Portfolio

6 inch LED square recessed downlight designed for glare free, even illumination. Featuring a two-stage diffused reflector system producing smooth distribution with excellent light control and low aperture brightness. Lumen packages range from 500 to 7000 with color temperatures of 2400K, 2700K, 3000K, 3500K, 4000K, and 5000K. VividTune: Dim-to-warm technology – similar to halogen at full power, the 3000K LED warms smoothly as dimmed to 1850K creating a rich warm glow within the space. Tunable white technology - adjust the color temperature from warm white to cool white while independently controlling intensity.

	Catalog #	Туре
	Project	
	Comments	Date
I		
В	Prepared by	

SPECIFICATION FEATURES

Lower Shielding Reflector

Painted die cast aluminum or 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. Available with non-conductive polymer trim. 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 / Collar

Galvanized steel plaster frame with adjustable collar adjusts for up to 2" thick ceilings and rotates+/- 7.5°.

Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above and below the ceiling.

Junction Box

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

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. 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. Quick 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 to1850K as fixture dims mimicking halogen sources.

W2N - Tunable white CCT range 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%. Optional 120-277V phase dimming, <1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem. Driver can be serviced 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

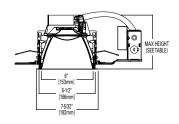
- The WTA and WTK tilemount kits include a control module mounted on the luminaire junction box via 1/2" knock-out, and a tilemount sensor on 54-inch whip; for ceiling installation by direct-mount spring clips or via mounting bracket in octagon ceiling boxes.
- The WTA and WTK tilemount kits may be ordered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

Code Compliance

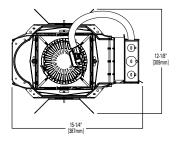
Thermally protected and cULus listed for wet locations with covered ceiling. IP66 rated when used with IP66 gasket kit accessory. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits, 2000 lumen and above are Non-IC rated - Insulation must be kept 3" from top and sides of housing. IC rated up to 1500 lumens. 5000 lumen and above are marked spacing and must follow spacing requirements. RoHS Compliant. Photometric testing completed in accordance with IES LM 79. Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11.

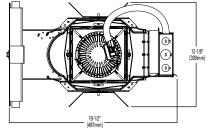
Warranty

5-vear warranty



	1000-2000 LUMENS	3000-5000 LUMENS	6000-7000 LUMENS
STANDARD	6-7/16" [163mm]	6-7/16" [163mm]	8-3/15" [208mm]
SHALLOW	4-7/16" [113mm]	5-5/8" [143mm]	5-5/8" [143mm]







LDSQ6B EU6B 6LBSQ

500, 1000, 1500, 2000, 3000, 4000, 5000, 6000, 7000 Lumens LED

Die Cast or Anodized Aluminum Square Downlight New Construction









Refer to ENERGY STAR® Qualified Products List. Can be used to comply with California Title 24 High Efficacy requirements.



