

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: P210236

Luminaire Tested: **PR810D010 - PR8M12WW - 4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210236
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 - 4000K
Description: HALO 8" ROUND DOWNLIGHT, WALLWASH, MATTE WHITE FINISH
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1060.6 lumens
Efficiency: N/A
Efficacy: 101.0 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

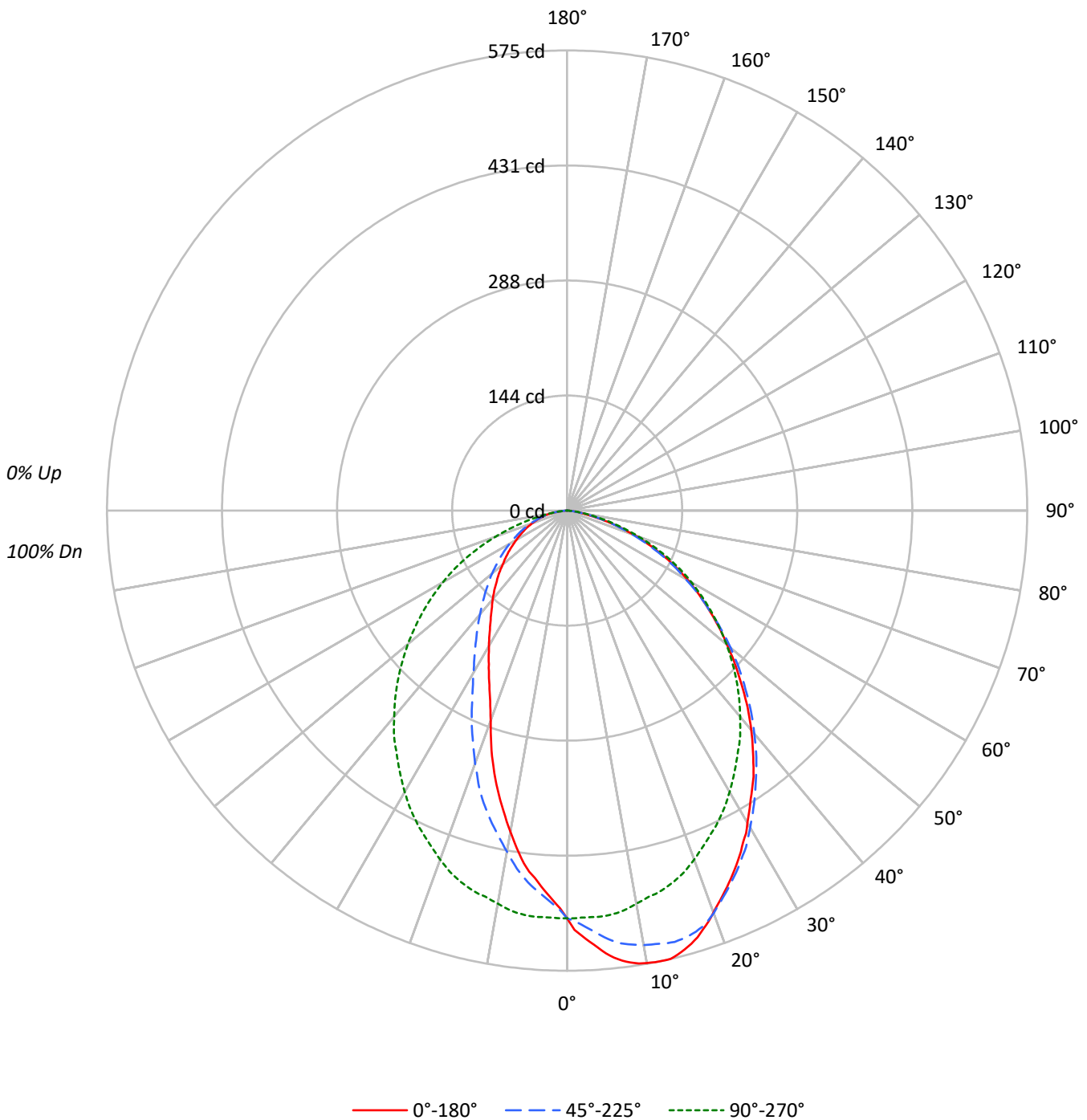
Input Watts (W): 10.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	15711	15711	15711
5°	17192	15756	14270
10°	17973	15615	12772
15°	18127	15509	11081
20°	17533	15230	9172
25°	16845	14879	7860
30°	16048	14453	6961
35°	15280	13977	6272
40°	14407	13533	5813
45°	13449	13043	5421
50°	12521	12468	5047
55°	11645	11811	4769
60°	10750	11070	4514
65°	9595	10084	4363
70°	7997	8556	4183
75°	5719	6577	4051
80°	3392	4297	3853
85°	1840	1628	1840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.0	4.5
10°-20°	132.1	12.5
20°-30°	182.3	17.2
30°-40°	199.1	18.8
40°-50°	187.2	17.6
50°-60°	152.7	14.4
60°-70°	103.8	9.8
70°-80°	47.8	4.5
80°-90°	7.8	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°	362.3	34.2
0°-40°	561.3	52.9
0°-60°	901.3	85.0
0°-90°	1060.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1060.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	510	510	510	510	510	
5°	555	535	509	474	461	54
15°	568	554	486	388	347	159
25°	495	499	437	282	231	228
35°	406	411	371	198	167	253
45°	308	315	299	144	124	238
55°	217	217	220	102	89	194
65°	132	128	138	66	60	130
75°	48	50	55	35	34	52
85°	5	5	5	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°	509.5	509.5	509.5	509.5	509.5	509.5	509.5	509.5	509.5
1°	524.0	518.3	512.6	511.1	509.5	501.8	499.2	499.7	497.1
2°	531.7	525.5	517.8	513.7	509.0	498.2	492.5	491.5	487.9
3°	539.4	533.2	523.4	516.2	509.0	494.6	485.8	482.7	479.1
4°	547.2	541.5	529.1	519.8	509.0	491.5	479.6	474.5	470.3
5°	555.4	548.2	535.3	522.9	509.0	488.4	473.9	465.7	461.0
6°	561.6	554.9	540.5	525.5	508.0	484.3	467.2	456.9	453.8
7°	566.8	560.1	544.6	527.1	506.9	480.1	459.5	447.6	444.0
8°	570.4	564.2	547.2	527.6	504.9	474.5	451.8	436.8	432.2
9°	573.0	566.8	549.2	528.1	501.8	468.3	442.5	426.0	420.3
10°	574.0	568.8	551.3	528.1	498.7	462.6	432.7	414.1	407.9
11°	575.0	570.4	552.3	528.1	496.1	456.9	423.9	402.8	395.6
12°	575.0	570.4	553.4	528.1	493.0	450.7	415.1	391.4	383.2
