

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: P210296

Luminaire Tested: **PR810D010 - PR8M12WW - 3500K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210296
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 - 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: 1130.2 lumens
Efficiency: N/A
Efficacy: 107.6 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

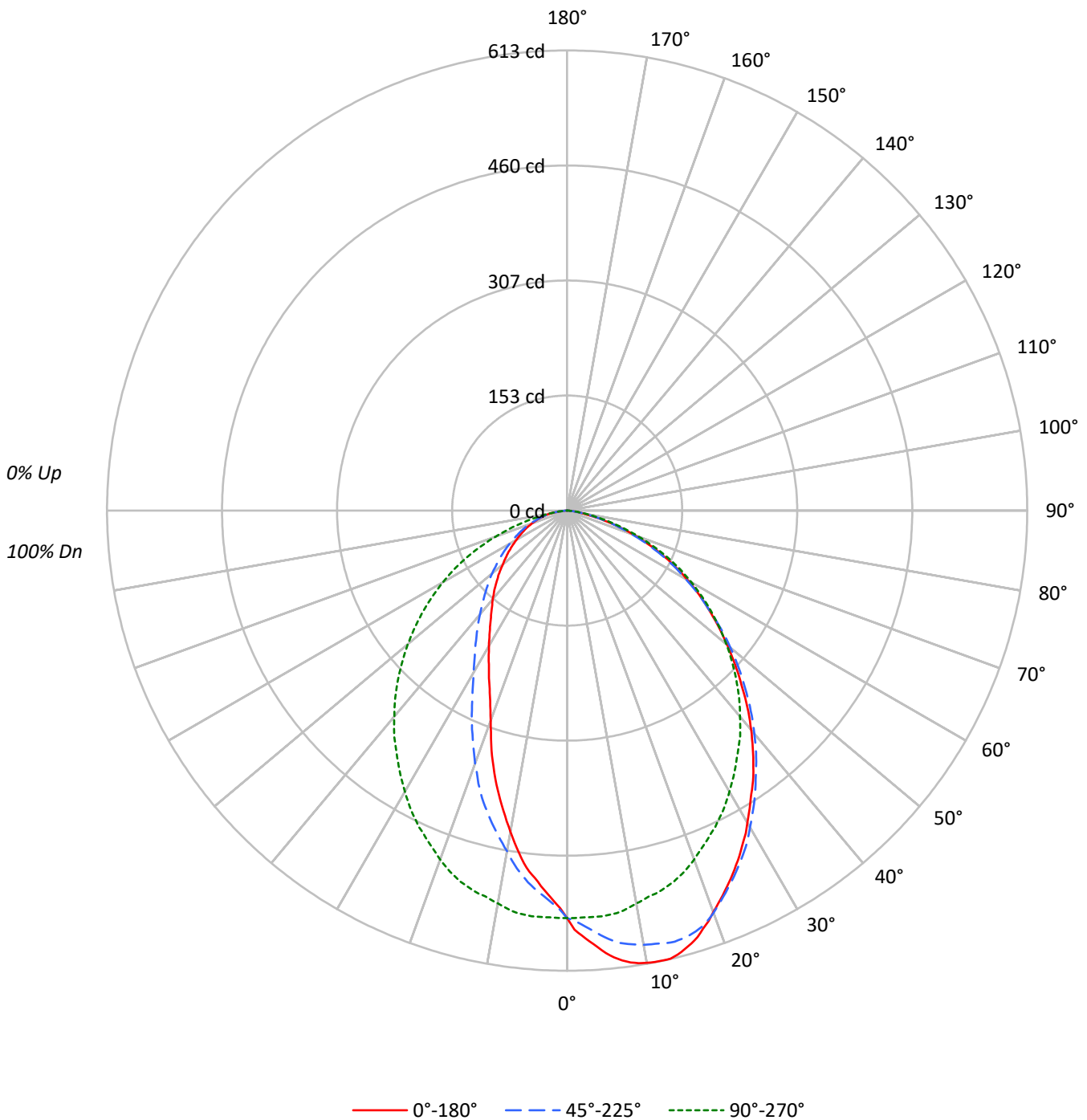
Input Watts (W): 10.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	16741	16741	16741
5°	18319	16790	15208
10°	19150	16639	13611
15°	19314	16524	11806
20°	18682	16230	9772
25°	17948	15855	8377
30°	17102	15400	7417
35°	16281	14896	6682
40°	15353	14423	6195
45°	14330	13898	5774
50°	13341	13288	5378
55°	12408	12586	5080
60°	11453	11792	4810
65°	10222	10748	4648
70°	8520	9115	4463
75°	6088	7006	4325
80°	3605	4582	4102
85°	1946	1734	1946



