

DESCRIPTION

4 inch recessed LED wall wash providing glare free, even illumination on vertical surfaces. Featuring a two-stage diffused reflector system producing smooth distribution with excellent light control and low aperture brightness. Lumen packages range from 1000 to 6000 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 #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Lower Shielding Reflector

Spun aluminum wall wash reflector with gradient kicker combined with a lensed upper optical chamber provides superior lumen output, high level vertical illumination with minimal source brightness. Offered in all Portfolio Alzak® finishes. 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

Die cast aluminum 1-1/2" deep collar accommodates ceiling materials up to 2". Universal mounting bracket accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above and below the ceiling.

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. 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 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. **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 120V leading edge, <1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem. Driver can be serviced from above or through the aperture.

Connected Lighting Systems

Factory installed WaveLinX tile mount sensor kit and Field installed WaveLinX accessory tile mount sensor kit.

The WTA WaveLinX tile mount sensor kit offers daylight dimming, PIR motion sensing control, and optional RLTS - Real Time Location Services available. (Refer to WaveLinX system specifications

and application guides for details) The WTA WaveLinX kit includes control module that mounts on the luminaire electrical junction box via 1/2" knock-out, and tilemount sensor with direct-mount spring clips or for octagon ceiling box with included mounting bracket. (Field mount kit ordered and installed separately).

Enlighted wireless tile mount sensor and relay accessory enables wireless control using a tile mount sensor accessory.

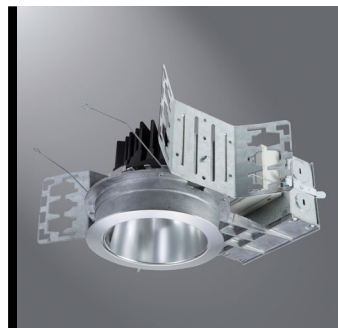
Distributed low voltage power system combines power, lighting, and controls with ease of installation.

Code Compliance

Thermally protected and cULus listed for damp locations 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. 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. Photometric testing completed in accordance with IES LM 79. Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11.

Warranty

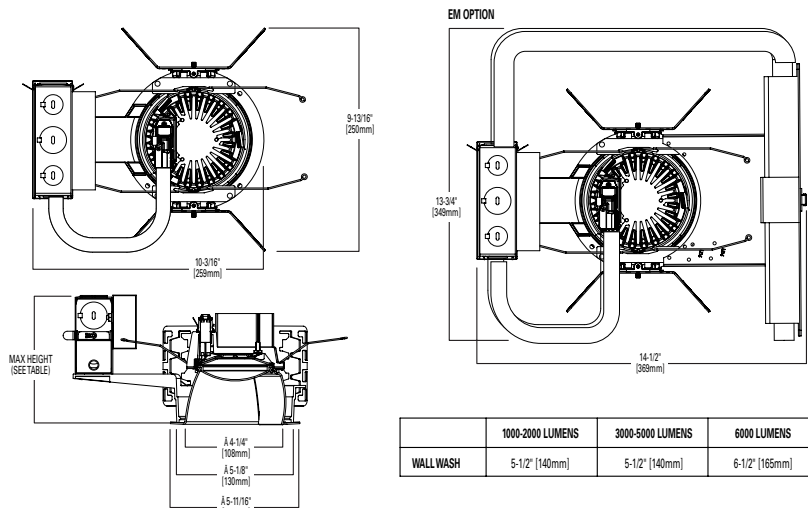
5-year warranty



LD4B EU4B
4LBSW 4LBDW
4LBCW 4LBLWW

1000 - 6000 Lumens LED

Single, Double or Corner
Open Wall Wash
Lensed Wall Wash
New Construction



VividTune
color tuning solutions

D2W™



Refer to ENERGY STAR® Qualified Products List.

