

Project		Catalog #		Type	
Prepared by		Notes		Date	



## Portfolio

### LDSQA4A 4L

4-Inch Square Adjustable Slope Wall Wash  
New Construction  
900, 1300, 1800, 2800 Lumens

#### Typical Applications

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

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#### Product Certification



#### Control Compatibility



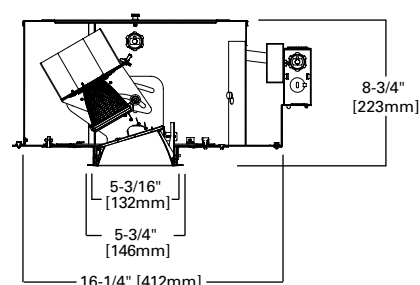
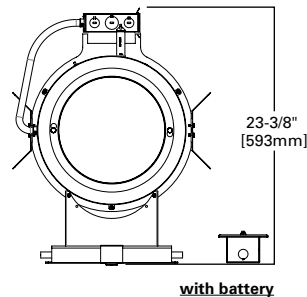
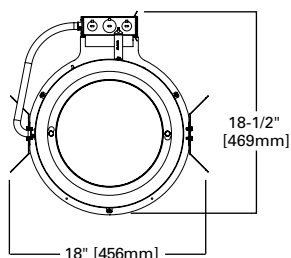
#### Product Features



### Top Product Features

- Square adjustable accent/slope for flat or sloped ceilings
- Excellent light control and low aperture brightness
- Lockable 365° rotation and 45° tilt holds any aiming position
- Anodized aluminum reflectors, Holds 2 lens media
- 4 color temperatures: 2700K, 3000K, 3500K and 4000K CCT
- CRI: 80 or 90, D2W™ option from 3000K to 1850K
- Angle cut or lensed angle cut reflectors
- Lumens: 900-2,800, Field-interchangeable optics: 15°, 25° or 35°

### Dimensional and Mounting Details





## Order Information

SAMPLE ORDER NUMBER: **LDSQA4A09835D010TE**

Housing	Lumens <sup>(1)</sup>	CRI	CCT	Driver <sup>(7)</sup>	Options <sup>(3)</sup>
<b>LDSQA4A</b> =4" Square Aperture adjustable/slope <b>LDSQA4ACP</b> =4" Square Aperture adjustable/slope, Chicago Plenum	<b>09</b> =900 (IC Rated) <b>13</b> =1300 (IC Rated) <b>18</b> =1800 (IC Rated) <b>28</b> =2800 (Non-IC)	<b>8</b> =80 CRI <b>9</b> =90 CRI	<b>27</b> =2700K <b>30</b> =3000K <b>35</b> =3500K <b>40</b> =4000K <b>30D2W</b> = Dim to warm - 3000K to 1850K (1800 lumen and below, 90 CRI) <sup>(8)</sup>	<b>900, 1300, 1800 and 2800 Lumen</b> <b>D010TE</b> =120-277V 0-10V 1% dimming or trailing edge 120V <b>D5LT</b> =Fifth Light® DALI DT6 Logarithmic Dimming, 0% to 100%, 120V-277V <b>DE010</b> =0-10V Linear Dimming, 0% to 100%, 120V-277V <b>DLT</b> =Hi-Lume Forward Phase 2-wire dimming 120V <b>DMX</b> =DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V <b>DMXC5</b> =DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V, with RJ45 connection  <b>900, 1300 and 1800 Lumen</b> <b>D010TR</b> =120-277V 0-10V 1% dimming or leading edge 120V	<b>EMB0D</b> =7W Bodine® Emergency Module with Remote Test Switch <b>EMB0D7ST</b> =Bodine® Emergency Module with Self Test Remote Test Switch <b>EM7</b> =7W Emergency Module with Remote Test Switch <b>EM14</b> =14W Emergency Module with Remote Test Switch <b>WPN</b> = WaveLinX PRO Wireless Node without sensor <sup>(11)</sup>

SAMPLE ORDER NUMBER: **LAR25NF**

Beam Forming Reflector
<b>LAR15SP</b> =15° optic <b>LAR25NF</b> =25° optic <b>LAR35FL</b> =35° optic

