

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: P580576

Luminaire Tested: **HCC4S40D010BZ-HM43040830-41WWBB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580576
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: HCC4S40D010BZ-HM43040830-41WWBB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

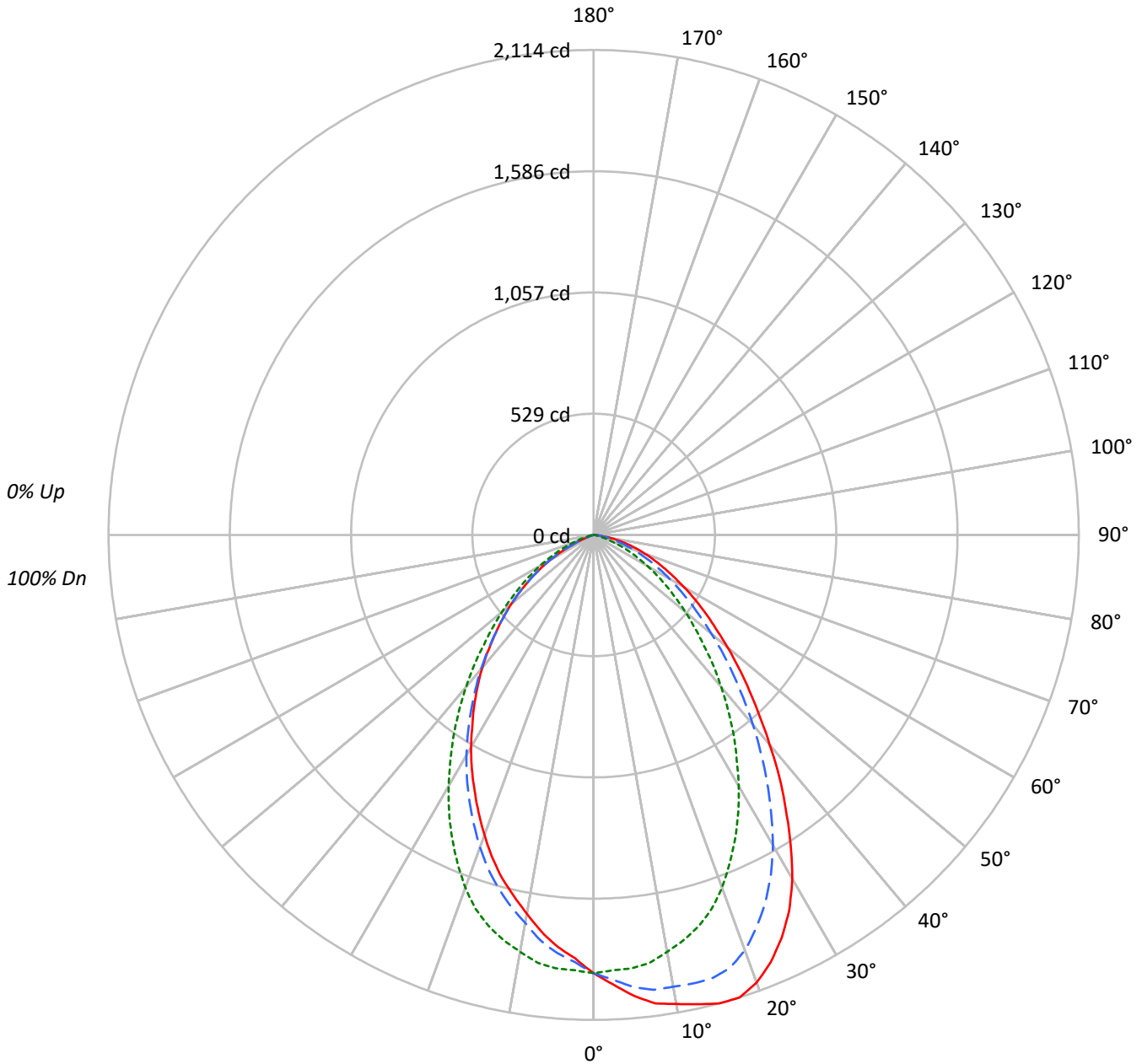
Lumens per Lamp: N/A
Luminaire Lumens: 3299.9 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.04 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 41
Input Voltage (V): NR
Input Current (A_{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: P580576
CATALOG NUMBER: HCC4S40D010BZ-HM43040830-41WWBB

Luminous Intensity Polar Plot





TEST NUMBER: P580576

CATALOG NUMBER: HCC4S40D010BZ-HM43040830-41WWBB

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°	235639	235639	235639
5°	249677	234856	223093
10°	260041	231121	210004
15°	269989	225564	197458
20°	272525	214744	182637
25°	263701	198606	167181
30°	246542	179985	152112
35°	219737	160003	136679
40°	192092	139150	121632
45°	167355	118024	105238
50°	146010	100129	90208
55°	127974	82965	73051
60°	111948	67026	53631
65°	97569	49967	30120
70°	85255	32349	9773
75°	69913	16823	2573
80°	52137	7742	1918
85°	30711	3821	3821



