

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: P582809

Luminaire Tested: **HC650D010-HM64560930-61WWWB**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582809
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC650D010-HM64560930-61WWWB
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4596.7 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

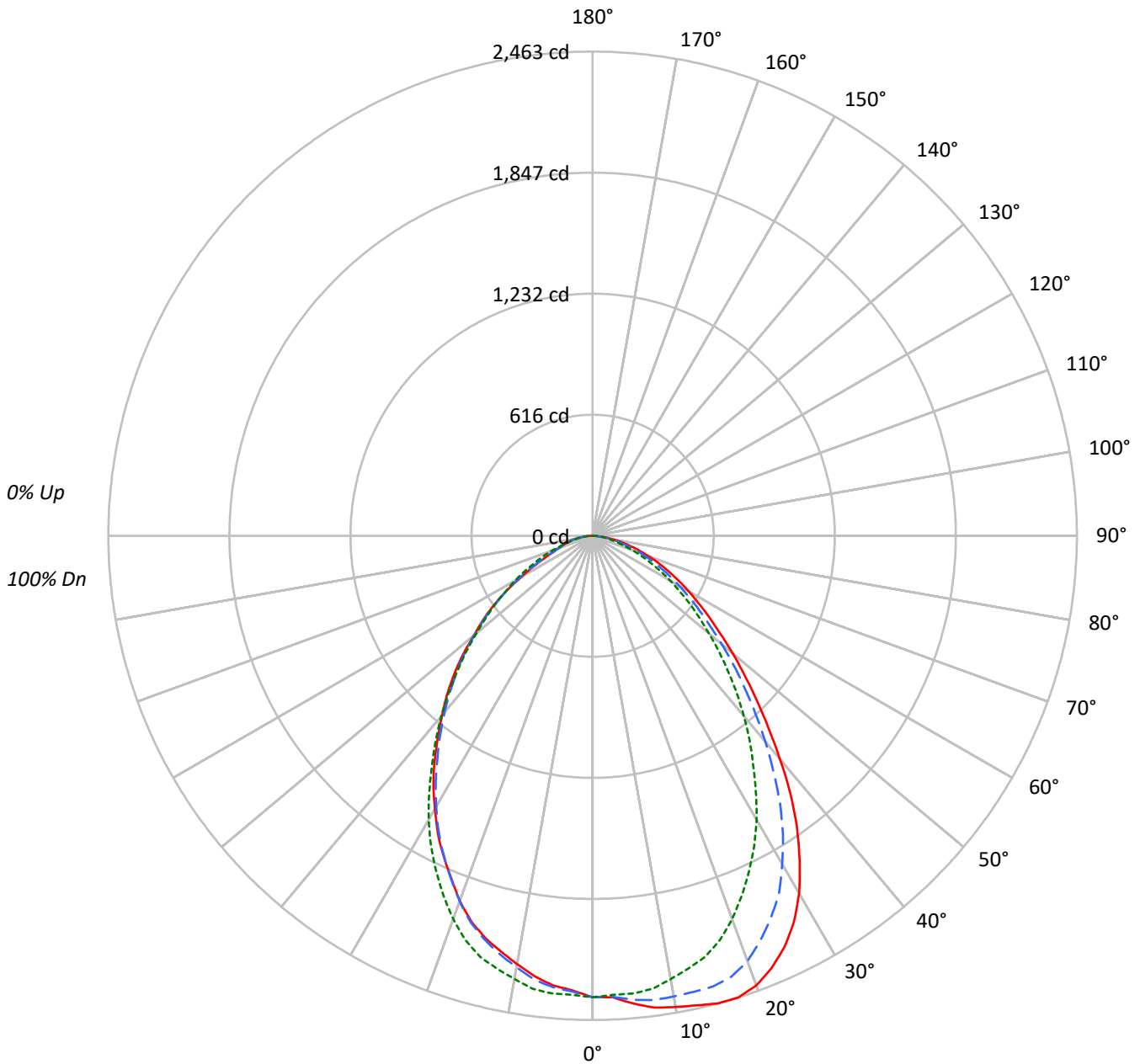
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P582809

CATALOG NUMBER: HC650D010-HM64560930-61WWWB

Luminous Intensity Polar Plot





TEST NUMBER: P582809

CATALOG NUMBER: HC650D010-HM64560930-61WWWB

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				
1	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87				87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				76				
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66				66				
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58				58				
5	81	70	61	56	79	68	61	55	66	60	55	65	59	54	63	58	54	52				52				
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46				46				
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42				42				
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				38				
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				34				
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	43	37	33	31				31				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	128674	128674	128674
5°	131460	128637	126342
10°	135480	127447	123161
15°	139762	125756	120114
20°	141984	121035	115230
25°	139647	113855	108617
30°	132951	105554	101490
35°	121245	95278	93779
40°	106013	85589	85131
45°	91242	75326	77062
50°	79307	65627	67000
55°	69264	57613	58234
60°	61519	49919	45709
65°	54909	42002	34945
70°	48309	34429	29300
75°	41430	27175	27832
80°	33401	23267	27339
85°	22203	20191	24216



