

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: P210409

Luminaire Tested: **PR8R15D010 - PR8M12WW - 3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210409
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: PR8R15D010 - 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: 1349.4 lumens
Efficiency: N/A
Efficacy: 90.0 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

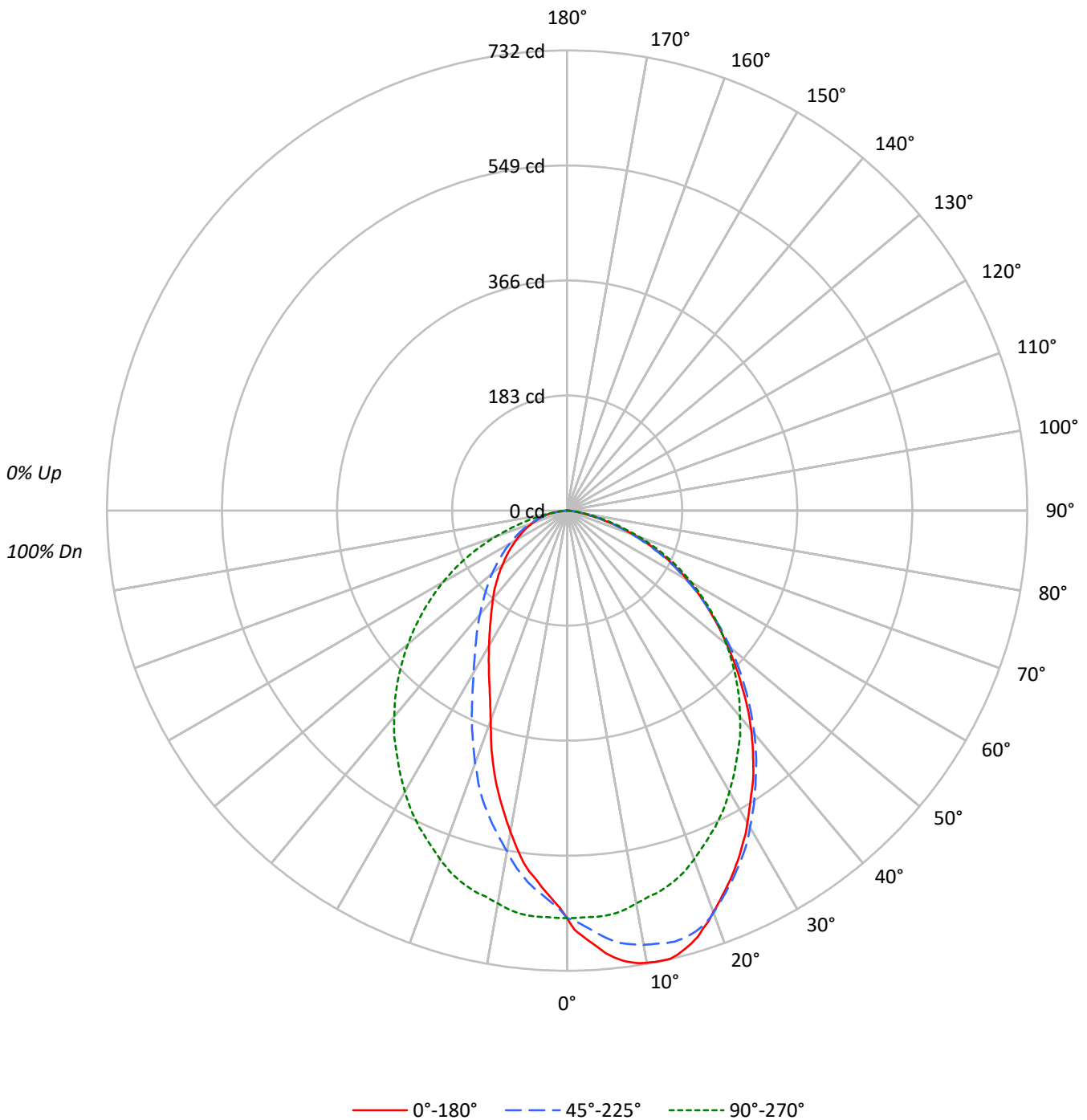
Input Watts (W): 15
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	19991	19991	19991
5°	21875	20046	18158
10°	22867	19867	16251
15°	23062	19732	14098
20°	22308	19377	11669
25°	21432	18931	10000
30°	20420	18387	8855
35°	19439	17783	7977
40°	18332	17221	7395
45°	17112	16598	6895
50°	15927	15865	6424
55°	14817	15026	6070
60°	13679	14080	5748
65°	12207	12827	5553
70°	10179	10882	5328
75°	7268	8364	5159
80°	4315	5469	4901
85°	2335	2087	2335



