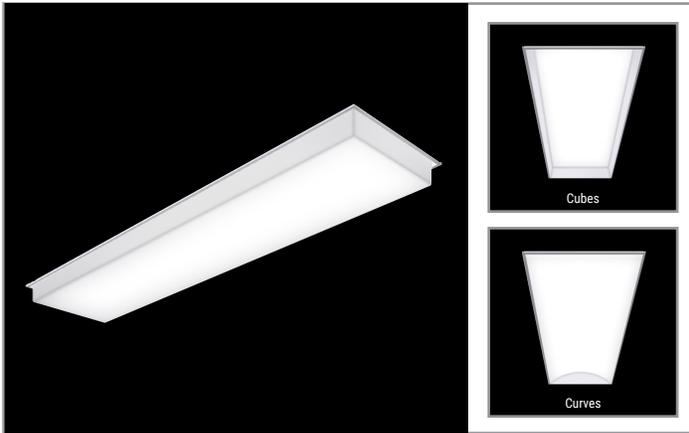


Project		Catalog #		Type	
Prepared by		Notes		Date	



Corelite

InDepth 14ID

1' x 4' LED Specification InDepth Series

Typical Applications

Office • Education • Healthcare • Hospitality • Retail

Product Certification



Systems | Features & Awards



Interactive Menu

- Order Information [page 2](#)
- Photometric Data [page 4](#)
- Connected Systems [page 8](#)
- Product Warranty

Top Product Features

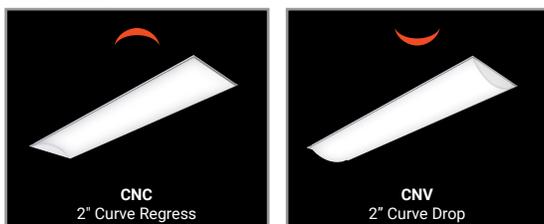
- Designer delight - create ceiling topography with regressed and drop lens options from factory or convert during installation
- Full range of lens options - cube and curve
- Regressed lens provides optical cut off with smooth lens for reduced glare
- Extruded aluminum housing is matte white powder coated
- Wireless control options maintain superb aesthetics
- Options to meet Trade Agreements Act requirements

Options

1x4 Cubes



1x4 Curves



[additional product diagrams](#)

Order Information

SAMPLE ORDER NUMBER: 141D-40-CFR2-L835-U

Domestic Preferences	Rating	Series	Lumen Output	Shielding	Voltage	Options	
Domestic Preferences ⁽¹¹⁾	Rating	Series ⁽¹⁾	Lumen Output ⁽²⁾	Shielding ⁽⁵⁾	Voltage	Options	
[Blank] =Standard TAA =Trade Agreements Act	[Blank] =Standard ATW-SW4 =Chicago Rated	141D =1x4 InDepth	Standard Efficacy 20 =2000 Lumens 25 =2500 Lumens 30 =3000 Lumens 35 =3500 Lumens 40 =4000 Lumens 45 =4500 Lumens	50 =5000 Lumens 55 =5500 Lumens 60 =6000 Lumens 70 =7000 Lumens ⁽³⁾ 80 =8000 Lumens ⁽³⁾	CFR1 =1" Cube Regressed CFR2 =2" Cube Regressed CFD1 =1" Cube Drop CFD2 =2" Cube Drop CFD3 =3" Cube Drop CNC =2" Curve Regressed CNV =2" Curve Drop	UNV =Universal Voltage 120-277 347V =347 Volt ⁽⁶⁾ 48V =48 Volt Low-voltage (Class 2) ⁽⁶⁾	GL =Single Element Fuse GM =Double Element Fuse
Notes <small>(11) Only product configurations with this designated prefix are built to be compliant with the Trade Agreements Act of 1979 (TAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.</small>	Notes <small>(1) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.</small>	Notes <small>(2) Lumens are approximate. Use IES files for actual performance. (3) SLTHD Driver not available on 70 and 80.</small>	Notes <small>(5) 1" and 2" options may be ordered as regressed or drop or they can be converted on site. 3" option must be factory ordered.</small>	Notes <small>(6) 347 with emergency not available with SD driver. (C) Consult WaveLinX Low-Voltage or DLVP system pages for additional details and compatibility.</small>			

