

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: P580612

Luminaire Tested: **HCC4S40D010MW-HM43040840-41WWBB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580612
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: HCC4S40D010MW-HM43040840-41WWBB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

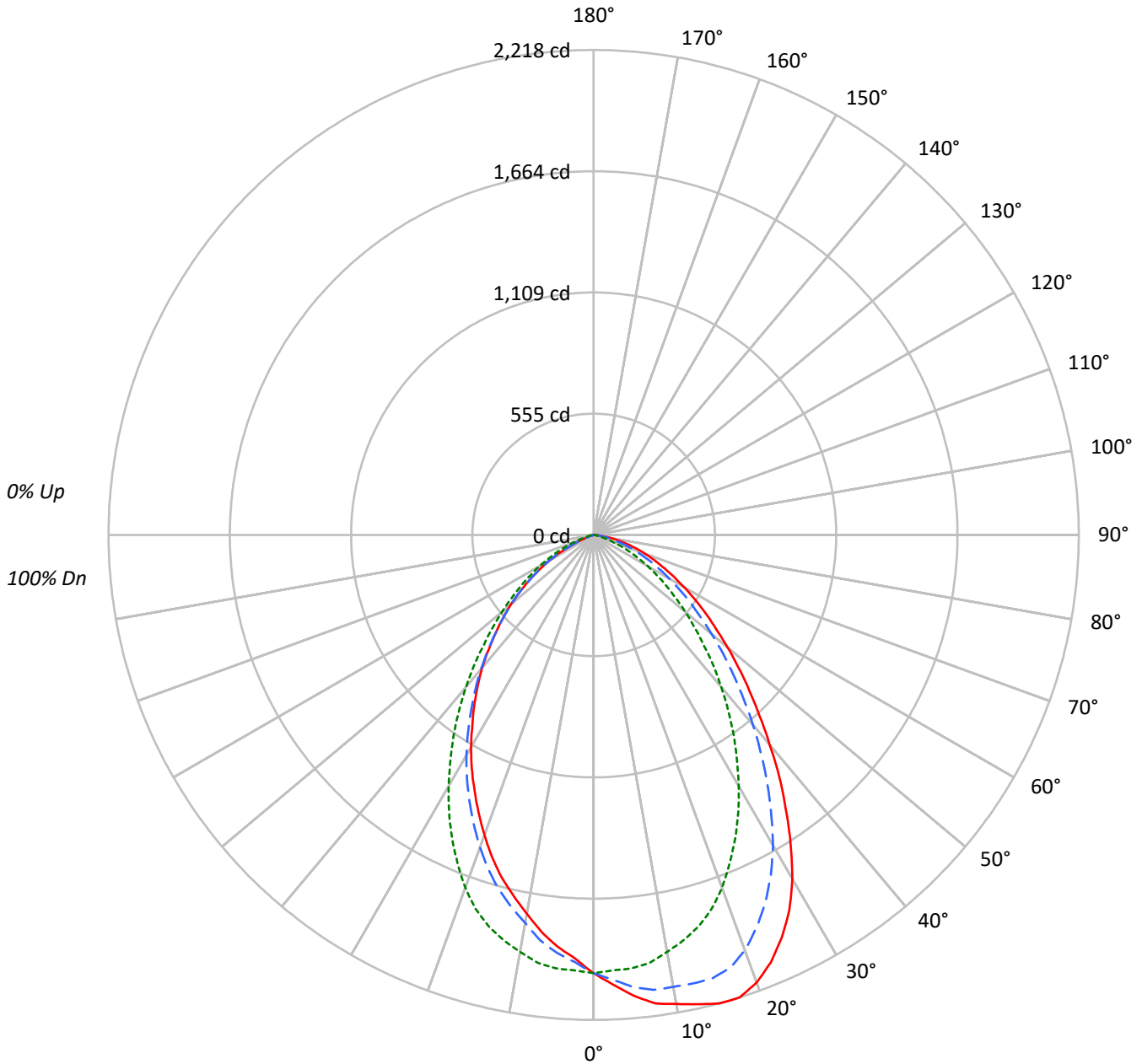
Lumens per Lamp: N/A
Luminaire Lumens: 3462.6 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.04 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P580612
CATALOG NUMBER: HCC4S40D010MW-HM43040840-41WWBB

Luminous Intensity Polar Plot



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



TEST NUMBER: P580612

CATALOG NUMBER: HCC4S40D010MW-HM43040840-41WWBB

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	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°	247259	247259	247259
5°	261972	246433	234088
10°	272866	242506	220362
15°	283295	236686	207188
20°	285967	225324	191642
25°	276712	208405	175415
30°	258705	188844	159618
35°	230579	167879	143410
40°	201560	146010	127654
45°	175571	123850	110419
50°	153206	105061	94679
55°	134297	87072	76664
60°	117474	70356	56270
65°	102385	52447	31638
70°	89474	33936	10278
75°	73392	17681	2716
80°	54695	8098	1989
85°	32267	3963	3963



