Project		Catalog #		Type	
Prepared by		Notes		Date	



PORTFOLIO

LDRT8B / LDRT810B / LDRT812B-ER8B-8LB

8" - 12" LED Narrow, Medium or Wide Beam
Retrofit/Remodel Downlight
1,000-20,000 Lumen

Typical Applications
Office • Education • Healthcare • Hospitality

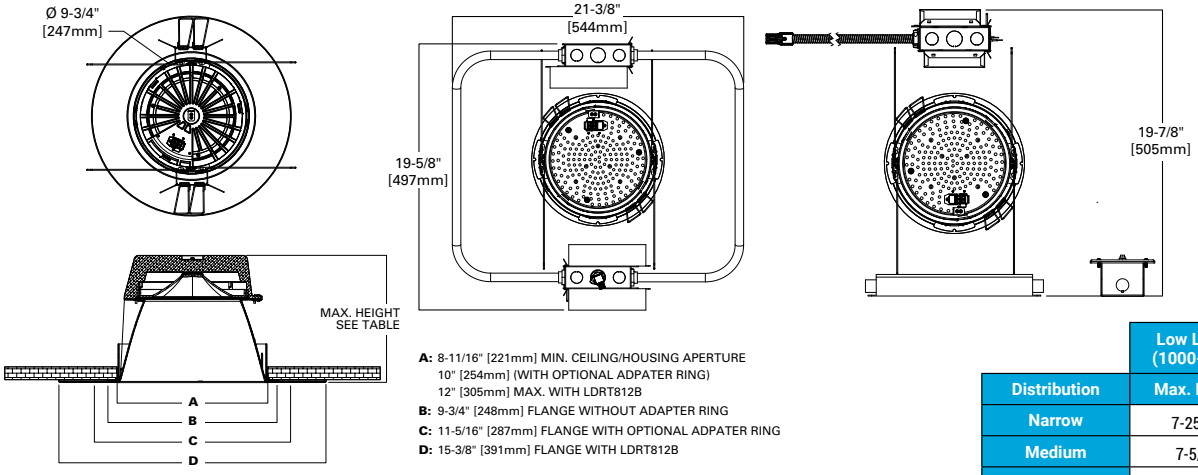
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- Product Warranty

Top Product Features

- Retrofits in ceiling openings from 8.7-inch to 12-inch; Flexible disconnect for easy LED engine replacement and installation
- 1,000 to 20,000 lumens; Offered in 80, 90 and 97 CRI; narrow beam, medium beam and wide beam distributions
- Coverts existing 8", 9", 10" and 12" incandescent, HID and compact fluorescent housings to LED
- 2700K, 3000K, 3500K, 4000K, 5000K; D2W™ option from 3000K to 1850K
- W2N tunable white CCT range 2700K to 6500K or 2000K to 5000K / BioUp = 2700K to 5000K

Dimensional and Mounting Details



A: 8-11/16" [221mm] MIN. CEILING/HOUSING APERTURE
10" [254mm] (WITH OPTIONAL ADPATER RING)
12" [305mm] MAX. WITH LDRT812B
B: 9-3/4" [248mm] FLANGE WITHOUT ADAPTER RING
C: 11-5/16" [287mm] FLANGE WITH OPTIONAL ADPATER RING
D: 15-3/8" [391mm] FLANGE WITH LDRT812B

	Low Lumen (1000-7000)	High Lumen (8000-20000)
Distribution	Max. Height	Max Height
Narrow	7-25/32"	9-3/4"
Medium	7-5/16"	9-9/32"
Wide	6-11/16"	8-11/16"
Shallow	4-26/32"	6-26/32"

