

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: P580614

Luminaire Tested: **HCC4W40D010MW-HM43040840-41WWWB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580614
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: HCC4W40D010MW-HM43040840-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

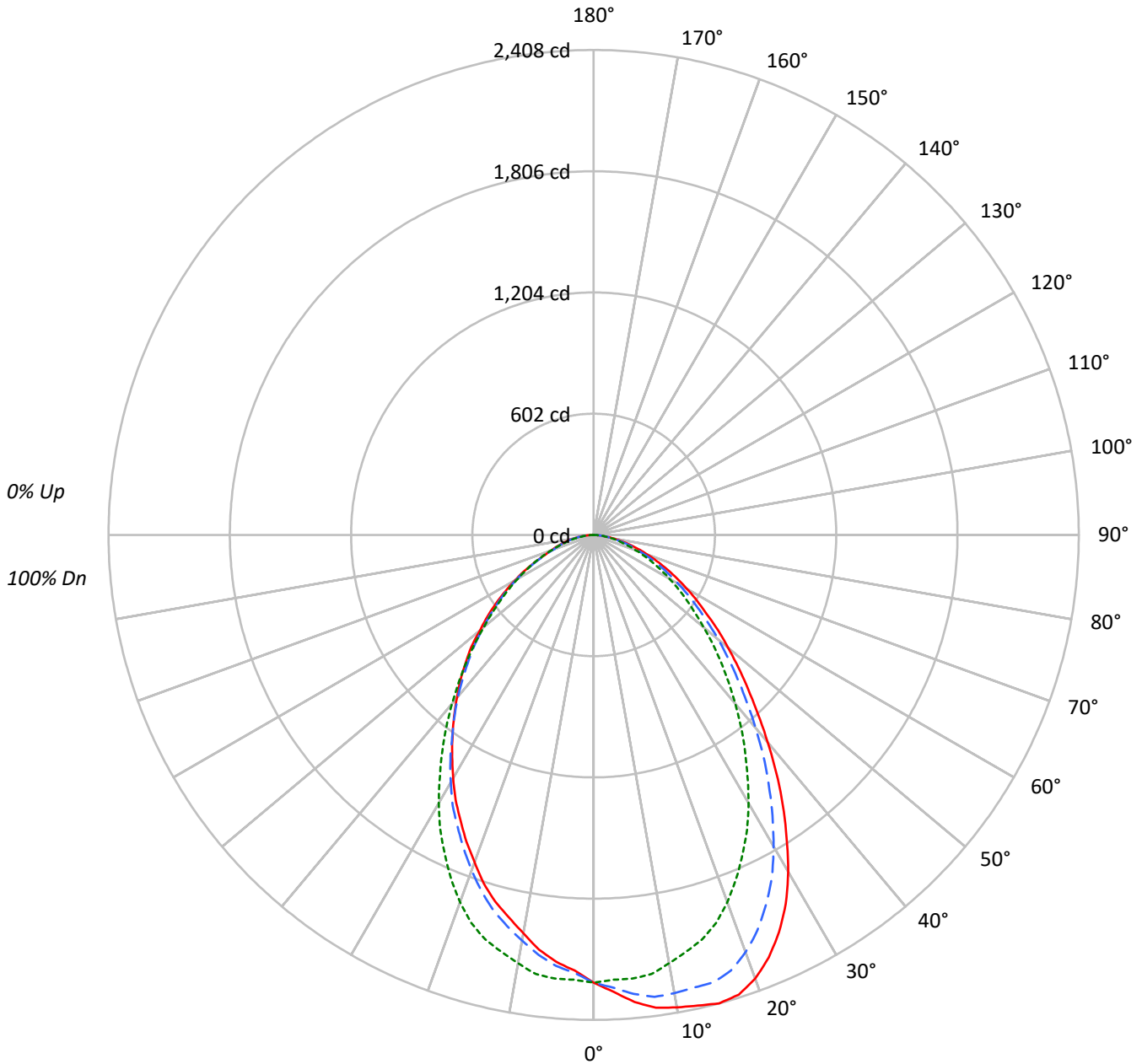
Lumens per Lamp: N/A
Luminaire Lumens: 4309.7 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P580614
CATALOG NUMBER: HCC4W40D010MW-HM43040840-41WWWB

Luminous Intensity Polar Plot





TEST NUMBER: P580614

CATALOG NUMBER: HCC4W40D010MW-HM43040840-41WWWB

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	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°	274111	274111	274111
5°	288221	273734	263495
10°	298342	270474	251536
15°	307456	265558	240785
20°	307796	254621	226912
25°	296228	237979	212747
30°	275070	218996	198686
35°	246555	197151	183855
40°	216341	175910	169953
45°	189090	155755	156749
50°	166965	136301	141213
55°	147221	120856	126985
60°	131610	106965	111208
65°	116569	94096	94096
70°	101844	80242	80242
75°	87022	67959	76108
80°	68901	60732	68901
85°	44438	52505	64535



