

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: P580396

Luminaire Tested: **HCC4W30D010MB-HM43040940-41WWBB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580396  
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: HCC4W30D010MB-HM43040940-41WWBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

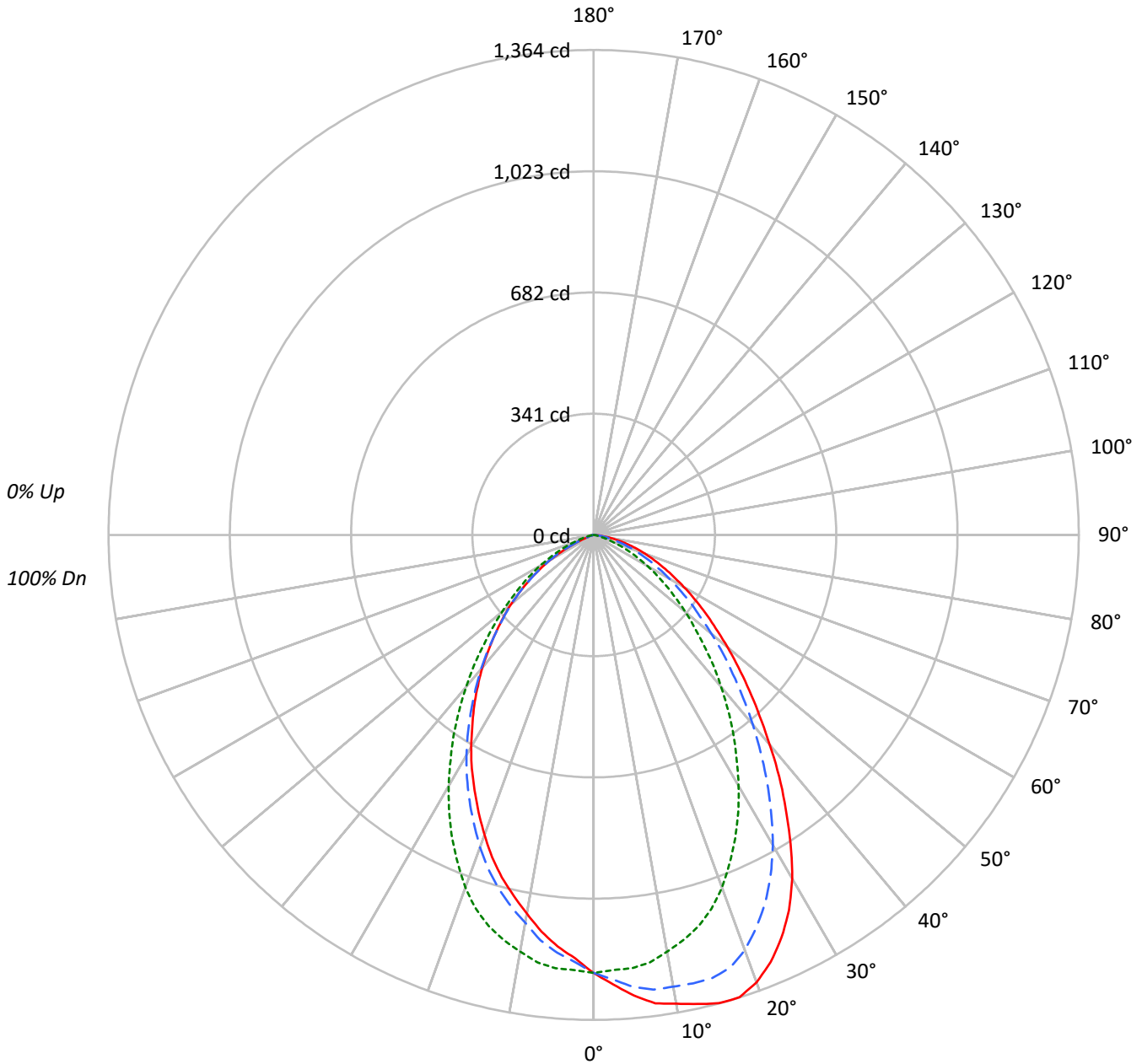
Lumens per Lamp: N/A  
Luminaire Lumens: 2128.3 lumens  
Efficiency: N/A  
Efficacy: 76.0 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.04 / 1.12  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 28  
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: P580396  
CATALOG NUMBER: HCC4W30D010MB-HM43040940-41WWBB

### Luminous Intensity Polar Plot



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



TEST NUMBER: P580396

CATALOG NUMBER: HCC4W30D010MB-HM43040940-41WWBB

**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	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°	151974	151974	151974
5°	161024	151477	143887
10°	167708	149046	135444
15°	174127	145485	127352
20°	175759	138494	117781
25°	170080	128094	107816
30°	159020	116078	98104
35°	141723	103191	88148
40°	123886	89734	78463
45°	107924	76124	67856
50°	94180	64572	58182
55°	82556	53504	47117
60°	72207	43245	34586
65°	62925	32221	19438
70°	54997	20881	6311
75°	45084	10866	1668
80°	33669	4972	1279
85°	19813	2547	2547



