Project		**Catalog #**		**Type**	
Prepared by		**Notes**		**Date**	

Corelite

Bryx

Linear LED
Recessed Mounting
Direct

Typical Applications

• Office • Education • Healthcare • Hospitality • Retail

Interactive Menu

Product Certifications

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

Product Features

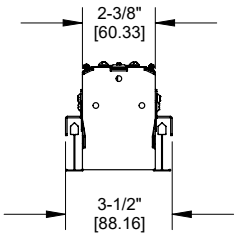
Connected Systems · powered by fifthlight · damp location · WaveLinx PRO · WaveLinx LITE

Top Product Features

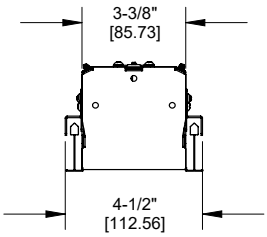
- Recessed Mount (Surface and Suspended mount options also available. See details on separate spec sheets)
- 2" and 3" apertures with high transmission lift and shift lay in lens
- 4' and 8' modular sections, continuous runs in 4' increments
- Designed to minimize light leaks between fixtures in continuous runs for a clean architectural appearance.
- Serviceable from below ceiling plenum with hinged reflector tray for easy serviceability
- Up to 131 lumens per watt in the 3" aperture
- Integrated control and emergency options

Dimensions

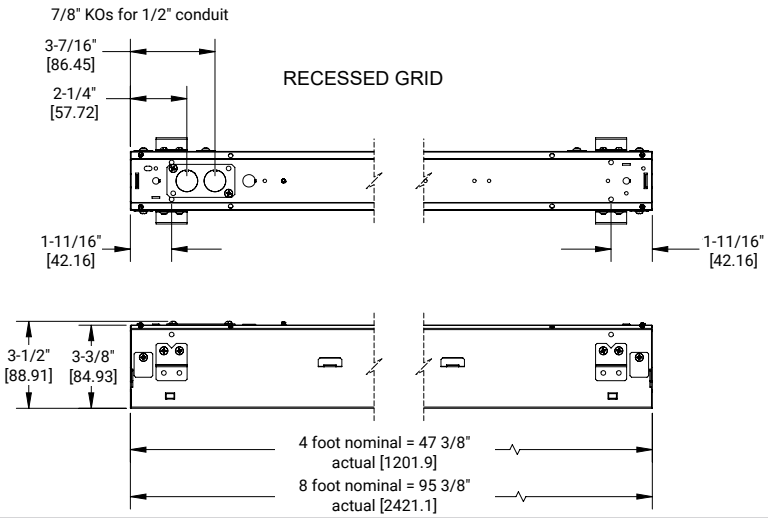
2 inch (CB2R)



3 inch (CB3R)



Note: See page 4 for apature sizes for different ceiling types



Order Information

SAMPLE ORDER NUMBER: **CB2R-085D-835-1D-UNV-STD-W-T1-8**

Series	Lumen Package (Lms/ft)	CRI/CCT	Circuiting	Emergency	Voltage
CB2R=Corelite Bryx 2" Recessed **CB3R**=Corelite Bryx 3" Recessed	**030D**=300 Lumens/ft Down **055D**=550 Lumens/ft Down **085D**=850 Lumens/ft Down **120D**=1200 Lumens/ft Down	**830**=3000K, 80 CRI **835**=3500K, 80 CRI **840**=4000K, 80 CRI	**1**=Single Circuit **S**=Secondary Circuit	**D**=No Emergency **E**=Emergency Circuit **B06**=6-watt, 120V-277V Emergency Battery Pack **EPC**=LVS Controls EPC UL924 Bypass Relay Device **B10**=10-watt, 120V-277V Emergency Battery Pack	**UNV**=Univeral (120V-277V) **347**=347V
Notes	**Notes** Custom lumen output available.Down (Direct): Min = 150 Lms/ft Max = 1200 Lms/ft Consult factory to specify custom lumen package	**Notes**	**Notes** Secondary is not available with sensor. Secondary circuit operates entire specified unit	**Notes** E and EPC options operate entire downlight portion of a specified unit. B06 and B10 options operate a single 4-foot downlight section of a specified unit.	**Notes** Integrated 347V driver with STD 0-10V option only.