Order Information

SAMPLE ORDER NUMBER: **LDRT8B50D010IEMBOD**

Housing	Lumens[1]	Voltage [10]	Driver Options
LDRT8B=LED downlight retrofit 8" nominal Aperture **LDRT8BCP**=LED downlight Retrofit 8" Nominal Aperture, Chicago Plenum **LDRT810B**=LED downlight retrofit 10" nominal Aperture, 11.3 OD **LDRT810BCP**=LED downlight retrofit 10" nominal Aperture, 11.3 OD, Chicago Plenum **LDRT812B**=LED Downlight Retrofit 12" Nominal Aperture **LDRT812BCP**=LED Downlight Retrofit 12" Nominal Aperture, Chicago Plenum	**10**=1000 lumens **15**=1500 lumens **20**=2000 lumens **30**=3000 lumens **40**=4000 lumens **50**=5000 lumens **60**=6000 lumens[7] **70**=7000 lumens[7] **80**=8000 lumens[7] **90**=9000 lumens[7] **100**=10000 lumens[7] **120**=12000 lumens[7] **150**=15000 lumens[7] **175**=17500 lumens[7] **200**=20000 lumens[7]	**Blank**=120-277V, for use with 1 driver **1**=120V, for use with 2 and 3 drivers **2**=277V, for use with 2 and 3 drivers **3**=347V step down transformer [11]	**80/90/97 CRI** **D010**=0-10V Dimming, 1% to 100%, 120V-277V 1 Driver: 1000-7000 Lumens 2 Drivers: 8000-12,000 Lumens 3 Drivers: 15,000-20,000 Lumens **D010TR**=0-10V 120-277V or 120V Phase Cut Dimming, 1% to 100% 1 Driver: 1000-5000 Lumens 2 Drivers: 6000-10,000 Lumens 3 Drivers: 12,000-15,000 Lumens **DE010**=0-10V Linear Dimming, 0.1% to 100%, 120V-277V 1 Driver: 1000-5000 Lumens 2 Drivers: 6000-9000 Lumens 3 Drivers: 12,000 Lumens **D5LT**=Fifth Light® DALI DT6 Logarithmic Dimming, 0.1% to 100%, 120V-277V 1 Driver: 1000-5000 Lumens 2 Drivers: 6000-9000 Lumens 3 Drivers: 12,000 Lumens **DMX**=DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V [3] 1 Driver: 1000-5000 Lumens 2 Drivers: 6000-9000 Lumens 3 Drivers: 12,000 Lumens **DMXC5**=DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V, with RJ45 connection [3] 1 Driver: 1000-5000 Lumens 2 Drivers: 6000-9000 Lumens 3 Drivers: 12,000 Lumens **DLE**=Lutron Ecosystem dimming 1% to 100% 1 Driver: 1000-5000 Lumens 2 Drivers: 6000-9000 Lumens 3 Drivers: 12,000 Lumens **DLV**=Low Voltage System 1 Driver: 1000-3000 Lumens	**Tunable white** 1 Driver: 1000-2000 Lumens 2 Drivers: 3000-4000 Lumens **DE010W2N2765** = 0-10V dimming, 0.1% to 100%, 120-277V, 2700K-6500K **DE010W2N2050** = 0-10V dimming, 0.1% to 100%, 120-277V, 2000K-5000K **D5LTW2N2765** = Fifth Light DALI DT6 Logarithmic Dimming, 0.1% to 100%, 120V-277V, 2700K-6500K **D5LTW2N2050** =Fifth Light DALI DT6 Logarithmic Dimming, 0.1% to 100%, 120V-277V, 2000K-5000K **BioUp Tunable white** 1 Driver: 1000 Lumens 2 Drivers: 2000-3000 Lumens **DE010B2750** = 0-10V dimming, 0.1% to 100%, 120-277V, 2700K-5000K **DE010B35** = 0-10V dimming, 0.1% to 100%, 120-277V, 3500K **DE010B40** = 0-10V dimming, 0.1% to 100%, 120-277V, 4000K **DE010B50** = 0-10V dimming, 0.1% to 100%, 120-277V, 5000K **D5LTB2750** = Fifth Light DALI DT6 Logarithmic Dimming, 0.1% to 100%, 120V-277V, 2700K-5000K **Dim-to-Warm** 1 Driver: 1000-3000 Lumens 2 Drivers: 4000 and 6000 Lumens 3 Drivers: 9000 Lumens **D010**=0-10V Dimming, 1% to 100%, 120V-277V, **D010TR**=0-10V 120-277V or 120V Phase Cut Dimming, 1% to 100% **DE010**=0-10V Linear Dimming, 0.1% to 100%, 120V-277V **D5LT**=Fifth Light® DALI DT6 Logarithmic Dimming, 0.1% to 100%, 120V-277V **DMX**=DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V [3] **DMXC5**=DMX/RDM Logarithmic Dimming, 0.1% to 100%, 120V-277V, with RJ45 connection [3] **DLE**=Lutron Ecosystem dimming 1% to 100% **DLV**=Low Voltage System [6]

Dim to Warm	Options
Blank=No color control or D2W for 2000 lumens and below **D2W**=For 4000, 6000 and 9000 dim 2 warm	**WPST**=Factory installed WaveLinx PRO Sensor Kit [2][3][16] **WLST**=Factory installed WaveLinx LITE Sensor Kit [2][3][17] **WPN** = WaveLinx PRO Wireless Node without sensor [2][18] **WLN** = WaveLinx LITE Wireless Node without sensor [2][19] **EMBOD**=Bodine® 7W Emergency Module with Remote Test Switch[3] **EMBOD7ST** =Bodine® 7W Emergency Module with Self Test Remote Test Switch[3] **EM7**=7W Emergency Module with Remote Test Switch[3] **EM14**=14W Emergency Module with Remote Test Switch[3] **EMV7**=7W Low Voltage Emergency Module with Remote Test Switch[3][4] **EMV14**=14W Low Voltage Emergency Module with Remote Test Switch[3][4]

