Large Office	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	3610	0.023	83.0	0.013	46.9	0.010	36.1	0.006	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	-\$2
Business	Retrofit	Lighting - Large Office	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	3610	0.029	104.7	0.018	65.0	0.011	39.7	0.007	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$3
Business	Retrofit	Lighting - Large Office	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	3610	0.075	270.8	0.038	136.1	0.037	134.7	0.024	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	-\$4
Business	Retrofit	Lighting - Large Office	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	3610	0.066	238.3	0.039	140.8	0.027	97.5	0.017	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$62
Business	Retrofit	Lighting - Large Office	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	3610	0.067	241.9	0.039	139.3	0.028	102.5	0.018	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$114
Business	Retrofit	Lighting - Large Office	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	3610	0.096	346.6	0.055	198.6	0.041	148.0	0.026	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$117
Business	Retrofit	Lighting - Large Office	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	3610	0.071	256.3	0.044	158.8	0.027	97.5	0.017	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$145



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Large Office	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	3610	4.122	14880.4	4.093	14775.7	0.029	104.7	0.019	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$167
Business	Retrofit	Lighting - Large Office	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	3610	0.066	238.3	0.032	115.5	0.034	122.7	0.022	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$39
Business	Retrofit	Lighting - Large Office	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	3610	0.067	241.9	0.031	111.9	0.036	130.0	0.023	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$84
Business	Retrofit	Lighting - Large Office	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	3610	0.096	346.6	0.042	151.6	0.054	194.9	0.035	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$104
Business	Retrofit	Lighting - Large Office	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	3610	0.113	406.6	0.053	191.3	0.060	215.3	0.038	14	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$184
Business	Retrofit	Lighting - Large Office	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	3610	0.017	59.6	0.009	33.9	0.007	25.6	0.005	12	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$16
Business	Retrofit	Lighting - Large Office	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	3610	0.022	79.4	0.012	43.3	0.010	36.1	0.006	12	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$55
Business	Retrofit	Lighting - Large Office	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	3610	0.026	93.9	0.015	55.2	0.011	38.6	0.007	12	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$56
Business	Retrofit	Lighting - Large Office	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	3610	0.028	99.3	0.006	21.7	0.022	77.6	0.014	7	PSP-Business- Large_Office- Lighting_Interior_Gen eral	-\$94
Business	Retrofit	Lighting - Large Office	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	3610	0.037	131.8	0.008	27.1	0.029	104.7	0.019	7	PSP-Business- Large_Office- Lighting_Interior_Gen eral	-\$55



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Large Office	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	3610	0.041	146.2	0.011	39.7	0.030	106.5	0.019	7	PSP-Business- Large_Office- Lighting_Interior_Gen eral	-\$27
Business	Retrofit	Lighting - Large Office	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	3610	0.052	185.9	0.013	46.9	0.039	139.0	0.025	7	PSP-Business- Large_Office- Lighting_Interior_Gen eral	-\$38
Business	Retrofit	Lighting - Large Office	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	3610	0.070	252.7	0.018	63.2	0.053	189.5	0.034	7	PSP-Business- Large_Office- Lighting_Interior_Gen eral	-\$139
Business	Retrofit	Lighting - Large Office	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	3610	0.200	722.0	0.200	-	0.000	216.6	0.039	9	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$120
Business	Retrofit	Lighting - Large Office	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	3610	0.300	1083.0	0.300	-	0.000	444.0	0.079	9	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$218
Business	Retrofit	Lighting - Large Office	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	3610	0.150	541.5	0.150	-	0.000	222.0	0.040	9	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Large Office	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	3610	0.030	108.3	0.030	-	0.000	44.4	0.008	9	PSP-Business- Large_Office- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Nursing Home	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	4308	0.032	137.9	0.019	81.9	0.013	56.0	0.008	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$5
Business	Retrofit	Lighting - Nursing Home	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	4308	0.061	262.8	0.028	120.6	0.033	142.2	0.021	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$1
Business	Retrofit	Lighting - Nursing Home	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	4308	0.023	99.1	0.013	56.0	0.010	43.1	0.007	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	-\$2



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Nursing Home	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	4308	0.029	124.9	0.018	77.5	0.011	47.4	0.007	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$3
Business	Retrofit	Lighting - Nursing Home	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	4308	0.075	323.1	0.038	162.4	0.037	160.7	0.024	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	-\$4
Business	Retrofit	Lighting - Nursing Home	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	4308	0.066	284.3	0.039	168.0	0.027	116.3	0.018	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$62
Business	Retrofit	Lighting - Nursing Home	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	4308	0.067	288.6	0.039	166.3	0.028	122.3	0.018	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$114
Business	Retrofit	Lighting - Nursing Home	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	4308	0.096	413.6	0.055	236.9	0.041	176.6	0.027	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$117
Business	Retrofit	Lighting - Nursing Home	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	4308	0.071	305.9	0.044	189.6	0.027	116.3	0.018	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$145
Business	Retrofit	Lighting - Nursing Home	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	4308	5.122	22065.6	5.093	21940.6	0.029	124.9	0.019	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$167
Business	Retrofit	Lighting - Nursing Home	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	4308	0.066	284.3	0.032	137.9	0.034	146.5	0.022	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$39
Business	Retrofit	Lighting - Nursing Home	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	4308	0.067	288.6	0.031	133.5	0.036	155.1	0.023	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$84
Business	Retrofit	Lighting - Nursing Home	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	4308	0.096	413.6	0.042	180.9	0.054	232.6	0.035	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$104



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Nursing Home	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	4308	0.113	485.3	0.053	228.3	0.060	256.9	0.039	12	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$184
Business	Retrofit	Lighting - Nursing Home	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	4308	0.017	71.1	0.009	40.5	0.007	30.6	0.005	10	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$16
Business	Retrofit	Lighting - Nursing Home	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	4308	0.022	94.8	0.012	51.7	0.010	43.1	0.007	10	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$55
Business	Retrofit	Lighting - Nursing Home	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	4308	0.026	112.0	0.015	65.9	0.011	46.1	0.007	10	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$56
Business	Retrofit	Lighting - Nursing Home	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	4308	0.028	118.5	0.006	25.8	0.022	92.6	0.014	6	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	-\$94
Business	Retrofit	Lighting - Nursing Home	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	4308	0.037	157.2	0.008	32.3	0.029	124.9	0.019	6	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	-\$55
Business	Retrofit	Lighting - Nursing Home	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	4308	0.041	174.5	0.011	47.4	0.030	127.1	0.019	6	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	-\$27
Business	Retrofit	Lighting - Nursing Home	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	4308	0.052	221.9	0.013	56.0	0.039	165.9	0.025	6	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	-\$38
Business	Retrofit	Lighting - Nursing Home	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	4308	0.070	301.6	0.018	75.4	0.053	226.2	0.034	6	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	-\$139
Business	Retrofit	Lighting - Nursing Home	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	4308	0.200	861.6	0.200	-	0.000	258.5	0.039	7	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$120



