

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: P210675

Luminaire Tested: **PR8S40D010 - PR8M34WW - 3500K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210675
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 - 3500K
Description: HALO 8" ROUND DOWNLIGHT, WALLWASH, MATTE WHITE FINISH
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3527.9 lumens
Efficiency: N/A
Efficacy: 81.1 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

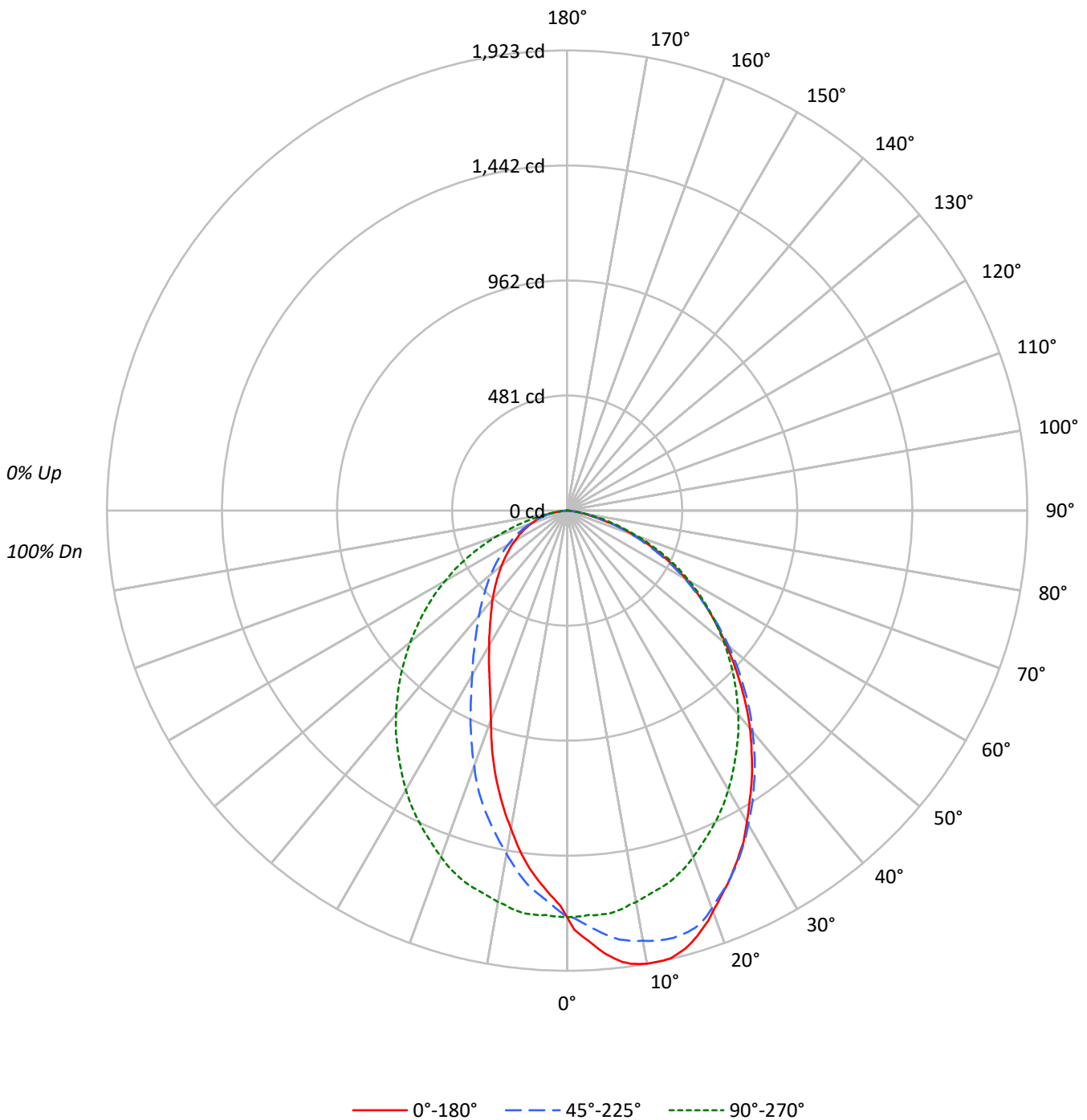
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100	100	100	100		
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86	86	86	86	86	86	86		
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74	74	74	74	74	74	74		
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64	64	64	64	64	64	64		
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55	55	55	55	55	55	55		
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49	49	49	49	49	49	49		
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43	43	43	43	43	43	43		
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	39	39	39	39	39	39	39		
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35	35	35	35	35	35	35		
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32	32	32	32	32	32	32		
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29	29	29	29	29	29	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	52394	52394	52394
5°	57568	52408	47487
10°	60210	52012	42277
15°	60586	51541	36786
20°	58480	50542	30587
25°	56136	49287	26127
30°	53488	47984	23223
35°	50729	46370	21005
40°	47846	44787	19507
45°	44638	42981	18194
50°	41520	41026	17155
55°	38547	38918	16209
60°	35536	36387	15449
65°	31514	33090	15002
70°	26327	28112	14407
75°	18110	21922	13999
80°	10744	13958	13194
85°	5201	5484	7041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.0	4.5
10°-20°	440.0	12.5
20°-30°	606.9	17.2
30°-40°	662.1	18.8
40°-50°	621.7	17.6
50°-60°	508.3	14.4
60°-70°	344.6	9.8
70°-80°	158.2	4.5
80°-90°	26.1	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°	1206.9	34.2
