

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: P581221

Luminaire Tested: **HC455D010-HM44560930-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-9)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC455D010-HM44560930-41WDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4141.4 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.07 / 1.04
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

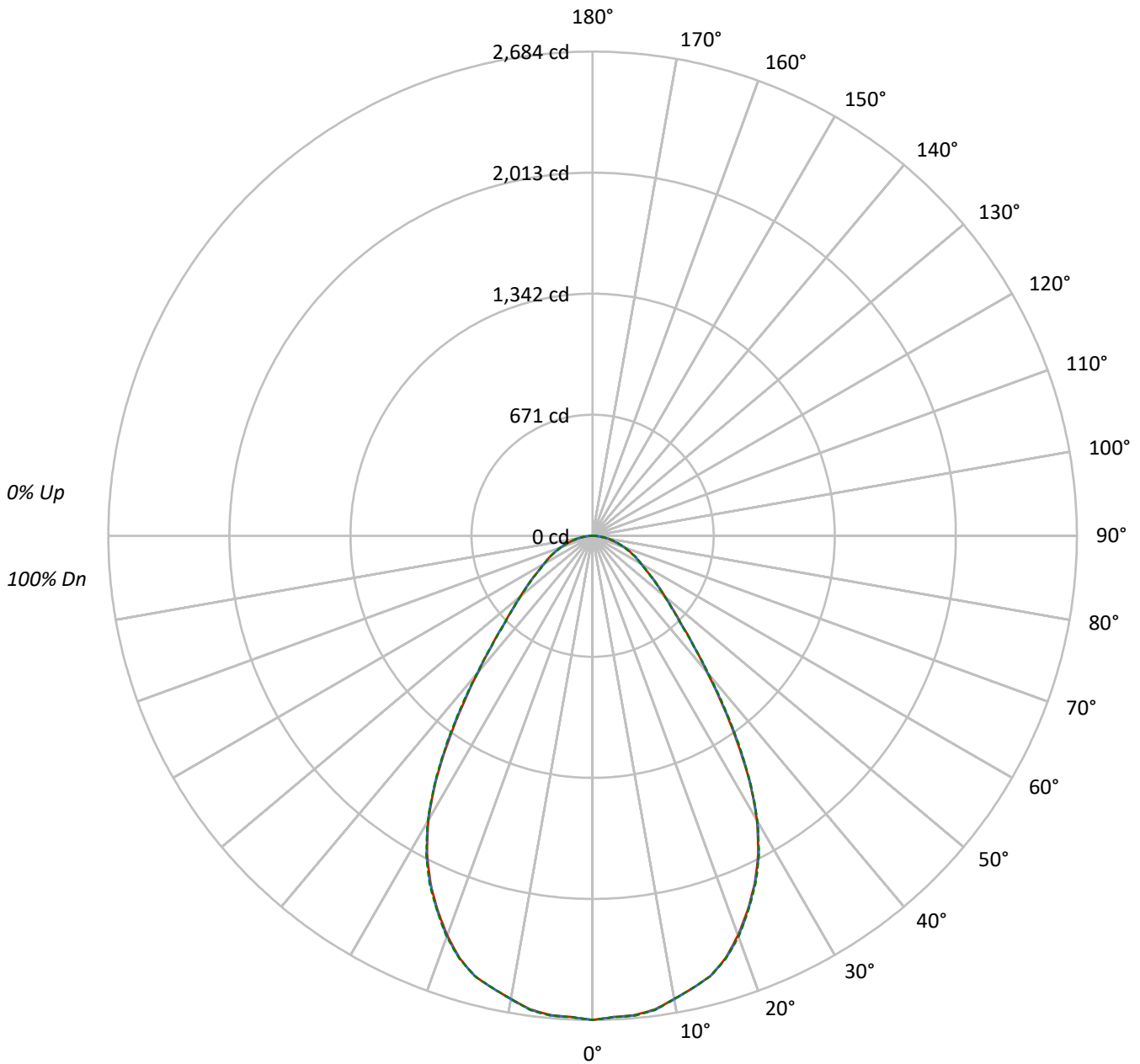
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



