

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: P582837

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

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582837
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: HC650D010-HM64560940-61RWWH
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5005.0 lumens
Efficiency: N/A
Efficacy: 104.3 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

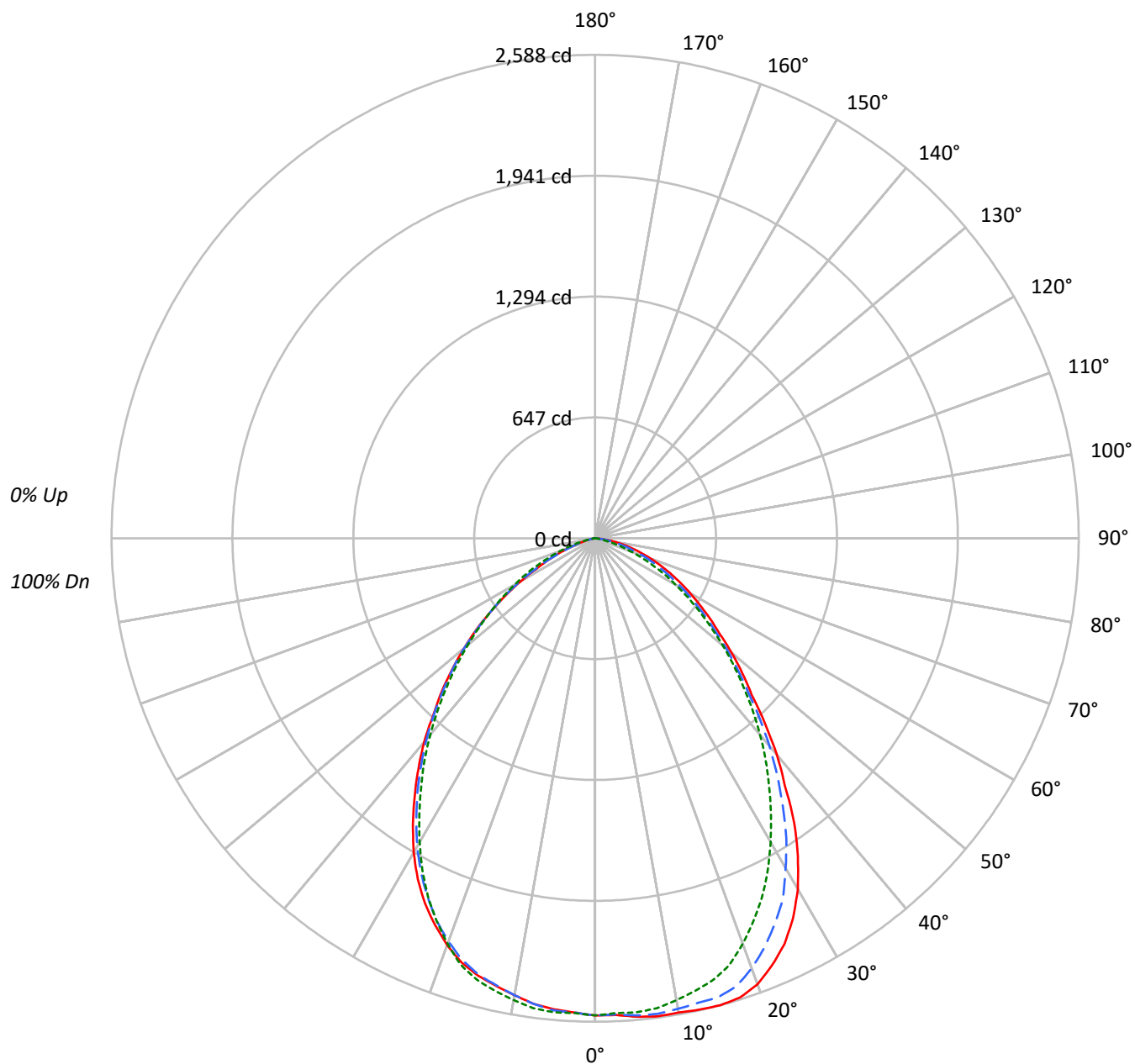
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	140027	140027	140027
5°	141481	140188	139269
10°	143490	139760	138274
15°	146862	138888	137549
20°	148232	134756	135141
25°	144988	127979	130405
30°	137319	118879	122911
35°	124336	108656	112692
40°	108281	98227	101819
45°	91870	86947	90056
50°	81370	75946	77942
55°	71663	64944	64629
60°	64238	54700	50281
65°	57321	43857	36048
70°	50441	31656	22552
75°	42552	19126	12751
80°	32769	8461	5304
85°	18933	2076	2076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.5	4.8
10°-20°	696.8	13.9
20°-30°	1007.3	20.1
30°-40°	1059.9	21.2
40°-50°	891.0	17.8
50°-60°	625.4	12.5
60°-70°	344.0	6.9
70°-80°	122.2	2.4
80°-90°	16.0	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°	1946.6	38.9
0°-40°	3006.5	60.1
0°-60°	4522.9	90.4
0°-90°	5005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5005.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2554	2554	2554	2554	2554	
5°	2571	2564	2548	2538	2531	246
15°	2588	2544	2447	2417	2424	730
25°	2397	2276	2116	2119	2156	1097
35°	1858	1751	1624	1657	1684	1152
45°	1185	1152	1122	1148	1162	930
55°	750	710	680	680	676	675
65°	442	395	338	278	278	440
75°	201	161	90	60	60	216
85°	30	17	3	3	3	41
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°	2554.3	2554.3	2554.3	2554.3	2554.3	2554.3	2554.3	2554.3	2554.3
2.5°	2554.3	2554.3	2551.0	2551.0	2544.2	2544.2	2540.9	2540.9	2540.9
5°	2571.0	2571.0	2564.3	2554.3	2547.5	2537.5	2537.5	2534.2	2530.8
7.5°	2581.1	2577.7	2567.6	2554.3	2537.5	2520.7	2514.1	2517.4	2514.1
