

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: P580577

Luminaire Tested: **HCC4W40D010MW-HM43040830-41WWW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580577  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W40D010MW-HM43040830-41WWW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

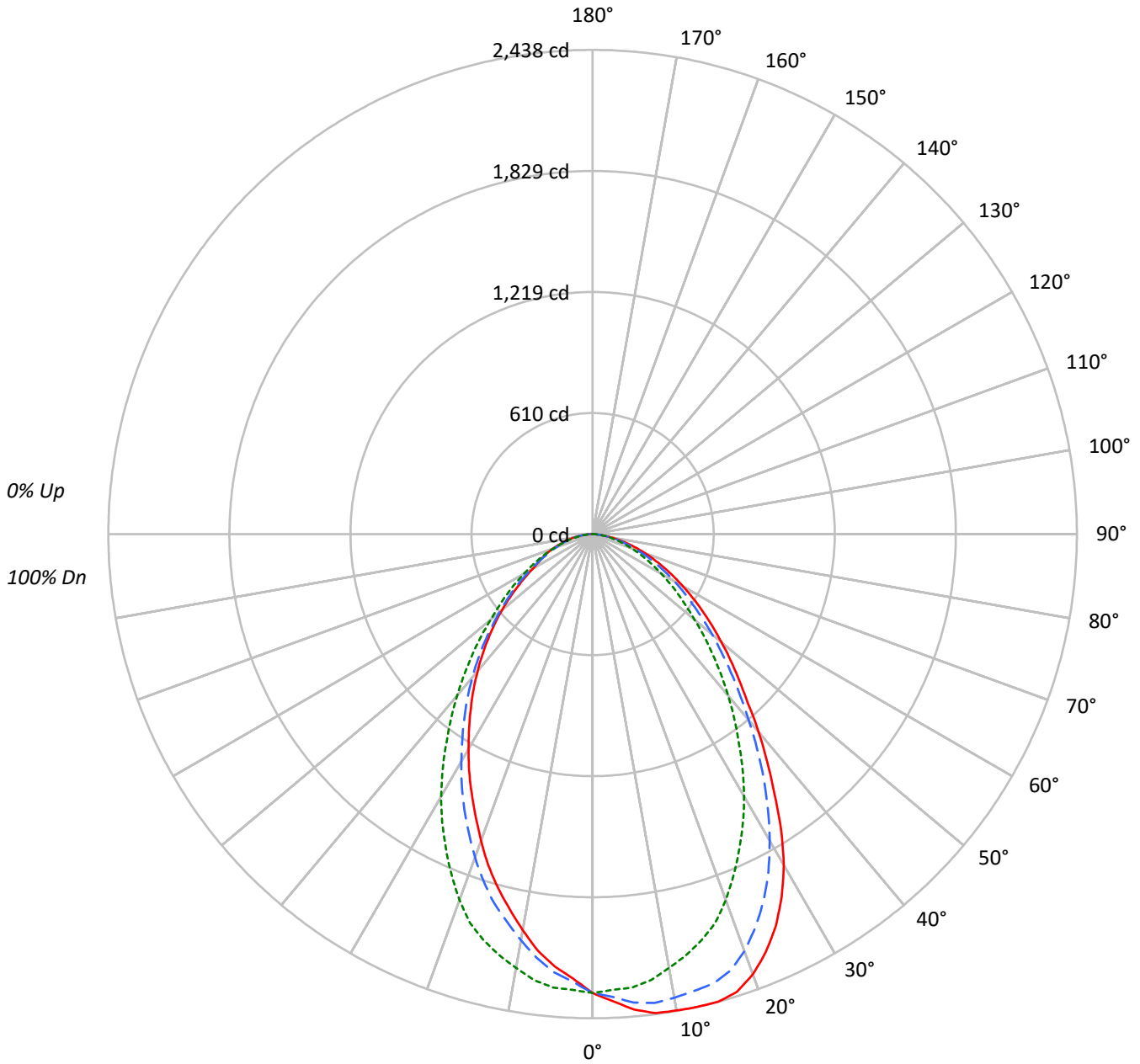
Lumens per Lamp: N/A  
Luminaire Lumens: 4126.3 lumens  
Efficiency: N/A  
Efficacy: 100.6 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.03 / 1.1  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P580577  
CATALOG NUMBER: HCC4W40D010MW-HM43040830-41WWW

### Luminous Intensity Polar Plot



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



TEST NUMBER: P580577

CATALOG NUMBER: HCC4W40D010MW-HM43040830-41WWW

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76																			
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66																			
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58																			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52																			
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47																			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42																			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38																			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35																			
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	285002	285002	285002
5°	297544	283726	270614
10°	305068	277826	253653
15°	311376	270411	235345
20°	309725	257273	215519
25°	296705	237884	196075
30°	274116	217202	177706
35°	240261	193206	160862
40°	209225	170693	144882
45°	182095	148882	129450
50°	162244	128318	114252
55°	144984	112813	98792
60°	129414	98578	85182
65°	115022	86478	80904
70°	100979	74508	75482
75°	85497	63479	69913
80°	65633	54055	63716
85°	38353	42315	53779



