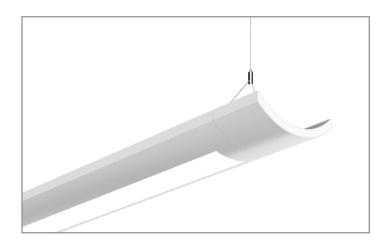
Project	Catalog #	Туре	
Prepared by	Notes	Date	



# **Corelite**

# Iridium i3

LED Suspended Direct / Indirect

### **Typical Applications**

• Office • Education • Healthcare • Hospitality • Retail

# Interactive Menu

- Order Information page 2
- Product Specifications page 2
- Photometric Data page 3
- Energy and Performance Data page 3
- Control Systems page 5
- Product Warranty

## **Product Certification**







# **Product Features**





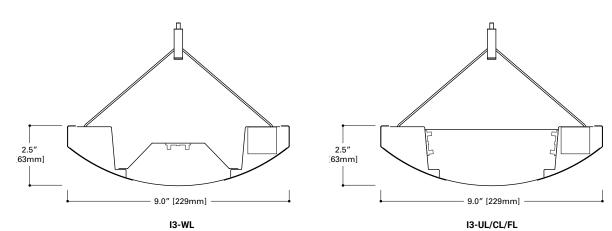




# **Top Product Features**

- · Timeless curvilinear low profile design
- Wide array of direct/indirect distributions
- · Efficacy up to 158 lumens per watt
- · Available in 4', 8', and Continuous runs
- White tuning solutions available, either 3000K 5000K or 2700K 6500K

## **Dimensions**







### Order Information

#### SAMPLE ORDER NUMBER: I3-CL-40L835-1D-UNV-STD-WAA-W-ES-AC48-T1-32

Series	Indirect Shielding	Direct Shielding	Lumen Package Nominal per 4' section	CRI	Color Temperature	Circuiting	Additional Section Wiring	Voltage
Series	Indirect Shielding	Direct Shielding	Lumen Package Nominal per 4' section	CRI	Color Temperature	Circuiting	Additional Section Wiring	Voltage
i3=Iridium i3 Suspended Direct/Indirect	U=0pen Top (80% Up / 20% Dn) C=Clear Top Cover (75% Up / 25% Dn) F=Frosted Top Cover (65% Up / 35% Dn) W=Downlight Tray (20% Up / 80% Dn)	L=Frosted Smooth Lens	20L=2,000 Lms (500 lms/ft) 30L=3,000 Lms (750 lms/ft) 40L=4,000 Lms (1,000 lms/ft) 50L=5,000 Lms (1,250 lms/ft) 60L=6,000 Lms (2,000 lms/ft) 80L=8,000 Lms (2,000 lms/ft)	DL=3,000 Lms (750 lms/ft) DL=4,000 Lms (1,000 lms/ft) DL=5,000 Lms (1,250 lms/ft) DL=6,000 Lms (1,500 lms/ft)		1=Single Circuit	D=None (Default Dimming) E=Emergency Circuit S=Secondary Circuit N=Secondary + Emergency Circuit	UNV=Universal (120V-277V) 347=347V
			Notes		Notes	Notes	Notes	Notes
			Custom lumen output available. 60L and 80L not available with WL shielding option.	Tunable White options to be used with W2A driver only. Must be used with two (2) 10V dimming control channels, 1 color, 1 intensity. Not compatible with other control or sensor options.		Refers to wiring in cross section.	Select 'D' wiring for individual fixtures. Secondary circuit not available with integrated sensor options.	Integral 347V driver with STD 0-10V option only. Factory supplied 347V remote transformer for all other driver options

