

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: P582735

Luminaire Tested: **HC650D010-HM64560830-61WWBB**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582735
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-HM64560830-61WWBB
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" 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: 4418.2 lumens
Efficiency: N/A
Efficacy: 92.0 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

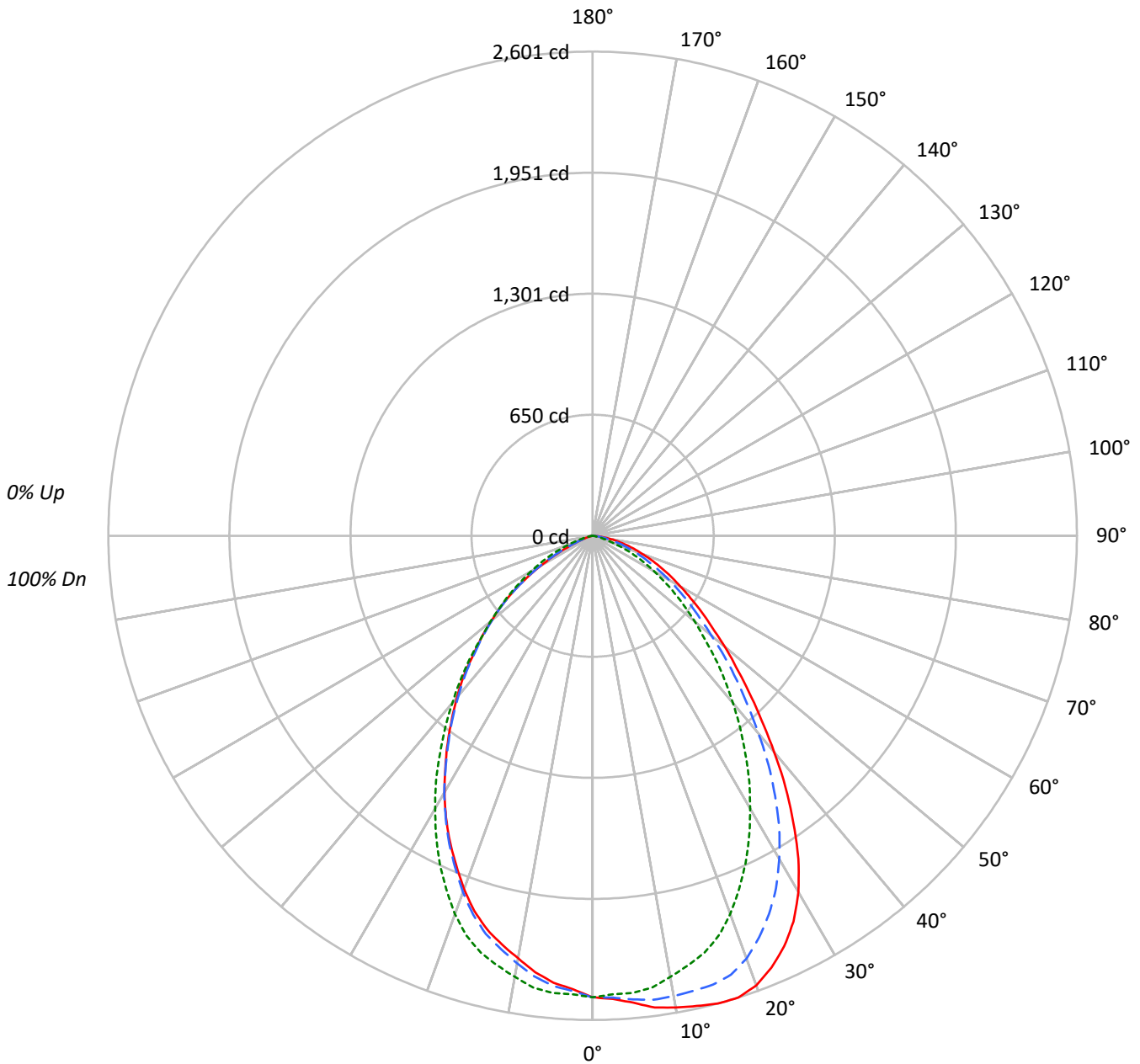
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	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°	135916	135916	135916
5°	138548	135664	132599
10°	143251	133938	128310
15°	147640	131607	124286
20°	149930	126122	117785
25°	147220	117485	109682
30°	139946	107054	100655
35°	125789	95680	90781
40°	108553	83850	81102
45°	91917	72186	70294
50°	78803	60970	60373
55°	68327	51324	49327
60°	59644	41663	35173
65°	52470	32105	19457
70°	45280	21238	9505
75°	38401	10336	3707
80°	29707	4388	2210
85°	17549	2201	2201



