

## **D-Series Size 2** LED Flood Luminaire







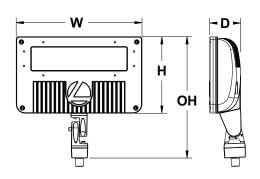
# Catalog

Notes

Туре

### **Specifications**

0.8 ft<sup>2</sup> EPA: (0.05 m<sup>2</sup>) 3-1/8" Depth: (8.0 cm) 12-7/8" Width: (32.6 cm) 7-3/4" Height: (19.8 cm) Overall 12" Height (30.5 cm) 10.5 lbs Weight:



#### Introduction

D-Series Size 2 Flood features advanced optics and precision illumination in a sleek and compact form that seamlessly blends with the environment. State of the art reflector design with cutting edge chip-on-board LED technology produces excellent uniformity using precision beam patterns. Provides long-life replacement for 150-250W metal halide floodlights offering up to 74% energy savings with expected service life of over 100,000 hours.

### **Ordering Information**

#### **EXAMPLE:** DSXF2 LED P1 40K MSP MVOLT THK DDBXD

| DSXF2 LED |                                 |                                     |                                                                                                                           |                                                                                                                            |                                                          |                                                                                                                        |                                         |                                                                                                                                                                                                                                                                                                                                                                                     |                                  |                                                      |
|-----------|---------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------|
| Series    | Performance<br>Package          | Color<br>Temperature                | Distribution                                                                                                              | Voltage                                                                                                                    | Mounting                                                 |                                                                                                                        | Options                                 |                                                                                                                                                                                                                                                                                                                                                                                     | Finish (required)                |                                                      |
| DSXF2 LED | P1<br>P2<br>P3 <sup>1,2,3</sup> | 30K 3000K<br>40K 4000K<br>50K 5000K | NSP Narrow spot MSP Medium spot MFL Medium flood FL Flood WFL Wide flood WFR Wide flood, rectangular HMF Horizontal flood | MVOLT <sup>4</sup> 120 <sup>5</sup> 208 <sup>5</sup> 240 <sup>5</sup> 277 <sup>5</sup> 347 <sup>5</sup> 480 <sup>5,6</sup> | Shipped in THK  YKC62  IS  Shipped se DSXF1/2TS  FTS CG6 | Knuckle with 1/2" NPS<br>threaded pipe<br>Yoke with 16-3 SO cord<br>Integral slipfitter<br>(fits 2-3/8" O.D.<br>tenon) | PE<br>PEX<br>DMG<br>SF<br>DF<br>SPD10KV | installed  Photocontrol, button style 8.9  Photocontrol external threaded adjustable <sup>9</sup> 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)  Single fuse (120, 277, 347V) 5  Double fuse (208, 240, 480V) 5  Separate surge protection 10  separately <sup>7</sup> Upper/bottom visor (universal)  Full visor  Vandal guard | DDBXD<br>DBLXD<br>DNAXD<br>DWHXD | Dark bronze<br>Black<br>Natural<br>aluminum<br>White |

#### Accessories

Ordered and shipped separately. DSXF1/2TS DDBXD U Slipfitter for 1–1/4" to 2–3/8" OD tenons; mates with 1/2" threaded knuckle (specify finish)

Slipfitter for 2-3/8" to 2-7/8" OD tenons; mates with FTS CG6 DDBXD U yoke mount (specify finish)

FRWB DDBXD U Radius wall bracket, 2-3/8" OD tenon (specify finish) Steel square pole bracket, 2-3/8"OD tenon (specify finish) FSPB DDBXD U

DSXF2UBV DDBXD U Upper/bottom visor accessory (specify finish) DSXF2FV DDBXD U Full visor accessory (specify finish) DSXF2VG U Vandal guard accessory

