Project		Catalog #		Type	
Prepared by		Notes		Date	

Shaper

340-6C Series

LED Recessed
LED 6" Farallon Glass Downlight

Typical Applications

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

Product Certification

ENERGY STAR • Efficiency Standards T24 (Can be used to comply with Title 24 Part 6 LED Enclosed Light Source Requirements (JA8)) • RoHS COMPLIANT • UL CERTIFIED

Product Features

powered by fifthlight technology • wet location • CHICAGO PLENUM APPROVED • BAA BUY AMERICAN ACT COMPLIANT OR MADE AVAILABLE • TAA TRADE AGREEMENTS ACT COMPLIANT OR MADE AVAILABLE

Top Product Features

- 6" recessed downlight with glass trim
- Provides aesthetic value while providing performance
- 7 Glass Trims, hand-crafted, hand-polished and hand-etched, available in clear, frosted or sandblasted quadrate pattern.
- 250-4000 lumens; Offered in 90 and 97 CRI; ENERGY STAR® qualified
- Easy disconnect for LED engine replacement and installation
- Optional snap in driver for ease of replacement
- Standard 0-10V driver dims to 1%
- 2400K, 2700K, 3000K, 3500K, 4000K, 5000K; D2W™ option from 3000K to 1850K
- Available W2N tunable white CCT range 2700K to 6500K or 2000K to 5000K
- Options to meet Buy American and other domestic preference requirements
- Available with dim-to-warm technology - similar to halogen at full power, the 3000K LED dims and warms smoothly down to 1850K, creating a rich glow within the space.

COOPER Lighting Solutions
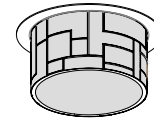
Dimensional and Mounting Details
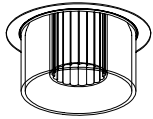
GLASS TRIM OPTIONS
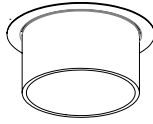
CC
Cylindrical Glass,
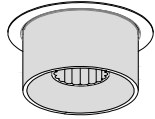Polished-Clear
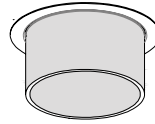
CF
Cylindrical Glass,
Polished-Frosted

CQ
Cylindrical Glass,
Polished-Frosted
Quadrate Etch

GCC
Glass-in-a Glass,
Polished-Clear Inside,
Clear outside

GF
Glass-in-a Glass,
Polished-Frosted Inside,
Frosted outside
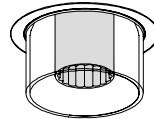
GCF
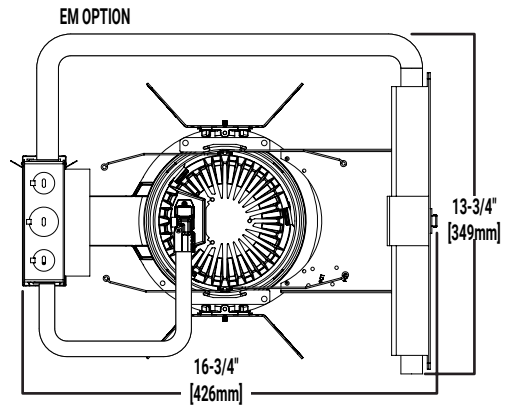Glass-in-a Glass,
Polished-Frosted Inside,
Clear outside

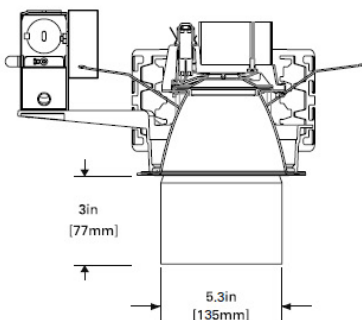### GLASS, TRIM, HOUSING DIMENSIONS

DOWNLIGHT

11-1/8" [283mm]
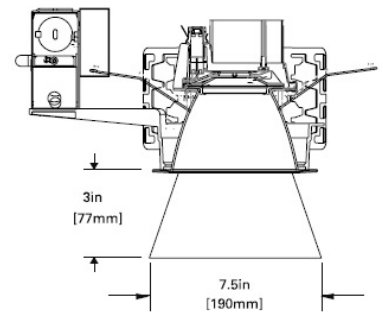
11-15/16" [303mm]

5.6"

5.56"

6-3/8" [161mm]

7" [176mm]

EM OPTION

13-3/4" [349mm]

16-3/4" [426mm]

CC, CF and CQ

3in [77mm]

5.3in [135mm]

GCC, GFF and GCF

3in [77mm]

