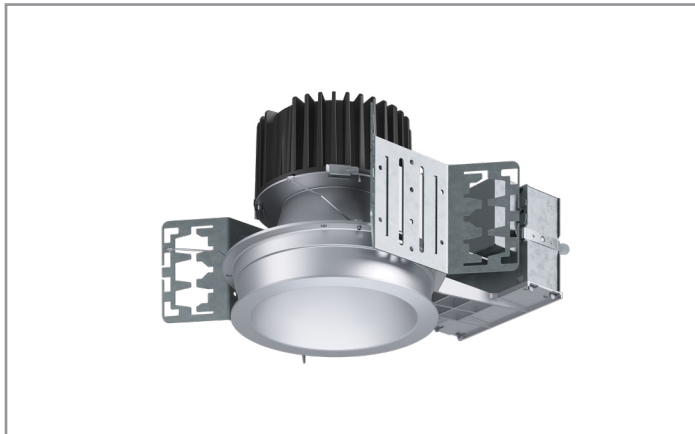


Project		Catalog #		Type	
Prepared by		Notes		Date	



Portfolio

LD4D | EU4D | 4LB Full Spectrum

4" Round, New Construction Downlight
with High Center Beam Optics
98CRI

250-4500 Lumens

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

Interactive Menu

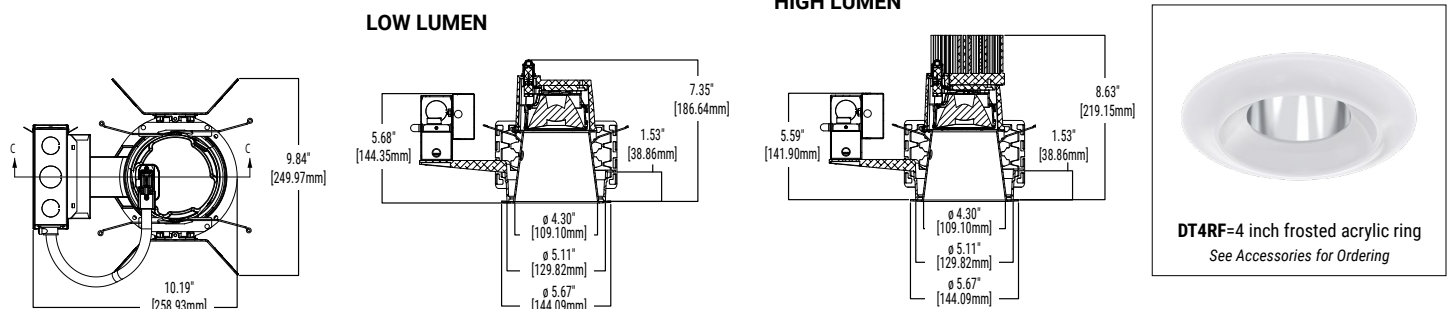
- Order Information [page 2](#)
- Product Specifications [page 4](#)
- Dimensional & Mounting Details [page 5](#)
- Energy Data [page 6](#)
- Connected System [page 7](#)
- Product Warranty



Top Product Features

- 250-4500 lumens
- Precision interchangeable optics
- Easy disconnect for LED engine replacement and installation
- Optional snap in driver for ease of replacement
- Standard 0-10V driver dims to 1%
- 5 color temperatures: 2700K, 3000K, 3500K, 4000K and 5000K CCT
- 98 CRI
- Options to meet Buy American and other domestic preference requirements

Dimensional and Mounting Details



[CLICK HERE](#)
dimension information

Single Line Order Information

SAMPLE ORDER NUMBER: **LD4D05R309840D010S2LI**

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.

 Multi-line Ordering Information Option

Housing	Lumen ⁽¹⁾	Optic	Color Control	CCT	Optic Position	
LD4D =LED Downlight 4" Nominal Aperture LD4DCP =LED Downlight 4" Nominal Aperture, Chicago Plenum For BAA or TAA use Multi-line Ordering	02 =250 lumens ⁽²⁷⁾ 05 =500 lumens ⁽²⁷⁾ 08 =800 lumens ⁽²⁷⁾ 10 =1000 Lumens 15 =1500 Lumens 20 =2000 Lumens 25 =2500 lumens	30 =3000 Lumens ⁽¹⁰⁾ 35 =3500 lumens ⁽¹⁰⁾ 40 =4000 Lumens ⁽¹⁰⁾ 45 =4500 Lumens ⁽¹⁰⁾	R25 =25° R30 =30° R35 =35° R40 =40° R45 =45° R50 =50° R55 =55° R60 =60° R65 =65° R70 =70°	98 =Full spectrum (Thrive) used with 98 CRI light engine	27 =2700K 30 =3000K 35 =3500K 40 =4000K 50 =5000K	Blank =Engine accepts optic only (preferred if media will not be used) 2M =Engine accepts up to 2 lenses or media (optic is recessed in engine)

