

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: P580681

Luminaire Tested: **HCC4S40D010MB-HM43040940-41WDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580681  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S40D010MB-HM43040940-41WDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

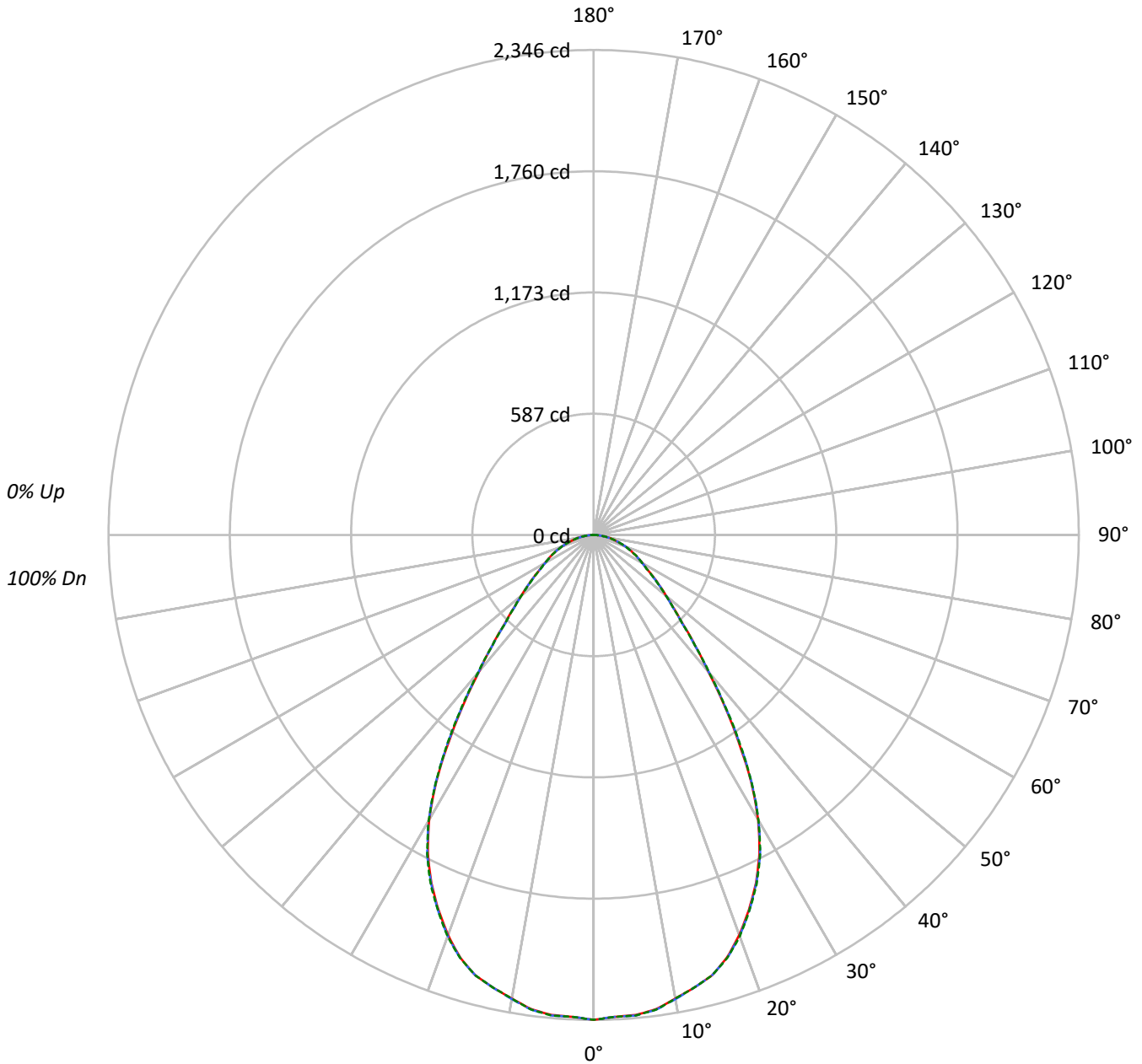
Lumens per Lamp: N/A  
Luminaire Lumens: 3618.7 lumens  
Efficiency: N/A  
Efficacy: 88.3 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.07 / 1.04  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P580681  
CATALOG NUMBER: HCC4S40D010MB-HM43040940-41WDW

