Project	Catalog #	Туре	
Prepared by	Notes	Date	



Portfolio

LD2B EU2B 2LB

2-Inch Spun or Die Cast Aluminum, Downlight or Wall Wash, New Construction or Retrofit 2x4 and 2x6

500, 1000, 1500, 2000 Lumens

Typical Applications

Healthcare • Hospitality • Retail • Institutional • Indoor Display & Signage

Interactive Menu

- Order Information page 2
- Product Specifications page 3
- Energy & Performance Data page 4
- Photometric Data page 4
- Connected Systems page 6
- · Product Warranty

Product Certification











Product Features













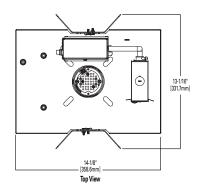
LO Showerlight

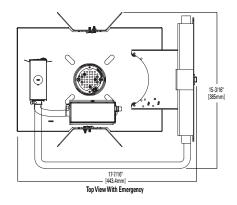


Top Product Features

- · New construction or retrofit from below, Downlight or lensed wall wash
- · Excellent light control and low aperture brightness
- · Installs in shallow or standard plenums, ENERGY STAR® qualified
- · Round or square die-cast or spun aluminum reflectors
- 6 color temperatures: 2400K, 2700K, 3000K, 3500K, 4000K and 5000K CCT
- CRI: 80, 90 or 97, D2W[™] option from 3000K to 1850K
- W2N Tunable White 2700K-6500K or 2000K-5000K
- Lumens: 500-2,000, Distributions: 15°, 25°, 40° or 55°
- · Options to meet Trade Agreements Act requirements

Dimensional and Mounting Details







Portfolio LDA2B | 2LB

Order Information

SAMPLE ORDER NUMBER: LD2B15D010

Domestic Preferences (15)	Housing	Lumens ⁽¹⁾	Voltage	Driver	Options (2) (10)
[Blank]=Standard TAA=Trade Agreements Act	LD2B=2" New Construction Downlight LDRT2B=2" Remodel Downlight limit to 1500 lumen (13) LD2BCP=2" LED Downlight Nominal Aperture, Chicago Plenum (12)	05=500 lumens (16) 10=1000 lumens 15=1500 lumens 20=2000 lumens	[Blank]=120-277V 3=347V 0-10V only 1000-2000 lumens	500 - 2000 Lumens D010=0-10V Dimming, 1% to 100%, 120V-277V DLV=Low voltage dimming driver (1-100%) for use with DLVP system (6) 1000 - 2000 Lumens. D010TR=0-10V or Line Voltage Dimming, 1% to 100%, 120V-277V DE010=0-10V Linear Dimming, 0% to 100%, 120V-277V (6) DSLT=Fifth Light* (DALI) Logarithmic Dimming, 0% to 100%, 120V-277V (6) DMX=DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V, with RJ45 connection (6)(7) DLE=Lutron Ecosystem dimming 1% to 100%, 120V-277V (6) Tunable White D5LTW2N2050 = Fifth Light (DALI) 0-100%, 120-277V, 2000K-5000K D5LTW2N2765 = Fifth Light (DALI) 0-100%, 120-277V, 2000K-5000K D610W2N2050 =0-10V dimming, 0-100%, 120-277V, 2700K-6500K	EMBOD=Bodine® Emergency Module with Remote Test Switch (®) EMBOD7ST=Bodine® Emergency Module with Self Test Remote Test Switch (®) EM7=7W Emergency Module with Remote Test Switch (®) EM14=14W Emergency Module with Remote Test Switch (®) EM14=14W Emergency Module with Remote Test Switch (®) EM17=7W Low Voltage Emergency Module with Remote Test Switch (®) EMV14=14W Low Voltage Emergency Module with Remote Test Switch (®) EMV14=7AW Low Voltage Emergency Module with Remote Test Switch (®) WTA = Factory installed WaveLinx sensor Kit (1®) (14) WTK = Factory installed WaveLinx Lite Sensor Kit (10) (15) WPN = WaveLinx PRO Wireless Node without sensor (20)

