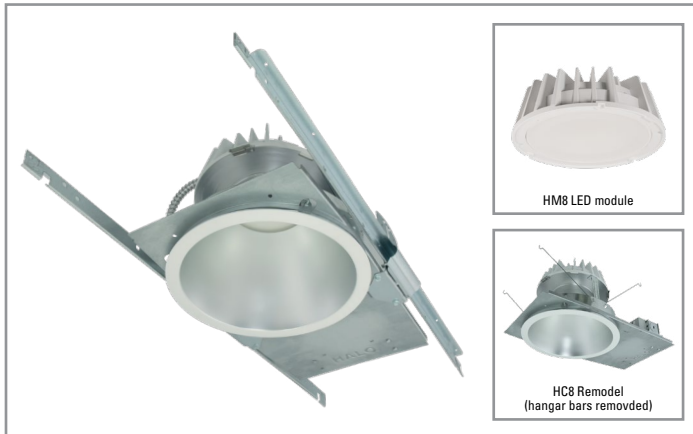


Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO Commercial

HC8 | HM8 | 81

8-inch downlight and wall wash

Typical Applications

Office • Education • Healthcare • Hospitality

Interactive Menu

- Order Information [page 2](#)
- Product Specifications [page 3](#)
- Photometric Data [page 4](#)
- Energy & Performance Data [page 6](#)
- Product Warranty

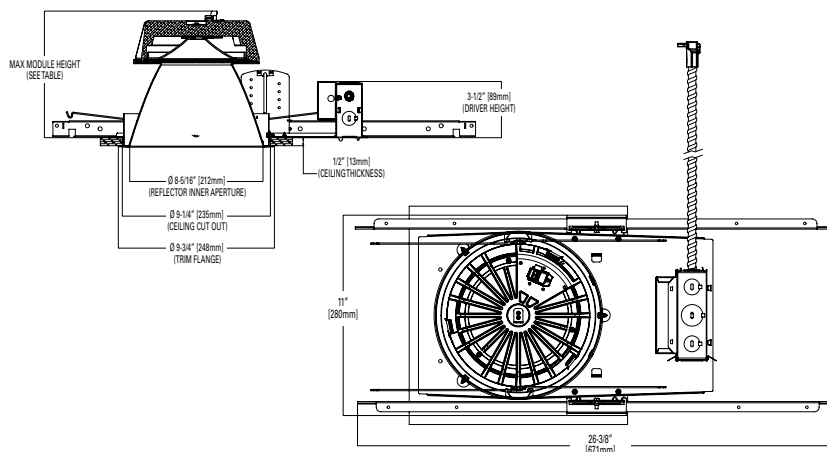
Product Certification



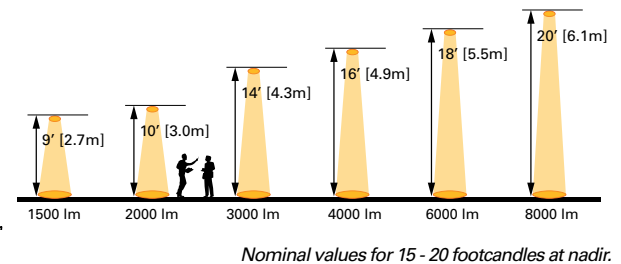
Top Product Features

- Lumen output in 1500, 2000, 3000, 4000, 6000, 8000 lm
- Color temperature in 2700K, 3000K, 3500K, 4000K CCT
- CRI in 80 CRI 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

Dimensional and Mounting Details



Scale



[additional product diagrams](#)

