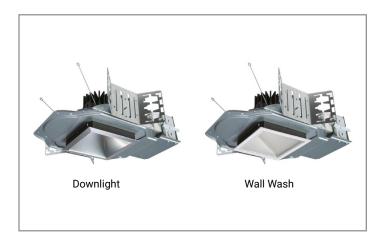
Project	Catalog #	т	Гуре	
Prepared by	Notes	D	Date	



Portfolio

LDSQ4C | EU4C | 4LBSQ

4" Square, New Construction Downlight and Wall Wash 250-7500 Lumens

Typical Applications

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

Interactive Menu

- Order Information page 2
- Product Specifications page 4
- Dimensional & Mounting Details page 5
- Energy Data page 6
- Photometric Data page 7
- Connected System page 9
- · Product Warranty

Product Certification











Control Compatibility





Product Features





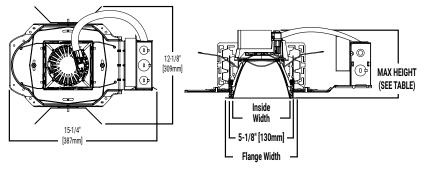


Top Product Features

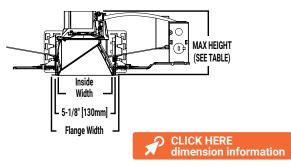
- 250-7500 lumens; Offered in 90 and 97 CRI; ENERGY STAR® qualified
- · Optional snap in driver for ease of replacement; Die-cast or anodized aluminum reflectors
- · Standard 0-10V driver dims to 1%; Easy disconnect for LED engine replacement and installation
- 2400K, 2700K, 3000K, 3500K, 4000K, 5000K; D2W[™] option from 3000K to 1850K
- Available W2N tunable white CCT range 2700K to 6500K or 2000K to 5000K

Dimensional and Mounting Details

DOWNLIGHT



WALL WASH





Single Line Order Information

SAMPLE ORDER NUMBER: LDSQ4C109030D0101H = LDSQ4C10D010 + EU4C10209030 + 4LBSQ1H



(all components in multiple packages in same shipment)

Invoice will indicate separate fixture components (housing, trim, module) which will ship complete from a single CLS facility in separate cartons. To receive separate components (housing, trim, module) shipment, click on the "Multi-Line Ordering Information Option" button to the right.

Housing		Lumen (1)	_	_	Color Control	CCT ⁽²⁰⁾
LDSQ4C=LED Square Downlight 4" Nominal Aperture LDSQ4CCP=LED Square Downlight 4" Nominal Aperture, Chicago Plenum	02 = 250 lumens, IC rated 05 = 500 lumens, IC rated 08 = 800 lumens, IC rated 10 = 1000 Lumens 10IC = 1000 Lumens, IC rated	15 = 1500 Lumens 15IC = 1500 Lumens, IC rated 20 = 2000 Lumens 25 = 2500 lumens 30 = 3000 Lumens	35 = 3500 lumens 40 = 4000 Lumens 45 = 4500 Lumens ⁽¹⁰⁾ 50 = 5000 Lumens ⁽¹⁰⁾ 55 = 5500 Lumens ⁽¹⁰⁾	60 = 6000 Lumens ⁽¹⁰⁾ 65 = 6500 Lumens ⁽¹⁰⁾ 70 = 7000 Lumens ⁽¹⁰⁾ 75 = 7500 Lumens ⁽¹⁰⁾	90=90 CRI Minimum 97=97 CRI Minimum	90 CRI 97 CRI 24=2400K 27=2700K 27=2700K 30=3000K 35=3500K 40=4000K 50=5000K

Voltage	Driver	Driver Options	Hanger Bars
Blank = 120-277V	D010 = 0-10V 1% dimming 500-7,000 lumens with integral driver, specify voltage with 7500 lumens	Blank = Integral driver RC100 = Remote 100ft (3) (26) (33)	Blank = Without hanger
1 = 120V Specify as noted in driver section	D010TR =0-10V or (120V) phase cut 1% dimming 250-7500 lumens with integral driver, specify voltage with 5000-7500 lumens	RC75 = Remote 75ft (3) (26) (33)	B26 = C-channel Bar
2 = 277V Specify as noted in driver section	DE010 = 0-10V linear 0.1% dimming 500-7000 lumens with integral driver, specify voltage with 7500 lumens	RC50 = Remote 50ft (3) (26) (33) RC25 = Remote 25ft (3) (26)	Hanger, 26" Long, Pair
3 = 347V (D010 driver 800-4000) all other integral drivers include	D5LT = DALI T6 Logarithmic 0.1% Dimming 500-7000 lumens with integral driver, specify voltage with 7500 lumens	RC15 = Remote 15ft (3) (26) RC5 = Remote 5ft (3) (26)	
step down transformer	DMX = DMX/RDM Logarithmic 0.1% Dimming 800-7500 with integral driver, specify voltage with 5000 lumens and above (14)	RC2 = Remote 2ft (3) (26) PD = Magnetic Plug in Driver (26)	
	$\label{eq:DMXC5} \textbf{DMX/RDM Logarithmic 0.1\% Dimming with RJ45 connection 800-7500 with integral driver, specify voltage with 5000 lumens and above $^{(14)}$$		
	DLE = Lutron Ecosystem dimming 1-100% 800-7500 lumens with integral driver, specify voltage with 4000 lumens and above		
	DLV = Low voltage dimming 1-100% for use with DLVP system, 800-3000 lumens (3)		

