

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: P580696

Luminaire Tested: **HC445D010-HM44560827-41MDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580696  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC445D010-HM44560827-41MDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3849.9 lumens  
Efficiency: N/A  
Efficacy: 87.5 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.04 / 1.01  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

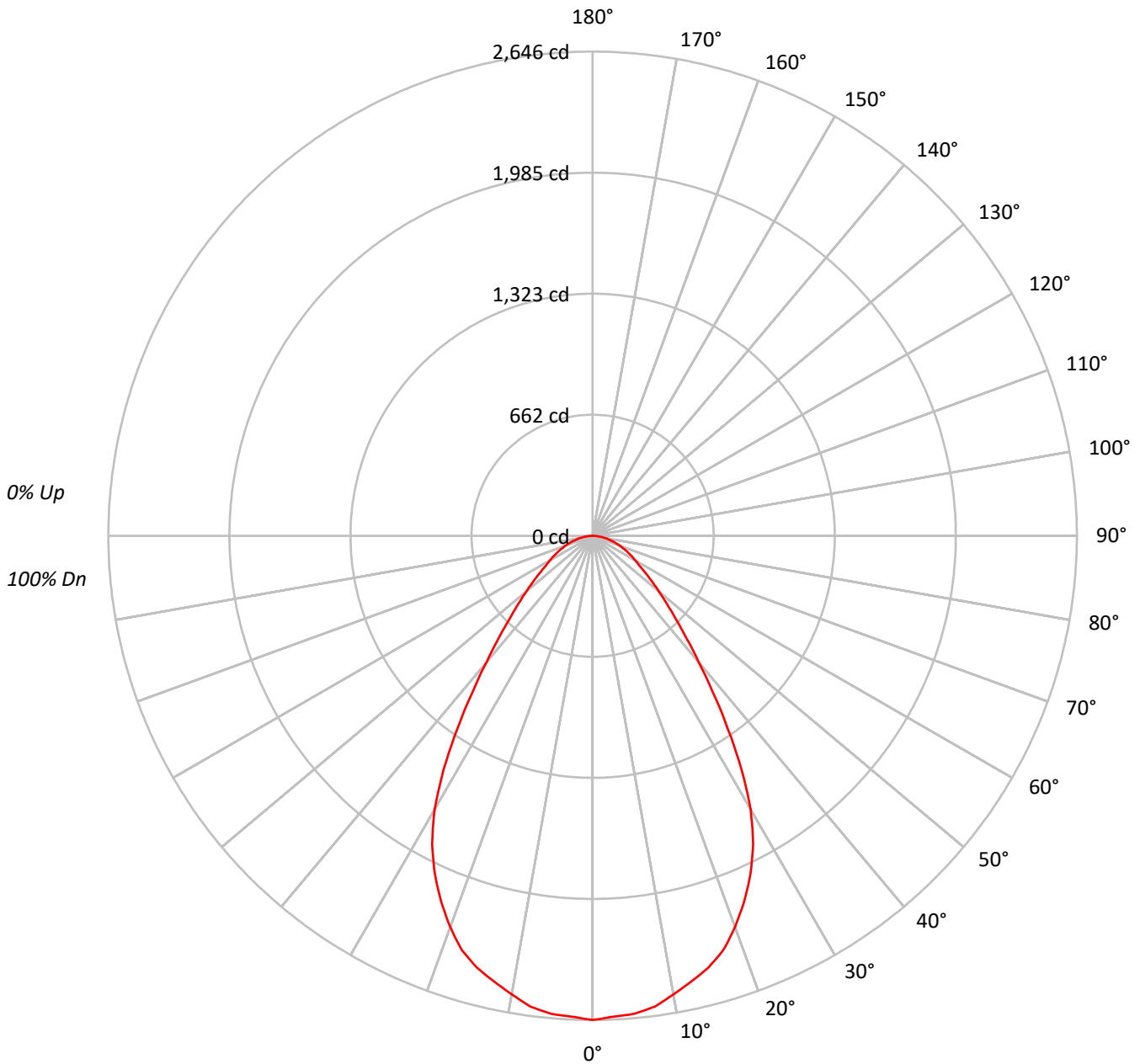
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P580696

CATALOG NUMBER: HC445D010-HM44560827-41MDW

### Luminous Intensity Polar Plot





TEST NUMBER: P580696

CATALOG NUMBER: HC445D010-HM44560827-41MDW

**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	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89			89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79			79
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70			70
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63			63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57			57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52			52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47			47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44			44
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40			40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37			37

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	326385
5°	324672
10°	318732
15°	312027
20°	298673
25°	277733
30°	245815
35°	194004
40°	145172
45°	111675
50°	90592
55°	75137
60°	66459
65°	61495
70°	56764
75°	52137
80°	47307
85°	37787



TEST NUMBER: P580696

CATALOG NUMBER: HC445D010-HM44560827-41MDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	247.9	6.4
10°-20°	685.2	17.8
20°-30°	930.4	24.2
30°-40°	806.0	20.9
40°-50°	506.0	13.1
50°-60°	318.3	8.3
60°-70°	209.1	5.4
70°-80°	115.4	3.0
80°-90°	31.6	0.8
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°	1863.6	48.4
0°-40°	2669.5	69.3
0°-60°	3493.9	90.8
0°-90°	3849.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3849.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2646	
5°	2622	248
15°	2444	685
25°	2041	930
35°	1288	806
45°	640	506
55°	349	318
65°	211	209
75°	109	115
85°	27	32
90°	0	



TEST NUMBER: P580696

CATALOG NUMBER: HC445D010-HM44560827-41MDW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2646.1
2.5°	2630.2
5°	2622.2
7.5°	2595.5
10°	2544.8
12.5°	2494.1
15°	2443.5
17.5°	2374.0
20°	2275.4
22.5°	2163.3
25°	2040.7
27.5°	1899.3
30°	1725.9
32.5°	1515.1
35°	1288.4
37.5°	1080.4
40°	901.6
42.5°	760.3
45°	640.2
47.5°	549.6
50°	472.1
52.5°	405.5
55°	349.4
57.5°	301.5
60°	269.4
62.5°	240.1
65°	210.7
67.5°	181.4
70°	157.4
72.5°	130.7
75°	109.4
77.5°	85.4
80°	66.6
82.5°	45.3
85°	26.7
87.5°	10.7
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)