

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: P580717

Luminaire Tested: **HC445D010-HM44560830-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580717
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-HM44560830-41WDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4411.2 lumens
Efficiency: N/A
Efficacy: 100.3 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

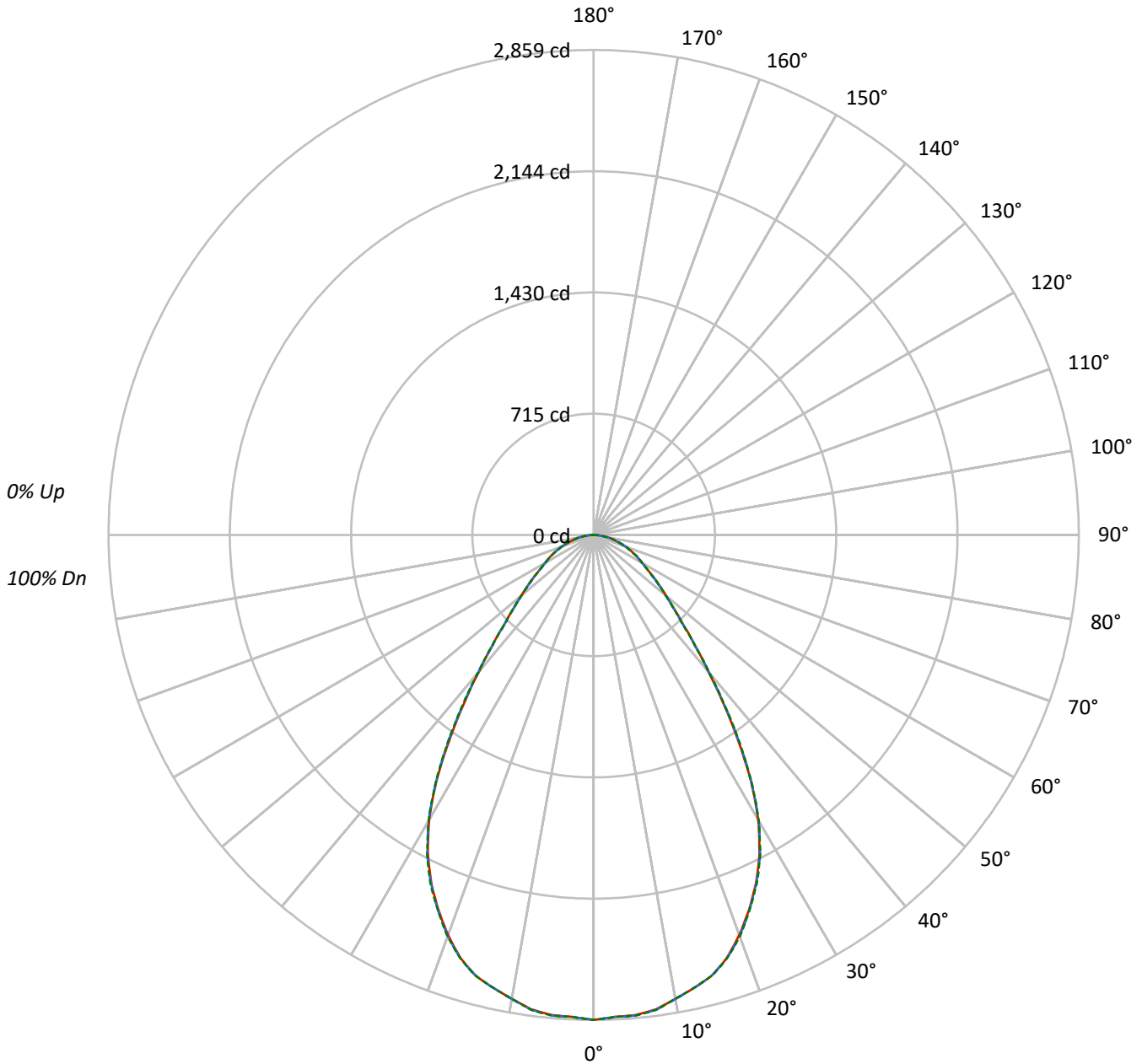
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	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°	352657	352657	352657
5°	351813	352172	352172
10°	347715	348090	347715
15°	343543	343543	343543
20°	329441	330215	330609
25°	308150	308545	309362
30°	276109	276950	276950
35°	224164	225956	226393
40°	169164	170130	170613
45°	129589	129083	129083
50°	106769	106212	106212
55°	91653	91008	91008
60°	81753	81038	81038
65°	76876	76876	76876
70°	71515	71515	71515
75°	64861	66291	64861
80°	60945	58885	60945
85°	50382	50382	50382



