

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: P581244

Luminaire Tested: **HC455D010-HM44560935-41WWWB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581244
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC455D010-HM44560935-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" 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: 4371.6 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

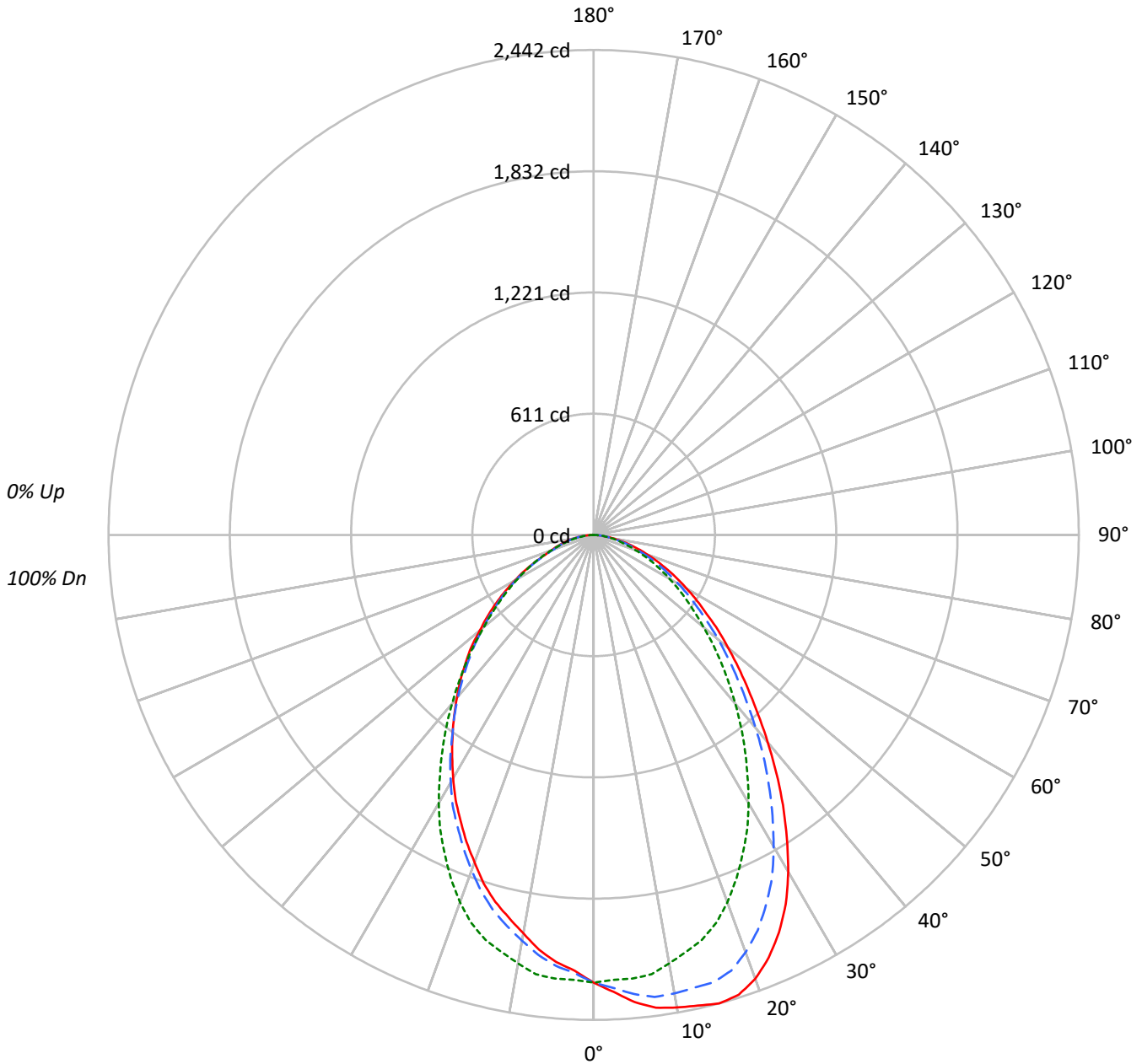
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P581244

CATALOG NUMBER: HC455D010-HM44560935-41WWWB

Luminous Intensity Polar Plot





TEST NUMBER: P581244

CATALOG NUMBER: HC455D010-HM44560935-41WWWB

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																			
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87																			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75																			
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66																			
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58																			
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51																			
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46																			
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41																			
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37																			
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34																			
10	58	45	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	278046	278046	278046
5°	292369	277672	267271
10°	302625	274357	255156
15°	311874	269376	244246
20°	312219	258270	230167
25°	300475	241409	215809
30°	279015	222144	201535
35°	250109	199997	186490
40°	219449	178438	172400
45°	191811	157988	158999
50°	169364	138277	143266
55°	149350	122577	128791
60°	133485	108519	112787
65°	118233	95438	95438
70°	103287	81396	81396
75°	88261	68960	77204
80°	69895	61727	69895
85°	45004	53213	65667