Emergency Options	CRI/CCT	Flex
Emergency Options	CRI/CCT	Flex ⁽¹⁰⁾
[Blank] =No emergency EL7W =7-watt 120V-277V emergency battery pack ⁽⁷⁾ EL10W =10-watt 120V-277V emergency battery pack ⁽⁷⁾ EL14W =14-watt 120V-277V emergency battery pack ⁽⁷⁾ EL10WSD =10W emergency battery pack with self-diagnostic installed ^{(7),(9)} EL14WSD =14W emergency battery pack with self-diagnostic installed ^{(7),(9)} ELV7W = Low-voltage system, 7-watt emergency battery pack ^{(7),(8)} ELV14W =Low-voltage system, 14-watt emergency battery pack ^{(7),(8)} ETRD =Emergency Transfer Relay with dimming control ⁽⁸⁾	L830 =80CRI, 3000K L835 =80CRI, 3500K L840 =80CRI, 4000K L850 =80CRI, 5000K	[Blank] =No Flex A3/8-4/18GDIM =3/8" Flex with 0-10V Dimming Leads A3/8-2/18G =3/8" Flex with line and common A3/8-5/18GDIM =Flex with 0-10V Dimming leads and Blue for alternate wiring. See below for details.
Notes <small>(7) Factory installed with integral test switch/indicator/laser test. 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 7=700 lumens). IES-format photometry for luminaire under emergency operation available. Battery option increases total height by 1 inch. (8) Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). ETRD option only requires one relay when used on a dimming fixture. Must specify voltage as 120V or 277V when ordering these devices. (9) EL10WSD and EL14WSD not available with 347V. (C) Consult WaveLinX Low-Voltage or DLVP system pages for additional details and compatibility.</small>	Notes <small>(10) Multiple options available in online configurator. See additional notes on Flex below. Flex options available for 0-10V dimming control, DALI dimming control, emergency and night light functions. 72-inch factory-installed and pre-wired to driver, fitted to luminaire housing access plate with 90° enclosed FMC connector. Not all options may be combined and installation ratings vary by type. A3/8-***** series notes: Factory installed dimming option 3/8" flexible metal conduit with 2-#18 power and ground wires and 2-#18 UL-listed jacketed 0-10V +/- control wires. Meets UL 66, 83, 1479, 1569, 1581, 2556. NEC® 250.118, 300.22(C), 392, 396, 330, 501, 502, 503, 530, 504, 505, 518, 520, 530, 645, 72; Federal Specification A-A-59544 (formerly J-C-30B); all applicable OSHA and HUD Requirements. UL Classified 1-, 2-, and 3-hour through penetration with applicable fire stop product (not included). May be surface mounted, fished and/or embedded in plaster. Cable tray and approved raceway rated, install per NEC®; Environmental Air-Handling Space Installation per NEC® 300.22(C).</small>	Flexible Metal Conduit Options

Driver Type	Number of Drivers	Integrated Sensing Systems	Options	Packaging	Accessories
Driver Type	Number of Drivers	Integrated Sensing Systems	Options	Packaging	Accessories (order separately) ⁽¹²⁾
[Blank] =0-10V Driver (1%-100% Dimming) SLTD =DALI Driver (5%-100% Dimming) SLTHD =DALI Driver (1%-100% Dimming) LVI =Low-voltage System Driver (0%-100% Dimming) ⁽²⁾ SD =Step Dimming Driver (50%-100% Dimming) LH =Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming ⁽²⁾	[Blank] =1 Driver	[Blank] =No Sensor WPN =WaveLinX PRO Wireless Node without Sensor ^{(13),(A)} WTA =Factory installed WaveLinX PRO sensor Kit ^{(13),(A)} WTK =Factory installed WaveLinX LITE sensor Kit ^{(13),(B)}	[Blank] =None AM =Anti Microbial Finish	U =Unit Pack PAL = Job Pack, out of carton PALC = Job Pack, in carton	T3A END E.Q. BRACKET PARTS BAG (Standard with fixture) DF-14W-U =1' x 4' Drywall Frame Kit SK-14-WT =1' x 4' Tall Surface Mount Kit 14CF1PK =Cube 1" Replacement Lens 14CF2PK =Cube 2" Replacement Lens 14CF3PK =Cube 3" Replacement Lens 14CN2PK =Curved 2" Replacement Lens
Notes <small>Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (C) Consult WaveLinX Low-Voltage or DLVP system pages for additional details and compatibility. (F) Consult Marketplace Options - Lutron system pages for additional details and compatibility. Compatible only with driver series shown, and may require two or more drivers. Requires field commissioning to operate or dim. Contact Lutron at www.lutron.com</small>	Notes <small>(13) WPN, WTA, and WTK to be used with default driver. Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (A) Consult WaveLinX PRO system pages for additional details and compatibility. (B) WaveLinX LITE devices are not currently compatible with the WaveLinX Wireless Area Controller. Consult WaveLinX LITE system pages for additional details and compatibility.</small>	Notes <small>(12) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.</small>			