TEST NUMBER: P580612

CATALOG NUMBER: HCC4S40D010MW-HM43040840-41WWBB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.2	5.5
10°-20°	529.5	15.3
20°-30°	732.1	21.1
30°-40°	736.1	21.3
40°-50°	594.0	17.2
50°-60°	401.7	11.6
60°-70°	204.4	5.9
70°-80°	65.4	1.9
80°-90°	10.0	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°	1450.8	41.9
0°-40°	2187.0	63.2
0°-60°	3182.7	91.9
0°-90°	3462.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3462.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2005	2005	2005	2005	2005	
5°	2116	2076	1990	1919	1891	204
15°	2218	2099	1854	1677	1622	625
25°	2033	1856	1531	1343	1289	930
35°	1531	1383	1115	975	952	957
45°	1006	901	710	633	633	780
55°	624	539	405	354	356	561
65°	351	285	180	117	108	352
75°	154	108	37	8	6	166
85°	23	11	3	3	3	31
90°	0	0	0	0	0	

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



TEST NUMBER: P580612

CATALOG NUMBER: HCC4S40D010MW-HM43040840-41WWBB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2004.6	2004.6	2004.6	2004.6	2004.6	2004.6	2004.6	2004.6	2004.6
2.5°	2058.8	2047.4	2036.0	2016.0	1993.3	1970.4	1956.1	1944.7	1939.0
5°	2115.8	2101.5	2075.9	2033.2	1990.3	1950.4	1919.0	1899.1	1890.6
7.5°	2161.4	2141.4	2098.7	2038.9	1973.2	1910.5	1870.6	1842.0	1830.7
10°	2178.6	2155.7	2098.7	2018.8	1936.2	1859.2	1802.1	1773.6	1759.4
12.5°	2198.5	2172.8	2101.5	2001.8	1899.1	1807.8	1742.3	1705.2	1690.9
15°	2218.5	2184.3	2098.7	1976.1	1853.5	1748.0	1676.7	1639.6	1622.5
17.5°	2218.5	2178.6	2075.9	1933.3	1793.6	1682.4	1602.6	1559.8	1545.5
20°	2178.6	2132.9	2021.7	1864.9	1716.6	1596.9	1519.9	1477.0	1460.0
22.5°	2115.8	2064.4	1944.7	1782.2	1625.3	1508.4	1431.4	1391.5	1374.5
25°	2033.2	1981.8	1856.4	1688.1	1531.3	1414.4	1343.1	1306.0	1288.9
27.5°	1936.2	1879.1	1753.7	1585.4	1431.4	1320.2	1254.6	1220.4	1206.2
30°	1816.4	1762.2	1639.6	1474.2	1325.9	1223.3	1163.4	1132.1	1120.7
32.5°	1676.7	1631.1	1511.3	1357.3	1217.6	1123.5	1069.3	1043.7	1032.2
35°	1531.3	1488.5	1383.0	1240.4	1114.9	1026.5	975.2	958.1	952.4
37.5°	1394.4	1357.3	1254.6	1123.5	1009.5	932.4	886.8	875.4	869.7
40°	1251.8	1226.1	1132.1	1012.3	906.8	838.3	801.3	792.8	792.8
42.5°	1123.5	1095.0	1012.3	904.0	809.8	741.4	715.8	707.1	710.0
45°	1006.5	978.1	901.1	801.3	710.0	653.0	633.0	633.0	633.0
47.5°	898.3	872.6	801.3	698.6	624.5	578.9	558.9	558.9	561.7
50°	798.4	781.3	701.5	613.1	547.5	504.7	490.4	487.6	493.4
52.5°	704.3	684.4	613.1	533.3	470.5	436.3	422.1	419.1	422.1
55°	624.5	601.6	539.0	462.0	404.9	370.7	353.6	350.8	356.5
57.5°	547.5	530.3	464.8	396.4	342.1	307.9	293.7	288.0	290.9
60°	476.2	459.0	399.2	333.6	285.2	250.9	230.9	225.3	228.1
62.5°	410.6	396.4	339.3	276.6	228.1	196.7	176.8	162.5	168.3
65°	350.8	336.5	285.2	222.4	179.7	145.4	116.9	105.5	108.4
67.5°	299.4	282.3	233.8	176.8	134.1	97.0	65.6	59.9	59.9
70°	248.1	230.9	188.2	136.9	94.1	51.3	28.5	28.5	28.5
72.5°	199.7	185.3	145.4	102.7	59.9	22.8	11.4	11.4	11.4
75°	154.0	142.6	108.4	71.3	37.1	11.4	8.5	5.7	5.7
77.5°	114.0	102.7	77.0	48.4	22.8	5.7	5.7	5.7	5.7
80°	77.0	68.4	51.3	28.5	11.4	2.8	2.8	2.8	2.8
82.5°	45.6	39.9	28.5	14.2	5.7	2.8	2.8	2.8	2.8
85°	22.8	17.2	11.4	5.7	2.8	2.8	2.8	2.8	2.8
87.5°	5.7	2.8	2.8	2.8	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)