SAMPLE ORDER NUMBER: **4LSQA1**

Reflector	Finish	Options
<b>4LSQA0</b> =4" Adjustable Accent, Polymer Trim Ring <b>4LSQA1</b> =4" Adjustable Accent, Self Flanged <b>4LSQAL0</b> =4" Lensed Adjustable Accent, Polymer Trim Ring <b>4LSQAL1</b> =4" Lensed Adjustable Accent, Self Flanged	<b>H</b> =Semi-Specular Clear <b>WMH</b> =Warm Haze <b>WH</b> =Wheat <b>WHH</b> =Wheat Haze  <b>GP</b> =Graphite <b>GPH</b> =Graphite Haze <b>B</b> =Specular Black <b>MB</b> =Matte Black <b>MW</b> =Matte White	<b>Self-Flanged Only</b> <b>WF</b> =White Painted Flange

Accessories				
<b>4SQPR</b> =Plaster Lathing Ring <sup>(2)</sup>  <b>Bar Hangers</b> <b>HB26</b> =C-channel Bar Hanger, 26" Long, Pair <b>HB50</b> =C-channel Bar Hanger, 50" Long, Pair <b>RMB22</b> =Wood Joist Bar Hanger, 22" Long, Pair	<b>Transformers</b> <b>H347</b> =347 to 120V Step Down Transformer, 75VA <b>H347200</b> =347 to 120V Step Down Transformer, 200VA  <b>Connected Lighting Systems</b> <sup>(3) (8)</sup> <b>WPST</b> = Field installed WaveLinX Sensor Kit <sup>(9)</sup> <b>WLST</b> = Field installed WaveLinX LITE Sensor Kit <sup>(10)</sup>	<b>Color Filters</b> <b>F22</b> =20=Red <b>F33</b> =20=Blue <b>F44</b> =20=Green <b>F55</b> =20=Yellow <b>F66</b> =20=Mercury	<b>Dichronic Filters</b> <b>F71</b> =20=Peach <b>F72</b> =20=Amber <b>F73</b> =20=Green <b>F74</b> =20=Medium Blue <b>F75</b> =20=Yellow <b>F76</b> =20=Red <b>F77</b> =20=Dark Blue <b>F78</b> =20=Light Blue <b>F79</b> =20=Neutral Density <b>F80</b> =20=Magenta	<b>Beam-Modifying Lenses</b> <b>LSL</b> =20=Linear Spread Lens <b>OSL</b> =20=Overall Spread Lens <b>DIF</b> =20=Diffused Lens  <b>Louvers</b> <b>LVR</b> =20=Hex Cell Louver  <b>Snoot</b> <b>PLNC-SN-B</b> =Snoot

- Notes:**
- Nominal Lumens will vary depending on selected color, driver and reflector finish.
  - Order trim with polymer trim ring (Consult specification sheet for color ordering information and options).
  - Not available with Chicago Plenum and requires above ceiling access. Not for use with insulation.
  - Not CSA approved.
  - Includes 30° distribution diffuse lens. Order with LARL15SP upper reflector. Reference ies files for output.
  - DMX fixtures default to full on upon loss of DMX signal.
  - Consult dimming guide for performance.
  - Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. Use with 0-10V driver.
  - WPST = WaveLinX 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)
  - 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.



## Product Specifications

### Lower Reflector

- Aluminum lower reflector is available in a variety of Alzak® and painted finishes.
- Mousetrap springs pull trim tight to ceiling.
- Offered with self flange or polymer trim ring.

### Upper Reflector

- Field interchangeable optics in 15°, 25° or 35° provides smooth beam without color separation.
- Media holder fits onto upper reflector and holds up to two lens media.

### Trim Ring

- Self flanged or white polymer trim ring.

### Adjustment Mechanism

- Stable aiming and locking mechanism allows smooth 365° rotation and 40° tilt adjustment.
- Tilt aiming scale enables consistent setting across multiple fixtures.

### Housing

- 20 gauge galvanized steel plaster frame that rotates +/-7.5°.
- 18 gauge CRS housing is painted matte black to eliminate stray light.
- Housing is tool-less top accessible.

### Universal Mounting Bracket

- Accepts 1/2" EMT, C Channel, T bar fasteners and hanger bars.
- Provides 5" total adjustment.

