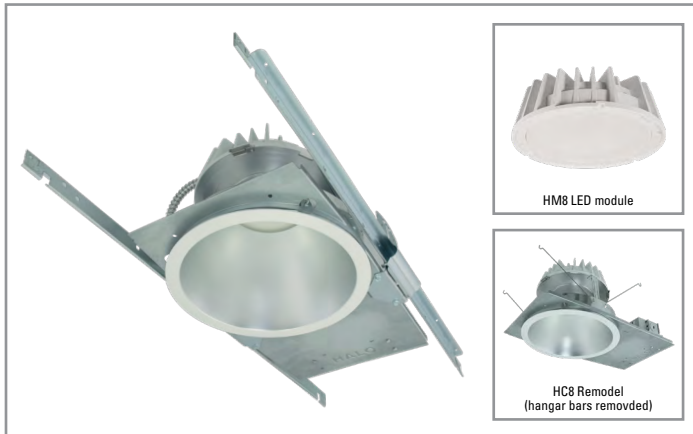


Project		Catalog #		Type	
Prepared by		Notes		Date	



# HALO Commercial

## HC8 | HM8 | 81

8-inch LED downlight and wall wash

### Typical Applications

Office • Education • Healthcare • Hospitality

### Interactive Menu

- Order Information [page 2](#)
- Product Specifications [page 4](#)
- Photometric Data [page 5](#)
- Energy & Performance Data [page 8](#)
- Connected Systems [page 10](#)
- Product Warranty

### Product Certification



### Product Features



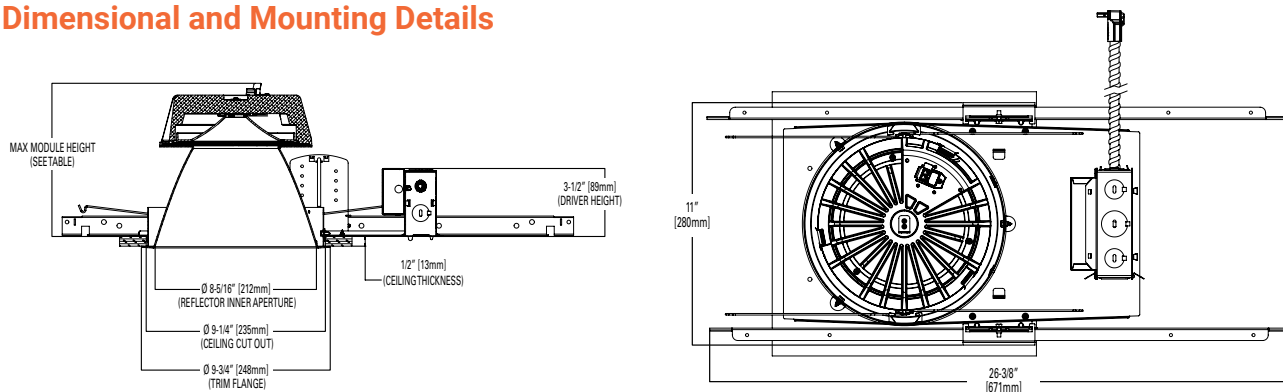
### Control Compatibility



### Top Product Features

- New construction/remodel series; 500 to 8,000 lumens
- Mounting frame converts to remodel that installs from below the ceiling
- 2700K, 3000K, 3500K, 4000K, 5000K CCT; 80 or 90 CRI
- Reflector distributions in Narrow, Medium, Wide, and Wall Wash with rotatable linear spread lens
- Reflector finishes in Specular clear, semi-specular (haze), matte white, black baffle, and white baffle finishes
- Rapid Response emergency backup mounting frames - fast delivery option

### Dimensional and Mounting Details



[additional product diagrams](#)

## Mounting Frame Order Information

Sample Number: HC820D010REM7 – HM80520835 - 81MDC

A complete luminaire consists of a mounting frame, LED module, and reflector; ordered separately

