

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: P210249

Luminaire Tested: **PR830D010 - PR8M34WW - 3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210249
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: PR830D010 - 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: 2701.8 lumens
Efficiency: N/A
Efficacy: 94.8 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

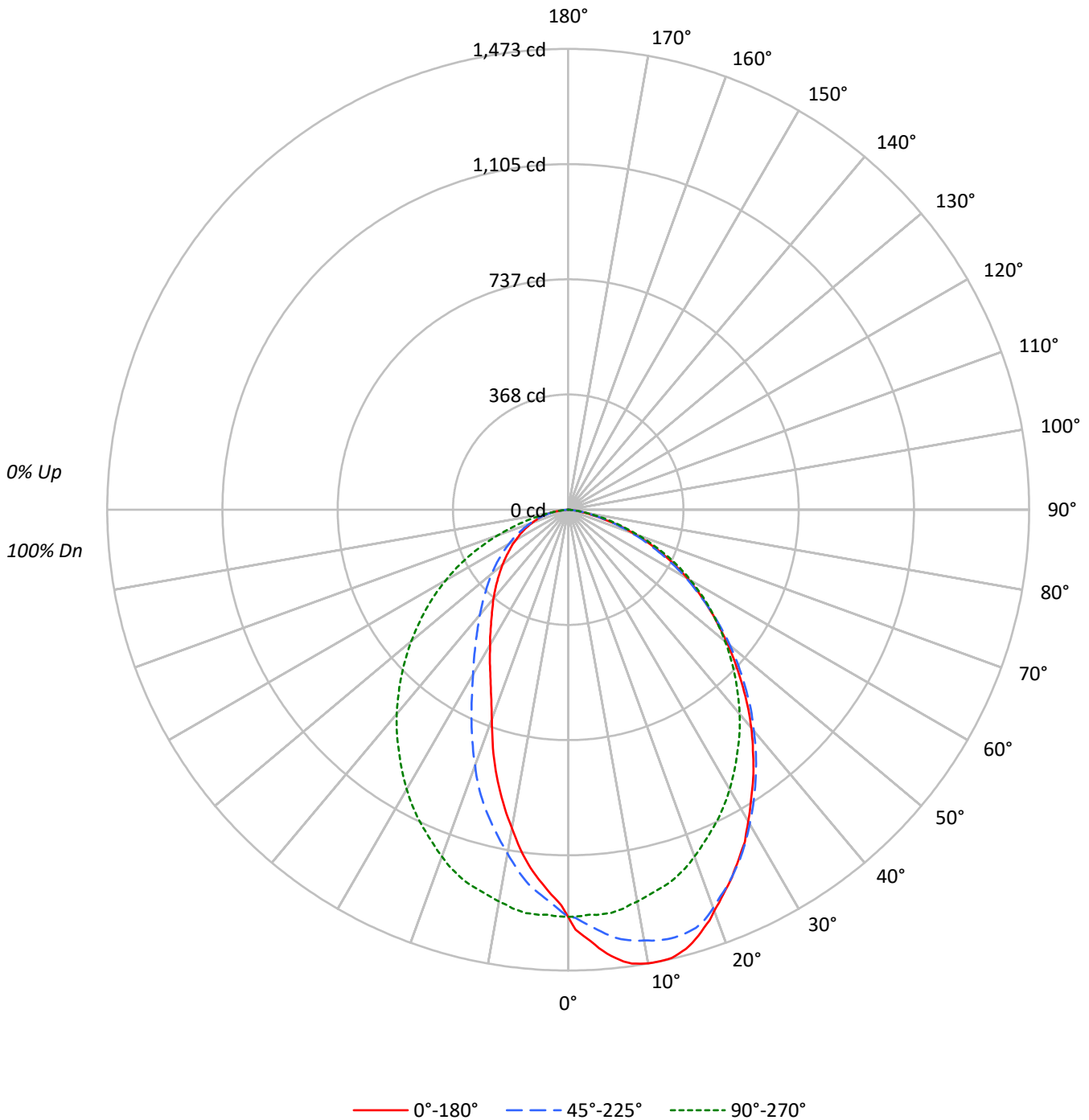
Input Watts (W): 28.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				
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°	40127	40127	40127
5°	44088	40138	36368
10°	46110	39835	32377
15°	46402	39474	28173
20°	44786	38709	23424
25°	42993	37746	20010
30°	40966	36746	17786
35°	38849	35514	16089
40°	36643	34300	14938
45°	34190	32916	13933
50°	31801	31417	13140
55°	29520	29805	12414
60°	27216	27864	11835
65°	24137	25341	11492
70°	20160	21530	11036
75°	13868	16787	10723
80°	8222	10690	10104
85°	3963	4210	5378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.5	4.5
10°-20°	337.0	12.5
20°-30°	464.8	17.2
30°-40°	507.1	18.8
40°-50°	476.1	17.6
50°-60°	389.3	14.4
60°-70°	263.9	9.8
70°-80°	121.2	4.5
80°-90°	20.0	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°	924.3	34.2
0°-40°	1431.3	53.0
0°-60°	2296.8	85.0
0°-90°	2701.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2701.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1301	1301	1301	1301	1301	
5°	1424	1360	1297	1220	1175	138
15°	1454	1406	1236	1003	882	407
25°	1264	1267	1109	732	588	581
35°	1032	1045	943	513	427	644
45°	784	800	755	374	320	606
55°	549	551	554	267	231	492
65°	331	320	347	173	158	328
75°	116	122	141	91	90	132
85°	11	11	12	15	15	17
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°	1301.3	1301.3	1301.3	1301.3	1301.3	1301.3	1301.3	1301.3	1301.3
1°	1342.3	1318.5	1304.6	1316.5	1300.6	1285.4	1284.1	1278.1	1264.9
2°	1362.2	1337.0	1318.5	1323.1	1299.3	1275.5	1266.9	1253.0	1241.8
3°	1381.3	1355.5	1332.4	1329.7	1296.0	1264.9	1250.4	1231.8	1220.6
4°	1404.5	1374.7	1346.3	1337.7	1298.7	1257.0	1235.1	1210.7	1197.4
5°	1424.3	1394.6	1360.2	1343.6	1296.7	1248.4	1219.9	1189.5	1174.9
6°	1440.9	1409.1	1373.4	1350.9	1296.7	1237.8	1204.0	1167.0	1151.1
7°	1455.4	1422.4	1383.3	1355.5	1291.4	1225.9	1184.2	1143.8	1124.7
8°	1464.7	1432.3	1389.3	1356.9	1286.1	1212.0	1163.0	1117.4	1096.2
9°	1469.3	1439.6	1395.2	1355.5	1277.5	1196.8	1139.2	1088.9	1065.1
10°	1472.6	1444.2	1397.9	1354.9	1272.2	1181.6	1116.7	1059.8	1034.0
11°	1472.6	1444.9	1403.2	1353.6	1264.3	1165.7	1093.6	1030.7	1004.9
12°	1472.6	1444.2	1406.5	1353.6	1257.0	1151.1	1071.1	1002.3	975.1
