

## PRODUCT DESCRIPTION

The Luminoso JFPT22 LED Panel delivers an impressive output of 106LPW while maintaining an 80+ CRI. It is available in 4,000K and 5,000K color temperature options, with 0-10 volt dimming capabilities. This product is perfect for new construction applications or retrofitting existing fluorescent troffer fixtures with recessed installation. The JFPT22 provides a cost effective, lighting solution for office spaces, major retail stores, education, government, health care and hospitality applications.

## PRODUCT SPECIFICATIONS

### • LED Chip

The active color management system maintains superior color consistency over time. Every fixture is tuned as a complete system to the optimal color point before shipment, ensuring consistent fixture to fixture color

### • Heat Sink

The thermal management system's cooling design allows for even heat disbursement which minimizes heat concentration. This enables the LEDs to consistently run cooler, providing significant boosts to lifetime, efficacy, and color consistency.

### • Optical System

Proprietary optical system utilizes a unique combination of reflective and refractive optical components to achieve a uniform, comfortable appearance. Using high density laser pixels to emit even light. This product produces no glare.

## Recommend Dimmer:

Leviton cat,Nos:

AWRMG-7XX AWSMG-7XX

AWSMT-7XX IP710-LFZ/DLX

[Http://www.leviton.com](http://www.leviton.com)

Lutron cat,Nos:

DIVA-DTV NOVA-NVT

NOVAT-NTFTV W/PP20

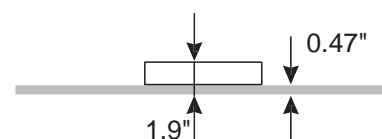
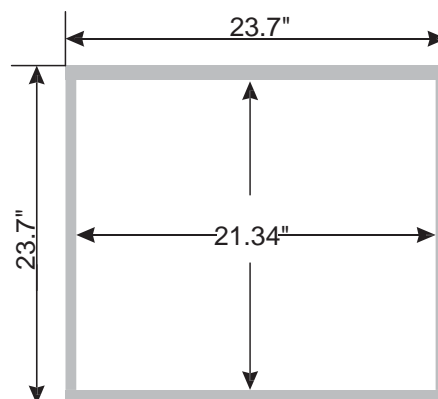
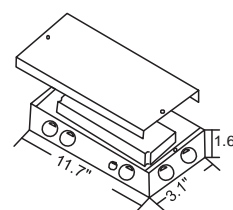
[Http://www.lutron.com/en-US](http://www.lutron.com/en-US)

## ORDER INFORMATION

EXAMPLE: JFPT22-52W-40-Y

Product category	Size	Wattage	CCT	Voltage
JFPT	22=2'X2'	40W 52W	40K=4000k 50K=5000k	Y=120-277V

## 2'X2' FLAT LED PANEL



## PERFORMANCE SUMMARY

Efficacy: 105LPW/115LPW

Delivered Light Output: 4192Lumens/4521Lumens

Input Power: 40Watts

CRI: Ra>80

DLC CCT: 4000K/5000K

Input Voltage: 120-277 VAC

Input current: 0.4 -0.16A

THD:<20%(at 277V)

Power Factor: >0.9(277V)

Diver output: DC36V 1A

Standard Warranty: 5 Years

Standard Lifetime: Designed to L70 minimum 50,000 hours

Mounting: Recessed

0-10v dimming, 10%-100% smooth linear dimming

Sign Current:0.04-0.37MA

Dimensions: L 23.7" x W 23.7" x H 1.9"

Weight:4.8 KG/10.6lbs

Fixture measurement and weight are round up, pls contact your Luminoso representative for exact data.