Mounting Frame	Lumens	Driver Options	Factory Installed Emergency & Connected Lighting Options	Accessories (Order & Install Separately)
<b>HC8</b> = 8" new construction downlight housing <b>HC8CP</b> = 8" new construction housing, Chicago Plenum - CCEA compliant	<b>05</b> = 500 lm <b>07</b> = 750 lm <b>10</b> = 1000 lm <b>15</b> = 1500 lm <b>20</b> = 2000 lm <b>25</b> = 2500 lm <b>30</b> = 3000 lm <b>35</b> = 3500 lm <b>40</b> = 4000 lm <b>45</b> = 4500 lm <b>50</b> = 5000 lm <b>55</b> = 5500 lm <b>60</b> = 6000 lm <sup>(7)</sup> <b>80</b> = 8000 lm <sup>(7)</sup>	<b>D010</b> =UNV 120-277V, 50/60Hz, 0-10V 1%-100% dimming at 120-277V on 0-10V controls  <b>Canada Option 500-5000 lumens:</b> <b>D010347</b> = 347VAC 50/60Hz 0-10V 1%-100% dimming. For 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000lm models only <sup>(1)</sup>  <b>Canada Option 5500-8000 lumens:</b> <b>D010X347</b> = step down transformer factory installed (with standard "D010" 120V-277V LED driver). For 5500, 6000, 8000lm models only <sup>(1)(6)</sup>  <b>DLV</b> = Distributed Low Voltage dimming driver 1%-100%, 1000-4000 lumens only. For use with DLVP system only, refer to DLVP specifications for details. <sup>(1)(6)</sup>	<b>REM7</b> = 7 watt emergency battery pack with remote test / indicator light, use with D010 only <sup>(1)(2)(8)</sup> <b>REM14</b> = 14 watt emergency battery pack with remote test / indicator light, use with D010 only <sup>(1)(2)(8)</sup> <b>IEM7</b> = 7 watt emergency battery pack with integral test / indicator light, use with D010 only <sup>(1)(2)(8)</sup> <b>IEM14</b> = 14 watt emergency battery pack with integral test / indicator light, use with D010 only <sup>(1)(2)(8)</sup> <b>BOD7ST</b> = 7.5 watt Bodine self-test emergency battery pack with remote test / indicator light, use with D010 only <sup>(1)(2)(8)</sup> <b>WTA</b> = Factory WaveLinX Tilemount Sensor Kit <sup>(4)</sup> <b>WTK</b> = Factory WaveLinX LITE Commercial Tilemount Sensor Kit <sup>(5)</sup> <b>WPN</b> = WaveLinX PRO Wireless Node without sensor <sup>(11)</sup>  <b>REM7V</b> = 7 watt emergency battery pack with remote test / indicator light, use with DLV only <sup>(1)(2)(3)(8)</sup> <b>REM14V</b> = 14 watt emergency battery pack with remote test / indicator light, use with DLV only <sup>(1)(2)(3)(8)</sup> <b>IEM7V</b> = 7 watt emergency battery pack with integral test / indicator light, use with DLV only <sup>(1)(2)(3)(8)</sup> <b>IEM14V</b> = 14 watt emergency battery pack with integral test / indicator light, use with DLV only <sup>(1)(2)(3)(8)</sup>	<b>HB128APK</b> = L channel hanger bar, 26", pair (replacement) <b>RMB22</b> = Adjustable wood joist mounting bars, pair, extend to 22" long <b>H347</b> = 347 to 120V step down transformer, 75VA <b>H347200</b> = 347 to 120V step down transformer, 200VA <b>WTA</b> = Field WaveLinX Tilemount Sensor Kit <sup>(4)</sup> <b>WTK</b> = Field WaveLinX LITE Commercial Tilemount Sensor Kit <sup>(5)</sup>
<b>Notes</b>	<b>Notes</b>	<b>Notes</b>	<b>Notes</b>	<b>Notes</b>
	(7) Marked Spacing: Center to Center of Adjacent Luminaires = 36" Center of Luminaire to Building Member = 18" Minimum overhead = 0.5"	(1) Not available with CP models (6) New Construction ONLY - Not available with retrofit kit models	(1) Not available with CP models (2) Not available with D010347 (347V driver) (3) ULUS for U.S. only (4) WTA = WaveLinX tilemount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only (Refer to WaveLinX specifications) (5) WTK = WaveLinX LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinX LITE specifications) (8) Emergency battery backup options are Non-IC only, and rated for a minimum starting temperature of 0°C (11) 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.	(4) WTA = WaveLinX tilemount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only (Refer to WaveLinX specifications) (5) WTK = WaveLinX LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinX LITE specifications)

## Rapid Response Emergency Mounting Frame Order Information

Sample Number :

Rapid Response Emergency Mounting Frame: RR-HC820D010REM7

LED module and reflectors are ordered separately.

Sample Number: LED Module: HM80520835 | Reflector: 81MDC

Select from the Rapid Response Mounting Frame ordering information to receive the **Fast Delivery** option for the frame.

RR Code	Mounting Frame	Lumens	Driver Options	Factory Installed Emergency & Connected Lighting Options	Accessories (Order & Install Separately)
<b>RR</b> = East Region <b>BRR</b> = West Region	<b>HC8</b> = 8" new construction downlight housing	<b>05</b> = 500 lm <b>07</b> = 750 lm <b>10</b> = 1000 lm <b>15</b> = 1500 lm <b>20</b> = 2000 lm <b>25</b> = 2500 lm <b>30</b> = 3000 lm <b>35</b> = 3500 lm <b>40</b> = 4000 lm <b>45</b> = 4500 lm <b>50</b> = 5000 lm <b>55</b> = 5500 lm <b>60</b> = 6000 lm <sup>(7)</sup> <b>80</b> = 8000 lm <sup>(7)</sup>	<b>D010</b> =UNV 120-277V, 50/60Hz, 0-10V 1%-100% dimming at 120-277V on 0-10V controls	<b>REM7</b> = 7 watt emergency battery pack with remote test / indicator light, use with D010 only <sup>(2)(8)</sup> <b>REM14</b> = 14 watt emergency battery pack with remote test / indicator light, use with D010 only <sup>(2)(8)</sup> <b>IEM7</b> = 7 watt emergency battery pack with integral test / indicator light, use with D010 only <sup>(2)(8)</sup> <b>IEM14</b> = 14 watt emergency battery pack with integral test / indicator light, use with D010 only <sup>(2)(8)</sup> <b>BOD7ST</b> = 7.5 watt Bodine self-test emergency battery pack with remote test / indicator light, use with D010 only <sup>(2)(8)</sup>	<b>HB128APK</b> = L channel hanger bar, 26", pair (replacement) <b>RMB22</b> = Adjustable wood joist mounting bars, pair, extend to 22" long
<b>Notes</b>	<b>Notes</b>	<b>Notes</b>	<b>Notes</b>	<b>Notes</b>	<b>Notes</b>
		(7) Marked Spacing: Center to Center of Adjacent Luminaires = 36" Center of Luminaire to Building Member = 18" Minimum overhead = 0.5"		(2) Not available with D010347 (347V driver) (8) Emergency battery backup options are Non-IC only, and rated for a minimum starting temperature of 0°C	

