

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: P580596

Luminaire Tested: **HCC4W40D010MW-HM43040835-41WWWB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580596  
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: HCC4W40D010MW-HM43040835-41WWWB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

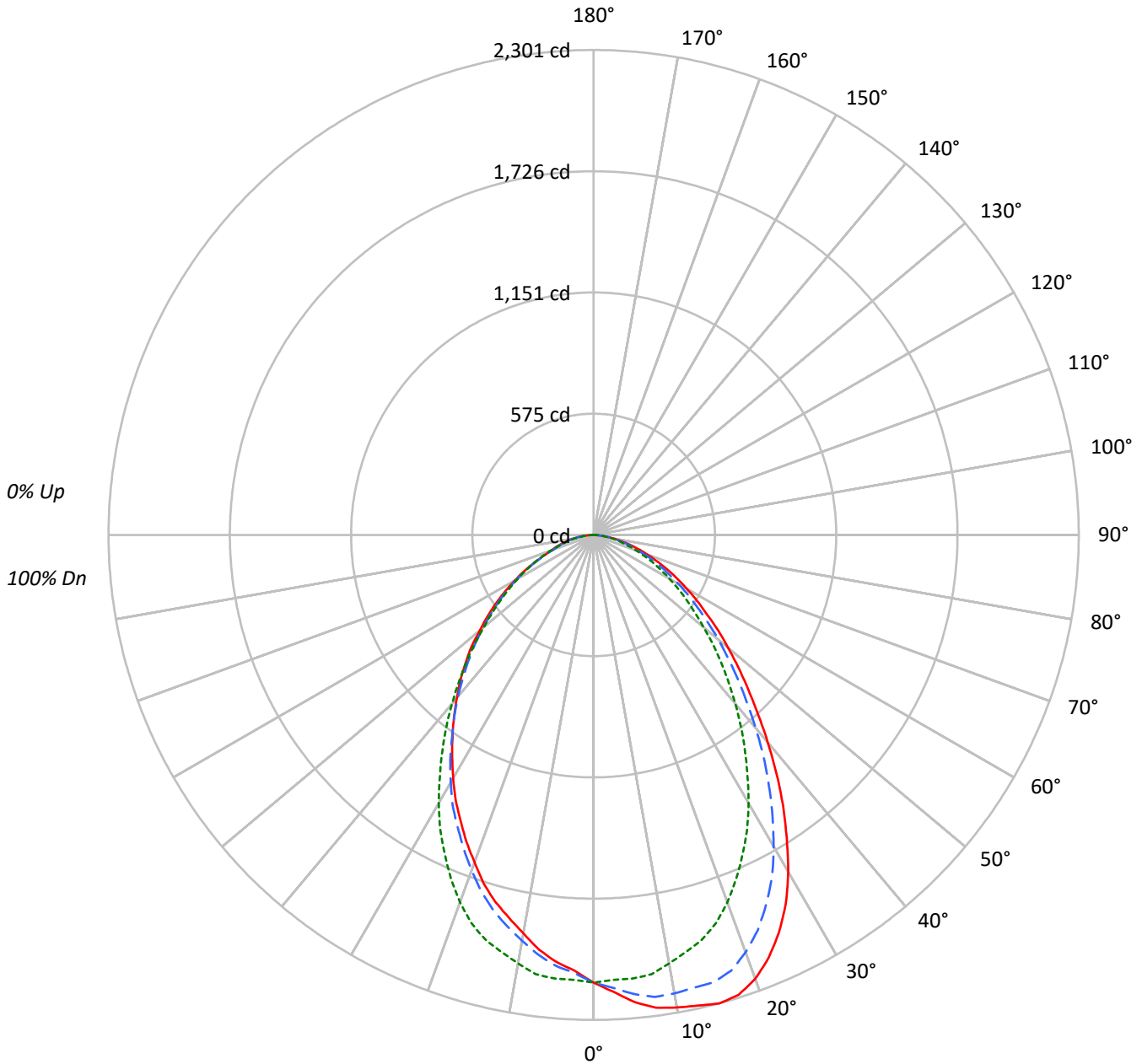
Lumens per Lamp: N/A  
Luminaire Lumens: 4119.0 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (A<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: P580596  
CATALOG NUMBER: HCC4W40D010MW-HM43040835-41WWWB

### Luminous Intensity Polar Plot





TEST NUMBER: P580596

CATALOG NUMBER: HCC4W40D010MW-HM43040835-41WWWB

**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°	261986	261986	261986
5°	275468	261625	251831
10°	285141	258513	240402
15°	293856	253810	230135
20°	294171	243359	216871
25°	283109	227459	203342
30°	262892	209297	189884
35°	235653	188447	175724
40°	206777	168133	162433
45°	180717	148865	149807
50°	159577	130275	134977
55°	140705	115501	121372
60°	125763	102229	106275
65°	111403	89922	89922
70°	97336	76708	76708
75°	83162	64957	72772
80°	65847	58104	65847
85°	42457	50099	61704