Trim Distribution (5)	Trim Flange	Trim Finish	Options ⁽³⁾ (13)
SQ = Medium beam 50° cutoff Anodized Aluminum SQW = Medium beam 45° cutoff Anodized Aluminum CSSQ=Cast Shallow Square, Die Cast Aluminum Wall Wash SQLWW = Lensed Wall Wash	0=White Polymer Trim Ring ⁽³⁴⁾ 1=Self-flanged ⁽¹³⁾ 2=White Painted Self-flanged 4=Knife edge rimless use with die cast only ⁽²²⁾ ⁽²³⁾	LI=Specular Clear (9) H=Semi-Specular Clear (9) WMH=Warm Hazac (9) WH=Wheat (19) GPH=Graphite Haze (9) B=Specular Black (9) MW=Matte White (Antimicrobial) MB=Matte Black (9) MMS=Matte Metallic Silver (8)	EMB0D=Bodine® Emergency Module with Remote Test Switch (21) EMB0D6ST=Bodine® 6W Self Test Emergency Module with Remote Test Switch EM7=7W Emergency Module with Remote Test Switch EM14=14W Emergency Module with Remote Test Switch EM14RSD = 14W Self Diagnostic Replaceable Emergency Battery Pack with Integral Test Switch EMB0D7ST=Bodine® Self Test Emergency Module (21) IEMB0D=Bodine® Emergency Module with Integral Test Switch (6) IEM7=7W Emergency Module with Integral Test Switch (6) IEM14=14W Emergency Module with Integral Test Switch (6)
PSSQMW1=Non-Conductive Shallow (dead front), Self Flange	d, White ^{(11) (12)}		IEM14RSD = 14W Self Diagnostic Replaceable Emergency Battery Pack with Remote Test Switch (8) IEM80D6ST =Bodine® 6W Self Test Emergency Module with Integral Test Switch (37) EMV7=7W Low Voltage Emergency Module with Remote Test Switch (4) EMV14=14W Low Voltage Emergency Module with Remote Test Switch (4) ETRD=Emergency transfer device (32) WPST = Factory installed WaveLinx PRO Sensor Kit (15) (18) WLST = Factory installed WaveLinx LITE Sensor Kit (15) (17) WPN = WaveLinx PRO Wireless Node without sensor (19 (36) WLN = WaveLinx LITE Wireless Node without sensor (35) (36)

	Accessories (Sold separately)
LGSKT4SOIP66=IP66 Gasket Kit	Connected Lighting Systems (3) (15)

PRSQ4=Rimless Plaster Ring (2)

RKPSQ4=Knife Edge plaster Ring (24)

RPMSQ4MW=Rimless Millwork Ring, Matte White (2) RPMSQ4MB=Rimless Millwork Ring, Matte Black (2) RKMSQ4MW=Knife Edge Millwork Ring, Matte White (24) RKMSQ4MB=Knife Edge Millwork Ring, Matte Black (24)

WPST = Field installed WaveLinx PRO Sensor Kit (17) WLST = Field installed WaveLinx LITE Sensor Kit (18)

<u>Transformers</u> **H347**=H347 for 5500 lumens and below

Bar Hangers

HB50=C-channel Bar Hanger, 50" Long, Pair RMB22=Wood Joist Bar Hanger, 22" Long, Pair

- 1. Nominal Lumens will vary depending on selected color, CRI, driver and reflector finish. Reference Multiplier tables.
 2. Order trim with polymer trim ring (Consult specification sheet for color
- ordering information and options).

 3. Not available with Chicago Plenum

 4. ULus listed only

- 5. Beam angles are nominal with LI finish trims.
 6. Available with SQ and SQW open anodized Aluminum trims. Required for use with All ILBMBOD, IEMBOD6ST, IEM7, IEM14,IEMV7 and IEMV14 housings. Not offered with remote driver.
- 7. Only available with Matte White and Matte Black Finishes.
- 8. Available only on CS distributions.
 9. Not available on PS, CS or BA distributions.
- Product is marked spacing. Reference table on page 4.
 Ps available in self-flanged MW finish only.
 Offered up to 2000 lumens
 Flange is the same finish as the reflector

- That girls the spanie initial as the reflection.
 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

- 17. WLST = WaveLinx LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinx LITE system specifications)
- 18. WPST = WaveLinx wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS Real Time Location Services, use with 0-10V
- 19. WPN = WaveLinx PRO wireless node provides luminairelevel control with scene and zone configuration without an integrated sensor, Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with D010 or DE010 drivers only.
- 21. Not available for W2N or 6500-7000 lumens with 90 and 97 CRI
- **22.** Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
- 23. Requires knife edge accessory ring
- 23. Requires Knife eage accessory ring 24. Order die cast trim with flange type 4 26. Offered with D010, D5LT, DE010 up to 7000 lumens D010TR, DMX up to 4500 lumens DLE up to 3500 lumens (specify voltage 3500 lumens & above)

- 29. Order with self flanged trim
- 30. Offered with DLVP up to 3000 lumens
- 31. 120V-277V
- 32. Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others)

 33. Not available with Lutron drivers
- 34. Not available with CSSQ Cast Shallow Square, Die Cast Aluminum
- 35. WLN = WaveLinx LITE wireless node provides luminaire level control with sene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with D010 or DE010 drivers only.
- 36. Not compatible with 347V or Chicago plenum.
- 37. Available with SQ open anodized Aluminum trims. Required for use with IEMBOD6ST housings. Not offered with remote driver.

Product Specifications

Lower Shielding Reflector

- Painted die cast aluminum or anodized aluminum lower reflector with medium beam or medium beam 45° cutoff with a lensed upper optical chamber providing superior lumen output with minimal source brightness.
- Anodized reflectors are offered in all Portfolio finishes
- Reflector is retained with two torsion springs holding the flange tight to the finished ceiling
- Plaster lathing ring, knife edge and millwork ring accessory for flush reflector transition

Wall Wash Reflector

· Lensed Wall Wash - Angle cut aluminum lower reflector in combination with spread lens provides even vertical illumination with minimal downlight.