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Nursing Home	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	4308	0.300	1292.4	0.300	-	0.000	529.9	0.080	7	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$218
Business	Retrofit	Lighting - Nursing Home	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	4308	0.150	646.2	0.150	-	0.000	264.9	0.040	7	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Nursing Home	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	4308	0.030	129.2	0.030	-	0.000	53.0	0.008	7	PSP-Business- Nursing_Home- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Other Commercial Buildings	LED HIGH BAY FIXTURE	≤175W ≥15,000 Lumens	400W Probe Start Metal Halide	2857	0.458	1308.5	0.175	500.0	0.283	808.5	0.128	17	PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	-\$136
Business	Retrofit	Lighting - Other Commercial Buildings	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	2857	0.032	91.4	0.019	54.3	0.013	37.1	0.006	18	PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	\$5
Business	Retrofit	Lighting - Other Commercial Buildings	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	2857	0.061	174.3	0.028	80.0	0.033	94.3	0.015	18	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	\$1
Business	Retrofit	Lighting - Other Commercial Buildings	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	2857	0.023	65.7	0.013	37.1	0.010	28.6	0.005	18	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	-\$2
Business	Retrofit	Lighting - Other Commercial Buildings	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	2857	0.029	82.9	0.018	51.4	0.011	31.4	0.005	18	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	\$3
Business	Retrofit	Lighting - Other Commercial Buildings	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	2857	0.075	214.3	0.038	107.7	0.037	106.6	0.017	18	PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	-\$4
Business	Retrofit	Lighting - Other Commercial Buildings	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	2857	0.066	188.6	0.039	111.4	0.027	77.1	0.012	18	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	\$62



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Other Commercial Buildings	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	2857	0.067	191.4	0.039	110.3	0.028	81.1	0.013	18	PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	\$114
Business	Retrofit	Lighting - Other Commercial Buildings	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	2857	0.096	274.3	0.055	157.1	0.041	117.1	0.018	18	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	\$117
Business	Retrofit	Lighting - Other Commercial Buildings	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	2857	0.071	202.8	0.044	125.7	0.027	77.1	0.012	18	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	\$145
Business	Retrofit	Lighting - Other Commercial Buildings	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	2857	6.122	17490.6	6.093	17407.7	0.029	82.9	0.013	18	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	\$167
Business	Retrofit	Lighting - Other Commercial Buildings	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	2857	0.066	188.6	0.032	91.4	0.034	97.1	0.015	18	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	\$39
Business	Retrofit	Lighting - Other Commercial Buildings	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	2857	0.067	191.4	0.031	88.6	0.036	102.9	0.016	18	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	\$84
Business	Retrofit	Lighting - Other Commercial Buildings	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	2857	0.096	274.3	0.042	120.0	0.054	154.3	0.024	18	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	\$104
Business	Retrofit	Lighting - Other Commercial Buildings	LED HIGH BAY FIXTURE	≤139W ≥8900 Lumens	250W Probe Start Metal Halide	2857	0.295	842.8	0.139	397.1	0.156	445.7	0.070	25	PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	-\$449
Business	Retrofit	Lighting - Other Commercial Buildings	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	2857	0.113	321.8	0.053	151.4	0.060	170.4	0.027	18	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	\$184
Business	Retrofit	Lighting - Other Commercial Buildings	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	2857	0.017	47.1	0.009	26.9	0.007	20.3	0.003	15	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	\$16



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)		INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Other Commercial Buildings	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	2857	0.022	62.9	0.012	34.3	0.010	28.6	0.005	15	PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	\$55
Business	Retrofit	Lighting - Other Commercial Buildings	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	2857	0.026	74.3	0.015	43.7	0.011	30.6	0.005	15	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	\$56
Business	Retrofit	Lighting - Other Commercial Buildings	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	2857	0.028	78.6	0.006	17.1	0.022	61.4	0.010	9	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	-\$94
Business	Retrofit	Lighting - Other Commercial Buildings	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	2857	0.037	104.3	0.008	21.4	0.029	82.9	0.013	9	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	-\$55
Business	Retrofit	Lighting - Other Commercial Buildings	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	2857	0.041	115.7	0.011	31.4	0.030	84.3	0.013	9	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	-\$27
Business	Retrofit	Lighting - Other Commercial Buildings	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	2857	0.052	147.1	0.013	37.1	0.039	110.0	0.017	9	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	-\$38
Business	Retrofit	Lighting - Other Commercial Buildings	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	2857	0.070	200.0	0.018	50.0	0.053	150.0	0.024	9	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	-\$139
Business	Retrofit	Lighting - Other Commercial Buildings	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	2857	0.200	571.4	0.200	-	0.000	171.4	0.027	11	PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen	\$120
Business	Retrofit	Lighting - Other Commercial Buildings	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	2857	0.300	857.1	0.300	-	0.000	351.4	0.055	11	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	\$218
Business	Retrofit	Lighting - Other Commercial Buildings	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	2857	0.150	428.6	0.150	-	0.000	175.7	0.028	11	eral PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	\$148



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Other Commercial Buildings	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	2857	0.030	85.7	0.030	-	0.000	35.1	0.006	11	PSP-Business- Other_Commercial_Bu ildings- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Other Non- Food Retail	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	4089	0.032	130.8	0.019	77.7	0.013	53.2	0.010	12	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen eral	\$5
Business	Retrofit	Lighting - Other Non- Food Retail	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	4089	0.061	249.4	0.028	114.5	0.033	134.9	0.025	12	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen eral	\$1
Business	Retrofit	Lighting - Other Non- Food Retail	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	4089	0.023	94.0	0.013	53.2	0.010	40.9	0.008	12	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	-\$2
Business	Retrofit	Lighting - Other Non- Food Retail	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	4089	0.029	118.6	0.018	73.6	0.011	45.0	0.008	12	PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$3
Business	Retrofit	Lighting - Other Non- Food Retail	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	4089	0.075	306.7	0.038	154.2	0.037	152.5	0.028	12	PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	-\$4
Business	Retrofit	Lighting - Other Non- Food Retail	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	4089	0.066	269.9	0.039	159.5	0.027	110.4	0.020	12	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$62
Business	Retrofit	Lighting - Other Non- Food Retail	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	4089	0.067	274.0	0.039	157.8	0.028	116.1	0.021	12	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$114
Business	Retrofit	Lighting - Other Non- Food Retail	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	4089	0.096	392.5	0.055	224.9	0.041	167.6	0.031	12	PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$117
Business	Retrofit	Lighting - Other Non- Food Retail	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	4089	0.071	290.3	0.044	179.9	0.027	110.4	0.020	12	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen eral	\$145