Driver/Dimming	Integrated Sensor Options	Options	Finish	Ceiling Type	Run Length
STD=Standard 0-10V (1%-100%) **5LT**=Fifth Light DALI (1%-100%) **LH**=Lutron HiLume 1% EcoSystems (LDE1)	**[Blank]**=No Sensor **WPS**=WaveLinx Pro Wireless Integrated Sensor (A) **WPN=**WaveLinx Pro Wireless Node without Sensor (A) **WLS**=WaveLinx LITE Wireless Integrated Sensor (B)	**[Blank]**=No CP option **CP**=Chicago Plenum	**W**=White **B**=Black **S**=Silver	**T1**=FLuch Mount 15/16" and 9/16" T-Grids **T2**=Tegular Mount 9/16" T-Grid **FG**=Flush Mount Flanged (Gypsum Board)	**4**=4 ft **8**=8 ft **XX**=Specify Run Length
Notes Not all driver options are available for every configuration.	**Notes** (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.	**Notes** Meets CCEA requirements	**Notes** Consult factory for custom finishes.	**Notes**	**Notes**

Product Specifications

Construction
- Precision formed 20 gauge cold rolled steel powder coated housing
- Die-formed 22 gauge cold rolled steel powder coated white reflector
- Extruded 6061 aluminum side walls (on GYP option only)
- Hinged tray provides easy access to driver

Lengths
- 4 ft and 8 ft fully illuminated sections for individual and continuous runs
- See table below for run configuration details

Finish
- Electrostatically applied polyester powder coat paint (excluding Grid-mount white fixtures)

Mounting
- Recessed lay-in for for flat and dimensional T-grid installations or direct into gypsum with ½" flange
- All sections are continuously wired with plug-in connectors for fast installation
- Fixtures can be joined for straight continuous runs
- Specially designed rigid alignment features optimize consistent positioning in straight continuous runs

Shielding
- Direct Shielding: Lift and shift .118" thick high diffusion, pixilation-free acrylic lens

Light Engine
- LED CCTs are available in 3000K, 3500K, 4000K.
- 80+ CRI standard
- L70 > 72,000 hours and L90 = 42,000 hours
- Lumen output can be affected by CCT choice - please refer to the lumen adjustment factor tables on page 5
- TM21 life at 60,000 hours up to L85 and calculated L70 exceeds 135,0000 hours
- Drivers available in 120-277V and 347V

Integrated Controls
- 0-10V dimming to 1% standard
- WaveLinx wireless sensor compatible for standalone, controlled, connected, and IoT capability
- DALI 2.0 and Lutron driver options available

Emergency Options
- UL 924 emergency/generator transfer options available
- Default emergency circuit section (E) For emergency, UL924, and (S) secondary circuit, controls the full length of fixture.
- Optional 120-277V emergency battery provided internal to fixture with pre-wired external test switch 90-minute backup period for code compliance. (emergency battery circuit section (B) is 4 ft. in length and located at the beginning of the fixture unless designated elsewhere)
- Estimated lumen output = battery wattage x min efficacy - see performance table (e.g. 100 lm/W x 6 = 600 lumens)

Weight
- 2.5 lbs. per foot

Compliance
- cULus listed for damp locations
- IC Rated for insulation contact (except where noted)
- Tested to IESNA LM-79 and LM-80
- Stated life per TM21 standards
- ROHS compliant
- Can be used for State of California Title 24 high efficacy luminaire

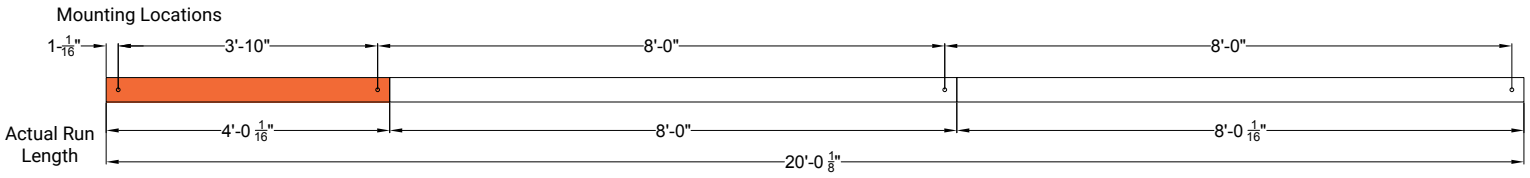
Warranty
- Five year limited warranty standard www.cooperlighting.com/legal

