

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P210297

Luminaire Tested: **PR815D010 - PR8M12WW - 3500K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210297
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29047)
Test Lab: INNOVATION CENTER-P2
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PR815D010 - PR8M12WW - 3500K
Description: HALO 8" ROUND DOWNLIGHT, WALLWASH, MATTE WHITE FINISH
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1534.1 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.19 / 1.17
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

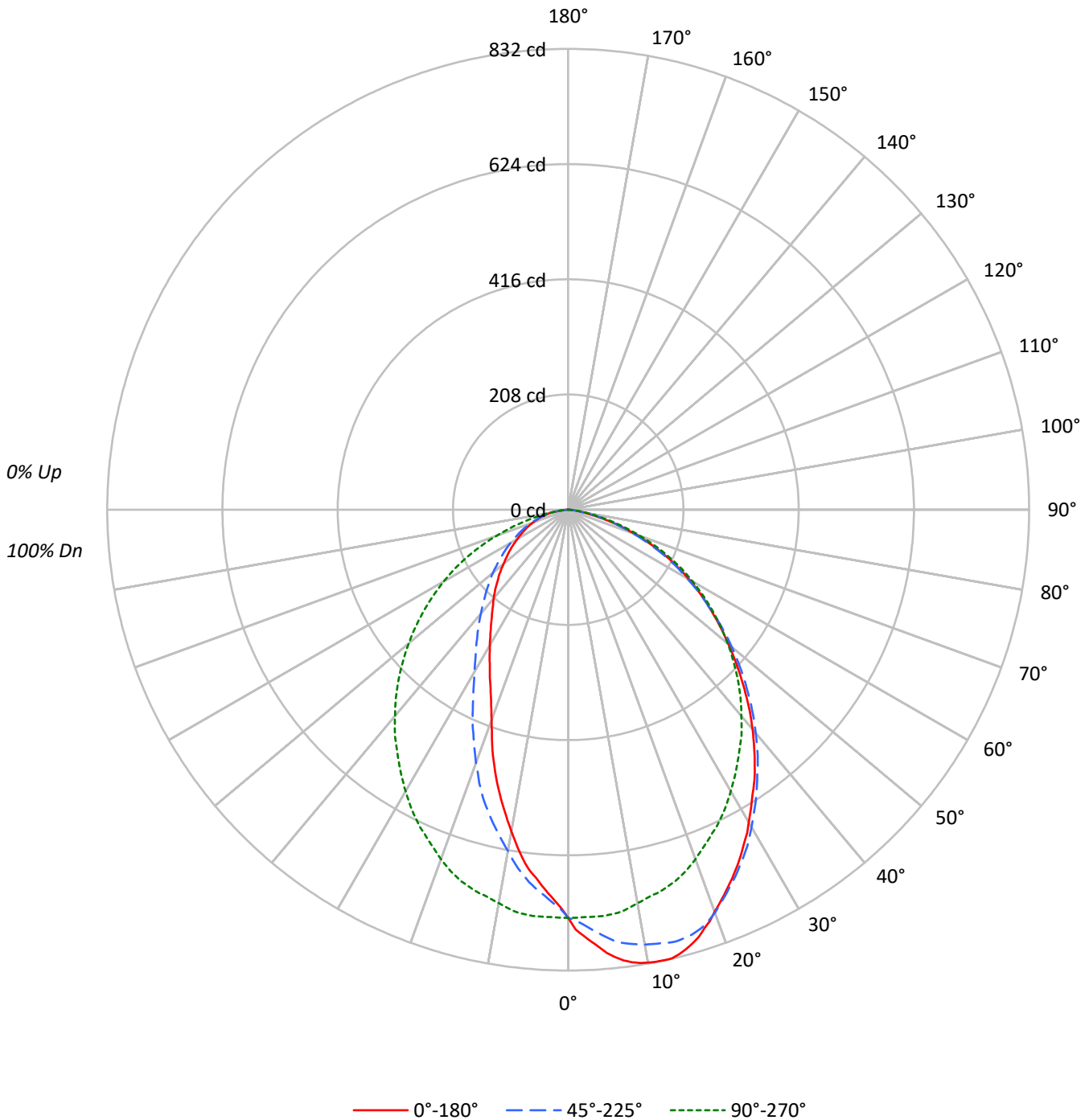
Input Watts (W): 15
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	50	48
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	37	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	22726	22726	22726
5°	24869	22788	20643
10°	25995	22585	18474
15°	26219	22433	16026
20°	25360	22029	13267
25°	24365	21520	11371
30°	23212	20901	10066
35°	22097	20219	9068
40°	20839	19575	8409
45°	19454	18865	7841
50°	18105	18033	7301
55°	16843	17085	6898
60°	15548	16010	6531
65°	13878	14586	6311
70°	11567	12370	6050
75°	8268	9508	5862
80°	4901	6233	5558
85°	2654	2371	2654



