

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: P583277

Luminaire Tested: **HC660D010-HM64560940-61WWWB**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P583277  
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: HC660D010-HM64560940-61WWWB  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5239.0 lumens  
Efficiency: N/A  
Efficacy: 95.3 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

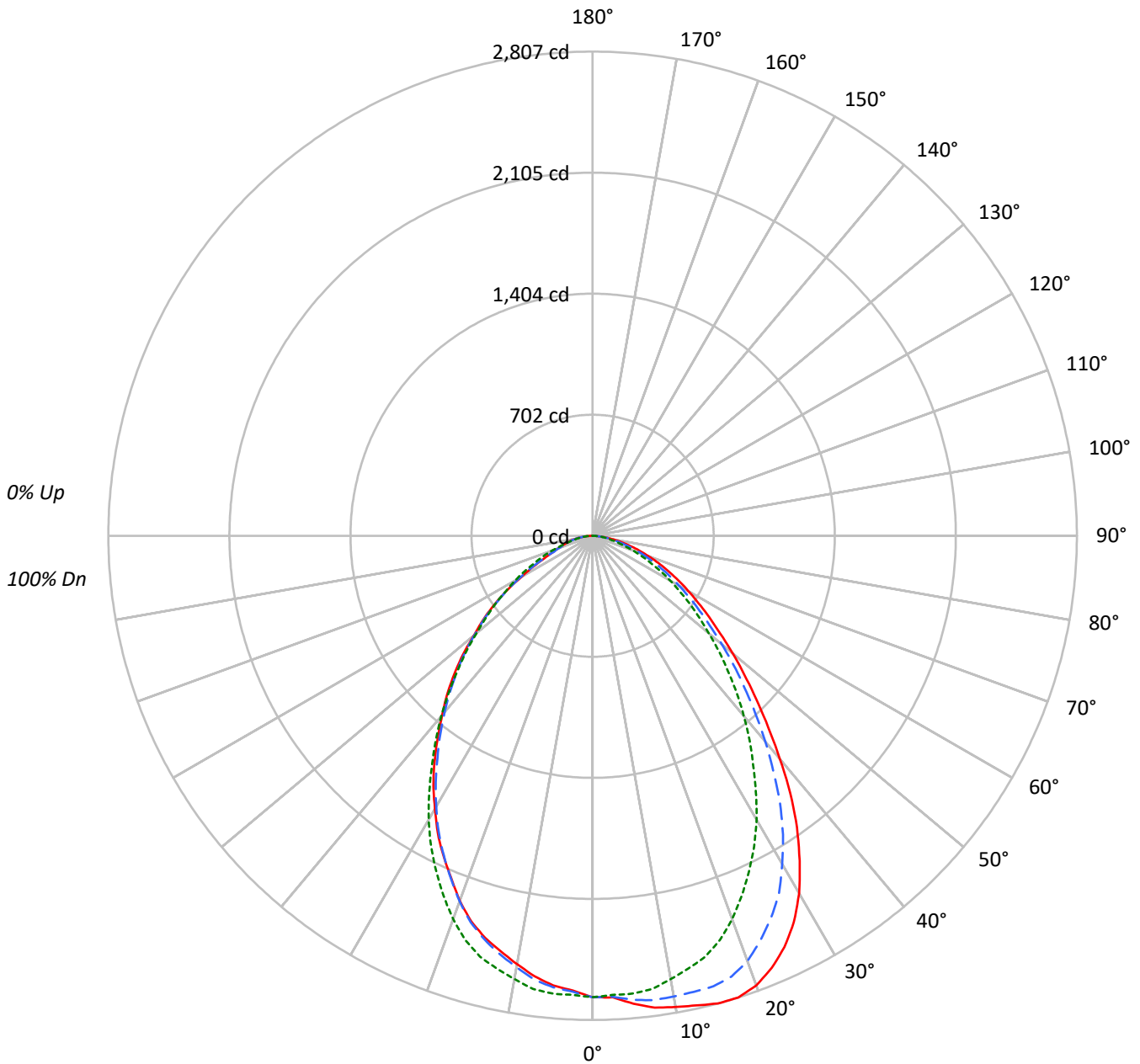
Input Watts (W): 55  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	146655	146655	146655
5°	149829	146615	144001
10°	154412	145260	140378
15°	159297	143327	136896
20°	161825	137947	131337
25°	159160	129757	123799
30°	151530	120297	115670
35°	138183	108596	106883
40°	120834	97554	97032
45°	103980	85846	87839
50°	90394	74804	76364
55°	78946	65661	66358
60°	70126	56903	52090
65°	62575	47878	39823
70°	55073	39253	33387
75°	47212	30966	31729
80°	38105	26550	31159
85°	25348	23021	27550



