

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: P210676

Luminaire Tested: **PR8S40D010 - PR8M34WW - 4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210676
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 - 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: 3281.2 lumens
Efficiency: N/A
Efficacy: 75.4 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

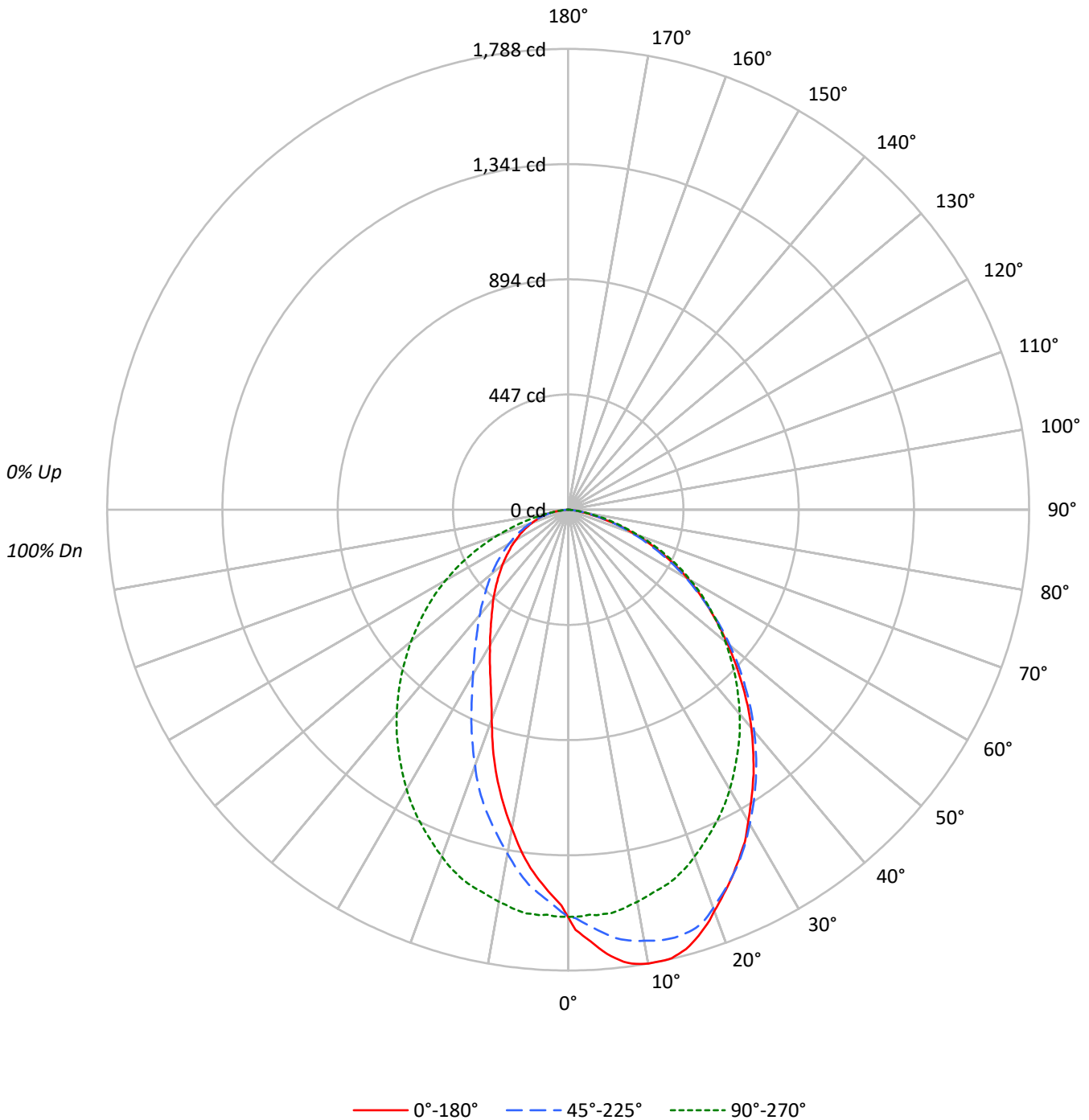
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P210676