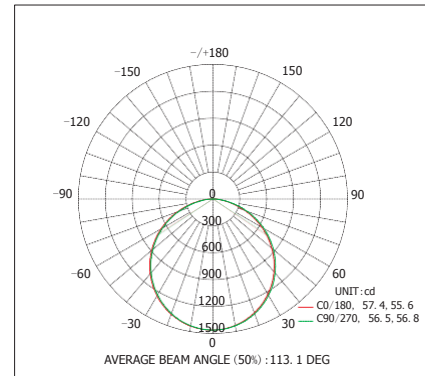
## REGULATORY & VOLUNTARY QUALIFICATIONS

UL Listed	Yes
LM79 Report	Yes
Suitable for Damp Locations	Yes

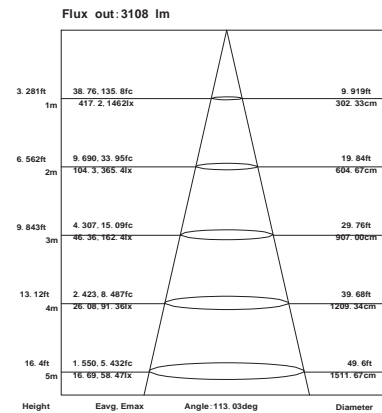
## PHOTOMETRY

Fixture photometry has been conducted in accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.Result may vary per actual order.

## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



## AVERAGE ILLUMINANCE CURVE



## ZONAL FLUX DIAGRAM

T	C0	C45	C90	C135	C180	C225	c270	c315
10	1430	1432	1436	1438	1439	1437	1434	1431
20	1349	1354	1361	1365	1366	1363	1357	1352
30	1224	1230	1239	1246	1248	1243	1236	1227
40	1057	1065	1078	1086	1088	1082	1073	1062
50	856.3	866.9	880.9	891.4	893.7	887.7	874.8	863.4
60	627.5	638.9	654.2	666.5	670.2	663.0	648.2	635.7
70	379.3	389.9	406.8	418.7	424.9	416.0	400.6	386.9
80	140.3	148.5	162.3	174.1	180.3	171.7	155.5	146.5
90	0.0012	0.0160	0.2463	2.065	5.647	1.387	0.7791	0.2785
DEG	LUMINOUS INTENSITY:cd							

## ZONAL LUMEN SUMMARY

T	φ zone	φ total	lum, lamp
0-10	138.2	138.2	3.3
10-20	395.9	534.0	12.7
20-30	600.4	1134	27.1
30-40	725.6	1860	44.4
40-50	755.2	2615	62.4
50-60	685.0	3300	78.7
60-70	522.3	3823	91.2
70-80	294.0	4117	98.2
80-90	72.78	4189	99.9
UNIT:lm			

## COEFFICIENTS OF UTILIZATION

ppc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			(CU)												
0.0	119	119	119	116	116	116	111	111	111	106	106	106	102	102	102	100
1.0	104	100	96	102	98	94	97	94	91	93	91	88	90	88	86	84
2.0	90	84	78	89	82	77	85	80	75	82	77	73	79	75	72	69
3.0	79	71	65	78	70	64	75	68	63	72	66	62	69	65	61	58
4.0	70	61	55	69	61	54	66	59	53	64	58	53	62	56	52	50
5.0	63	54	47	62	53	47	59	52	46	57	51	46	56	50	45	43
6.0	56	47	41	55	47	41	54	46	40	52	45	40	50	44	40	38
7.0	51	42	36	50	42	36	49	41	36	47	40	35	46	40	35	33
8.0	47	38	32	46	38	32	45	37	32	43	37	32	42	36	31	29
9.0	43	34	29	42	34	29	41	34	29	40	33	28	39	33	28	26
10.0	39	31	26	39	31	26	38	31	26	37	30	26	36	30	26	24

## PRODUCT DESCRIPTION

The Luminoso Emergency Battery Back-up allows the LED fixture to be used for both normal and emergency operation. In the event of a power failure, the EMBE switches to the emergency mode and operates the existing fixture for 90 minutes. The LED Emergency Battery Back-up is UL recognized and contains a battery, charger and converter circuit in a single can and is available in different mounting configurations for individual fixture requirements.

- 1.The EMBE-8W-Y is for use with an LED load up to 8W at a rated voltage of 12V-48V.
- 2.The EMBE-12W-Y is for use with an LED load up to 12W at a rated voltage of 12V-48V.
- 3.The EMBE-25W-Y is for use with an LED load up to 25W at a rated voltage of 18V-48V.

