

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: P593335

Luminaire Tested: **HC645D010-HM64560950-61RWWC**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P593335
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC645D010-HM64560950-61RWWC
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4713.5 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.15 / 1.2
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

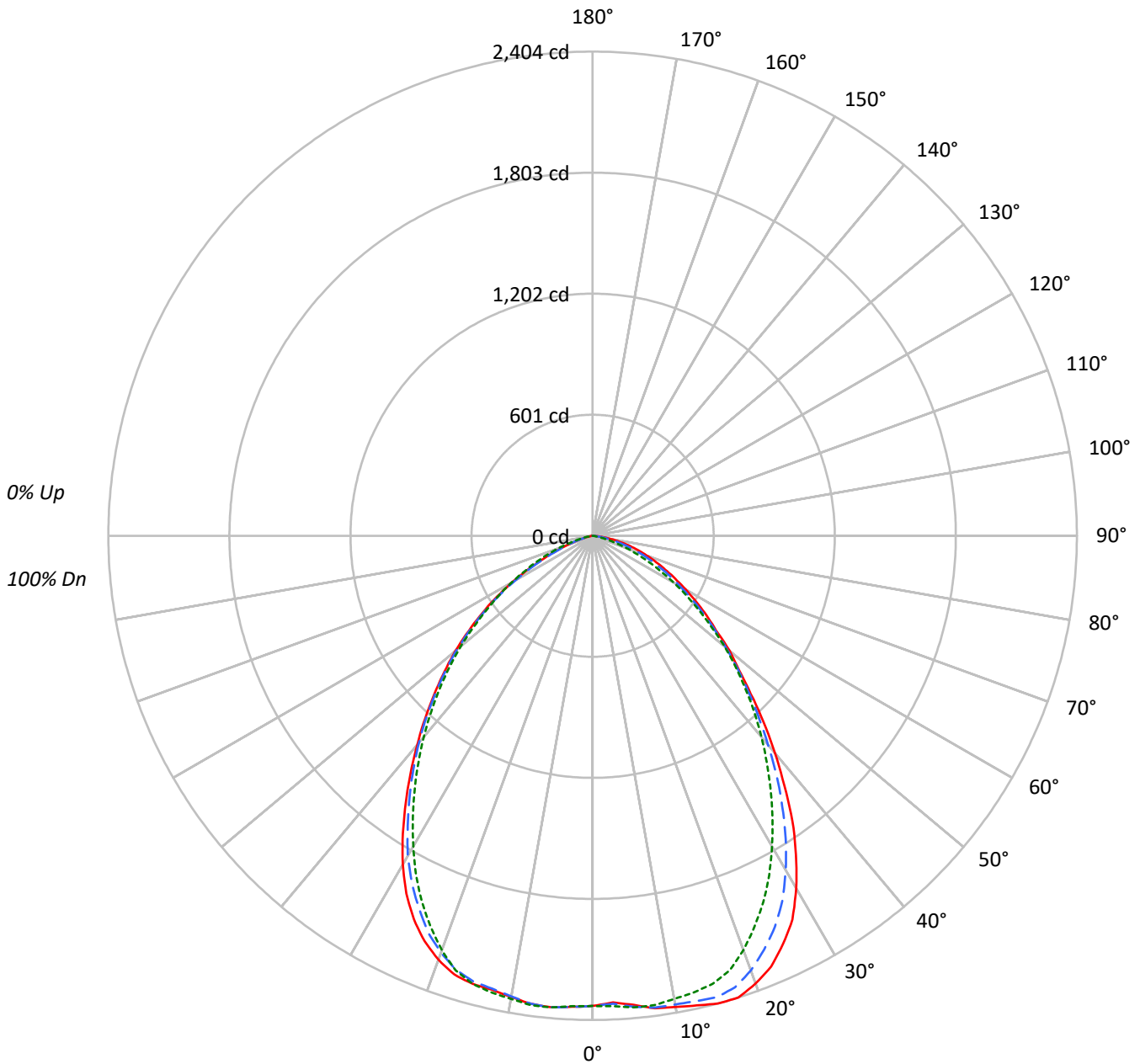
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88	88	88	88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77	77	77	77
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	69	68	68	68	68
4	88	78	70	64	86	76	69	64	74	68	63	72	67	62	70	65	61	60	60	60	60
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53	53	53	53
6	76	64	56	50	74	63	56	50	62	55	50	60	54	49	58	53	49	47	47	47	47
7	71	59	51	45	69	58	50	45	56	50	45	55	49	45	54	48	44	42	42	42	42
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38	38	38	38
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35	35	35	35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32	32	32	32

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	127989	127989	127989
5°	128654	129347	129347
10°	132251	129963	129434
15°	136454	130710	130710
20°	138046	127714	130666
25°	135292	121320	127060
30°	127963	112745	119354
35°	115804	103102	108181
40°	100739	93268	96896
45°	86086	83148	86086
50°	75537	72850	75810
55°	65909	61379	63807
60°	58274	50994	50303
65°	51705	40212	34465
70°	45633	28386	20789
75°	38867	16076	10061
80°	28949	4988	2999
85°	15913	2013	2013



