Project	Catalog #	Туре	
Prepared by	Notes	Date	



# **HALO Commercial**

## HC4 | HM4 | 41/41PS

4-inch LED downlight and wall wash

#### **Typical Applications**

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

### Interactive Menu

- Order Information page 2
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### **Product Certification**











### **Product Features**

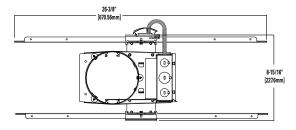




### **Top Product Features**

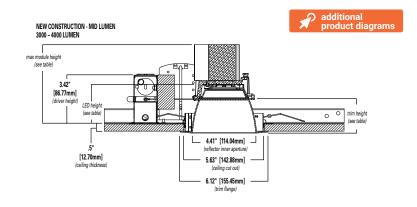
- New construction/remodel series; 500 to 6,000 lumens
- · Narrow, Medium and Wide distributions; Wall wash with rotatable linear spread lens
- 2700K, 3000K, 3500K, 4000K and 5000K CCT; 80 or 90 CRI
- Universal voltage 120V-277V; Standard 0-10V driver dims to 1%
- · Mounting frame converts to remodel that installs from below the ceiling
- Rapid Response emergency backup mounting frames fast delivery option

## **Dimensional and Mounting Details**



Mid Lumen (3000 - 4000 Lumens)

Distribution	Max. Module Height	Trim Height	LED Height
Narrow	5.6"	2.5"	2.9"
Medium	5.7"	2.6"	3.0"
Wide	5.5"	2.4"	2.8"
Baffle	5.5"	2.4"	2.8"





## **Mounting Frame Order Information**

Sample Number: HC420D010REM7 - HM40525930 - 41MDC

A complete luminaire consists of a housing frame, LED module, and reflector (ordered separately)

Mounting Frame	Lumens	Driver Options	Factory Installed Emergency & Connected Lighting Options	Accessories (Order & Install Separately)
HC4 = 4" new construction downlight housing  HC4CP = 4" new construction housing, Chicago Plenum - CCEA compliant	05 = 500 lm 07 = 750 lm 10 = 1000 lm 15 = 1500 lm 20 = 2000 lm 25 = 2500 lm 30 = 3000 lm 35 = 3500 lm 40 = 4000 lm 45 = 4500 lm (7) 50 = 5000 lm (7) 50 = 5000 lm (7)	D010=UNV 120-277V, 50/60Hz, 0-10V 1%-100% dimming at 120-277V on 0-10V controls  Canada Option 500-5000 lumens: D010347 = 347VAC 50/60Hz 0-10V 1%-100% dimming. For 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000lm models only (1)  Canada Option 5500-6000 lumens: D010X347 = step down transformer factory installed (with standard "D010" 120V-277V LED driver). For 5500, 6000lm models only (1)	REM7 = 7 watt emergency battery pack with remote test / indicator light, use with D010 only (1) (2) (6) REM14 = 14 watt emergency battery pack with remote test / indicator light, use with D010 only (1) (2) (6) IEM7 = 7 watt emergency battery pack with integral test / indicator light, use with D010 only (1) (2) (6) (10) IEM14 = 14 watt emergency battery pack with integral test / indicator light, use with D010 only (1) (2) (6) (10) B0D7ST = 7.5 watt Bodine self-test emergency battery pack with remote test / indicator light, use with D010 only (1) (2) (6) WTA = Factory WaveLinx Tilemount Sensor Kit (6) WTK = Factory WaveLinx Lite Commercial Tilemount Sensor Kit (5)	HB128APK = L channel hanger bar, 26", pair (replacement) RMB22 = Adjustable wood joist mounting bars, pair, extend to 22" long H347 = 347 to 120V step down transformer, 75VA H34720 = 347 to 120V step down transformer, 200VA WTA = Field WaveLinx Tilemount Sensor Kit (*) WTK = Field WaveLinx Lite Commercial Tilemount Sensor Kit (*)
		DLV = Distributed Low Voltage driver 1%-100% dimming. DLV for use with DLVP system only. Refer to DLVP low-voltage power module and DLVP specifications for details. (1)	REMV7 = 7 watt emergency battery pack with remote test / indicator light, use with DLV only (10 (20) (9)) REMV14 = 14 watt emergency battery pack with remote test / indicator light, use with DLV only (10 (20) (9)) IEMV7 = 7 watt emergency battery pack with integral test / indicator light, use with DLV only (10 (20) (9)) (10) IEMV14 = 14 watt emergency battery pack with integral test / indicator light, use with DLV only (10 (20) (9) (10)	
Notes	Notes	Notes	Notes	Notes
	(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	(1) Not available with CP models (2) Not available with D010347 (347V models) (3) Ulus for U.S. only (4) 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 Specifications) (5) WTK = WaveLinx Lite tile mount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinx Lite specifications) (6) Emergency battery backup options are Non-IC only, and rated for a minimum starting temperature of 0°C (10) IEM option requires compatible IEM reflector or baffle trim. See Trim Ordering below.	(4) WTA = WaveLinx tile mount sensor kit for day- light dimming, PIR motion sensing, and optional RITS - Real Time Location Services, use with D010 only (Refer to WaveLinx specifications) (5) WTX = WaveLinx Lite tile mount 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-HC420D010REM7