CATALOG NUMBER: PR8S40D010 - PR8M34WW - 4000K

Luminous Intensity Polar Plot





TEST NUMBER: P210676

CATALOG NUMBER: PR8S40D010 - PR8M34WW - 4000K

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°	48731	48731	48731
5°	53541	48743	44168
10°	55998	48377	39318
15°	56349	47937	34213
20°	54388	47008	28448
25°	52210	45841	24300
30°	49746	44626	21599
35°	47179	43129	19537
40°	44501	41655	18142
45°	41516	39976	16920
50°	38618	38158	15956
55°	35848	36198	15075
60°	33050	33840	14370
65°	29310	30777	13951
70°	24487	26146	13398
75°	16847	20385	13022
80°	9980	12981	12271
85°	4847	5130	6545



TEST NUMBER: P210676

CATALOG NUMBER: PR8S40D010 - PR8M34WW - 4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.8	4.5
10°-20°	409.2	12.5
20°-30°	564.5	17.2
30°-40°	615.8	18.8
40°-50°	578.2	17.6
50°-60°	472.8	14.4
60°-70°	320.5	9.8
70°-80°	147.2	4.5
80°-90°	24.3	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°	1122.5	34.2
0°-40°	1738.2	53.0
0°-60°	2789.2	85.0
0°-90°	3281.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3281.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1580	1580	1580	1580	1580	
5°	1730	1652	1575	1482	1427	167
15°	1765	1708	1502	1218	1072	494
25°	1534	1538	1347	889	714	706
35°	1253	1269	1146	623	519	783
45°	952	971	917	454	388	736
55°	667	669	673	324	280	597
65°	402	389	422	210	191	398
75°	141	149	171	111	109	160
85°	14	13	14	18	18	21
90°	0	0	0	0	0	



