

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: P582845

Luminaire Tested: **HC650D010-HM64560940-61WWWB**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582845
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-HM64560940-61WWWB
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4797.5 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

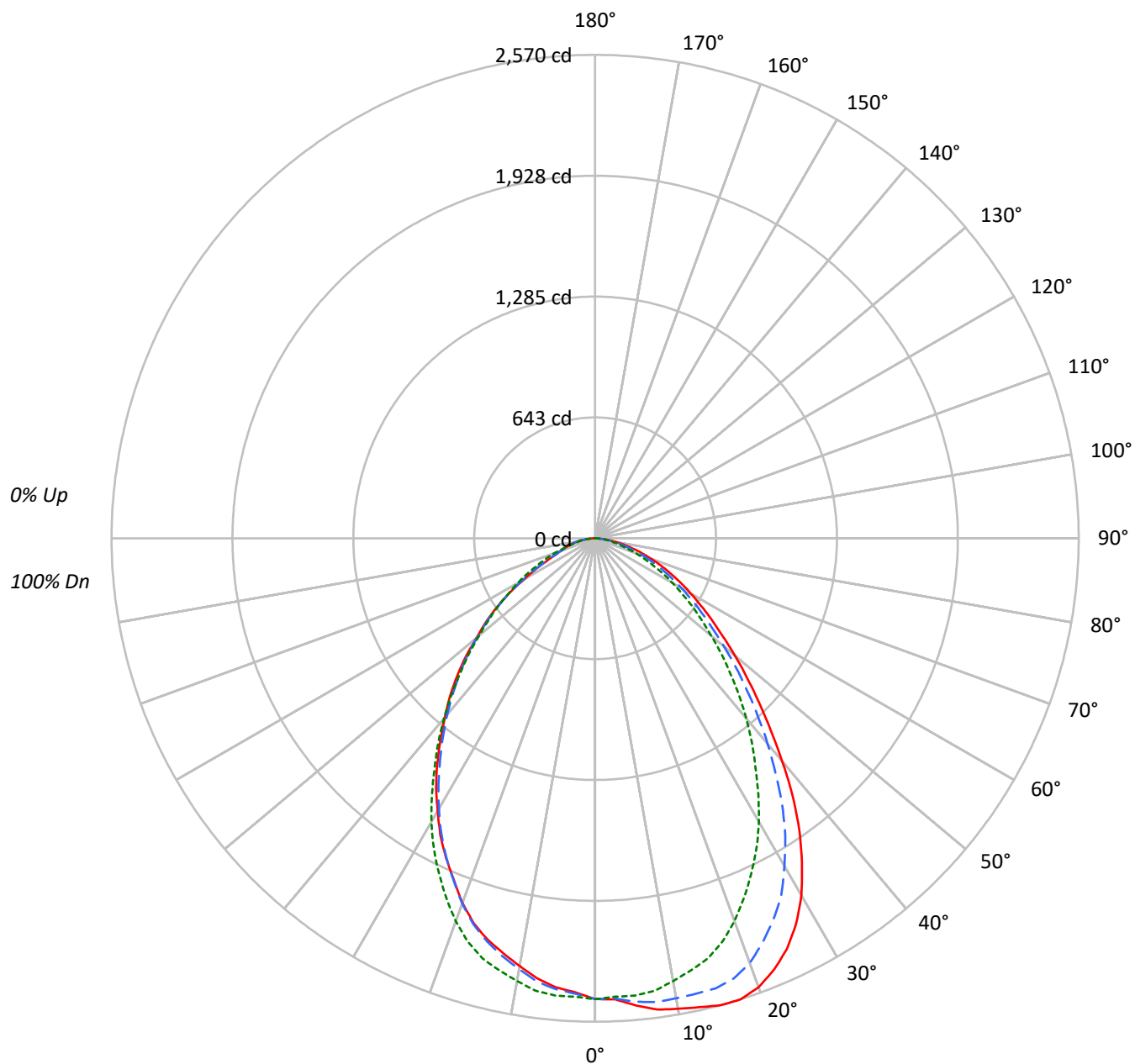
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	134293	134293	134293
5°	137200	134256	131856
10°	141397	133014	128544
15°	145869	131244	125358
20°	148185	126314	120270
25°	145750	118827	113359
30°	138762	110156	105928
35°	126545	99441	97868
40°	110650	89332	88852
45°	95219	78613	80435
50°	82769	68501	69934
55°	72284	60127	60777
60°	64216	52101	47705
65°	57308	43844	36463
70°	50425	35952	30566
75°	43251	28340	29060
80°	34853	24309	28507
85°	23147	21008	25285