SAMPLE ORDER NUMBER: **ER8B30408035**

Power Module	Lumen Levels[1]	Color
ER8B=8" LED Module	**1 Driver** **1020**=1000, 1500, or 2000 Lumens **3040**=3000 or 4000 Lumens **5070**=5000, 6000, or 7000 lumens **2 Drivers** **60**=6000 lumens, 2 LEDs **80120**=8000, 9000, 10000, or 12000 lumens **3 Drivers** **120**=12000 lumens, 3 LEDs **150200**=15000, 17500 or 20000 lumens	**80 CRI** **8027**= 80CRI, 2700K **8030**= 80CRI, 3000K **8035**= 80CRI, 3500K **8040**= 80CRI, 4000K **8050**= 80CRI, 5000K **90 CRI** **9027**= 90CRI, 2700K **9030**= 90CRI, 3000K **9035**= 90CRI, 3500K **9040**= 90CRI, 4000K **9050**= 90CRI, 5000K **97 CRI** **9727**= 97CRI, 2700K **9730**= 97CRI, 3000K **Dim 2 Warm 1 Driver** **109030D2W**=1000 Lumen, 90 CRI, Dim 2 Warm, IC Rated **159030D2W**=1500 Lumen, 90 CRI, Dim 2 Warm, IC Rated **209030D2W**=2000 Lumen, 90 CRI, Dim 2 Warm, IC Rated **309030D2W**=3000 Lumen, 90 CRI, Dim 2 Warm **Dim 2 Warm 2 Drivers** **409030D2W**=4000 Lumen, 90 CRI, Dim 2 Warm **609030D2W**=6000 Lumen, 90 CRI, Dim 2 Warm **Dim 2 Warm 3 Drivers** **909030D2W**=9000 Lumen, 90 CRI, Dim 2 Warm **W2N Tunable White 1 Driver** [15] **10W2N902050**=1000 lumens, 90 CRI, Tunable white 2000K - 5000K **10W2N902765**=1000 lumens, 90 CRI, Tunable white 2700K - 6500K **15W2N902050**=1500 lumens, 90 CRI, Tunable white 2000K - 5000K **15W2N902765**=1500 lumens, 90 CRI, Tunable white 2700K - 6500K **20W2N902050**=2000 lumens, 90 CRI, Tunable white 2000K - 5000K **20W2N902765**=2000 lumens, 90 CRI, Tunable white 2700K - 6500K **W2N Tunable White 2 Drivers** **30W2N902050**=3000 lumens, 90 CRI, Tunable white 2000K - 5000K **30W2N902765**=3000 lumens, 90 CRI, Tunable white 2700K - 6500K **40W2N902050**=4000 lumens, 90 CRI, Tunable white 2000K - 5000K **40W2N902765**=4000 lumens, 90 CRI, Tunable white 2700K - 6500K **BioUp Tunable White 1 Driver** **10B**=1000 lumens **BioUp Tunable White 2 Drivers** **20B**=2000 lumens **30B**=3000 lumens **35**= Static 3500K **40**= Static 4000K **50**= Static 5000K **2750**= BioUp Tunable White 2700K-5000K

continued on next page

Order Information

SAMPLE ORDER NUMBER: **8LBM1LI**

Trim	Distribution [5]	Flange	Finish	Options
8LB=8" Reflector	**N**=Narrow Spun Aluminum **M**=Medium Spun Aluminum **W**=Wide Spun Aluminum **S**=Shallow Spun Aluminum	**1**=Self-flanged [8] **2**=White Painted Self-flanged	**LI**=Specular Clear **H**=Semi-Specular Clear **WMH**=Warm Haze **WH**=Wheat **GPH**=Graphite Haze **B**=Specular Black **MW**=Matte White	**E**=Integral Emergency Test Switch Hole [6]

Accessories
Transformers **H347**=347 to 120V Step Down Transformer, 75VA **Connected Lighting Systems** [2] **WTA** = Field installed WaveLinx PRO Sensor Kit [16] **WTK** = Field installed WaveLinx Lite Sensor Kit [17]

Notes

1. Nominal Lumens will vary depending on selected color, driver and reflector finish.
2. Refer to system specifications for additional information, features and benefits. Order either factory installed option or accessory, use with 0-10V driver.
3. Not available with Chicago Plenum or IC rating.
4. ULus listed only.
5. Beam angles are nominal with LI finish trims. See chart.
6. DMX fixtures default to full on upon loss of DMX signal.
7. Product is marked spacing and must be installed with the following minimum spacing
- Center to center of adjacent luminaires: 36"
- Center of luminaire to side of building member: 18"
- Minimum overhead: 1/2"
-7000 & 20,000 Lumens minimum overhead: 6"

8. Flange is the same finish as the reflector.
9. Field required for D2W 4000, 6000 and 9000 lumens only.
10. For single driver.
11. 347V step down transformer only available up to 7000 Lumen
12. DMX fixtures default to full on upon loss of DMX signal.
13. For D2W up to 3000 lumens.
14. Not for use with D2W.
15. Non-IC.
16. WPST = WaveLinx PRO wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with 0-10V only.
17. WLST = WaveLinx LITE tile mount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinx LITE system specifications)
18. 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.
19. 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.