## LED Module Order Information

Module	Lumens	CRI / CCT	
<b>HM8</b> = 8" LED Modules	<b>0520</b> = 500 - 2000 lumen <b>2555</b> = 2500-5500 lumen <b>6080</b> = 6000-8000 lumen	<b>827</b> = 80CRI, 2700K <b>830</b> = 80CRI, 3000K <b>835</b> = 80CRI, 3500K <b>840</b> = 80CRI, 4000K <b>850</b> = 80CRI, 5000K	<b>927</b> = 90CRI, 2700K <b>930</b> = 90CRI, 3000K <b>935</b> = 90CRI, 3500K <b>940</b> = 90CRI, 4000K <b>950</b> = 90CRI, 5000K
<b>Notes</b>	<b>Notes</b>	<b>Notes</b>	

## Trim Order Information

Reflector	Distribution <sup>(10)</sup>	Finish	Flange	Accessories
<b>81</b> = 8" conical reflector	<b>ND</b> = narrow reflector 13° beam angle, 0.24 SC <b>MD</b> = medium reflector 37° beam angle, 0.60 SC <b>WD</b> = wide reflector 71° beam angle, 1.08 SC <b>RWW</b> = rotatable wall wash with linear spread lens	<b>C</b> = Specular clear <b>H</b> = Semi-specular clear <b>W</b> = White	<b>Blank</b> = Polished flange standard with C & H reflectors <b>Blank</b> = White flange standard with W reflector <b>WF</b> = White flange option available with C & H reflectors	<b>81RWWPK</b> = Replacement part kit - wall wash lens insert - for use with 81RWW* only.
<b>81</b> = 8" baffle reflector	<b>WD</b> = wide baffle 71° beam angle, 1.08 SC <b>RWW</b> = rotatable wall wash with linear spread lens (wide beam baffle with lens wall wash)	<b>BB</b> = Black baffle <b>WB</b> = White baffle	<b>Blank</b> = White flange standard with BB & WB <b>BF</b> = Black flange option available with BB	
<b>81PS</b> = 8" non-conductive polymer conical reflector <sup>(9)</sup>	<b>MD</b> = medium reflector 37° beam angle, 0.60 SC	<b>W</b> = White	<b>Blank</b> = White flange standard with W reflector	
<b>Integral Emergency</b>				
<b>81IEM</b> = 8" conical reflector for integral emergency only	<b>ND</b> = narrow reflector 13° beam angle, 0.24 SC <b>MD</b> = medium reflector 37° beam angle, 0.60 SC <b>WD</b> = wide reflector 71° beam angle, 1.08 SC	<b>C</b> = Specular clear <b>H</b> = Semi-specular clear <b>W</b> = White	<b>Blank</b> = Polished flange standard with C & H reflectors <b>Blank</b> = White flange standard with W reflector <b>WF</b> = White flange option available with C & H reflectors	<b>IEM</b> = Reflector for IEM only
<b>81IEM</b> = 8" baffle reflector for integral emergency only	<b>WD</b> = wide baffle 71° beam angle, 1.08 SC	<b>BB</b> = Black baffle <b>WB</b> = White baffle	<b>Blank</b> = White flange standard with BB & WB <b>BF</b> = Black flange option with BB	<b>IEM</b> = Reflector for IEM only
<b>Notes</b> (9) 81PS reflector is for Non-IC environment only, and up to 4000 lumens only	<b>Notes</b> (10) Values are nominal, based on specular clear reflector, other may vary.	<b>Notes</b>	<b>Notes</b>	<b>Notes</b>

## Product Specifications

### Frame

- Boat shaped galvanized steel plaster frame with adjustable plaster lip for 1/2" to 1-1/2" thick ceilings
- May be installed in new construction; or from below the finished (non-accessible) ceiling in remodeling.
- Provided with (2) old work clips to secure the frame to the ceiling when remodeling

### Universal Mounting Bracket

- Mounting bracket adjusts 2" vertically from above the ceiling or thru the aperture
- Use with the included mounting bars or with 1/2" EMT (by others)
- Removable to facilitate installation from below the finished ceiling

### Mounting Bars

- Captive preinstalled No Fuss™ mounting bars lock to tee grid with screwdriver or pliers
- Centering mechanism allows for consistent positioning of fixtures
- Accessory adjustable wood joist mounting bars option available to order separately (requires field replacement of No Fuss bars)

### LED Module

- Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation
- Available in 80 or 90 CRI minimum, provides accuracy within 3 SDCM color uniformity
- 90 CRI, R9>50 (refer to photometry section for colorimetric data)
- Available in 2700K, 3000K, 3500K, 4000K and 5000K correlated color temperature (CCT)
- Lumen options include 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000, 8000 lumens (nominal)
- Passive thermal management achieves L70 at 60,000 hours in IC and non IC applications (refer to compliance listings)
- Integral diffuse lens provides visual shielding
- Integral connector allows quick connection to housing flex

