Project	Catalog #	Туре	
Prepared by	Notes	Date	



## Interactive Menu

- Order Information page 2
- Photometric Data page 6
- Energy and Performance Data page 7
- Connected Systems page 9
- Product Limited Warranty

### **Top Product Features**

- · Sleek design with integral electrical components and circuiting options
- · Low glare illumination with precision-engineered optical system
- Black (UGR<6) and White (UGR<13) baffle options
- Architechtural ceiling integrations
- · Up to 121 lumens per watt

### **Dimensions**







## **Product Certification**

Office 
 Education 
 Healthcare 
 Hospitality 
 Retail



### **Product Features**

**Corelite** 

**Discreet** <sup>™</sup>

LED Recessed

**Typical Applications** 



\*Self-tested by Cooper Lighting. Not a third party certification.



## **Discreet - Recessed**

### **Order Information**

SAMPLE ORDER NUMBER: DLR2-WB-M-075D-935-1BSL6-UNV-STD-WAA-W-T1-8

Icon Key: Ø Consult factory for availability Orange bar denotes coming soon

Domestic Preferences	Series	Shielding	Distribution	Lumen Package (Lms/ft)	CRI/CCT	Circuiting	Emergency
Domestic Preferences	Series	Shielding	Distribution	Lumen Package (Lms/ft)	CRI/CCT	Circuiting	Emergency
[Blank]=Standard BAA=Buy American Act	DL2R= Discreet Linear 2" Recessed	BB= Black Baffle, TIR Optic WB= White Baffle, TIR Optic	M= Medium, 80° N= Narrow, 35° ø WW= Wall Wash ø	050D= 500 Lumens/ft Down 075D= 750 Lumens/ft Down 100D= 1000 Lumens/ft Down 125D= 1250 Lumens/ft Down U= Specify ∅	930= 3000K, 90CRI 935= 3500K, 90CRI 940= 4000K, 90CRI	1=Single Circuit S=Secondary Circuit	D= No Emergency E= Emergency Circuit BSL6= Bodine 6-watt, 120V-277V Emergency Battery Pack, BSL6LST EPC= LVS Controls EPC UL924 Bypass Relay Device
Notes Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.	Notes	Notes	Notes ø Coming soon	Notes           Custom lumen output available.           Down (Direct):           Min = 150 Lms/ft           Max = 1500 Lms/ft           Consult factory to specify custom lumen package.           See Driver Availability tables for more details.           Outputs above 1000 lumens/ft are not for IC installation           Batteries are only allowed up to 1000 lumens/ft.	Notes	Notes Secondary circuit integrated sensor options.	Notes See page 8 for Battery Integration Battery available in fixtures up to a combined 2000 lms/ft. EPC option used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). 4ft Fixture with uplight not available with integrated battery and sensor in same fixture. 4ft Fixture with uplight not available with integrated battery and SR and SLI drivers in same fixture.

Voltage	Driver/Dimming	Integral Sensor Options	Options	Finish	Ceiling Type	Run Length
Voltage	Driver/Dimming	Integral Sensor Options	Options	Finish	Ceiling Type	Run Length
UNV=Univeral (120V-277V) 347=347V	STD= Standard 0-10V (1%-100%) SR= Sensor Ready (1%-100%) 5LT= Fifth Light DALI (1%-100%) LH= Lutron HiLume 1% EcoSystems (LDE1)	WAA= WaveLinx Wireless Integrated Sensor WAB= WaveLinx Lite Wireless Integrated Sensor LWIPD1 = Enlighted Wireless Integrated Sensor	CP=Chicago Plenum	W= White S= Silver B= Black CC= Custom Color	T1= 15/16" T-Grid, 9/16" T-Grid T2= 9/16" Slot T-Grid, 9/16" Tegular T-Grid, 9/16" Interlude T-Grid FG= Flanged (Gypsum Board) MD= Mud-in Flange	2= 2 ft 4= 4 ft 6= 6 ft 8= 8 ft XX= Specify Run Length
Notes	Notes	Notes	Notes	Notes	Notes	Notes
Integrated 347V driver with STD 0-10V option only.	Not all driver options are available for every configuration. See Driver Availability tables for more details.	WAA and WAB sensor must be used with "STD'driver. LWI sensor must be used with "SR" driver. Integrated Sensors combined with Emergency Circuit require one UL924 Bypass Relay per emergency fixture.	Meets CCEA requirements	CC=must denote RAL color number Consult factory for custom finishes.		See 'Standard Row Configurations' table on Page 9 for continuous row length breakdowns.