## FEATURES

- 1.Dial the code to suitable rated voltage of luminaire.
- 2.Recyclable Ni-Cad battery.
- 3.Includes test switch and charge indicator accessory kit.
- 4.For use with switched or unswitched fixtures
- 5.Meets or exceeds all National Electrical Code and Life Safety Code Emergency Lighting

## TECHNICAL SPECIFICATIONS :

Model (UL)	EMBE-8W-Y	EMBE-12W-Y	EMBE-25W-Y
Input Voltage	100-277VAC, 50-60Hz		
Input Current	65mA (max)	65mA (max)	80mA (max)
Input Power	4.8 Watts(max)	4.8 Watts(max)	6 Watts(max)
Output Voltage	12V-48VDC	12V-48VDC	18V-48VDC
Max. Connected Load	0.5 A	0.75 A	1.04 A
Output Power	8W(max)	12W(max)	25W(max)
Emergency Operation	≥90 minutes		
Battery	High Temp Nickel-Cadmium; 24 Hour Recharge; 7-10 Year Life Expectancy		
UL Conditions of Acceptability	Must be factory wired Battery temperature must not exceed 50°C		

## Form for dial the code to suitable rated voltage of luminaire

Model	Emergency Power	Switch select	Voltage	Current
EMBE-8W-Y	8W	1	12-16V	0.5A
		2	16-24V	0.33A
		3	24-36V	0.22A
		4	36-48V	0.16A
EMBE-12W-Y	12W	1	12-16V	0.75A
		2	16-24V	0.5A
		3	24-36V	0.33A
		4	36-48V	0.25A
EMBE-25W-Y	25W	1	18-24V	1.040A
		2	24-36V	0.7A
		3	36-42V	0.6A
		4	42-48V	0.52A

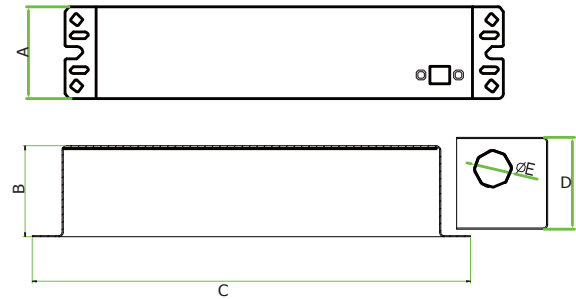
## Order Information

Example: EMBE-8W-Y

Product Category	Source	Base
EMBE	8W 12W 25W	Y = 120-277V

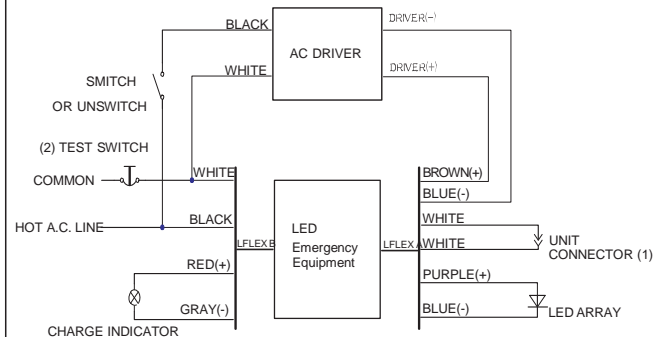


## Dimensions



Model	EMBE-8W-Y	EMBE-12W-Y	EMBE-25W-Y
A	2.18"	2.18"	2.7"
B	2.17"	2.17"	2.8"
C	10.4"	10.4"	14.8"
D	2.7"	2.18"	2.7"
E	0.9"	0.9"	0.9"

## TYPICAL WIRING DIAGRAM



- (1) DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.
- (2) TEST ACCESSORY LEADS-OBSERVE PROPER POLARITY WIRING.

# IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed, including the following:

## Read And Follow All Safety Instructions

- 1: CAUTION-TO prevent electrical shock, do not mate unit connector until installation is complete and A.C. power is supplied to the unit.
- 2: CAUTION-This fixture provides more than one power supply output source. To reduce the risk of electrical shock, disconnect both normal and emergency sources by turning off the A.C. branch circuit and by disconnecting the unit connector.
- 3: CAUTION-This is a sealed unit. Components are not replaceable. Replace the entire unit when necessary.
- 4: CAUTION-Installation and servicing should be performed by qualified personnel only. De-energize before opening.
- 5: DONOT USE OUTDOORS. The LED Emergency Equipment is for use with grounded, UL Listed, damp location rated, indoor fixtures. Not for use in heated air outlets or hazardous locations.
- 6: The LED Emergency Equipment requires an unswitched A.C. power source of 100-277/120-250V volts. Properly cap the unused A.C. lead.
- 7: The LED Emergency Equipment and A.C. driver must be on the same branch circuit.
- 8: Do not mount near gas or electric heaters.
- 9: The LED Emergency Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- 10: The LED Emergency Equipment will supply 48VDC output at the individual rated specification for 90 minutes. See individual units for output specifications.
- 11: Suitable for use in damp locations.
- 12: For use in 0°C minimum, 50°C maximum ambient temperatures.
- 13: The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- 14: Do not use this equipment for other than intended use.
- 15: Install in accordance with the National Electrical Code and local regulations.
- 16: Lighting fixture manufacturers, electricians, and end-users need to ensure product system compatibility before final installation.

## SAVE THESE INSTRUCTIONS

## Installation Instructions

**CAUTION:** Before installing, make certain the A.C. power is off and the **LED Emergency Equipment** unit connector is disconnected.

### 1. Production Information

AC Input	Model	LED Arrays
120-250VAC (UL/CUL)	EMBE-8W-CAN	8W
	EMBE-12W-CAN	12W
	EMBE-25W-CAN	25W
100-277VAC (UL)	EMBE-8W-US	8W
	EMBE-12W-US	12W
	EMBE-25W-US	25W

### 2. Mounting The LED Emergency Equipment

The LED Emergency Equipment should be mounted on or nearby the fixture above the ceiling. The flex conduit marked "A" should be wired into the driver/lamp compartment or to an electrical junction box on the fixture which allows access to the fixture connections. Refer to Illustration 1 for typical mounting.

When battery packs are remote mounted, the remote distance can not exceed 1/2 of the distance from driver to lamp specified by the A.C. driver manufacturer. Under no circumstances should the battery pack exceed a distance of 50' from the lamp.

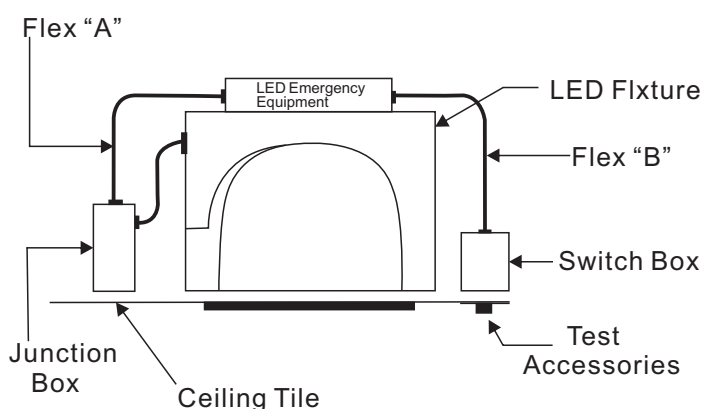
### 3. Wiring

Refer to the wiring diagram on the back page for the appropriate wiring of the LED load and driver. Install in accordance with the National Electrical Code and local regulations. For additional wiring diagrams consult Customer Service.

### 4. Mounting The Test Accessories

Cut a single gang switch box into the ceiling tile adjacent to the fixture within reach of the LED Emergency Equipment flex. After mounting the switch box, connect flex to the box and route all leads inside the box. Note proper polarity of the charge indicator light prior to removal from harness.

**Illustration 1 Downlight Fixture**



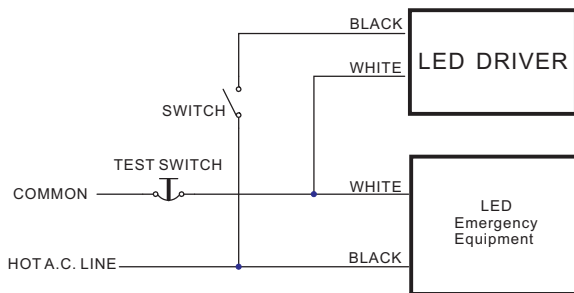
## 5. LABELS

Attach the appropriate labels adjacent to the Test Switch and Charge Indicator. Annotate Replacement Label for LED array type and wattage. The Caution and the Relamping labels must be on the fixture in a readily visible location to anyone attempting to service the fixture.