LED module and reflectors are ordered separately.

Order separately: LED Module: HM40525835 | Reflector: 41MDC

**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 Options	Accessories (Order & Install Separately)
RR = East Region BRR = West Region	HC4 = 4" new construction downlight housing	05 = 500 lm 07 = 750 lm 10 = 1000 lm 15 = 1500 lm 20 = 2000 lm 25 = 2500 lm 30 = 3000 lm 35 = 3500 lm 40 = 4000 lm 45 = 4500 lm 50 = 5000 lm 60 = 6000 lm	<b>D010</b> =UNV 120-277V, 50/60Hz, 0-10V 1%-100% dimming at 120-277V on 0-10V controls	REM7 = 7 watt emergency battery pack with remote test / indicator light, use with D010 only <sup>(2)</sup> <sup>(6)</sup> REM14 = 14 watt emergency battery pack with remote test / indicator light, use with D010 only <sup>(2)</sup> <sup>(6)</sup> IEM7 = 7 watt emergency battery pack with integral test / indicator light, use with D010 only <sup>(2)</sup> <sup>(6)</sup> <sup>(10)</sup> IEM14 = 14 watt emergency battery pack with integral test / indicator light, use with D010 only <sup>(2)</sup> <sup>(6)</sup> <sup>(10)</sup> BDD7ST = 7.5 watt Bodine self-test emergency battery pack with remote test / indicator light, use with D010 only <sup>(2)</sup> <sup>(6)</sup>	HB128APK = L channel hanger bar, 26", pair (replacement) RMB22 = Adjustable wood joist mounting bars, pair, extend to 22" long
	Notes	Notes	Notes	Notes	Notes
		(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 models) (6) Emergency battery backup options are Non-IC only, and rated for a minimum starting temperature of 0°C (10) IEM option requires compatible IEM reflector or baffle trim. See Trim Ordering below.	



## **LED Module Order Information**

LED Module	Lumens	CRI/CCT	
LED Module	Lumens	CRI/CCT	
HM4 = 4" LED module	<b>0525</b> = 500 - 2500 lumen <b>3040</b> = 3000-4000 lumen <b>4560</b> = 4500-6000 lumen	827 = 80CRI, 2700K 927 = 90CRI, 270 830 = 80CRI, 3000K 930 = 90CRI, 300 835 = 80CRI, 4000K 940 = 90CRI, 400 850 = 80CRI, 5000K 950 = 90CRI, 500	
Notes	Notes	Notes	

## **Trim Order Information**

Reflector	Distribution <sup>(8)</sup>	Finish	Flange	Accessories
41 = 4" conical reflector	ND = narrow 50° beam angle 0.84 SC (nominal) MD = medium 60° beam angle 1.00 SC (nominal) WD = wide 75° beam angle 1.24 SC (nominal) RWW = rotatable wall wash with linear spread lens	C = Specular clear H = Semi-specular clear W = White	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors	41RWWPK = Replacement part kit - wall wash lens insert - for use with 41RWW* only.
Notes	Notes	Notes	Notes	Notes
	(8) Values are nominal for white reflector, others may vary.			