Product Specifications

Lower Shielding Reflector
- Self-flanged, spun .060" thick aluminum lower reflector
- Lensed upper optical chamber
- Provides superior lumen output with minimal source brightness
- Available in all Portfolio Alzak® finishes

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

Retrofit Ring
- Galvanized steel ring installs with four mouse trap springs for secure installation
- Accommodates up to 2" ceiling thickness
- Installs in ceiling openings from 8.7" to 10" with optional adapter ring
- Pre-wired flexible conduit with snap in connector installs into 1/2" knockout on the existing junction box

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 transitional lens producing even distribution with no pixilation
- Lumen output shall not decrease by more than 10% over the minimum life of 55,000 hours (L90 > 55,000 hours)
- Color variation within 2-step MacAdam ellipses
- Flexible disconnect allows for tool-less replacement of LED engine from below ceiling
- 2700K, 3000K, 3500K, 4000K and 5000K correlated color temperature (CCT)
- Available in 80, 90 or 97 color rendering index (CRI)

VividTune™ Color Tuning Solutions
- **D2W™** – Dim-to-Warm shifts CCT from 3000K to 1850K as fixture dims, mimicking halogen sources
- **W2N** – Tunable white CCT range from 2700K to 6500K or 2000K to 5000K; 90 CRI
- **BioUp** - Tunable white CCT range 2700K to 5000K Provides the biological effectiveness of natural sunlight, with color temperatures that are more comfortable for indoor environments

Driver
- Combination 0-10V/Phase Cut driver provides flicker free dimming from 100% to 1%
- Optional 1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem
- Driver can be serviced from above or through the aperture
- 1,000-7,000 lumens utilize one driver; 8,000-12,000 lumens utilize two drivers; 15,000-20,000 lumens utilize three drivers (with D010); reference ordering information for other variations
- Distributed low voltage power system combines power, lighting, and controls with ease of installation.

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.**

Compliance
- Thermally protected
- cULus Certified to UL 1598 / C22.2 No. 250.0 suitable for wet locations with downlight with covered ceiling
- cULus listed for 25°C ambient environments
- Optional City of Chicago environmental air (CCEA) marking for plenum applications
- EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits
- Insulated ceiling (IC) rated up to 2000 lumens; 3000 lumens and above, Tunable White, BioUp 2000 lumens and above are non-IC rated (insulation must be kept 3" from top and sides of housing)
- RoHS compliant
- T24 compliant
- IP20 above ceiling
- IP65 below ceiling
- Photometric testing completed in accordance with IES LM-79 standards
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11
- 6,000 lumens and above are marked spacing and must follow spacing requirements

Warranty
- Five year warranty www.cooperlighting.com/legal

Housing Compatibility

Manufr.	Series	Nom. Size	Housing Aperture	Housing Catalog #	Ceiling Aperture	Retrofit Kit
Cooper	Portfolio	8	8.730	C8	8.73" MIN 9" MAX	LDRT8B
Philips	Lightolier Calculite	8	8.750	S8		
Philips	Capri	8	8.875	CM8		
Cooper	PDS	8	8.875	PD8		
Juno		9	8.938	C9H		
Juno	Indy Performance Series (Elate)	9	9.000	C9 and M9		
Philips	Capri	10	9.625	CM10	8.73" MIN 10.3" MAX	LDRT810B
Philips	Omega	10	9.813	OM10 and S10		
Juno	Indy Performance Series (Elate)	10	9.875	M10		
Cooper	Portfolio	9	10.000	C9		
Lithonia	Gotham	10	10.125	GRSF		
Lithonia	Gotham	10	10.125	AF, LGF, LGH, AH, A		
Lithonia	Gotham	10	10.250	GRSH		

Color Metric Summary

8027	
R_f	93.2
R_g	94.1
CRI	81.3
R_9	0.7

8030	
R_f	83.4
R_g	94.4
CRI	82.4
R_9	4.5

8035	
R_f	83.7
R_g	94.8
CRI	83.1
R_9	9.1

8040	
R_f	83.3
R_g	94
CRI	83.7
R_9	9.9

8050	
R_f	82.5
R_g	94.3
CRI	94.2
R_9	11.9

9027	
R_f	92
R_g	98.4
CRI	93.4
R_9	59.3

9030	
R_f	91.6
R_g	98.6
CRI	93.2
R_9	60.2

9035	
R_f	90.9
R_g	98.3
CRI	93.3
R_9	63.1

9040	
R_f	89.4
R_g	96.6
CRI	91.8
R_9	58

9050	
R_f	88.4
R_g	96.8
CRI	91
R_9	55.2

9727	
R_f	95
R_g	100.1
CRI	98
R_9	93.9

9730	
R_f	94.2
R_g	99.6
CRI	98.5
R_9	94.7

Energy

ENERGY DATA
Sound Rating: Class A standards
(Values at non-dimming line voltage)
Minimum Starting Temperature: -20°C (-4°F)
EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer)
Power Factor: >0.90
Input Frequency: 50-60Hz

	NOMINAL BEAM ANGLES WITH LI FINISH			
	Narrow	Medium	Wide	Shallow
1000-7000	15	40	73	86
8000-12000	30	44	73	86
15000-20000	34	46	73	86

