Ohio | Public Utilities Commission

Application to Commit Energy Efficiency/Peak Demand Reduction Programs (Mercantile Customers Only)

Case No.: 11-3686-EL-EEC

Rule 4901:1-39-05(F), Ohio Administrative Code (O.A.C.), permits a mercantile customer to file, either individually or jointly with an electric utility, an application to commit the customer's existing demand reduction, demand response, and energy efficiency programs for integration with the electric utility's programs. The following application form is to be used by mercantile customers, either individually or jointly with their electric utility, to apply for commitment of such programs implemented during the prior three calendar years.

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the rider will be automatically approved on the sixty-first calendar day after filing, unless the Commission, or an attorney examiner, suspends or denies the application prior to that time. Completed applications requesting the exemption from the electric utilities' energy efficiency rider option (Option 2) will not qualify for the 60-day automatic approval.

Complete a separate application for each customer program. Projects undertaken by a customer as a single program at a single location or at various locations within the same service territory should be submitted together as a single program filing, when possible. Check all boxes that are applicable to your program. For each box checked, be sure to complete all subparts of the question, and provide all requested additional information. Submittal of incomplete applications may result in a suspension of the automatic approval process or denial of the application.

If you consider some of the items requested in the application to be confidential or trade secret information, please file a copy of the application under seal, along with a motion for protective order pertaining to the material you believe to be confidential. Please also file a copy of the application in the public docket, with the information you believe to be confidential redacted.

Section 1: Company Information

Name: DISCOUNT DRUG MART, INC. - #15 PURITAS

Principal address: 211 COMMERCE DRIVE, MEDINA, OH 44256

Address of facility for which this energy efficiency program applies: 17815 PURITAS AVENUE, CLEVELAND, OH 44135

Name and telephone number for responses to questions: GEORGE KENNEDY - 440-899-2222

Electricity use by our company (at least one must apply to your company—check the box or boxes that apply):

☐ We use more than seven hundred thousand kilowatt hours per year at our facility. (Please attach documentation.)

☒ We are part of a national account involving multiple facilities in one or more states. (Please attach documentation.)

Section 2: Application Information

A) We are filing this application (choose which applies):

☐ Individually, on our own.

☒ Jointly with our electric utility.

B) Our electric utility is CLEVELAND ELECTRIC ILLUMINATING.

C) We are offering to commit (choose which applies):

☐ Energy savings from our energy efficiency program. (Complete Sections 3, 5, 6, and 7.)

☐ Demand reduction from our demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)

☒ Both the energy savings and the demand reduction from our energy efficiency program. (Complete all sections of the Application.)

Section 3: Energy Efficiency Programs

A) Our energy efficiency program involves (choose whichever applies):

☒ Early replacement of fully functioning equipment with new equipment. (Provide the date on which you replaced your fully functioning equipment, and the date on which you would have replaced your equipment if you had not replaced it early. Please include a brief explanation for how you determined this future replacement date (or, if not known, please explain why this is not known). **See Exhibit 1 and Exhibit 2**

☐ Installation of new equipment to replace equipment that needed to be replaced. We installed our new equipment on the following date(s): **See Exhibit 2**

☐ Installation of new equipment for new construction or facility expansion. We installed our new equipment on the following date(s): **See Exhibit 2**

B) Energy savings achieved/to be achieved by your energy efficiency program:

a) If you checked the box indicating that your project involves the early replacement of fully functioning equipment replaced with new equipment, then calculate the annual savings [(kWh used by the original equipment) – (kWh used by new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: 140,101kWh

b) If you checked the box indicating that you installed new equipment to replace equipment that needed to be replaced, then calculate the annual savings [(kWh used by less efficient new equipment) – (kWh used by the higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: _____kWh

Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment. **See Exhibit 1**

c) If you checked the box indicating that your project involves equipment for new construction or facility expansion, then calculate the annual savings [(kWh used by less efficient new equipment) – (kWh used by higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: _____kWh

Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment. **See Exhibit 1**

Section 4: Demand Reduction/Demand Response Programs

A) Our program involves (choose which applies):

☒ Coincident peak-demand savings from our energy efficiency program.

☐ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction). **See Exhibit 1**

☐ Potential peak-demand reduction (choose which applies):

- Choose one or more of the following that applies:

  ☐ Our peak-demand reduction program meets the requirements to be counted as a capacity resource under a tariff of a regional transmission organization (RTO) approved by the Federal Energy Regulatory Commission.

  ☐ Our peak-demand reduction program meets the requirements to be counted as a capacity resource under a program that is equivalent to an RTO program, which has been approved by the Public Utilities Commission of Ohio.

B) What is the date your peak demand reduction program was initiated? **See Exhibit 2**

C) What is the peak demand reduction achieved or capable of being achieved (show calculations through which this was determined):

25 kW **See Exhibit 2**

Section 5: Request for Cash Rebate Reasonable Arrangement (Option 1) or Exemption from Rider (Option 2)

Under this section, check the box that applies and fill in all blanks relating to that choice.

Note: If Option 2 is selected, the application will not qualify for the 60day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) We are applying for:

☒ Option 1: A cash rebate reasonable arrangement.

OR

☐ Option 2: An exemption from the cost recovery mechanism implemented by the electric utility.

B) The value of the option that we are seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☐ A cash rebate of $ **$14,472** (Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined).

OR

☒ A cash rebate valued at no more than 50% of the total project cost, which is equal to $ **$11,344** (Attach documentation and calculations showing how this payment amount was determined).

Option 2: An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider.

☐ An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for _____months (not to exceed 24 months).

(Attach calculations showing how this time period was determined).

OR

☐ Ongoing exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for an initial period of 24 months because this program is part of an ongoing efficiency program that is practiced by our organization. (Attach documentation that establishes your organization's ongoing efficiency program. In order to continue the exemption beyond the initial 24 month period your organization will need to provide a future application establishing additional energy savings and the continuance of the organization's energy efficiency program).

Section 6: Cost Effectiveness

The program is cost effective because it has a benefit/cost ratio greater than 1 using the (choose which applies):

☐ Total Resource Cost (TRC) Test. The calculated TRC value is: _____ (Continue to Subsection 1, then skip Subsection 2)

☒ Utility Cost Test (UCT). The calculated UCT value is: 2.7(Skip to Subsection 2).

Subsection 1: TRC Test Used (please fill in all blanks).

The TRC value of the program is calculated by dividing the value of our avoided supply costs (capacity and energy) by the sum of our program costs and our electric utility's administrative costs to implement the program.

Our avoided supply costs were _____.

Our program costs were _____.

The utility's administrative costs were _____.

Subsection 2: UCT Used (please fill in all blanks).

We calculated the UCT value of our program by dividing the value of our avoided supply costs (capacity and energy) by the costs to our electric utility (including administrative costs and incentives paid or rider exemption costs) to obtain our commitment.

Our avoided supply costs were **43190**.

The utility's administrative costs were **4947**.

The utility's incentive costs/rebate costs were **11344**.

Section 7: Additional Information

Please attach the following supporting documentation to this application:

- Narrative description of your program including, but not limited to, make, model, and year of any installed and replaced equipment.
- A copy of the formal declaration or agreement that commits your program to the electric utility, including:
  1) any confidentiality requirements associated with the agreement;
  2) a description of any consequences of noncompliance with the terms of the commitment;
  3) a description of coordination requirements between you and the electric utility with regard to peak demand reduction;
  4) permission by you to the electric utility and Commission staff and consultants to measure and verify energy savings and/or peak-demand reductions resulting from your program; and,
  5) a commitment by you to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.
- A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results. Additionally, identify and explain all deviations from any program measurement and verification guidelines that may be published by the Commission.

Ohio | Public Utilities Commission

Application to Commit Energy Efficiency/Peak Demand Reduction Programs (Mercantile Customers Only)

Case No.: 11-3686-EL-EEC

State of Ohio :

DAVE BOODJEH, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

   DISCOUNT DRUG MART, INC.
   [insert customer or EDU company name and any applicable name(s) doing business as]

2. I have personally examined all the information contained in the foregoing application, including any exhibits and attachments. Based upon my examination and inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.

3. I am aware of fines and penalties which may be imposed under Ohio Revised Code Sections 2921.11, 2921.31, 4903.02, 4903.03, and 4903.99 for submitting false information.

DIR. OF OPERATIONS
Signature of Affiant & Title

Sworn and subscribed before me this 28 day of FEBRUARY, 2011 Month/Year

Marcia D. Rager
Signature of official administering oath

Print Name and Title

My commission expires on MARCIA G. RAGER NOTARY PUBLIC, STATE OF OHIO COMMISSION EXPIRES JULY 6, 2015

Exhibit 1

Customer Legal Entity Name: DISCOUNT DRUG MART, INC.

Site Address: DISCOUNT DRUG MART, INC. - #15 - PURITAS

Principal Address: 17815 PURITAS AVENUE

Project No.	Project Name	Narrative description of your program including, but not limited to, make, model, and year of any installed and replaced equipment:	Description of methodologies, protocols and practices used in measuring and verifying project results	What date would you have replaced your equipment if you had not replaced it early? Also, please explain briefly how you determined this future replacement date.	Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.
1	LIGHTING UPGRADE	LIGHTING UPGRADE	See attached spreadsheet for energy savings calculations. Verification of energy savings was performed utilizing the partially measured retrofit isolation method described in Section 3.4 of the international performance measurement & verification protocol.	The decision was made to do a lighting upgrade and replace the T12 with the newer T8 technology for the energy savings, increase in light levels and maintenance savings.	N/A

Exhibit 2

Customer Legal Entity Name: DISCOUNT DRUG MART, INC.
Site Address: DISCOUNT DRUG MART, INC. - #15 - PURITAS
Principal Address: 17815 PURITAS AVENUE

	Unadjusted Usage, kwh (A)	Weather Adjusted Usage, kwh (B)	Weather Adjusted Usage with Energy Efficiency Addbacks, kwh (c) *Note 1*
2010	636,400	636,400	776,501
2009	654,720	654,720	794,821
Average	645,560	645,560	785,661

Project Number	Project Name	In-Service Date	Project Cost $	50% of Project Cost $	KWh Saved/Year (D) counting towards utility compliance	KWh Saved/Year (E) eligible for incentive	Utility Peak Demand Reduction Contribution, KW (F)	Prescriptive Rebate Amount (G) $	Eligible Rebate Amount (H) $ *Note 2*
1	LIGHTING UPGRADE	05/10/2007	$22,687	$11,344	140,101	140,101	25	$19,297	$11,344
					-	-	-		
					-	-	-		
					-	-	-		
					-	-	-		
					-	-	-		
		Total	$22,687		140,101	140,101	25	$19,297	$11,344

Docket No. 11-3686
Site: 17815 PURITAS AVENUE

Notes
(1) Customer's usage is adjusted to account for the effects of the energy efficiency programs included in this application. When applicable, such adjustments are prorated to the in-service date to account for partial year savings.

(2) The eligible rebate amount is based upon 75% of the rebates offered by the FirstEnergy Commercial and Industrial Energy Efficiency programs or 75% of $0.08/kWh for custom programs for all energy savings eligible for a cash rebate as defined in the PUCO order in Case NO.10-834-EL-EEC dated 9/15/2010, not to exceed the lesser of 50% of the project cost or $250,000 per project. The rebate also cannot exceed $500,000 per customer per year, per utility service territory.

Exhibit 3 Utility Cost Test

UCT = Utility Avoided Costs / Utility Costs

Project	Total Annual Savings, MWh (A)	Utility Avoided Cost $/MWh (B)	Utility Avoided Cost $ (C)	Utility Cost $ (D)	Cash Rebate $ (E)	Administrator Variable Fee $ (F)	Total Utility Cost $ (G)	UCT (H)
1	140	$ 308	$ 43,190	$ 3,546	$11,344	$1,401	$ 16,291	**2.7**
Total	**140**	**$ 308**	**43,190**	**3,546**	**$11,344**	**$1,401**	**16,291**	**2.7**

Notes

(A) From Exhibit 2, = kWh saved / 1000

(B) This value represents avoided energy costs (wholesale energy prices) from the Department of Energy, Energy Information Administration's 2009 Annual Energy Outlook (AEO) low oil prices case. The AEO represents a national average energy price, so for a better representation of the energy price that Ohio customers would see, a Cinergy Hub equivalent price was derived by applying a ratio based on three years of historic national average and Cinergy Hub prices.This value is consistent with avoided cost assumptions used in EE&PDR Program Portfolio and Initial Benchmark Report, filed Dec 15, 2009 (See Section 8.1, paragraph a).

(C) = (A) * (B)

(D) Represents the utility's costs incurred for self-directed mercantile applications for applications filed and applications in progress. Includes incremental costs of legal fees, fixed administrative expenses, etc.

(E) This is the amount of the cash rebate paid to the customer for this project.

(F) Based on approximate Administrator's variable compensation for purposes of calculating the UCT, actual compensation may be less.

(G) = (D) + (E) + (F)

(H) =(C) / (G)

DISCOUNT DRUG MART, INC. ~ DISCOUNT DRUG MART, INC. - #15 - PURITAS
Docket No. 11-3686

Site: 17815 PURITAS AVENUE

Lighting Inventory Form

Applicant Name: DISCOUNT DRUG MART, INC.

Facility Name: DISCOUNT DRUG MART #15 - PURITAS

Date: [illegible]

Instructions: Please use one line for each fixture type in a room or area.
For existing or proposed control, choose OCC for Occupancy Sensor, DAYLTG for photosensor, or NONE for none. Controls must save energy to qualify.
The total of Column S, the quantities of CFLs and exit signs in Column M, and the quantities of sensors in Column R, will be used to calculate your incentive on the Non-Standard Lighting form.

