

Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO Commercial

**PR810/PR815/PR820/PR830/PR840 |
PR8M12/PR8M34**

**8-inch LED new construction shallow lensed
downlight**

Typical Applications

Office • Healthcare • Hospitality • Institutional • Mixed-Use/Retail

Interactive Menu

- Order Information page 2
- Product Specifications page 3
- Photometric Data page 4
- Energy & Performance Data page 6
- Connected Systems page 9
- Product Warranty

Product Certification



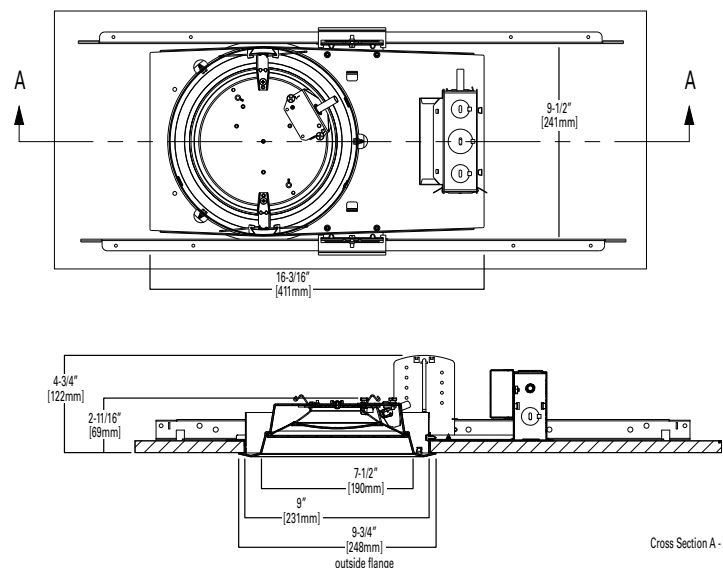
Product Features



Top Product Features

- New construction downlight; 1,000 to 4,000 lumens
- Medium and Wide interchangeable lens distributions; Wall wash accessory kit option
- Matte White, Matte Black and Matte Metallic Silver finishes
- Selectable color temperatures: 3000K, 3500K and 4000K CCT; 80 CRI
- Universal voltage 120V-277V; Standard 0-10V driver dims to 1%

Dimensional and Mounting Details



Order Information

FRAME SAMPLE NUMBER: PR840D010

A complete luminaire consists of a frame and LED module, order separately.

Frame	Lumens	Driver	Factory Installed Options
PR8 = 8" aperture LED downlight frame PR8CP = 8" aperture LED downlight frame, CCEA listed for City of Chicago plenum requirements	10 = 1,000 lumens (nominal) 15 = 1,500 lumens (nominal) 20 = 2,000 lumens (nominal) 30 = 3,000 lumens (nominal) 40 = 4,000 lumens (nominal)	D010 = 120-277V 50/60Hz, 0-10V 100% to 1% dimming DLV = Low voltage dimming driver (available for 1000, 1500, 2000 lumen values only). DLV for use with Distributed Low Voltage System only, consult. DLVP sytem specifications and design guide.	REM7 = 7W emergency battery pack with remote test switch and charge indicator light. For use with D010 only. ^{(1) (2)} REM14 = 14W emergency battery pack with remote test switch and charge indicator light. For use with D010 only. ^{(1) (2)} BOD7ST = 7.5 watt Bodine self-test diagnostic emergency module with remote test / indicator light, use with D010 only. ⁽¹⁾ WTA = Factory installed WaveLinX Sensor Kit ^{(1) (3)} WTK = Factory installed WaveLinX Lite Sensor Kit ^{(1) (4)} REM7V = 7W low voltage emergency module with remote test switch. For use with DLV only. ^{(1) (2)} REM14V = 14W low voltage emergency module with remote test switch. For use with DLV only. ^{(1) (2)}
Notes	Notes	Notes	Notes
			⁽¹⁾ Not available with CP version. ⁽²⁾ UL qualified for US only (not Canada). ⁽³⁾ WTA = WaveLinX tile mount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only (Refer to WaveLinX system specifications) ⁽⁴⁾ WTK = WaveLinX Lite tile mount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinX Lite system specifications)

MODULE SAMPLE NUMBER: PR8M34MDMW

A complete luminaire consists of a frame and LED module, order separately.