TEST NUMBER: P581244

CATALOG NUMBER: HC455D010-HM44560935-41WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.6	4.9
10°-20°	601.4	13.8
20°-30°	842.6	19.3
30°-40°	868.1	19.9
40°-50°	739.1	16.9
50°-60°	547.6	12.5
60°-70°	343.7	7.9
70°-80°	170.7	3.9
80°-90°	44.8	1.0
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°	1657.6	37.9
0°-40°	2525.7	57.8
0°-60°	3812.4	87.2
0°-90°	4371.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4371.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2254	2254	2254	2254	2254	
5°	2361	2321	2243	2179	2159	227
15°	2442	2332	2110	1956	1913	687
25°	2208	2054	1774	1620	1586	1010
35°	1661	1536	1328	1241	1238	1036
45°	1100	1024	906	888	912	853
55°	694	639	570	582	599	628
65°	405	365	327	321	327	404
75°	185	165	145	156	162	198
85°	32	32	38	43	46	41
90°	0	0	0	0	0	



TEST NUMBER: P581244

CATALOG NUMBER: HC455D010-HM44560935-41WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2254.2	2254.2	2254.2	2254.2	2254.2	2254.2	2254.2	2254.2	2254.2
2.5°	2303.3	2294.7	2283.1	2262.8	2242.6	2225.2	2207.8	2199.2	2196.2
5°	2361.3	2343.8	2320.6	2283.1	2242.6	2207.8	2178.9	2164.5	2158.6
7.5°	2401.8	2384.3	2346.8	2288.9	2231.0	2178.9	2132.7	2112.4	2106.6
10°	2416.2	2395.9	2343.8	2265.8	2190.5	2126.8	2074.7	2048.7	2037.2
12.5°	2427.8	2401.8	2335.2	2242.6	2150.0	2071.8	2016.9	1982.1	1973.5
15°	2442.3	2413.4	2332.2	2219.4	2109.5	2016.9	1956.2	1924.3	1912.7
17.5°	2427.8	2395.9	2300.4	2173.2	2048.7	1947.4	1880.9	1852.0	1840.4
20°	2378.6	2343.8	2236.8	2100.8	1967.6	1863.6	1797.0	1768.0	1753.5
22.5°	2303.3	2265.8	2155.7	2011.0	1875.0	1773.8	1710.1	1681.2	1672.5
25°	2207.8	2170.2	2054.5	1906.9	1773.8	1675.5	1620.4	1594.4	1585.7
27.5°	2095.0	2057.4	1944.6	1799.9	1672.5	1580.0	1536.5	1510.5	1504.7
30°	1959.0	1921.4	1811.5	1678.3	1559.7	1472.9	1438.1	1417.8	1415.0
32.5°	1808.6	1776.7	1675.5	1553.9	1441.0	1368.7	1342.7	1328.2	1325.2
35°	1661.0	1626.2	1536.5	1426.6	1328.2	1264.5	1241.3	1238.5	1238.5
37.5°	1510.5	1475.8	1403.4	1302.2	1218.3	1160.3	1151.7	1154.6	1154.6
40°	1362.9	1331.1	1267.4	1183.5	1108.2	1064.8	1062.0	1067.7	1070.7
42.5°	1224.0	1198.0	1140.1	1067.7	1004.1	969.4	972.2	983.8	992.5
45°	1099.6	1076.4	1024.3	960.6	905.7	879.6	888.3	902.8	911.5
47.5°	986.7	966.5	917.3	859.4	813.2	795.7	807.3	824.7	836.2
50°	882.6	865.2	818.9	758.1	720.6	709.0	723.4	740.8	746.6
52.5°	790.0	772.6	723.4	671.3	642.4	636.6	651.0	665.6	674.2
55°	694.5	680.1	639.4	593.2	570.0	567.1	581.6	593.2	598.9
57.5°	616.4	601.9	564.3	523.8	503.6	500.6	515.0	523.8	526.6
60°	541.1	526.6	492.0	454.3	439.9	439.9	448.5	454.3	457.2
62.5°	471.7	457.2	425.4	393.5	381.9	381.9	381.9	384.9	393.5
65°	405.1	393.5	364.6	335.7	327.0	321.2	321.2	321.2	327.0
67.5°	344.4	332.8	309.6	283.6	275.0	266.2	263.4	269.1	269.1
70°	286.4	277.8	254.6	234.3	225.7	217.0	214.1	225.7	225.7
72.5°	234.3	225.7	211.3	191.0	182.2	179.4	185.2	191.0	193.8
75°	185.2	176.5	164.9	153.3	144.7	147.6	156.3	159.2	162.0
77.5°	138.9	136.0	124.4	115.8	115.8	118.7	124.4	130.2	133.1
80°	98.4	95.5	89.7	83.9	86.9	92.6	95.5	101.2	98.4
82.5°	60.8	60.8	57.8	57.8	60.8	66.6	69.4	72.3	75.3
85°	31.8	31.8	31.8	34.8	37.6	40.5	43.4	46.4	46.4
87.5°	8.7	11.6	11.6	14.5	17.3	17.3	20.2	20.2	20.2
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)