

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: P582447

Luminaire Tested: **HC640D010-HM63040830-61WWBB**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582447
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC640D010-HM63040830-61WWBB
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3839.2 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.06 / 1.14
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

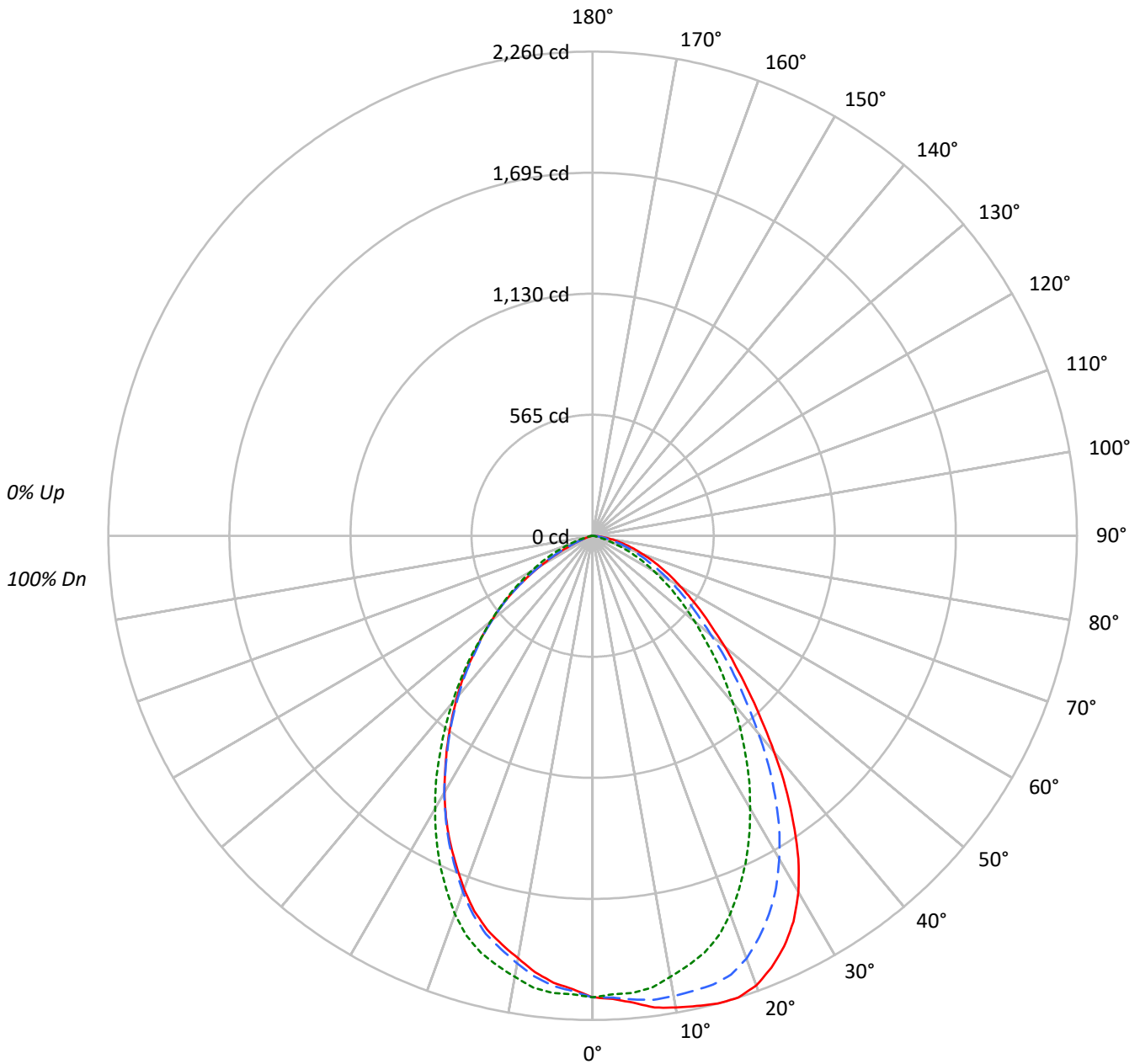
Input Watts (W): 41
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89																			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78																			
3	96	87	80	75	93	86	79	74	83	77	73	80	76	72	78	74	71	69																			
4	89	79	71	66	87	78	71	65	75	69	64	73	68	64	71	66	63	61																			
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54																			
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	49																			
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44																			
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40																			
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37																			
10	60	48	40	36	58	47	40	36	46	40	36	45	40	35	45	39	35	34																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	118099	118099	118099
5°	120388	117884	115221
10°	124480	116381	111493
15°	128287	114359	107997
20°	130281	109600	102349
25°	127931	102091	95310
30°	121601	93027	87463
35°	109299	83145	78882
40°	94327	72858	70475
45°	79877	62727	61076
50°	68484	52971	52450
55°	59362	44605	42866
60°	51827	36214	30557
65°	45595	27902	16902
70°	39350	18449	8271
75°	33381	9002	3219
80°	25824	3820	1926
85°	15284	1887	1887



