

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: P582718

Luminaire Tested: **HC650D010-HM64560827-61WWW**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582718
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC650D010-HM64560827-61WWW
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4469.0 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.06 / 1.14
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

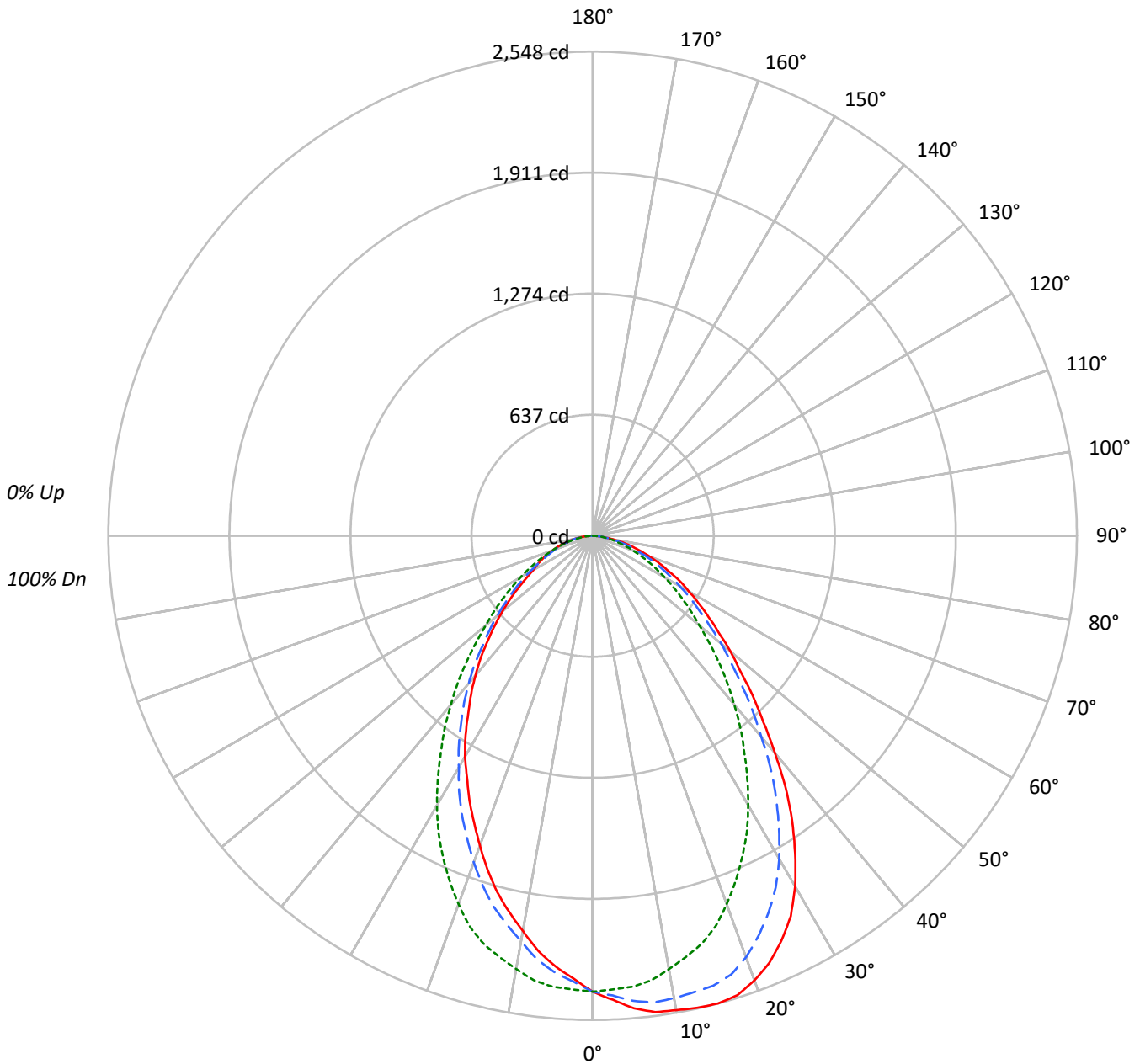
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78	76																			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66																			
4	87	76	69	63	85	75	68	62	73	67	62	71	65	61	69	64	60	58																			
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51																			
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46																			
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42																			
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38																			
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34																			
10	58	46	39	34	57	45	38	34	44	38	33	44	38	33	43	37	33	32																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	131519	131519	131519
5°	137348	131130	125093
10°	141096	128872	117550
15°	144592	126079	110137
20°	145233	120370	101153
25°	142188	112694	92776
30°	134901	103630	85032
35°	122523	93137	76279
40°	106750	82955	68629
45°	92374	72597	60332
50°	80688	62505	52868
55°	71290	54937	45360
60°	64085	48143	39295
65°	57386	41885	38110
70°	51243	35727	35727
75°	44459	30098	33529
80°	35674	25508	30559
85°	24342	22329	26355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.5	5.0
10°-20°	626.8	14.0
20°-30°	873.5	19.5
30°-40°	900.0	20.1
40°-50°	745.9	16.7
50°-60°	536.0	12.0
60°-70°	341.4	7.6
70°-80°	175.3	3.9
80°-90°	44.6	1.0
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°	1725.8	38.6
0°-40°	2625.8	58.8
0°-60°	3907.7	87.4
0°-90°	4469.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4469.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2399	2399	2399	2399	2399	
5°	2496	2457	2383	2305	2273	239
15°	2548	2451	2222	2018	1941	718
25°	2351	2189	1863	1624	1534	1077
35°	1831	1682	1392	1208	1140	1137
45°	1192	1108	936	817	778	922
55°	746	684	575	510	475	672
65°	442	394	323	281	294	443
75°	210	181	142	149	158	224
85°	39	36	36	39	42	50
