

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: P582683

Luminaire Tested: **HC645D010-HM64560935-61WWWB**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582683
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: HC645D010-HM64560935-61WWWB
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4394.4 lumens
Efficiency: N/A
Efficacy: 99.9 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

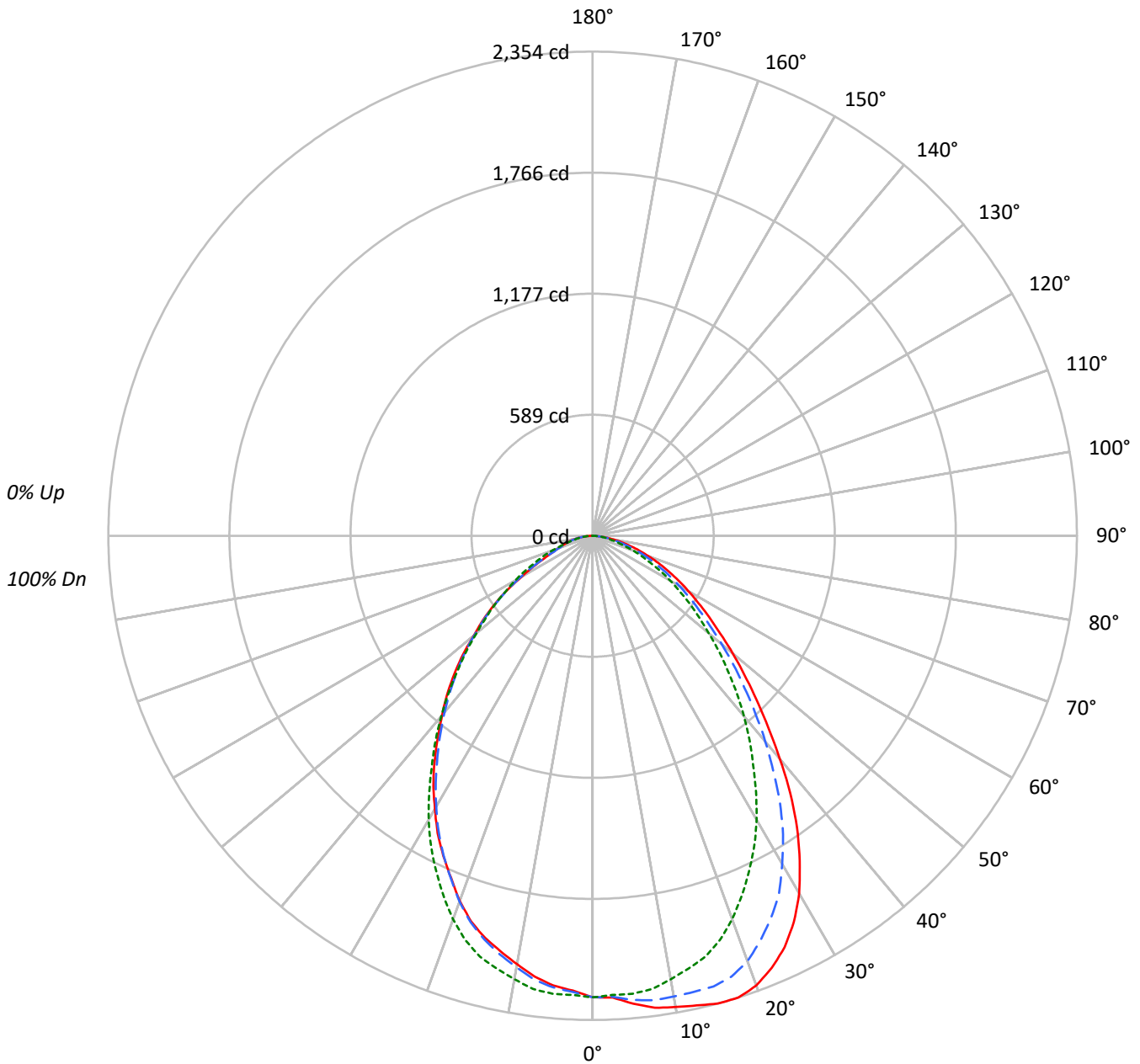
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P582683

CATALOG NUMBER: HC645D010-HM64560935-61WWWB

Luminous Intensity Polar Plot





TEST NUMBER: P582683

CATALOG NUMBER: HC645D010-HM64560935-61WWWB

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	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76																			
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66																			
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58																			
5	81	70	61	56	79	68	61	55	66	60	55	65	59	54	63	58	54	52																			
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	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	38	34	57	45	38	33	44	38	33	43	37	33	43	37	33	31																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	123011	123011	123011
5°	125677	122980	120784
10°	129523	121841	117744
15°	133616	120216	114825
20°	135742	115708	110160
25°	133502	108847	103839
30°	127102	100908	97028
35°	115917	91082	89650
40°	101354	81825	81388
45°	87218	72015	73667
50°	75818	62744	64058
55°	66215	55080	55663
60°	58811	47726	43692
65°	52496	40173	33402
70°	46194	32922	28018
75°	39608	25968	26603
80°	31917	22257	26140
85°	21197	19247	23147



