

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: P581385

Luminaire Tested: **HC460D010-HM44560935-41RWWH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581385
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC460D010-HM44560935-41RWWH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4617.4 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

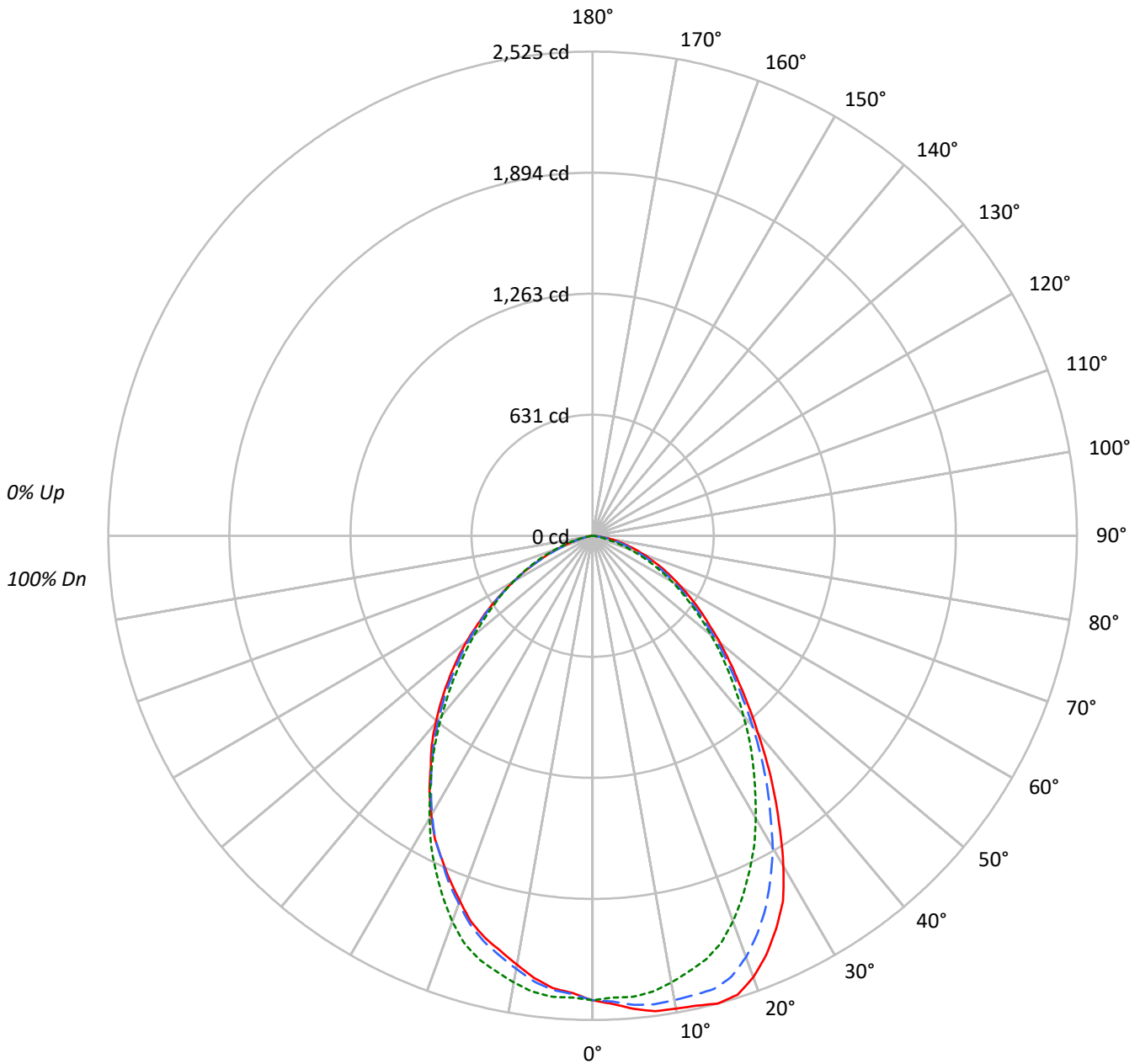
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P581385

CATALOG NUMBER: HC460D010-HM44560935-41RWWH

Luminous Intensity Polar Plot





TEST NUMBER: P581385

CATALOG NUMBER: HC460D010-HM44560935-41RWWH

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88															
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77															
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67				67															
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59				59															
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				52															
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47				47															
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42				42															
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38															
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35				35															
10	58	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°	298805	298805	298805
5°	306657	298832	293235
10°	313597	296250	284564
15°	322409	292055	277064
20°	321539	280861	265844
25°	307987	262939	253099
30°	283316	242155	239591
35°	249220	219767	221589
40°	215633	196730	204958
45°	187398	174803	185322
50°	166293	154185	164566
55°	147565	135264	141071
60°	131388	117302	117302
65°	116803	97481	91352
70°	100943	73787	65131
75°	84591	48753	40175
80°	64071	23512	21381
85°	33966	8491	8491