### Thermal

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

### LED

- LED system contains a plurality of high brightness white LED's combined with a high reflectance upper reflector producing even distribution without 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 3-step MacAdam ellipses.
- D2W™ – dim-to-warm shifts CCT from 3000K to 1850K as fixture dims mimicking halogen sources.

### Driver

- Combination 120-277V 0-10V or 120V trailing edge phase cut driver provides flicker free dimming from 100% to 10%.
- Optional 0.1% 0-10V, Fifth Light, or DMX. Driver can be serviced from above or through the aperture.

### 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
- Optional City of Chicago environmental air (CCEA) marking for plenum applications.
- EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits.
- IC rated up to 1800 lumens, 2800 lumen is Non-IC rated. RoHS Compliant.
- Photometric testing completed in accordance with IES LM 79 standards.
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11.

### Warranty

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

## Energy Data

ENERGY DATA	
Sound Rating: Class A standards	
T ambient -40 + 40°C	
Power Factor: >0.90	
THD < 20%	

900 Lumen		
	120V	277V
Input Power	13.8W	15.0W
Input Current	0.12A	0.06A
Inrush Current	0.49A	0.85A

1300 Lumen		
	120V	277V
Input Power	22.9W	22.9W
Input Current	0.19A	0.09A
Inrush Current	0.72A	0.53A

1800 Lumen		
	120V	277V
Input Power	29.1W	29.4W
Input Current	0.24A	0.12A
Inrush Current	0.79A	1.09A

2800 Lumen		
	120V	277V
Input Power	44.5W	44.2W
Input Current	0.37A	0.17A
Inrush Current	1.09A	1.23A



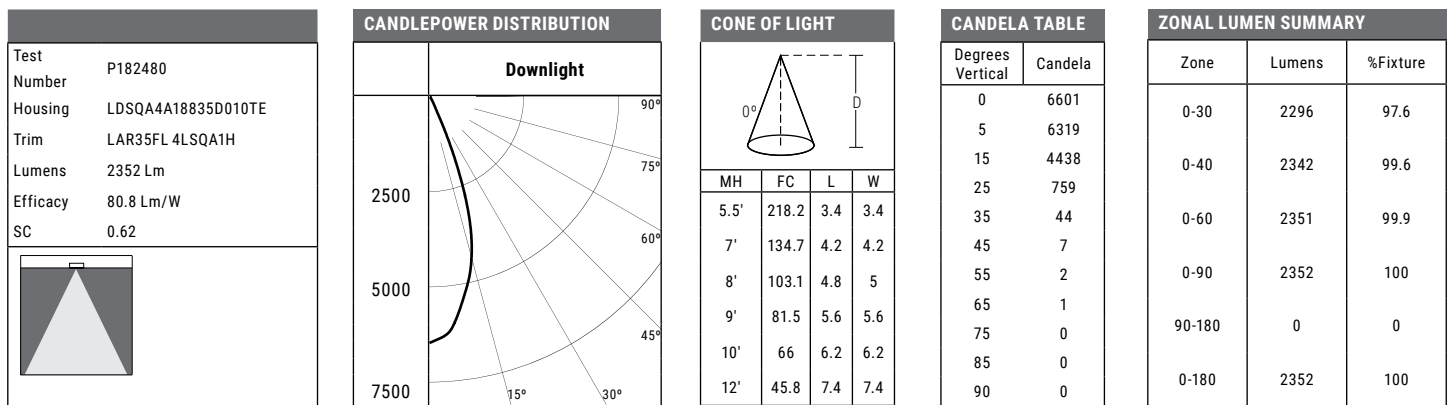
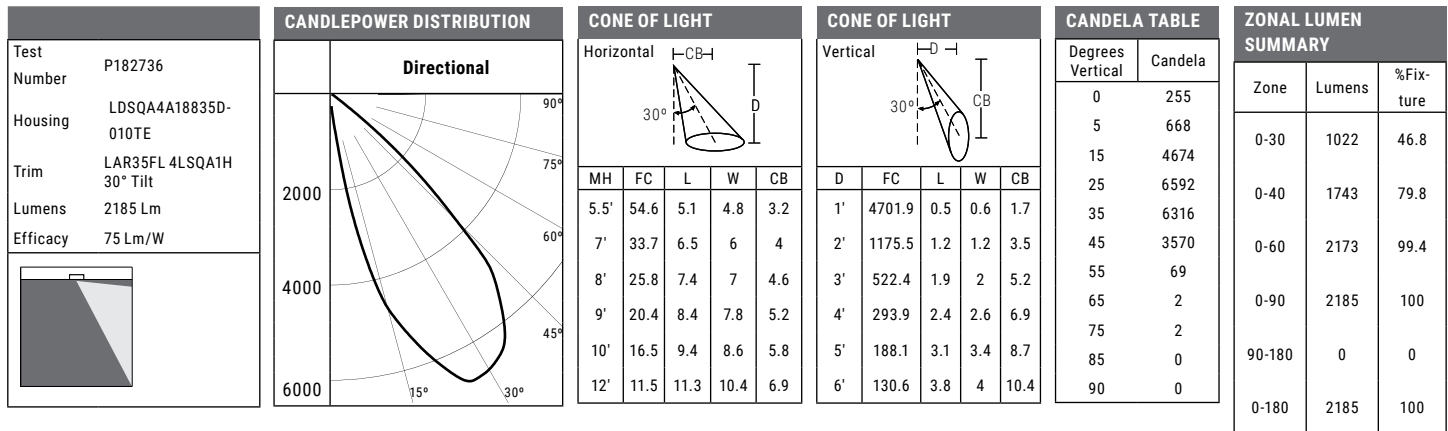
## Photometric Data

