

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: P582843

Luminaire Tested: **HC650D010-HM64560940-61WWBB**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582843
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC650D010-HM64560940-61WWBB
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4241.7 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.06 / 1.14
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

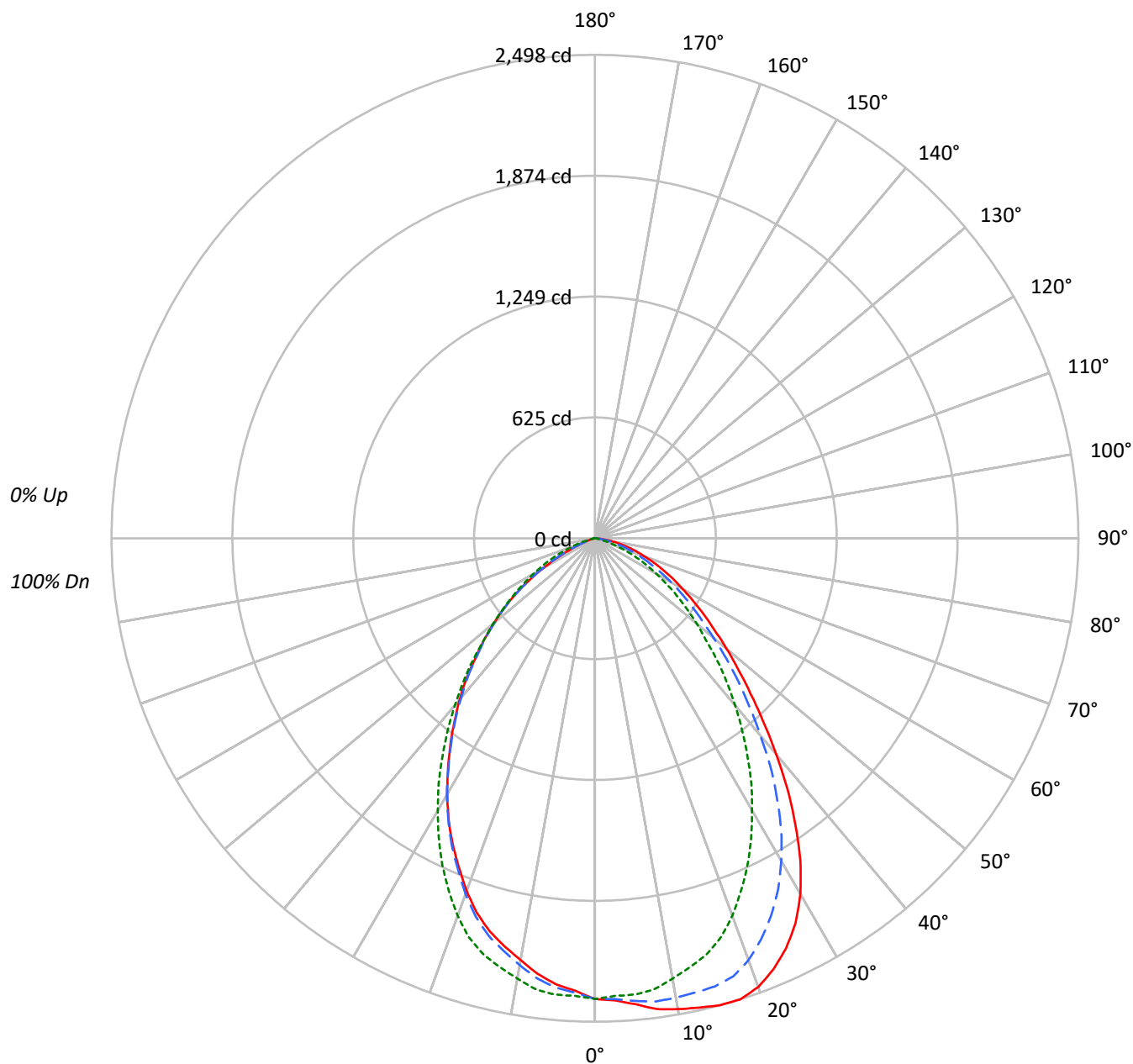
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	91	87	84	88	85	82	85	83	80	78		
3	96	87	80	75	93	86	79	74	83	77	73	80	76	72	78	74	71	69		
4	89	79	71	66	87	78	71	65	75	69	64	73	68	64	71	66	63	61		
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54		
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	49		
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44		
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40		
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37		
10	60	48	40	36	58	47	40	36	46	40	36	45	40	35	45	39	35	34		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	130488	130488	130488
5°	133006	130244	127300
10°	137534	128583	123177
15°	141743	126351	119320
20°	143938	121087	113083
25°	141341	112791	105296
30°	134356	102775	96635
35°	120756	91859	87154
40°	104217	80501	77867
45°	88242	69302	67480
50°	75665	58531	57951
55°	65594	49269	47348
60°	57254	40008	33769
65°	50369	30833	18679
70°	43469	20388	9120
75°	36876	9934	3558
80°	28507	4199	2115
85°	16857	2076	2076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.6	5.3
10°-20°	635.2	15.0
20°-30°	894.5	21.1
30°-40°	913.9	21.5
40°-50°	736.9	17.4
50°-60°	494.2	11.7
60°-70°	250.1	5.9
70°-80°	79.9	1.9
80°-90°	12.3	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°	1754.3	41.4
0°-40°	2668.2	62.9
0°-60°	3899.3	91.9
0°-90°	4241.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4241.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2380	2380	2380	2380	2380	
5°	2417	2400	2367	2330	2313	233
15°	2498	2397	2226	2126	2102	705
25°	2337	2153	1865	1751	1741	1070
35°	1804	1640	1373	1296	1302	1123
45°	1138	1048	894	864	870	885
55°	686	609	516	492	495	617
65°	388	321	238	157	144	388
75°	174	124	47	17	17	187
85°	27	13	3	3	3	36
