

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: P580807

Luminaire Tested: **HC445D010-HM44560935-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580807
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: HC445D010-HM44560935-41WDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3892.8 lumens
Efficiency: N/A
Efficacy: 88.5 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

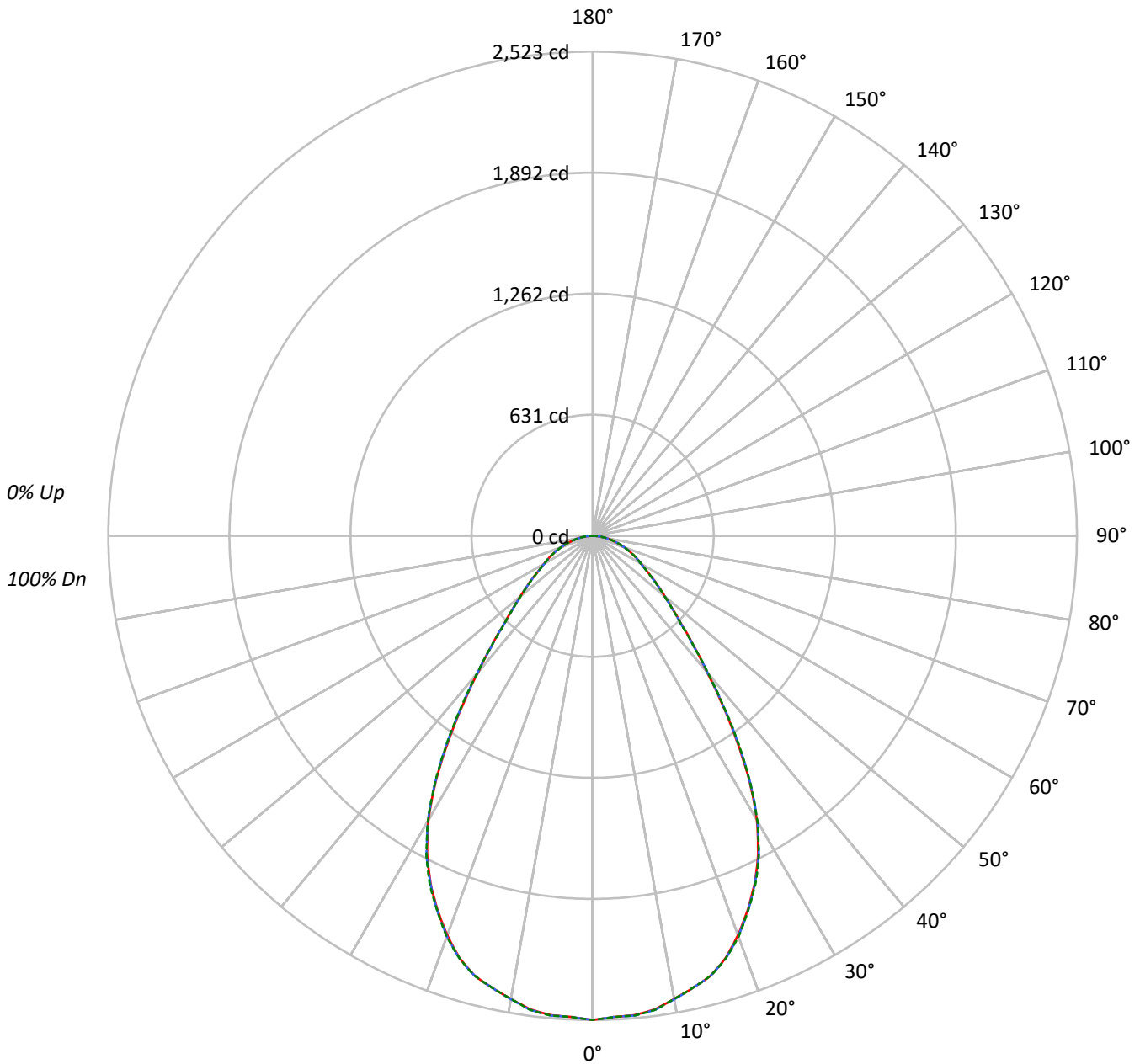
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	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	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89			89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78			78
3	96	87	81	76	94	86	80	75	83	78	74	81	76	72	78	74	71	69			69
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	68	64	62			62
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56			56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51			51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46			46
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42			42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39			39
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36			36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	311201	311201	311201
5°	310446	310768	310768
10°	306846	307172	306846
15°	303178	303178	303178
20°	290718	291401	291755
25°	271935	272275	272997
30°	243650	244405	244405
35°	197813	199394	199786
40°	149294	150132	150566
45°	114361	113907	113907
50°	94219	93720	93720
55°	80879	80320	80320
60°	72157	71516	71516
65°	67858	67858	67858
70°	63112	63112	63112
75°	57284	58475	57284
80°	53771	51995	53771
85°	44297	44297	44297