SAMPLE NUMBER: LDSQ6B15D010EMBOD

Housing	Lumens ¹	Voltage	Driver	Options ⁴
LDSQ6B=LED Square Downlight 6" Nominal Aperture LDSQ6BCP=LED Square Downlight 6" Nominal Aperture, Chicago Plenum	05=500 lumens ¹⁵ 10=1000 lumens 15=1500 lumens 20=2000 lumens 30=3000 lumens 40=4000 lumens 60=6000 lumens ⁶ 70=7000 lumens	Blank=120-277V 3=347V (step down transformer)	500 - 4000 Lumen D010=0-10V Dimming, 1% to 100%, 120V-277V D010TR=0-10V cr Line Voltage Dimming, 5% to 100%, 120V-277V 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 DMXC5=DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V, with RJ45 connection D12=Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 120V Only DLE=Lutron Ecosystem dimming 1% to 100%, 120V-277V 5000, 6000 and 7000 Lumen D010TE=0-10V 1% orTrailing Edge, 10% to 100%, 120V-277V (120V Only for Trailing Edge Dimming) 1000 - 3000 Lumen DLV=Low voltage dimming driver (1-100%) for use with DLVP system (3000 lumen and below) ^{4,10} Tunable white 1000-2000 Lumens ¹² 1DE010W2N2050=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 120V, 2700K - 6500K 1D5LTW2N2050=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 120V, 2700K - 6500K 2DE010W2N2050=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 120V, 2700K - 6500K 2DE010W2N2050=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 277V, 2000K - 5000K 2DE010W2N2050=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 277V, 2000K - 5000K 2DE1TW2N2050=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 277V, 2000K - 5000K 2D5LTW2N2050=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 277V, 2000K - 5000K	EMBOD=Bodine® Emergency Module with Remote Test Switch EMBOD7ST=Bodine® Emergency Module with SelfTest Remote Test Switch EM7=7W Emergency Module with Remote Test Switch EM14=14W Emergency Module with Remote Test Switch EM17=7W Low Voltage Emergency Module with Remote Test Switch EM71=14W Low Voltage Emergency Module with Remote Test Switch EM714=14W Low Voltage Emergency Module with Remote Test Switch WTA = Factory installed WaveLinx sensor Kit 10, 13 WTK = Factory installed WaveLinx Lite Sensor Kit 10, 14

SAMPLE NUMBER: EU6B10208035

Power Module	Lumen Levels ¹	CRI	Color		
EU6B=6" Universal LED Module	05=500 lumens 1020=1000, 1500, 2000 lumens 3050=3000, 4000, 5000 lumens ⁶ 6070=6000, 7000 lumens ⁶ 1015IC=1000, 1500 lumen 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
	Dim 2 Warm 109030D2W=1000 lumen, 90 CRI, Dim 2 Wa 159030D2W=1500 lumen, 90 CRI, Dim 2 Wa 209030D2W=2000 lumen, 90 CRI, Dim 2 Wa 309030D2W=3000 lumen, 90 CRI, Dim 2 Wa	rm, IC rated			CRI, tunable white 2000K-5000K CRI, tunable white 2700K-6500K

SAMPLE NUMBER: 6LBSQ1LI

ONIN DE NOMBER GEOGRE					
Trim	Distribution	Flange	Finish		
6LB =6" LED	SQ =Square Anodized Aluminum CSSQ =Cast Shallow Square, Die Cast Aluminum ⁷	0=White Polymer Trim Ring ¹¹ 1=Self-flanged ⁸ 2=White Painted Self-flanged	LI=Specular Clear ² H=Semi-Specular Clear ² WMH=Warm Haze ² WH=Wheat ² GPH=Graphite Haze ²	B=Specular Black ² MW=Matte White MB=Matte Black ³ MMS=Matte Metallic Silver ³	

Accessories

PRSQ6=Plaster Lathing Ring for Flush Mount for use with Rimless Flange (order with white polymer trim ring flange option) LGSKT6SQIP66=IP66 Gasket Kit

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

Transformers

H347=347 to 120V Step DownTransformer, 75VA H347200=347 to 120V Step DownTransformer, 200VA

Connected Lighting Systems 4, 10

WTA = Field installed WaveLinx sensor Kit ¹³
WTK = Field installed WaveLinx Lite Sensor Kit ¹⁴

Notes:

- Nominal Lumens will vary depending on selected color, driver and reflector finish.
- 2 Available on anodized aluminum
- 3 Available only on cast aluminum
- 4 Not available with Chicago Plenum
- 5 UL/US approved only
- **6** Product is marked spacing and must be installed with the following minimum spacing.
 - Center to center of adjacent luminaires: 36"
 - Center of luminaire to side of building member: 18"
- Minimum overhead: 1/2"
- Not available with CSSQ or PSSQ trims.
- 7 Offered up to 5000 lumens
- 8 Flange is the same finish as reflector