0% Up
100% Dn



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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
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	94	92	90	89		
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78		
3	96	87	81	76	94	86	80	75	83	78	74	81	76	72	78	74	71	69		
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	68	64	62		
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56		
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51		
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46		
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42		
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39		
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	331084	331084	331084
5°	330281	330628	330628
10°	326448	326798	326448
15°	322537	322537	322537
20°	309292	310014	310381
25°	289301	289682	290431
30°	259218	260001	260001
35°	210462	212133	212540
40°	158826	159728	160163
45°	121670	121181	121181
50°	100225	99707	99707
55°	86062	85438	85438
60°	76770	76104	76104
65°	72177	72177	72177
70°	67151	67151	67151
75°	60906	62240	60906
80°	57252	55334	57252
85°	47127	47127	47127



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.9	6.1
10°-20°	707.7	17.1
20°-30°	972.5	23.5
30°-40°	874.4	21.1
40°-50°	552.5	13.3
50°-60°	360.7	8.7
60°-70°	244.4	5.9
70°-80°	137.6	3.3
80°-90°	38.6	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°	1933.1	46.7
0°-40°	2807.5	67.8
0°-60°	3720.8	89.8
0°-90°	4141.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4141.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2684	2684	2684	2684	2684	
5°	2668	2668	2670	2670	2670	253
15°	2526	2526	2526	2526	2526	707
25°	2126	2128	2128	2134	2134	970
35°	1398	1403	1409	1414	1412	870
45°	698	695	695	695	695	553
55°	400	400	397	400	397	362
65°	247	247	247	247	247	245
75°	128	131	131	131	128	137
85°	33	33	33	33	33	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2684.2	2684.2	2684.2	2684.2	2684.2
2.5°	2670.3	2670.3	2670.3	2670.3	2670.3
5°	2667.5	2667.5	2670.3	2670.3	2670.3
7.5°	2648.0	2650.8	2650.8	2650.8	2650.8
10°	2606.4	2606.4	2609.2	2609.2	2606.4
12.5°	2567.5	2567.5	2567.5	2570.3	2567.5
15°	2525.8	2525.8	2525.8	2525.8	2525.8
17.5°	2453.6	2456.3	2456.3	2456.3	2456.3
20°	2356.3	2361.8	2361.8	2364.6	2364.6
22.5°	2245.2	2248.0	2250.7	2253.5	2250.7
25°	2125.7	2128.5	2128.5	2134.0	2134.0
27.5°	1986.8	1989.6	1995.1	1995.1	1995.1
30°	1820.0	1822.8	1825.5	1825.5	1825.5
32.5°	1622.7	1622.7	1628.3	1631.1	1628.3
35°	1397.7	1403.2	1408.8	1414.4	1411.5
37.5°	1183.7	1189.2	1192.0	1192.0	1194.9
40°	986.4	992.0	992.0	997.5	994.7
42.5°	830.8	828.0	828.0	833.6	830.8
45°	697.5	694.7	694.7	694.7	694.7
47.5°	600.2	597.4	597.4	597.4	597.4
50°	522.3	519.6	519.6	519.6	519.6
52.5°	458.4	455.7	455.7	455.7	452.9
55°	400.2	400.2	397.3	400.2	397.3
57.5°	347.3	347.3	347.3	347.3	347.3
60°	311.2	308.5	308.5	308.5	308.5
62.5°	277.9	277.9	277.9	277.9	277.9
65°	247.3	247.3	247.3	247.3	247.3
67.5°	216.8	214.0	216.8	216.8	214.0
70°	186.2	183.4	186.2	186.2	186.2
72.5°	155.6	155.6	155.6	158.4	155.6
75°	127.8	130.6	130.6	130.6	127.8
77.5°	102.8	105.6	102.8	102.8	102.8
80°	80.6	77.9	77.9	77.9	80.6
82.5°	55.6	55.6	55.6	55.6	55.6
85°	33.3	33.3	33.3	33.3	33.3
87.5°	13.8	13.8	13.8	13.8	13.8
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)