



# D821-LED

## Architectural Diamond LED Luminaire

Client: \_\_\_\_\_ Order #: \_\_\_\_\_  
Project Name: \_\_\_\_\_ Type: \_\_\_\_\_ Qty: \_\_\_\_\_



### Performance Data

#### CRI

72+ Standard; 90+ Optional

#### CCT

3000K, 3500K, 4000K, 5000K

#### Projected Lifetime

223,000 Hours (L80);  
102,000 Hours (L90)

#### Dimming

0-10V dimming standard  
100% down to 10%

#### Operating Temperature

-40°C to +55°C Ambient

#### ETL Listed

Suitable for dry, damp, wet  
locations

<b>DLC</b> Listed	<b>ETL</b> Listed	<b>10 Yr</b> Warranty Including Labor	<b>USA</b> Buy American Act Compliant
----------------------	----------------------	---	---

### Description

The D821 series features a heavy-cast aluminum housing designed with modern aesthetics in mind. The architectural luminaire provides brilliant illumination to walkways and other outdoor spaces, improving the visibility, safety, and overall look of any outdoor area. Powered by DECO's energy-saving LED technology, this high-powered outdoor luminaire is Dark Sky compliant when ordered at 3000K and paired with state-of-the-art optics to restrict light trespass, glare and light pollution for neighborhood-friendly outdoor lighting.

### Features

- Delivers up to 130 lumens per watt
- DLC Listed (Premium for select models) for utility rebates
- Effective Projected Area (EPA): 1.08 ft<sup>2</sup>
- Housing is heavy cast aluminum with heavy wall cast aluminum supports & heavy gauge spun aluminum cover.
- Incorporates precision-designed optical lenses to avoid light trespass
- Cast aluminum mounting bracket is designed to fit a 2-3/8" or 3" OD tenon/pole; other tenon sizes available
- Clear impact resistant acrylic lens.

# D821-L



### Ordering Information

#### A FIXTURE SERIES

D821-L	Architectural Diamond LED Luminaire
--------	-------------------------------------

#### B WATTAGE/LUMENS

40	40W/5450 <sup>3,B</sup>
60	60W/7500 <sup>3,B</sup>
80	80W/10300 <sup>3,B</sup>
120	120W/14500 <sup>3,B</sup>

#### C CCT

30	3000K
35	3500K
40	4000K
50	5000K <sup>4</sup>

#### D VOLTAGE

U	120-277V <sup>1</sup>
K	347-480V

#### E DISTRIBUTION

2	Type II
3	Type III
4	Type IV
5	Type V <sup>1</sup>

#### F MOUNTING

TB	Post Top 2 3/8" Tenon
TD	Post Top 3" Tenon <sup>1</sup>
TC	Custom Tenon <sup>6</sup>

#### G FINISH

Z	Bronze <sup>1</sup>
B	Black
W	White
C	Custom <sup>2</sup>

#### H OPTIONS

T	Photocell <sup>7</sup>
H	Light Shield / House Side Shield
M	Motion Sensor w/ Dimming (FSP-211) <sup>8</sup>
9	90+ CRI

<sup>1</sup> Standard for fixture

<sup>2</sup> Contact factory for custom finish

<sup>3</sup> Delivered Lumens (5000K Type V Distribution)

<sup>4</sup> Standard Color Temp.

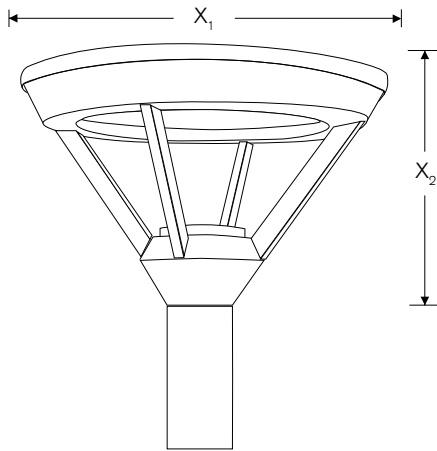
<sup>5</sup> See more info on Page 3 (FSP-211 motion sensor)

