

Project		Catalog #		Type	
Prepared by		Notes		Date	



# Portfolio

## LSR2B/LSSQ2B Cylinders

LSR2B/LSSQ2B/LSRYM2B/LSSQYM2B  
LED 2" Round and Square Cylinder

### Typical Applications

Office • Education • Healthcare • Hospitality • Retail • Residential

### Interactive Menu

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- Product Specifications page 4
- Energy Data page 4
- Photometric Data page 5
- Connected Systems page 8
- Product Warranty

### Product Certification



### Control Compatibility



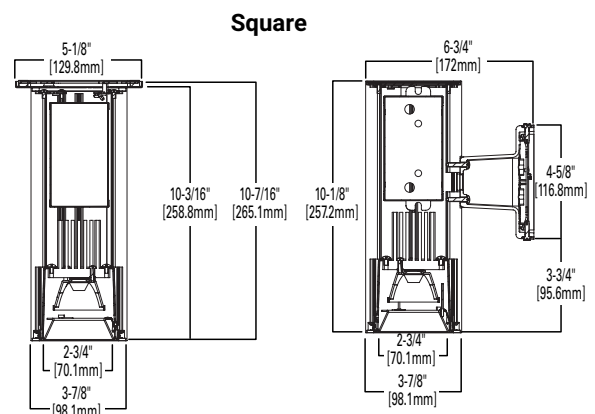
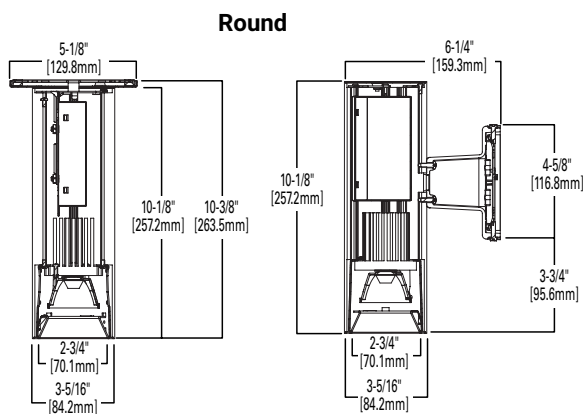
### Product Features



### Top Product Features

- 500 to 2000 lumens; Offered in 80, 90 and 97 CRI; Downlight
- Round or square surface-mount cylinders; Ceiling, wall, stem, up/down, yoke mount adjustable, LuxWire power over cable
- Extruded aluminum housing; Matte Black, White, Bronze and Silver paint finishes
- 6 color temperatures: 2400K, 2700K, 3000K, 3500K, 4000K and 5000K CCT; D2W™ option from 3000K to 1850K
- W2N Tunable White 2700K-6500K or 2000K-5000K (remote only)
- Options to meet Trade Agreements Act requirements

### Dimensional and Mounting Details



additional product diagrams

## Order Information

SAMPLE ORDER NUMBER: **LSR2B10D010P**

Domestic Preferences <sup>(22)</sup>	Cylinder	Lumens	Distribution	CRI	Color		
[Blank]=Standard TAA=Trade Agreements Act	<b>Ceiling Surface Mount</b> LSR2B=2-inch round surface ceiling mount <sup>(17)</sup> LSRM2B=2-inch round surface mount with conduit canopy LSSQ2B=2-inch square surface ceiling mount <sup>(17)</sup> LSSQM2B=2-inch square surface mount with conduit canopy LSSQPC2B=2-inch square surface ceiling mount LuxWire aircraft cable with power 120" <sup>(15)</sup> LSRPC2B=2-inch round surface ceiling mount LuxWire aircraft cable with power 120" <sup>(15)</sup>  <b>Wall Mount</b> LSRWM2B=2-inch round wall mount LSRUD2B=2-inch round wall mount up/down <sup>(1)</sup> LSSQWM2B=2-inch square wall mount LSSQUD2B=2-inch square wall mount up/down <sup>(1)</sup>  <b>Yoke Mount</b> LSRYM2B=2-inch round yoke mount <sup>(18)</sup> LSSQYM2B=2-inch square yoke mount <sup>(18)</sup>	05=500 lumens <sup>(21)</sup> 10=1000 lumens 15=1500 lumens 20=2000 lumens	SP15=15° NFL25=25° FL40=40° WFL55=55°	80=80 CRI minimum 90=90 CRI minimum 97=97 CRI minimum	<b>80 CRI</b> 27=2700K 30=3000K 35=3500K 40=4000K 50=5000K	<b>90 CRI</b> 24=2400K 27=2700K 30=3000K 35=3500K 40=4000K 50=5000K	<b>97 CRI</b> 27=2700K 30=3000K
<b>Dim to Warm (1000 &amp; 1500 lumens only)</b> 9030D2W=1800-3000K Dim to Warm, 90 CRI  <b>Tunable White (1000 lumens only)</b> (select DE010 or D5LT driver) W2N902765=0% to 100%, 120-277V, 2700K-6500K W2N902050=0% to 100%, 120-277V, 2000K-5000K							