SAMPLE ORDER NUMBER: EU2B158035

Domestic Preferences (15)	Power Module	Lumen Levels / Distribution (1) / Optic	CRI		Color	
[Blank]=Standard TAA=Trade Agreements Act	EU2B=2" Universal LED Module	05SP15=500 lumen 15° IC Rated 05W=500 lumen wall wash IC Rated ⁸ 10SP15=1000 lumen wall wash Non-IC Rated ⁸ 10WW=1000 lumen wall wash Non-IC Rated ⁸ 0510NFL25=500 and 1000 lumen 25° IC Rated 0510FL40=500 and 1000 lumen 40° IC Rated 0510WFL55=500 and 1000 lumen 55° IC Rated	80=80 CRI minimum 90=90 CRI minimum 97=97 CRI minimum	80 CRI 27=2700K 30=3000K 35=3500K 40=4000K 50=5000K	90 CRI 24=2400K 27=2700K 30=3000K 35=3500K 40=4000K 50=5000K	97 CRI 27=2700K 30=3000K
		Rated 15NFL25=1500	Dim to Warm (1500 lum 10NFL259030D2W=100 15NFL259030D2W=150 10FL409030D2W=1500 15FL409030D2W=1500 10WFL559030D2W=150 15WFL559030D2W=150	0 lumen 25° IC Rated 0 lumen 25° Non-IC lumen 40° IC Rated lumen 40° Non-IC 00 lumen 55° IC Rated		umen 40° 2000K-5000K lumen 40° 2700K-6500K

SAMPLE ORDER NUMBER: 2LBD1LI

Trim (17)	Refl	Flange	Fir	nish	
2LB =2" LED	D=Round downlight spun reflector SW=Round lensed Wall Wash, Spun Aluminum, Splay black oculus SWW=Round lensed Wall Wash, Spun Aluminum, Splay white oculus DL=Round Downlight lensed spun reflector	DC=Round Cast Downlight (2) DLC=Round Lensed cast downlight (2) PIN=Round Pinhole downlight black oculus (3) PINW=Round Pinhole downlight white oculus (3) DSQC=Square Cast Downlight (2) DSQLC=Square Lensed cast shallow downlight (2)	1=Self-flanged (*) 2=White Painted Self-flanged (*) 3=Rimless (*) (*) [Blank]=Pinhole	LI=Specular Clear (4) H=Semi-Specular Clear Haze (4) WMH=Warm Haze (4) WH=Wheat (4) GPH=Graphite Haze (4)	B=Specular Black ⁽⁴⁾ MW=Matte White MB=Matte Black ⁽³⁾ MMS=Matte Metallic Silver ⁽³⁾

Accessories (18)					
RPR2=Round plaster lathing ring (order with rimless option) Bar Hangers HB26=Pair C-channel bar hanger, 26" long BAA-HB26=Pair C-channel bar hanger, 26" long ¹⁷ TAA-HB26=Pair C-channel bar hanger, 26" long ¹⁷ RMB22=Pair wood joist bar hanger 22" long Connected Lighting Systems (10) WTA = Field installed WaveLinx sensor Kit 14 WTK = Field installed WaveLinx Lite Sensor Kit 15	L100 lenses - optical lenses L110M-Diffuse Sandblasted Lens: Provides an even beam spread - especially useful in wall washing. L111=Soft Focus Lens: Smooths irregular beam pattern while maintaining high controlled illumination levels and beam angles. L113=Prismatic Spread Lens: Provides a symmetrical broadening of lamp beam. Suitable when a wide, uniform light distribution is required. L115=Linear Spread Lens: Fans out the beam 55° (27-1/2° to each side) to produce a wide rectangular pattern. L100MB=Black finished metal hexagonal-cell louver - controls light spill while retaining lamp optics.				

Notes:

- 1. Nominal Lumens will vary depending on selected distribution, color, driver
- 2. Only available with Matte White, Matte metallic silver and Matte Black Finishes.
- 3. Available on DC, DLC and PIN.
- Not available on DC or PIN.
 DMX, D5LT, DE010, DLC, Lutron, connected and emergency module drivers require accessible ceiling.
- 7. Flange is the same finish as reflector.
- 8. Order with 2LBSW Wall Wash trim.
- 9. DMX fixtures default to full on upon loss of DMX signal.
- 10. Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. Use with 0-10V

- 11. Not available with Wall Wash.
- 12. Limited to 1000 lumens
- 13. Available with D010 and D010TR driver only.
- 14. WTA = WaveLinx wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with 0-10V
- 15. WTK = WaveLinx Lite tile mount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinx Lite system specifications)
- 16. Limited to D010 and D010A drivers.
- 17. 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. CComponents shipped separately may be separately analyzed under domestic preference requirements. Accessories sold separately will be separately analyzed under

domestic preference requirements. Consult factory for further information. Trim must be ordered with power module for TAA compliance Example: TAA-EU2B158035-2LB

- 18. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
- 19. For use with plaster lathing ring RPR2 (required).
- 19. For use with plaster latining ring NFR2 (required).
 20. WPN = WaveLinx PRO wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor, Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only.