Baffle	Distribution <sup>(8)</sup>	Finish	Flange	Accessories
41 = 4" baffle reflector	WD = wide 75° beam angle 1.24 SC (nominal) RWW = rotatable wall wash with linear spread lens	BB = Black baffle WB = White baffle	Blank = White flange standard with BB, & WB BF = Black flange option available with BB	41RWWPK = Replacement part kit - wall wash lens insert - for use with 41RWW* only.
Notes	Notes	Notes	Notes	Notes
	(8) Values are nominal for white reflector, others may vary.			

Reflector	Distribution <sup>(8)</sup>	Finish	Flange
41PS = 4" non-conductive polymer 'dead front' conical reflector (9)	MD = medium 60° beam angle 1.00 SC (nominal)	<b>W</b> = White	Blank = White flange standard with W reflector
Notes	Notes	Notes	Notes
(9) 41PS* is 1000-3000 lumens Non-IC rated. 500 & 750 lumens IC rated. 41PS is not for use over 3000 lumens in Non-IC or over 750 lumens in IC.	(8) Values are nominal for white reflector, others may vary.		

IEM Reflector	Distribution <sup>(8)</sup>	Finish	Flange	Integral Emergency
41 = 4" conical reflector for integral emergency only	ND = narrow 50° beam angle 0.84 SC (nominal) MD = medium 60° beam angle 1.00 SC (nominal) WD = wide 75° beam angle 1.24 SC (nominal)	C = Specular clear H = Semi-specular clear W = White	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors	IEM = Reflector for use with integral emergency housings only. Provides access hole for integral emergency test switch.
Notes	Notes	Notes	Notes	Notes
	(8) Values are nominal for white reflector, others may vary.			

IEM Baffle	Distribution <sup>(8)</sup>	Finish	Flange	Integral Emergency
IEW Ballie	Distribution	FIIIISII	Fialige	integral Emergency
41 = 4" baffle reflector for integral emergency only	<b>WD</b> = wide 75° beam angle 1.24 SC (nominal)	BB = Black baffle WB = White baffle	Blank = White flange standard with BB, & WB BF = Black flange option with BB	IEM = Reflector for use with integral emergency housings only. Provides access hole for integral emergency test switch.
Notes	Notes	Notes	Notes	Notes
	(8) Values are nominal for white reflector, others may vary.			



### **Product Specifications**

#### **Housing Frame**

- Boat shaped galvanized steel plaster frame with adjustable plaster lip
- · Accommodates 1/2" to 1-1/2" 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 to 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<sup>™</sup> mounting bars lock to T-grid with screwdriver or pliers
- Centering detents allow for consistent positioning of fixtures

#### **LED Module**

- Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation
- · Available in 80 or 90 color rendering index (CRI)
- Color accuracy within 3 SDCM provides color consistency and uniformity
- 90 CRI option: R9>50 (refer to chromaticity information for details)
- 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 lumens (nominal)
- Passive thermal management achieves 60,000 hours at 70% lumen maintenance (L70) in insulated ceilings (IC) and non-IC applications
- Integral diffuse lens provides visual shielding
- Integral connector allows quick connection to housing flex

#### Reflector

- Self-flanged aluminum reflectors available in narrow, medium or wide distribution patterns
- Medium distribution polymer non-conductive matte white reflector may be used to meet local codes for 'dead front' applications (500 & 750 lumen max. in IC and 3000 lumen max. in Non-IC)
- Wall wash reflector features a rotatable linear spread lens for alignment of vertical illumination
- Reflectors attach to LED module with three speed clamps
- · Available in multiple painted or plated finishes

#### **Reflector/Module Retention**

 Reflector/module 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)

#### **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 lumen models only

#### **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 (self-diagnostic) with remote charge indicator and test switch
- Rapid Response emergency ordering option for quick-turn projects

#### **Connected Lighting System Options**

Two WaveLinx connected systems to choose. Summary information provided below, refer to WaveLinx system specifications and application quides for details.

