

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: P580650

Luminaire Tested: **HCC4S40D010BZ-HM43040930-41WWWB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580650
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: HCC4S40D010BZ-HM43040930-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

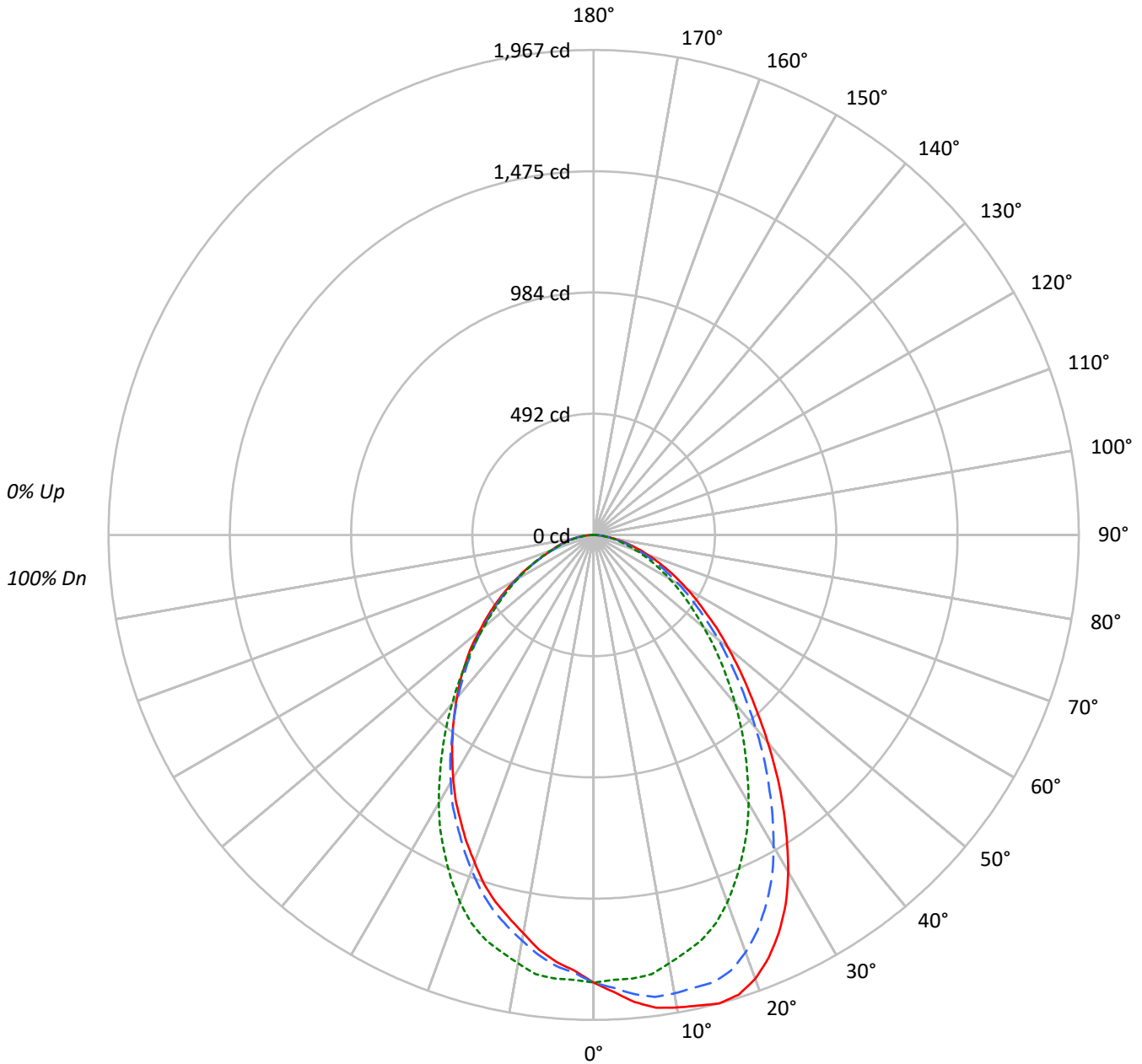
Lumens per Lamp: N/A
Luminaire Lumens: 3520.9 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P580650
CATALOG NUMBER: HCC4S40D010BZ-HM43040930-41WWWB

Luminous Intensity Polar Plot





TEST NUMBER: P580650

CATALOG NUMBER: HCC4S40D010BZ-HM43040930-41WWWB

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°	223934	223934	223934
5°	235475	223638	215268
10°	243746	220963	205495
15°	251180	216957	196717
20°	251458	208024	185381
25°	242007	194428	173823
30°	224722	178917	162310
35°	201427	161087	150201
40°	176748	143739	138844
45°	154481	127234	128054
50°	136397	111355	115384
55°	120297	98749	103760
60°	107508	87378	90832
65°	95234	76847	76847
70°	83199	65564	65564
75°	71104	55521	62193
80°	56328	49722	56328
85°	36371	42882	52788