<b>Driver/Dimming Options</b>	Integrated Sensing Systems	Integral Emergency Devices	Finish	End Cap	Suspension Type	Ceiling Type	Run Length
Driver/Dimming Options	Integrated Sensing Systems	Integral Emergency Devices	Finish	End Cap	Suspension Type	Ceiling Type	Run Length
STD=Standard 0-10V (1%-100%) SR=Sensor Ready (1%-100%) SLT=Fifth Light DALI (1%-100%) LH=Lutron HiLlume 1% EcoSystems (LDE1) W2A=White Tuning, 2ch, 0-10V Intensity and CCT Control	SR=Sensor Ready (1%-100%) SLT=Fifth Light DALI (1%-100%) LH=Lutron HiLume 1% EcoSystems (LDE1) W2A=White Tuning, 2ch, 0-10V Intensity LH=Lutron Hillume 1% EcoSystems (LDE1) W2A=White Tuning, 2ch, 0-10V Intensity		W=White S=Silver B=Black CC=Custom Color	ES=Straight End Cap EB=Beveled End Cap	AC48=48" Aircraft cable AC120=120" Aircraft cable AC240=240" Aircraft cable	T1=15/16" T-Bar T9=9/16" T-Bar TS=Slotted T-Bar JB=Junction Box / Structure UM=Universal Ceiling kit (T1, T9, JB) _S=Swivel at Canopy (_ = T1, T9, TS or JB)	4=4 ft 8=8 ft XX=Specify Run Length
Notes	Notes	Notes			Notes	Notes	
One driver per 4' section unless otherwise noted.	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 section.	EPC option used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others).			Suspension length available up to 360°. White mounting hardware standard; for black mounting hardware, add *-B° after ceiling type.		See 'Standard Row Configurations' table on Page 4 for continuous row length breakdowns.

# **Product Specifications**

#### Construction

- · Low profile curvilinear 2.5" x 9" housing
- Die-formed 20 gauge cold rolled steel Driver accessible from above while fixture is suspended

#### **End Caps**

- · Die cast aluminum end caps
- Standard straight or beveled endcaps
- Attach mechanically to the end of the fixture without exposed fasteners Standard end cap adds 5" at each end. Beveled end
- cap adds 2" at each end.

#### Lengths

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

- · Electrostatically applied polyester powder coat
- White, Silver, or Black finish standard
- · RAL custom colors are available

#### Mounting

- Aircraft cable mounts on 4'-0" and 8'-0" centers, equal to the respective unit length
- Fixture is balanced with cross cable for minimal leveling and simple installation

- Minimum suspension height from ceiling to top of fixture is 8"
- All sections are continuously wired with push-in connectors for fast installation
- Fixtures can be joined for straight continuous runs
- Refer to installation instructions for various ceiling interface details

#### **Shielding / Optics**

- Bottom lens is a high light transmission 0.08" thick frosted smooth acrylic
- Optional top cover optics allow light distribution adjustment
- Top optics are 0.06" thick acrylic and do not protrude above fixture housing

#### **LED and Light Engine**

- LED's are available in 3000K, 3500K, 4000K at 80 CRI or 90 CRI minimum
- Lumen output will be affected please refer to the
- lumen adjustment factor tables TM21 life at 60,000 hours up to L93 and calculated L70 exceeds 331,000 hrs.
- Drivers available in 120-277V and 347V
- White Tuning options available with Cooper Lighting Solutions' VividTune

### **Integrated Controls**

- · 0-10V dimming to 1% standard
- WaveLinx sensor compatible for IoT capability Enlighted sensor compatible for IoT capability
- WaveLinx Lite sensor compatible for out-of-the-box

### functionality

DALI 2.0 and Lutron dimming available

#### **Emergency Options**

- Optional 12-watt 120-277V emergency battery illuminates a 4 ft. down-light section
- 90-minute backup period for code compliance
- Test switch/indicator button located on the top side of the luminaire
- 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 12 = 1200 lumens)
- UL 924 emergency/generator transfer options available

· 4.0 lbs. per foot

#### Compliance

- cULus listed for damp locations, 25°C ambient environments
- 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

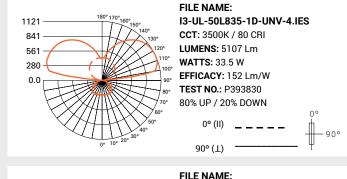
### Warranty

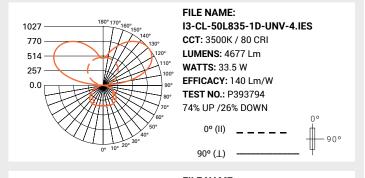
· Five-year warranty standard. Optional ten year warranty available. www.cooperlighting.com/legal

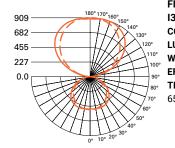


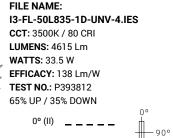
### **Photometric Data**

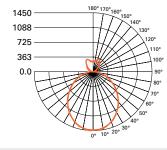












FILE NAME:

13-WL-50L835-1D-UNV-4.IES

CCT: 3500K / 80 CRI

LUMENS: 4767 Lm

WATTS: 42.9 W

EFFICACY: 111 Lm/W

TEST NO.: P393848

20% UP /80% DOWN

90° (L)

Note: Refer to IES files for more product data.

