

# Proteus - XPL1A

## Hazardous Location (C1D1) LED Linear Luminaire

### Product Description

The Proteus Hazardous Location LED luminaire is designed for installations where moisture, dirt, corrosion and vibration may be present. For use in locations made hazardous by the presence of flammable vapors or gases as defined by the NEC, Proteus fixtures are available in class C1D1 in 40W with a two-foot length or in 80W with a four-foot length. Proteus Series is ideal for retrofit of existing HPS/MH & FL and offers higher efficacy for increased energy savings, lower maintenance costs and shorter paybacks.

#### Certifications

- Class I, Division 1, Group C, D
- Class I, Division 2, Group A, B, C, D<sup>2</sup>
- UL 844 Hazardous Location
- UL 924 Emergency Lighting<sup>1</sup>
- UL 1598 Wet Location<sup>2</sup>
- UL 1598A Marine<sup>2</sup>
- UL 8750 LED Safety<sup>2</sup>
- IP 66 Rated
- IK07
- 5G Vibration
- 1000 hrs Salt Spray
- CSA C22.2 No. 137-M1981
- IECEx Ex nR II C T6 Gc
- Meets FCC Part 15, Subpart B, Class B standards for conducted and radiated emissions

#### Construction

- Heavy duty die-cast copper-free aluminum housing
- Stainless steel hardware
- 3/4" NPT threaded conduit wires access ports
- Weight - 2': 17.9 lbs ; 4': 26.7 lbs ; 4'EM: 29.8lbs
- RoHS Compliant
- Captive bolts on power supply cover

#### Optical System

- Heavy-duty tempered glass lens creates uniform light distribution and maximizes lumen output
- Diffused lens optional<sup>3</sup>
- CCT: 5000K, 3000K<sup>2,3</sup>, or 4000K<sup>2,3</sup>
- CRI: 70

#### Electrical

- Input voltage of 120-277VAC or 347-480VAC<sup>2</sup>
- Input frequency of 50/60Hz
- Power Factor of:
  - Non-Emergency Models:  $\geq 0.9$
  - Emergency Models:  $\geq 0.95$
- THD <20%
- 6Kv for 40W and 10Kv for 80W surge protection<sup>2</sup>
- Battery Backup Mode<sup>1</sup>
  - Output Power of 6W
  - Charge Time of 24 hours
  - Emergency Run Time of 90 min
- Reported L70 hours >140,000 Operation Hours @ 60°C<sup>2</sup>

#### Environmental

- Ambient Operating Temperature
  - Non-Emergency Models: -40°F (-40°C) ~ 140°F (60°C)
    - C1D1 T6 Class I, Division 1, Group C, D,
    - C1D2 T3C Class I, Division 2, Group A, B, C, D,
  - Emergency Models: -4°F (-20°C) ~ 113°F (45°C)
    - C1D1 T6 Class I, Division 1, Group C, D,
- Ambient Operating Humidity of 10%~90% RH

#### Finish

- RAL 7037 (Dusty Gray) polyester powder coat

#### Installation

- Prewired with 2' flying leads
- Allows wiring without opening power supply cover
- Integrated 3/4" NPT threaded hub for pendant mount
- Universal trunnion bracket available, with legacy bolt pattern (drill rigs)
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the electrical distribution panel

#### Warranty

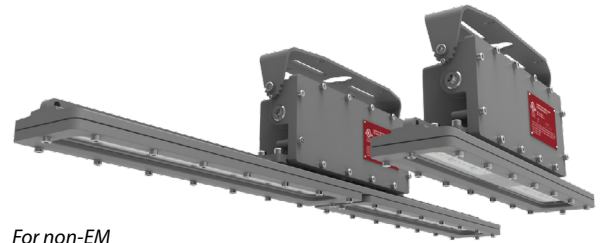
- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)