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	253.3	4.8
10°-20°	721.1	13.8
20°-30°	1029.3	19.6
30°-40°	1078.2	20.6
40°-50°	907.8	17.3
50°-60°	646.1	12.3
60°-70°	378.2	7.2
70°-80°	179.0	3.4
80°-90°	46.0	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°	2003.7	38.2
0°-40°	3081.9	58.8
0°-60°	4635.9	88.5
0°-90°	5239.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5239.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2675	2675	2675	2675	2675	
5°	2723	2701	2664	2628	2617	262
15°	2807	2704	2525	2423	2412	792
25°	2631	2445	2145	2043	2047	1204
35°	2065	1893	1623	1568	1597	1283
45°	1341	1243	1107	1111	1133	1041
55°	826	757	687	687	694	744
65°	482	428	369	311	307	481
75°	223	186	146	142	150	239
85°	40	33	37	44	44	52
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°	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2
2.5°	2678.9	2678.9	2675.2	2671.6	2664.3	2653.3	2646.0	2638.6	2638.6
5°	2722.7	2715.4	2700.7	2682.6	2664.3	2642.3	2627.7	2616.8	2616.8
7.5°	2759.3	2744.7	2715.4	2682.6	2649.6	2620.3	2594.8	2580.2	2576.5
10°	2773.9	2755.6	2711.7	2660.6	2609.5	2569.2	2539.9	2521.8	2521.8
12.5°	2788.5	2766.6	2708.1	2635.0	2569.2	2514.4	2485.2	2470.5	2466.9
15°	2806.8	2777.6	2704.4	2613.1	2525.4	2463.2	2423.1	2412.1	2412.1
17.5°	2806.8	2770.3	2678.9	2565.6	2456.0	2386.5	2350.0	2339.0	2342.7
20°	2773.9	2733.7	2624.0	2485.2	2364.6	2291.5	2254.9	2247.6	2251.3
22.5°	2711.7	2664.3	2539.9	2390.1	2258.6	2181.8	2148.9	2148.9	2145.2
25°	2631.3	2580.2	2445.0	2287.9	2145.2	2068.5	2043.0	2046.7	2046.7
27.5°	2525.4	2474.2	2339.0	2170.9	2028.4	1951.6	1933.3	1940.6	1944.3
30°	2393.8	2339.0	2196.5	2032.0	1900.4	1823.6	1812.8	1823.6	1827.3
32.5°	2233.0	2192.8	2054.0	1885.9	1761.5	1695.8	1692.1	1703.1	1717.7
35°	2064.8	2021.0	1893.2	1739.6	1622.7	1567.9	1567.9	1586.1	1597.1
37.5°	1882.2	1838.3	1721.4	1593.4	1494.7	1443.6	1450.9	1469.2	1472.9
40°	1688.5	1655.5	1556.9	1447.2	1363.2	1323.0	1333.9	1352.2	1355.9
42.5°	1505.7	1476.5	1396.1	1297.4	1235.3	1206.0	1220.7	1242.6	1249.8
45°	1341.2	1308.4	1242.6	1158.6	1107.3	1092.7	1111.0	1125.6	1133.0
47.5°	1191.4	1162.2	1107.3	1030.6	994.1	986.8	1005.1	1012.3	1019.6
50°	1059.9	1030.6	975.8	906.4	877.1	877.1	891.7	899.1	895.4
52.5°	931.9	906.4	855.1	796.7	778.4	778.4	789.4	793.0	800.4
55°	826.0	800.4	756.6	701.7	687.0	679.8	687.0	687.0	694.3
57.5°	727.3	705.3	665.2	613.9	595.8	588.4	584.8	581.1	588.4
60°	639.6	621.3	577.5	533.5	519.0	500.7	486.1	471.4	475.1
62.5°	559.2	540.9	500.7	456.8	442.3	416.7	398.4	380.1	387.4
65°	482.4	464.1	427.6	391.0	369.1	339.9	310.6	299.7	307.0
67.5°	413.0	398.4	361.9	325.3	307.0	274.1	244.9	244.9	248.5
70°	343.6	328.9	299.7	266.8	244.9	215.6	204.6	208.3	208.3
72.5°	281.5	270.5	241.2	211.9	190.1	171.8	171.8	175.4	179.1
75°	222.9	215.6	186.4	160.8	146.2	135.2	142.5	146.2	149.8
77.5°	171.8	160.8	138.8	120.7	109.7	113.3	120.7	124.2	127.9
80°	120.7	117.0	98.7	87.7	84.1	87.7	95.0	98.7	98.7
82.5°	76.7	73.1	62.1	58.4	58.4	62.1	69.4	69.4	69.4
85°	40.3	36.6	32.9	32.9	36.6	40.3	43.8	43.8	43.8
87.5°	14.6	11.0	14.6	14.6	18.3	18.3	18.3	18.3	18.3
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)