- **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 driver.
- 11 Not available with cast shallow
- **12** Non-IC
- 13 WTA = WaveLinx wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with 0-10V only.
- 14 WTK = WaveLinx Lite tile mount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinx Lite system specifications)
- 15 Limited to D010 drivers

ENERGY

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 Lur	nen Dutu	1500 Lun	IEN DUIU
Input Power: 11W THD: <14%		Input Power: 15.5W	THD: <13%
120V Input Current: 0.09A 277V Input Current: 0.04A		120V Input Current: 0.13A	277V Input Current: 0.06A
2000 Lur	nen D010	3000 Lun	nen D010
Input Power: 21.2W	THD: <9%	Input Power: 27.6W	THD: <10%

120V Input Current: 0.18A 277V Input Current: 0.08A		120V Input Current: 0.23A	277V Input Current: 0.10A		
4000 Lun	nen D010	5000 Lumo	en D010TE		
Innut Davison 41 CM/	TUD129/	Innut Daving E7 0M/	TUD: -149/		

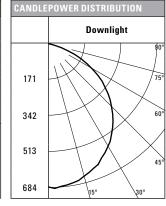
120V IIIput Current: 0.35A	277V IIIput Current: 0.15A	120V IIIput Current: 0.49A	277V IIIput Current: 0.22A
6000 Lume	en D010TE	7000 Lume	en D010TE
Input Power: 59.7W	THD: <14%	Input Power: 75.8W	THD: <13%
120V Input Current: 0.50A	277V Input Current: 0.22A	120V Input Current: 0.64A	277V Input Current: 0.29A

	120V		27	7V
Lumens	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
4000 Lumen D010	1.2	0.088	3.9	0.03
5000 Lumen D010TE	5.1	0.132	10.2	0.153
6000 Lumen D010TE	5.4	0.123	10.8	0.154
7000 Lumen D010TE	4.9	0.13	9.8	0.156



PHOTOMETRY





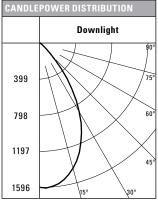
CONE OF LIGHT					
000					
D	FC	L	W		
5.5'	23	6.6	6.6		
7'	14	8.6	8.4		
8'	11	9.8	9.6		
9'	8	11	10.8		
10'	7	12.2	12		
12'	5	14.6	14.4		

CANDELA TABLE				
Degrees Vertical	Candela			
0	678			
5	678			
15	648			
25	607			
35	527			
45	420			
55	295			
65	139			
75	20			
85	0			
90	0			

ZONAL LUMEN SUMMARY			LUMINANCE
Zone	Lumens	% Fixture	Average Average Candela 0°
0-30	522	31.9	Degrees Luminance
0-40	848	51.8	55 00144
0-60	1442	88.1	55 22144
0-90	1637	100	65 14161
90-180	0	0	75 3327
0-180	1637	100	85 0

Test Number	P35360
Housing	LDSQ6B15D010
Module	EU4B10208035
Trim	6LBSQ0LI
Lumens	1491
Efficacy	106.5 Lm/W
Efficacy SC	106.5 Lm/W 0.92





CONE	CONE OF LIGHT				
000					
D	FC	L	W		
5.5'	53	5	5		
7'	33	6.4	6.4		
8'	24	7.2	7.2		
9'	20	8.2	8.2		
10'	16	9	9.2		
12'	11	11	11		

CANDELA	TABLE
Degrees Vertical	Candela
0	1587
5	1566
15	1400
25	1045
35	441
45	83
55	14
65	4
75	1
85	0
90	0

ZONAL LUMEN SUMMARY			LUMINANC	E
Zone	Lumens	% Fixture	Average Candela	Average 0°
0-30	1029	69	Degrees	Luminance
0-40	1364	91.4	45	5054
0-40	1304	31.4	55	1051
0-60	1485	99.6		
0-90	1491	100	65	408
90-180	0	0	75	166
0-180	1491	100	85	0

