

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: P582567

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

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582567
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC645D010-HM64560827-61RWWH
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4561.3 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.19
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

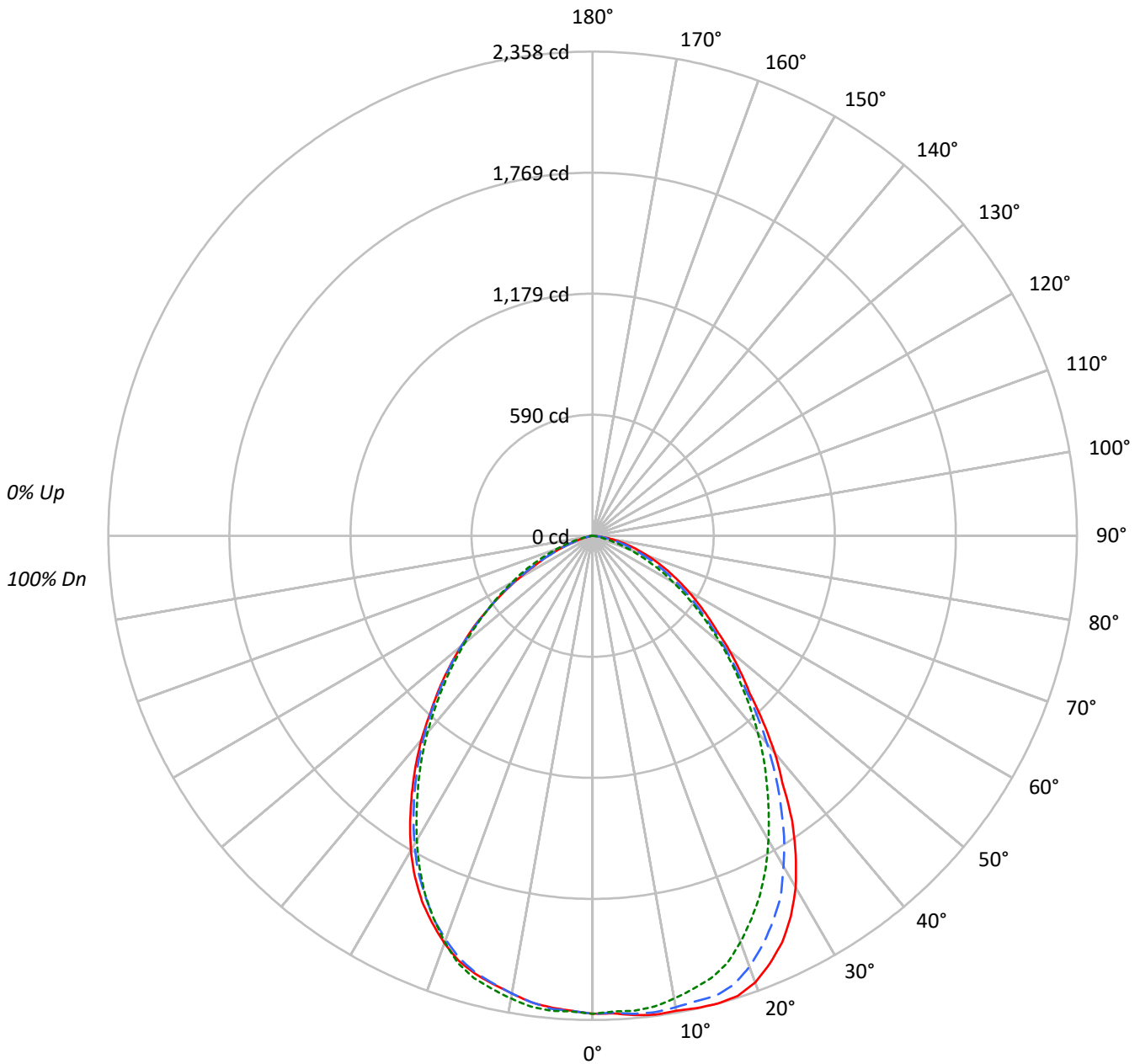
Input Watts (W): 44
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P582567

CATALOG NUMBER: HC645D010-HM64560827-61RWWH

Luminous Intensity Polar Plot





TEST NUMBER: P582567

CATALOG NUMBER: HC645D010-HM64560827-61RWWH

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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88			88
2	103	96	90	85	100	94	89	84	91	86	83	87	84	81	85	82	79	77			77
3	95	86	79	74	93	84	78	73	82	76	72	79	74	70	77	73	69	67			67
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59			59
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53			53
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47			47
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42			42
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38			38
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35			35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32			32

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	127616	127616	127616
5°	128945	127768	126926
10°	130776	127375	126016
15°	133849	126573	125364
20°	135094	122814	123170
25°	132135	116632	118846
30°	125146	108346	112017
35°	113314	99026	102700
40°	98685	89518	92788
45°	83730	79233	82071
50°	74155	69217	71034
55°	65317	59190	58904
60°	58537	49832	45819
65°	52236	39965	32857
70°	45969	28867	20532
75°	38782	17432	11628
80°	29833	7703	4799
85°	17234	1887	1887



