

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: P582645

Luminaire Tested: **HC645D010-HM64560927-61WWBB**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582645
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: HC645D010-HM64560927-61WWBB
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3214.4 lumens
Efficiency: N/A
Efficacy: 73.1 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

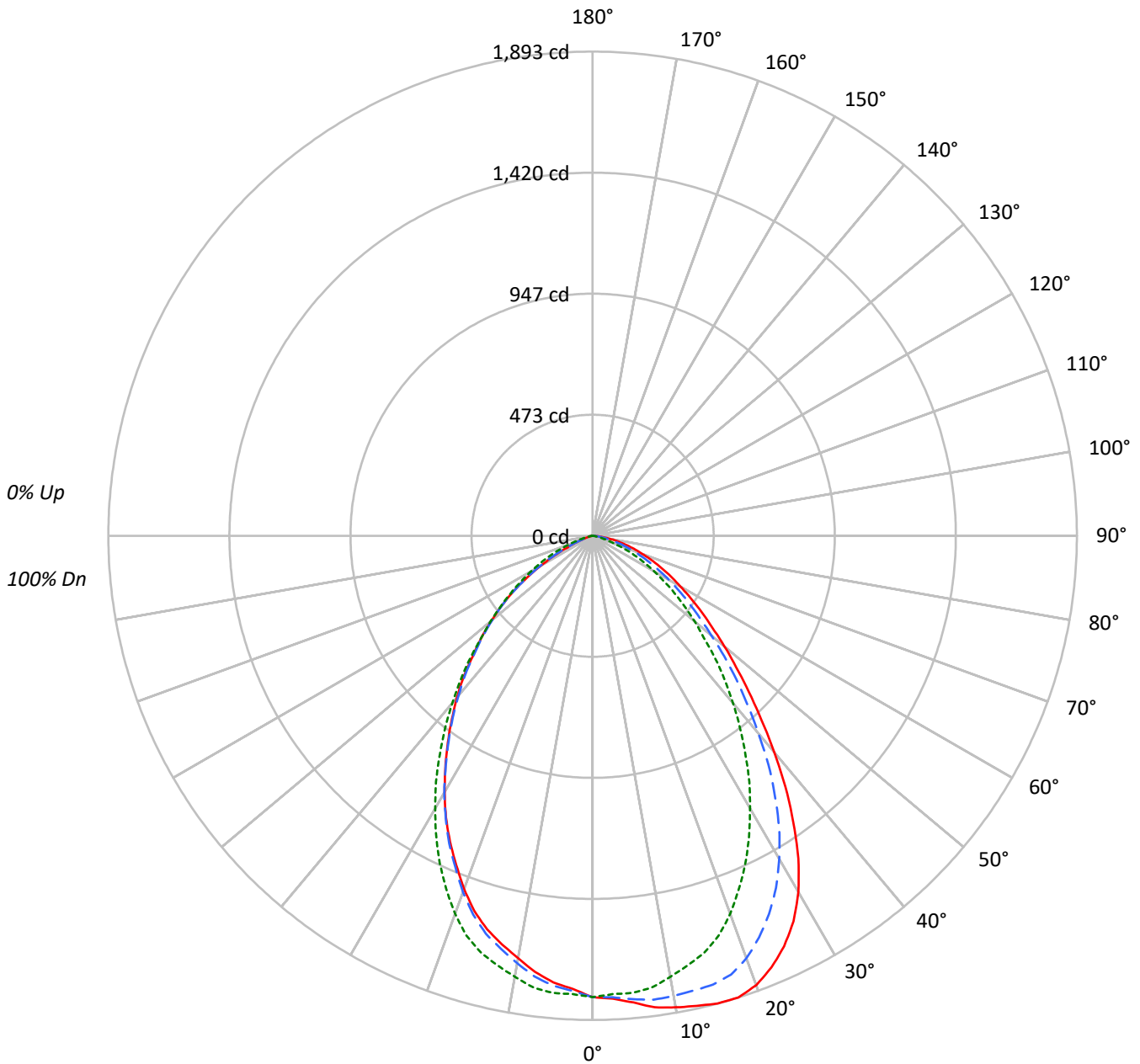
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			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	100	100	100
1	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89	89	89	89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78	78	78	78
3	96	87	80	75	93	86	79	74	83	77	73	80	76	72	78	74	71	69	69	69	69
4	89	79	71	66	87	78	71	65	75	69	64	73	68	64	71	66	63	61	61	61	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54	54	54	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	49	49	49	49
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44	44	44	44
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40	40	40	40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37	37	37	37
10	60	48	40	36	58	47	40	36	46	40	36	45	40	35	45	39	35	34	34	34	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	98885	98885	98885
5°	100803	98701	96467
10°	104223	97449	93346
15°	107413	95750	90426
20°	109081	91766	85693
25°	107117	85475	79801
30°	101813	77892	73233
35°	91517	69613	66040
40°	78977	61000	59003
45°	66875	52517	51137
50°	57346	44357	43930
55°	49709	37342	35889
60°	43396	30316	25590
65°	38175	23375	14152
70°	32938	15451	6924
75°	27959	7519	2690
80°	21625	3220	1578
85°	12769	1635	1635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.2	5.3
10°-20°	481.4	15.0
20°-30°	677.9	21.1
30°-40°	692.6	21.5
40°-50°	558.4	17.4
50°-60°	374.5	11.7
60°-70°	189.5	5.9
70°-80°	60.6	1.9
80°-90°	9.3	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°	1329.5	41.4
0°-40°	2022.0	62.9
0°-60°	2955.0	91.9
0°-90°	3214.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3214.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1804	1804	1804	1804	1804	
5°	1832	1819	1794	1766	1753	176
15°	1893	1816	1687	1611	1593	534
25°	1771	1631	1413	1327	1319	811
35°	1368	1243	1040	982	987	851
45°	863	794	677	654	660	671
55°	520	462	391	373	376	468
65°	294	244	180	119	109	294
