

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: P210669

Luminaire Tested: **PR8S30D010 - PR8M34WW - 3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210669  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29052)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR8S30D010 - PR8M34WW - 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: 2284.7 lumens  
Efficiency: N/A  
Efficacy: 80.2 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.18 / 1.17  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

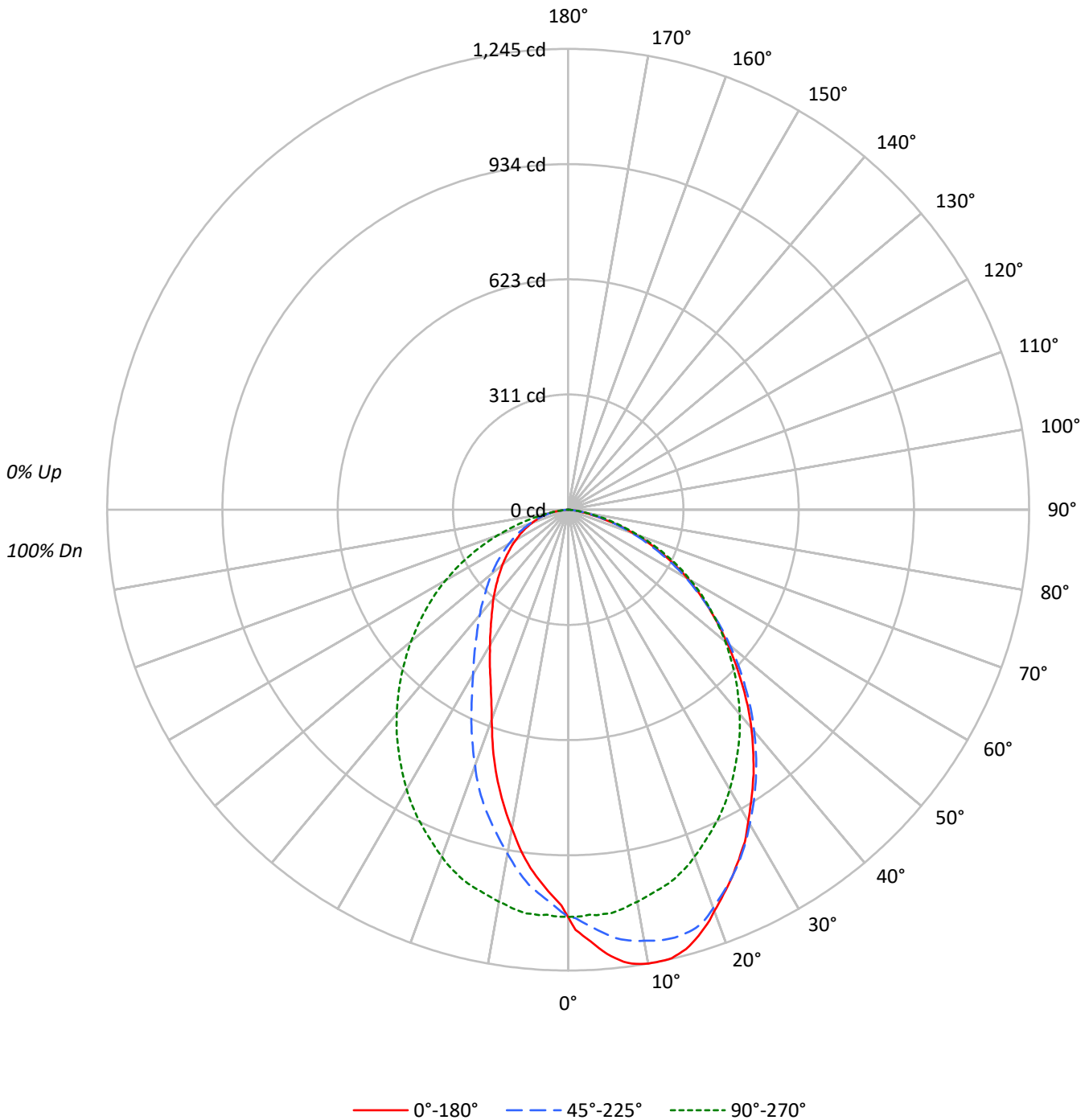
Input Watts (W): 28.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P210669

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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	64
4	86	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	51	49
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	39
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	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	33932	33932	33932
5°	37281	33941	30753
10°	38993	33685	27379
15°	39238	33380	23825
20°	37872	32733	19807
25°	36355	31921	16920
30°	34638	31074	15040
35°	32852	30029	13605
40°	30987	29003	12632
45°	28908	27836	11783
50°	26889	26567	11110
55°	24961	25203	10494
60°	23010	23565	10003
65°	20408	21430	9712
70°	17049	18212	9331
75°	11736	14202	9067
80°	6961	9039	8542
85°	3361	3573	4564



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CATALOG NUMBER: PR8S30D010 - PR8M34WW - 3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.6	4.5
10°-20°	284.9	12.5
20°-30°	393.1	17.2
30°-40°	428.8	18.8
40°-50°	402.6	17.6
50°-60°	329.2	14.4
60°-70°	223.2	9.8
70°-80°	102.5	4.5
80°-90°	16.9	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°	781.6	34.2
0°-40°	1210.4	53.0
0°-60°	1942.2	85.0
0°-90°	2284.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2284.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1100	1100	1100	1100	1100	
5°	1204	1150	1096	1032	994	116
15°	1229	1189	1046	848	746	344
25°	1068	1071	938	619	497	492
35°	873	884	798	434	361	545
45°	663	676	638	316	270	512
55°	464	466	469	225	195	416
65°	280	271	294	147	133	277
75°	98	104	119	77	76	111
85°	10	9	10	13	13	15
90°	0	0	0	0	0	



