Project	c	Catalog #	Туре	
Prepared by	١	Notes	Date	



# **Portfolio**

# LDS4C | EU4C | 4LBS

4" round, new construction shallow downlight 250-4000 Lumens

### **Typical Applications**

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

# **♠** Interactive Menu

- Order Information page 2
- Product Specifications page 3
- Energy Data page 4
- Photometric Data page 5
- Connected System page 9
- · Product Warranty

## **Product Certification**









## **Control Compatibility**





## **Product Features**





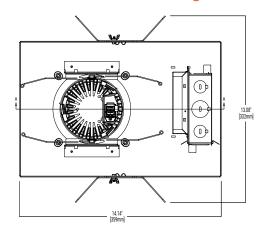


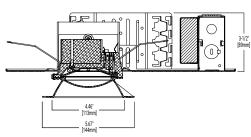


## **Top Product Features**

- · 250-4000 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
- · Options to meet Trade Agreements Act requirements

## **Dimensional and Mounting Details**









## Single Line Order Information

## SAMPLE ORDER NUMBER: LDS4C089035D010CS2MW



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)
LDS4C=LED Downlight 4" Nominal Aperture LDS4CCP=LED Downlight 4" Nominal Aperture, Chicago Plenum For TAA use Multi-line Ordering	02 = 250 Lumens, IC rated 05 = 500 Lumens, IC rated 08 = 800 Lumens, IC rated 10 = 1000 Lumens, IC rated 15 = 1500 Lumens (IC rated 15 = 1500 Lumens, IC rated 15 = 1500 Lumens 16 = 1500 Lumens 17 = 1500 Lumens 17 = 1500 Lumens 17 = 1500 Lumens 18 = 1500 Lumens 18 = 1500 Lumens 18 = 1500 Lumens 19	90=90 CRI Minimum 97=97 CRI Minimum	90 CRI 97 CRI 24=2400K 27=2700K 27=2700K 30=3000K 30=3000K 35=3500K 40=4000K 50=5000K

Driver	Driver Options	Hanger Bars
Univer	Blank = Standard mount driver PD = Plug in Driver (22)	Blank = Without hanger bars B26 = C-channel Bar Hanger,
<b>D010</b> = 0-10V Dimming, 1% to 100%, 120V-277V up to 4000 lumens <b>3D010</b> =0-10V Dimming, 1% to 100%, 347V dedicated drivers for 800 to 4000 lumens; 250 and 500 use step down transformer	FD - Flug III Driver	26" Long, Pair
<b>D010TR</b> = 0-10V Dimming, 5% to 100%, 120V-277V 250- 4000 lumens <b>3D010TR</b> =0-10V Dimming, 5% to 100%, 347V step down transformer 250-4,000		
<b>DE010</b> = 0-10V Dimming, 0% to 100%, 120V-277V 500-4000 lumens <b>3DE010</b> =0-10V Dimming, 0% to 100%, 347V step down transformer 500-4000 lumens		
DSLT = Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 120V-277V, 500-4000 lumens 3D5LT=Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100% 347V step down transformer, 500-4000 lumens		
DMX = DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V 800-4000 lumens (14) 3DMX=DMX/RDM Logarithmic Dimming, 0% to 100%, 347V step down transformer, 800-4000 (14)		
DMXC5 = DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V, 800-4000 lumens, RJ45 Connection (14) 3DMXC5=DMX/RDM Logarithmic Dimming, 0% to 100%, 347V step down transformer, 800-4000, RJ45 Connection (14)		
1DL2 = Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 120V Only 800-3500 lumens 3DL2 = Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 347V step down transformer, 800-3500 lumens		
DLE = Lutron Ecosystem dimming 1% to 100%, 120V-277V, 800-3500 lumens 3DLE=Lutron Ecosystem dimming 1% to 100%, 347V, step down transformer, 800-3500 lumens		
<b>DLV</b> = Low voltage dimming driver (1-100%) for use with DLVP system 800-3000 lumens (3)		