Run Configurations Details

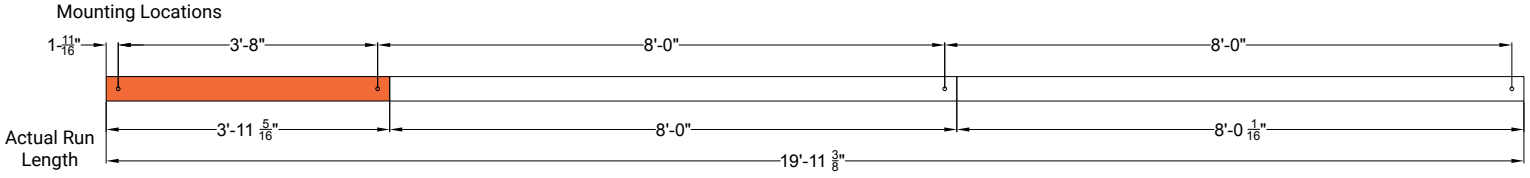
Standard Length	4ft	8ft	12ft	16ft	20ft	24ft	28ft	32ft	36ft	40ft	44ft	48ft	52ft	56ft	60ft	64ft	68ft	72ft	76ft	80ft	84ft	88ft	92ft	96ft
4ft	1		1		1		1		1		1		1		1		1		1		1		1	
8ft		1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12

NOTE: Run configurations will consist of beginning of run (BOR), end of run (EOR) and intermediate fixtures. BOR and EOR fixtures are supplied with end caps pre-installed to simplify installation. Intermediate fixtures are shipped ready to join.

Mounting Locations for Recessed FG Gyp Ceiling



Mounting Locations for Recessed Grid Ceiling

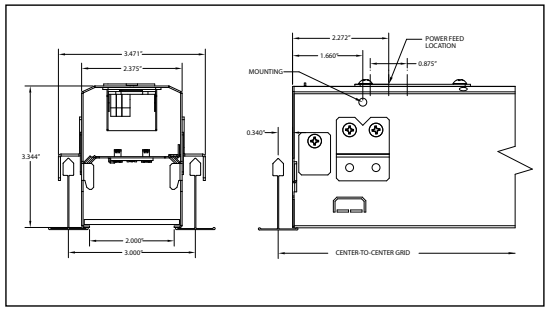


Note: In continuous runs requiring a 4ft fixture, the 4ft fixture is placed at the beginning of the run.

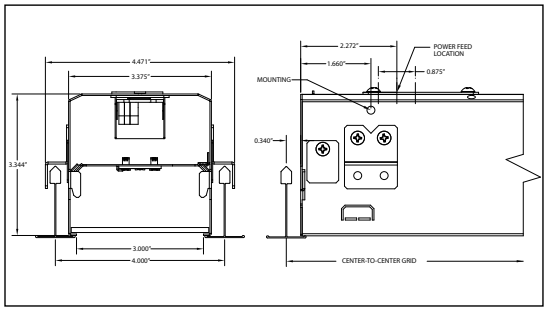
Recessed Mounting Details and Dimensions by Ceiling Type

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

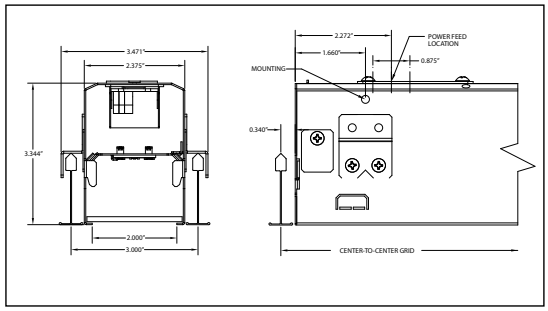
2 inch (CB2R) 15/16" Tee Flush Mount (T1)