Driver (Specify from Driver column.)	Driver Options	Bar Hanger
D010 =0-10V Dimming, 1% to 100%, 120V-277V, 98 CRI =500-4500 lumens (500-1000 lumens for remote driver) 1D010 =0-10V Dimming, 1% to 100%, 120V, 98 CRI =1500 to 4500 lumens for remote driver 2D010 =0-10V Dimming, 1% to 100%, 277V, 98 CRI =1500 to 4500 lumens for remote driver 3D010 =0-10V Dimming, 1% to 100%, 347V dedicated drivers, 98 CRI =800-3000; 250, 500, 3500 and above use step down transformer (250 to 4500 lumens for remote driver)	Blank =Integral driver RD100 =Remote 100ft ⁽³⁾ ⁽³³⁾ RD75 =Remote 75ft ⁽³⁾ ⁽³³⁾ RD50 =Remote 50ft ⁽³⁾ ⁽³³⁾ RD25 =Remote 25ft ⁽³⁾ RD15 =Remote 15ft ⁽³⁾ RD5 =Remote 5ft ⁽³⁾ RD2 =Remote 2ft ⁽³⁾ PD =Plug in Driver	Blank = Without hanger bars B26 = C-channel Bar Hanger, 26" Long, Pair
D010TR =0-10V or Line Voltage Dimming, 1% to 100%, 120-277V, 98 CRI =250-3000 lumens (250-1000 lumens for remote driver) 1D010TR =0-10V or Line Voltage Dimming, 1% to 100%, 120V, 98 CRI =1500 to 3000 lumens for remote driver 2D010TR =0-10V or Line Voltage Dimming, 1% to 100%, 277V, 98 CRI =1500 to 3000 lumens for remote driver 3D010TR =0-10V or Line Voltage Dimming, 1% to 100%, 347V step down transformer, 98 CRI =250-3000; (250-3000 lumens for remote driver)		
DE010 =0-10V Linear Dimming, 0.1% to 100%, 120V-277V, 98 CRI =500-4500 lumens (500-1000 lumens for remote driver) 1DE010 =0-10V Linear Dimming, 0.1% to 100%, 120V, 98 CRI =1500 to 4500 lumens for remote driver 2DE010 =0-10V Linear Dimming, 0.1% to 100%, 277V, 98 CRI = 1500 to 4500 lumens for remote driver 3DE010 =0-10V Linear Dimming, 0.1% to 100%, 347V step down transformer, 98 CRI =500-4500; (500-4500 lumens for remote driver)		
D5LT =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 120V-277V, 98 CRI =500-4500 lumens (500-1000 lumens for remote driver) 1D5LT =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 120V, 98 CRI =1500 to 4500 lumens for remote driver 2D5LT =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 277V, 98 CRI =1500 to 4500 lumens for remote driver 3D5LT =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 347V step down transformer, 98 CRI = 500-4500; (500-4500 lumens for remote driver)		
DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V, 98 CRI =800-3000 lumens (800-1000 lumens for remote driver) ⁽¹⁴⁾ 1DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V, 98 CRI =1500 to 3000 lumens for remote driver ⁽¹⁴⁾ 2DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 277V, 98 CRI =1500 to 3000 lumens for remote driver ⁽¹⁴⁾ 3DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 347V step down transformer, 98 CRI =800-3000; (800-3000 lumens for remote driver) ⁽¹⁴⁾		
DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V, RJ45 Connection, 98 CRI =800-3000 lumens (800-1000 lumens for remote driver) ⁽¹⁴⁾ 1DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V, RJ45 Connection, 98 CRI =1500 to 3000 lumens for remote driver ⁽¹⁴⁾ 2DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 277V, RJ45 Connection, 98 CRI =1500 to 3000 lumens for remote driver ⁽¹⁴⁾ 3DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, RJ45 Connection, 347V step down transformer, 98 CRI =800-3000; (800-3000 lumens for remote driver) ⁽¹⁴⁾		
DLE =Lutron Ecosystem dimming 1% to 100%, 120V-277V, 98 CRI =800-2500 lumens (800-1000 lumens for remote driver) 1DLE =Lutron Ecosystem dimming 1% to 100%, 120V, 98 CRI =1500 to 2500 lumens for remote driver 2DLE =Lutron Ecosystem dimming 1% to 100%, 277V, 98 CRI =1500 to 2500 lumens for remote driver 3DLE =Lutron Ecosystem dimming 1% to 100%, 347V step down transformer, 98 CRI =800-2500; (800 to 2500 lumens for remote driver)		
DLV =Low voltage dimming driver (1-100%) for use with DLVP system, 98 CRI =800-2000 lumens ⁽³⁾		

Trim Distribution	Trim Flange	Trim Finish	Options ⁽⁹⁾ ⁽¹⁴⁾ ⁽³¹⁾
DP =45° cutoff downlight S =Shallow trim CS =Cast shallow trim	0 =White Polymer Trim Ring 1 =Self-flanged ⁽¹³⁾ 2 =White Painted Self-flanged 4 =Knife edge rimless use with die cast only ⁽⁸⁾ ⁽²²⁾	LI =Specular Clear ⁽⁹⁾ H =Semi-Specular Clear ⁽⁹⁾ WMH =Warm Haze ⁽⁹⁾ WH =Wheat ⁽⁹⁾ GPH =Graphite Haze ⁽⁹⁾ B =Specular Black ⁽⁹⁾ MW =Matte White (Antimicrobial) MB =Matte Black ⁽⁶⁾ MMS =Matte Metallic Silver ⁽⁶⁾	EMBOD =Bodine® 7W 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 EM14RSD =14W Self Diagnostic Replaceable Emergency Battery Pack with Integral Test Switch EMBOD7ST =Bodine® 7W Self Test Emergency Module with Integral Test Switch ITEM7 =7W Emergency Module with Integral Test Switch ⁽⁶⁾ ITEM14 =14W Emergency Module with Integral Test Switch ⁽⁶⁾ IEM14RSD =14W Self Diagnostic Replaceable Emergency Battery Pack with Remote Test Switch ⁽⁶⁾ IEMBOD6ST =Bodine® 6W Self Test Emergency Module with Integral Test Switch ⁽⁷⁾ 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 (includes control module, sensor, cable, tilemount and ceiling mount sensor) ⁽¹⁵⁾ ⁽¹⁸⁾ WLST =Factory installed Wavelinx LITE Sensor Kit ⁽¹⁵⁾ ⁽¹⁷⁾ WPN = Wavelinx PRO Wireless Node without sensor ⁽²¹⁾ WLN = Wavelinx LITE Wireless Node without sensor ⁽²⁵⁾