Trim Distribution	Trim Flange	Trim Finish	Options <sup>(3) (16) (23)</sup>
S=Shallow, Spun Aluminum PS=Non-Conductive Shallow, Injection Molded white (11)(12) CS=Cast Shallow, Die Cast Aluminum	0=White Polymer Trim Ring 1=Self-flanged <sup>(13)</sup> 2=White Painted Self-flanged 4=Knife edge rimless use with die cast only <sup>(8) (6)</sup>	LI=Specular Clear (*) H=Semi-Specular Clear (*) WMH=Warm Haze (*) WH=Wheat (*) GPH=Graphite Haze (*) B=Specular Black (*) MW=Matte White (Antimicrobial) MB=Matte Black (*) MMS=Matte Metallic Silver (*)	EMBOD6ST=Bodine® 6W Self Test Emergency Module with Remote Test Switch WPN = WaveLinx PRO Wireless Node without sensor (19)

TRM4P=White Metal Trim Ring (2) LGSKT4IP66=IP66 Gasket Kit

PRR4=Rimless Plaster Ring (2) RKP4=Knife Edge Plaster Ring (5)

RPM4MW=Rimless Millwork Ring, Matte White (2) RPM4MB=Rimless Millwork Ring, Matte Black (2)
RKM4MW=Knife Edge Millwork Ring, Matte White (5) RKM4MB=Knife Edge Millwork Ring, Matte Black (5)

HSA4=Slope Adapter for 4" Aperture Housings, Specify Slope (24)

**Bar Hangers** 

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

Connected Lighting Systems (3) (15) WPST = Field installed WaveLinx sensor Kit (17)

WLST = Field installed WaveLinx LITE Sensor Kit (18)

- 1. Nominal Lumens will vary depending on selected color, CRI, driver and
- 2. Order trim with polymer trim ring.
  3. Not available with Chicago Plenum.
- 4. ULus listed only
  5. Order die cast trim with flange type 4
  6. Requires knife edge accessory ring.
  8. Available only on CS distributions.

- Not available on PS or CS distributions.

   Not available on PS or CS distributions.

   Product is marked spacing. Reference table on page 3.

   PS available in self-flanged MW finish only.

- 12. Offered up to 2000 lumens
- 13. Flange is the same finish as the reflector
- 14. DMX fixtures default to full on upon loss of DMX signal.

  15. Refer to system specifications for additional information, features, and benefits. Use with 0-10V driver.
- 16. Non-IC
- 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. Offered with shallow (S) spun trim. PIR motion sensing, and optional RLTS - Real Time Location Services, use with 0-10V only.
- 19. WPN = WaveLinx PRO 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.
- 20. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
  22. Not available with DLVP
- 23 120\/-277\/
- 24. Not recommended for use with Wall Wash



## **Product Specifications**

### **Lower Shielding Reflector**

- Painted die cast aluminum, spun aluminum or nonconductive injection molded lower reflector with a lensed upper optical chamber providing superior lumen output with minimal source brightness
- Spun reflectors are offered in all Portfolio anodized 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**

 Galvanized steel plaster frame designed for ceiling thickness from ½ to 1-1/4-inch

#### **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 life

#### **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<sup>™</sup> 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.

#### Drive

- 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
- 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**

- 6W battery provides 90 minutes of standby lighting, meeting most life safety codes for egress lighting.
- UL 924 listed

### **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 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 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 0-10V driver only.

## WaveLinx LITE Tilemount Sensor Kit

 WaveLinx LITE WLST tilemount sensor kit offers daylight dimming and PIR motion sensing, scene and grouping configuration.

