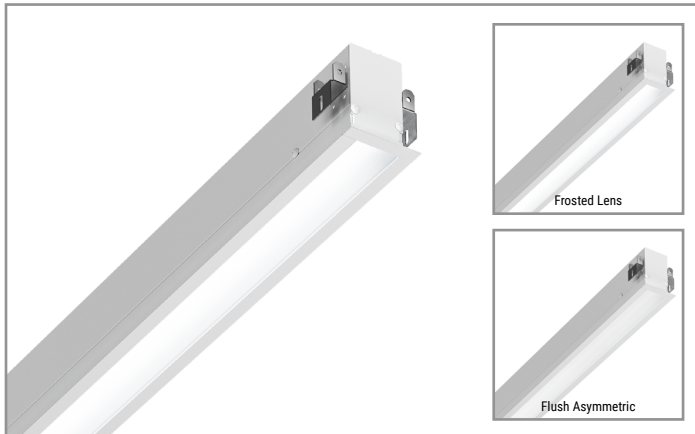


Project		Catalog #		Type	
Prepared by		Notes		Date	



# Corelite

## CL2

LED  
Recessed  
Direct

### Typical Applications

• Office • Education • Healthcare • Hospitality • Retail

### Interactive Menu

- Order Information [page 2](#)
- Photometric Data [page 3](#)
- Run Configurations [page 3](#)
- Integrated Sensor Details [page 4](#)
- Product Warranty

### Product Certification



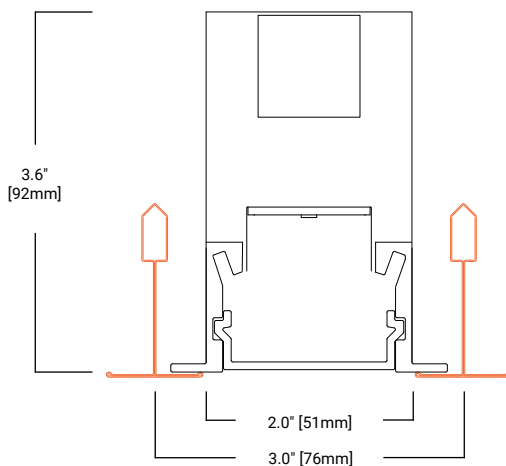
### Product Features



### Top Product Features

- 2" and 4" linear aperture sizes
- 4 ft. and 8 ft. lengths for individual or continuous runs
- High performance efficacy up to 122 lumens per watt
- Fits a variety of different architectural ceiling types
- Integrated wireless sensor control available
- Options to meet Buy American Act requirements

### Dimensions



[additional product diagrams](#)

Order Information

Icon Key: Grey bar denotes available with 10-Day Quick Ship

SAMPLE ORDER NUMBER: CL2DR-F-70D835-1B3-UNV-STD-SWPD1-CP-W-T1-20

Domestic Preferences	Light Distribution	Shielding Down	Lumen Package Down	CCT & Min CRI	Circuiting	Emergency	Voltage
<b>Domestic Preferences</b>	<b>Light Distribution</b>	<b>Shielding Down</b>	<b>Lumen Package Down</b>	<b>CCT &amp; Min CRI</b>	<b>Circuiting</b>	<b>Emergency</b>	<b>Voltage</b>
<b>[Blank]</b> =Standard <b>BAA</b> =Buy American Act	<b>CL2DR</b> =Corelite CL Series 2" Aperture Direct Recessed <b>QS-CL2DR</b> =Corelite CL Series 2" Aperture Direct Recessed Quick Ship	<b>F</b> =Frosted Flush Diffuser <b>A</b> =Asymmetric Flush Optic	<b>30D</b> =300 lumens/ft <b>50D</b> =500 lumens/ft <b>70D</b> =700 lumens/ft <b>90D</b> =900 lumens/ft <b>100D</b> =1000 lumens/ft	<b>830</b> =3000K, 80+ CRI <b>835</b> =3500K, 80+ CRI <b>840</b> =4000K, 80+ CRI <b>930</b> =3000K, 90+ CRI <b>935</b> =3500K, 90+ CRI <b>940</b> =4000K, 90+ CRI	<b>1</b> =Single Circuit <b>S</b> =Secondary Circuit	<b>E</b> =Emergency Circuit <b>B3</b> =lota 5-watt 120V-277V Integral EM Battery <b>EPC</b> =EPC UL924 Device	<b>UNV</b> =Universal (120-277V) <b>347</b> =347V
<b>Notes</b> 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.	<b>Notes</b>	<b>Notes</b> All lensing options are snap-in lenses	<b>Notes</b> Nominal lumen output. Refer to performance table on Page 3 for more detail.	<b>Notes</b> Additional lead-time may apply for 930, 935 and 940 configurations.	<b>Notes</b> Secondary circuit similar to A/B switching. Secondary circuit not available with sensor options.	<b>Notes</b> Fixture Non-IC-Rated for internal battery and lumen output ≥1000 Lms/ft. External battery standard with chicago plenum.	<b>Notes</b> 347V only available with STD driver.

