

DESCRIPTION

4 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 1000 to 4000 with color temperatures of 2400K, 2700K, 3000K, 3500K, 4000K, and 5000K. Available with 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.

Catalog #		Type	
Project			
Comments		Date	
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 and push in lever connectors.

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 3-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 to 1850K as fixture dims mimicking halogen sources.

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.

Connected Lighting Systems

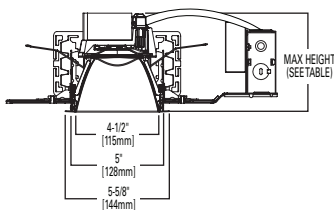
WaveLinX tilemount daylight sensor includes control module, sensor and cable allowing use with the comprehensive lighting system. LumaWatt Pro (powered by Enlighted) wireless tile mount sensor and relay accessory enables wireless control using a tile mount sensor accessory. Distributed low voltage power system combines power, lighting, and controls with ease of installation.

Code Compliance

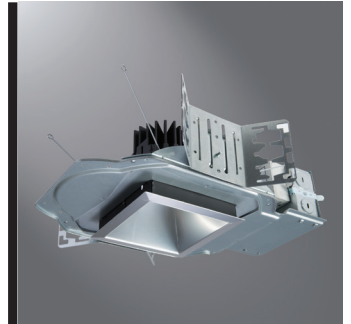
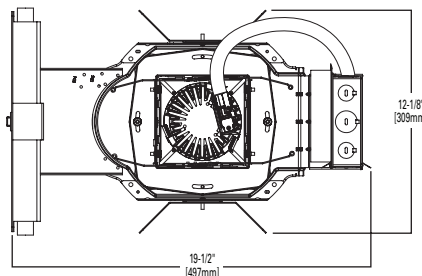
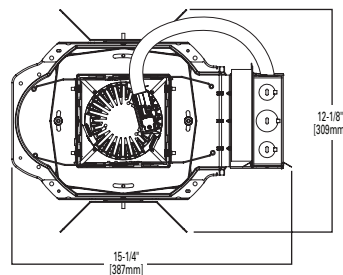
Thermally protected and cULus listed for wet locations with covered ceiling. IP66 rated when used with IP66 gasket kit accessory. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits. 2000 lumen and above are non-IC rated - insulation must be kept 3" from top and sides of housing. IC rated up to 1500 lumens. 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

5-year warranty



	1000-2000 LUMENS	3000-4000 LUMENS
STANDARD	5-3/8" [137mm]	5-3/8" [137mm]
SHALLOW	4-7/16" [113mm]	NA



LDSQ4B EU4B 4LBSQ

1000, 1500, 2000, 3000, 4000
Lumens LED

Square Downlight
New Construction

D2W™



Refer to ENERGY STAR® Qualified Products List. Can be used to comply with California Title 24 High Efficacy requirements. Certified to California Title 20 Appliance Efficiency Database.

ORDERING INFORMATION

SAMPLE NUMBER: LDSQ4B15D010EMBOD

Housing	Lumens ¹	Voltage	Driver	Options
LDSQ4B =LED Square Downlight 4" Nominal Aperture	10 =1000 lumens 15 =1500 lumens 20 =2000 lumens	Blank =120-277V	D010 =0-10V Dimming, 1% to 100%, 120V-277V D010TR =0-10V or Line Voltage Dimming, 5% to 100%, 120V-277V	EMBOD =Bodine® Emergency Module with Remote Test Switch ³ EM7 =7W Emergency Module with Remote Test Switch ^{2, 6} EM14 =14W Emergency Module with Remote Test Switch ^{2, 6} EMV7 =7W Low Voltage Emergency Module with Remote Test Switch ^{3, 6} EMV14 =14W Low Voltage Emergency Module with Remote Test Switch ^{3, 6} SWPD1 =Factory installed WaveLinX tilemount daylight sensor (includes control module, sensor, cable, and tile mount) ¹⁰ LWTPD1 =Factory installed LumaWatt Pro wireless sensor kit ¹⁰
LDSQ4BCP =LED Square Downlight 4" Nominal Aperture, Chicago Plenum	30 =3000 lumens 40 =4000 lumens		DE010 =0-10V Dimming, 0% to 100%, 120V-277V D5LT =Fifth Light® (DALI) Dimming, 0% to 100%, 120V-277V DMX =DMX Dimming, 0% to 100%, 120V-277V ⁹ DL2 =Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 120V Only DL3 =Lutron® Hi-Lume 3 Wire Dimming, 1% to 100%, 120V-277V DLE =Lutron Ecosystem dimming 1% to 100%, 120V-277V DLV =Low voltage dimming driver (1-100%) for use with DLVP system (3000 lumen and below) ^{6, 10}	