0°-40°	1868.9	53.0
0°-60°	2999.0	85.0
0°-90°	3527.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3527.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1699	1699	1699	1699	1699	
5°	1860	1776	1693	1593	1534	180
15°	1898	1836	1614	1310	1152	531
25°	1650	1654	1449	955	768	759
35°	1348	1365	1232	670	558	841
45°	1024	1044	986	488	417	791
55°	717	720	724	348	302	642
65°	432	418	454	226	206	428
75°	152	160	184	119	118	172
85°	15	14	16	20	20	23
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°	1699.1	1699.1	1699.1	1699.1	1699.1	1699.1	1699.1	1699.1	1699.1
1°	1752.7	1721.6	1703.5	1719.0	1698.3	1678.4	1676.7	1668.9	1651.6
2°	1778.6	1745.8	1721.6	1727.6	1696.5	1665.4	1654.2	1636.1	1621.4
3°	1803.7	1770.0	1739.7	1736.3	1692.2	1651.6	1632.6	1608.4	1593.7
4°	1833.9	1795.0	1757.9	1746.6	1695.7	1641.3	1612.8	1580.8	1563.5
5°	1859.8	1820.9	1776.0	1754.4	1693.1	1630.0	1592.9	1553.1	1534.1
6°	1881.4	1839.9	1793.3	1763.9	1693.1	1616.2	1572.2	1523.8	1503.0
7°	1900.4	1857.2	1806.2	1770.0	1686.2	1600.7	1546.2	1493.5	1468.5
8°	1912.5	1870.2	1814.0	1771.7	1679.3	1582.5	1518.6	1459.0	1431.4
9°	1918.5	1879.7	1821.8	1770.0	1668.0	1562.7	1487.5	1421.8	1390.8
10°	1922.9	1885.7	1825.3	1769.1	1661.1	1542.8	1458.1	1383.8	1350.2
11°	1922.9	1886.6	1832.2	1767.4	1650.8	1522.1	1427.9	1345.8	1312.1
12°	1922.9	1885.7	1836.5	1767.4	1641.3	1503.0	1398.5	1308.7	1273.3
13°	1920.3	1886.6	1839.1	1769.1	1631.8	1483.2	1368.3	1270.7	1233.5
14°	1909.0	1884.9	1839.9	1767.4	1624.0	1467.6	1338.9	1233.5	1192.9
15°	1897.8	1874.5	1836.5	1765.6	1614.5	1446.9	1309.6	1194.7	1152.3
16°	1879.7	1859.8	1831.3	1761.3	1603.3	1426.2	1278.5	1155.8	1109.1
17°	1858.9	1840.8	1824.4	1753.6	1588.6	1402.0	1245.6	1115.2	1066.0
18°	1834.8	1821.8	1811.4	1743.2	1574.7	1376.1	1211.1	1072.9	1021.0
19°	1812.3	1798.5	1791.6	1733.7	1559.2	1351.0	1175.7	1030.5	975.3
20°	1782.1	1771.7	1769.1	1719.9	1540.2	1321.6	1135.1	986.5	932.1
21°	1756.1	1749.2	1744.9	1705.2	1522.9	1296.6	1099.6	942.4	892.3
