

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: P210601

Luminaire Tested: **PR8S15D010 - PR8M12WW - 4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210601  
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: PR8S15D010 - 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: 1217.5 lumens  
Efficiency: N/A  
Efficacy: 81.2 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

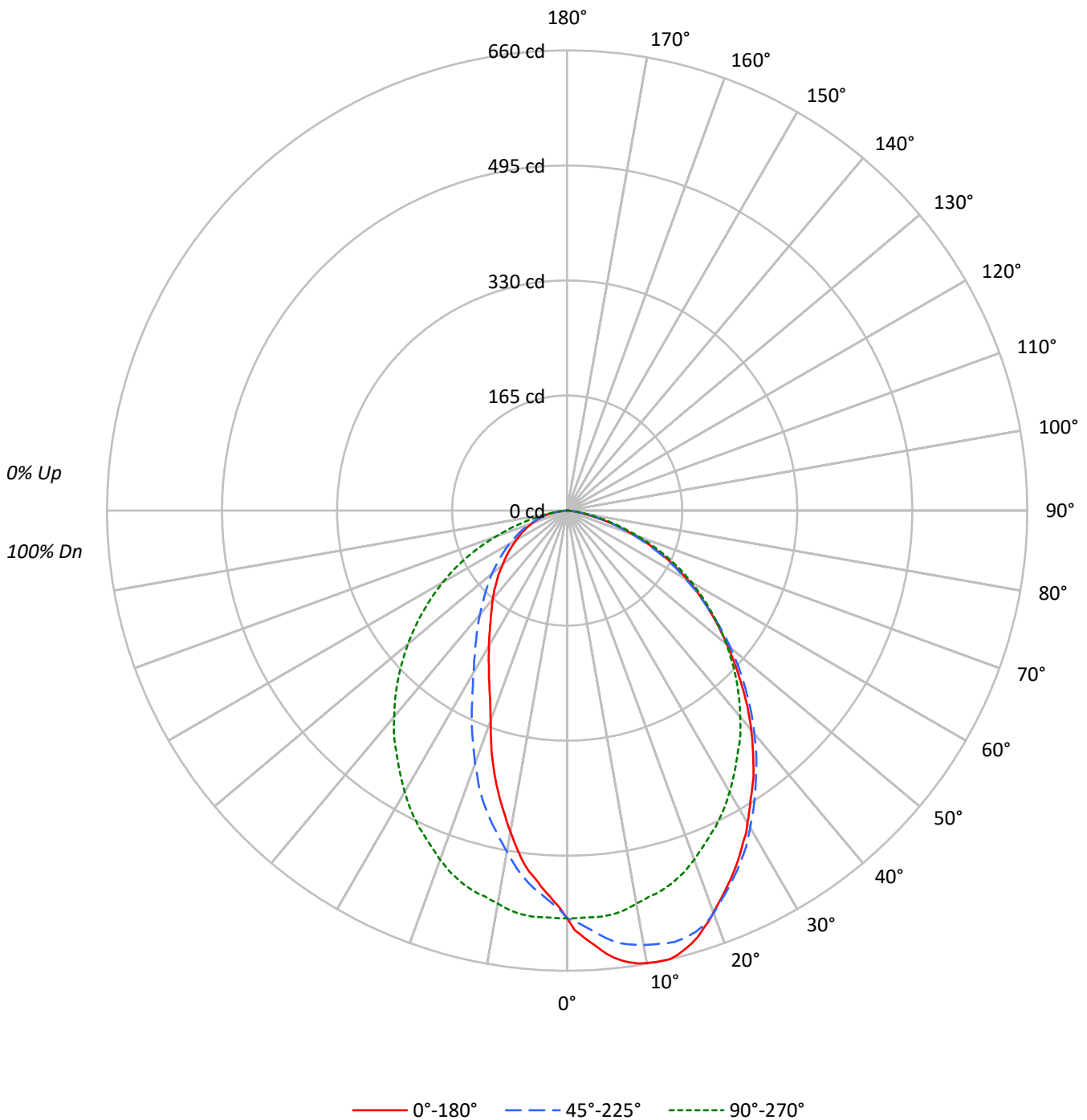
Input Watts (W): 15  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	18033	18033	18033
5°	19733	18086	16381
10°	20628	17923	14660
15°	20805	17801	12719
20°	20126	17484	10527
25°	19336	17080	9023
30°	18423	16589	7990
35°	17538	16044	7198
40°	16536	15538	6670
45°	15438	14971	6223
50°	14368	14310	5795
55°	13365	13559	5473
60°	12341	12705	5187
65°	11010	11572	5013
70°	9178	9818	4805
75°	6565	7542	4658
80°	3889	4937	4422
85°	2087	1875	2087