Portfolio LD2B | EU2B | 2LB

Product Specifications

Lower Reflector

- Round or square painted die cast aluminum or round anodized aluminum lower reflector with a lensed upper optical chamber providing superior lumen output with minimal source brightness.
- Anodized reflectors are offered in all Portfolio Alzak® finishes.
- Plaster lathing ring accessory offered for flush reflector transition.

Trim Retention

 Reflector is retained with three or four pressure springs holding the flange tight to the finished ceiling surface

Optic

- TIR optic in 15°, 25°, 40, 55° or wall wash provides smooth beam without color separation.
- Media holder fits onto upper reflector and holds up one lens media.
- · For non-lens trims only.

Plaster Frame / Collar

- New Construction
- Galvanized steel plaster frame designed for ceiling thickness from 1/2 to 1-1/4-inch.
- Retrofit
- Installs from below.

Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers.

Junction Box

- (4) 1/2" trade size pry outs positioned to allow straight conduit runs.
- Listed for (4) #12AWG (two in, two out) 90°C conductors and feed thru branch wiring.
- · Lever connectors for simple push in wiring.

Thermal

 Forged aluminum heat sink conducts heat away from the LED COB for optimal performance and long life.

LED

 Chip on board with a multitude of highly efficient white LED's, combined with TIR optic produces an even distribution with no pixilation.

- Lumen output shall not decrease by more than 10% over the minimum life of 55,000 hours (L90 > 55,000 hours)
- Auto resetting, thermally protected, LED's are turned off when safe operating temperatures are exceeded.
- · Color variation within 2-step MacAdam ellipses.
- Flexible disconnect allows for replacement of LED engine from below ceiling. Available in 80, 90 or 97 CRI.
- D2W[™] dim-to-warm shifts CCT from 3000K to 1850K as fixture dims mimicking halogen sources.
- W2N Tunable white CCT range 2700K to 6500K or 2000K to 5000K, 90 CRI.

Drive

- Standard 120-277V 0-10V dimming driver provides flicker free dimming from 100% to 1%.
- Optional 120V leading edge, <1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem.
- Driver can be serviced from above or through the aperture with standard D010 driver. Other drivers require above ceiling access.
- Distributed low voltage power system combines power, lighting, and controls with ease of installation.

Connected Lighting System

Two WaveLinx connected solutions to choose from. Refer to WaveLinx system specifications and application guides for details.

WaveLinx PRO Tilemount Sensor Kit

 WaveLinx WPST tilemount sensor kit offers daylight dimming, PIR motion sensing, scene and zone configuration, automatic commissioning; and optional RLTS - Real Time Location Services available.

WaveLinx PRO Wireless Node

 WaveLinx PRO wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired.
 Use with 0-10V driver only

WaveLinx LITE Tilemount Sensor Kit

 WaveLinx LITE WLST tilemount sensor kit offers daylight dimming and PIR motion sensing, scene and grouping configuration.

WaveLinx Tilemount Kits Application

- The WPST and WLST tilemount kits include a control module mounted on the luminaire junction box via 1/2" knock-out, and a tilemount sensor on 54-inch whip; for ceiling installation by direct-mount spring clips or via mounting bracket in octagon ceiling boxes.
- The WPST and WLST tilemount kits may be ordered as factory installed on the luminaire, or ordered separately as a field installed accessory kit.

Code Compliance

- · Thermally protected
- cULus Certified to UL 1598 / C22.2 No. 250.0 suitable for wet locations with downlight; damp location with wall wash and hyperbolic with covered ceiling
- EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits.
- Optional City of Chicago environmental air (CCEA) marking for plenum applications.
- 1500 lumen and above are Non-IC rated Insulation must be kept 3" from top and sides of housing. ICrated up to 1000 lumens (except wall wash).
- RoHS Compliant. Photometric testing completed in accordance with IES LM 79 and TM-30 standards.
 Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11.
- Can be used to comply with California Energy Commission (CEC) Title 24 2016 & 2019 JA8 High Efficacy Lighting Requirements, reference Modernized Appliance Efficiency Database System (MAEDBS) for 2016 & 2019 JA8 High Efficacy Lighting.
- ENERGY STAR® certified, reference certified light fixtures database
- · Options to meet Trade Agreements Act requirements

