

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: P580668

Luminaire Tested: **HCC4S40D010BZ-HM43040935-41WWWB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580668
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-HM43040935-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

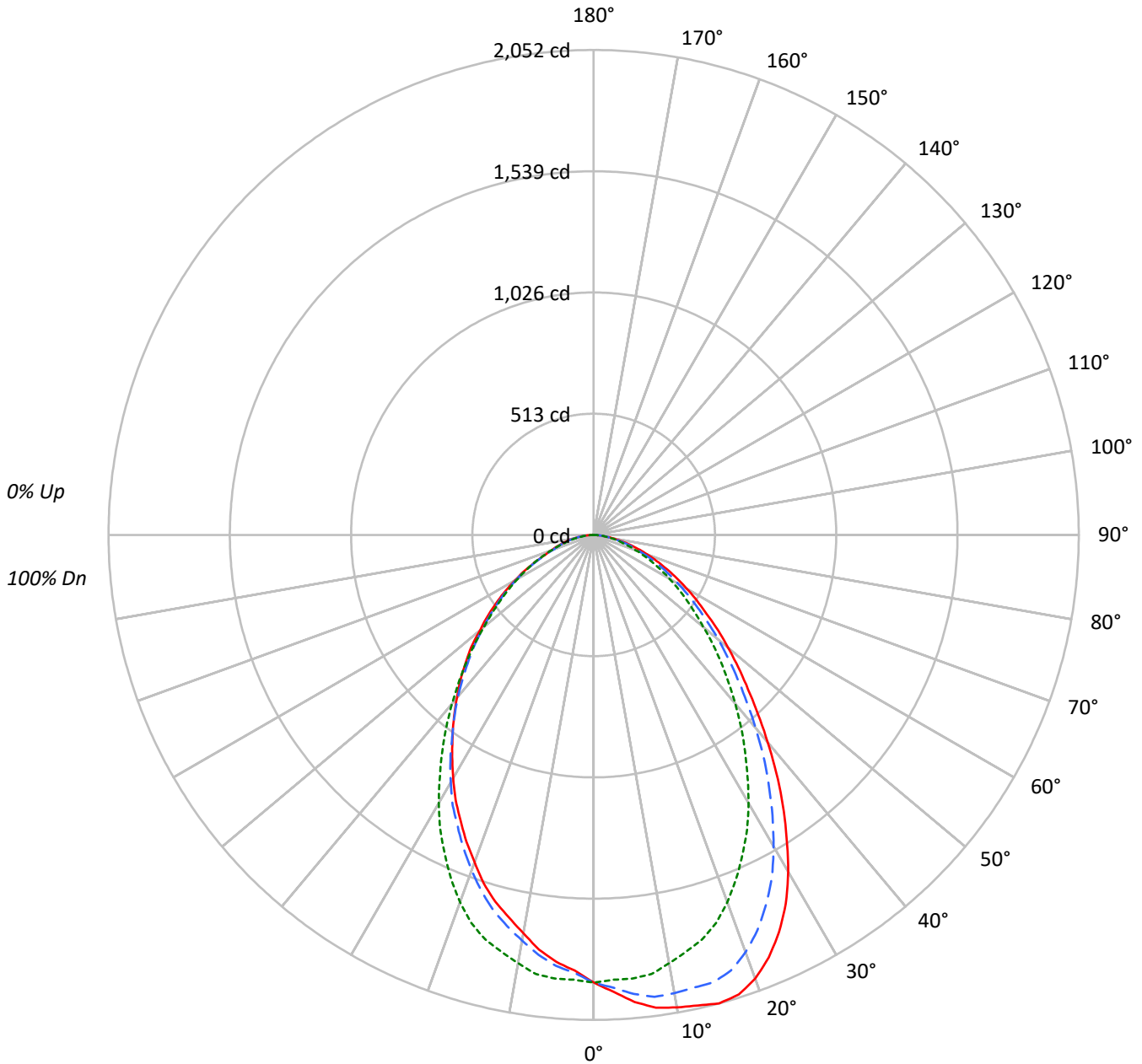
Lumens per Lamp: N/A
Luminaire Lumens: 3672.4 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P580668
CATALOG NUMBER: HCC4S40D010BZ-HM43040935-41WWWB

Luminous Intensity Polar Plot





TEST NUMBER: P580668

CATALOG NUMBER: HCC4S40D010BZ-HM43040935-41WWWB

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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°	233567	233567	233567
5°	245591	233246	224529
10°	254229	230470	214338
15°	261996	226291	205170
20°	262287	216962	193362
25°	252419	202798	181295
30°	234378	186608	169303
35°	210100	167999	156661
40°	184348	149906	144818
45°	161128	132712	133584
50°	142269	116133	120354
55°	125458	102986	108211
60°	112146	91152	94754
65°	99320	80145	80145
70°	86806	68377	68377
75°	74154	57903	64861
80°	58672	51853	58672
85°	37928	44721	55053