TEST NUMBER: P580650

CATALOG NUMBER: HCC4S40D010BZ-HM43040930-41WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.0	4.9
10°-20°	484.4	13.8
20°-30°	678.6	19.3
30°-40°	699.2	19.9
40°-50°	595.2	16.9
50°-60°	441.0	12.5
60°-70°	276.8	7.9
70°-80°	137.5	3.9
80°-90°	36.1	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°	1335.0	37.9
0°-40°	2034.2	57.8
0°-60°	3070.5	87.2
0°-90°	3520.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3520.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1816	1816	1816	1816	1816	
5°	1902	1869	1806	1755	1739	183
15°	1967	1878	1699	1576	1540	553
25°	1778	1655	1429	1305	1277	813
35°	1338	1238	1070	1000	998	834
45°	886	825	729	716	734	687
55°	559	515	459	468	482	506
65°	326	294	263	259	263	325
75°	149	133	116	126	130	159
85°	26	26	30	35	37	33
90°	0	0	0	0	0	

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



TEST NUMBER: P580650

CATALOG NUMBER: HCC4S40D010BZ-HM43040930-41WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1815.5	1815.5	1815.5	1815.5	1815.5	1815.5	1815.5	1815.5	1815.5
2.5°	1855.1	1848.1	1838.8	1822.5	1806.2	1792.1	1778.2	1771.2	1768.9
5°	1901.8	1887.8	1869.2	1838.8	1806.2	1778.2	1754.9	1743.3	1738.6
7.5°	1934.4	1920.4	1890.1	1843.5	1796.9	1754.9	1717.6	1701.3	1696.6
10°	1946.1	1929.7	1887.8	1824.9	1764.2	1713.0	1671.0	1650.0	1640.7
12.5°	1955.4	1934.4	1880.7	1806.2	1731.6	1668.7	1624.4	1596.4	1589.5
15°	1967.0	1943.7	1878.5	1787.5	1699.0	1624.4	1575.5	1549.8	1540.5
17.5°	1955.4	1929.7	1852.8	1750.2	1650.0	1568.5	1514.8	1491.6	1482.2
20°	1915.7	1887.8	1801.6	1691.9	1584.8	1500.9	1447.3	1424.0	1412.3
22.5°	1855.1	1824.9	1736.2	1619.7	1510.2	1428.6	1377.4	1354.1	1347.1
25°	1778.2	1747.9	1654.7	1535.9	1428.6	1349.3	1305.1	1284.1	1277.2
27.5°	1687.3	1657.1	1566.1	1449.6	1347.1	1272.4	1237.5	1216.5	1211.9
30°	1577.8	1547.5	1458.9	1351.7	1256.2	1186.2	1158.3	1142.0	1139.6
32.5°	1456.6	1431.0	1349.3	1251.5	1160.6	1102.4	1081.4	1069.8	1067.4
35°	1337.7	1309.8	1237.5	1148.9	1069.8	1018.4	999.8	997.5	997.5
37.5°	1216.5	1188.6	1130.3	1048.7	981.2	934.6	927.5	929.9	929.9
40°	1097.7	1072.0	1020.8	953.2	892.7	857.7	855.3	859.9	862.3
42.5°	985.8	964.8	918.2	859.9	808.7	780.8	783.0	792.4	799.4
45°	885.6	867.0	825.1	773.7	729.4	708.5	715.5	727.1	734.1
47.5°	794.7	778.4	738.7	692.2	654.9	640.9	650.2	664.2	673.5
50°	710.8	696.8	659.6	610.6	580.3	571.0	582.6	596.6	601.3
52.5°	636.3	622.3	582.6	540.7	517.3	512.7	524.4	536.1	543.0
55°	559.4	547.7	515.1	477.8	459.2	456.8	468.5	477.8	482.5
57.5°	496.4	484.7	454.5	421.8	405.5	403.2	414.9	421.8	424.2
60°	435.8	424.2	396.2	365.9	354.2	354.2	361.2	365.9	368.2
62.5°	379.9	368.2	342.6	316.9	307.6	307.6	307.6	310.0	316.9
65°	326.3	316.9	293.7	270.4	263.3	258.7	258.7	258.7	263.3
67.5°	277.3	268.0	249.4	228.3	221.4	214.4	212.1	216.7	216.7
70°	230.7	223.8	205.1	188.8	181.8	174.8	172.4	181.8	181.8
72.5°	188.8	181.8	170.2	153.8	146.9	144.5	149.2	153.8	156.2
75°	149.2	142.1	132.8	123.5	116.5	118.8	125.9	128.1	130.5
77.5°	111.9	109.5	100.2	93.3	93.3	95.5	100.2	104.9	107.2
80°	79.3	76.9	72.2	67.6	70.0	74.5	76.9	81.6	79.3
82.5°	49.0	49.0	46.6	46.6	49.0	53.6	55.9	58.3	60.6
85°	25.7	25.7	25.7	27.9	30.3	32.6	35.0	37.3	37.3
87.5°	7.0	9.3	9.3	11.7	14.0	14.0	16.4	16.4	16.4
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)