

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: P582573

Luminaire Tested: **HC645D010-HM64560827-61WWBB**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582573
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-HM64560827-61WWBB
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3865.7 lumens
Efficiency: N/A
Efficacy: 87.9 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

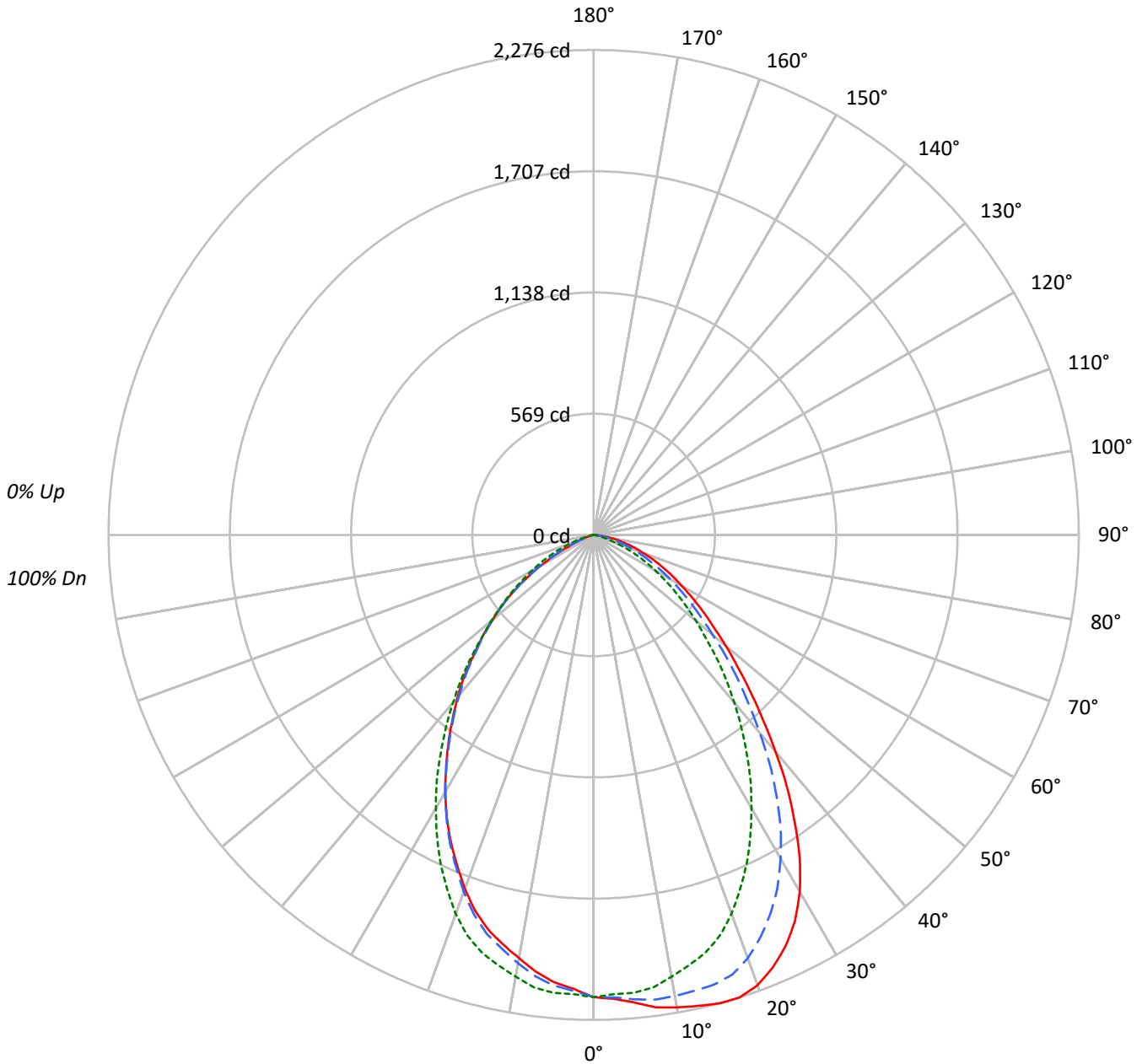
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	118921	118921	118921
5°	121225	118704	116013
10°	125343	117188	112261
15°	129178	115148	108746
20°	131180	110359	103055
25°	128820	102792	95969
30°	122449	93666	88071
35°	110055	83714	79424
40°	94978	73366	70969
45°	80427	63154	61503
50°	68953	53337	52817
55°	59773	44911	43162
60°	52189	36455	30776
65°	45906	28109	17006
70°	39622	18577	8303
75°	33614	9044	3219
80°	25982	3852	1926
85°	15347	1887	1887