75°	132	94	36	13	13	142
85°	20	10	3	3	3	27
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°	1803.8	1803.8	1803.8	1803.8	1803.8	1803.8	1803.8	1803.8	1803.8
2.5°	1811.5	1808.9	1806.3	1801.3	1793.6	1786.0	1781.0	1775.9	1773.3
5°	1831.8	1826.6	1819.1	1808.9	1793.6	1775.9	1765.7	1755.6	1753.0
7.5°	1859.7	1849.5	1829.2	1806.3	1781.0	1755.6	1737.8	1727.7	1720.1
10°	1872.3	1854.5	1826.6	1788.6	1750.6	1720.1	1697.2	1682.1	1676.9
12.5°	1882.4	1862.1	1821.6	1770.9	1720.1	1679.5	1654.2	1641.5	1636.3
15°	1892.6	1872.3	1816.5	1750.6	1687.1	1638.9	1611.0	1598.3	1593.3
17.5°	1892.6	1864.7	1798.8	1715.0	1638.9	1580.5	1552.7	1539.9	1537.5
20°	1869.8	1839.4	1758.1	1659.2	1573.0	1507.0	1481.6	1474.0	1468.9
22.5°	1826.6	1791.2	1699.8	1588.1	1494.3	1430.8	1403.0	1397.9	1392.8
25°	1770.9	1735.3	1631.3	1512.1	1413.1	1349.7	1326.9	1321.7	1319.3
27.5°	1699.8	1661.8	1552.7	1430.8	1324.3	1263.4	1243.1	1243.1	1240.6
30°	1608.4	1565.4	1458.7	1337.0	1230.5	1174.6	1159.4	1159.4	1156.9
32.5°	1496.9	1453.7	1357.3	1240.6	1139.1	1080.8	1068.1	1073.2	1070.6
35°	1367.5	1331.9	1243.1	1129.0	1040.2	986.8	981.8	986.8	986.8
37.5°	1238.1	1205.0	1129.0	1030.0	946.3	898.0	898.0	905.7	903.2
40°	1103.6	1078.2	1007.1	920.9	852.4	819.5	814.4	822.0	824.5
42.5°	976.8	956.5	895.6	824.5	763.6	730.7	738.3	743.3	745.9
45°	862.6	842.3	794.1	720.5	677.4	654.5	654.5	662.2	659.6
47.5°	761.2	745.9	697.7	626.6	588.6	578.4	583.6	588.6	588.6
50°	672.4	649.5	603.9	548.0	520.1	507.4	512.5	515.1	515.1
52.5°	588.6	573.4	527.7	476.9	451.6	444.0	444.0	446.6	446.6
55°	520.1	502.3	461.7	411.0	390.7	380.5	372.9	370.4	375.5
57.5°	454.1	438.9	400.8	352.6	329.8	319.6	304.4	299.3	304.4
60°	395.8	383.1	345.0	299.3	276.5	256.2	238.5	228.4	233.4
62.5°	345.0	329.8	291.7	253.7	228.4	205.5	177.6	162.3	170.0
65°	294.3	281.6	243.5	205.5	180.2	152.3	119.3	109.1	109.1
67.5°	248.7	235.9	200.5	167.4	137.0	104.0	73.5	71.1	73.5
70°	205.5	192.8	162.3	129.4	96.4	63.5	43.2	43.2	43.2
72.5°	170.0	154.7	126.8	93.8	60.9	33.0	22.9	25.3	25.3
75°	132.0	119.3	93.8	63.5	35.5	15.2	12.7	12.7	12.7
77.5°	99.0	88.8	65.9	40.6	17.7	5.0	5.0	5.0	5.0
80°	68.5	58.3	43.2	25.3	10.2	5.0	5.0	5.0	5.0
82.5°	40.6	35.5	25.3	12.7	5.0	2.6	2.6	2.6	2.6
85°	20.3	17.7	10.2	5.0	2.6	2.6	2.6	2.6	2.6
87.5°	5.0	5.0	2.6	2.6	0.0	2.6	2.6	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)