

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: P582827

Luminaire Tested: **HC650D010-HM64560935-61WWWB**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582827
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: HC650D010-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: 4650.7 lumens
Efficiency: N/A
Efficacy: 96.9 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

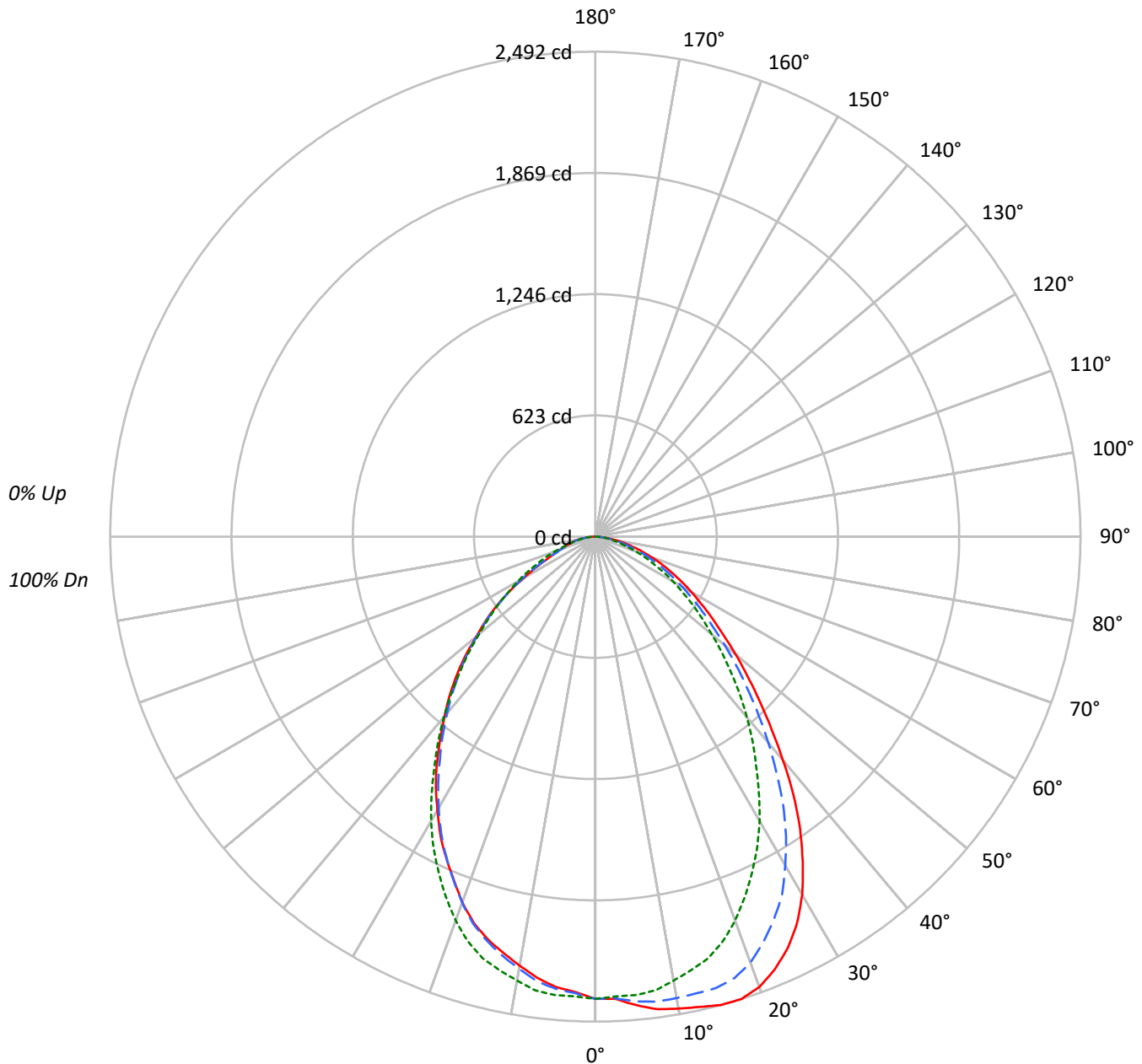
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	130187	130187	130187
5°	133001	130150	127828
10°	137072	128944	124614
15°	141408	127231	121522
20°	143652	122452	116589
25°	141292	115192	109887
30°	134514	106795	102680
35°	122670	96403	94884
40°	107258	86598	86133
45°	92312	76202	77969
50°	80236	66403	67785
55°	70076	58292	58913
60°	62243	50511	46235
65°	55544	42495	35360
70°	48870	34846	29636
75°	41917	27493	28171
80°	33811	23551	27655
85°	22455	20442	24531