TEST NUMBER: P582683

CATALOG NUMBER: HC645D010-HM64560935-61WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.5	4.8
10°-20°	604.8	13.8
20°-30°	863.4	19.6
30°-40°	904.4	20.6
40°-50°	761.5	17.3
50°-60°	542.0	12.3
60°-70°	317.2	7.2
70°-80°	150.1	3.4
80°-90°	38.6	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°	1680.7	38.2
0°-40°	2585.1	58.8
0°-60°	3888.5	88.5
0°-90°	4394.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4394.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2244	2244	2244	2244	2244	
5°	2284	2265	2235	2204	2195	219
15°	2354	2268	2118	2032	2023	665
25°	2207	2051	1800	1714	1717	1010
35°	1732	1588	1361	1315	1340	1076
45°	1125	1042	929	932	950	873
55°	693	635	576	576	582	624
65°	405	359	310	260	258	404
75°	187	156	123	120	126	201
85°	34	28	31	37	37	44
90°	0	0	0	0	0	



TEST NUMBER: P582683

CATALOG NUMBER: HC645D010-HM64560935-61WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2243.9	2243.9	2243.9	2243.9	2243.9	2243.9	2243.9	2243.9	2243.9
2.5°	2247.0	2247.0	2243.9	2240.9	2234.8	2225.5	2219.4	2213.3	2213.3
5°	2283.8	2277.6	2265.4	2250.0	2234.8	2216.4	2204.1	2194.9	2194.9
7.5°	2314.4	2302.2	2277.6	2250.0	2222.5	2198.0	2176.5	2164.2	2161.1
10°	2326.8	2311.4	2274.6	2231.6	2188.8	2155.0	2130.5	2115.2	2115.2
12.5°	2339.0	2320.5	2271.5	2210.3	2155.0	2109.1	2084.5	2072.2	2069.2
15°	2354.3	2329.8	2268.5	2191.9	2118.2	2066.1	2032.5	2023.2	2023.2
17.5°	2354.3	2323.6	2247.0	2152.0	2060.0	2001.7	1971.1	1962.0	1965.0
20°	2326.8	2293.0	2201.0	2084.5	1983.4	1922.1	1891.5	1885.2	1888.3
22.5°	2274.6	2234.8	2130.5	2004.9	1894.5	1830.1	1802.5	1802.5	1799.5
25°	2207.1	2164.2	2050.9	1919.0	1799.5	1735.1	1713.6	1716.7	1716.7
27.5°	2118.2	2075.4	1962.0	1821.0	1701.3	1636.9	1621.7	1627.8	1630.8
30°	2007.9	1962.0	1842.3	1704.4	1594.1	1529.7	1520.4	1529.7	1532.8
32.5°	1873.0	1839.3	1722.8	1581.8	1477.6	1422.4	1419.3	1428.5	1440.8
35°	1732.1	1695.2	1587.9	1459.2	1361.0	1315.1	1315.1	1330.4	1339.6
37.5°	1578.7	1541.9	1443.8	1336.5	1253.8	1210.9	1217.0	1232.4	1235.4
40°	1416.3	1388.7	1305.9	1213.9	1143.4	1109.7	1118.9	1134.3	1137.3
42.5°	1263.0	1238.5	1171.0	1088.3	1036.1	1011.6	1023.9	1042.3	1048.4
45°	1125.0	1097.5	1042.3	971.7	928.9	916.6	931.9	944.1	950.2
47.5°	999.4	974.9	928.9	864.5	833.8	827.7	843.0	849.1	855.2
50°	889.0	864.5	818.5	760.2	735.7	735.7	748.0	754.1	751.1
52.5°	781.7	760.2	717.3	668.3	653.0	653.0	662.2	665.2	671.3
55°	692.8	671.3	634.6	588.6	576.3	570.2	576.3	576.3	582.4
57.5°	610.1	591.7	557.9	514.9	499.7	493.6	490.4	487.4	493.6
60°	536.4	521.2	484.3	447.6	435.3	419.9	407.7	395.4	398.5
62.5°	469.0	453.7	419.9	383.2	370.9	349.4	334.2	318.8	324.9
65°	404.7	389.3	358.7	328.0	309.7	285.0	260.5	251.4	257.5
67.5°	346.4	334.2	303.5	272.8	257.5	229.9	205.4	205.4	208.4
70°	288.2	275.9	251.4	223.8	205.4	180.9	171.6	174.8	174.8
72.5°	236.0	226.9	202.3	177.8	159.4	144.0	144.0	147.1	150.3
75°	187.0	180.9	156.4	134.9	122.6	113.4	119.5	122.6	125.6
77.5°	144.0	134.9	116.5	101.1	92.0	95.0	101.1	104.3	107.3
80°	101.1	98.1	82.8	73.5	70.5	73.5	79.6	82.8	82.8
82.5°	64.4	61.3	52.1	49.0	49.0	52.1	58.3	58.3	58.3
85°	33.7	30.6	27.6	27.6	30.6	33.7	36.8	36.8	36.8
87.5°	12.3	9.1	12.3	12.3	15.4	15.4	15.4	15.4	15.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)