1000 Lumen D010	
Input Power: 11W	THD <14%
Input Current: 0.09A	277V Input Current: 0.04A

1500 Lumen D010	
Input Power: 15.5W	THD <13%
Input Current: 0.13A	277V Input Current: 0.06A

2000 Lumen D010	
Input Power:21.2 W	THD <9%
Input Current:0.18A	277V Input Current:0.08A

3000 Lumen D010	
Input Power:27.6 W	THD <10%
Input Current:0.23A	277V Input Current:0.10A

4000 Lumen D010	
Input Power: 41.6 W	THD <13%
Input Current: 0.35A	277V Input Current: 0.15A

5000 Lumen D010TE	
Input Power: 52.5 W	THD <12%
Input Current: 0.44A	277V Input Current: 0.19A

6000 Lumen D010TE	
Input Power: 59.7W	THD: <14%
Input Current:0.50A	277V Input Current:0.22A

7000 Lumen D010TE	
Input Power:75.8 W	THD <13%
Input Current:0.64A	277V Input Current:0.29A

8000 Lumen D010	
Input Power:73.8 W	THD <13%
Input Current:0.62A	277V Input Current:0.26A

9000 Lumen D010	
Input Power:86.9 W	THD <13%
Input Current:0.72A	277V Input Current:0.32A

10000 Lumen D010TE	
Input Power:115.4 W	THD <13%
Input Current:0.96A	277V Input Current:0.42A

12000 Lumen D010TE	
Input Power:119.4 W	THD <13%
Input Current:1.0A	277V Input Current:0.43A

15000 Lumen D010TE	
Input Power:173.7 W	THD <13%
Input Current:1.45A	277V Input Current:0.63A

17500 Lumen D010TE	
Input Power:179.1 W	THD <13%
Input Current:1.49A	277V Input Current:0.65A

20000 Lumen D010TE	
Input Power:227.4 W	THD <13%
Input Current:1.9A	277V Input Current:0.82A

Photometric Data

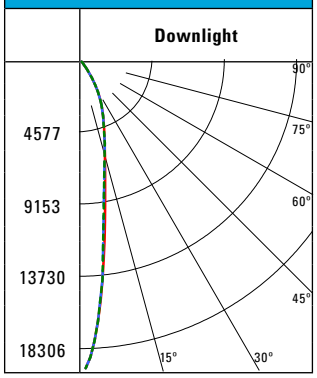
View IES files

NARROW (15° BEAM)

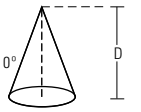
Test Number	
Housing	LD8B50D010
Module	ER8B50835
Trim	8LBN0H
Lumens	4986
Efficacy	94.1 Lm/W
SC	0.32



CANDLEPOWER DISTRIBUTION



CONE OF LIGHT



MH	FC	L	W
4'	1144.4	1.2	1.2
7'	373.7	2.2	2.2
9'	226.1	2.8	2.8
13'	108.3	4	4
16'	71.5	5	5

CANDELA TABLE

Degrees Vertical	Candela
0	18310
5	14091
15	5762
25	3117
35	1021
45	99
55	5
65	1
75	1
85	0
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	4214	84.5
0-40	4883	97.9
0-60	4983	99.9
0-90	4986	100
90-180	0	0
0-180	4986	100

LUMINANCE

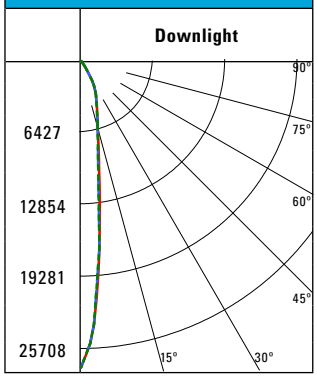
Average Candela Degrees	Average 0° Luminance
45	4330
55	253
65	88
75	143
85	0

NARROW (15° BEAM)

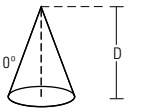
Test Number	
Housing	LD8B50D010
Module	ER8B50835
Trim	8LBN0LI
Lumens	5248
Efficacy	99 Lm/W
SC	0.25



CANDLEPOWER DISTRIBUTION



CONE OF LIGHT



MH	FC	L	W
4'	1607	1	1
7'	524.7	1.6	1.6
9'	317.4	2.2	2.2
13'	152.1	3.2	3.2
16'	100.4	4	4

CANDELA TABLE

Degrees Vertical	Candela
0	25712
5	17790
15	5743
25	3148
35	879
45	101
55	7
65	7
75	4
85	0
90	0

ZONAL LUMEN SUMMARY

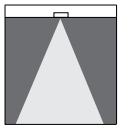
Zone	Lumens	% Fixture
0-30	4514	86
0-40	5134	97.8
0-60	5238	99.8
0-90	5248	100
90-180	0	0
0-180	5248	100

LUMINANCE

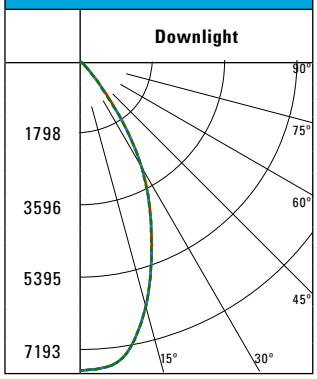
Average Candela Degrees	Average 0° Luminance
45	4422
55	382
65	518
75	429
85	0

