

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: P583023

Luminaire Tested: **HC655D010-HM64560830-61WWBB**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P583023  
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: HC655D010-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: 4627.7 lumens  
Efficiency: N/A  
Efficacy: 89.0 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

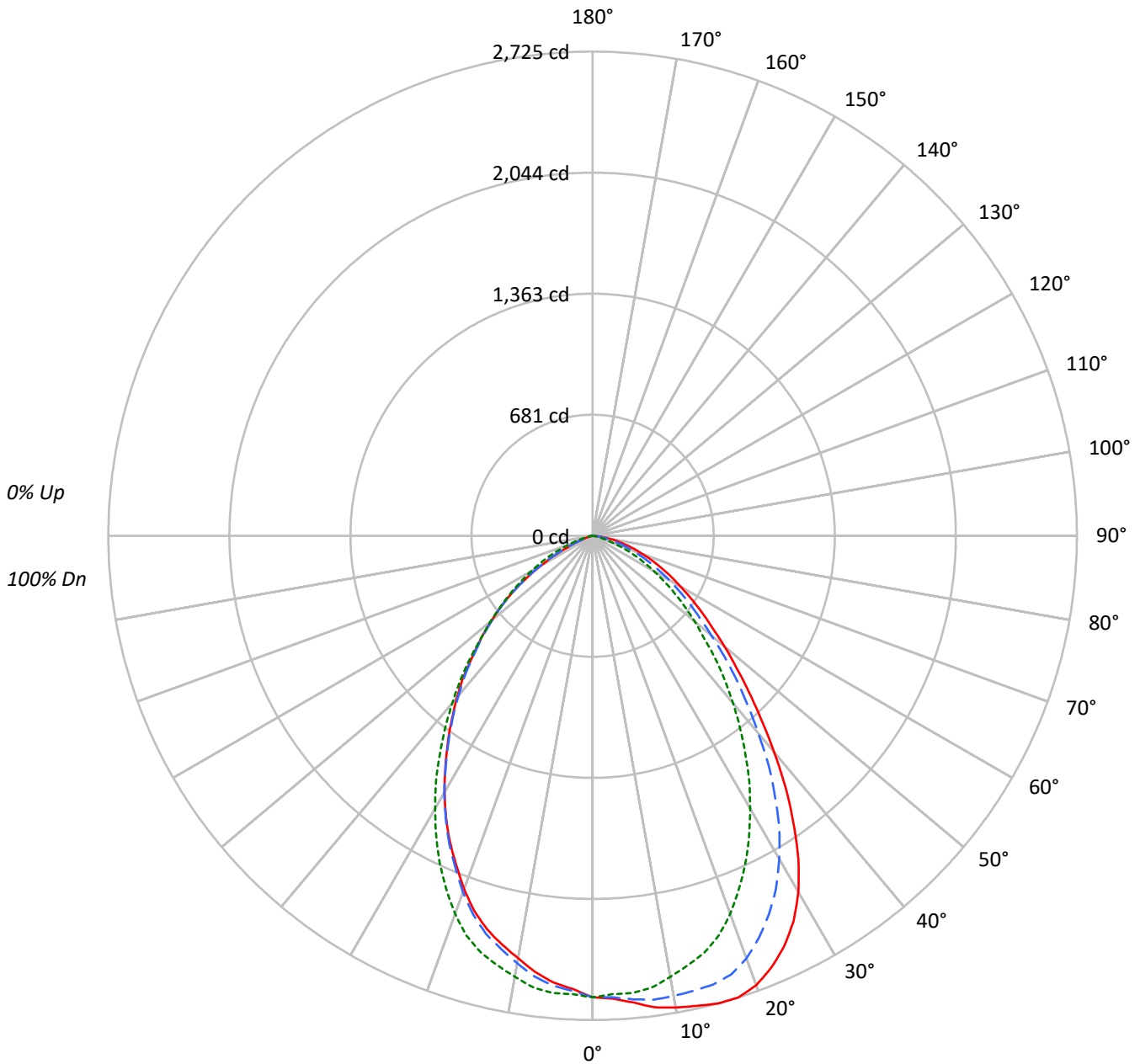
Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			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	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89			89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78			78
3	96	87	80	75	93	86	79	74	83	77	73	80	76	72	78	74	71	69			69
4	89	79	71	66	87	78	71	65	75	69	64	73	68	64	71	66	63	61			61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54			54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	49			49
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44			44
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40			40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37			37
10	60	48	40	36	58	47	40	36	46	40	36	45	40	35	45	39	35	34			34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	142362	142362	142362
5°	145113	142103	138884
10°	150047	140284	134394
15°	154638	137844	130177
20°	157035	132107	123368
25°	154206	123055	114884
30°	146580	112131	105428
35°	131745	100211	95084
40°	113699	87822	84945
45°	96274	75597	73620
50°	82547	63853	63230
55°	71558	53762	51659
60°	62462	43648	36839
65°	54948	33635	20378
70°	47428	22247	9954
75°	40223	10823	3855
80°	31159	4609	2305
85°	18367	2327	2327