Trim Retention

Two torsion springs hold reflector flange tightly to the finished ceiling surface

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" Electric Metallic Tube (EMT), C-channel and bar hangers
- Adjusts 5" vertically from above and below the ceiling

Junction box

- Four 1/2" and two 3/4" trade size pry outs positioned to allow straight conduit runs
- Lever connectors for simple push in wiring
- Listed for (4) #12 AWG (two in, two out) 90°C conductors and feed thru branch wiring for type IC and Plug in drivers for 120/277V only. For all other cases (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring for 120/277V only

Thermal

Aluminum heat sink conducts heat away from the LED module for improved performance and longer

LED System

- Contains a plurality of high brightness white LED's combined with a high reflectance upper reflector and convex transitional lens producing even distribution without pixilation
- Auto resetting, thermally protected, LED's are turned off when safe operating temperatures are exceeded
- Quick disconnect allows for tool-less replacement of LED engine from below ceiling
- 90 and 97 CRI
- 90 & 97CRI: L78 55,000 hours for 1000-2000 lumens, L90 55,000 for all other lumen output
- Color variation within 2-step MacAdam ellipses
- Available in 2400K, 2700K, 3000K, 3500K, 4000K and 5000K correlated color temperature (CCT)

Vividtune and High CRI

- · 98 CRI and W2N: L70 55,000 hours
- 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
- 98 CRI With a full-spectrum approach using broadblue chip technology and special phosphor blends, Thrive is able to closely match the spectrum of the sun across all color temperatures. Benefits of the natural spectrum of the sun using Thrive include superior accurate color rendering, reduced eye strain, and a higher sense of emotional well-being.
- See dedicated specification sheet for more details.

- Standard 120-277V 0-10V dimming driver provides flicker free dimming from 100% to 1%
- Optional 120V leading edge/0-10V, <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.
- Optional magnetically guided snap in driver for ease of maintenance.

Emergency Option

- · Provides 90 minutes of standby lighting, meeting most life safety codes for egress lighting
- Available with integral or remote charge indicator and test switch
- Available Self-Test with remote charge indicator and test switch
- · Emergency transfer device (ETRD) senses the loss of power regardless of local control settings allowing emergency power to the fixture.
- UL 924 listed
- · EM14RSD with simplified battery replacement and self diagnostics

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 PRO 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 WPN 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. Note: Not compatible with 347V or Chicago plenum.

WaveLinx LITE Tilemount Sensor Kit

· WaveLinx LITE WLST tilemount sensor kit offers

daylight dimming and PIR motion sensing, scene and grouping configuration.

WaveLinx LITE Wireless Node

WaveLinx LITE WLN 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. Note: Not compatible with 347V or Chicago plenum.

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.
- Note: WaveLinx PRO devices are only compatible with the WaveLinx PRO system.
- Note: WaveLinx LITE devices are only compatible with the WaveLinx LITE system.

Code Compliance

- · Thermally protected
- cULus Certified to UL 1598 / C22.2 No. 250.0 suitable for wet locations with downlight with covered ceiling
- IP66 rated when used with IP66 gasket kit accessory
- Use IP66 gasket with non conductive reflector for steam room applications up to 2000 lumens and 40°C.
- Optional City of Chicago environmental air (CCEA) marking for plenum applications
- FCC CFR Title 47 Part 15 Class B at 120VAC and Class A at 277VA
- Insulated ceiling (IC) rated up to 1,500 lumens (90 and 97CRI). All others are non-IC rated insulation must be kept 3" from top and sides
- Can be used for State of California Title 24 high efficacy LED compliance under JA8, reference Modernized Appliance Efficiency Database System (MAEDBS) for 2016 JA8 High Efficacy Lighting
- RoHS compliant
- · Photometric testing completed in accordance with IES LM-79
- LED life testing completed in accordance with IES LM-80-08 and TM-21-11 standards
- See table on page 3 for marked spacing

Warranty

· Five year warranty www.cooperlighting.com/legal

Marked Spacing

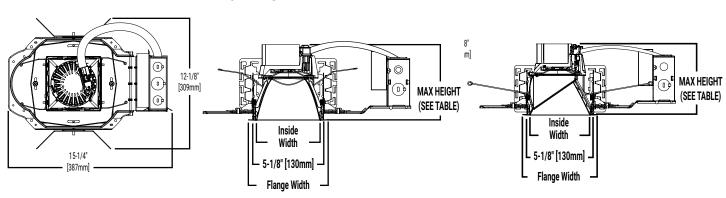
4-inch Marked spacing for 90 and 97 CRI								
Lumens	Center to Center of Adjacent Luminaire (inches)	Center Luminaire to Building Side Member (inches)	Minimum Overhead Height (inches)					
4000	36	18	6					
4000-7500 (Lutron)	36	18	8					
4500-7500	36	18	8					



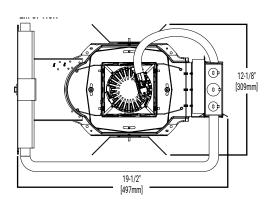
Dimensional and Mounting Details

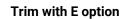
DOWNLIGHT

WALL WASH



Emergency Option

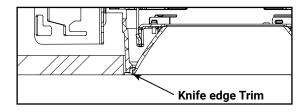


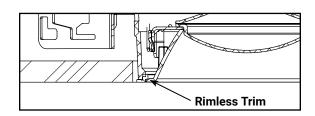




Trim with EM6 option







					MAX HEIGHT		
	Flange	INSIDE				1000-1500IC LUMENS (90/97CRI)	2 LEDs
CATALOG #	DIAMETER or WIDTH [IN]	DIAMETER or WIDTH [IN]	250-2000 LUMENS (90/97CRI)	2500-4000 LUMENS (90/97CRI)	4500-6000 LUMENS (90/97CRI)	6500-7000 LUMENS (90/97CRI)	4500-7500 LUMENS (90/97CRI)
4LBSQ	5.68	4.48	5.6	5.6	5.8	6.3	8.3
4LBCSSQ	5.66	4.48	5.6	5.6	5.6	5.6	6.4
4LBSQW	5.68	4.1	5.8	6	6.4	6.9	8.9
4LBSQLWW	5.68	4.5	5.6	5.6	5.7	6.2	8.2

Energy and Performance Data

D010 DRIVER ENERGY DATA

Series	250 l	umen	500 I	umen	800 I	umen	1000	lumen	1500	lumen	2000	lumen
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V
Input Current (A)	0.029	0.017	0.061	0.032	0.085	0.041	0.084	0.042	0.135	0.063	0.189	0.084
Input Power (W)	3.45	3.87	7.33	7.78	10.15	10.52	10.04	10.43	16.17	16.56	22.58	22.63
In-rush (A)	2.1	8.5	3.7	8.5	3.6	8.3	3.6	8.4	2.3	9.5	2.1	9.7
Inrush duration (µs)	250	131	190	136	220	135	226	136	230	125	243	132
THDi (%)	7.21	16.92	7.82	10.78	5.57	9.63	7.78	9.24	4.75	9.93	8.03	7.44
PF	≥ 0.98	≥ 0.9	≥ 0.99	≥ 0.93	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.94	≥ 0.99	≥ 0.96