Driver	Finish <sup>(6)</sup>
D010=120-277V 0-10 1% driver D010TR=0-10V 120-277 or line voltage 120V dimming, 5-100% D010R=Remote 120-277V 0-10V 1% dimming 3D010R=Remote 347V 0-10V 1% dimming D010TRR=Remote 0-10V (120-277V) or line voltage (120V) dimming, 5-100% DE010R=Remote 120-277V 0-10V 0% linear dimming	D5LTR=Remote Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 120V-277V DMXR=Remote DMX/RDM logarithmic dimming <sup>(3)</sup> DMXC5R=Remote DMX/RDM logarithmic dimming with RJ45 connection DL2R=Remote 1 to 100% dimming, 120V Lutron Hi-Lume forward phase dimming DLER=Remote Lutron Ecosystem dimming 1% to 100%, 120-277V
	P=White MB=Matte Black SL=Silver BZ=Bronze

SAMPLE ORDER NUMBER: **2LBSW3LI**

Trim	Reflector	Flange	Finish
2LB=2" trim	D=Spun aluminum DL=Lensed spun aluminum DC=Die cast aluminum <sup>(9)</sup> DLC=Lensed die cast aluminum <sup>(9)</sup>	3=Rimless <sup>(10)</sup>	LI=Specular Clear <sup>(11)</sup> H=Semi-Specular Clear <sup>(11)</sup> WMH=Warm Haze <sup>(11)</sup> WH=Wheat <sup>(11)</sup> WHH=Wheat Haze <sup>(11)</sup>  GPH=Graphite Haze <sup>(11)</sup> B=Specular Black <sup>(11)</sup> MW=Matte White MB=Matte Black <sup>(12)</sup> MMS=Matte Metallic Silver <sup>(12)</sup>

### REQUIRED if Remote Driver (R) is specified on Cylinder

Domestic Preferences <sup>(22)</sup>	Remote Drivers <sup>(5)</sup>	Lumens	Voltage	Driver	Options	Controls
[Blank]=Standard TAA=Trade Agreements Act	R100=Remote 100 ft R75=Remote 75ft R50=Remote 50 ft R25=Remote 25ft R15=Remote 15ft R5=Remote 5ft R2=Remote 2 ft	05=500 lumens <sup>(21)</sup> 10=1000 lumens 15=1500 lumens 20=2000 lumens	blank=120-277V 3=347V	D010=120-277V 0-10V 1% dimming D010TR=0-10V (120-277V) or line voltage (120V) dimming, 5-100% DE010=0-10V Linear Dimming, 0% to 100%, 120V-277V D5LT=Fifth Light® DALI DT6 Logarithmic Dimming, 0% to 100%, 120V-277V DMX=DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V <sup>(6)</sup> DMXC5=DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V, with RJ45 connection DL2=1 to 100% dimming, 120V Lutron Hi-Lume forward phase dimming <sup>(7)</sup> DLE=Lutron Ecosystem dimming 1% to 100%, 120-277V <sup>(7)</sup> DLV=Low Voltage System  <b>Tunable White 1000-2000 lumens</b> DE010W2N2765=0-10V dimming, 0% to 100%, 120-277V, 2700K-6500K DE010W2N2050=0-10V dimming, 0% to 100%, 120-277V, 2000K-5000K D5LTW2N276=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 120V-277V, 2700K-6500K D5LTW2N2050=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 120V-277V, 2000K-5000K	EM7=7W Emergency Module with Remote Test Switch EM14=14W Emergency Module with Remote Test Switch EMB0D=Bodine® Emergency Module with Remote Test Switch EMV7=7W Emergency Module for use with DLV driver with Remote Test Switch EMV14=14W Emergency Module for use with DLV driver with Remote Test Switch	WPST=Factory installed WaveLinX PRO Sensor Kit <sup>(8)(19)</sup> WLST=Factory installed WaveLinX LITE Sensor Kit <sup>(8)(20)</sup> WPN=WaveLinX PRO Wireless Node without sensor <sup>(23)</sup> WLN=WaveLinX LITE Wireless Node without sensor <sup>(24)</sup>