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Other Non- Food Retail	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	4089	7.122	29121.9	7.093	29003.3	0.029	118.6	0.022	12	PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$167
Business	Retrofit	Lighting - Other Non- Food Retail	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	4089	0.066	269.9	0.032	130.8	0.034	139.0	0.026	12	PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$39
Business	Retrofit	Lighting - Other Non- Food Retail	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	4089	0.067	274.0	0.031	126.8	0.036	147.2	0.027	12	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$84
Business	Retrofit	Lighting - Other Non- Food Retail	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	4089	0.096	392.5	0.042	171.7	0.054	220.8	0.041	12	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$104
Business	Retrofit	Lighting - Other Non- Food Retail	LED HIGH BAY FIXTURE	≤139W ≥8900 Lumens	250W Probe Start Metal Halide	4089	0.295	1206.3	0.139	568.4	0.156	637.9	0.118	17	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_High	-\$449
Business	Retrofit	Lighting - Other Non- Food Retail	LED HIGH BAY FIXTURE	≤175W ≥15,000 Lumens	400W Probe Start Metal Halide	4089	0.458	1872.8	0.175	715.6	0.283	1157.2	0.213	17	PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_High	-\$136
Business	Retrofit	Lighting - Other Non- Food Retail	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	4089	0.113	460.6	0.053	216.7	0.060	243.9	0.045	12	PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen eral	\$184
Business	Retrofit	Lighting - Other Non- Food Retail	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	4089	0.017	67.5	0.009	38.4	0.007	29.0	0.005	11	PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$16
Business	Retrofit	Lighting - Other Non- Food Retail	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	4089	0.022	90.0	0.012	49.1	0.010	40.9	0.008	11	PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$55
Business	Retrofit	Lighting - Other Non- Food Retail	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	4089	0.026	106.3	0.015	62.6	0.011	43.8	0.008	11	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen eral	\$56



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Other Non- Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	4089	0.028	112.4	0.006	24.5	0.022	87.9	0.016	6	PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen eral	-\$94
Business	Retrofit	Lighting - Other Non- Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	4089	0.037	149.2	0.008	30.7	0.029	118.6	0.022	6	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen eral	-\$55
Business	Retrofit	Lighting - Other Non- Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	4089	0.041	165.6	0.011	45.0	0.030	120.6	0.022	6	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen eral	-\$27
Business	Retrofit	Lighting - Other Non- Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	4089	0.052	210.6	0.013	53.2	0.039	157.4	0.029	6	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen eral	-\$38
Business	Retrofit	Lighting - Other Non- Food Retail	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	4089	0.070	286.2	0.018	71.6	0.053	214.7	0.040	6	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	-\$139
Business	Retrofit	Lighting - Other Non- Food Retail	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	4089	0.200	817.8	0.200	-	0.000	245.3	0.045	8	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$120
Business	Retrofit	Lighting - Other Non- Food Retail	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	4089	0.300	1226.7	0.300	-	0.000	502.9	0.093	8	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$218
Business	Retrofit	Lighting - Other Non- Food Retail	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	4089	0.150	613.4	0.150	-	0.000	251.5	0.046	8	PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen	\$148
Business	Retrofit	Lighting - Other Non- Food Retail	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	4089	0.030	122.7	0.030	-	0.000	50.3	0.009	8	eral PSP-Business- Other_Non_Food_Ret ail- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Restaurant	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	5110	0.032	163.5	0.019	97.1	0.013	66.4	0.011	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$5



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Restaurant	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	5110	0.061	311.7	0.028	143.1	0.033	168.6	0.028	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$1
Business	Retrofit	Lighting - Restaurant	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	5110	0.023	117.5	0.013	66.4	0.010	51.1	0.008	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	-\$2
Business	Retrofit	Lighting - Restaurant	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	5110	0.029	148.2	0.018	92.0	0.011	56.2	0.009	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$3
Business	Retrofit	Lighting - Restaurant	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	5110	0.075	383.3	0.038	192.6	0.037	190.6	0.031	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	-\$4
Business	Retrofit	Lighting - Restaurant	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	5110	0.066	337.3	0.039	199.3	0.027	138.0	0.023	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$62
Business	Retrofit	Lighting - Restaurant	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	5110	0.067	342.4	0.039	197.2	0.028	145.1	0.024	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$114
Business	Retrofit	Lighting - Restaurant	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	5110	0.096	490.6	0.055	281.1	0.041	209.5	0.034	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$117
Business	Retrofit	Lighting - Restaurant	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	5110	0.071	362.8	0.044	224.8	0.027	138.0	0.023	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$145
Business	Retrofit	Lighting - Restaurant	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	5110	8.122	41503.4	8.093	41355.2	0.029	148.2	0.024	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$167
Business	Retrofit	Lighting - Restaurant	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	5110	0.066	337.3	0.032	163.5	0.034	173.7	0.028	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$39



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Restaurant	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	5110	0.067	342.4	0.031	158.4	0.036	184.0	0.030	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$84
Business	Retrofit	Lighting - Restaurant	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	5110	0.096	490.6	0.042	214.6	0.054	275.9	0.045	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$104
Business	Retrofit	Lighting - Restaurant	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	5110	0.113	575.6	0.053	270.8	0.060	304.8	0.050	10	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$184
Business	Retrofit	Lighting - Restaurant	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	5110	0.017	84.3	0.009	48.0	0.007	36.3	0.006	9	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$16
Business	Retrofit	Lighting - Restaurant	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	5110	0.022	112.4	0.012	61.3	0.010	51.1	0.008	9	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$55
Business	Retrofit	Lighting - Restaurant	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	5110	0.026	132.9	0.015	78.2	0.011	54.7	0.009	9	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$56
Business	Retrofit	Lighting - Restaurant	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	5110	0.028	140.5	0.006	30.7	0.022	109.9	0.018	5	PSP-Business- Restaurant- Lighting_Interior_Gen eral	-\$94
Business	Retrofit	Lighting - Restaurant	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	5110	0.037	186.5	0.008	38.3	0.029	148.2	0.024	5	PSP-Business- Restaurant- Lighting_Interior_Gen eral	-\$55
Business	Retrofit	Lighting - Restaurant	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	5110	0.041	207.0	0.011	56.2	0.030	150.7	0.025	5	PSP-Business- Restaurant- Lighting_Interior_Gen eral	-\$27
Business	Retrofit	Lighting - Restaurant	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	5110	0.052	263.2	0.013	66.4	0.039	196.7	0.032	5	PSP-Business- Restaurant- Lighting_Interior_Gen eral	-\$38