TEST NUMBER: P210669

CATALOG NUMBER: PR8S30D010 - PR8M34WW - 3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4
1°	1135.1	1114.9	1103.2	1113.3	1099.8	1087.0	1085.8	1080.8	1069.6
2°	1151.9	1130.6	1114.9	1118.8	1098.7	1078.6	1071.3	1059.6	1050.0
3°	1168.1	1146.3	1126.7	1124.4	1095.9	1069.6	1057.3	1041.6	1032.1
4°	1187.7	1162.5	1138.4	1131.2	1098.2	1062.9	1044.4	1023.7	1012.6
5°	1204.4	1179.3	1150.2	1136.2	1096.5	1055.6	1031.6	1005.8	993.5
6°	1218.4	1191.6	1161.4	1142.3	1096.5	1046.7	1018.2	986.8	973.4
7°	1230.7	1202.8	1169.8	1146.3	1092.0	1036.6	1001.4	967.2	951.0
8°	1238.6	1211.2	1174.8	1147.4	1087.5	1024.9	983.5	944.9	927.0
9°	1242.5	1217.3	1179.8	1146.3	1080.2	1012.0	963.3	920.8	900.7
10°	1245.3	1221.2	1182.1	1145.7	1075.8	999.1	944.3	896.2	874.4
11°	1245.3	1221.8	1186.5	1144.6	1069.1	985.7	924.7	871.6	849.8
12°	1245.3	1221.2	1189.3	1144.6	1062.9	973.4	905.7	847.5	824.6
13°	1243.6	1221.8	1191.0	1145.7	1056.8	960.5	886.1	822.9	798.9
14°	1236.3	1220.7	1191.6	1144.6	1051.7	950.5	867.1	798.9	772.6
15°	1229.1	1214.0	1189.3	1143.5	1045.6	937.0	848.1	773.7	746.3
16°	1217.3	1204.4	1186.0	1140.7	1038.3	923.6	827.9	748.5	718.3
17°	1203.9	1192.1	1181.5	1135.6	1028.8	907.9	806.7	722.2	690.3
18°	1188.2	1179.8	1173.1	1128.9	1019.8	891.2	784.3	694.8	661.2
19°	1173.7	1164.7	1160.2	1122.8	1009.8	874.9	761.4	667.4	631.6
20°	1154.1	1147.4	1145.7	1113.8	997.5	855.9	735.1	638.9	603.6
21°	1137.3	1132.8	1130.0	1104.3	986.3	839.7	712.1	610.3	577.9
22°	1120.0	1116.1	1116.1	1096.5	974.0	822.4	688.1	585.2	554.4
23°	1103.7	1098.7	1102.6	1085.3	962.2	806.1	665.2	561.1	534.3
24°	1087.5	1084.2	1087.0	1075.8	950.5	789.3	642.2	541.0	514.7
25°	1068.5	1065.7	1071.3	1064.0	938.2	771.4	618.7	521.9	497.3
26°	1051.7	1048.4	1055.1	1054.0	927.0	753.0	595.8	503.5	481.1
27°	1032.7	1030.5	1037.2	1040.0	913.5	736.8	573.4	486.7	466.0
28°	1016.5	1013.1	1019.8	1026.5	900.7	717.7	552.2	470.5	450.9
29°	994.1	993.0	1000.3	1012.0	886.7	701.0	532.6	455.4	435.8
30°	972.8	974.0	980.7	997.5	872.7	683.1	514.1	440.8	422.4
32.5°	921.4	924.7	933.1	954.4	835.8	637.2	472.7	406.1	390.5
35°	872.7	872.1	883.9	907.4	797.7	591.9	434.1	375.4	361.4
37.5°	820.1	822.9	833.5	861.5	760.8	547.7	401.1	348.0	336.2
40°	769.8	773.7	781.0	811.7	720.5	500.7	371.5	322.8	313.8
42.5°	717.2	722.2	730.0	760.8	679.1	457.6	343.5	300.4	291.5
45°	662.9	669.1	676.3	708.8	638.3	415.7	316.1	279.7	270.2
47.5°	611.5	614.8	623.8	656.8	595.8	380.4	292.6	258.5	250.6
50°	560.5	563.9	570.6	604.2	553.8	346.3	269.6	238.9	231.6
52.5°	511.9	514.1	518.0	553.8	510.8	314.4	247.8	219.3	213.1
55°	464.3	465.4	466.0	501.8	468.8	283.6	225.4	200.8	195.2
57.5°	418.4	418.4	413.4	449.2	426.3	255.1	204.7	182.9	180.1
60°	373.1	373.1	367.0	398.3	382.1	227.7	184.6	166.1	162.2
62.5°	326.7	327.3	318.3	345.7	339.6	201.4	165.6	149.4	148.2
65°	279.7	280.3	270.8	294.8	293.7	175.7	146.6	133.7	133.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	234.4	233.8	224.9	245.0	248.4	152.2	128.1	118.0	118.0
70°	189.1	189.1	181.3	195.8	202.0	127.0	109.6	102.9	103.5
72.5°	147.7	147.1	142.1	151.0	157.8	103.5	93.4	88.9	89.5
75°	98.5	104.1	103.5	111.9	119.2	82.2	77.2	75.0	76.1
77.5°	63.2	66.6	70.5	77.8	81.7	62.1	60.4	60.4	61.5
80°	39.2	40.8	44.2	48.1	50.9	43.1	44.8	46.4	48.1
82.5°	22.4	22.4	23.5	25.7	29.6	26.3	28.5	30.8	30.8
85°	9.5	9.5	9.0	9.0	10.1	11.2	12.9	13.4	12.9
87.5°	2.2	2.2	1.7	1.1	1.7	2.2	2.8	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)