3in [51mm]

5.3in

FF

3in [77mm]

7.5in [190mm]
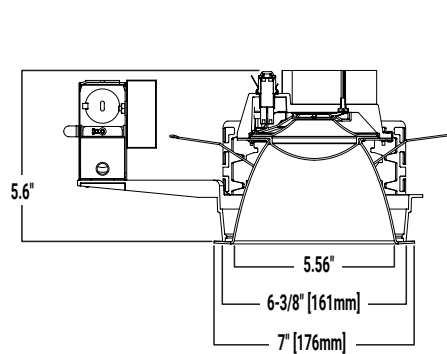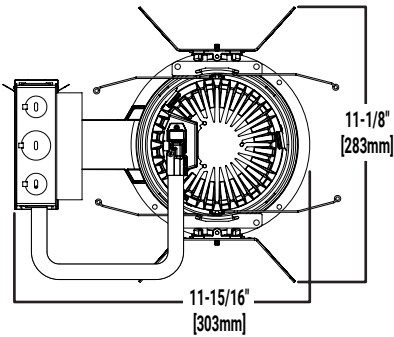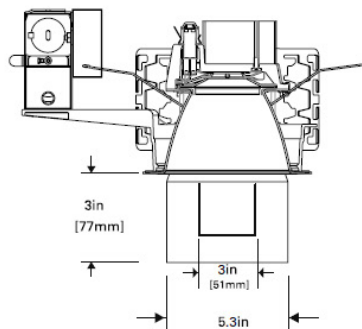
Order Information

SAMPLE ORDER NUMBER: 340-6C-02-D010
"HOUSING": (Select HOUSING and then MODULE/TRIM/GLASS KIT for complete specification)

Domestic Preferences [7]	Series	Housing	Light Level/Wattage	Color Control	Voltage	Driver
[Blank]=Standard **BAA**=Buy American Act **TAA**=Trade Agreements Act	**340** = Shaper Farallon recessed downlight (housing)	**6C** = 6" downlight **6CCP** = 6" downlight Chicago Plenum	**02** = 250 Lumens, 3.5W **05** = 500 Lumens, 7.3W **08** = 800 Lumens, 10.2W **10** = 1000 Lumens, 10.2W **15** = 1500 Lumens, 16.2W **20** = 2000 Lumens, 22.6W **25** = 2500 Lumens, 33.0W **30** = 3000 Lumens, 33.0W **35** = 3500 Lumens, 39.8W **40** = 4000 Lumens, 48.4W	**Blank** = 90/97 CRI **D2W** = Dim to warm	**Blank** = 120 - 277V **347** = 347V step down transformer	**D010** = 0-10V Dimming, 1% to 100%, 120V-277V **D10TR** = 0-10V Line Voltage Dimming, 5% to 100%, 120V-277V **DE010** = O-10V Dimming, 1% to 100%, 120V-277V[1] **D5LT** = Fifth Light® (DALI) Dimming, 0%-100%, 120V-2177V [1] **DMX** = DMX Dimming, 0% to 100%, 120V-277V [2] **DLE** = Lutron® Ecosystem dimming, 1%-100%, 120V-277V [2][3]

Options		Controls
EMBOD6ST = Bodine® 6W Self Test Emergency with Remote Test Switch **EMBOD7ST** = Bodine® Self Test Emergency Module with Remote Test Switch **ETRD** = Emergency Transfer Device[8]		**WPST** = Factory installed Wavelinx (includes control module, sensor, cable, tile mount and ceiling mount sensor)[4][6] **WLST** = Factory installed WaveLink LITE Sensor Kit[4][5]

Order Information

Sample Module/Trim/Glass Kit Number: **340-EU6C-1020-9024-6LBW1LI-CC**
ORDERING INFORMATION "MODULE/TRIM/GLASS KIT": (Select HOUSING and then MODULE/TRIM/GLASS KIT for complete specification)