22°	1729.4	1723.3	1723.3	1693.1	1503.9	1269.8	1062.5	903.6	856.0
23°	1704.3	1696.5	1702.6	1675.8	1485.8	1244.8	1027.1	866.4	824.9
24°	1679.3	1674.1	1678.4	1661.1	1467.6	1218.9	991.7	835.3	794.7
25°	1649.9	1645.6	1654.2	1643.0	1448.6	1191.2	955.4	805.9	767.9
26°	1624.0	1618.8	1629.2	1627.4	1431.4	1162.7	920.0	777.4	742.9
27°	1594.6	1591.2	1601.5	1605.8	1410.6	1137.7	885.4	751.5	719.6
28°	1569.6	1564.4	1574.7	1585.1	1390.8	1108.3	852.6	726.5	696.2
29°	1535.0	1533.3	1544.5	1562.7	1369.2	1082.4	822.4	703.1	672.9
30°	1502.2	1503.9	1514.3	1540.2	1347.6	1054.7	793.9	680.7	652.2
32.5°	1422.7	1427.9	1440.9	1473.7	1290.5	983.9	729.9	627.1	602.9
35°	1347.6	1346.7	1364.8	1401.1	1231.8	913.9	670.3	579.6	558.0
37.5°	1266.4	1270.7	1287.1	1330.3	1174.8	845.7	619.4	537.3	519.2
40°	1188.6	1194.7	1205.9	1253.4	1112.6	773.1	573.6	498.4	484.6
42.5°	1107.4	1115.2	1127.3	1174.8	1048.7	706.6	530.4	463.9	450.1
45°	1023.6	1033.1	1044.4	1094.5	985.6	641.8	488.1	431.9	417.2
47.5°	944.2	949.3	963.2	1014.1	920.0	587.4	451.8	399.1	387.0
50°	865.5	870.7	881.1	932.9	855.2	534.7	416.4	368.9	357.6
52.5°	790.4	793.9	799.9	855.2	788.7	485.5	382.7	338.6	329.1
55°	717.0	718.7	719.6	774.8	723.9	438.0	348.1	310.1	301.5
57.5°	646.1	646.1	638.4	693.6	658.2	393.9	316.2	282.5	278.2
60°	576.2	576.2	566.7	615.0	590.0	351.6	285.1	256.6	250.5
62.5°	504.5	505.3	491.5	533.8	524.3	311.0	255.7	230.6	228.9
65°	431.9	432.8	418.1	455.2	453.5	271.2	226.3	206.5	205.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	361.9	361.1	347.3	378.4	383.5	235.0	197.8	182.3	182.3
70°	292.0	292.0	279.9	302.3	311.8	196.1	169.3	158.9	159.8
72.5°	228.0	227.2	219.4	233.2	243.6	159.8	144.3	137.3	138.2
75°	152.0	160.7	159.8	172.8	184.0	127.0	119.2	115.8	117.5
77.5°	97.6	102.8	108.8	120.1	126.1	95.9	93.3	93.3	95.0
80°	60.5	63.1	68.2	74.3	78.6	66.5	69.1	71.7	74.3
82.5°	34.6	34.6	36.3	39.7	45.8	40.6	44.1	47.5	47.5
85°	14.7	14.7	13.8	13.8	15.5	17.3	19.9	20.7	19.9
87.5°	3.5	3.5	2.6	1.7	2.6	3.5	4.3	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)