TEST NUMBER: P580576

CATALOG NUMBER: HCC4S40D010BZ-HM43040830-41WWBB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.3	5.5
10°-20°	504.6	15.3
20°-30°	697.7	21.1
30°-40°	701.6	21.3
40°-50°	566.1	17.2
50°-60°	382.8	11.6
60°-70°	194.8	5.9
70°-80°	62.4	1.9
80°-90°	9.5	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°	1382.7	41.9
0°-40°	2084.2	63.2
0°-60°	3033.1	91.9
0°-90°	3299.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3299.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1910	1910	1910	1910	1910	
5°	2016	1978	1897	1829	1802	194
15°	2114	2000	1766	1598	1546	596
25°	1938	1769	1459	1280	1228	887
35°	1459	1318	1063	929	908	912
45°	959	859	677	603	603	743
55°	595	514	386	337	340	535
65°	334	272	171	111	103	335
75°	147	103	35	8	5	158
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: P580576

CATALOG NUMBER: HCC4S40D010BZ-HM43040830-41WWBB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1910.4	1910.4	1910.4	1910.4	1910.4	1910.4	1910.4	1910.4	1910.4
2.5°	1962.1	1951.2	1940.3	1921.3	1899.5	1877.8	1864.2	1853.3	1848.0
5°	2016.5	2002.9	1978.3	1937.6	1896.8	1858.8	1828.9	1809.9	1801.8
7.5°	2059.9	2040.9	2000.1	1943.0	1880.6	1820.7	1782.7	1755.6	1744.7
10°	2076.2	2054.5	2000.1	1924.1	1845.3	1771.9	1717.5	1690.4	1676.7
12.5°	2095.3	2070.8	2002.9	1907.7	1809.9	1723.0	1660.4	1625.1	1611.5
15°	2114.3	2081.7	2000.1	1883.3	1766.4	1665.9	1597.9	1562.6	1546.3
17.5°	2114.3	2076.2	1978.3	1842.5	1709.3	1603.4	1527.3	1486.6	1472.9
20°	2076.2	2032.7	1926.8	1777.2	1636.0	1521.9	1448.4	1407.8	1391.4
22.5°	2016.5	1967.5	1853.3	1698.4	1549.0	1437.6	1364.3	1326.1	1309.9
25°	1937.6	1888.7	1769.2	1608.7	1459.3	1347.9	1280.0	1244.6	1228.4
27.5°	1845.3	1790.9	1671.3	1511.0	1364.3	1258.2	1195.8	1163.1	1149.5
30°	1731.0	1679.5	1562.6	1404.9	1263.7	1165.8	1108.8	1078.9	1068.0
32.5°	1597.9	1554.5	1440.3	1293.5	1160.3	1070.7	1019.1	994.7	983.8
35°	1459.3	1418.5	1318.1	1182.1	1062.6	978.3	929.4	913.1	907.7
37.5°	1328.8	1293.5	1195.8	1070.7	962.0	888.6	845.1	834.2	828.9
40°	1193.0	1168.5	1078.9	964.7	864.2	798.9	763.6	755.4	755.4
42.5°	1070.7	1043.5	964.7	861.5	771.8	706.6	682.1	673.9	676.6
45°	959.4	932.1	858.8	763.6	676.6	622.3	603.3	603.3	603.3
47.5°	856.0	831.6	763.6	665.8	595.1	551.6	532.6	532.6	535.4
50°	760.9	744.6	668.6	584.3	521.8	481.0	467.5	464.7	470.1
52.5°	671.3	652.2	584.3	508.1	448.4	415.8	402.2	399.5	402.2
55°	595.1	573.4	513.6	440.2	385.8	353.2	337.0	334.3	339.7
57.5°	521.8	505.5	442.9	377.8	326.1	293.5	279.9	274.4	277.2
60°	453.8	437.5	380.5	317.9	271.7	239.1	220.2	214.7	217.4
62.5°	391.3	377.8	323.4	263.7	217.4	187.5	168.5	154.9	160.3
65°	334.3	320.7	271.7	212.0	171.2	138.6	111.4	100.6	103.2
67.5°	285.3	269.0	222.9	168.5	127.7	92.4	62.6	57.1	57.1
70°	236.4	220.2	179.4	130.5	89.7	48.9	27.1	27.1	27.1
72.5°	190.2	176.7	138.6	97.9	57.1	21.7	10.9	10.9	10.9
75°	146.7	135.9	103.2	67.9	35.3	10.9	8.2	5.4	5.4
77.5°	108.7	97.9	73.4	46.2	21.7	5.4	5.4	5.4	5.4
80°	73.4	65.2	48.9	27.1	10.9	2.7	2.7	2.7	2.7
82.5°	43.5	38.0	27.1	13.6	5.4	2.7	2.7	2.7	2.7
85°	21.7	16.3	10.9	5.4	2.7	2.7	2.7	2.7	2.7
87.5°	5.4	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)