MEDIUM (40° BEAM)

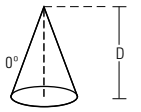
Test Number	
Housing	LD8B50D010
Module	ER8B50835
Trim	8LBM0H
Lumens	5426
Efficacy	102.4 Lm/W
SC	0.8



CANDLEPOWER DISTRIBUTION



CONE OF LIGHT



MH	FC	L	W
4'	449.8	3.2	3.2
7'	146.9	5.6	5.6
9'	88.8	7.2	7.2
13'	42.6	10.4	10.4
16'	28.1	12.8	12.8

CANDELA TABLE

Degrees Vertical	Candela
0	7197
5	7141
15	5914
25	3883
35	1774
45	244
55	16
65	2
75	1
85	0
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	4078	75.2
0-40	5174	95.4
0-60	5422	99.9
0-90	5426	100
90-180	0	0
0-180	5426	100

LUMINANCE

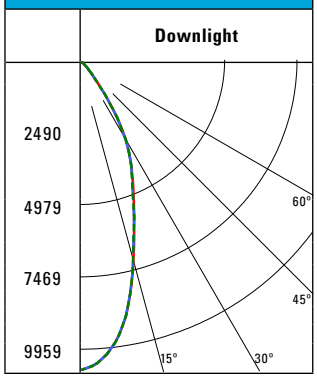
Average Candela Degrees	Average 0° Luminance
45	10619
55	887
65	175
75	143
85	0

MEDIUM (40° BEAM)

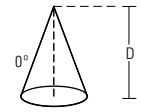
Test Number	
Housing	LD8B50D010
Module	ER8B50835
Trim	8LBM0LI
Lumens	5711
Efficacy	107.8 Lm/W
SC	0.63



CANDLEPOWER DISTRIBUTION



CONE OF LIGHT



MH	FC	L	W
4'	622.7	2.4	2.4
7'	203.3	4.4	4.4
9'	123	5.6	5.6
13'	59	8	8
16'	38.9	10	10

CANDELA TABLE

Degrees Vertical	Candela
0	9963
5	9498
15	6587
25	3908
35	1559
45	219
55	27
65	7
75	2
85	0
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	4491	78.6
0-40	5481	96
0-60	5702	99.8
0-90	5711	100
90-180	0	0
0-180	5711	100

LUMINANCE

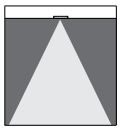
Average Candela Degrees	Average 0° Luminance
45	9546
55	1435
65	518
75	214
85	0

Photometric Data

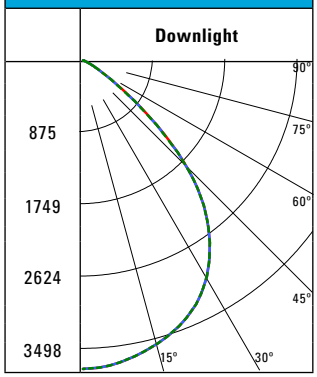
View IES files

SHALLOW (86° BEAM)

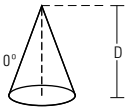
Test Number	
Housing	LD8B50D010
Module	ER8B50835
Trim	8LBS0H
Lumens	6035
Efficacy	113.9 Lm/W
SC	1.2



CANDLEPOWER DISTRIBUTION



CONE OF LIGHT



MH	FC	L	W
4'	218.9	4.6	4.6
7'	71.5	8.2	8.2
9'	43.2	10.6	10.6
13'	20.7	15.4	15.4
16'	13.7	19	19

CANDELA TABLE

Degrees Vertical	Candela
0	3502
5	3477
15	3322
25	3056
35	2525
45	1630
55	459
65	84
75	18
85	4
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	2670	44.2
0-40	4240	70.2
0-60	5920	98.1
0-90	6035	100
90-180	0	0
0-180	6035	100

LUMINANCE

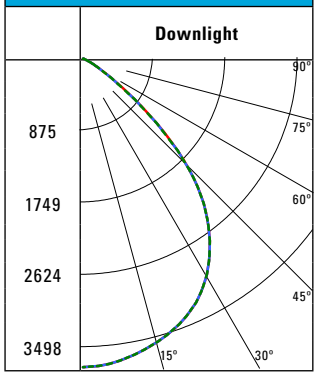
Average Candela Degrees	Average 0° Luminance
45	71087
55	24682
65	6100
75	2121
85	1274

SHALLOW (86° BEAM)

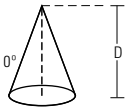
Test Number	
Housing	LD8B50D010
Module	ER8B50835
Trim	8LBS0LI
Lumens	6206
Efficacy	117.1 Lm/W
SC	1.28