#### WaveLinx System Tilemount Sensor Kit

 WaveLinx 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 in<sup>3</sup> internal volume excluding voltage barrier
- 25 in<sup>3</sup> 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 Listed 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; IP64 Below finished ceiling
- Non-Insulated ceiling (Non-IC) rated for 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000 lumen models (insulation must be kept 3" from top and sides)
- Insulated ceiling (IC) rated for 500, 750, 1000, 1500 lumen models and suitable for direct contact with air permeable insulation\* (IC models are also suitable for Non-IC installations)
- Non-IC marked spacing required for 4500, 5000, 5500, 6000 lumen models
- Marked Spacing Center to Center of Adjacent Luminaires = 36"
- Center of Luminaire to Building Member = 18"
- Minimum overhead = 0.5"
- · 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 at 120/277V
- · Contains no mercury or lead and RoHS compliant
- Photometric testing completed in accordance of IFS I M-79-08
- Lumen maintenance projection in accordance of IES LM-80-08 and TM-21-11
- 1,000 and 1,500 lumen, 90 CRI, ICAT models 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 as a dimmable LED luminaire
- 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/legal

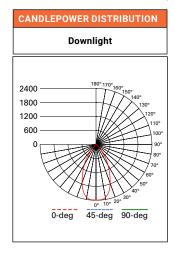


### **Photometric Data**



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

NARROW (50° BEAM*)				
Test Number	P571728			
Housing	HC420D010			
Module	HM40525835			
Reflector	41NDC			
Lumens	2010 Lm			
Efficacy	100.5 Lm/W			
sc	0.84			
UGR	12.2			



CONE OF LIGHT					
0° D					
МН	FC	L	w		
5.5'	79.3	4.6	4.6		
7'	49	5.8	5.8		
8'	37.5	6.6	6.6		
9'	29.6	7.4	7.4		
10'	24	8.4	8.4		
12' 16.7 10 10					

Degrees Vertical         Candela           0         2400           5         2387           15         2110           25         1368           35         676           45         152           55         23           65         5           75         1           85         0	CANDELA TABLE		
5 2387 15 2110 25 1368 35 676 45 152 55 23 65 5 75 1		Candela	
15 2110 25 1368 35 676 45 152 55 23 65 5 75 1	0	2400	
25 1368 35 676 45 152 55 23 65 5 75 1	5	2387	
35 676 45 152 55 23 65 5 75 1	15	2110	
45 152 55 23 65 5 75 1	25	1368	
55 23 65 5 75 1	35	676	
65 5 75 1	45	152	
75 1	55	23	
	65	5	
85 0	75	1	
	85	0	
90 0	90	0	

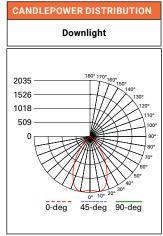
JUMEN SU	JMMARY
Lumens	% Fixture
1436	71.5
1848	92
2002	99.6
2010	100
0	0
2010	100
	Lumens 1436 1848 2002 2010 0

LUMINANCE		
Average Candela Degrees	Average 0° Luminance	
45	26514	
55	4968	
65	1576	
75	667	
85	0	

\*Value are nominal for specular clear reflectors, other may vary. SC = Spacing Criteria UGR = Unified Glare Rating

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

### MEDIUM (60° BEAM\*) Test P571727 Number Housing HC420D010 Module HM40525835 Reflector 41MDC Lumens 2096 Lm 104.8 Lm/W Efficacy SC 1.0 UGR 13.6



CANDLEFOWER DISTRIBUTION	
Downlight	
2035 180°170°160° 1526 130°	
1018	М
509	5.
90°	7
70°	8
50°	9
0° 10° 20° 30° 40	10
0-deg 45-deg 90-deg	12

CONE OF LIGHT				
0°   D				
MH FC L W				
5.5'	.5' 65.3 5.4 5.4			
7'	7' 40.3 6.8 6.8			
8' 30.9 7.8 7.8			7.8	
9'	9' 24.4 8.8 8.8		8.8	
10'	19.8	9.8	9.8	
12'	13.7	11.8	11.8	

CANDEL	A TABLE
Degrees Vertical	Candela
0	1969
5	1997
15	1974
25	1467
35	800
45	192
55	26
65	4
75	1
85	0
90	0