 View IES files

Test Number	Housing	Trim	Lumens	Efficacy	CANDLEPOWER DISTRIBUTION					CONE OF LIGHT					CONE OF LIGHT					CANDELA TABLE		ZONAL LUMEN SUMMARY		
																				Degrees Vertical	Canhala	Zone	Lumens	%Fix- ture
P182672	LDSQA4A18835D-010TE	LAR15SP 4LSQA1H 30° Tilt	1937 Lm	66.5 Lm/W	Directional					Horizontal					Vertical					0	167	0-30	920	47.5
																				5	277			
																				15	3171			
																				25	10759	0-40	1676	86.5
																				35	10581			
																				45	1899	0-60	1925	99.4
																				55	25			
																				65	3	0-90	1937	100
																				75	2			
																				85	0	90-180	0	0
																				90	0	0-180	1937	100
P182416	LDSQA4A18835D010TE	LAR15SP 4LSQA1H	2092 Lm	71.8 Lm/W	Downlight					Horizontal					Vertical					0	12742	0-30	2064	98.6
																				5	10640			
																				15	3104	0-40	2085	99.7
																				25	450			
																				35	22	0-60	2091	99.9
																				45	5			
																				55	2	0-90	2092	100
																				65	1			
																				75	0	90-180	0	0
																				85	0			
																				90	0	0-180	2092	100
P182704	LDSQA4A18835D-010TE	LAR25NF 4LSQA1H 30° Tilt	2145 Lm	73.7 Lm/W	Directional					Horizontal					Vertical					0	224	0-30	1012	47.2
																				5	494			
																				15	4419			
																				25	8118	0-40	1765	82.3
																				35	7722			
																				45	3169	0-60	2133	99.4
																				55	67			
																				65	2	0-90	2145	100
																				75	2			
																				85	0	90-180	0	0
																				90	0	0-180	2145	100
P182448	LDSQA4A18835D010TE	LAR25NF 4LSQA1H	2321 Lm	79.7 Lm/W	Downlight					Horizontal					Vertical					0	8951	0-30	2269	97.7
																				5	7882			
																				15	4182	0-40	2311	99.6
																				25	600			
																				35	40	0-60	2320	99.9
																				45	7			
																				55	3	0-90	2321	100
																				65	1			
																				75	0	90-180	0	0
																				85	0			
																				90	0	0-180	2321	100



## Photometric Data

[View IES files](#)


