

## DESCRIPTION

4 inch recessed LED wall wash 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 6000 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

### Lower Shielding Reflector

Spun aluminum 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. Offered in all Portfolio Alzak® finishes. Reflector is retained with two torsion springs holding the flange tight to the finished ceiling surface. Plaster lathing ring accessory offered for flush reflector transition.

### Plaster Frame / Collar

Die cast aluminum 1-1/2" deep collar accommodates ceiling materials up to 2". Universal mounting bracket accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above and below the ceiling.

### Junction Box

Listed for (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring. (4) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Lever connectors for simple push in wiring.

### 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 to 1850K 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. Distributed low voltage power system combines power, lighting, and controls with ease of installation.

### 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 - RealTime 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.

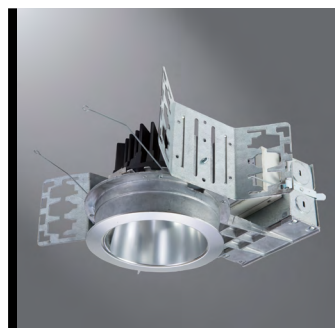
### Code Compliance

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 and above are marked spacing and must follow spacing requirements. 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 Buy American and other domestic preference requirements

### Warranty

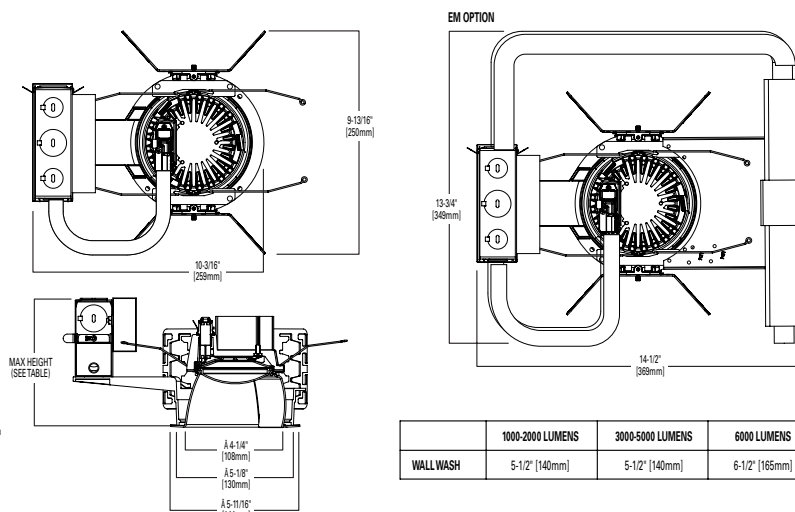
5-year warranty



**LD4B EU4B  
4LBSW 4LBDW  
4LBCW 4LBLWW**

500 - 6000 Lumens LED

Single, Double or Corner  
Open Wall Wash  
Lensed Wall Wash  
New Construction



	1000-2000 LUMENS	3000-5000 LUMENS	6000 LUMENS
WALL WASH	5-1/2" (140mm)	5-1/2" (140mm)	6-1/2" (165mm)