## Order Information

Domestic Preferences <sup>(22)</sup>	Accessories <sup>(22)</sup>	Finish <sup>(4)</sup>	Type	Lengths
<b>[Blank]</b> =Standard <b>TAA</b> =Trade Agreements Act	<b>Pendant or Canopy Kit REQUIRED for Surface Ceiling Mount</b>  <b>Pendant Kit for round cylinder</b> <sup>(13)</sup> <b>P236</b> =Pendant stem kit for round suspended mount cylinder  <b>Pendant Kit for square cylinder</b> <sup>(13)</sup> <b>PSQ236</b> =Pendant stem kit for square suspended mount cylinder  <b>Conduit Pendant Kit</b> <sup>(13)</sup> <b>PMRCC2</b> =Round conduit stem kit with conduit knockout cover	<b>P</b> =White <b>MB</b> =Matte Black <b>SL</b> =Silver <b>BZ</b> =Bronze	<b>Blank</b> =for integral drivers (D010 & D010TR) <b>RM</b> =For remote drivers	<b>Blank</b> =36" <b>SP</b> *=* Specify 6" to 144" in 1" increments
	<b>OR</b>			
	<b>Surface Ceiling Mount Canopy</b> <b>2SQPSML</b> =Low profile canopy for square surface mount 2-inch junction box <b>2RCPMSML</b> =Low profile canopy for round surface mount 2-inch junction box <b>2SQPSTAN</b> =Low profile canopy for square surface mount standard junction box <b>2RCPSTAN</b> =Low profile canopy for round surface mount standard junction box	<b>P</b> =White <b>MB</b> =Matte Black <b>SL</b> =Silver <b>BZ</b> =Bronze		

### Notes

- Requires 2 reflectors and light engines.
- DMX fixtures default to full on upon loss of DMX signal.
- Consult factory for custom finishes.
- Up down surface mount require 2 driver assemblies.
- DMX fixtures default to full on upon loss of DMX signal.
- Only available up to 25'.
- Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory.
- Available with Matte White, Matte metallic silver and Matte Black Finishes.
- Available on D, DL, DLC and DC.
- Not available on Pinhole or DC distributions.
- Available only on DC.
- 0-45° slope.

- Canopy mount driver available omit R in driver ordering information, not offered with DMX.
- Requires canopy or pendant kit, see Accessory section for ordering information.
- Ceiling mount only.
- WPST=WaveLinX PRO wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with 0-10V only.
- WLST=WaveLinX LITE tile mount sensor kit for daylight dimming, PIR motion sensing, use with D010 only. (Refer to WaveLinX Lite system specifications.)
- Limited to D010 drivers.
- 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. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.  
Trim must be ordered with cylinder for TAA compliance.  
Example: TAALSR2B10D010P-2LB

- 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.
- WLN=WaveLinX LITE 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 D010 or DE010 drivers only.

## Product Specifications

### Lower Reflector

- Round or square 2-3/4" aperture
- Painted die-cast aluminum or spun aluminum with a lensed upper optical chamber provides superior lumen output with minimal source brightness
- Square surface mount available with round reflectors
- Available in all Portfolio finishes

### Trim retention

- Three pressure springs hold flange tightly to the cylinder lip

### Cylinder

- Round and soft square extruded aluminum
- Matte white, bronze, silver or matte black
- Available in standard and shallow heights
- Yoke mount provides +/-45° lockable tilt

### Mounting

- Mounting plate installs to mounted junction box
- Cylinder mounts to plate with easy twist and lock hooks for ceiling mount
- For wall mount, mounting arm attaches directly to junction box via a robust mounting plate
- Offered with optional stem and aircraft cable
- LuxWire™ provides low voltage power to the cylinder via aircraft cable
- Conduit canopy allows for mounting pendant and surface cylinder on hard ceilings provided in painted finish to match the cylinder accommodates 1/2" or 3/4" conduit.

