

Classified
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P580686

Luminaire Tested: **HCC4W40D010MB-HM43040940-41WWWB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580686
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4W40D010MB-HM43040940-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

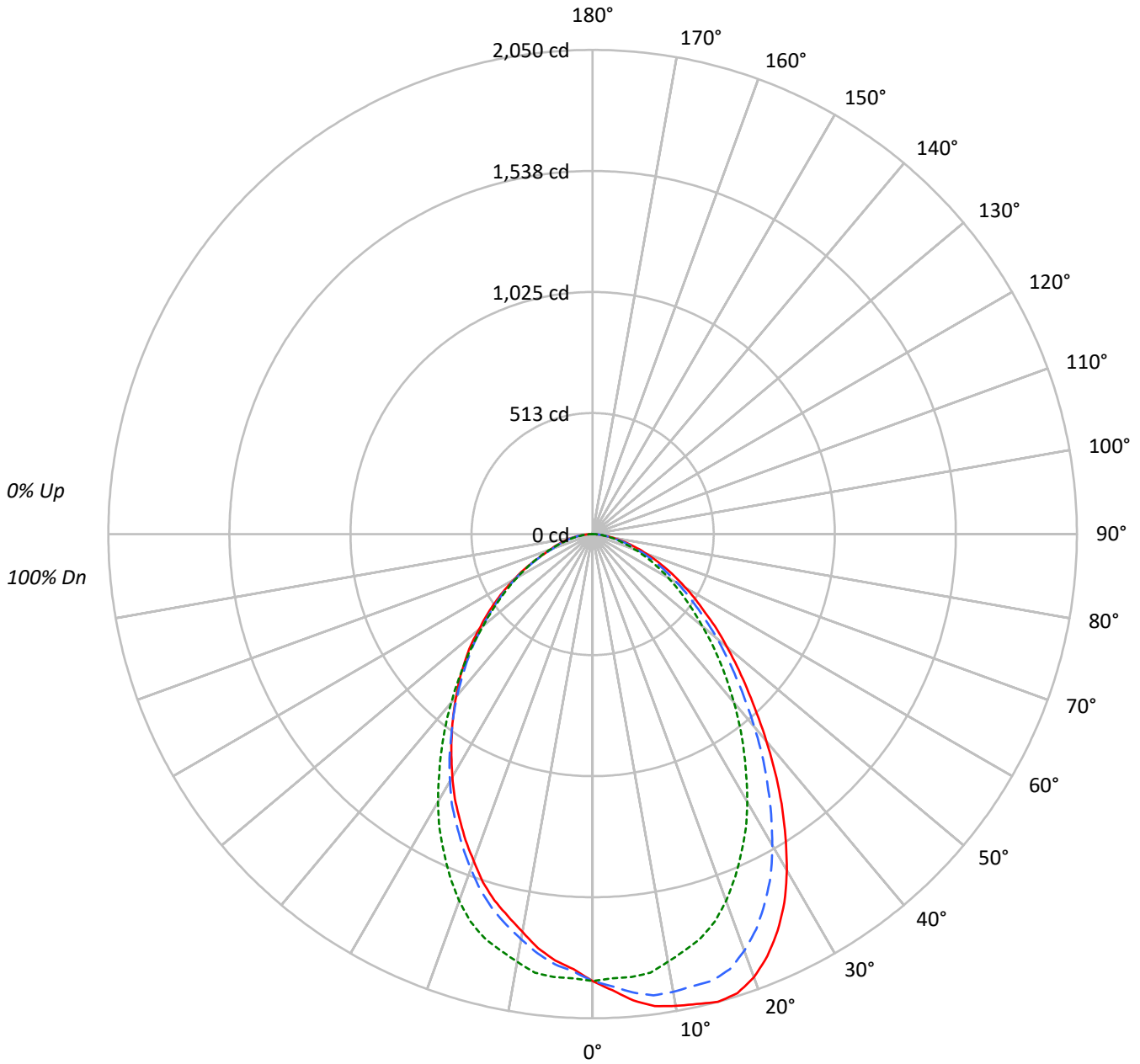
Lumens per Lamp: N/A
Luminaire Lumens: 3669.7 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 41
Input Voltage (V): NR
Input Current (A_{in}): 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: P580686
CATALOG NUMBER: HCC4W40D010MB-HM43040940-41WWWB

Luminous Intensity Polar Plot





TEST NUMBER: P580686

CATALOG NUMBER: HCC4W40D010MB-HM43040940-41WWWB

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								
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58								
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46								
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41								
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	233395	233395	233395
5°	245430	233085	224368
10°	254041	230307	214187
15°	261804	226125	205030
20°	262090	216818	193217
25°	252228	202648	181172
30°	234222	186480	169175
35°	209950	167879	156540
40°	184219	149793	144721
45°	161005	132624	133479
50°	142173	116075	120278
55°	125372	102921	108125
60°	112047	91103	94680
65°	99262	80116	80116
70°	86734	68305	68305
75°	74107	57856	64814
80°	58672	51782	58672
85°	37787	44721	55053