Test Number	P202483
Housing	LDSQ6B40D010
Module	EU6B30508035
Trim	6LBCSSQ1MMS
Lumens	4636
Efficacy	107.8 Lm/W
sc	1.24



CANDLE	CANDLEPOWER DISTRIBUTION			нт	
	Downlight				Ī
484	90°	0°			D
107	$ \cdot \cdot \rangle X / \cdot \rangle$	D	FC	L	W
		5.5'	64	6.6	6.6
969	60°	7'	39	8.6	8.4
		8'	30	9.8	9.6
1453	45°	9'	24	11	10.8
		10'	19	12.2	12
1937	15° 30°	12'	13	14.6	14.4

0° D					
D	FC	L	W		
5.5'	64	6.6	6.6		
7'	39	8.6	8.4		
8'	30	9.8	9.6		
9'	24	11	10.8		
10'	19	12.2	12		
12'	13	14.6	14.4		

CANDELA	TABLE
Degrees Vertical	Candela
0	1920
5	1920
15	1835
25	1719
35	1492
45	1190
55	836
65	394
75	57
85	0
90	0

ZONAL LUMEN SUMMARY				LUMINANC	
Zone	Lumens	% Fixture		Average Candela	Average 0°
			Ш	Degrees	Luminance
0-30	1479	31.9		45	18216
0-40	2401	51.8			
				55	15774
0-60	4083	88.1			
0-90	4636	100		65	10088
90-180	0	0		75	2368
0-180	4636	100		85	0

Test Number	P202482	
Housing	LDSQ6B40D010	
Module	EU6B30508035	
Trim	6LBSO1LL	
111111	OLDSUILI	
Lumens	4222	
	02504.2.	
Lumens	4222	



CANDLE	CANDLEPOWER DISTRIBUTION					
	Downlight					
1130	90°					
2259	60°					
3389	45°					
4519	15° 30°					

	0°/	0.					
	D	FC	L	w			
	5.5'	149	5	5			
	7'	92	6.4	6.4			
1	8'	70	7.2	7.2			
	9'	56	8.2	8.2			
	10'	45	9	9.2			
	12'	31	11	11			

CONE OF LIGHT

CANDELA TABLE	
Degrees Vertical	Candela
0	4493
5	4434
15	3964
25	2959
35	1249
45	235
55	40
65	11
75	3
85	0
90	0

ZONALI	JMMARY	
Zone	Lumens	% Fixture
0-30	2913	69
0-40	3861	91.4
0-60	4204	99.6
0-90	4222	100
90-180	0	0
0-180	4222	100

	LUMINANCE		
	Average Candela	Average 0°	
1	Degrees	Luminance	
	45	3599	
	55	748	
	65	290	
	75	117	
	85	0	

Connected Systems

O COOPER

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









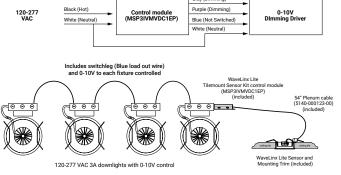








WaveLinx Lite WTK Tilemount Wiring Diagram Purple (Dimming)





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















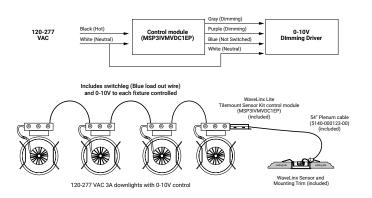




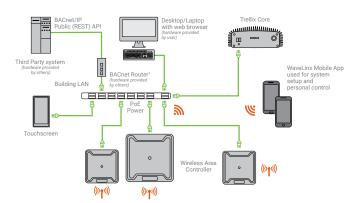




WaveLinx Lite WTA Tilemount Wiring Diagram



WaveLinx Wireless Trellix Building Management Integration





Cooper Lighting Solutions

1121 Highway 74 South Peachtree City, GA 30269 P: 770-486-4800

www.cooperlighting.com