TEST NUMBER: P580596

CATALOG NUMBER: HCC4W40D010MW-HM43040835-41WWWB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.2	4.9
10°-20°	566.7	13.8
20°-30°	793.9	19.3
30°-40°	817.9	19.9
40°-50°	696.4	16.9
50°-60°	516.0	12.5
60°-70°	323.8	7.9
70°-80°	160.9	3.9
80°-90°	42.2	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°	1561.8	37.9
0°-40°	2379.8	57.8
0°-60°	3592.1	87.2
0°-90°	4119.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4119.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2124	2124	2124	2124	2124	
5°	2225	2187	2113	2053	2034	214
15°	2301	2198	1988	1843	1802	647
25°	2080	1936	1671	1527	1494	951
35°	1565	1448	1252	1170	1167	976
45°	1036	965	853	837	859	804
55°	654	602	537	548	564	592
65°	382	344	308	303	308	381
75°	174	155	136	147	153	186
85°	30	30	35	41	44	39
90°	0	0	0	0	0	

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



TEST NUMBER: P580596

CATALOG NUMBER: HCC4W40D010MW-HM43040835-41WWWB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0
2.5°	2170.3	2162.1	2151.2	2132.1	2113.0	2096.6	2080.2	2072.2	2069.4
5°	2224.8	2208.5	2186.6	2151.2	2113.0	2080.2	2053.0	2039.4	2033.9
7.5°	2263.0	2246.6	2211.2	2156.6	2102.1	2053.0	2009.4	1990.3	1984.8
10°	2276.6	2257.5	2208.5	2134.8	2064.0	2003.9	1954.9	1930.4	1919.4
12.5°	2287.5	2263.0	2200.3	2113.0	2025.8	1952.1	1900.3	1867.6	1859.4
15°	2301.2	2273.8	2197.5	2091.2	1987.6	1900.3	1843.0	1813.1	1802.2
17.5°	2287.5	2257.5	2167.6	2047.6	1930.4	1835.0	1772.2	1744.9	1734.1
20°	2241.1	2208.5	2107.6	1979.5	1854.0	1755.8	1693.2	1665.9	1652.2
22.5°	2170.3	2134.8	2031.3	1894.9	1766.7	1671.3	1611.3	1584.1	1575.9
25°	2080.2	2044.8	1935.7	1796.7	1671.3	1578.6	1526.8	1502.3	1494.1
27.5°	1974.0	1938.5	1832.2	1695.8	1575.9	1488.7	1447.8	1423.2	1417.7
30°	1845.8	1810.4	1706.7	1581.4	1469.5	1387.8	1355.1	1336.0	1333.2
32.5°	1704.0	1674.1	1578.6	1464.1	1357.8	1289.6	1265.0	1251.5	1248.7
35°	1565.0	1532.3	1447.8	1344.2	1251.5	1191.5	1169.7	1167.0	1167.0
37.5°	1423.2	1390.5	1322.3	1226.9	1147.8	1093.3	1085.1	1087.8	1087.8
40°	1284.2	1254.2	1194.2	1115.2	1044.2	1003.3	1000.6	1006.1	1008.8
42.5°	1153.3	1128.7	1074.3	1006.1	946.1	913.4	916.1	927.0	935.1
45°	1036.0	1014.3	965.2	905.2	853.4	828.9	837.1	850.6	858.8
47.5°	929.8	910.6	864.3	809.8	766.1	749.7	760.7	777.1	788.0
50°	831.6	815.2	771.6	714.3	678.9	668.0	681.6	697.9	703.4
52.5°	744.3	728.0	681.6	632.6	605.2	599.8	613.4	627.1	635.3
55°	654.3	640.8	602.5	558.9	537.1	534.4	548.1	558.9	564.4
57.5°	580.8	567.1	531.7	493.5	474.4	471.7	485.3	493.5	496.3
60°	509.8	496.3	463.5	428.1	414.4	414.4	422.6	428.1	430.8
62.5°	444.4	430.8	400.8	370.8	359.8	359.8	359.8	362.6	370.8
65°	381.7	370.8	343.6	316.2	308.1	302.7	302.7	302.7	308.1
67.5°	324.4	313.5	291.7	267.2	259.1	250.9	248.1	253.6	253.6
70°	269.9	261.8	239.9	220.8	212.7	204.5	201.8	212.7	212.7
72.5°	220.8	212.7	199.0	179.9	171.7	169.0	174.5	179.9	182.7
75°	174.5	166.4	155.4	144.5	136.3	139.0	147.2	150.0	152.7
77.5°	130.8	128.1	117.3	109.1	109.1	111.8	117.3	122.6	125.4
80°	92.7	90.0	84.5	79.0	81.8	87.2	90.0	95.4	92.7
82.5°	57.3	57.3	54.5	54.5	57.3	62.7	65.5	68.2	70.8
85°	30.0	30.0	30.0	32.7	35.4	38.2	40.9	43.6	43.6
87.5°	8.2	10.9	10.9	13.7	16.4	16.4	19.1	19.1	19.1
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)