<sup>6</sup> Specify size desired or consult factory

<sup>7</sup> Please specify voltage when ordering Photocell option

<sup>8</sup> DLC Listed Wattage - see table on Page 2 for more info

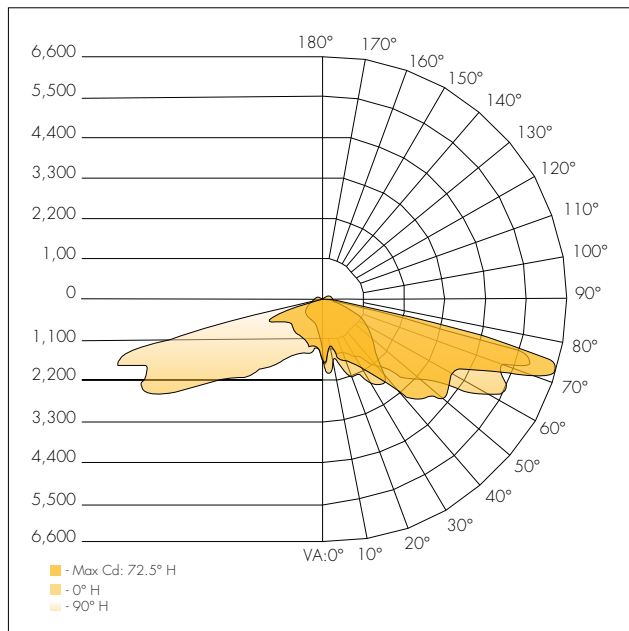
Dimensions



	Inches
X <sub>1</sub>	20.00
X <sub>2</sub>	13.00

Photometrics

Model 80W 4000K Type 2 Optics



Lumen Output

	Delivered Lumen Output			
	5000K	4000K	3500K	3000K
Standard	100%	98%	95%	93%
90+ CRI	78%	75%	73%	67%

Use above multipliers relative to the 5000K delivered lumen output to calculate lumen output for various CCT options and 90+ CRI if desired

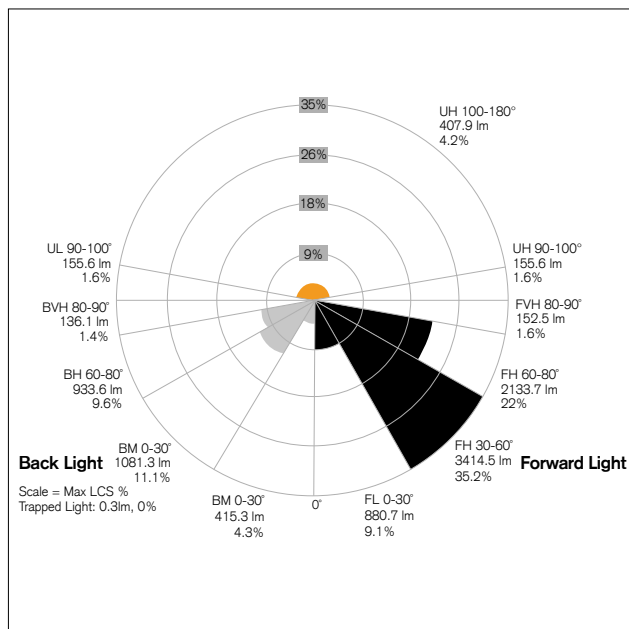
Type 2 Optics - Multiply by 0.97  
 Type 3 Optics - Multiply by 0.98

DLC Listed

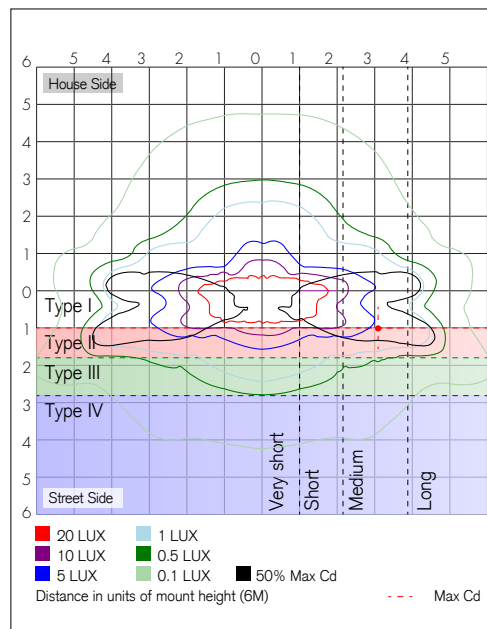
	120-277V ONLY			
	40W <sup>1</sup>	60W <sup>1</sup>	80W <sup>1</sup>	120W <sup>2</sup>
	All Optics	All Optics	All Optics	All Optics
4000K	X	X	X	X
5000K	X	X	X	X