### Thermal

- Aluminum heat sink conducts heat away from the LED module for optical performance and longer life

### LED System

- Contains a plurality of high brightness white LED's combined with high reflectance upper reflector and convex transitional lens producing 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)
- Color variation within 2-step MacAdam ellipses
- Available in 2400K, 2700K, 3000K, 3500K, 4000K and 5000K correlated color temperature (CCT)
- Available in 80, 90 or 97 color rendering index (CRI)

### VividTune™ Color Tuning Solutions

- D2W™ – Dim-to-Warm shifts CCT from 3000K to 1850K as fixture dims, mimicking halogen sources
- W2N – Tunable white CCT range from 2700K to 6500K or 2000K to 5000K; 90 CRI

### Driver

- Standard 120-277V 0-10V dimming driver provides flicker-free dimming from 100% to 1%
- Distributed low voltage power system combines power, lighting, and controls with ease of installation.

### Remote Driver

- 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

### 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 PRO 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 WPN 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. **Note:** Not compatible with 347V or Chicago plenum.

#### WaveLinX LITE Tilemount Sensor Kit

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

#### WaveLinX LITE Wireless Node

- WaveLinX LITE WLN 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. **Note:** Not compatible with 347V or Chicago plenum.

#### WaveLinX Tilemount Sensor Kits Application

- The WPST and WLST tilemount sensor 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 sensor kits may be ordered as factory installed on the luminaire, or ordered separately as a field installed accessory kit.
- **Note: WaveLinX PRO devices are only compatible with the WaveLinX PRO system.**
- **Note: WaveLinX LITE devices are only compatible with the WaveLinX LITE system.**

#### Compliance

- Pendant mount cULus Listed for damp locations
- Ceiling mount cULus Listed for protected wet locations with lensed trims with covered ceiling
- Wall mount cULus Listed for wet locations
- EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits
- RoHS compliant
- Photometric testing completed in accordance with IES LM-79
- LED life testing completed in accordance with IES LM-80 standards

#### Warranty

- Five year warranty [www.cooperlighting.com/legal](http://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

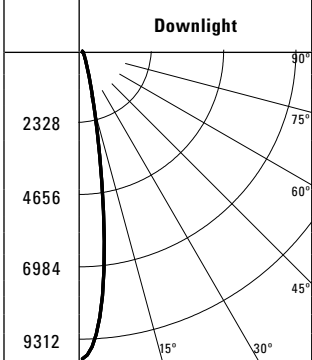
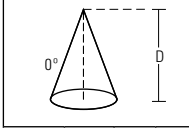
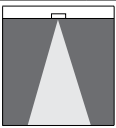
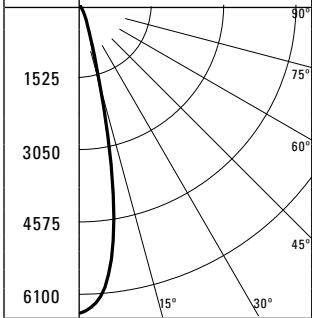
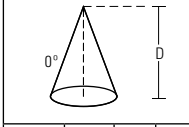
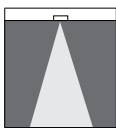
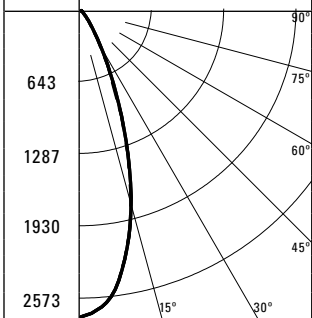
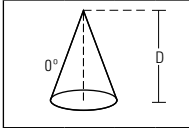
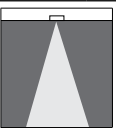
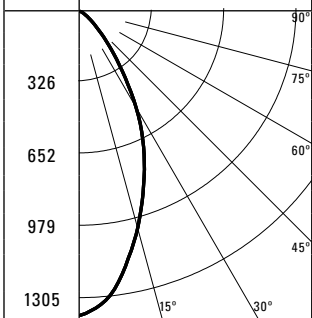
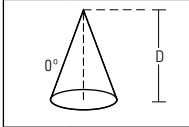
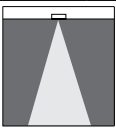
Lumens	120V		277V	
	Inrush (A)	Duration (ms)	Inrush (A)	Duration (ms)
500 Lumen D010	0.64	0.05	1.4	0.04
1000 Lumen D010	1.02	0.041	2.18	0.021
1500 Lumen D010	1.02	1.02	2.24	0.064
2000 Lumen D010	1.02	0.077	2.43	0.027