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Restaurant	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	5110	0.070	357.7	0.018	89.4	0.053	268.3	0.044	5	PSP-Business- Restaurant- Lighting_Interior_Gen eral	-\$139
Business	Retrofit	Lighting - Restaurant	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	5110	0.200	1022.0	0.200	-	0.000	306.6	0.050	6	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$120
Business	Retrofit	Lighting - Restaurant	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	5110	0.300	1533.0	0.300	-	0.000	628.5	0.103	6	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$218
Business	Retrofit	Lighting - Restaurant	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	5110	0.150	766.5	0.150	-	0.000	314.3	0.051	6	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Restaurant	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	5110	0.030	153.3	0.030	-	0.000	62.9	0.010	6	PSP-Business- Restaurant- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Schools	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	2596	0.032	83.1	0.019	49.3	0.013	33.7	0.002	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$5
Business	Retrofit	Lighting - Schools	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	2596	0.061	158.4	0.028	72.7	0.033	85.7	0.004	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$1
Business	Retrofit	Lighting - Schools	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	2596	0.023	59.7	0.013	33.7	0.010	26.0	0.001	19	PSP-Business-Schools- Lighting_Interior_Gen eral	-\$2
Business	Retrofit	Lighting - Schools	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	2596	0.029	75.3	0.018	46.7	0.011	28.6	0.001	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$3
Business	Retrofit	Lighting - Schools	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	2596	0.075	194.7	0.038	97.9	0.037	96.8	0.005	19	PSP-Business-Schools- Lighting_Interior_Gen eral	-\$4



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Schools	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	2596	0.066	171.3	0.039	101.2	0.027	70.1	0.004	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$62
Business	Retrofit	Lighting - Schools	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	2596	0.067	173.9	0.039	100.2	0.028	73.7	0.004	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$114
Business	Retrofit	Lighting - Schools	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	2596	0.096	249.2	0.055	142.8	0.041	106.4	0.005	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$117
Business	Retrofit	Lighting - Schools	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	2596	0.071	184.3	0.044	114.2	0.027	70.1	0.004	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$145
Business	Retrofit	Lighting - Schools	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	2596	9.122	23680.7	9.093	23605.4	0.029	75.3	0.004	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$167
Business	Retrofit	Lighting - Schools	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	2596	0.066	171.3	0.032	83.1	0.034	88.3	0.004	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$39
Business	Retrofit	Lighting - Schools	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	2596	0.067	173.9	0.031	80.5	0.036	93.5	0.005	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$84
Business	Retrofit	Lighting - Schools	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	2596	0.096	249.2	0.042	109.0	0.054	140.2	0.007	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$104
Business	Retrofit	Lighting - Schools	LED HIGH BAY FIXTURE	≤139W ≥8900 Lumens	250W Probe Start Metal Halide	2596	0.295	765.8	0.139	360.8	0.156	405.0	0.020	27	PSP-Business-Schools- Lighting_Interior_High _Bay	-\$449
Business	Retrofit	Lighting - Schools	LED HIGH BAY FIXTURE	≤175W ≥15,000 Lumens	400W Probe Start Metal Halide	2596	0.458	1189.0	0.175	454.3	0.283	734.7	0.037	27	PSP-Business-Schools- Lighting_Interior_High _Bay	-\$136



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Schools	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	2596	0.113	292.4	0.053	137.6	0.060	154.8	0.008	19	PSP-Business-Schools- Lighting_Interior_Gen eral	\$184
Business	Retrofit	Lighting - Schools	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	2596	0.017	42.8	0.009	24.4	0.007	18.4	0.001	17	PSP-Business-Schools- Lighting_Interior_Gen eral	\$16
Business	Retrofit	Lighting - Schools	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	2596	0.022	57.1	0.012	31.2	0.010	26.0	0.001	17	PSP-Business-Schools- Lighting_Interior_Gen eral	\$55
Business	Retrofit	Lighting - Schools	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	2596	0.026	67.5	0.015	39.7	0.011	27.8	0.001	17	PSP-Business-Schools- Lighting_Interior_Gen eral	\$56
Business	Retrofit	Lighting - Schools	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	2596	0.028	71.4	0.006	15.6	0.022	55.8	0.003	10	PSP-Business-Schools- Lighting_Interior_Gen eral	-\$94
Business	Retrofit	Lighting - Schools	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	2596	0.037	94.8	0.008	19.5	0.029	75.3	0.004	10	PSP-Business-Schools- Lighting_Interior_Gen eral	-\$55
Business	Retrofit	Lighting - Schools	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	2596	0.041	105.1	0.011	28.6	0.030	76.6	0.004	10	PSP-Business-Schools- Lighting_Interior_Gen eral	-\$27
Business	Retrofit	Lighting - Schools	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	2596	0.052	133.7	0.013	33.7	0.039	99.9	0.005	10	PSP-Business-Schools- Lighting_Interior_Gen eral	-\$38
Business	Retrofit	Lighting - Schools	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	2596	0.070	181.7	0.018	45.4	0.053	136.3	0.007	10	PSP-Business-Schools- Lighting_Interior_Gen eral	-\$139
Business	Retrofit	Lighting - Schools	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	2596	0.200	519.2	0.200	-	0.000	155.8	0.008	12	PSP-Business-Schools- Lighting_Interior_Gen eral	\$120



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Schools	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	2596	0.300	778.8	0.300	-	0.000	319.3	0.016	12	PSP-Business-Schools- Lighting_Interior_Gen eral	\$218
Business	Retrofit	Lighting - Schools	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	2596	0.150	389.4	0.150	-	0.000	159.7	0.008	12	PSP-Business-Schools- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Schools	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	2596	0.030	77.9	0.030	-	0.000	31.9	0.002	12	PSP-Business-Schools- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - University Colleges	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	3255	0.032	104.2	0.019	61.8	0.013	42.3	0.006	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$5
Business	Retrofit	Lighting - University Colleges	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	3255	0.061	198.6	0.028	91.1	0.033	107.4	0.014	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$1
Business	Retrofit	Lighting - University Colleges	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	3255	0.023	74.9	0.013	42.3	0.010	32.6	0.004	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	-\$2
Business	Retrofit	Lighting - University Colleges	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	3255	0.029	94.4	0.018	58.6	0.011	35.8	0.005	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$3
Business	Retrofit	Lighting - University Colleges	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	3255	0.075	244.1	0.038	122.7	0.037	121.4	0.016	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	-\$4
Business	Retrofit	Lighting - University Colleges	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	3255	0.066	214.8	0.039	126.9	0.027	87.9	0.012	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$62
Business	Retrofit	Lighting - University Colleges	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	3255	0.067	218.1	0.039	125.6	0.028	92.4	0.012	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$114