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.0	4.5
10°-20°	151.6	12.5
20°-30°	209.2	17.2
30°-40°	228.5	18.8
40°-50°	214.9	17.6
50°-60°	175.3	14.4
60°-70°	119.1	9.8
70°-80°	54.8	4.5
80°-90°	9.0	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°	415.8	34.2
0°-40°	644.3	52.9
0°-60°	1034.5	85.0
0°-90°	1217.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1217.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	585	585	585	585	585	
5°	638	614	584	544	529	62
15°	652	636	558	446	398	183
25°	568	573	502	324	265	261
35°	466	472	426	228	191	291
45°	354	362	343	166	143	274
55°	249	249	252	117	102	223
65°	151	147	159	76	69	149
75°	55	57	63	40	39	60
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°	584.8	584.8	584.8	584.8	584.8	584.8	584.8	584.8	584.8
1°	601.4	594.9	588.4	586.6	584.8	576.0	573.0	573.6	570.6
2°	610.3	603.2	594.3	589.6	584.3	571.8	565.3	564.1	560.0
3°	619.2	612.1	600.8	592.5	584.3	567.7	557.6	554.1	549.9
4°	628.1	621.6	607.3	596.7	584.3	564.1	550.5	544.6	539.9
5°	637.5	629.2	614.4	600.2	584.3	560.6	544.0	534.5	529.2
6°	644.6	636.9	620.4	603.2	583.1	555.8	536.3	524.5	520.9
7°	650.6	642.9	625.1	605.0	581.9	551.1	527.4	513.8	509.7
8°	654.7	647.6	628.1	605.6	579.5	544.6	518.6	501.4	496.1
9°	657.7	650.6	630.4	606.2	576.0	537.5	507.9	489.0	482.4
10°	658.8	652.9	632.8	606.2	572.4	531.0	496.6	475.3	468.2
11°	660.0	654.7	634.0	606.2	569.5	524.5	486.6	462.3	454.0
12°	660.0	654.7	635.2	606.2	565.9	517.4	476.5	449.3	439.8
13°	660.0	655.3	636.9	606.8	564.1	512.0	466.5	436.9	426.2
14°	656.5	654.7	637.5	606.8	561.2	504.9	456.4	423.2	412.6
15°	651.7	651.1	636.3	606.2	557.6	497.8	445.7	409.6	398.4
16°	646.4	645.2	634.6	605.6	554.1	490.7	435.7	396.0	383.0
17°	639.9	639.3	631.6	603.2	549.3	483.0	423.8	381.2	368.2
18°	631.0	632.2	627.5	600.2	544.6	475.3	412.0	366.4	352.8
19°	623.3	623.9	621.6	595.5	538.7	465.3	397.8	351.6	336.2
20°	613.3	615.0	614.4	592.0	532.8	455.8	386.0	336.2	320.8
21°	604.4	606.2	606.2	587.2	526.2	446.9	372.9	321.4	307.2
22°	595.5	597.3	597.9	582.5	519.7	438.0	360.5	308.4	294.8
23°	586.6	588.4	589.6	577.7	513.8	429.2	348.1	296.0	284.1
24°	577.7	579.5	581.3	571.8	507.3	419.7	336.2	285.3	274.1
25°	568.3	570.6	573.0	567.1	502.0	411.4	323.8	275.3	265.2
26°	558.8	561.2	564.1	561.2	494.9	401.3	311.4	265.8	256.3
27°	548.7	551.7	555.3	554.7	488.4	392.5	299.5	256.9	247.4
28°	538.1	541.6	546.4	548.1	481.3	383.0	288.3	248.0	239.7
29°	529.2	531.0	535.7	540.5	473.6	372.9	278.2	239.7	231.5
30°	517.4	520.3	525.1	531.6	465.9	363.5	268.2	232.0	224.4
32.5°	490.1	493.7	499.0	510.9	446.3	339.2	246.8	214.3	206.6
35°	465.9	466.5	471.8	486.0	426.2	314.9	227.9	197.1	191.2
37.5°	438.0	441.0	445.7	463.5	407.9	291.2	210.7	182.9	177.6
40°	410.8	413.2	417.9	435.1	386.0	267.6	194.8	170.5	165.7
42.5°	383.0	385.4	390.1	409.6	365.2	243.9	179.4	158.6	154.5
45°	354.0	356.4	361.7	381.8	343.3	222.0	165.7	146.8	142.7
47.5°	326.8	327.3	333.9	354.0	320.8	203.0	152.7	135.6	132.0
50°	299.5	300.1	306.0	326.2	298.3	184.1	140.9	123.7	120.8
52.5°	274.1	274.1	277.6	297.8	275.3	166.9	127.9	113.1	111.3
55°	248.6	248.0	249.2	269.3	252.2	151.5	116.6	103.6	101.8
57.5°	224.4	222.6	223.2	241.5	229.1	136.1	106.0	94.7	92.9
60°	200.1	198.9	196.5	214.3	206.0	120.2	95.3	85.8	84.1
62.5°	175.8	174.6	172.9	187.1	182.9	106.6	85.2	77.5	76.4
65°	150.9	150.9	147.4	159.2	158.6	92.9	75.8	69.3	68.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	126.1	124.9	122.5	132.0	133.8	79.9	66.3	61.0	61.0
70°	101.8	101.8	98.3	104.8	108.9	67.5	57.4	53.9	53.3
72.5°	78.1	78.7	76.4	81.1	85.8	55.1	48.5	46.8	46.2
75°	55.1	57.4	56.8	60.4	63.3	43.2	40.3	39.1	39.1
77.5°	33.7	37.3	39.1	42.0	43.8	32.6	32.0	32.0	32.0
80°	21.9	22.5	23.7	26.6	27.8	22.5	23.1	24.3	24.9
82.5°	12.4	12.4	13.0	14.2	15.4	13.6	14.8	16.0	16.0
85°	5.9	5.3	5.3	5.3	5.3	5.9	5.9	6.5	5.9
87.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)