

Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO Commercial

HCC4 | HM4 | 41

4-inch lens cylinder and lens wall wash

Typical Applications

Office • Healthcare • Hospitality • Institutional

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Product Certification

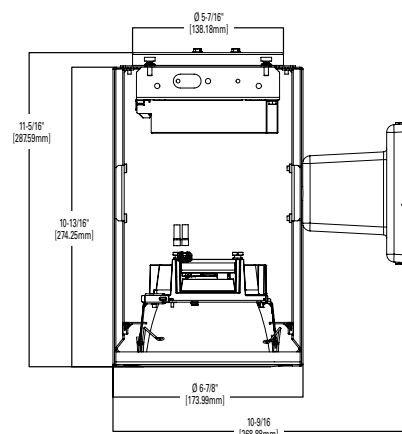


Top Product Features

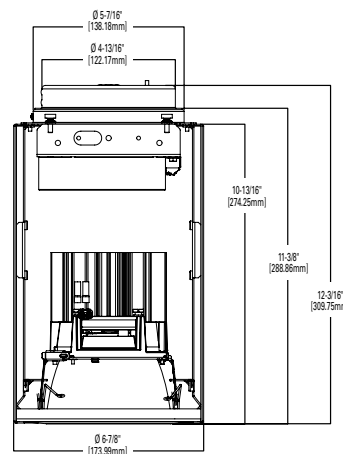
- 1000, 1500, 2000 lumens
- 2700K, 3000K, 3500K, 4000K CCT; 80 or 90 CRI
- Narrow, Medium, Wide beam distribution in precision formed reflectors
- Wall wash with exclusive rotatable linear spread lens
- Specular, Semi Specular, White, Black & White Baffle reflector finishes

Dimensional and Mounting Details

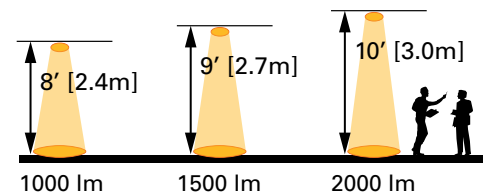
WALL MOUNT



SURFACE MOUNT



Scale



Nominal values for 15 - 20 footcandles at nadir.

Order Information

Icon Key: ▲ Configurable Product

SAMPLE ORDER NUMBER: **HCC4S20D010MW - HM412835 - 41MDC**

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

Cylinder	Lumens (nominal)	Input / Control	Finish
Cylinder HCC4S = 4" surface mount cylinder HCC4W = 4" wall mount cylinder	Lumens (nominal) 10 = 1000 lumens 15 = 1500 lumens 20 = 2000 lumens	Input / Control D010 = 120-277VAC 50/60Hz, 0-10V analog, 1%-100% dimming <u>Canada option</u> D010347 = 347VAC 50/60Hz 0-10V analog 1%-100% dimming LED driver (Canada only)	Finish MW = Matte White MB = Matte Black BZ = Bronze SL = Silver
Notes	Notes	Notes	Notes

Accessories	Type	Length
Accessories Pendant Kit ⁽¹⁾ HCC8P36MW = Matte White pendant stem kit HCC8P36MB = Matte black pendant stem kit HCC8P36BZ = Bronze pendant stem kit HCC8P36SL = Silver pendant stem kit Aircraft Cable Kit ⁽¹⁾ HCAC120MW = 120" white aircraft cable kit HCAC48MW = 48" white aircraft cable kit HCAC120MB = 120" black aircraft cable kit HCAC48MB = 48" black aircraft cable kit	Type Blank = 5 conductor cable (power & 0-10V dimming)	Length Blank = 36" SP* = * specify 6 to 144 in 1" increments
Notes	Notes	Notes

(1) Pendant and Aircraft Cable mounting accessories for use with surface cylinders.