TEST NUMBER: P580668
 CATALOG NUMBER: HCC4S40D010BZ-HM43040935-41WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.4	4.9
10°-20°	505.2	13.8
20°-30°	707.8	19.3
30°-40°	729.2	19.9
40°-50°	620.9	16.9
50°-60°	460.0	12.5
60°-70°	288.7	7.9
70°-80°	143.4	3.9
80°-90°	37.7	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°	1392.5	37.9
0°-40°	2121.7	57.8
0°-60°	3202.6	87.2
0°-90°	3672.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3672.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1894	1894	1894	1894	1894	
5°	1984	1950	1884	1830	1813	191
15°	2052	1959	1772	1643	1607	577
25°	1855	1726	1490	1361	1332	848
35°	1395	1291	1116	1043	1040	870
45°	924	860	761	746	766	717
55°	583	537	479	489	503	527
65°	340	306	275	270	275	339
75°	156	139	122	131	136	166
85°	27	27	32	36	39	34
90°	0	0	0	0	0	



TEST NUMBER: P580668

CATALOG NUMBER: HCC4S40D010BZ-HM43040935-41WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1893.6	1893.6	1893.6	1893.6	1893.6	1893.6	1893.6	1893.6	1893.6
2.5°	1935.0	1927.7	1917.9	1900.9	1883.8	1869.3	1854.7	1847.4	1844.9
5°	1983.5	1968.9	1949.5	1917.9	1883.8	1854.7	1830.4	1818.3	1813.4
7.5°	2017.6	2003.0	1971.4	1922.7	1874.2	1830.4	1791.5	1774.5	1769.6
10°	2029.8	2012.8	1968.9	1903.3	1840.1	1786.6	1742.9	1721.1	1711.3
12.5°	2039.4	2017.6	1961.6	1883.8	1806.2	1740.5	1694.3	1665.1	1657.8
15°	2051.7	2027.3	1959.3	1864.4	1772.1	1694.3	1643.3	1616.5	1606.7
17.5°	2039.4	2012.8	1932.5	1825.5	1721.1	1636.0	1580.0	1555.7	1546.0
20°	1998.2	1968.9	1879.0	1764.8	1652.9	1565.5	1509.5	1485.2	1473.1
22.5°	1935.0	1903.3	1811.0	1689.5	1575.2	1490.1	1436.7	1412.3	1405.1
25°	1854.7	1823.1	1725.9	1601.9	1490.1	1407.4	1361.2	1339.4	1332.1
27.5°	1760.0	1728.4	1633.5	1512.0	1405.1	1327.3	1290.7	1268.9	1264.0
30°	1645.6	1614.0	1521.6	1409.9	1310.2	1237.2	1208.1	1191.1	1188.7
32.5°	1519.3	1492.5	1407.4	1305.4	1210.6	1149.8	1128.0	1115.7	1113.3
35°	1395.3	1366.2	1290.7	1198.3	1115.7	1062.3	1042.9	1040.4	1040.4
37.5°	1268.9	1239.7	1179.0	1093.9	1023.4	974.7	967.4	969.9	969.9
40°	1144.9	1118.2	1064.7	994.2	931.0	894.6	892.1	897.0	899.4
42.5°	1028.3	1006.3	957.8	897.0	843.4	814.3	816.8	826.5	833.8
45°	923.7	904.3	860.5	807.0	760.8	739.0	746.2	758.5	765.8
47.5°	828.9	811.9	770.6	721.9	683.0	668.5	678.2	692.8	702.5
50°	741.4	726.9	688.0	636.8	605.2	595.6	607.7	622.3	627.2
52.5°	663.6	649.1	607.7	564.0	539.6	534.8	546.9	559.0	566.3
55°	583.4	571.3	537.2	498.3	478.9	476.4	488.6	498.3	503.2
57.5°	517.8	505.6	474.0	440.0	423.0	420.5	432.7	440.0	442.5
60°	454.6	442.5	413.2	381.6	369.5	369.5	376.8	381.6	384.1
62.5°	396.3	384.1	357.4	330.6	320.8	320.8	320.8	323.3	330.6
65°	340.3	330.6	306.3	281.9	274.6	269.8	269.8	269.8	274.6
67.5°	289.2	279.6	260.1	238.2	230.9	223.6	221.2	226.1	226.1
70°	240.7	233.4	213.9	196.8	189.6	182.3	179.9	189.6	189.6
72.5°	196.8	189.6	177.5	160.4	153.1	150.7	155.6	160.4	162.9
75°	155.6	148.3	138.6	128.8	121.5	124.0	131.3	133.7	136.1
77.5°	116.7	114.2	104.5	97.2	97.2	99.7	104.5	109.4	111.8
80°	82.6	80.3	75.3	70.5	73.0	77.8	80.3	85.1	82.6
82.5°	51.0	51.0	48.7	48.7	51.0	55.9	58.3	60.8	63.2
85°	26.8	26.8	26.8	29.1	31.6	34.1	36.4	38.9	38.9
87.5°	7.3	9.8	9.8	12.1	14.6	14.6	17.0	17.0	17.0
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)