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - University Colleges	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	3255	0.096	312.5	0.055	179.0	0.041	133.5	0.018	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$117
Business	Retrofit	Lighting - University Colleges	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	3255	0.071	231.1	0.044	143.2	0.027	87.9	0.012	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$145
Business	Retrofit	Lighting - University Colleges	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	3255	10.122	32947.1	10.093	32852.7	0.029	94.4	0.012	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$167
Business	Retrofit	Lighting - University Colleges	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	3255	0.066	214.8	0.032	104.2	0.034	110.7	0.015	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$39
Business	Retrofit	Lighting - University Colleges	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	3255	0.067	218.1	0.031	100.9	0.036	117.2	0.015	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$84
Business	Retrofit	Lighting - University Colleges	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	3255	0.096	312.5	0.042	136.7	0.054	175.8	0.023	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$104
Business	Retrofit	Lighting - University Colleges	LED HIGH BAY FIXTURE	≤139W ≥8900 Lumens	250W Probe Start Metal Halide	3255	0.295	960.2	0.139	452.4	0.156	507.8	0.067	22	PSP-Business- University_Colleges- Lighting_Interior_High _Bay	-\$449
Business	Retrofit	Lighting - University Colleges	LED HIGH BAY FIXTURE	≤175W ≥15,000 Lumens	400W Probe Start Metal Halide	3255	0.458	1490.8	0.175	569.6	0.283	921.2	0.121	22	PSP-Business- University_Colleges- Lighting_Interior_High _Bay	-\$136
Business	Retrofit	Lighting - University Colleges	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	3255	0.113	366.6	0.053	172.5	0.060	194.1	0.026	15	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$184
Business	Retrofit	Lighting - University Colleges	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	3255	0.017	53.7	0.009	30.6	0.007	23.1	0.003	14	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$16



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - University Colleges	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	3255	0.022	71.6	0.012	39.1	0.010	32.6	0.004	14	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$55
Business	Retrofit	Lighting - University Colleges	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	3255	0.026	84.6	0.015	49.8	0.011	34.8	0.005	14	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$56
Business	Retrofit	Lighting - University Colleges	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	3255	0.028	89.5	0.006	19.5	0.022	70.0	0.009	8	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	-\$94
Business	Retrofit	Lighting - University Colleges	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	3255	0.037	118.8	0.008	24.4	0.029	94.4	0.012	8	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	-\$55
Business	Retrofit	Lighting - University Colleges	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	3255	0.041	131.8	0.011	35.8	0.030	96.0	0.013	8	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	-\$27
Business	Retrofit	Lighting - University Colleges	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	3255	0.052	167.6	0.013	42.3	0.039	125.3	0.017	8	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	-\$38
Business	Retrofit	Lighting - University Colleges	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	3255	0.070	227.9	0.018	57.0	0.053	170.9	0.023	8	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	-\$139
Business	Retrofit	Lighting - University Colleges	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	3255	0.200	651.0	0.200	-	0.000	195.3	0.026	10	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$120
Business	Retrofit	Lighting - University Colleges	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	3255	0.300	976.5	0.300	-	0.000	400.4	0.053	10	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$218
Business	Retrofit	Lighting - University Colleges	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	3255	0.150	488.3	0.150	-	0.000	200.2	0.026	10	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$148



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - University Colleges	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	3255	0.030	97.7	0.030	-	0.000	40.0	0.005	10	PSP-Business- University_Colleges- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Warehouse Wholesale	4' T5 LED TUBE REPLACEMENT	≤28W ≥1600 Lumens	4' T5 fluorescent lamp 28W	3759	0.032	120.3	0.019	71.4	0.013	48.9	0.010	13	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$5
Business	Retrofit	Lighting - Warehouse Wholesale	4' T5HO LED TUBE REPLACEMENT	≤32W ≥3200 Lumens	4' T5HO fluorescent lamp 54W	3759	0.061	229.3	0.028	105.3	0.033	124.0	0.024	13	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$1
Business	Retrofit	Lighting - Warehouse Wholesale	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤15W ≥1500 Lumens	4' T8 fluorescent lamp 25W Electronic Ballast	3759	0.023	86.5	0.013	48.9	0.010	37.6	0.007	13	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	-\$2
Business	Retrofit	Lighting - Warehouse Wholesale	4' T8 LED TUBE / U-BEND REPLACEMENT LAMP	≤22W ≥2100 Lumens	4' T8 fluorescent lamp 32W Electronic Ballast	3759	0.029	109.0	0.018	67.7	0.011	41.3	0.008	13	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$3
Business	Retrofit	Lighting - Warehouse Wholesale	8' T8 LED TUBE REPLACEMENT LAMP	≤43W ≥3200 Lumens	59W 8' T8 w/ electronic ballast	3759	0.075	281.9	0.038	141.7	0.037	140.2	0.028	13	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	-\$4
Business	Retrofit	Lighting - Warehouse Wholesale	INTEGRAL LED FIXTURE	2' x 2' LED troffer / 2' LED linear ambient fixture (≥2000 Lumens)	U-bend 32W - 2 lamp T8	3759	0.066	248.1	0.039	146.6	0.027	101.5	0.020	13	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$62
Business	Retrofit	Lighting - Warehouse Wholesale	INTEGRAL LED FIXTURE	1' x 4' LED troffer / 4' LED linear ambient fixture (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	3759	0.067	251.9	0.039	145.1	0.028	106.8	0.021	13	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$114
Business	Retrofit	Lighting - Warehouse Wholesale	INTEGRAL LED FIXTURE	2' x 4' LED troffer / 4' LED linear ambient fixture (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	3759	0.096	360.9	0.055	206.7	0.041	154.1	0.030	13	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$117
Business	Retrofit	Lighting - Warehouse Wholesale	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥2000 to <9000 Lumens)	Measure mix of T8s and T12s	3759	0.071	266.9	0.044	165.4	0.027	101.5	0.020	13	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$145



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Warehouse Wholesale	LED LINEAR AMBIENT FIXTURES	8' LED linear ambient fixture (≥9000 Lumens)	Measure mix of T8s and T12s	3759	11.122	41807.6	11.093	41698.6	0.029	109.0	0.021	13	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$167
Business	Retrofit	Lighting - Warehouse Wholesale	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 2' LED troffer / 2' linear ambient retrofit kit (≥2000 Lumens)	U-bend 32W - 2 lamp T8	3759	0.066	248.1	0.032	120.3	0.034	127.8	0.025	13	PSP-Business- Warehouse_Wholesale Lighting_Interior_Gen eral	\$39
Business	Retrofit	Lighting - Warehouse Wholesale	INTEGRAL LED FIXTURE RETROFIT KIT	1' x 4' LED troffer / 4' LED linear ambient retrofit kit (≥1500 Lumens)	Two-lamp Std. T8 fixtures (4' 32W)	3759	0.067	251.9	0.031	116.5	0.036	135.3	0.027	13	PSP-Business- Warehouse_Wholesale Lighting_Interior_Gen eral	\$84
Business	Retrofit	Lighting - Warehouse Wholesale	INTEGRAL LED FIXTURE RETROFIT KIT	2' x 4' LED troffer / 4' linear ambient retrofit kit (≥3000 Lumens)	Three-lamp Std. T8 fixtures (4' 32W)	3759	0.096	360.9	0.042	157.9	0.054	203.0	0.040	13	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$104
Business	Retrofit	Lighting - Warehouse Wholesale	LED HIGH BAY FIXTURE	≤139W ≥8900 Lumens	250W Probe Start Metal Halide	3759	0.295	1108.9	0.139	522.5	0.156	586.4	0.115	19	PSP-Business- Warehouse_Wholesale Lighting_Interior_High _Bay	-\$449
Business	Retrofit	Lighting - Warehouse Wholesale	LED HIGH BAY FIXTURE	≤175W ≥15,000 Lumens	400W Probe Start Metal Halide	3759	0.458	1721.6	0.175	657.8	0.283	1063.8	0.209	19	PSP-Business- Warehouse_Wholesale Lighting_Interior_High _Bay	-\$136
Business	Retrofit	Lighting - Warehouse Wholesale	LED LOW-BAY FIXTURES	≤100W ≤10,000 Lumens	Four-lamp Tandem T8 Strip Fixture (32W)	3759	0.113	423.4	0.053	199.2	0.060	224.2	0.044	13	PSP-Business- Warehouse_Wholesale Lighting_Interior_Gen eral	\$184
Business	Retrofit	Lighting - Warehouse Wholesale	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥400 and <600 Lumens	ENERGY STAR® 15W or 18W CFL	3759	0.017	62.0	0.009	35.3	0.007	26.7	0.005	12	PSP-Business- Warehouse_Wholesale Lighting_Interior_Gen eral	\$16
Business	Retrofit	Lighting - Warehouse Wholesale	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥600 and <800 Lumens	ENERGY STAR® 22W CFL	3759	0.022	82.7	0.012	45.1	0.010	37.6	0.007	12	PSP-Business- Warehouse_Wholesale Lighting_Interior_Gen eral	\$55
Business	Retrofit	Lighting - Warehouse Wholesale	LED RECESSED DOWNLIGHTS	LED Downlight with Light Output ≥800 Lumens	ENERGY STAR® 26W CFL	3759	0.026	97.7	0.015	57.5	0.011	40.2	0.008	12	PSP-Business- Warehouse_Wholesale Lighting_Interior_Gen eral	\$56



