

PROJECT DOCUMENTS FOR:

PROJECT: CARFAX WATERPLANT LIGHTING FIXTURE RENOVATION PROJECT

OWNER: WISE COUNTY PUBLIC SERVICE AUTHORITY

ADVERTISEMENT: The Wise County Public Service Authority seeks bids from Contractors or Individuals qualified, licensed, and bonded in the Commonwealth of Virginia to install/retrofit forty (40) 2x4 LED 5k flat panel fixtures installed in drop ceiling, fourteen (14) LED 4 bulb retrofit fixture kits, and one hundred eleven (111) LED 2 bulb retro fit fixture kits as further described by the Contract Document(s). Copies of the Contract Document(s) may be obtained from, and questions regarding the Project should be directed to Cody Culbertson, Staff Engineer; 5622 Industrial Park Rd; Norton, VA 24273; (276) 679-1263.

The Contract Document(s) will contain all the bid form and the General Information and/or requirements related to the Project. Note that all bids must be submitted on the form described in the Contract Document(s). The Bid shall be submitted to Mr. Cody W. Culbertson, Staff Engineer; Wise County Public Service Authority; 5622 Industrial Park Rd; Norton, VA 24273 no later than **12:00 PM local time on April 11th, 2022.** Bids may be submitted via email (cculbertson@wisecountypsa.org) or dropped off at the PSA offices at the above listed address.

Site visits shall be scheduled with the PSA if any contractor wants to view the existing light fixtures.

The Wise County Public Service Authority reserves the right to reject any or all bids, waive formalities or irregularities and to select the Contractor or Individual whose bid, in the sole judgment of the PSA, is in the best interest of the PSA.

Attached to this document are the following items:

1. Bid form, 1 page
2. Lighting Specifications

BID FORM

PROJECT: CARFAX WATERPLANT LIGHTNING FIXTURE RENOVATION PROJECT

THIS BID IS SUBMITTED TO: WISE COUNTY PUBLIC SERVICE AUTHORITY
5622 INDUSTRIAL PARK RD
NORTON, VIRGINIA 24273

Wise County Public Service Authority					
Item	Description	Unit	Quantity	Unit Cost	Total Cost
1	2X4 flat panel LED 5k drop ceiling fixtures	ea.	40		
2	LED 2 bulb retrofit	ea.	111		
3	LED 4 bulb retrofit	ea.	14		
Total Bid Cost					

DATE TO BEGIN WORK BY: _____

TIME TO COMPLETE WORK: _____ DAYS

BIDDER: *[Indicate correct name of bidding entity]*

By: _____

[Signature] _____

[Printed name] _____

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____

[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices:

Telephone Number:

Fax Number:

Contact Name and e-mail address:

Bidder's License No.:

(where applicable)

SECTION 16235 – LED LIGHTING

1. GENERAL

- 1.1 THE CONTRACT DOCUMENTS APPLY TO THIS SECTION.

2. PRODUCTS

- 2.1 MANUFACTURER FOR ALL LIGHTING SHALL BE Eiko
- 2.2 LED T8 REPLACEMENT LAMPS SHALL BE FOR RETROFIT IN RETROFIT FIXTURES
- 2.3 LED 2X4 DROP CEILING FIXTURES SHALL BE REPLACED WITH 2X4 5K LED BACKLIT PANEL FIXTURES
- 2.4 LED T8 REPLACEMENT LAMPS SHALL HAVE A LIFE (L70) RATING OF ATLEAST 50,000 HOURS
- 2.5 LED T8 REPLACEMENT BULBS SHALL BE DAMP LOCATION RATED
- 2.6 HARDWARE
 - A. HARDWARE FOR FIXTURES AND WIRING SHALL BE SUPPLIED BY CONTRACTOR
 - B. WIRING, CONNECTORS, AND OTHER MISCELLANEOUS ELECTRICAL COMPONENTS SHALL BE SUPPLIED BY CONTRACTOR

3. EXECUTION

- 3.1 BULBS AND/OR BACKLIT PANELS SHALL BE REPLACED PROMPTLY AFTER REMOVING OLD BULBS OR FIXTURES.
- 3.2 NOT MORE THAN 3 LIGHTING FIXTURES SHALL BE OUT OF SERVICE AT ANY TIME.
- 3.3 OLD MATERIALS SHALL BE DISPOSED OF BY CONTRACTOR



