

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: **HCC4W30D010MW-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: HCC4W30D010MW-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**

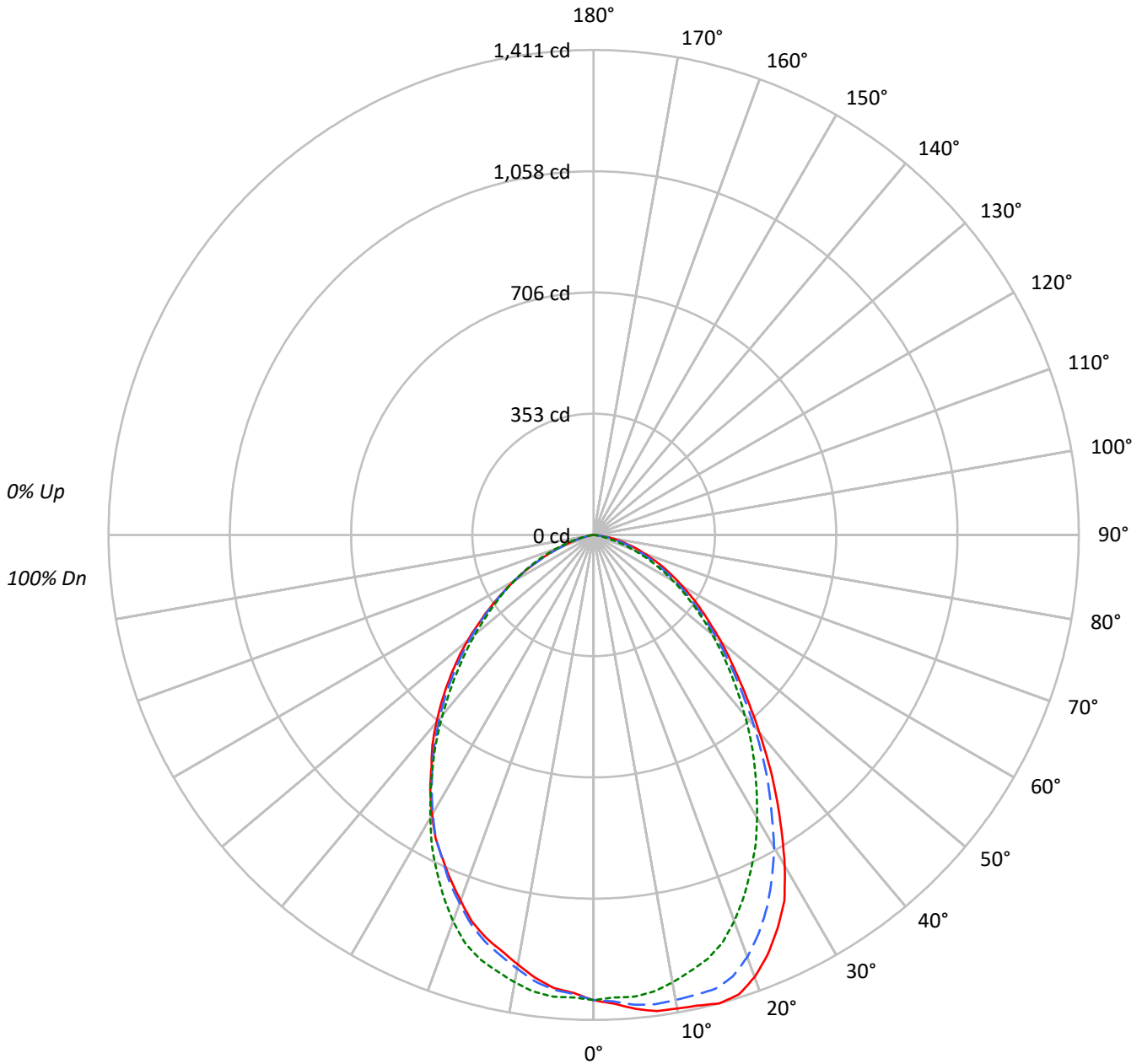
Lumens per Lamp: N/A  
Luminaire Lumens: 2580.2 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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



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**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	



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**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

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Scaled Data Report



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— 0°-180°    - - 45°-225°    - - - - 90°-270°

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