Series	2500	lumen	3000	lumen	3500	lumen	4000	lumen	4500	lumen	5000	lumen
Input Voltage 120-277VAC	120V	277V										
Input Current (A)	0.276	0.121	0.276	0.121	0.333	0.152	0.404	0.181	0.421	0.192	0.491	0.216
Input Power (W)	32.98	32.57	32	32.57	39.83	39.84	48.38	47.94	50.22	50.17	58.69	58.01
In-rush (A)	2.5	11.8	3.6	11.8	3.1	14.3	3.1	14.5	5.6	22.6	5.6	22.6
Inrush duration (µs)	215	111	220	111	200	94	197	95	215	120	213	135
THDi (%)	9.86	6.57	5.57	6.57	4.25	10.05	5.02	7.97	6.12	8.35	8.51	7.92
PF	≥ 0.99	≥ 0.97	≥ 0.99	≥ 0.99	≥ 0.99	≥ 0.94	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.96

Series	5500	lumen	6000	lumen	6500	lumen	7000	lumen	7500	lumen
Input Voltage 120-277VAC	120V	277V								
Input Current (A)	0.526	0.231	0.542	0.256	0.572	0.266	0.632	0.292	0.668	0.306
Input Power (W)	62.97	61.97	64.88	65.7	68.35	69.02	75.56	75.85	79.89	80.09
In-rush (A)	5.1	23.1	6.2	27.5	6.3	28.4	6.4	29.1	6.4	28.7
Inrush duration (µs)	217	138	188	101	189	92	187	90	185	100
THDi (%)	9.42	7.16	4.33	11.86	4.38	11.33	4.84	10.32	4.46	9.85
PF	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.93	≥ 0.99	≥ 0.93	≥ 0.99	≥ 0.94	≥ 0.99	≥ 0.94

Minimum starting temperature -30°C (-22°F)*

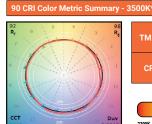
(Nominal input 120-277VAC & 100% of rated output power)

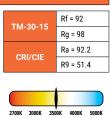
Sound Rating: Class A standards

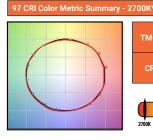
Notes:

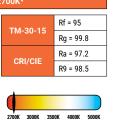
Emergency Battery packs are rated for a minimum starting temperature of 0°C.

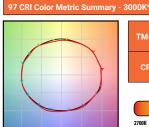
COLOR METRICS - TM-30-15 & CRI/CIE

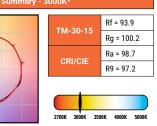








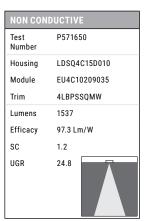


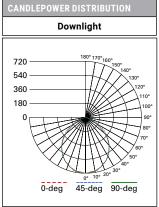


^{*} Color values are based on haze reflector, other finishes and field results may vary.

Photometric Data







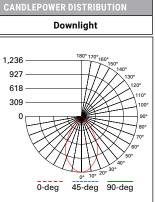
CONE	CONE OF LIGHT							
000								
D	FC	L	W					
4'	45.4	4.6	4.6					
7'	14.8	8.2	8.2					
9'	9	10.6	10.6					
13'	4.3 15.4 15.4							
16'	16' 2.8 18.8 19							

CANDEL	A TABLE
Degrees Vertical	Candela
0	720
5	705
15	678
25	618
35	526
45	410
55	237
65	78
75	2
85	0
90	0

E	ZONAL	ZONAL LUMEN SUMMARY		
ela	Zone	Lumens	% Fixture	
١	0-30	545	35.5	
	0-40	876	57	
	0-60	1425	92.7	
	0-90	1537	100	
,	90-180	0	0	
	0-180	1537	100	

Υ	LUMINA	LUMINANCE		
	Average Candela Degrees Average 0°			
	37	61218		
	45	55920		
	55	39886		
	65	17740		
	75	746		
	85	0		

MEDIUM/W	/IDE 65° BEAM (H)	
Test Number	P571651	
Housing	LDSQ4C15D010	
Module	EU4C10209035	
Trim	4LBSQH	
Lumens	1247	
Efficacy	78.9 Lm/W	
sc	0.95	
UGR	11.3	



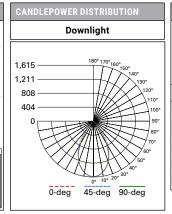
CONE OF LIGHT			
D	FC	L	W
4'	77.3	3.6	3.6
7'	25.2	6.6	6.6
9'	15.3	8.4	8.4
13'	7.3	12.2	12.2
16'	4.8	15	15

CANDELA TABLE		
Degrees Vertical	Candela	
0	1236	
5	1214	
15	1065	
25	847	
35	463	
45	143	
55	34	
65	9	
75	2	
85	0	
90	0	

LE	ZONAL	ZONAL LUMEN SUMMARY		
dela	Zone	Lumens	% Fixture	
36	0-30	796	63.8	
14	0-40	1084	87	
65 17	0-60	1233	98.9	
53	0-90	1247	100	
13	90-180	0	0	
4	0-180	1247	100	
,				

LUMINANCE		
Average Candela Degrees	Average 0° Luminance	
37	46109	
45	19513	
55	5703	
65	2146	
75	708	
85	0	
	Average Candela Degrees 37 45 55 65 75	

MEDIUM/	WIDE 65° BEAM
Test Number	P571652
Housing	LDSQ4C15D010
Module	EU4C10209035
Trim	4LBSQLI
Lumens	1484
Efficacy	93.9 Lm/W
sc	0.9
UGR	5.2