Line Item	Building Address	Floor	Area Description	Interior or Exterior Fixture	Predominant Space Type	Area Cooling	Pre Fixture Qty	Pre Fixture Code	Pre Watts/Fixture (W)	Pre kW/Space (kW)	Existing Control Device	Existing Sensor Quantity	Post Fixture Qty	Post Fixture Code	Post Watts/Fixture (W)	Post kW/Space (kW)	Proposed Control	Proposed Sensor Quantity	Interior Change in Connected Load (kW) excluding CFLs or Exit Signs	Exterior Change in Connected Load (kW) excluding CFLs or Exit Signs	Change in Connected Load (kW) CFL or LED Exit Sign	Applicable Coincidence Factor (CF) Estimate	Coincidence Factor	Interactive Factor (demand)	Interactive Factor (energy)	Pre Controls Factor	Post Controls Factor	Demand Savings (kW)	Applicable Operational Full Load Hours (EFLH) Estimate	Prescribed Operational Full Load Hours	Annual kWh Savings (excluding CFLs or Exit Signs)
e.g.	400 North Street	2	Office	Interior	Office - Small	Cooled Space	3	F44LL	112	0.34	NONE		3	[illegible]	58	0.17	OCC	2			0.17	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	0.17	[illegible]	[illegible]	
e.g.	Example	1	Restaurant	Exterior	Restaurant - Fast Food	Uncooled space	5	Example Cut Sheet 1	90	0.55	OCC	3	6	Example Cut Sheet 2	73	0.43	DAYLTG	5		0.12		[illegible]	[illegible]			[illegible]	[illegible]		[illegible]	[illegible]	
1	17815 PURITAS	1	SALES FLOOR	Interior	Other - Please estimate CF and EFLH	Cooled Space	240	F[illegible]	122	29.28	NONE		240	CUT SHEET 1	64	15.63	NONE		13.58			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
2	17815 PURITAS	1	SALES FLOOR F	Interior	Other - Please estimate CF and EFLH	Cooled Space	27	F[illegible]	122	3.29	NONE		27	CUT SHEET 1	64	1.41	NONE		1.02			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
3	17815 PURITAS	1	SALES FLOOR 12	Interior	Other - Please estimate CF and EFLH	Cooled Space	16	F[illegible]	122	1.95	NONE		15	CUT SHEET 1	64	0.96	NONE		0.99			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
4	17815 PURITAS	1	BREAK ROOM	Interior	Other - Please estimate CF and EFLH	Cooled Space	3	F[illegible]	122	0.36	NONE		2	CUT SHEET 1	64	0.19	NONE		0.17			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
5	17815 PURITAS	1	RESTROOMS	Interior	Other - Please estimate CF and EFLH	Cooled Space	2	F[illegible]	72	0.14	NONE		3	CUT SHEET 6	42	0.13	NONE		0.06			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
6	17815 PURITAS	1	FRONT FOYER	Interior	Other - Please estimate CF and EFLH	Cooled Space	2	F[illegible]	122	0.25	NONE		2	CUT SHEET 1	64	0.13	NONE		0.12			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
7	17815 PURITAS	1	CHECKOUT	Interior	Other - Please estimate CF and EFLH	Cooled Space	4	[illegible]	96	0.24	NONE		4	CUT SHEET 3	11	0.05	NONE		0.19			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
8	17815 PURITAS	1	EAST COVE	Interior	Other - Please estimate CF and EFLH	Cooled Space	3	F[illegible]	83	0.17	NONE		3	CUT SHEET 5	42	0.13	NONE		0.07			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
9	17815 PURITAS	1	EAST COVE	Interior	Other - Please estimate CF and EFLH	Cooled Space	2	F[illegible]	63	0.09	NONE		2	CUT SHEET 8	24	0.05	NONE		0.03			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
10	17815 PURITAS	1	SOUTH COVE	Interior	Other - Please estimate CF and EFLH	Cooled Space	12	F[illegible]	93	1.09	NONE		12	CUT SHEET 6	49	0.59	NONE		0.41			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
11	17815 PURITAS	1	SOUTH COVE	Interior	Other - Please estimate CF and EFLH	Cooled Space	1	F[illegible]	63	0.06	NONE		1	CUT SHEET 8	24	0.02	NONE		0.02			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
12	17815 PURITAS	1	WEST COVE	Interior	Other - Please estimate CF and EFLH	Cooled Space	2	F[illegible]	43	0.09	NONE		2	CUT SHEET 8	29	0.06	NONE		0.03			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
13	17815 PURITAS	1	WEST COVE	Interior	Other - Please estimate CF and EFLH	Cooled Space	7	F[illegible]	37	0.26	NONE		1	CUT SHEET 6	49	0.24	NONE		0.24			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
14	17815 PURITAS	1	NORTH COVE	Interior	Other - Please estimate CF and EFLH	Cooled Space	1	F[illegible]	43	0.04	NONE		1	CUT SHEET 8	21	0.02	NONE		0.02			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
15	17815 PURITAS	1	NORTH COVE	Interior	Other - Please estimate CF and EFLH	Cooled Space	12	F[illegible]	93	1.09	NONE		12	CUT SHEET 4	49	0.59	NONE		0.41			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
16	17815 PURITAS	1	PHARMACY	Interior	Other - Please estimate CF and EFLH	Cooled Space	24	F[illegible]	140	3.40	NONE		24	CUT SHEET 11	97	2.33	NONE		1.12			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
17	17815 PURITAS	1	MAGAZINES	Interior	Other - Please estimate CF and EFLH	Cooled Space	7	F[illegible]	60	0.28	NONE		7	CUT SHEET 10	22	0.16	NONE		0.50			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
18	17815 PURITAS	1	BACK ROOM	Interior	Other - Please estimate CF and EFLH	Cooled Space	58	F[illegible]	122	6.36	NONE		50	CUT SHEET 13	54	2.70	NONE		3.49			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
19	17815 PURITAS	1	EXITS	Interior	Other - Please estimate CF and EFLH	Cooled Space	9	[illegible]	40	0.36	NONE		1	CUT SHEET 7	2	0.02	NONE		0.36			[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
20	17815 PURITAS	1	OUTSIDE	Exterior	Other - Please estimate CF and EFLH	Unconditioned space	9	[illegible]	107	0.19	NONE		9	CUT SHEET 2	109	0.98	NONE			1.15		[illegible]	[illegible]						[illegible]	[illegible]	
21											NONE						NONE														
22											NONE						NONE														
23											NONE						NONE														
24											NONE						NONE														
25											NONE						NONE														
26											NONE						NONE														
27											NONE						NONE														
28											NONE						NONE														
29											NONE						NONE														
30											NONE						NONE														
31											NONE						NONE														
32											NONE						NONE														
33											NONE						NONE														
34											NONE						NONE														
35											NONE						NONE														
36											NONE						NONE														
37											NONE						NONE														
38											NONE						NONE														
39											NONE						NONE														
40											NONE						NONE														
41											NONE						NONE														
42											NONE						NONE														
43											NONE						NONE														
44											NONE						NONE														
45											NONE						NONE														
46											NONE						NONE														
47											NONE						NONE														
48											NONE						NONE														
49											NONE						NONE														
50											NONE						NONE														
51											NONE						NONE														
52											NONE						NONE														
53											NONE						NONE														
54											NONE						NONE														
55											NONE						NONE														
56											NONE						NONE														
57											NONE						NONE														
58											NONE						NONE														
59											NONE						NONE														
60											NONE						NONE														
61											NONE						NONE														
62											NONE						NONE														
63											NONE						NONE														
64											NONE						NONE														
Totals							450			52.88			450			29.40			22.60	1.12								18.88			[illegible]

Project Estimated Annual Savings Summary

Estimated Annual kWh Savings	140,101.69
Total Change in Connected Load	24.55

Annual Estimated Cost Savings	$14,010.17
Annual Operating Hours	5,311

Interior Lighting Incentive @ $0.80/W (excluding CFLs, sensors, or LED exit signs)	$18,720.80
Exterior Lighting Incentive @ $0.50/W (excluding CFLs, sensors, or LED exit signs)	$576.00
Total CFL Incentive @ $1/screw-in CFL lamp; $15/hard-wired CFL lamp (includes all CFLs, both interior and exterior)	$0.00
Total LED Exit Incentive @ $10/exit sign	$0.00
Total Lighting Controls Incentive @ $25/sensor (includes all Lighting Controls, both interior and exterior)	$0.00

Total Calculated Incentive	$19,296.80

Total Fixture Quantity excluding CFLs and LED Exit Sign	430
Total Lamp Quantity for Screw-In CFLs	0
Total Lamp Quantity for Hard-Wired CFLs	0
Total Fixture Quantity for LED Exit Signs	0
Total Quantity for Occupancy Sensors	0
Total Quantity for Daylight Sensors	0

Please briefly describe how you estimated your coincidence factor (CF) for facility type "Other" indicated on the Lighting Form tab

15-Puritas 15

Executive Summary

Reduction in Electrical Load (kW): Puritas Rd Discount Drug Mart	
kW Reduction	**26.734**
Percent Reduction in Lighting Load	*52.5%*
Savings in Electrical Usage (kWh):	
kWh saved from Lighting Upgrade	136,052.7
kWh saved from Occupancy Sensors	0.0
kWh saved from reduced Air Conditioning Load	12,466.9
Total kWh Saved	**148,519.5**
Energy Cost Savings Summary:	
Annual Electrical Cost Savings @ $0.100 /kWh	$14,851.95
Less: Heating Cost Increase	-$342.22
Net Annual Energy Savings	**$14,509.73**
Annual Deferred Material & Labor Cost Savings:	
Material Cost Savings	$1,914.55
Labor Cost Savings	$0.00
Recycling Cost Savings	$199.41
Total Additional Cost Savings	**$2,113.95**
Project Cost Summary:	
Turn-Key Project Cost	$22,687.07
Less: Rebates and Incentives	$0.00
Net Project Cost	**$22,687.07**
Simple Payback in Years	**1.36**

Lighting Upgrade Report

Item No.	Room Description	Annual Hours Old	Annual Hours New	Annual Hours Saved	Old Qty	Existing Fixture Description	New Qty	New Fixture Description	Ballast Type Bist #1	Ballast Type Bist #2	Fixture Wattage Old	Fixture Wattage New	Fixture Wattage Saved	Retrofit Savings kW	Retrofit Savings kWh	Sensor Savings kWh	Sensor Savings %	Survey Comments
1	Sales Floor @ 12	4,928	4,928		245	8ft Strip (2) F96T12 Lamps	245	8ft Reflector (2) 4ft T8 Lamps	332N/120		123	58	66	15.925	78,470.4			
2	Sales Floor @ 3'	4,928	4,928		22	8ft Strip (2) F96T12 Lamps	22	8ft Reflector (2) 4ft T8 Lamps	332N/120		123	58	65	1.430	7,045.3			
3	Sales Floor @ 12'	8,760	8,760		15	8ft Strip (2) F96T12 Lamps	15	8ft Reflector (2) 4ft T8 Lamps	332N/120		123	58	65	0.975	8,541.0			
4	Break Room	4,928	4,928		2	8ft Strip (2) F96T12 Lamps	2	8ft Reflector (2) 4ft T8 Lamps	332N/120		123	58	65	0.130	640.6			
5	Break Room Bathrooms	4,928	4,928		2	4ft Wall Bracket (2) F40T12 Lamps	2	Rebellast (2) 4ft T8 Lamps	232L/120		72	48	24	0.048	236.5			
6	Front Foyer	4,380	4,380		2	8ft Strip (2) F96T12 Lamps	2	8ft Reflector (2) 4ft T8 Lamps	332N/120		123	58	65	0.130	569.4			Connect to Outside Ctr.
7	Checkout & Back Cooler	4,928	4,928		4	Porcelain Socket (1) 60w Lamp	4	Replace with (1) 13w CFL			60	13	47	0.188	926.4			
8	East Wall Wash	4,928	4,928		2	8ft Strip (1) F96T12 Lamp	2	8ft Pan Kit (2) 4ft T8 Lamps	232L/120		83	48	35	0.070	344.9			
9	East Wall Wash	4,928	4,928		2	4ft Strip (1) F40T12 Lamp	2	4ft Pan Kit (1) 4ft T8 Lamp	232L/120		43	26	17	0.034	167.5			
10	South Wall Wash	4,928	4,928		12	8ft Strip (1) F96T12 Lamp	12	8ft Pan Kit (2) 4ft T8 Lamps	232L/120		83	48	35	0.420	2,069.6			
11	South Wall Wash	4,928	4,928		1	4ft Strip (1) F40T12 Lamp	1	4ft Pan Kit (1) 4ft T8 Lamp	132N/120		43	28	15	0.015	73.9			
12	West Wall Wash	4,928	4,928		2	4ft Strip (1) F40T12 Lamp	2	4ft Pan Kit (1) 4ft T8 Lamp	232L/120		43	26	17	0.034	167.5			
13	West Wall Wash	4,928	4,928		7	8ft Strip (1) F96T12 Lamp	7	8ft Pan Kit (2) 4ft T8 Lamps	232L/120		83	48	35	0.245	1,207.2			
14	North Wall Wash	4,928	4,928		1	4ft Strip (1) F40T12 Lamp	1	4ft Pan Kit (1) 4ft T8 Lamp	232L/120		43	26	17	0.017	83.8			
15	North Wall Wash	4,928	4,928		12	8ft Strip (1) F96T12 Lamp	12	8ft Pan Kit (2) 4ft T8 Lamps	232L/120		83	48	35	0.420	2,069.6			
16	Pharmacy	4,928	4,928		24	2x4 Recd Troffer (4) F40T12 Lamps	24	Rebellast (4) 4ft T8 Lamps	432L/120		144	93	51	1.224	6,031.3			
17	Magazines	4,928	4,928		7	3ft Strip (1) F30T12 Lamp	7	Rebellast (1) 3ft T8 Lamp	232L/120		44	24	20	0.140	689.9			
18	Back Room Storage	4,928	4,928		50	8ft Strip (2) F96T12 Lamps	50	8ft Pan Kit (2) 4ft T8 Lamps	232L/120		123	48	75	3.750	18,478.1			
19	Exits	8,760	8,760		9	Exit Sign (2) 20w Lamps	9	New LED Exit Sign w/BBU			40	2	38	0.342	2,995.9			
20	Exterior Canopy	4,380	4,380		9	65 Vaporite (2) F96T12HO Lamps	9	8ft VT Pan Kit (4) 4ft T8 Lamps	432N/120		237	104	133	1.197	5,242.9			
21																		
22																		
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
32																		
33																		
34																		
35																		
36																		
37																		
38																		
39																		
40																		
41																		
42																		
43																		
44																		
45																		
46																		
47																		
48																		
49																		
50																		

UltraMax® Instant Start Multi-Voltage 120–277V High-Efficiency
T8 Instant Start Ballasts For F17 (2 ft), F25 (3 ft), F32 (4 ft), F40 (5 ft) Lamps

78623 – GE332MAX-N/ULTRA (replaces 71719)

UltraMax® Instant Start Multi-Voltage High-Efficiency

3 or 2 – F32T8 120 to 277 "N" .87 BF UltraMax®

- Energy-saving high-efficiency instant-start electronic ballast (> 90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Anti-striation control for better light quality, with no striations
- Cold temperature -22°F Minimum Starting Temperature
- UL 55C Ambient Temperature rating

General characteristics

Ballast Type	Electronic – High-Efficiency Multivolt Instant Start
Starting Method	Instant start
Lamp Wiring	Parallel
Line Voltage Regulation (+/-)	10%
Ambient Temperature (MAX)	55°C (131°F)
Case Temperature (MAX)	70°C (158°F)
Ballast Factor	Normal
Power Factor Correction	Active
Sound Rating	A (20-24 decibels)
Additional Info	Anti-striation control, Auto-restart, Thermally protected

Electrical characteristics

Supply Current Frequency	50 Hz/60 Hz

Order information

10 Pack	Pallet Pack	DSV Pack	IP Pack
78623	78624 (replaces 71723)		

Dimensions

Wiring diagram – LFL 1C – see example on Page 10-62

Case dimensions – Ref Drawing -A – see Page 10-65

Length (L)	9.5 in (241 mm)
Width (W)	1.7 in (43 mm)
Height (H)	1.18 in (30 mm)
Mounting dimensions	
Mount Length (M)	8.9 in (226 mm)
Mount Width (X or Y)	1.18 in (30 mm)
Mount Slots (MS)	0.3 in (8 mm)
Weight	1.40 lbs
Exit Type	Side
Remote Mounting Distance to Lamp (F32T8)	18 ft
Remote Mounting Wire Gauge	18 AWG
Lead lengths	Length (± 1 in)
Black	25 in (635 mm)
White	25 in (635 mm)
Red	37 in (940 mm)
Blue	31 in (787 mm)