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Lighting - Warehouse Wholesale	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤7W ≥250 Lumens	20W - 35W Halogen or Incandescent Lamp	3759	0.028	103.4	0.006	22.6	0.022	80.8	0.016	7	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	-\$94
Business	Retrofit	Lighting - Warehouse Wholesale	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤14W ≥400 Lumens	35W - 38W Halogen or Incandescent Lamp	3759	0.037	137.2	0.008	28.2	0.029	109.0	0.021	7	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	-\$55
Business	Retrofit	Lighting - Warehouse Wholesale	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤16W ≥600 Lumens	38W - 43W Halogen or Incandescent Lamp	3759	0.041	152.2	0.011	41.3	0.030	110.9	0.022	7	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	-\$27
Business	Retrofit	Lighting - Warehouse Wholesale	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤20W ≥800 Lumens	43W - 60W Halogen or Incandescent Lamp	3759	0.052	193.6	0.013	48.9	0.039	144.7	0.028	7	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	-\$38
Business	Retrofit	Lighting - Warehouse Wholesale	LED REFLECTOR (FLOOD/SPOT) LAMP PIN & SCREW BASE	≤30W ≥1100 Lumens	60W - 80W Halogen or Incandescent Lamp	3759	0.070	263.1	0.018	65.8	0.053	197.3	0.039	7	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	-\$139
Business	Retrofit	Lighting - Warehouse Wholesale	OCCUPANCY SENSORS	Switch Plate Mounted	No Occupancy Sensor	3759	0.200	751.8	0.200	-	0.000	225.5	0.044	9	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$120
Business	Retrofit	Lighting - Warehouse Wholesale	OCCUPANCY SENSORS	Ceiling/Wall Mounted	No Occupancy Sensor	3759	0.300	1127.7	0.300	-	0.000	462.4	0.091	9	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$218
Business	Retrofit	Lighting - Warehouse Wholesale	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (High Bay) for fixtures >= 100W	No Occupancy Sensor	3759	0.150	563.9	0.150	-	0.000	231.2	0.045	9	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Lighting - Warehouse Wholesale	OCCUPANCY SENSORS	Fixture Mounted Occupancy Sensor (all other) for fixtures <100W	No Occupancy Sensor	3759	0.030	112.8	0.030	-	0.000	46.2	0.009	9	PSP-Business- Warehouse_Wholesale- Lighting_Interior_Gen eral	\$148
Business	Retrofit	Multi- Residential In Suite Appliance	ENERGY STAR® REFRIGERATOR	-	Standard Refrigerator	3000	-	-	-	-	0.210	350.0	0.044	17	PSP-Business- Restaurant- Refrigeration	\$54



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Multi- Residential In Suite Appliance	IN-SUITE TEMPERATURE CONTROLS FOR ELECTRIC SPACE HEATING & COOLING	-	No In-suite temperature controls for electric space heating & cooling	-	-	-	-	-	0.000	1155.0	0.323	11	EM&V-Commercial- Space_Cooling_&_Hea ting	\$169
Business	Retrofit	Refrigeration	ECM MOTORS FOR EVAPORATOR FANS (FREEZER WALK-IN)	Motor Size ≥1/20 hp to <1/10 hp	Shaded Pole Motor (SP) and/or Permanent Split Capacitor (PSC)	8273	-	-	-	-	0.079	652.9	0.078	15	PSP-Business- Commercial- Refrigeration	\$239
Business	Retrofit	Refrigeration	ECM MOTORS FOR EVAPORATOR FANS (REFRIGERATOR WALK-IN)	Motor Size ≥1/20 hp to <1/10 hp	Shaded Pole Motor (SP) and/or Permanent Split Capacitor (PSC)	8273	-	-	-	-	0.062	542.2	0.064	15	PSP-Business- Commercial- Refrigeration	\$239
Business	Retrofit	Space Cooling	ADVANCED ROOFTOP UNIT CONTROLS	Single-zone packaged rooftop unit with single-speed supply fan retrofitted with advanced controls (≥3.0 ton to <5.4 tons)	Single-zone packaged rooftop unit with single-speed supply fan	-	-	-	-	-	0.000	1672.0	1.226	12	EM&V-Commercial- Cooling	\$1,350
Business	Retrofit	Space Cooling	ADVANCED ROOFTOP UNIT CONTROLS	Single-zone packaged rooftop unit with single-speed supply fan retrofitted with advanced controls (≥5.4 ton to <11.4 tons)	Single-zone packaged rooftop unit with single-speed supply fan	-	-	-	-	-	0.000	5201.0	3.814	12	EM&V-Commercial- Cooling	\$4,200
Business	Retrofit	Space Cooling	ADVANCED ROOFTOP UNIT CONTROLS	Single-zone packaged rooftop unit with single-speed supply fan retrofitted with advanced controls (≥11.4 ton to <19.9 tons)	Single-zone packaged rooftop unit with single- speed supply fan	-	-	-	-	-	0.000	9691.0	7.106	12	EM&V-Commercial- Cooling	\$7,825
Business	Retrofit	Space Cooling	ADVANCED ROOFTOP UNIT CONTROLS	Single-zone packaged rooftop unit with single-speed supply fan retrofitted with advanced controls (≥19.9 ton to <63.4 tons)	Single-zone packaged rooftop unit with single- speed supply fan	-	-	-	-	-	0.000	25759.0	18.887	12	EM&V-Commercial- Cooling	\$20,825
Business	Retrofit	Space Cooling	ECM MOTORS FOR HVAC APPLICATION (FAN MOTOR REPLACEMENT)	Motor <1 hp	VAV Box with PSC motors	3000	-	-	-	-	0.062	1205.0	0.851	15	PSP-Business- Other_Commercial_Bu ildings-Cooling_DX	\$162
Business	Retrofit	Space Cooling	ECM MOTORS FOR HVAC APPLICATION (FAN- POWERED VAV BOX)	VAV Units <1000 CFM	VAV Box with PSC motors	3000	-	-	-	-	0.180	500.0	0.353	15	PSP-Business- Other_Commercial_Bu ildings-Cooling_DX	\$160
Business	Retrofit	Space Cooling	ECM MOTORS FOR HVAC APPLICATION (FAN- POWERED VAV BOX)	VAV Units ≥1000 CFM	VAV Box with PSC motors	3000	-	-	-	-	0.320	350.0	0.247	15	PSP-Business- Other_Commercial_Bu ildings-Cooling_DX	\$550