### Reflector

- Self-flanged aluminum reflectors are available in narrow, medium or wide distribution patterns
- Medium distribution non-conductive polymer matte white reflector for use in meeting 'dead front' applications
- Wall wash reflector features a rotatable linear spread lens for precise alignment of vertical illumination.
- Reflectors attach to LED module with (3) speed clamps
- Multiple painted or plated finishes are available

### Reflector / Module Retention

- Reflector / module assembly is securely retained in the housing with (2) torsion springs

### Driver

- Field replaceable constant current driver
- UNV 120-277VAC 50/60Hz input standard;
- Continuous 1% - 100% dimming with 0-10V analog controls
- Optional "DLV" low voltage DC driver for Cooper Lighting Solutions DLVP distributed low voltage system combines power and control

### Canada Options

- 347VAC 50/60Hz; 1% dimming on 0-10V analog control, for 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000 lumen models only
- 347V step down transformer factory installed with the standard "D010" 120V-277V, LED driver on 5500, 6000, 8000 lumen models only

### Emergency Option

- Provides 90 minutes of standby lighting meeting most life safety codes for egress
- Available with integral or remote charge indicator and test switch
- Available Self-Test (self-diagnostic), with remote charge indicator and test switch
- Rapid Response emergency ordering option for quick-turn projects

### 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 WTA 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 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.

#### WaveLinX LITE Tilemount Sensor Kit

- WaveLinX LITE WTK tilemount 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 divider for 0-10V dimming wires [occupies (1) 1/2" pry-out space]
- Listed for (8) #12 AWG (four in, four out) 90° C conductors and feed-thru branch wiring
- (3) 1/2" and (2) 3/4" trade size pry-outs available
- (3) 4-port push wire nuts for mains voltage, with 1-port for fixture connection

### Compliance

- cULus Certified to UL 1598 / C22.2 No. 250.0, suitable for damp locations and wet locations in covered ceilings only
- Emergency options provided with UL Listed emergency drivers to UL 924 / C22.2 No. 141, suitable for indoor/damp locations.
- IP20 - Above finished ceiling; IP65 - Below finished ceiling
- Non-IC rated 3500, 4000, 4500, 5000, 5500, 6000, 8000 lumen models. Insulation must be kept 3" from top and sides.
- IC rated 500, 750, 1000, 1500, 2000, 2500, 3000 lumen models are suitable for direct contact with air permeable insulation (IC models are also suitable for Non-IC)
- Non-IC marked spacing required for 3500, 4000, 4500, 5000, 5500, 6000, 8000 lumen models
  - Marked Spacing Center to Center of Adjacent Luminaires = 36"
  - Center of Luminaire to Building Member = 18"
  - Minimum overhead = 0.5
- Emergency battery backup options are Non-IC only.
- Not for use in direct contact with spray foam insulation, consult NEMA LSD57-2013
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions FCC CFR Title 47 Part 15 Class A 120/277V
- Contains no mercury or lead and RoHS compliant
- Photometric testing in accordance with IES LM-79-08
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11
- 500, 750, 1000, 1500 lumen 90CRI IC rated model may be used to comply with State of California Title 24 residential code, per JA8 certification standards
- May be used to comply with State of California Title 24 non-residential code, in Non-IC, as a dimmable LED luminaire
- ENERGY STAR® certified, refer to certified light fixtures database

### Warranty

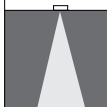
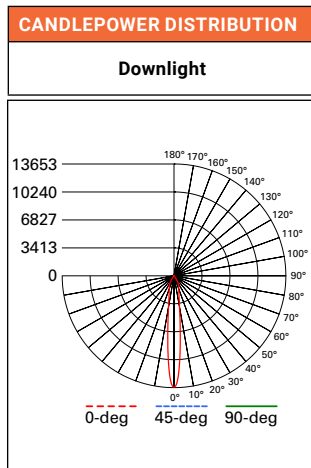
- Five year limited warranty, consult website for details. [www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)

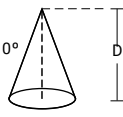
## Photometric Data

[View IES files](#)

### NARROW DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

NARROW (55° BEAM*)	
Test Number	P575618
Housing	HC820D010
Module	HM80520835
Reflector	81NDC
Lumens	2237 Lm
Efficacy	111.8 Lm/W
SC	0.22
UGR	11.7

CONE OF LIGHT				
				
MH	FC	L	W	
5.5'	451.4	1.2	1.2	
7'	278.6	1.4	1.4	
8'	213.3	1.6	1.6	
9'	168.6	1.8	1.8	
10'	136.5	2.2	2.2	
12'	94.8	2.6	2.6	


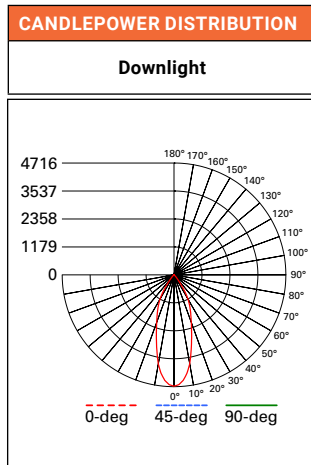
CANDELA TABLE	
Degrees Vertical	Candela
0	13653
5	8724
15	2306
25	1331
35	319
45	47
55	3
65	2
75	0
85	2
90	0

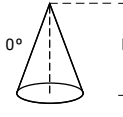
ZONAL LUMEN SUMMARY		
Zone	Lumens	% Fixture
0-30	1946	87
0-40	2190	97.9
0-60	2234	99.9
0-90	2237	100
90-180	0	0
0-180	2237	100

