

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: P210671

Luminaire Tested: **PR8S30D010 - PR8M34WW - 4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210671
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 - 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: 2401.2 lumens
Efficiency: N/A
Efficacy: 84.3 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

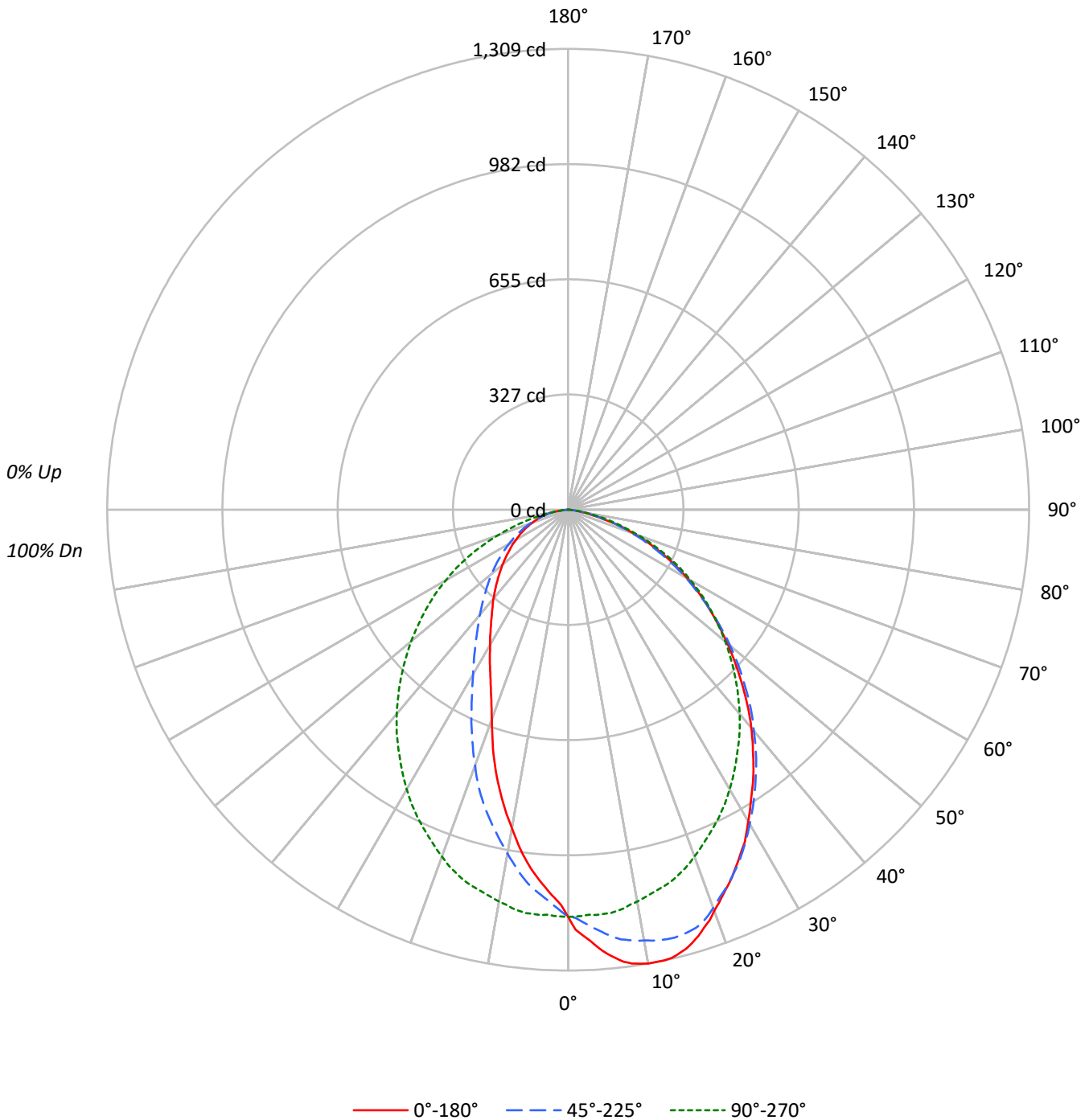
Input Watts (W): 28.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					86			
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74					74			
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64					64			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43					43			
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	35662	35662	35662
5°	39182	35672	32322
10°	40981	35401	28776
15°	41236	35081	25038
20°	39802	34400	20818
25°	38209	33548	17784
30°	36404	32658	15806
35°	34527	31561	14297
40°	32565	30484	13276
45°	30382	29253	12385
50°	28261	27925	11677
55°	26236	26488	11032
60°	24188	24768	10515
65°	21452	22524	10208
70°	17915	19132	9809
75°	12331	14917	9531
80°	7316	9500	8986
85°	3538	3750	4776