13°	575.0	570.9	554.9	528.6	491.5	446.1	406.4	380.6	371.3
14°	571.9	570.4	555.4	528.6	488.9	439.9	397.6	368.7	359.5
15°	567.8	567.3	554.4	528.1	485.8	433.7	388.3	356.9	347.1
16°	563.2	562.1	552.8	527.6	482.7	427.5	379.6	345.0	333.7
17°	557.5	557.0	550.3	525.5	478.6	420.8	369.3	332.1	320.8
18°	549.8	550.8	546.7	522.9	474.5	414.1	358.9	319.2	307.4
19°	543.0	543.6	541.5	518.8	469.3	405.4	346.6	306.3	292.9
20°	534.3	535.8	535.3	515.7	464.1	397.1	336.2	292.9	279.5
21°	526.5	528.1	528.1	511.6	458.5	389.4	324.9	280.0	267.7
22°	518.8	520.4	520.9	507.5	452.8	381.6	314.1	268.7	256.8
23°	511.1	512.6	513.7	503.3	447.6	373.9	303.2	257.9	247.5
24°	503.3	504.9	506.4	498.2	442.0	365.6	292.9	248.6	238.8
25°	495.1	497.1	499.2	494.1	437.3	358.4	282.1	239.8	231.0
26°	486.8	488.9	491.5	488.9	431.1	349.7	271.3	231.6	223.3
27°	478.1	480.6	483.7	483.2	425.5	341.9	261.0	223.8	215.6
28°	468.8	471.9	476.0	477.6	419.3	333.7	251.2	216.1	208.9
29°	461.0	462.6	466.7	470.8	412.6	324.9	242.4	208.9	201.6
30°	450.7	453.3	457.4	463.1	405.9	316.6	233.6	202.2	195.5
32.5°	427.0	430.1	434.7	445.1	388.8	295.5	215.1	186.7	180.0
35°	405.9	406.4	411.0	423.4	371.3	274.4	198.5	171.7	166.6
37.5°	381.6	384.2	388.3	403.8	355.3	253.7	183.6	159.4	154.7
40°	357.9	360.0	364.1	379.0	336.2	233.1	169.7	148.5	144.4
42.5°	333.7	335.7	339.9	356.9	318.2	212.5	156.3	138.2	134.6
45°	308.4	310.5	315.1	332.6	299.1	193.4	144.4	127.9	124.3
47.5°	284.7	285.2	290.9	308.4	279.5	176.9	133.1	118.1	115.0
50°	261.0	261.5	266.6	284.2	259.9	160.4	122.7	107.8	105.2
52.5°	238.8	238.8	241.9	259.4	239.8	145.4	111.4	98.5	97.0
55°	216.6	216.1	217.1	234.6	219.7	132.0	101.6	90.2	88.7
57.5°	195.5	193.9	194.4	210.4	199.6	118.6	92.3	82.5	81.0
60°	174.3	173.3	171.2	186.7	179.5	104.7	83.0	74.8	73.2
62.5°	153.2	152.1	150.6	163.0	159.4	92.8	74.3	67.6	66.5
65°	131.5	131.5	128.4	138.7	138.2	81.0	66.0	60.3	59.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	109.8	108.8	106.8	115.0	116.6	69.6	57.8	53.1	53.1
70°	88.7	88.7	85.6	91.3	94.9	58.8	50.0	46.9	46.4
72.5°	68.1	68.6	66.5	70.7	74.8	48.0	42.3	40.7	40.2
75°	48.0	50.0	49.5	52.6	55.2	37.6	35.1	34.0	34.0
77.5°	29.4	32.5	34.0	36.6	38.2	28.4	27.8	27.8	27.8
80°	19.1	19.6	20.6	23.2	24.2	19.6	20.1	21.1	21.7
82.5°	10.8	10.8	11.3	12.4	13.4	11.9	12.9	13.9	13.9
85°	5.2	4.6	4.6	4.6	4.6	5.2	5.2	5.7	5.2
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)