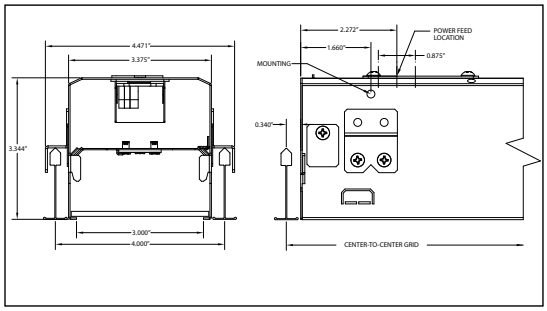
3 inch (CB3R) 15/16" Tee Flush Mount (T1)



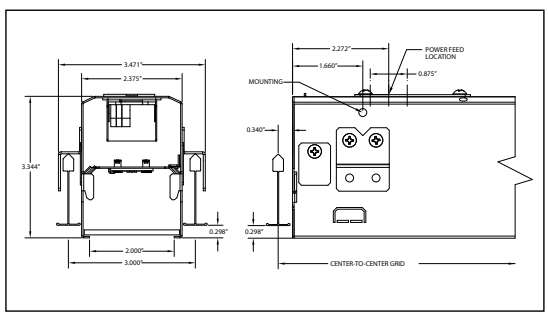
9/16" Tee Flush Mount (T1)



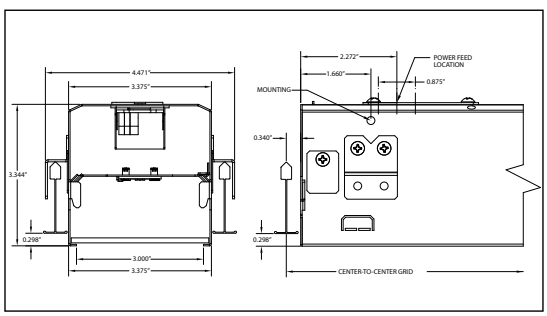
9/16" Tee Flush Mount (T1)



9/16" Tee Tegular Mount (T2)

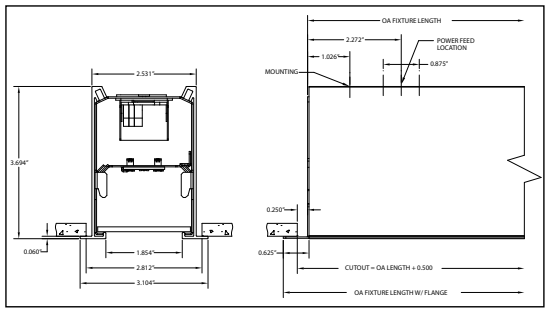


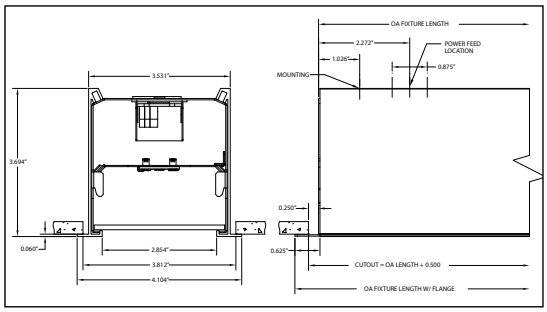
9/16" Tee Tegular Mount (T2)



Gypsum Flanged Flush Mount (FG)

Gypsum Flanged Flush Mount (FG)

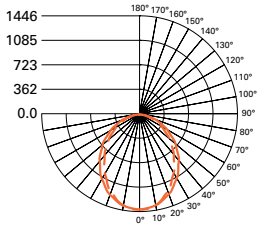




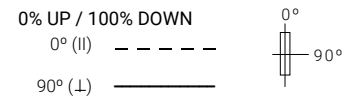
Fixture Length Dimensions			
Fixture	Housing Length	Flange Length	Cutout Length
4-Foot	48.070"	49.250"	48.500"
8-Foot	96.070"	96.250"	96.500"
Continuous Run	XXX + 0.070″	XXX + 1.250″	XXX + 0.500″

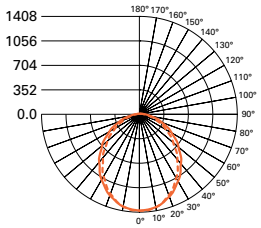
Photometric Data

View IES files

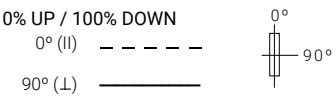


FILE NAME: CB2-0U-085D-835-1D-UNV-STD-W-4.ies
CCT/CRI: 3500K / 80 CRI
LUMENS: 3371.2 Lm
WATTS: 28.9 W
EFFICACY: 116.7 Lm/W
TEST NO.: P824227
0% UP / 100% DOWN