BLP Backlit Panel

FEATURES

- One for one alternative LED solution to fluorescent luminaires/fixtures/troffers
- Ultra efficient, delivering > 125 lpw
- Available in 1'x4', 2'x2' and 2'x4'
- PowerSet feature allows for multiple "set and forget" lumen stops in each fixture
- FieldCCeT feature allows for multiple "set and forget" CCT options in each fixture

CERTIFICATIONS

- UL Listed for dry/damp locations
- IC Rated for insulation contact
- Premium rebate friendly - eligible for local utility rebates

PERFORMANCE

- Rated lifetime:
 - L80 > 140,000 hours estimated
 - L90 > 54,000 hours
- PowerSet: 40/30/25W; 50/40/30W
- FieldCCeT: 35/40/5000K
- CRI: >80

ELECTRICAL

- Input voltage: 120-277V 50/60Hz
- 0-10V dimming (to 10%)
- Power Factor: >0.9
- THD: <20%

THERMAL

- -4°F to 104°F (-20°C to 40°C) operating temperature

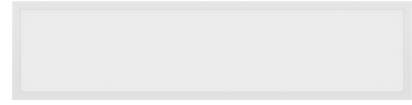
CONSTRUCTION

- Precision mitered and welded extruded aluminium frame with satin white powder coated finish
- Ultra low profile is ideal for shallow plenum spaces
- Features integral T-bar clips

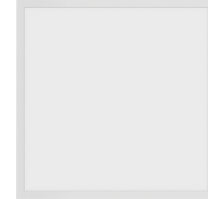
WARRANTY

- 5 year limited warranty. Additional warranty options available. Contact EiKO for details

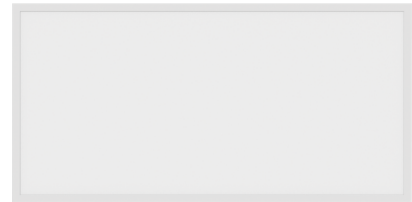
project name	type
catalog number	voltage
approved by	date



BLP14



BLP22



BLP24

APPLICATIONS

- Conference rooms
- Retail
- Offices
- Hospitality
- Healthcare
- Schools
- Reception areas
- Corridors
- Foyer

CONFIGURATOR

MODEL	SIZE	LUMEN PACKAGE	CCT	VOLTAGE	DIMMING	REVISION	OPTIONS
BLP : Backlit Panel	14 - 1'x4'	PS40 - 40/30/25W; 5,000/3,750/3,125 lm	FCCT - 35/40/5000K	U - 120-277V	D - 0-10V Dimming	A - Rev A	See pg. 2 for options
	22 - 2'x2'	PS40 - 40/30/25W; 5,000/3,750/3,125 lm					
	24 - 2'x4'	PS50 - 50/40/30W; 6,250/5,000/3,750 lm					



PERFORMANCE SUMMARY

ORDER CODE	ITEM #	LENGTH	WATTS	NOMINAL LUMENS	LPW	CCT	DIMMING	VOLTS	DLC PREMIUM
12597	BLP14/PS40/FCCT/UD/A	1'x4'	40/30/25W	5,000/3,750/3,125	125	35/40/5000K	0-10V	120-277V	
12598	BLP22/PS40/FCCT/UD/A	2'x2'	40/30/25W	5,000/3,750/3,125	125	35/40/5000K	0-10V	120-277V	
12599	BLP24/PS50/FCCT/UD/A	2'x4'	50/40/30W	6,250/5,000/3,750	125	35/40/5000K	0-10V	120-277V	

ACCESSORIES

ORDER CODE	ITEM #	DESCRIPTION
10367	SLM14-RMK-A	1x4 Recessed Mounting Kit
10364	SLM14-SMK-A	1x4 Surface Mounting Kit
10366	SLM22-RMK-A	2x2 Recessed Mounting Kit
10363	SLM22-SMK-A	2x2 Surface Mounting Kit
10368	SLM24-RMK-A	2x4 Recessed Mounting Kit
10365	SLM24-SMK-A	2x4 Surface Mounting Kit