Single Line Order Information

Accessories (Sold separately) ⁽²²⁾

TRM4P =White metal trim ring ⁽²⁾ DT4RF =4 inch frosted acrylic ring ⁽²⁹⁾ LGSKT4IP66 =IP66 Gasket Kit PRR4 =Rimless Plaster Ring ⁽²⁾ RKP4 =Knife Edge plaster Ring ⁽²⁴⁾ HSA4 =Slope Adapter for 4" Aperture Housings, Specify Slope RPM4MW =Rimless Millwork Ring, Matte White ⁽²⁾ RPM4MB =Rimless Millwork Ring, Matte Black ⁽²⁾ RKM4MW =Knife Edge Millwork Ring, Matte White ⁽²⁴⁾ RKM4MB =Knife Edge Millwork Ring, Matte Black ⁽²⁴⁾	Connected Lighting Systems ^{(3) (15) (16) (31)} WPST =Field installed WaveLinX sensor Kit ⁽¹⁸⁾ WLST =Field installed WaveLinX LITE Sensor Kit ⁽¹⁷⁾ Transformers H347 =H347 for 98CRI 4000 lumens and below Bar Hangers HB50 =C-channel Bar Hanger, 50" Long, Pair RMB22 =Wood Joist Bar Hanger, 22" Long, Pair	Optics 46R25 =25° 46R30 = 30° 46R35 = 35° 46R40 = 40° 46R45 = 45° 46R50 = 50° 46R55 = 55° 46R60 = 60° 46R65 = 65° 46R70 = 70°	Color Filters ⁽³⁷⁾ F22-20 =Red F33-20 =Blue F44-20 =Green F55-20 =Yellow F66-20 =Mercury Dichronic Filters ⁽³⁷⁾ F71-20 =Peach F72-20 =Amber F73-20 =Green F74-20 =Medium Blue F75-20 =Yellow F76-20 =Red F77-20 =Dark Blue F78-20 =Light Blue F79-20 =Neutral Density F80-20 =Magenta	Beam-Modifying Lenses ⁽³⁷⁾ LSL-20 =Linear Spread Lens OSL-20 =Overall Spread Lens DIF-20 =Diffused Lens Asymmetric Film ⁽³⁷⁾ 46ASYMFILM =Asymmetric Film (see chart for distribution) Louvers ⁽³⁷⁾ LVR-20 =Hex Cell Louver
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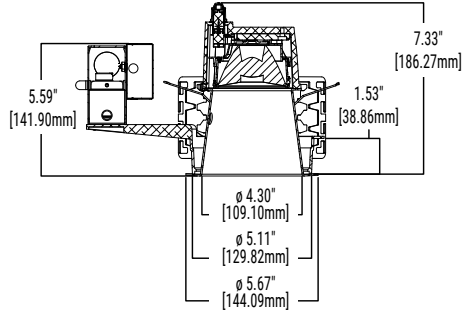
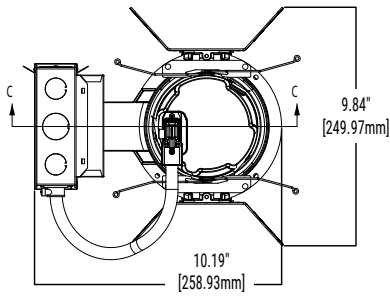
Notes:

- Nominal Lumens will vary depending on selected color, CRI, driver and reflector finish.
- Order trim with polymer trim ring (Consult specification sheet for color ordering information and options).
- Not available with Chicago Plenum.
- ULus listed only
- Available with 45 degree (DP) Spun Aluminum trims. Required for use with all IEMBOD, IEM7, IEM14, IEMV7 and IEMV14 housings. Not offered with remote driver.
- Available with 45D cutoff (DP) trim only. Not available with LI or WH finishes. Required for use with IEMBOD6ST. Not offered with remote driver.
- Available only on CS distributions.
- Not available on PS, CS or BA distributions.
- Product is marked spacing. [Reference table on page 4.](#)
- Flange is the same finish as the reflector
- DMX fixtures default to full on upon loss of DMX signal.

- Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. Use with 0-10V driver.
- Non-IC
- WLST=WaveLinX LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinX LITE system specifications)
- WPST=WaveLinX wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with 0-10V only.
- 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.
- Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
- Accessory (Requires knife edge accessory ring)
- Order die cast trim with flange type 4
- IC rated
- Order with self flanged trim.

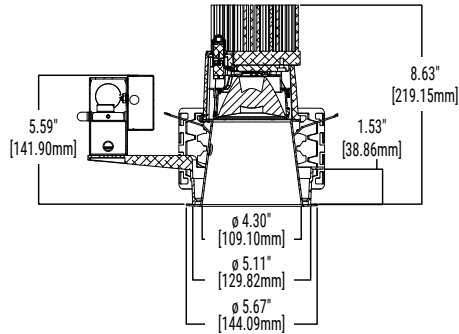
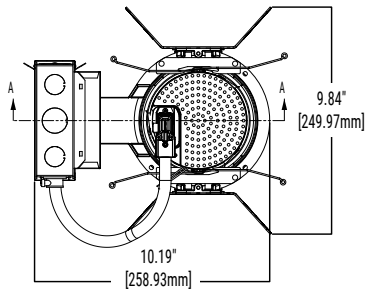
- 120V-277V
- Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others)
- Not available with Lutron drivers
- WLN = WaveLinX LITE wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only.
- Requires 2M designation on light engine.