LED Module	Lumens (nominal)	CRI / CCT (minimum)
LED Module HM4 = 4" module	Lumens (nominal) 12 = 1000, 1500, 2000 lumens	CRI / CCT (minimum) 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 41 = 4" self-flanged, conical reflector	Distribution⁽²⁾ ND = narrow reflector 53° beam angle, 0.84 SC MD = medium reflector 61° beam angle, 1.00 SC WD = wide reflector 76° beam angle, 1.24 SC RWW = rotatable wall wash with linear spread lens	Finish C = Specular clear H = Semi-specular clear W = White	Flange Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors	Accessories 41RWWPK = Rotatable wall wash replacement kit (for 41RWW reflector only)
41 = 4" self-flanged, baffle reflector	WD = wide baffle 76° beam angle, 1.24 SC RWW = rotatable wall wash with linear spread lens (wide beam baffle with lens wall wash insert)	BB = Black baffle WB = White baffle	Blank = White flange standard with BB & WB BF = Black flange option available with BB	
Notes	Notes (1) Values are nominal, based on specular clear reflector, other may vary. Additional factors include CRI/CCT, reflector finish, and lumen selected.	Notes	Notes	

Product Specifications

Cylinder

- Round seamless spun aluminum housing available in matte white, matte black, bronze, or silver paint finish

Mounting

- Ceiling mount: Included cylinder mounting plate installs to ceiling junction box (supplied by others), and the surface cylinder mounts to the plate with easy twist and lock hooks
- Pendant mount: Pendant stem (ordered separately) is field installed to the surface cylinder mounting plate. Offered in matching housing finishes
- Aircraft cable mount: Aircraft cable (ordered separately) is field installed to the surface cylinder mounting plate. Offered in white or black cable kit
- Wall mount: A mounting arm on the cylinder is designed to be attached directly to wall junction box (supplied by others) via a sturdy mounting plate

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 (nominal), provides accuracy within 3 SDCM color uniformity
- 90 CRI, R9>50 (refer to chromaticity technical note online for details)
- Correlated Color Temperature options (nominal)
 - 2700K
 - 3000K
 - 3500K
 - 4000K
- Passive thermal management achieves L70 at 60,000 hours in IC and non IC applications
- Integral diffuse lens provides visual shielding

Lumen Options

- Nominal lumen values
 - 1000 lm
 - 1500 lm
 - 2000 lm

Reflector

- Self-flanged aluminum reflectors are available in narrow, medium or wide distribution patterns
- Wall wash reflector features a rotatable linear spread lens for precise alignment of vertical illumination.
- Reflector attaches 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 120-277V input standard; continuous dimming 1%-100% with 0-10V analog controls.

Canada option

- 347VAC 50/60Hz continuous 1%-100% dimming on 0-10V analog controls

Electrical Connections

- Quick disconnect allows for tool-less replacement of LED engine from below
- (3) 4-port push wire nuts for mains voltage, with 1-port for fixture connection

Compliance

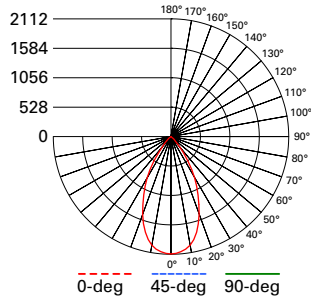
- Surface and wall mount cylinder is UL Certified (US and Canada) for wet location with protected ceiling and IP65 rated (not applicable to wall wash)
- Pendant and aircraft cable mount cylinders are UL Certified (US and Canada) for damp location
- EMI/RFI emissions FCC CFR Title 47 Part 15 Class A 277V & 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
- May be used to comply with State of California Title 24 non-residential code, as a dimmable LED luminaire
- ENERGY STAR® certified, refer to certified light fixture database

Warranty

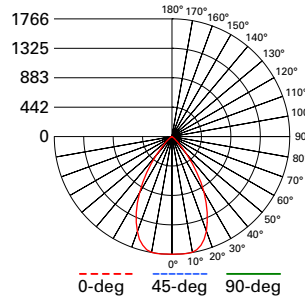
- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Photometric Data

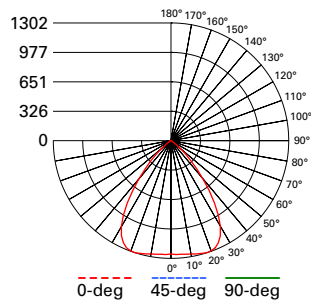
[View IES files](#)