LED Module	Shielding	Flange Finish	Accessories
PR8M12 = Downlight LED module for PR8 series, provides 1000, 1500 or 2000 lumens (nominal) depending on connected frame type PR8M34 = Downlight LED module for PR8 series, provides 3000 or 4000 lumens (nominal) depending on connected frame type	MD = Medium distribution plastic lens WD = Wide distribution plastic lens	MW = Matte White MB = Matte Black MMS = Matte Metallic Silver	HB128APK = L channel hanger bar, 26", 'No-Fuss', pair (replacement) RMB22 = 22" long wood joist mounting bars, pair PR8WW = Field Installed wall wash optic for PR8M12 and PR834 modules PR8MD = Replacement 8" medium distribution lens for PR8M12 and PR8M34 modules PR8WD = Replacement 8" wide distribution lens for PR8M12 and PR8M34 modules PR8TC = Specular clear trim insert for PR8M12 and PR8M34 modules PR8TH = Semi-specular clear trim insert for PR8M12 and PR8M34 modules ABR10P = Oversize trim ring for max 10" ceiling opening - 11.3" flange WTA = Field installed WaveLinX Sensor Kit ^{(1) (3)} WTK = Field installed WaveLinX Lite Sensor Kit ^{(1) (4)}
Notes	Notes	Notes	Notes
			⁽¹⁾ Not available with CP version. ⁽³⁾ WTA = WaveLinX tile mount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only (Refer to WaveLinX system specifications) ⁽⁴⁾ WTK = WaveLinX Lite tile mount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinX Lite system specifications)

Product Specifications

Housing Frame

- Boat shaped galvanized steel plaster frame with adjustable plaster lip
- Accommodates 1/2" to 1-3/4" thick ceilings
- Installs in new construction or from below the finished ceiling (non-accessible) for remodeling
- Provided with two remodel clips to secure the frame when installing from below the ceiling

Universal Mounting Bracket

- Adjusts 2" vertically from above and below the ceiling
- Use with the included mounting bars or with 1/2" Electric Metallic Tube (EMT)
- Removable to facilitate remodeling installation from below the finished ceiling

Mounting Bars

- Captive pre-installed No Fuss™ mounting bars lock to T-grid with screwdriver or pliers
- Centering detents allow for consistent positioning of fixtures

LED Module

- Self-flanged aluminum housing maximizes thermal performance
- LED array uses a plurality of mid-power surface-mount LED packages delivering high flux and excellent efficiency
- Patented SeleCCTable™ technology allows the color temperature to be selected in the field, providing flexibility and reduces ordering complexity
- Selectable color temperatures in 3000K, 3500K and 4000K correlated color temperature (CCT)
- Lumen options include 1,000, 1,500, 2,000, 3,000 and 4,000 lumens (nominal)
- Available in 80 color rendering index (CRI)
- Color accuracy within 3 SDCM provides color consistency and uniformity (refer to chromaticity information for details)
- Integral connector allows for quick connection to the housing flex
- Passive thermal management achieves 50,000 hours at 70% lumen maintenance (L70) in insulated ceilings (IC) and non-IC applications

LED Module – Optics

- Interchangeable polymer lens pre-installed in LED module
- Available in medium and wide distribution patterns and can be interchanged without tools
- Optional field-installed wall wash kit offers 360° rotation, allowing the housing to be installed in any orientation

LED Module - Retention

- Module/reflector assembly is securely retained in the housing with two torsion springs

Driver

- Field-replaceable constant current driver provides low noise operation
- Universal 120-277VAC 50/60Hz input standard
- Continuous, 1% to 100% dimming with 0-10V analog control
- Optional low-voltage DC driver for use with Distributed Low Voltage Power (DLVP) system
- Distributed Low Voltage Power (DLVP) system combines power, lighting and controls with ease of installation (refer to DLVP Design Guide at www.cooperlighting.com for details)

Emergency Option

- Provides 90 minutes of standby lighting, meeting most life safety codes for egress lighting
- Available with 7- or 14-watt emergency battery pack with remote charge indicator and test switch
- Available Self-Test (self-diagnostic) with remote charge indicator and test switch

Connected Lighting System Options

Two WaveLinX connected systems to choose. Summary information provided below, 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.