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.4	6.1
10°-20°	753.8	17.1
20°-30°	1035.9	23.5
30°-40°	931.4	21.1
40°-50°	588.5	13.3
50°-60°	384.2	8.7
60°-70°	260.3	5.9
70°-80°	146.5	3.3
80°-90°	41.2	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°	2059.1	46.7
0°-40°	2990.5	67.8
0°-60°	3963.2	89.8
0°-90°	4411.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4411.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2859	2859	2859	2859	2859	
5°	2841	2841	2844	2844	2844	269
15°	2690	2690	2690	2690	2690	753
25°	2264	2267	2267	2273	2273	1033
35°	1489	1495	1501	1506	1504	927
45°	743	740	740	740	740	589
55°	426	426	423	426	423	386
65°	263	263	263	263	263	261
75°	136	139	139	139	136	146
85°	36	36	36	36	36	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2859.1	2859.1	2859.1	2859.1	2859.1
2.5°	2844.3	2844.3	2844.3	2844.3	2844.3
5°	2841.4	2841.4	2844.3	2844.3	2844.3
7.5°	2820.6	2823.5	2823.5	2823.5	2823.5
10°	2776.2	2776.2	2779.2	2779.2	2776.2
12.5°	2734.8	2734.8	2734.8	2737.7	2734.8
15°	2690.3	2690.3	2690.3	2690.3	2690.3
17.5°	2613.4	2616.4	2616.4	2616.4	2616.4
20°	2509.8	2515.7	2515.7	2518.7	2518.7
22.5°	2391.4	2394.3	2397.4	2400.3	2397.4
25°	2264.2	2267.1	2267.1	2273.1	2273.1
27.5°	2116.2	2119.1	2125.1	2125.1	2125.1
30°	1938.6	1941.5	1944.5	1944.5	1944.5
32.5°	1728.4	1728.4	1734.4	1737.3	1734.4
35°	1488.7	1494.6	1500.6	1506.5	1503.5
37.5°	1260.8	1266.7	1269.7	1269.7	1272.7
40°	1050.6	1056.6	1056.6	1062.5	1059.6
42.5°	884.9	882.0	882.0	888.0	884.9
45°	742.9	740.0	740.0	740.0	740.0
47.5°	639.3	636.3	636.3	636.3	636.3
50°	556.4	553.5	553.5	553.5	553.5
52.5°	488.3	485.4	485.4	485.4	482.5
55°	426.2	426.2	423.2	426.2	423.2
57.5°	369.9	369.9	369.9	369.9	369.9
60°	331.4	328.5	328.5	328.5	328.5
62.5°	296.0	296.0	296.0	296.0	296.0
65°	263.4	263.4	263.4	263.4	263.4
67.5°	230.9	227.9	230.9	230.9	227.9
70°	198.3	195.3	198.3	198.3	198.3
72.5°	165.7	165.7	165.7	168.7	165.7
75°	136.1	139.1	139.1	139.1	136.1
77.5°	109.5	112.4	109.5	109.5	109.5
80°	85.8	82.9	82.9	82.9	85.8
82.5°	59.2	59.2	59.2	59.2	59.2
85°	35.6	35.6	35.6	35.6	35.6
87.5°	14.8	14.8	14.8	14.8	14.8
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)