ZONAL LUMEN SUMMARY		
Zone	Lumens	% Fixture
0-30	1408	67.1
0-40	1899	90.6
0-60	2091	99.7
0-90	2096	100
90-180	0	0
0-180	2096	100

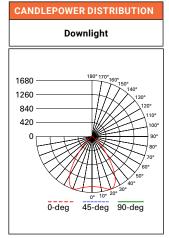
LUMINANCE		
Average Candela Degrees	Average 0° Luminance	
45	33405	
55	5548	
65	1197	
75	667	
85	0	

\*Value are nominal for specular clear reflectors, other may vary. SC = Spacing Criteria UGR = Unified Glare Rating



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





CONE OF LIGHT			Т
0° D			
МН	FC	L	W
5.5'	49.9	6.8	6.8
7'	30.8	8.6	8.6
8'	23.6	9.8	9.8
9' 18.6 11.2 11.2			
10'	15.1	12.4	12.4
12'	10.5	14.8	14.8

Degrees Vertical         Candela           0         1509           5         1525           15         1630           25         1603           35         1012           45         369           55         44           65         5           75         1           85         0           90         0	CANDELA TABLE		
5 1525 15 1630 25 1603 35 1012 45 369 55 44 65 5 75 1		Candela	
15 1630 25 1603 35 1012 45 369 55 44 65 5 75 1 85 0	0	1509	
25 1603 35 1012 45 369 55 44 65 5 75 1 85 0	5	1525	
35 1012 45 369 55 44 65 5 75 1 85 0	15	1630	
45 369 55 44 65 5 75 1 85 0	25	1603	
55 44 65 5 75 1 85 0	35	1012	
65 5 75 1 85 0	45	369	
75 1 85 0	55	44	
85 0	65	5	
	75	1	
90 0	85	0	
	90	0	

ZONAL LUMEN SUMMARY			
Lumens	% Fixture		
1334	57.9		
1960	85.1		
2296	99.7		
2304	100		
0	0		
2304	100		
	Lumens 1334 1960 2296 2304 0		

LUMINANCE		
Average Candela Degrees	Average 0° Luminance	
45	64437	
55	9355	
65	1576	
75	667	
85	0	

\*Value are nominal for specular clear reflectors, other 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
0.33	0.44	0.54	0.74	1.00	1.24	1.54	1.85
4000 Lumen	4500 Lumen	5000 Lumen	5500 Lumen	6000 Lumen			
2 15	2 28	2.44	2.52	2.62			

Multipliers for relative lumen values with other series models.

### **Color Finish Multipliers**

Finish code	С	Н	W/WB	ВВ
Finish	Specular Clear	Semi-Specular	Matte White White Baffle	Black Baffle
Multiplier	1.00	0.94	0.88	0.76

Multipliers for relative lumen values with other color finishes.

#### CCT Multipliers - 80CRI

2700K	3000K	3500K	4000K	5000K
0.89	0.96	1.00	1.03	1.03

Multipliers for relative lumen values with other series color temperatures.

#### CCT Multipliers - 90CRI

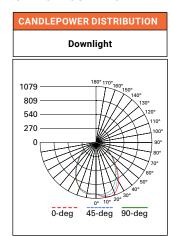
2700K	3000K	3500K	4000K	5000K
0.76	0.85	0.89	0.93	0.93

Multipliers for relative lumen values with other series color temperatures.



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

WALL WASH				
Test Number	P571729			
Housing	HC420D010			
Module	HM40525835			
Reflector	41RWWC			
Lumens	2094 Lm			
Efficacy	104.7 Lm/W			
sc	1.15			



CANDEL	A TABLE
Degrees Vertical	Candela
0	1005
5	1041
15	1079
25	980
35	743
45	494
55	312
65	180
75	80
85	10
90	0

ZONAL LUMEN SUMMARY					
Zone	Lumens	% Fixture			
0-30	789	37.7			
0-40	1221	58.3			
0-60	1872	89.4			
0-90	2094	100			
90-180	0	0			
0-180	2094	100			

LUMIN	NANCE
Average Candela Degrees	Average 0° Luminance
45	86207
55	67159
65	52681
75	38173
85	13445

SC = Spacing Criteria, nominal for specular clear reflector, other may vary.