500 Lumen D010		1000 Lumen D010	
Input Power: 7.38W	THD <14.4%	Input Power: 11W	THD <13.8%
Input Current: 0.06A	277V Input Current: 0.03A	Input Current: 0.086A	277V Input Current: 0.042A

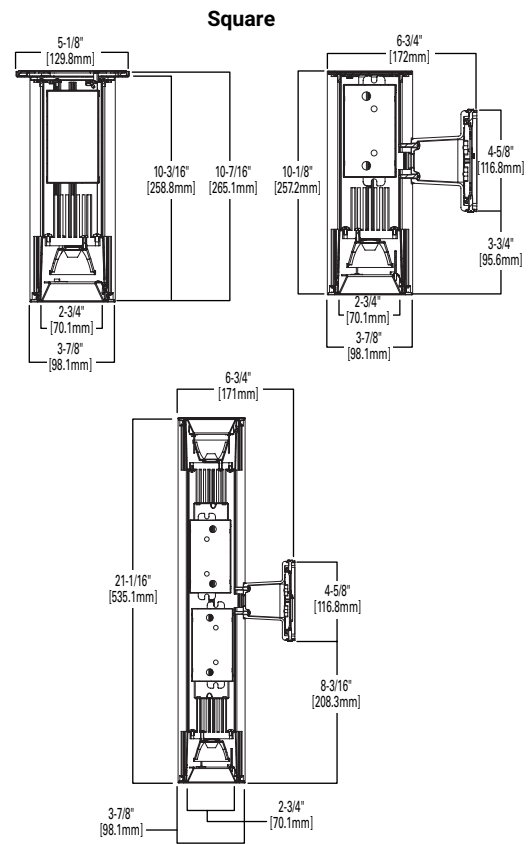
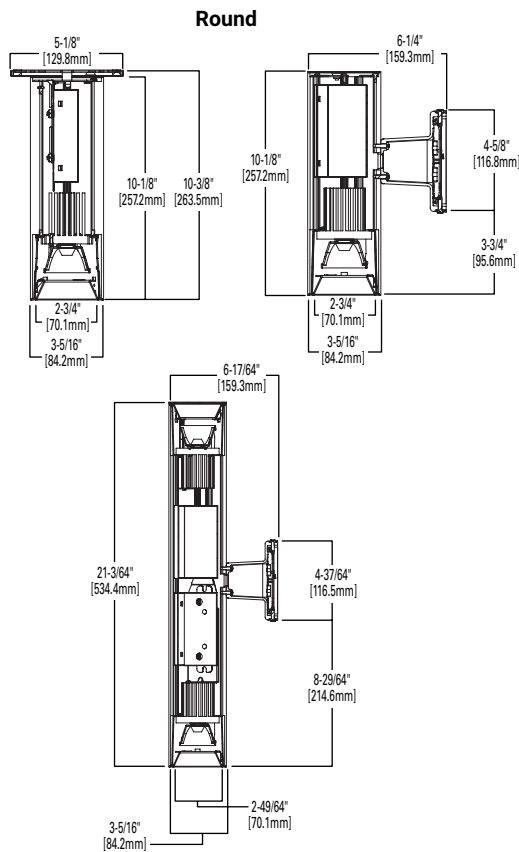
1500 Lumen D010		2000 Lumen D010	
Input Power: 15.05 W	THD <13.0%	Input Power: 21.2 W	THD <8.6%
Input Current: 0.13A	277V Input Current: 0.06A	Input Current: 0.18A	277V Input Current: 0.081A