LUMINANCE	
Average Candela Degrees	Average 0° Luminance
45	2037
55	161
65	109
75	0
85	531

### MEDIUM DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

MEDIUM (60° BEAM*)	
Test Number	P575617
Housing	HC820D010
Module	HM80520835
Reflector	81MDC
Lumens	2434 Lm
Efficacy	121.7 Lm/W
SC	0.58
UGR	11.8

CONE OF LIGHT				
				
MH	FC	L	W	
5.5'	155.9	3.2	3.2	
7'	96.3	4	4	
8'	73.7	4.6	4.6	
9'	58.2	5.2	5.2	
10'	47.2	5.8	5.8	
12'	32.8	7	7	

CANDELA TABLE	
Degrees Vertical	Candela
0	4716
5	4483
15	2870
25	1630
35	592
45	93
55	14
65	3
75	0
85	0
90	0

ZONAL LUMEN SUMMARY		
Zone	Lumens	% Fixture
0-30	1954	80.3
0-40	2339	96.1
0-60	2431	99.9
0-90	2434	100
90-180	0	0
0-180	2434	100

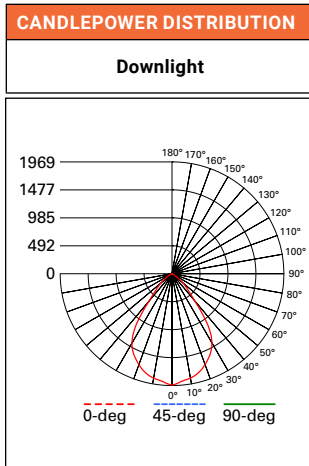
LUMINANCE	
Average Candela Degrees	Average 0° Luminance
45	4073
55	731
65	219
75	0
85	0

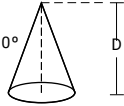
## Photometric Data

 View IES files

### WIDE DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

WIDE (65° BEAM*)	
Test Number	P575620
Housing	HC820D010
Module	HM80520835
Reflector	81WDC
Lumens	2531 Lm
Efficacy	126.5 Lm/W
SC	1.1
UGR	11.6



CONE OF LIGHT			
			
MH	FC	L	W
5.5'	65.1	6	6
7'	40.2	7.6	7.6
8'	30.8	8.6	8.6
9'	24.3	9.8	9.8
10'	19.7	10.8	10.8
12'	13.7	13	13

CANDELA TABLE	
Degrees Vertical	Candela
0	1969
5	1909
15	1809
25	1585
35	1107
45	389
55	130
65	15
75	2
85	0
90	0

ZONAL LUMEN SUMMARY		
Zone	Lumens	% Fixture
0-30	1415	55.9
0-40	2076	82
0-60	2510	99.2
0-90	2531	100
90-180	0	0
0-180	2531	100

LUMINANCE	
Average Candela Degrees	Average 0° Luminance
45	16947
55	6962
65	1094
75	179
85	0

\*Value are nominal with specular clear reflectors, other finishes and field results may vary.  
 SC = Spacing Criteria  
 UGR = Unified Glare Rating

### Photometric Multipliers (Nominal Lumen Values)

500 Lumen	750 Lumen	1000 Lumen	1500 Lumen	2000 Lumen	2500 Lumen	3000 Lumen	3500 Lumen
0.32	0.43	0.53	0.72	1.00	1.24	1.51	1.80

4000 Lumen	4500 Lumen	5000 Lumen	5500 Lumen	6000 Lumen	8000 Lumen
2.10	2.26	2.39	2.50	2.63	3.05

Multipliers for relative lumen values with other series models.

### Color Finish Multipliers

Finish code	C	H	W	BB
Finish	Specular Clear	Semi-Specular	Matte White	Black Baffle (lower cone)
Multiplier	1.00	0.95	0.91	0.89

Multipliers for relative lumen values with other color finishes.

### CCT Multipliers – 80CRI

2700K	3000K	3500K	4000K	5000K
0.97	0.96	1.00	1.07	1.07

Multipliers for relative lumen values with other series color temperatures.

### CCT Multipliers – 90CRI

2700K	3000K	3500K	4000K	5000K
0.78	0.87	0.92	0.94	0.94

Multipliers for relative lumen values with other series color temperatures.

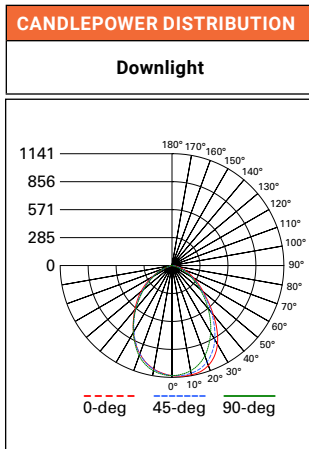
Note: Refer to IES files for more product data.

## Photometric Data

View IES files

### WALL WASH DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

WALL WASH	
Test Number	P575619
Housing	HC820D010
Module	HM80520835
Reflector	81RWWC
Lumens	2145 Lm
Efficacy	107.2 Lm/W
SC	1.08



CANDELA TABLE	
Degrees Vertical	Candela
0	1129
5	1139
15	1127
25	1028
35	803
45	524
55	330
65	197
75	90
85	15
90	0

ZONAL LUMEN SUMMARY		
Zone	Lumens	% Fixture
0-30	831	38.7
0-40	1278	59.6
0-60	1933	90.1
0-90	2145	100
90-180	0	0
0-180	2145	100

LUMINANCE	
Average Candela Degrees	Average 0° Luminance
45	22864
55	17741
65	14403
75	10770
85	5307

SC = Spacing Criteria, nominal for specular clear reflector, other finishes and field results may vary.