#### 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.

#### **Code Compliance**

- · Thermally protected
- cULus Certified to UL 1598 / C22.2 No. 250.0 suitable for wet locations with downlight; damp location with wall wash and hyperbolic 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 CFR Title 47 Part 15 Class B at 120VAC and Class A at 277VAC
- 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 of housing).
- 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

### Warranty

Five year warranty <u>www.cooperlighting.com/legal</u>

# **Marked Spacing**

4-inch Marked spacing for 90 and 97 CRI					
4000	36	36	0.5		



## **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

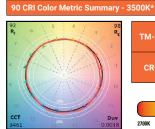
Series	2500 lumen		3000	lumen
Input Voltage 120-277VAC	120V	277V	120V	277V
Input Current (A)	0.276	0.121	0.276	0.121
Input Power (W)	32.98	32.57	32	32.57
In-rush (A)	2.5	11.8	3.6	11.8
Inrush duration (µs)	215	111	220	111
THDi (%)	9.86	6.57	5.57	6.57
PF	≥ 0.99	≥ 0.97	≥ 0.99	≥ 0.99

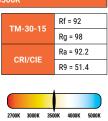
Minimum starting temperature -30°C (-22°F)\* (Nominal input 120-277VAC & 100% of rated output power)

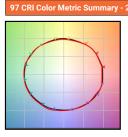
Sound Rating: Class A standards

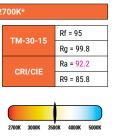
Emergency Battery packs are rated for a minimum starting temperature of 0°C.

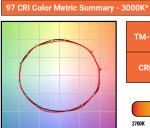
## **COLOR METRICS - TM-30-15 & CRI/CIE**

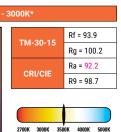










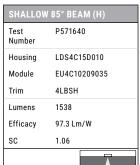


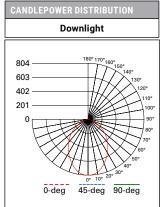


<sup>\*</sup> Color values are based on haze reflector, other finishes and field results may vary.

## **Photometric Data**





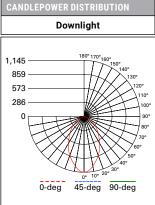


CONE OF LIGHT					
09					
D	FC	L	w		
4'	50.3	4.2	4.2		
7'	16.4	7.4	7.4		
9'	9.9	9.4	9.4		
13'	4.8	13.6	13.6		
16'	3.1	16.8	16.8		

CANDELA TABLE					
Degrees Vertical	Candela				
0	804				
5	798				
15	730				
25	618				
35	496				
45	376				
55	246				
65	120				
75	29				
85	0				
90	0				

ZONAL	. LUMEN S	LUMINA	NCE	
Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance
0-30	565	36.7		
0-40	875	56.9	37	72577
0-40	673	30.9	45	65309
0-60	1384	90	55	52605
0-90	1538	100	65	34942
			05	34942
90-180	0	0	75	13670
0-180	1538	100	85	0





D         FC         L         W           4'         71.6         3.6         3.6           7'         23.4         6.2         6.2           9'         14.1         8.2         8.2           12'         6.8         11.8         11.8	000						
7' 23.4 6.2 6.2 9' 14.1 8.2 8.2	D	FC	L	w			
9' 14.1 8.2 8.2	4'	71.6	3.6	3.6			
	7'	23.4	6.2	6.2			
13' 68 118 118	9'	14.1	8.2	8.2			
13   0.0   11.0   11.0	13'	6.8	11.8	11.8			
16' 4.5 14.4 14.4	16'	4.5	14.4	14.4			

CANDELA TABLE					
Degrees Vertical	Candela				
0	1145				
5	1115				
15	945				
25	749				
35	534				
45	371				
55	208				
65	73				
75	4				
85	0				
90	0				

IMARY	LUMINA	LUMINANCE			
% Fixture	Average Candela Degrees	Average 0° Luminance			
44.4	37	77201			
65.3	45	64475			
94.8	55	44508			
100	65	21163			
0	75	1709			
100	85	0			

## Photometric Multipliers (Nominal Lumen Values)

250 Lumen	500 Lumen	800 Lumen	1000 Lumen	1500 Lumen	2000 Lumen	2500 Lumen	3000 Lumen
0.224	0.423	0.569	0.653	1.00	1.29	1.62	1.902

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

 $\label{lem:multipliers} \mbox{Multipliers for relative lumen values with other series color temperatures.}$ 

## CCT Multipliers - 97CRI

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

Zone

0-30

0-40

0-60

0-90

90-180

0-180

Lumens

712

1048

1520

1604

0

1604

Multipliers for relative lumen values with other series color temperatures.