Specifications by lamp and wattage

Lamp	# of Lamps	Line Volts	System Watts	Nom. Line Current	System Ballast Factor	Ballast Efficacy Factor	Power Factor% (≥)	Crest Factor (≤)	THD% (≤)	Min. Starting Temp (°F/°C)
	3	120	82	0.72 A	0.87	1.06	99	1.4	10	-22.0/-30
	3	277	80	0.31 A	0.87	1.09	98	1.4	10	-22.0/-30
	2	120	64	0.56 A	0.97	1.52	99	1.4	10	-22.0/-30
F32T8	2	277	62	0.25 A	0.97	1.54	97	1.4	13	-22.0/-30
	3	120	77	0.68 A	0.87	1.13	99	1.4	10	50.0/10
	3	277	76	0.29 A	0.87	1.14	98	1.4	10	50.0/10
	2	120	59	0.51 A	0.95	1.61	99	1.4	10	50.0/10
F32T8/WM	2	277	58	0.23 A	0.95	1.64	97	1.4	15	50.0/10
	3	120	70	0.62 A	0.87	1.24	99	1.4	10	50.0/10
	3	277	70	0.27 A	0.87	1.24	98	1.4	10	50.0/10
	2	120	54	0.47 A	0.93	1.72	99	1.4	10	50.0/10
F28T8	2	277	53	0.21 A	0.93	1.75	97	1.4	16	50.0/10
	3	120	65		0.87	1.34	99	1.4	10	60.0/16
	3	277	64		0.87	1.36	98	1.4	10	60.0/16
	2	120	50		0.93	1.86	99	1.4	10	60.0/16
F32T8/25W	2	277	48		0.93	1.94	97	1.4	10	60.0/16
	3	120	67	0.59 A	0.84	1.25	99	1.4	10	-22.0/-30
	3	277	67	0.26 A	0.84	1.25	98	1.4	13	-22.0/-30
	2	277	51	0.20 A	0.94	1.84	97	1.4	17	-22.0/-30
F25T8	2	120	51	0.45 A	0.94	1.84	99	1.4	10	-22.0/-30
	3	120	45	0.40 A	0.86	1.91	99	1.4	10	-22.0/-30
	3	277	45	0.18 A	0.86	1.91	97	1.4	17	-22.0/-30
	2	120	35	0.31 A	0.97	2.77	99	1.4	10	-22.0/-30
F17T8	2	277	35	0.15 A	0.97	2.77	95	1.4	19	-22.0/-30
	3	120	36	0.31 A	0.77	2.14	99	1.4	10	0.0/-18
	3	277	36	0.16 A	0.77	2.14	96	1.4	23	0.0/-18
	2	120	28	0.25 A	0.86	3.07	99	1.4	10	0.0/-18
FE15T8	2	277	28	0.13 A	0.86	3.07	93	1.4	23	0.0/-18
	3	120	68	0.60 A	0.78	1.15	99	1.4	10	0.0/-18
	3	277	67	0.26 A	0.78	1.16	98	1.4	13	0.0/-18
	2	120	52	0.46 A	0.89	1.71	99	1.4	10	0.0/-18
F25T12	2	277	52	0.21 A	0.89	1.73	97	1.4	16	0.0/-18

Safety and performance UL Type 1 Outdoor · UL Type HL · FCC – CLASS A Non-Consumer · UL Class P · cUL Listed · UL Type CC · UL Listed · RoHS Compliant · NEMA Premium

Cut Sheet 1.

Bulb Shape	Base	Watts	Nominal Length (in.)	Order Code	Description	Case Qty.	Rated Life (3 hr/Start)	Rated Life (12 hr/Start)	Initial Lumens	Mean Lumens	Color Temp K	CRI	High Color Rendering	Energy Savings	Reduced Wattage	Meets Federal Minimum Efficiency Standards	Footnotes	Warning and Caution Notices	Additional Information
T8 Starcoat® Lamps (continued)																			
3' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	25	36.0	45750	F25T8/SP30/ECO	24	20000	24000	2080	1970	3000	78					18	101	
		25	36.0	45754	F25T8/SP35/ECO	24	20000	24000	2080	1970	3500	78					18	101	
		25	36.0	45756	F25T8/SP41/ECO	24	20000	24000	2080	1970	4100	78					18	101	
		25	36.0	45753	F25T8/SPX30/ECO	24	20000	24000	2150	2040	3000	86					18	101	
		25	36.0	45755	F25T8/SPX35/ECO	24	20000	24000	2150	2040	3500	86					18	101	
		25	36.0	45757	F25T8/SPX41/ECO	24	20000	24000	2150	2040	4100	86					18	101	
3' T8 Ecolux® XL Extra-life																			
T8	Medium Bi-Pin (G13)	25	36.0	15486	F25T8/XL/SP30/ECO	24	24000	29000	2080	1970	3000	78					18	101	
		25	36.0	15487	F25T8/XL/SP35/ECO	24	24000	29000	2080	1970	3500	78					18	101	
		25	36.0	15488	F25T8/XL/SP41/ECO	24	24000	29000	2080	1970	4100	78					18	101	
		25	36.0	15489	F25T8/XL/SPX30/ECO	24	24000	29000	2150	2040	3000	86					18	101	
		25	36.0	15490	F25T8/XL/SPX35/ECO	24	24000	29000	2150	2040	3500	86					18	101	
		25	36.0	15491	F25T8/XL/SPX41/ECO	24	24000	29000	2150	2040	4100	86					18	101	
		25	36.0	10416	F25T8/XL/SPX50/ECO	24	24000	29000	2050	1950	5000	86					18	101	
		25	36.0	16314	F25T8/XL/SPX65/ECO	24	24000	29000	1950	1755	6500	85					18	101	
4' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	32	48.0	26666	F32T8/SP30/ECO	36	30000	36000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	26667	F32T8/SP35/ECO	36	30000	36000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	26668	F32T8/SP41/ECO	36	30000	36000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	16090	F32T8/SP50/ECO	36	30000	36000	2750	2610	5000	78				Ⓔ	18	101	
		32	48.0	16091	F32T8/SP65/ECO	36	30000	36000	2700	2565	6500	78				Ⓔ	18	101	
		32	48.0	25611	F32T8/SPX30/ECO	36	30000	36000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	25612	F32T8/SPX35/ECO	36	30000	36000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	25613	F32T8/SPX41/ECO	36	30000	36000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	42064	F32T8/SPX50/ECO	36	30000	36000	2800	2660	5000	86				Ⓔ	18	101	
4' T8 Ecolux® XL Extra-life																			
T8	Medium Bi-Pin (G13)	32	48.0	27616	F32T8/XL/SP30/ECO	36	36000	42000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	27617	F32T8/XL/SP35/ECO	36	36000	42000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	27618	F32T8/XL/SP41/ECO	36	36000	42000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	27619	F32T8/XL/SPX30/ECO	36	36000	42000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	27620	F32T8/XL/SPX35/ECO	36	36000	42000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	27621	F32T8/XL/SPX41/ECO	36	36000	42000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	16313	F32T8/XL/SPX50/ECO	36	36000	42000	2800	2660	5000	86				Ⓔ	18	101	
		32	48.0	16089	F32T8/XL/SPX65/ECO	36	36000	42000	2750	2475	6500	85				Ⓔ	18	101	
4' T8 Ecolux® Super Long Life																			
T8	Medium Bi-Pin (G13)	32	48.0	73093	F32T8/SXL/SPX30/ECO	36	40000	46000	2850	2675	3000	84				Ⓔ	18	101	
		32	48.0	73094	F32T8/SXL/SPX35/ECO	36	40000	46000	2850	2675	3500	83				Ⓔ	18	101	
		32	48.0	73095	F32T8/SXL/SPX41/ECO	36	40000	46000	2850	2675	4100	81				Ⓔ	18	101	
		32	48.0	73096	F32T8/SXL/SPX50/ECO	36	40000	46000	2800	2630	5000	80				Ⓔ	18	101	
Ultra Energy Saving T8 Lamps																			
2' T8 Ecolux® Watt-Miser® 15 Watt Lamp																			
T8	Medium Bi-Pin (G13)	15	24.0	72132	F17T8/XL/SPX30/WM/ECO	24	24000	29000	1200	1130	3000	85		$			1,18	101	
		15	24.0	72133	F17T8/XL/SPX35/WM/ECO	24	24000	29000	1200	1130	3500	85		$			1,18	101	
		15	24.0	72134	F17T8/XL/SPX41/WM/ECO	24	24000	29000	1200	1130	4100	82		$			1,18	101	
		15	24.0	72135	F17T8/XL/SPX50/WM/ECO	24	24000	29000	1175	1105	5000	80		$			1,18	101	
3' T8 Ecolux® Watt-Miser® 22 Watt Lamp																			
T8	Medium Bi-Pin (G13)	22	36.0	72136	F25T8/XL/SPX30/WM/ECO	24	24000	29000	1925	1810	3000	85		$			1,18	101	
		22	36.0	72137	F25T8/XL/SPX35/WM/ECO	24	24000	29000	1925	1810	3500	85		$			1,18	101	
		22	36.0	72138	F25T8/XL/SPX41/WM/ECO	24	24000	29000	1925	1810	4300	82		$			1,18	101	
		22	36.0	72139	F25T8/XL/SPX50/WM/ECO	24	24000	29000	1900	1785	5000	80		$			1,18	101	

Rated life for 2 ft through 4 ft Starcoat® Ecolux® Medium Bi-Pin T8 lamps is determined on programmed start ballasts. Life ratings are based on engineering data on programmed start ballasts with lamps cycled every 3 or 12 operating hours. Lamp life is approximately 35% longer @ 3 hour starts and 20% longer @ 12 hours starts with programmed start ballasts as compared to standard instant start ballasts (see chart on page 4-4).

For the most up-to-date product information, see www.gelighting.com. To convert inches to millimeters, multiply by 25.4.
All footnotes, warning and caution notices found at the end of this section (page 4-32).

UltraMax® Instant Start Multi-Voltage 120–277V High-Efficiency
T8 Instant Start Ballasts For F17 (2 ft), F25 (3 ft), F32 (4 ft), F40 (5 ft) Lamps

78627 – GE432MAX-N/ULTRA (replaces 71727)
UltraMax® Instant Start Multi-Voltage High-Efficiency
4 or 3 – F32T8 120 to 277 "N" .87 BF UltraMax®

- Energy-saving high-efficiency instant-start electronic ballast (> 90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Anti-striation control for better light quality, with no striations
- Cold temperature -22°F Minimum Starting Temperature
- UL 55C Ambient Temperature rating

General characteristics

Ballast Type	Electronic – High-Efficiency Multivolt Instant Start
Starting Method	Instant start
Lamp Wiring	Parallel
Line Voltage Regulation (+/-)	10%
Ambient Temperature (MAX)	55°C (131°F)
Case Temperature (MAX)	70°C (158°F)
Ballast Factor	Normal
Power Factor Correction	Active
Sound Rating	A (20-24 decibels)
Additional Info	Anti-striation control, Auto-restart, Thermally protected

Electrical characteristics

Supply Current Frequency	50 Hz/60 Hz

Dimensions

Wiring diagram – LFL 3D – see example on Page 10-62	
Case dimensions – Ref Drawing – A – see Page 10-65	
Length (L)	9.5 in (241 mm)
Width (W)	1.7 in (43 mm)
Height (H)	1.18 in (30 mm)
Mounting dimensions	
Mount Length (ML)	8.9 in (226 mm)
Mount Width (K or F)	1.18 in (30 mm)
Mount Slots (MS)	0.3 in (8 mm)
Weight	1.40 lbs
Exit Type	Side
Remote Mounting Distance to Lamp (F32T8)	18 ft
Remote Mounting Wire Gauge	18 AWG
Lead lengths	Length (± 1 in)
Blue and Red	31 in (787 mm)
White	25 in (635 mm)
Yellow	39 in (991 mm)
Black	25 in (635 mm)

Order information

10 Pack	Pallet Pack	DIV Pack	IP Pack
78627	78628 (replaces 71729)	71730 (replaces 23942)	

Specifications by lamp and wattage

Lamp	# of Lamps	Line Volts	System Watts	Nom. Line Current	System Ballast Factor	Ballast Efficacy Factor	Power Factor % (>=)	Crest Factor (<=)	THD % (<=)	Min. Starting Temp (°F/°C)
	4	120	109	0.97 A	0.87	0.80	99	1.4	10	-22.0/-30
	4	277	107	0.41 A	0.87	0.81	98	1.4	10	-22.0/-30
	3	120	87	0.81 A	0.87	1.02	99	1.4	10	-22.0/-30
F32T8	3	277	85	0.31 A	0.87	1.03	99	1.4	10	-22.0/-30
	4	120	103	0.91 A	0.87	0.84	99	1.4	10	50.0/10
	4	277	101	0.38 A	0.87	0.86	98	1.4	10	50.0/10
	3	120	85	0.75 A	0.91	1.07	99	1.4	10	50.0/10
F32T8/WM	3	277	84	0.32 A	0.91	1.08	97	1.4	10	50.0/10
	4	120	94	0.82 A	0.87	0.93	99	1.4	10	50.0/10
	4	277	92	0.35 A	0.87	0.95	98	1.4	10	50.0/10
	3	120	77	0.68 A	0.89	1.16	99	1.4	10	50.0/10
F28T8	3	277	76	0.29 A	0.89	1.17	97	1.4	13	50.0/10
	4	120	87		0.87	1.00	99	1.4	10	
	4	277	86		0.87	1.01	98	1.4	10	
	3	120	71		0.89	1.25	99	1.4	10	
F32T8/25W	3	277	71		0.89	1.25	97	1.4	10	
	4	120	89	0.78 A	0.82	0.92	99	1.4	10	-22.0/-30
	4	277	88	0.33 A	0.82	0.93	98	1.4	10	-22.0/-30
	3	120	74	0.65 A	0.90	1.22	99	1.4	10	-22.0/-30
F25T8	3	277	73	0.28 A	0.90	1.23	97	1.4	15	-22.0/-30
	4	120	61	0.51 A	0.87	1.43	99	1.4	10	-22.0/-30
	4	277	61	0.24 A	0.87	1.43	97	1.4	10	-22.0/-30
	3	120	51	0.45 A	0.96	1.88	99	1.4	10	-22.0/-30
F17T8	3	277	51	0.21 A	0.96	1.88	96	1.4	18	-22.0/-30
	4	120	48	0.42 A	0.77	1.60	99	1.4	10	0.0/-18
	4	277	48	0.20 A	0.77	1.60	96	1.4	10	0.0/-18
	3	120	41	0.35 A	0.85	2.07	99	1.4	11	0.0/-18
FE15T8	3	277	40	0.17 A	0.85	2.13	94	1.4	23	0.0/-18
	4	120	91	0.80 A	0.79	0.87	99	1.4	10	0.0/-18
	4	277	90	0.34 A	0.79	0.88	98	1.4	10	0.0/-16
	3	120	76	0.66 A	0.87	1.16	99	1.4	10	0.0/-18
F25T12	3	277	71	0.29 A	0.87	1.23	98	1.4	13	0.0/-18

Safety and performance UL Type 1 Outdoor · UL Type HL · FCC – CLASS A Non-Consumer · UL Class P · cUL Listed · UL Type CC · UL Listed · RoHS Compliant · NEMA Premium