Warranty

Five year warranty www.cooperlighting.com/legal

Energy Data

ENERGY DATA
Sound Rating: Class A standards
(Values at non-dimming line voltage)
Minimum Starting Temperature: -30°C (-22°F)
EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer)
Input Voltage: UNV (120V - 277V)
Power Factor: >0.90 (at nominal input 120-277 VAC & 100% of Rated Output Power)
Input Frequency: 50/60Hz

500 Lum	ien Dutu	1000 Lun	nen Dutu	
Input Power: 7.38W THD: <14.4%		Input Power: 11W	THD: <13.8%	
120V Input Current: 0.06A 277V Input Current: 0.03A		120V Input Current: 0.086A 277V Input Current: 0.		
45001	D040	00001	D040	
1500 Lun	nen D010	2000 Lun	nen D010	
1500 Lun Input Power: 15.05W	nen D010 THD: <13.0%	2000 Lun Input Power: 21.2W	nen D010 THD: <8.6%	

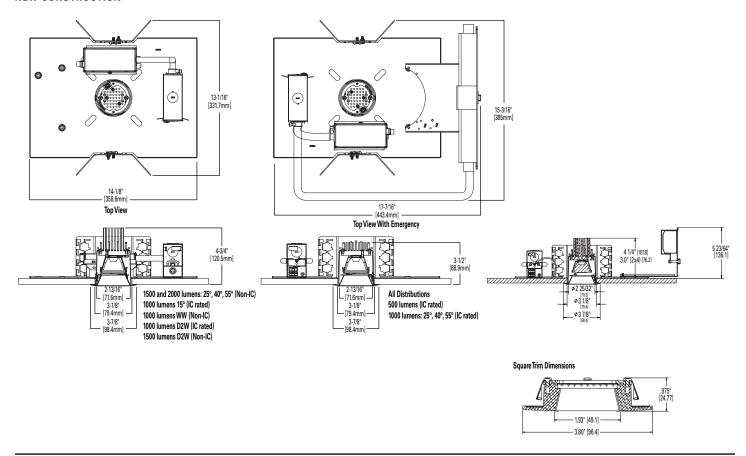
	12	20V	277V		
Lumens	Inrush (A) Duration (ms)		Inrush (A)	Duration (ms)	
500 Lumen D010	0.64 0.05		1.4	0.04	
1000 Lumen D010	1.02	0.041	2.18	0.021	
1500 Lumen D010	1.02	1.02	2.24	0.064	
2000 Lumen D010	1.02	0.077	2.43	0.027	

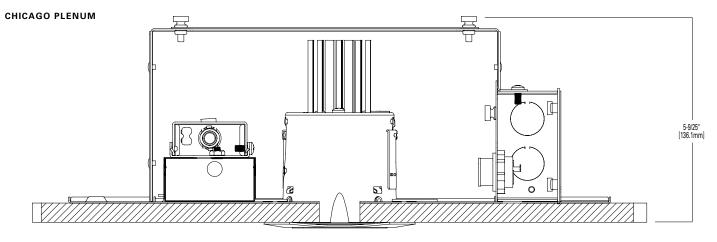


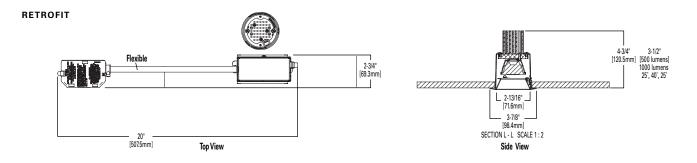
Portfolio LD2B | EU2B | 2LB

Dimensional and Mounting Details

NEW CONSTRUCTION

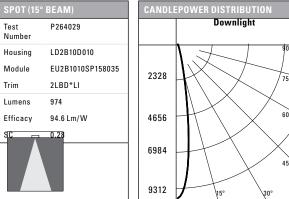


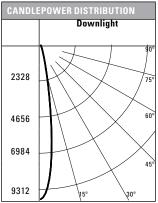




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Photometric Data



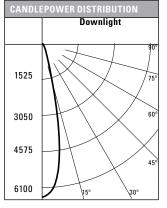


ONE OF LIGHT				CANDEL	A TABLE
	$\overline{\bigwedge}$	<u>T</u>		Degrees Vertical	Candela
0°/	$' \mid \setminus$	D		0	9316
K	\leftarrow	\perp	.	5	7438
				15	976
D	FC	L	W	25	141
4'	582.2	1	1	35	30
7'	190.1	1.8	1.8	45	7
				55	2
9'	115	2.4	2.4	65	1
3'	55.1	3.6	3.6	75	0
				85	0
6'	36.4	4.4	4.4	90	0