Dimensional and Mounting Details



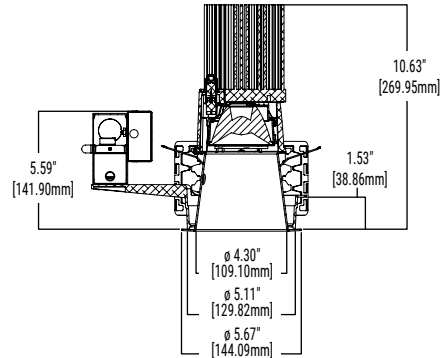
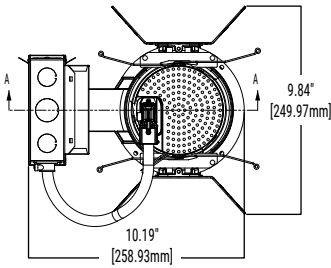
LD4D-4LBDP

	Min-Max Lumens	Beam Angles
98 CRI	250-800	25°-70°



LD4D-4LBDP

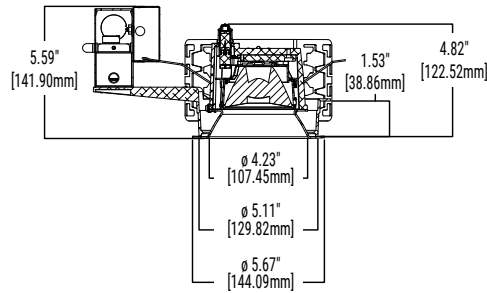
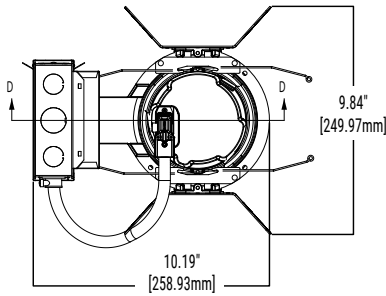
	Min-Max Lumens	Beam Angles
98 CRI	1000-2500	25°-70°



LD4D-4LBDP

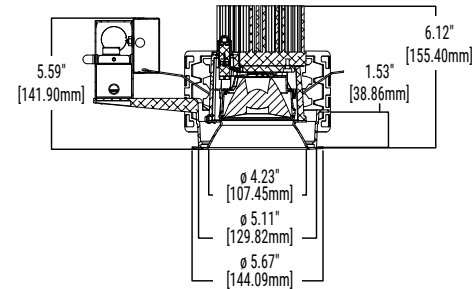
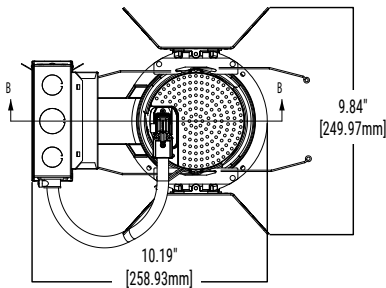
	Min-Max Lumens	Beam Angles
98 CRI	3000-4500	25°-70°

Dimensional and Mounting Details



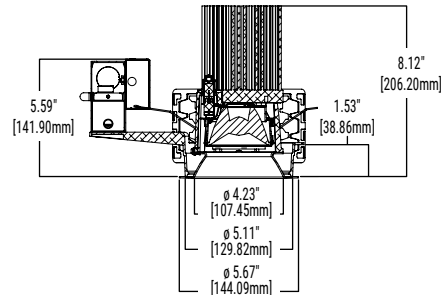
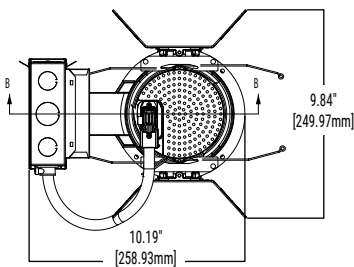
LD4D-4LBS

	Min-Max Lumens	Beam Angles
98 CRI	250-800	25°-70°



LD4D-4LBS

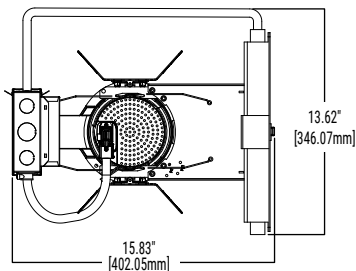
	Min-Max Lumens	Beam Angles
98 CRI	1000-2500	25°-70°



LD4D-4LBS

	Min-Max Lumens	Beam Angles
98 CRI	3000-4500	25°-70°

Emergency Option



Trim with E option



Trim with EM6 option



Product Specifications

Lower Shielding Reflector

- Spun aluminum reflector provides superior lumen output with minimal source brightness
- Spun reflectors are available in all Portfolio anodized finishes
- Plaster lathing ring and millwork ring accessory for flush reflector transition
- Decorative frosted acrylic ring provides a light glow in the ceiling

Optic

- Interchangeable silicone optic in 5° increments from 10°-70° providing smooth beam without color separation
- Elliptical beams
- Available media holder fits onto optic holder and holds up to two lens media

Trim Retention

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

Plaster Frame/Collar

- Die-cast aluminum 1 1/2" deep collar
- Accommodates up to 2" ceiling thickness

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 eight #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring

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
- 98 CRI L70 55,000 hours
- Color variation within 2-step MacAdam ellipses
- Available in 2700K, 3000K, 3500K, 4000K and 5000K correlated color temperature (CCT)
- **98 CRI** With a full-spectrum approach using broad-blue 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.