<sup>1</sup>DLC Premium  
<sup>2</sup>DLC Standard

LCS Graph



Isolux Plot



Zonal Lumen Summary

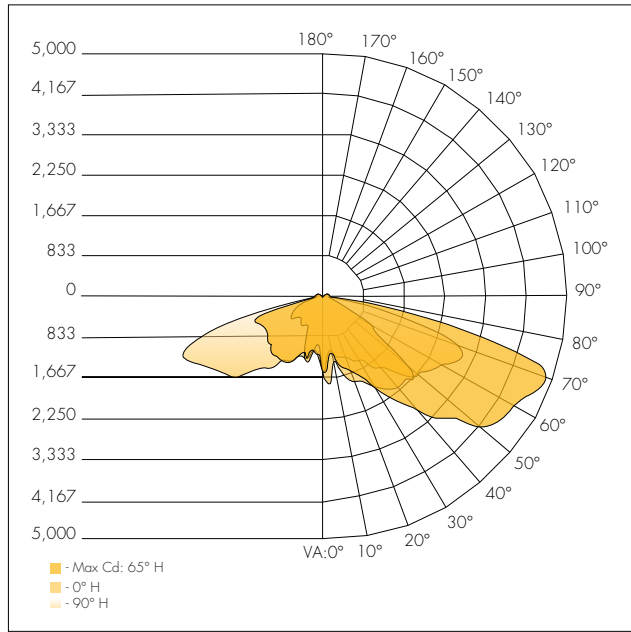
Zone	Lumens	%Luminaire
0-30	1,296.1	13.3%
0-40	2,469.1	25.4%
0-60	5,792.0	59.6%
60-90	3,355.9	34.6%
70-100	1,647.1	17%
90-120	474.9	4.9%
0-90	9,147.9	94.2%
90-180	563.6	5.8%
0-180	9,711.5	100%