HCC4S20D010MW-HM412835-41NDC
 Narrow Distribution
 53° beam angle
 Specular Clear Finish, 2000 Lumen Model, 80 CRI, 3500K
 Spacing criterion: 0.84
 Lumens: 1667
 Input Watts: 20 W
 Efficacy: 83.4 LPW
 UGR: 12.2
 Test Report:
 HCC4S20D010MW-HM412835-41NDC.ies



HCC4S20D010MW-HM412835-41MDC
 Medium Distribution
 61° beam angle
 Specular Clear Finish, 2000 Lumen Model, 80 CRI, 3500K
 Spacing criterion: 1.0
 Lumens: 1793
 Input Watts: 20 W
 Efficacy: 89.7 LPW
 UGR: 13.6
 Test Report:
 HCC4S20D010MW-HM412835-41MDC.ies



HCC4S20D010MW-HM412835-41WDC
 Wide Distribution
 76° beam angle
 Specular Clear Finish, 2000 Lumen Model, 80 CRI, 3500K
 Spacing criterion: 1.24
 Lumens: 1889
 Input Watts: 20 W
 Efficacy: 94.4 LPW
 UGR: 15.7
 Test Report:
 HCC4S20D010MW-HM412835-41WDC.ies

Photometric Multipliers (nominal lumen values)

1000 Lumen	1500 Lumen	2000 Lumen
0.53	0.72	1.00

Multipliers for relative lumen values with other series models.

Color Finish Multipliers

Finish code	C	H	W/WB	BB
Finish	Specular Clear	Semi-Specular	Matte White White Baffle	Black Baffle
Multiplier	1.00	0.95	0.97	0.82

Multipliers for relative lumen values with other color finishes.

CCT Multipliers – 80CRI

2700K	3000K	3500K	4000K
0.91	0.94	1.00	1.01

Multipliers for relative lumen values with other series color temperatures.

CCT Multipliers – 90CRI

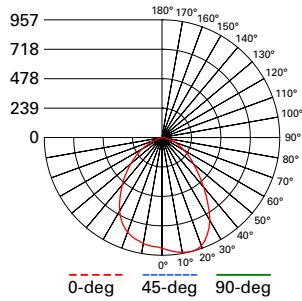
2700K	3000K	3500K	4000K
0.75	0.82	0.89	0.89

Multipliers for relative lumen values with other series color temperatures.

Note: Refer to IES files for more product data.

Photometric Data

[View IES files](#)



HCC4S20D010MW-HM412835-41WWC
 Wall Wash - Specular Clear Finish, 2000 Lumen Model, 80 CRI, 3500K
 Spacing criterion: 1.20
 Lumens: 1816
 Input Watts: 20 W
 Efficacy: 90.8 LPW
 Test Report: HCC4S20D010MW-HM412835-41WWC.ies

SINGLE UNIT FOOTCANDLES							
2.5' from wall (distance from fixture along wall)							
1	9.4	6.9	3.2	1.1	0.3	0.1	0
2	12.4	9.5	5.2	2.4	0.9	0.3	0.1
3	13.7	11.1	5.9	2.5	1.1	0.4	0.2
4	10.7	9.4	6.1	3	1.2	0.5	0.2
5	7.7	7	5.4	3.1	1.5	0.6	0.2
6	5.5	5.2	4.3	3	1.6	0.8	0.3
7	4	3.9	3.4	2.6	1.6	0.9	0.4
8	3	2.9	2.6	2.1	1.5	0.9	0.5
9	2.3	2.2	2.1	1.8	1.4	1	0.6
10	1.8	1.8	1.6	1.4	1.2	0.9	0.6

MULTIPLE UNIT FOOTCANDLES						
	2.5' from wall (distance from fixture along wall)			2.5' from wall (distance from fixture along wall)		
	3			4		
1	10.5	9.8	10.5	10.5	9.8	10.5
2	14.8	14.5	14.8	14.8	14.5	14.8
3	16.2	17	16.2	16.2	17	16.2
4	13.7	15.8	13.7	13.7	15.8	13.7
5	10.8	12.6	10.8	10.8	12.6	10.8
6	8.5	9.6	8.5	8.5	9.6	8.5
7	6.6	7.3	6.6	6.6	7.3	6.6
8	5.2	5.6	5.2	5.2	5.6	5.2
9	4.1	4.4	4.1	4.1	4.4	4.1
10	3.2	3.4	3.2	3.2	3.4	3.2

Photometric Multipliers (nominal lumen values)

1000 Lumen	1500 Lumen	2000 Lumen
0.53	0.72	1.00

Multipliers for relative lumen values with other series models.