TEST NUMBER: P580577  
 CATALOG NUMBER: HCC4W40D010MW-HM43040830-41WWW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.6	5.2
10°-20°	597.4	14.5
20°-30°	816.2	19.8
30°-40°	819.6	19.9
40°-50°	678.0	16.4
50°-60°	491.4	11.9
60°-70°	311.2	7.5
70°-80°	157.3	3.8
80°-90°	38.5	0.9
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°	1630.2	39.5
0°-40°	2449.8	59.4
0°-60°	3619.2	87.7
0°-90°	4126.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4126.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2311	2311	2311	2311	2311	
5°	2403	2368	2292	2215	2186	230
15°	2438	2343	2118	1922	1843	686
25°	2180	2036	1748	1528	1441	996
35°	1596	1501	1283	1125	1068	1000
45°	1044	984	854	769	742	812
55°	674	614	525	478	459	606
65°	394	351	296	266	277	392
75°	179	155	133	139	147	192
85°	27	27	30	35	38	38
90°	0	0	0	0	0	



TEST NUMBER: P580577

CATALOG NUMBER: HCC4W40D010MW-HM43040830-41WWW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2310.6	2310.6	2310.6	2310.6	2310.6	2310.6	2310.6	2310.6	2310.6
2.5°	2354.1	2345.9	2332.4	2316.1	2297.0	2275.3	2256.2	2245.4	2240.0
5°	2403.1	2392.2	2367.7	2332.4	2291.5	2250.9	2215.4	2193.7	2185.6
7.5°	2432.9	2416.7	2381.3	2327.0	2264.4	2204.6	2153.0	2123.1	2114.9
10°	2435.7	2416.7	2370.5	2297.0	2218.2	2139.3	2076.9	2033.4	2025.2
12.5°	2438.4	2414.0	2356.8	2269.8	2171.9	2074.1	1998.0	1946.4	1932.7
15°	2438.4	2414.0	2343.2	2240.0	2117.6	2006.1	1921.8	1862.1	1843.0
17.5°	2416.7	2389.4	2305.2	2185.6	2052.3	1927.3	1829.5	1766.9	1747.9
20°	2359.6	2329.7	2234.5	2104.0	1960.0	1829.5	1731.6	1666.4	1641.9
22.5°	2278.0	2242.7	2142.1	2000.8	1856.6	1723.4	1628.3	1560.3	1538.6
25°	2180.1	2144.8	2036.1	1897.4	1747.9	1622.9	1527.7	1465.1	1440.7
27.5°	2060.5	2022.5	1916.5	1777.8	1639.1	1514.1	1427.1	1370.1	1345.5
30°	1924.6	1883.8	1783.3	1650.0	1525.0	1405.4	1321.1	1274.9	1247.7
32.5°	1766.9	1731.6	1641.9	1522.3	1405.4	1291.2	1220.5	1179.7	1158.0
35°	1595.6	1576.7	1500.6	1397.2	1283.1	1187.9	1125.4	1087.4	1068.3
37.5°	1443.4	1424.5	1359.2	1272.2	1171.7	1084.7	1033.0	1000.4	984.0
40°	1299.4	1283.1	1220.5	1147.1	1060.1	984.0	940.5	916.1	899.8
42.5°	1158.0	1149.9	1098.2	1030.3	954.2	889.0	853.5	834.6	820.9
45°	1043.9	1033.0	984.0	918.8	853.5	799.2	769.3	755.7	742.1
47.5°	943.3	929.6	878.1	820.9	761.2	712.2	685.0	671.5	666.0
50°	845.5	831.8	785.6	728.5	668.7	633.4	611.6	598.1	595.4
52.5°	758.5	744.8	693.2	638.9	592.6	562.7	543.7	530.1	524.6
55°	674.2	657.8	614.3	562.7	524.6	497.5	478.4	464.9	459.4
57.5°	598.1	581.7	543.7	494.7	459.4	434.9	418.6	405.0	399.6
60°	524.6	511.1	475.8	429.5	399.6	377.9	361.5	350.6	345.3
62.5°	456.7	445.8	410.5	369.7	345.3	326.2	312.6	301.8	307.2
65°	394.1	383.3	350.6	315.3	296.3	277.2	266.3	266.3	277.2
67.5°	334.4	323.5	296.3	266.3	250.1	236.5	228.3	236.5	244.6
70°	280.0	269.2	244.6	220.2	206.6	195.7	195.7	203.9	209.3
72.5°	228.3	217.5	198.4	179.4	168.5	160.4	168.5	174.0	179.4
75°	179.4	171.3	154.9	141.4	133.2	130.5	138.7	144.0	146.7
77.5°	133.2	127.8	116.9	106.0	100.6	103.2	111.4	114.1	116.9
80°	92.4	89.7	81.5	76.1	76.1	78.8	84.3	87.0	89.7
82.5°	57.1	57.1	51.7	48.9	51.7	57.1	59.7	62.6	62.6
85°	27.1	29.9	27.1	27.1	29.9	35.3	35.3	38.0	38.0
87.5°	8.2	8.2	10.9	10.9	13.6	13.6	13.6	13.6	16.3
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)