Domestic Preferences [7]	Series	Module	Light Level	Color Temperature/CRI		Trim
[Blank]=Standard **BAA**=Buy American Act	**340** = Shaper Farallon recessed downlight (module+glass trim)	**EU6C** = 6" Universal LED Module	**For Use with One Driver** **0208IC** = 250, 500, 800 lumens, IC Rated (for use with all drivers, min 500 lumen with DE010 and D5LT, min 800 lumen with DLVP, Lutron and DMX) **1025** = 1000, 1500, 2000, 2500 lumens **1015IC** = 1000, 1500, 2000 lumens IC Rated **3040** = 2500, 3000, 3500, 4000 lumens (for use with Lutron 3000-3500, DLYP 3000 lumens, DMX, D010, DD10TR, D5LT and DE010 3000-4000) **For Use with Two Driver** **4080** = 4000 lumens (for use with Lutron 4000 Lumens) **Dim 2 Warm** **08259030D2W** = 800-2500 lumen, 90 CRI, Dim 2 Warm (1 Driver and 1 LED) **35459030D2W** = 3500-4500 lumen, 90 CRI, Dim 2 Warm (2 Driver and 2 LEDs)	**9024** = 90 CRI, 2400K **9027** = 90 CRI, 2700K **9030** = 90 CRI, 3000K **9035** = 90 CRI, 3500K **9040** = 90 CRI, 4000K **9050** = 90 CRI, 5000K **9727** = 97 CRI, 2700K **9730** = 97 CRI, 3000K	**6LBW1LI** = 6" wide, self-flanged specular clear trim	**FF** = Flared Frosted glass kit **CC** = Cylindrical Clear glass kit **CF** = Cylindrical Frosted glass kit **CQ** = Cylindrical Frosted, Quadrate etched glass kit **GFF** = Glass-in-a-Glass, Frosted Inside, Frosted Outside glass kit **GFC** = Glass-in-a-Glass, Frosted Inside, Clear Outside glass kit **GCC** = Glass-in-a-Glass, Clear Inside, Clear Outside glass kit

COMPLETE ORDERING INFORMATION: *(must order HOUSING + MODULE/TRIM/GLASS KIT for complete fixture)*
Sample for complete fixture: **340-6C-02-D010 | 340-EU6C-1020-9024-4LBW1LI-CC**

Notes:
1. DE010, D5LT = available for 500 and above Lumens only
2. DMX, DLE = available for 800 and above lumens only
3. DLE = 4000 Lumens uses 2 LED, 2 Driver
4. Refer to system specifications for additional information, features and benefits. Order either factory installed option or accessory. Use with 0-10V driver.
5. WLST = WaveLinx LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with DO10 only. (Refer to WaveLinx LITE system specifications)

6. WPST = WaveLinx wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with 0-10V only.
7. Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1993 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
8. Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others)

Product Specifications

Lower Shielding Reflector
- Spun aluminum lower reflector with lensed upper optical chamber provides superior lumen output with minimal source brightness

Glass Trims
- FF / CC / CF / CQ / GCC / GFF / GFC outer cylindrical Borosilicate Glass* (5mm thick) is available in clear, frosted, or sandblasted quadrate pattern.
- Bottom edges are ground and polished.
- GCC/ GFF / GFC inner fluted cylindrical Borosilicate Glass* (2.3 mm thick) option is available in clear and frosted.
- Portfolio recessed downlights are the LD4C EU4C. Refer to Portfolio specification sheets for additional details. Note that Shaper Farallon LED Glass Luminaire is provided complete from Shaper.

*Borosilicate Glass - Contains 5% or more of B2O3, is highly resistant to heat and shock with low coefficients of expansion, which makes it heat-resistant.

Glass
- Farallon Glass trims are handcrafted, hand-polished and handetched.
- It is an artisan process.
- No trims will be exactly alike and slight glass and pattern inconsistencies may occur.

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

Plaster Frame/Collar
- Die-cast aluminum 1 ½" deep collar
- Accommodates up to 2" ceiling thickness

Universal Mounting Bracket
- Accepts 1/2" Electric Metallic Tube (EMT), C-channel and bar hangers
- Adjusts 5" vertically from above and below the ceiling

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

Thermal
- Aluminum heat sink conducts heat away from the LED module for improved performance and longer life

LED System
- Contains a plurality of high brightness white LED's combined with a high reflectance upper reflector and convex transitional lens producing even distribution without pixilation
- Auto resetting, thermally protected, LED's are turned off when safe operating temperatures are exceeded
- Quick disconnect allows for tool-less replacement of LED engine from below ceiling
- 90 and 97 CRI
- 90 & 97CRI: L78 55,000 hours for 1000-2000 lumens, L90 55,000 for all other lumen output
- Color variation within 2-step MacAdam ellipses
- Available in 2400K, 2700K, 3000K, 3500K, 4000K and 5000K correlated color temperature (CCT)
- D2W™ – dim-to-warm shifts CCT from 3000K to 1850K as fixture dims mimicking halogen sources.

Driver
- Standard 120-277V 0-10V dimming driver provides flicker free dimming from 100% to 1%
- Optional 120V leading edge/0-10V, <1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem
- Driver can be serviced from above or through the aperture
- Distributed low voltage power system combines power, lighting, and controls with ease of installation.
- Optional magnetically guided snap in driver for ease of maintenance.

