

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: P580359

Luminaire Tested: **HCC4S30D010MW-HM43040930-41RWWH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580359  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-15)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S30D010MW-HM43040930-41RWWH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

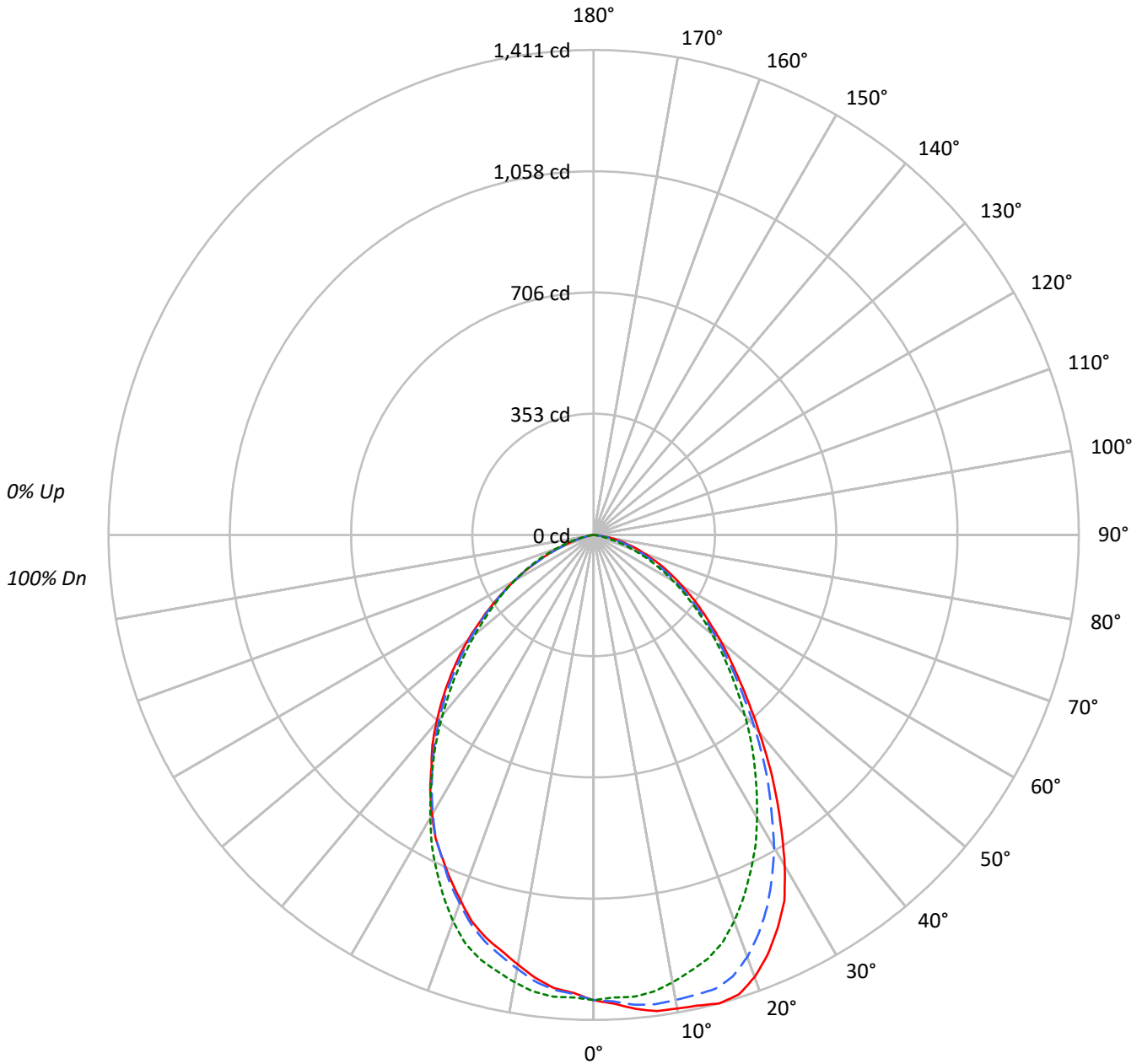
Lumens per Lamp: N/A  
Luminaire Lumens: 2580.2 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P580359  
CATALOG NUMBER: HCC4S30D010MW-HM43040930-41RWWH

### Luminous Intensity Polar Plot



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



TEST NUMBER: P580359

CATALOG NUMBER: HCC4S30D010MW-HM43040930-41RWWH

**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	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77								
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67								
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59								
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52								
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47								
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42								
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38								
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35								
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32								

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

	0°	90°	180°
0°	166973	166973	166973
5°	171350	166979	163872
10°	175235	165553	159015
15°	180167	163196	154832
20°	179671	156950	148549
25°	172108	146930	141432
30°	158308	135320	133896
35°	139254	122796	123820
40°	120488	109942	114531
45°	104715	97667	103563
50°	92933	86140	91974
55°	82449	75589	78836
60°	73440	65521	65521
65°	65289	54490	51017
70°	56368	41257	36352
75°	47323	27260	22399
80°	35800	13141	11933
85°	18964	4812	4812