Project

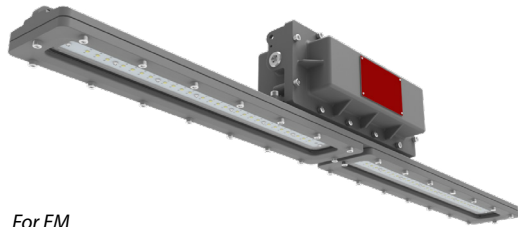
Catalog

Type

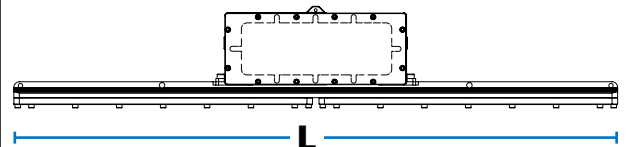
Date



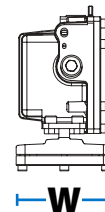
For non-EM



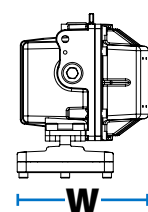
For EM



For non-EM



For EM



#### 40W

#### 80W

#### 80W-EM

|                    |                 |                  |                  |
|--------------------|-----------------|------------------|------------------|
| Fixture Length (L) | 21.4 in (544mm) | 43.3 in (1100mm) | 43.3 in (1100mm) |
| Fixture Width (W)  | 4.3 in (108 mm) | 4.3 in (108 mm)  | 5.4 in (138 mm)  |
| Fixture Height (H) | 7.3 in (185 mm) | 7.3 in (185 mm)  | 7.3 in (185 mm)  |



<sup>1</sup> For EM Models only

<sup>2</sup> For non-EM Models only

<sup>3</sup> Consult Factory for Lead Time & MOQ

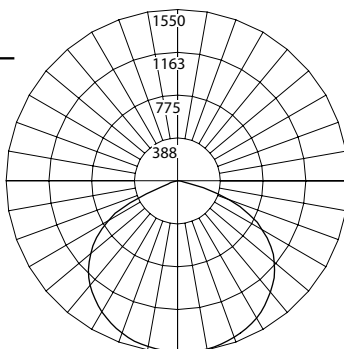
NICOR, Inc. 2200 Midtown Place NE, Albuquerque, NM 87107 P: 800.821.6283 F: 800.892.8393

www.nicorlighting.com November 13, 2023 12:48 PM Proteus C1D1 Page 1 of 2

# Photometric Data

## XPL1A 40W 5000K

|                             |         |
|-----------------------------|---------|
| Input Voltage (VAC)         | 120-277 |
| System Level Power (W)      | 38.1    |
| 120V Current (A)            | 0.32    |
| 277V Current (A)            | 0.14    |
| Delivered Lumens (Lm)       | 4426    |
| System Efficacy (Lm/W)      | 116.3   |
| Correlated Color Temp (K)   | 4982    |
| Color Rendering Index (CRI) | 72.3    |
| Power Factor                | 0.95    |
| THD                         | <20     |
| Beam Angle                  | 115.5°  |
| Spacing Criteria            | 1.36    |



| Angle | Along | Across |
|-------|-------|--------|
| 0     | 1550  | 1550   |
| 5     | 1549  | 1549   |
| 15    | 1530  | 1524   |
| 25    | 1466  | 1458   |
| 35    | 1360  | 1354   |
| 45    | 1207  | 1210   |
| 55    | 868   | 988    |
| 65    | 410   | 668    |
| 75    | 104   | 274    |
| 85    | 0     | 16     |
| 90    | 0     | 1      |

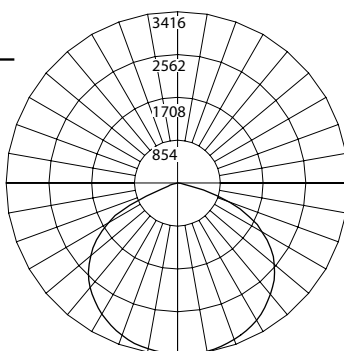
| Mounted height (Feet) | Footcandles Beam Center | Diameter (Feet) |
|-----------------------|-------------------------|-----------------|
| 4                     | 119.7                   | 12.7            |
| 6                     | 53.2                    | 19.0            |
| 8                     | 29.9                    | 25.4            |
| 10                    | 19.2                    | 31.7            |
| 12                    | 13.3                    | 38.0            |
| 14                    | 9.8                     | 44.4            |
| 16                    | 7.5                     | 50.7            |

|               |       |
|---------------|-------|
| XPL1A040U30GR | 0.906 |
| XPL1A040U40GR | 0.952 |

| Zone   | Lumens | % of Luminaire |
|--------|--------|----------------|
| 0-30   | 1243   | 28.1%          |
| 0-40   | 2080   | 47.0%          |
| 0-60   | 3791   | 85.6%          |
| 0-90   | 4426   | 100.0%         |
| 90-180 | 0      | 0.0%           |
| 0-180  | 4426   | 100.0%         |

