

Project		Catalog #		Type	
Prepared by		Notes		Date	



Portfolio

LDSSQ4 | EU4B | 4LBCSSQ

4" square, new construction shallow downlight

Typical Applications

Office • Education • Healthcare • Hospitality • Retail • Code-Compliance Areas • Sports Venues

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Product Certification



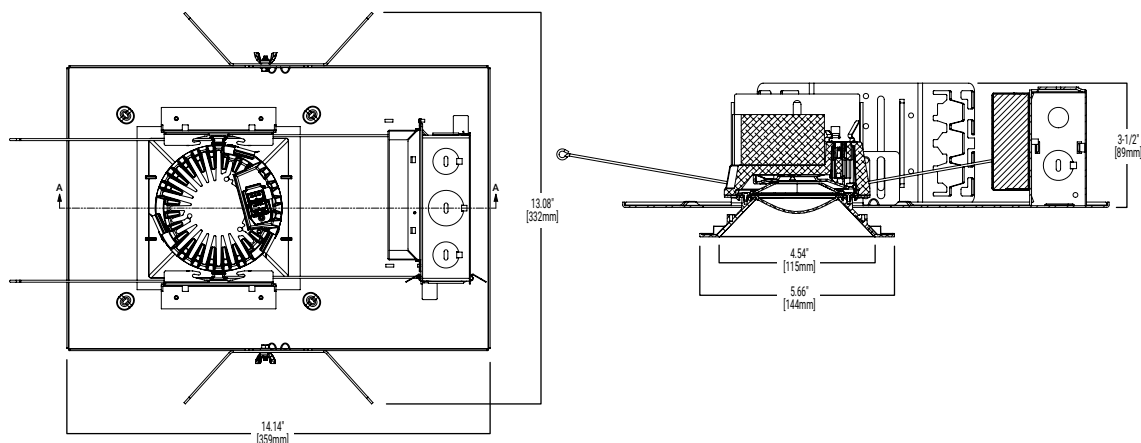
Product Features



Top Product Features

- 500, 1000, 1500, 2000, 3000 lumens
- 2400K, 2700K, 3000K, 3500K, 4000K, 5000K color temperature
- For standard or shallow plenum heights
- Dim-to-warm technology
- Tuneable white technology

Dimensional and Mounting Details



Order Information

SAMPLE ORDER NUMBER: **LDSSQ4B10D010-EU4B102027-4LBCSSQ1MW**

Housing	Lumens	Driver
LDSSQ4B = 4" square downlight 4" nominal aperture LDSSQ4BCP = 4" square downlight 4" nominal aperture, Chicago Plenum	05 = 500 Lumens ⁽¹⁰⁾ 10 = 1000 Lumens 15 = 1500 Lumens 20 = 2000 Lumens 30 = 3000 Lumens	D010 = 0-10V Dimming, 1% to 100%, 120V-277V D010TR = 0-10V or Line Voltage Dimming, 5% to 100%, 120V-277V DE010 = 0-10V Linear Dimming, 0% to 100%, 120V-277V ⁽⁶⁾ D5LT = Fifth Light® DALI DT6 Logarithmic Dimming, 0% to 100%, 120V-277V ⁽⁶⁾ DMX = DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V ⁽⁹⁾⁽⁶⁾ DL2 = Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 120V Only DMXC5 = DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V, with RJ45 connection DLE = Lutron Ecosystem dimming 1% to 100%, 120V-277V DLV = Low voltage dimming driver (1-100%) for use with DLVP system ⁽³⁾
Notes	Notes	Notes
	(1) Nominal lumens will vary depending on selected color, driver and reflector finish. (10) Limited to D010 drivers	(2) Non-IC (3) Not available with Chicago Plenum. (5) Requires above ceiling access. (6) DMX fixtures default to full on upon loss of DMX signal.

Power Module	Lumen	CRI / CCT						
EU4B = 4" Universal LED Module	1020 = 1000, 1500, 2000 Lumens 3040 = 3000 Lumens	<table border="1"> <thead> <tr> <th>80 CRI</th> <th>90 CRI</th> <th>97 CRI</th> </tr> </thead> <tbody> <tr> <td> 27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K 50 = 5000K </td> <td> 24 = 2400K 27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K 50 = 5000K </td> <td> 27 = 2700K 30 = 3000K </td> </tr> </tbody> </table>	80 CRI	90 CRI	97 CRI	27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K 50 = 5000K	24 = 2400K 27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K 50 = 5000K	27 = 2700K 30 = 3000K
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Notes	Notes	Notes						
	(1) Nominal lumens will vary depending on selected color, driver and reflector finish.	Dim 2 Warm 109030D2W = 1000 lumen, 90 CRI, Dim 2 Warm, IC rated 159030D2W = 1500 lumen, 90 CRI, Dim 2 Warm, IC rated 209030D2W = 2000 lumen, 90 CRI, Dim 2 Warm 309030D2W = 1000 lumen, 90 CRI, Dim 2 Warm Tunable White 1020W2N902050 = 1000, 1500, 2000 lumens, 90 CRI, tunable white 2000K-5000K 1020W2N902650 = 1000, 1500, 2000 lumens, 90 CRI, tunable white 2700K-6500K						

