solutions for ighting

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Constant-Power Emergency LED Driver LS-EM-CP



STANDARD



ILLUMINATION

- Provides constant power output to the load during emergency mode operation.
- Can be operated as NORMALLY-ON, NORMALLY-OFF or SWITCHED LOAD.

ELECTRICAL

- Universal 120-277V, 50/60 Hz input.
- Charge/Power "ON" LED indicator light and push-to-test switch for mandated code compliance testing.
- Long-life, maintenance free, rechargeable NiCad battery.
- Output short/overcurrent protection: Electronic limiting, with normal operation resuming upon removal of fault.
- 90 Minute minimum emergency operating time over full temperature range (other run times available upon request).
- Output classification: Class 2 Compliant.
- Surge protection: Per C62.41 (TVS).
- Input overcurrent protection: Fusible link.
- 24 Hour maximum battery recharge time.

HOUSING

- LED illuminated and remote mounted test switch.
- Injection-molded, engineering grade, 5VA flame retardant, high-impact resistant, thermoplastic in a black finish.

MOUNTING

 Suitable for installation inside, on top, or in remote mount of the fixture.

ORDERING INFORMATION

Lumen output based on LED light source having efficacy of 160 lumens/watt. Actual output may vary depending on light source utilized.

Provides regulated power from 5.0 watts to 17.0 watts (up to 800 to 2400 lumens)

| MODEL | OUTPUT OPERATING RANGE | | OPERATING RANGE OUTPUT POWER | |
|---------------|------------------------|----------------|------------------------------|----------|
| | VOLTAGE (Vdc) | CURRENT (mAdc) | (Watts) | (Lumens) |
| LS-EM-CP-800 | 20-50 | 250-100 | 5.0 | 800 |
| LS-EM-CP-1200 | 20-50 | 390-156 | 7.8 | 1250 |
| LS-EM-CP-1600 | 20-50 | 535-214 | 10.7 | 1700 |
| LS-EM-CP-2000 | 20-50 | 685-274 | 13.7 | 2200 |
| LS-EM-CP-2400 | 20-50 | 850-340 | 17.0 | 2700 |

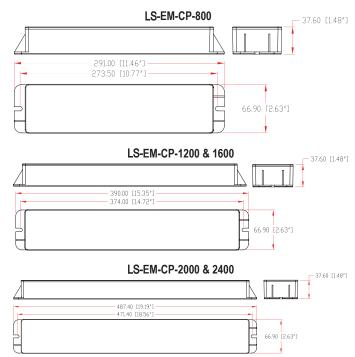
WARRANTY/LISTING

Date:

Type: Fixture: Project:

- UL Classified for factory or field installation.
- Suitable for damp locations (0°C 50°C).
- 5 year warranty on all electronics and housing.
- Meets UL924, NFPA 101 Life Safety Code, NEC, OSHA, Local and State codes.

DIMENSIONS



ELECTRICAL INFORMATION

| MODEL | INPUT CURRENT (A) | INPUT POWER (W) |
|---------------|-------------------|-----------------|
| LS-EM-CP-800 | 0.061 | 3.9 |
| LS-EM-CP-1200 | 0.065 | 4.8 |
| LS-EM-CP-1600 | 0.087 | 5.7 |
| LS-EM-CP-2000 | 0.110 | 6.9 |
| LS-EM-CP-2400 | 0.110 | 7.9 |

LS-EM-CP Series System Coordination Guidelines

These guidelines were developed to allow the lighting system Designer/Specifier to predict the operating performance levels of LED luminaires when powered by an electrically compatible LS-EM-CP Series model. It is ultimately the responsibility of the Designer/Specifier to insure that the as installed system delivers code-compliant path of egress illumination.

1) Determine Electrical Compatibility

A) Verify that the Luminaire LED Driver, where applicable, is Class 2 compliant.

B) Verify that the Luminaire LED Lamp(s) have an operating voltage between 20Vdc and 50Vdc.

C) Verify that the Luminaire LED Lamp(s) have a power rating equal to, or greater than, the emergency power rating of the LS-EM-CP model under consideration.

Please refer to Table 1.

2) Calculate Lumen Output During Emergency Operation

A) Access luminaire data by logging onto Design Lites Consortium (www.designlights.org).

B) Select "Search the DLC Qualified Product List' on the DLC homepage.

C) Enter manufacturer name and P/N of luminaire under consideration in the "search by keyword" text window.

D) Select "Search" tab to open the "Qualified Products List".

E) Determine luminaire Lumens per Watt efficacy in "Rated Data" specifications.

F) Multiply luminaire Lumens per Watt by Emergency Output of the LS-EM-CP model under consideration.

Please refer to Table 1.

This figure is the Lumens available from the luminaire during emergency operation.

3) Determine Suitability of Means of Egress Lighting Levels

A) Using industry standard lighting design software, along with IES files for the luminaire under consideration, verify that the as installed available Lumens (as calculated in 2F above) are sufficient to meet Code-compliant path of egress illumination levels.

While the LS-EM-CP series has been found compliant with the requirements of UL Standard 924, it is untimately the responsibility of the Designer/Specifier to assure the as-installed system delivers code-compliant path of egress illumination in accordance with Federal, State or local municipal requirements.

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|----|---------------|-------------------------|--|--|--|
| | TABLE 1 | | | | |
| | MODEL | OUTPUT POWER (constant) | | | |
| | LS-EM-CP-800 | 5.0 watts | | | |
| | LS-EM-CP-1200 | 7.8 watts | | | |
| | LS-EM-CP-1600 | 10.7 watts | | | |
| | LS-EM-CP-2000 | 13.7 watts | | | |
| er | LS-EM-CP-2400 | 17.0 watts | | | |
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