Product Specifications

Construction

- Extruded aluminum channels form rigid housing for robust life and aesthetic appeal
- Extruded edges are smooth to enable easy installation
- Earthquake clips are included on every fixture to ensure code compliance for all regions
- If desired, one extruded frame member may be removed to enable lens conversion between regress and drop arrangement during installation
- Four auxiliary fixture corner suspension points for use with suspension option
- Driver enclosures use access plate to speed wiring and conduit installation with additional KO on sides. There are six KO.
- Chicago plenum option available

Integrated Controls

- 0-10V dimming to 1% standard
- Tile mount WaveLinX sensor compatible for standalone, controlled, connected, and IoT capability
- Tile mount Enlighted sensor compatible for IoT capability
- Low-voltage driver compatible for WaveLinX Low-Voltage and DLVP applications
- DALI 2.0, Lutron, and step-dimming available

LED and Light Engine

- LED's available in 3000K, 3500K, 4000K, or 5000K at 80 CRI minimum
- TM21 life at 60,000 hours up to L86 and calculated L70 exceeds 131,000 hrs.
- Drivers available in 120-277V and 347V

Emergency Battery Options

- 120V-277V integral emergency battery pack comes in 7-watts, 10-watt, or 14-watts
- Self-diagnostic emergency battery available in 10 or 14-watts (NFPA 101® Life Safety Code®)
- Constant power to the LED system for controlled, predictable discharge
- Integrated test switch/indicator light visible from floor
- Min. 90-minute backup period for code compliance
- Integral emergency transfer relay available for generator equipped power systems

Finish

- 90% reflective, matte white enamel finish
- Full fixture housing painted after fabrication
- Back plate and J-box are constructed of code gauge steel for code compliance
- Multiple acrylic lens options enable regression and drop options from factory or change at installation
- Acrylic lenses are finely textured to optimize aesthetics, cleaning and do not show finger prints after installation
- Texture is specifically designed to limit glare from other light sources in on or off state
- 3 regressed options and 4 drop lens options enables versatility in many spaces
- Lenses are made with smooth corners and no sharp edges to enable easy cleaning and maintenance