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.9	4.8
10°-20°	660.3	13.8
20°-30°	942.6	19.6
30°-40°	987.3	20.6
40°-50°	831.3	17.3
50°-60°	591.7	12.3
60°-70°	346.3	7.2
70°-80°	163.9	3.4
80°-90°	42.1	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°	1834.8	38.2
0°-40°	2822.2	58.8
0°-60°	4245.1	88.5
0°-90°	4797.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4797.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2450	2450	2450	2450	2450	
5°	2493	2473	2440	2406	2396	240
15°	2570	2477	2312	2219	2209	725
25°	2410	2239	1964	1871	1874	1103
35°	1891	1734	1486	1436	1462	1174
45°	1228	1138	1014	1017	1038	954
55°	756	693	629	629	636	682
65°	442	392	338	284	281	441
75°	204	171	134	130	137	219
85°	37	30	33	40	40	48
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°	2449.7	2449.7	2449.7	2449.7	2449.7	2449.7	2449.7	2449.7	2449.7
2.5°	2453.1	2453.1	2449.7	2446.3	2439.7	2429.7	2422.9	2416.2	2416.2
5°	2493.2	2486.6	2473.1	2456.4	2439.7	2419.6	2406.2	2396.1	2396.1
7.5°	2526.7	2513.3	2486.6	2456.4	2426.2	2399.6	2376.1	2362.7	2359.4
10°	2540.1	2523.3	2483.2	2436.3	2389.5	2352.7	2325.9	2309.2	2309.2
12.5°	2553.4	2533.4	2479.9	2412.9	2352.7	2302.5	2275.7	2262.3	2259.0
15°	2570.2	2543.4	2476.6	2392.8	2312.5	2255.6	2218.9	2208.8	2208.8
17.5°	2570.2	2536.8	2453.1	2349.4	2249.0	2185.3	2151.9	2141.9	2145.2
20°	2540.1	2503.2	2402.9	2275.7	2165.2	2098.3	2064.9	2058.1	2061.6
22.5°	2483.2	2439.7	2325.9	2188.7	2068.2	1997.9	1967.8	1967.8	1964.5
25°	2409.6	2362.7	2238.9	2095.0	1964.5	1894.2	1870.7	1874.1	1874.1
27.5°	2312.5	2265.6	2141.9	1987.9	1857.4	1787.1	1770.3	1777.1	1780.4
30°	2192.1	2141.9	2011.4	1860.7	1740.2	1669.9	1659.9	1669.9	1673.4
32.5°	2044.8	2007.9	1880.9	1726.9	1613.1	1552.8	1549.5	1559.5	1572.9
35°	1890.9	1850.6	1733.6	1593.1	1485.9	1435.7	1435.7	1452.4	1462.4
37.5°	1723.6	1683.4	1576.3	1459.1	1368.8	1321.9	1328.6	1345.4	1348.7
40°	1546.2	1516.0	1425.7	1325.3	1248.3	1211.5	1221.5	1238.3	1241.6
42.5°	1378.8	1352.0	1278.4	1188.1	1131.2	1104.4	1117.8	1137.9	1144.5
45°	1228.2	1198.1	1137.9	1060.9	1014.0	1000.7	1017.4	1030.8	1037.5
47.5°	1091.0	1064.2	1014.0	943.7	910.3	903.6	920.4	927.0	933.7
50°	970.5	943.7	893.5	830.0	803.2	803.2	816.5	823.3	820.0
52.5°	853.4	830.0	783.1	729.6	712.9	712.9	722.9	726.2	732.9
55°	756.3	732.9	692.8	642.6	629.1	622.5	629.1	629.1	635.9
57.5°	666.0	645.9	609.0	562.3	545.5	538.8	535.5	532.2	538.8
60°	585.7	568.9	528.7	488.6	475.2	458.5	445.1	431.7	435.1
62.5°	512.1	495.3	458.5	418.3	405.0	381.5	364.8	348.0	354.8
65°	441.8	425.0	391.5	358.1	338.0	311.2	284.5	274.5	281.1
67.5°	378.2	364.8	331.3	297.8	281.1	251.0	224.3	224.3	227.6
70°	314.6	301.2	274.5	244.3	224.3	197.5	187.4	190.7	190.7
72.5°	257.7	247.7	220.8	194.2	174.1	157.3	157.3	160.6	164.0
75°	204.2	197.5	170.7	147.3	133.8	123.8	130.5	133.8	137.2
77.5°	157.3	147.3	127.2	110.4	100.4	103.7	110.4	113.7	117.2
80°	110.4	107.1	90.3	80.3	77.0	80.3	87.0	90.3	90.3
82.5°	70.3	67.0	56.9	53.5	53.5	56.9	63.5	63.5	63.5
85°	36.8	33.4	30.1	30.1	33.4	36.8	40.2	40.2	40.2
87.5°	13.3	10.0	13.3	13.3	16.8	16.8	16.8	16.8	16.8
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)