

Estimate

Date	Estimate #
3/5/2018	3239

Name / Address
Jefferson Parish JPRD/Lafreniere Park 3000 Downs Blvd Metairie, LA 70003

Project

Item	Description	Qty	Price	Total
ZY-T8-15W-1200-Bixx-4000K	FREE SHIPPING	1,256	7.02	8,817.12T
DEBP2FT9W-4k		30	7.02	210.60T
DEBP3FT12W-4k		30	7.02	210.60T

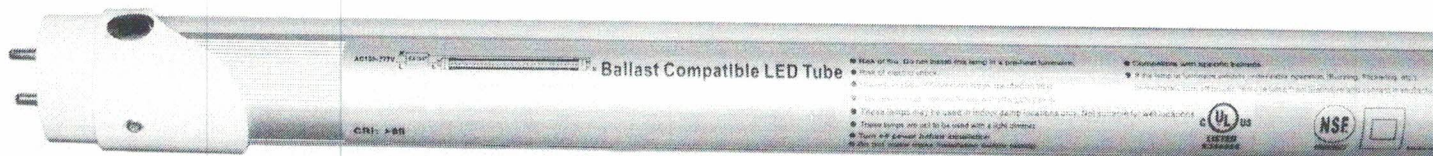
		Subtotal	\$9,238.32
		Sales Tax (0.0%)	\$0.00
		Total	\$9,238.32

4203 Portage St. Kalamazoo, MI 49001
 1-877-LED-5554 or 269-532-1313
 www.LEDLightingWHOLESALEinc.com

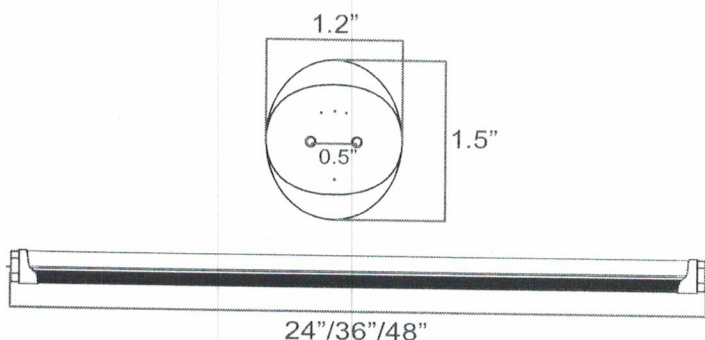
LED MAGIC TUBE

Works with or without a ballast

The LED Magic Tube serves as a special energy efficient replacement for all traditional fluorescent T8 lamps. Designed to operate on all existing rapid-start, instant-start, programmed-start, and emergency fixture ballasts... or simply **no ballast** at all.



DIMENSIONS



CERTIFICATIONS



FEATURES

- Works both with or without a ballast
- Works both with shunted or non-shunted sockets
- Fantastic replacement "plug and play" tube or retrofit kit
- Compatible with over 90% of all North American electronic ballasts
- Versatility supports massive projects with different types of ballasts
- Suitable for damp or dry environments
- Minimize labor and recycling costs
- Stable lumen output for different ballast brands with different ballast factors
- UL Type A & B
- Globally patented technology
- 5 Year Manufacturer's Warranty

COMMON TECHNICAL DATA

Color Temperature	2700K to 5000K
Beam Angle	120 Degrees
Color Consistency	4 Steps
CRI	> 80
Operation Temperature	-30°C to 40°C
Efficiency with ballast	More than 110 LPW
Efficiency without ballast	More than 125 LPW
Input Voltage with ballast	100-277VAC, 347 V
Input Voltage without ballast	100-277VAC
Frequency	50-60Hz
Power Factor	More than 0.99
Rated Life	50,000 hours
LED Type	SMT2835
Housing	Aluminum/PC

WARRANTY

This product has a warranty for a period of 5 years from the date of purchase. The warranty is invalid in the case of improper installation, tampering, or removal of the Q.C. date label. Installation in an improper working environment or installation not according to the current edition of the National Electric Code also invalidates the warranty. Should this product fail during the warranty period, it will be replaced free of charge, subject to correct installation and return of the faulty unit. James® does not accept responsibility for any installation costs associated with the replacement of this product. This warranty is in addition to the statutory rights in the country of purchase. James® reserves the right to alter specifications without prior notice.