BUG Rating

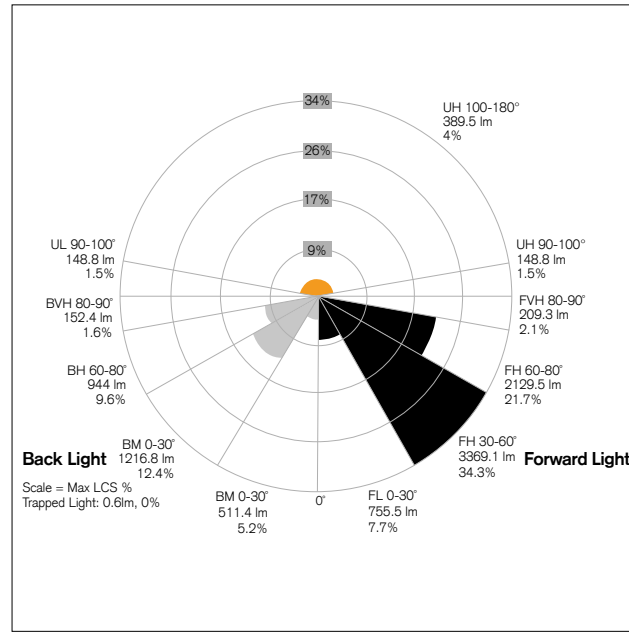
B	U	G
3	3	4

Photometrics

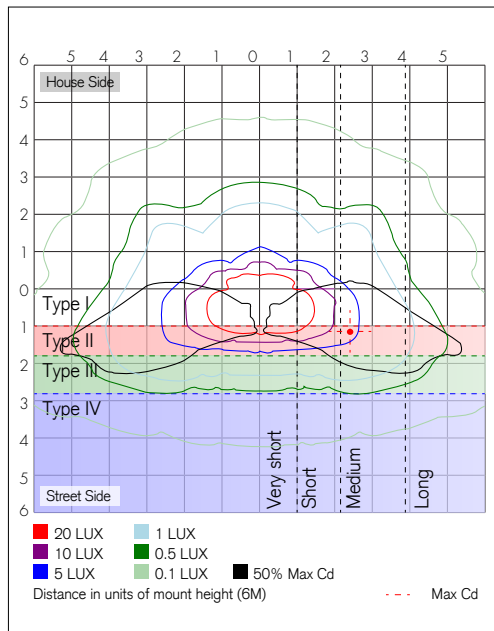
Model 80W 4000K Type 3 Optics



LCS Graph



Isolux Plot



Zonal Lumen Summary

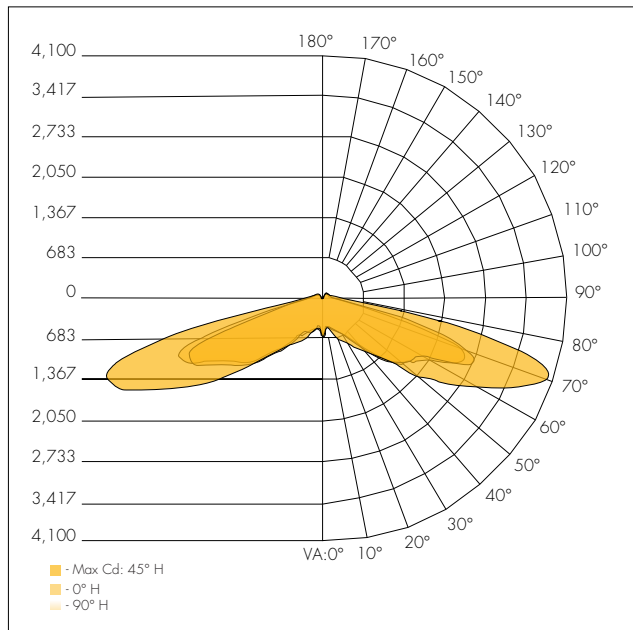
Zone	Lumens	%Luminaire
0-30	1,266.8	12.9%
0-40	2,373.4	24.2%
0-60	5,853.1	59.6%
60-90	3,435.3	35%
70-100	1,791.7	18.2%
90-120	454.7	4.6%
0-90	9,288.3	94.5%
90-180	538.5	5.5%
0-180	9,826.8	100%

BUG Rating

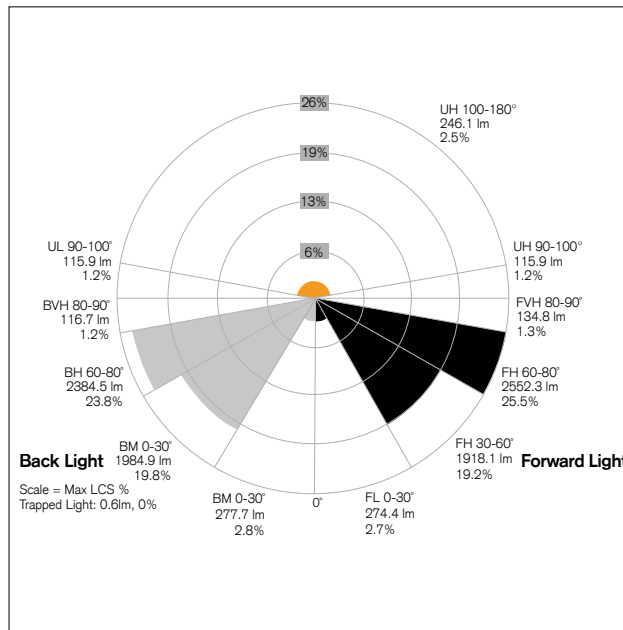
B	U	G
2	2	1

Photometrics

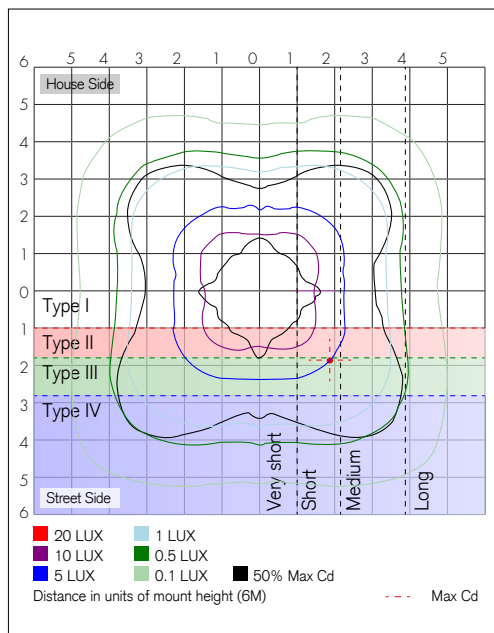
Model 80W 4000K Type 5 Optics



LCS Graph



Isolux Plot



Zonal Lumen Summary

Zone	Lumens	%Luminaire
0-30	551.9	5.5%
0-40	1,182.8	11.8%
0-60	4,456.2	44.5%
60-90	5,187.3	51.8%
70-100	2,325.8	23.2%
90-120	314.6	3.1%
0-90	9,643.5	96.4%
90-180	362.2	3.6%
0-180	10,005.7	100%