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.0	5.3
10°-20°	661.6	15.0
20°-30°	931.7	21.1
30°-40°	951.9	21.5
40°-50°	767.5	17.4
50°-60°	514.8	11.7
60°-70°	260.5	5.9
70°-80°	83.3	1.9
80°-90°	12.8	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°	1827.3	41.4
0°-40°	2779.2	62.9
0°-60°	4061.6	91.9
0°-90°	4418.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4418.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2479	2479	2479	2479	2479	
5°	2518	2500	2465	2427	2410	242
15°	2601	2497	2319	2214	2190	734
25°	2434	2242	1942	1824	1813	1114
35°	1880	1709	1430	1350	1356	1170
45°	1186	1092	931	900	907	922
55°	715	635	537	513	516	643
65°	404	335	248	164	150	404
75°	181	129	49	18	18	195
85°	28	14	4	4	4	37
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°	2479.3	2479.3	2479.3	2479.3	2479.3	2479.3	2479.3	2479.3	2479.3
2.5°	2489.8	2486.2	2482.8	2475.8	2465.3	2454.9	2447.9	2440.9	2437.5
5°	2517.7	2510.7	2500.2	2486.2	2465.3	2440.9	2427.0	2413.0	2409.6
7.5°	2556.0	2542.1	2514.1	2482.8	2447.9	2413.0	2388.7	2374.6	2364.2
10°	2573.4	2549.1	2510.7	2458.4	2406.1	2364.2	2332.8	2311.9	2305.0
12.5°	2587.5	2559.5	2503.7	2433.9	2364.2	2308.4	2273.5	2256.2	2249.1
15°	2601.4	2573.4	2496.8	2406.1	2318.9	2252.6	2214.3	2196.9	2189.9
17.5°	2601.4	2563.0	2472.3	2357.3	2252.6	2172.4	2134.1	2116.6	2113.2
20°	2570.0	2528.2	2416.6	2280.5	2161.9	2071.4	2036.4	2026.0	2019.0
22.5°	2510.7	2461.9	2336.4	2182.8	2053.9	1966.7	1928.3	1921.4	1914.4
25°	2433.9	2385.1	2242.1	2078.3	1942.3	1855.1	1823.7	1816.7	1813.3
27.5°	2336.4	2284.1	2134.1	1966.7	1820.3	1736.5	1708.7	1708.7	1705.1
30°	2210.8	2151.5	2005.1	1837.6	1691.2	1614.5	1593.6	1593.6	1590.1
32.5°	2057.4	1998.1	1865.6	1705.1	1565.7	1485.5	1468.1	1475.1	1471.5
35°	1879.6	1830.7	1708.7	1551.7	1429.7	1356.5	1349.5	1356.5	1356.5
37.5°	1701.7	1656.4	1551.7	1415.8	1300.6	1234.4	1234.4	1244.9	1241.3
40°	1516.9	1482.0	1384.4	1265.8	1171.7	1126.3	1119.4	1129.9	1133.3
42.5°	1342.6	1314.6	1231.0	1133.3	1049.6	1004.3	1014.7	1021.7	1025.2
45°	1185.6	1157.7	1091.5	990.3	931.1	899.7	899.7	910.1	906.7
47.5°	1046.1	1025.2	959.0	861.3	809.0	795.0	802.0	809.0	809.0
50°	924.0	892.7	829.9	753.2	714.9	697.4	704.3	707.9	707.9
52.5°	809.0	788.1	725.3	655.6	620.7	610.2	610.2	613.8	613.8
55°	714.9	690.4	634.7	564.9	537.0	523.1	512.6	509.1	516.1
57.5°	624.2	603.3	550.9	484.7	453.3	439.3	418.4	411.5	418.4
60°	544.0	526.5	474.3	411.5	380.0	352.2	327.7	313.8	320.8
62.5°	474.3	453.3	401.1	348.7	313.8	282.5	244.1	223.2	233.6
65°	404.5	387.0	334.8	282.5	247.5	209.3	163.9	150.0	150.0
67.5°	341.8	324.3	275.5	230.2	188.3	143.0	101.1	97.7	101.1
70°	282.5	265.0	223.2	177.9	132.5	87.2	59.3	59.3	59.3
72.5°	233.6	212.7	174.3	129.0	83.7	45.4	31.4	34.8	34.8
75°	181.3	163.9	129.0	87.2	48.8	20.9	17.5	17.5	17.5
77.5°	136.1	122.0	90.7	55.7	24.4	7.0	7.0	7.0	7.0
80°	94.1	80.2	59.3	34.8	13.9	7.0	7.0	7.0	7.0
82.5°	55.7	48.8	34.8	17.5	7.0	3.5	3.5	3.5	3.5
85°	27.9	24.4	13.9	7.0	3.5	3.5	3.5	3.5	3.5
87.5°	7.0	7.0	3.5	3.5	0.0	3.5	3.5	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)