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.7	6.1
10°-20°	665.2	17.1
20°-30°	914.1	23.5
30°-40°	821.9	21.1
40°-50°	519.3	13.3
50°-60°	339.1	8.7
60°-70°	229.7	5.9
70°-80°	129.3	3.3
80°-90°	36.3	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°	1817.1	46.7
0°-40°	2639.0	67.8
0°-60°	3497.4	89.8
0°-90°	3892.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3892.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2523	2523	2523	2523	2523	
5°	2507	2507	2510	2510	2510	238
15°	2374	2374	2374	2374	2374	665
25°	1998	2001	2001	2006	2006	912
35°	1314	1319	1324	1330	1327	818
45°	656	653	653	653	653	520
55°	376	376	374	376	374	340
65°	232	232	232	232	232	230
75°	120	123	123	123	120	129
85°	31	31	31	31	31	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2523.0	2523.0	2523.0	2523.0	2523.0
2.5°	2509.9	2509.9	2509.9	2509.9	2509.9
5°	2507.3	2507.3	2509.9	2509.9	2509.9
7.5°	2489.0	2491.6	2491.6	2491.6	2491.6
10°	2449.9	2449.9	2452.5	2452.5	2449.9
12.5°	2413.3	2413.3	2413.3	2415.9	2413.3
15°	2374.2	2374.2	2374.2	2374.2	2374.2
17.5°	2306.3	2308.9	2308.9	2308.9	2308.9
20°	2214.8	2220.0	2220.0	2222.7	2222.7
22.5°	2110.4	2113.0	2115.5	2118.2	2115.5
25°	1998.1	2000.6	2000.6	2005.9	2005.9
27.5°	1867.5	1870.0	1875.3	1875.3	1875.3
30°	1710.7	1713.3	1716.0	1716.0	1716.0
32.5°	1525.2	1525.2	1530.5	1533.1	1530.5
35°	1313.7	1318.9	1324.2	1329.5	1326.8
37.5°	1112.6	1117.8	1120.4	1120.4	1123.1
40°	927.2	932.4	932.4	937.7	935.1
42.5°	780.9	778.3	778.3	783.5	780.9
45°	655.6	653.0	653.0	653.0	653.0
47.5°	564.1	561.6	561.6	561.6	561.6
50°	491.0	488.4	488.4	488.4	488.4
52.5°	431.0	428.4	428.4	428.4	425.7
55°	376.1	376.1	373.5	376.1	373.5
57.5°	326.5	326.5	326.5	326.5	326.5
60°	292.5	289.9	289.9	289.9	289.9
62.5°	261.2	261.2	261.2	261.2	261.2
65°	232.5	232.5	232.5	232.5	232.5
67.5°	203.8	201.1	203.8	203.8	201.1
70°	175.0	172.3	175.0	175.0	175.0
72.5°	146.3	146.3	146.3	148.9	146.3
75°	120.2	122.7	122.7	122.7	120.2
77.5°	96.6	99.3	96.6	96.6	96.6
80°	75.7	73.2	73.2	73.2	75.7
82.5°	52.3	52.3	52.3	52.3	52.3
85°	31.3	31.3	31.3	31.3	31.3
87.5°	13.0	13.0	13.0	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)