ORDERING INFORMATION

SAMPLE NUMBER: LD4B15D010IEMBOD

Housing	Lumens ¹	Voltage	Driver	Options ³
LD4B =LED Downlight 4" Nominal Aperture LD4BCP =LED Downlight 4" Nominal Aperture, Chicago Plenum	10 =1000 lumens 15 =1500 lumens 20 =2000 lumens 30 =3000 lumens 40 =4000 lumens 50 =5000 lumens ⁷ 60 =6000 lumens ⁷	Blank =120-277V 3 =347V (step down transformer)	1000-4000 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 D5LT =Fifth Light® (DALI) Logarithmic Dimming, 0% to 100%, 120V-277V DMX =DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V ⁷ 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) ^{3,6} 5000-6000 D010TE =0-10V 1% or trailing edge 10%, 120-277V (120V only with trailing edge dimming) Tunable white 1000-2000 Lumens⁸ 1DE010W2N2050 =0-10V dimming, 0% to 100%, 120V, 2000K - 5000K 1DE010W2N2765 =0-10V dimming, 0% to 100%, 120V, 2700K - 6500K 1D5LTW2N2050 =Fifth Light (DALI), 0% to 100%, 120, 2000K - 5000K 1D5LTW2N2765 =Fifth Light (DALI), 0% to 100%, 120V, 2700K - 6500K 2DE010W2N2050 =0-10V dimming, 0% to 100%, 277V, 2000K - 5000K 2DE010W2N2765 =0-10V dimming, 0% to 100%, 277V, 2700K - 6500K 2D5LTW2N2050 =Fifth Light (DALI), 0% to 100%, 277V, 2000K - 5000K 2D5LTW2N2765 =Fifth Light (DALI), 0% to 100%, 277V, 2700K - 6500K	EMBOD =Bodine® Emergency Module with Remote Test Switch EMBOD7ST =Bodine® Emergency Module with Self Test Remote Test Switch EM7 =7W Emergency Module with Remote Test Switch EM14 =14W Emergency Module with Remote Test Switch EMV7 =7W Low Voltage Emergency Module with Remote Test Switch ⁴ EMV14 =14W Low Voltage Emergency Module with Remote Test Switch ⁴ WTA =Factory installed WaveLinx Sensor Kit (WTA = WaveLinx wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only) ⁶ LWTPD1 =Factory installed Enlighted wireless sensor kit

SAMPLE NUMBER: EU4B10208035

Power Module	Lumen Levels ¹	CRI	Color		
EU4B =4" Universal LED Module	1020 =1000, 1500, 2000 lumens 3040 =3000-4000 lumens 5000 =5000 lumens ⁷ 6000 =6000 lumens ⁷ 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 Warm, IC rated 159030D2W =1500 lumen, 90 CRI, Dim 2 Warm, IC rated 209030D2W =2000 lumen, 90 CRI, Dim 2 Warm 309030D2W =3000 lumen, 90 CRI, Dim 2 Warm		Tunable white⁴ 1020W2N902050 =1000, 1500, 2000 lumens, 90 CRI, tunable white 2000K-5000K 1020W2N902765 =1000, 1500, 2000 lumens, 90 CRI, tunable white 2700K-6500K		

SAMPLE NUMBER: 4LBM1LIE

Trim	Distribution	Flange	Finish
4LB =4" LED	SW =Single Wall Wash DW =Double Wall Wash CW =Corner Wall Wash LWW =Lensed Wall Wash	0 =White Polymer Trim Ring 1 =Self-flanged ^{5,6} 2 =White Painted Self-flanged ^{5,9}	L =Specular Clear H =Semi-Specular Clear WMH =Warm Haze WH =Wheat GPH =Graphite Haze B =Specular Black MW =Matte White

Accessories

TRM4=Metal Trim Ring, Specify Color²
TRR4=Rimless Trim Ring²
PRR4=Rimless Plaster Ring for Flush Mount²
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 Solutions
ORLWTPD1=Enlighted wireless sensor kit (0-10V only) field installed⁶
WTA=WaveLinx wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only (Refer to WaveLinx system specifications and guides for details) Field installed.⁶

Notes:

- Nominal Lumens will vary depending on selected color, driver and reflector finish.
- Order with polymer trim ring.
- Not available with Chicago Plenum.
- ULus approved only.
- Flange is the same finish as reflector.
- Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. Use with 0-10V driver.
- 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"
- Non-IC
- Not available with MW finish. Order flange option 1 in MW finish which comes with White Flange standard.

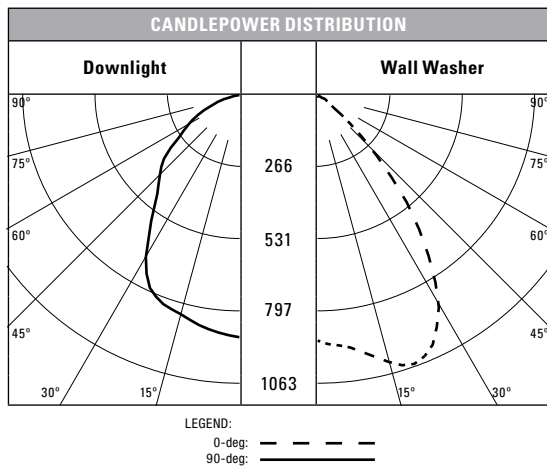
ENERGY

ENERGY DATA
Sound Rating: Class A standards
(Values at non-dimming line voltage)
Minimum Starting Temperature: -30°C (-22°F)
EM/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		5000 Lumen D010TE	
Input Power: 41.6W	THD: <13%	Input Power: 57.9W	THD: <14%
120V Input Current: 0.35A	277V Input Current: 0.15A	120V Input Current: 0.49A	277V Input Current: 0.22A
6000 Lumen D010TE			
Input Power: 59.7W		THD: <14%	
120V Input Current: 0.50A		277V Input Current: 0.22A	