ADDITIONAL FACTORY INSTALLED OPTIONS

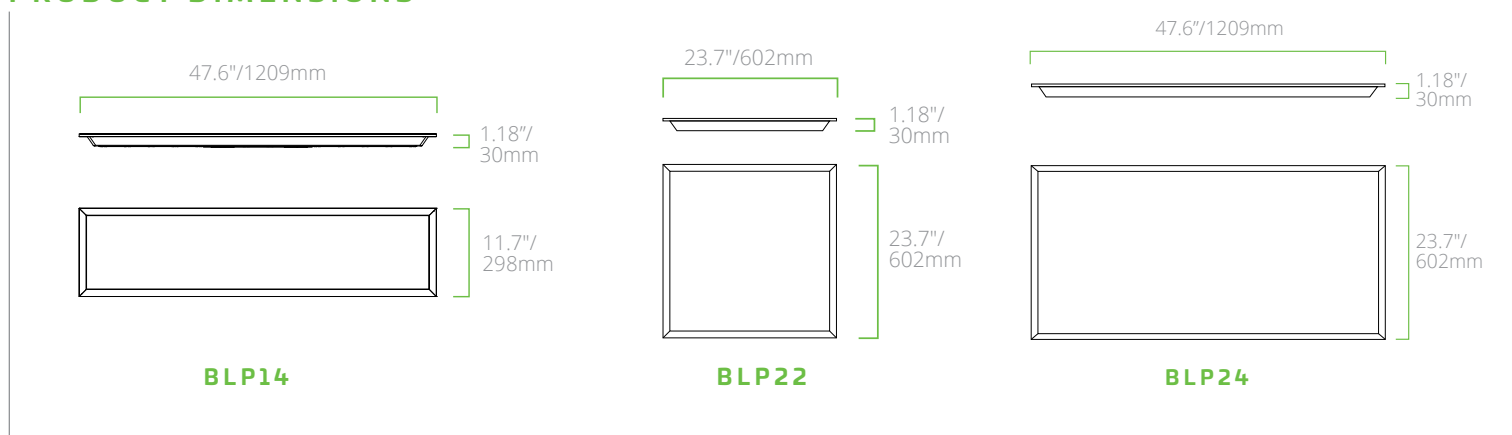
EXAMPLE: BLP24/PS50/FCCT/UD/A-EM8W

EMERGENCY BATTERIES*

EM8W - 8W Emergency Battery

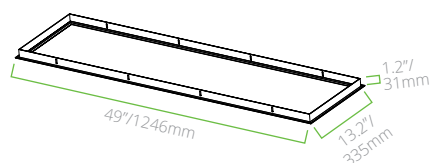
EM18W - 18W Emergency Battery

PRODUCT DIMENSIONS

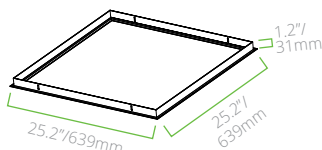


ACCESSORY DIMENSIONS

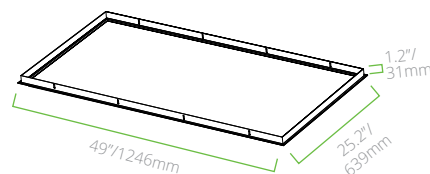
RECESSED MOUNT KIT



SLM14-RMK-A

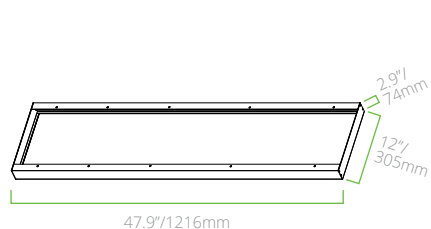


SLM22-RMK-A

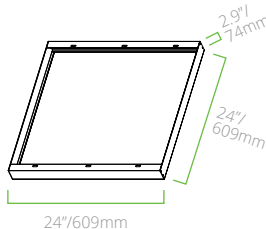


SLM24-RMK-A

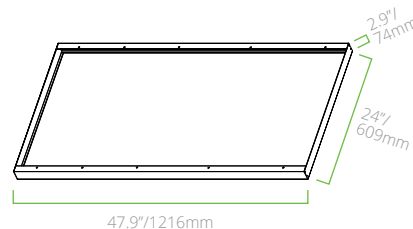
SURFACE MOUNT KIT



SLM14-SMK-A



SLM22-SMK-A

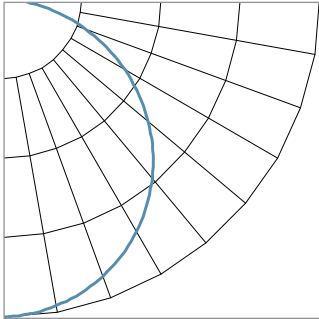


SLM24-SMK-A

PHOTOMETRICS

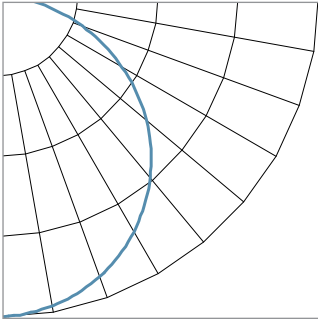
BLP14/PS40/FCCT/UD (Typical performance 40W @ 4000K)

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXTURE
0-20	626.24	12.6
0-30	1330.92	26.8
0-40	2183.27	44.0
0-60	3876.60	78.1
0-80	4853.83	97.8
0-90	4961.30	100.0



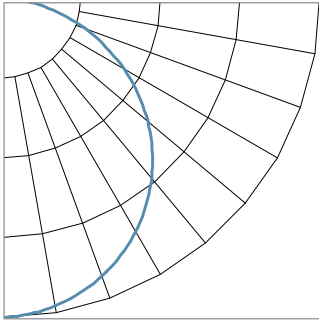
BLP22/PS40/FCCT/UD (Typical performance 40W @ 4000K)

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXTURE
0-20	606.41	12.6
0-30	1290.09	26.8
0-40	2118.56	44.0
0-60	3767.04	78.3
0-80	4709.67	97.9
0-90	4811.80	100.0



BLP24/PS50/FCCT/UD (Typical performance 50W @ 4000K)

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXTURE
0-20	781.52	12.6
0-30	1661.13	26.7
0-40	2725.78	43.8
0-60	4845.70	77.9
0-80	6078.26	97.8
0-90	6217.92	100.0



SCALING FACTOR

POWERSET		FIELDCCET		
FIXTURE	WATTS	3500K	4000K	5000K
1'X4'	25	0.61	0.66	0.64
	30	0.69	0.75	0.73
	40	0.92	1.00	0.97
2'X2'	25	0.63	0.68	0.65
	30	0.71	0.78	0.74
	40	0.91	1.00	0.95
2'X4'	30	0.61	0.65	0.63
	40	0.80	0.86	0.83
	50	0.93	1.00	0.97



T8 TUBES : BYPASS/LINE VOLTAGE : 8' DOUBLE-ENDED

DESCRIPTION

LED T8 Replacement Lamps directly replace fluorescent T8 lamps at a fraction of the energy cost.

FEATURES

- Solid state replacement for high output 8' T8 and T12 fluorescent lamps
- Direct replacement of 8' LED slimline with an 8' HO lumen output
- Recessed double contact (R17d) base
- Simple installation; bypass ballast, connect line voltage to sockets
- Frosted lens for uniform diffuse appearance
- No ballast or external driver required
- High Output: 5,500 lumens; 127 lpw
- Instant-On with no warm up like fluorescents
- Integral 120-277V drivers provide easy installation
- Existing fixture maintains original UL compliance per UL1598C listing
- Does not operate on emergency backup

WARRANTY

- 5 year limited warranty; see eiko.com for warranty details

APPLICATIONS

- Commercial
- Conference rooms
- Hospitality
- Education
- Healthcare
- Retail
- Residential



