

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: P582753

Luminaire Tested: **HC650D010-HM64560835-61WWBB**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P582753  
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-HM64560835-61WWBB  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" 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: 4616.5 lumens  
Efficiency: N/A  
Efficacy: 96.2 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

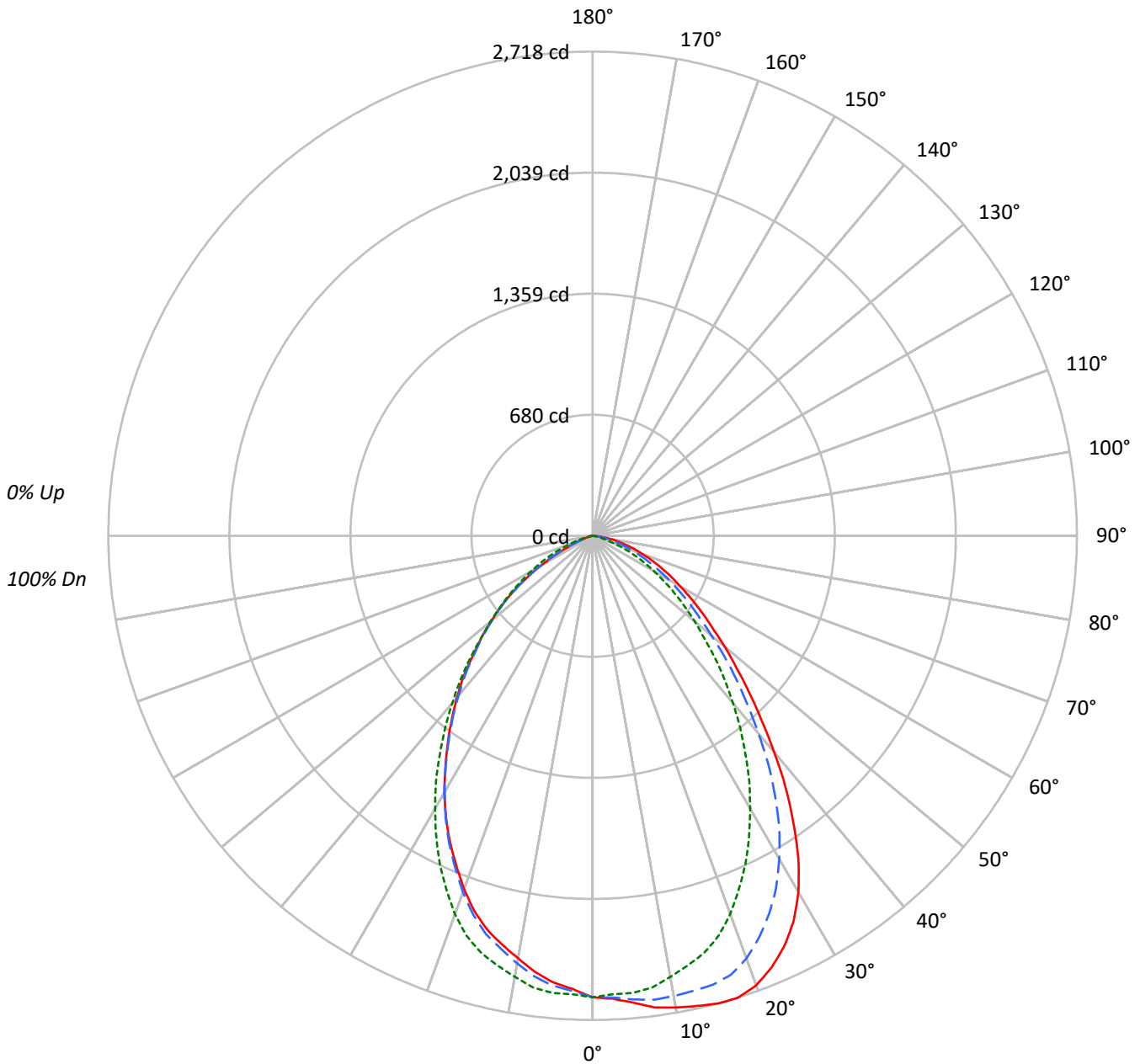
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P582753

CATALOG NUMBER: HC650D010-HM64560835-61WWBB

### Luminous Intensity Polar Plot





TEST NUMBER: P582753

CATALOG NUMBER: HC650D010-HM64560835-61WWBB

**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								
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°	142012	142012	142012
5°	144766	141756	138548
10°	149680	139944	134066
15°	154263	137509	129865
20°	156650	131786	123071
25°	153831	122753	114605
30°	146225	111859	105168
35°	131430	99970	94850
40°	113420	87607	84744
45°	96041	75419	73442
50°	82351	63708	63085
55°	71395	53628	51535
60°	62320	43549	36751
65°	54831	33544	20326
70°	47300	22183	9922
75°	40117	10802	3855
80°	31065	4578	2305
85°	18367	2327	2327