CANDLEPOWER DISTRIBUTION



CONE OF LIGHT



MH	FC	L	W
4'	216.3	5	5
7'	70.6	8.8	8.8
9'	42.7	11.4	11.4
13'	20.5	16.6	16.6
16'	13.5	20.4	20.4

CANDELA TABLE

Degrees Vertical	Candela
0	3460
5	3462
15	3498
25	3343
35	2681
45	1591
55	418
65	57
75	5
85	2
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	2850	45.9
0-40	4513	72.7
0-60	6132	98.8
0-90	6206	100
90-180	0	0
0-180	6206	100

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	69395
55	22488
65	4159
75	631
85	637

Nominal Scaling From 80 CRI 3500K

CRI	CCT	Lumen Mult
80	2700	0.938
80	3000	0.962
80	3500	1.000
80	4000	0.993
80	5000	1.013
90	2700	0.784
90	3000	0.826
90	3500	0.853
90	4000	0.891
90	5000	0.922
97	2700	0.696
97	3000	0.737

Nominal Scaling From 5000 lumen package

LUMEN PACKAGE	LUMEN MULT
1000 LUMEN	0.207
1500 LUMEN	0.280
2000 LUMEN	0.398
3000 LUMEN	0.562
4000 LUMEN	0.799
5000 LUMEN	1.000
6000 LUMEN	1.133
7000 LUMEN	1.368
8000 LUMEN	1.535
9000 LUMEN	1.729
10,000 LUMEN	1.994
12,000 LUMEN	2.261
15,000 LUMEN	2.949
17,500 LUMEN	3.329
20,000 LUMEN	3.924

Connected Solutions

Control Solutions

- WaveLinx LITE wireless
- WaveLinx PRO wireless
- WaveLinx CAT wired
- WaveLinx DALI wired

The LDRT8B / LDRT810B / LDRT812B with WaveLinx offers no-hassle lighting control with multiple luminaire level control solutions.

WaveLinx by Cooper Lighting Solutions is a wired and wireless solution for a single room, a parking lot, or an entire campus, helping meet energy codes, reduce energy use, and create healthier environments. As a true hybrid architecture, it enables the seamless integration of DALI, CAT, and PRO technologies and luminaires for unmatched reliability and flexibility, with sensor-enabled luminaires that can also share data with the WaveLinx CORE platform, further improving operations across office, education, healthcare, warehouse, and parking garage applications.

WaveLinx LITE is a Bluetooth wireless digital lighting control solution with out-of-the-box functionality that saves energy and meets energy codes. It's designed for applications that require occupancy-based, daylighting, or manual light control using WaveLinx LITE-enabled luminaires and a mobile app for cost-effective projects.

WaveLinx PRO is a Zigbee wireless solution that offers a rich portfolio of devices, WaveLinx PRO-enabled luminaires, and a mobile app and the WAC (WaveLinx Area Controller). It offers advanced energy savings and deep data integration to improve the occupant experience.

WaveLinx CAT is a scalable CAT5-wired solution for a single room and connected spaces, supporting applications that require occupancy-based, daylighting, or manual light control, with self-commissioning to meet energy codes and maximize energy savings.

WaveLinx DALI is a powerful two-wire DALI-2 solution for connected spaces, combining open-standard devices enabling interoperability with the simplicity of WaveLinx app-based commissioning. It delivers deterministic wired control, granular addressability, and tunable white.

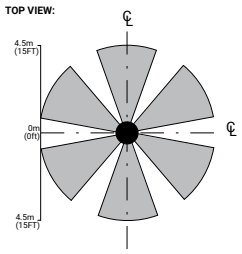
WaveLinx Tilemount Sensor



LITE and PRO Tilemount Sensor

The WLST (LITE) and WPST (PRO) tilemount sensor kit provides occupancy/vacancy sensing and daylight dimming capabilities as part of the innovative WaveLinx Bluetooth enabled system.

Sensor Converage Pattern



Note: Installation of integrated sensors within 3-ft (1m) of HVAC air vents is not recommended. The pattern shown is intended solely as a general guide and is not to scale.

WaveLinx Node



LITE Node

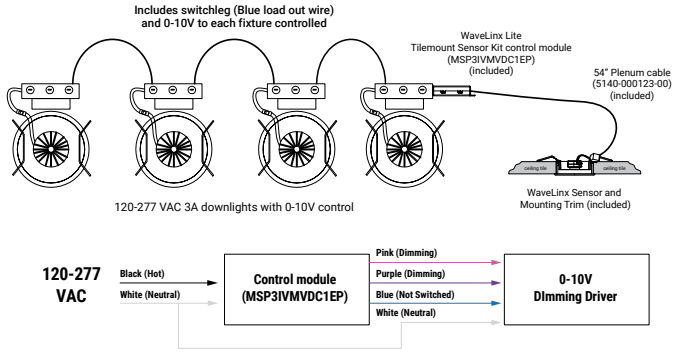
The WaveLinx LITE Node (OEM-WLN) is a wireless to 0-10V control module designed to be integrated into the luminaire. The LITE Node offers two continuous 0-10V output channels that can be used to control dim-to-off 0-10V LED drivers with auxiliary power.