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.8	4.8
10°-20°	640.1	13.8
20°-30°	913.8	19.6
30°-40°	957.1	20.6
40°-50°	805.8	17.3
50°-60°	573.6	12.3
60°-70°	335.7	7.2
70°-80°	158.9	3.4
80°-90°	40.9	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°	1778.7	38.2
0°-40°	2735.8	58.8
0°-60°	4115.3	88.5
0°-90°	4650.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4650.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2375	2375	2375	2375	2375	
5°	2417	2398	2365	2333	2323	232
15°	2492	2401	2242	2151	2141	703
25°	2336	2170	1904	1814	1817	1069
35°	1833	1681	1440	1392	1418	1138
45°	1191	1103	983	986	1006	924
55°	733	672	610	610	616	661
65°	428	380	328	276	273	427
75°	198	166	130	126	133	212
85°	36	29	32	39	39	46
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°	2374.8	2374.8	2374.8	2374.8	2374.8	2374.8	2374.8	2374.8	2374.8
2.5°	2378.1	2378.1	2374.8	2371.6	2365.1	2355.3	2348.8	2342.4	2342.4
5°	2416.9	2410.4	2397.5	2381.3	2365.1	2345.6	2332.6	2322.9	2322.9
7.5°	2449.4	2436.4	2410.4	2381.3	2352.1	2326.1	2303.4	2290.4	2287.2
10°	2462.4	2446.2	2407.2	2361.8	2316.4	2280.7	2254.8	2238.6	2238.6
12.5°	2475.4	2455.9	2403.9	2339.1	2280.7	2232.1	2206.1	2193.1	2189.8
15°	2491.6	2465.6	2400.7	2319.6	2241.8	2186.6	2151.0	2141.2	2141.2
17.5°	2491.6	2459.1	2378.1	2277.4	2180.1	2118.5	2086.0	2076.3	2079.5
20°	2462.4	2426.7	2329.4	2206.1	2099.0	2034.2	2001.7	1995.2	1998.5
22.5°	2407.2	2365.1	2254.8	2121.8	2005.0	1936.8	1907.7	1907.7	1904.4
25°	2335.9	2290.4	2170.4	2030.8	1904.4	1836.2	1813.5	1816.7	1816.7
27.5°	2241.8	2196.3	2076.3	1927.0	1800.6	1732.4	1716.2	1722.7	1725.9
30°	2125.0	2076.3	1949.8	1803.7	1687.1	1618.9	1609.1	1618.9	1622.1
32.5°	1982.2	1946.5	1823.2	1674.1	1563.8	1505.3	1502.1	1511.8	1524.8
35°	1833.0	1794.1	1680.6	1544.3	1440.5	1391.8	1391.8	1408.0	1417.8
37.5°	1670.8	1631.9	1528.1	1414.5	1326.9	1281.5	1288.0	1304.2	1307.5
40°	1498.8	1469.6	1382.0	1284.7	1210.1	1174.4	1184.2	1200.4	1203.6
42.5°	1336.7	1310.7	1239.3	1151.7	1096.6	1070.6	1083.6	1103.1	1109.5
45°	1190.7	1161.4	1103.1	1028.4	982.9	970.1	986.3	999.2	1005.7
47.5°	1057.6	1031.7	982.9	914.9	882.4	875.9	892.1	898.6	905.1
50°	940.8	914.9	866.3	804.6	778.6	778.6	791.6	798.1	794.8
52.5°	827.3	804.6	759.1	707.3	691.0	691.0	700.8	704.0	710.5
55°	733.2	710.5	671.5	622.9	609.9	603.4	609.9	609.9	616.4
57.5°	645.7	626.2	590.5	545.0	528.9	522.4	519.0	515.9	522.4
60°	567.7	551.5	512.6	473.7	460.7	444.4	431.5	418.5	421.7
62.5°	496.4	480.2	444.4	405.6	392.6	369.9	353.6	337.4	343.9
65°	428.2	412.1	379.6	347.1	327.6	301.7	275.8	266.1	272.6
67.5°	366.6	353.6	321.2	288.8	272.6	243.3	217.4	217.4	220.6
70°	304.9	291.9	266.1	236.8	217.4	191.4	181.6	184.9	184.9
72.5°	249.8	240.1	214.1	188.1	168.6	152.5	152.5	155.8	159.0
75°	197.9	191.4	165.5	142.8	129.8	120.0	126.5	129.8	133.0
77.5°	152.5	142.8	123.3	107.1	97.3	100.6	107.1	110.3	113.5
80°	107.1	103.8	87.6	77.8	74.6	77.8	84.3	87.6	87.6
82.5°	68.1	64.8	55.2	52.0	52.0	55.2	61.6	61.6	61.6
85°	35.7	32.5	29.2	29.2	32.5	35.7	39.0	39.0	39.0
87.5°	13.0	9.7	13.0	13.0	16.2	16.2	16.2	16.2	16.2
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)