> For more mounting options, visit our Floodlighting Accessories pages

#### Stock configurations are offered for shorter lead times:

| Standard Part Number                      | Stock Part Number   | CI Code |
|-------------------------------------------|---------------------|---------|
| DSXF2 LED P1 40K WFL MVOLT THK DDBXD      | DSXF2 LED P1 40K    | *240TJ9 |
| DSXF2 LED P1 50K WFL MVOLT THK DDBXD      | DSXF2 LED P1 50K    | *240TJ8 |
| DSXF2 LED P1 40K WFL MVOLT YKC62 DDBXD    | DSXF2 LED P1 40K YK | *263KLF |
| DSXF2 LED P1 50K WFL MVOLT YKC62 DDBXD    | DSXF2 LED P1 50K YK | *263UJK |
| DSXF2 LED P2 40K WFL MVOLT THK DDBXD      | DSXF2 LED P2 40K    | *240THT |
| DSXF2 LED P2 50K WFL MVOLT THK DDBXD      | DSXF2 LED P2 50K    | *240TJC |
| DSXF2 LED P2 40K WFL MVOLT YKC62 DDBXD    | DSXF2 LED P2 40K YK | *263KLG |
| DSXF2 LED P2 50K WFL MVOLT YKC62 DDBXD    | DSXF2 LED P2 50K YK | *263UJM |
| DSXF1/2 Slip-fitter Tenon Accessory DDBXD | DSXF1/2TS DDBXD U   | *216G5K |

#### NOTES

- Performance package P3 rated 35C maximum ambient. Not available with PE (use PEX).
- Rated 25C maximum ambient with SPD10KV.
- MVOLT driver operates on line voltage from 120-277V. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Not available with PE and PEX
- Also available as accessories; see accessories information at left.
- Rated 25C maximum ambient for performance package P2. Not available in performance package P3. Specify PEX for higher ambient temperatures.
- Photocontrol (PE, PEX) requires 120, 208, 240, 277 or 347 voltage option
- 10. Cannot exceed 25°C maximum ambient when used with P3 performance package.



#### **Performance Data**

#### **Lumen Output**

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Actual wattage may differ by +/- 8% when operating between 120-480V +/- 10%. Contact factory for performance data on any configurations not shown here.