Compliance

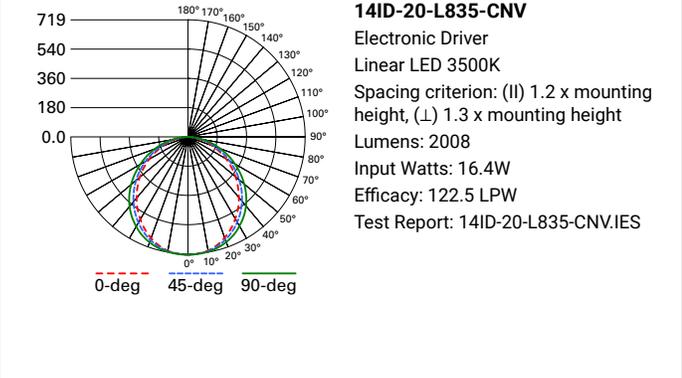
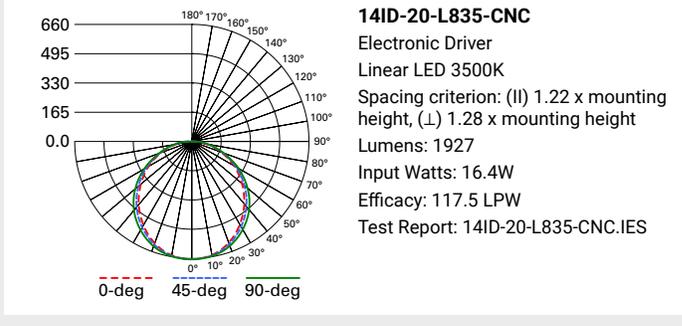
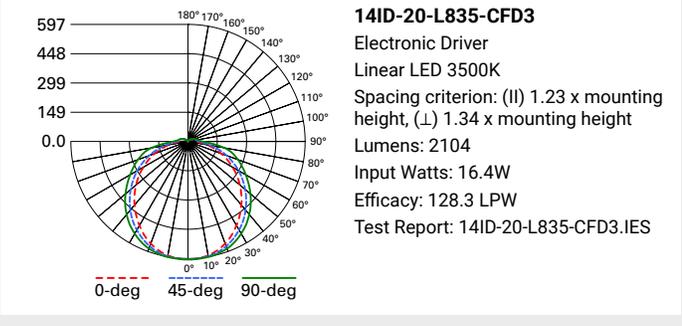
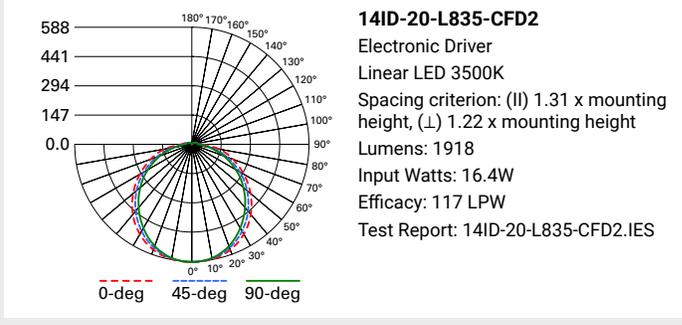
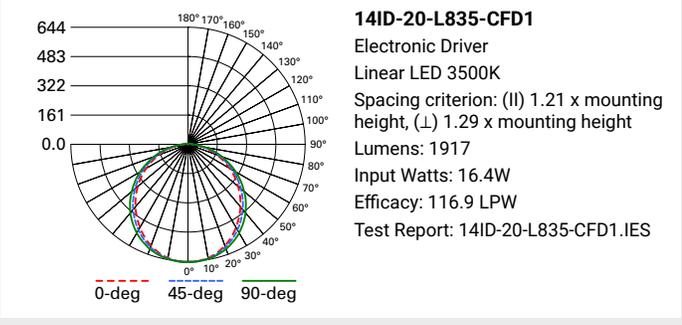
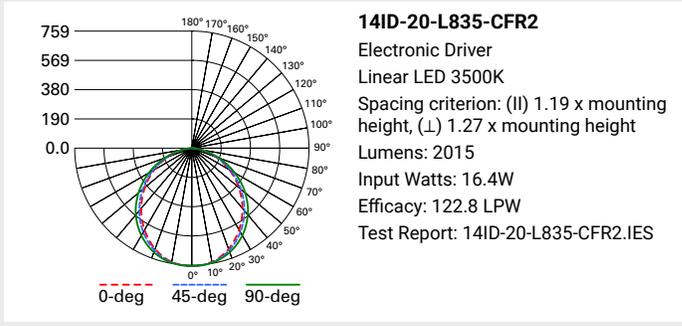
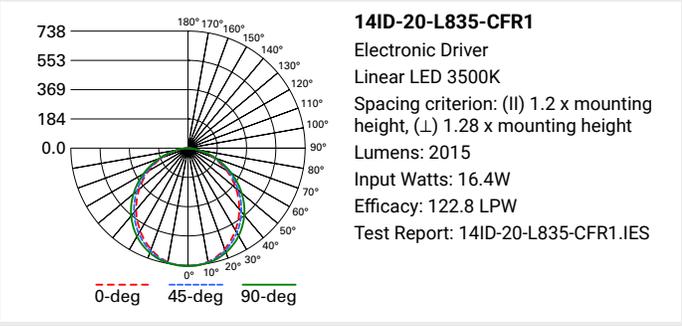
- IC rated for insulation contact
- cULus listed for damp locations for all lens options
- cULus listed for wet location, IP66, with regressed lens options
- RoHS compliant
- Tested to IESNA LM-79 and LM-80
- Stated life tested to TM21 standards
- Can be used for State of California Title 24 high efficacy luminaire
- DesignLights Consortium® Qualified and classified for DLC Standard and DLC Premium (refer to www.designlights.org)
- Contributes to meeting several WELL™ v1 and v2 Features

Warranty

- Five year warranty standard. Extended ten year warranty available. warranty available.