SINGLE UNIT FOOTCANDLES							
2.5' from wall (distance from fixture along wall)							
1	20.6	14.6	6.2	2.3	0.8	0.3	0.1
2	30	23.2	12.3	5.7	2.6	1.2	0.6
3	27.9	23	13.8	7.2	3.7	1.9	1
4	21	18.3	12.5	7.4	4.1	2.3	1.3
5	14.3	13	9.9	6.6	4.1	2.5	1.5
6	9.7	9	7.4	5.4	3.7	2.4	1.6
7	6.7	6.3	5.5	4.3	3.2	2.2	1.5
8	4.7	4.5	4	3.4	2.6	1.9	1.4
9	3.4	3.3	3.1	2.6	2.1	1.7	1.3
10	2.6	2.5	2.3	2.1	1.7	1.4	1.1

MULTIPLE UNIT FOOTCANDLES								
2.5' from wall (Distance from fixture along 3')						2.5' from wall (Distance from fixture along 4')		
1	22.9	20	22.9	21.4	12.5	21.4		
2	35.7	35	35.7	32.6	24.7	32.6		
3	35.1	36.6	35.1	31.6	27.7	31.6		
4	28.4	31	28.4	25.2	25	25.2		
5	20.9	23.2	20.9	18.4	19.8	18.4		
6	15.1	16.6	15.1	13.3	14.8	13.3		
7	11	11.9	11	9.8	10.9	9.8		
8	8.1	8.7	8.1	7.3	8.1	7.3		
9	6.1	6.4	6.1	5.6	6.1	5.6		
10	4.6	4.9	4.6	4.3	4.7	4.3		

#### Photometric Multipliers (Nominal Lumen Values)

500 Lumen	750 Lumen	1000 Lumen	1500 Lumen	2000 Lumen	2500 Lumen	3000 Lumen	3500 Lumen
0.32	0.43	0.53	0.72	1.00	1.24	1.51	1.80

4000 Lumen	4500 Lumen	5000 Lumen	5500 Lumen	6000 Lumen	8000 Lumen
2.10	2.26	2.39	2.50	2.63	3.05

Multipliers for relative lumen values with other series models.

#### Color Finish Multipliers

Finish code	C	H	W	BB
Finish	Specular Clear	Semi-Specular	Matte White	Black Baffle (lower cone)
Multiplier	1.00	0.95	0.91	0.89

Multipliers for relative lumen values with other color finishes.

#### CCT Multipliers – 80CRI

2700K	3000K	3500K	4000K	5000K
0.97	0.96	1.00	1.07	1.07

Multipliers for relative lumen values with other series color temperatures.

#### CCT Multipliers – 90CRI

2700K	3000K	3500K	4000K	5000K
0.78	0.87	0.92	0.94	0.94

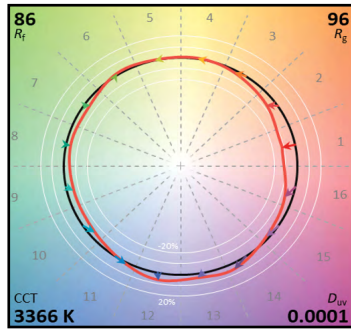
Multipliers for relative lumen values with other series color temperatures.

Note: Refer to IES files for more product data.

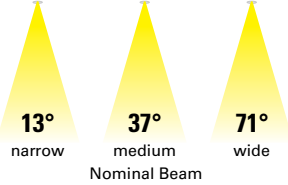
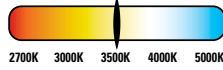
## Energy and Performance Data

### COLOR METRICS - TM-30-15 & CRI/CIE (3500K)

#### 80 CRI Color Metric Summary - 3500K\*

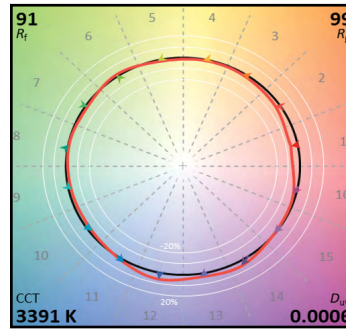


TM-30-15	Rf = 86
	Rg = 95.5
CRI/CIE	Ra = 83.8
	R9 = 10.3

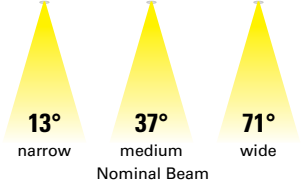
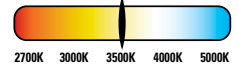


— Reference Illuminant — Test Source

#### 90 CRI Color Metric Summary - 3500K\*



TM-30-15	Rf = 91.1
	Rg = 99
CRI/CIE	Ra = 92.4
	R9 = 55.1



— Reference Illuminant — Test Source

### ENERGY DATA

Series	500 lumen		750 lumen		1000 lumen		1500 lumen		2000 lumen	
	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V
Input Current (A)	0.051	0.026	0.067	0.036	0.083	0.039	0.119	0.053	0.171	0.077
Input Power (W)	6.1	6.5	7.9	8.3	10	10.4	14.5	14.5	20.9	20.6
In-rush (A)	1.9	8.4	2	8.4	2.2	8.5	2.7	8.5	2.1	9.7
Inrush duration (µs)	251	135	237	133	250	134	250	139	245	131
THD (%)	6.2	13.5	7.4	8.8	5.4	10.3	10	6.7	6.5	7.9
PF	≥ 0.99	≥ 0.9	≥ 0.98	≥ 0.92	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.97	≥ 0.99	≥ 0.96