Driver

- 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 Sensor Kits Application

- The WPST and WLST tilemount sensor 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 sensor 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 damp locations with covered ceiling
- 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 277VAC
- Insulated ceiling (IC) rated up to 800 lumens (98 CRI & D2W); 1000 lumens (W2N). 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
- See table on page 3 for marked spacing requirements

Warranty

- Five year warranty www.cooperlighting.com/legal

Marked Spacing

4-inch Marked spacing for 98 CRI

Lumens	Center to Center of Adjacent Luminaire (inches)	Center Luminaire to Building Side Member (inches)	Minimum Overhead Height (inches)
3000-4500	36	18	8

Energy and Performance Data

D010 DRIVER ENERGY DATA

Series	250 Lumen		500 Lumen		750 Lumen		1000 Lumen		1500 Lumen		2000 Lumen	
Input Voltage 120-277 VAC	120	277	120	277	120	277	120	277	120	277	120	277
Input Current (A)	0.029	0.017	0.054	0.027	0.065	0.031	0.09	0.045	0.129	0.057	0.194	0.086
Input Power (W)	3.4	3.9	6.5	6.9	7.7	8.1	10.7	11.1	15.5	15.4	23.2	23.1
In-rush (A)	2.1	9.15	2.1	9	2.1	9	2.1	9.1	2.1	9.3		11.1
Inrush duration	250	127	254	128	249	142	255	153	255	236	246	115
THDi (%)	8.2	19.9	7.8	14	8.1	11.2	6.6	9.7	11.5	6.6	9.1	11.1
PF	0.99	0.83	0.99	0.91	0.99	0.93	1.0	0.97	0.99	0.98	0.97	0.97

Series	2500 Lumen		3000 Lumen		3500 Lumen		4000 Lumen		4500 Lumen	
Input Voltage 120-277 VAC	120	277	120	277	120	277	120	277	120	277
Input Current (A)	0.23	0.103	0.27	0.128	0.278	0.133	0.294	0.137	0.33	0.153
Input Power (W)	27.5	276	32.3	32.5	33.2	34.2	35.20	35.6	39.5	40
In-rush (A)	2.6	12.5	2.6	12.9	1.1	2.6	3.03	14.4	1.1	2.5
Inrush duration	231	197	212	124	59	38	214	167	60	39
THDi (%)	7.6	8.8	9.1	16.5	7.3	15.9	4.3	10.9	4.6	12.1
PF	1.0	0.97	1.0	0.97	1.0	0.93	1.0	0.93	1.0	0.95

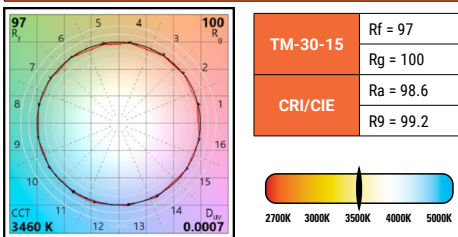
Minimum starting temperature -30°C (-22°F)*
(Nominal input 120-277VAC & 100% of rated output power)

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

98 CRI Color Metric Summary - 3500K*



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

Asymmetric Film Distribution

TIR	Short Axis Beam angle	Long Axis Beam angle
R10	12°	27.4°
R15	15°	28°
R20	21°	32°
R30	32°	37°
R35	32°	40°
R40	28°	37°
R45	41°	45°
R50	42°	46°

Connected Solutions



WaveLinX LITE Wireless Node - WLN

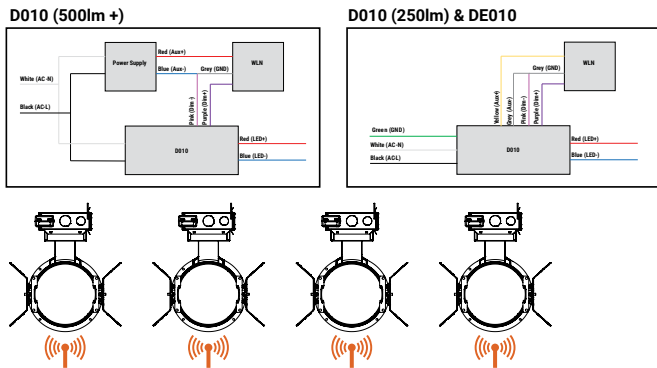
WaveLinX LITE devices only compatible with the WaveLinX LITE system.

- 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

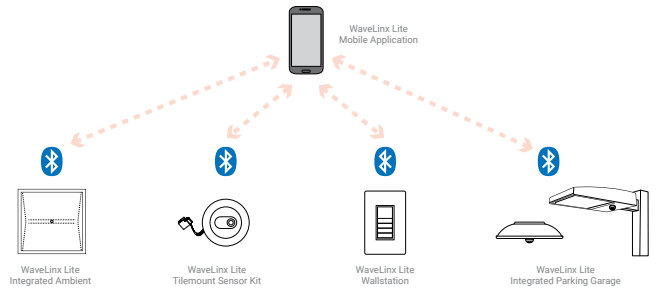


WaveLinX LITE Wireless Node (WLN) Wiring Diagram



120-277 VAC 3A downlights with 0-10V control

WaveLinX LITE Bluetooth Enabled System



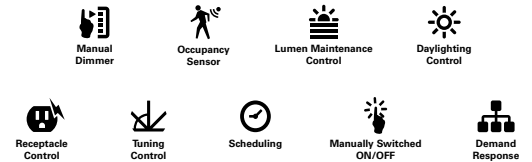
WaveLinX PRO Wireless Node - WPN

WaveLinX PRO devices only compatible with the WaveLinX PRO system.