Junction Box

- Galvanized steel junction box
- 20 in³ internal volume excluding voltage barrier
- 25 in³ internal total volume
- Voltage barrier for 0-10V dimming wires (occupies one 1/2" pry-out space)
- Listed for eight #12 AWG (four in, four out) 90°C conductors and feed-thru branch wiring
- Three 1/2" and two 3/4" trade size pry-outs available
- Three 4-port push wire nuts for mains voltage with 1-port for fixture connection

Compliance

- cULus damp and wet location listed in protected ceilings
 - IP55 rated
 - Non-Insulated ceiling (Non-IC) rated for 3,000 and 4,000 lumen models (insulation must be kept 3" from top and sides)
 - Insulated ceiling (IC) rated for 1,000, 1,500 and 2,000 lumen models and suitable for direct contact with air permeable insulation* (IC models are also suitable for Non-IC installations)
 - Airtight per ASTM-E283-04
 - Optional City of Chicago environmental air (CCEA) marking for Chicago Plenum applications
 - EMI/RFI emissions FCC CFR Title 47 Part 15 Class A at 120/277V
 - Contains no mercury or lead and RoHS compliant
 - Photometric testing completed in accordance of IES LM-79-08 and TM-30-15
 - Lumen maintenance projection in accordance of IES LM-80-08 and TM-21-11
 - May be used to comply with State of California Title 24 non-residential code as a dimmable LED luminaire
 - Suitable for use in closets when installed in accordance with the NEC 410.16 spacing requirements
 - ENERGY STAR® certified, reference certified light fixtures database
- *Not for use in direct contact with spray foam insulation, consult NEMA LSD57-2013

Warranty

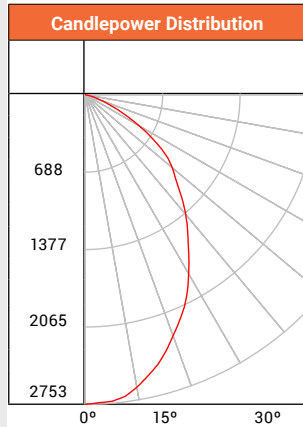
- Five year limited warranty, consult website for details. www.cooperlighting.com/warranty

Photometric Data

 View IES files

MEDIUM DISTRIBUTION PHOTOMETRY

PR840D010 - PR8M34MDMW - 3500K
 Spacing Criteria = 1.04
 Lumens per Watt = 114 Lm/W
 Test No. P210300
 Test Model: PR840D010-PR8M34MDMW-3500K



Zonal Lumen Summary		
Zone	Lumens	% Fixture
0-30	1909	38.5
0-40	2911	58.7
0-60	4540	91.5
0-90	4961	100

Candela Distribution	
Degrees Vertical	Candela
0*	2753
5	2737
10	2642
20	2281
30	1838
40	1388
50	1011
60	553
70	168
80	13
90	0

Luminance	
(Average Candela/M ²)	
Degree	Avg. 0° Luminance
45	51175
55	43697
65	24049
75	8495
85	0

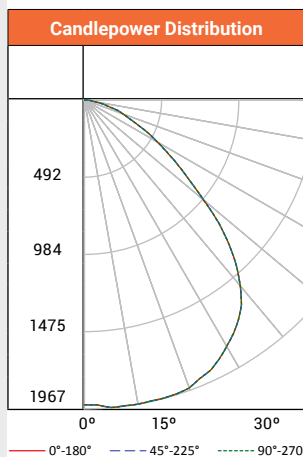
Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5	91	5.6	5.6
7	56.2	7.2	7.2
8	43	8.2	8.2
9	34	9.2	9.2
10	27.5	10.2	10.2
12	19.1	12.4	12.4

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot. Footcandle values are initial, apply appropriate light loss factors where necessary.