RoHS
Compliant



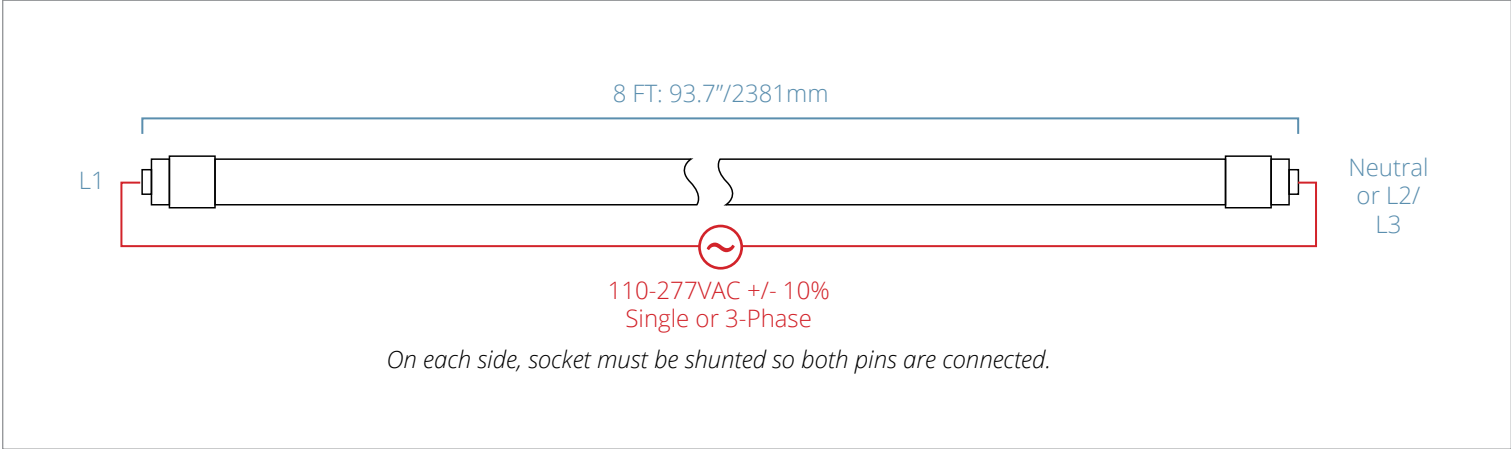
PERFORMANCE	Power Consumption	43W
	Lumens	5,500
	Efficacy (LPW)	128
	CRI	80+
	CCT	4000K, 5000K
	Life (L70)	50,000 hours
ELECTRICAL	Power Factor	≥0.9
	THD	<20%
	Input Voltage	120-277V
CONSTRUCTION	Operating Temperature	-4°F to 113°F (-20°C to 45°C)
	Base	R17d
	Lens	Frosted
LISTINGS	Certification(s)	NSF Listed; cULus Classified; FCC
	Material Usage	RoHS Compliant; no mercury or lead
	Environment	

PERFORMANCE SUMMARY

Order Code	Item #	Lngth	Lumens	Watts	CCT	CRI	Appearance	Envelope	Life/Hours
10104	LED43WT8/96/840-R17D-G8	8'	5,500	43W	4000K	80+	Frosted	Glass	50K
10105	LED43WT8/96/850-R17D-G8	8'	5,500	43W	5000K	80+	Frosted	Glass	50K

NOTE: Use order code when ordering.

DIMENSIONS



NSF offers the most accepted and trusted certification and verification programs for commercial foodservice equipment, specified by health departments, restaurant buyers and specifiers worldwide. NSF means market access – products with the NSF mark receive guaranteed regulatory acceptance in North America and improved acceptance worldwide. Verification programs, such as HACCP Compliance Verification - EU, demonstrate hygienic quality, independently verified by a trusted source.



T8 TUBES : BYPASS/LINE VOLTAGE : 8'

DESCRIPTION

LED T8 Replacement Lamps directly replace fluorescent T8 lamps at a fraction of the energy cost.

FEATURES

- Solid state replacement for high output 8' T8 and T12 fluorescent lamps
- Direct replacement of single-pin LED slimline with HO-equivalent lumen output
- Double-ended single contact base – same as T8 and T12 lamps
- Simple installation; bypass ballast, connect line voltage to single-pin sockets
- Frosted lens for uniform diffuse appearance
- No ballast or external driver required
- High Output: 3,500/5,500 lumens; 140/128lpw
- Instant-On with no warm up like fluorescents
- Integral 120~277V drivers provide easy installation
- Existing fixture maintains original UL compliance per UL1598C listing
- Does not operate on emergency backup

WARRANTY

- 5 year limited warranty; see eiko.com for warranty details

APPLICATIONS

- Commercial
- Conference rooms
- Hospitality
- Education
- Healthcare
- Retail
- Residential



