

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: P581296

Luminaire Tested: **HC460D010-HM44560830-41WWBB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581296
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: HC460D010-HM44560830-41WWBB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4140.9 lumens
Efficiency: N/A
Efficacy: 75.3 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

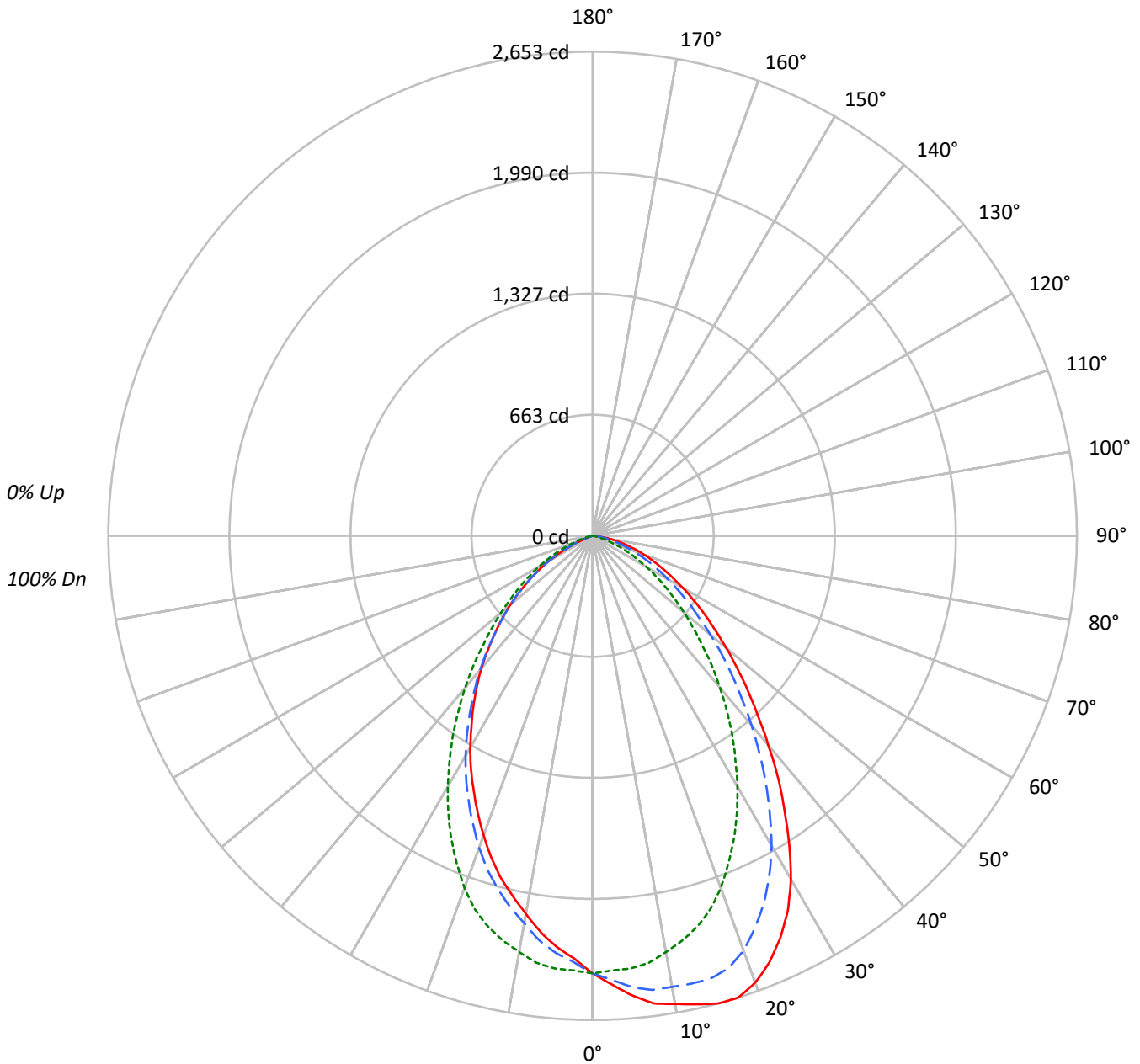
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P581296

CATALOG NUMBER: HC460D010-HM44560830-41WWBB

Luminous Intensity Polar Plot





TEST NUMBER: P581296

CATALOG NUMBER: HC460D010-HM44560830-41WWBB

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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°	295696	295696	295696
5°	313294	294721	279950
10°	326310	290000	263535
15°	338792	283053	247783
20°	341976	269454	229183
25°	330906	249221	209780
30°	309395	225847	190881
35°	275737	200780	171492
40°	241057	174622	152643
45°	209987	148132	132049
50°	183237	125632	113197
55°	160597	104147	91674
60°	140491	84122	67322
65°	122406	62721	37825
70°	107001	40608	12298
75°	87784	21112	3241
80°	65349	9660	2415
85°	38636	4812	4812