Order Information

Icon Key:  Configurable Product

SAMPLE ORDER NUMBER: HC820D010REM7 – HM81520835 - 81MDC

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

Mounting Frame	Lumens (nominal)	Input / Control	Factory Installed Options	Accessories
Mounting Frame	Lumens (nominal)	Input / Control	Factory Installed Options	Accessories
HC8 = 8" new construction and remodeler housing HC8CP = 8" new construction and remodeler housing, CCEA Chicago Plenum rated	15 = 1500 lumens 20 = 2000 lumens 30 = 3000 lumens 40 = 4000 lumens 60 = 6000 lumens ⁽¹⁾ 80 = 8000 lumens ⁽¹⁾	D010 = 120-277VAC 50/60Hz, 0-10V analog, 1%-100% dimming Canada option D010347 = 347VAC 50/60Hz 0-10V analog 1%-100% dimming LED driver; for 1500, 2000, 3000, 4000 lumen models only (Canada only) ⁽²⁾ D010X347 = step down transformer factory installed with the standard "D010" 120V-277V LED driver, for 6000 and 8000 lumen models only (Canada only) ⁽²⁾ DLV = Distributed low voltage dimming (1%-100%) driver. For use with Cooper Lighting Solutions' DLVP system only. Refer to DLVP low-voltage power module and DLVP specifications for details. ⁽²⁾	REM7 = 7 watt emergency battery backup with remote test / indicator light, use with D010 only ^{(2) (4)} REM14 = 14 watt emergency battery backup with remote test / indicator light, use with D010 only ^{(2) (4)} IEM7 = integral 7 watt emergency battery backup with integral test / indicator light, use with D010 only ^{(2) (4)} IEM14 = integral 14 watt emergency battery backup with integral test / indicator light, use with D010 only ^{(2) (4)} B0D7ST = 7.5 watt Bodine self-test diagnostic emergency module with remote test / indicator light, use with D010 only ⁽²⁾ LWTPD1 = factory installed Enlighted wireless tile sensor kit, use with D010 only ⁽²⁾ WTA = Field installed WaveLinX Sensor Kit ^{(2) (8)} REM7V = 7 watt emergency battery backup with remote test / indicator light, use with DLV only ^{(2) (3)} REM14V = 14 watt emergency battery backup with remote test / indicator light, use with DLV only ^{(2) (3)} IEM7V = integral 7 watt emergency battery backup with integral test / indicator light, use with DLV only ^{(2) (3)} IEM14V = integral 14 watt emergency battery backup with integral test / indicator light, use with DLV only ^{(2) (3)}	HB128APK = L channel hanger bar, 26", pair (replacement part kit) RMB22 = adjustable wood joist mounting bars, pair, extend to 22" PORLWTPD1 = Enlighted wireless sensor kit, field installed, use with D010 driver only ⁽²⁾ WTA = Field installed WaveLinX Sensor Kit ^{(2) (8)}
Notes	Notes	Notes	Notes	Notes
	(1) Marked Spacing: Center to Center of Adjacent Luminaires = 36" Center of Luminaire to Building Member = 18" Minimum overhead = 0.5"	(2) Not available with CP version	(2) Not available with CP version (3) ULus for U.S. only (4) Emergency battery backup options are Non-IC only. (8) 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)	(2) Not available with CP version (8) 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)

Module	Lumens (nominal)	CRI / CCT (minimum)
Module	Lumens (nominal)	CRI / CCT (minimum)
HM8 = 8" module	1520 = 1500, 2000 lumens 3040 = 3000, 4000 lumens 6080 = 6000, 8000 lumens	827 = 80 CRI, 2700K CCT 830 = 80 CRI, 3000K CCT 835 = 80 CRI, 3500K CCT 840 = 80 CRI, 4000K CCT 927 = 90 CRI, 2700K CCT 930 = 90 CRI, 3000K CCT 935 = 90 CRI, 3500K CCT 940 = 90 CRI, 4000K CCT
Notes	Notes	Notes

Reflector	Distribution	Finish	Flange	Accessories
Reflector	Distribution ⁽⁶⁾	Finish	Flange	Accessories
81 = 8" conical reflector	ND = narrow reflector 13° beam angle, 0.24 SC MD = medium reflector 37° beam angle, 0.60 SC WD = wide reflector 71° beam angle, 1.08 SC 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	81RWWPK = Rotatable wall wash replacement kit ⁽⁷⁾
81 = 8" baffle reflector	WD = wide baffle 71° beam angle, 1.08 SC RWW = rotatable wall wash with linear spread lens (wide beam baffle with lens wall wash)	BB = Black baffle WB = White baffle	Blank = White flange standard with BB & WB	
81PS = 8" non-conductive polymer conical reflector ⁽⁵⁾	MD = medium reflector 37° beam angle, 0.60 SC	W = White	Blank = White flange standard with W reflector BF = Black flange option available with BB	
Integral Emergency				
81IEM = 8" conical reflector for integral emergency only	ND = narrow reflector 13° beam angle, 0.24 SC MD = medium reflector 37° beam angle, 0.60 SC WD = wide reflector 71° beam angle, 1.08 SC	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 IEM only
81IEM = 8" baffle reflector for integral emergency only	WD = wide baffle 71° beam angle, 1.08 SC	BB = Black baffle WB = White baffle	Blank = White flange standard with BB & WB BF = Black flange option with BB	IEM = Reflector for IEM only
Notes	Notes	Notes	Notes	Notes
(5) 81PS reflector is for Non-IC environment only, and up to 4000 lumens only	(6) Values are nominal, based on specular clear reflector, other may vary.			(7) For use with 81RWW only.