Photometric Data

[View IES files](#)



Other Optical Metrics

	Shielding	UGR	Uplight
	CFR1	17.5	0%
	CFR2	17.2	0%
	CFD1	17.4	2%
	CFD2	18.6	5%
	CFD3	16.6	8%
	CNC	17.3	0%
	CNV	17.3	1%

Energy and Performance Data

Electrical Performance - 1x4 Cubes

Lumen Pkg	CCT	Delivered Nominal Lumens					Power Watts	Efficacy (LPW)					Current (A)	
		CFR1	CFR2	CFD1	CFD2	CFD3		CFR1	CFR2	CFD1	CFD2	CFD3	120V	277V
2000	3500	2015	2015	1917	1918	2105	16.4	123	123	117	117	128	0.14	0.06
2500	3500	2560	2560	2437	2438	2674	20.4	126	126	119	120	131	0.17	0.07
3000	3500	3098	3098	2949	2951	3237	24.8	125	125	119	119	131	0.21	0.09
3500	3500	3525	3525	3355	3357	3683	28.4	124	124	118	118	130	0.24	0.10
4000	3500	4037	4037	3843	3845	4218	33.4	121	121	115	115	126	0.28	0.12
4500	3500	4552	4552	4333	4335	4756	38.1	120	120	114	114	125	0.32	0.14
5000	3500	5052	5052	4809	4811	5278	43.1	117	117	112	112	123	0.36	0.16
5500	3500	5548	5548	5280	5283	5796	48.2	115	115	110	110	120	0.40	0.17
6000	3500	6081	6081	5788	5791	6353	53.3	114	114	109	109	119	0.44	0.19
6500	3500	6615	6615	6296	6299	6910	58.4	113	113	108	108	118	0.49	0.21
7000	3500	7104	7104	6762	6765	7421	65.6	108	108	103	103	113	0.55	0.24
7500	3500	7578	7578	7213	7217	7917	70.9	107	107	102	102	112	0.59	0.26
8000	3500	8115	8115	7724	7728	8477	77.1	105	105	100	100	110	0.64	0.28
8500	3500	8622	8622	8206	8211	9007	83.30	104	104	99	99	108	0.69	0.30

Lumen Calculator

CCT Multiplier	80 CRI
3000K	0.98
3500K	1.0
4000K	1.03
5000K	1.07

Example of Lumen Adjustment Calculation

141D-40-CFR2-L835 at 80CRI at 5000K
 Lumen Adjustment Factor = 1.07
 Total Light Output =
 $4,037 \text{ lm} \times 1.07 = 4,320 \text{ lm}$
 Efficacy = $4,320 \text{ lm} = 131 \text{ lm/W}$
 33.4W

Optical Performance - 1x4 Cubes

Lumen Pkg	CCT	UGR [CIE 190:2010] ⁽¹⁾ (4H, 8H; Reflectance: 70% Ceiling, 50% Wall, 20% Ref. Plane)					MAX INTENSITY [45-90 DEG FROM NADIR] ⁽²⁾ (Candela CD)					MAX LUMINANCE [45-90 DEG FROM NADIR] ⁽²⁾ (CD/M ²)				
		CFR1	CFR2	CFD1	CFD2	CFD3	CFR1	CFR2	CFD1	CFD2	CFD3	CFR1	CFR2	CFD1	CFD2	CFD3
2000	3500	17.4	17.1	17.4	18.2	17	502	510	450	424	452	1907	1938	1580	1547	1379
2500	3500	18.3	18	18.2	19.5	17.8	637	648	572	539	575	2423	2463	2007	1966	1752
3000	3500	18.9	18.6	18.9	20.2	18.5	772	784	692	652	696	2933	2981	2430	2380	2120
3500	3500	19.4	19.1	19.3	20.6	18.9	878	892	788	742	792	3337	3392	2764	2707	2412
4000	3500	19.9	19.6	19.8	21.1	19.4	1005	1022	902	850	907	3821	3884	3166	3101	2763
4500	3500	20.3	20	20.2	21.5	19.8	1134	1152	1017	958	1022	4309	4380	3570	3496	3115
5000	3500	20.6	20.3	20.6	21.9	20.2	1258	1278	1129	1063	1134	4782	4861	3962	3880	3457
5500	3500	21	20.7	20.9	22.2	20.5	1381	1404	1239	1168	1246	5251	5338	4350	4261	3796
6000	3500	21.4	21.1	21.2	22.5	20.8	13	1539	1359	1280	1366	50	5851	4769	4671	4161
6500	3500	21.6	21.3	21.5	22.8	21.1	1647	1674	1478	1392	1485	6261	6364	5187	5080	4526
7000	3500	21.8	21.5	21.7	23.1	21.4	1769	1798	1587	1495	1595	6724	6835	5571	5456	4861
7500	3500	22	21.7	22	23.3	21.6	1887	1918	1693	1595	1702	7173	7292	5943	5821	5186
8000	3500	22.3	22	22.2	23.5	21.8	2021	2053	1813	1708	1822	7681	7808	6363	6232	5553
8500	3500	22.5	22.2	22.4	23.7	22	2147	2182	1926	1815	1936	8161	8296	6761	6622	5900

