

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: P210600

Luminaire Tested: **PR8S15D010 - PR8M12WW - 3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210600  
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: PR8S15D010 - 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: 1297.3 lumens  
Efficiency: N/A  
Efficacy: 86.5 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

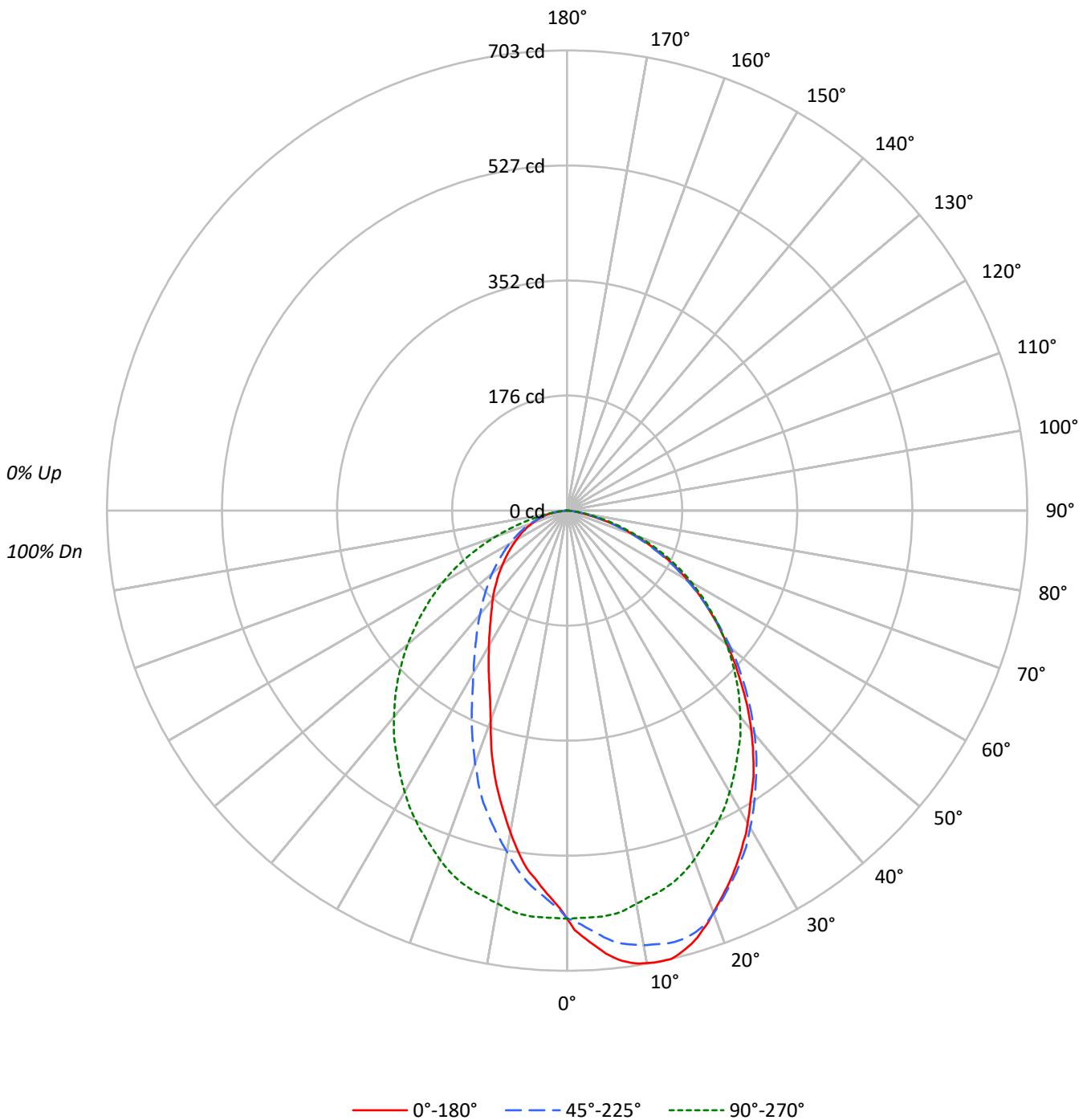
Input Watts (W): 15  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	19217	19217	19217
5°	21027	19272	17455
10°	21981	19097	15622
15°	22171	18969	13552
20°	21445	18629	11220
25°	20602	18199	9615
30°	19630	17675	8514
35°	18687	17094	7668
40°	17619	16556	7109
45°	16449	15952	6629
50°	15313	15251	6174
55°	14241	14446	5833
60°	13149	13537	5526
65°	11733	12331	5341
70°	9782	10468	5121
75°	6994	8042	4956
80°	4138	5256	4706
85°	2229	2017	2229