 View IES files

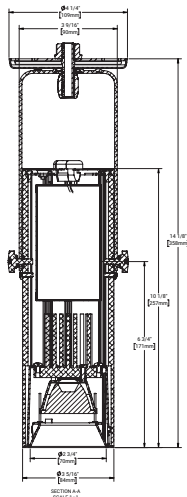
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Test Number	P264029					Degrees Vertical	Candela	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance	
Housing	LSR2B10SP158035					0	9316	0-30	945	97	45	4884	
Trim	2LBD*LI					5	7438	0-40	965	99.1	55	1720	
Lumens	974					15	976	0-60	973	99.9	65	1167	
Efficacy	94.6 Lm/W					25	141	0-90	974	100	75	0	
SC	0.28					35	30	90-180	0	0	85	0	
						45	7	0-180	974	100			
						55	2						
						65	1						
						75	0						
						85	0						
						90	0						
Test Number	P218711					Degrees Vertical	Candela	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance	
Housing	LSR2B10NFL258035					0	6104	0-30	987	96.2	45	3836	
Trim	2LBD*LI					5	5611	0-40	1019	99.3	55	676	
Lumens	1026					15	1236	0-60	1026	100	65	0	
Efficacy	99.6 Lm/W					25	229	0-90	1026	100	75	0	
SC	0.39					35	51	90-180	0	0	85	0	
						45	7						
						55	1						
						65	0						
						75	0						
						85	0						
						90	0						
Test Number	P218754					Degrees Vertical	Candela	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance	
Housing	LSR2B10FL408035					0	2577	0-30	938	90.2	45	10412	
Trim	2LBD*LI					5	2467	0-40	1020	98.0	55	2702	
Lumens	1041					15	1626	0-60	1040	99.9	65	0	
Efficacy	101 Lm/W					25	581	0-90	1041	100	75	0	
SC	0.59					35	120	90-180	0	0	85	0	
						45	19						
						55	4						
						65	0						
						75	0						
						85	0						
						90	0						
Test Number	P218801					Degrees Vertical	Candela	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance	
Housing	LSR2B10WFL558035					0	1309	0-30	674	68.5	45	57541	
Trim	2LBD*LI					5	1250	0-40	873	88.7	55	18916	
Lumens	985					15	959	0-60	984	99.9	65	0	
Efficacy	95.6 Lm/W					25	644	0-90	985	100	75	0	
SC	0.73					35	313	90-180	0	0	85	0	
						45	105						
						55	28						
						65	0						
						75	0						
						85	0						
						90	0						

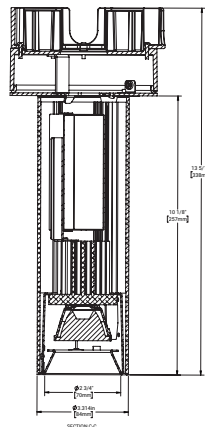
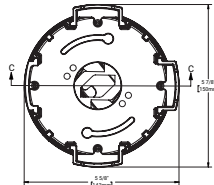
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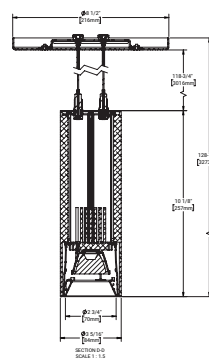
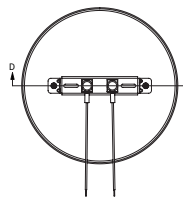
**2IN ROUND CYLINDER  
STANDARD YOKE MOUNT**



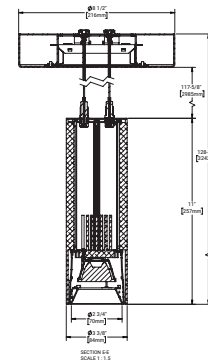
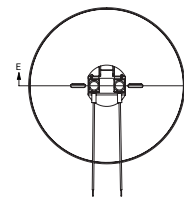
**2IN ROUND CYLINDER  
CONDUIT CANOPY**