Notes: (1) For other UGR data for room or reflective ceiling plans please see technical data on website. (2) For other CCT please see technical data on website.

Nominal Lumen Maintenance

TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (hours) ⁽³⁾
> 86%	> 131,000

Notes: (3) 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.

Load Data

Thd	6%
Power Factor	0.99
Weight (lbs.)	10.6
Low Temp. Start	-20°C

Shipping Data

Lens Catalog No.	Weight (lbs)	Units per Pallet 49"L x 52"W x 55"H
CFR1, CFR2, CNC	18	21
CNV, CFD1, CFD2, CFD3	18	10

Energy and Performance Data

Electrical Performance - 1x4 Curves

Lumen Pkg	CCT	Delivered Nominal Lumens		Power	Efficacy (LPW)		Current (A)	
		CNC	CNV	Watts	CNC	CNV	120V	277V
2000	3500	2008	1927	16.4	123	118	0.14	0.06
2500	3500	2552	2448	20.4	125	120	0.17	0.07
3000	3500	3089	2963	24.8	125	120	0.21	0.09
3500	3500	3515	3371	28.4	124	119	0.24	0.10
4000	3500	4025	3861	33.4	121	116	0.28	0.12
4500	3500	4538	4353	38.1	119	114	0.32	0.14
5000	3500	5037	4831	43.1	117	112	0.36	0.16
5500	3500	5531	5305	48.2	115	110	0.40	0.17
6000	3500	6063	5816	53.3	114	109	0.44	0.19
6500	3500	6595	6326	58.4	113	108	0.49	0.21
7000	3500	7083	6794	65.6	108	104	0.55	0.24
7500	3500	7556	7247	70.9	107	102	0.59	0.26
8000	3500	8090	7760	77.1	105	101	0.64	0.28
8500	3500	8596	8245	83.3	103	99	0.69	0.30