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.7	4.5
10°-20°	161.5	12.5
20°-30°	222.9	17.2
30°-40°	243.5	18.8
40°-50°	228.9	17.6
50°-60°	186.8	14.4
60°-70°	126.9	9.8
70°-80°	58.4	4.5
80°-90°	9.6	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°	443.1	34.2
0°-40°	686.6	52.9
0°-60°	1102.3	85.0
0°-90°	1297.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1297.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	623	623	623	623	623	
5°	679	655	623	580	564	66
15°	694	678	594	475	424	195
25°	606	611	535	345	283	278
35°	496	503	454	243	204	310
45°	377	385	366	177	152	291
55°	265	266	269	124	108	237
65°	161	157	169	81	73	159
75°	59	61	68	43	42	64
85°	6	6	6	6	6	9
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°	623.2	623.2	623.2	623.2	623.2	623.2	623.2	623.2	623.2
1°	640.8	633.9	627.0	625.1	623.2	613.7	610.6	611.2	608.0
2°	650.3	642.7	633.3	628.2	622.6	609.3	602.4	601.1	596.7
3°	659.8	652.2	640.2	631.4	622.6	604.9	594.2	590.4	586.0
4°	669.2	662.3	647.2	635.8	622.6	601.1	586.6	580.3	575.2
5°	679.3	670.5	654.7	639.6	622.6	597.3	579.7	569.6	563.9
6°	686.9	678.7	661.0	642.7	621.3	592.3	571.5	558.8	555.1
7°	693.2	685.0	666.1	644.6	620.0	587.2	562.0	547.5	543.1
8°	697.6	690.0	669.2	645.3	617.5	580.3	552.5	534.3	528.6
9°	700.8	693.2	671.8	645.9	613.7	572.7	541.2	521.0	514.1
10°	702.0	695.7	674.3	645.9	609.9	565.8	529.2	506.5	498.9
11°	703.3	697.6	675.5	645.9	606.8	558.8	518.5	492.6	483.8
12°	703.3	697.6	676.8	645.9	603.0	551.3	507.8	478.7	468.7
13°	703.3	698.2	678.7	646.5	601.1	545.6	497.0	465.5	454.1
14°	699.5	697.6	679.3	646.5	598.0	538.0	486.3	451.0	439.6
15°	694.5	693.8	678.1	645.9	594.2	530.5	475.0	436.5	424.5
16°	688.8	687.5	676.2	645.3	590.4	522.9	464.2	422.0	408.1
17°	681.8	681.2	673.0	642.7	585.3	514.7	451.6	406.2	392.3
18°	672.4	673.6	668.6	639.6	580.3	506.5	439.0	390.4	375.9
19°	664.2	664.8	662.3	634.5	574.0	495.8	423.9	374.7	358.3
20°	653.5	655.4	654.7	630.8	567.7	485.7	411.3	358.3	341.9
21°	644.0	645.9	645.9	625.7	560.7	476.2	397.4	342.5	327.4
22°	634.5	636.4	637.1	620.7	553.8	466.8	384.1	328.6	314.1
23°	625.1	627.0	628.2	615.6	547.5	457.3	370.9	315.4	302.8
24°	615.6	617.5	619.4	609.3	540.6	447.2	358.3	304.0	292.0
25°	605.5	608.0	610.6	604.3	534.9	438.4	345.0	293.3	282.6
26°	595.4	598.0	601.1	598.0	527.3	427.7	331.8	283.2	273.1
27°	584.7	587.9	591.6	591.0	520.4	418.2	319.2	273.7	263.7
28°	573.4	577.1	582.2	584.1	512.8	408.1	307.2	264.3	255.5
29°	563.9	565.8	570.8	575.9	504.6	397.4	296.5	255.5	246.6
30°	551.3	554.4	559.5	566.4	496.4	387.3	285.7	247.3	239.1
32.5°	522.3	526.1	531.7	544.3	475.6	361.4	263.0	228.3	220.1
35°	496.4	497.0	502.7	517.9	454.1	335.6	242.8	210.0	203.7
37.5°	466.8	469.9	475.0	493.9	434.6	310.3	224.5	194.9	189.2
40°	437.7	440.3	445.3	463.6	411.3	285.1	207.5	181.7	176.6
42.5°	408.1	410.6	415.7	436.5	389.2	259.9	191.1	169.0	164.6
45°	377.2	379.7	385.4	406.8	365.8	236.5	176.6	156.4	152.0
47.5°	348.2	348.8	355.7	377.2	341.9	216.3	162.7	144.4	140.7
50°	319.2	319.8	326.1	347.5	317.9	196.2	150.1	131.8	128.7
52.5°	292.0	292.0	295.8	317.3	293.3	177.9	136.2	120.5	118.6
55°	264.9	264.3	265.5	287.0	268.7	161.5	124.3	110.4	108.5
57.5°	239.1	237.2	237.8	257.3	244.1	145.1	112.9	100.9	99.0
60°	213.2	211.9	209.4	228.3	219.5	128.0	101.6	91.5	89.6
62.5°	187.3	186.1	184.2	199.3	194.9	113.5	90.8	82.6	81.4
65°	160.8	160.8	157.1	169.7	169.0	99.0	80.7	73.8	73.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	134.4	133.1	130.6	140.7	142.6	85.2	70.6	65.0	65.0
70°	108.5	108.5	104.7	111.6	116.1	71.9	61.2	57.4	56.8
72.5°	83.3	83.9	81.4	86.4	91.5	58.7	51.7	49.8	49.2
75°	58.7	61.2	60.6	64.3	67.5	46.0	42.9	41.6	41.6
77.5°	36.0	39.7	41.6	44.8	46.7	34.7	34.1	34.1	34.1
80°	23.3	24.0	25.2	28.4	29.6	24.0	24.6	25.9	26.5
82.5°	13.2	13.2	13.9	15.1	16.4	14.5	15.8	17.0	17.0
85°	6.3	5.7	5.7	5.7	5.7	6.3	6.3	6.9	6.3
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)