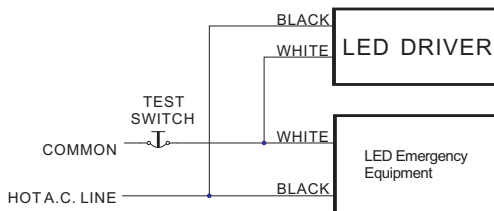
## 6. WIRING THE A.C. INPUT

- A. The LED Emergency Equipment and A.C. driver must be on the same branch circuit.
- B. When the LED Emergency Equipment is used with a switched fixture, the A.C. input to the LED Emergency Equipment must be connected ahead of the fixture switch. Refer to Illustration 2 for switched and unswitched fixture wiring diagrams.

Illustration 2: Switched Fixture



Unswitched Fixture



## 7. COMPLETING INSTALLATION

When the installation is complete, switch the A.C. power on and join the LED Emergency Equipment unit connector.

## OPERATION

**Normal Mode-** A.C. power is present. The A.C. driver operates the LED load as intended. The LED Emergency Equipment is in the standby charging mode. The Charge Indicator will be lit providing a visual indication that the battery is being charged.

**Emergency Mode-** The A.C. power fails. The LED Emergency Equipment senses the A.C. power failure and automatically switches to the Emergency Mode. One or multiple LED are illuminated, for a minimum of 90 minutes. When the A.C. power is restored, the LED Emergency Equipment switches the system back to the Normal Mode and resumes battery charging. See page 1 of the Instruction Manual.

# Instruction Manual LED Emergency Equipment

## TESTING & MAINTENANCE

Pressing the Test Switch turns off the light on the Charge Indicator and forces the unit into emergency mode, interrupting power to the designated A.C. driver. The LED load is now being lit by the LED Emergency Equipment unit. After releasing the Test Switch, the fixture returns to normal operation after a momentary delay. To simulate a "BLACK OUT" use the circuit breaker to turn off A.C. power.

**Initial Testing-** Allow the unit to charge approximately 1 hour, then conduct a short discharge test. Allow a 24 hour charge before conducting a one hour test.

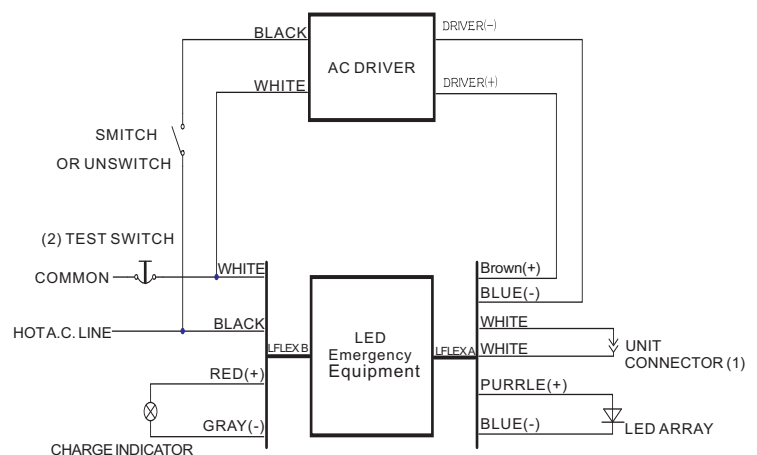
The LED Emergency Equipment is a maintenance free unit, however, periodic inspection and testing is required. NFPA 101, Life Safety Code, outlines the following schedule:

**Monthly-** Insure that the Charge Indicator light is illuminated. Conduct a 30 second discharge test by depressing the Test Switch. At least one LED should operate at reduced output.

**Annually-** Insure that the Charge Indicator is illuminated. Conduct a full 90 minute discharge test. The unit should operate as intended for the duration of the test.

Written records of testing shall be kept by the owner for inspection by the authority having jurisdiction.

## TYPICAL WIRING DIAGRAM



(1) DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

(2) TEST ACCESSORY LEADS-OBSERVE PROPER POLARITY WIRING.