## **Discreet - Recessed**

### **Product Specifications**

### Construction

- Single-piece extruded aluminum housing
- 2.63" x 3" profile
- Die-formed 20 gauge cold rolled steel LED tray
- Driver accessible from below

### **End Caps**

- Sheet metal steel end caps with laser cut features for precision alignment to housing
- Attach mechanically to the end of the fixture without exposed fasteners above ceiling
- Integrated sensor and battery end caps add 1.88" at each end

### Lengths

- Available in 2-ft, 4-ft, 6-ft and 8-ft sections
- Modular design eliminates the need for starter, intermediate, and end of run sections
- See table on page 9 for standard continuous row length breakdowns

#### Finish

- Electrostatically applied polyester powder coat paint
- · White, silver, and black finishes are standard
- RAL custom colors are available

#### Mounting

- Recessed lay-in T-grid or visible flange gypsum installations with 1/2" flange or 1" mud-in flange available
- Fixtures can be joined for straight continuous runs using rigid alignment features

### Shielding

 BB(Black) and WB(White): Injection molded, contoured, segmented baffles with for low UGR values and improved visual comfort

#### Optics

- Precision engineered TIR optics on upper and lower LED light engines for optimal light distribution and low glare
- +  $110^{\circ}$  peak candela angle in indirect distribution
- + 80° beam angle direct distribution with 45° cutoff

#### LED and Light Engine

- · LEDs are available in 3000K, 3500K, 4000K
- CRI standard ≥90CRI
- Lumen output will be affected please refer to the lumen adjustment factor tables
- TM21 life at 60,000 hours up to L85 and calculated
- theoretical L70 exceeds 135,000 hrs • Drivers available in 120-277V and 347V

#### **Integrated Controls**

- 0-10V dimming to 1% standard
- · WaveLinx sensor compatible for IoT capability
- · Enlighted sensor compatible for IoT capability
- DALI 2.0 and Lutron dimming available

#### **Emergency Options**

- Emergency circuit option operates entire downlight portion
   of a specified unit (4 ft, 6 ft or 8 ft)
- See table on page 8 for battery integration details

#### 90-minute backup period for code compliance

- Test switch is located either in the endcap, or tile mount ceiling plate
- For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 6 = 600 lumens)
   Battery is self-testing
- UL 924 emergency/generator transfer options available

### Weight

· 2.6 lbs. per foot

#### Compliance

- cULus listed for damp locations
- Tested to IESNA LM-79 and LM-80
- RoHS compliant
- Can be used for State of California Title 24 high efficacy luminaire
- Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions
- L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours

### Warranty

 Five year warranty standard www.cooperlighting.com/legal



## **Ceiling Type**

Extruded Trim Flange Details - Refer to submittal drawings for detailed flange information - for additional options consult factory.



Note: - Actual dimensions and cutout length varies from Nominal Length as shown in the FG/MD Length Table.

73.000

97.000

72.500

96.500

2.750

2.750

1.375

1.375

72.375

96.375



72.000

96.000

6

8

## **Discrete Optical System**



## **Baffle & Finish Options**







Black Baffle White Fixture Finish



White Baffle Black Fixture Finish



Note: All Finish and Baffle combinations are available. Not all are shown. Custom color housing finishes are also available.



## **Discreet - Recessed**

View IES files

### **Photometric Data**



FILE NAME:
DL2-BB-M-0U-075D-935-UNV-
STD-W-4.les
CCT/CRI: 3500K / 90 CRI
LUMENS: 2988 Lm
WATTS: 27.6 W
EFFICACY: 108 Lm/W
TEST NO.: P559652
0% UP /100% DOWN 0°
0° (II)
90° (⊥) ———— <sup>Щ</sup>





Note: Refer to IES files for more product data.