| Performance | System | Dist. | ,g.c |     | Beam<br>Angle |    | 30K<br>(3000K, 70 CRI) |        | 40K<br>(4000K, 70 CRI) |        |        | 50K<br>(5000K, 70 CRI) |        |        |     |
|-------------|--------|-------|------|-----|---------------|----|------------------------|--------|------------------------|--------|--------|------------------------|--------|--------|-----|
| Package     | Watts  | Туре  | °H   | °V  | Ή             | °V | Max Cd                 | Lumens | LPW                    | Max Cd | Lumens | LPW                    | Max Cd | Lumens | LPW |
|             |        | NSP   | 39   | 39  | 19            | 18 | 43,427                 | 7,337  | 136                    | 45,662 | 7,715  | 143                    | 45,662 | 7,715  | 143 |
|             |        | MSP   | 52   | 51  | 28            | 28 | 26,563                 | 7,010  | 130                    | 27,930 | 7,370  | 136                    | 27,930 | 7,370  | 136 |
|             |        | MFL   | 59   | 59  | 45            | 46 | 11,831                 | 7,058  | 131                    | 12,440 | 7,421  | 137                    | 12,440 | 7,421  | 137 |
| P1          | 54W    | FL    | 87   | 87  | 62            | 68 | 6,258                  | 7,309  | 135                    | 6,581  | 7,686  | 142                    | 6,581  | 7,686  | 142 |
|             |        | WFL   | 114  | 101 | 87            | 83 | 3,991                  | 7,412  | 137                    | 4,197  | 7,793  | 144                    | 4,197  | 7,793  | 144 |
|             |        | WFR   | 107  | 92  | 81            | 71 | 4,827                  | 7,427  | 138                    | 5,076  | 7,810  | 145                    | 5,076  | 7,810  | 145 |
|             |        | HMF   | 123  | 64  | 89            | 50 | 6,580                  | 6,764  | 125                    | 6,919  | 7,102  | 132                    | 6,919  | 7,102  | 132 |
|             |        | NSP   | 39   | 39  | 19            | 18 | 59,506                 | 10,054 | 129                    | 62,568 | 10,571 | 136                    | 62,568 | 10,571 | 136 |
|             |        | MSP   | 52   | 51  | 28            | 28 | 36,397                 | 9,605  | 123                    | 38,271 | 10,099 | 129                    | 38,271 | 10,099 | 129 |
|             |        | MFL   | 59   | 59  | 45            | 46 | 16,211                 | 9,671  | 124                    | 17,046 | 10,169 | 130                    | 17,046 | 10,169 | 130 |
| P2          | 78W    | FL    | 87   | 87  | 62            | 68 | 8,575                  | 10,016 | 128                    | 9,017  | 10,531 | 135                    | 9,017  | 10,531 | 135 |
|             |        | WFL   | 114  | 101 | 87            | 83 | 5,469                  | 10,156 | 130                    | 5,751  | 10,678 | 137                    | 5,751  | 10,678 | 137 |
|             |        | WFR   | 107  | 92  | 81            | 71 | 6,615                  | 10,177 | 131                    | 6,955  | 10,701 | 137                    | 6,955  | 10,701 | 137 |
|             |        | HMF   | 123  | 64  | 89            | 50 | 9,017                  | 9,254  | 119                    | 9,481  | 9,731  | 125                    | 9,481  | 9,731  | 125 |
|             |        | NSP   | 39   | 39  | 19            | 18 | 70,481                 | 11,908 | 117                    | 74,109 | 12,521 | 123                    | 74,109 | 12,521 | 123 |
|             |        | MSP   | 52   | 51  | 28            | 28 | 43,111                 | 11,377 | 112                    | 45,330 | 11,962 | 117                    | 45,330 | 11,962 | 117 |
|             |        | MFL   | 59   | 59  | 45            | 46 | 19,011                 | 11,455 | 112                    | 20,190 | 12,044 | 118                    | 20,190 | 12,044 | 118 |
| P3          | 102W   | FL    | 87   | 87  | 62            | 68 | 10,157                 | 11,863 | 116                    | 10,680 | 12,474 | 122                    | 10,680 | 12,474 | 122 |
|             |        | WFL   | 114  | 101 | 87            | 83 | 6,198                  | 11,508 | 113                    | 6,811  | 12,648 | 124                    | 6,811  | 12,648 | 124 |
|             |        | WFR   | 107  | 92  | 81            | 71 | 7,835                  | 12,054 | 118                    | 8,238  | 12,675 | 124                    | 8,238  | 12,675 | 124 |
|             |        | HMF   | 123  | 64  | 89            | 50 | 10,680                 | 10,961 | 107                    | 11,230 | 11,526 | 113                    | 11,230 | 11,526 | 113 |

| IF REPLACING<br>OLD BELOW | USE NEW<br>BELOW | RECOMMENDED                                                              | ALSO CONSIDER                                                                                                    |
|---------------------------|------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| DSXF1 LED 1               | DSXF1 LED P1     | Summary, customer gets ~<br>900 more lumens* at slightly<br>higher watts |                                                                                                                  |
| DSXF1 LED 2               | DSXF1 LED P2     | Summary, customer gets<br>~ 1500 more lumens* at<br>higher watts         | Consider dropping down to<br>DSXF1 LED P1, however 900<br>lumens less VS. older design,<br>but at half the watts |
| DSXF2 LED 3               | DSXF1 LED P2     | Summary, use size 1-P2 at<br>lower watts, roughly same<br>lumens         | If staying with size two,<br>same watts, but 2000 more<br>lumens                                                 |
| DSXF2 LED 4               | DSXF2 LED P1     | Summary, use size 2-P1 at<br>lower watts, roughly same<br>lumens         |                                                                                                                  |

## Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40  $^{\circ}\text{C}$  (32-104  $^{\circ}\text{F}$ ).

| Ambient |       |  |  |  |  |  |  |  |
|---------|-------|--|--|--|--|--|--|--|
| 0℃      | 32°F  |  |  |  |  |  |  |  |
| 10°C    | 50°F  |  |  |  |  |  |  |  |
| 20°C    | 68°F  |  |  |  |  |  |  |  |
| 25°C    | 77°F  |  |  |  |  |  |  |  |
| 30°C    | 86°F  |  |  |  |  |  |  |  |
| 40°C    | 104°F |  |  |  |  |  |  |  |