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°	2399.1	2399.1	2399.1	2399.1	2399.1	2399.1	2399.1	2399.1	2399.1
2.5°	2444.3	2434.6	2421.8	2408.8	2389.4	2366.8	2347.5	2341.0	2331.3
5°	2495.9	2483.1	2457.2	2424.9	2382.9	2341.0	2305.4	2282.9	2273.2
7.5°	2528.3	2512.1	2476.6	2421.8	2360.3	2299.1	2247.3	2215.1	2202.1
10°	2534.7	2518.6	2470.2	2395.9	2315.1	2231.1	2166.7	2127.9	2111.7
12.5°	2544.3	2521.8	2460.5	2373.2	2269.9	2173.0	2092.4	2044.0	2027.8
15°	2547.7	2521.8	2450.8	2344.2	2221.5	2105.3	2018.1	1960.0	1940.6
17.5°	2534.7	2505.6	2421.8	2292.6	2153.7	2031.0	1927.6	1866.3	1840.5
20°	2489.5	2457.2	2360.3	2215.1	2063.3	1934.1	1827.6	1763.0	1733.9
22.5°	2431.4	2389.4	2279.7	2124.6	1966.4	1830.8	1724.3	1659.7	1630.6
25°	2350.7	2311.9	2189.2	2024.6	1863.1	1721.1	1624.1	1556.3	1533.8
27.5°	2257.0	2211.8	2085.9	1921.3	1756.5	1614.4	1520.8	1459.5	1430.4
30°	2131.1	2089.1	1963.2	1798.5	1637.1	1504.7	1407.9	1356.1	1343.3
32.5°	1982.5	1947.0	1824.3	1669.3	1514.4	1391.7	1310.9	1256.1	1243.1
35°	1830.8	1788.9	1682.2	1537.0	1391.7	1281.9	1207.6	1159.2	1139.8
37.5°	1666.2	1627.4	1537.0	1407.9	1278.7	1175.3	1110.7	1068.8	1049.4
40°	1491.7	1462.7	1378.7	1275.5	1159.2	1068.8	1013.9	978.3	959.0
42.5°	1330.3	1301.2	1243.1	1146.3	1049.4	968.7	920.2	888.0	871.8
45°	1191.5	1165.6	1107.5	1023.6	936.4	868.6	816.9	794.3	778.2
47.5°	1052.6	1039.8	988.0	910.6	829.9	771.7	736.2	710.4	697.5
50°	946.1	929.9	881.5	800.7	732.9	687.8	655.5	632.9	619.9
52.5°	836.3	820.2	775.0	707.2	652.3	610.2	578.0	558.6	545.7
55°	745.9	732.9	684.5	623.2	574.8	539.2	510.2	487.5	474.6
57.5°	662.0	649.0	603.8	545.7	503.7	471.5	445.6	426.2	410.0
60°	584.5	574.8	529.6	474.6	439.1	406.9	384.3	368.1	358.4
62.5°	516.7	497.2	458.5	410.0	377.8	351.9	329.4	319.7	326.1
65°	442.4	432.7	394.0	351.9	322.9	297.0	281.0	287.3	293.8
67.5°	381.0	368.1	335.8	297.0	271.3	251.9	242.2	255.1	258.3
70°	319.7	306.7	277.7	245.4	222.9	209.9	209.9	219.5	222.9
72.5°	261.6	251.9	226.0	200.2	184.0	174.3	180.8	187.3	190.5
75°	209.9	200.2	180.8	158.3	142.1	142.1	148.6	154.9	158.3
77.5°	161.4	154.9	135.6	119.5	113.0	113.0	119.5	122.7	125.9
80°	113.0	106.5	96.8	87.2	80.8	87.2	93.7	93.7	96.8
82.5°	74.3	71.0	64.6	58.1	58.1	61.3	64.6	67.8	67.8
85°	38.7	38.7	35.5	32.2	35.5	38.7	38.7	41.9	41.9
87.5°	12.9	12.9	12.9	12.9	16.2	16.2	16.2	16.2	16.2
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)