Lumen Calculator

CCT Multiplier	80 CRI
3000K	0.98
3500K	1.0
4000K	1.03
5000K	1.07

Example of Lumen Adjustment Calculation

141D-40-CNC-L835 at 5000K

Lumen Adjustment Factor = 1.07

Total Light Output =

$4,025 \text{ lm} \times 1.07 = 4,300 \text{ lm}$

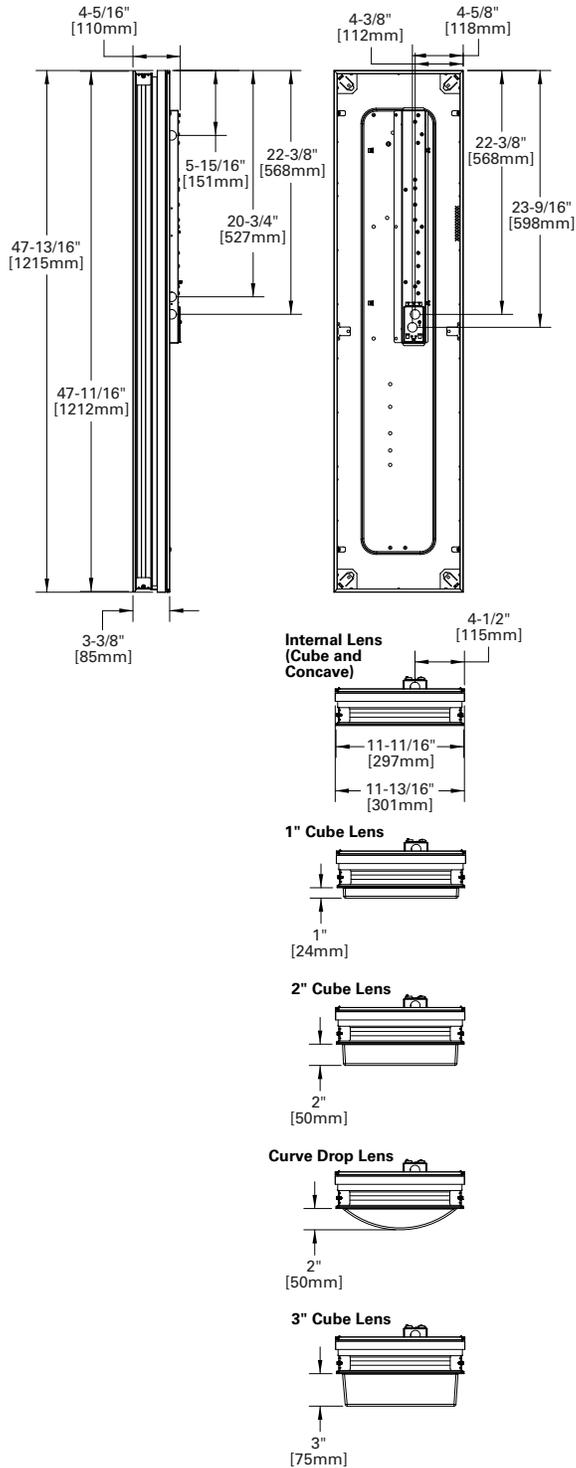
Efficacy = $\frac{4,300 \text{ lm}}{33.4 \text{ W}} = 129 \text{ lm/W}$

Optical Performance - 1x4 Curves

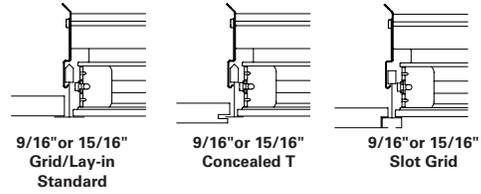
Lumen Pkg	CCT	UGR [CIE 190:2010] ⁽¹⁾ (4H, 8H; Reflectance: 70% Ceiling, 50% Wall, 20% Ref. Plane)		MAX INTENSITY [45-90 DEG FROM NADIR] ⁽²⁾ (Candela CD)		MAX LUMINANCE [45-90 DEG FROM NADIR] ⁽²⁾ (CD/M ²)	
		CNC	CNV	CNC	CNV	CNC	CNV
2000	3500	17.2	17.4	507	461	1926	1522
2500	3500	18.1	18.2	644	586	2448	1934
3000	3500	18.7	18.9	779	709	2963	2341
3500	3500	19.2	19.3	886	806	3371	2663
4000	3500	19.6	19.8	1015	923	3860	3050
4500	3500	20.1	20.2	1145	1041	4352	3439
5000	3500	20.4	20.6	1270	1156	4830	3816
5500	3500	20.7	20.9	1395	1269	5304	4191
6000	3500	21.1	21.2	1529	1391	5814	4594
6500	3500	21.4	21.5	1663	1513	6324	4997
7000	3500	21.6	21.8	1786	1625	6792	5366
7500	3500	21.8	22	1906	1734	7246	5725
8000	3500	22.1	22.2	2040	1856	7759	6130
8500	3500	22.3	22.4	2168	1972	8244	6513

Notes: (1) For other UGR data for room or reflective ceiling plans please see technical data on website. (2) For other CCT please see technical data on website.