ORDERING INFORMATION

SAMPLE NUMBER: LD4B15D010IEMBOD					
Domestic Preferences <sup>13</sup>	Housing	Lumens <sup>1</sup>	Voltage	Driver	Options <sup>3</sup>
<b>[Blank]</b> =Standard <b>BAA</b> =Buy American Act <b>TAA</b> =Trade Agreements Act	<b>LD4B</b> =LED Downlight 4" Nominal Aperture <b>LD4BCP</b> =LED Downlight 4" Nominal Aperture, Chicago Plenum	<b>05</b> =500 lumens <sup>12</sup> <b>10</b> =1000 lumens <b>15</b> =1500 lumens <b>20</b> =2000 lumens <b>30</b> =3000 lumens <b>40</b> =4000 lumens <b>50</b> =5000 lumens <sup>7</sup> <b>60</b> =6000 lumens <sup>7</sup>	<b>Blank</b> =120-277V <b>3</b> =347V (step down transformer)	<b>500-4000 Lumens</b> <b>D010</b> =0-10V Dimming, 1% to 100%, 120V-277V <b>D010TR</b> =0-10V or Line Voltage Dimming, 5% to 100%, 120V-277V <b>DE010</b> =0-10V Linear Dimming, 0% to 100%, 120V-277V <b>D5LT</b> =Fifth Light® DALI DT6 Logarithmic Dimming, 0% to 100%, 120V-277V <b>DMX</b> =DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V <sup>7</sup> <b>DMXC5</b> =DMX/RDM Logarithmic Dimming, 0% to 100%, 120V-277V, with RJ45 connection <b>DL2</b> =Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 120V Only <b>DL3</b> =Lutron® Hi-Lume 3 Wire Dimming, 1% to 100%, 120V-277V <b>DLE</b> =Lutron Ecosystem dimming 1% to 100%, 120V-277V <b>DLV</b> =Low voltage dimming driver (1-100%) for use with DLVP system (3000 lumen and below) <sup>3,6</sup> <b>5000-6000 Lumens</b> <b>D010TE</b> =0-10V 1% or trailing edge 10%, 120-277V (120V only with trailing edge dimming) <b>Tunable white 1000-2000 Lumens</b> <sup>8</sup> <b>1DE010W2N2050</b> =0-10V dimming, 0% to 100%, 120V, 2000K - 5000K <b>1DE010W2N2765</b> =0-10V dimming, 0% to 100%, 120V, 2700K - 6500K <b>1D5LTW2N2050</b> =Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 120V, 2000K - 5000K <b>1D5LTW2N2765</b> =Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 120V, 2700K - 6500K <b>2DE010W2N2050</b> =0-10V dimming, 0% to 100%, 277V, 2000K - 5000K <b>2DE010W2N2765</b> =0-10V dimming, 0% to 100%, 277V, 2700K - 6500K <b>2D5LTW2N2050</b> =Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 277V, 2000K - 5000K <b>2D5LTW2N2765</b> =Fifth Light DALI DT6 Logarithmic Dimming, 0% to 100%, 277V, 2700K - 6500K	<b>EMBOD</b> =Bodine® Emergency Module with Remote Test Switch <b>EMBOD7ST</b> =Bodine® Emergency Module with Self Test Remote Test Switch <b>EM7</b> =7W Emergency Module with Remote Test Switch <b>EM14</b> =14W Emergency Module with Remote Test Switch <b>EMV7</b> =7W Low Voltage Emergency Module with Remote Test Switch <sup>4</sup> <b>EMV14</b> =14W Low Voltage Emergency Module with Remote Test Switch <sup>4</sup> <b>WTA</b> = Factory installed WaveLinX sensor Kit <sup>6,10</sup> <b>WTK</b> = Factory installed WaveLinX Lite Sensor Kit <sup>6,11</sup>

SAMPLE NUMBER: EU4B10208035

Domestic Preferences <sup>13</sup>	Power Module	Lumen Levels <sup>1</sup>	CRI	Color		
<b>[Blank]</b> =Standard <b>BAA</b> =Buy American Act <b>TAA</b> =Trade Agreements Act	<b>EU4B</b> =4" Universal LED Module	<b>05</b> =500 lumens <b>1020</b> =1000, 1500, 2000 lumens <b>3040</b> =3000-4000 lumens <b>5000</b> =5000 lumens <sup>7</sup> <b>6000</b> =6000 lumens <sup>7</sup> <b>1015IC</b> =1000, 1500 lumen IC rated	<b>80</b> =80 CRI Minimum <b>90</b> =90 CRI Minimum <b>97</b> =97 CRI Minimum	<b>80 CRI</b> <b>27</b> =2700K <b>30</b> =3000K <b>35</b> =3500K <b>40</b> =4000K <b>50</b> =5000K	<b>90 CRI</b> <b>24</b> =2400K <b>27</b> =2700K <b>30</b> =3000K <b>35</b> =3500K <b>40</b> =4000K <b>50</b> =5000K	<b>97 CRI</b> <b>27</b> =2700K <b>30</b> =3000K
		<b>Dim 2 Warm</b> <b>109030D2W</b> =1000 lumen, 90 CRI, Dim 2 Warm, IC rated <b>159030D2W</b> =1500 lumen, 90 CRI, Dim 2 Warm, IC rated <b>209030D2W</b> =2000 lumen, 90 CRI, Dim 2 Warm <b>309030D2W</b> =3000 lumen, 90 CRI, Dim 2 Warm	<b>Tunable white</b> <sup>8</sup> <b>1020W2N902050</b> =1000, 1500, 2000 lumens, 90 CRI, tunable white 2000K-5000K <b>1020W2N902765</b> =1000, 1500, 2000 lumens, 90 CRI, tunable white 2700K-6500K			