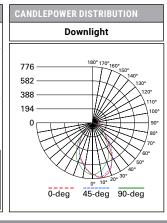
CONE OF LIGHT				
00				
D	FC	L	w	
4'	100.6	3.6	3.6	
7'	32.9	6.2	6.2	
9'	19.9	8	8	
13'	9.5	11.6	11.6	
16'	6.3	14.4	14.4	

CANDELA TABLE		
Degrees Vertical	Candela	
0	1607	
5	1583	
15	1393	
25	1039	
35	449	
45	99	
55	14	
65	4	
75	1	
85	0	
90	0	

LUM	ZONAL LUMEN SUMMARY				
Avera	% Fixture	Lumens	Zone		
Degr	68.5	1017	0-30		
37	91	1350	0-40		
45	91	1330	0-40		
55	99.5	1477	0-60		
65	100	1484	0-90		
	0	0	90-180		
75	"	0	90-100		
85	100	1484	0-180		

1	LUMINA	LUMINANCE		
	Average Candela Degrees	Average 0° Luminance		
	37	42636		
	45	13523		
	55	2406		
	65	936		
	75	373		
	85	0		

LENSED W	ALL WASH (H)
Test Number	P571653
Housing	LDSQ4C15D010
Module	EU4C10209035
Trim	4LBSQLWWH
Lumens	1027
Efficacy	65 Lm/W
sc	1
UGR	26.9



CONE OF LIGHT			
00			
D	FC	L	w
4'	48.2	3.6	3.8
7'	15.8	6.5	6.8
9'	9.5	8.3	8.8
13'	4.6	12	12.6
16'	3	14.8	15.6

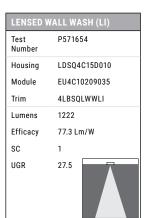
CANDELA TABLE		
Degrees Vertical	Candela	
0	716	
5	755	
15	746	
25	631	
35	424	
45	257	
55	174	
65	118	
75	53	
85	0	
90	0	
35 45 55 65 75 85	424 257 174 118 53 0	

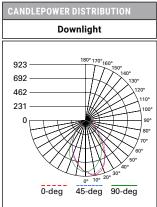
ZONAL LUMEN SUMMARY		
Zone	Lumens	% Fixture
0-30	489	47.7
0-40	719	70
0-60	965	93.9
0-90	1027	100
90-180	0	0
0-180	1027	100

LUMINANCE	
Average Candela Degrees	Average 0° Luminance
37	46123
45	35056
55	29187
65	27055
75	19870
85	0

Photometric Data







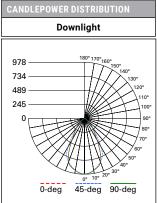
CONE OF LIGHT			
000			
D	FC	L	W
4'	57.4	3.6	3.8
7'	18.7	6.5	6.8
9'	11.3	8.3	8.8
13'	5.4	12	12.6
16'	3.6	14.8	15.6

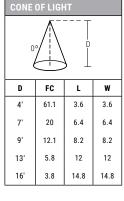
CANDELA TABLE	
Degrees Vertical	Candela
0	852
5	898
15	887
25	751
35	505
45	306
55	206
65	141
75	63
85	0
90	0

	70NAI	LUMEN S	IIMMARY
а	Zone	Lumens	% Fixture
	0-30	582	47.7
	0-40	855	70
	0-60	1148	93.9
	0-90	1222	100
	90-180	0	0
	0-180	1222	100

₹Y	LUMINA	LUMINANCE		
e	Average Candela Degrees	Average 0° Luminance		
	37	54885		
	45	41701		
	55	34738		
	65	32192		
	75	23636		
	85	0		







CANDELA TABLE		
Degrees Vertical	Candela	
0	978	
5	965	
15	890	
25	650	
35	302	
45	159	
55	57	
65	19	
75	5	
85	1	
90	0	

1	ZONAL LUMEN SUMMARY		
	Zone	Lumens	% Fixture
	0-30	649	62.7
1	0-40	857	82.8
	0-60	1012	97.8
	0-90	1035	100
9	0-180	0	0
1	0-180	1035	100

ZONAL LUMEN SUMI

Lumens

882

1115

1197

1202

0

1202

Zone

0-30

0-40

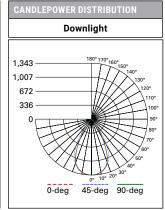
0-90

90-180

0-180

ŀΥ	LUMINA	LUMINANCE	
	Average Candela Degrees	Average 0° Luminance	
	37	32299	
	45	21751	
	55	9656	
	65	4429	
	75	1939	
	85	996	

MEDIUM/WIDE 45° CUTOFF 55° BEAM (LI)				
Test Number	P571656			
Housing	LDSQ4C15D010			
Module	EU4C10209035			
Trim	4LBSQWLI			
Lumens	1202			
Efficacy	76.1 Lm/W			
sc	0.91			
UGR	3.7			



CONE OF LIGHT						
000						
D FC L W						
83.9	3.6	3.6				
27.4	6.4	6.2				
9' 16.6 8.2 8						
7.9	11.8	11.8				
16' 5.2 14.6 14.4						
	FC 83.9 27.4 16.6 7.9	FC L 83.9 3.6 27.4 6.4 16.6 8.2 7.9 11.8				

CANDEL	A TABLE
Degrees Vertical	Candela
0	1343
5	1339
15	1240
25	866
35	323
45	88
55	10
65	3
75	1
85	0
90	0

MARY	LUMINA	LUMINANCE				
% cture	Average Candela Degrees	Average 0° Luminance				
3.4	37	32072				
2.7	45	11954				
9.6	55	1665				
00	65	776				
0	75	447				
00	85	332				

Photometric Multipliers (Nominal Lumen Values)

250 Lumen	500 Lumen	800 Lumen	1000 Lumen	1500 Lumen	2000 Lumen	2500 Lumen	3000 Lumen	3500 Lumen
0.22	0.42	0.57	0.65	1.00	1.29	1.62	1.90	2.25
4000 Lumen	4500 Lumen	5000 Lumen	5500 Lumen	6000 Lumen	6500 Lumen	7000 Lumen	7500 Lumen	
2.61	3.02	3.42	3.82	4.13	4.32	4.54	5.34	

Multipliers for relative lumen values with other series models.

