Portfolio

DESCRIPTION

6-inch recessed LED for international, remodel or retrofit applications. Offered with open or lensed wall wash reflectors providing glare free, even illumination on vertical surfaces. Featuring a two-stage diffused reflector system producing smooth distribution with excellent light control and low aperture brightness. Lumen packages range from 500 to 7000 with color temperatures of 2400K, 2700K, 3000K, 3500K, 4000K, and 5000K. VividTune: Dim-to-warm technology – similar to halogen at full power, the 3000K LED warms smoothly as dimmed to 1850K creating a rich warm glow within the space. Tunable white technology - adjust the color temperature from warm white to cool white while independently controlling intensity.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Reflector
Open Wall Wash - wall wash reflector with gradient kicker combined with a lensed upper optical chamber provides superior lumen output, high level vertical illumination with minimal source brightness.
Lensed Wall Wash - offered in all Portfolio Alzak® finishes. Reflector is retained with two torsion springs holding the flange tight to the finished ceiling surface.

Plaster Ring
Galvanized steel ring installs with 2 mouse trap springs for secure installation and accommodates up to 2 inch ceiling thickness.
Retrofit - Converts existing HID, incandescent or compact fluorescent downlights to energy saving LED. Simple below ceiling installation without removing the existing fixture. Pre-wired flexible conduit with snap in connector installs into 1/2" knockout on the existing junction box. Includes oversize adapter ring.

Thermal
Aluminum heat sink conducts heat away from the LED module for optimal performance and long life.

LED
Chip on board with a multitude of highly efficient white LED's, combined with a high reflectance upper reflector and convex transitional lens produce even distribution with no pixilation. Lumen output shall not decrease by more than 10% over the minimum life of 55,000 hours (L90 > 55,000 hours) Auto resetting, thermally protected, LED's are turned off when safe operating temperatures are exceeded. Color variation within 2-step MacAdam ellipses. Quick disconnect allows for tool-less replacement of LED engine from below ceiling. Available in 80, 90 or 97 CRI.
D2W™ – dim-to-warm shifts CCT from 3000K to1850K as fixture dims mimicking halogen sources.
W2N - Tunable white CCT range 2700K to 6500K or 2000K to 5000K, 90 CRI.

Driver
Standard 120-277V 0-10V dimming driver provides flicker free dimming from 100% to 1%. Optional 120V leading edge, <1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem. Driver can be serviced from above or through the aperture.

Connected Lighting System Options
Two WaveLinx connected systems to choose from. Refer to WaveLinx system specifications and application guides for details.
WaveLinx Wireless System Tilemount Sensor Kit
• WaveLinx Wireless WTA tile mount sensor kit offers daylight dimming, PIR motion sensing, scene and zone configuration, automatic commissioning; and optional RLTS - Real Time Location Services available.

WaveLinx Lite System Tilemount Sensor Kit
• WaveLinx Lite WTK tile mount sensor kit offers daylight dimming and PIR motion sensing, scene and grouping configuration.

WaveLinx Tilemount Kits Application
• The WTA and WTK 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 WTA and WTK tilemount kits may be ordered as factory installed on the luminaire, or ordered separately as a field installed accessory kit.

Code Compliance
Thermally protected and cULus listed for damp locations with covered ceiling. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits. 2000 lumen and above are Non-IC rated - Insulation must be kept 3" from top and sides of housing. IC rated up to 1500 lumens. 5000 lumen is marked spacing and must follow spacing requirements. RoHS Compliant. Photometric testing completed in accordance with IES LM 79. Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11.
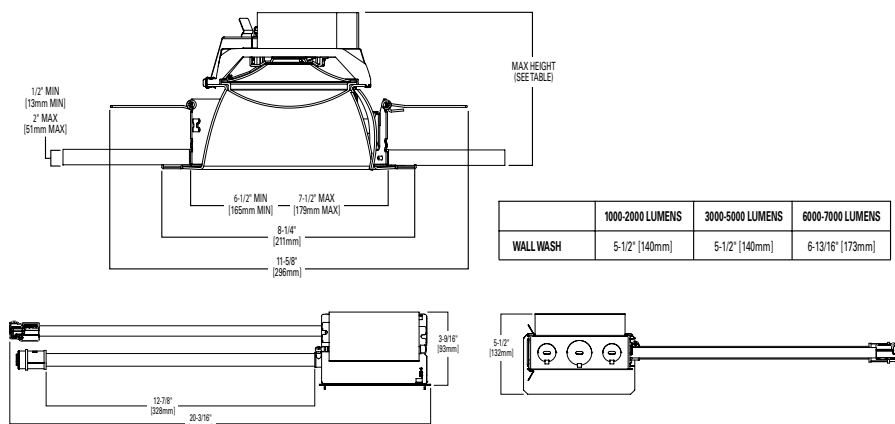• Options to meet Trade Agreements Act requirements

