

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: P581170

Luminaire Tested: **HC455D010-HM44560835-41WWBB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581170
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: HC455D010-HM44560835-41WWBB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4001.5 lumens
Efficiency: N/A
Efficacy: 77.0 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

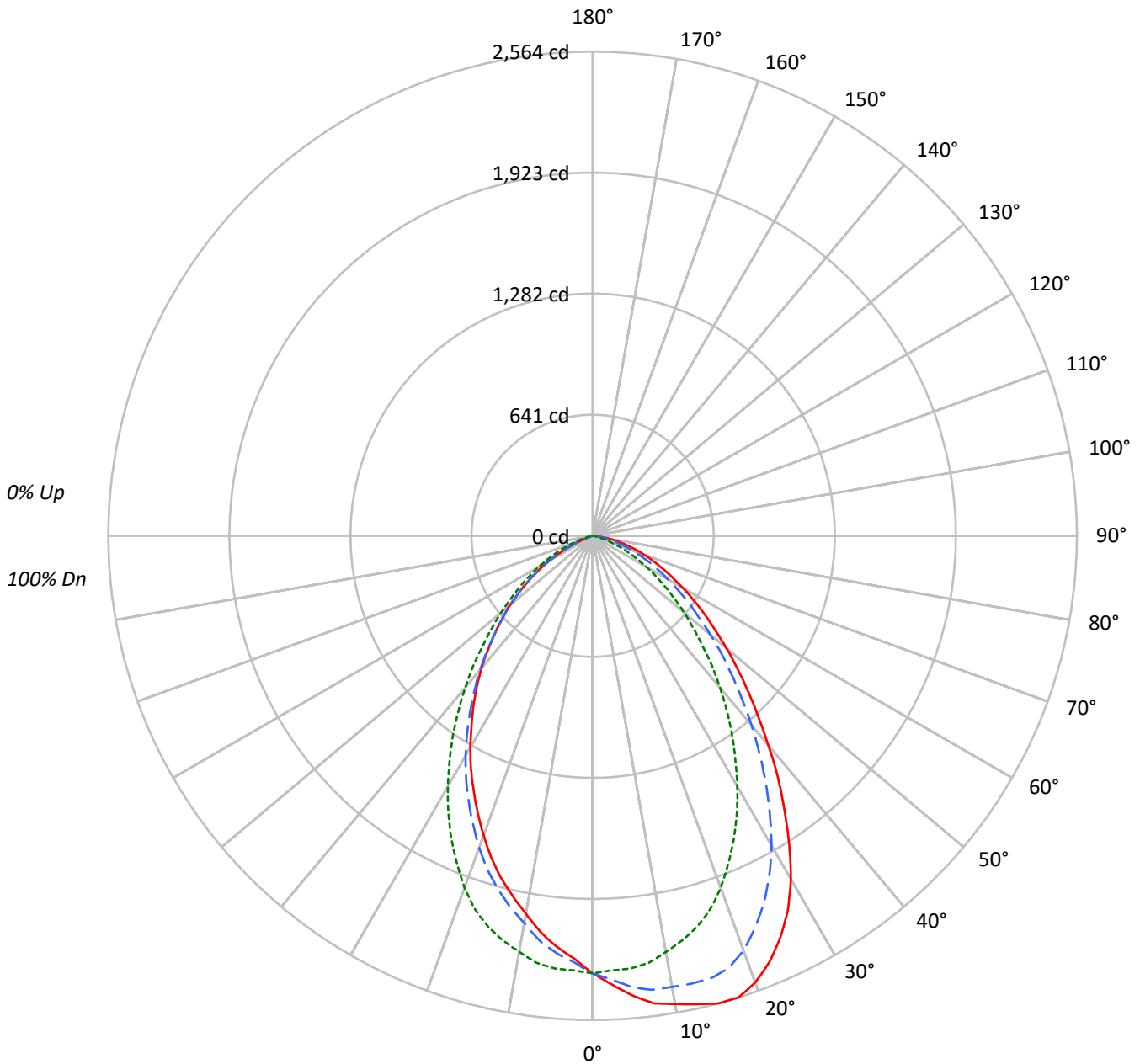
Input Watts (W): 52
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P581170

CATALOG NUMBER: HC455D010-HM44560835-41WWBB

Luminous Intensity Polar Plot





TEST NUMBER: P581170

CATALOG NUMBER: HC455D010-HM44560835-41WWBB

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°	285742	285742	285742
5°	302744	284791	270515
10°	315325	280243	254655
15°	327389	273514	239431
20°	330464	260384	221465
25°	319773	240823	202716
30°	298969	218227	184443
35°	266446	194019	165725
40°	232926	168729	147507
45°	202905	143143	127618
50°	177059	121410	109378
55°	155199	100620	88578
60°	135779	81285	65028
65°	118291	60590	36541
70°	103395	39237	11901
75°	84830	20445	3145
80°	63218	9376	2344
85°	37221	4670	4670