**2IN ROUND CYLINDER  
POWER CORD PENDANT**

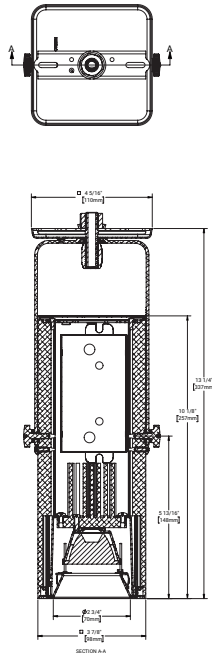


**2IN ROUND CYLINDER  
POWER CORD PENDANT DRIVER**

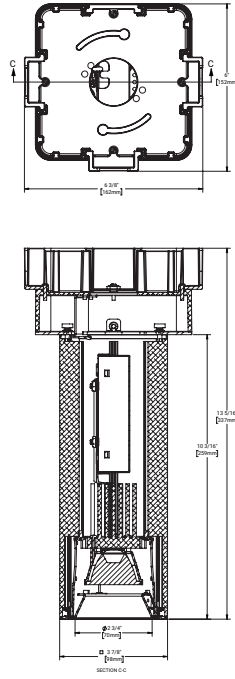


## Dimensional and Mounting Details

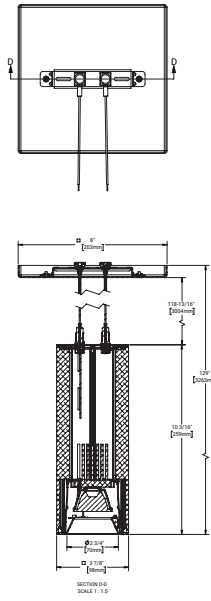
2IN SQUARE CYLINDER  
STANDARD YOKE MOUNT



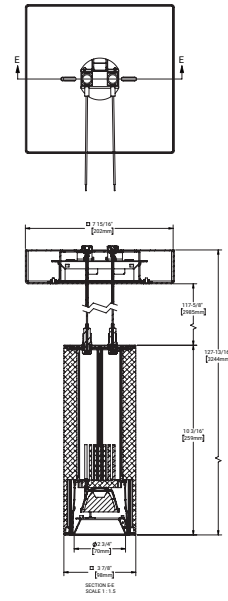
2IN SQUARE CYLINDER  
CONDUIT CANOPY



2IN SQUARE CYLINDER  
POWER CORD PENDANT



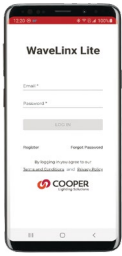
2IN SQUARE CYLINDER  
POWER CORD PENDANT DRIVER



## Connected Solutions

### WaveLinX LITE - WLST Tilemount Sensor

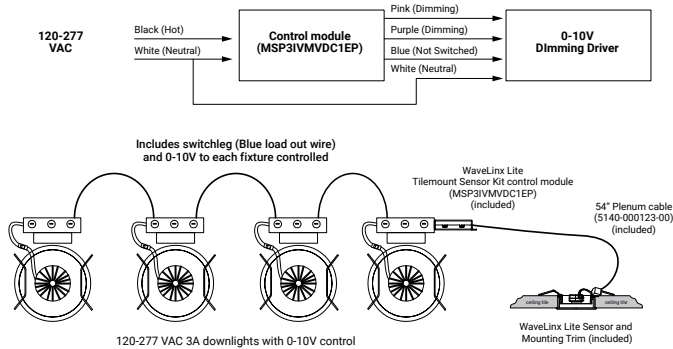
WaveLinX LITE devices only compatible with the WaveLinX LITE system.



- 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



### WaveLinX PRO Wireless – WPST Tilemount Sensor

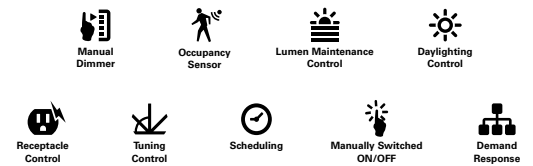
WaveLinX PRO devices only compatible with the WaveLinX PRO system.



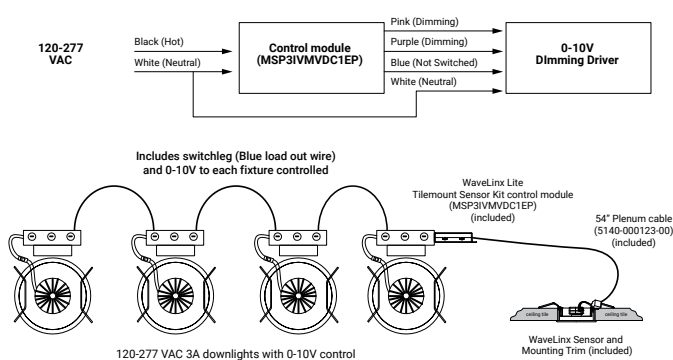
- WaveLinX PRO Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with Wireless Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building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