Color Finish Multipliers

Finish code	C	H	W/WB	BB
Finish	Specular Clear	Semi-Specular	Matte White White Baffle	Black Baffle
Multiplier	1.00	0.95	0.97	0.82

Multipliers for relative lumen values with other color finishes.

CCT Multipliers – 80CRI

2700K	3000K	3500K	4000K
0.91	0.94	1.00	1.01

Multipliers for relative lumen values with other series color temperatures.

CCT Multipliers – 90CRI

2700K	3000K	3500K	4000K
0.75	0.82	0.89	0.89

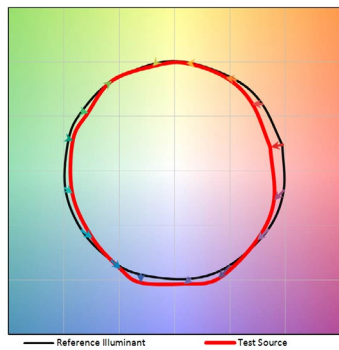
Multipliers for relative lumen values with other series color temperatures.

Note: Refer to IES files for more product data.

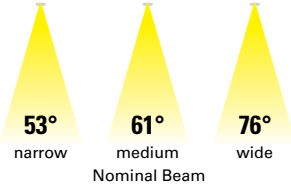
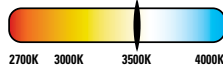
Energy and Performance Data

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

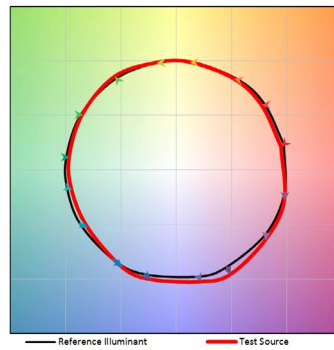
80 CRI Color Metric Summary - 3500K*



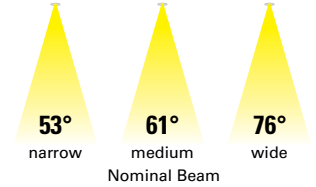
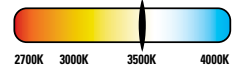
TM-30-15	Rf = 84.4
	Rg = 95.1
CRI/CIE	Ra = 84.7
	R9 = 14.2



90 CRI Color Metric Summary - 3500K*



TM-30-15	Rf = 90.7
	Rg = 100.4
CRI/CIE	Ra = 92.2
	R9 = 77.2



ENERGY DATA

Series	1000 lumen		Series	1500 lumen		Series	2000 lumen	
Input Voltage 120-277VAC	120V	277V	Input Voltage 120-277VAC	120V	277V	Input Voltage 120-277VAC	120V	277V
Input Current (A)	0.085	0.042	Input Current (A)	0.119	0.055	Input Current (A)	0.176	0.082
Input Power (W)	10.1	10.9	Input Power (W)	14.2	14.9	Input Power (W)	21.1	21.4
In-rush (A)	0.644	1.95	In-rush (A)	0.212	0.85	In-rush (A)	0.588	0.624
In-rush Duration (ms)	0.125	0.24	In-rush Duration (ms)	0.28	0.32	In-rush Duration (ms)	0.3	0.38
THD (%)	8.6	15.6	THD (%)	7.8	16.3	THD (%)	8.8	11.2
PF	≥ 0.90	≥ 0.90	PF	≥ 0.90	≥ 0.90	PF	≥ 0.90	≥ 0.90
Minimum starting temperature -40°C (-40°F)			Minimum starting temperature -40°C (-40°F)			Minimum starting temperature -40°C (-40°F)		
Sound Rating: Class A standards			Sound Rating: Class A standards			Sound Rating: Class A standards		