SINGLE UNIT FOOTCANDLES							
2.5' from wall (distance from fixture along wall)							
1	18.7	13.6	6.1	2.3	0.8	0.3	0.1
2	28.4	22.3	12.2	5.7	2.6	1.2	0.6
3	25.9	21.4	13.3	7.2	3.8	2	1.1
4	19.6	16.9	11.6	7	4.1	2.4	1.4
5	13.6	12.3	9.2	6.2	3.9	2.5	1.5
6	9.3	8.6	7	5.1	3.5	2.3	1.6
7	6.4	6.1	5.2	4.1	3	2.1	1.5
8	4.6	4.4	3.9	3.2	2.5	1.8	1.3
9	3.3	3.2	2.9	2.5	2	1.6	1.2
10	2.5	2.4	2.2	2	1.7	1.4	1.1

	MULTIPLE UNIT FO						
	2.5' from wall (Distance from fixture along wall)  3 ——						
	1	21	18.8	21			
	2	34.1	34.1	34.1			
	3	33.1	34.4	33.1			
	4	26.7	28.7	26.7			
	5	19.8	21.7	19.8			
	6	14.4	15.8	14.4			
	7	10.5	11.4	10.5			
	8	7.8	8.3	7.8			
	9	5.8	6.2	5.8			
The state of the s	10	4.4	4.7	4.4			

DOTCANDLES						
		5' from wa from fixture a				
	19.5	12.1	19.5			
	31	24.4	31			
	29.7	26.5	29.7			
	23.7	23.3	23.7			
	17.5	18.5	17.5			
	12.8	14	12.8			
	9.4	10.4	9.4			
	7	7.7	7			
	5.4	5.9	5.4			
	4.1	4.5	4.1			

### **Photometric Multipliers (Nominal Lumen Values)**

500 Lumen	750 Lumen	1000 Lumen	1500 Lumen	2000 Lumen	2500 Lumen	3000 Lumen	3500 Lumen
0.33	0.44	0.54	0.74	1.00	1.24	1.54	1.85
4000 Lumen	4500 Lumen	5000 Lumen	5500 Lumen	6000 Lumen			

2 62

Multipliers for relative lumen values with other series models.

2.28

### **Color Finish Multipliers**

2.15

Finish code	С	Н	W/WB	BB					
Finish	Specular Clear	Semi-Specular	Matte White White Baffle	Black Baffle					
Multiplier	1.00	0.94	0.88	0.76					

Multipliers for relative lumen values with other color finishes.

### CCT Multipliers - 80CRI

•				
2700K	3000K	3500K	4000K	5000K
0.89	0.96	1.00	1.03	1.03

Multipliers for relative lumen values with other series color temperatures.

### CCT Multipliers - 90CRI

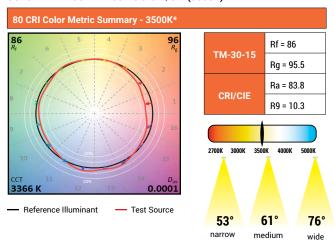
•				
2700K	3000K	3500K	4000K	5000K
0.76	0.85	0.89	0.93	0.93

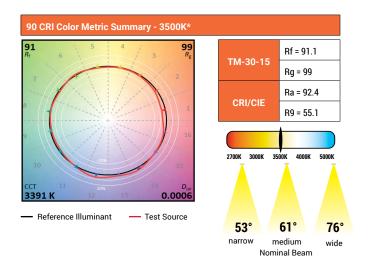
 $\label{lem:multipliers} \mbox{Multipliers for relative lumen values with other series color temperatures}.$ 



## **Energy & Performance Data**

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





\* Color values are based on 61WDWB reflector, other finishes and field results may vary.