Reflector	Flange	Finish
4LBCSSQ = 4" Shallow wide beam die cast 4LBPSSQ = 4" Shallow non-conductive, injection molded white (self flanged white only)	1 = Self-flanged (finish is the same as the reflector) 2 = White painted self-flanged 3 = Flangeless for use with plaster lathing ring	Die Cast reflectors MW = Matte White MB = Matte Black MMS = Matte Metallic Silver
Notes	Notes	Notes

Accessories

Accessories
LGSKT4SQIP66 = IP66 Gasket Kit PRSQ4 = Rimless Plaster Ring for Flush Mount (order reflector with flangeless reflector)
Bar Hangers HB26 = C-channel Bar Hanger, 26" Long, Pair HB50 = C-channel Bar Hanger, 50" Long, Pair RMB22 = Wood Joist Bar Hanger, 22" Long, Pair
Connected Lighting Systems ⁽⁷⁾ WTA = Field installed WaveLinX sensor Kit ⁽⁸⁾ WTK = Field installed WaveLinX Lite Sensor Kit ⁽⁹⁾
Notes
(7) Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. (8) WTA = WaveLinX wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with 0-10V only. (9) WTK = WaveLinX Lite tile mount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinX Lite system specifications)

Product Specifications

Lower Shielding Reflector

- Painted die cast aluminum or non-conductive injection molded lower reflector with a lensed upper optical chamber providing superior lumen output with minimal source brightness
- Reflector is retained with two torsion springs holding the flange tight to the finished ceiling surface
- Plaster lathing ring accessory offered for flush reflector transition

Plaster Frame

- Galvanized steel plaster frame s for up to 1-1/4" thick ceilings

Junction box

- Listed for (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring
- (4) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs

Thermal

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

LED

- Chip on board with a multitude of highly efficient white LED's, combined with a high reflectance upper reflector and convex transitional lens produce even distribution with no pixilation
- Rated for 50,000 hours at 70% lumen maintenance
- 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 tool-less 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. Standard (requires above ceiling access)

Driver

- 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
- W2N, DMX, DE010, and D5LT require above ceiling access and all other drivers can be accessed from above or through the aperture
- Distributed low voltage power system combines power, lighting, and controls with ease of installation.

Connected Lighting System Options

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

WaveLinx Wireless System Tilemount Sensor Kit

- WaveLinx Wireless WTA tile mount sensor kit offers daylight dimming, PIR motion sensing, scene and zone configuration, automatic commissioning, and optional RLTS - Real Time Location Services available.

WaveLinx Lite System Tilemount Sensor Kit

- WaveLinx Lite WTK tile mount sensor kit offers daylight dimming and PIR motion sensing, scene and grouping configuration.

WaveLinx Tilemount Kits Application

- The WTA and WTK 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 WTA and WTK tilemount kits may be ordered as factory installed on the luminaire, or ordered separately as a field installed accessory kit.

Code Compliance

- Thermally protected and cULus listed for protected wet locations
- IP66 rated when used with IP66 gasket kit accessory
- 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 1500 lumens
- 2000 lumen and above are non-IC rated - insulation must be kept 3" from top and sides of housing
- RoHS Compliant
- Photometric testing completed in accordance with IES LM 79 and TM-30 standards
- LED life testing completed in accordance with LM 80 standards