Integral LED Driver	Integrated Sensor	Options	Finish	Ceiling Type	Length
<b>Integral LED Driver</b>	<b>Integrated Sensor</b>	<b>Options</b>	<b>Finish</b>	<b>Ceiling Type</b>	<b>Length</b>
<b>STD</b> =Standard 0-10V (1%-100%) <b>SLT</b> =Fifth Light DALI (5%-100%) <b>LH</b> =Lutron HiLume 1% EcoSystems (LDE1) <b>L5</b> =Lutron 5-Series 5% EcoSystems (LDE5)	<b>SWPD1</b> =WaveLinX Wireless Integral Sensor <b>LWIPD1</b> =LumaWatt Pro Wireless Integrated Sensor <b>SVPD1</b> =0-10V Stand-alone Integrated Sensor	<b>CP</b> =Chicago Plenum	<b>W</b> =White	<b>T1</b> =15/16" T-Grid, 9/16" T-Grid <b>T2</b> =9/16" Slot T-Grid, 9/16" Tegular T-Grid <b>FG</b> =Flanged (Gypsum Board)	<b>4</b> =4' Individual <b>8</b> =8' Individual <b>XX</b> =4' Incremental Run (e.g. 40=40')
<b>Notes</b> Additional lead-time may apply for SLT, LH, and L5 configurations.	<b>Notes</b> Sensor options must be used with 'STD' driver. Please refer to page 4 for additional detail. Integral sensor not available with asymmetric lens option. Additional lead-time may apply for LWIPD1 and SVPD1 configurations.	<b>Notes</b> Meets CCEC requirements	<b>Notes</b>	<b>Notes</b> Please refer to ceiling interface diagrams for additional detail and dimensions.	<b>Notes</b> Standard row configurations over 8' consist of 4' and 8' luminaires.

Product Specifications

Construction

- Formed housing with precision cut housing trim extruded from 6063 aluminum.
- Laser-cut formed cold rolled steel endcaps
- Die-formed 22 gauge cold rolled steel pre-paint white reflector
- Driver accessible from below
- These fixtures may have MWS (Modular Wiring System) added. Consult factory for details.

Lengths

- 4 ft and 8 ft fully illuminated sections for individual and continuous runs
- See table on page 3 for continuous row length breakdowns

Finish

- Electrostatically applied polyester powder coat paint

Mounting

- Recessed lay-in for T-grid installation or direct into gypsum with 1/2" flange
- All sections are continuously wired with plug-in connectors for fast installation
- Fixtures can be joined for straight continuous runs using rigid alignment features

Shielding

- Frosted (F) – Flush, high diffusion pixilation-free lens
- Asymmetric (A) – Flush, internal prismatic design for asymmetric distribution
- Patent-pending under-lens solution eliminates light leak

Light Engine

- LED's are available in 3000K, 3500K, 4000K
- CRI options of either ≥80CRI or ≥90CRI
- Lumen output will be affected - please refer to the lumen adjustment factor tables
- TM21 life at 60,000 hours up to L94 and calculated L70 exceeds 400,000 hrs
- Drivers available in 120-277V and 347V