#### **Projected LED Lumen Maintenance**

Data references the extrapolated performance projections for the DSXF LED P3 platform noted in a 25C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Operating Hours             | 0   | 25,000 | 50,000 | 100,000 |
|-----------------------------|-----|--------|--------|---------|
| Lumen Maintenance<br>Factor | 1.0 | 0.95   | 0.95   | 0.95    |

#### **Electrical Load**

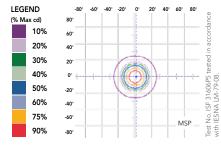
|                  |                  | Current (A) |      |      |      |      |      |  |  |  |  |
|------------------|------------------|-------------|------|------|------|------|------|--|--|--|--|
| Light<br>Engines | System<br>Watts* | 120         | 208  | 240  | 277  | 347  | 480  |  |  |  |  |
| P1               | 54W              | 0.45        | 0.26 | 0.23 | 0.2  | 0.16 | 0.13 |  |  |  |  |
| P2               | 78W              | 0.65        | 0.37 | 0.33 | 0.29 | 0.23 | 0.18 |  |  |  |  |
| P3               | 102W             | 0.88        | 0.49 | 0.43 | 0.39 | 0.31 | 0.23 |  |  |  |  |

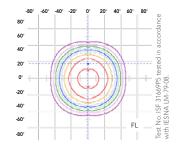
<sup>\*</sup> Systems Watts for 347-480V; P1: 56W, P2: 80W, P3:103W.

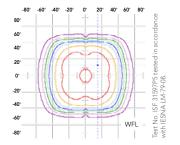
#### **Photometric Diagrams**

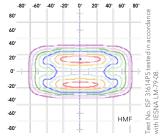
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Flood Size 2 homepage.

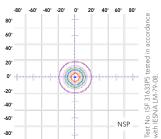
Isocandela plots for the DSXF2 LED P2 40K.

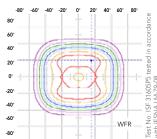


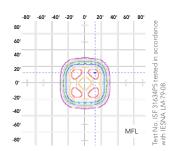












#### **Mounting, Options and Accessories**



THK - Knuckle with 1/2" NPS threaded pipe



YKC62 - Yoke with SO cord W= 4-3/4" (12.0 cm)

H= 4-1/4" (10.7 cm) D= 2-1/4" (5.7 cm)



IS - Integral slipfitter

H= 2-1/2" (6.3 cm) ID = 2-3/8" (6.0 cm)OD= 3-1/2" (8.8 cm)



UBV - Upper/bottom visor

W= 10" (25.4 cm) H = 2-1/2'' (6.3 cm)D = 3'' (7.6 cm)



FV - Full visor

W= 10" (25.4 cm) H = 2-1/2'' (6.3 cm)D= 3" (7.6 cm)



VG - Vandal guard

W= 10-1/2" (26.6cm) H= 4" (10 1cm

#### **FEATURES & SPECIFICATIONS**

#### INTENDED USE

The sleek design of the D-Series Size 2 Flood reflects the embedded high performance LED technology. It is ideal for larger signage, facade and flagpole lighting in many commercial and residential applications.

#### CONSTRUCTION

Die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants using a tempered glass lens (IP66). Low EPA (0.8 ft²) for optimized wind loading.

#### **FINISH**

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

#### OPTICS

A variety of precision-molded vacuum-metallized specular reflectors are engineered for superior target illumination, uniformity and spacing. Light engines are available in 3000K (70 CRI min.), 4000K (70 CRI min.) or 5000K (70 CRI min.) configurations. Optional visors offer additional

Light engine(s) consist of chip-on-board (COB) LEDs directly coupled to the housing to maximize heat dissipation and promote long life (100,000 hrs, L80). Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate. Standard 6KV surge protection meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

#### INSTALLATION

Integral adjustable knuckle with 1/2-14 NPS threaded pipe, tenon slipfitter, or yoke mounting, facilitates quick and easy installation to a variety of mounting accessories. This secure connection enables the D-Series Size 2 to withstand up to a 1.5 G vibration load rating per ANSI C136.31.

CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. Rated for -40°C minimum ambient

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

#### WARRANTY

5-year limited warranty. Complete warranty terms located at:

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