Cut Sheet 2

Bulb Shape	Base	Watts	Nominal Length (in)	Order Code	Description	Case Qty	Rated Life (3hr/Start)	Rated Life (12hr/Start)	Initial Lumens	Mean Lumens	Color Temp (K)	CRI	High Color Rendering	Energy Savings	Reduced Wattage	Meets Federal Minimum Efficiency Standards	Foot notes	Warning and Caution Notices	Additional Information
T8 Starcoat® Lamps (continued)																			
3' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	25	36.0	45750	F25T8/SP30/ECO	24	20000	24000	2080	1970	3000	78					18	101	
		25	36.0	45754	F25T8/SP35/ECO	24	20000	24000	2080	1970	3500	78					18	101	
		25	36.0	45756	F25T8/SP41/ECO	24	20000	24000	2080	1970	4100	78					18	101	
		25	36.0	45753	F25T8/SPX30/ECO	24	20000	24000	2150	2040	3000	86					18	101	
		25	36.0	45755	F25T8/SPX35/ECO	24	20000	24000	2150	2040	3500	86					18	101	
		25	36.0	45757	F25T8/SPX41/ECO	24	20000	24000	2150	2040	4100	86					18	101	
3' T8 Ecolux® XL Extra-Life																			
T8	Medium Bi-Pin (G13)	25	36.0	15486	F25T8/XL/SP30/ECO	24	24000	29000	2080	1970	3000	78					18	101	
		25	36.0	15487	F25T8/XL/SP35/ECO	24	24000	29000	2080	1970	3500	78					18	101	
		25	36.0	15488	F25T8/XL/SP41/ECO	24	24000	29000	2080	1970	4100	78					18	101	
		25	36.0	15489	F25T8/XL/SPX30/ECO	24	24000	29000	2150	2040	3000	86					18	101	
		25	36.0	15490	F25T8/XL/SPX35/ECO	24	24000	29000	2150	2040	3500	86					18	101	
		25	36.0	15491	F25T8/XL/SPX41/ECO	24	24000	29000	2150	2040	4100	86					18	101	
		25	36.0	10416	F25T8/XL/SPX50/ECO	24	24000	29000	2050	1950	5000	86					18	101	
		25	36.0	16314	F25T8/XL/SPX65/ECO	24	24000	29000	1950	1755	6500	85					18	101	
4' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	32	48.0	26666	F32T8/SP30/ECO	36	30000	36000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	26667	F32T8/SP35/ECO	36	30000	36000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	26668	F32T8/SP41/ECO	36	30000	36000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	16090	F32T8/SP50/ECO	36	30000	36000	2750	2610	5000	78				Ⓔ	18	101	
		32	48.0	16091	F32T8/SP65/ECO	36	30000	36000	2700	2565	6500	78				Ⓔ	18	101	
		32	48.0	25611	F32T8/SPX30/ECO	36	30000	36000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	25612	F32T8/SPX35/ECO	36	30000	36000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	25613	F32T8/SPX41/ECO	36	30000	36000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	42064	F32T8/SPX50/ECO	36	30000	36000	2800	2660	5000	86				Ⓔ	18	101	
4' T8 Ecolux® XL Extra-Life																			
T8	Medium Bi-Pin (G13)	32	48.0	27616	F32T8/XL/SP30/ECO	36	36000	42000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	27617	F32T8/XL/SP35/ECO	36	36000	42000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	27618	F32T8/XL/SP41/ECO	36	36000	42000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	27619	F32T8/XL/SPX30/ECO	36	36000	42000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	27620	F32T8/XL/SPX35/ECO	36	36000	42000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	27621	F32T8/XL/SPX41/ECO	36	36000	42000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	16313	F32T8/XL/SPX50/ECO	36	36000	42000	2800	2660	5000	86				Ⓔ	18	101	
		32	48.0	16089	F32T8/XL/SPX65/ECO	36	36000	42000	2750	2475	6500	85				Ⓔ	18	101	
4' T8 Ecolux® Super Long Life																			
T8	Medium Bi-Pin (G13)	32	48.0	73093	F32T8/SXL/SPX30/ECO	36	40000	46000	2850	2675	3000	84				Ⓔ	18	101	
		32	48.0	73094	F32T8/SXL/SPX35/ECO	36	40000	46000	2850	2675	3500	83				Ⓔ	18	101	
		32	48.0	73095	F32T8/SXL/SPX41/ECO	36	40000	46000	2850	2675	4100	81				Ⓔ	18	101	
		32	48.0	73096	F32T8/SXL/SPX50/ECO	36	40000	46000	2800	2630	5000	80				Ⓔ	18	101	
Ultra Energy Saving T8 Lamps																			
2' T8 Ecolux® Watt-Miser® 15 Watt Lamp																			
T8	Medium Bi-Pin (G13)	15	24.0	72132	F17T8/XL/SPX30/WM/ECO	24	24000	29000	1200	1130	3000	85		$			1,18	101	
		15	24.0	72133	F17T8/XL/SPX35/WM/ECO	24	24000	29000	1200	1130	3500	85		$			1,18	101	
		15	24.0	72134	F17T8/XL/SPX41/WM/ECO	24	24000	29000	1200	1130	4100	82		$			1,18	101	
		15	24.0	72135	F17T8/XL/SPX50/WM/ECO	24	24000	29000	1175	1105	5000	80		$			1,18	101	
3' T8 Ecolux® Watt-Miser® 22 Watt Lamp																			
T8	Medium Bi-Pin (G13)	22	36.0	72136	F25T8/XL/SPX30/WM/ECO	24	24000	29000	1925	1810	3000	85		$			1,18	101	
		22	36.0	72137	F25T8/XL/SPX35/WM/ECO	24	24000	29000	1925	1810	3500	85		$			1,18	101	
		22	36.0	72138	F25T8/XL/SPX41/WM/ECO	24	24000	29000	1925	1810	4100	82		$			1,18	101	
		22	36.0	72139	F25T8/XL/SPX50/WM/ECO	24	24000	29000	1900	1785	5000	80		$			1,18	101	

Rated life for 2 ft through 4 ft Starcoat® Ecolux® Medium Bi-Pin T8 lamps is determined on programmed start ballasts. Life ratings are based on engineering data on programmed start ballasts with lamps cycled every 3 or 12 operating hours. Lamp life is approximately 35% longer @ 3 hour starts and 20% longer @ 12 hours starts with programmed start ballasts as compared to standard instant start ballasts (see chart on page 4-4).

For the most up-to-date product information, see www.gelighting.com. To convert inches to millimeters, multiply by 25.4.
All footnotes, warning and caution notices found at the end of this section (page 4-32).

Cut Sheet 3

Base	Watts	Nominal Length (in)	Order Code	Description	Case Qty	Volts	Rated Life (hrs)	Initial Lumens	Mean Lumens	Color Temp. K	CRI	Min. Start Temp. (°F)	Power Factor	THD	ENERGY STAR® Screw-Ins	Additional Information	Caution Notice	Footnotes
Self-Ballasted Lamps																		
Spiral®																		
Med	10	4.4	15829	FLE10HT3/2/827	10	120	8000	520	420	2700	82	5	0.6	120	★	T3 Spiral®, Boxed	153	1,7,8,9,10
	10	4.4	49906	FLE10HT3/2/SW/CD	12	120	8000	520	420	2700	82	5	0.6	120	★	T3 Spiral®, Corded Single Pack	153	1,7,8,9,10
	10	4.4	49907	FLE10HT325WCD2PK	3	120	8000	520	420	2700	82	5	0.6	120	★	T3 Spiral®, Corded Twin Pack	153	1,7,8,9,10
	10	4.4	25182	FLE10HT3/2/841	10		8000	520	420	4100	82	5	0.6		★	T3 Spiral®, Boxed	153	1,7,8,9,10
	10	4.4	89082	FLE10HT3/2/D/CD	12	120	8000	500	400	6500	82	5	0.6	120	★	Corded Single Pack		
	10	4.4	85393	FLE10HT3/2/D/2PK	3	120	8000	500	400	6500	82	5	0.6	120	★	T3 Spiral®, Corded Twin Pack	153	1,7,8,9,10
	10	4.4	80936	FLE10HT3/2/XL	10	120	12000	550	440	2700	82	5	0.6	120	★	T3 Spiral®, Boxed	153	1,7,8,9,10
	10	4.4	47430	FLE10HT3/2/XL/CD	12	120	12000	550	440	2700	82	5	0.6	120	★	T3 Spiral®, Corded Single Pack	153	1,7,8,9,10
	10	4.4	49671	FLE10HT3/2/XL2PK	3	120	12000	550	440	2700	82	5	0.6	120	★	T3 Spiral®, Corded Twin Pack	153	1,7,8,9,10
	10	3.7	86241	FLE10HT2/2/827	10	120	12000	580	460	2700	82	5	0.5	120	★	T2 Spiral®, Boxed	153	1,7,8,9,10
	10	3.7	85382	FLE10HT2/2/SW/CD	3	120	12000	580	464	2700	82	5	0.5	120	★	T2 Spiral®, Corded Single Pack	153	1,7,8,9,10
Med	13	4.7	16460	FLE13HT3/2/SW/CD	12	120	8000	825	660	2700	82	5	0.6	120	★	T3 Spiral®, Corded Single Pack	153	1,7,8,9,10
	13	4.7	16459	FLE13HT3/2/SW/2P	3	120	8000	825	660	2700	82	5	0.6	120	★	T3 Spiral®, Corded Twin Pack	153	1,7,8,9,10
	13	4.7	21760	FLE13HT3/2/10PK	10	120	8000	825	660	2700	82	5	0.6	120	★	T3 Spiral®, Consumer 10-Pack	153	1,7,8,9,10
	13	4.7	71763	FLE13HT3/2/6STP	6	120	6000	855	685	5000	82	5	0.6	145	★	T3 Spiral®, Tray Pack	153	1,7,8,9,10
	13	3.9	86256	FLE13HT2/2/827	10	120	12000	870	695	2700	82	5	0.5	120	★	T2 Spiral®, Boxed	153	1,7,8,9,10
	13	3.9	85383	FLE13HT2/2/SW/CD	3	120	12000	870	750	2700	82	5	0.6	120	★	T2 Spiral®, Corded Single Pack	153	1,7,8,9,10
Med	15	4.8	15831	FLE15HT3/2/827	10	120	8000	950	765	2700	82	5	0.6	145	★	T3 Spiral®, Boxed	153	1,7,8,9,10
	15	4.8	25183	FLE15HT3/2/841	10	120	8000	950	765	4100	82	5	0.6	145	★	T3 Spiral®, Boxed	153	1,7,8,9,10
	15	4.8	89091	FLE15HT3/2/D/CD	3	120	8000	900	738	6500	82	5	0.6	145	★	Corded Single Pack		
	15	4.8	85394	FLE15HT3/2/D/2PK	3	120	8000	900	738	6500	82	5	0.6	145	★	T3 Spiral®, Corded Twin Pack	153	1,7,8,9,10
	15	4.8	80937	FLE15HT3/2/XL/SW	10	120	12000	950	765	2700	82	5	0.6	145	★	T3 Spiral®, Boxed	153	1,7,8,9,10
	15	4.8	47435	FLE15HT3/2/XL/CD	12	120	12000	950	765	2700	82	5	0.6	145	★	T3 Spiral®, Corded Single Pack	153	1,7,8,9,10
	15	4.8	49680	FLE15HT3/2/XL2PK	3	120	12000	950	765	2700	82	5	0.6	145	★	T3 Spiral®, Corded Twin Pack	153	1,7,8,9,10
	15	4.1	86271	FLE15HT2/2/827	10	120	12000	950	760	2700	82	5	0.5	120	★	T2 Spiral®, Boxed	153	1,7,8,9,10
	15	4.1	85385	FLE15HT2/2/SW/CD	12	120	8000	950	765	2700	82	5	0.6	145	★	T2 Spiral®, Corded Single Pack	153	1,7,8,9,10
	15	5.2	89619	FLE15HT3/2/DV	10	120	10000	900	720	2700	82	5	0.6	120	★	Dimming, Boxed	152	1,7,8,9,14
	15	5.2	89623	FLE15HT3/2/DV/CD	12	120	10000	900	720	2700	82	5	0.6	120	★	Dimming, Corded Single Pack	152	1,7,8,9,14
Med	20	4.7	15834	FLE20HT3/2/827	10	120	8000	1200	965	2700	82	5	0.6	135	★	T3 Spiral®, Boxed	153	1,7,8,9,10
	20	4.7	15516	FLE20HT3/2/SW/CD	12	120	8000	1200	965	2700	82	5	0.6	135	★	T3 Spiral®, Corded Single Pack	153	1,7,8,9,10
	20	4.7	15518	FLE20HT3/2/SW/2P	3	120	8000	1200	965	2700	82	5	0.6	135	★	T3 Spiral®, Corded Twin Pack	153	1,7,8,9,10
	20	4.7	25186	FLE20HT3/2/841	10	120	8000	965	965	4100	82	5	0.6	135	★	T3 Spiral®, Boxed	153	1,7,8,9,10
	20	4.7	80888	FLE20HT3/2/XL827	10	120	12000	1300	1040	2700	82	5	0.6	135	★	T3 Spiral®, Boxed	153	1,7,8,9,10
	20	4.7	71764	FLE20HT3/2/6S/TP	6	120	6000	1235	990	5000	82	5	0.6	145	★	T3 Spiral®, Tray Pack	153	1,7,8,9,10
	20	4.7	89094	FLE20HT3/2/D/CD	12	120	8000	1150	945	6500	82	5	0.6	145	★	Corded Single Pack	153	1,7,8,9,14
	20	4.8	85396	FLE20HT3/2/D/2PK	3	120	8000	1150	945	6500	82	5	0.6	135	★	T3 Spiral®, Corded Twin Pack	153	1,7,8,9,10
	20	4.8	47442	FLE20HT3/2/XL/CD	12	120	12000	1300	1040	2700	82	5	0.6	135	★	T3 Spiral®, Corded Single Pack	153	1,7,8,9,10
	20	4.8	49684	FLE20HT3/2/XL2PK	3	120	12000	1300	1040	2700	82	5	0.6	135	★	T3 Spiral®, Corded Twin Pack	153	1,7,8,9,10
	20	4.8	47466	FLE20HT3/2/XL/D	12	120	12000	1250	1000	6500	82	5	0.6	135	★	T3 Spiral®, Corded Single Pack, Daylight	153	1,7,8,9,10
	20	4.5	72880	FLE20HT2/2/XL/CD	3	120	12000	1250	1000	2700	82	5	0.6	120	★	T3 Spiral®, Corded	153	1,7,8,9,10
Med	23	5.1	80889	FLE23HT3/2/XL827	10	120	12000	1600	1280	2700	82	5	0.6	135	★	T3 Spiral®, Boxed	153	1,7,8,9,10
	23	5.1	47445	FLE23HT3/2/XL/CD	12	120	12000	1600	1280	2700	82	5	0.6	135	★	T3 Spiral®, Corded Single Pack	153	1,7,8,9,10
Med	26	5.1	89095	FLE26HT3/2/D/CD	12	120	8000	1600	1280	6500	82	5	0.6	120	★	Corded Single Pack	153	1,7,8,9,10
	26	5.2	15836	FLE26HT3/2/827	10	120	8000	1700	1365	2700	82	5	0.6	120	★	T3 Spiral®, Boxed	153	1,7,8,9,10
	26	5.2	15517	FLE26HT3/2/SW/CD	12	120	8000	1700	1365	2700	82	5	0.6	120	★	T3 Spiral®, Corded Single Pack	153	1,7,8,9,10

For the most up-to-date product information, see www.gelighting.com. To convert inches to millimeters, multiply by 25.4.
All footnotes and caution notices found at the end of this section (page S-15).