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Space Cooling	HOTEL OCCUPANCY CONTROLS (HVAC + LIGHTING)	Electrically heated facility	No controls installed	-	-	-	-	-	-	310.0	0.219	10	PSP-Business- Other_Commercial_Bu ildings-Cooling_DX	\$351
Business	Retrofit	Space Cooling	HOTEL OCCUPANCY CONTROLS (HVAC + LIGHTING)	Gas heated facility	No controls installed	-	-	-	-	-	-	122.0	0.086	10	PSP-Business- Other_Commercial_Bu ildings-Cooling_DX	\$351
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Split System ≥3.0 to <5.4 tons, All Heating Type, 12.5 EER	Split System ≥3.0 to <5.4 tons, All Heating Type, 13.0 SEER (Approximately 11.14 EER)	600	-	-	-	-	0.493	295.9	0.217	15	EM&V-Commercial- Cooling	\$357
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Single Package With Economizer ≥3.0 to <5.4 tons, All Heating Type, 12.5 EER	Single Package With Economizer ≥3.0 to <5.4 tons, All Heating Type, 13.0 SEER (Approximately	600	-	-	-	-	0.493	295.9	0.217	15	EM&V-Commercial- Cooling	\$357
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Split System ≥5.4 to ≤ 7.5 tons, Electric Resistance, 12.2 EER	Split System ≥5.4 to ≤ 7.5 tons, Electric Resistance, 11.2 EER	600	-	-	-	-	0.567	340.3	0.250	15	EM&V-Commercial- Cooling	\$549
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Split System ≥5.4 to ≤ 7.5 tons, All Other Heating, 12.0 EER	Split System ≥5.4 to ≤ 7.5 tons, All Other Heating, 11 EER	600	-	-	-	-	0.587	352.3	0.258	15	EM&V-Commercial- Cooling	\$549
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Single Package With Economizer ≥5.4 to ≤ 7.5 tons, Electric Resistance, 12.2 EER	Single Package With Economizer ≥ 5.4 to ≤ 7.5 tons, Electric Resistance, 11.2 EER	600	-	-	-	-	0.567	340.3	0.250	15	EM&V-Commercial- Cooling	\$549
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Single Package With Economizer ≥5.4 to ≤ 7.5 tons, All Other Heating, 12.0 EER	Single Package With Economizer ≥5.4 to ≤ 7.5 tons, All Other Heating, 11 EER	600	-	-	-	-	0.587	352.3	0.258	15	EM&V-Commercial- Cooling	\$549
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Split System/Single Package >7.5 to <11.25 tons, Electric Resistance, 12.2 EER	Split System/Single Package >7.5 to <11.25 tons, Electric Resistance, 11.2 EER	600	-	-	-	-	0.823	494.0	0.362	15	EM&V-Commercial- Cooling	\$797
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Split System/Single Package >7.5 to <11.25 tons, All Other, 12.0 EER	Split System/Single Package >7.5 to <11.25 tons, All Other, 11 EER	600	-	-	-	-	0.852	511.4	0.375	15	EM&V-Commercial- Cooling	\$797



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Split System/Single Package ≥11.25 to <20 tons, Electric Resistance, 12.2 EER	Split System/Single Package ≥11.25 to <20 tons, Electric Resistance, 11 EER	600	-	-	-	-	1.677	1006.0	0.738	15	EM&V-Commercial- Cooling	\$1,329
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Split System/Single Package ≥11.25 to <20 tons, All Other, 12.0 EER	Split System/Single Package ≥11.25 to <20 tons, All Other, 10.8 EER	600	-	-	-	-	1.736	1041.7	0.764	15	EM&V-Commercial- Cooling	\$1,329
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Split System/Single Package ≥20 to <63 tons, Electric Resistance, 10.8 EER	Split System/Single Package ≥20 to <63 tons, Electric Resistance, 10 EER	600	-	-	-	-	3.704	2222.2	1.629	15	EM&V-Commercial- Cooling	\$1,064
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Split System/Single Package ≥20 to <63 tons, All Other, 10.6 EER	Split System/Single Package ≥20 to <63 tons, All Other, 9.8 EER	600	-	-	-	-	3.851	2310.4	1.694	15	EM&V-Commercial- Cooling	\$1,064
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Split System/Single Package >63 tons, Electric Resistance, 10.4 EER	Split System/Single Package >63 tons, Electric Resistance, 9.7 EER	600	-	-	-	-	5.274	3164.2	2.320	15	EM&V-Commercial- Cooling	\$1,616
Business	Retrofit	Space Cooling	UNITARY AIR-CONDITIONING UNIT	Split System/Single Package >63 tons, All Other, 10.2 EER	Split System/Single Package >63 tons, All Other, 9.5 EER	600	-	-	-	-	5.490	3294.1	2.415	15	EM&V-Commercial- Cooling	\$1,616
Business	Retrofit	Space Cooling and Heating	PACKAGED TERMINAL AIR CONDITIONERS (PTAC)	Cooling Capacity <7,000 Btu/h and EER ≥13.1	Cooling Capacity <7,000 Btu/h and EER = 11.9	650	-	-	-	-	0.064	34.8	0.011	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$20
Business	Retrofit	Space Cooling and Heating	PACKAGED TERMINAL AIR CONDITIONERS (PTAC)	Cooling Capacity \geq 7,000 Btu/h & \leq 15,000 Btu/h and EER \geq [14.0-(0.3 × Cap)] × 1.1	Cooling Capacity ≥7,000 Btu/h & ≤15,000 Btu/h and EER = 14.0-(0.3	650	-	-	-	-	0.093	60.7	0.018	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$32
Business	Retrofit	Space Cooling and Heating	PACKAGED TERMINAL AIR CONDITIONERS (PTAC)	Cooling Capacity >15,000 Btu/h and EER ≥10.5	Cooling Capacity >15,000 Btu/h and EER = 9.5	650	-	-	-	-	0.144	93.3	0.028	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$44
Business	Retrofit	Space Cooling and Heating	PACKAGED TERMINAL HEAT PUMPS (PTHP)	Cooling Capacity <7,000 Btu/h and EER ≥13.1 and COP ≥3.6	Cooling Capacity <7,000 Btu/h and EER = 11.9 and COP = 3.3	2650	-	-	-	-	0.064	147.8	0.045	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$20