## Color Finish Multipliers (from H = Semi Specular Clear)

Finish code	LI	Н	WMH	WH	GPH	В	MW
Finish	Specular Clear	Semi-Specular Clear	Warm Haze	Wheat	Graphite Haze	Specular Black	Matte White
Multiplier	1.25	1.00	1.02	1.02	0.72	0.55	0.95

Multipliers for relative lumen values with other color finishes.



**Portfolio** 

# LDS4C | EU4C | 4LBS

## **Multi-line Order Information**

## SAMPLE ORDER NUMBER: LDS4C10D010TREM6



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

Domestic Preferences (1)	Housing	Lum	ens <sup>(2)</sup>
[Blank]=Standard TAA=Trade Agreements Act	LDS4C=LED Downlight 4" Nominal Aperture LDS4CCP=LED 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

### Specify from Driver column. Information below for reference only.

Driver	Remote driver & plug in driver
D010 = 0-10V Dimming, 1% to 100%, 120V-277V up to 4000 lumens (up to 3000 lumens for remote driver) 1D010=0-10V Dimming, 1% to 100%, 120V, 3500 to 4000 lumens for remote driver only 2D010=0-10V Dimming, 1% to 100%, 277V, 3500 to 4000 lumens for remote driver only 3D010=0-10V Dimming, 1% to 100%, 347V dedicated drivers for 800 to 4000 lumens; 250, and 500 use step down transformers	250-4000 with 90 & 97 CRI
<b>D010TR</b> = 0-10V Dimming, 5% to 100%, 120V-277V 250- 4000 lumens (up to 3000 lumens for remote driver) <b>1DE010</b> =0-10V Dimming, 0% to 100%, 120V, 3500 to 4000 lumens for remote driver only <b>2DE010</b> =0-10V Dimming, 0% to 100%, 277V, 3500 to 4000 lumens for remote driver only <b>3D010TR</b> =0-10V Dimming, 5% to 100%, 347V step down transformer 250-4,000	250-4000 with 90 & 97 CRI
DE010 = 0-10V Dimming, 0% to 100%, 120V-277V 500-4000 lumens (up to 3000 lumens for remote driver) 1D010TR=0-10V Dimming, 5% to 100%, 120V, 3500 to 4000 lumens for remote driver only 2D010TR=0-10V Dimming, 5% to 100%, 277V, 3500 to 4000 lumens for remote driver only 3DE010=0-10V Dimming, 0% to 100%, 347V step down transformer 500-4000 lumens	500-4000 with 90 & 97 CRI
DSLT = Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 120V-277V, 500-4000 lumens (up to 3000 lumens for remote driver) 1D5LT=Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 120V, 3500 to 4000 lumens for remote driver only 2D5LT=Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 277V, 3500 to 4000 lumens for remote driver only 3D5LT=Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100% 347V step down transformer, 500-4000 lumens	500-4000 with 90 & 97 CRI
DMX = DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V 800-4000 lumens (up to 3000 lumens for remote driver) (S) 1DMX= DMX/RDM Logarithmic Dimming, 0% to 100%, 120V, 3500 to 4000 lumens for remote driver only (S) 2DMX=DMX/RDM Logarithmic Dimming, 0% to 100%, 277V, 3500 to 4000 lumens for remote driver only (S) 3DMX=DMX/RDM Logarithmic Dimming, 0% to 100%, 347V step down transformer, 800-4000 (S)	800-4000 with 90 & 97 CRI
DMXC5 = DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V, 800-4000 lumens, RJ45 Connection (up to 3000 lumens for remote driver) (5) 1DMXC5=DMX/RDM Logarithmic Dimming, 0% to 100%, 120V, 3500 to 4000 lumens for remote driver only, RJ45 Connection (5) 2DMXC5=DMX/RDM Logarithmic Dimming, 0% to 100%, 277V, 3500 to 4000 lumens for remote driver only, RJ45 Connection (5) 3DMXC5=DMX/RDM Logarithmic Dimming, 0% to 100%, 347V step down transformer, 800-4000, RJ45 Connection (9)	800-4000 with 90 & 97 CRI
1DL2 = Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 120V Only 800-3500 lumens 3DL2 = Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 347V step down transformer, 800-3500 lumens	800-3500 with 90 & 97 CRI
DLE = Lutron Ecosystem dimming 1% to 100%, 120V-277V, 800-3500 lumens (up to 3000 lumens for remote driver)  1DLE=Lutron Ecosystem dimming 1% to 100%, 120V, 3500 lumens for remote driver only  2DLE=Lutron Ecosystem dimming 1% to 100%, 277V, 3500 lumens for remote driver only  3DLE=Lutron Ecosystem dimming 1% to 100%, 347, step down transformer, 800-3500 lumens	800-3500 with 90 & 97 CRI
<b>DLV</b> = Low voltage dimming driver (1-100%) for use with DLVP system 800-3000 lumens (6)	800-4000 with 90 & 97 CRI (Not offered with plug in driver)