Cut Sheet 6

UltraMax® Instant Start Multi-Voltage 120–277V High-Efficiency
T8 Instant Start Ballasts For F17 (2 ft), F25 (3 ft), F32 (4 ft), F40 (5 ft) Lamps

72262 – GE232MAX-L/ULTRA (replaces 49707)
UltraMax® Instant Start Multi-Voltage High-Efficiency
2 or 1 – F32T8 120 to 277 "L" .77 BF UltraMax®

- Energy-saving high-efficiency instant-start electronic ballast (> 90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Active Current Regulation regulates the output to each lamp with individual lamp inverter modules
- Anti-striation control for better light quality, with no striations
- Cold temperature -22°F Minimum Starting Temperature

General characteristics

Ballast Type	Electronic - High-Efficiency Multivolt Instant Start
Starting Method	Instant start
Lamp Wiring	Parallel
Line Voltage Regulation (+/-)	10%
Case Temperature (MAX)	70°C (158°F)
Ballast Factor	Low
Power Factor Correction	Active
Sound Rating	A (20-24 decibels)
Additional Info	Anti-striation control, Auto-restart, Thermally protected

Electrical characteristics

Supply Current Frequency	50 Hz/60 Hz

Order information

10 Pack	Pallet Pack	DIY Pack	IP Pack
72262	72263 (replaces 47546)		

Dimensions

Wiring diagram (FL 1B – see example on Page 10-62	
Case dimensions – Ref Drawing - A – see Page 10-65	
Length (L)	9.5 in (241 mm)
Width (W)	1.3 in (33 mm)
Height (H)	1.18 in (30 mm)
Mounting dimensions	
Mount Length (M)	8.9 in (226 mm)
Mount Width (K or F)	0.87 in (22 mm)
Mount Slots (MS)	0.3 in (8 mm)
Weight	1.06 lbs
Exit Type	Side
Remote Mounting Distance to Lamp (F32T8)	18 ft
Remote Mounting Wire Gauge	18 AWG
Lead lengths	Length (± 1 in)
Black	25 in (635 mm)
Blue	31 in (787 mm)
White	25 in (635 mm)
Red	37 in (940 mm)

Specifications by lamp and wattage

Lamp	# of Lamps	Line Volts	System Watts	Nom. Line Current	System Ballast Factor	Ballast Efficacy Factor	Power Factor % (>=)	Crest Factor (<=)	THD % (<=)	Min. Starting Temp (°F/°C)
F32T8	2	120	49	0.42 A	0.77	1.57	99	1.5	5	-22.0/-30
	2	277	48	0.18 A	0.77	1.60	98	1.5	8	-22.0/-30
	1	120	28	0.23 A	0.77	2.75	99	1.5	8	-22.0/-30
	1	277	28	0.11 A	0.77	2.75	95	1.5	12	-22.0/-30
F32T8/ARW	2	120	47	0.39 A	0.78	1.66	99	1.5	5	60.0/16
	2	277	46	0.17 A	0.78	1.70	98	1.5	9	60.0/16
	1	120	27	0.23 A	0.78	2.89	99	1.5	8	60.0/16
	1	277	27	0.10 A	0.78	2.89	95	1.5	12	60.0/16
F28T8	2	120	43	0.36 A	0.77	1.79	99	1.5	6	60.0/16
	2	277	43	0.16 A	0.77	1.79	98	1.5	9	60.0/16
	1	120	25	0.21 A	0.77	3.08	99	1.5	8	60.0/16
	1	277	25	0.10 A	0.77	3.08	94	1.5	13	60.0/16
F32T8/25W	2	120	38	0.00 A	0.77	2.03	99	1.5	10	60.0/16
	2	277	38	0.00 A	0.77	2.03	98	1.5	10	60.0/16
	1	120	22	0.00 A	0.77	3.50	99	1.5	10	60.0/16
	1	277	22	0.00 A	0.77	3.50	97	1.5	10	60.0/16
F25T8	2	120	39	0.33 A	0.80	2.05	99	1.5	6	-22.0/-30
	2	277	39	0.14 A	0.80	2.05	97	1.5	10	-22.0/-30
	1	120	23	0.19 A	0.80	3.48	99	1.5	9	-22.0/-30
	1	277	23	0.09 A	0.80	3.48	93	1.5	13	-22.0/-30
F17T8	2	120	27	0.23 A	0.79	2.93	99	1.5	8	-22.0/-30
	2	277	27	0.10 A	0.79	2.93	95	1.5	12	-22.0/-30
	1	120	17	0.14 A	0.79	4.65	99	1.5	11	-22.0/-30
	1	277	17	0.08 A	0.79	4.65	80	1.5	36	-22.0/-30
FE35T8	2	120	21	0.18 A	0.78	3.71	99	1.5	9	0.0/-18
	2	277	22	0.09 A	0.78	3.55	93	1.5	13	0.0/-18
	1	120	14	0.12 A	0.78	5.57	99	1.5	12	0.0/-18
	1	277	15	0.07 A	0.78	5.20	73	1.5	40	0.0/-18
F25T12	2	120	41	0.35 A	0.80	1.95	99	1.5	6	0.0/-18
	2	277	41	0.15 A	0.80	1.95	98	1.5	9	0.0/-18
	1	120	24	0.20 A	0.80	3.33	99	1.5	9	0.0/-18
	1	277	24	0.09 A	0.80	3.33	94	1.5	13	0.0/-18

Safety and performance UL Type 1 Outdoor · NRCan · UL Type CC · RoHS Compliant · UL Type HL · FCC - CLASS A Non-Consumer · UL Class P · cUL Listed · UL Listed · NEMA Premium

See page E-1 for warranty information.

Cut Sheet 6

Bulb Shape	Base	Watts	Nominal Length (in)	Order Code	Description	Case Qty	Rated Life (3hr/Start)	Rated Life (12hr/Start)	Initial Lumens	Mean Lumens	Color Temp K	CRI	High Color Rendering	Energy Savings	Reduced Wattage	Meets Federal Minimum Efficiency Standards	Footnotes	Warning and Caution Notices	Additional Information
T8 Starcoat® Lamps (continued)																			
3' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	25	36.0	45750	F25T8/SP30/ECO	24	20000	24000	2080	1970	3000	78					18	101	
		25	36.0	45754	F25T8/SP35/ECO	24	20000	24000	2080	1970	3500	78					18	101	
		25	36.0	45756	F25T8/SP41/ECO	24	20000	24000	2080	1970	4100	78					18	101	
		25	36.0	45753	F25T8/SPX30/ECO	24	20000	24000	2150	2040	3000	86					18	101	
		25	36.0	45755	F25T8/SPX35/ECO	24	20000	24000	2150	2040	3500	86					18	101	
		25	36.0	45757	F25T8/SPX41/ECO	24	20000	24000	2150	2040	4100	86					18	101	
3' T8 Ecolux® XL Extra-life																			
T8	Medium Bi-Pin (G13)	25	36.0	15486	F25T8/XL/SP30/ECO	24	24000	29000	2080	1970	3000	78					18	101	
		25	36.0	15487	F25T8/XL/SP35/ECO	24	24000	29000	2080	1970	3500	78					18	101	
		25	36.0	15488	F25T8/XL/SP41/ECO	24	24000	29000	2080	1970	4100	78					18	101	
		25	36.0	15489	F25T8/XL/SPX30/ECO	24	24000	29000	2150	2040	3000	86					18	101	
		25	36.0	15490	F25T8/XL/SPX35/ECO	24	24000	29000	2150	2040	3500	86					18	101	
		25	36.0	15491	F25T8/XL/SPX41/ECO	24	24000	29000	2150	2040	4100	86					18	101	
		25	36.0	10416	F25T8/XL/SPX50/ECO	24	24000	29000	2050	1950	5000	86					18	101	
		25	36.0	16314	F25T8/XL/SPX65/ECO	24	24000	29000	1950	1755	6500	85					18	101	
4' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	32	48.0	26666	F32T8/SP30/ECO	36	30000	36000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	26667	F32T8/SP35/ECO	36	30000	36000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	26668	F32T8/SP41/ECO	36	30000	36000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	16090	F32T8/SP50/ECO	36	30000	36000	2750	2610	5000	78				Ⓔ	18	101	
		32	48.0	16091	F32T8/SP65/ECO	36	30000	36000	2700	2565	6500	78				Ⓔ	18	101	
		32	48.0	25611	F32T8/SPX30/ECO	36	30000	36000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	25612	F32T8/SPX35/ECO	36	30000	36000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	25613	F32T8/SPX41/ECO	36	30000	36000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	42064	F32T8/SPX50/ECO	36	30000	36000	2800	2660	5000	86				Ⓔ	18	101	
4' T8 Ecolux® XL Extra-life																			
T8	Medium Bi-Pin (G13)	32	48.0	27616	F32T8/XL/SP30/ECO	36	36000	42000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	27617	F32T8/XL/SP35/ECO	36	36000	42000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	27618	F32T8/XL/SP41/ECO	36	36000	42000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	27619	F32T8/XL/SPX30/ECO	36	36000	42000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	27620	F32T8/XL/SPX35/ECO	36	36000	42000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	27621	F32T8/XL/SPX41/ECO	36	36000	42000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	16313	F32T8/XL/SPX50/ECO	36	36000	42000	2800	2660	5000	86				Ⓔ	18	101	
		32	48.0	16089	F32T8/XL/SPX65/ECO	36	36000	42000	2750	2475	6500	85				Ⓔ	18	101	
4' T8 Ecolux® Super Long Life																			
T8	Medium Bi-Pin (G13)	32	48.0	73093	F32T8/SXL/SPX30/ECO	36	40000	46000	2850	2675	3000	84				Ⓔ	18	101	
		32	48.0	73094	F32T8/SXL/SPX35/ECO	36	40000	46000	2850	2675	3500	83				Ⓔ	18	101	
		32	48.0	73095	F32T8/SXL/SPX41/ECO	36	40000	46000	2850	2675	4100	81				Ⓔ	18	101	
		32	48.0	73096	F32T8/SXL/SPX50/ECO	36	40000	46000	2800	2630	5000	80				Ⓔ	18	101	
Ultra Energy Saving T8 Lamps																			
2' T8 Ecolux® Watt-Miser® 15 Watt Lamp																			
T8	Medium Bi-Pin (G13)	15	24.0	72132	F17T8/XL/SPX30/ WM/ECO	24	24000	29000	1200	1130	3000	85		$			1,18	101	
		15	24.0	72133	F17T8/XL/SPX35/ WM/ECO	24	24000	29000	1200	1130	3500	85		$			1,18	101	
		15	24.0	72134	F17T8/XL/SPX41/ WM/ECO	24	24000	29000	1200	1130	4100	82		$			1,18	101	
		15	24.0	72135	F17T8/XL/SPX50/ WM/ECO	24	24000	29000	1175	1105	5000	80		$			1,18	101	
3' T8 Ecolux® Watt-Miser® 22 Watt Lamp																			
T8	Medium Bi-Pin (G13)	22	36.0	72136	F25T8/XL/SPX30/ WM/ECO	24	24000	29000	1925	1810	3000	85		$			1,18	101	
		22	36.0	72137	F25T8/XL/SPX35/ WM/ECO	24	24000	29000	1925	1810	3500	85		$			1,18	101	
		22	36.0	72138	F25T8/XL/SPX41/ WM/ECO	24	24000	29000	1925	1810	4100	82		$			1,18	101	
		22	36.0	72139	F25T8/XL/SPX50/ WM/ECO	24	24000	29000	1900	1785	5000	80		$			1,18	101	

Rated life for 2 ft through 4 ft Starcoat® Ecolux® Medium Bi-Pin T8 lamps is determined on programmed start ballasts. Life ratings are based on engineering data on programmed start ballasts with lamps cycled every 3 or 12 operating hours. Lamp life is approximately 35% longer @ 3 hour starts and 20% longer @ 12 hours starts with programmed start ballasts as compared to standard instant start ballasts (see chart on page 4-4).

For the most up-to-date product information, see www.gelighting.com. To convert inches to millimeters, multiply by 25.4.
All footnotes, warning and caution notices found at the end of this section (page 4-32).

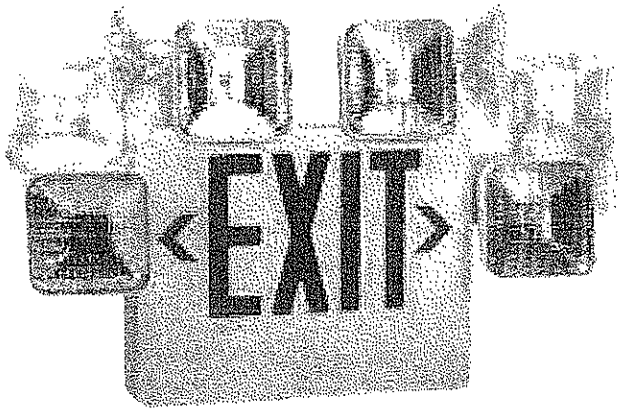
Cut Sheet 7

ADJUSTABLE THERMOPLASTIC HEADS, COMBINATION EXIT

The CC model combination exit & emergency unit with Adjustable Heads offers tremendous flexibility. The emergency lighting heads can be rotated from a side-mount configuration to a top-mount configuration in one simple motion. Featuring a durable thermoplastic housing, the CC model incorporates red or green energy efficient, high-brightness LEDs. Ideal for commercial and institutional installations, this truly universal unit comes complete with a mounting canopy, two exit stencil faces and a backplate.

BENEFITS & FEATURES

- Universal mounting capability
- Energy-efficient LED exit light source
- 120/277 Standard
- Durable thermoplastic housing
- Remote capability (REM Option)
- Universal pop-out chevrons
- Charge/Power LED indicator
- Push-to-Test switch
- Solid State Charger
- 5.4W Tungsten lamps are standard
- Sealed maintenance-free lead calcium batteries
- 90 Minute emergency operating time
- Damp location rated
- UL listed

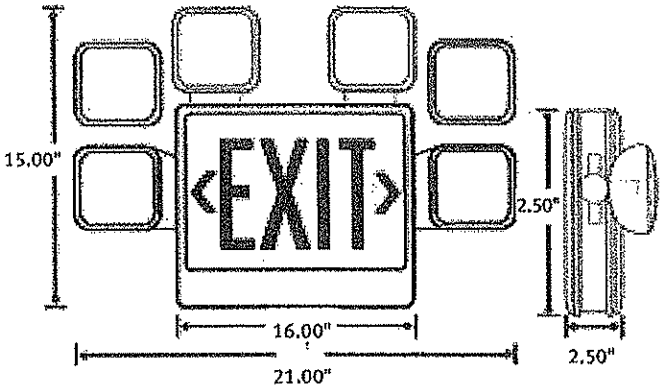


SQRM-2 SQRM-1

ACCESSORIES

ACCESSORY	DESCRIPTION
SQRM-1	Matching Single Remote Head
SQRM-2	Matching Double Remote Head
WG1	Wire Guard
VRS2	Vandal Resistant Shield
Remote	Infrared Remote Controller

Add suffix to model or order separately



ORDERING INFORMATION

MODEL	LETTER COLOR	NUMBER OF FACES	HOUSING COLOR	OPTIONS
CC	R = Red	U = Universal	W = White	SD = Self-Diagnostics
	G = Green		B = Black	IRT = Infrared Remote Test
				REM = Remote Capability

Ordering Example: CC-R-U-W-SD

Cut Sheet 8

UltraMax® Instant Start Multi-Voltage 120–277V High-Efficiency T8 Instant Start Ballasts For F17 (2 ft), F25 (3 ft), F32 (4 ft), F40 (5 ft) Lamps

72262 – GE232MAX-L/ULTRA (replaces 49707)

UltraMax® Instant Start Multi-Voltage High-Efficiency

2 or 1 - F32T8 120 to 277 "L" .77 BF UltraMax®

- Energy-saving high-efficiency instant-start electronic ballast (> 90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Active Current Regulation regulates the output to each lamp with individual lamp inverter modules
- Anti-striation control for better light quality, with no striations
- Cold temperature -22°F Minimum Starting Temperature

General characteristics

Ballast Type	Electronic - High-Efficiency Multivolt Instant Start
Starting Method	Instant start
Lamp Wiring	Parallel
Line Voltage Regulation (+/-)	10%
Case Temperature (MAX)	70°C (158°F)
Ballast Factor	Low
Power Factor Correction	Active
Sound Rating	A (20-24 decibels)
Additional Info	Anti-striation control, Auto-restart, Thermally protected

Electrical characteristics

Supply Current Frequency	50 Hz/60 Hz

Order information

10 Pack	Pallet Pack	DIY Pack	IP Pack
72262	72263 (replaces 47546)		

Dimensions

Wiring diagram LFL 18 - see example on Page 10-62	
Case dimensions - Ref Drawing - A - see Page 10-65	
Length (L)	9.5 in (241 mm)
Width (W)	1.3 in (33 mm)
Height (H)	1.18 in (30 mm)
Mounting dimensions	
Mount Length (M)	8.9 in (226 mm)
Mount Width (K or F)	0.87 in (22 mm)
Mount Slots (MS)	0.3 in (8 mm)
Weight	1.06 lbs
Exit Type	Side
Remote Mounting Distance to Lamp (F32T8)	18 ft
Remote Mounting Wire Gauge	18 AWG
Lead lengths	Length (± 1 in)
Black	25 in (635 mm)
Blue	31 in (787 mm)
White	25 in (635 mm)
Red	37 in (940 mm)