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	4.5
10°-20°	191.0	12.5
20°-30°	263.6	17.2
30°-40°	287.9	18.8
40°-50°	270.7	17.6
50°-60°	220.9	14.4
60°-70°	150.1	9.8
70°-80°	69.1	4.5
80°-90°	11.4	0.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	524.0	34.2
0°-40°	811.9	52.9
0°-60°	1303.5	85.0
0°-90°	1534.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1534.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	737	737	737	737	737	
5°	803	774	736	686	667	78
15°	821	802	703	562	502	230
25°	716	722	632	408	334	329
35°	587	594	537	287	241	366
45°	446	456	433	209	180	345
55°	313	314	318	147	128	281
65°	190	186	200	96	86	188
75°	69	72	80	51	49	76
85°	8	7	7	8	8	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	737.0	737.0	737.0	737.0	737.0	737.0	737.0	737.0	737.0
1°	757.9	749.6	741.4	739.2	737.0	725.8	722.1	722.8	719.1
2°	769.0	760.1	748.9	742.9	736.2	720.6	712.4	710.9	705.6
3°	780.2	771.3	757.1	746.7	736.2	715.3	702.7	698.2	693.0
4°	791.4	783.2	765.3	751.9	736.2	710.9	693.7	686.2	680.3
5°	803.4	792.9	774.3	756.4	736.2	706.4	685.5	673.6	666.9
6°	812.3	802.6	781.7	760.1	734.7	700.4	675.8	660.9	656.4
7°	819.8	810.1	787.7	762.3	733.2	694.5	664.6	647.5	642.2
8°	825.0	816.0	791.4	763.1	730.3	686.2	653.4	631.8	625.1
9°	828.7	819.8	794.4	763.8	725.8	677.3	640.0	616.1	607.9
10°	830.2	822.7	797.4	763.8	721.3	669.1	625.8	599.0	590.0
11°	831.7	825.0	798.9	763.8	717.6	660.9	613.1	582.6	572.1
12°	831.7	825.0	800.4	763.8	713.1	651.9	600.5	566.2	554.2
13°	831.7	825.7	802.6	764.6	710.9	645.2	587.8	550.5	537.1
14°	827.2	825.0	803.4	764.6	707.1	636.3	575.1	533.3	519.9
15°	821.3	820.5	801.9	763.8	702.7	627.3	561.7	516.2	502.0
16°	814.5	813.1	799.6	763.1	698.2	618.4	549.0	499.0	482.6
17°	806.3	805.6	795.9	760.1	692.2	608.7	534.1	480.4	464.0
18°	795.2	796.6	790.7	756.4	686.2	599.0	519.2	461.7	444.6
19°	785.5	786.2	783.2	750.4	678.8	586.3	501.3	443.1	423.7
20°	772.8	775.0	774.3	745.9	671.3	574.4	486.3	423.7	404.3
21°	761.6	763.8	763.8	740.0	663.1	563.2	469.9	405.0	387.1
22°	750.4	752.6	753.4	734.0	654.9	552.0	454.3	388.6	371.5
23°	739.2	741.4	742.9	728.0	647.5	540.8	438.6	373.0	358.0
24°	728.0	730.3	732.5	720.6	639.3	528.9	423.7	359.5	345.4
25°	716.1	719.1	722.1	714.6	632.5	518.4	408.0	346.9	334.2
26°	704.1	707.1	710.9	707.1	623.6	505.7	392.4	334.9	323.0
27°	691.5	695.2	699.7	698.9	615.4	494.5	377.4	323.7	311.8
28°	678.0	682.5	688.5	690.7	606.4	482.6	363.3	312.5	302.1
29°	666.9	669.1	675.1	681.0	596.7	469.9	350.6	302.1	291.7
30°	651.9	655.7	661.6	669.8	587.0	458.0	337.9	292.4	282.7
32.5°	617.6	622.1	628.8	643.7	562.4	427.4	311.0	270.0	260.3
35°	587.0	587.8	594.5	612.4	537.1	396.8	287.2	248.4	240.9
37.5°	552.0	555.7	561.7	584.1	513.9	367.0	265.5	230.5	223.8
40°	517.7	520.7	526.6	548.3	486.3	337.2	245.4	214.8	208.9
42.5°	482.6	485.6	491.6	516.2	460.2	307.3	226.0	199.9	194.7
45°	446.1	449.0	455.8	481.1	432.6	279.7	208.9	185.0	179.8
47.5°	411.7	412.5	420.7	446.1	404.3	255.9	192.4	170.8	166.3
50°	377.4	378.2	385.6	411.0	375.9	232.0	177.5	155.9	152.2
52.5°	345.4	345.4	349.8	375.2	346.9	210.3	161.1	142.5	140.2
55°	313.3	312.5	314.0	339.4	317.8	191.0	146.9	130.5	128.3
57.5°	282.7	280.5	281.2	304.3	288.7	171.6	133.5	119.3	117.1
60°	252.1	250.6	247.6	270.0	259.6	151.4	120.1	108.2	105.9
62.5°	221.5	220.0	217.8	235.7	230.5	134.3	107.4	97.7	96.2
65°	190.2	190.2	185.7	200.7	199.9	117.1	95.5	87.3	86.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	158.9	157.4	154.4	166.3	168.6	100.7	83.5	76.8	76.8
70°	128.3	128.3	123.8	132.0	137.2	85.0	72.4	67.9	67.1
72.5°	98.5	99.2	96.2	102.2	108.2	69.4	61.2	58.9	58.2
75°	69.4	72.4	71.6	76.1	79.8	54.5	50.7	49.2	49.2
77.5°	42.5	47.0	49.2	53.0	55.2	41.0	40.3	40.3	40.3
80°	27.6	28.3	29.8	33.6	35.1	28.3	29.1	30.6	31.3
82.5°	15.7	15.7	16.4	17.9	19.4	17.2	18.6	20.1	20.1
85°	7.5	6.7	6.7	6.7	6.7	7.5	7.5	8.2	7.5
87.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)