

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: P593285

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

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P593285
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: HC640D010-HM63040850-61WWWB
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4734.6 lumens
Efficiency: N/A
Efficacy: 115.5 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

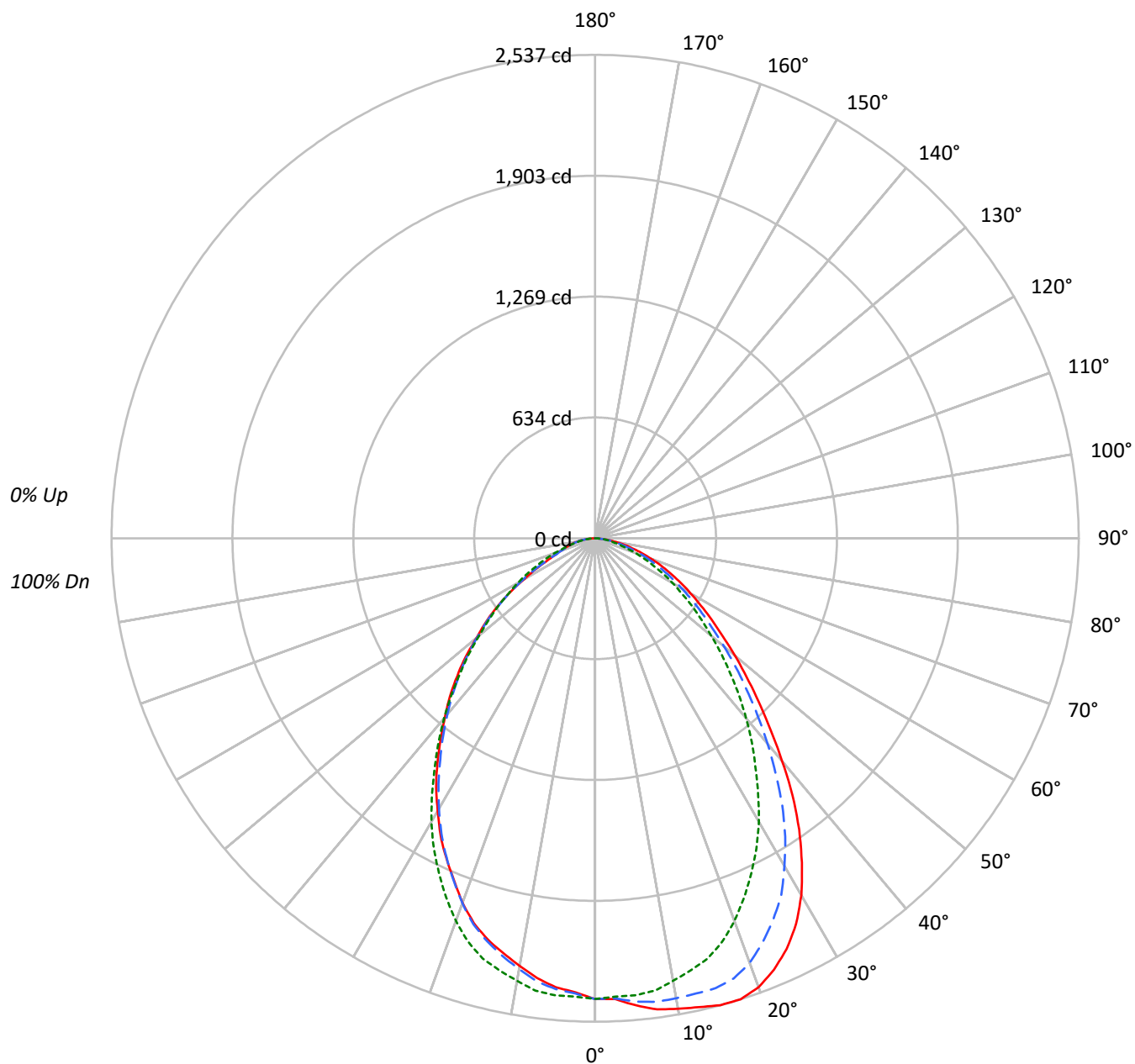
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	103	100	108	104	101	98		100	97	95			96	94	92			93
2	102	95	89	84	100	93	88	83		90	85	81			87	83	80			84
3	94	85	78	72	92	84	77	72		81	75	71			78	73	69			76
4	87	77	69	63	85	75	68	63		73	67	62			71	65	61			69
5	81	70	61	56	79	68	61	55		66	60	55			65	59	54			63
6	75	63	55	49	74	62	55	49		61	54	49			59	53	48			58
7	70	58	50	44	69	57	50	44		56	49	44			54	48	44			53
8	66	53	46	40	64	53	45	40		51	45	40			50	44	40			49
9	62	49	42	37	60	49	42	37		48	41	36			47	41	36			46
10	58	46	38	34	57	45	38	33		44	38	33			43	37	33			43

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	132533	132533	132533
5°	135406	132495	130128
10°	139543	131266	126851
15°	143962	129530	123712
20°	146243	124663	118695
25°	143839	117267	111871
30°	136939	108719	104535
35°	124878	98143	96583
40°	109190	88158	87693
45°	93979	77582	79373
50°	81695	67605	69013
55°	71338	59343	59984
60°	63372	51421	47069
65°	56543	43273	35983
70°	49768	35471	30165
75°	42658	28001	28700
80°	34379	23993	28160
85°	22832	20757	24908