Warranty
5-year warranty

LDRT67B
EU6B
6LBSW 6LBDW
6LBCW 6LBLWW

500 - 7000 Lumens LED

Single, Double or Corner
Open Wall Wash
Lensed Wall Wash
International, Remodel, Retrofit

	1000-2000 LUMENS	3000-5000 LUMENS	6000-7000 LUMENS
WALL WASH	5-1/2" [140mm]	5-1/2" [140mm]	6-13/16" [173mm]

VividTune color tuning solutions

D2W™ TAA Compliant Device Trade Agreements Act Available

ENERGY STAR Can be used to comply with T24 California Non-Residential Lighting Controls requirements

RoHS Compliant

Refer to ENERGY STAR® Qualified Products List. Can be used to comply with California Title 24 High Efficacy requirements.

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SAMPLE NUMBER: LDRT6B15D010EMBOD

Domestic Preferences[14]	Housing	Lumens[1]	Voltage	Driver	Options[3]
[Blank]=Standard TAA=Trade Agreements Act	**LDRT67B**=LED Downlight Retrofit for 6-1/2" to 7-5/8" openings[6] **LDRT67BCP**=LED Downlight Retrofit for 6-1/2" to 7-5/8" openings, Chicago Plenum[6]	**05**=500 lumens[13] **10**=1000 lumens **15**=1500 lumens **20**=2000 lumens **30**=3000 lumens **40**=4000 lumens **50**=5000 lumens[5] **60**=6000 lumens[5] **70**=7000 lumens[5]	**Blank**=120-277V **3**=347V (step down transformer)	**500 - 4000 Lumen** **D010**=0-10V Dimming, 1% to 100%, 120V-277V **D010TR**=0-10V or Line Voltage Dimming, 5% to 100%, 120V-277V **DE010**=0-10V Linear Dimming, 0% to 100%, 120V-277V **D5LT**=Fifth Light® DALI DT6 Logarithmic Dimming, 0% to 100%, 120V-277V **DMX**=DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V[8] **DMXC5**=DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V, with RJ45 connection **DL2**=Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 120V Only **DLE**=Lutron Ecosystem dimming 1% to 100%, 120V-277V **DLV**=Low voltage dimming driver (1-100%) for use with DLVP system (2000 lumen and below)[9] **5000, 6000, and 7000 Lumen** **D010TE**=0-10V 1% or Trailing Edge, 10% to 100%, 120V-277V (120V Only for Trailing Edge Dimming) **Tunable white 1000-2000 Lumens[10]** **1DE010W2N2050**=0-10V dimming, 0% to 100%, 120V, 2000K - 5000K **1DE010W2N2765**=0-10V dimming, 0% to 100%, 120V, 2700K - 6500K **1D5LTW2N2050**=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 120, 2000K - 5000K **1D5LTW2N2765**=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 120V, 2700K - 6500K **2DE010W2N2050**=0-10V dimming, 0% to 100%, 277V, 2000K - 5000K **2DE010W2N2765**=0-10V dimming, 0% to 100%, 277V, 2700K - 6500K **2D5LTW2N2050**=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 277V, 2000K - 5000K **2D5LTW2N2765**=Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 277V, 2700K - 6500K	**EMBOD**=Bodine® Emergency Module with Remote Test Switch[3] **EMBOD7ST**=Bodine® Emergency Module with Self Test Remote Test Switch **EM7**=7W Emergency Module with Remote Test Switch[3, 4] **EM14**=14W Emergency Module with Remote Test Switch[3, 4] **WTA** = Factory installed WaveLinx sensor Kit [9, 11] **WTK** = Factory installed WaveLinx Lite Sensor Kit [9, 12]