*CBCP

WIDE DISTRIBUTION PHOTOMETRY

PR840D010 - PR8M34WDMW - 3500K
 Spacing Criteria = 1.37
 Lumens per Watt = 113.4 Lm/W
 Test No. P210306
 Test Model: PR840D010-PR8M34WDMW-3500K



Zonal Lumen Summary		
Zone	Lumens	% Fixture
0-30	1617	32.8
0-40	2681	54.3
0-60	4340	88
0-90	4933	100

Candela Distribution	
Degrees Vertical	Candela
0*	1941
5	1966
10	1967
20	1952
30	1813
40	1544
50	991
60	539
70	262
80	72
90	0

Luminance	
(Average Candela/M ²)	
Degree	Avg. 0° Luminance
45	56914
55	39531
65	27449
75	18527
85	13480

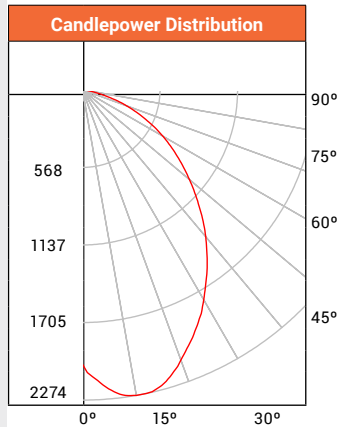
Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5'	64.3	7.4	7.4
7'	39.7	9.4	9.4
8'	30.4	10.8	10.8
9'	24	12.2	12.2
10'	19.4	13.6	13.6
12'	13.5	16.2	16.2

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot. Footcandle values are initial, apply appropriate light loss factors where necessary.

*CBCP

WALL WASH PHOTOMETRY

PR840D010 - PR8M34WW - 3500K
 Spacing Criteria = 0.99
 Lumens per Watt = 95.9 Lm/W
 Test No. P210312
 Test Model: PR840D010-PR8M34WW-3500K



Zonal Lumen Summary		
Zone	Lumens	% Fixture
0-30	1427	34.2
0-40	2210	53
0-60	3546	85
0-90	4172	100

Candela Distribution	
Degrees Vertical	Candela
0*	2009
5	2199
10	2274
20	2107
30	1776
40	1406
50	1024
60	681
70	345
80	72
90	0

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	52789
55	45584
65	37270
75	21422
85	6156

Specifications and dimensions subject to change without notice.

Single Unit Footcandles								
2.5' from wall (distance from fixture along wall)								
1	51.9	37.7	17.1	6.8	2.8	1.2	0.6	
2	74.3	60.1	34.4	17.2	8.3	4.1	2.1	
3	59.3	51.2	34.3	20.1	11.3	6.4	3.6	
4	40.5	36.4	27.4	18.3	11.5	7.1	4.4	
5	27.2	25.1	20.2	14.8	10.3	6.9	4.6	
6	18.5	17.4	14.8	11.5	8.6	6.2	4.4	
7	12.9	12.3	10.8	8.9	7	5.3	3.9	
8	9.3	8.9	8	6.8	5.6	4.4	3.5	
9	6.9	6.6	6	5.3	4.5	3.7	3	
10	5.2	5	4.6	4.1	3.6	3.1	2.5	

Multiple Unit Footcandles			
2.5' from wall (spacing between fixtures)			
1	58.6	52.6	58.6
2	91.5	94	91.5
3	79.5	86	79.5
4	58.8	64.4	58.8
5	42	45.8	42
6	30	32.4	30
7	21.8	23.2	21.8
8	16.1	17	16.1
9	12.1	12.7	12.1
10	9.3	9.7	9.3

Multiple Unit Footcandles			
2.5' from wall (spacing between fixtures)			
1	54.7	34.1	54.7
2	82.7	68.8	82.7
3	70.6	68.6	70.6
4	52	54.7	52
5	37.5	40.5	37.5
6	27	29.5	27
7	19.9	21.6	19.9
8	14.9	16	14.9
9	11.3	12.1	11.3
10	8.7	9.3	8.7

Energy & Performance Data

Lumens	1000 Series	
Input Voltage 120-277VAC	120V	277V
Input Current (A)	0.09	0.04
Input Power (W)	10.5	11.2
THD: $\leq 20\%$		
PF: ≥ 0.90		
T Ambient -30 - +40°C*		
Sound Rating ≤ 22 dba		