Specifications by lamp and wattage

Lamp	# of Lamps	Line Volts	System Watts	Nom. Line Current	System Ballast Factor	Ballast Efficacy Factor	Power Factor % (>=)	Crest Factor (<=)	THD% (<=)	Min. Starting Temp [°F/°C]
	2	120	49	0.42 A	0.77	1.57	99	1.5	5	-22.0/-30
	2	277	48	0.18 A	0.77	1.60	98	1.5	8	-22.0/-30
	1	120	28	0.23 A	0.77	2.75	99	1.5	8	-22.0/-30
F32T8	1	277	28	0.11 A	0.77	2.75	95	1.5	12	-22.0/-30
	2	120	47	0.39 A	0.78	1.66	99	1.5	5	60.0/16
	2	277	46	0.17 A	0.78	1.70	98	1.5	9	60.0/16
	1	120	27	0.23 A	0.78	2.89	99	1.5	8	60.0/16
F32T8/WM	1	277	27	0.10 A	0.78	2.89	95	1.5	12	60.0/16
	2	120	43	0.36 A	0.77	1.79	99	1.5	6	60.0/16
	2	277	43	0.16 A	0.77	1.79	98	1.5	9	60.0/16
	1	120	25	0.21 A	0.77	3.08	99	1.5	8	60.0/16
F28T8	1	277	25	0.10 A	0.77	3.08	94	1.5	13	60.0/16
	2	120	38	0.00 A	0.77	2.03	99	1.5	10	60.0/16
	2	277	38	0.00 A	0.77	2.03	98	1.5	10	60.0/16
	1	120	22	0.00 A	0.77	3.50	99	1.5	10	60.0/16
F32T8/25W	1	277	22	0.00 A	0.77	3.50	97	1.5	10	60.0/16
	2	120	39	0.33 A	0.80	2.05	99	1.5	6	-22.0/-30
	2	277	39	0.14 A	0.80	2.05	97	1.5	10	-22.0/-30
	1	120	23	0.19 A	0.80	3.48	99	1.5	9	-22.0/-30
F25T8	1	277	23	0.09 A	0.80	3.48	93	1.5	13	-22.0/-30
	2	120	27	0.23 A	0.79	2.93	99	1.5	8	-22.0/-30
	2	277	27	0.10 A	0.79	2.93	95	1.5	12	-22.0/-30
	1	120	17	0.14 A	0.79	4.65	99	1.5	11	-22.0/-30
F17T8	1	277	17	0.08 A	0.79	4.65	80	1.5	36	-22.0/-30
	2	120	21	0.18 A	0.78	3.71	99	1.5	9	0.0/-18
	2	277	22	0.09 A	0.78	3.55	93	1.5	13	0.0/-18
	1	120	14	0.12 A	0.78	5.57	99	1.5	12	0.0/-18
FE15T8	1	277	15	0.07 A	0.78	5.20	73	1.5	40	0.0/-18
	2	120	41	0.35 A	0.80	1.95	99	1.5	6	0.0/-18
	2	277	41	0.15 A	0.80	1.95	98	1.5	9	0.0/-18
	1	120	24	0.20 A	0.80	3.33	99	1.5	9	0.0/-18
F25T12	1	277	24	0.09 A	0.80	3.33	96	1.5	13	0.0/-18

Safety and performance UL Type 1 Outdoor · NRCan · UL Type CC · RoHS Compliant · UL Type HL · FCC - CLASS A Non-Consumer · UL Class P · cUL Listed · UL Listed · NEMA Premium

See page E-1 for warranty information.

Cut Sheet 9

Bulb Shape	Base	Watts	Nominal Length (in)	Order Code	Description	Case Qty	Rated Life (3hr/Start)	Rated Life (12hr/Start)	Initial Lumens	Mean Lumens	Color Temp K	CRI	High Color Rendering	Energy Savings	Reduced Wattage	Meets Federal Minimum Efficiency Standards	Footnotes	Warnings and Caution Notices	Additional Information
T8 Starcoat® Lamps (continued)																			
3' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	25	36.0	45750	F25T8/SP30/ECO	24	20000	24000	2080	1970	3000	78					18	101	
		25	36.0	45754	F25T8/SP35/ECO	24	20000	24000	2080	1970	3500	78					18	101	
		25	36.0	45756	F25T8/SP41/ECO	24	20000	24000	2080	1970	4100	78					18	101	
		25	36.0	45753	F25T8/SPX30/ECO	24	20000	24000	2150	2040	3000	86					18	101	
		25	36.0	45755	F25T8/SPX35/ECO	24	20000	24000	2150	2040	3500	86					18	101	
		25	36.0	45757	F25T8/SPX41/ECO	24	20000	24000	2150	2040	4100	86					18	101	
3' T8 Ecolux® XL Extra-Life																			
T8	Medium Bi-Pin (G13)	25	36.0	15486	F25T8/XL/SP30/ECO	24	24000	29000	2080	1970	3000	78					18	101	
		25	36.0	15487	F25T8/XL/SP35/ECO	24	24000	29000	2080	1970	3500	78					18	101	
		25	36.0	15488	F25T8/XL/SP41/ECO	24	24000	29000	2080	1970	4100	78					18	101	
		25	36.0	15489	F25T8/XL/SPX30/ECO	24	24000	29000	2150	2040	3000	86					18	101	
		25	36.0	15490	F25T8/XL/SPX35/ECO	24	24000	29000	2150	2040	3500	86					18	101	
		25	36.0	15491	F25T8/XL/SPX41/ECO	24	24000	29000	2150	2040	4100	86					18	101	
		25	36.0	10416	F25T8/XL/SPX50/ECO	24	24000	29000	2050	1950	5000	86					18	101	
		25	36.0	16314	F25T8/XL/SPX65/ECO	24	24000	29000	1950	1755	6500	85					18	101	
4' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	32	48.0	26666	F32T8/SP30/ECO	36	30000	36000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	26667	F32T8/SP35/ECO	36	30000	36000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	26668	F32T8/SP41/ECO	36	30000	36000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	18090	F32T8/SP50/ECO	36	30000	36000	2750	2610	5000	78				Ⓔ	18	101	
		32	48.0	16091	F32T8/SP65/ECO	36	30000	36000	2700	2565	6500	78				Ⓔ	18	101	
		32	48.0	25611	F32T8/SPX30/ECO	36	30000	36000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	25612	F32T8/SPX35/ECO	36	30000	36000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	25613	F32T8/SPX41/ECO	36	30000	36000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	42064	F32T8/SPX50/ECO	36	30000	36000	2800	2660	5000	86				Ⓔ	18	101	
4' T8 Ecolux® XL Extra-Life																			
T8	Medium Bi-Pin (G13)	32	48.0	27616	F32T8/XL/SP30/ECO	36	36000	42000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	27617	F32T8/XL/SP35/ECO	36	36000	42000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	27618	F32T8/XL/SP41/ECO	36	36000	42000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	27619	F32T8/XL/SPX30/ECO	36	36000	42000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	27620	F32T8/XL/SPX35/ECO	36	36000	42000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	27621	F32T8/XL/SPX41/ECO	36	36000	42000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	16313	F32T8/XL/SPX50/ECO	36	36000	42000	2800	2660	5000	86				Ⓔ	18	101	
		32	48.0	16089	F32T8/XL/SPX65/ECO	36	36000	42000	2750	2475	6500	85				Ⓔ	18	101	
4' T8 Ecolux® Super Long Life																			
T8	Medium Bi-Pin (G13)	32	48.0	73093	F32T8/SXL/SPX30/ECO	36	40000	46000	2850	2675	3000	84				Ⓔ	18	101	
		32	48.0	73094	F32T8/SXL/SPX35/ECO	36	40000	46000	2850	2675	3500	83				Ⓔ	18	101	
		32	48.0	73095	F32T8/SXL/SPX41/ECO	36	40000	46000	2850	2675	4100	81				Ⓔ	18	101	
		32	48.0	73096	F32T8/SXL/SPX50/ECO	36	40000	46000	2800	2630	5000	80				Ⓔ	18	101	
Ultra Energy Saving T8 Lamps																			
2' T8 Ecolux® Watt-Miser® 15 Watt Lamp																			
T8	Medium Bi-Pin (G13)	15	24.0	72132	F17T8/XL/SPX30/WM/ECO	24	24000	29000	1200	1130	3000	85		$			1,18	101	
		15	24.0	72133	F17T8/XL/SPX35/WM/ECO	24	24000	29000	1200	1130	3500	85		$			1,18	101	
		15	24.0	72134	F17T8/XL/SPX41/WM/ECO	24	24000	29000	1200	1130	4100	82		$			1,18	101	
		15	24.0	72135	F17T8/XL/SPX50/WM/ECO	24	24000	29000	1175	1105	5000	80		$			1,18	101	
3' T8 Ecolux® Watt-Miser® 22 Watt Lamp																			
T8	Medium Bi-Pin (G13)	22	36.0	72136	F25T8/XL/SPX30/WM/ECO	24	24000	29000	1925	1810	3000	85		$			1,18	101	
		22	36.0	72137	F25T8/XL/SPX35/WM/ECO	24	24000	29000	1925	1810	3500	85		$			1,18	101	
		22	36.0	72138	F25T8/XL/SPX41/WM/ECO	24	24000	29000	1925	1810	4100	82		$			1,18	101	
		22	36.0	72139	F25T8/XL/SPX50/WM/ECO	24	24000	29000	1900	1785	5000	80		$			1,18	101	

Rated life for 2 ft through 4 ft Starcoat® Ecolux® Medium Bi-Pin T8 lamps is determined on programmed start ballasts. Life ratings are based on engineering data on programmed start ballasts with lamps cycled every 3 or 12 operating hours. Lamp life is approximately 35% longer @ 3 hour starts and 20% longer @ 12 hours starts with programmed start ballasts as compared to standard instant start ballasts (see chart on page 4-4).

For the most up-to-date product information, see www.gelighting.com. To convert inches to millimeters, multiply by 25.4.
All footnotes, warning and caution notices found at the end of this section (page 4-32).

Cut Sheet 10

UltraMax® Instant Start Multi-Voltage 120–277V High-Efficiency T8 Instant Start Ballasts For F17 (2 ft), F25 (3 ft), F32 (4 ft), F40 (5 ft) Lamps

72262 – GE232MAX-L/ULTRA (replaces 49707)

UltraMax® Instant Start Multi-Voltage High-Efficiency

2 or 1 – F32T8 120 to 277 "L" .77 BF UltraMax®

- Energy-saving high-efficiency instant-start electronic ballast (> 90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Active Current Regulation regulates the output to each lamp with individual lamp inverter modules
- Anti-striation control for better light quality, with no striations
- Cold temperature -22°F Minimum Starting Temperature

General characteristics

Ballast Type	Electronic - High-Efficiency Multivolt Instant Start
Starting Method	Instant start
Lamp Wiring	Parallel
Line Voltage Regulation (+/-)	10%
Case Temperature (MAX)	70°C (158°F)
Ballast Factor	Low
Power Factor Correction	Active
Sound Rating	A (20-24 decibels)
Additional Info	Anti-striation control, Auto-restart, Thermally protected

Electrical characteristics

Supply Current Frequency	50 Hz/60 Hz

Order information

10 Pack	Pallet Pack	DIY Pack	IP Pack
72262	72263 (replaces 47546)		

Dimensions

Wiring diagram LFL 1B - see example on Page 10-62

Case dimensions - Ref Drawing - A - see Page 10-65

Length (L)	9.5 in (241 mm)
Width (W)	1.3 in (33 mm)
Height (H)	1.18 in (30 mm)
Mounting dimensions	
Mount Length (M)	8.9 in (226 mm)
Mount Width (K or F)	0.87 in (22 mm)
Mount Slots (MS)	0.3 in (8 mm)
Weight	1.06 lbs
Exit Type	Side
Remote Mounting Distance to Lamp (F32T8)	18 ft
Remote Mounting Wire Gauge	18 AWG
Lead lengths	Length (± 1 in)
Black	25 in (635 mm)
Blue	31 in (787 mm)
White	25 in (635 mm)
Red	37 in (940 mm)

Specifications by lamp and wattage

Lamp	# of Lamps	Line Volts	System Watts	Nom. Line Current	System Ballast Factor	Ballast Efficacy Factor	Power Factor % (>=)	Crest Factor (<=)	THD % (<=)	Min. Starting Temp (°F/°C)
F32T8	2	120	49	0.42 A	0.77	1.57	99	1.5	5	-22.0/-30
	2	277	48	0.18 A	0.77	1.60	98	1.5	8	-22.0/-30
	1	120	28	0.23 A	0.77	2.75	99	1.5	8	-22.0/-30
	1	277	28	0.11 A	0.77	2.75	95	1.5	12	-22.0/-30
F32T8/XM	2	120	47	0.39 A	0.78	1.66	99	1.5	5	60.0/16
	2	277	46	0.17 A	0.78	1.70	98	1.5	9	60.0/16
	1	120	27	0.23 A	0.78	2.89	99	1.5	8	60.0/16
	1	277	27	0.10 A	0.78	2.89	95	1.5	12	60.0/16
F28T8	2	120	43	0.36 A	0.77	1.79	99	1.5	6	60.0/16
	2	277	43	0.16 A	0.77	1.79	98	1.5	9	60.0/16
	1	120	25	0.21 A	0.77	3.08	99	1.5	8	60.0/16
	1	277	25	0.10 A	0.77	3.08	94	1.5	13	60.0/16
F32T8/25W	2	120	38	0.00 A	0.77	2.03	99	1.5	10	60.0/16
	2	277	38	0.00 A	0.77	2.03	98	1.5	10	60.0/16
	1	120	22	0.00 A	0.77	3.50	99	1.5	10	60.0/16
	1	277	22	0.00 A	0.77	3.50	97	1.5	10	60.0/16
F25T8	2	120	39	0.33 A	0.80	2.05	99	1.5	6	-22.0/-30
	2	277	39	0.14 A	0.80	2.05	97	1.5	10	-22.0/-30
	1	120	23	0.19 A	0.80	3.48	99	1.5	9	-22.0/-30
	1	277	23	0.09 A	0.80	3.48	93	1.5	13	-22.0/-30
F17T8	2	120	27	0.23 A	0.79	2.93	99	1.5	8	-22.0/-30
	2	277	27	0.10 A	0.79	2.93	95	1.5	12	-22.0/-30
	1	120	17	0.14 A	0.79	4.65	99	1.5	11	-22.0/-30
	1	277	17	0.08 A	0.79	4.65	80	1.5	36	-22.0/-30
FE15T8	2	120	21	0.18 A	0.78	3.71	99	1.5	9	0.0/-18
	2	277	22	0.09 A	0.78	3.55	93	1.5	13	0.0/-18
	1	120	14	0.12 A	0.78	5.57	99	1.5	12	0.0/-18
	1	277	15	0.07 A	0.78	5.20	73	1.5	40	0.0/-18
F25T12	2	120	41	0.35 A	0.80	1.95	99	1.5	6	0.0/-18
	2	277	41	0.15 A	0.80	1.95	98	1.5	9	0.0/-18
	1	120	24	0.20 A	0.80	3.33	99	1.5	9	0.0/-18
	1	277	24	0.09 A	0.80	3.33	94	1.5	13	0.0/-18

Safety and performance UL Type 1 Outdoor · NRCan · UL Type CC · RoHS Compliant · UL Type HL · FCC - CLASS A Non-Consumer · UL Class P · cUL Listed · UL Listed · HERA

See page E-1 for warranty information.