SAMPLE NUMBER: EU6B10208035

Domestic Preferences[14]	Power Module	Lumen Levels[1]	CRI	Color		
[Blank]=Standard TAA=Trade Agreements Act	**EU6B**=6" Universal LED Module	**05**=500 lumens **1020**=1000, 1500, 2000 lumens **3050**=3000, 4000, 5000 lumens[5] **6070**=6000, 7000 lumens[5] **1015IC**=1000, 1500 lumen IC rated	**80**=80 CRI Minimum **90**=90 CRI Minimum **97**=97 CRI Minimum	**80 CRI** **27**=2700K **30**=3000K **35**=3500K **40**=4000K **50**=5000K	**90 CRI** **24**=2400K **27**=2700K **30**=3000K **35**=3500K **40**=4000K **50**=5000K	**97 CRI** **27**=2700K **30**=3000K
		Dim 2 Warm **109030D2W**=1000 lumen, 90 CRI, Dim 2 Warm, IC rated **159030D2W**=1500 lumen, 90 CRI, Dim 2 Warm, IC rated **209030D2W**=2000 lumen, 90 CRI, Dim 2 Warm **309030D2W**=3000 lumen, 90 CRI, Dim 2 Warm		**Tunable white[10]** **1020W2N902050** =1000, 1500, 2000 lumens, 90 CRI, tunable white 2000K-5000K **1020W2N902765** =1000, 1500, 2000 lumens, 90 CRI, tunable white 2700K-6500K		

SAMPLE NUMBER: 6LBM1LI

Domestic Preferences[14]	Trim	Distribution[5]	Flange	Finish	
[Blank]=Standard TAA=Trade Agreements Act	**6LB**=6" LED	**SW**=Single Wall Wash **DW**=Double Wall Wash **CW**=Corner Wall Wash **LWW**=Lensed Wall Wash	**0**=White Polymer Trim Ring **1**=Self-flanged[7] **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

Accessories[15]

Bar Hangers
HB26=C-channel Bar Hanger, 26" Long, Pair
TAA-HB26=Pair C-channel bar hanger, 26" long[20]
HB50=C-channel Bar Hanger, 50" Long, Pair
RMB22=Wood Joist Bar Hanger, 22" Long, Pair

Transformers
H347=347 to 120V Step Down Transformer, 75VA
H347200=347 to 120V Step Down Transformer, 200VA

Connected Lighting Systems [3, 9]
WTA = Field installed WaveLinx sensor Kit [11]
WTK = Field installed WaveLinx Lite Sensor Kit [12]

Notes:
1. Nominal Lumens will vary depending on selected color, driver and reflector finish.
2. Order trim with polymer trim ring (Consult specification sheet for color ordering information and options).
3. Not available with Chicago Plenum.
4. ULus listed only
5. 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"
6. 8-9/16" requires ABR8 adapter ring.
7. Flange and reflector have the same finish.
8. DMX fixtures default to full on upon loss of DMX signal.
9. Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory.
   Use with 0-10V driver.
10. Non-IC

11. WTA = WaveLinx wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with 0-10V only.
12. WTK = WaveLinx Lite tile mount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinx Lite system specifications)
13. Limited to D010 drivers.
14. Only product configurations with this designated prefix are built to be compliant with the Trade Agreements Act of 1979 (TAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
15. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

ENERGY

ENERGY DATA	
Sound Rating: Class A standards	
(Values at non-dimming line voltage)	
Minimum Starting Temperature: -30°C (-22°F)	
EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer)	
Input Voltage: UNV (120V - 277V)	
Power Factor: >0.90 (at nominal input 120-277 VAC & 100% of Rated Output Power)	
Input Frequency: 50/60Hz	

1000 Lumen D010		1500 Lumen D010	
Input Power: 11W		Input Power: 15.5W	
120V Input Current: 0.09A	277V Input Current: 0.04A	120V Input Current: 0.13A	277V Input Current: 0.06A

2000 Lumen D010		3000 Lumen D010	
Input Power: 21.2W	THD: <9%	Input Power: 27.6W	THD: <10%
120V Input Current: 0.18A	277V Input Current: 0.08A	120V Input Current: 0.23A	277V Input Current: 0.10A

4000 Lumen D010		5000 Lumen D010TE	
Input Power: 41.6W	THD: <13%	Input Power: 52.5 W	THD <12%
120V Input Current: 0.35A	277V Input Current: 0.15A	120V Input Current: 0.44A	277V Input Current: 0.19A

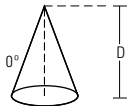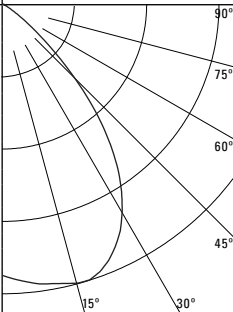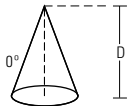| 6000 Lumen D010TE		7000 Lumen D010TE	
Input Power: 59.7W	THD: <14%	Input Power: 75.8W	THD: <13%
120V Input Current: 0.50A	277V Input Current: 0.22A	120V Input Current: 0.64A	277V Input Current: 0.29A