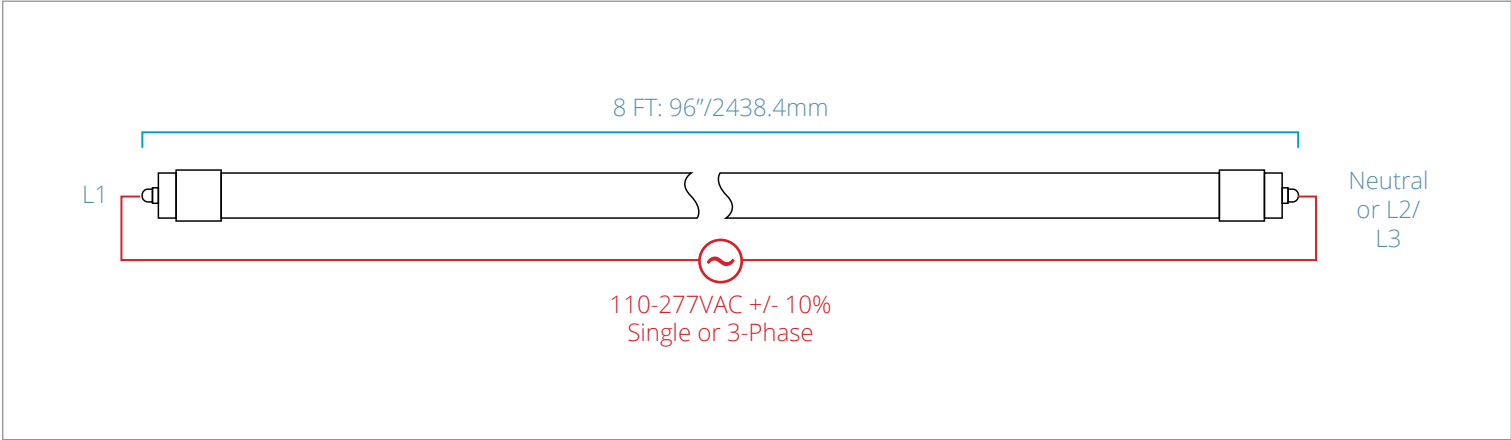
PERFORMANCE	Power Consumption	25W	43W
	Lumens	3,500	5,500
	Efficacy (LPW)	140	128
	CRI	80+	
	Beam	210°	
	CCT	4000K, 5000K	
	Life (L70)	50,000 hours	
ELECTRICAL	Power Factor	≥0.9	
	THD	<20%	
	Input Voltage	120V	
CONSTRUCTION	Operating Temperature	-4°F to 113°F (-20°C to 45°C)	
	Base	Fa8	
	Lens	Frosted glass	
LISTINGS	Certification(s)	DesignLights Consortium® Qualified; NSF Listed; cULus Listed; FCC	
	Material Usage	RoHS Compliant; no mercury or lead	
	Environment	Damp location rated	

PERFORMANCE SUMMARY

Order Code	Item #	Lngh	Lumens	Watts	CCT	CRI	Volts	Life/Hours	Replaces	DLC
10794	LED25WT8/96/840-DBL-G7D	8'	3,500	25W	4000K	80+	120-277V	50K	59W T8; 60/75W T12	✓
10795	LED25WT8/96/850-DBL-G7D	8'	3,500	25W	5000K	80+	120-277V	50K	59W T8; 60/75W T12	✓
09567	LED43WT8/96/840-DBL-G7D	8'	5,500	43W	4000K	80+	120-277V	50K	59W T8; 60/75W T12	✓
09568	LED43WT8/96/850-DBL-G7D	8'	5,500	43W	5000K	80+	120-277V	50K	59W T8; 60/75W T12	✓

NOTE: Use order code when ordering. ✓DesignLights Consortium Qualified

DIMENSIONS / WIRING DIAGRAM



NSF offers the most accepted and trusted certification and verification programs for commercial foodservice equipment, specified by health departments, restaurant buyers and specifiers worldwide. NSF means market access – products with the NSF mark receive guaranteed regulatory acceptance in North America and improved acceptance worldwide. Verification programs, such as HACCP Compliance Verification - EU, demonstrate hygienic quality, independently verified by a trusted source.