TEST NUMBER: P581170

CATALOG NUMBER: HC455D010-HM44560835-41WWBB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.7	5.5
10°-20°	611.9	15.3
20°-30°	846.1	21.1
30°-40°	850.7	21.3
40°-50°	686.5	17.2
50°-60°	464.2	11.6
60°-70°	236.3	5.9
70°-80°	75.6	1.9
80°-90°	11.6	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°	1676.6	41.9
0°-40°	2527.3	63.2
0°-60°	3678.0	91.9
0°-90°	4001.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4001.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2317	2317	2317	2317	2317	
5°	2445	2399	2300	2218	2185	236
15°	2564	2425	2142	1938	1875	722
25°	2350	2145	1770	1552	1490	1075
35°	1770	1598	1288	1127	1101	1106
45°	1163	1041	821	732	732	901
55°	722	623	468	409	412	648
65°	405	330	208	135	125	406
75°	178	125	43	10	7	192
85°	26	13	3	3	3	35
90°	0	0	0	0	0	



TEST NUMBER: P581170

CATALOG NUMBER: HC455D010-HM44560835-41WWBB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2316.6	2316.6	2316.6	2316.6	2316.6	2316.6	2316.6	2316.6	2316.6
2.5°	2379.2	2366.0	2352.8	2329.8	2303.4	2277.0	2260.6	2247.4	2240.8
5°	2445.1	2428.6	2399.0	2349.6	2300.1	2253.9	2217.7	2194.6	2184.8
7.5°	2497.8	2474.8	2425.3	2356.1	2280.4	2207.8	2161.7	2128.7	2115.6
10°	2517.6	2491.2	2425.3	2333.0	2237.5	2148.5	2082.6	2049.6	2033.2
12.5°	2540.7	2511.0	2428.6	2313.2	2194.6	2089.2	2013.4	1970.6	1954.1
15°	2563.8	2524.2	2425.3	2283.6	2141.9	2020.0	1937.6	1894.7	1875.0
17.5°	2563.8	2517.6	2399.0	2234.2	2072.7	1944.2	1852.0	1802.5	1786.0
20°	2517.6	2464.9	2336.4	2155.2	1983.7	1845.3	1756.4	1707.0	1687.2
22.5°	2445.1	2385.8	2247.4	2059.5	1878.3	1743.2	1654.2	1608.1	1588.3
25°	2349.6	2290.2	2145.3	1950.8	1769.5	1634.4	1552.0	1509.2	1489.5
27.5°	2237.5	2171.6	2026.6	1832.2	1654.2	1525.7	1449.9	1410.4	1393.9
30°	2099.1	2036.5	1894.7	1703.7	1532.2	1413.7	1344.5	1308.3	1295.0
32.5°	1937.6	1884.9	1746.4	1568.6	1407.0	1298.4	1235.7	1206.1	1192.8
35°	1769.5	1720.1	1598.2	1433.5	1288.5	1186.3	1127.0	1107.2	1100.6
37.5°	1611.3	1568.6	1449.9	1298.4	1166.5	1077.5	1024.9	1011.6	1005.1
40°	1446.6	1416.9	1308.3	1169.8	1047.9	968.8	926.0	916.1	916.1
42.5°	1298.4	1265.4	1169.8	1044.6	935.9	856.8	827.1	817.2	820.6
45°	1163.2	1130.3	1041.3	926.0	820.6	754.6	731.6	731.6	731.6
47.5°	1038.0	1008.3	926.0	807.3	721.7	668.9	645.9	645.9	649.1
50°	922.7	902.9	810.7	708.5	632.7	583.3	566.8	563.5	570.0
52.5°	813.9	790.9	708.5	616.2	543.7	504.2	487.7	484.4	487.7
55°	721.7	695.2	622.8	533.8	467.9	428.4	408.6	405.3	411.9
57.5°	632.7	612.9	537.1	458.0	395.4	355.8	339.4	332.8	336.2
60°	550.4	530.6	461.4	385.5	329.5	290.0	267.0	260.3	263.6
62.5°	474.5	458.0	392.2	319.6	263.6	227.4	204.3	187.9	194.4
65°	405.3	388.8	329.5	257.1	207.6	168.1	135.1	122.0	125.2
67.5°	346.0	326.2	270.2	204.3	154.9	112.0	75.8	69.2	69.2
70°	286.7	267.0	217.5	158.2	108.8	59.3	33.0	33.0	33.0
72.5°	230.6	214.2	168.1	118.6	69.2	26.3	13.2	13.2	13.2
75°	178.0	164.8	125.2	82.4	42.9	13.2	9.9	6.6	6.6
77.5°	131.8	118.6	89.0	56.0	26.3	6.6	6.6	6.6	6.6
80°	89.0	79.1	59.3	33.0	13.2	3.3	3.3	3.3	3.3
82.5°	52.8	46.1	33.0	16.4	6.6	3.3	3.3	3.3	3.3
85°	26.3	19.8	13.2	6.6	3.3	3.3	3.3	3.3	3.3
87.5°	6.6	3.3	3.3	3.3	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)