

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: P210674

Luminaire Tested: **PR8S40D010 - PR8M34WW - 3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210674
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: PR8S40D010 - 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: 3126.7 lumens
Efficiency: N/A
Efficacy: 71.9 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

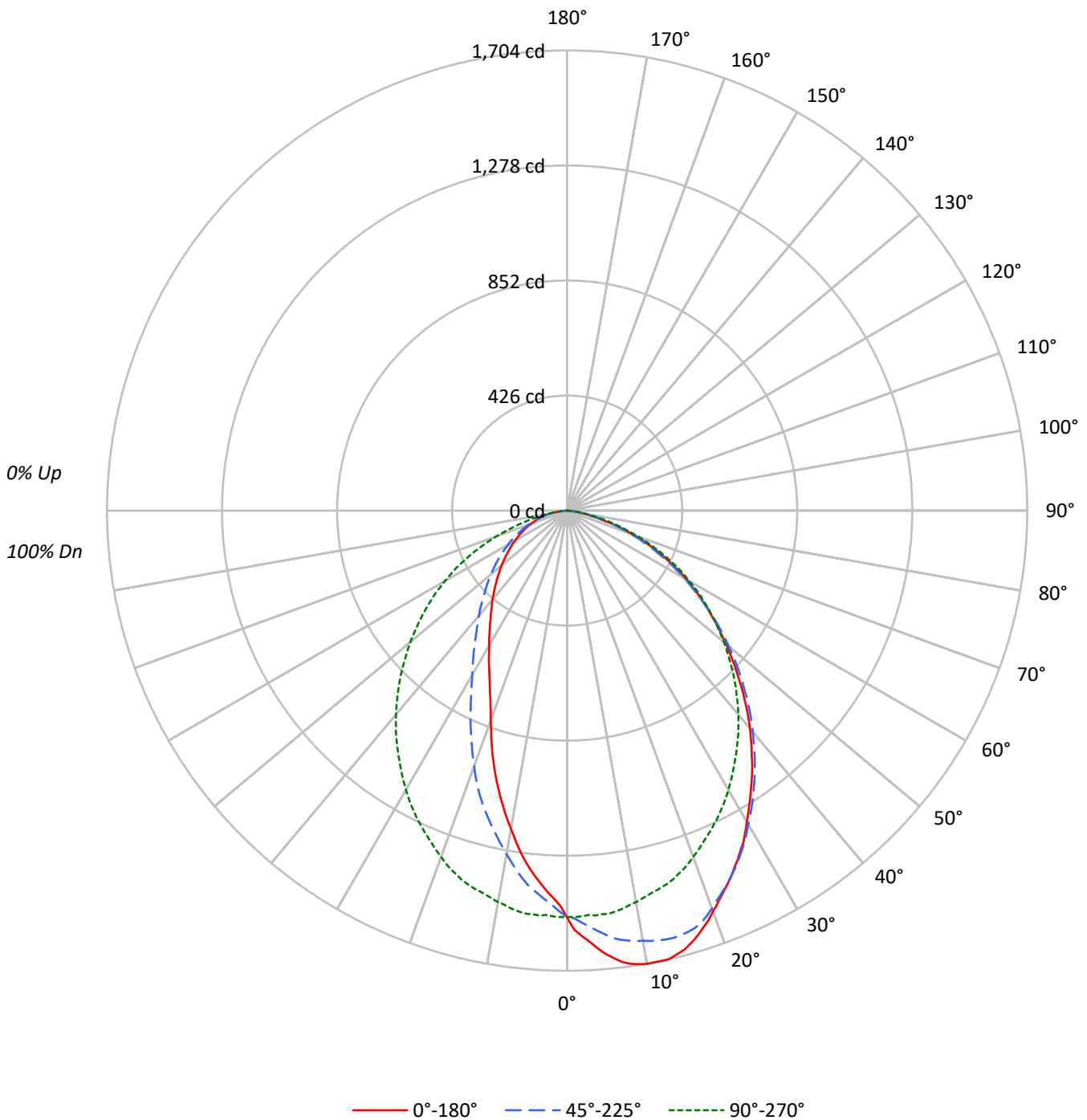
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	46436	46436	46436
5°	51022	46447	42088
10°	53362	46098	37468
15°	53696	45680	32604
20°	51829	44793	27109
25°	49753	43684	23157
30°	47403	42525	20581
35°	44958	41096	18619
40°	42404	39694	17289
45°	39562	38093	16127
50°	36800	36359	15207
55°	34160	34493	14365
60°	31490	32249	13691
65°	27931	29325	13294
70°	23333	24920	12767
75°	16048	19432	12403
80°	9518	12377	11685
85°	4599	4883	6227