TEST NUMBER: P580359  
 CATALOG NUMBER: HCC4S30D010MW-HM43040930-41RWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.2	5.0
10°-20°	363.4	14.1
20°-30°	512.6	19.9
30°-40°	529.5	20.5
40°-50°	448.9	17.4
50°-60°	326.6	12.7
60°-70°	190.8	7.4
70°-80°	70.9	2.7
80°-90°	9.3	0.4
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°	1004.2	38.9
0°-40°	1533.7	59.4
0°-60°	2309.1	89.5
0°-90°	2580.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2580.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1354	1354	1354	1354	1354	
5°	1384	1372	1349	1328	1324	133
15°	1411	1367	1278	1224	1212	397
25°	1265	1194	1080	1041	1039	578
35°	925	885	816	817	822	578
45°	600	584	560	580	594	467
55°	383	365	352	363	367	345
65°	224	205	187	175	175	222
75°	99	82	57	46	47	107
85°	13	8	3	3	3	19
90°	0	0	0	0	0	



TEST NUMBER: P580359

CATALOG NUMBER: HCC4S3D0D10MW-HM43040930-41RWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1353.7	1353.7	1353.7	1353.7	1353.7	1353.7	1353.7	1353.7	1353.7
2.5°	1365.4	1362.1	1358.8	1353.7	1346.9	1342.0	1336.9	1333.5	1333.5
5°	1383.9	1379.0	1372.2	1360.5	1348.6	1338.6	1328.4	1323.5	1323.5
7.5°	1397.4	1390.7	1377.3	1360.5	1340.3	1325.1	1309.9	1303.3	1299.9
10°	1399.1	1392.4	1373.9	1348.6	1321.8	1298.2	1281.4	1271.3	1269.6
12.5°	1402.4	1394.1	1370.5	1335.2	1299.9	1271.3	1252.8	1242.7	1239.3
15°	1410.9	1399.1	1367.1	1321.8	1278.0	1244.4	1224.2	1215.8	1212.5
17.5°	1402.4	1385.6	1346.9	1293.1	1244.4	1207.4	1187.2	1178.8	1178.8
20°	1368.8	1352.0	1306.6	1247.8	1195.7	1160.3	1140.2	1135.1	1131.7
22.5°	1321.8	1303.3	1254.4	1192.3	1140.2	1108.1	1094.7	1088.0	1086.4
25°	1264.6	1246.1	1194.0	1130.0	1079.6	1052.6	1040.9	1040.9	1039.2
27.5°	1200.6	1177.2	1123.4	1067.9	1019.0	998.8	993.9	993.9	995.5
30°	1111.5	1094.7	1049.4	995.5	950.1	936.7	936.7	940.1	940.1
32.5°	1015.7	1003.9	963.5	916.5	881.2	872.7	876.1	882.9	884.6
35°	924.8	911.4	884.6	842.5	815.5	812.3	817.2	822.3	822.3
37.5°	835.7	822.3	803.8	770.2	750.0	751.7	758.4	765.1	770.2
40°	748.3	738.3	724.7	697.9	682.8	689.4	697.9	704.5	711.3
42.5°	670.9	660.9	650.7	630.6	620.5	629.0	639.0	645.8	652.4
45°	600.3	593.7	583.5	566.7	559.9	568.4	580.1	586.9	593.7
47.5°	539.7	536.5	522.9	507.8	504.4	512.9	522.9	531.4	536.5
50°	484.3	479.3	467.4	452.3	448.9	462.5	469.1	474.2	479.3
52.5°	430.4	425.5	411.9	398.5	398.5	408.7	413.6	415.3	420.4
55°	383.4	378.3	364.9	354.9	351.5	359.8	363.2	363.2	366.6
57.5°	339.6	334.7	321.1	309.4	307.7	312.8	312.8	312.8	314.5
60°	297.7	292.6	279.2	269.0	265.6	267.3	265.6	264.1	265.6
62.5°	259.0	253.9	240.5	228.6	225.4	225.4	220.3	218.6	220.3
65°	223.7	215.2	205.2	193.3	186.7	181.6	174.8	174.8	174.8
67.5°	188.4	181.6	169.9	158.0	149.7	141.2	131.2	134.6	136.3
70°	156.3	151.4	137.8	126.1	114.4	104.2	95.9	99.3	100.8
72.5°	127.8	121.0	109.3	95.9	85.7	72.3	67.2	70.6	70.6
75°	99.3	92.5	82.3	68.9	57.2	45.5	45.5	47.0	47.0
77.5°	74.0	67.2	57.2	45.5	35.3	27.0	28.5	28.5	28.5
80°	50.4	45.5	37.0	27.0	18.5	15.1	15.1	15.1	16.8
82.5°	28.5	25.3	20.2	13.4	8.5	8.5	8.5	8.5	8.5
85°	13.4	10.0	8.5	5.1	3.4	3.4	3.4	3.4	3.4
87.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
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)