Cut sheet 10

Bulb Shape	Base	Watts	Nominal Length (in)	Order Code	Description	Case Qty.	Rated Life (Lt/Start)	Rated Life (12hr/Start)	Initial Lumens	Mean Lumens	Color Temp K	CRI	High Color Rendering	Energy Savings	Reduced Wattage	Meets Federal Minimum Efficiency Standards	Foot Note	Warning and Caution Notices	Additional Information
T8 Starcoat® Lamps (continued)																			
3' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	25	36.0	45750	F25T8/SP30/ECO	24	20000	24000	2080	1970	3000	78					18	101	
		25	36.0	45754	F25T8/SP35/ECO	24	20000	24000	2080	1970	3500	78					18	101	
		25	36.0	45756	F25T8/SP41/ECO	24	20000	24000	2080	1970	4100	78					18	101	
		25	36.0	45753	F25T8/SPX30/ECO	24	20000	24000	2150	2040	3000	86					18	101	
		25	36.0	45755	F25T8/SPX35/ECO	24	20000	24000	2150	2040	3500	86					18	101	
		25	36.0	45757	F25T8/SPX41/ECO	24	20000	24000	2150	2040	4100	86					18	101	
3' T8 Ecolux® XL Extra-life																			
T8	Medium Bi-Pin (G13)	25	36.0	15486	F25T8/XL/SP30/ECO	24	24000	29000	2080	1970	3000	78					18	101	
		25	36.0	15487	F25T8/XL/SP35/ECO	24	24000	29000	2080	1970	3500	78					18	101	
		25	36.0	15488	F25T8/XL/SP41/ECO	24	24000	29000	2080	1970	4100	78					18	101	
		25	36.0	15489	F25T8/XL/SPX30/ECO	24	24000	29000	2150	2040	3000	86					18	101	
		25	36.0	15490	F25T8/XL/SPX35/ECO	24	24000	29000	2150	2040	3500	86					18	101	
		25	36.0	15491	F25T8/XL/SPX41/ECO	24	24000	29000	2150	2040	4100	86					18	101	
		25	36.0	10416	F25T8/XL/SPX50/ECO	24	24000	29000	2050	1950	5000	86					18	101	
		25	36.0	16314	F25T8/XL/SPX65/ECO	24	24000	29000	1950	1755	6500	85					18	101	
4' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	32	48.0	26666	F32T8/SP30/ECO	36	30000	36000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	26667	F32T8/SP35/ECO	36	30000	36000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	26668	F32T8/SP41/ECO	36	30000	36000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	16090	F32T8/SP50/ECO	36	30000	36000	2750	2610	5000	78				Ⓔ	18	101	
		32	48.0	16091	F32T8/SP65/ECO	36	30000	36000	2700	2565	6500	78				Ⓔ	18	101	
		32	48.0	25611	F32T8/SPX30/ECO	36	30000	36000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	25612	F32T8/SPX35/ECO	36	30000	36000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	25613	F32T8/SPX41/ECO	36	30000	36000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	42064	F32T8/SPX50/ECO	36	30000	36000	2800	2660	5000	86				Ⓔ	18	101	
4' T8 Ecolux® XL Extra-life																			
T8	Medium Bi-Pin (G13)	32	48.0	27616	F32T8/XL/SP30/ECO	36	36000	42000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	27617	F32T8/XL/SP35/ECO	36	36000	42000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	27618	F32T8/XL/SP41/ECO	36	36000	42000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	27619	F32T8/XL/SPX30/ECO	36	36000	42000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	27620	F32T8/XL/SPX35/ECO	36	36000	42000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	27621	F32T8/XL/SPX41/ECO	36	36000	42000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	16313	F32T8/XL/SPX50/ECO	36	36000	42000	2800	2660	5000	86				Ⓔ	18	101	
		32	48.0	16089	F32T8/XL/SPX65/ECO	36	36000	42000	2750	2475	6500	85				Ⓔ	18	101	
4' T8 Ecolux® Super Long Life																			
T8	Medium Bi-Pin (G13)	32	48.0	73093	F32T8/SXL/SPX30/ECO	36	40000	46000	2850	2675	3000	84				Ⓔ	18	101	
		32	48.0	73094	F32T8/SXL/SPX35/ECO	36	40000	46000	2850	2675	3500	83				Ⓔ	18	101	
		32	48.0	73095	F32T8/SXL/SPX41/ECO	36	40000	46000	2850	2675	4100	81				Ⓔ	18	101	
		32	48.0	73096	F32T8/SXL/SPX50/ECO	36	40000	46000	2800	2630	5000	80				Ⓔ	18	101	
Ultra Energy Saving T8 Lamps																			
2' T8 Ecolux® Watt-Miser® 15 Watt Lamp																			
T8	Medium Bi-Pin (G13)	15	24.0	72132	F17T8/XL/SPX30/WM/ECO	24	24000	29000	1200	1130	3000	85		$			1,18	101	
		15	24.0	72133	F17T8/XL/SPX35/WM/ECO	24	24000	29000	1200	1130	3500	85		$			1,18	101	
		15	24.0	72134	F17T8/XL/SPX41/WM/ECO	24	24000	29000	1200	1130	4100	82		$			1,18	101	
		15	24.0	72135	F17T8/XL/SPX50/WM/ECO	24	24000	29000	1175	1105	5000	80		$			1,18	101	
3' T8 Ecolux® Watt-Miser® 22 Watt Lamp																			
T8	Medium Bi-Pin (G13)	22	36.0	72136	F25T8/XL/SPX30/WM/ECO	24	24000	29000	1925	1810	3000	85		$			1,18	101	
		22	36.0	72137	F25T8/XL/SPX35/WM/ECO	24	24000	29000	1925	1810	3500	85		$			1,18	101	
		22	36.0	72138	F25T8/XL/SPX41/WM/ECO	24	24000	29000	1925	1810	4100	82		$			1,18	101	
		22	36.0	72139	F25T8/XL/SPX50/WM/ECO	24	24000	29000	1900	1785	5000	80		$			1,18	101	

Rated life for 2 ft through 4 ft Starcoat® Ecolux® Medium Bi-Pin T8 lamps is determined on programmed start ballasts. Life ratings are based on engineering data on programmed start ballasts with lamps cycled every 3 or 12 operating hours. Lamp life is approximately 35% longer @ 3 hour starts and 20% longer @ 12 hours starts with programmed start ballasts as compared to standard instant start ballasts (see chart on page 4-4).

For the most up-to-date product information, see www.gelighting.com. To convert inches to millimeters, multiply by 25.4.
All footnotes, warning and caution notices found at the end of this section (page 4-32).

Cut Sheet 12

UltraMax® Instant Start Multi-Voltage 120–277V High-Efficiency T8 Instant Start Ballasts For F17 (2 ft), F25 (3 ft), F32 (4 ft), F40 (5 ft) Lamps

78625 – GE432MAX-L/ULTRA (replaces 71725)

UltraMax® Instant Start Multi-Voltage High-Efficiency

4 or 3 – F32T8 120 to 277 "L" .77 BF UltraMax®

- Energy-saving high-efficiency instant-start electronic ballast (> 90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Anti-striation control for better light quality, with no striations
- Cold temperature -22°F Minimum Starting Temperature
- UL 55C Ambient Temperature rating

General characteristics

Ballast Type	Electronic – High-Efficiency Multivolt Instant Start
Starting Method	Instant start
Lamp Wiring	Parallel
Line Voltage Regulation (+/-)	10%
Ambient Temperature (MAX)	55°C (131°F)
Case Temperature (MAX)	70°C (158°F)
Ballast Factor	Low
Power Factor Correction	Active
Sound Rating	A (20-24 decibels)
Additional Info	Anti-striation control, Auto-restart, Thermally protected

Electrical characteristics

Supply Current Frequency	50 Hz/60 Hz

Order information

10 Pack	Pallet Pack	DIY Pack	IP Pack
78625	78626 (replaces 71726)		

Dimensions

Wiring diagram – LFL 1D – see example on Page 10-62	
Case dimensions – Ref Drawing -A – see Page 10-65	
Length (L)	9.5 in (241 mm)
Width (W)	1.7 in (43 mm)
Height (H)	1.18 in (30 mm)
Mounting dimensions	
Mount Length (M)	8.9 in (226 mm)
Mount Width (K or F)	1.18 in (30 mm)
Mount Slots (MS)	0.3 in (8 mm)
Weight	1.40 lbs
Exit Type	Side
Remote Mounting Distance to Lamp (F32T8)	18 ft
Remote Mounting Wire Gauge	18 AWG
Lead lengths	Length (± 1 in)
Blue and Red	34 in (864 mm)
Black	31 in (787 mm)
White	31 in (787 mm)
Yellow	39 in (991 mm)

Specifications by lamp and wattage

Lamp	# of Lamps	Line Volts	System Watts	Nom. Line Current	System Ballast Factor	Ballast Efficacy Factor	Power Factor % (=>)	Crest Factor (<=)	THD % (<=)	Min. Starting Temp (°F/°C)
F32T8	4	120	92	0.88 A	0.77	0.79	99	1.4	10	-22.0/-30
	4	277	96	0.37 A	0.77	0.80	98	1.4	10	-22.0/-30
	3	120	84	0.76 A	0.88	1.05	99	1.4	10	-22.0/-30
	3	277	83	0.32 A	0.88	1.06	97	1.4	10	-22.0/-30
F32T8/WM	4	120	92	0.82 A	0.77	0.84	99	1.4	10	50.0/10
	4	277	93	0.35 A	0.77	0.85	98	1.4	10	50.0/10
	3	120	72	0.68 A	0.83	1.15	99	1.4	10	50.0/10
	3	277	76	0.29 A	0.83	1.09	97	1.4	12	50.0/10
F28T8	4	120	86	0.75 A	0.77	0.90	99	1.4	10	50.0/10
	4	277	84	0.32 A	0.77	0.92	98	1.4	10	50.0/10
	3	120	68	0.62 A	0.81	1.19	99	1.4	10	50.0/10
	3	277	67	0.27 A	0.81	1.21	97	1.4	13	50.0/10
F32T8/25W	4	120	77		0.77	1.00	99	1.4	10	60.0/16
	4	277	75		0.77	1.03	98	1.4	10	60.0/16
	3	120	61		0.81	1.33	99	1.4	10	60.0/16
	3	277	60		0.81	1.35	97	1.4	10	60.0/16
F25T8	4	120	82	0.72 A	0.76	0.93	99	1.4	10	-22.0/-30
	4	277	81	0.31 A	0.76	0.94	97	1.4	11	-22.0/-30
	3	120	68	0.59 A	0.83	1.22	99	1.4	10	-22.0/-30
	3	277	67	0.26 A	0.83	1.24	97	1.4	14	-22.0/-30
F17T8	4	120	56	0.50 A	0.81	1.45	99	1.4	10	-22.0/-30
	4	277	56	0.22 A	0.81	1.45	96	1.4	16	-22.0/-30
	3	120	47	0.41 A	0.87	1.85	99	1.4	10	-22.0/-30
	3	277	47	0.20 A	0.87	1.85	95	1.4	17	-22.0/-30
FE15T8	4	120	44	0.38 A	0.70	1.59	99	1.4	10	0.0/-18
	4	277	44	0.18 A	0.70	1.59	95	1.4	17	0.0/-18
	3	120	36	0.32 A	0.76	2.11	99	1.4	11	0.0/-18
	3	277	37	0.16 A	0.76	2.05	93	1.4	20	0.0/-18
F25T12	4	120	82	0.72 A	0.70	0.85	99	1.4	10	0.0/-18
	4	277	81	0.31 A	0.70	0.86	97	1.4	10	0.0/-18
	3	120	68	0.60 A	0.76	1.12	99	1.4	10	0.0/-18
	3	277	67	0.26 A	0.76	1.13	97	1.4	13	0.0/-18

Safety and performance UL Type 1 Outdoor · UL Type CC · UL Type HL · FCC – CLASS A Non-Consumer · RoHS Compliant · UL Class P · cUL Listed · UL Listed · NEMA

See page E-1 for warranty information.

Bulb Shape	Base	Watts	Nominal Length (in)	Order Code	Description	Case Qty	Rated Life (3hr/Start)	Rated Life (12hr/Start)	Initial Lumens	Mean Lumens	Color Temp K	CRI	High Color Rendering	Energy Savings	Reduced Wattage	Meets Federal Minimum Efficiency Standards	Foot-notes	Warning and Caution Notices	Additional Information
T8 Starcoat® Lamps (continued)																			
3' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	25	36.0	45750	F25T8/SP30/ECO	24	20000	24000	2080	1970	3000	78					18	101	
		25	36.0	45754	F25T8/SP35/ECO	24	20000	24000	2080	1970	3500	78					18	101	
		25	36.0	45756	F25T8/SP41/ECO	24	20000	24000	2080	1970	4100	78					18	101	
		25	36.0	45753	F25T8/SPX30/ECO	24	20000	24000	2150	2040	3000	86					18	101	
		25	36.0	45755	F25T8/SPX35/ECO	24	20000	24000	2150	2040	3500	86					18	101	
		25	36.0	45757	F25T8/SPX41/ECO	24	20000	24000	2150	2040	4100	86					18	101	
3' T8 Ecolux® XL Extra-life																			
T8	Medium Bi-Pin (G13)	25	36.0	15486	F25T8/XL/SP30/ECO	24	24000	29000	2080	1970	3000	78					18	101	
		25	36.0	15487	F25T8/XL/SP35/ECO	24	24000	29000	2080	1970	3500	78					18	101	
		25	36.0	15488	F25T8/XL/SP41/ECO	24	24000	29000	2080	1970	4100	78					18	101	
		25	36.0	15489	F25T8/XL/SPX30/ECO	24	24000	29000	2150	2040	3000	86					18	101	
		25	36.0	15490	F25T8/XL/SPX35/ECO	24	24000	29000	2150	2040	3500	86					18	101	
		25	36.0	15491	F25T8/XL/SPX41/ECO	24	24000	29000	2150	2040	4100	86					18	101	
		25	36.0	10416	F25T8/XL/SPX50/ECO	24	24000	29000	2050	1950	5000	86					18	101	
		25	36.0	16314	F25T8/XL/SPX65/ECO	24	24000	29000	1950	1755	6500	85					18	101	
4' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	32	48.0	26666	F32T8/SP30/ECO	36	30000	36000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	26667	F32T8/SP35/ECO	36	30000	36000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	26668	F32T8/SP41/ECO	36	30000	36000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	16090	F32T8/SP50/ECO	36	30000	36000	2750	2610	5000	78				Ⓔ	18	101	
		32	48.0	16091	F32T8/SP65/ECO	36	30000	36000	2700	2565	6500	78				Ⓔ	18	101	
		32	48.0	25611	F32T8/SPX30/ECO	36	30000	36000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	25612	F32T8/SPX35/ECO	36	30000	36000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	25613	F32T8/SPX41/ECO	36	30000	36000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	42064	F32T8/SPX50/ECO	36	30000	36000	2800	2660	5000	86				Ⓔ	18	101	
4' T8 Ecolux® XL Extra-life																			
T8	Medium Bi-Pin (G13)	32	48.0	27616	F32T8/XL/SP30/ECO	36	36000	42000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	27617	F32T8/XL/SP35/ECO	36	36000	42000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	27618	F32T8/XL/SP41/ECO	36	36000	42000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	27619	F32T8/XL/SPX30/ECO	36	36000	42000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	27620	F32T8/XL/SPX35/ECO	36	36000	42000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	27621	F32T8/XL/SPX41/ECO	36	36000	42000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	16313	F32T8/XL/SPX50/ECO	36	36000	42000	2800	2660	5000	86				Ⓔ	18	101	
		32	48.0	16089	F32T8/XL/SPX65/ECO	36	36000	42000	2750	2475	6500	85				Ⓔ	18	101	
4' T8 Ecolux® Super Long Life																			
T8	Medium Bi-Pin (G13)	32	48.0	73093	F32T8/SXL/SPX30/ECO	36	40000	46000	2850	2675	3000	84				Ⓔ	18	101	
		32	48.0	73094	F32T8/SXL/SPX35/ECO	36	40000	46000	2850	2675	3500	83				Ⓔ	18	101	
		32	48.0	73095	F32T8/SXL/SPX41/ECO	36	40000	46000	2850	2675	4100	81				Ⓔ	18	101	
		32	48.0	73096	F32T8/SXL/SPX50/ECO	36	40000	46000	2800	2630	5000	80				Ⓔ	18	101	
Ultra Energy Saving T8 Lamps																			
2' T8 Ecolux® Watt-Miser® 15 Watt Lamp																			
T8	Medium Bi-Pin (G13)	15	24.0	72132	F17T8/XL/SPX30/ WM/ECO	24	24000	29000	1200	1130	3000	85		$			1,18	101	
		15	24.0	72133	F17T8/XL/SPX35/ WM/ECO	24	24000	29000	1200	1130	3500	85		$			1,18	101	
		15	24.0	72134	F17T8/XL/SPX41/ WM/ECO	24	24000	29000	1200	1130	4100	82		$			1,18	101	
		15	24.0	72135	F17T8/XL/SPX50/ WM/ECO	24	24000	29000	1175	1105	5000	80		$			1,18	101	
3' T8 Ecolux® Watt-Miser® 22 Watt Lamp																			
T8	Medium Bi-Pin (G13)	22	36.0	72136	F25T8/XL/SPX30/ WM/ECO	24	24000	29000	1925	1810	3000	85		$			1,18	101	
		22	36.0	72137	F25T8/XL/SPX35/ WM/ECO	24	24000	29000	1925	1810	3500	85		$			1,18	101	
		22	36.0	72138	F25T8/XL/SPX41/ WM/ECO	24	24000	29000	1925	1810	4100	82		$			1,18	101	
		22	36.0	72139	F25T8/XL/SPX50/ WM/ECO	24	24000	29000	1900	1785	5000	80		$			1,18	101	