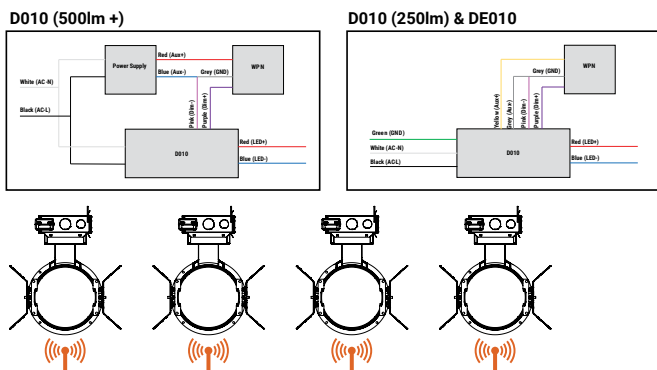
- WaveLinX Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with WaveLinX Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations



WaveLinX mobile app settings

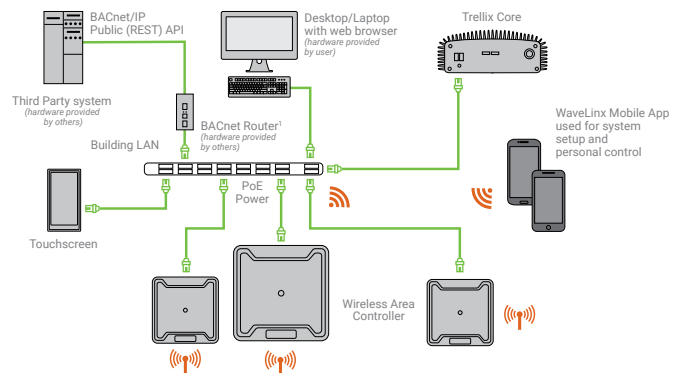


WaveLinX PRO Wireless Node (WPN) Wiring Diagram



120-277 VAC 3A downlights with 0-10V control

WaveLinX CORE Building Management Integration



Multi-line Order Information

SAMPLE ORDER NUMBER: **LD4D10FSD010IEM14**

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

 Single line Ordering Information Option

Domestic Preferences ⁽¹⁾	Housing	Lumens ^{(2) (14)}			Color Control
[Blank] =Standard BAA =Buy American Act TAA =Trade Agreements Act	LD4D =LED Downlight 4-inch Nominal Aperture LD4DCP =LED Downlight 4-inch 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 ⁽³⁾	35 =3500 lumens ⁽³⁾ 40 =4000 lumens ⁽³⁾ 45 =4500 lumens ⁽³⁾	FS =Full spectrum (Thrive) used with 98 CRI light engine

Driver (Specify from Driver column.)

D010 =0-10V Dimming, 1% to 100%, 120V-277V, 98 CRI =500-4500 lumens (500-1000 lumens for remote driver) 1D010 =0-10V Dimming, 1% to 100%, 120V, 98 CRI =1500 to 4500 lumens for remote driver 2D010 =0-10V Dimming, 1% to 100%, 277V, 98 CRI =1500 to 4500 lumens for remote driver 3D010 =0-10V Dimming, 1% to 100%, 347V dedicated drivers, 98 CRI =800-3000; 250, 500, 3500 and above use step down transformer (250 to 4500 lumens for remote driver)	
D010TR =0-10V or Line Voltage Dimming, 1% to 100%, 120-277V, 98 CRI =250-3000 lumens (250-1000 lumens for remote driver) 1D010TR =0-10V or Line Voltage Dimming, 1% to 100%, 120V, 98 CRI =1500 to 3000 lumens for remote driver 2D010TR =0-10V or Line Voltage Dimming, 1% to 100%, 277V, 98 CRI =1500 to 3000 lumens for remote driver 3D010TR =0-10V or Line Voltage Dimming, 1% to 100%, 347V step down transformer, 98 CRI =250-3000; (250-3000 lumens for remote driver)	
DE010 =0-10V Linear Dimming, 0.1% to 100%, 120V-277V, 98 CRI =500-4500 lumens (500-1000 lumens for remote driver) 1DE010 =0-10V Linear Dimming, 0.1% to 100%, 120V, 98 CRI =1500 to 4500 lumens for remote driver 2DE010 =0-10V Linear Dimming, 0.1% to 100%, 277V, 98 CRI =1500 to 4500 lumens for remote driver 3DE010 =0-10V Linear Dimming, 0.1% to 100%, 347V step down transformer, 98 CRI =500-4500; (500-4500 lumens for remote driver)	
DSL =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 120V-277V, 98 CRI =500-4500 lumens (500-1000 lumens for remote driver) 1DSL =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 120V, 98 CRI =1500 to 4500 lumens for remote driver 2DSL =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 277V, 98 CRI =1500 to 4500 lumens for remote driver 3DSL =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 347V step down transformer, 98 CRI =500-4500; (500-4500 lumens for remote driver)	
DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V, 98 CRI =800-3000 lumens (800-1000 lumens for remote driver) ⁽⁵⁾ 1DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V, 98 CRI =1500 to 3000 lumens for remote driver ⁽⁵⁾ 2DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 277V, 98 CRI =1500 to 3000 lumens for remote driver ⁽⁵⁾ 3DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 347V step down transformer, 98 CRI =800-3000; (800-3000 lumens for remote driver) ⁽⁵⁾	
DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V, RJ45 Connection, 98 CRI =800-3000 lumens (800-1000 lumens for remote driver) ⁽⁵⁾ 1DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V, RJ45 Connection, 98 CRI =1500 to 3000 lumens for remote driver ⁽⁵⁾ 2DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 277V, RJ45 Connection, 98 CRI =1500 to 3000 lumens for remote driver ⁽⁵⁾ 3DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, RJ45 Connection, 347V step down transformer, 98 CRI =800-3000; (800-3000 lumens for remote driver) ⁽⁵⁾	
DLE =Lutron Ecosystem dimming 1% to 100%, 120V-277V, 98 CRI =800-2500 lumens (800-1000 lumens for remote driver) 1DLE =Lutron Ecosystem dimming 1% to 100%, 120V, 98 CRI =1500 to 2500 lumens for remote driver 2DLE =Lutron Ecosystem dimming 1% to 100%, 277V, 98 CRI =1500 to 2500 lumens for remote driver 3DLE =Lutron Ecosystem dimming 1% to 100%, 347V step down transformer, 98 CRI =800-2500; (800 to 2500 lumens for remote driver)	
DLV =Low voltage dimming driver (1-100%) for use with DLVP system, 98 CRI =800-2000 lumens ⁽⁶⁾	800-2500 with D2W and 800-2000 with 98 CRI (Not offered with plug in driver)