Lumens	1500 Series	
Input Voltage 120-277VAC	120V	277V
Input Current (A)	0.125	0.06
Input Power (W)	15	15.5
THD: $\leq 20\%$		
PF: ≥ 0.90		
T Ambient -30 - +40°C*		
Sound Rating ≤ 22 dba		

Lumens	2000 Series	
Input Voltage 120-277VAC	120V	277V
Input Current (A)	0.18	0.08
Input Power (W)	22	22.5
THD: $\leq 20\%$		
PF: ≥ 0.90		
T Ambient -30 - +40°C*		
Sound Rating ≤ 22 dba		

Lumens	3000 Series	
Input Voltage 120-277VAC	120V	277V
Input Current (A)	0.24	0.10
Input Power (W)	28.5	28.5
THD: $\leq 20\%$		
PF: ≥ 0.90		
T Ambient -30 - +40°C*		
Sound Rating ≤ 22 dba		

Lumens	4000 Series	
Input Voltage 120-277VAC	120V	277V
Input Current (A)	0.36	0.16
Input Power (W)	43.5	43
THD: $\leq 20\%$		
PF: ≥ 0.90		
T Ambient -30 - +40°C*		
Sound Rating ≤ 22 dba		

Notes:

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

Lumen Tables

1000 Lumen, 10.5W	3000K		3500K		4000K	
	Lumens	LPW	Lumens	LPW	Lumens	LPW
Medium Distribution Lens, Matte White Trim	1176	112	1326	126	1245	119
Medium Distribution Lens, Matte Black Trim	1072	102	1209	115	1134	108
Medium Distribution Lens, Matte Metallic Silver Trim	1137	108	1282	122	1203	115
Wide Distribution Lens, Matte White Trim	1172	112	1322	126	1240	118
Wide Distribution Lens, Matte Black Trim	1063	101	1198	114	1125	107
Wide Distribution Lens, Matte Metallic Silver Trim	1126	107	1270	121	1192	114
Wall Wash Optic, Matte White Trim	996	95	1130	108	1061	101

1500 Lumen, 15W	3000K		3500K		4000K	
	Lumens	LPW	Lumens	LPW	Lumens	LPW
Medium Distribution Lens, Matte White Trim	1597	106	1800	120	1690	113
Medium Distribution Lens, Matte Black Trim	1455	97	1641	109	1540	103
Medium Distribution Lens, Matte Metallic Silver Trim	1543	103	1740	116	1633	109
Wide Distribution Lens, Matte White Trim	1591	106	1794	120	1684	112
Wide Distribution Lens, Matte Black Trim	1443	96	1627	108	1527	102
Wide Distribution Lens, Matte Metallic Silver Trim	1529	102	1724	115	1618	108
Wall Wash Optic, Matte White Trim	1349	90	1534	102	1440	96

2000 Lumen, 22W	3000K		3500K		4000K	
	Lumens	LPW	Lumens	LPW	Lumens	LPW
Medium Distribution Lens, Matte White Trim	2186	99	2465	112	2313	105
Medium Distribution Lens, Matte Black Trim	1992	91	2246	102	2108	96
Medium Distribution Lens, Matte Metallic Silver Trim	2113	96	2382	108	2236	102
Wide Distribution Lens, Matte White Trim	2179	99	2456	112	2305	105
Wide Distribution Lens, Matte Black Trim	1975	90	2227	101	2090	95
Wide Distribution Lens, Matte Metallic Silver Trim	2093	95	2360	107	2215	101
Wall Wash Optic, Matte White Trim	1847	84	2100	95	1971	90

3000 Lumen, 28.5W	3000K		3500K		4000K	
	Lumens	LPW	Lumens	LPW	Lumens	LPW
Medium Distribution Lens, Matte White Trim	3217	113	3630	127	3376	118
Medium Distribution Lens, Matte Black Trim	2917	102	3292	116	3062	107
Medium Distribution Lens, Matte Metallic Silver Trim	3092	108	3488	122	3244	114
Wide Distribution Lens, Matte White Trim	3200	112	3610	127	3358	118
Wide Distribution Lens, Matte Black Trim	2901	102	3274	115	3045	107
Wide Distribution Lens, Matte Metallic Silver Trim	3075	108	3469	122	3227	113
Wall Wash Optic, Matte White Trim	2702	95	3053	107	2840	100