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.3	5.3
10°-20°	574.9	15.0
20°-30°	809.6	21.1
30°-40°	827.2	21.5
40°-50°	666.9	17.4
50°-60°	447.3	11.7
60°-70°	226.4	5.9
70°-80°	72.4	1.9
80°-90°	11.1	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°	1587.8	41.4
0°-40°	2415.0	62.9
0°-60°	3529.3	91.9
0°-90°	3839.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3839.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2154	2154	2154	2154	2154	
5°	2188	2172	2142	2109	2094	211
15°	2260	2170	2015	1924	1903	638
25°	2115	1948	1688	1585	1576	968
35°	1633	1485	1242	1173	1179	1016
45°	1030	948	809	782	788	801
55°	621	552	467	445	448	559
65°	352	291	215	142	130	351
75°	158	112	42	15	15	169
85°	24	12	3	3	3	33
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°	2154.3	2154.3	2154.3	2154.3	2154.3	2154.3	2154.3	2154.3	2154.3
2.5°	2163.4	2160.4	2157.4	2151.3	2142.2	2133.2	2127.2	2121.1	2118.1
5°	2187.7	2181.6	2172.5	2160.4	2142.2	2121.1	2108.9	2096.8	2093.8
7.5°	2221.1	2208.9	2184.7	2157.4	2127.2	2096.8	2075.6	2063.4	2054.3
10°	2236.2	2215.0	2181.6	2136.1	2090.7	2054.3	2027.0	2009.0	2002.9
12.5°	2248.2	2224.1	2175.6	2115.0	2054.3	2005.9	1975.6	1960.4	1954.4
15°	2260.4	2236.2	2169.5	2090.7	2015.0	1957.4	1924.0	1909.0	1902.9
17.5°	2260.4	2227.1	2148.3	2048.3	1957.4	1887.8	1854.4	1839.2	1836.2
20°	2233.2	2196.8	2099.8	1981.7	1878.7	1799.9	1769.6	1760.5	1754.4
22.5°	2181.6	2139.2	2030.1	1896.9	1784.7	1708.9	1675.7	1669.6	1663.5
25°	2115.0	2072.5	1948.3	1805.8	1687.8	1611.9	1584.8	1578.7	1575.7
27.5°	2030.1	1984.7	1854.4	1708.9	1581.7	1508.9	1484.7	1484.7	1481.6
30°	1921.0	1869.6	1742.3	1596.8	1469.6	1402.9	1384.7	1384.7	1381.7
32.5°	1787.8	1736.2	1621.1	1481.6	1360.5	1290.8	1275.6	1281.7	1278.6
35°	1633.2	1590.7	1484.7	1348.4	1242.4	1178.7	1172.6	1178.7	1178.7
37.5°	1478.6	1439.3	1348.4	1230.2	1130.3	1072.6	1072.6	1081.7	1078.7
40°	1318.1	1287.7	1202.9	1099.9	1018.1	978.7	972.6	981.7	984.8
42.5°	1166.5	1142.4	1069.6	984.8	912.1	872.7	881.8	887.8	890.9
45°	1030.3	1006.0	948.4	860.5	809.1	781.8	781.8	790.9	787.8
47.5°	909.1	890.9	833.2	748.4	703.0	690.9	697.0	703.0	703.0
50°	803.0	775.7	721.1	654.5	621.1	605.9	612.0	615.0	615.0
52.5°	703.0	684.8	630.2	569.7	539.3	530.2	530.2	533.3	533.3
55°	621.1	600.0	551.5	490.9	466.7	454.5	445.4	442.4	448.5
57.5°	542.4	524.2	478.8	421.2	393.9	381.9	363.6	357.6	363.6
60°	472.7	457.6	412.1	357.6	330.3	306.0	284.8	272.8	278.7
62.5°	412.1	393.9	348.5	303.0	272.8	245.5	212.1	193.9	203.0
65°	351.5	336.3	290.8	245.5	215.1	181.8	142.5	130.3	130.3
67.5°	296.9	281.7	239.4	200.0	163.7	124.2	87.8	84.8	87.8
70°	245.5	230.3	193.9	154.6	115.1	75.7	51.6	51.6	51.6
72.5°	203.0	184.8	151.6	112.1	72.7	39.4	27.3	30.3	30.3
75°	157.6	142.5	112.1	75.7	42.5	18.2	15.2	15.2	15.2
77.5°	118.2	106.0	78.7	48.5	21.2	6.1	6.1	6.1	6.1
80°	81.8	69.6	51.6	30.3	12.1	6.1	6.1	6.1	6.1
82.5°	48.5	42.5	30.3	15.2	6.1	3.0	3.0	3.0	3.0
85°	24.3	21.2	12.1	6.1	3.0	3.0	3.0	3.0	3.0
87.5°	6.1	6.1	3.0	3.0	0.0	3.0	3.0	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)