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.9	4.8
10°-20°	651.6	13.8
20°-30°	930.2	19.6
30°-40°	974.4	20.6
40°-50°	820.4	17.3
50°-60°	583.9	12.3
60°-70°	341.8	7.2
70°-80°	161.7	3.4
80°-90°	41.6	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°	1810.8	38.2
0°-40°	2785.2	58.8
0°-60°	4189.5	88.5
0°-90°	4734.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4734.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2418	2418	2418	2418	2418	
5°	2461	2441	2408	2375	2365	236
15°	2537	2444	2282	2190	2180	716
25°	2378	2210	1939	1846	1850	1088
35°	1866	1711	1466	1417	1443	1159
45°	1212	1123	1001	1004	1024	941
55°	746	684	621	621	628	673
65°	436	386	334	281	277	435
75°	201	168	132	129	136	216
85°	36	30	33	40	40	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°	2417.6	2417.6	2417.6	2417.6	2417.6	2417.6	2417.6	2417.6	2417.6
2.5°	2420.9	2420.9	2417.6	2414.3	2407.7	2397.8	2391.2	2384.6	2384.6
5°	2460.6	2454.0	2440.7	2424.2	2407.7	2387.9	2374.7	2364.7	2364.7
7.5°	2493.6	2480.4	2454.0	2424.2	2394.5	2368.1	2344.9	2331.7	2328.4
10°	2506.8	2490.3	2450.7	2404.4	2358.1	2321.8	2295.5	2278.8	2278.8
12.5°	2519.9	2500.2	2447.3	2381.3	2321.8	2272.2	2245.9	2232.7	2229.4
15°	2536.6	2510.1	2444.0	2361.4	2282.3	2226.1	2189.7	2179.8	2179.8
17.5°	2536.6	2503.5	2420.9	2318.5	2219.5	2156.7	2123.7	2113.7	2117.1
20°	2506.8	2470.5	2371.4	2245.9	2136.9	2070.8	2037.9	2031.1	2034.6
22.5°	2450.7	2407.7	2295.5	2160.0	2041.2	1971.8	1942.0	1942.0	1938.7
25°	2378.0	2331.7	2209.6	2067.5	1938.7	1869.4	1846.2	1849.5	1849.5
27.5°	2282.3	2236.0	2113.7	1961.9	1833.0	1763.6	1747.1	1753.7	1757.0
30°	2163.3	2113.7	1985.0	1836.3	1717.5	1648.1	1638.2	1648.1	1651.4
32.5°	2017.9	1981.7	1856.1	1704.3	1591.9	1532.4	1529.1	1539.1	1552.3
35°	1866.0	1826.4	1710.9	1572.1	1466.5	1416.9	1416.9	1433.4	1443.2
37.5°	1700.9	1661.3	1555.6	1440.0	1350.8	1304.6	1311.2	1327.7	1331.0
40°	1525.8	1496.1	1407.0	1307.9	1231.9	1195.5	1205.6	1222.1	1225.4
42.5°	1360.7	1334.3	1261.6	1172.5	1116.3	1089.9	1103.1	1123.0	1129.6
45°	1212.2	1182.4	1123.0	1047.0	1000.7	987.5	1004.0	1017.2	1023.8
47.5°	1076.7	1050.3	1000.7	931.3	898.4	891.8	908.3	914.9	921.5
50°	957.9	931.3	881.9	819.1	792.7	792.7	805.9	812.5	809.2
52.5°	842.2	819.1	772.8	720.0	703.4	703.4	713.4	716.7	723.3
55°	746.4	723.3	683.6	634.2	620.9	614.3	620.9	620.9	627.6
57.5°	657.3	637.5	601.1	554.9	538.3	531.7	528.4	525.1	531.7
60°	578.0	561.5	521.8	482.2	469.0	452.4	439.2	426.0	429.3
62.5°	505.3	488.8	452.4	412.8	399.7	376.6	360.0	343.5	350.1
65°	435.9	419.4	386.5	353.4	333.6	307.2	280.7	270.8	277.4
67.5°	373.1	360.0	327.0	294.0	277.4	247.7	221.3	221.3	224.6
70°	310.5	297.3	270.8	241.1	221.3	194.8	184.9	188.2	188.2
72.5°	254.3	244.4	218.0	191.5	171.7	155.2	155.2	158.5	161.8
75°	201.4	194.8	168.4	145.4	132.2	122.1	128.9	132.2	135.5
77.5°	155.2	145.4	125.6	108.9	99.1	102.4	108.9	112.2	115.5
80°	108.9	105.7	89.2	79.3	76.0	79.3	85.9	89.2	89.2
82.5°	69.4	66.1	56.2	52.9	52.9	56.2	62.8	62.8	62.8
85°	36.3	33.0	29.7	29.7	33.0	36.3	39.6	39.6	39.6
87.5°	13.2	9.9	13.2	13.2	16.5	16.5	16.5	16.5	16.5
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)