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)
- Correlated Color Temperature options
 - 2700K
 - 3000K
 - 3500K
 - 4000K
- Passive thermal management achieves L70 at 50,000 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

Lumen Options

- Lumen values (nominal)
 - 1500 lm
 - 2000 lm
 - 3000 lm
 - 4000 lm
 - 6000 lm
 - 8000 lm

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 1500, 2000, 3000, 4000 lumen models only
- 347V step down transformer factory installed with the standard "D010" 120V-277V, LED driver on 6000 and 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

Connected Lighting System Options

- WaveLinx - Two WaveLinx options:
 - Factory installed WaveLinx tile mount sensor kit
 - Field installed WaveLinx accessory tile mount sensor kit.
- The WTA WaveLinx tile mount sensor kit offers daylight dimming, PIR motion sensing control, and optional RLTS - Real Time Location Services available. (Refer to WaveLinx system specifications and application guides for details) The WTA WaveLinx kit includes control module that mounts on the luminaire electrical junction box via 1/2" knock-out, and tilemount sensor with direct-mount spring clips or for octagon ceiling box with included mounting bracket. (Field mount kit ordered and installed separately).
- Enlighted wireless tile mount sensor and control 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

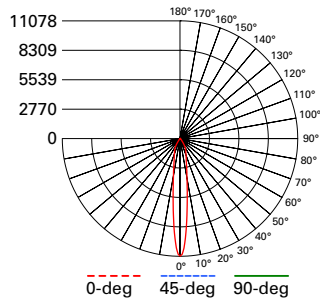
Compliance

- UL Certified (US and Canada), wet location listed in protected ceilings
- IP20 - Above finished ceiling;
- IP65 - Below finished ceiling
- Non-IC rated 4000, 6000, 8000 lumen models. Insulation must be kept 3" from top and sides.
- IC rated 1500, 2000, 3000 lumen models are suitable for direct contact with air permeable insulation (also suitable for Non-IC)
- Non-IC marked spacing required for 6000 and 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 277V & Class B 120V
- 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
- 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

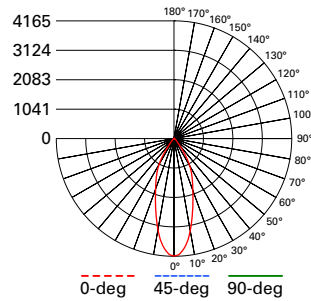
Warranty

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

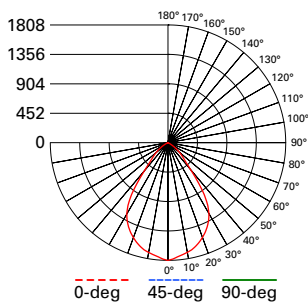
Photometric Data

[View IES files](#)


HC820D010-HM81520835-81NDC
Narrow Distribution
 13° beam angle
 Specular Clear Finish, 2000 Lumen
 Model, 80 CRI, 3500K
 Spacing criterion: 0.24
 Lumens: 2050
 Input Watts: 20.5 W
 Efficacy: 100 LPW
 UGR: 10.0
 Test Report:
 HC820D010-HM81520835-81NDC.ies



HC820D010-HM81520835-81MDC
Medium Distribution
 37° beam angle
 Specular Clear Finish, 2000 Lumen
 Model, 80 CRI, 3500K
 Spacing criterion: 0.59
 Lumens: 2185
 Input Watts: 20.5 W
 Efficacy: 106.6 LPW
 UGR: 10.2
 Test Report:
 HC820D010-HM81520835-81MDC.ies



HC820D010-HM81520835-81WDC
Wide Distribution
 71° beam angle
 Specular Clear Finish, 2000 Lumen
 Model, 80 CRI, 3500K
 Spacing criterion: 1.08
 Lumens: 2286
 Input Watts: 20.5 W
 Efficacy: 111.5 LPW
 UGR: 14.7
 Test Report:
 HC820D010-HM81520835-81WDC.ies

Photometric Multipliers (nominal lumen values)

1500 Lumen	2000 Lumen	3000 Lumen	4000 Lumen	6000 Lumen	8000 Lumen
0.72	1.00	1.47	2.06	2.80	3.32

Multipliers for relative lumen values with other series models.