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.0	4.5
10°-20°	168.0	12.5
20°-30°	231.9	17.2
30°-40°	253.3	18.8
40°-50°	238.1	17.6
50°-60°	194.3	14.4
60°-70°	132.0	9.8
70°-80°	60.8	4.5
80°-90°	10.0	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°	460.9	34.2
0°-40°	714.2	52.9
0°-60°	1146.6	85.0
0°-90°	1349.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1349.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	648	648	648	648	648	
5°	707	681	648	603	587	68
15°	722	705	618	494	442	202
25°	630	635	556	359	294	290
35°	516	523	472	253	212	322
45°	392	401	381	184	158	303
55°	276	276	280	129	113	247
65°	167	163	176	84	76	165
75°	61	63	70	45	43	67
85°	7	6	6	7	7	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°	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3
1°	666.6	659.4	652.2	650.2	648.3	638.4	635.1	635.8	632.5
2°	676.5	668.6	658.8	653.5	647.6	633.8	626.6	625.3	620.7
3°	686.3	678.4	666.0	656.8	647.6	629.2	618.1	614.1	609.5
4°	696.2	688.9	673.2	661.4	647.6	625.3	610.2	603.6	598.4
5°	706.7	697.5	681.1	665.3	647.6	621.4	603.0	592.5	586.6
6°	714.5	706.0	687.6	668.6	646.3	616.1	594.5	581.3	577.4
7°	721.1	712.6	692.9	670.6	645.0	610.9	584.6	569.5	564.9
8°	725.7	717.8	696.2	671.2	642.4	603.6	574.8	555.7	549.8
9°	729.0	721.1	698.8	671.9	638.4	595.8	563.0	542.0	534.7
10°	730.3	723.7	701.4	671.9	634.5	588.6	550.5	526.9	519.0
11°	731.6	725.7	702.7	671.9	631.2	581.3	539.3	512.4	503.3
12°	731.6	725.7	704.0	671.9	627.3	573.5	528.2	498.0	487.5
13°	731.6	726.3	706.0	672.5	625.3	567.6	517.0	484.2	472.4
14°	727.7	725.7	706.7	672.5	622.0	559.7	505.9	469.1	457.3
15°	722.4	721.7	705.3	671.9	618.1	551.8	494.1	454.0	441.6
16°	716.5	715.2	703.4	671.2	614.1	543.9	482.9	439.0	424.5
17°	709.3	708.6	700.1	668.6	608.9	535.4	469.8	422.5	408.1
18°	699.4	700.7	695.5	665.3	603.6	526.9	456.7	406.1	391.1
19°	690.9	691.6	688.9	660.1	597.1	515.7	440.9	389.7	372.7
20°	679.8	681.7	681.1	656.1	590.5	505.2	427.8	372.7	355.6
21°	669.9	671.9	671.9	650.9	583.3	495.4	413.4	356.3	340.5
22°	660.1	662.0	662.7	645.6	576.1	485.5	399.6	341.8	326.8
23°	650.2	652.2	653.5	640.4	569.5	475.7	385.8	328.1	314.9
24°	640.4	642.4	644.3	633.8	562.3	465.2	372.7	316.3	303.8
25°	629.9	632.5	635.1	628.6	556.4	456.0	358.9	305.1	293.9
26°	619.4	622.0	625.3	622.0	548.5	444.9	345.1	294.6	284.1
27°	608.2	611.5	615.5	614.8	541.3	435.0	332.0	284.8	274.3
28°	596.4	600.4	605.6	607.6	533.4	424.5	319.5	274.9	265.7
29°	586.6	588.6	593.8	599.0	524.9	413.4	308.4	265.7	256.5
30°	573.5	576.7	582.0	589.2	516.4	402.9	297.2	257.2	248.7
32.5°	543.3	547.2	553.1	566.2	494.7	376.0	273.6	237.5	229.0
35°	516.4	517.0	522.9	538.7	472.4	349.1	252.6	218.5	211.9
37.5°	485.5	488.8	494.1	513.8	452.1	322.8	233.6	202.7	196.8
40°	455.4	458.0	463.2	482.3	427.8	296.6	215.9	189.0	183.7
42.5°	424.5	427.1	432.4	454.0	404.8	270.3	198.8	175.8	171.3
45°	392.4	395.0	400.9	423.2	380.6	246.0	183.7	162.7	158.1
47.5°	362.2	362.8	370.1	392.4	355.6	225.1	169.3	150.3	146.3
50°	332.0	332.7	339.2	361.5	330.7	204.1	156.2	137.1	133.9
52.5°	303.8	303.8	307.7	330.0	305.1	185.0	141.7	125.3	123.4
55°	275.6	274.9	276.2	298.5	279.5	168.0	129.3	114.8	112.9
57.5°	248.7	246.7	247.4	267.7	253.9	150.9	117.4	105.0	103.0
60°	221.8	220.5	217.8	237.5	228.3	133.2	105.6	95.1	93.2
62.5°	194.9	193.6	191.6	207.3	202.7	118.1	94.5	86.0	84.6
65°	167.3	167.3	163.4	176.5	175.8	103.0	84.0	76.8	76.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	139.8	138.4	135.8	146.3	148.3	88.6	73.5	67.6	67.6
70°	112.9	112.9	108.9	116.1	120.7	74.8	63.6	59.7	59.1
72.5°	86.6	87.3	84.6	89.9	95.1	61.0	53.8	51.8	51.2
75°	61.0	63.6	63.0	66.9	70.2	47.9	44.6	43.3	43.3
77.5°	37.4	41.3	43.3	46.6	48.6	36.1	35.4	35.4	35.4
80°	24.3	24.9	26.2	29.5	30.8	24.9	25.6	26.9	27.6
82.5°	13.8	13.8	14.4	15.7	17.1	15.1	16.4	17.7	17.7
85°	6.6	5.9	5.9	5.9	5.9	6.6	6.6	7.2	6.6
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)