SAMPLE NUMBER: EU4B10208035

Power Module	Lumen Levels ¹	CRI	Color		
EU4B =4" Universal LED Module	1020 =1000, 1500, 2000 lumens 3040 =3000-4000 lumens 1015IC =1000, 1500 lumen IC rated	80 =80 CRI Minimum 90 =90 CRI Minimum 97 =97 CRI Minimum	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
Dim 2 Warm 109030D2W =1000 lumen, 90 CRI, Dim 2 Warm 159030D2W =1500 lumen, 90 CRI, Dim 2 Warm 209030D2W =2000 lumen, 90 CRI, Dim 2 Warm					

SAMPLE NUMBER: 4LBSQ1LI

Trim	Distribution	Flange	Finish
4LB =4" LED	SQ =Square Anodized Aluminum CSSQ =Cast Shallow Square, Die Cast Aluminum ⁷ PSSQ =Plastic Shallow Non-Conductive ^{5, 7}	0 =White Polymer Trim Ring ¹¹ 1 =Self-flanged ⁸ 2 =White Painted Self-flanged	LI =Specular Clear ³ H =Semi-Specular Clear ³ WMH =Warm Haze ³ WH =Wheat ³ GPH =Graphite Haze ³ B =Specular Black ³ MW =Matte White MB =Matte Black ⁴ MMS =Matte Metallic Silver ⁴

Accessories

PRSQ4=Plaster Lathing Ring for use with Rimless Flange (order with polymer trim ring flange option)
LGSKTSQ4IP66=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 Down Transformer, 75VA
H347200=347 to 120V Step Down Transformer, 200VA

Connected Lighting Systems

PORLWTPD1=LumaWatt Pro wireless sensor kit (0-10V only) field installed¹⁰
TMSWPD1=WaveLinX tilemount daylight sensor (includes control module, sensor, cable and tile mount) field installed¹⁰

Notes:

- Nominal Lumens will vary depending on selected color, driver and reflector finish.
- UL/US approved only.
- Available on anodized aluminum
- Available on cast aluminum only
- Matte white finish and self flange
- Not available with Chicago Plenum.
- Offered up to 2000 lumens
- Flange is the same finish as the reflector
- DMX fixtures default to full on upon loss of DMX signal.
- Refer to system specifications for additional information, features, and benefits.
Order either factory installed option or accessory. Use with 0-10V driver.
- Not available with cast shallow

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 Lumen D010		1500 Lumen D010	
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 Lumen D010		3000 Lumen 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 Lumen D010	
Input Power: 41.6W	THD: <13%
120V Input Current: 0.35A	277V Input Current: 0.15A

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
4000 Lumen D010	1.2	0.088	3.9	0.03



Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

PHOTOMETRY

Test Data		CANDLEPOWER DISTRIBUTION	CONE OF LIGHT	CANDELA TABLE	ZONAL LUMEN SUMMARY	LUMINANCE																																																									
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85	0																																																														
Housing	LDSQ4B40D010																																																														
Module	EU4B30508035																																																														
Trim	4LBSQ1LI																																																														
Lumens	3970																																																														
Efficacy	92.3 Lm/W																																																														
SC	0.91																																																														