Rated life for 2 ft through 4 ft Starcoat® Ecolux® Medium Bi-Pin T8 lamps is determined on programmed start ballasts. Life ratings are based on engineering data on programmed start ballasts with lamps cycled every 3 or 12 operating hours. Lamp life is approximately 35% longer @ 3 hour starts and 20% longer @ 12 hours starts with programmed start ballasts as compared to standard instant start ballasts (see chart on page 4-4).

For the most up-to-date product information, see www.gelighting.com. To convert inches to millimeters, multiply by 25.4.
All footnotes, warning and caution notices found at the end of this section (page 4-32).

UltraMax® Instant Start Multi-Voltage 120–277V High-Efficiency T8 Instant Start Ballasts For F17 (2 ft), F25 (3 ft), F32 (4 ft), F40 (5 ft) Lamps

72266 – GE232MAX-N/ULTRA (replaces 49772)

UltraMax® Instant Start Multi-Voltage High-Efficiency

2 or 1 - F32T8 120 to 277 "N" .87 BF UltraMax®

- Energy-saving high-efficiency instant-start electronic ballast (> 90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Active Current Regulation regulates the output to each lamp with individual lamp inverter modules
- Anti-striation control for better light quality, with no striations
- Cold temperature -22°F Minimum Starting Temperature

General characteristics

Ballast Type	Electronic - High-Efficiency Multivolt Instant Start
Starting Method	Instant start
Lamp Wiring	Parallel
Line Voltage Regulation (+/-)	10%
Case Temperature (MAX)	70°C (158°F)
Ballast Factor	Normal
Power Factor Correction	Active
Sound Rating	A (20-24 decibels)
Additional Info	Anti-striation control, Auto-restart, Thermally protected

Electrical characteristics

Supply Current Frequency	50 Hz/60 Hz

Order information

10 Pack	Pallet Pack	DIV Pack	JP Pack
72266	72267 (replaces 31052)		

Dimensions

Wiring diagram – LFL 18 – see example on Page 10-62	
Case dimensions – Ref Drawing - A – see Page 10-65	
Length (L)	9.5 in (241 mm)
Width (W)	1.3 in (33 mm)
Height (H)	1.18 in (30 mm)
Mounting dimensions	
Mount Length (M)	8.9 in (226 mm)
Mount Width (X or F)	0.87 in (22 mm)
Mount Slots (MS)	0.3 in (8 mm)
Weight	1.06 lbs
Exit Type	Side
Remote Mounting Distance to Lamp (F32T8)	18 ft
Remote Mounting Wire Gauge	18 AWG
Lead lengths	Length (± 1 in)
Red	37 in (940 mm)
White	25 in (635 mm)
Black	25 in (635 mm)
Blue	31 in (787 mm)

Specifications by lamp and wattage

Lamp	# of Lamps	Line Volts	System Watts	Nom. Line Current	System Ballast Factor	Ballast Efficacy Factor	Power Factor % (>=)	Crest Factor (<=)	THD% (<=)	Min. Starting Temp (°F/°C)
F32T8	2	120	54	0.47 A	0.87	1.61	99	1.5	5	-22.0/-30
	2	277	53	0.20 A	0.87	1.64	99	1.5	8	-22.0/-30
	1	120	31	0.26 A	0.87	2.81	99	1.5	7	-22.0/-30
	1	277	31	0.12 A	0.87	2.81	96	1.5	12	-22.0/-30
F32T8/WM	2	120	53	0.45 A	0.88	1.66	99	1.5	5	60.0/16
	2	277	52	0.19 A	0.88	1.69	99	1.5	8	60.0/16
	1	120	29	0.24 A	0.88	3.03	99	1.5	7	60.0/16
	1	277	30	0.11 A	0.88	2.93	96	1.5	12	60.0/16
F28T8	2	120	49	0.41 A	0.87	1.78	99	1.5	6	60.0/16
	2	277	48	0.18 A	0.87	1.81	98	1.5	8	60.0/16
	1	120	28	0.23 A	0.87	3.11	99	1.5	7	60.0/16
	1	277	28	0.11 A	0.87	3.11	95	1.5	33	60.0/16
F32T8/25W	2	120	44	0.00 A	0.87	1.98	99	1.5	10	60.0/16
	2	277	43	0.00 A	0.87	2.02	98	1.5	10	60.0/16
	1	120	25	0.00 A	0.87	3.48	99	1.5	10	60.0/16
	1	277	25	0.00 A	0.87	3.48	97	1.5	10	60.0/16
F25T8	2	120	45	0.38 A	0.93	2.07	99	1.5	6	-22.0/-30
	2	277	45	0.16 A	0.93	2.07	98	1.5	10	-22.0/-30
	1	120	25	0.21 A	0.93	3.72	99	1.5	8	-22.0/-30
	1	277	26	0.08 A	0.93	3.58	94	1.5	13	-22.0/-30
F17T8	2	120	32	0.27 A	0.92	2.88	99	1.5	7	-22.0/-30
	2	277	32	0.12 A	0.92	2.88	96	1.5	13	-22.0/-30
	1	120	19	0.16 A	0.92	4.84	99	1.5	9	-22.0/-30
	1	277	19	0.08 A	0.92	4.84	87	1.5	16	-22.0/-30
FE15T8	2	120	25	0.21 A	0.91	3.64	99	1.5	8	-22.0/-30
	2	277	25	0.97 A	0.91	3.64	95	1.5	16	-22.0/-30
	1	120	15	0.13 A	0.91	6.07	99	1.5	11	-22.0/-30
	1	277	16	0.08 A	0.91	5.69	78	1.5	40	-22.0/-30
F25T12	2	120	48	0.40 A	0.93	1.94	99	1.5	5	0.0/-18
	2	277	47	0.17 A	0.93	1.98	98	1.5	9	0.0/-18
	1	120	26	0.22 A	0.93	3.58	99	1.5	7	0.0/-18
	1	277	27	0.10 A	0.93	3.44	95	1.5	13	0.0/-18

Safety and performance UL Type 1 Outdoor RoHS Compliant UL Type HL FCC - CLASS A Non-Consumer UL Class P cUL Listed UL Type CC NRCan UL Listed NEMA Premium

Cut Sheet 13

Bulb Shape	Base	Watts	Nominal Length (in)	Order Code	Description	Case Qty	Rated Life (3hr/Start)	Rated Life (12hr/Start)	Initial Lumens	Mean Lumens	Color Temp K	CRI	High Color Rendering	Energy Savings	Reduced Wattage	Meets Federal Minimum Efficiency Standards	Foot Notes	Warning and Caution Notices	Additional Information
T8 Starcoat® Lamps (continued)																			
2' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	25	36.0	45750	F25T8/SP30/ECO	24	20000	24000	2080	1970	3000	78					18	101	
		25	36.0	45754	F25T8/SP35/ECO	24	20000	24000	2080	1970	3500	78					18	101	
		25	36.0	45756	F25T8/SP41/ECO	24	20000	24000	2080	1970	4100	78					18	101	
		25	36.0	45753	F25T8/SPX30/ECO	24	20000	24000	2150	2040	3000	86					18	101	
		25	36.0	45755	F25T8/SPX35/ECO	24	20000	24000	2150	2040	3500	86					18	101	
		25	36.0	45757	F25T8/SPX41/ECO	24	20000	24000	2150	2040	4100	86					18	101	
3' T8 Ecolux® XL Extra-life																			
T8	Medium Bi-Pin (G13)	25	36.0	15486	F25T8/XL/SP30/ECO	24	24000	29000	2080	1970	3000	78					18	101	
		25	36.0	15487	F25T8/XL/SP35/ECO	24	24000	29000	2080	1970	3500	78					18	101	
		25	36.0	15488	F25T8/XL/SP41/ECO	24	24000	29000	2080	1970	4100	78					18	101	
		25	36.0	15489	F25T8/XL/SPX30/ECO	24	24000	29000	2150	2040	3000	86					18	101	
		25	36.0	15490	F25T8/XL/SPX35/ECO	24	24000	29000	2150	2040	3500	86					18	101	
		25	36.0	15491	F25T8/XL/SPX41/ECO	24	24000	29000	2150	2040	4100	86					18	101	
		25	36.0	10416	F25T8/XL/SPX50/ECO	24	24000	29000	2050	1950	5000	86					18	101	
		25	36.0	16314	F25T8/XL/SPX65/ECO	24	24000	29000	1950	1755	6500	85					18	101	
4' T8 Ecolux®																			
T8	Medium Bi-Pin (G13)	32	48.0	26666	F32T8/SP30/ECO	36	30000	36000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	26667	F32T8/SP35/ECO	36	30000	36000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	26668	F32T8/SP41/ECO	36	30000	36000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	16090	F32T8/SP50/ECO	36	30000	36000	2750	2610	5000	78				Ⓔ	18	101	
		32	48.0	16091	F32T8/SP65/ECO	36	30000	36000	2700	2565	6500	78				Ⓔ	18	101	
		32	48.0	25611	F32T8/SPX30/ECO	36	30000	36000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	25612	F32T8/SPX35/ECO	36	30000	36000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	25613	F32T8/SPX41/ECO	36	30000	36000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	62066	F32T8/SPX50/ECO	36	30000	36000	2800	2660	5000	86				Ⓔ	18	101	
4' T8 Ecolux® XL Extra-life																			
T8	Medium Bi-Pin (G13)	32	48.0	27616	F32T8/XL/SP30/ECO	36	36000	42000	2800	2660	3000	78				Ⓔ	18	101	
		32	48.0	27617	F32T8/XL/SP35/ECO	36	36000	42000	2800	2660	3500	78				Ⓔ	18	101	
		32	48.0	27618	F32T8/XL/SP41/ECO	36	36000	42000	2800	2660	4100	78				Ⓔ	18	101	
		32	48.0	27619	F32T8/XL/SPX30/ECO	36	36000	42000	2950	2800	3000	86				Ⓔ	18	101	
		32	48.0	27620	F32T8/XL/SPX35/ECO	36	36000	42000	2950	2800	3500	86				Ⓔ	18	101	
		32	48.0	27621	F32T8/XL/SPX41/ECO	36	36000	42000	2950	2800	4100	86				Ⓔ	18	101	
		32	48.0	16313	F32T8/XL/SPX50/ECO	36	36000	42000	2800	2660	5000	86				Ⓔ	18	101	
		32	48.0	16089	F32T8/XL/SPX65/ECO	36	36000	42000	2750	2475	6500	85				Ⓔ	18	101	
4' T8 Ecolux® Super Long Life																			
T8	Medium Bi-Pin (G13)	32	48.0	73093	F32T8/SXL/SPX30/ECO	36	40000	46000	2850	2675	3000	84				Ⓔ	18	101	
		32	48.0	73094	F32T8/SXL/SPX35/ECO	36	40000	46000	2850	2675	3500	83				Ⓔ	18	101	
		32	48.0	73095	F32T8/SXL/SPX41/ECO	36	40000	46000	2850	2675	4100	81				Ⓔ	18	101	
		32	48.0	73096	F32T8/SXL/SPX50/ECO	36	40000	46000	2800	2630	5000	80				Ⓔ	18	101	
Ultra Energy Saving T8 Lamps																			
2' T8 Ecolux® Watt-Miser® 15 Watt Lamp																			
T8	Medium Bi-Pin (G13)	15	24.0	72132	F17T8/XL/SPX30/WM/ECO	24	24000	29000	1200	1130	3000	85		$	~		1,18	101	
		15	24.0	72133	F17T8/XL/SPX35/WM/ECO	24	24000	29000	1200	1130	3500	85		$	~		1,18	101	
		15	24.0	72134	F17T8/XL/SPX41/WM/ECO	24	24000	29000	1200	1130	4100	82		$	~		1,18	101	
		15	24.0	72135	F17T8/XL/SPX50/WM/ECO	24	24000	29000	1175	1105	5000	80		$	~		1,18	101	
3' T8 Ecolux® Watt-Miser® 22 Watt Lamp																			
T8	Medium Bi-Pin (G13)	22	36.0	72136	F25T8/XL/SPX30/WM/ECO	24	24000	29000	1925	1810	3000	85		$	~		1,18	101	
		22	36.0	72137	F25T8/XL/SPX35/WM/ECO	24	24000	29000	1925	1810	3500	85		$	~		1,18	101	
		22	36.0	72138	F25T8/XL/SPX41/WM/ECO	24	24000	29000	1925	1810	4100	82		$	~		1,18	101	
		22	36.0	72139	F25T8/XL/SPX50/WM/ECO	24	24000	29000	1900	1785	5000	80		$	~		1,18	101	

Rated life for 2 ft through 4 ft Starcoat® Ecolux® Medium Bi-Pin T8 lamps is determined on programmed start ballasts. Life ratings are based on engineering data on programmed start ballasts with lamps cycled every 3 or 12 operating hours. Lamp life is approximately 35% longer @ 3 hour starts and 20% longer @ 12 hours starts with programmed start ballasts as compared to standard instant start ballasts (see chart on page 4-4).

For the most up-to-date product information, see www.gelighting.com. To convert inches to millimeters, multiply by 25.4.
All footnotes, warning and caution notices found at the end of this section (page 4-32).

Summary: Application of The Cleveland Electric Illuminating Company and Discount Drug Mart, Inc. to Commit Energy Efficiency/Peak Demand Reduction Programs electronically filed by Mr. Kevin P. Shannon on behalf of The Cleveland Electric Illuminating Company