TEST NUMBER: P582809

CATALOG NUMBER: HC650D010-HM64560930-61WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.2	4.8
10°-20°	632.7	13.8
20°-30°	903.1	19.6
30°-40°	946.0	20.6
40°-50°	796.5	17.3
50°-60°	566.9	12.3
60°-70°	331.8	7.2
70°-80°	157.0	3.4
80°-90°	40.4	0.9
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°	1758.0	38.2
0°-40°	2704.1	58.8
0°-60°	4067.4	88.5
0°-90°	4596.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4596.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2347	2347	2347	2347	2347	
5°	2389	2370	2338	2306	2296	230
15°	2463	2373	2216	2126	2116	695
25°	2309	2145	1882	1792	1796	1057
35°	1812	1661	1424	1376	1401	1125
45°	1177	1090	972	975	994	914
55°	725	664	603	603	609	653
65°	423	375	324	273	269	422
75°	196	164	128	125	131	210
85°	35	29	32	38	38	46
90°	0	0	0	0	0	



TEST NUMBER: P582809

CATALOG NUMBER: HC650D010-HM64560930-61WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2347.2	2347.2	2347.2	2347.2	2347.2	2347.2	2347.2	2347.2	2347.2
2.5°	2350.4	2350.4	2347.2	2344.0	2337.6	2328.0	2321.6	2315.1	2315.1
5°	2388.9	2382.4	2369.7	2353.6	2337.6	2318.3	2305.5	2295.9	2295.9
7.5°	2420.9	2408.2	2382.4	2353.6	2324.8	2299.1	2276.6	2263.9	2260.7
10°	2433.8	2417.7	2379.2	2334.4	2289.5	2254.2	2228.5	2212.5	2212.5
12.5°	2446.6	2427.4	2376.1	2311.9	2254.2	2206.1	2180.5	2167.6	2164.4
15°	2462.6	2437.0	2372.9	2292.7	2215.8	2161.2	2125.9	2116.4	2116.4
17.5°	2462.6	2430.6	2350.4	2251.0	2154.9	2093.9	2061.8	2052.2	2055.4
20°	2433.8	2398.5	2302.4	2180.5	2074.7	2010.5	1978.4	1972.0	1975.2
22.5°	2379.2	2337.6	2228.5	2097.1	1981.6	1914.3	1885.5	1885.5	1882.3
25°	2308.7	2263.9	2145.2	2007.3	1882.3	1815.0	1792.5	1795.7	1795.7
27.5°	2215.8	2170.8	2052.2	1904.7	1779.6	1712.3	1696.3	1702.6	1705.8
30°	2100.3	2052.2	1927.2	1782.8	1667.5	1600.0	1590.5	1600.0	1603.3
32.5°	1959.2	1924.0	1802.1	1654.6	1545.6	1487.8	1484.6	1494.2	1507.1
35°	1811.7	1773.3	1661.0	1526.3	1423.7	1375.6	1375.6	1391.7	1401.3
37.5°	1651.4	1612.9	1510.3	1398.1	1311.5	1266.6	1273.0	1289.1	1292.3
40°	1481.4	1452.6	1365.9	1269.8	1196.0	1160.8	1170.4	1186.4	1189.6
42.5°	1321.1	1295.4	1224.9	1138.4	1083.8	1058.2	1071.0	1090.2	1096.7
45°	1176.9	1147.9	1090.2	1016.5	971.6	958.7	974.8	987.7	994.0
47.5°	1045.3	1019.7	971.6	904.3	872.2	865.8	881.9	888.2	894.6
50°	929.9	904.3	856.1	795.3	769.5	769.5	782.4	788.8	785.6
52.5°	817.7	795.3	750.3	699.0	683.0	683.0	692.7	695.8	702.2
55°	724.7	702.2	663.7	615.7	602.8	596.4	602.8	602.8	609.3
57.5°	638.1	618.8	583.7	538.7	522.7	516.2	513.0	509.8	516.2
60°	561.1	545.1	506.6	468.1	455.3	439.3	426.5	413.7	416.9
62.5°	490.6	474.5	439.3	400.8	388.0	365.5	349.5	333.5	339.9
65°	423.3	407.2	375.2	343.1	323.8	298.2	272.6	262.9	269.4
67.5°	362.3	349.5	317.5	285.3	269.4	240.5	214.8	214.8	218.0
70°	301.4	288.6	262.9	234.1	214.8	189.2	179.5	182.8	182.8
72.5°	246.9	237.3	211.6	186.0	166.8	150.7	150.7	153.9	157.1
75°	195.6	189.2	163.6	141.1	128.3	118.7	125.1	128.3	131.4
77.5°	150.7	141.1	121.9	105.8	96.3	99.4	105.8	109.0	112.2
80°	105.8	102.6	86.6	77.0	73.7	77.0	83.4	86.6	86.6
82.5°	67.3	64.1	54.6	51.3	51.3	54.6	60.9	60.9	60.9
85°	35.3	32.1	28.8	28.8	32.1	35.3	38.5	38.5	38.5
87.5°	12.9	9.6	12.9	12.9	16.1	16.1	16.1	16.1	16.1
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)