TEST NUMBER: P580614

CATALOG NUMBER: HCC4W40D010MW-HM43040840-41WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.5	4.9
10°-20°	592.9	13.8
20°-30°	830.7	19.3
30°-40°	855.8	19.9
40°-50°	728.6	16.9
50°-60°	539.8	12.5
60°-70°	338.8	7.9
70°-80°	168.3	3.9
80°-90°	44.2	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°	1634.1	37.9
0°-40°	2489.9	57.8
0°-60°	3758.4	87.2
0°-90°	4309.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4309.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2222	2222	2222	2222	2222	
5°	2328	2288	2211	2148	2128	224
15°	2408	2299	2080	1928	1886	677
25°	2177	2025	1749	1598	1563	995
35°	1637	1515	1309	1224	1221	1021
45°	1084	1010	893	876	899	841
55°	685	630	562	573	590	619
65°	399	359	322	317	322	398
75°	183	163	143	154	160	195
85°	31	31	37	43	46	40
90°	0	0	0	0	0	

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



TEST NUMBER: P580614

CATALOG NUMBER: HCC4W40D010MW-HM43040840-41WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3
2.5°	2270.7	2262.2	2250.7	2230.8	2210.8	2193.7	2176.6	2168.0	2165.2
5°	2327.8	2310.7	2287.8	2250.7	2210.8	2176.6	2148.1	2133.8	2128.1
7.5°	2367.8	2350.6	2313.5	2256.5	2199.4	2148.1	2102.4	2082.5	2076.8
10°	2382.0	2362.1	2310.7	2233.6	2159.5	2096.7	2045.4	2019.7	2008.3
12.5°	2393.4	2367.8	2302.1	2210.8	2119.6	2042.5	1988.3	1954.1	1945.5
15°	2407.7	2379.1	2299.3	2188.0	2079.6	1988.3	1928.5	1897.1	1885.6
17.5°	2393.4	2362.1	2267.9	2142.3	2019.7	1919.8	1854.2	1825.7	1814.3
20°	2344.9	2310.7	2205.1	2071.0	1939.8	1837.1	1771.5	1742.9	1728.7
22.5°	2270.7	2233.6	2125.2	1982.6	1848.5	1748.6	1686.0	1657.4	1648.9
25°	2176.6	2139.5	2025.4	1879.9	1748.6	1651.7	1597.5	1571.9	1563.2
27.5°	2065.3	2028.2	1917.0	1774.3	1648.9	1557.5	1514.8	1489.1	1483.4
30°	1931.3	1894.2	1785.8	1654.6	1537.6	1452.0	1417.7	1397.8	1395.0
32.5°	1783.0	1751.6	1651.7	1531.8	1420.6	1349.3	1323.7	1309.3	1306.5
35°	1637.4	1603.3	1514.8	1406.4	1309.3	1246.7	1223.8	1221.0	1221.0
37.5°	1489.1	1454.8	1383.5	1283.7	1200.9	1143.9	1135.3	1138.3	1138.3
40°	1343.6	1312.2	1249.5	1166.7	1092.5	1049.8	1046.9	1052.6	1055.5
42.5°	1206.6	1181.0	1123.9	1052.6	989.8	955.7	958.5	969.9	978.5
45°	1084.0	1061.3	1009.8	947.1	892.9	867.2	875.7	890.1	898.6
47.5°	972.8	952.7	904.3	847.3	801.6	784.5	795.9	813.1	824.4
50°	870.1	853.0	807.3	747.4	710.3	698.9	713.2	730.3	735.9
52.5°	778.8	761.7	713.2	661.8	633.3	627.5	641.9	656.1	664.6
55°	684.6	670.4	630.5	584.8	562.0	559.2	573.4	584.8	590.5
57.5°	607.6	593.3	556.2	516.3	496.4	493.5	507.8	516.3	519.1
60°	533.5	519.1	484.9	447.8	433.6	433.6	442.1	447.8	450.8
62.5°	465.0	450.8	419.4	388.0	376.5	376.5	376.5	379.5	388.0
65°	399.4	388.0	359.4	330.9	322.4	316.7	316.7	316.7	322.4
67.5°	339.4	328.0	305.2	279.6	271.1	262.4	259.6	265.3	265.3
70°	282.4	273.9	251.0	231.0	222.5	214.0	211.1	222.5	222.5
72.5°	231.0	222.5	208.3	188.3	179.7	176.9	182.6	188.3	191.1
75°	182.6	174.0	162.7	151.2	142.6	145.5	154.0	156.9	159.7
77.5°	136.9	134.1	122.6	114.1	114.1	116.9	122.6	128.4	131.3
80°	97.0	94.2	88.4	82.7	85.5	91.2	94.2	99.9	97.0
82.5°	59.9	59.9	57.1	57.1	59.9	65.6	68.5	71.3	74.2
85°	31.4	31.4	31.4	34.2	37.1	39.9	42.8	45.6	45.6
87.5°	8.5	11.4	11.4	14.2	17.2	17.2	20.0	20.0	20.0
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)