

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: P581297

Luminaire Tested: **HC460D010-HM44560830-41WWW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581297
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC460D010-HM44560830-41WWW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5177.8 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.03 / 1.1
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

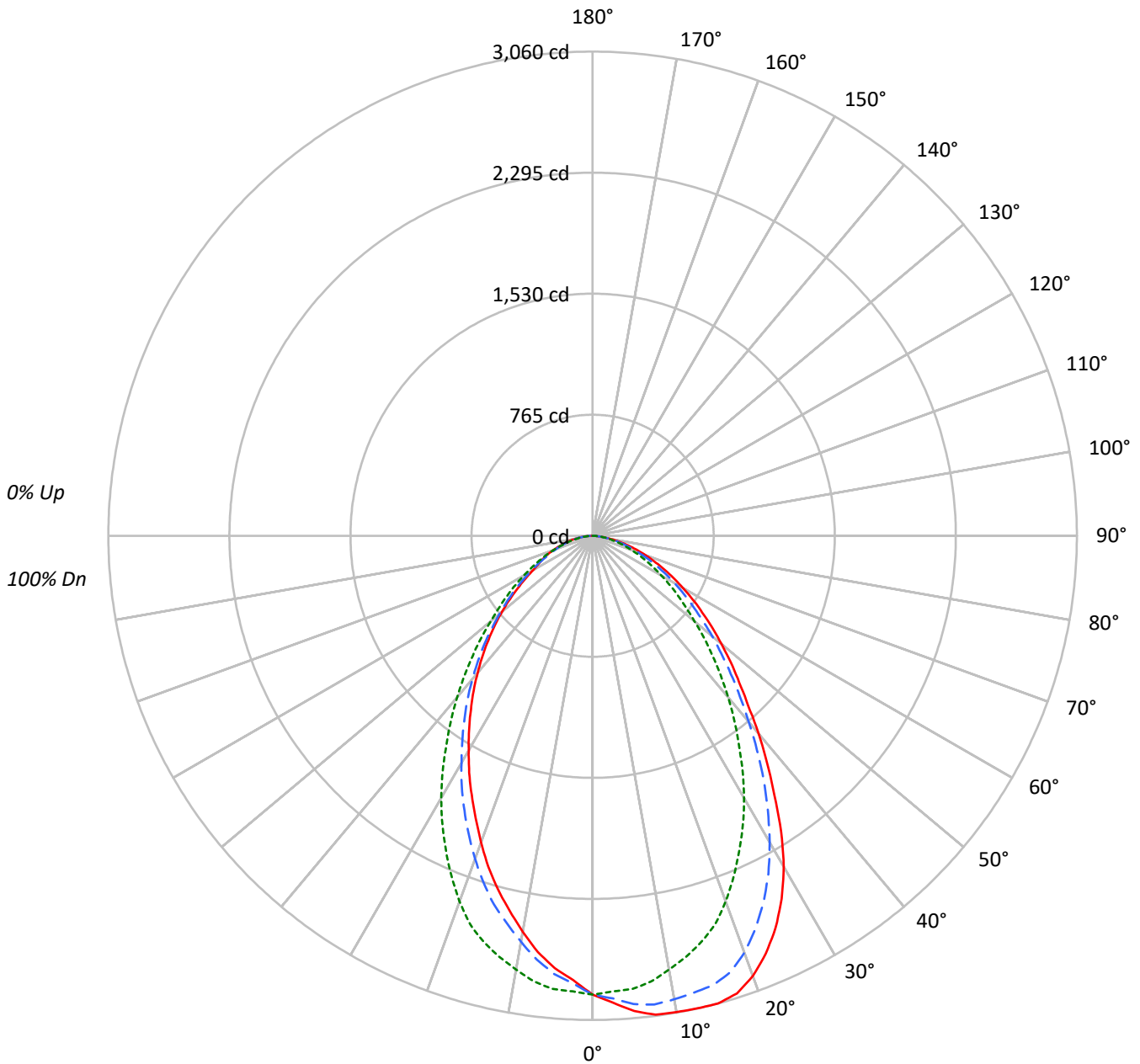
Input Watts (W): 55
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P581297

CATALOG NUMBER: HC460D010-HM44560830-41WWW

Luminous Intensity Polar Plot





TEST NUMBER: P581297

CATALOG NUMBER: HC460D010-HM44560830-41WWW

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
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87			87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76			76
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66			66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58			58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52			52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47			47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	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	42	37	47	41	37	46	41	37	35			35
10	59	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°	357628	357628	357628
5°	373370	356048	339568
10°	382797	348629	318294
15°	390727	339316	295324
20°	388653	322825	270438
25°	372320	298515	246036
30°	343962	272563	222998
35°	301501	242444	201864
40°	262537	214216	181803
45°	228478	186840	162453
50°	203578	161016	143362
55°	181929	141565	123974
60°	162397	123691	106891
65°	144354	108514	101567
70°	126728	93477	94740
75°	107276	79683	87784
80°	82397	67835	79982
85°	48259	53213	67507