CCT Multipliers – 80CRI

2700K	3000K	3500K	4000K
0.93	0.94	1.00	1.02

Multipliers for relative lumen values with other series color temperatures.

CCT Multipliers – 90CRI

2700K	3000K	3500K	4000K
0.77	0.83	0.87	0.90

Multipliers for relative lumen values with other series color temperatures.

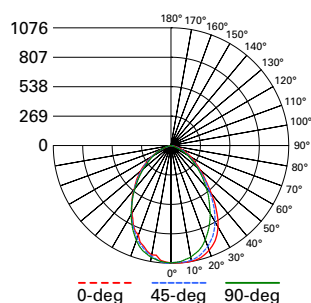
Color Finish Multipliers

Finish code	C	H	W	BB
Finish	Specular Clear	Semi-Specular	Matte White	Black Baffle (lower cone)
Multiplier	1.00	0.95	0.98	0.89

Multipliers for relative lumen values with other color finishes.

Note: Refer to IES files for more product data.

Photometric Data

[View IES files](#)


HC820D010-HM81520835-81RWWC
Wall Wash - Specular Clear Finish, 2000 Lumen Model, 80 CRI, 3500K
Spacing criterion: 1.05
Lumens: 1927
Input Watts: 20.5 W
Efficacy: 94 LPW
Test Report:
HC820D010-HM81520835-81RWWC.ies

SINGLE UNIT FOOTCANDLES

2.5' from wall (distance from fixture along wall)

	1	2	3	4	5	6	7	8	9	10
1	17.5	12.3	5.2	1.8	0.6	0.2	0.1			
2	25.6	19.9	10.4	4.8	2.2	1	0.5			
3	24.6	20.3	11.9	6.1	3.1	1.6	0.9			
4	19.4	16.9	11.1	6.4	3.5	2	1.1			
5	13.4	12.2	9.1	5.9	3.6	2.1	1.3			
6	9	8.5	6.9	5	3.3	2.1	1.3			
7	6.2	6	5.1	4	2.9	2	1.3			
8	4.4	4.3	3.8	3.1	2.4	1.8	1.3			
9	3.2	3.2	2.9	2.4	2	1.5	1.1			
10	2.4	2.4	2.2	1.9	1.6	1.3	1			

MULTIPLE UNIT FOOTCANDLES

2.5' from wall (distance from fixture along wall)

	1	2	3	4	5	6	7	8	9	10
1	19.4	16.7	19.4							
2	30.4	29.8	30.4							
3	30.7	31.9	30.7							
4	25.9	28.1	25.9							
5	19.3	21.5	19.3							
6	14	15.5	14							
7	10.2	11.1	10.2							
8	7.6	8.1	7.6							
9	5.7	6.1	5.7							
10	4.4	4.6	4.4							

2.5' from wall (distance from fixture along wall)

	1	2	3	4	5	6	7	8	9	10
1	18.2	10.5	18.2							
2	27.7	20.8	27.7							
3	27.7	23.8	27.7							
4	23	22.3	23							
5	16.9	18.2	16.9							
6	12.3	13.8	12.3							
7	9.1	10.2	9.1							
8	6.8	7.6	6.8							
9	5.2	5.7	5.2							
10	4.1	4.4	4.1							

Photometric Multipliers (nominal lumen values)

1500 Lumen	2000 Lumen	3000 Lumen	4000 Lumen	6000 Lumen	8000 Lumen
0.72	1.00	1.47	2.06	2.80	3.32

Multipliers for relative lumen values with other series models.

CCT Multipliers – 80CRI

2700K	3000K	3500K	4000K
0.93	0.94	1.00	1.02

Multipliers for relative lumen values with other series color temperatures.

CCT Multipliers – 90CRI

2700K	3000K	3500K	4000K
0.77	0.83	0.87	0.90

Multipliers for relative lumen values with other series color temperatures.

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	0.98	0.89

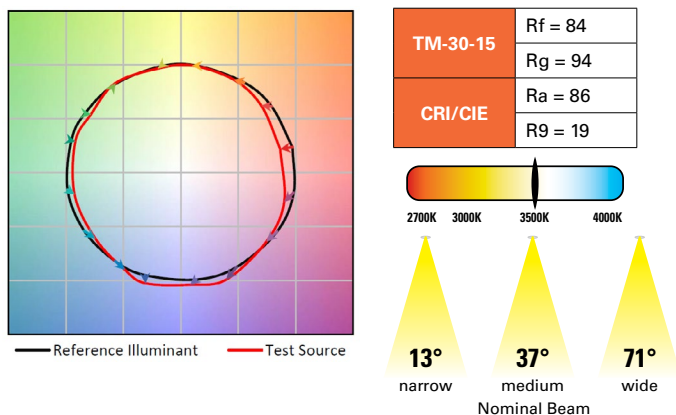
Multipliers for relative lumen values with other color finishes.