Driver Options

Options ^{(6) (29) (30) (32)}

Blank =Integral driver R =Remote driver (order remote driver separately) ⁽⁶⁾ PD =Plug in Driver	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 EM14RSD =14W Self Diagnostic Replaceable Emergency Battery Pack with Integral Test Switch EMBOD7ST =Bodine® Self Test Emergency Module IEMBOD =Bodine® Emergency Module with Integral Test Switch ⁽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⁾ IEMBOD6ST =Bodine® 6W Self Test Emergency Module with Integral Test Switch ⁽²³⁾ 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 ⁽³¹⁾ 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⁾ WLN =Wavelinx LITE Wireless Node without sensor ⁽³⁵⁾
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SAMPLE ORDER NUMBER: **EU4DR3010259830**

Domestic Preferences ⁽¹⁾	Power Module	Optics		Lumen Levels ^{(2) (14)}	Color	Media
[Blank] =Standard BAA =Buy American Act TAA =Trade Agreements Act	EU4D =4-inch Universal LED Module	R25 =25° R30 =30° R35 =35° R40 =40° R45 =45°	R50 =50° R55 =55° R60 =60° R65 =65° R70 =70°	0208IC =250, 500 and 800 lumens 98 CRI, IC rated 1025 =1000, 1500, 2000 and 2500 lumens, 98 CRI 3045 =3000, 3500, 4000 and 4500 lumens, 98 CRI ⁽⁶⁾	98 CRI 9827 =2700K 9830 =3000K 9835 =3500K 9840 =4000K 9850 =5000K	Blank =No Media Holder 2M =Media Holder included for 1 - 2 media

Multi-line Order Information (continued)

SAMPLE ORDER NUMBER: **4LBDPH**

Domestic Preferences ⁽¹⁾	Trim	Reflector	Flange	Finish		Options
[Blank] =Standard BAA =Buy American Act (S only)	4LB =4" LED	DP =45° cutoff downlight S =Shallow trim CS =Cast shallow trim	0 =White polymer trim ring 1 =Self flanged ⁽¹⁸⁾ 2 =White painted self flanged 4 =Knife edge ^{(19) (21)}	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, for use with IEM7, IEM14, IEMBOD ⁽²²⁾ EM6 =Integral Emergency Test Switch Hole, for use with IEMBOD6ST ⁽²³⁾

REQUIRED if Remote Driver (R) is specified

SAMPLE ORDER NUMBER: **RD10010FSD010TREM7**

Domestic Preferences ⁽¹⁾	Remote Drivers ⁽⁶⁾		Lumens ^{(2) (14)}			Color Control
[Blank] =Standard BAA =Buy American Act TAA =Trade Agreements Act	RD100 =Remote 100ft ⁽⁹⁾ RD75 =Remote 75ft ⁽⁹⁾ RD50 =Remote 50ft ⁽⁹⁾ RD25 =Remote 25ft	RD15 =Remote 15ft RD5 =Remote 5ft RD2 =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 ⁽³⁾	35 =3500 lumens ⁽³⁾ 40 =4000 lumens ⁽³⁾ 45 =4500 lumens ⁽³⁾	FS =Full spectrum (Thrive) used with 98 CRI light engine up to 4,500 lumens

Driver	
D010 =0-10V Dimming, 1% to 100%, 120V-277V, 98 CRI =500-4500 lumens (500-1000 lumens for remote driver) 1D010 =0-10V Dimming, 1% to 100%, 120V, 98 CRI =1500 to 4500 lumens for remote driver 2D010 =0-10V Dimming, 1% to 100%, 277V, 98 CRI =1500 to 4500 lumens for remote driver 3D010 =0-10V Dimming, 1% to 100%, 347V dedicated drivers, 98 CRI =800-3000; 250, 500, 3500 and above use step down transformer (250 to 4500 lumens for remote driver)	
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DE010 =0-10V Linear Dimming, 0.1% to 100%, 120V-277V, 98 CRI =500-4500 lumens (500-1000 lumens for remote driver) 1DE010 =0-10V Linear Dimming, 0.1% to 100%, 120V, 98 CRI =1500 to 4500 lumens for remote driver 2DE010 =0-10V Linear Dimming, 0.1% to 100%, 277V, 98 CRI = 1500 to 4500 lumens for remote driver 3DE010 =0-10V Linear Dimming, 0.1% to 100%, 347V step down transformer, 98 CRI =500-4500; (500-4500 lumens for remote driver)	
DSL =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 120V-277V, 98 CRI =500-4500 lumens (500-1000 lumens for remote driver) 1DSL =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 120V, 98 CRI =1500 to 4500 lumens for remote driver 2DSL =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 277V, 98 CRI =1500 to 4500 lumens for remote driver 3DSL =Fifth Light® (DALI T6) Logarithmic Dimming, 0.1% to 100%, 347V step down transformer, 98 CRI = 500-4500; (500-4500 lumens for remote driver)	
DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V, 98 CRI =800-3000 lumens (800-1000 lumens for remote driver) ⁽⁵⁾ 1DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V, 98 CRI =1500 to 3000 lumens for remote driver ⁽⁵⁾ 2DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 277V, 98 CRI =1500 to 3000 lumens for remote driver ⁽⁵⁾ 3DMX =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 347V step down transformer, 98 CRI =800-3000; (800-3000 lumens for remote driver) ⁽⁵⁾	
DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V, RJ45 Connection, 98 CRI =800-3000 lumens (800-1000 lumens for remote driver) ⁽⁵⁾ 1DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V, RJ45 Connection, 98 CRI =1500 to 3000 lumens for remote driver ⁽⁵⁾ 2DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, 277V, RJ45 Connection, 98 CRI =1500 to 3000 lumens for remote driver ⁽⁵⁾ 3DMXC5 =DMX/RDM Logarithmic Dimming, 0.1% to 100%, RJ45 Connection, 347V step down transformer, 98 CRI =800-3000; (800-3000 lumens for remote driver) ⁽⁵⁾	
DLE =Lutron Ecosystem dimming 1% to 100%, 120V-277V, 98 CRI =800-2500 lumens (800-1000 lumens for remote driver) 1DLE =Lutron Ecosystem dimming 1% to 100%, 120V, 98 CRI =1500 to 2500 lumens for remote driver 2DLE =Lutron Ecosystem dimming 1% to 100%, 277V, 98 CRI =1500 to 2500 lumens for remote driver 3DLE =Lutron Ecosystem dimming 1% to 100%, 347V step down transformer, 98 CRI =800-2500; (800 to 2500 lumens for remote driver)	
DLV =Low voltage dimming driver (1-100%) for use with DLVP system, 98 CRI =800-2000 lumens ⁽⁶⁾	800-2500 with D2W and 800-2000 with 98 CRI (Not offered with plug in driver)