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.8	4.5
10°-20°	389.9	12.5
20°-30°	537.9	17.2
30°-40°	586.8	18.8
40°-50°	551.0	17.6
50°-60°	450.5	14.4
60°-70°	305.4	9.8
70°-80°	140.2	4.5
80°-90°	23.1	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°	1069.6	34.2
0°-40°	1656.4	53.0
0°-60°	2657.9	85.0
0°-90°	3126.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3126.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1506	1506	1506	1506	1506	
5°	1648	1574	1500	1412	1360	159
15°	1682	1628	1431	1161	1021	471
25°	1462	1466	1284	847	681	673
35°	1194	1210	1092	594	495	746
45°	907	926	874	433	370	701
55°	635	638	642	308	267	569
65°	383	370	402	201	182	379
75°	135	142	163	106	104	152
85°	13	12	14	18	18	20
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°	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9
1°	1553.4	1525.8	1509.7	1523.5	1505.1	1487.5	1486.0	1479.1	1463.8
2°	1576.3	1547.2	1525.8	1531.2	1503.6	1476.0	1466.1	1450.0	1437.0
3°	1598.5	1568.7	1541.9	1538.8	1499.8	1463.8	1447.0	1425.5	1412.5
4°	1625.3	1590.9	1558.0	1548.0	1502.8	1454.6	1429.3	1401.0	1385.7
5°	1648.3	1613.8	1574.0	1554.9	1500.5	1444.7	1411.7	1376.5	1359.7
6°	1667.4	1630.7	1589.3	1563.3	1500.5	1432.4	1393.4	1350.5	1332.1
7°	1684.3	1646.0	1600.8	1568.7	1494.4	1418.6	1370.4	1323.7	1301.5
8°	1695.0	1657.5	1607.7	1570.2	1488.3	1402.5	1345.9	1293.1	1268.6
9°	1700.4	1665.9	1614.6	1568.7	1478.3	1384.9	1318.3	1260.1	1232.6
10°	1704.2	1671.3	1617.7	1567.9	1472.2	1367.3	1292.3	1226.5	1196.6
11°	1704.2	1672.0	1623.8	1566.4	1463.0	1349.0	1265.5	1192.8	1162.9
12°	1704.2	1671.3	1627.6	1566.4	1454.6	1332.1	1239.5	1159.9	1128.5
13°	1701.9	1672.0	1629.9	1567.9	1446.2	1314.5	1212.7	1126.2	1093.3
14°	1691.9	1670.5	1630.7	1566.4	1439.3	1300.7	1186.7	1093.3	1057.3
15°	1682.0	1661.3	1627.6	1564.8	1430.9	1282.3	1160.6	1058.8	1021.3
16°	1665.9	1648.3	1623.0	1561.0	1420.9	1264.0	1133.1	1024.3	983.0
17°	1647.5	1631.5	1616.9	1554.1	1407.9	1242.5	1104.0	988.4	944.7
18°	1626.1	1614.6	1605.4	1544.9	1395.7	1219.6	1073.3	950.9	904.9
19°	1606.2	1593.9	1587.8	1536.5	1381.9	1197.4	1042.0	913.3	864.3
20°	1579.4	1570.2	1567.9	1524.3	1365.0	1171.3	1006.0	874.3	826.1
21°	1556.4	1550.3	1546.5	1511.3	1349.7	1149.1	974.6	835.2	790.8
22°	1532.7	1527.3	1527.3	1500.5	1332.9	1125.4	941.7	800.8	758.7
23°	1510.5	1503.6	1509.0	1485.2	1316.8	1103.2	910.3	767.9	731.1
24°	1488.3	1483.7	1487.5	1472.2	1300.7	1080.2	878.9	740.3	704.3
25°	1462.3	1458.4	1466.1	1456.1	1283.9	1055.7	846.7	714.3	680.6
26°	1439.3	1434.7	1443.9	1442.4	1268.6	1030.5	815.3	689.0	658.4
27°	1413.3	1410.2	1419.4	1423.2	1250.2	1008.3	784.7	666.1	637.7
28°	1391.1	1386.5	1395.7	1404.8	1232.6	982.2	755.6	643.9	617.1
29°	1360.4	1358.9	1368.9	1384.9	1213.4	959.3	728.8	623.2	596.4
30°	1331.3	1332.9	1342.1	1365.0	1194.3	934.8	703.6	603.3	578.0
32.5°	1260.9	1265.5	1277.0	1306.1	1143.8	872.0	646.9	555.8	534.4
35°	1194.3	1193.5	1209.6	1241.8	1091.7	810.0	594.1	513.7	494.6
37.5°	1122.3	1126.2	1140.7	1179.0	1041.2	749.5	548.9	476.2	460.1
40°	1053.4	1058.8	1068.8	1110.9	986.1	685.2	508.3	441.7	429.5
42.5°	981.5	988.4	999.1	1041.2	929.4	626.2	470.1	411.1	398.9
45°	907.2	915.6	925.6	970.0	873.5	568.8	432.6	382.8	369.8
47.5°	836.8	841.4	853.6	898.8	815.3	520.6	400.4	353.7	343.0
50°	767.1	771.7	780.9	826.8	757.9	473.9	369.0	326.9	317.0
52.5°	700.5	703.6	708.9	757.9	699.0	430.3	339.2	300.1	291.7
55°	635.4	637.0	637.7	686.7	641.6	388.2	308.5	274.8	267.2
57.5°	572.7	572.7	565.8	614.8	583.4	349.1	280.2	250.3	246.5
60°	510.6	510.6	502.2	545.1	522.9	311.6	252.6	227.4	222.0
62.5°	447.1	447.9	435.6	473.1	464.7	275.6	226.6	204.4	202.9
65°	382.8	383.6	370.5	403.5	401.9	240.4	200.6	183.0	182.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	320.8	320.0	307.8	335.3	339.9	208.2	175.3	161.5	161.5
70°	258.8	258.8	248.0	268.0	276.4	173.8	150.1	140.9	141.6
72.5°	202.1	201.3	194.5	206.7	215.9	141.6	127.9	121.7	122.5
75°	134.7	142.4	141.6	153.1	163.1	112.5	105.7	102.6	104.1
77.5°	86.5	91.1	96.5	106.4	111.8	85.0	82.7	82.7	84.2
80°	53.6	55.9	60.5	65.8	69.7	58.9	61.2	63.5	65.8
82.5°	30.6	30.6	32.2	35.2	40.6	36.0	39.0	42.1	42.1
85°	13.0	13.0	12.2	12.2	13.8	15.3	17.6	18.4	17.6
87.5°	3.1	3.1	2.3	1.5	2.3	3.1	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)