FILE NAME: CB3-0U-085D-835-1D-UNV-STD-W-4.ies
CCT/CRI: 3500K / 80 CRI
LUMENS: 3371 Lm
WATTS: 25.9 W
EFFICACY: 130.2 Lm/W
TEST NO.: P824323
0% UP / 100% DOWN



Note: Refer to IES files for more product data.

Nominal Lumen Maintenance

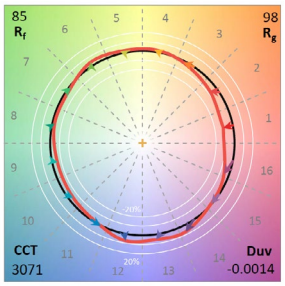
Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours) (1)	Calculated L70 (Hours) (2)
25°C	85%	>135,000

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.

Color Data (3000K)

		80CRI
TM-30-15	R_f	85.3
	R_g	97.6
CRI/CIE	R_a	83.9
	R_9	12.3

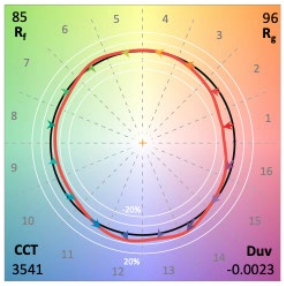
80CRI



Color Data (3500K)

		80CRI
TM-30-15	R_f	85.1
	R_g	96.5
CRI/CIE	R_a	84.5
	R_9	14.2

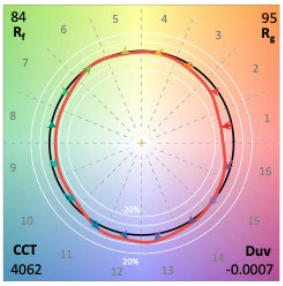
80CRI



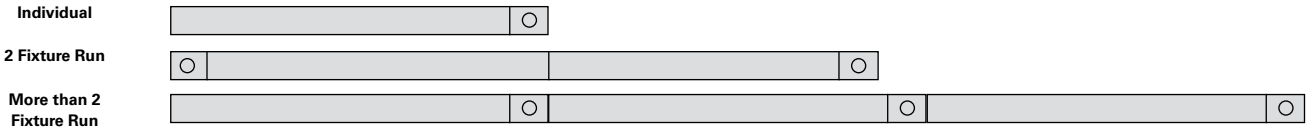
Color Data (4000K)

		80CRI
TM-30-15	R_f	84.1
	R_g	94.8
CRI/CIE	R_a	84.1
	R_9	12.5

80CRI



Default Integral Sensor Placement



○ Standard Sensor with Luminaire Control

Energy and Performance Data

	Bryx Recessed / Surface Performance (3500K)						Glare	
	Lumen Package	Lumens/ft Down	Lumens/ft Total	W/ft Total	Lm/W	Distribution (up% / down%)	UGR (1-2)(4-6)	MAX LUMINANCE (3-6)
CB2	030D	289	289	2.4	119	0% / 100%	22.3	7003
	055D	552	552	4.7	119	0% / 100%	24.6	13380
	085D	843	843	7.2	117	0% / 100%	26	20422
	120D	1200	1200	10.9	111	0% / 100%	27.3	29073
CB3	030D	289	289	2.2	131	0% / 100%	20.9	4522
	055D	552	552	4.2	131	0% / 100%	23.1	8637
	085D	843	843	6.5	130	0% / 100%	24.6	13185
	120D	1200	1200	9.6	125	0% / 100%	25.8	18769

Note: Refer to IES files for more product data.