Dimensional and Shielding Details



Ceiling Compatibility

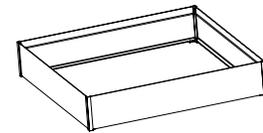


Ceiling Mounting Choices

Application	Catalog	UPC	Description
Hard Ceiling Recessed	DF-14W-U	662401232949	1x4 Dry Wall Frame Kit
Surface Mount	SK-14-WT	080083906703	1x4 Tall Surface Mount Kit

Suspension Cover

Catalog	UPC	Description
SUS-14-W	coming soon	Field installed suspension cover kit - side covers, corner covers and installation hardware



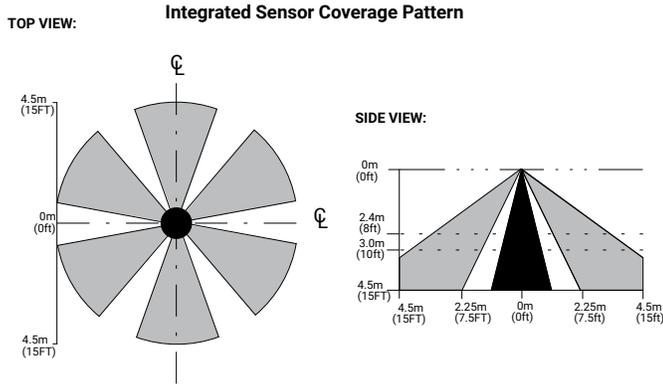
Suspension Kit

Catalog	UPC	Description
FPSUS2	080083802784	2 point Y-hanger suspension kit includes aircraft cable, carabiner, ceiling connection, SO cord, cord connectors and round 4" J-box cover plate

Mounting height from ceiling
Min. = 7-1/4" [184mm]
Max. = 27" [286mm]

Control Systems

- WaveLinx PRO Wireless
- WaveLinx LITE Wireless
- WaveLinx Wired



Note: Installation of integrated sensors within 3-ft (1m) of HVAC air vents is not recommended. The pattern shown is intended solely as a general guide and is not to scale.

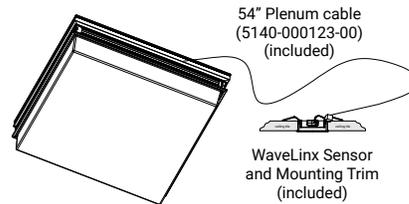
The InDepth with WaveLinx offers no-hassle lighting control with multiple luminaire level control solutions.

WaveLinx PRO is used for applications where spaces need to be connected to a lighting or building management system and to help building owners improve their operations, building environment, and tenants' experience by leveraging the data generated by the sensors. The WaveLinx PRO devices communicate with each other via the WaveLinx Area Controller which coordinates the data traffic between the devices, lighting apps and CORE platform. The WaveLinx Area Controller also hosts the time clock required if spaces need to be turned on/off at a specific time.

The WaveLinx PRO Sensor offers built-in occupancy and daylighting controls as well as luminaire level control including white tuning while the WaveLinx PRO Node offers luminaire level control and white tuning. If opting for the WaveLinx PRO Node option, a PRO Ceiling Sensor will most likely be needed within the space to control the lights based on occupancy and daylight levels.

WaveLinx LITE is used for single spaces where there is no need to manage the spaces remotely or exchange the sensor data with other sub-systems within the building or smart applications.

The WaveLinx LITE Sensor offers built-in occupancy and daylighting controls as well as luminaire level control.



For more information on tilemount sensor specifications and installation, see WaveLinx PRO and WaveLinx LITE Tilemount Sensor Kit at cooperlighting.com.

Systems comparison chart

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



Luminaire with standalone sensor



Standalone Spaces WaveLinx LITE



Networked Spaces WaveLinx PRO



Enterprise WaveLinx CORE

	Luminaire with standalone sensor	Standalone Spaces WaveLinx LITE	Networked Spaces WaveLinx PRO	Enterprise WaveLinx CORE
Occupancy	Yes	Yes	Yes	Yes
Daylighting	Yes	Yes	Yes	Yes
Wallstations	-	Yes	Yes	Yes
Gateways	-	-	1 WAC	300 WACs
Devices (MAX)	-	50 per Area (1400 per site)	200 per WAC2	32,500 per CORE Enterprise
Software	-	WaveLinx LITE Mobile App	WaveLinx Mobile App	CORE
Areas	-	28 per Site	50 per WAC2	up to 3,000
Zones	-	16 per Area	16 per Area	up to 9,000
Scheduling	-	-	Local	Global
VividTune™	-	-	Yes	Yes
Plug-Load Control	-	-	Yes	Yes
Low-Voltage Power	-	-	Yes	Yes
Integration	-	-	-	BACnet, API
Dashboards	-	-	-	Energy, Occupancy
Configuration	-	Installer	Technician	Technician / IT

SCALABILITY