TEST NUMBER: P580686
 CATALOG NUMBER: HCC4W40D010MB-HM43040940-41WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.3	4.9
10°-20°	504.9	13.8
20°-30°	707.3	19.3
30°-40°	728.7	19.9
40°-50°	620.4	16.9
50°-60°	459.7	12.5
60°-70°	288.5	7.9
70°-80°	143.3	3.9
80°-90°	37.6	1.0
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°	1391.5	37.9
0°-40°	2120.2	57.8
0°-60°	3200.3	87.2
0°-90°	3669.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3669.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1892	1892	1892	1892	1892	
5°	1982	1948	1882	1829	1812	191
15°	2050	1958	1771	1642	1606	576
25°	1853	1725	1489	1360	1331	848
35°	1394	1290	1115	1042	1040	869
45°	923	860	760	746	765	716
55°	583	537	479	488	503	527
65°	340	306	274	270	274	339
75°	156	138	121	131	136	166
85°	27	27	32	36	39	34
90°	0	0	0	0	0	



TEST NUMBER: P580686

CATALOG NUMBER: HCC4W40D010MB-HM43040940-41WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1892.2	1892.2	1892.2	1892.2	1892.2	1892.2	1892.2	1892.2	1892.2
2.5°	1933.6	1926.3	1916.6	1899.5	1882.5	1867.9	1853.3	1846.1	1843.7
5°	1982.2	1967.6	1948.2	1916.6	1882.5	1853.3	1829.1	1816.9	1812.1
7.5°	2016.1	2001.5	1970.0	1921.4	1872.9	1829.1	1790.2	1773.2	1768.4
10°	2028.3	2011.3	1967.6	1902.0	1838.8	1785.4	1741.7	1719.8	1710.1
12.5°	2038.0	2016.1	1960.3	1882.5	1804.8	1739.2	1693.0	1663.9	1656.6
15°	2050.2	2025.9	1957.8	1863.1	1770.8	1693.0	1642.0	1615.4	1605.6
17.5°	2038.0	2011.3	1931.1	1824.2	1719.8	1634.8	1578.9	1554.6	1544.9
20°	1996.7	1967.6	1877.7	1763.6	1651.8	1564.4	1508.4	1484.2	1472.0
22.5°	1933.6	1902.0	1809.6	1688.2	1574.1	1489.0	1435.6	1411.3	1404.1
25°	1853.3	1821.8	1724.7	1600.8	1489.0	1406.4	1360.3	1338.5	1331.2
27.5°	1758.6	1727.1	1632.4	1510.9	1404.1	1326.3	1289.8	1268.0	1263.1
30°	1644.5	1612.9	1520.6	1408.9	1309.3	1236.5	1207.2	1190.3	1187.8
32.5°	1518.2	1491.5	1406.4	1304.4	1209.7	1148.9	1127.1	1114.9	1112.5
35°	1394.3	1365.2	1289.8	1197.6	1114.9	1061.5	1042.1	1039.6	1039.6
37.5°	1268.0	1238.8	1178.1	1093.1	1022.7	974.0	966.8	969.2	969.2
40°	1144.1	1117.4	1063.9	993.5	930.3	893.9	891.5	896.4	898.8
42.5°	1027.5	1005.6	957.1	896.4	842.9	813.7	816.2	825.8	833.1
45°	923.0	903.6	859.9	806.4	760.3	738.4	745.7	757.9	765.2
47.5°	828.3	811.3	770.0	721.5	682.6	668.0	677.8	692.3	702.0
50°	740.9	726.3	687.4	636.4	604.9	595.1	607.2	621.8	626.8
52.5°	663.2	648.6	607.2	563.5	539.3	534.4	546.6	558.7	566.0
55°	583.0	570.8	536.8	497.9	478.6	476.1	488.2	497.9	502.8
57.5°	517.3	505.2	473.6	439.7	422.6	420.3	432.4	439.7	442.1
60°	454.2	442.1	413.0	381.4	369.3	369.3	376.5	381.4	383.8
62.5°	395.9	383.8	357.0	330.4	320.6	320.6	320.6	323.1	330.4
65°	340.1	330.4	306.0	281.8	274.5	269.6	269.6	269.6	274.5
67.5°	289.1	279.4	260.0	238.1	230.8	223.5	221.1	225.9	225.9
70°	240.5	233.2	213.8	196.7	189.4	182.2	179.8	189.4	189.4
72.5°	196.7	189.4	177.3	160.3	153.0	150.6	155.5	160.3	162.8
75°	155.5	148.2	138.4	128.7	121.4	123.9	131.2	133.6	136.0
77.5°	116.6	114.1	104.5	97.2	97.2	99.5	104.5	109.3	111.8
80°	82.6	80.2	75.3	70.4	72.9	77.7	80.2	85.0	82.6
82.5°	51.0	51.0	48.5	48.5	51.0	55.8	58.3	60.8	63.1
85°	26.7	26.7	26.7	29.1	31.6	34.0	36.4	38.9	38.9
87.5°	7.3	9.8	9.8	12.1	14.6	14.6	17.0	17.0	17.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Classified
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

Classified
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Classified
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



— 0°-180° - - 45°-225° - - - - 90°-270°

Classified
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Classified
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Classified
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)