### Luminous Intensity Polar Plot





TEST NUMBER: P580681

CATALOG NUMBER: HCC4S40D010MB-HM43040940-41WDW

**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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89					89			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78					78			
3	96	87	81	76	94	86	80	75	83	78	74	81	76	72	78	74	71	69					69			
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56					56			
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51					51			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46					46			
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42					42			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39					39			
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36					36			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	289307	289307	289307
5°	288605	288889	288889
10°	285241	285554	285241
15°	281827	281827	281827
20°	270255	270898	271213
25°	252786	253127	253780
30°	226516	227200	227200
35°	183900	185361	185722
40°	138780	139569	139955
45°	106302	105883	105883
50°	87599	87119	87119
55°	75180	74664	74664
60°	67100	66483	66483
65°	63071	63071	63071
70°	58676	58676	58676
75°	53233	54377	53233
80°	50006	48231	50006
85°	41183	41183	41183



TEST NUMBER: P580681  
 CATALOG NUMBER: HCC4S40D010MB-HM43040940-41WDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	221.0	6.1
10°-20°	618.4	17.1
20°-30°	849.8	23.5
30°-40°	764.1	21.1
40°-50°	482.8	13.3
50°-60°	315.2	8.7
60°-70°	213.5	5.9
70°-80°	120.2	3.3
80°-90°	33.7	0.9
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°	1689.2	46.7
0°-40°	2453.2	67.8
0°-60°	3251.2	89.8
0°-90°	3618.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3618.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2346	2346	2346	2346	2346	
5°	2331	2331	2333	2333	2333	221
15°	2207	2207	2207	2207	2207	618
25°	1857	1860	1860	1865	1865	848
35°	1221	1226	1231	1236	1233	760
45°	609	607	607	607	607	483
55°	350	350	347	350	347	316
65°	216	216	216	216	216	214
75°	112	114	114	114	112	120
85°	29	29	29	29	29	34
90°	0	0	0	0	0	

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



TEST NUMBER: P580681

CATALOG NUMBER: HCC4S40D010MB-HM43040940-41WDW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2345.5	2345.5	2345.5	2345.5	2345.5
2.5°	2333.2	2333.2	2333.2	2333.2	2333.2
5°	2330.9	2330.9	2333.2	2333.2	2333.2
7.5°	2313.9	2316.3	2316.3	2316.3	2316.3
10°	2277.4	2277.4	2279.9	2279.9	2277.4
12.5°	2243.5	2243.5	2243.5	2245.9	2243.5
15°	2207.0	2207.0	2207.0	2207.0	2207.0
17.5°	2143.9	2146.4	2146.4	2146.4	2146.4
20°	2058.9	2063.8	2063.8	2066.2	2066.2
22.5°	1961.9	1964.2	1966.7	1969.1	1966.7
25°	1857.4	1859.9	1859.9	1864.7	1864.7
27.5°	1736.0	1738.4	1743.3	1743.3	1743.3
30°	1590.4	1592.7	1595.2	1595.2	1595.2
32.5°	1418.0	1418.0	1422.8	1425.2	1422.8
35°	1221.3	1226.1	1231.0	1235.9	1233.4
37.5°	1034.3	1039.2	1041.6	1041.6	1044.0
40°	861.9	866.8	866.8	871.7	869.2
42.5°	726.0	723.5	723.5	728.4	726.0
45°	609.4	607.0	607.0	607.0	607.0
47.5°	524.4	522.0	522.0	522.0	522.0
50°	456.5	454.0	454.0	454.0	454.0
52.5°	400.6	398.2	398.2	398.2	395.7
55°	349.6	349.6	347.2	349.6	347.2
57.5°	303.5	303.5	303.5	303.5	303.5
60°	272.0	269.5	269.5	269.5	269.5
62.5°	242.8	242.8	242.8	242.8	242.8
65°	216.1	216.1	216.1	216.1	216.1
67.5°	189.3	187.0	189.3	189.3	187.0
70°	162.7	160.3	162.7	162.7	162.7
72.5°	136.0	136.0	136.0	138.4	136.0
75°	111.7	114.1	114.1	114.1	111.7
77.5°	89.8	92.3	89.8	89.8	89.8
80°	70.4	67.9	67.9	67.9	70.4
82.5°	48.5	48.5	48.5	48.5	48.5
85°	29.1	29.1	29.1	29.1	29.1
87.5°	12.1	12.1	12.1	12.1	12.1
90°	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)