CCT Multipliers - 90CRI

•					
2400K	2700K	3000K	3500K	4000K	5000K
0.912	0.949	0.986	1	1.001	1.022

Multipliers for relative lumen values with other series color temperatures.

CCT Multipliers - 97CRI

2700K	3000K	3500K	4000K	5000K
0.889	0.955	1	1.016	1.07

Color Finish Multipliers

Finish code	LI	н	WMH		GPH	В	MW
Finish	Specular Clear	Semi- Specular Clear	Warm Haze	Wheat	Graphite Haze	Specular Black	Matte White
Multiplier	1.26	1.0	1.06	1.11	0.83	0.62	1.11

Multipliers for relative lumen values with other color finishes.

Connected Systems



WaveLinx LITE - WLST Tilemount Sensor

WaveLinx LITE devices only compatible with the WaveLinx LITE system.

- · 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











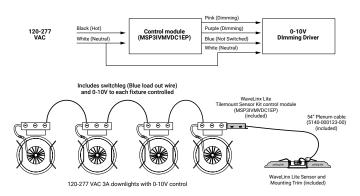








WaveLinx LITE WLST Tilemount Wiring Diagram



WaveLinx LITE Bluetooth Enabled System

0

WaveLinx PRO Wireless - WPST Tilemount Sensor

WaveLinx PRO devices only compatible with the WaveLinx PRO system.

- · 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















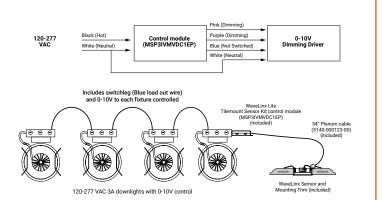




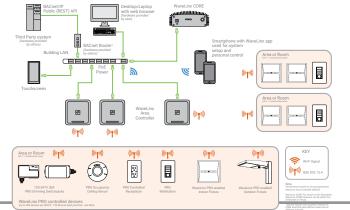




WaveLinx PRO WPST Tilemount Wiring Diagram



WaveLinx CORE Building Management Integration



Connected Solutions



WaveLinx LITE Wireless Node - WLN

WaveLinx LITE devices only compatible with the WaveLinx LITE system.

- · 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
- · Refer to the WaveLinx system specifications for details
- · Not available with BioUp or Tunable White

WaveLinx mobile app settings









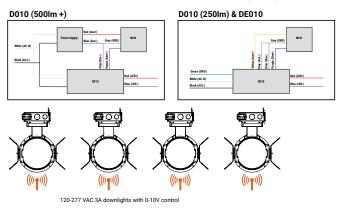








WaveLinx LITE Wireless Node (WLN) Wiring Diagram



WaveLinx LITE Bluetooth Enabled System



WaveLinx PRO Wireless Node - WPN

WaveLinx PRO devices only compatible with the WaveLinx PRO system.

- 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











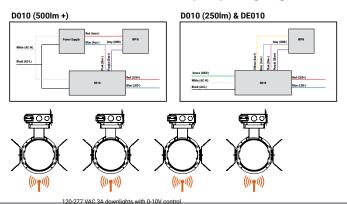




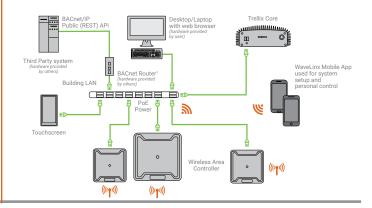




WaveLinx PRO Wireless Node (WPN) Wiring Diagram



WaveLinx CORE Building Management Integration



Multi-line Order Information

SAMPLE ORDER NUMBER: LDSQ4C10D010TRIEM14 (All components may ship separately)



Invoice will indicate separate fixture components (housing, trim, module) and may ship from multiple CLS facilities in separate cartons.

Housing		Lumens (2)	
LDSQ4C=LED Square Downlight 4" Nominal Aperture LDSQ4CCP=LED Square Downlight 4" Nominal Aperture, Chicago Plenum	02=250 lumens 05=500 lumens 08=800 lumens 10=1000 lumens 15=1500 lumens 20=2000 lumens	25=2500 lumens 30=3000 lumens 35=3500 lumens 40=4000 lumens 45=4500 lumens ⁽³⁾ 50=5000 lumens ⁽³⁾	55=5500 lumens (3) 60=6000 lumens (3) 65=6500 lumens (3) 70=7000 lumens (3) 75=7500 lumens (3)

Voltage	Driver	Driver Options
•	Diffel	·
Blank = 120-277V 1 = 120V Specify as noted in driver section 2 = 277V Specify as noted in driver section 3 = 347V (integral driver with D010 800-4000 lumens) all other integral drivers include step	D010 = 0-10V 1% dimming 500-7000 lumens with integral driver Specify voltage with 7500 lumens D010W = Fixed, Wired 0-10V 1% dimming 500-7000 lumens with integral driver Specify voltage with 7500 lumens (BAA only) 1 driver: 500-7000 / 2 drivers: 7500	Blank=Integral driver R=Remote driver (offered with single driver, order remote driver separately), (not available with CP)
	D010TR=0-10V or (120V) phase cut 1% dimming 250-7500 lumens with integral driver Specify voltage with 5000-7500 lumens 1 driver: 250-4500 / 2 drivers: 5000-7500	PD=Magnetic Plug in Driver (offered with single driver) (8)
down transformer	DE010 = 0-10V linear 0.1% dimming 500-7000 lumens with integral driver Specify voltage with 7500 lumens 1 driver: 500-7000 / 2 drivers: 7500	
	D5LT = DALI T6 Logarithmic 0.1% Dimming 500-7000 lumens with integral driver Specify voltage with 7500 lumens 1 driver: 500-7000 / 2 drivers: 7500	
	DMX = DMX/RDM Logarithmic 0.1% Dimming 800-7500 with integral driver Specify voltage with 5000 lumens and above (5) 1 driver: 800-4500 / 2 drivers: 5000-7500	
	DMXC5 = DMX/RDM Logarithmic 0.1% Dimming with RJ45 connection 800-7500 with integral driver Specify voltage with 5000 lumens and above 5 1 driver: 800-4500 / 2 drivers: 5000-7500	
	DLE = Lutron Ecosystem dimming 1-100% 800-7500 lumens with integral driver Specify voltage with 4000 lumens and above	
	1 driver: 800-3500 / 2 drivers: 4000-7500	
	DLV = Low voltage dimming 1-100% for use with DLVP system, 800-3000 lumens (6)	