ZONAL LUMEN SUMMARY						
Zone	Lumens	%				
		Fixture				
0-30	945	97				
0-40	965	99.1				
0-60	973	99.9				
0-90	974	100				
90-180	0	0				
0-180	974	100				

View IES files							
Υ	LU	MINAN	ICE				
	C	verage andela egrees	Average 0° Lumi- nance				
		45	4884				
		55	1720				
		65	1167				
		75	0				
		85	0				



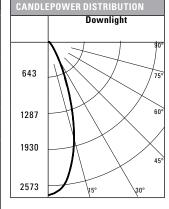


CONE	CAN			
	$\overline{\Lambda}$		T	Deg Ver
0°/	$' \mid \setminus$		D 	(
6	\pm		L	,
			,,,	1
D	FC	L	W	2
4'	382	1.4	1.4	3
7'	125	2.6	2.6	4
				5
9'	75	3.4	3.4	6
13'	36	5	5	7
				8
16'	24	6	6	9

CANDELA TABLE			
Degrees Vertical	Candela		
0	6104		
5	5611		
15	1236		
25	229		
35	51		
45	7		
55	1		
65	0		
75	0		
85	0		
90	0		

ZONAL LUMEN SUMMARY			LUMINANO	E
Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Lumi-
0-30	987	96.2	. .	nance
0-40	1019	99.3	45	3836
0-60	1026	100	55	676
0-90	1026	100	65	0
90-180	0	0	75	0
0-180	1026	100	85	0

FLOOD (40	° BEAM)
Test Number	P218754
Housing	LD2B10D010
Module	EU2B0510FL408035
Trim	2LBD*LI
Lumens	1041
Efficacy	101 Lm/W
sc ¬	0.59



CONE OF LIGHT				
000				
D FC L W				
161	2.2	2.2		
53	4	4		
9' 32 5.2 5.2				
15	7.6	7.6		
10	9.4	9.4		
	FC 161 53 32 15	FC L 161 2.2 53 4 32 5.2 15 7.6		

CANDELA TABLE				
Degrees Vertical	Candela			
0	2577			
5	2467			
15	1626			
25	581			
35	120			
45	19			
55	4			
65	0			
75	0			
85	0			
90	0			

ZONAL LUMEN SUMMARY			LUMINANO	E
Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Lumi-
0-30	938	90.2	3	nance
0-40	1020	98.0	45	10412
0-60	1040	99.9	55	2702
0-90	1041	100	65	0
90-180	0	0	75	0
0-180	1041	100	85	0

WIDE FLO	OD (55° BEAM)
Test Number	P218801
Housing	LD2B10D010
Module	EU2B0510W-
	FL558035
Trim	2LBD*LI
Lumens	985
Efficacy	95.6 Lm/W
s	

CANDLEPOWER DISTRIBUTION				
	Downlight			
	90°			
326	75°			
652	60°			
979	45°			
1305	15° \\ 30°			

CONE OF LIGHT			CANDEL	A TABLE	
				Degrees Vertical	Candela
0°/ \ D				0	1309
			5	1250	
		1		15	959
D	FC	L	W	25	644
4'	82	2.8	2.8	35	313
7'	27	5	5	45	105
				55	28
9'	16	6.6	6.6	65	0
13'	8	9.4	9.4	75	0
401	_			85	0
16'	5	11.6	11.6	90	0

ZONAL LUMEN SUMMARY				
Zone	Lumens	%		
		Fixture		
0-30	674	68.5		
0-40	873	88.7		
0-60	984	99.9		
0-90	985	100		
90-180	0	0		
0-180	985	100		

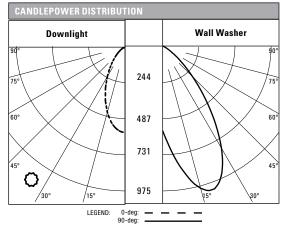
LUMINANCE			
Average Candela Degrees	Average 0° Lumi- nance		
45	57541		
55	18916		
65	0		
75	0		
85	0		

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Photometric Data



WALL WAS	Н
Test Number	P14828
Housing	LD2B10D010
Module	EU2B1010WW8035
Trim	2LBSW*XX
Lumens	742
Efficacy	72 Lm/W



