

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: P580415

Luminaire Tested: **HCC4W35D010MB-HM43040827-41WWW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580415  
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: HCC4W35D010MB-HM43040827-41WWW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

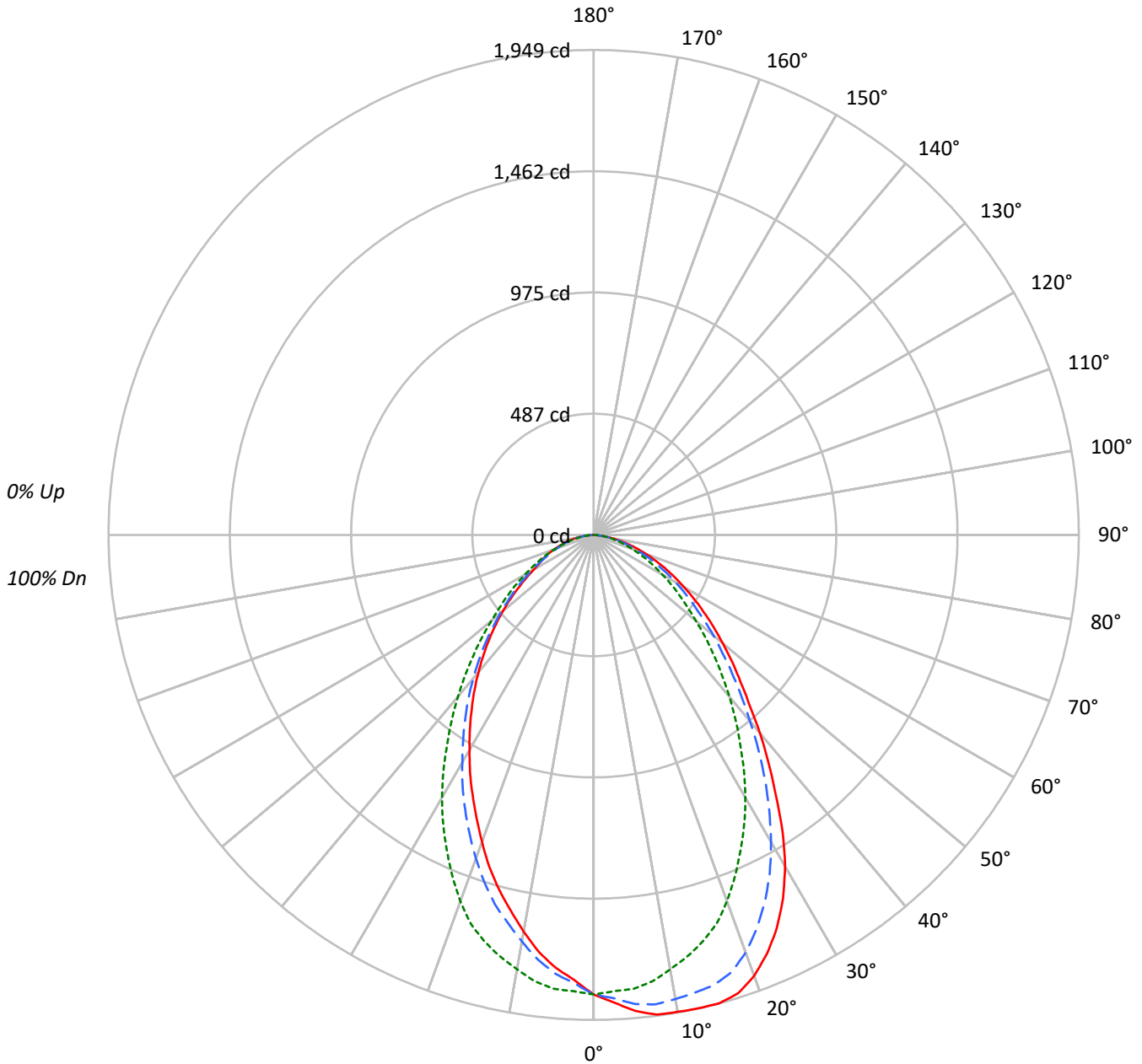
Lumens per Lamp: N/A  
Luminaire Lumens: 3297.5 lumens  
Efficiency: N/A  
Efficacy: 97.8 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.03 / 1.1  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.7  
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: P580415  
CATALOG NUMBER: HCC4W35D010MB-HM43040827-41WWW

### Luminous Intensity Polar Plot



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



TEST NUMBER: P580415

CATALOG NUMBER: HCC4W35D010MB-HM43040827-41WWW

**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°	227758	227758	227758
5°	237778	226746	216258
10°	243784	222028	202702
15°	248830	216101	188085
20°	247507	205595	172242
25°	237108	190100	156688
30°	219067	173562	142014
35°	192016	154387	128563
40°	167199	136429	115771
45°	145515	119001	103441
50°	129642	102528	91302
55°	115846	90169	78944
60°	103438	78769	68062
65°	91907	69113	64647
70°	80711	59541	60335
75°	68340	50707	55902
80°	52422	43187	50930
85°	30711	33824	43165