# **Energy and Performance Data**

Iridium i3 LED Light Level Outputs and Distributions (3500K)													
Series /	Lumen	Delivered	l Lumens	Wat	tage	Efficacy LPW	Distri	bution					
Distribution	Package	4FT Per FT		4FT	4FT Per FT		%Up	% Down					
	20L	1988	497	12.8	3.2	155							
	30L	3111	778	19.7	4.9	158							
i3-UL	40L	4058	1015	27.9	7.0	145	80%	20%					
13-UL	50L	5107	1277	33.5	8.4	152	80%	20%					
	60L	6141	1535	41.3	10.3	149							
	80L	8002	2001	57.2	14.3	140							
	20L	1821	455	12.8	3.2	142		25%					
	30L	2849	712	19.7	4.9	145							
:0.01	40L	3716	929	27.9	7.0	133	750						
i3-CL	50L	4677	1169	33.5	8.4	140	75%						
	60L	5624	1406	41.3	10.3	136							
	80L	7329	1832	57.2	14.3	128							
	20L	1796	449	12.8	3.2	140							
	30L	2811	703	19.7	4.9	143							
i3-FL	40L	3667	917	27.9	7.0	131	65%	35%					
13-FL	50L	4615	1154	33.5	8.4	138	05%	35%					
	60L	5550	1388	41.3	10.3	134							
	80L	7232	1808	57.2	14.3	126							
	20L	1900	475	14.9	3.7	128							
:0.14//	30L	2894	724	23.1	5.8	125	000	000/					
i3-WL	40L	3916	979	34.7	8.7	113	20%	80%					
	50L	4767	1192	42.9	10.7	111							

90°(工)

#### **Lumen Adjustment Factors**

CCT Multiplier	80 CRI	90 CRI
3000K	0.961	0.830
3500K	1.000	0.861
4000K	1.019	0.883

### **Example Calculation:**

I3-UL-40L / 3500K / 80 CRI

Lumen Output selected = 1015 lms/ft

3500K / 90 CRI Desired

Lumen Adjustment Factor = 0.861

Adjusted Lumen Output = 1015 lms/ft x 0.861 = 874 lms/ft

#### **Nominal Lumen Maintenance**

Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (Hours)
25°C	>93%	331,000

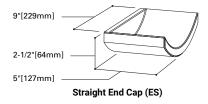
Notes: (1) Theoretical values represent estimations. Refer to LED Product Lifetime Prediction, IES PS-10-18, that explains proper use of IES TM-21 and LM-80.

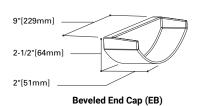
### Color Data (3500K)

		80CRI	90CRI
TM-30-15	R <sub>f</sub>	82.5	92.4
1 M-30-13	$R_g$	96.0	100.6
CDL/CIE	R <sub>a</sub>	83.1	96.1
CRI/CIE	R <sub>9</sub>	14.0	72.1

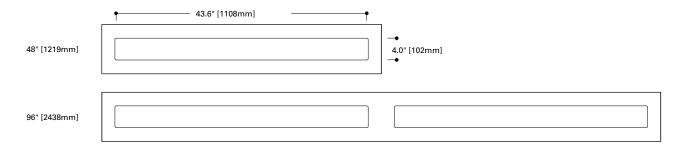


# **End Cap Dimensions**





# **Fixture Lengths**



# **Standard Row Configurations**

Fixture Length	4'	8'	12'	16'	20'	24'	28'	32'	36'	40'	44'	48'	52'	56'	60'	64'	68'	72'	76'	80'	84'	88'	92'	96'	100'
4'	1		1		1		1		1		1		1		1		1		1		1		1		1
8'		1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12





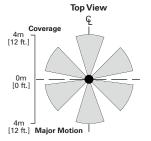
# Control Systems

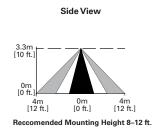
- · WaveLinx Wireless
- · WaveLinx Wired
- · WaveLinx Lite
- Enlighted
- · iLumin Plus
- VividTune



The Iridium i3 with Integrated Sensor technology provides automatic energy savings without sacrificing performance. The Iridium i3 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 meets modern code and utility requirements, delivers 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







# **Sensor Integration**

Integrated sensors are located in the middle of each 8' section and on the end of 4' sections for individual and continuous runs. Each section can be individually controllable or grouped together with the integrated sensors.