Emergency Option
- Provides 90 minutes of standby lighting, meeting most life safety codes for egress lighting
- Available with integral or remote charge indicator and test switch
- Available Self-Test with remote charge indicator and test switch
- Emergency transfer device (ETRD) senses the loss of power regardless of local control settings allowing emergency power to the fixture.
- UL 924 listed

Connected Lighting System
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 PRO Wireless Node
- WaveLinx PRO wireless node provides luminairelevel 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.

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
- cULus Listed for wet locations with downlight; damp location with wall wash and hyperbolic with covered ceiling
- IP66 rated when used with IP66 gasket kit accessory
- Optional City of Chicago environmental air (CCEA) marking for plenum applications
- FCC CFR Title 47 Part 15 Class B at 120VAC and Class A at 277VAC
- Insulated ceiling (IC) rated up to 1,500 lumens (90 and 97CRI). All others are non-IC rated (insulation must be kept 3" from top and sides of housing).
- Can be used for State of California Title 24 high efficacy LED compliance under JA8, reference Modernized Appliance Efficiency Database System (MAEDBS) for 2016 JA8 High Efficacy Lighting
- RoHS compliant
- Photometric testing completed in accordance with IES LM-79
- LED life testing completed in accordance with IES LM-80-08 and TM-21-11 standards
- See table on page 3 for marked spacing requirements

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

Marked Spacing

6-inch Marked spacing for 90 and 97 CRI			
4000	36	36	0.5

Energy and Performance Data

D010 DRIVER ENERGY DATA

Series	250 lumen		500 lumen		800 lumen		1000 lumen		1500 lumen		2000 lumen	
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V
Input Current (A)	0.029	0.017	0.061	0.032	0.085	0.041	0.084	0.042	0.135	0.063	0.189	0.084
Input Power (W)	3.45	3.87	7.33	7.78	10.15	10.52	10.04	10.43	16.17	16.56	22.58	22.63
In-rush (A)	2.1	8.5	3.7	8.5	3.6	8.3	3.6	8.4	2.3	9.5	2.1	9.7
Inrush duration (µs)	250	131	190	136	220	135	226	136	230	125	243	132
THDi (%)	7.21	16.92	7.82	10.78	5.57	9.63	7.78	9.24	4.75	9.93	8.03	7.44
PF	≥ 0.98	≥ 0.9	≥ 0.99	≥ 0.93	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.94	≥ 0.99	≥ 0.96

Series	2500 lumen		3000 lumen		3500 lumen		4000 lumen	
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V	120V	277V
Input Current (A)	0.276	0.121	0.276	0.041	0.333	0.152	0.404	0.181
Input Power (W)	32.98	32.57	32	10.52	39.83	39.84	48.38	47.94
In-rush (A)	2.5	11.8	3.6	8.3	3.1	14.3	3.1	14.5
Inrush duration (µs)	215	111	220	135	200	94	197	95
THDi (%)	9.86	6.57	5.57	9.63	4.25	10.05	5.02	7.97
PF	≥ 0.99	≥ 0.97	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.94	≥ 0.99	≥ 0.95

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

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

COLOR METRICS - TM-30-15 & CRI/CIE

90 CRI Color Metric Summary - 3500K*

TM-30-15	Rf = 92
	Rg = 98
CRI/CIE	Ra = 92.2
	R9 = 51.4

97 CRI Color Metric Summary - 2700K*

TM-30-15	Rf = 95
	Rg = 99.8
CRI/CIE	Ra = 92.2
	R9 = 85.8

97 CRI Color Metric Summary - 3000K*

TM-30-15	Rf = 93.9
	Rg = 100.2
CRI/CIE	Ra = 92.2
	R9 = 98.7
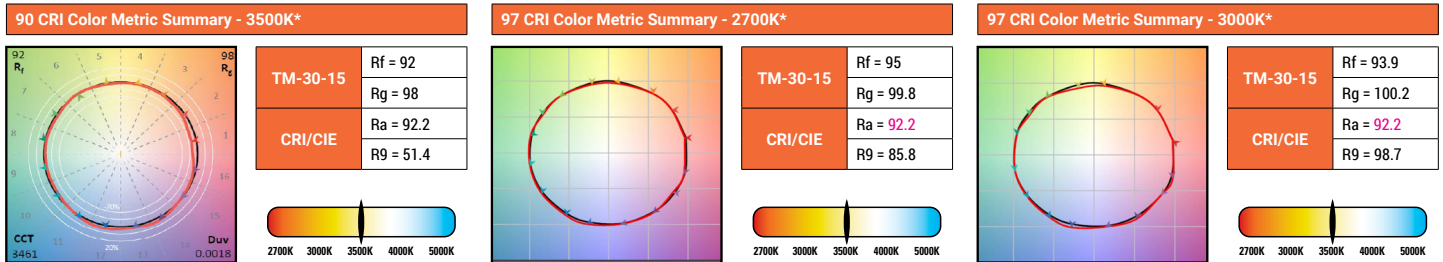
* Color values are based on haze reflector, other finishes and field results may vary.