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.1	4.5
10°-20°	140.7	12.5
20°-30°	194.2	17.2
30°-40°	212.1	18.8
40°-50°	199.5	17.6
50°-60°	162.7	14.4
60°-70°	110.6	9.8
70°-80°	50.9	4.5
80°-90°	8.4	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°	386.0	34.2
0°-40°	598.1	52.9
0°-60°	960.3	85.0
0°-90°	1130.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1130.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	543	543	543	543	543	
5°	592	570	542	505	491	57
15°	605	591	518	414	370	169
25°	528	532	466	301	246	242
35°	432	438	396	212	178	270
45°	329	336	319	154	132	254
55°	231	231	234	108	94	207
65°	140	137	147	70	64	138
75°	51	53	59	37	36	56
85°	6	5	5	6	6	8
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°	542.9	542.9	542.9	542.9	542.9	542.9	542.9	542.9	542.9
1°	558.3	552.3	546.2	544.6	542.9	534.7	531.9	532.5	529.7
2°	566.6	560.0	551.7	547.3	542.4	530.8	524.8	523.7	519.8
3°	574.8	568.2	557.8	550.1	542.4	527.0	517.6	514.4	510.5
4°	583.0	577.0	563.8	553.9	542.4	523.7	511.1	505.6	501.2
5°	591.8	584.1	570.4	557.2	542.4	520.4	505.0	496.2	491.3
6°	598.4	591.3	575.9	560.0	541.3	516.0	497.9	486.9	483.6
7°	603.9	596.8	580.3	561.6	540.2	511.6	489.6	477.0	473.1
8°	607.8	601.2	583.0	562.2	538.0	505.6	481.4	465.4	460.5
9°	610.5	603.9	585.2	562.7	534.7	499.0	471.5	453.9	447.9
10°	611.6	606.1	587.4	562.7	531.4	492.9	461.0	441.3	434.7
11°	612.7	607.8	588.5	562.7	528.6	486.9	451.7	429.2	421.5
12°	612.7	607.8	589.6	562.7	525.3	480.3	442.4	417.1	408.3
13°	612.7	608.3	591.3	563.3	523.7	475.3	433.0	405.5	395.7
14°	609.4	607.8	591.8	563.3	520.9	468.7	423.7	392.9	383.0
15°	605.0	604.5	590.7	562.7	517.6	462.1	413.8	380.3	369.8
16°	600.1	599.0	589.1	562.2	514.4	455.6	404.4	367.6	355.5
17°	594.0	593.5	586.3	560.0	510.0	448.4	393.5	353.9	341.8
18°	585.8	586.9	582.5	557.2	505.6	441.3	382.5	340.2	327.5
19°	578.6	579.2	577.0	552.8	500.1	431.9	369.3	326.4	312.1
20°	569.3	571.0	570.4	549.5	494.6	423.1	358.3	312.1	297.8
21°	561.1	562.7	562.7	545.1	488.5	414.9	346.2	298.4	285.2
22°	552.8	554.5	555.0	540.7	482.5	406.6	334.7	286.3	273.7
23°	544.6	546.2	547.3	536.3	477.0	398.4	323.1	274.8	263.8
24°	536.3	538.0	539.6	530.8	470.9	389.6	312.1	264.9	254.4
25°	527.5	529.7	531.9	526.4	466.0	381.9	300.6	255.5	246.2
26°	518.7	520.9	523.7	520.9	459.4	372.6	289.0	246.7	237.9
27°	509.4	512.2	515.4	514.9	453.4	364.3	278.1	238.5	229.7
28°	499.5	502.8	507.2	508.9	446.8	355.5	267.6	230.2	222.6
29°	491.3	492.9	497.3	501.7	439.6	346.2	258.3	222.6	214.9
30°	480.3	483.0	487.4	493.5	432.5	337.4	248.9	215.4	208.3
32.5°	455.0	458.3	463.2	474.2	414.3	314.9	229.1	198.9	191.8
35°	432.5	433.0	438.0	451.2	395.7	292.3	211.6	183.0	177.5
37.5°	406.6	409.4	413.8	430.3	378.6	270.4	195.6	169.8	164.9
40°	381.4	383.6	388.0	403.9	358.3	248.4	180.8	158.3	153.9
42.5°	355.5	357.7	362.1	380.3	339.1	226.4	166.5	147.3	143.4
45°	328.6	330.8	335.8	354.4	318.7	206.1	153.9	136.3	132.4
47.5°	303.3	303.9	309.9	328.6	297.8	188.5	141.8	125.8	122.5
50°	278.1	278.6	284.1	302.8	277.0	170.9	130.8	114.8	112.1
52.5°	254.4	254.4	257.7	276.4	255.5	155.0	118.7	105.0	103.3
55°	230.8	230.2	231.3	250.0	234.1	140.7	108.3	96.2	94.5
57.5°	208.3	206.6	207.2	224.2	212.7	126.4	98.4	87.9	86.3
60°	185.7	184.6	182.4	198.9	191.2	111.6	88.5	79.7	78.0
62.5°	163.2	162.1	160.5	173.6	169.8	98.9	79.1	72.0	70.9
65°	140.1	140.1	136.8	147.8	147.3	86.3	70.3	64.3	63.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	117.0	115.9	113.8	122.5	124.2	74.2	61.5	56.6	56.6
70°	94.5	94.5	91.2	97.3	101.1	62.6	53.3	50.0	49.5
72.5°	72.5	73.1	70.9	75.3	79.7	51.1	45.1	43.4	42.9
75°	51.1	53.3	52.8	56.1	58.8	40.1	37.4	36.3	36.3
77.5°	31.3	34.6	36.3	39.0	40.7	30.2	29.7	29.7	29.7
80°	20.3	20.9	22.0	24.7	25.8	20.9	21.4	22.5	23.1
82.5°	11.5	11.5	12.1	13.2	14.3	12.6	13.7	14.8	14.8
85°	5.5	4.9	4.9	4.9	4.9	5.5	5.5	6.0	5.5
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)