

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: P580877

Luminaire Tested: **HC450D010-HM44560835-41NDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580877  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC450D010-HM44560835-41NDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4326.6 lumens  
Efficiency: N/A  
Efficacy: 90.1 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.01  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

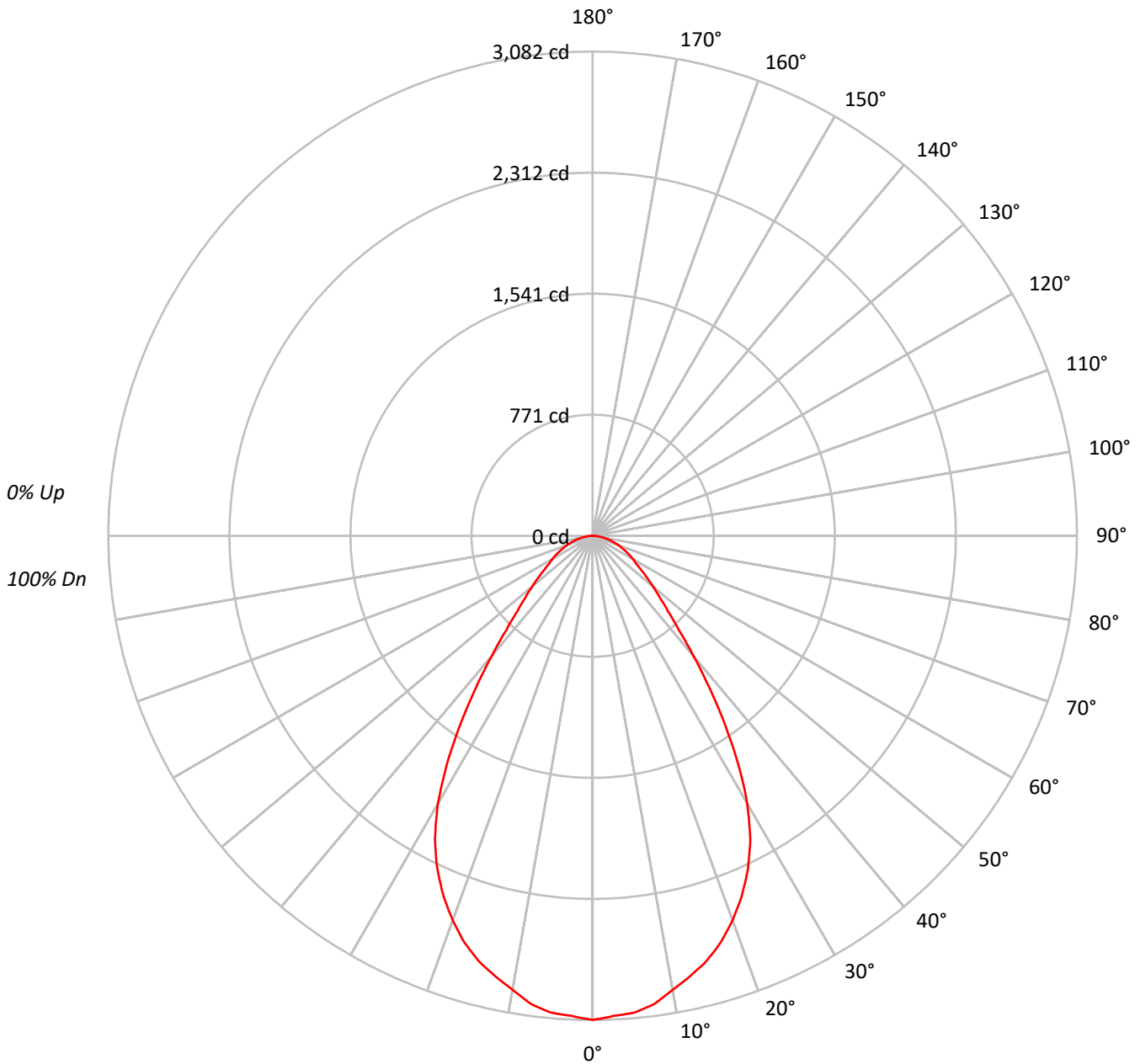
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P580877

CATALOG NUMBER: HC450D010-HM44560835-41NDW

### Luminous Intensity Polar Plot





TEST NUMBER: P580877

CATALOG NUMBER: HC450D010-HM44560835-41NDW

**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	98	96	94	94	92	91	89			89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79			79
3	97	88	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71			71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64			64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58			58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	55	63	58	54	52			52
7	75	63	56	51	73	62	56	51	61	55	50	60	54	50	59	53	50	48			48
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44			44
9	66	55	48	43	65	54	47	43	53	47	43	52	47	43	51	46	42	41			41
10	63	51	44	40	62	51	44	40	50	44	40	49	43	39	48	43	39	38			38

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

	0°
0°	380127
5°	377282
10°	367479
15°	357794
20°	341779
25°	318412
30°	280382
35°	221123
40°	160517
45°	117954
50°	95946
55°	80470
60°	72922
65°	67011
70°	62354
75°	56903
80°	51356
85°	44438



TEST NUMBER: P580877

CATALOG NUMBER: HC450D010-HM44560835-41NDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	287.3	6.6
10°-20°	785.9	18.2
20°-30°	1065.3	24.6
30°-40°	914.1	21.1
40°-50°	539.8	12.5
50°-60°	342.0	7.9
60°-70°	229.8	5.3
70°-80°	126.8	2.9
80°-90°	35.5	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°	2138.5	49.4
0°-40°	3052.7	70.6
0°-60°	3934.5	90.9
0°-90°	4326.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4326.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3082	
5°	3047	287
15°	2802	786
25°	2340	1065
35°	1468	914
45°	676	540
55°	374	342
65°	230	230
75°	119	127
85°	31	36
90°	0	



TEST NUMBER: P580877

CATALOG NUMBER: HC450D010-HM44560835-41NDW

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3081.8
2.5°	3059.7
5°	3047.1
7.5°	3006.3
10°	2934.0
12.5°	2871.1
15°	2801.9
17.5°	2713.8
20°	2603.8
22.5°	2481.1
25°	2339.6
27.5°	2172.9
30°	1968.6
32.5°	1726.4
35°	1468.5
37.5°	1220.1
40°	996.9
42.5°	811.3
45°	676.2
47.5°	578.6
50°	500.0
52.5°	433.9
55°	374.2
57.5°	327.0
60°	295.6
62.5°	264.1
65°	229.6
67.5°	201.3
70°	172.9
72.5°	144.7
75°	119.4
77.5°	94.3
80°	72.3
82.5°	50.4
85°	31.4
87.5°	12.6
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)