4000 Lumen, 43.5W	3000K		3500K		4000K	
	Lumens	LPW	Lumens	LPW	Lumens	LPW
Medium Distribution Lens, Matte White Trim	4397	101	4961	114	4614	106
Medium Distribution Lens, Matte Black Trim	3987	92	4498	103	4184	96
Medium Distribution Lens, Matte Metallic Silver Trim	4225	97	4767	110	4433	102
Wide Distribution Lens, Matte White Trim	4372	101	4933	113	4588	105
Wide Distribution Lens, Matte Black Trim	3965	91	4473	103	4161	96
Wide Distribution Lens, Matte Metallic Silver Trim	4201	97	4740	109	4409	101
Wall Wash Optic, Matte White Trim	3698	85	4172	96	3880	89

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

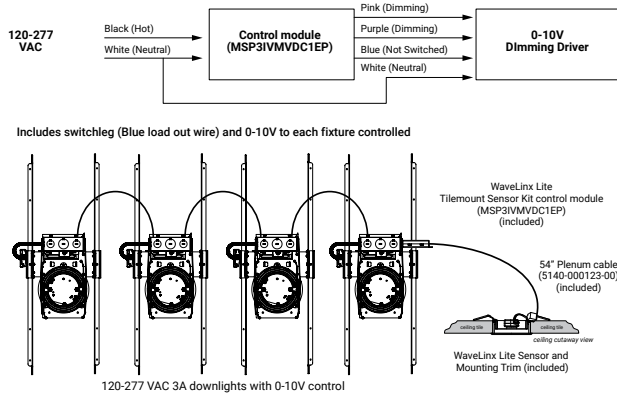


Lumen Maintenance Control

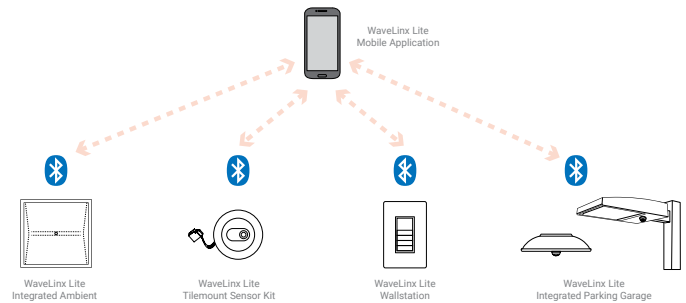


Scenes

WaveLinx Lite WTK Tilemount Wiring Diagram



WaveLinx Lite Bluetooth Enabled System



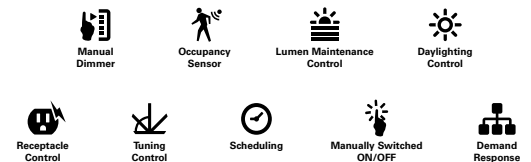
WaveLinx Wireless – WTA Tilemount Sensor



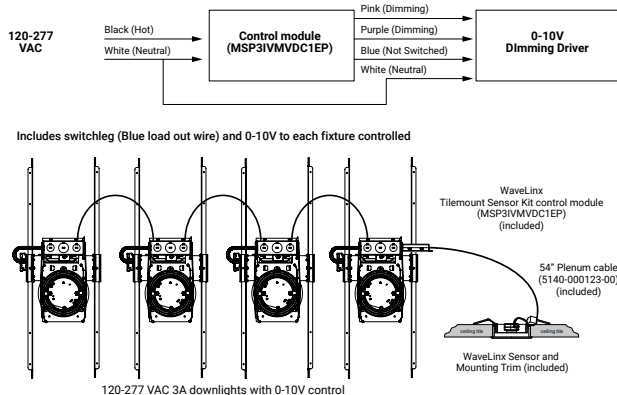
- WaveLinx Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with Wireless Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building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



WaveLinx mobile app settings



WaveLinx Lite WTA Tilemount Wiring Diagram



WaveLinx Wireless Trellix Building Management Integration