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Connected Systems

WaveLinx Lite - WLST Tilemount Sensor

- Intuitive Android™ or Apple® iOS® app for basic system code compliant set up and configuration via Bluetooth
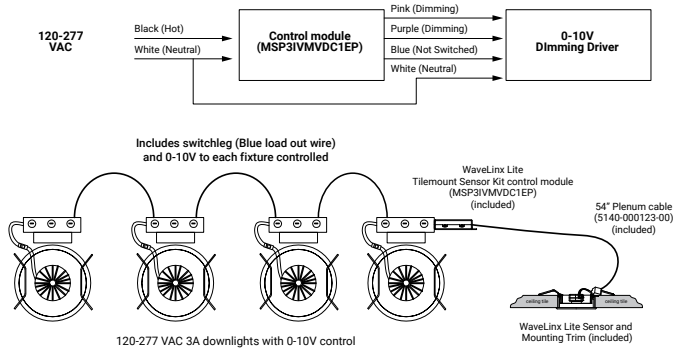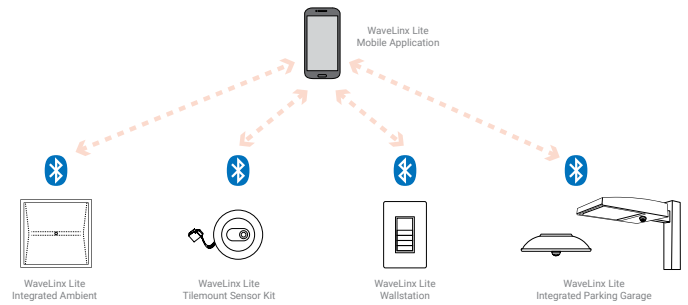- Up to 28 unique areas per project site (WaveLinx Lite Bluetooth network)
- Up to 50 devices for an area, any one of 16 control zones, up to 6 occupancy sets, and custom lighting scenes
- Automatic occupancy or vacancy, sensor sensitivity, daylight dimming, etc. configurable through the app
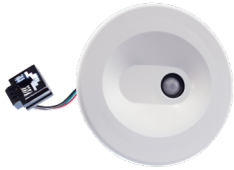- Refer to the WaveLinx system specifications for details

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

WaveLinx Lite WLST Tilemount Wiring Diagram

120-277 VAC

Black (Hot) — White (Neutral) → Control module (MSP3IVMVDC1EP) → Pink (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)

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
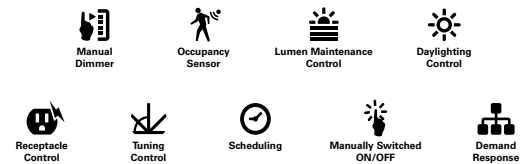
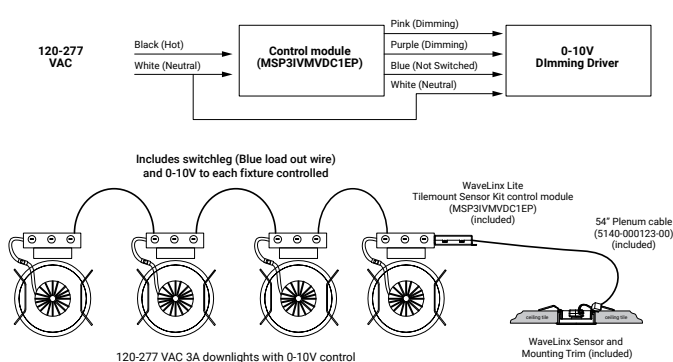### WaveLinx Wireless – WPST Tilemount Sensor

- 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 WPST Tilemount Wiring Diagram

120-277 VAC

Black (Hot) — White (Neutral) → Control module (MSP3IVMVDC1EP) → Pink (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)

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 | PoE Power | Touchscreen | Wireless Area Controller | WaveLinx Mobile App used for system setup and personal control

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