Note: Refer to IES files for more product data.

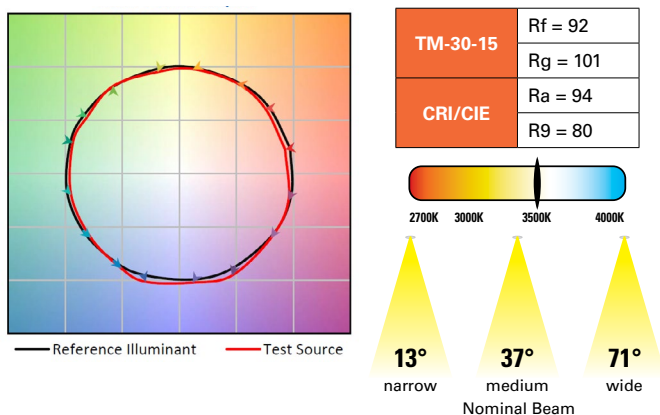
Energy and Performance Data

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

80 CRI Color Metric Summary - 3500K*



90 CRI Color Metric Summary - 3500K*



ENERGY DATA

Series	1500 lumen		Series	2000 lumen		Series	3000 lumen	
Input Voltage 120-277VAC	120V	277V	Input Voltage 120-277VAC	120V	277V	Input Voltage 120-277VAC	120V	277V
Input Current (A)	0.119	0.055	Input Current (A)	0.176	0.082	Input Current (A)	0.228	0.102
Input Power (W)	14.2	14.9	Input Power (W)	21.1	21.4	Input Power (W)	27.2	27
In-rush (A)	0.212	0.85	In-rush (A)	0.588	0.624	In-rush (A)	0.898	1.7
In-rush Duration (ms)	0.28	0.32	In-rush Duration (ms)	0.3	0.38	In-rush Duration (ms)	0.36	0.38
THD (%)	7.8	16.3	THD (%)	8.8	11.2	THD (%)	9.7	9.3
PF	≥ 0.99	≥ 0.95	PF	≥ 0.99	≥ 0.94	PF	≥ 0.99	≥ 0.96
Minimum starting temperature -40°C (-40°F)* (Nominal input 120-277VAC & 100% of rated output power)			Minimum starting temperature -40°C (-40°F)* (Nominal input 120-277VAC & 100% of rated output power)			Minimum starting temperature -40°C (-40°F)* (Nominal input 120-277VAC & 100% of rated output power)		
Sound Rating: Class A standards			Sound Rating: Class A standards			Sound Rating: Class A standards		

Series	4000 lumen		Series	6000 lumen		Series	8000 lumen	
Input Voltage 120-277VAC	120V	277V	Input Voltage 120-277VAC	120V	277V	Input Voltage 120-277VAC	120V	277V
Input Current (A)	0.345	0.15	Input Current (A)	0.5	0.22	Input Current (A)	0.636	0.29
Input Power (W)	41.3	40.7	Input Power (W)	59.7	59	Input Power (W)	75.8	75
In-rush (A)	1.05	2.23	In-rush (A)	5.4	10.8	In-rush (A)	4.9	9.8
In-rush Duration (ms)	0.32	0.34	In-rush Duration (ms)	0.12	0.154	In-rush Duration (ms)	0.13	0.156
THD (%)	10.06	14.01	THD (%)	12.4	10.8	THD (%)	7.2	12.8
PF	≥ 0.99	≥ 0.97	PF	≥ 0.99	≥ 0.95	PF	≥ 0.99	≥ 0.93
Minimum starting temperature -40°C (-40°F)* (Nominal input 120-277VAC & 100% of rated output power)			Minimum starting temperature -40°C (-40°F)* (Nominal input 120-277VAC & 100% of rated output power)			Minimum starting temperature -40°C (-40°F)* (Nominal input 120-277VAC & 100% of rated output power)		
Sound Rating: Class A standards			Sound Rating: Class A standards			Sound Rating: Class A standards		

Notes:

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

Dimensional Details