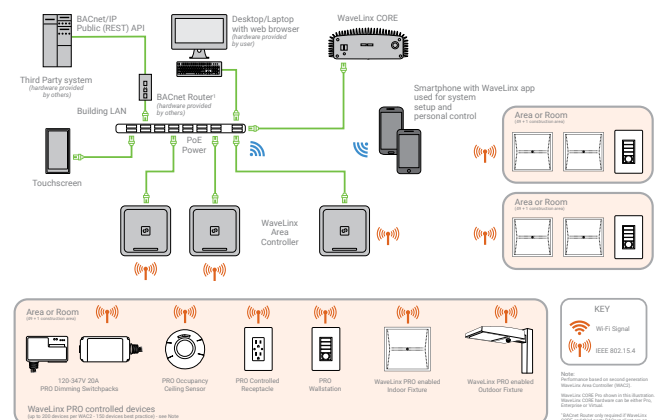
#### WaveLinX mobile app settings



#### WaveLinX PRO WPST Tilemount Wiring Diagram



#### WaveLinX CORE Building Management Integration





## Connected Solutions



### WaveLinx LITE Wireless Node - WLN

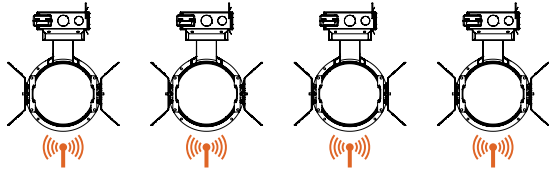
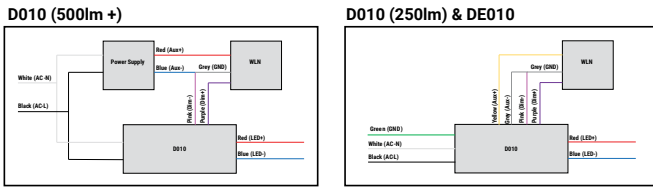
WaveLinx LITE devices only compatible with the WaveLinx LITE system.

- 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
- Refer to the WaveLinx system specifications for details
- Not available with BioUp or Tunable White

#### WaveLinx mobile app settings



#### WaveLinx LITE Wireless Node (WLN) Wiring Diagram



120-277 VAC 3A downlights with 0-10V control

#### WaveLinx LITE Bluetooth Enabled System



### WaveLinx PRO Wireless Node - WPN

WaveLinx PRO devices only compatible with the WaveLinx PRO system.

- 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

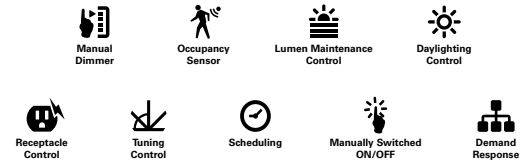
**Downlights with wireless communication**  
Highly efficient LED fixtures

**WaveLinx Area Controller**  
Provides centralized coordination of multiple area control options

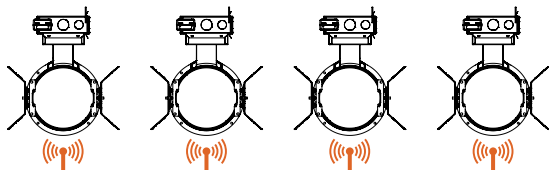
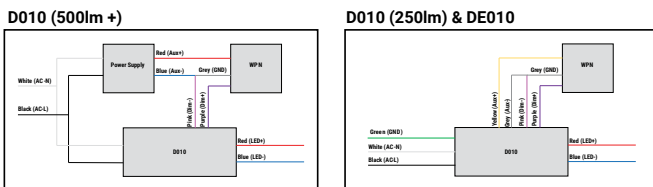
**Wireless Wall Station/Receptacle**  
Provides customized wireless control of each area

**Mobile Applications**  
Provides personalized, local control from a tablet or smartphone

#### WaveLinx mobile app settings



#### WaveLinx PRO Wireless Node (WPN) Wiring Diagram



120-277 VAC 3A downlights with 0-10V control

#### WaveLinx CORE Building Management Integration

