

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: P593282

Luminaire Tested: **HC640D010-HM63040850-61RWWH**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P593282
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: HC640D010-HM63040850-61RWWH
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4939.4 lumens
Efficiency: N/A
Efficacy: 120.5 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

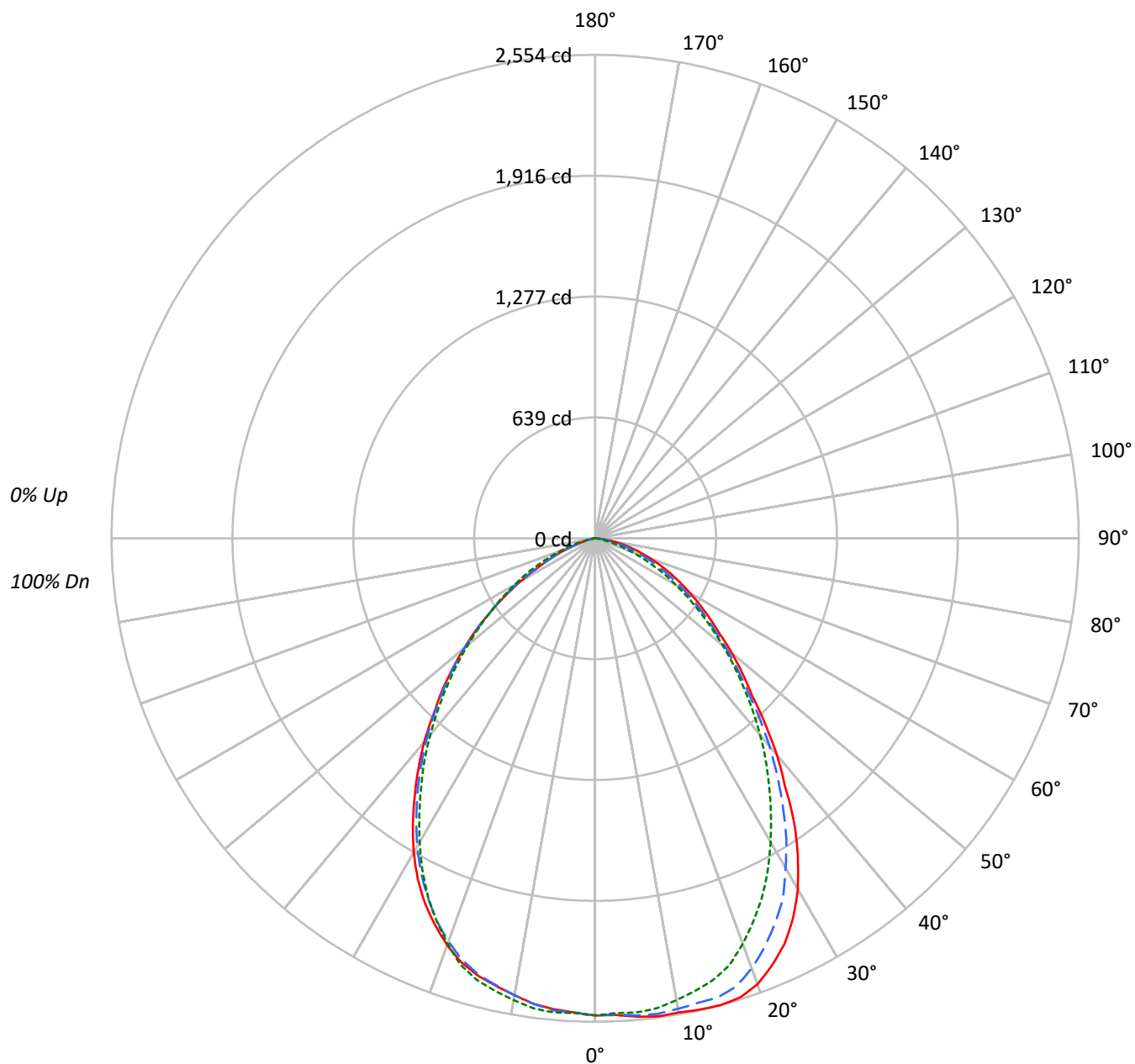
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	138185	138185	138185
5°	139621	138350	137447
10°	141614	137934	136459
15°	144938	137067	135750
20°	146289	132988	133373
25°	143083	126298	128699
30°	135521	117328	121297
35°	122703	107231	111213
40°	106857	96932	100481
45°	90676	85807	88870
50°	80304	74948	76919
55°	70736	64103	63787
60°	63383	53976	49634
65°	56569	43286	35568
70°	49768	31239	22247
75°	41981	18893	12603
80°	32327	8334	5209
85°	18681	2076	2076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.3	4.8
10°-20°	687.7	13.9
20°-30°	994.1	20.1
30°-40°	1046.0	21.2
40°-50°	879.3	17.8
50°-60°	617.2	12.5
60°-70°	339.5	6.9
70°-80°	120.6	2.4
80°-90°	15.8	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°	1921.1	38.9
0°-40°	2967.1	60.1
0°-60°	4463.6	90.4
0°-90°	4939.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4939.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2521	2521	2521	2521	2521	
5°	2537	2531	2514	2504	2498	242
15°	2554	2511	2415	2385	2392	721
25°	2366	2246	2088	2091	2128	1082
35°	1834	1728	1602	1635	1662	1136
45°	1170	1136	1107	1133	1146	918
55°	740	700	671	671	667	666
65°	436	390	334	274	274	434
75°	198	158	89	60	60	213
85°	30	16	3	3	3	41
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°	2520.7	2520.7	2520.7	2520.7	2520.7	2520.7	2520.7	2520.7	2520.7
2.5°	2520.7	2520.7	2517.4	2517.4	2510.8	2510.8	2507.6	2507.6	2507.6
5°	2537.2	2537.2	2530.6	2520.7	2514.1	2504.3	2504.3	2501.0	2497.7
7.5°	2547.3	2544.0	2533.9	2520.7	2504.3	2487.8	2481.2	2484.5	2481.2