## EM MULTIPLIER DATA

LUMENS	EM MULTIPLIER	
	7	14
900	0.50	0.99
1300	0.29	0.57
1800	0.22	0.44
2800	0.16	0.32



## Connected Solutions

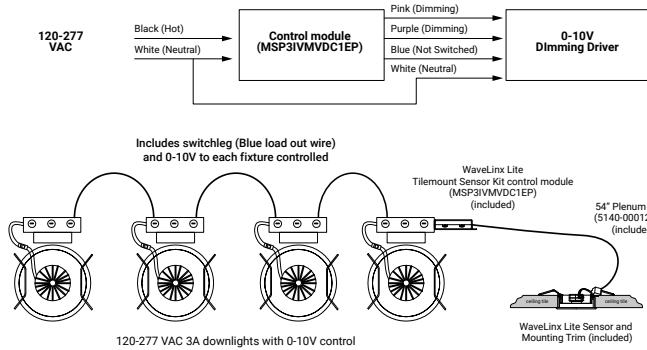


### WaveLinX LITE - WLST Tilemount Sensor

- 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



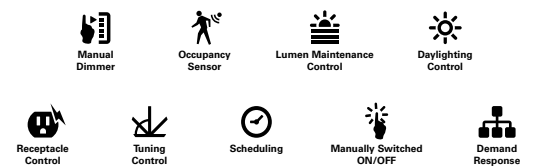
### WaveLinX PRO Wireless – WPST Tilemount Sensor



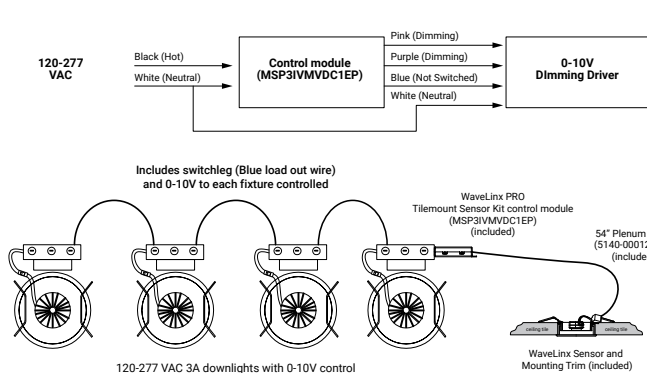
- WaveLinX PRO Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with Wireless Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building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



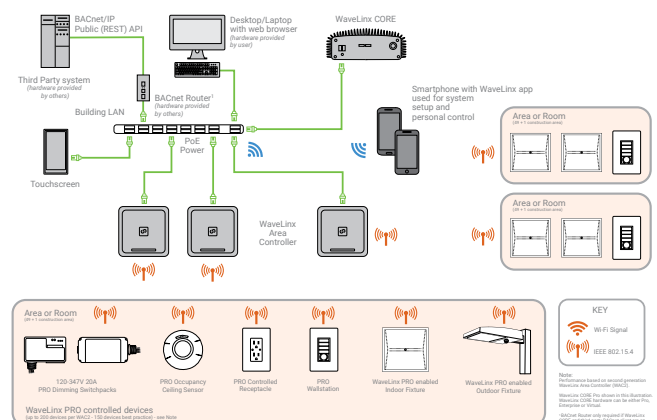
#### WaveLinX mobile app settings



#### WaveLinX PRO WPST Tilemount Wiring Diagram



#### WaveLinX CORE Building Management Integration





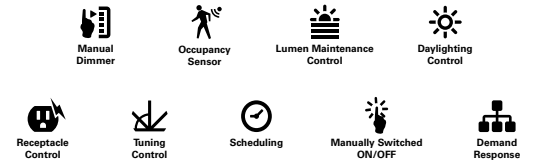
## Connected Solutions

## 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

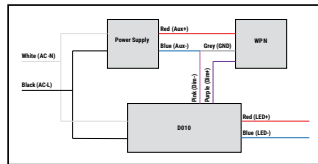


## WaveLinX mobile app settings

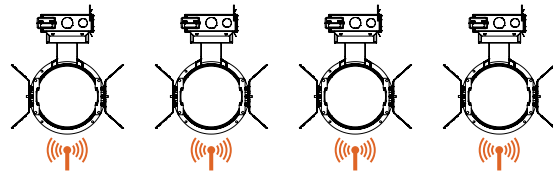
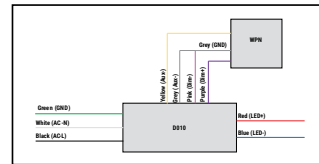


## WaveLinX PRO Wireless Node (WPN) Wiring Diagram

For 0-10V drivers 250 lumens and Tunable White



For 0-10V drivers 500 lumens and over



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

## WaveLinX CORE Building Management Integration