Integrated Controls

- 0-10V dimming to 1% standard
- WaveLinX sensor compatible for IoT capability
- LumaWatt Pro sensor compatible for IoT capability
- SVPD sensor compatible for out of the box functionality
- DALI 2.0 and Lutron dimming available

Emergency Options

- Default emergency circuit section (E) is 4 ft. in length and located at the beginning of the fixture unless designated elsewhere
- Optional 120-277V emergency battery provided internal to fixture with pre-wired external test switch
- 90-minute backup period for code compliance
- Estimated lumen output = battery wattage x min efficacy - see performance table (e.g. 100 lm/W x 5 = 500 lumens)
- UL 924 emergency/generator transfer options available

Weight

- 2.5 lbs. per foot

Compliance

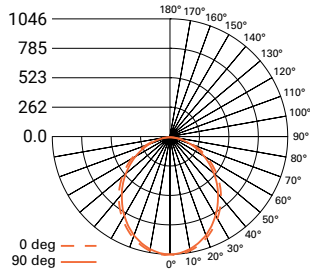
- cULus listed for damp locations
- Meets NYC requirements
- IC Rated for insulation contact (except where noted)
- Tested to IESNA LM-79 and LM-80
- Stated life per TM21 standards
- Can be used for State of California Title 24 high efficacy luminaire
- DesignLights Consortium® Qualified and classified for DLC Standard, refer to [www.designlights.org](http://www.designlights.org) for details

Warranty

- Five year warranty standard.

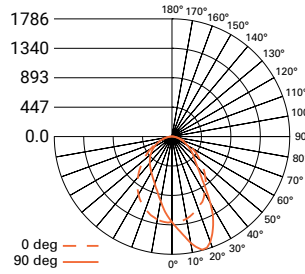
Photometric Data

[View IES files](#)



**FILE NAME:**  
**CL2DR-F-70D835-1-UNV-STD-W-4**  
**LUMENS:** 2646 Lms  
**LPW:** 101 LPW  
**CCT:** 3500K  
**WATTS:** 26.3 W  
**TEST NUMBER:** G3-1802-639-10

FROSTED FLUSH LENS



**FILE NAME:**  
**CL2DR-A-70D835-1-UNV-STD-W-4**  
**LUMENS:** 2870 Lms  
**LPW:** 109 LPW  
**CCT:** 3500K  
**WATTS:** 26.4 W  
**TEST NUMBER:** G3-1802-639-19

ASYMMETRIC LENS

Note: Refer to IES files for more product data.

Photometric Overview and Performance Data

CL2DR LED Light Level Outputs (3500K, 80 CRI)				
Series	Lumen Package	Delivered Lumens	Wattage	Efficacy LPW
		Per FT	Per FT	
CL2DR	30D	290	2.9	100
	50D	475	4.7	101
	70D	662	6.6	101
	90D	844	8.7	97
	100D	980	10.3	95

LUMEN ADJUSTMENT FACTORS

CCT	80CRI	90CRI
3000K	0.943	0.815
3500K	1.000	0.861
4000K	1.010	0.892

LUMEN ADJUSTMENT CALCULATIONS

Example - Adjusted Lumen Output

Nominal Lumen Output selected = 50D = 485 lms/ft (based on standard of 3500K/80CRI)  
 Lumen Adjustment Factor = 0.861 (3500K/90CRI desired)

Adjusted Lumen Output = Nominal Lumen Output x Lumen Adjustment Factor  
 Adjusted Lumen Output = 485 lms/ft x 0.861 = 418 lms/ft