10°	2544.0	2537.2	2524.0	2497.7	2477.9	2454.7	2451.4	2448.1	2451.4
12.5°	2550.6	2540.7	2514.1	2481.2	2448.1	2421.7	2418.4	2418.4	2421.7
15°	2553.8	2544.0	2510.8	2461.3	2415.1	2388.6	2385.3	2388.6	2391.9
17.5°	2544.0	2530.6	2481.2	2415.1	2362.2	2335.8	2335.8	2342.4	2349.0
20°	2507.6	2487.8	2418.4	2339.1	2279.6	2259.7	2266.4	2279.6	2286.2
22.5°	2441.5	2418.4	2339.1	2249.8	2187.0	2170.5	2187.0	2203.7	2210.2
25°	2365.5	2339.1	2246.5	2154.1	2088.0	2068.2	2091.3	2117.7	2127.7
27.5°	2263.1	2233.3	2147.5	2041.7	1975.6	1965.7	1992.2	2021.9	2028.5
30°	2140.9	2107.8	2012.0	1912.8	1853.5	1850.2	1879.8	1906.2	1916.2
32.5°	1992.2	1962.4	1879.8	1780.8	1727.9	1727.9	1757.6	1780.8	1790.7
35°	1833.5	1800.6	1727.9	1645.3	1602.3	1605.6	1635.4	1651.9	1661.8
37.5°	1645.3	1635.4	1579.2	1509.9	1480.0	1486.6	1509.9	1523.0	1532.9
40°	1493.2	1466.9	1430.6	1374.4	1354.5	1361.2	1384.3	1397.5	1404.1
42.5°	1328.1	1311.6	1281.8	1242.2	1229.0	1238.9	1258.7	1268.6	1265.3
45°	1169.6	1166.3	1136.5	1113.4	1106.8	1120.0	1133.2	1143.0	1146.3
47.5°	1053.9	1040.7	1014.3	997.7	991.1	1004.3	1017.6	1024.2	1024.2
50°	941.6	928.3	901.9	885.4	878.8	892.0	901.9	908.5	901.9
52.5°	829.3	816.1	792.9	773.1	769.8	776.4	779.7	783.0	789.6
55°	740.1	726.8	700.4	677.3	670.7	674.0	670.7	670.7	667.4
57.5°	654.1	640.9	614.5	588.0	578.1	574.8	564.9	561.6	558.3
60°	578.1	561.6	535.3	505.4	492.3	479.1	462.6	452.7	452.7
62.5°	505.4	489.0	459.3	432.8	413.0	389.9	363.4	350.2	350.2
65°	436.1	422.9	389.9	360.1	333.7	303.9	274.2	267.6	274.2
67.5°	370.0	356.8	323.8	294.0	261.0	224.6	198.2	198.2	204.8
70°	310.5	297.3	267.6	231.2	194.9	158.5	138.8	138.8	138.8
72.5°	254.4	241.1	208.1	175.2	138.8	102.4	92.5	95.8	92.5
75°	198.2	188.4	158.5	122.3	89.2	62.8	59.5	56.2	59.5
77.5°	148.7	138.8	112.4	79.3	49.6	36.4	33.0	33.0	33.0
80°	102.4	92.5	72.7	46.3	26.4	16.5	16.5	16.5	16.5
82.5°	62.8	52.9	39.7	23.1	9.9	9.9	9.9	9.9	9.9
85°	29.7	23.1	16.5	6.6	3.3	3.3	3.3	3.3	3.3
87.5°	6.6	6.6	3.3	3.3	0.0	3.3	3.3	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)