Driver Options	Options <sup>(6)</sup> (25) (25) (27)
Blank=Integral driver R=Remote driver (order remote driver separately) (6) PD=Plug in Driver (8)	EMBOD6ST=Bodine® 6W Self Test Emergency Module with Remote Test Switch WPN = WaveLinx PRO Wireless Node without sensor (15)

## SAMPLE ORDER NUMBER: EU4C10209035

Domestic Preferences (1)	Power Module	Lumen Levels <sup>(2)</sup>	CRI <sup>(14)</sup>	Co	lor
[Blank]=Standard TAA=Trade Agreements Act	EU4C=4-inch Universal LED Module	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)	<b>90</b> =90 CRI Minimum <b>97</b> =97 CRI Minimum	90 CRI 24=2400K 27=2700K 30=3000K 35=3500K 40=4000K 50=5000K	97 CRI 27=2700K 30=3000K

Continued on next page.



## Multi-line Order Information

SAMPLE ORDER NUMBER: 4LBM2H

Trim	Reflector	Flange	Finish
4LB=4" LED	S=Shallow spun aluminum PS=Non-Conductive Shallow, Injection Molded white, non-conductive (16) (17) CS=Cast shallow, die cast aluminum	0=White polymer trim ring 1=Self flanged (18) 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)

### REQUIRED if Remote Driver (R) is specified

SAMPLE ORDER NUMBER: RC10010D010TREM7

Domestic Preferences (1)	Remot	e Drivers (6)	Lum	nens <sup>(2) (14)</sup>
[Blank]=Standard TAA=Trade Agreements Act	RC100=Remote 100ft RC75=Remote 75ft RC50=Remote 50ft RC25=Remote 25ft	RC15=Remote 15ft RC5=Remote 5ft RC2=Remote 2ft	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

**D010** = 0-10V Dimming, 1% to 100%, 120V-277V, 250-3,000 lumens

**1D010** = 0-10V Dimming, 1% to 100%, 120V, 3500-4000 lumens **2D010** = 0-10V Dimming, 1% to 100%, 277V, 3500-4000 lumens

3D010 = 0-10V Dimming, 1% to 100%, 347V dedicated drivers for 800 to 4000 lumens; 250 and 500 lumens use step down transformer

 $\begin{array}{l} \textbf{D010TR} = 0\text{-}10\text{V Dimming, } 5\text{w to } 100\text{W}, 120\text{V-}277\text{V, } 250\text{-} 3\text{,}000 \text{ lumens} \\ \textbf{1D010TR} = 0\text{-}10\text{V Dimming, } 5\text{w to } 100\text{W, } 120\text{V, } 3\text{,}500\text{-}4\text{,}000 \text{ lumens} \\ \end{array}$ 

