

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: P580735

Luminaire Tested: **HC445D010-HM44560835-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580735
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-HM44560835-41WDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4434.9 lumens
Efficiency: N/A
Efficacy: 100.8 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

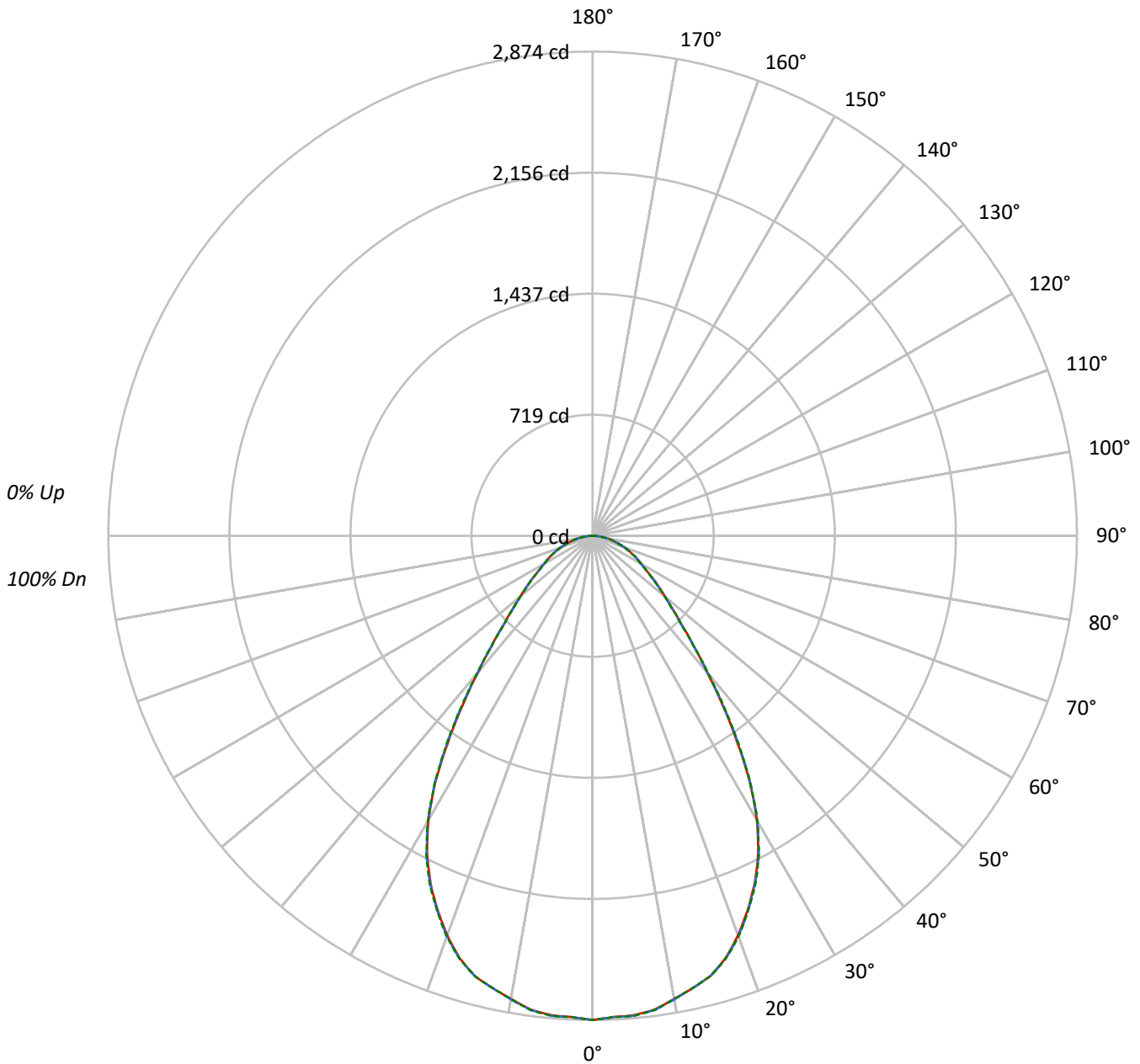
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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								
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°	354532	354532	354532
5°	353683	354054	354054
10°	349581	349944	349581
15°	345394	345394	345394
20°	331213	331987	332368
25°	309797	310192	311009
30°	277591	278445	278445
35°	225369	227161	227613
40°	170098	171048	171515
45°	130287	129764	129764
50°	107344	106769	106769
55°	92147	91502	91502
60°	82198	81482	81482
65°	77285	77285	77285
70°	71911	71911	71911
75°	65243	66625	65243
80°	61301	59241	61301
85°	50524	50524	50524