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Space Cooling and Heating	PACKAGED TERMINAL HEAT PUMPS (PTHP)	Cooling Capacity \geq 7,000 Btu/h & <15,000 Btu/h and EER \geq [14.0 - (0.3 × Cap)] x 1.1 and COP \geq [3.7 - (0.052 x Cap)] x 1.1	Cooling Capacity ≥7,000 Btu/h & <15,000 Btu/h and EER = 14.0 - (0.3 × Cap) and COP = 3.7 -	2650	-	-	-	-	0.093	260.9	0.079	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$32
Business	Retrofit	Space Cooling and Heating	PACKAGED TERMINAL HEAT PUMPS (PTHP)	Cooling Capacity >15,000 Btu/h and EER ≥10.5 and COP ≥3.2	Cooling Capacity >15,000 Btu/h and EER = 9.5 and COP =2.9	2650	-	-	-	-	0.144	368.9	0.112	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$44
Business	Retrofit	Space Cooling and Heating	ROOM AIR CONDITIONERS	<8,000 Btu/h and CEER ≥12.1	<8,000 Btu/h and CEER ≥11.0	200	-	-	-	-	0.079	15.9	0.011	10	EM&V-Commercial- Cooling	\$25
Business	Retrofit	Space Cooling and Heating	ROOM AIR CONDITIONERS	≥8,000 to 13,999 Btu/h and CEER ≥12.0	8,000 to 13,999 Btu/h and CEER ≥10.9	200	-	-	-	-	0.137	27.5	0.019	10	EM&V-Commercial- Cooling	\$25
Business	Retrofit	Space Cooling and Heating	ROOM AIR CONDITIONERS	14,000 to 19,999 Btu/h and CEER ≥11.8	14,000 to 19,999 Btu/h and CEER ≥10.7	200	-	-	-	-	0.212	42.4	0.030	10	EM&V-Commercial- Cooling	\$25
Business	Retrofit	Space Cooling and Heating	ROOM AIR CONDITIONERS	≥20,000 to 27,999 Btu/h and CEER ≥10.3	20,000 to 27,999 Btu/h and CEER ≥9.4	200	-	-	-	-	0.259	51.4	0.036	10	EM&V-Commercial- Cooling	\$25
Business	Retrofit	Space Cooling and Heating	ROOM AIR CONDITIONERS	≥28,000 Btu/h and CEER ≥9.9	≥28,000 Btu/h and CEER ≥9.0	200	-	-	-	-	0.299	59.7	0.042	10	EM&V-Commercial- Cooling	\$25
Business	Retrofit	Space Cooling and Heating	UNITARY AIR SOURCE HEAT PUMP (ASHP)	Split System ≥3.0 to <5.4 Tons, All Heating Type, 12.5 EER	Split System ≥3.0 to <5.4 tons, All Heating Type, 14 SEER	2650	-	-	-	-	0.330	2114.7	0.643	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$1,620
Business	Retrofit	Space Cooling and Heating	UNITARY AIR SOURCE HEAT PUMP (ASHP)	Single Package ≥3.0 to <5.4 Tons, All Heating Type, 12 EER	Single Package With Economizer ≥3.0 to <5.4 tons, All Heating Type, 14 SEER	2650	-	-	-	-	0.330	2114.7	0.643	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$1,620
Business	Retrofit	Space Cooling and Heating	UNITARY AIR SOURCE HEAT PUMP (ASHP)	Split System/Single Package ≥5.4 to <11.25 Tons, Electric Resistance (or None), 11.8 EER	Split System/Single Package > 5.4 to <11.25 Tons, Electric Resistance, 11.0 FER	2650	-	-	-	-	0.757	1467.2	0.446	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$5,040



SECTOR	PROGRAM	END-USE	CONSERVATION MEASURE	MEASURE DESCRIPTION	BASE MEASURE	ASSUMED ANNUAL OPERATING HOURS	BASE CASE KW	BASE CASE KWH	CONSERVATION CASE KW	CONSERVATION CASE KWH	FIRST YEAR DEMAND SAVINGS (KW)	FIRST YEAR ENERGY SAVINGS (KWH)	SUMMER PEAK DEMAND SAVINGS (KW)	EFFECTIVE USEFUL LIFE (YEAR)	END USE LOAD PROFILE	INCREMENTAL LIFE CYCLE COST (\$)
Business	Retrofit	Space Cooling and Heating	UNITARY AIR SOURCE HEAT PUMP (ASHP)	Split System/Single Package ≥5.4 to <11.25 Tons, All Other, 11.6 EER	Split System/Single Package ≥5.4 to <11.25 tons, All Other, 10.8 EER	2650	-	-	-	-	0.757	1467.2	0.446	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$5,040
Business	Retrofit	Space Cooling and Heating	UNITARY AIR SOURCE HEAT PUMP (ASHP)	Split System/Single Package ≥11.25 to <20.0 Tons, Electric Resistance, 10.9 EER	Split System/Single Package ≥11.25 to <20.0 Tons, Electric Resistance, 10.6 FER	2650	-	-	-	-	1.482	2166.2	0.658	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$9,390
Business	Retrofit	Space Cooling and Heating	UNITARY AIR SOURCE HEAT PUMP (ASHP)	Split System/Single Package ≥11.25 to <20.0 Tons, All Other, 10.7 EER	Split System/Single Package ≥11.25 to <20.0 Tons, All Other, 10.4 EER	2650	-	-	-	-	1.482	2166.2	0.658	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$9,390
Business	Retrofit	Space Cooling and Heating	UNITARY AIR SOURCE HEAT PUMP (ASHP)	Split System/Single Package ≥20.0 to ≤63.3 Tons, Electric Resistance, 10.3 EER	Split System/Single Package ≥20.0 to ≤63.3 Tons, Electric Resistance, 9.5 FFR	2650	-	-	-	-	4.328	6279.0	1.909	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$24,990
Business	Retrofit	Space Cooling and Heating	UNITARY AIR SOURCE HEAT PUMP (ASHP)	Split System/Single Package ≥20.0 to ≤63.3 Tons, All Other 10.1 EER	Split System/Single Package ≥20.0 to ≤63.3 Tons, All Other, 9.3 EER	2650	-	-	-	-	4.328	6279.0	1.909	15	PSP-Business- Commercial- Space_Cooling_&_Hea ting	\$24,990