

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: P583161

Luminaire Tested: **HC660D010-HM64560830-61RWWH**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P583161  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-15)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC660D010-HM64560830-61RWWH  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5693.1 lumens  
Efficiency: N/A  
Efficacy: 103.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.19  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

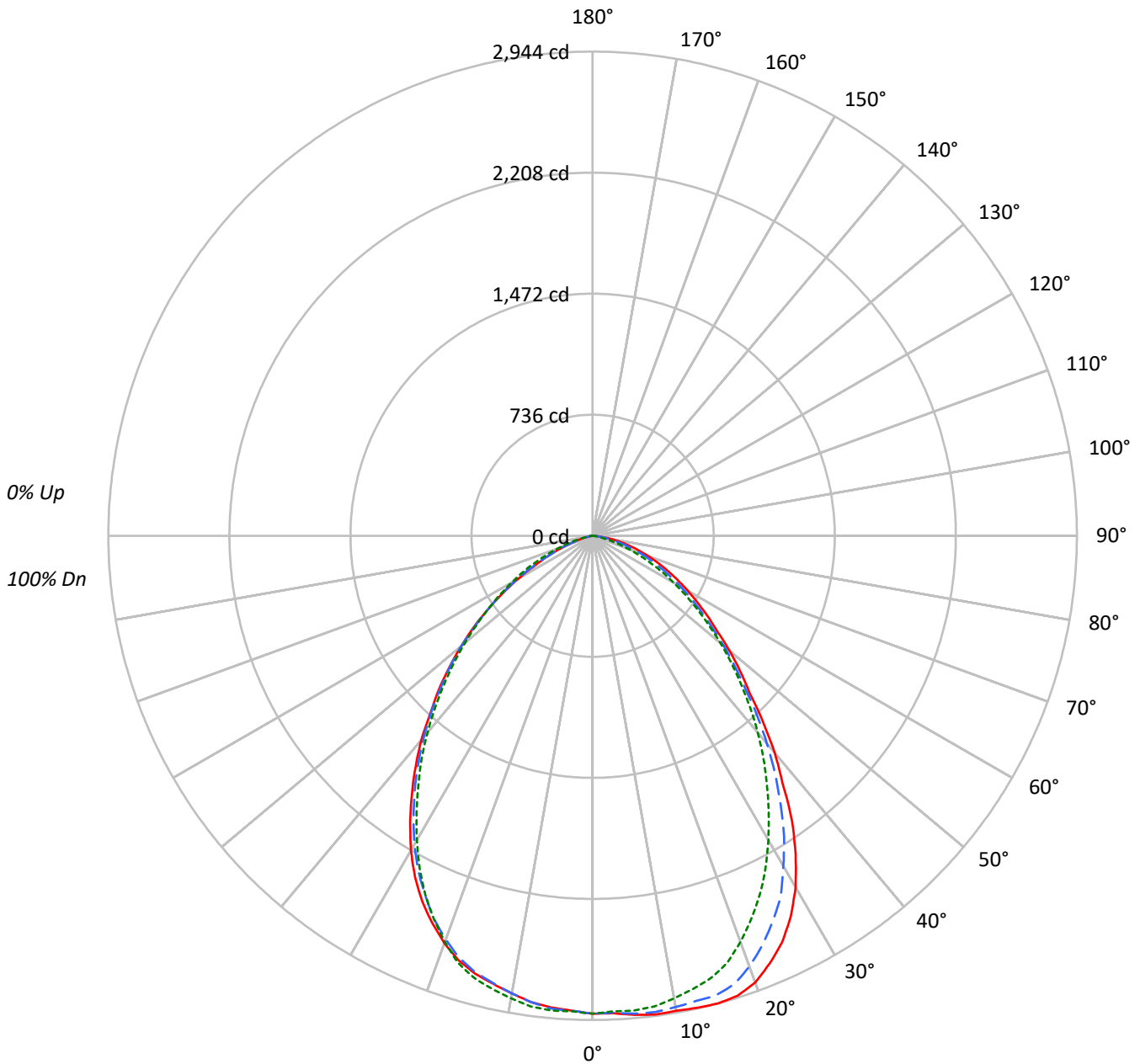
Input Watts (W): 55  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	90	85	100	94	89	84	91	86	83	87	84	81	85	82	79	77																			
3	95	86	79	74	93	84	78	73	82	76	72	79	74	70	77	73	69	67																			
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59																			
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53																			
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47																			
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42																			
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38																			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35																			
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																			

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

	0°	90°	180°
0°	159280	159280	159280
5°	160928	159465	158414
10°	163218	158976	157284
15°	167055	157980	156465
20°	168610	153278	153728
25°	164919	145569	148333
30°	156195	135230	139806
35°	141435	123594	128184
40°	123174	111731	115817
45°	104507	98902	102445
50°	92560	86377	88662
55°	81517	73880	73517
60°	73064	62210	57199
65°	65195	49889	41003
70°	57381	36016	25629
75°	48398	21774	14509
80°	37252	9629	6030
85°	21574	2390	2390