TEST NUMBER: P581297

CATALOG NUMBER: HC460D010-HM44560830-41WWW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.8	5.2
10°-20°	749.7	14.5
20°-30°	1024.2	19.8
30°-40°	1028.5	19.9
40°-50°	850.8	16.4
50°-60°	616.6	11.9
60°-70°	390.5	7.5
70°-80°	197.4	3.8
80°-90°	48.3	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°	2045.7	39.5
0°-40°	3074.2	59.4
0°-60°	4541.5	87.7
0°-90°	5177.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5177.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2899	2899	2899	2899	2899	
5°	3016	2971	2876	2780	2742	289
15°	3060	2940	2657	2412	2313	861
25°	2736	2555	2193	1917	1808	1250
35°	2002	1883	1610	1412	1341	1255
45°	1310	1235	1071	965	931	1019
55°	846	771	658	600	576	761
65°	495	440	372	334	348	492
75°	225	194	167	174	184	240
85°	34	34	38	44	48	47
90°	0	0	0	0	0	



TEST NUMBER: P581297

CATALOG NUMBER: HC460D010-HM44560830-41WWW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2899.4	2899.4	2899.4	2899.4	2899.4	2899.4	2899.4	2899.4	2899.4
2.5°	2954.0	2943.9	2926.7	2906.3	2882.4	2855.1	2831.3	2817.6	2810.8
5°	3015.5	3001.8	2971.0	2926.7	2875.6	2824.4	2780.1	2752.8	2742.5
7.5°	3052.9	3032.5	2988.2	2919.9	2841.4	2766.4	2701.6	2664.1	2653.8
10°	3056.3	3032.5	2974.5	2882.4	2783.5	2684.5	2606.1	2551.5	2541.3
12.5°	3059.8	3029.1	2957.5	2848.3	2725.5	2602.6	2507.2	2442.3	2425.3
15°	3059.8	3029.1	2940.4	2810.8	2657.2	2517.4	2411.7	2336.7	2312.7
17.5°	3032.5	2998.3	2892.6	2742.5	2575.4	2418.5	2295.7	2217.2	2193.4
20°	2960.9	2923.3	2804.0	2640.2	2459.4	2295.7	2172.9	2091.0	2060.3
22.5°	2858.6	2814.1	2688.0	2510.6	2329.8	2162.6	2043.3	1958.0	1930.7
25°	2735.7	2691.4	2554.9	2381.0	2193.4	2036.5	1917.0	1838.6	1807.8
27.5°	2585.6	2537.9	2404.9	2230.8	2056.9	1900.0	1790.8	1719.2	1688.5
30°	2415.0	2363.9	2237.7	2070.6	1913.7	1763.5	1657.8	1599.8	1565.7
32.5°	2217.2	2172.9	2060.3	1910.3	1763.5	1620.3	1531.6	1480.4	1453.1
35°	2002.3	1978.4	1883.0	1753.4	1610.1	1490.7	1412.3	1364.4	1340.6
37.5°	1811.3	1787.4	1705.5	1596.5	1470.2	1361.0	1296.2	1255.4	1234.8
40°	1630.5	1610.1	1531.6	1439.4	1330.4	1234.8	1180.2	1149.5	1129.1
42.5°	1453.1	1442.9	1378.1	1292.8	1197.3	1115.5	1071.1	1047.2	1030.2
45°	1309.8	1296.2	1234.8	1152.9	1071.1	1002.9	965.3	948.3	931.3
47.5°	1183.6	1166.6	1101.8	1030.2	955.1	893.7	859.6	842.5	835.7
50°	1060.9	1043.9	985.9	914.1	839.1	794.8	767.5	750.5	747.1
52.5°	951.7	934.7	869.8	801.7	743.6	706.1	682.2	665.2	658.3
55°	846.0	825.5	770.9	706.1	658.3	624.2	600.3	583.3	576.5
57.5°	750.5	729.9	682.2	620.9	576.5	545.7	525.3	508.3	501.4
60°	658.3	641.3	596.9	539.0	501.4	474.1	453.7	440.0	433.3
62.5°	573.0	559.4	515.0	463.9	433.3	409.4	392.3	378.7	385.4
65°	494.6	481.0	440.0	395.7	371.8	348.0	334.3	334.3	348.0
67.5°	419.6	406.0	371.8	334.3	313.8	296.8	286.5	296.8	307.0
70°	351.4	337.7	307.0	276.2	259.2	245.6	245.6	255.8	262.7
72.5°	286.5	272.9	249.1	225.1	211.5	201.2	211.5	218.3	225.1
75°	225.1	214.9	194.5	177.4	167.2	163.8	173.9	180.8	184.2
77.5°	167.2	160.3	146.6	133.0	126.2	129.6	139.9	143.3	146.6
80°	116.0	112.6	102.3	95.5	95.5	98.9	105.7	109.2	112.6
82.5°	71.6	71.6	64.9	61.4	64.9	71.6	75.0	78.5	78.5
85°	34.1	37.6	34.1	34.1	37.6	44.3	44.3	47.7	47.7
87.5°	10.3	10.3	13.6	13.6	17.0	17.0	17.0	17.0	20.4
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)