

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: P581368

Luminaire Tested: **HC460D010-HM44560930-41WWBB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581368
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC460D010-HM44560930-41WWBB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3510.6 lumens
Efficiency: N/A
Efficacy: 63.8 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.04 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

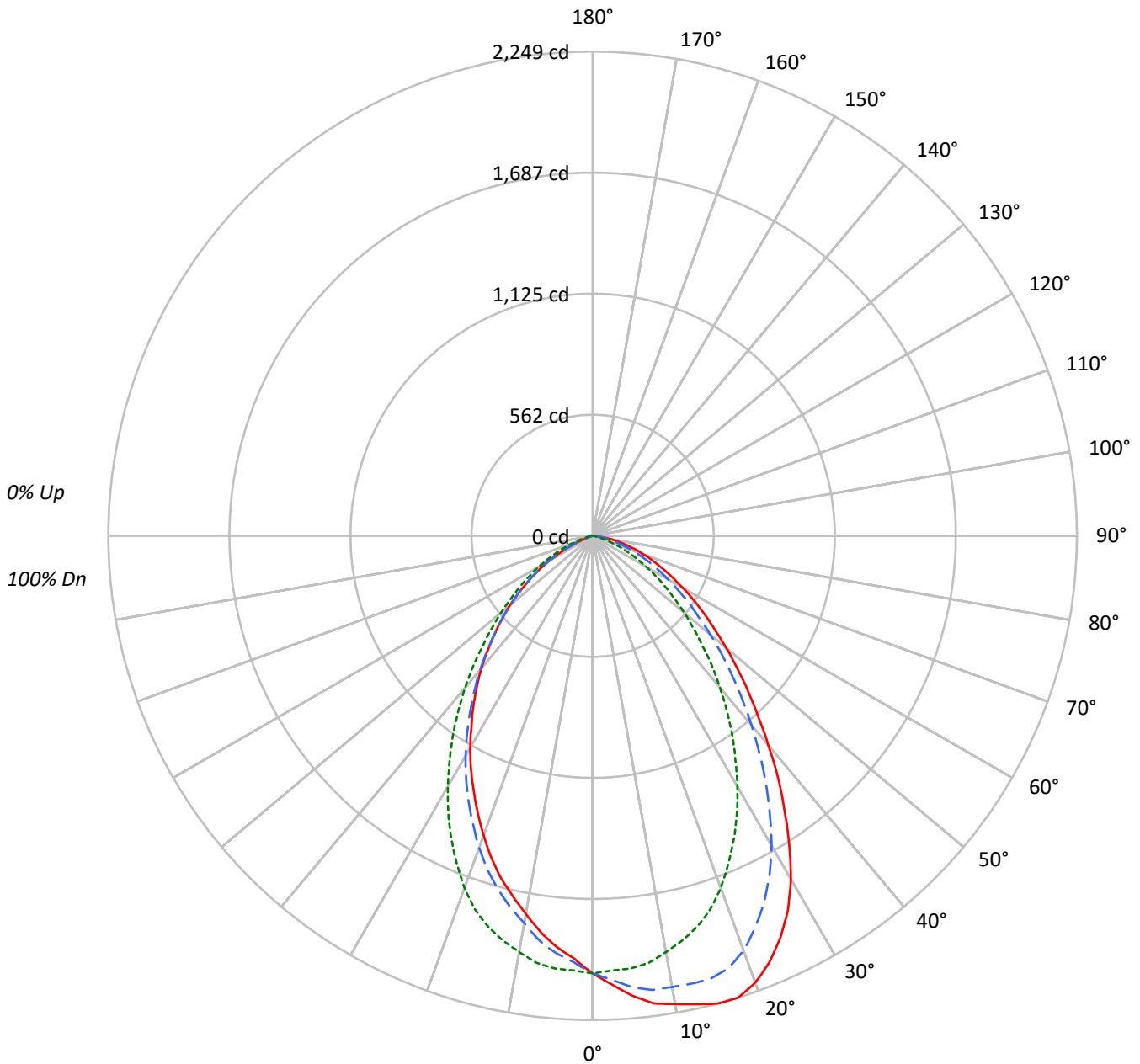
Input Watts (W): 55
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P581368

CATALOG NUMBER: HC460D010-HM44560930-41WWBB

Luminous Intensity Polar Plot





TEST NUMBER: P581368

CATALOG NUMBER: HC460D010-HM44560930-41WWBB

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								
1	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89								
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78								
3	96	87	80	75	94	86	79	74	83	78	73	80	76	72	78	74	71	69								
4	89	79	72	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61								
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55								
6	77	66	58	52	75	65	57	52	63	57	52	61	56	51	60	55	51	49								
7	72	60	53	47	71	59	52	47	58	51	47	57	51	46	55	50	46	44								
8	68	56	48	43	66	55	48	43	54	47	42	53	47	42	51	46	42	40								
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	43	39	37								
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	36	34								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	250688	250688	250688
5°	265599	249862	237332
10°	276636	245875	223418
15°	287216	239955	210061
20°	289918	228448	194294
25°	280536	211290	177851
30°	262294	191479	161826
35°	233771	170212	145397
40°	204346	148022	129409
45°	178013	125577	111954
50°	155336	106519	95984
55°	136146	88277	77718
60°	119103	71318	57035
65°	103756	53177	32075
70°	90701	34405	10422
75°	74393	17919	2764
80°	55476	8240	2060
85°	32692	4104	4104