TEST NUMBER: P581296

CATALOG NUMBER: HC460D010-HM44560830-41WWBB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.3	5.5
10°-20°	633.2	15.3
20°-30°	875.5	21.1
30°-40°	880.4	21.3
40°-50°	710.4	17.2
50°-60°	480.4	11.6
60°-70°	244.5	5.9
70°-80°	78.3	1.9
80°-90°	12.0	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°	1735.0	41.9
0°-40°	2615.4	63.2
0°-60°	3806.2	91.9
0°-90°	4140.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4140.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2397	2397	2397	2397	2397	
5°	2530	2483	2380	2295	2261	244
15°	2653	2510	2217	2005	1940	747
25°	2431	2220	1831	1606	1541	1113
35°	1831	1654	1333	1166	1139	1144
45°	1204	1078	849	757	757	933
55°	747	644	484	423	426	671
65°	419	341	215	140	130	421
75°	184	130	44	10	7	199
85°	27	14	3	3	3	37
90°	0	0	0	0	0	



TEST NUMBER: P581296

CATALOG NUMBER: HC460D010-HM44560830-41WWBB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2397.3	2397.3	2397.3	2397.3	2397.3	2397.3	2397.3	2397.3	2397.3
2.5°	2462.1	2448.4	2434.8	2411.0	2383.7	2356.4	2339.4	2325.7	2318.8
5°	2530.3	2513.3	2482.6	2431.4	2380.3	2332.5	2295.0	2271.1	2261.0
7.5°	2584.9	2561.0	2509.8	2438.3	2359.8	2284.8	2237.0	2203.0	2189.3
10°	2605.3	2578.0	2509.8	2414.4	2315.4	2223.4	2155.2	2121.1	2104.1
12.5°	2629.3	2598.5	2513.3	2394.0	2271.1	2162.0	2083.5	2039.2	2022.2
15°	2653.1	2612.1	2509.8	2363.2	2216.6	2090.4	2005.1	1960.8	1940.4
17.5°	2653.1	2605.3	2482.6	2312.1	2145.0	2012.0	1916.5	1865.4	1848.3
20°	2605.3	2550.7	2417.8	2230.2	2052.8	1909.7	1817.5	1766.4	1746.0
22.5°	2530.3	2469.0	2325.7	2131.4	1943.8	1804.0	1711.9	1664.1	1643.7
25°	2431.4	2370.0	2220.0	2018.8	1831.2	1691.4	1606.2	1561.8	1541.4
27.5°	2315.4	2247.3	2097.2	1896.1	1711.9	1578.9	1500.5	1459.5	1442.5
30°	2172.3	2107.4	1960.8	1763.1	1585.7	1462.9	1391.3	1353.8	1340.2
32.5°	2005.1	1950.5	1807.4	1623.2	1456.1	1343.6	1278.8	1248.1	1234.5
35°	1831.2	1780.1	1653.9	1483.4	1333.4	1227.6	1166.2	1145.8	1138.9
37.5°	1667.5	1623.2	1500.5	1343.6	1207.2	1115.1	1060.5	1046.9	1040.1
40°	1497.1	1466.4	1353.8	1210.6	1084.5	1002.6	958.2	948.0	948.0
42.5°	1343.6	1309.5	1210.6	1081.0	968.5	886.6	855.9	845.7	849.2
45°	1203.8	1169.6	1077.6	958.2	849.2	780.9	757.0	757.0	757.0
47.5°	1074.2	1043.5	958.2	835.5	746.8	692.3	668.3	668.3	671.8
50°	954.9	934.3	838.9	733.2	654.7	603.6	586.6	583.2	589.9
52.5°	842.3	818.5	733.2	637.7	562.6	521.7	504.7	501.3	504.7
55°	746.8	719.6	644.5	552.5	484.3	443.3	422.9	419.4	426.3
57.5°	654.7	634.3	555.9	474.0	409.2	368.3	351.3	344.4	347.9
60°	569.5	549.0	477.4	399.0	341.0	300.0	276.2	269.4	272.9
62.5°	491.0	474.0	405.9	330.7	272.9	235.3	211.4	194.4	201.2
65°	419.4	402.4	341.0	266.0	214.9	173.9	139.8	126.2	129.6
67.5°	358.0	337.6	279.6	211.4	160.3	116.0	78.4	71.6	71.6
70°	296.7	276.2	225.0	163.7	112.6	61.4	34.1	34.1	34.1
72.5°	238.7	221.7	173.9	122.7	71.6	27.3	13.6	13.6	13.6
75°	184.2	170.6	129.6	85.3	44.3	13.6	10.3	6.8	6.8
77.5°	136.4	122.7	92.0	58.0	27.3	6.8	6.8	6.8	6.8
80°	92.0	81.9	61.4	34.1	13.6	3.4	3.4	3.4	3.4
82.5°	54.6	47.7	34.1	17.0	6.8	3.4	3.4	3.4	3.4
85°	27.3	20.4	13.6	6.8	3.4	3.4	3.4	3.4	3.4
87.5°	6.8	3.4	3.4	3.4	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



Report Generated By 670245859 / DESKTOP-HRDQ47P





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







(END OF REPORT)