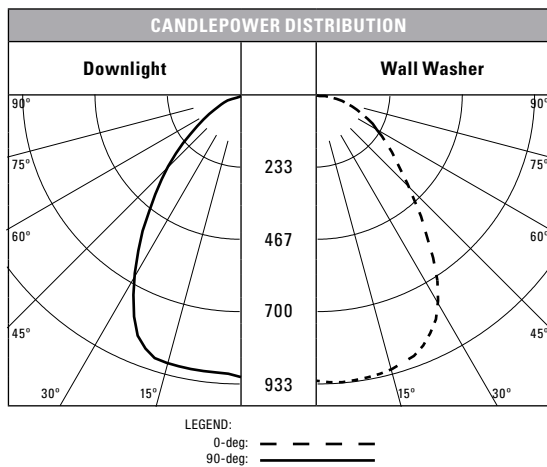
Lumens	120V		277V	
	Inrush (A)	Duration (ms)	Inrush (A)	Duration (ms)
1000 Lumen D010	1.02	0.041	2.18	0.021
1500 Lumen D010	1.02	0.042	2.24	0.064
2000 Lumen D010	1.02	0.077	2.43	0.027
3000 Lumen D010	1.15	0.067	3.26	0.027
4000 Lumen D010	1.2	0.088	3.9	0.03
5000 Lumen D010TE	5.1	0.132	10.2	0.153
6000 Lumen D010TE	5.4	0.123	10.8	0.154

PHOTOMETRY



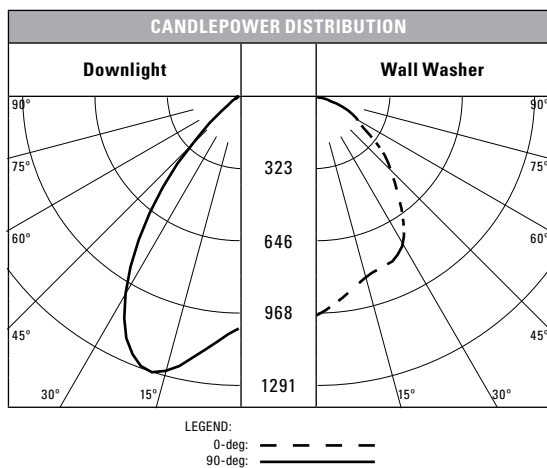
Test Number	P251844
LD4B20D010 EU4B10208035 4LBDW1LI	
Lumens	1874
CCT	3500K

Single Unit Footcandles				MULTIPLE UNIT FOOTCANDLES												
	3' FROM WALL (Distance From Fixture Along Wall)			2.5' FROM WALL (Spacing Between Fixtures)			3' FROM WALL (Spacing Between Fixtures)			3' FROM WALL (Spacing Between Fixtures)						
DD	● 1'	● 2'	● 3'	● 2'	● 3'	● 4'	● 3'	● 4'	● 4'	● 4'	● 4'					
1'	16.4	13.4	7.7	3.7	51.4	55.7	51.4	42.9	37.8	42.9	20.1	21	20.1	17.9	15.3	17.9
2'	17.4	15	9.9	5.9	45.7	50.3	45.7	37.5	37.3	37.5	23.3	24.9	23.3	20.3	19.8	20.3
3'	14.4	13	9.2	5.9	36.6	40.9	36.6	29.9	32.3	29.9	20.3	22.3	20.3	17.5	18.4	17.5
4'	12.1	11	8.3	5.4	26.4	29.6	26.4	21.7	25.8	21.7	17.5	19.5	17.5	15.2	16.6	15.2
5'	9.7	9.1	7.3	5.1	17.8	19.1	17.8	15.2	18	15.2	14.8	16.7	14.8	12.8	14.7	12.8
6'	7.1	6.9	6.1	4.6	12	12.5	12	10.9	12.1	10.9	11.7	13.2	11.7	10.3	12.1	10.3
7'	5.1	5.1	4.7	3.9	8.3	8.5	8.3	7.8	8.3	7.8	9.1	9.8	9.1	8.1	9.4	8.1
8'	3.8	3.7	3.6	3.2	5.9	6	5.9	5.7	5.9	5.7	6.9	7.3	6.9	6.4	7.1	6.4
9'	2.8	2.8	2.7	2.5	4.3	4.4	4.3	4.2	4.4	4.2	5.3	5.6	5.3	5	5.4	5
10'	2.2	2.2	2.1	2	3.3	3.3	3.3	3.2	3.3	3.2	4.2	4.3	4.2	4	4.2	4



