

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: P210596

Luminaire Tested: **PR8S10D010 - PR8M12WW - 4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210596
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: PR8S10D010 - 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: 896.9 lumens
Efficiency: N/A
Efficacy: 85.4 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

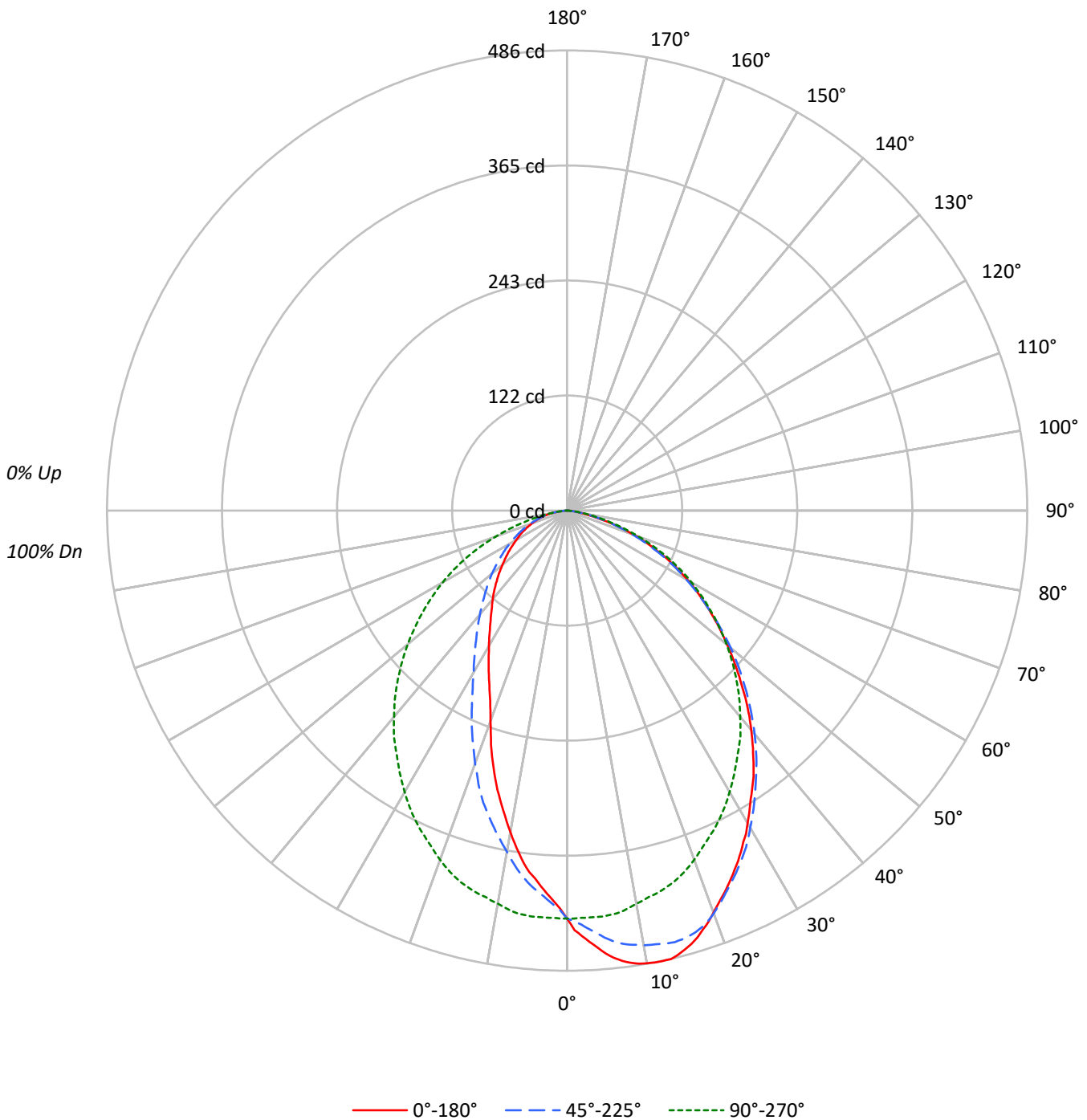
Input Watts (W): 10.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	13287	13287	13287
5°	14539	13323	12069
10°	15199	13204	10800
15°	15327	13114	9370
20°	14826	12880	7758
25°	14242	12582	6648
30°	13570	12220	5886
35°	12919	11820	5304
40°	12181	11444	4915
45°	11373	11029	4583
50°	10588	10544	4270
55°	9849	9989	4032
60°	9091	9362	3818
65°	8114	8530	3692
70°	6762	7231	3534
75°	4837	5564	3431
80°	2859	3640	3250
85°	1557	1380	1557