SINGLE UNIT FOOTCANDLES					MULTIPLE UNIT FOOTCANDLES											
	_	FRON nce Fron Wa	n Fixture		2.5' FROM WALL (Spacing Between Fixtures)						3' FROM WALL (Spacing Between Fixtures)					
DD		1'	2'	3'		3'	•		4'			3'	•		4'	•
1'	0.5	0.5	0.3	0.2	1.3	1.1	1.3	1.2	0.7	1.2	0.7	0.8	0.7	0.6	0.6	0.6
2'	4.3	3.3	1.4	0.5	10.7	8.7	10.7	10.2	4.9	10.2	4.8	4.6	4.8	4.5	2.9	4.5
3'	10.1	8.1	4.2	1.6	19.2	18	19.2	17.8	11.5	17.8	11.8	12.1	11.8	10.7	8.3	10.7
4'	12.2	10.2	5.9	2.8	19.3	19.9	19.3	17.5	14	17.5	15.1	16.1	15.1	13.4	11.9	13.4
5'	10.9	9.4	6.1	3.3	15.6	16.9	15.6	13.8	12.8	13.8	14.2	15.7	14.2	12.5	12.3	12.5
6'	8.6	7.6	5.4	3.2	11.7	12.9	11.7	10.2	10.4	10.2	11.8	13.2	11.8	10.3	10.7	10.3
7'	6.4	5.8	4.4	2.9	8.5	9.5	8.5	7.5	8	7.5	9.2	10.4	9.2	8.1	8.8	8.1
8'	4.7	4.4	3.5	2.4	6.3	7	6.3	5.5	6	5.5	7.1	7.9	7.1	6.3	6.9	6.3
9'	3.4	3.3	2.7	2	4.6	5.1	4.6	4.1	4.6	4.1	5.4	6	5.4	4.8	5.4	4.8
10'	2.6	2.4	2.1	1.6	3.5	3.8	3.5	3.1	3.5	3.1	4.2	4.6	4.2	3.7	4.2	3.7



Portfolio LD2B | EU2B | 2LB

Connected Solutions



WaveLinx LITE - WLST Tilemount Sensor

- Intuitive Android™ or Apple® iOS® app for basic system code compliant set up and configuration via Bluetooth
- Up to 28 unique areas per project site (WaveLinx LITE Bluetooth network)
- Up to 50 devices for an area, any one of 16 control zones, up to 6 occupancy sets, and custom lighting scenes
- Automatic occupancy or vacancy, sensor sensitivity, daylight dimming, etc. configurable through the app
- Refer to the WaveLinx system specifications for details









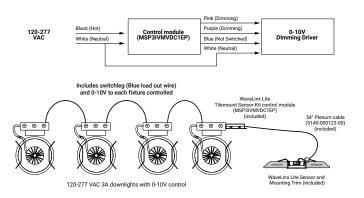








WaveLinx LITE WLST Tilemount Wiring Diagram



WaveLinx LITE Bluetooth Enabled System Ş * 8

WaveLinx PRO Wireless - WPST Tilemount Sensor

- WaveLinx PRO Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with Wireless Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations



WaveLinx mobile app settings





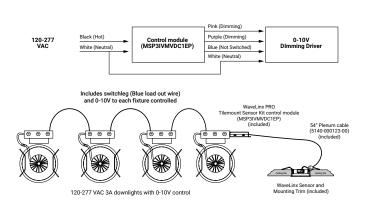




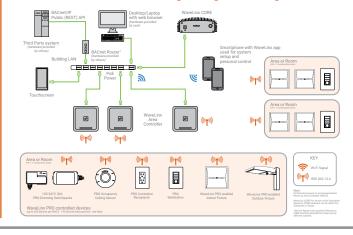




WaveLinx PRO WPST Tilemount Wiring Diagram



WaveLinx CORE Building Management Integration



Portfolio LD2B | EU2B | 2LB

Connected Solutions

WaveLinx PRO Wireless Node - WPN

- · WaveLinx Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with WaveLinx Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations



WaveLinx mobile app settings











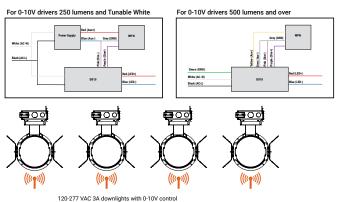








WaveLinx PRO Wireless Node (WPN) Wiring Diagram



WaveLinx CORE Building Management Integration