Lumens	120V		277V	
	Inrush (A)	Duration (ms)	Inrush (A)	Duration (ms)
1000 Lumen D010	1.02	0.041	2.18	0.021
1500 Lumen D010	1.02	0.042	2.24	0.064
2000 Lumen D010	1.02	0.077	2.43	0.027
3000 Lumen D010	1.15	0.067	3.26	0.027
4000 Lumen D010	1.2	0.088	3.9	0.03
5000 Lumen D010TE	5.1	0.132	10.2	0.153
6000 Lumen D010TE	5.4	0.123	10.8	0.154
7000 Lumen D010TE	4.9	0.13	9.8	0.156

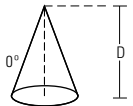**COOPER** Lighting Solutions
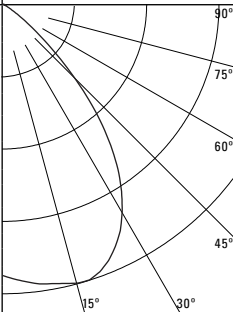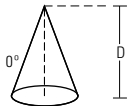
LDRT67B

Manufr.	Series	Nom. Size	Housing Aperture	Housing Catalog #	Ceiling Aperture	Retrofit Kit	Oversize Adapter Ring
Juno	Indy Performance Series (Elate)	6	6.563	A6, C6, M6	6-1/2" MIN 7-1/2" MAX	LDRT67B	ABR7 (included)
Juno		6	6.563	CH6, CV6, MX6, TC906			
Lithonia	Commercial	6	6.750	LF6, LP6			
Philips	Lightolier Lytecaster	6	6.750	1102			
Lithonia	Gotham	6	6.750	AF and LG			
Cooper	Portfolio CFL (New)	6	6.750	CD6			
Cooper	Halo	7	6.875	M700, H600, H803E			
Cooper	Halo Commercial	6	7.125	PD6 (New)			
Philips	Lightolier Calculite	7	7.500	S7 and CS7			

Note: Retrofit kit includes oversize trim ring.

PHOTOMETRY

15

Test Number	P212785
Housing	LD6B15D010
Module	EU6B10208035
Trim	6LBSWLI1
Lumens	1436
Efficacy	99.8 Lm/W
SC	1.24

CANDLEPOWER DISTRIBUTION

Downlight

229 · 457 · 686 · 915

90° · 75° · 60° · 45° · 30° · 15°

CONE OF LIGHT

0° — D

D	FC	L	W
5.5'	28.4	5	6.2
7'	17.6	6.5	7.8
8'	13.4	7.4	9
9'	10.6	8.3	10.2
10'	8.6	9.3	11.2
12'	6	11.1	13.6

CANDELA TABLE

Degrees Vertical	Candela
0	859
5	827
15	780
25	698
35	542
45	333
55	157
65	61
75	20
85	3
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	689	48
0-40	1063	74
0-60	1394	97.1
0-90	1436	100
90-180	0	0
0-180	1436	100

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	25817
55	15005
65	7913
75	4236
85	1887

20

Test Number	P212798
Housing	LD6B20D010D010
Module	EU6B10208035
Trim	6LBSWLI1
Lumens	1996
Efficacy	95.9 Lm/W
SC	1.24

CANDLEPOWER DISTRIBUTION

Downlight

318 · 636 · 954 · 1271

90° · 75° · 60° · 45° · 30° · 15°

CONE OF LIGHT

0° — D

D	FC	L	W
5.5'	40.5	6.4	6.6
7'	25	8.1	8.4
8'	19.1	9.3	9.6
9'	15.1	10.4	10.8
10'	12.3	11.6	12.2
12'	8.5	14	14.6

CANDELA TABLE

Degrees Vertical	Candela
0	1194
5	1149
15	1084
25	970
35	753
45	463
55	218
65	85
75	28
85	4
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	958	48
0-40	1477	74
0-60	1938	97.1
0-90	1996	100
90-180	0	0
0-180	1996	100

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	35872
55	20855
65	11000
75	5888
85	2642