## XPL1A 80W 5000K

|                             |         |
|-----------------------------|---------|
| Input Voltage (VAC)         | 120-277 |
| System Level Power (W)      | 80.8    |
| 120V Current (A)            | 0.67    |
| 277V Current (A)            | 0.29    |
| Delivered Lumens (Lm)       | 9160    |
| System Efficacy (Lm/W)      | 113.4   |
| Correlated Color Temp (K)   | 4864    |
| Color Rendering Index (CRI) | >70     |
| Power Factor                | 0.94    |
| THD                         | <20%    |
| Beam Angle                  | 111.1°  |
| Spacing Criteria            | 1.34    |



| Angle | Along | Across |
|-------|-------|--------|
| 0     | 3415  | 3415   |
| 5     | 3409  | 3412   |
| 15    | 3349  | 3329   |
| 25    | 3178  | 3160   |
| 35    | 2893  | 2888   |
| 45    | 2494  | 2478   |
| 55    | 1673  | 1965   |
| 65    | 736   | 1316   |
| 75    | 201   | 577    |
| 85    | 0     | 54     |
| 90    | 0     | 3      |

| Mounted height (Feet) | Footcandles Beam Center | Diameter (Feet) |
|-----------------------|-------------------------|-----------------|
| 4                     | 228.9                   | 11.7            |
| 6                     | 101.7                   | 17.5            |
| 8                     | 57.2                    | 23.3            |
| 10                    | 36.6                    | 29.2            |
| 12                    | 25.4                    | 35.0            |
| 14                    | 18.7                    | 40.8            |
| 16                    | 14.0                    | 46.6            |

|               |       |
|---------------|-------|
| XPL1A080U30GR | 0.906 |
| XPL1A080U40GR | 0.952 |

| Zone   | Lumens | % of Luminaire |
|--------|--------|----------------|
| 0-30   | 2705   | 29.5%          |
| 0-40   | 4478   | 48.9%          |
| 0-60   | 7903   | 86.3%          |
| 0-90   | 9160   | 100.0%         |
| 90-180 | 0      | 0.0%           |
| 0-180  | 9160   | 100.0%         |

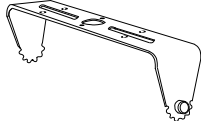



Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

| Model Number  | Lumens | Watts | Lumens/Watt |
|---------------|--------|-------|-------------|
| XPL1A040U30GR | 4011   |       | 105.3       |
| XPL1A040U40GR | 4213   | 38.1  | 110.6       |
| XPL1A040U50GR | 4426   |       | 116.3       |
| XPL1A080U30GR | 8280   |       | 102.5       |
| XPL1A080U40GR | 8723   | 80.8  | 107.9       |
| XPL1A080U50GR | 9160   |       | 113.4       |

| Ordering Information |         |           |           |                             |                            |           |                                   |                             |                                       | Example: XPL1A080U50GRTDEM  |
|----------------------|---------|-----------|-----------|-----------------------------|----------------------------|-----------|-----------------------------------|-----------------------------|---------------------------------------|-----------------------------|
| Series               | Version | Class/DIV | Wattage   | Voltage                     | CCTs                       | Finish    | Beam Angle                        | Lens                        | Mounting                              | Emergency                   |
| XPL                  | 1       | A (C1D1)  | 040 (40W) | U (120-277VAC)              | 50 (5000 K)                | GR (Gray) | ___ (110°)                        | ___ (Clear)                 | ___3/4" Pendant                       | __none                      |
|                      |         |           | 080 (80W) | H (347-480V) <sup>2,3</sup> | 40 (4000 K) <sup>2,3</sup> |           | 60 (60°) <sup>2,3</sup>           | D (Diffused) <sup>2,3</sup> | T (Trunnion mount, factory installed) | EM <sup>1</sup> (emergency) |
|                      |         |           |           |                             | 30 (3000 K) <sup>2,3</sup> |           | T2 (Type II/Aisle) <sup>2,3</sup> |                             |                                       |                             |

Specifications and dimensions subject to change without notice.

- Emergency Models are available only for 80W, 120-277VAC only, 5000K, 110°, Clear Lens, and 3/4" Pendant configuration.
- Non-Emergency Models only
- Consult factory for lead time and MOQ

| Accessories                              |                   | Accessories sold separately  |
|--|-------------------|--|
| Trunnion Mount Bracket                   | XPL1BRACKET       |   |
| C1D1 Drill Rig Kit                       | XPL1ARIGKIT       |  |
| C1D1 Heavy Duty Dual Point Retention Kit | XPL1ARETENTIONKIT |   |
| 3' Heavy Duty DS Safety Cable            | XP1DSCABLE-3      |  |

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.