10°	2577.7	2571.0	2557.6	2530.8	2510.7	2487.3	2484.0	2480.6	2484.0
12.5°	2584.4	2574.3	2547.5	2514.1	2480.6	2453.9	2450.5	2450.5	2453.9
15°	2587.7	2577.7	2544.2	2494.0	2447.2	2420.3	2417.0	2420.3	2423.6
17.5°	2577.7	2564.3	2514.1	2447.2	2393.5	2366.8	2366.8	2373.5	2380.2
20°	2540.9	2520.7	2450.5	2370.1	2309.9	2289.8	2296.5	2309.9	2316.5
22.5°	2474.0	2450.5	2370.1	2279.8	2216.1	2199.4	2216.1	2232.9	2239.5
25°	2397.0	2370.1	2276.4	2182.7	2115.8	2095.7	2119.1	2145.9	2155.9
27.5°	2293.1	2263.0	2176.0	2068.9	2001.9	1991.9	2018.7	2048.8	2055.4
30°	2169.3	2135.8	2038.8	1938.3	1878.0	1874.7	1904.8	1931.6	1941.7
32.5°	2018.7	1988.4	1904.8	1804.3	1750.8	1750.8	1780.9	1804.3	1814.4
35°	1857.9	1824.5	1750.8	1667.1	1623.6	1626.9	1657.1	1673.8	1683.9
37.5°	1667.1	1657.1	1600.1	1529.9	1499.8	1506.5	1529.9	1543.2	1553.3
40°	1513.1	1486.4	1449.6	1392.6	1372.6	1379.3	1402.7	1416.0	1422.8
42.5°	1345.7	1329.0	1298.9	1258.7	1245.4	1255.4	1275.5	1285.5	1282.1
45°	1185.0	1181.7	1151.6	1128.2	1121.5	1134.8	1148.3	1158.3	1161.6
47.5°	1067.9	1054.5	1027.7	1010.9	1004.3	1017.7	1031.1	1037.7	1037.7
50°	954.1	940.7	913.9	897.2	890.5	903.8	913.9	920.6	913.9
52.5°	840.3	826.8	803.4	783.4	780.1	786.7	790.1	793.4	800.1
55°	749.8	736.5	709.7	686.3	679.5	683.0	679.5	679.5	676.2
57.5°	662.8	649.4	622.6	595.9	585.9	582.5	572.4	569.1	565.7
60°	585.9	569.1	542.3	512.2	498.9	485.4	468.6	458.6	458.6
62.5°	512.2	495.4	465.3	438.5	418.4	395.0	368.2	354.9	354.9
65°	441.9	428.5	395.0	364.9	338.1	308.0	277.9	271.2	277.9
67.5°	375.0	361.5	328.1	298.0	264.4	227.7	200.9	200.9	207.5
70°	314.7	301.3	271.2	234.3	197.5	160.7	140.7	140.7	140.7
72.5°	257.8	244.3	210.9	177.4	140.7	103.8	93.8	97.1	93.8
75°	200.9	190.8	160.7	123.9	90.3	63.7	60.2	56.9	60.2
77.5°	150.7	140.7	113.8	80.3	50.2	36.8	33.4	33.4	33.4
80°	103.8	93.8	73.7	46.9	26.8	16.8	16.8	16.8	16.8
82.5°	63.7	53.6	40.2	23.4	10.0	10.0	10.0	10.0	10.0
85°	30.1	23.4	16.8	6.7	3.3	3.3	3.3	3.3	3.3
87.5°	6.7	6.7	3.3	3.3	0.0	3.3	3.3	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)