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)
(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)
(6) For technical data of other configurations please see photometric section on website or click link at top-right

Lumen Adjustment Table

CCT	3000K	3500K	4000K
CRI	80+	80+	80+
Lumen Multiplier	0.917	1	0.987

Example Calculation:
085D / 3500K / 80 CRI
Lumen Output selected = 843 lms/ft

3000K / 80 CRI Desired
Lumen Adjustment Factor = 0.917
Adjusted Lumen Output = 843 lms/ft x 0.917 = 773 lms/ft

Control Solutions

- WaveLinx LITE wireless
- WaveLinx PRO wireless
- WaveLinx CAT wired
- WaveLinx Wired

WaveLinx Digital Lighting Control Solutions

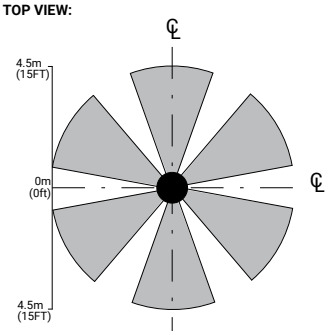
The Bryx with WaveLinx offers no-hassle lighting control with multiple luminaire level control solutions.

WaveLinx PRO is a wireless lighting control solution, for connected spaces, that significantly reduces a building's energy consumption. From a single floor to an entire campus, WaveLinx PRO connects more than lighting assets; it shares aggregated sensor data with the WaveLinx CORE platform and other building systems, so building owners can improve operations, spaces environment, and tenants' experience. WaveLinx PRO offers a rich portfolio of wireless devices, WaveLinx PRO-enabled luminaires, and an intuitive WaveLinx mobile app for office, education, warehouse, and parking garage applications.

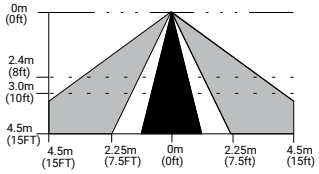
WaveLinx LITE is a cost effective, wireless digital lighting control solution, with out-of-the-box functionality, that saves energy and meets code. It's designed for applications that require occupancy-based, daylighting, or manual light control. Customize installations for office, education, warehouse and parking garages using the secure, simple mobile app.

Integrated Sensor Coverage Pattern

TOP VIEW:



SIDE VIEW:



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.

With Integrated WaveLinx Sensor

Add a hidden WaveLinx sensor node (WPN, WLN) to your space lighting design!

Allows to:

- Keeps luminaire aesthetics
- Connect fixtures without the realestate to include sensor option such as downlights
- Connect sealed fixtures without a standard sensor option such as products for clinical space.

Integrated Controls Options

Option	Out of the Box Functionality	Luminaire Level Lighting Control (LLLC)	Automatic Dimming Photocell	Occupancy Sensing	CCT Control
WLS	X	X	X	X	
WLN		X			
WPS		X	X	X	X
WPN		X			X

Note: WaveLinx utilizes scenes to allow users to change an area's fixtures Correlated Color Temperature (CCT) and intensity using commissioned manual wireless wallstation scene control. To enable CCT adjustments through WaveLinx, include WPS or WPN devices in addition to VividTune or BioUp technologies for integrated fixture control.

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

Standalone Spaces WaveLinx CAT

Networked Spaces WaveLinx PRO

Enterprise WaveLinx CORE

	Luminaire with standalone sensor	Standalone Spaces WaveLinx LITE	Standalone Spaces WaveLinx CAT	Networked Spaces WaveLinx PRO	Enterprise WaveLinx CORE
Occupancy	Yes	Yes	Yes	Yes	Yes
Daylighting	Yes	Yes	Yes	Yes	Yes
Wallstations	–	Yes	Yes	Yes	Yes
Gateways	–	–	–	1 WAC	300 WACs
Devices (MAX)	–	40 per Area (1120 per space)	40 per Area	200 per WAC2	32,500 per CORE Enterprise
Software	–	WaveLinx LITE Mobile App	WaveLinx CAT Mobile App	WaveLinx Mobile App	CORE
Areas	–	28 per Space	Unlimited	50 per WAC2	up to 3,000
Zones	–	16 per Area	16 per Area	16 per Area	up to 9,000
Scheduling	–	–	–	Local	Global
VividTune™	–	–	–	Yes	Yes
Plug-Load Control	–	Yes	Yes	Yes	Yes
Low-Voltage Power	–	–	Yes	Yes	Yes
Integration	–	–	–	–	BACnet, API
Dashboards	–	–	–	–	Energy, Occupancy
Configuration	–	Installer	Installer	Technician	Technician / IT

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