

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: P580594

Luminaire Tested: **HCC4W40D010BZ-HM43040835-41WWBB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580594  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W40D010BZ-HM43040835-41WWBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

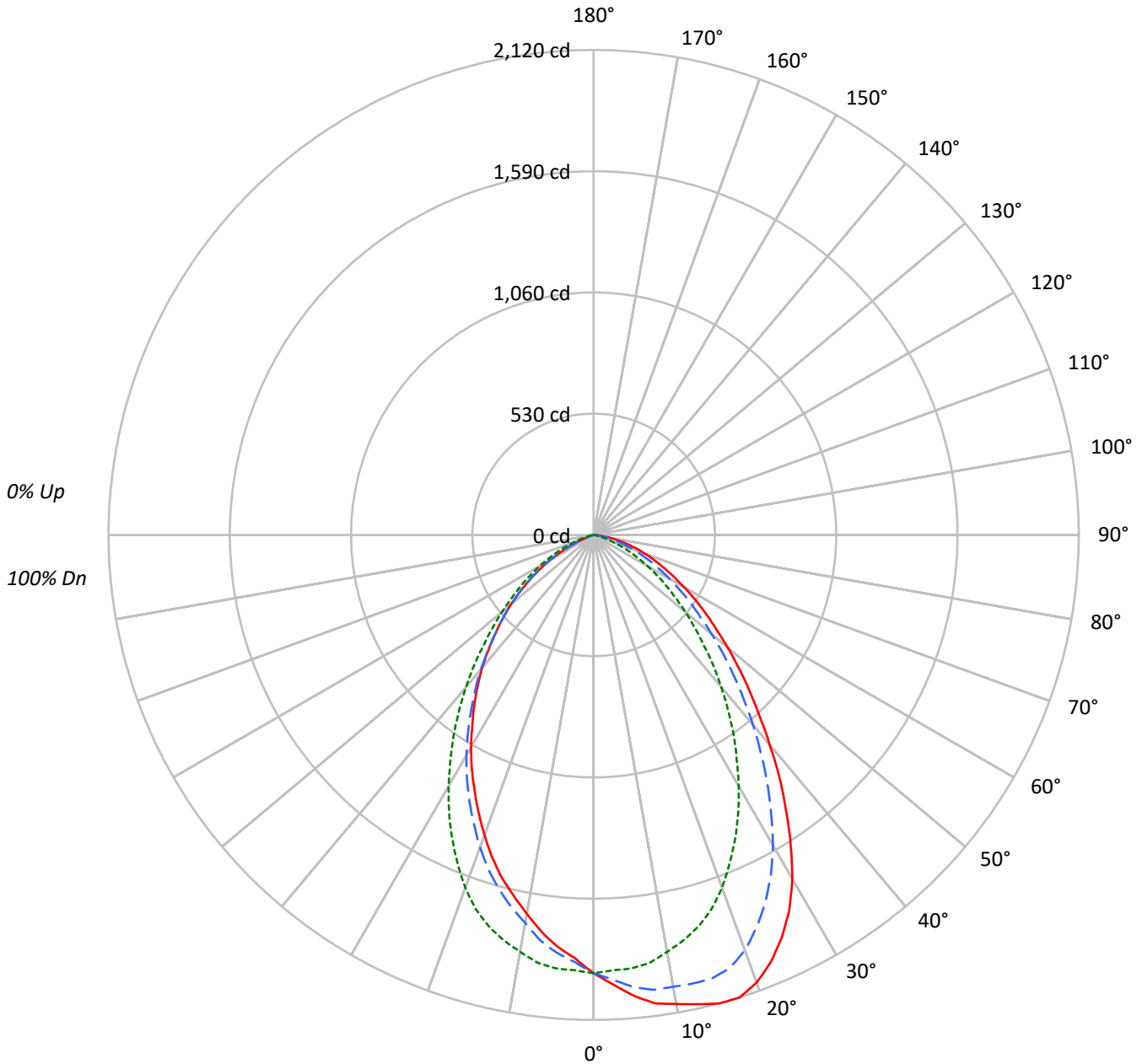
Lumens per Lamp: N/A  
Luminaire Lumens: 3309.4 lumens  
Efficiency: N/A  
Efficacy: 80.7 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.04 / 1.12  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P580594  
CATALOG NUMBER: HCC4W40D010BZ-HM43040835-41WWBB

### Luminous Intensity Polar Plot



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



TEST NUMBER: P580594

CATALOG NUMBER: HCC4W40D010BZ-HM43040835-41WWBB

**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	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89								
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78								
3	96	87	80	75	94	86	79	74	83	78	73	80	76	72	78	74	71	69								
4	89	79	72	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61								
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55								
6	77	66	58	52	75	65	57	52	63	57	52	61	56	51	60	55	51	49								
7	72	60	53	47	71	59	52	47	58	51	47	57	51	46	55	50	46	44								
8	68	56	48	43	66	55	48	43	54	47	42	53	47	42	51	46	42	40								
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	43	39	37								
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	36	34								

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

	0°	90°	180°
0°	236318	236318	236318
5°	250382	235537	223725
10°	260780	231772	210605
15°	270756	226215	198019
20°	273300	215361	183163
25°	264450	199178	167658
30°	247268	180498	152540
35°	220370	160455	137070
40°	192640	139537	122002
45°	167808	118390	105534
50°	146433	100417	90477
55°	128340	83223	73266
60°	112269	67223	53779
65°	97832	50112	30237
70°	85507	32421	9809
75°	70151	16871	2621
80°	52208	7742	1918
85°	30711	3821	3821