EMBOD=Bodine® Emergency Module with Remote Test Switch (10)

EMBDD6ST=Bodine® 6W Self Test Emergency Module with Remote Test Switch EM7=7W Emergency Module with Remote Test Switch

EM14=14W Emergency Module with Remote Test Switch

EM14RSD =14W Self Diagnostic Replaceable Emergency Battery Pack with Integral Test Switch

EMBOD7ST=Bodine® Self Test Emergency Module (10)

IEMBOD=Bodine® Emergency Module with Integral Test Switch (10) (22)

IEM7=7W Emergency Module with Integral Test Switch (22)

IEM14=14W Emergency Module with Integral Test Switch (22)

IEM14RSD =14W Self Diagnostic Replaceable Emergency Battery Pack with Remote Test Switch (22)

IEMB0D6ST =Bodine® 6W Self Test Emergency Module with Integral Test Switch (4) EMV7=7W Low Voltage Emergency Module with Remote Test Switch (7)

EMV14=14W Low Voltage Emergency Module with Remote Test Switch (7)

ETRD=Emergency transfer device (32)

WPST =Factory installed WaveLinx PRO Sensor Kit (11) (13) WLST =Factory installed WaveLinx LITE Sensor Kit (11) (12)

WPN = WaveLinx PRO Wireless Node without sensor (23) (37)

WLN = WaveLinx LITE Wireless Node without sensor (36) (37)

SAMPLE ORDER NUMBER: EU4C10209035

Power Module	Lumen Levels (2)	CRI (2)	Со	lor
EU4C=4-inch Universal LED Module	For use with one driver 0208IC=250, 500, 800 lumens, IC Rated (for use with all drivers, min 500 lumen with DE010 and D5LT, min 800 lumens with DLVP, Lutron and DMX) 1020=1000, 1500, 2000 lumens 1015IC=1000, 1500 lumens IC Rated 2540=2500, 3000, 3500, 4000 lumens (For use with Lutron 3000-3500, DLVP 3000 lumens, DMX, D010, D010TR, D5LT and DE010 3000-4000) 4560=4500, 5000, 5500, 6000 lumens (For use with DMX and D010TR 4500 lumens, D010, D5LT and DE010 4500-6000) (3) 6570=6500, 7000 lumens (For use with D010, D5LT and DE010) (5) For use with two drivers 4075=4000, 4500, 5000, 5500, 6000, 6500, 7000, 7500 lumens (For use with Lutron 4000-7500, D010TR & DMX 5000, D010, D5LT & DE010 7500 lumen) (5)	90=90 CRI Minimum 97=97 CRI Minimum	90 CRI 24=2400K 27=2700K 30=3000K 35=3500K 40=4000K 50=5000K	97 CRI 27-2700K 30-3000K



Multi-line Order Information

SAMPLE ORDER NUMBER: 4LBSQ2H

Trim	Reflector	Flange	Finish	Options
4LB=4" LED	SQ=Square Anodized Aluminum SQW=Square Wide Anodized Aluminum CSSQ=Cast Shallow Square, Die Cast Aluminum PSSQ=Non-Conductive Shallow (dead front), white (16) (17) Wall Wash SQLWW=Square Anodized Aluminum Lensed Wall Wash	0=White polymer trim ring (34) 1=Self flanged (19) 2=White painted self flanged 4=Knife edge rimless use with die cast only (19)	LI=Specular Clear (20) H=Semi-Specular Clear (20) WMH=Warm Haze (20) WH=Wheat (20) GPH=Graphite Haze (20) B=Specular Black (20) MW=Matte White MB=Matte Black (21) MMS=Matte Metallic Silver (21)	E=Integral Emergency Test Switch Hole (22) For use with: Available with (SQ) (SQW) Anodized Aluminum Trims. EM6=Integral Emergency Test Switch Hole (39) For use with: - Available with (SQ) Anodized Aluminum Trim.

REQUIRED if Remote Driver (R) is specified

SAMPLE ORDER NUMBER: RC10010D010TREM7

Remote Drivers	Lumens (2) (14)			
	00.0501		50 5000 l	
RC100=Remote 100ft	02 =250 lumens	20 =2000 lumens	50 =5000 lumens	
RC75=Remote 75ft	05 =500 lumens	25 =2500 lumens	55 =5500 lumens	
RC50=Remote 50ft	08=800 lumens	30 =3000 lumens	60 =6000 lumens	
RC25=Remote 25ft	10=1000 lumens	35=3500 lumens	65=6500 lumens	
RC15=Remote 15ft	15=1500 lumens	40=4000 lumens	70=7000 lumens	
RC5=Remote 5ft		45=4500 lumens		
RC2=Remote 2ft				