BUG Rating

B	U	G
2	3	2

**Projected LED Maintenance**

Operating Hours	0	25,000	50,000	100,000	150,000
Lumen Maintenance Factor	25°C (77°F) Ambient Outdoor Temp				
	1	0.97	0.95	0.90	0.86
	55°C (131°F) Ambient Outdoor Temp				
	1	0.94	0.89	0.80	0.71

**Step Dimming & Bi-Level**

**FSP-211**

The FSP-211 mounts in an outdoor lighting fixture and provides multi-level control based on motion. The sensor also includes a photocell to measure the ambient light level. It controls 0-10 VDC LED drivers or dimming ballasts, as well as non-dimming ballasts and, with an SFP-LX Lens, is rated for wet and cold locations. All control parameters are adjustable via a wireless configuration tool capable of storing and transmitting sensor profiles.

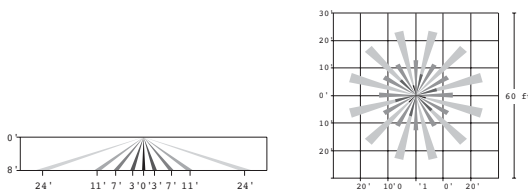
**Key Factors**

- Fully adjustable high and low dimmed light levels.
- Designed for LED fixtures; rated for extreme temperatures and up to 200,000 on/off cycles
- Hold off setpoint with automatic calibration option for convenience and added energy savings
- Adjustable via handheld wireless configuration tool
- IP66 rated with choice of lenses for wet and outdoor locations, and mounting heights from 8' to 40'
- Adjustable time delay and cut off delay

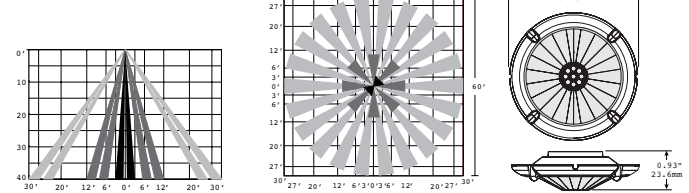


**Coverage & Dimensions**

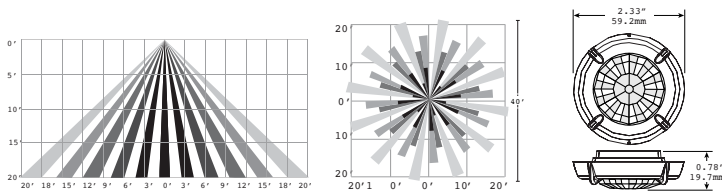
The FS-Lx lenses work with FSP-211 motion sensors to provide multi-level lighting control based on motion and the ambient light level. Four lens choices provide flexibility for varying mounting heights.



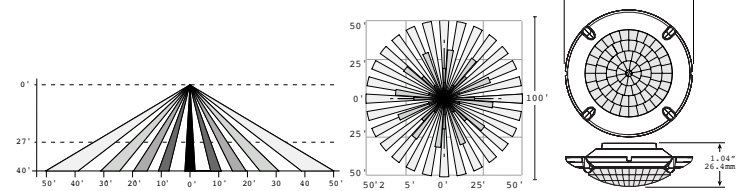
**FSP-L2**  
360° lens, maximum coverage 48' diameter from 8' height



**FSP-L4**  
360° lens, maximum coverage 60' diameter from 40' height



**FSP-L3**  
360° lens, maximum coverage 40' diameter from 20' height



**FSP-L7**  
360° lens, maximum coverage 100' diameter from 40' height

\*When a Motion Sensor (MS) option is ordered, the default lens type shipped with luminaire is FSP-L3. If another lens type is desired (L2, L4, or L7), it will ship separately to be changed out by the installer.