SAMPLE NUMBER: 4LBM1LIE

Domestic Preferences <sup>13</sup>	Trim	Distribution	Flange	Finish
<b>[Blank]</b> =Standard <b>BAA</b> =Buy American Act <b>TAA</b> =Trade Agreements Act	<b>4LB</b> =4" LED	<b>SW</b> =Single Wall Wash <b>DW</b> =Double Wall Wash <b>CW</b> =Corner Wall Wash <b>LWW</b> =Lensed Wall Wash	<b>0</b> =White Polymer Trim Ring <b>1</b> =Self-flanged <sup>5,6</sup> <b>2</b> =White Painted Self-flanged <sup>5,9</sup>	<b>LI</b> =Specular Clear <b>H</b> =Semi-Specular Clear <b>WMH</b> =Warm Haze <b>WH</b> =Wheat <b>GPH</b> =Graphite Haze <b>B</b> =Specular Black <b>MW</b> =Matte White

Accessories <sup>14</sup>
<b>TRM4</b> =Metal Trim Ring, Specify Color <sup>2</sup> <b>TRR4</b> =Rimless Trim Ring <sup>2</sup> <b>PRR4</b> =Rimless Plaster Ring for Flush Mount <sup>2</sup> <b>Bar Hangers</b> <b>HB26</b> =C-channel Bar Hanger, 26" Long, Pair <b>BAA-HB26</b> =Pair C-channel bar hanger, 26" long <sup>13</sup> <b>TAA-HB26</b> =Pair C-channel bar hanger, 26" long <sup>13</sup> <b>HB50</b> =C-channel Bar Hanger, 50" Long, Pair <b>RMB22</b> =Wood Joist Bar Hanger, 22" Long, Pair <b>Transformers</b> <b>H347</b> =347 to 120V Step DownTransformer, 75VA <b>H347200</b> =347 to 120V Step Down Transformer, 200VA <b>Connected Lighting Systems</b> <sup>3,6</sup> <b>WTA</b> = Field installed WaveLinX sensor Kit <sup>10</sup> <b>WTK</b> = Field installed WaveLinX Lite Sensor Kit <sup>11</sup>

Notes:

- 1

Nominal Lumens will vary depending on selected color, driver and reflector finish.
- 2

Order with polymer trim ring.
- 3

Not available with Chicago Plenum.
- 4

ULus approved only.
- 5

Flange is the same finish as reflector.
- 6

Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. Use with 0-10V driver.
- 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: ½"
- 8

Non-IC
- 9

Not available with MW finish. Order flange option 1 in MW finish which comes with White Flange standard.
- 10

WTA = WaveLinX wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with 0-10V only.
- 11

WTK = WaveLinX Lite tile mount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinX Lite system specifications)
- 12

Limited to D010 drivers.
- 13

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 analyzed under domestic preference requirements.
- 14

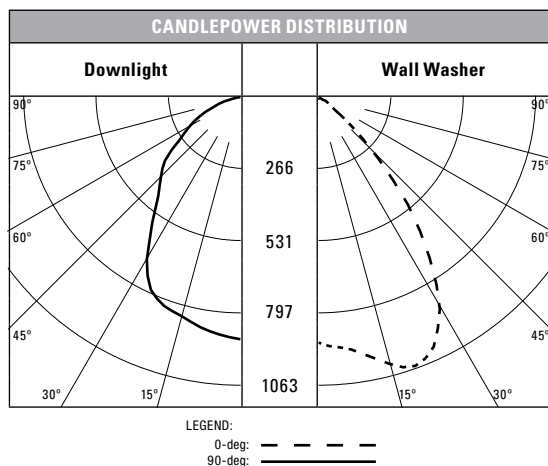
Accessories sold separately will be separately analysed under domestic preference requirements. Consult factory for further information.

