

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: P580288

Luminaire Tested: **HCC4W30D010BZ-HM43040830-41WWBB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580288  
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: HCC4W30D010BZ-HM43040830-41WWBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

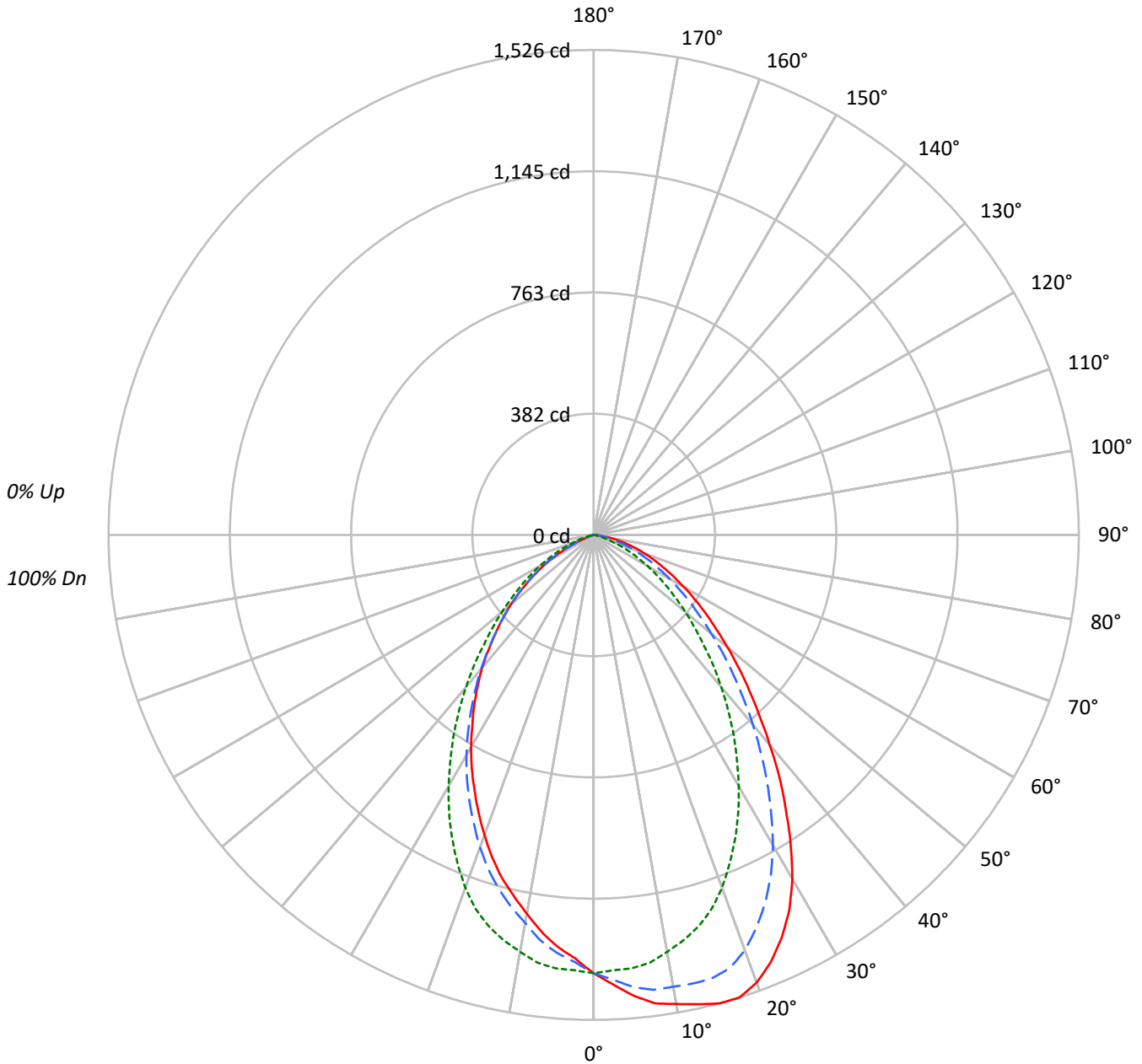
Lumens per Lamp: N/A  
Luminaire Lumens: 2382.0 lumens  
Efficiency: N/A  
Efficacy: 85.1 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.04 / 1.12  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P580288  
CATALOG NUMBER: HCC4W30D010BZ-HM43040830-41WWBB

### Luminous Intensity Polar Plot





TEST NUMBER: P580288

CATALOG NUMBER: HCC4W30D010BZ-HM43040830-41WWBB

**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	100	100	100
1	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89	89	89	89
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78	78	78	78
3	96	87	80	75	94	86	79	74	83	78	73	80	76	72	78	74	71	69	69	69	69
4	89	79	72	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61	61	61	61
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55	55	55	55
6	77	66	58	52	75	65	57	52	63	57	52	61	56	51	60	55	51	49	49	49	49
7	72	60	53	47	71	59	52	47	58	51	47	57	51	46	55	50	46	44	44	44	44
8	68	56	48	43	66	55	48	43	54	47	42	53	47	42	51	46	42	40	40	40	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	43	39	37	37	37	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	36	34	34	34	34