LED MAGIC TUBE

Works with or without a ballast

PRODUCT SPECIFICATION

Product Number	Length (inch)	Color	Bare Lamp (Watt)	Lumens	Average System Watts (W)			Average System Initial Lumens		
					Low Ballast Factor (0.78)	Norm Ballast Factor	High Ballast Factor (1.10)	Low Ballast Factor (0.78)	Norm Ballast Factor	High Ballast Factor (1.10)
ZY-T8-10W600 BIXX	24"	3500K-5000K	10W	1400	11.5	12.5	13.5	1437	1550	1680
ZY-T8-15W600 BIXX	24"	3500K-5000K	15W	2100	16.5	17.5	20.5	2069	2180	2560
ZY-T8-15W900 BIXX	36"	3500K-5000K	15W	2100	16.5	17.5	20.5	2069	2180	2560
ZY-T8-12W1200 BIXX	48"	3500K-5000K	12W	1680	13.5	16.5	17.5	1680	2069	2180
ZY-T8-15W1200 BIXX	48"	3500K-5000K	15W	2100	16.5	17.5	20.5	2069	2180	2560
ZY-T8-18W1200 BIXX	48"	3500K-5000K	18W	2520	19.5	21.5	22.5	2430	2680	2810
ZY-T8-20W1200 BIXX	48"	3500K-5000K	20W	2700	21.5	22.5	23.5	2687	2805	2935

ORDERING GUIDE

ZY	T8	12W/15W/18W/20W	600/900/1200	B	I	XX	3000K-5000K
Company Code	Housing Type	Wattage	Length	2835 LED	Internal Driver	Input Type	CCT

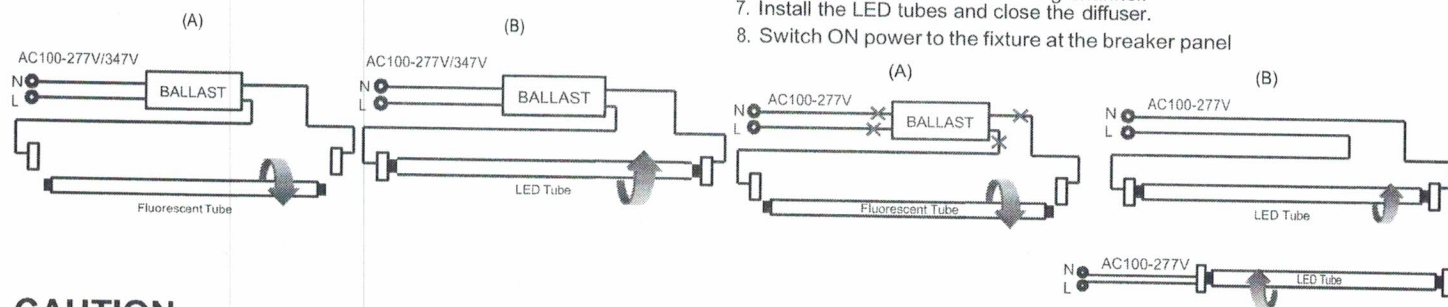
INSTALLATION INSTRUCTIONS

Direct Replacement Procedure:

1. Turn OFF power to the fixture at the breaker panel before installation.
2. Open the diffuser from the light fixture.
3. Remove the fluorescent tubes (A) and dispose of these properly as they may contain mercury.
4. Put LED tube (B) into the lighting fixture and ensure the pins are firmly seated in lamp holders.
5. Install the LED tubes and close the diffuser.
6. Switch ON power to the fixture at the breaker panel

Retrofit Procedure:

1. Turn OFF power to the fixture at the breaker panel before installation.
2. Open the diffuser from the light fixture.
3. Remove the fluorescent tubes and dispose of these properly as they may contain mercury.
4. Cut wires and remove (A).
5. Make new wire connection to the branch circuit as shown on diagram (B) below.
6. Replace the cover over the wiring channel.
7. Install the LED tubes and close the diffuser.
8. Switch ON power to the fixture at the breaker panel