Warranty

- Five year warranty

Energy and Performance 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

1000 Lumen D010	
Input power: 11W	THD: <14%
120V input current: 0.09A	277V Input Current: 0.04A

1500 Lumen D010	
Input power: 15.5W	THD: <13%
120V input current: 0.13A	277V Input Current: 0.06A

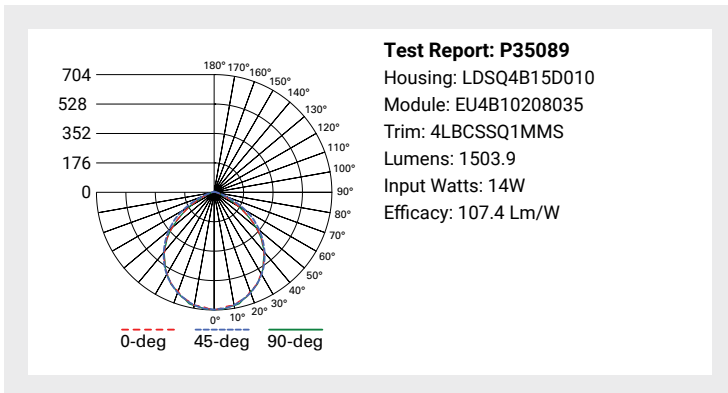
2000 Lumen D010	
Input power: 21.2W	THD: <9%
120V input current: 0.18A	277V Input Current: 0.08A

3000 Lumen D010	
Input power: 27.6W	THD: <10%
120V input current: 0.23A	277V Input Current: 0.10A

Lumens	120V		277V	
	Inrush (A)	Duration (ms)	Inrush (A)	Duration (ms)
1000 Lumen D010	1.02	0.041	2.18	0.021
1500 Lumen D010	1.02	0.042	2.24	0.064
2000 Lumen D010	1.02	0.077	2.43	0.027
3000 Lumen D010	1.15	0.067	3.26	0.027

Photometric Data

[View IES files](#)



Connected Systems

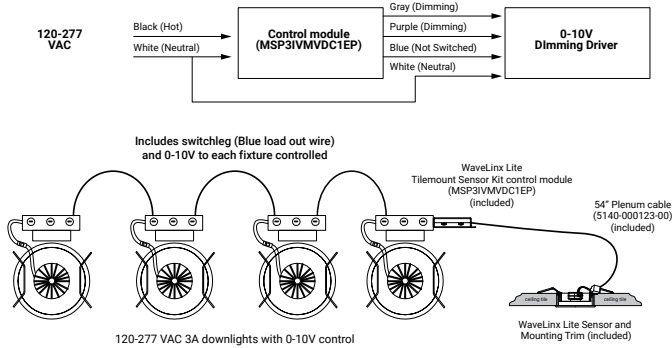
WaveLinx Lite - WTK Tilemount Sensor



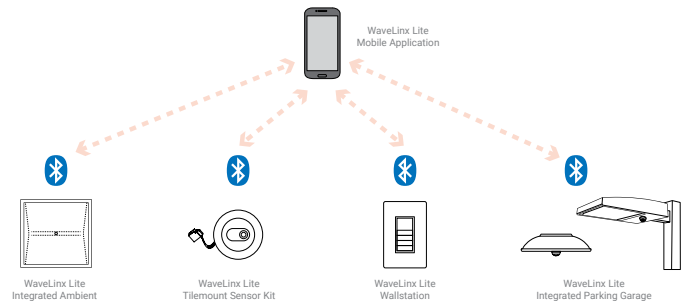
- Intuitive Android™ or Apple® iOS® app for basic system code compliant set up and configuration via Bluetooth
- Up to 28 unique areas per project site (WaveLinx Lite Bluetooth network)
- Up to 50 devices for an area, any one of 16 control zones, up to 6 occupancy sets, and custom lighting scenes
- Automatic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



WaveLinx Lite WTK Tilemount Wiring Diagram



WaveLinx Lite Bluetooth Enabled System



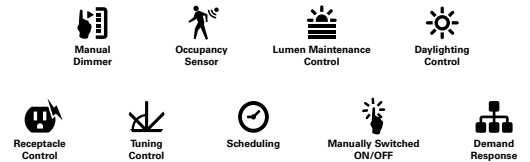
WaveLinx Wireless – WTA Tilemount Sensor



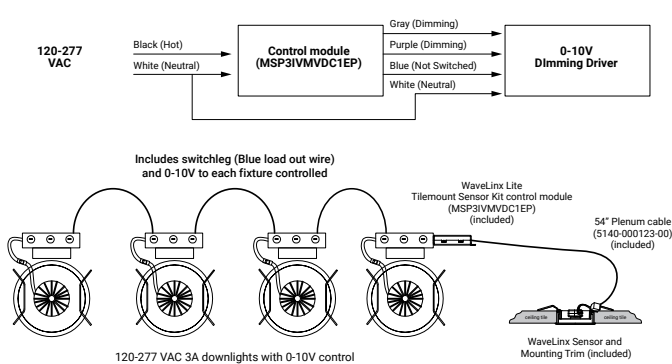
- WaveLinx Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with Wireless Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building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



WaveLinx mobile app settings



WaveLinx Lite WTA Tilemount Wiring Diagram



WaveLinx Wireless Trellix Building Management Integration