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.8	6.1
10°-20°	757.9	17.1
20°-30°	1041.4	23.5
30°-40°	936.4	21.1
40°-50°	591.7	13.3
50°-60°	386.3	8.7
60°-70°	261.7	5.9
70°-80°	147.3	3.3
80°-90°	41.4	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°	2070.1	46.7
0°-40°	3006.5	67.8
0°-60°	3984.4	89.8
0°-90°	4434.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4434.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2874	2874	2874	2874	2874	
5°	2856	2856	2860	2860	2860	271
15°	2705	2705	2705	2705	2705	757
25°	2276	2279	2279	2285	2285	1039
35°	1497	1503	1509	1515	1512	932
45°	747	744	744	744	744	592
55°	428	428	426	428	426	388
65°	265	265	265	265	265	262
75°	137	140	140	140	137	147
85°	36	36	36	36	36	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2874.3	2874.3	2874.3	2874.3	2874.3
2.5°	2859.5	2859.5	2859.5	2859.5	2859.5
5°	2856.5	2856.5	2859.5	2859.5	2859.5
7.5°	2835.7	2838.7	2838.7	2838.7	2838.7
10°	2791.1	2791.1	2794.0	2794.0	2791.1
12.5°	2749.3	2749.3	2749.3	2752.4	2749.3
15°	2704.8	2704.8	2704.8	2704.8	2704.8
17.5°	2627.4	2630.4	2630.4	2630.4	2630.4
20°	2523.3	2529.2	2529.2	2532.1	2532.1
22.5°	2404.2	2407.3	2410.2	2413.2	2410.2
25°	2276.3	2279.2	2279.2	2285.2	2285.2
27.5°	2127.5	2130.5	2136.4	2136.4	2136.4
30°	1949.0	1951.9	1955.0	1955.0	1955.0
32.5°	1737.8	1737.8	1743.7	1746.6	1743.7
35°	1496.7	1502.7	1508.6	1514.6	1511.6
37.5°	1267.5	1273.6	1276.5	1276.5	1279.5
40°	1056.4	1062.3	1062.3	1068.3	1065.2
42.5°	889.6	886.7	886.7	892.7	889.6
45°	746.9	743.9	743.9	743.9	743.9
47.5°	642.7	639.8	639.8	639.8	639.8
50°	559.4	556.4	556.4	556.4	556.4
52.5°	491.0	488.0	488.0	488.0	485.0
55°	428.5	428.5	425.5	428.5	425.5
57.5°	371.9	371.9	371.9	371.9	371.9
60°	333.2	330.3	330.3	330.3	330.3
62.5°	297.6	297.6	297.6	297.6	297.6
65°	264.8	264.8	264.8	264.8	264.8
67.5°	232.1	229.1	232.1	232.1	229.1
70°	199.4	196.4	199.4	199.4	199.4
72.5°	166.6	166.6	166.6	169.6	166.6
75°	136.9	139.8	139.8	139.8	136.9
77.5°	110.1	113.1	110.1	110.1	110.1
80°	86.3	83.4	83.4	83.4	86.3
82.5°	59.5	59.5	59.5	59.5	59.5
85°	35.7	35.7	35.7	35.7	35.7
87.5°	14.9	14.9	14.9	14.9	14.9
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)