2D010TR = 0-10V Dimming, 5% to 100%, 277V, 3,500-4,000 lumens **3D010TR** = 0-10V Dimming, 5% to 100% 347V step down transformer, 250-4,000 lumens

DE010 = 0-10V Dimming, 0% to 100%, 120V-277V, 500-3,000 lumens

1DE010 = 0-10V Dimming, 0% to 100%, 120V, 3,500-4,000 lumens 2DE010 = 0-10V Dimming, 0% to 100%, 277V, 3,500-4,000 lumens 3DE010 = 0-10V Dimming, 0% to 100%-0-10V Dimming 347V step down transformer, 500-4,000 lumens

DSLT = Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 120V-277V, 500-3,000 lumens 1DSLT = Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 120V, 3,500-4,000 lumens

2D5LT =Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 277V, 3,500-4,000 lumens

3D5LT =Fifth Light® (DALIT6) Logarithmic Dimming, 0% to 100% 347V step down transformer, 500-4,000 lumens

 $\label{eq:DMX} \textbf{DMX} = \text{DMX/RDM Logarithmic Dimming, } 0\% \text{ to } 100\%, 120V-277V, 800-3,00 \text{ lumens} \ ^{(5)} \\ \textbf{1DMX} = \text{DMX/RDM Logarithmic Dimming, } 0\% \text{ to } 100\%, 120V, 3,500-4,000 \ ^{(5)} \\ \textbf{100\%} = \text{100\%} \\ \textbf{120V} = \text{100\%} \\$ 

2DMX=DMX/RDM Logarithmic Dimming, 0% to 100%, 277V, 3,500-4,000 (5)

3DMX=DMX/RDM Logarithmic Dimming, 0% to 100%, 347V step down transformer, 800-4,000 (5)

DMXC5 = DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V up to 800-3,000 lumens, RJ45 Connection (5) 1DMXC5=DMX/RDM Logarithmic Dimming, 0% to 100%, 120V, 3,500-4,000 lumens, RJ45 Connection (5) 2DMXC5=DMX/RDM Logarithmic Dimming, 0% to 100%, 277V, 3,500-4,000 lumens, RJ45 Connection (5)

3DMXCF=DMX/RDM Logarithmic Dimming, 0% to 100%, 347V step down transformer, 800-4,000 lumens, RJ45 Connection (5)

1DL2 = Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 120V Only, 25' Max remote length, 800-3500 lumens 3DL2 = Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 347V step down transformer, 25' Max remote length, 800-3500 lumens

DLE = Lutron Ecosystem dimming 1% to 100%, 120V-277V, 25' Max remote length, 800-3000 lumens

TDLE=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

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

Option	Controls	
EMBOD=Bodine® Emergency Module with Remote Test Switch 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	EMB0D7ST=Bodine® Self Test Emergency Module 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 (28)	WPST=Factory installed Wavelinx (includes control module, sensor, cable, tilemount and ceiling mount sensor) (11) (13) WLST=Factory installed WaveLinx LITE Sensor Kit (11) (12) WPN = WaveLinx PRO Wireless Node without sensor (15)



## **Multi-line Order Information**

TRM4P=White Metal Trim Ring (23) LGSKT4IP66=IP66 Gasket Kit

PRR4=Rimless Plaster Ring (23) RKP4=Knife Edge plaster Ring (24) RPM4MW=Rimless Millwork Ring, Matte White (23) RPM4MB=Rimless Millwork Ring, Matte Black (23) RKM4MW=Knife Edge Millwork Ring, Matte White (24) RKM4MB=Knife Edge Millwork Ring, Matte Black (24)

HSA4=Slope Adapter for 4" Aperture Housings, Specify Slope (29)

Bar Hangers
TAA-HB26=C-channel Bar Hanger, 26" Long, Pair (1) HB26=C-channel Bar Hanger, 26" Long, Pai HB50=C-channel Bar Hanger, 50" Long, Pair RMB22=Wood Joist Bar Hanger, 22" Long, Pair

Connected Lighting Systems (6) (11) WPST = Field installed WaveLinx sensor Kit (13)

WLST = Field installed WaveLinx LITE Sensor Kit (12)

1.0 only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to <a href="DOMESTIC PREFERENCES">DOMESTIC PREFERENCES</a> website for more information. Components shipped separately may be separately analysed under domestic preference requirements. Offered with shallow (S) spun aluminum.