TEST NUMBER: P582567

CATALOG NUMBER: HC645D010-HM64560827-61RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.0	4.8
10°-20°	635.1	13.9
20°-30°	918.0	20.1
30°-40°	966.0	21.2
40°-50°	812.0	17.8
50°-60°	569.9	12.5
60°-70°	313.5	6.9
70°-80°	111.3	2.4
80°-90°	14.5	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°	1774.1	38.9
0°-40°	2740.0	60.1
0°-60°	4122.0	90.4
0°-90°	4561.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4561.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2328	2328	2328	2328	2328	
5°	2343	2337	2322	2313	2306	224
15°	2358	2319	2230	2203	2209	665
25°	2184	2075	1928	1931	1965	999
35°	1693	1596	1480	1510	1535	1049
45°	1080	1050	1022	1046	1059	847
55°	683	647	619	619	616	615
65°	403	360	308	253	253	401
75°	183	146	82	55	55	197
85°	27	15	3	3	3	38
90°	0	0	0	0	0	



TEST NUMBER: P582567

CATALOG NUMBER: HC645D010-HM64560827-61RWWH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2327.9	2327.9	2327.9	2327.9	2327.9	2327.9	2327.9	2327.9	2327.9
2.5°	2327.9	2327.9	2324.9	2324.9	2318.8	2318.8	2315.7	2315.7	2315.7
5°	2343.2	2343.2	2337.1	2327.9	2321.8	2312.6	2312.6	2309.5	2306.5
7.5°	2352.3	2349.3	2340.1	2327.9	2312.6	2297.3	2291.2	2294.3	2291.2
10°	2349.3	2343.2	2331.0	2306.5	2288.2	2266.8	2263.8	2260.7	2263.8
12.5°	2355.4	2346.2	2321.8	2291.2	2260.7	2236.3	2233.3	2233.3	2236.3
15°	2358.4	2349.3	2318.8	2272.9	2230.2	2205.8	2202.8	2205.8	2208.9
17.5°	2349.3	2337.1	2291.2	2230.2	2181.4	2157.0	2157.0	2163.1	2169.2
20°	2315.7	2297.3	2233.3	2160.1	2105.2	2086.9	2093.0	2105.2	2111.3
22.5°	2254.6	2233.3	2160.1	2077.7	2019.8	2004.4	2019.8	2035.0	2041.1
25°	2184.5	2160.1	2074.7	1989.2	1928.2	1909.9	1931.2	1955.6	1964.8
27.5°	2089.9	2062.5	1983.1	1885.5	1824.5	1815.3	1839.7	1867.2	1873.3
30°	1977.0	1946.5	1858.0	1766.5	1711.6	1708.6	1736.0	1760.4	1769.6
32.5°	1839.7	1812.3	1736.0	1644.4	1595.6	1595.6	1623.1	1644.4	1653.6
35°	1693.2	1662.7	1595.6	1519.4	1479.7	1482.8	1510.2	1525.5	1534.6
37.5°	1519.4	1510.2	1458.4	1394.3	1366.8	1372.9	1394.3	1406.5	1415.7
40°	1379.0	1354.6	1321.0	1269.2	1250.9	1257.0	1278.3	1290.5	1296.6
42.5°	1226.5	1211.2	1183.8	1147.2	1135.0	1144.1	1162.4	1171.6	1168.5
45°	1080.0	1076.9	1049.5	1028.1	1022.0	1034.2	1046.4	1055.6	1058.6
47.5°	973.2	961.0	936.6	921.4	915.3	927.5	939.7	945.8	945.8
50°	869.5	857.3	832.9	817.7	811.6	823.8	832.9	839.0	832.9
52.5°	765.7	753.5	732.2	713.9	710.8	716.9	720.0	723.0	729.1
55°	683.4	671.2	646.8	625.4	619.3	622.4	619.3	619.3	616.3
57.5°	604.1	591.9	567.5	543.1	533.9	530.9	521.8	518.7	515.7
60°	533.9	518.7	494.3	466.9	454.5	442.3	427.1	417.9	417.9
62.5°	466.9	451.5	424.0	399.6	381.3	360.0	335.6	323.4	323.4
65°	402.7	390.5	360.0	332.5	308.1	280.7	253.3	247.2	253.3
67.5°	341.7	329.5	299.0	271.5	241.1	207.5	183.1	183.1	189.2
70°	286.8	274.6	247.2	213.6	180.1	146.4	128.1	128.1	128.1
72.5°	235.0	222.8	192.3	161.8	128.1	94.5	85.4	88.4	85.4
75°	183.1	174.0	146.4	112.8	82.3	57.9	54.9	51.8	54.9
77.5°	137.2	128.1	103.7	73.2	45.7	33.5	30.5	30.5	30.5
80°	94.5	85.4	67.1	42.7	24.4	15.2	15.2	15.2	15.2
82.5°	57.9	48.8	36.6	21.3	9.1	9.1	9.1	9.1	9.1
85°	27.4	21.3	15.2	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



Report Generated By 670245859 / DESKTOP-HRDQ47P





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







(END OF REPORT)