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.7	5.3
10°-20°	578.9	15.0
20°-30°	815.2	21.1
30°-40°	832.9	21.5
40°-50°	671.6	17.4
50°-60°	450.4	11.7
60°-70°	227.9	5.9
70°-80°	72.8	1.9
80°-90°	11.2	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°	1598.8	41.4
0°-40°	2431.7	62.9
0°-60°	3553.7	91.9
0°-90°	3865.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3865.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2169	2169	2169	2169	2169	
5°	2203	2188	2157	2124	2108	212
15°	2276	2185	2029	1937	1916	643
25°	2130	1962	1699	1596	1587	975
35°	1644	1495	1251	1181	1187	1023
45°	1037	955	815	787	793	807
55°	625	555	470	449	452	563
65°	354	293	217	144	131	353
75°	159	113	43	15	15	170
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°	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3
2.5°	2178.5	2175.4	2172.4	2166.3	2157.1	2148.0	2141.9	2135.8	2132.7
5°	2202.9	2196.8	2187.6	2175.4	2157.1	2135.8	2123.6	2111.3	2108.2
7.5°	2236.4	2224.2	2199.8	2172.4	2141.9	2111.3	2089.9	2077.7	2068.6
10°	2251.7	2230.3	2196.8	2151.0	2105.2	2068.6	2041.1	2022.8	2016.7
12.5°	2263.9	2239.5	2190.7	2129.7	2068.6	2019.8	1989.3	1974.0	1967.9
15°	2276.1	2251.7	2184.6	2105.2	2028.9	1971.0	1937.4	1922.2	1916.1
17.5°	2276.1	2242.5	2163.2	2062.5	1971.0	1900.8	1867.3	1852.0	1849.0
20°	2248.6	2212.0	2114.4	1995.4	1891.7	1812.3	1781.8	1772.6	1766.5
22.5°	2196.8	2154.1	2044.2	1910.0	1797.0	1720.8	1687.2	1681.1	1675.0
25°	2129.7	2086.9	1961.8	1818.4	1699.4	1623.2	1595.7	1589.6	1586.6
27.5°	2044.2	1998.4	1867.3	1720.8	1592.7	1519.4	1495.0	1495.0	1491.9
30°	1934.4	1882.5	1754.3	1607.9	1479.7	1412.6	1394.3	1394.3	1391.3
32.5°	1800.1	1748.2	1632.3	1491.9	1369.9	1299.8	1284.6	1290.7	1287.6
35°	1644.5	1601.8	1495.0	1357.7	1250.9	1186.8	1180.7	1186.8	1186.8
37.5°	1488.9	1449.2	1357.7	1238.7	1138.0	1080.1	1080.1	1089.2	1086.2
40°	1327.2	1296.8	1211.2	1107.5	1025.2	985.4	979.3	988.6	991.7
42.5°	1174.6	1150.2	1077.0	991.7	918.3	878.7	887.8	893.9	897.0
45°	1037.4	1013.0	954.9	866.5	814.6	787.2	787.2	796.3	793.3
47.5°	915.3	897.0	839.0	753.7	707.9	695.6	701.7	707.9	707.9
50°	808.5	781.1	726.2	659.0	625.4	610.2	616.3	619.3	619.3
52.5°	707.9	689.5	634.6	573.6	543.1	533.9	533.9	537.0	537.0
55°	625.4	604.1	555.3	494.3	469.9	457.7	448.6	445.5	451.6
57.5°	546.1	527.8	482.1	424.2	396.6	384.4	366.1	360.0	366.1
60°	476.0	460.8	414.9	360.0	332.5	308.1	286.8	274.6	280.7
62.5°	414.9	396.6	350.8	305.1	274.6	247.2	213.6	195.3	204.5
65°	353.9	338.6	292.9	247.2	216.7	183.1	143.5	131.1	131.1
67.5°	299.0	283.7	241.1	201.4	164.8	125.0	88.4	85.4	88.4
70°	247.2	231.9	195.3	155.7	115.9	76.2	51.8	51.8	51.8
72.5°	204.5	186.2	152.6	112.8	73.2	39.6	27.4	30.5	30.5
75°	158.7	143.5	112.8	76.2	42.7	18.3	15.2	15.2	15.2
77.5°	118.9	106.7	79.3	48.8	21.3	6.1	6.1	6.1	6.1
80°	82.3	70.1	51.8	30.5	12.2	6.1	6.1	6.1	6.1
82.5°	48.8	42.7	30.5	15.2	6.1	3.0	3.0	3.0	3.0
85°	24.4	21.3	12.2	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)