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.6	4.5
10°-20°	111.7	12.5
20°-30°	154.1	17.2
30°-40°	168.3	18.8
40°-50°	158.3	17.6
50°-60°	129.2	14.4
60°-70°	87.8	9.8
70°-80°	40.4	4.5
80°-90°	6.7	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°	306.3	34.2
0°-40°	474.7	52.9
0°-60°	762.1	85.0
0°-90°	896.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	896.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	431	431	431	431	431	
5°	470	453	430	401	390	45
15°	480	469	411	328	294	134
25°	419	422	370	238	195	192
35°	343	348	314	168	141	214
45°	261	266	253	122	105	202
55°	183	184	186	86	75	164
65°	111	109	117	56	51	110
75°	41	42	47	30	29	44
85°	4	4	4	4	4	6
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°	430.9	430.9	430.9	430.9	430.9	430.9	430.9	430.9	430.9
1°	443.1	438.3	433.5	432.2	430.9	424.3	422.1	422.6	420.4
2°	449.6	444.4	437.8	434.3	430.4	421.3	416.5	415.6	412.5
3°	456.2	450.9	442.6	436.5	430.4	418.2	410.8	408.2	405.1
4°	462.7	457.9	447.4	439.6	430.4	415.6	405.6	401.2	397.7
5°	469.7	463.6	452.7	442.2	430.4	413.0	400.8	393.8	389.9
6°	474.9	469.2	457.0	444.4	429.6	409.5	395.1	386.4	383.8
7°	479.3	473.6	460.5	445.7	428.7	406.0	388.6	378.5	375.5
8°	482.3	477.1	462.7	446.1	426.9	401.2	382.0	369.4	365.4
9°	484.5	479.3	464.4	446.6	424.3	396.0	374.2	360.2	355.4
10°	485.4	481.0	466.2	446.6	421.7	391.2	365.9	350.2	344.9
11°	486.2	482.3	467.1	446.6	419.5	386.4	358.5	340.6	334.5
12°	486.2	482.3	467.9	446.6	416.9	381.1	351.1	331.0	324.0
13°	486.2	482.8	469.2	447.0	415.6	377.2	343.6	321.8	314.0
14°	483.6	482.3	469.7	447.0	413.4	372.0	336.2	311.8	304.0
15°	480.1	479.7	468.8	446.6	410.8	366.8	328.4	301.8	293.5
16°	476.2	475.3	467.5	446.1	408.2	361.5	321.0	291.7	282.2
17°	471.4	471.0	465.3	444.4	404.7	355.9	312.2	280.8	271.2
18°	464.9	465.7	462.3	442.2	401.2	350.2	303.5	269.9	259.9
19°	459.2	459.6	457.9	438.7	396.8	342.8	293.1	259.0	247.7
20°	451.8	453.1	452.7	436.1	392.5	335.8	284.3	247.7	236.4
21°	445.2	446.6	446.6	432.6	387.7	329.2	274.7	236.8	226.3
22°	438.7	440.0	440.5	429.1	382.9	322.7	265.6	227.2	217.2
23°	432.2	433.5	434.3	425.6	378.5	316.2	256.4	218.0	209.3
24°	425.6	426.9	428.2	421.3	373.7	309.2	247.7	210.2	201.9
25°	418.6	420.4	422.1	417.8	369.8	303.1	238.5	202.8	195.4
26°	411.7	413.4	415.6	413.4	364.6	295.7	229.4	195.8	188.8
27°	404.3	406.4	409.1	408.6	359.8	289.1	220.7	189.3	182.3
28°	396.4	399.0	402.5	403.8	354.5	282.2	212.4	182.7	176.6
29°	389.9	391.2	394.7	398.2	348.9	274.7	205.0	176.6	170.5
30°	381.1	383.3	386.8	391.6	343.2	267.8	197.5	170.9	165.3
32.5°	361.1	363.7	367.6	376.3	328.8	249.9	181.9	157.9	152.2
35°	343.2	343.6	347.6	358.0	314.0	232.0	167.9	145.2	140.9
37.5°	322.7	324.9	328.4	341.5	300.5	214.6	155.2	134.8	130.8
40°	302.6	304.4	307.9	320.5	284.3	197.1	143.5	125.6	122.1
42.5°	282.2	283.9	287.4	301.8	269.1	179.7	132.1	116.9	113.8
45°	260.8	262.5	266.5	281.3	252.9	163.5	122.1	108.2	105.1
47.5°	240.7	241.2	246.0	260.8	236.4	149.6	112.5	99.9	97.2
50°	220.7	221.1	225.5	240.3	219.8	135.6	103.8	91.1	89.0
52.5°	201.9	201.9	204.5	219.4	202.8	123.0	94.2	83.3	82.0
55°	183.2	182.7	183.6	198.4	185.8	111.6	85.9	76.3	75.0
57.5°	165.3	164.0	164.4	177.9	168.8	100.3	78.1	69.8	68.5
60°	147.4	146.5	144.8	157.9	151.8	88.5	70.2	63.2	61.9
62.5°	129.5	128.6	127.3	137.8	134.8	78.5	62.8	57.1	56.3
65°	111.2	111.2	108.6	117.3	116.9	68.5	55.8	51.0	50.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	92.9	92.0	90.3	97.2	98.6	58.9	48.8	44.9	44.9
70°	75.0	75.0	72.4	77.2	80.2	49.7	42.3	39.7	39.2
72.5°	57.6	58.0	56.3	59.7	63.2	40.6	35.8	34.5	34.0
75°	40.6	42.3	41.9	44.5	46.7	31.8	29.7	28.8	28.8
77.5°	24.9	27.5	28.8	31.0	32.3	24.0	23.5	23.5	23.5
80°	16.1	16.6	17.4	19.6	20.5	16.6	17.0	17.9	18.3
82.5°	9.2	9.2	9.6	10.5	11.3	10.0	10.9	11.8	11.8
85°	4.4	3.9	3.9	3.9	3.9	4.4	4.4	4.8	4.4
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)