Color Data (3500K)					
90CRI					
R <sub>f</sub>	91.3				
R <sub>g</sub>	98.4				
R <sub>a</sub>	94.6				
R <sub>9</sub>	70.2				
	R <sub>f</sub> R <sub>g</sub> R <sub>a</sub> R <sub>9</sub>				



Color Data (4000K)				
	90CRI			
R <sub>f</sub>	89.7			
R <sub>g</sub>	97.2			
R <sub>a</sub>	93.7			
R <sub>9</sub>	68.1			
	R <sub>f</sub> R <sub>g</sub> R <sub>a</sub> R <sub>9</sub>			



### Luminance Data

Luminance (cd/sq.m) - Average 0-Deg. (3500K) - Black Baffle							
Average		Direct Lumen	Package				
Candela Degrees	050D	075D	100D	125D			
45	8851	13345	18250	22995			
55	1012	1575	2025	2559			
65	0	0	0	38			
75	0	0	0	0			
85	0	0	0	0			

Note: Refer to IES files for more product data

### Nominal Lumen Maintenance

Ambient Temperature TM-21 Lumen Maintenance (60,00 hours) (1)		Theoretical L70 (Hours) <sup>(2)</sup>
25°C	>85%	>135,000

**Notes:** (1) Supported by IES TM-21 standards. (2) Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, that explains proper use of IES TM-21 and LM-80.

Luminance (cd/sq.m) - Average 0-Deg. (3500K) - White Baffle						
Average		Direct Lumen	Package			
Candela Degrees	050D	075D	100D	125D		
45	10220	15010	20554	25071		
55	1912	2897	3797	4809		
65	802	1221	1641	2023		
75	748	1184	1558	1932		
85	740	1110	1296	1666		



## **Discreet - Recessed**

## **Energy and Performance Data - Black Baffle**

Discre	Glare			
Lumen Package	Lumens/ft Down	W/ft Total	Lm/W	UGR (1-2)(4-6)
050D	502	4.5	111	2
075D	748	6.9	108	3.4
100D	999	9.5	105	4.4
125D	1250	12.5	100	5.1

## **Energy and Performance Data - White Baffle**

Discre	Glare			
Lumen Package	Lumens/ft Down	W/ft Total	Lm/W	UGR (1-2)(4-6)
050D	549	4.5	121	9.6
075D	816	6.9	118	11.1
100D	1091	9.5	115	12
125D	1363	12.5	109	12.8



KEY:		

	Meets WELL v2
TEXT	Meets LEED v4.1

Notes:

(1) UGR values per CIE 190:2010 with 4H, 8H, Reflectance: 70% Ceiling, 50% Wall, 20% Ref. Plane

(2)For other UGR data for room or reflective ceiling plans please see technical data on website.

(3) Luminance measured at 45-90 degrees from nadir.

(4) UGR and Luminance values that meet WELL v2 L04 requirements for Managing Glare are shown with green highlighted cell. (UGR < 16, Luminance < 6,000, Indirect-only)</li>
 (5) UGR and Luminance values that meet LEED v4.1 requirements for Glare Control are shown with green text. (UGR < 19, Luminance < 7,000, Indirect-only)</li>

(6) For technical data of other configurations and most accurate data please see the IES files in the photometric section on website or click link at top-right

Lumen Adjustment & Melanopic Ratios

	3000K	3500K	4000K
CRI	90+	90+	90+
Lumen Multiplier	0.962	1.000	1.058
Melanopic Ratio		0.645	0.75

Lumen Adjustment Example Calculation: 075D / 3500K / 90 CRI Lumen Output selected = 748 lms/ft

<u>4000K / 90 CRI Desired</u> Lumen Adjustment Factor = 1.058

Adjusted Lumen Output = 748 lms/ft x 1.058 = 791 lms/ft



## Discreet - Recessed

### 🖌 Control Systems

- WaveLinx Wireless
- WaveLinx Wired
- WaveLinx Lite
- Enlighted
- iLumin Plus
- VividTune



The Discreet with Integrated Sensor technology provides automatic energy savings without sacrificing performance. The Discreet delivers superior lighting with integrated occupancy and daylighting controls. For standalone and controlled applications, the WaveLinx Lite integral sensor provides out-of-the-box functionality with no gateways required and factory startup is not needed. When more connectivity is required, the Wavelinx Wireless sensor delivers potential energy and cost savings, while enabling buildings to become smart buildings. The WaveLinx Wireless Connected Lighting System combined with Trellix provides an open IoT platform and infrastructure that connects intelligent sensors leveraging the real-estate of the physical light fixture to solve higher complexity problems to deliver actionable insights through the aggregation of valuable data. For additional information integrated sensors and connected lighting, please visit Cooper Lighting Solutions' Connected Lighting Website.