13°	1470.7	1444.9	1408.5	1354.9	1249.7	1135.9	1047.9	973.2	944.7
14°	1462.1	1443.5	1409.1	1353.6	1243.7	1124.0	1025.4	944.7	913.6
15°	1453.5	1435.6	1406.5	1352.2	1236.5	1108.1	1002.9	914.9	882.5
16°	1439.6	1424.3	1402.5	1348.9	1227.9	1092.2	979.1	885.2	849.4
17°	1423.7	1409.8	1397.2	1343.0	1216.6	1073.7	954.0	854.1	816.4
18°	1405.2	1395.2	1387.3	1335.0	1206.0	1053.9	927.5	821.7	782.0
19°	1388.0	1377.4	1372.1	1327.8	1194.1	1034.7	900.4	789.2	746.9
20°	1364.8	1356.9	1354.9	1317.2	1179.6	1012.2	869.3	755.5	713.8
21°	1345.0	1339.7	1336.4	1305.9	1166.3	993.0	842.2	721.8	683.4
22°	1324.5	1319.8	1319.8	1296.7	1151.8	972.5	813.7	692.0	655.6
23°	1305.3	1299.3	1303.9	1283.4	1137.9	953.3	786.6	663.5	631.8
24°	1286.1	1282.1	1285.4	1272.2	1124.0	933.5	759.5	639.7	608.6
25°	1263.6	1260.3	1266.9	1258.3	1109.4	912.3	731.7	617.2	588.1
26°	1243.7	1239.8	1247.7	1246.4	1096.2	890.5	704.6	595.4	568.9
27°	1221.2	1218.6	1226.5	1229.8	1080.3	871.3	678.1	575.6	551.1
28°	1202.1	1198.1	1206.0	1214.0	1065.1	848.8	653.0	556.4	533.2
29°	1175.6	1174.3	1182.9	1196.8	1048.6	828.9	629.8	538.5	515.4
30°	1150.5	1151.8	1159.7	1179.6	1032.0	807.8	608.0	521.3	499.5
32.5°	1089.6	1093.6	1103.5	1128.6	988.4	753.5	559.0	480.3	461.8
35°	1032.0	1031.4	1045.3	1073.1	943.4	699.9	513.4	443.9	427.4
37.5°	969.9	973.2	985.7	1018.8	899.7	647.7	474.3	411.5	397.6
40°	910.3	914.9	923.5	959.9	852.1	592.1	439.3	381.7	371.1
42.5°	848.1	854.1	863.3	899.7	803.1	541.2	406.2	355.3	344.7
45°	784.0	791.2	799.8	838.2	754.8	491.5	373.8	330.8	319.5
47.5°	723.1	727.1	737.6	776.7	704.6	449.9	346.0	305.6	296.4
50°	662.9	666.9	674.8	714.5	654.9	409.5	318.9	282.5	273.9
52.5°	605.3	608.0	612.6	654.9	604.0	371.8	293.1	259.3	252.1
55°	549.1	550.4	551.1	593.4	554.4	335.4	266.6	237.5	230.9
57.5°	494.9	494.9	488.9	531.2	504.1	301.7	242.1	216.3	213.0
60°	441.3	441.3	434.0	471.0	451.8	269.3	218.3	196.5	191.9
62.5°	386.4	387.0	376.4	408.8	401.6	238.2	195.8	176.6	175.3
65°	330.8	331.4	320.2	348.6	347.3	207.7	173.3	158.1	157.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	277.2	276.5	265.9	289.8	293.7	179.9	151.5	139.6	139.6
70°	223.6	223.6	214.3	231.5	238.8	150.2	129.7	121.7	122.4
72.5°	174.7	174.0	168.0	178.6	186.6	122.4	110.5	105.2	105.9
75°	116.4	123.1	122.4	132.3	140.9	97.3	91.3	88.6	90.0
77.5°	74.8	78.7	83.4	92.0	96.6	73.4	71.4	71.4	72.8
80°	46.3	48.3	52.3	56.9	60.2	50.9	52.9	54.9	56.9
82.5°	26.5	26.5	27.8	30.4	35.1	31.1	33.7	36.4	36.4
85°	11.2	11.2	10.6	10.6	11.9	13.2	15.2	15.9	15.2
87.5°	2.6	2.6	2.0	1.3	2.0	2.6	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)