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°	2380.3	2380.3	2380.3	2380.3	2380.3	2380.3	2380.3	2380.3	2380.3
2.5°	2390.3	2386.9	2383.6	2376.9	2366.8	2356.8	2350.2	2343.5	2340.2
5°	2417.0	2410.4	2400.4	2386.9	2366.8	2343.5	2330.0	2316.6	2313.3
7.5°	2453.9	2440.5	2413.7	2383.6	2350.2	2316.6	2293.3	2279.8	2269.8
10°	2470.7	2447.3	2410.4	2360.2	2309.9	2269.8	2239.6	2219.6	2212.8
12.5°	2484.0	2457.3	2403.7	2336.7	2269.8	2216.3	2182.7	2166.0	2159.3
15°	2497.5	2470.7	2397.0	2309.9	2226.3	2162.6	2125.8	2109.1	2102.4
17.5°	2497.5	2460.6	2373.6	2263.2	2162.6	2085.6	2048.8	2032.1	2028.7
20°	2467.3	2427.2	2320.0	2189.5	2075.6	1988.6	1955.1	1945.1	1938.4
22.5°	2410.4	2363.5	2243.0	2095.7	1971.8	1888.2	1851.3	1844.6	1837.9
25°	2336.7	2289.8	2152.6	1995.3	1864.7	1781.1	1750.8	1744.2	1740.8
27.5°	2243.0	2192.8	2048.8	1888.2	1747.5	1667.2	1640.4	1640.4	1637.1
30°	2122.5	2065.6	1924.9	1764.3	1623.6	1550.1	1530.0	1530.0	1526.6
32.5°	1975.2	1918.3	1791.1	1637.1	1503.2	1426.2	1409.4	1416.1	1412.7
35°	1804.4	1757.6	1640.4	1489.7	1372.6	1302.3	1295.6	1302.3	1302.3
37.5°	1633.7	1590.2	1489.7	1359.2	1248.7	1185.1	1185.1	1195.2	1191.9
40°	1456.3	1422.8	1329.1	1215.2	1124.9	1081.3	1074.6	1084.6	1088.1
42.5°	1288.9	1262.1	1181.7	1088.1	1007.6	964.2	974.2	980.9	984.2
45°	1138.2	1111.4	1047.9	950.8	893.9	863.8	863.8	873.8	870.4
47.5°	1004.3	984.2	920.6	826.9	776.6	763.3	770.0	776.6	776.6
50°	887.2	857.1	796.8	723.1	686.3	669.5	676.2	679.5	679.5
52.5°	776.6	756.5	696.3	629.4	595.9	585.9	585.9	589.2	589.2
55°	686.3	662.9	609.3	542.3	515.5	502.2	492.1	488.8	495.4
57.5°	599.2	579.2	529.0	465.3	435.2	421.9	401.8	395.0	401.8
60°	522.2	505.5	455.3	395.0	364.9	338.1	314.7	301.3	308.0
62.5°	455.3	435.2	385.0	334.8	301.3	271.2	234.3	214.2	224.3
65°	388.3	371.7	321.4	271.2	237.7	200.9	157.3	144.0	144.0
67.5°	328.1	311.3	264.4	221.0	180.8	137.2	97.1	93.8	97.1
70°	271.2	254.4	214.2	170.8	127.2	83.7	56.9	56.9	56.9
72.5°	224.3	204.2	167.3	123.9	80.3	43.6	30.1	33.4	33.4
75°	174.1	157.3	123.9	83.7	46.9	20.1	16.8	16.8	16.8
77.5°	130.6	117.2	87.0	53.6	23.4	6.7	6.7	6.7	6.7
80°	90.3	77.0	56.9	33.4	13.3	6.7	6.7	6.7	6.7
82.5°	53.6	46.9	33.4	16.8	6.7	3.3	3.3	3.3	3.3
85°	26.8	23.4	13.3	6.7	3.3	3.3	3.3	3.3	3.3
87.5°	6.7	6.7	3.3	3.3	0.0	3.3	3.3	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)