ENERGY

ENERGY DATA	1000 Lumen D010		1500 Lumen D010	
	Input Power: 11W	THD: <14%	Input Power: 15.5W	THD: <13%
(Values at non-dimming line voltage)	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: 57.9W	THD: <14%
	120V Input Current: 0.35A	277V Input Current: 0.15A	120V Input Current: 0.49A	277V Input Current: 0.22A
	6000 Lumen D010TE			
	Input Power: 59.7W	THD: <14%		
	120V Input Current: 0.50A	277V Input Current: 0.22A		

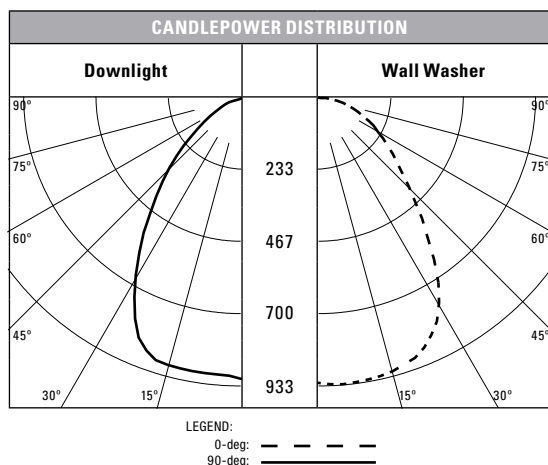
		120V		277V	
Lumens	Inrush (A)	Duration (ms)	Inrush (A)	Duration (ms)	
1000 Lumen D010	1.02	0.041	2.18	0.021	
1500 Lumen D010	1.02	0.042	2.24	0.064	
2000 Lumen D010	1.02	0.077	2.43	0.027	
3000 Lumen D010	1.15	0.067	3.26	0.027	
4000 Lumen D010	1.2	0.088	3.9	0.03	
5000 Lumen D010TE	5.1	0.132	10.2	0.153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

## PHOTOMETRY



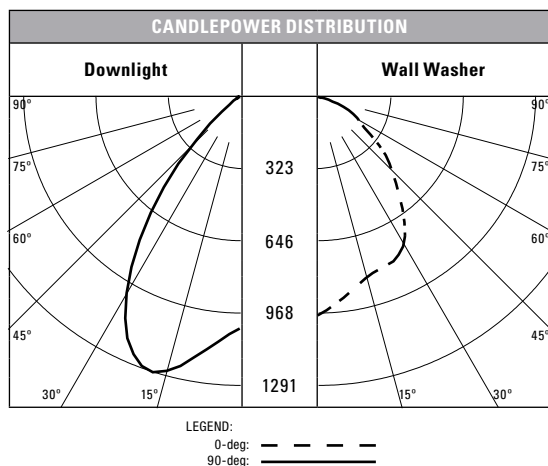
Test Number P251844  
LD4B20D010 EU4B10208035 4LBDW1LI  
Lumens 1874  
CCT 3500K