Discreet Recesssed with Integrated Sensor - Endcap



Discreet Recessed with Integrated Sensor - Center Mount

and the set

	Standalone	Controlled WaveLinx Lite	Connected WaveLinx Wireless	<b>Enterprise</b> Trellix
Occupancy	Yes	Yes	Yes	Yes
Daylighting	Yes	Yes	Yes	Yes
Gateways	-	-	1 WAC	300 WACs
Devices	-	50 per Area (1400 per site)	150 per WAC	45,000 per Core Enterprise
Software	-	WaveLinx Lite Mobile App	WaveLinx Mobile App	Trellix Core
Areas	-	28 per Site	16 per WAC	up to 4,800
Zones	-	16 per Area	16 per Area	up to 76,800
Scheduling	-	-	Local	Global
VividTune™	-	-	Yes	Yes
Plug-Load Co	ontrol –	_	Yes	Yes
Integration	-	-	-	BACnet, API
Dashboards	-	-	-	Energy, Occupancy
Configuration	ı –	Installer	Technician	Technician / IT

# SCALABILITY



floors

buildings



## **Default Integral Sensor Placement**

≤8ft Individual	0
10ft Continuous (6' + 4')	0 0
14ft Continuous (8' + 6')	0 0
16ft Continuous (8' + 8')	0
>16ft Continuous* (6' + 8' + 4')	0 0 0

○ Standard Sensor with Luminaire Control

 Note:
 \*See Standard Row Configuration table on Page 4.

 8' sensor spacing for continuous runs using 8' max units.
 4' and 6' units at the ends of runs will utilize sensor end caps.

## **Battery Integration**





## **Standard Row Configurations**

### 8' Unit Max

Fixture Length	4'	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'	34'	36'	38'	40'	42'	44'	46'	48'	50'	
4'	1			1	1			1	1			1	1			1	1			1	1			1	]
6'		1		1		1		1		1		1		1		1		1		1		1		1	
8'			1		1	1	2	1	2	2	3	2	3	3	4	3	4	4	5	4	5	5	6	5	
	1																		1			1	1		-
Fixture Length	52'	54'	56'	58'	60'	62'	64'	66'	68'	70'	72'	74'	76'	78'	80'	82'	84'	86'	88'	90'	92'	94'	96'	98'	100'
4'	1			1	1			1	1			1	1			1	1			1	1			1	1
6'		1		1		1		1		1		1		1		1		1		1		1		1	

### **Driver Availability**

Grid Fixture	'S1 (	ΓD' 0-1 Ωty of	IOV, U Drivei	NV rs	'5 (	LT' DA Ity of	LI / 'S Drive	rs	'L! (	5' / 'LH 2ty of	l' Lutı Drive	ron rs	'STD' 0-10V, 347V Qty of Drivers					
Lumen Package	2'	4'	6'	8'	2'	4'	6'	8'	2'	4'	6'	8'	2'	4'	6'	8'		
050D	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
075D	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
100D	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
125D	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		

Non-Grid Fixture	'S1 (	ΓD' 0-1 Ωty of	IOV, U Drivei	NV rs	'5 (	LT' DA Ity of	LI / 'S Drive	R' s	'L! (	5' / 'LH 2ty of	l' Lutı Drive	on rs	'STD' 0-10V, 347V Qty of Drivers					
Lumen Package	2'	4'	6'	8'	2'	4'	6'	8'	2'	4'	6'	8'	2'	4'	6'	8'		
050D	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
075D	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
100D	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
125D	1	1	1	2	1	1	1	2	1	1	1	2	1	1	1	2		



© 2023 Cooper Lighting Solutions All Rights Reserved. Specifications and dimensions subject to change without notice.