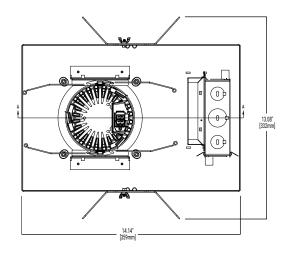
- 2. Nominal Lumens will vary depending on selected color, CRI, driver and reflector finish. Reference Multiplier tables.
- 5. DMX fixtures default to full on upon loss of DMX signal.
- 6. Not available with Chicago Plenum.
- 7. ULus listed only

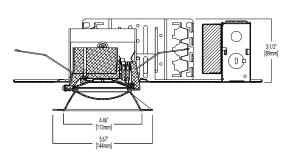
8. Not available with DLVP
11. Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. Use with 0-10V

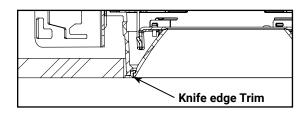
- 12. WLST = WaveLinx LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinx LITE system specifications)
- 13. WPST = WaveLinx wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS Real Time Location Services, use with 0-10V only. **14.** IC rated up to 3000 lumens for 90 & 97 CRI
- 15. WPN = WaveLinx PRO 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
- 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 ring
- 20. Anodized or spun reflectors
- 21 Die cast only

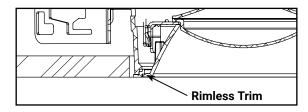
- **22.** Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
- 23. Order trim with polymer trim ring.
- 24. Order die cast trim with flange type 4
- 25. For remote driver order emergency module with the remote driver
- 26. If using remote driver order battery and controls with the remote driver
- 27. 120V-277V
- 28. Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others).
- 29. Not recommended for use with Wall Wash

## **Dimensional and Mounting Details**









## **Connected Solutions**



## **WaveLinx LITE - WLST 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







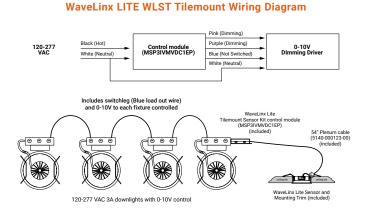














## WaveLinx PRO Wireless - WPST Tilemount Sensor

- 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 mobile app settings











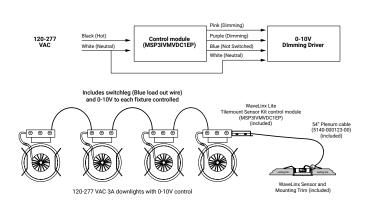




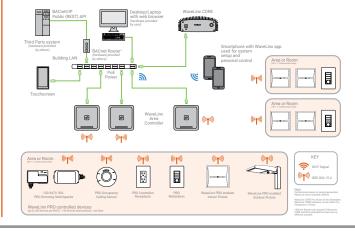




### **WaveLinx PRO WPST Tilemount Wiring Diagram**



#### **WaveLinx CORE Building Management Integration**



## **Connected Solutions**

## WaveLinx PRO Wireless Node - WPN

- · 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











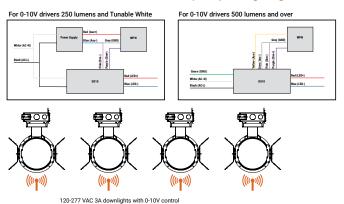








### WaveLinx PRO Wireless Node (WPN) Wiring Diagram



### **WaveLinx CORE Building Management Integration**