TEST NUMBER: P580396  
 CATALOG NUMBER: HCC4W30D010MB-HM43040940-41WWBB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.3	5.5
10°-20°	325.5	15.3
20°-30°	450.0	21.1
30°-40°	452.5	21.3
40°-50°	365.1	17.2
50°-60°	246.9	11.6
60°-70°	125.6	5.9
70°-80°	40.2	1.9
80°-90°	6.2	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°	891.8	41.9
0°-40°	1344.2	63.2
0°-60°	1956.2	91.9
0°-90°	2128.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2128.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1232	1232	1232	1232	1232	
5°	1300	1276	1223	1180	1162	125
15°	1364	1290	1139	1030	997	384
25°	1250	1141	941	826	792	572
35°	941	850	685	599	585	588
45°	619	554	436	389	389	479
55°	384	331	249	217	219	345
65°	216	175	110	72	67	216
75°	95	67	23	5	4	102
85°	14	7	2	2	2	19
90°	0	0	0	0	0	



TEST NUMBER: P580396

CATALOG NUMBER: HCC4W30D010MB-HM43040940-41WWBB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1
2.5°	1265.4	1258.4	1251.4	1239.1	1225.1	1211.1	1202.3	1195.3	1191.8
5°	1300.5	1291.7	1276.0	1249.7	1223.4	1198.8	1179.5	1167.3	1162.1
7.5°	1328.6	1316.3	1290.0	1253.2	1212.8	1174.2	1149.8	1132.3	1125.2
10°	1339.0	1325.1	1290.0	1240.9	1190.0	1142.8	1107.7	1090.2	1081.4
12.5°	1351.3	1335.6	1291.7	1230.4	1167.3	1111.2	1070.9	1048.1	1039.3
15°	1363.6	1342.5	1290.0	1214.6	1139.3	1074.4	1030.5	1007.8	997.3
17.5°	1363.6	1339.0	1276.0	1188.3	1102.4	1034.0	985.0	958.7	950.0
20°	1339.0	1311.0	1242.6	1146.3	1055.1	981.5	934.2	907.9	897.3
22.5°	1300.5	1269.0	1195.3	1095.4	999.1	927.2	879.8	855.4	844.8
25°	1249.7	1218.1	1141.0	1037.5	941.2	869.3	825.5	802.7	792.2
27.5°	1190.0	1155.1	1077.9	974.5	879.8	811.5	771.2	750.1	741.4
30°	1116.5	1083.1	1007.8	906.1	815.0	751.9	715.0	695.9	688.8
32.5°	1030.5	1002.6	928.9	834.3	748.4	690.6	657.3	641.5	634.5
35°	941.2	914.9	850.1	762.4	685.3	631.0	599.4	588.9	585.4
37.5°	857.1	834.3	771.2	690.6	620.4	573.1	545.0	538.1	534.6
40°	769.4	753.6	695.9	622.2	557.3	515.3	492.5	487.3	487.3
42.5°	690.6	673.1	622.2	555.7	497.8	455.7	439.9	434.6	436.4
45°	618.7	601.2	553.8	492.5	436.4	401.3	389.0	389.0	389.0
47.5°	552.0	536.4	492.5	429.4	383.9	355.8	343.5	343.5	345.3
50°	490.8	480.2	431.1	376.9	336.5	310.2	301.5	299.7	303.2
52.5°	432.9	420.6	376.9	327.8	289.2	268.1	259.4	257.6	259.4
55°	383.9	369.9	331.3	283.9	248.8	227.9	217.4	215.6	219.1
57.5°	336.5	326.0	285.7	243.6	210.4	189.3	180.5	177.0	178.8
60°	292.7	282.2	245.3	205.1	175.3	154.2	142.0	138.5	140.2
62.5°	252.3	243.6	208.6	170.0	140.2	120.9	108.6	99.9	103.4
65°	215.6	206.8	175.3	136.7	110.4	89.3	71.9	64.9	66.6
67.5°	184.0	173.5	143.7	108.6	82.3	59.6	40.3	36.8	36.8
70°	152.5	142.0	115.7	84.1	57.9	31.6	17.5	17.5	17.5
72.5°	122.7	113.9	89.3	63.1	36.8	14.0	7.0	7.0	7.0
75°	94.6	87.6	66.6	43.8	22.8	7.0	5.3	3.5	3.5
77.5°	70.2	63.1	47.4	29.8	14.0	3.5	3.5	3.5	3.5
80°	47.4	42.1	31.6	17.5	7.0	1.8	1.8	1.8	1.8
82.5°	28.1	24.6	17.5	8.8	3.5	1.8	1.8	1.8	1.8
85°	14.0	10.5	7.0	3.5	1.8	1.8	1.8	1.8	1.8
87.5°	3.5	1.8	1.8	1.8	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)