#### **ENERGY DATA**

Series	500 lo	umen	750 l	umen	1000	lumen	1500	lumen	2000	umen
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	umen	3000	lumen	3500	lumen	4000	umen	4500 l	umen
Input Voltage 120-277VAC	120V	277V								
Input Current (A)	0.23	0.103	0.24	0.107	0.292	0.152	0.351	0.159	0.384	0.172
Input Power (W)	27.5	27.5	28.6	28.5	34.6	35.1	42.1	42.1	45.9	45.6
In-rush (A)	2.5	5.6	2.5	11.6	3.4	13.9	3.1	14.7	3.1	14.8
Inrush duration (µs)	232	123	216	111	183	95	200	98	202	100
THD (%)	6.5	8.1	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	
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V
Input Current (A)	0.419	0.186	0.457	0.201	0.489	0.214
Input Power (W)	50.1	49.5	54.6	53.7	58.4	57.4
In-rush (A)	3.1	15	3.2	14.8	3.4	14.8
Inrush duration (µs)	202	117	196	131	192	121
THD (%)	5.5	7.6	7	7.2	8.1	7.2
PF	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.97

Nominal Beam

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.



### **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









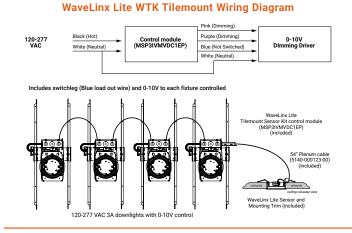








## **WaveLinx Lite Bluetooth Enabled System**





### WaveLinx - WTA Tilemount Sensor

- WaveLinx 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











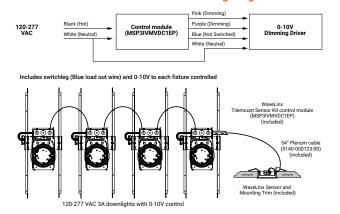




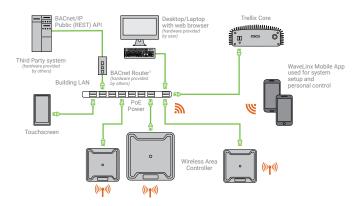




### **WaveLinx WTA Tilemount Wiring Diagram**

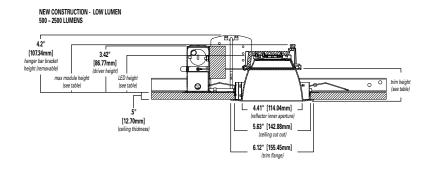


### **WaveLinx Trellix Building Management Integration**



### **Dimensional and Mounting Details**

### **NEW CONSTRUCTIONS - LOW LUMEN 500 - 2500 LUMENS**

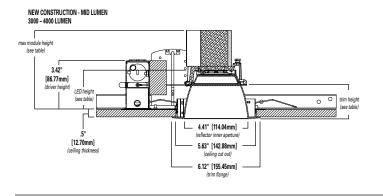


#### Low Lumen (500 - 2500 Lumens)\*

Distribution	Max. Module Height	Trim Height	LED Height
Narrow	3.6"	2.5"	2.7"
Medium	3.7"	2.6"	2.8"
Wide	3.5"	2.4"	2.6"
Baffle	3.1"	2.4"	2.6"

<sup>\*</sup>Max. height w/removable hanger bar bracket 4.2"

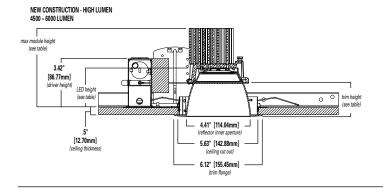
### **NEW CONSTRUCTIONS - MID LUMEN 3000 - 4000 LUMENS**



#### Mid Lumen (3000 - 4000 Lumens)

Distribution	Max. Module Height	Trim Height	LED Height
Narrow	5.6"	2.5"	2.9"
Medium	5.7"	2.6"	3.0"
Wide	5.5"	2.4"	2.8"
Baffle	5.5"	2.4"	2.8"

#### **NEW CONSTRUCTIONS - HIGH LUMEN 4500 - 6000 LUMENS**



### High Lumen (4500 - 6000 Lumens)

Distribution	Max. Module Height	Trim Height	LED Height	
Narrow	5.9"	2.5"	2.9"	
Medium	6.0"	2.6"	3.0"	
Wide	5.8"	2.4"	2.8"	
Baffle	5.8"	2.4"	2.8"	