TEST NUMBER: P210676

CATALOG NUMBER: PR8S40D010 - PR8M34WW - 4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3
1°	1630.1	1601.2	1584.3	1598.8	1579.5	1561.0	1559.4	1552.2	1536.1
2°	1654.2	1623.7	1601.2	1606.8	1577.9	1549.0	1538.5	1521.7	1508.0
3°	1677.5	1646.2	1618.1	1614.9	1573.9	1536.1	1518.4	1495.9	1482.3
4°	1705.6	1669.5	1634.9	1624.5	1577.1	1526.5	1500.0	1470.2	1454.2
5°	1729.7	1693.6	1651.8	1631.7	1574.7	1516.0	1481.5	1444.5	1426.9
6°	1749.8	1711.3	1667.9	1640.6	1574.7	1503.2	1462.2	1417.2	1397.9
7°	1767.5	1727.3	1679.9	1646.2	1568.3	1488.7	1438.1	1389.1	1365.8
8°	1778.7	1739.4	1687.2	1647.8	1561.8	1471.8	1412.4	1357.0	1331.2
9°	1784.4	1748.2	1694.4	1646.2	1551.4	1453.4	1383.5	1322.4	1293.5
10°	1788.4	1753.8	1697.6	1645.4	1545.0	1434.9	1356.2	1287.1	1255.7
11°	1788.4	1754.6	1704.0	1643.8	1535.3	1415.6	1328.0	1251.7	1220.4
12°	1788.4	1753.8	1708.0	1643.8	1526.5	1397.9	1300.7	1217.2	1184.2
13°	1786.0	1754.6	1710.5	1645.4	1517.6	1379.5	1272.6	1181.8	1147.3
14°	1775.5	1753.0	1711.3	1643.8	1510.4	1365.0	1245.3	1147.3	1109.5
15°	1765.1	1743.4	1708.0	1642.2	1501.6	1345.7	1218.0	1111.1	1071.7
16°	1748.2	1729.7	1703.2	1638.2	1491.1	1326.4	1189.0	1075.0	1031.6
17°	1728.9	1712.1	1696.8	1630.9	1477.5	1303.9	1158.5	1037.2	991.4
18°	1706.4	1694.4	1684.7	1621.3	1464.6	1279.8	1126.4	997.8	949.6
19°	1685.6	1672.7	1666.3	1612.4	1450.2	1256.5	1093.4	958.5	907.0
20°	1657.4	1647.8	1645.4	1599.6	1432.5	1229.2	1055.7	917.5	866.9
21°	1633.3	1626.9	1622.9	1585.9	1416.4	1205.9	1022.7	876.5	829.9
22°	1608.4	1602.8	1602.8	1574.7	1398.7	1181.0	988.2	840.4	796.2
23°	1585.1	1577.9	1583.5	1558.6	1381.9	1157.7	955.3	805.8	767.3
24°	1561.8	1557.0	1561.0	1545.0	1365.0	1133.6	922.3	776.9	739.1
25°	1534.5	1530.5	1538.5	1528.1	1347.3	1107.9	888.6	749.6	714.2
26°	1510.4	1505.6	1515.2	1513.6	1331.2	1081.4	855.6	723.1	690.9
27°	1483.1	1479.9	1489.5	1493.5	1312.0	1058.1	823.5	699.0	669.2
28°	1459.8	1455.0	1464.6	1474.3	1293.5	1030.8	793.0	675.7	647.5
29°	1427.7	1426.1	1436.5	1453.4	1273.4	1006.7	764.8	654.0	625.9
30°	1397.1	1398.7	1408.4	1432.5	1253.3	981.0	738.3	633.1	606.6
32.5°	1323.2	1328.0	1340.1	1370.6	1200.3	915.1	678.9	583.3	560.8
35°	1253.3	1252.5	1269.4	1303.1	1145.7	850.0	623.4	539.1	519.0
37.5°	1177.8	1181.8	1197.1	1237.3	1092.6	786.5	576.0	499.7	482.8
40°	1105.5	1111.1	1121.6	1165.7	1034.8	719.1	533.5	463.6	450.7
42.5°	1030.0	1037.2	1048.4	1092.6	975.3	657.2	493.3	431.4	418.6
45°	952.0	960.9	971.3	1017.9	916.7	596.9	453.9	401.7	388.0
47.5°	878.1	882.9	895.8	943.2	855.6	546.3	420.2	371.2	359.9
50°	805.0	809.8	819.5	867.7	795.4	497.3	387.2	343.1	332.6
52.5°	735.1	738.3	744.0	795.4	733.5	451.5	355.9	314.9	306.1
55°	666.8	668.4	669.2	720.7	673.3	407.3	323.8	288.4	280.4
57.5°	601.0	601.0	593.7	645.1	612.2	366.4	294.0	262.7	258.7
60°	535.9	535.9	527.0	572.0	548.7	327.0	265.1	238.6	233.0
62.5°	469.2	470.0	457.1	496.5	487.7	289.2	237.8	214.5	212.9
65°	401.7	402.5	388.9	423.4	421.8	252.3	210.5	192.0	191.2



TEST NUMBER: P210676

CATALOG NUMBER: PR8S40D010 - PR8M34WW - 4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	336.6	335.8	323.0	351.9	356.7	218.5	184.0	169.5	169.5
70°	271.6	271.6	260.3	281.2	290.0	182.4	157.5	147.8	148.6
72.5°	212.1	211.3	204.1	216.9	226.6	148.6	134.2	127.7	128.5
75°	141.4	149.4	148.6	160.7	171.1	118.1	110.9	107.7	109.3
77.5°	90.8	95.6	101.2	111.7	117.3	89.2	86.8	86.8	88.4
80°	56.2	58.6	63.5	69.1	73.1	61.9	64.3	66.7	69.1
82.5°	32.1	32.1	33.7	37.0	42.6	37.8	41.0	44.2	44.2
85°	13.7	13.7	12.9	12.9	14.5	16.1	18.5	19.3	18.5
87.5°	3.2	3.2	2.4	1.6	2.4	3.2	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)