Single Unit Footcandles					MULTIPLE UNIT FOOTCANGLES											
	3' FROM WALL (Distance From Fixture Along Wall)				2.5' FROM WALL (Spacing Between Fixtures)						3' FROM WALL (Spacing Between Fixtures)					
DD	●	1'	2'	3'	●	2'	●	●	3'	●	●	3'	●	●	4'	●
1'	16.4	13.4	7.7	3.7	51.4	55.7	51.4	42.9	37.8	42.9	20.1	21	20.1	17.9	15.3	17.9
2'	17.4	15	9.9	5.9	45.7	50.3	45.7	37.5	37.3	37.5	23.3	24.9	23.3	20.3	19.8	20.3
3'	14.4	13	9.2	5.9	36.6	40.9	36.6	29.9	32.3	29.9	20.3	22.3	20.3	17.5	18.4	17.5
4'	12.1	11	8.3	5.4	26.4	29.6	26.4	21.7	25.8	21.7	17.5	19.5	17.5	15.2	16.6	15.2
5'	9.7	9.1	7.3	5.1	17.8	19.1	17.8	15.2	18	15.2	14.8	16.7	14.8	12.8	14.7	12.8
6'	7.1	6.9	6.1	4.6	12	12.5	12	10.9	12.1	10.9	11.7	13.2	11.7	10.3	12.1	10.3
7'	5.1	5.1	4.7	3.9	8.3	8.5	8.3	7.8	8.3	7.8	9.1	9.8	9.1	8.1	9.4	8.1
8'	3.8	3.7	3.6	3.2	5.9	6	5.9	5.7	5.9	5.7	6.9	7.3	6.9	6.4	7.1	6.4
9'	2.8	2.8	2.7	2.5	4.3	4.4	4.3	4.2	4.4	4.2	5.3	5.6	5.3	5	5.4	5
10'	2.2	2.2	2.1	2	3.3	3.3	3.3	3.2	3.3	3.2	4.2	4.3	4.2	4	4.2	4



Test Number P251688  
LD4B20D010 EU4B10208035 4LBLWW1LI  
Lumens 1679  
CCT 3500K

Single Unit Footcandles					MULTIPLE UNIT FOOTCANGLES											
	3' FROM WALL (Distance From Fixture Along Wall)				2.5' FROM WALL (Spacing Between Fixtures)						3' FROM WALL (Spacing Between Fixtures)					
DD	●	1'	2'	3'	●	2'	●	●	3'	●	●	3'	●	●	4'	●
1'	11.9	9.5	5.4	2.6	42.6	44.4	42.6	37.1	28.2	37.1	14.5	14.9	14.5	13.1	10.9	13.1
2'	16.5	13.7	8.5	4.5	47.6	50.8	47.6	40.7	35.5	40.7	21	22.2	21	18.8	17	18.8
3'	15.9	13.6	8.9	5.2	40.4	44	40.4	34.4	32.5	34.4	21.2	22.6	21.2	18.9	17.9	18.9
4'	14.2	12.3	8.5	5.2	28.4	31.5	28.4	23.8	25.6	23.8	19.4	20.9	19.4	17.3	16.9	17.3
5'	11.3	10.2	7.5	4.9	18.8	20.4	18.8	15.9	17.8	15.9	16.2	17.8	16.2	14.4	15	14.4
6'	8.3	7.7	6.1	4.4	12.5	13.3	12.5	10.9	12.2	10.9	12.6	14	12.6	11.1	12.3	11.1
7'	5.9	5.6	4.8	3.7	8.6	9	8.6	7.7	8.4	7.7	9.6	10.5	9.6	8.5	9.5	8.5
8'	4.3	4.1	3.6	3	6.1	6.3	6.1	5.6	6	5.6	7.3	7.8	7.3	6.6	7.3	6.6
9'	3.2	3.1	2.8	2.4	4.4	4.6	4.4	4.1	4.4	4.1	5.6	5.9	5.6	5.1	5.6	5.1
10'	2.4	2.3	2.2	1.9	3.3	3.4	3.3	3.2	3.3	3.2	4.3	4.5	4.3	4	4.3	4