TEST NUMBER: P580415  
 CATALOG NUMBER: HCC4W35D010MB-HM43040827-41WWW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.1	5.2
10°-20°	477.4	14.5
20°-30°	652.3	19.8
30°-40°	655.0	19.9
40°-50°	541.8	16.4
50°-60°	392.7	11.9
60°-70°	248.7	7.5
70°-80°	125.7	3.8
80°-90°	30.8	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°	1302.8	39.5
0°-40°	1957.8	59.4
0°-60°	2892.3	87.7
0°-90°	3297.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3297.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1846	1846	1846	1846	1846	
5°	1920	1892	1831	1770	1747	184
15°	1949	1873	1692	1536	1473	548
25°	1742	1627	1397	1221	1151	796
35°	1275	1199	1025	899	854	799
45°	834	786	682	615	593	649
55°	539	491	419	382	367	485
65°	315	280	237	213	222	314
75°	143	124	106	111	117	153
85°	22	22	24	28	30	30
90°	0	0	0	0	0	



TEST NUMBER: P580415

CATALOG NUMBER: HCC4W35D010MB-HM43040827-41WWW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5
2.5°	1881.2	1874.7	1863.9	1850.9	1835.6	1818.3	1803.0	1794.4	1790.0
5°	1920.4	1911.7	1892.1	1863.9	1831.3	1798.7	1770.5	1753.1	1746.6
7.5°	1944.3	1931.3	1902.9	1859.5	1809.5	1761.8	1720.5	1696.6	1690.0
10°	1946.4	1931.3	1894.3	1835.6	1772.7	1709.6	1659.7	1625.0	1618.4
12.5°	1948.6	1929.0	1883.5	1813.9	1735.7	1657.6	1596.6	1555.4	1544.6
15°	1948.6	1929.0	1872.6	1790.0	1692.3	1603.2	1535.8	1488.1	1472.9
17.5°	1931.3	1909.5	1842.1	1746.6	1640.1	1540.2	1462.0	1412.1	1396.8
20°	1885.6	1861.7	1785.7	1681.4	1566.3	1462.0	1383.8	1331.6	1312.2
22.5°	1820.4	1792.2	1711.9	1598.9	1483.7	1377.2	1301.3	1247.0	1229.5
25°	1742.2	1714.0	1627.1	1516.3	1396.8	1296.9	1220.9	1170.9	1151.3
27.5°	1646.7	1616.2	1531.6	1420.7	1309.9	1210.0	1140.5	1094.9	1075.3
30°	1538.1	1505.5	1425.1	1318.7	1218.6	1123.1	1055.8	1018.8	997.1
32.5°	1412.1	1383.8	1312.2	1216.5	1123.1	1031.8	975.4	942.8	925.4
35°	1275.2	1260.0	1199.2	1116.6	1025.3	949.3	899.3	869.0	853.8
37.5°	1153.6	1138.3	1086.2	1016.7	936.3	866.7	825.5	799.4	786.4
40°	1038.4	1025.3	975.4	916.7	847.3	786.4	751.6	732.1	719.0
42.5°	925.4	918.9	877.6	823.3	762.5	710.4	682.2	666.9	656.1
45°	834.2	825.5	786.4	734.3	682.2	638.7	614.8	603.9	593.0
47.5°	753.8	743.0	701.7	656.1	608.3	569.2	547.4	536.6	532.2
50°	675.6	664.7	627.9	582.2	534.3	506.1	488.8	477.9	475.8
52.5°	606.1	595.3	553.9	510.5	473.5	449.7	434.4	423.6	419.3
55°	538.7	525.7	491.0	449.7	419.3	397.6	382.4	371.5	367.1
57.5°	477.9	464.9	434.4	395.4	367.1	347.5	334.5	323.7	319.3
60°	419.3	408.3	380.1	343.3	319.3	301.9	288.9	280.2	275.9
62.5°	365.0	356.3	328.0	295.4	275.9	260.7	249.9	241.1	245.5
65°	314.9	306.3	280.2	252.0	236.8	221.5	212.9	212.9	221.5
67.5°	267.2	258.5	236.8	212.9	199.8	188.9	182.4	188.9	195.5
70°	223.8	215.0	195.5	175.9	165.1	156.5	156.5	163.0	167.3
72.5°	182.4	173.8	158.6	143.4	134.7	128.1	134.7	139.0	143.4
75°	143.4	136.9	123.9	113.0	106.4	104.3	110.8	115.1	117.3
77.5°	106.4	102.1	93.4	84.7	80.4	82.5	89.0	91.3	93.4
80°	73.8	71.7	65.2	60.8	60.8	62.9	67.3	69.5	71.7
82.5°	45.6	45.6	41.3	39.1	41.3	45.6	47.8	50.0	50.0
85°	21.7	23.9	21.7	21.7	23.9	28.2	28.2	30.5	30.5
87.5°	6.5	6.5	8.7	8.7	10.9	10.9	10.9	10.9	13.0
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)