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.8	4.8
10°-20°	792.6	13.9
20°-30°	1145.8	20.1
30°-40°	1205.6	21.2
40°-50°	1013.5	17.8
50°-60°	711.3	12.5
60°-70°	391.3	6.9
70°-80°	138.9	2.4
80°-90°	18.2	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°	2214.2	38.9
0°-40°	3419.8	60.1
0°-60°	5144.7	90.4
0°-90°	5693.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5693.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2906	2906	2906	2906	2906	
5°	2924	2917	2898	2886	2879	279
15°	2944	2894	2784	2749	2757	831
25°	2726	2589	2407	2410	2452	1247
35°	2113	1992	1847	1885	1915	1310
45°	1348	1310	1276	1306	1321	1058
55°	853	807	773	773	769	768
65°	503	449	385	316	316	500
75°	228	183	103	68	68	245
85°	34	19	4	4	4	47
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°	2905.5	2905.5	2905.5	2905.5	2905.5	2905.5	2905.5	2905.5	2905.5
2.5°	2905.5	2905.5	2901.6	2901.6	2894.0	2894.0	2890.2	2890.2	2890.2
5°	2924.4	2924.4	2916.9	2905.5	2897.8	2886.4	2886.4	2882.6	2878.7
7.5°	2935.9	2932.1	2920.7	2905.5	2886.4	2867.3	2859.8	2863.5	2859.8
10°	2932.1	2924.4	2909.2	2878.7	2855.9	2829.3	2825.5	2821.6	2825.5
12.5°	2939.7	2928.3	2897.8	2859.8	2821.6	2791.2	2787.4	2787.4	2791.2
15°	2943.5	2932.1	2894.0	2836.9	2783.6	2753.1	2749.3	2753.1	2756.9
17.5°	2932.1	2916.9	2859.8	2783.6	2722.6	2692.2	2692.2	2699.7	2707.4
20°	2890.2	2867.3	2787.4	2696.0	2627.4	2604.6	2612.2	2627.4	2635.1
22.5°	2814.1	2787.4	2696.0	2593.2	2520.9	2501.8	2520.9	2539.8	2547.5
25°	2726.5	2696.0	2589.4	2482.7	2406.6	2383.8	2410.4	2440.9	2452.3
27.5°	2608.4	2574.1	2475.2	2353.3	2277.1	2265.7	2296.2	2330.5	2338.0
30°	2467.5	2429.5	2319.0	2204.8	2136.3	2132.4	2166.7	2197.2	2208.6
32.5°	2296.2	2261.9	2166.7	2052.4	1991.5	1991.5	2025.8	2052.4	2063.8
35°	2113.4	2075.3	1991.5	1896.3	1846.8	1850.6	1884.9	1903.9	1915.4
37.5°	1896.3	1884.9	1820.2	1740.2	1706.0	1713.5	1740.2	1755.4	1766.9
40°	1721.2	1690.7	1648.9	1584.1	1561.3	1568.9	1595.5	1610.7	1618.4
42.5°	1530.8	1511.8	1477.4	1431.7	1416.5	1427.9	1450.8	1462.2	1458.4
45°	1348.0	1344.2	1310.0	1283.2	1275.7	1290.9	1306.1	1317.5	1321.4
47.5°	1214.7	1199.5	1169.0	1150.0	1142.4	1157.6	1172.9	1180.4	1180.4
50°	1085.3	1070.1	1039.6	1020.5	1012.8	1028.2	1039.6	1047.1	1039.6
52.5°	955.7	940.5	913.9	891.1	887.2	894.9	898.6	902.5	910.0
55°	852.9	837.7	807.2	780.6	773.0	776.9	773.0	773.0	769.2
57.5°	754.0	738.7	708.3	677.8	666.4	662.6	651.2	647.3	643.6
60°	666.4	647.3	616.8	582.6	567.4	552.2	533.1	521.7	521.7
62.5°	582.6	563.6	529.3	498.8	476.0	449.4	418.9	403.7	403.7
65°	502.6	487.4	449.4	415.1	384.6	350.3	316.1	308.4	316.1
67.5°	426.5	411.2	373.2	338.9	300.9	259.0	228.5	228.5	236.1
70°	358.0	342.7	308.4	266.6	224.7	182.8	159.9	159.9	159.9
72.5°	293.2	278.0	239.9	201.8	159.9	118.0	106.6	110.5	106.6
75°	228.5	217.0	182.8	140.8	102.8	72.3	68.5	64.8	68.5
77.5°	171.3	159.9	129.4	91.4	57.1	41.9	38.0	38.0	38.0
80°	118.0	106.6	83.7	53.3	30.5	19.1	19.1	19.1	19.1
82.5°	72.3	60.9	45.7	26.6	11.4	11.4	11.4	11.4	11.4
85°	34.3	26.6	19.1	7.7	3.8	3.8	3.8	3.8	3.8
87.5°	7.7	7.7	3.8	3.8	0.0	3.8	3.8	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)