Test Number P251532  
LD4B20D010 EU4B10208035 4LBSW1LI  
Lumens 1915  
CCT 3500K

Single Unit Footcandles					MULTIPLE UNIT FOOTCANGLES											
	3' FROM WALL (Distance From Fixture Along Wall)				2.5' FROM WALL (Spacing Between Fixtures)						3' FROM WALL (Spacing Between Fixtures)					
DD	●	1'	2'	3'	●	2'	●	●	3'	●	●	3'	●	●	4'	●
1'	10.8	8.4	4.4	1.9	45.1	48	45.1	38.9	29.9	38.9	12.7	12.6	12.7	11.5	8.8	11.5
2'	18.4	15.2	9.4	5	58.8	66.5	58.8	50	45.9	50	23.5	24.5	23.5	20.8	18.8	20.8
3'	20	17.5	11.7	6.1	47.2	52.9	47.2	38.5	41.7	38.5	26.2	29.5	26.2	23.1	23.5	23.1
4'	16.4	14.8	10.9	6.8	31.7	35.1	31.7	25.9	31.1	25.9	23.1	25.8	23.1	20	21.8	20
5'	12.2	11.5	9.2	6.4	20.3	21.5	20.3	17.4	20.4	17.4	18.6	20.9	18.6	16.1	18.5	16.1
6'	8.4	8.2	7.2	5.7	13.2	13.6	13.2	12	13.3	12	14.1	15.6	14.1	12.3	14.5	12.3
7'	5.9	5.8	5.4	4.6	9	9.1	9	8.5	9	8.5	10.5	11.2	10.5	9.4	10.8	9.4
8'	4.2	4.1	4	3.6	6.3	6.4	6.3	6.1	6.3	6.1	7.8	8.2	7.8	7.2	8	7.2
9'	3.1	3.1	3	2.8	4.6	4.6	4.6	4.5	4.6	4.5	5.9	6	5.9	5.6	6	5.6
10'	2.3	2.3	2.3	2.2	3.5	3.5	3.5	3.4	3.5	3.4	4.5	4.6	4.5	4.4	4.6	4.4

## 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

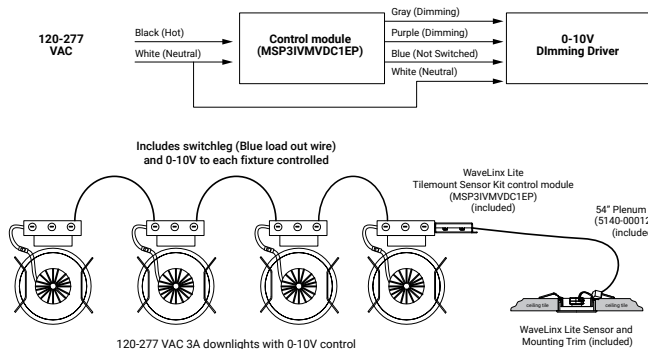


Lumen Maintenance Control

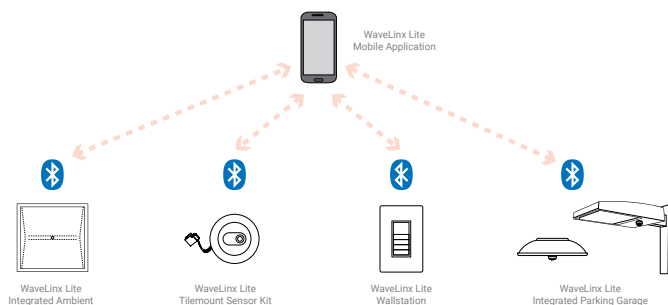


Scenes

### WaveLinX Lite WTK Tilemount Wiring Diagram



### WaveLinX Lite Bluetooth Enabled System



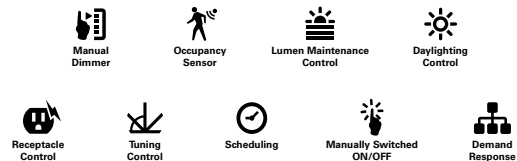
## WaveLinX Wireless – WTA Tilemount Sensor



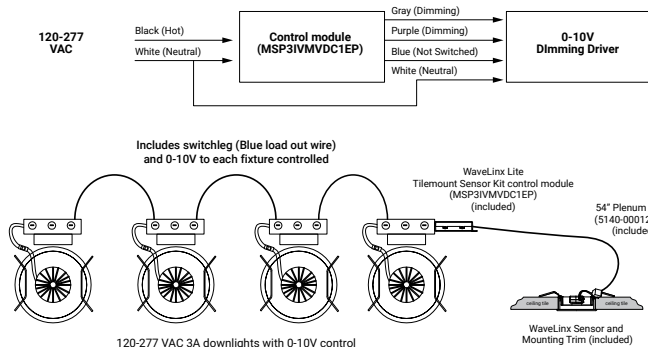
- WaveLinX Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with Wireless Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building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



### WaveLinX mobile app settings



### WaveLinX Lite WTA Tilemount Wiring Diagram



### WaveLinX Wireless Trellix Building Management Integration