TEST NUMBER: P582753

CATALOG NUMBER: HC650D010-HM64560835-61WWBB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	244.5	5.3
10°-20°	691.3	15.0
20°-30°	973.5	21.1
30°-40°	994.7	21.5
40°-50°	802.0	17.4
50°-60°	537.9	11.7
60°-70°	272.2	5.9
70°-80°	87.0	1.9
80°-90°	13.4	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°	1909.3	41.4
0°-40°	2903.9	62.9
0°-60°	4243.8	91.9
0°-90°	4616.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4616.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2590	2590	2590	2590	2590	
5°	2631	2612	2576	2536	2518	253
15°	2718	2609	2423	2314	2288	767
25°	2543	2343	2029	1906	1895	1164
35°	1964	1785	1494	1410	1417	1222
45°	1239	1140	973	940	947	963
55°	747	663	561	536	539	672
65°	423	350	259	171	157	422
75°	189	135	51	18	18	203
85°	29	14	4	4	4	39
90°	0	0	0	0	0	



TEST NUMBER: P582753

CATALOG NUMBER: HC650D010-HM64560835-61WWBB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2590.5	2590.5	2590.5	2590.5	2590.5	2590.5	2590.5	2590.5	2590.5
2.5°	2601.5	2597.8	2594.2	2586.9	2576.0	2565.0	2557.8	2550.5	2546.8
5°	2630.7	2623.4	2612.4	2597.8	2576.0	2550.5	2536.0	2521.3	2517.7
7.5°	2670.7	2656.2	2627.0	2594.2	2557.8	2521.3	2495.8	2481.3	2470.3
10°	2688.9	2663.4	2623.4	2568.7	2514.0	2470.3	2437.6	2415.6	2408.4
12.5°	2703.5	2674.4	2616.0	2543.2	2470.3	2412.1	2375.6	2357.4	2350.1
15°	2718.1	2688.9	2608.8	2514.0	2422.9	2353.7	2313.7	2295.4	2288.2
17.5°	2718.1	2678.0	2583.3	2463.1	2353.7	2269.9	2229.8	2211.7	2208.0
20°	2685.2	2641.5	2525.0	2382.9	2259.0	2164.3	2127.8	2116.9	2109.6
22.5°	2623.4	2572.3	2441.1	2280.9	2146.0	2054.9	2014.9	2007.6	2000.3
25°	2543.2	2492.1	2342.7	2171.5	2029.4	1938.4	1905.5	1898.3	1894.7
27.5°	2441.1	2386.6	2229.8	2054.9	1901.9	1814.5	1785.3	1785.3	1781.7
30°	2310.0	2248.0	2095.1	1920.2	1767.1	1686.9	1665.1	1665.1	1661.4
32.5°	2149.7	2087.8	1949.2	1781.7	1635.9	1552.2	1533.9	1541.2	1537.5
35°	1963.9	1912.9	1785.3	1621.4	1493.8	1417.3	1410.0	1417.3	1417.3
37.5°	1778.0	1730.6	1621.4	1479.3	1359.1	1289.8	1289.8	1300.8	1297.1
40°	1584.9	1548.5	1446.5	1322.6	1224.2	1176.9	1169.5	1180.5	1184.2
42.5°	1402.8	1373.6	1286.2	1184.2	1096.7	1049.3	1060.3	1067.5	1071.2
45°	1238.8	1209.7	1140.4	1034.8	972.8	940.1	940.1	950.9	947.3
47.5°	1093.0	1071.2	1002.0	899.9	845.4	830.7	838.0	845.4	845.4
50°	965.6	932.8	867.2	787.0	747.0	728.7	736.0	739.7	739.7
52.5°	845.4	823.4	757.8	685.0	648.6	637.6	637.6	641.3	641.3
55°	747.0	721.5	663.1	590.3	561.1	546.6	535.6	531.9	539.2
57.5°	652.1	630.3	575.7	506.4	473.7	459.1	437.2	429.9	437.2
60°	568.4	550.2	495.5	429.9	397.2	368.0	342.5	328.0	335.2
62.5°	495.5	473.7	419.0	364.3	328.0	295.1	255.1	233.1	244.1
65°	422.7	404.5	349.8	295.1	258.6	218.6	171.2	156.7	156.7
67.5°	357.0	338.8	287.8	240.5	196.8	149.4	105.7	102.0	105.7
70°	295.1	276.9	233.1	185.8	138.4	91.1	61.9	61.9	61.9
72.5°	244.1	222.3	182.2	134.9	87.4	47.4	32.8	36.5	36.5
75°	189.4	171.2	134.9	91.1	51.0	21.8	18.2	18.2	18.2
77.5°	142.1	127.5	94.7	58.3	25.5	7.3	7.3	7.3	7.3
80°	98.4	83.9	61.9	36.5	14.5	7.3	7.3	7.3	7.3
82.5°	58.3	51.0	36.5	18.2	7.3	3.7	3.7	3.7	3.7
85°	29.2	25.5	14.5	7.3	3.7	3.7	3.7	3.7	3.7
87.5°	7.3	7.3	3.7	3.7	0.0	3.7	3.7	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)