CAUTION

- Risk of fire- do not install this lamp in a pre-heated luminaire.
- Loose or damaged end caps and/or lamp holders need to be replaced before installation.
- Risk of electric shock- make installation with gloves.
- Use only in place of fluorescent lamps specified on label or as a retrofit kit.
- These lamps are not intended for use with emergency exists.
- These lamps are not to be used with a light dimmer.
- If the lamp or luminaire exhibits undesirable operation (i.e. buzzing, flickering, etc.), immediately turn off power and remove the lamp from luminaire and contact manufacturer.
- This lamp only operates on electronic ballasts. If lamp does not light when the luminaire is energized, remove this lamp from luminaire and contact manufacturer.
- Check the ballast installed in the field and make sure the ballast is in manufacturer's ballast list. If the ballast out of the list, a test must needed before mass installation.
- Do not make mass installation before sample testing.

DEBP Series

LED T8 Lamp Replacement – Dual-Ended Bypass Existing Fluorescent Ballast



Project:	
Type:	
Catalog #:	

STANDARD



The DEBP (dual-ended bypass) Series of LED T8 lamps replace conventional fluorescent lamps in existing luminaires. Offering significant energy-efficiency and lifetime improvements over fluorescent lamps, DEBP Series lamps are installed by bypassing existing fluorescent ballasts, and hard-wiring tombstone lamp-holders directly to incoming AC power leads. Dual-ended bypass lamps eliminate the need to replace shunted tombstone lamp-holders in existing fluorescent luminaires with instant-start ballasts.

FEATURES

- Available in 3500k, (warm/neutral white), 4000k (neutral white) and 5000k (cool white) color temperatures (except DEBP8FT43W, which is available in 5000k only).
- Long-life LEDs provide up to 90,000 hours of operation with at least 70% of initial lumen output (L_{70}).
- Models provide 1,100 to 5,500 lumens per lamp, and 121 to 129 lumens per watt (LPW).
- Uniform illumination with no visible LED pixilation.
- Universal 120-277 AC voltage (50-60Hz) is standard.
- Power factor > 0.90.
- Total harmonic distortion < 20%.
- Color rendering index ≥ 80 .
- Full glass housing inhibits yellowing and distortion.
- Easy installation in existing fluorescent luminaires. Bypass models connect directly to incoming AC power leads.

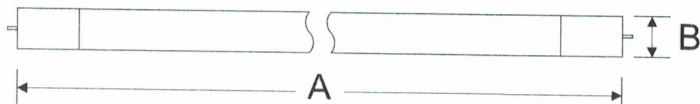
* Contact factory for other color temperatures and lumen packages.

** L_{70} hours are IES TM-21-11 calculated hours.

WARRANTY & LISTINGS

- cULus listed for dry and damp locations in ambient temperatures from -20°C to 45°C (-4°F to 113°F).
- DLC standard approved (2- & 4-foot models only).
- Complies with RoHS (Restriction on Hazardous Substances) requirements.
- Complies with FCC Part 15, Class B.
- 5-year warranty of all electronics and housing.
- Shatter-proof models (NSF certified) available by special order.

DIMENSIONS



	A (Length)	B (Diameter)
2 Foot	23 1/8"	1"
3 Foot	35 1/8"	1"
4 Foot	47 1/8"	1"
8 Foot	93 1/8"	1"

ORDERING INFORMATION

Example: DEBP2FT9W-35K

Model	Watts	Color Temperature	Lumens	Lumens / Watt	Options
DEBP2FT9W	9	35K = 3500k 4K = 4000k 5K = 5000k	1,100 1,150 1,150	122 128 128	BLEDEM-BP/DM-20 = Emergency battery backup
DEBP3FT12W	12	35K = 3500k 4K = 4000k 5K = 5000k	1,500 1,500 1,500	125 125 125	
DEBP4FT14W	14	35K = 3500k 4K = 4000k 5K = 5000k	1,700 1,800 1,800	121 129 129	
DEBP4FT17W	17	35K = 3500k 4K = 4000k 5K = 5000k	2,100 2,200 2,200	124 129 129	
DEBP8FT43W	43	5K = 5000k	5,500	128	