TEST NUMBER: P580594

CATALOG NUMBER: HCC4W40D010BZ-HM43040835-41WWBB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.8	5.5
10°-20°	506.1	15.3
20°-30°	699.7	21.1
30°-40°	703.6	21.3
40°-50°	567.8	17.2
50°-60°	383.9	11.6
60°-70°	195.4	5.9
70°-80°	62.6	1.9
80°-90°	9.6	0.3
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°	1386.6	41.9
0°-40°	2090.2	63.2
0°-60°	3041.9	91.9
0°-90°	3309.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3309.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1916	1916	1916	1916	1916	
5°	2022	1984	1902	1834	1807	195
15°	2120	2006	1772	1602	1551	597
25°	1943	1774	1464	1284	1232	889
35°	1464	1322	1066	932	910	914
45°	962	861	679	605	605	745
55°	597	515	387	338	341	536
65°	335	272	172	112	104	336
75°	147	104	35	8	6	159
85°	22	11	3	3	3	29
90°	0	0	0	0	0	

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



TEST NUMBER: P580594

CATALOG NUMBER: HCC4W40D010BZ-HM43040835-41WWBB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1915.9	1915.9	1915.9	1915.9	1915.9	1915.9	1915.9	1915.9	1915.9
2.5°	1967.7	1956.8	1945.9	1926.8	1905.0	1883.2	1869.6	1858.7	1853.2
5°	2022.2	2008.6	1984.1	1943.1	1902.3	1864.1	1834.2	1815.1	1806.9
7.5°	2065.8	2046.7	2005.8	1948.6	1886.0	1826.0	1787.8	1760.5	1749.7
10°	2082.1	2060.4	2005.8	1929.6	1850.5	1776.9	1722.4	1695.2	1681.5
12.5°	2101.2	2076.7	2008.6	1913.2	1815.1	1727.9	1665.1	1629.7	1616.1
15°	2120.3	2087.6	2005.8	1888.7	1771.5	1670.6	1602.5	1567.0	1550.7
17.5°	2120.3	2082.1	1984.1	1847.7	1714.2	1608.0	1531.6	1490.7	1477.1
20°	2082.1	2038.5	1932.3	1782.4	1640.7	1526.2	1452.6	1411.7	1395.4
22.5°	2022.2	1973.2	1858.7	1703.4	1553.5	1441.7	1368.1	1330.0	1313.6
25°	1943.1	1894.2	1774.2	1613.5	1463.5	1351.8	1283.7	1248.2	1231.9
27.5°	1850.5	1796.0	1676.1	1515.3	1368.1	1261.8	1199.1	1166.4	1152.8
30°	1736.1	1684.3	1567.0	1409.0	1267.3	1169.2	1111.9	1082.0	1071.0
32.5°	1602.5	1558.9	1444.4	1297.2	1163.7	1073.8	1022.0	997.5	986.6
35°	1463.5	1422.7	1321.8	1185.6	1065.6	981.1	932.1	915.7	910.3
37.5°	1332.6	1297.2	1199.1	1073.8	964.7	891.2	847.6	836.7	831.2
40°	1196.4	1171.9	1082.0	967.5	866.6	801.3	765.9	757.7	757.7
42.5°	1073.8	1046.6	967.5	864.0	774.1	708.6	684.0	675.9	678.7
45°	962.0	934.8	861.2	765.9	678.7	624.1	605.0	605.0	605.0
47.5°	858.5	833.9	765.9	667.7	596.8	553.2	534.2	534.2	536.8
50°	763.1	746.7	670.5	585.9	523.3	482.4	468.8	466.0	471.5
52.5°	673.2	654.1	585.9	509.6	449.6	417.0	403.3	400.6	403.3
55°	596.8	575.1	515.1	441.4	387.0	354.3	338.0	335.2	340.7
57.5°	523.3	506.9	444.3	378.8	327.0	294.4	280.7	275.2	278.0
60°	455.1	438.8	381.6	318.8	272.5	239.8	220.7	215.3	218.0
62.5°	392.5	378.8	324.3	264.3	218.0	188.1	168.9	155.4	160.8
65°	335.2	321.6	272.5	212.5	171.7	139.0	111.8	100.9	103.6
67.5°	286.2	269.8	223.5	168.9	128.1	92.7	62.7	57.3	57.3
70°	237.1	220.7	179.9	130.8	89.9	49.1	27.2	27.2	27.2
72.5°	190.8	177.1	139.0	98.1	57.3	21.7	10.9	10.9	10.9
75°	147.2	136.3	103.6	68.2	35.4	10.9	8.2	5.5	5.5
77.5°	109.0	98.1	73.5	46.3	21.7	5.5	5.5	5.5	5.5
80°	73.5	65.4	49.1	27.2	10.9	2.7	2.7	2.7	2.7
82.5°	43.6	38.1	27.2	13.7	5.5	2.7	2.7	2.7	2.7
85°	21.7	16.4	10.9	5.5	2.7	2.7	2.7	2.7	2.7
87.5°	5.5	2.7	2.7	2.7	0.0	0.0	0.0	0.0	0.0
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)