

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: P210234

Luminaire Tested: **PR810D010 - PR8M12WW - 3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210234
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: PR810D010 - PR8M12WW - 3000K
Description: HALO 8" ROUND DOWNLIGHT, WALLWASH, MATTE WHITE FINISH
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 995.7 lumens
Efficiency: N/A
Efficacy: 94.8 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

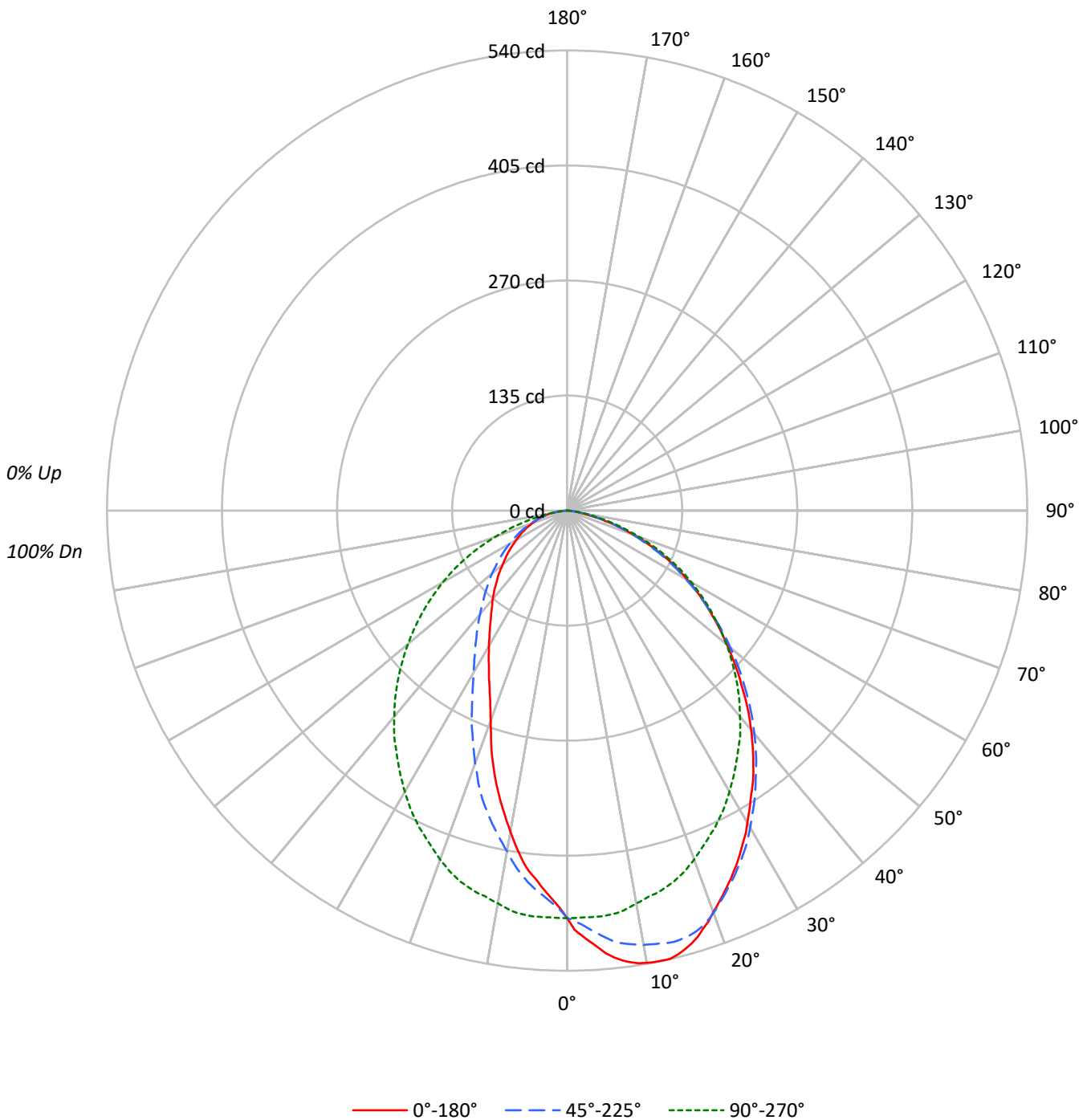
Input Watts (W): 10.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					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°	14749	14749	14749
5°	16139	14790	13397
10°	16871	14657	11989
15°	17016	14557	10401
20°	16457	14298	8611
25°	15814	13967	7380
30°	15065	13566	6534
35°	14342	13123	5888
40°	13525	12704	5458
45°	12625	12245	5089
50°	11753	11705	4740
55°	10930	11086	4478
60°	10090	10392	4237
65°	9011	9464	4101
70°	7510	8033	3931
75°	5361	6172	3813
80°	3179	4049	3605
85°	1698	1557	1698