Series	2500 lumen		3000 lumen		3500 lumen		4000 lumen		4500 lumen	
	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V
Input Current (A)	0.2	0.088	0.24	0.107	0.292	0.152	0.351	0.159	0.384	0.172
Input Power (W)	23.9	23.8	28.6	28.5	34.6	35.1	42.1	42.1	45.9	45.6
In-rush (A)	2.1	9.9	2.5	11.6	3.4	13.9	3.1	14.7	3.1	14.8
Inrush duration (µs)	244	137	216	111	183	95	200	98	202	100
THD (%)	8.7	6.7	7.8	8.3	5.6	10	4.1	9.5	4.5	8.5
PF	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.93	≥ 0.99	≥ 0.94	≥ 0.99	≥ 0.95

Series	5000 lumen		5500 lumen		6000 lumen		8000 lumen	
	120V	277V	120V	277V	120V	277V	120V	277V
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V	120V	277V
Input Current (A)	0.419	0.186	0.457	0.201	0.489	0.214	0.61	0.29
Input Power (W)	50.1	49.5	54.6	53.7	58.4	57.4	72.5	72.9
In-rush (A)	3.1	15	3.2	14.8	3.4	14.8	6.8	12.9
Inrush duration (µs)	202	117	196	131	192	121	119	109
THD (%)	5.5	7.6	7	7.2	8.1	7.2	10.1	18.6
PF	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.97	≥ 0.98	≥ 0.91

Minimum starting temperature -30°C (-22°F)\*  
(Nominal input 120-277VAC & 100% of rated output power)

Sound Rating: Class A standards

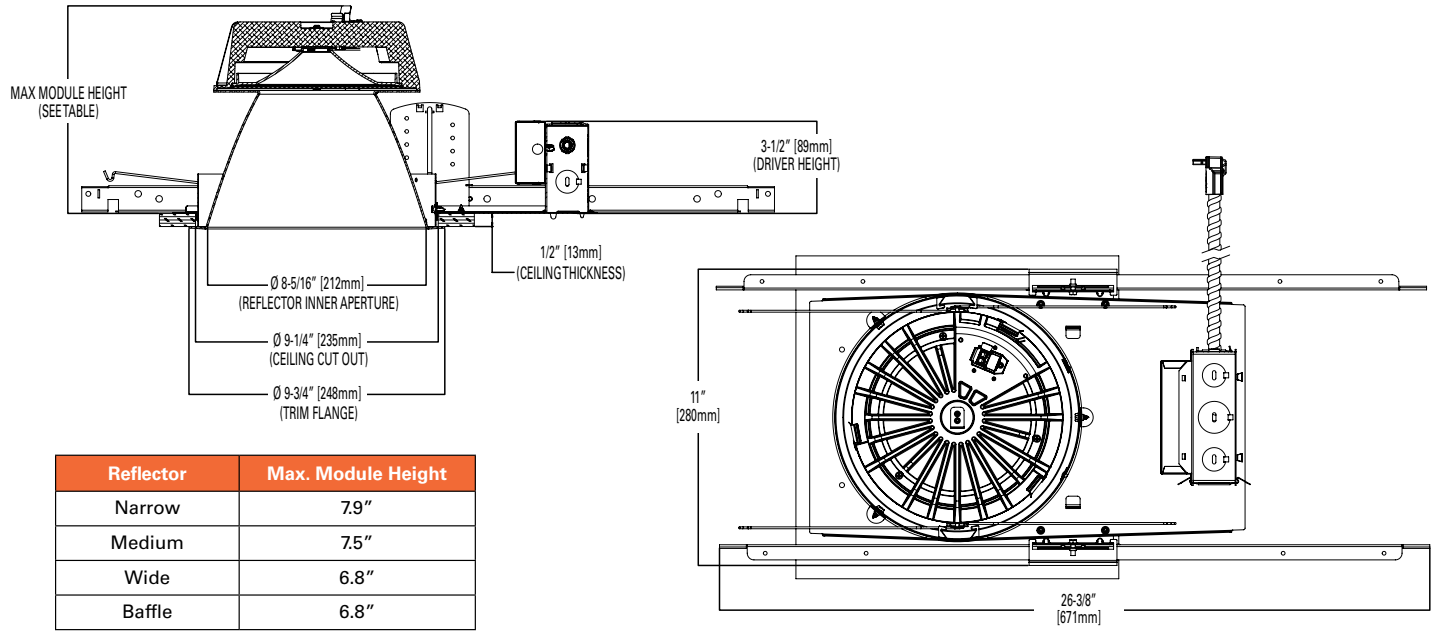
#### Notes:

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

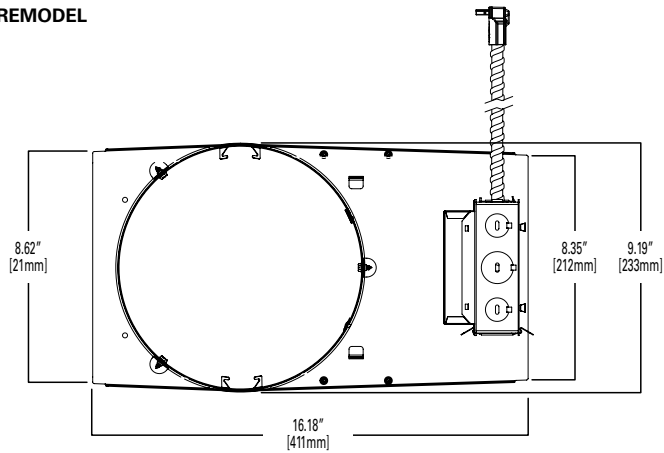


## Dimensional Details

### NEW CONSTRUCTION



### REMODEL



## Connected Solutions

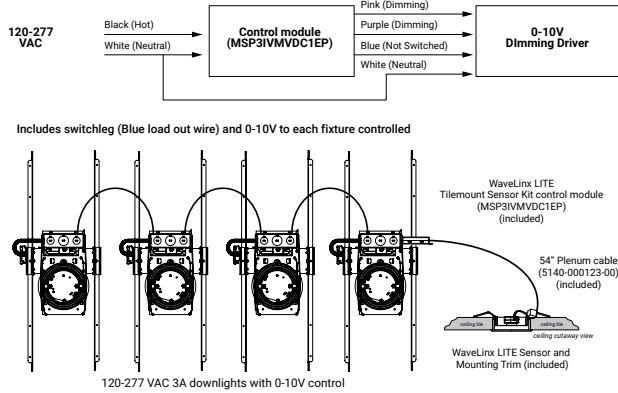
### WaveLinX LITE - WTK Tilemount Sensor



- 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



#### WaveLinX LITE WTK Tilemount Wiring Diagram



#### WaveLinX LITE Bluetooth Enabled System



### WaveLinX PRO – WTA Tilemount Sensor



- WaveLinX PRO tilemount 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-Along Offices or Entire Building Network Installations

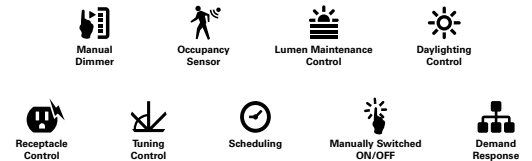
**Downlights with tilemount sensor**  
Highly efficient LED fixtures

**WaveLinX Area Controller**  
Provides centralized coordination of multiple area control options

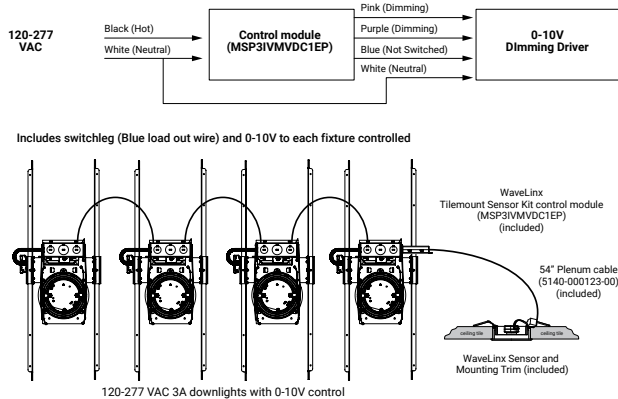
**Wireless Wall Station/Receptacle**  
Provides customized wireless control of each area

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

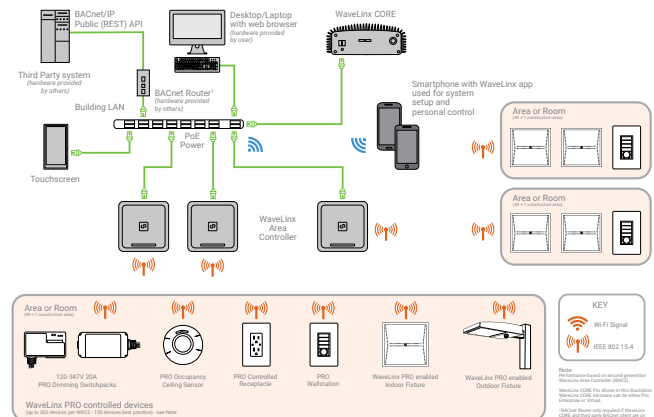
#### WaveLinX mobile app settings



#### WaveLinX WTA Tilemount Wiring Diagram



#### WaveLinX CORE Building Management Integration



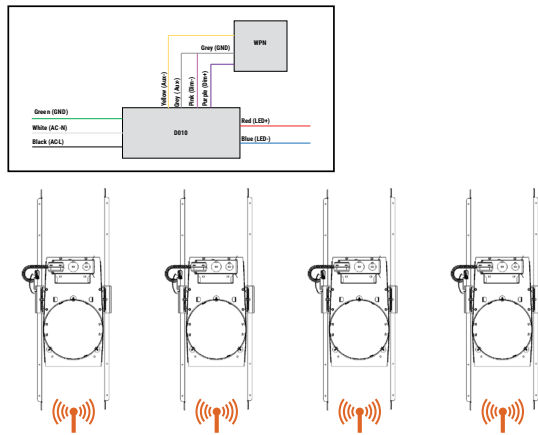
## Connected Solutions

### WaveLinx PRO Wireless Node - WPN

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



### WaveLinx PRO Wireless Node (WPN) Wiring Diagram



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

### WaveLinx CORE Building Management Integration