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Connected Systems

WaveLinx Lite - WTK 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

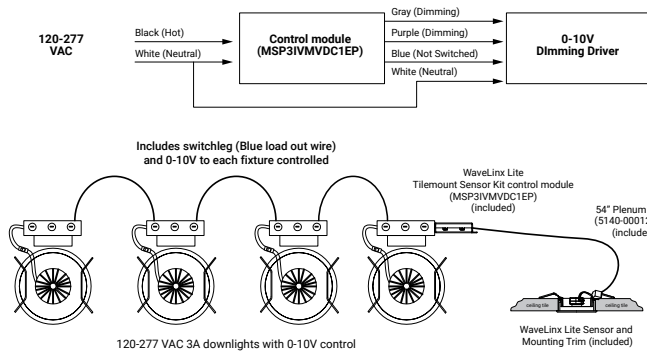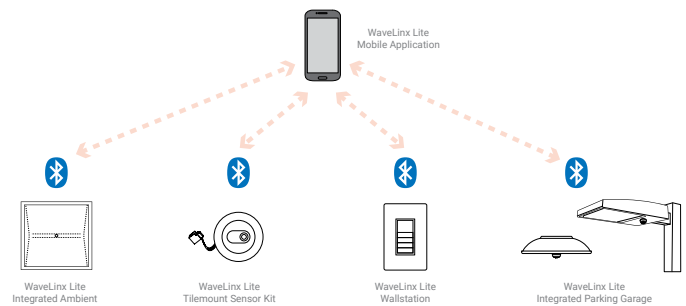| Device Security | Manual Dimmer | Occupancy Sensor | Daylighting Control | Manually Switched ON/OFF | Tuning Control | Lumen Maintenance Control | Scenes |

WaveLinx Lite WTK Tilemount Wiring Diagram

120-277 VAC
Black (Hot)
White (Neutral)

Control module (MSP3IVMVDC1EP)
Gray (Dimming)
Purple (Dimming)
Blue (Not Switched)
White (Neutral)

0-10V DImming Driver

Includes switchleg (Blue load out wire) and 0-10V to each fixture controlled

WaveLinx Lite Tilemount Sensor Kit control module (MSP3IVMVDC1EP) (included)

54" Plenum cable (5140-000123-00) (included)

ceiling tile   ceiling tile

WaveLinx Lite Sensor and Mounting Trim (included)

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

WaveLinx Lite Bluetooth Enabled System

WaveLinx Lite Mobile Application

WaveLinx Lite Integrated Ambient

WaveLinx Lite Tilemount Sensor Kit

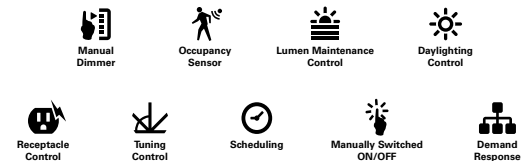WaveLinx Lite Wallstation

WaveLinx Lite Integrated Parking Garage

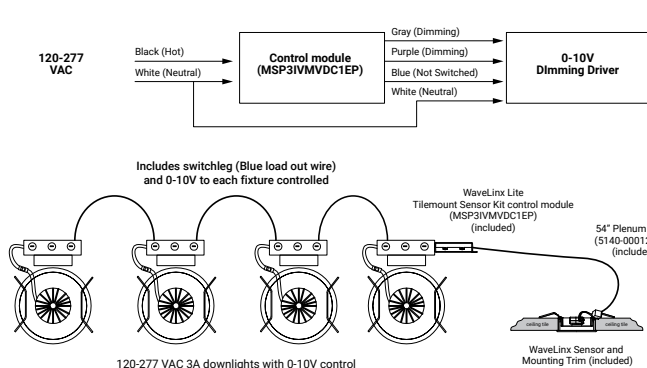## WaveLinx Wireless – WTA Tilemount Sensor

- 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 Wireless Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations

Downlights with tilemount sensor wireless communication
Highly efficient LED fixtures

+

Wireless Area Controller
Provides centralized coordination of multiple area control options

+

Wireless Wall Station/Receptacle
Provides customized wireless control of each area

+

Mobile Applications
Provides personalized, local control from a tablet or smartphone

WaveLinx mobile app settings

| Manual Dimmer | Occupancy Sensor | Lumen Maintenance Control | Daylighting Control |
| Receptacle Control | Tuning Control | Scheduling | Manually Switched ON/OFF | Demand Response |

WaveLinx Lite WTA Tilemount Wiring Diagram

120-277 VAC
Black (Hot)
White (Neutral)

Control module (MSP3IVMVDC1EP)
Gray (Dimming)
Purple (Dimming)
Blue (Not Switched)
White (Neutral)

0-10V DImming Driver

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54" Plenum cable (5140-000123-00) (included)

ceiling tile   ceiling tile

WaveLinx Sensor and Mounting Trim (included)

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

WaveLinx Wireless Trellix Building Management Integration

BACnet/IP Public (REST) API

Desktop/Laptop with web browser *(hardware provided by user)*

Trellix Core

Third Party system *(hardware provided by others)*

BACnet Router[1] *(hardware provided by others)*

Building LAN

WaveLinx Mobile App used for system setup and personal control

Touchscreen

PoE Power

Wireless Area Controller

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