Test Number	P251688
LD4B20D010 EU4B10208035 4LBLW1LI	
Lumens	1679
CCT	3500K

Single Unit Footcandles				MULTIPLE UNIT FOOTCANDLES												
	3' FROM WALL (Distance From Fixture Along Wall)			2.5' FROM WALL (Spacing Between Fixtures)			3' FROM WALL (Spacing Between Fixtures)			3' FROM WALL (Spacing Between Fixtures)						
DD	● 1'	● 2'	● 3'	● 2'	● 3'	● 4'	● 3'	● 4'	● 4'	● 4'	● 4'					
1'	11.9	9.5	5.4	2.6	42.6	44.4	42.6	37.1	28.2	37.1	14.5	14.9	14.5	13.1	10.9	13.1
2'	16.5	13.7	8.5	4.5	47.6	50.8	47.6	40.7	35.5	40.7	21	22.2	21	18.8	17	18.8
3'	15.9	13.6	8.9	5.2	40.4	44	40.4	34.4	32.5	34.4	21.2	22.6	21.2	18.9	17.9	18.9
4'	14.2	12.3	8.5	5.2	28.4	31.5	28.4	23.8	25.6	23.8	19.4	20.9	19.4	17.3	16.9	17.3
5'	11.3	10.2	7.5	4.9	18.8	20.4	18.8	15.9	17.8	15.9	16.2	17.8	16.2	14.4	15	14.4
6'	8.3	7.7	6.1	4.4	12.5	13.3	12.5	10.9	12.2	10.9	12.6	14	12.6	11.1	12.3	11.1
7'	5.9	5.6	4.8	3.7	8.6	9	8.6	7.7	8.4	7.7	9.6	10.5	9.6	8.5	9.5	8.5
8'	4.3	4.1	3.6	3	6.1	6.3	6.1	5.6	6	5.6	7.3	7.8	7.3	6.6	7.3	6.6
9'	3.2	3.1	2.8	2.4	4.4	4.6	4.4	4.1	4.4	4.1	5.6	5.9	5.6	5.1	5.6	5.1
10'	2.4	2.3	2.2	1.9	3.3	3.4	3.3	3.2	3.3	3.2	4.3	4.5	4.3	4	4.3	4



Test Number	P251532
LD4B20D010 EU4B10208035 4LBSW1LI	
Lumens	1915
CCT	3500K

Single Unit Footcandles				MULTIPLE UNIT FOOTCANDLES												
	3' FROM WALL (Distance From Fixture Along Wall)			2.5' FROM WALL (Spacing Between Fixtures)			3' FROM WALL (Spacing Between Fixtures)			3' FROM WALL (Spacing Between Fixtures)						
DD	● 1'	● 2'	● 3'	● 2'	● 3'	● 4'	● 3'	● 4'	● 4'	● 4'	● 4'					
1'	10.8	8.4	4.4	1.9	45.1	48	45.1	38.9	29.9	38.9	12.7	12.6	12.7	11.5	8.8	11.5
2'	18.4	15.2	9.4	5	58.8	66.5	58.8	50	45.9	50	23.5	24.5	23.5	20.8	18.8	20.8
3'	20	17.5	11.7	6.1	47.2	52.9	47.2	38.5	41.7	38.5	26.2	29.5	26.2	23.1	23.5	23.1
4'	16.4	14.8	10.9	6.8	31.7	35.1	31.7	25.9	31.1	25.9	23.1	25.8	23.1	20	21.8	20
5'	12.2	11.5	9.2	6.4	20.3	21.5	20.3	17.4	20.4	17.4	18.6	20.9	18.6	16.1	18.5	16.1
6'	8.4	8.2	7.2	5.7	13.2	13.6	13.2	12	13.3	12	14.1	15.6	14.1	12.3	14.5	12.3
7'	5.9	5.8	5.4	4.6	9	9.1	9	8.5	9	8.5	10.5	11.2	10.5	9.4	10.8	9.4
8'	4.2	4.1	4	3.6	6.3	6.4	6.3	6.1	6.3	6.1	7.8	8.2	7.8	7.2	8	7.2
9'	3.1	3.1	3	2.8	4.6	4.6	4.6	4.5	4.6	4.5	5.9	6	5.9	5.6	6	5.6
10'	2.3	2.3	2.3	2.2	3.5	3.5	3.5	3.4	3.5	3.4	4.5	4.6	4.5	4.4	4.6	4.4