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.0	4.8
10°-20°	655.2	13.9
20°-30°	957.0	20.3
30°-40°	1003.6	21.3
40°-50°	845.5	17.9
50°-60°	592.4	12.6
60°-70°	317.6	6.7
70°-80°	106.5	2.3
80°-90°	11.6	0.2
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°	1836.2	39.0
0°-40°	2839.8	60.2
0°-60°	4277.8	90.8
0°-90°	4713.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4713.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2335	2335	2335	2335	2335	
5°	2338	2347	2350	2350	2350	225
15°	2404	2373	2303	2290	2303	678
25°	2237	2142	2006	2040	2101	1025
35°	1730	1642	1541	1585	1616	1074
45°	1110	1092	1072	1101	1110	865
55°	690	668	642	655	668	621
65°	399	364	310	256	266	398
75°	184	142	76	48	48	195
85°	25	13	3	3	3	35
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°	2334.7	2334.7	2334.7	2334.7	2334.7	2334.7	2334.7	2334.7	2334.7
2.5°	2318.9	2318.9	2325.2	2331.6	2337.9	2337.9	2341.1	2344.2	2341.1
5°	2337.9	2337.9	2347.3	2350.5	2350.5	2347.3	2350.5	2350.5	2350.5
7.5°	2366.3	2360.0	2363.1	2356.8	2350.5	2347.3	2344.2	2344.2	2344.2
10°	2375.8	2369.5	2363.1	2350.5	2334.7	2325.2	2322.1	2325.2	2325.2
12.5°	2388.5	2382.1	2366.3	2341.1	2322.1	2306.2	2303.1	2309.4	2309.4
15°	2404.3	2398.0	2372.6	2331.6	2303.1	2287.2	2290.4	2296.7	2303.1
17.5°	2404.3	2391.6	2350.5	2296.7	2261.9	2246.1	2258.7	2274.6	2284.1
20°	2366.3	2353.6	2296.7	2230.3	2189.2	2179.7	2201.8	2230.3	2239.8
22.5°	2315.7	2290.4	2224.0	2144.8	2100.6	2100.6	2132.3	2167.0	2179.7
25°	2236.7	2217.7	2141.7	2049.9	2005.7	2002.5	2040.4	2087.9	2100.6
27.5°	2148.0	2122.8	2040.4	1945.5	1898.1	1901.3	1942.4	1989.9	2002.5
30°	2021.5	1989.9	1917.2	1825.3	1781.1	1793.8	1834.8	1869.6	1885.5
32.5°	1879.1	1850.6	1784.3	1698.9	1660.9	1673.5	1708.4	1739.9	1752.6
35°	1730.4	1698.9	1641.8	1566.0	1540.6	1553.3	1585.0	1610.3	1616.5
37.5°	1562.8	1540.6	1499.6	1439.4	1420.4	1436.2	1461.6	1477.4	1483.7
40°	1407.7	1388.8	1354.0	1309.7	1303.3	1316.0	1341.3	1350.8	1354.0
42.5°	1255.9	1240.1	1217.9	1186.4	1186.4	1198.9	1221.1	1227.4	1230.6
45°	1110.4	1100.9	1091.5	1066.1	1072.5	1088.3	1100.9	1110.4	1110.4
47.5°	983.9	987.1	974.4	955.4	961.7	977.6	987.1	996.5	996.5
50°	885.7	876.3	863.7	844.7	854.2	866.8	879.5	885.7	888.9
52.5°	772.0	768.8	759.3	737.1	743.4	749.8	762.4	772.0	775.1
55°	689.6	680.1	667.6	642.2	642.2	648.6	654.9	661.2	667.6
57.5°	610.5	601.0	582.0	553.7	550.5	550.5	547.3	553.7	563.2
60°	531.5	528.3	499.8	474.5	465.1	455.6	442.9	446.1	458.8
62.5°	461.9	455.6	430.3	398.6	379.6	363.9	348.0	344.9	357.5
65°	398.6	392.3	363.9	332.2	310.0	281.5	256.3	256.3	265.7
67.5°	341.7	329.0	303.7	268.9	240.5	205.6	180.3	186.6	189.8
70°	284.7	275.2	246.8	212.0	177.1	142.4	126.6	129.7	129.7
72.5°	234.1	221.5	193.0	158.1	123.4	91.7	85.4	82.2	82.2
75°	183.5	170.8	142.4	107.6	75.9	53.7	47.5	47.5	47.5
77.5°	132.9	123.4	98.1	66.4	41.2	25.3	22.2	19.0	19.0
80°	91.7	82.2	60.1	34.8	15.8	9.5	9.5	9.5	9.5
82.5°	53.7	44.3	28.5	15.8	6.3	3.2	3.2	3.2	3.2
85°	25.3	19.0	12.7	6.3	3.2	3.2	3.2	3.2	3.2
87.5°	3.2	3.2	3.2	0.0	0.0	0.0	0.0	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)