T8 Type B : Single/Double-Ended

FEATURES

- Replaces 4' F32T8 (32W, 30W, 28W, 25W) lamps
- Flexible design allows for single-end or double-end operation on 120-277V
- Operates with both shunted and non-shunted lamp holders; see installation instructions for additional information
- Instantaneous full light output upon power-up
- Frosted glass lens reduces visual glare
- Suitable for use in totally enclosed fixtures
- Optimal choice when upgrading from fluorescent to LED
- Simple modifications on install allow for years of maintenance-free, low-cost operation

WARRANTY

- 5 year limited warranty. Additional warranty options available. Contact EiKO for details

APPLICATIONS

- Highbays
- Troffers
- Industrial Strips
- Cove Lighting
- Warehouses
- Stairwells
- Cold Storage

project name	type
catalog number	voltage
approved by	date



PERFORMANCE	Power Consumption	9.5W	12W	15W
	Lumens	1,625	1,800	2,200
	Efficacy (LPW)	171	150	147
	CRI	>80		
	Beam	210°		
	CCT	3500K, 4000K, 5000K		
	Life (L70)	50,000 hours		
ELECTRICAL	Power Factor	≥0.9		
	Input Voltage	120-277V		
CONSTRUCTION	Operating Temperature	-4°F to 113°F (-20°C to 45°C)		
	Lens	Frosted Glass		
	Base	G13		
LISTINGS	Certification(s)	DesignLights Consortium® Qualified; cULus Classified; NSF Listed		
	Material Usage	RoHS Compliant; no mercury		
	Environment	Suitable for dry and damp locations; Suitable for use in enclosed fixtures		



PERFORMANCE SUMMARY

ORDER CODE	ITEM #	LENGTH	WATTS	NOMINAL LUMENS	LPW	CCT	CRI	VOLTS	BEAM	GLASS TUBE	DLC STANDARD
12116	LED9.5WT8/48/835-DBL-A	4'	9.5W	1,625	171	3500K	>80	120-277V	210°	Frosted	✓
12117	LED9.5WT8/48/840-DBL-A	4'	9.5W	1,625	171	4000K	>80	120-277V	210°	Frosted	✓
12118	LED9.5WT8/48/850-DBL-A	4'	9.5W	1,625	171	5000K	>80	120-277V	210°	Frosted	✓
12017	LED12WT8/48/835-DBL-A	4'	12W	1,800	150	3500K	>80	120-277V	210°	Frosted	✓
12018	LED12WT8/48/840-DBL-A	4'	12W	1,800	150	4000K	>80	120-277V	210°	Frosted	✓
12019	LED12WT8/48/850-DBL-A	4'	12W	1,800	150	5000K	>80	120-277V	210°	Frosted	✓
12020	LED15WT8/48/835-DBL-A	4'	15W	2,200	147	3500K	>80	120-277V	210°	Frosted	✓
12021	LED15WT8/48/840-DBL-A	4'	15W	2,200	147	4000K	>80	120-277V	210°	Frosted	✓
12022	LED15WT8/48/850-DBL-A	4'	15W	2,200	147	5000K	>80	120-277V	210°	Frosted	✓

COMPATIBLE EMERGENCY BATTERY (12W AND 15W ONLY)

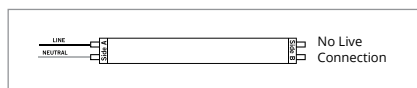
ORDER CODE	ITEM #	INPUT VOLTAGE	FREQUENCY RANGE	OUTPUT POWER	MAX STANDBY POWER	EMERGENCY TIME	RECHARGE TIME
10361	EMB-CP-5WBT-U*	120-277V	50/60Hz	5W	1.8W	90 min @5W	≤24 hrs

*Compatible with listed 12W and 15W T8s only. Please review EM spec sheet for complete compatibility and installation instructions

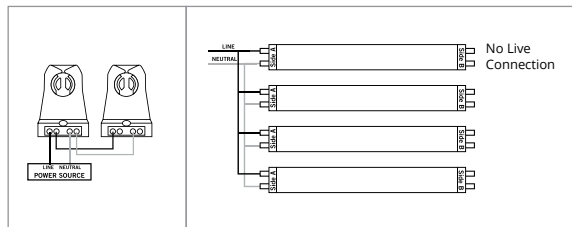
WIRING DIAGRAMS

SINGLE-ENDED

Single Lamp Installation

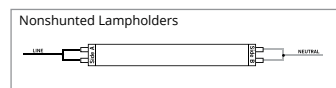
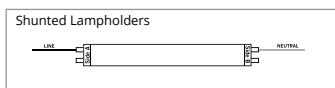


Multiple Lamp Installation



DOUBLE-ENDED

Single Lamp Installation



Multiple Lamp Installation