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	4.5
10°-20°	124.0	12.5
20°-30°	171.1	17.2
30°-40°	186.9	18.8
40°-50°	175.7	17.6
50°-60°	143.4	14.4
60°-70°	97.4	9.8
70°-80°	44.8	4.5
80°-90°	7.4	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°	340.1	34.2
0°-40°	526.9	52.9
0°-60°	846.0	85.0
0°-90°	995.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	995.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	478	478	478	478	478	
5°	521	502	478	445	433	50
15°	533	520	456	364	326	149
25°	465	469	410	265	217	214
35°	381	386	349	186	156	238
45°	290	296	281	136	117	224
55°	203	204	206	95	83	182
65°	124	120	130	62	56	122
75°	45	46	52	33	32	49
85°	5	4	4	5	5	7
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°	478.3	478.3	478.3	478.3	478.3	478.3	478.3	478.3	478.3
1°	491.9	486.5	481.2	479.8	478.3	471.0	468.6	469.1	466.7
2°	499.1	493.3	486.1	482.2	477.8	467.7	462.3	461.4	458.0
3°	506.4	500.6	491.4	484.6	477.8	464.3	456.0	453.1	449.7
4°	513.6	508.3	496.7	488.0	477.8	461.4	450.2	445.4	441.5
5°	521.4	514.6	502.5	490.9	477.8	458.5	444.9	437.2	432.8
6°	527.2	520.9	507.4	493.3	476.9	454.6	438.6	428.9	426.0
7°	532.0	525.8	511.2	494.8	475.9	450.7	431.3	420.2	416.8
8°	535.4	529.6	513.6	495.3	474.0	445.4	424.1	410.0	405.7
9°	537.9	532.0	515.6	495.7	471.0	439.6	415.4	399.9	394.6
10°	538.8	534.0	517.5	495.7	468.1	434.3	406.2	388.7	382.9
11°	539.8	535.4	518.5	495.7	465.7	428.9	397.9	378.1	371.3
12°	539.8	535.4	519.5	495.7	462.8	423.1	389.7	367.4	359.7
13°	539.8	535.9	520.9	496.2	461.4	418.8	381.5	357.3	348.6
14°	536.9	535.4	521.4	496.2	458.9	413.0	373.3	346.1	337.4
15°	533.0	532.5	520.4	495.7	456.0	407.1	364.5	335.0	325.8
16°	528.7	527.7	519.0	495.3	453.1	401.3	356.3	323.9	313.2
17°	523.3	522.8	516.6	493.3	449.3	395.0	346.6	311.8	301.1
18°	516.1	517.0	513.2	490.9	445.4	388.7	336.9	299.7	288.5
19°	509.8	510.3	508.3	487.0	440.5	380.5	325.3	287.6	275.0
20°	501.5	503.0	502.5	484.1	435.7	372.8	315.6	275.0	262.4
21°	494.3	495.7	495.7	480.2	430.4	365.5	305.0	262.9	251.3
22°	487.0	488.5	489.0	476.4	425.1	358.2	294.8	252.2	241.1
23°	479.8	481.2	482.2	472.5	420.2	351.0	284.7	242.1	232.4
24°	472.5	474.0	475.4	467.7	414.9	343.2	275.0	233.3	224.1
25°	464.8	466.7	468.6	463.8	410.5	336.5	264.8	225.1	216.9
26°	457.0	458.9	461.4	458.9	404.7	328.2	254.6	217.4	209.6
27°	448.8	451.2	454.1	453.6	399.4	321.0	245.0	210.1	202.4
28°	440.1	443.0	446.8	448.3	393.6	313.2	235.8	202.8	196.1
29°	432.8	434.3	438.1	442.0	387.3	305.0	227.5	196.1	189.3
30°	423.1	425.5	429.4	434.7	381.0	297.2	219.3	189.8	183.5
32.5°	400.8	403.8	408.1	417.8	365.0	277.4	201.9	175.3	169.0
35°	381.0	381.5	385.8	397.5	348.6	257.6	186.4	161.2	156.4
37.5°	358.2	360.7	364.5	379.1	333.6	238.2	172.3	149.6	145.2
40°	336.0	337.9	341.8	355.8	315.6	218.8	159.3	139.4	135.6
42.5°	313.2	315.2	319.0	335.0	298.7	199.5	146.7	129.7	126.4
45°	289.5	291.4	295.8	312.3	280.8	181.5	135.6	120.1	116.7
47.5°	267.2	267.7	273.0	289.5	262.4	166.1	124.9	110.9	108.0
50°	245.0	245.4	250.3	266.7	244.0	150.6	115.2	101.2	98.8
52.5°	224.1	224.1	227.1	243.5	225.1	136.5	104.6	92.5	91.0
55°	203.3	202.8	203.8	220.3	206.2	123.9	95.4	84.7	83.3
57.5°	183.5	182.0	182.5	197.5	187.4	111.3	86.7	77.5	76.0
60°	163.6	162.7	160.7	175.3	168.5	98.3	77.9	70.2	68.7
62.5°	143.8	142.8	141.4	153.0	149.6	87.1	69.7	63.4	62.5
65°	123.5	123.5	120.5	130.2	129.7	76.0	62.0	56.6	56.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	103.1	102.1	100.2	108.0	109.4	65.4	54.2	49.9	49.9
70°	83.3	83.3	80.4	85.7	89.1	55.2	47.0	44.1	43.6
72.5°	63.9	64.4	62.5	66.3	70.2	45.0	39.7	38.2	37.8
75°	45.0	47.0	46.5	49.4	51.8	35.3	32.9	32.0	32.0
77.5°	27.6	30.5	32.0	34.4	35.8	26.6	26.1	26.1	26.1
80°	17.9	18.4	19.4	21.8	22.8	18.4	18.9	19.8	20.3
82.5°	10.2	10.2	10.7	11.6	12.6	11.1	12.1	13.1	13.1
85°	4.8	4.4	4.4	4.4	4.4	4.8	4.8	5.3	4.8
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)