Multi-line Order Information

D010 = 0-10V Dimming, 1% to 100%, 120V-277V, 500-3000 lumens **1D010** = 0-10V Dimming, 1% to 100%, 120V, 3500-7000 lumens **2D010** = 0-10V Dimming, 1% to 100%, 277V, 3500-7000 lumens 3D010 = 0-10V Dimming, 1% to 100%, 347V dedicated drivers for 800 to 3000 lumens; 500, 3500-7000 lumens use step down transformer **D010TR** = 0-10V Dimming, 1% to 100%,120V-277V or 120V line voltage dimming, 120V-277V, 250-3000 lumens **1D010TR** = 0-10V or line voltage Dimming, 1% to 100%, 120V, 3500-4500 lumens **2D010TR** = 0-10V Dimming, 1% to 100%, 277V, 3500-4500 lumens **3D010TR** = 0-10V or line voltage Dimming, 1% to 100% 347V step down transformer, 250-4500 lumens **DE010** = 0-10V Dimming, 0.1% to 100%, 120V-277V, 500-3000 lumens 1DE010 = 0-10V Dimming, 0.1% to 100%, 120V, 3500-7,000 lumens **2DE010** = 0-10V Dimming, 0.1% to 100%, 277V, 3500-7,000 lumens **3DE010** = 0-10V Dimming, 0.1% to 100%, 347V step down transformer, 500-7,000 lumens D5LT = Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 120V-277V, 500-3000 lumens 105LT = Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 120V, 3500-7,000 lumens
2D5LT =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 277V, 3500-7,000 lumens
3D5LT =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100% 347V step down transformer, 500-7,000 lumens DMX = DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V, 800-3000 lumens (5) 1DMX=DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V, 3500-4500 (5)
2DMX=DMX/RDM Logarithmic Dimming, 0.1% to 100%, 277V, 3500-4500 (5)
3DMX=DMX/RDM Logarithmic Dimming, 0.1% to 100%, 347V step down transformer, 800-4500 (5) DMXC5 = DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V up to 800-3000 lumens, RJ45 Connection (5) 1DMXC5=DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V, 3500-4500 lumens, RJ45 Connection (5 2DMXC5=DMX/RDM Logarithmic Dimming, 0.1% to 100%, 277V, 3500-4500 lumens, RJ45 Connection (5 3DMXCF=DMX/RDM Logarithmic Dimming, 0.1% to 100%, 347V step down transformer, 800-4500 lumens, RJ45 Connection (5) DLE = Lutron Ecosystem dimming 1% to 100%, 120V-277V, 25' Max remote length, 800-3000 lumens 1DLE=Lutron Ecosystem dimming 1% to 100%, 120V, 25' Max remote length, 3500 lumens 2DLE=Lutron Ecosystem dimming 1% to 100%, 277V, 25' Max remote length, 3500 lumens 3DLE=Lutron Ecosystem dimming 1% to 100%, 347V, step down transformer, 25' Max remote length, 800-3500 lumens

Options ®	Controls	
EMBOD=Bodine® Emergency Module with Remote Test Switch (10) EMBOD6ST=Bodine® 6W Self Test Emergency Module with Remote Test Switch EM7=7W Emergency Module with Remote Test Switch EM14=14W Emergency Module with Remote Test Switch	EMBOD7ST=Bodine® Self Test Emergency Module with Remote Test Switch (10) EMV7=7W Low Voltage Emergency Module with Remote Test Switch (7) EMV14=14W Low Voltage Emergency Module with Remote Test Switch (7) ETRD=Emergency transfer device (32)	WPST=Factory installed WaveLinx PRO Sensor Kit (11)(13) WLST=Factory installed WaveLinx LITE Sensor Kit (11)(12) WPN = WaveLinx PRO Wireless Node without sensor (23) (37) WLN = WaveLinx LITE Wireless Node without sensor (36) (37)

LGSKT4SOIP66=IP66 Gasket Kit

PRSQ4=Rimless Plaster Ring (26) RKPSQ4=Knife Edge plaster Ring (27)

RPMSQ4MW=Rimless Millwork Ring, Matte White (26) RPMSQ4MB=Rimless Millwork Ring, Matte Black (26 RKMSQ4MW=Knife Edge Millwork Ring, Matte White (27) RKMSQ4MB=Knife Edge Millwork Ring, Matte Black (27)

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

nnected Lighting Systems (6) (11)

WPST = Field installed Wavel inx PRO Sensor Kit (13) WLST = Field installed WaveLinx LITE Sensor Kit (12)

Transformers
H347=H347 for 5500 lumens and below

2. Nominal Lumens will vary depending on selected color, CRI, driver and reflector finish. Reference Multiplier tab 3. Product is marked spacing. Reference table on page 4 for the spacing

DLV = Low voltage dimming driver (1-100%) for use with DLVP system, 800-3000 lumens (6)

- 4. Available with SQ open anodized Aluminum trims. Required for use with
- IEMBOD6ST housings. Not offered with remote drive 5. DMX fixtures default to full on upon loss of DMX signal
- 6. Not available with Chicago Plenum.
- 7. ULus listed only
- 8. Offered with D010, D5LT, DE010 up to 7000 lumens
- D010TR, DMX up to 4500 lumens DLE, DL2 up to 3500 lumens 9. Not available with 5500 lumens
- 10. Not available for 6500-7000 lumens
- 11. Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. Use with 0-10V driver.
- 12. WLST = WaveLinx LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinx LITE system specifications)
- 13. WPST = WaveLinx wireless sensor kit for daylight dimming, PIR motion

- sensing, and optional RLTS Real Time Location Services, use with 0-10V only.
- 14. IC rated up to 3000 lumens
- 15. Spun aluminum only
- 16. PS available in self-flanged MW finish only
- 17. Offered up to 2000 lumens
- 18. Flange is the same finish as the reflector
- 19. Requires knife edge accessory ring 20. Anodized or spun reflectors
- 22. Available with SO and SOW open anodized Aluminum trims. Required for use with all IEMBOD, IEMBOD65T, IEM7, IEM14,IEMV7 and IEMV14 housings. Not offered with remote driver.
- 23. WPN = WaveLinx PRO wireless node provides luminairelevel control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with D010 or DE010 drivers only.
- 24. Black or white paint.
- 25. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information
- 26. Order trim with polymer trim ring (Consult specification sheet for color ordering information and options).

- 27. Order die cast trim with flange type 4
- 28. Order with self flanged trim. 29. Use only with single LED/driver
- 30. If using remote driver order battery and controls with the remote driver.
 31. 120V-277V
 32. Used to bypass local control during outage. Must be used in
- conjunction with UL 1008 device (provided by others)
- 33 Non-IC
- 34. Not available with CSSQ Cast Shallow Square, Die Cast Aluminum
- 36. WLN = WaveLinx LITE 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 D010 or DE010 drivers only.
- 37. Not compatible with 347V or Chicago plenum
- 38. Required for use with IEMBOD6ST. Not offered with remote driver.