TEST NUMBER: P581385

CATALOG NUMBER: HC460D010-HM44560935-41RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.4	5.0
10°-20°	650.4	14.1
20°-30°	917.2	19.9
30°-40°	947.6	20.5
40°-50°	803.3	17.4
50°-60°	584.4	12.7
60°-70°	341.5	7.4
70°-80°	126.9	2.7
80°-90°	16.6	0.4
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°	1797.1	38.9
0°-40°	2744.7	59.4
0°-60°	4132.4	89.5
0°-90°	4617.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4617.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2422	2422	2422	2422	2422	
5°	2477	2456	2414	2377	2368	237
15°	2525	2447	2287	2191	2170	710
25°	2263	2137	1932	1863	1860	1035
35°	1655	1583	1460	1463	1472	1034
45°	1074	1044	1002	1038	1062	836
55°	686	653	629	650	656	617
65°	400	367	334	313	313	397
75°	178	147	102	81	84	191
85°	24	15	6	6	6	34
90°	0	0	0	0	0	



TEST NUMBER: P581385

CATALOG NUMBER: HC460D010-HM44560935-41RWWH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2422.5	2422.5	2422.5	2422.5	2422.5	2422.5	2422.5	2422.5	2422.5
2.5°	2443.6	2437.6	2431.5	2422.5	2410.5	2401.5	2392.5	2386.4	2386.4
5°	2476.7	2467.7	2455.7	2434.6	2413.5	2395.4	2377.4	2368.3	2368.3
7.5°	2500.8	2488.7	2464.7	2434.6	2398.5	2371.4	2344.3	2332.3	2326.3
10°	2503.8	2491.8	2458.6	2413.5	2365.3	2323.2	2293.1	2275.1	2272.0
12.5°	2509.8	2494.8	2452.6	2389.4	2326.3	2275.1	2242.0	2224.0	2217.9
15°	2524.8	2503.8	2446.6	2365.3	2287.1	2226.9	2190.8	2175.8	2169.7
17.5°	2509.8	2479.7	2410.5	2314.2	2226.9	2160.7	2124.6	2109.6	2109.6
20°	2449.6	2419.6	2338.2	2233.0	2139.7	2076.4	2040.3	2031.3	2025.3
22.5°	2365.3	2332.3	2244.9	2133.6	2040.3	1983.1	1959.1	1947.0	1944.0
25°	2263.0	2229.9	2136.7	2022.3	1932.0	1883.9	1862.8	1862.8	1859.7
27.5°	2148.7	2106.5	2010.2	1910.9	1823.6	1787.5	1778.5	1778.5	1781.6
30°	1989.2	1959.1	1877.8	1781.6	1700.2	1676.2	1676.2	1682.2	1682.2
32.5°	1817.7	1796.6	1724.4	1640.1	1576.9	1561.8	1567.9	1579.9	1582.9
35°	1655.1	1631.1	1582.9	1507.7	1459.5	1453.5	1462.6	1471.6	1471.6
37.5°	1495.6	1471.6	1438.4	1378.3	1342.2	1345.1	1357.2	1369.3	1378.3
40°	1339.2	1321.1	1297.1	1248.9	1221.8	1233.8	1248.9	1260.9	1272.9
42.5°	1200.8	1182.7	1164.7	1128.6	1110.4	1125.5	1143.6	1155.6	1167.6
45°	1074.3	1062.4	1044.2	1014.2	1002.1	1017.1	1038.2	1050.3	1062.4
47.5°	966.0	959.9	935.9	908.8	902.9	917.9	935.9	950.9	959.9
50°	866.6	857.6	836.6	809.6	803.5	827.6	839.6	848.6	857.6
52.5°	770.4	761.4	737.3	713.2	713.2	731.3	740.3	743.4	752.4
55°	686.2	677.1	653.0	635.0	629.0	644.0	650.1	650.1	656.0
57.5°	607.9	598.9	574.8	553.7	550.7	559.7	559.7	559.7	562.8
60°	532.6	523.6	499.6	481.5	475.5	478.5	475.5	472.5	475.5
62.5°	463.5	454.4	430.3	409.2	403.3	403.3	394.2	391.2	394.2
65°	400.2	385.2	367.2	346.1	334.0	325.0	313.0	313.0	313.0
67.5°	337.0	325.0	304.0	282.9	267.8	252.8	234.7	240.7	243.8
70°	279.9	270.8	246.8	225.7	204.6	186.6	171.6	177.5	180.6
72.5°	228.8	216.7	195.6	171.6	153.5	129.4	120.4	126.4	126.4
75°	177.5	165.5	147.4	123.4	102.3	81.2	81.2	84.3	84.3
77.5°	132.4	120.4	102.3	81.2	63.2	48.2	51.2	51.2	51.2
80°	90.2	81.2	66.2	48.2	33.1	27.1	27.1	27.1	30.1
82.5°	51.2	45.1	36.1	24.0	15.0	15.0	15.0	15.0	15.0
85°	24.0	18.0	15.0	9.0	6.0	6.0	6.0	6.0	6.0
87.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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)