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DEBP Series

LED T8 Lamp Replacement – Dual-Ended Bypass Existing Fluorescent Ballast



ELECTRICAL DATA

Model	Color Temperature	CRI ¹	Lamp Lumens	Lamp Watts	Lumens/Watt	Input Voltage ²	Input Current (A)			Power Factor	THD ³	L ₇₀ Hours ⁴
							120V	240V	277V			
DEBP2FT9W35K	3500k	> 80	1,100	9	122	120-277	0.08	0.04	0.03	> 90%	< 20%	90,000
DEBP2FT9W4K	4000k	> 80	1,150	9	128	120-277	0.08	0.04	0.03	> 90%	< 20%	90,000
DEBP2FT9W5K	5000k	> 80	1,150	9	128	120-277	0.08	0.04	0.03	> 90%	< 20%	90,000
DEBP3FT12W35K	3500k	> 80	1,500	12	125	120-277	0.10	0.05	0.04	> 90%	< 20%	TBD
DEBP3FT12W4K	4000k	> 80	1,500	12	125	120-277	0.10	0.05	0.04	> 90%	< 20%	TBD
DEBP3FT12W5K	5000k	> 80	1,500	12	125	120-277	0.10	0.05	0.04	> 90%	< 20%	TBD
DEBP4FT14W35K	3500k	> 80	1,700	14	121	120-277	0.12	0.06	0.05	> 90%	< 20%	90,000
DEBP4FT14W4K	4000k	> 80	1,800	14	129	120-277	0.12	0.06	0.05	> 90%	< 20%	90,000
DEBP4FT14W5K	5000k	> 80	1,800	14	129	120-277	0.12	0.06	0.05	> 90%	< 20%	90,000
DEBP4FT17W35K	3500k	> 80	2,100	17	124	120-277	0.14	0.07	0.06	> 90%	< 20%	90,000
DEBP4FT17W4K	4000k	> 80	2,200	17	129	120-277	0.14	0.07	0.06	> 90%	< 20%	90,000
DEBP4FT17W5K	5000k	> 80	2,200	17	129	120-277	0.14	0.07	0.06	> 90%	< 20%	90,000
DEBP8FT43W5K	5000k	> 80	5,500	43	128	120-277	0.36	0.18	0.16	> 90%	< 20%	63,000

¹ Color rendering index.

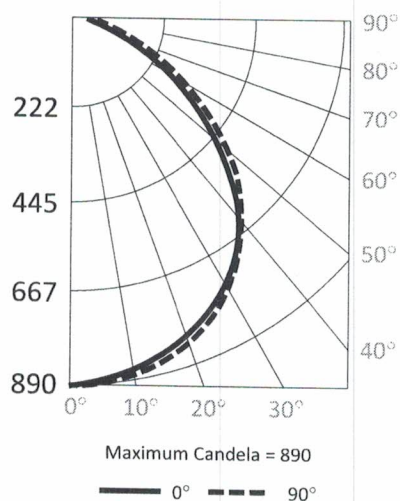
² All 50-60Hz.

³ Total harmonic distortion.

⁴ L₇₀ refers to the number of hours at which lumen output declines to 70% of the initial level. L₇₀ hours are IES TM-21-11 calculated hours.

PHOTOMETRIC DATA

DEBP4FT17W5K (2,200 Lumens)



Candlepower Summary

	0°	90°
0°	890	890
10°	876	876
20°	829	831
30°	744	750
40°	613	636
50°	442	481
60°	272	280
70°	155	156
80°	77	90
90°	2	2

Zonal Lumen Summary

Zone	Lumens	% Fixture
0° – 10°	84	3.8%
0° – 20°	325	14.8%
0° – 30°	687	31.2%
0° – 40°	1,113	50.6%
0° – 50°	1,526	69.4%
0° – 60°	1,846	83.9%
0° – 70°	2,044	92.9%
0° – 80°	2,159	98.2%
0° – 90°	2,200	100.0%
90° – 180°	0	0.0%
0° – 180°	2,200	100.0%

Cone of Light