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.9	4.5
10°-20°	299.5	12.5
20°-30°	413.1	17.2
30°-40°	450.6	18.8
40°-50°	423.1	17.6
50°-60°	346.0	14.4
60°-70°	234.6	9.8
70°-80°	107.7	4.5
80°-90°	17.8	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°	821.4	34.2
0°-40°	1272.1	53.0
0°-60°	2041.2	85.0
0°-90°	2401.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2401.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1156	1156	1156	1156	1156	
5°	1266	1209	1152	1084	1044	122
15°	1292	1250	1099	891	784	361
25°	1123	1126	986	650	523	517
35°	917	929	838	456	380	573
45°	697	711	671	332	284	538
55°	488	490	493	237	205	437
65°	294	285	309	154	140	291
75°	104	109	125	81	80	117
85°	10	9	11	14	14	15
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°	1156.5	1156.5	1156.5	1156.5	1156.5	1156.5	1156.5	1156.5	1156.5
1°	1192.9	1171.8	1159.4	1170.0	1155.9	1142.4	1141.2	1135.9	1124.1
2°	1210.6	1188.2	1171.8	1175.9	1154.7	1133.6	1125.9	1113.6	1103.6
3°	1227.6	1204.7	1184.1	1181.8	1151.8	1124.1	1111.2	1094.7	1084.8
4°	1248.2	1221.7	1196.5	1188.8	1154.1	1117.1	1097.7	1075.9	1064.2
5°	1265.8	1239.4	1208.8	1194.1	1152.4	1109.4	1084.2	1057.1	1044.2
6°	1280.5	1252.3	1220.6	1200.6	1152.4	1100.0	1070.1	1037.1	1023.0
7°	1293.5	1264.1	1229.4	1204.7	1147.7	1089.5	1052.4	1016.6	999.5
8°	1301.7	1272.9	1234.7	1205.9	1143.0	1077.1	1033.6	993.0	974.2
9°	1305.8	1279.4	1240.0	1204.7	1135.3	1063.6	1012.4	967.8	946.6
10°	1308.8	1283.5	1242.3	1204.1	1130.6	1050.1	992.4	941.9	919.0
11°	1308.8	1284.1	1247.0	1202.9	1123.6	1036.0	971.9	916.0	893.1
12°	1308.8	1283.5	1250.0	1202.9	1117.1	1023.0	951.9	890.7	866.6
13°	1307.0	1284.1	1251.7	1204.1	1110.6	1009.5	931.3	864.9	839.6
14°	1299.4	1282.9	1252.3	1202.9	1105.3	998.9	911.3	839.6	811.9
15°	1291.7	1275.8	1250.0	1201.8	1098.9	984.8	891.3	813.1	784.3
16°	1279.4	1265.8	1246.4	1198.8	1091.2	970.7	870.2	786.7	754.9
17°	1265.3	1252.9	1241.7	1193.5	1081.2	954.2	847.8	759.0	725.5
18°	1248.8	1240.0	1232.9	1186.5	1071.8	936.6	824.3	730.2	694.9
19°	1233.5	1224.1	1219.4	1180.0	1061.2	919.5	800.2	701.4	663.8
20°	1212.9	1205.9	1204.1	1170.6	1048.3	899.6	772.6	671.4	634.4
21°	1195.3	1190.6	1187.6	1160.6	1036.5	882.5	748.5	641.4	607.3
22°	1177.1	1172.9	1172.9	1152.4	1023.6	864.3	723.2	615.0	582.7
23°	1160.0	1154.7	1158.8	1140.6	1011.3	847.2	699.1	589.7	561.5
24°	1143.0	1139.4	1142.4	1130.6	998.9	829.6	675.0	568.5	540.9
25°	1123.0	1120.0	1125.9	1118.3	986.0	810.8	650.3	548.6	522.7
26°	1105.3	1101.8	1108.9	1107.7	974.2	791.4	626.2	529.1	505.6
27°	1085.3	1083.0	1090.0	1093.0	960.1	774.3	602.6	511.5	489.8
28°	1068.3	1064.8	1071.8	1078.9	946.6	754.3	580.3	494.5	473.9
29°	1044.8	1043.6	1051.2	1063.6	931.9	736.7	559.7	478.6	458.0
30°	1022.4	1023.6	1030.7	1048.3	917.2	717.9	540.3	463.3	443.9
32.5°	968.3	971.9	980.7	1003.0	878.4	669.7	496.8	426.8	410.4
35°	917.2	916.6	928.9	953.6	838.4	622.0	456.2	394.5	379.8
37.5°	861.9	864.9	876.0	905.4	799.6	575.6	421.6	365.7	353.4
40°	809.0	813.1	820.8	853.1	757.3	526.2	390.4	339.2	329.8
42.5°	753.7	759.0	767.3	799.6	713.8	480.9	361.0	315.7	306.3
45°	696.7	703.2	710.8	744.9	670.8	436.8	332.2	294.0	284.0
47.5°	642.6	646.1	655.6	690.2	626.2	399.8	307.5	271.6	263.4
50°	589.1	592.6	599.7	635.0	582.1	363.9	283.4	251.1	243.4
52.5°	538.0	540.3	544.4	582.1	536.8	330.4	260.5	230.5	224.0
55°	488.0	489.2	489.8	527.4	492.7	298.1	236.9	211.1	205.2
57.5°	439.8	439.8	434.5	472.1	448.0	268.1	215.2	192.3	189.3
60°	392.2	392.2	385.7	418.6	401.6	239.3	194.0	174.6	170.5
62.5°	343.4	343.9	334.5	363.3	356.9	211.7	174.0	157.0	155.8
65°	294.0	294.6	284.6	309.8	308.7	184.6	154.0	140.5	139.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	246.3	245.8	236.4	257.5	261.0	159.9	134.6	124.1	124.1
70°	198.7	198.7	190.5	205.8	212.2	133.5	115.2	108.2	108.8
72.5°	155.2	154.6	149.3	158.7	165.8	108.8	98.2	93.5	94.1
75°	103.5	109.4	108.8	117.6	125.2	86.4	81.1	78.8	80.0
77.5°	66.4	70.0	74.1	81.7	85.8	65.3	63.5	63.5	64.7
80°	41.2	42.9	46.4	50.6	53.5	45.3	47.0	48.8	50.6
82.5°	23.5	23.5	24.7	27.0	31.2	27.6	30.0	32.3	32.3
85°	10.0	10.0	9.4	9.4	10.6	11.8	13.5	14.1	13.5
87.5°	2.4	2.4	1.8	1.2	1.8	2.4	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)