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

	0°	90°	180°
0°	170094	170094	170094
5°	180228	169530	161036
10°	187710	166818	151588
15°	194891	162826	142535
20°	196722	155007	131839
25°	190345	143364	120663
30°	177977	129922	109797
35°	158618	115493	98643
40°	138651	100442	87818
45°	120798	85195	75967
50°	105387	72266	65128
55°	92362	59890	52729
60°	80816	48401	38706
65°	70426	36074	21773
70°	61561	23333	7069
75°	50469	12153	1859
80°	37647	5612	1350
85°	22219	2689	2689



TEST NUMBER: P580288

CATALOG NUMBER: HCC4W30D010BZ-HM43040830-41WWBB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.2	5.5
10°-20°	364.3	15.3
20°-30°	503.6	21.1
30°-40°	506.4	21.3
40°-50°	408.7	17.2
50°-60°	276.3	11.6
60°-70°	140.6	5.9
70°-80°	45.0	1.9
80°-90°	6.9	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°	998.1	41.9
0°-40°	1504.5	63.2
0°-60°	2189.5	91.9
0°-90°	2382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2382.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1379	1379	1379	1379	1379	
5°	1456	1428	1369	1320	1301	140
15°	1526	1444	1275	1154	1116	430
25°	1399	1277	1053	924	887	640
35°	1053	951	767	671	655	658
45°	692	620	488	436	436	537
55°	430	371	278	243	245	386
65°	241	196	124	80	75	242
75°	106	75	26	6	4	114
85°	16	8	2	2	2	21
90°	0	0	0	0	0	

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



TEST NUMBER: P580288

CATALOG NUMBER: HCC4W30D010BZ-HM43040830-41WWBB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0
2.5°	1416.3	1408.4	1400.6	1386.9	1371.2	1355.5	1345.7	1337.8	1333.9
5°	1455.6	1445.8	1428.0	1398.6	1369.2	1341.8	1320.2	1306.4	1300.6
7.5°	1486.9	1473.2	1443.7	1402.6	1357.4	1314.3	1286.8	1267.2	1259.4
10°	1498.7	1483.0	1443.7	1388.8	1331.9	1279.0	1239.8	1220.2	1210.3
12.5°	1512.4	1494.7	1445.8	1377.1	1306.4	1243.6	1198.6	1173.0	1163.2
15°	1526.2	1502.6	1443.7	1359.5	1275.1	1202.4	1153.5	1127.9	1116.2
17.5°	1526.2	1498.7	1428.0	1330.0	1233.9	1157.3	1102.4	1073.1	1063.3
20°	1498.7	1467.3	1390.8	1282.9	1180.9	1098.6	1045.5	1016.1	1004.4
22.5°	1455.6	1420.3	1337.8	1226.0	1118.2	1037.8	984.7	957.3	945.5
25°	1398.6	1363.3	1277.0	1161.3	1053.4	973.0	923.9	898.5	886.6
27.5°	1331.9	1292.7	1206.4	1090.7	984.7	908.3	863.1	839.6	829.8
30°	1249.6	1212.3	1127.9	1014.2	912.2	841.5	800.3	778.8	770.9
32.5°	1153.5	1122.0	1039.7	933.8	837.7	772.9	735.6	718.0	710.1
35°	1053.4	1024.0	951.4	853.3	767.0	706.2	670.9	659.1	655.1
37.5°	959.3	933.8	863.1	772.9	694.4	641.5	610.0	602.2	598.3
40°	861.1	843.5	778.8	696.4	623.8	576.7	551.3	545.4	545.4
42.5°	772.9	753.3	696.4	621.9	557.1	510.0	492.4	486.5	488.4
45°	692.5	672.9	619.8	551.3	488.4	449.2	435.5	435.5	435.5
47.5°	617.9	600.2	551.3	480.6	429.5	398.2	384.5	384.5	386.5
50°	549.2	537.5	482.6	421.8	376.6	347.2	337.4	335.5	339.4
52.5°	484.5	470.8	421.8	366.8	323.6	300.2	290.3	288.3	290.3
55°	429.5	413.9	370.8	317.8	278.5	255.0	243.2	241.3	245.2
57.5°	376.6	364.9	319.8	272.6	235.4	211.8	202.0	198.1	200.1
60°	327.6	315.8	274.7	229.5	196.2	172.6	158.9	155.0	156.9
62.5°	282.5	272.6	233.4	190.3	156.9	135.4	121.6	111.8	115.7
65°	241.3	231.5	196.2	153.0	123.6	100.1	80.4	72.5	74.6
67.5°	206.0	194.2	160.9	121.6	92.2	66.7	45.1	41.2	41.2
70°	170.7	158.9	129.5	94.2	64.7	35.3	19.6	19.6	19.6
72.5°	137.3	127.5	100.1	70.6	41.2	15.7	7.9	7.9	7.9
75°	105.9	98.1	74.6	49.1	25.5	7.9	5.9	3.9	3.9
77.5°	78.5	70.6	53.0	33.4	15.7	3.9	3.9	3.9	3.9
80°	53.0	47.0	35.3	19.6	7.9	1.9	1.9	1.9	1.9
82.5°	31.4	27.4	19.6	9.8	3.9	1.9	1.9	1.9	1.9
85°	15.7	11.7	7.9	3.9	1.9	1.9	1.9	1.9	1.9
87.5°	3.9	1.9	1.9	1.9	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)