# Systems comparison chart

Cooper Lighting Solutions provides many lighting system solutions designed to satisfy code requirements and meet the unique needs of any project.









		_			
	Standalone	<b>Controlled</b> WaveLinx Lite	<b>Connected</b> WaveLinx Wireless	Enterprise 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 Contro	ol –	-	Yes	Yes	
Integration	-	-	-	BACnet, API	
Dashboards	-	-	_	Energy, Occupancy	
Configuration	-	Installer	Technician	Technician / IT	

# SCALABILIT





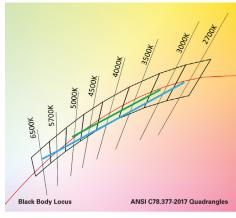


#### Iridium with VividTune Tunable White

VividTune tunable white luminaires from Cooper Lighting Solutions deliver high-quality light in a broad range of continuously variable color temperatures and intensities. Create a dynamic environment by adjusting the ambient light warmer or cooler to influence mood, support the task at hand, or create a dramatic ambience. The ability to control correlated color temperature and intensity separately using simple controls is the next evolution of LED lighting for the commercial, educational, healthcare and hospitality space. The unparalleled flexibility and number of available lighting environments enable users to find the right light with tunable white.

### **Performance Data**

Tunable White - i3 LED Light Level Outputs (83050 tuned to 3500K)											
	_	Delivered	d Lumens	Wat	tage						
Series	Lumen Package	4FT	Per FT	4FT	Per FT	Efficacy LPW					
	20L	2357	589	16.2	4.1	146					
	30L	3031	758	20.7	5.2	146					
	40L	4038	1009	27.9	7.0	145					
i3-UL	50L	5042	1260	35.5	8.9	142					
	60L	6073	1518	44.1	11.0	138					
	80L	8033	2008	62.3	15.6	129					
	20L	2160	540	16.2	4.1	133					
	30L	2776	694	20.7	5.2	134					
	40L	3698	924	27.9	7.0	133					
i3-CL	50L	4617	1154	35.5	8.9	130					
	60L	5561	1390	44.1	11.0	126					
	80L	7357	1839	62.3	15.6	118					
	20L	2129	532	16.2	4.1	131					
	30L	2739	685	20.7	5.2	132					
	40L	3649	912	27.9	7.0	131					
i3-FL	50L	4555	1139	35.5	8.9	128					
	60L	5488	1372	44.1	11.0	124					
	80L	7260	1815	62.3	15.6	117					
	20L	1963	491	17	4.3	115					
	30L	2857	714	25.8	6.5	111					
i3-WL	40L	3805	951	46.7	9.2	104					
	50L	4813	1203	50.7	12.7	95					



3000K - 5000K 2700K - 6500K

Tunable White - Lumen Adjustment Factors											
ССТ	3000K-	-5000K	2700K-6500K								
CCI	80 CRI	90 CRI	80 CRI	90 CRI							
2700K	-	-	0.918	0.784							
3000K	0.946	0.778	0.944	0.815							
3500K	1.000	0.850	0.977	0.856							
4000K	1.053	0.919	0.998	0.883							
4500K	1.062	0.934	1.016	0.916							
5000K	1.052	0.934	1.030	0.924							
6500K	-	-	1.045	0.949							

#### Example of Lumen Adjustment Calculation

13-UL-40L93050 ... at 90 CRI tuned to 4000K

Lumen Adjustment Factor = 0.919

Light Output Per Foot= 1009 lm/ft x 0.919 = 927 lm/ft

$$Efficacy = \frac{927 \text{ Im}}{7.0 \text{ W}} = 132 \text{ Im/W}$$

### **Controlling VividTune Tunable White**

VividTune luminaires make tunable white more accessible by using simple and familiar controls. From wall dimmers to wireless controls, VividTune tunable white luminaires are compatible with industry standard 0-10V dimming controls. A single 0-10V dimming input is used to control intensity (brightness) while a second 0-10V dimming input is used to adjust CCT. For suggested control configurations, go to <a href="https://www.cooperlighting.com">www.cooperlighting.com</a> for tunable white application guides.

Cooper Lighting Solutions

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