Options ^{(6) (29) (30) (32)}	Controls ^{(6) (29) (30) (32)}
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	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⁾ WLN = WaveLinx LITE Wireless Node without sensor ⁽¹⁵⁾

Continued on next page.

Multi-line Order Information (continued)

Accessories (Order separately) ⁽²⁵⁾					
TRM4P =White metal trim ring ⁽²⁶⁾ DT4RF =4 inch frosted acrylic ring ⁽²⁸⁾ LGSKT4IP66 =IP66 Gasket Kit PRR4 =Rimless Plaster Ring ⁽²⁶⁾ RKP4 =Knife Edge plaster Ring ⁽²⁷⁾ RPM4MW =Rimless Millwork Ring, Matte White ⁽²⁶⁾ RPM4MB =Rimless Millwork Ring, Matte Black ⁽²⁶⁾ RKM4MW =Knife Edge Millwork Ring, Matte White ⁽²⁷⁾ RKM4MB =Knife Edge Millwork Ring, Matte Black ⁽²⁷⁾ HSA4 =Slope Adapter for 4" Aperture Housings, Specify Slope	Connected Lighting Systems ^{(6) (11) (29) (30) (32)} WPST =Field installed WaveLinX sensor Kit ⁽¹³⁾ WLST =Field installed WaveLinX LITE Sensor Kit ⁽¹²⁾ Transformers H347 =H347 for 98CRI 4000 lumens and below Bar Hangers HB50 =C-channel Bar Hanger, 50" Long, Pair RMB22 =Wood Joist Bar Hanger, 22" Long, Pair	Optics 46R25 =25° 46R30 = 30° 46R35 = 35° 46R40 = 40° 46R45 = 45° 46R50 = 50° 46R55 = 55° 46R60 = 60° 46R65 = 65° 46R70 = 70°	Color Filters ⁽³⁷⁾ F22-20 =Red F33-20 =Blue F44-20 =Green F55-20 =Yellow F66-20 =Mercury	Dichronic Filters ⁽³⁷⁾ F71-20 =Peach F72-20 =Amber F73-20 =Green F74-20 =Medium Blue F75-20 =Yellow F76-20 =Red F77-20 =Dark Blue F78-20 =Light Blue F79-20 =Neutral Density F80-20 =Magenta	Beam-Modifying Lenses ⁽³⁷⁾ LSL-20 =Linear Spread Lens OSL-20 =Overall Spread Lens DIF-20 =Diffused Lens Asymmetric Film ⁽³⁷⁾ 46ASYMFILM =Asymmetric Film (see chart for distribution) Louvers ⁽³⁷⁾ LVR-20 =Hex Cell Louver

Notes:

- 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 [DOMESTIC PREFERENCES](#) website for more information. Components shipped separately may be separately analysed under domestic preference requirements.
- Nominal Lumens will vary depending on selected color, CRI. Reference IES files.
- Product is marked spacing. [Reference table on page 4 for the spacing details.](#)
- DMX fixtures default to full on upon loss of DMX signal.
- Not available with Chicago Plenum.
- ULus listed only
- Not available with Lutron drivers
- Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. Use with 0-10V driver.
- WLST=WaveLinX LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinX LITE system specifications)

- WPST=WaveLinX wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with 0-10V only.
- IC rated up to 800 lumens
- 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.
- Flange is the same finish as the reflector
- Requires knife edge ring accessory.
- Anodized or spun reflectors
- Die cast only
- Available with 45° cutoff (DP) trim only. Required for use with all IEMBOD, IEM7, IEM14, IEMV7 and IEMV14 housings. Not offered with remote driver.
- Available with 45D cutoff (DP) trim only. Not available with LI or WH finishes. Required for use with IEMBOD6ST. Not offered with remote driver.
- Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
- Order trim with polymer trim ring (Consult specification sheet for color ordering information and options).
- Order die cast trim with flange type 4

- Order with self flanged trim.
- If using remote driver order battery and controls with the remote driver.
- 120V-277V
- Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others)
- Non-IC
- 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 0-10V driver only.
- Requires 2M designation on light engine.