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	245.1	5.3
10°-20°	693.0	15.0
20°-30°	975.9	21.1
30°-40°	997.1	21.5
40°-50°	803.9	17.4
50°-60°	539.2	11.7
60°-70°	272.9	5.9
70°-80°	87.2	1.9
80°-90°	13.5	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°	1914.0	41.4
0°-40°	2911.0	62.9
0°-60°	4254.2	91.9
0°-90°	4627.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4627.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2597	2597	2597	2597	2597	
5°	2637	2619	2582	2542	2524	254
15°	2725	2615	2429	2319	2294	769
25°	2549	2348	2034	1910	1899	1167
35°	1969	1790	1497	1413	1421	1225
45°	1242	1143	975	942	950	966
55°	749	665	562	537	540	674
65°	424	351	259	172	157	423
75°	190	135	51	18	18	204
85°	29	15	4	4	4	39
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°	2596.9	2596.9	2596.9	2596.9	2596.9	2596.9	2596.9	2596.9	2596.9
2.5°	2607.8	2604.1	2600.5	2593.3	2582.3	2571.3	2564.0	2556.7	2553.0
5°	2637.0	2629.7	2618.8	2604.1	2582.3	2556.7	2542.0	2527.5	2523.8
7.5°	2677.2	2662.6	2633.4	2600.5	2564.0	2527.5	2501.9	2487.3	2476.4
10°	2695.5	2669.9	2629.7	2574.9	2520.1	2476.4	2443.5	2421.6	2414.3
12.5°	2710.1	2680.9	2622.5	2549.4	2476.4	2417.9	2381.4	2363.2	2355.8
15°	2724.7	2695.5	2615.1	2520.1	2428.8	2359.5	2319.3	2301.1	2293.7
17.5°	2724.7	2684.6	2589.6	2469.0	2359.5	2275.5	2235.3	2217.1	2213.4
20°	2691.8	2648.0	2531.1	2388.7	2264.5	2169.5	2133.1	2122.1	2114.7
22.5°	2629.7	2578.6	2447.2	2286.4	2151.3	2060.0	2019.7	2012.5	2005.2
25°	2549.4	2498.3	2348.5	2176.8	2034.4	1943.1	1910.2	1902.9	1899.3
27.5°	2447.2	2392.4	2235.3	2060.0	1906.5	1818.9	1789.6	1789.6	1786.1
30°	2315.6	2253.5	2100.2	1924.9	1771.4	1691.1	1669.2	1669.2	1665.5
32.5°	2155.0	2092.8	1954.1	1786.1	1640.0	1555.9	1537.7	1545.0	1541.3
35°	1968.6	1917.5	1789.6	1625.3	1497.4	1420.8	1413.4	1420.8	1420.8
37.5°	1782.4	1734.9	1625.3	1482.9	1362.3	1292.9	1292.9	1303.9	1300.2
40°	1588.8	1552.3	1450.0	1325.8	1227.2	1179.7	1172.5	1183.4	1187.0
42.5°	1406.2	1377.0	1289.4	1187.0	1099.4	1051.9	1062.8	1070.1	1073.8
45°	1241.8	1212.6	1143.3	1037.3	975.1	942.4	942.4	953.3	949.6
47.5°	1095.7	1073.8	1004.4	902.2	847.4	832.7	840.0	847.4	847.4
50°	967.9	935.0	869.3	788.9	748.7	730.5	737.8	741.4	741.4
52.5°	847.4	825.5	759.7	686.6	650.2	639.2	639.2	642.8	642.8
55°	748.7	723.2	664.7	591.7	562.5	547.8	537.0	533.3	540.5
57.5°	653.7	631.8	577.1	507.7	474.9	460.2	438.3	431.0	438.3
60°	569.7	551.5	496.7	431.0	398.1	368.9	343.3	328.8	336.0
62.5°	496.7	474.9	420.1	365.2	328.8	295.9	255.6	233.8	244.8
65°	423.6	405.4	350.6	295.9	259.3	219.1	171.7	157.1	157.1
67.5°	358.0	339.6	288.5	241.1	197.2	149.8	105.9	102.2	105.9
70°	295.9	277.5	233.8	186.3	138.8	91.3	62.1	62.1	62.1
72.5°	244.8	222.8	182.7	135.1	87.7	47.4	32.9	36.6	36.6
75°	189.9	171.7	135.1	91.3	51.1	21.9	18.2	18.2	18.2
77.5°	142.4	127.9	95.0	58.4	25.6	7.3	7.3	7.3	7.3
80°	98.7	84.0	62.1	36.6	14.6	7.3	7.3	7.3	7.3
82.5°	58.4	51.1	36.6	18.2	7.3	3.7	3.7	3.7	3.7
85°	29.2	25.6	14.6	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)