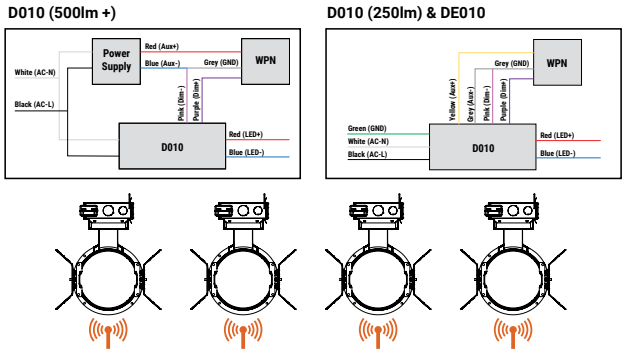
PRO Node

The WaveLinx PRO Node (OEM-WPN) is a wireless to 0-10V control module designed to be integrated into the luminaire. The adapter offers two continuous 0-10V output channels that can be used to control dim-to-off 0-10V LED drivers with auxiliary power.

WaveLinx LITE WLST & WaveLinx PRO WPST Tilemount Wiring



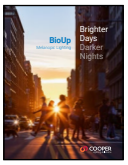
WaveLinx LITE WLN & WaveLinx PRO WPN Fixture Wiring



Proven Research. Industry Recognized.

BioUp
Melanopic Lighting

See better | Feel better | Function better



See BioUp brochure for more details

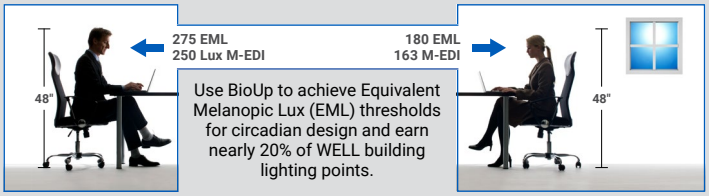


ANSI/IES RP-46-23 / TM18 published March 2024 based on over 40 years of research.

"…circadian clock synchronization is paramount to the body's efficient and appropriate functioning." – TM18

INTERNATIONAL WELL BUILDING INSTITUTE™

BioUp solutions maximize WELL points for Circadian Lighting Design (L03):



Use BioUp to achieve Equivalent Melanopic Lux (EML) thresholds for circadian design and earn nearly 20% of WELL building lighting points.

MDER, M-EDI and **EML** are key metrics used to quantify non-visual performance of indoor lighting systems.



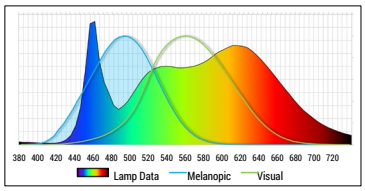
See BioUp white paper for more details

30% boost Biological impact
compared to traditional LED sources

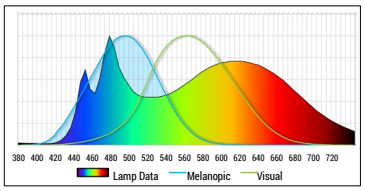
CCT	LED @ ~83 CRI	BioUp Static		BioUp Dynamic	
		MDER	CRI	MDER	CRI
2700K	0.45	-	-	0.43	95
3000K	0.50	-	-	0.57	94
3500K	0.57	0.71	90	0.71	90
4000K	0.65	0.84	87	0.84	87
5000K	0.79	1.00	84	1.00	84

MDER - Melanopic Daylight Efficacy Ratio (MDER) measures the amount of light stimulating to the melanopsin receptors.

Standard 4000K LED
MDER = .62



BioUp 4000K LED
MDER = .82

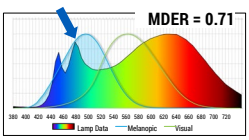


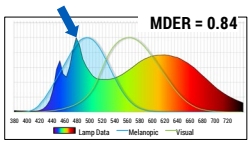
BioUp enhances the LED spectrum with cyan light at 475nm increasing the biological impact of the light to enhance our circadian rhythm which regulates our sleep/wake cycle, daytime engagement, and mood – ***all without distorting visual color impression.***

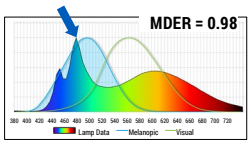
Static (non-tunable)

Static BioUp is used when simple Melanopic Lighting is desired at all times.

Arrow in graph shows BioUp spectrum boost is at 475nm where non-visual biological response is enhanced.







3500K or 4000K or 5000K

Cyan light component always present

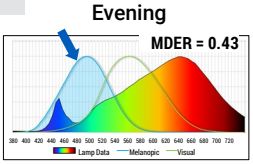
Dimming Control

› no CCT control needed

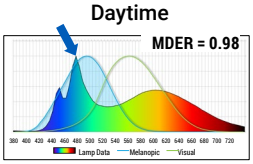
Dynamic - (Tunable)

Dynamic BioUp is used when Melanopic Lighting is desired to adjust during the day.

Evening



Daytime



Warmer CCT **Without** Cyan content ⟷ Cooler Light **With** Cyan content

2700K – 5000K

CCT Control

Dimming Control

› Control with Wavelinx, 2ch 0-10V, or DALI

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