TEST NUMBER: P581368

CATALOG NUMBER: HC460D010-HM44560930-41WWBB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.8	5.5
10°-20°	536.8	15.3
20°-30°	742.3	21.1
30°-40°	746.4	21.3
40°-50°	602.3	17.2
50°-60°	407.2	11.6
60°-70°	207.2	5.9
70°-80°	66.4	1.9
80°-90°	10.2	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°	1470.9	41.9
0°-40°	2217.3	63.2
0°-60°	3226.8	91.9
0°-90°	3510.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3510.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2032	2032	2032	2032	2032	
5°	2145	2105	2018	1946	1917	207
15°	2249	2128	1879	1700	1645	634
25°	2061	1882	1552	1362	1307	943
35°	1552	1402	1130	989	966	970
45°	1020	914	720	642	642	791
55°	633	546	410	358	361	569
65°	356	289	182	119	110	357
75°	156	110	38	9	6	168
85°	23	12	3	3	3	31
90°	0	0	0	0	0	



TEST NUMBER: P581368

CATALOG NUMBER: HC460D010-HM44560930-41WWBB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2032.4	2032.4	2032.4	2032.4	2032.4	2032.4	2032.4	2032.4	2032.4
2.5°	2087.4	2075.7	2064.2	2043.9	2020.8	1997.7	1983.2	1971.7	1965.9
5°	2145.1	2130.7	2104.6	2061.3	2018.0	1977.5	1945.7	1925.4	1916.8
7.5°	2191.4	2171.2	2127.9	2067.1	2000.6	1937.0	1896.5	1867.6	1856.0
10°	2208.7	2185.6	2127.9	2046.9	1963.1	1885.0	1827.1	1798.3	1783.8
12.5°	2229.0	2203.0	2130.7	2029.5	1925.4	1832.9	1766.4	1728.9	1714.3
15°	2249.2	2214.5	2127.9	2003.4	1879.1	1772.2	1699.9	1662.3	1645.0
17.5°	2249.2	2208.7	2104.6	1960.1	1818.4	1705.8	1624.8	1581.3	1566.9
20°	2208.7	2162.5	2049.8	1890.8	1740.4	1619.0	1541.0	1497.5	1480.2
22.5°	2145.1	2093.1	1971.7	1806.9	1647.9	1529.3	1451.3	1410.8	1393.5
25°	2061.3	2009.3	1882.1	1711.5	1552.5	1433.9	1361.7	1324.0	1306.8
27.5°	1963.1	1905.2	1778.0	1607.4	1451.3	1338.6	1272.0	1237.4	1222.9
30°	1841.6	1786.6	1662.3	1494.7	1344.4	1240.2	1179.5	1147.7	1136.2
32.5°	1699.9	1653.6	1532.3	1376.2	1234.5	1139.1	1084.1	1058.1	1046.6
35°	1552.5	1509.2	1402.1	1257.6	1130.4	1040.8	988.7	971.4	965.6
37.5°	1413.7	1376.2	1272.0	1139.1	1023.4	945.4	899.1	887.5	881.8
40°	1269.1	1243.2	1147.7	1026.4	919.3	849.9	812.4	803.7	803.7
42.5°	1139.1	1110.2	1026.4	916.5	821.1	751.7	725.6	717.0	719.9
45°	1020.5	991.6	913.6	812.4	719.9	662.0	641.8	641.8	641.8
47.5°	910.6	884.7	812.4	708.3	633.1	586.9	566.6	566.6	569.5
50°	809.5	792.2	711.2	621.5	555.1	511.7	497.2	494.4	500.2
52.5°	714.1	693.8	621.5	540.7	477.0	442.3	427.9	425.0	427.9
55°	633.1	610.0	546.4	468.3	410.5	375.8	358.5	355.5	361.4
57.5°	555.1	537.7	471.3	401.9	347.0	312.2	297.8	292.0	294.9
60°	482.8	465.4	404.7	338.3	289.1	254.4	234.2	228.4	231.2
62.5°	416.3	401.9	344.0	280.4	231.2	199.4	179.2	164.8	170.6
65°	355.5	341.1	289.1	225.5	182.2	147.4	118.6	106.9	109.9
67.5°	303.5	286.2	237.1	179.2	135.9	98.2	66.4	60.7	60.7
70°	251.5	234.2	190.9	138.7	95.4	52.0	28.9	28.9	28.9
72.5°	202.4	187.9	147.4	104.1	60.7	23.1	11.6	11.6	11.6
75°	156.1	144.5	109.9	72.3	37.6	11.6	8.7	5.8	5.8
77.5°	115.6	104.1	78.1	49.2	23.1	5.8	5.8	5.8	5.8
80°	78.1	69.4	52.0	28.9	11.6	2.9	2.9	2.9	2.9
82.5°	46.2	40.5	28.9	14.4	5.8	2.9	2.9	2.9	2.9
85°	23.1	17.4	11.6	5.8	2.9	2.9	2.9	2.9	2.9
87.5°	5.8	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0
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)