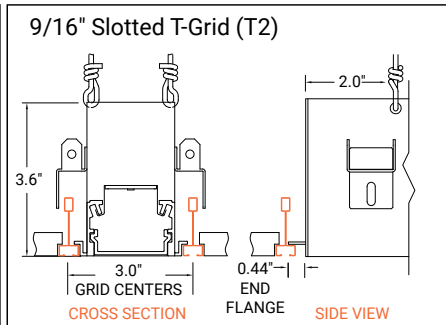
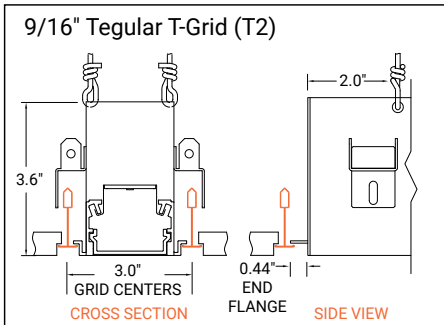
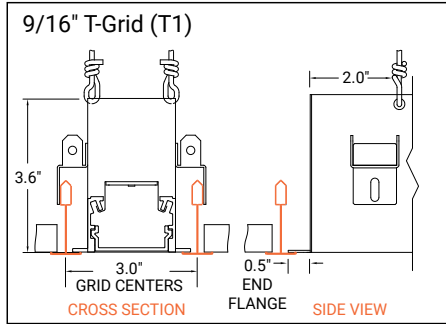
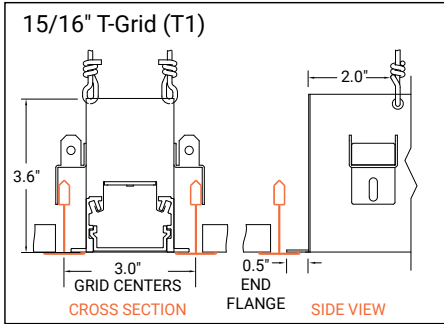
Run Configurations

Standard Length	4ft	8ft	12ft	16ft	20ft	24ft	28ft	32ft	36ft	40ft	44ft	48ft	52ft	56ft	60ft	64ft	68ft	72ft	76ft	80ft	84ft	88ft	92ft	96ft
4ft	1		1		1		1		1		1		1		1		1		1		1		1	
8ft		1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12

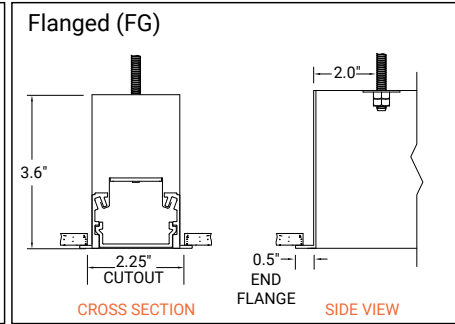
Ceiling Type

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

Grid Ceiling Systems



Drywall Ceiling



Drywall ceiling note: actual length of 'fg' fixtures will be 1" shorter in length than total requested run length for all recessed fixtures

Overall run length = 'fixture order length' - 1"  
e.g. - overall run length of 47" will ship when ordering a '4ft' fixture

Ceiling cutout = 'overall run length' + 0.25"  
Or ceiling cutout = 'fixture order length' - 0.75"  
e.g. - ceiling cutout when ordering a '4ft' length fixture will be 47.25"  
e.g. - ceiling cutout when ordering a '20ft' length fixture will be 239.25"

Integrated Sensor Details and Placement

Sensor Type	Wireless	Sensor Integration	Sensor Mounting	Ordering Code
WaveLinx	Yes	Integral to Fixture	Mounted in solid cover	SWPD1
LumaWatt Pro (enlighted)	Yes	Integral to Fixture	Mounted in illuminated lens	LWIPD1
Stand-Alone SVPD1	No	Integral to Fixture	Mounted in solid cover	SVPD1

Optional standalone and wireless connected integrated sensors require use of the STD (0-10V) driver. WaveLinx and LumaWatt Pro sensors require additional system hardware (not provided) for full functionality. Tilemount sensor recommended for optimal sensor coverage on perimeter applications. Tilemount sensor not available with Chicago plenum option.

Standard sensor layout is shown below. Please refer to sensor coverage pattern diagrams to ensure proper coverage for the application. Standard configurations are available in both individual fixtures and in continuous runs.

For additional information integrated sensors and connected lighting, please visit [Eaton's Connected Lighting Website](#).

- Standard Sensor with Luminaire Control
- Auxiliary Sensor used for Sensor Coverage (wireless systems only)

INTEGRAL SENSOR LAYOUT EXAMPLES

