

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: P580894

Luminaire Tested: **HC450D010-HM44560840-41MDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580894  
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: HC450D010-HM44560840-41MDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5176.1 lumens  
Efficiency: N/A  
Efficacy: 107.8 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

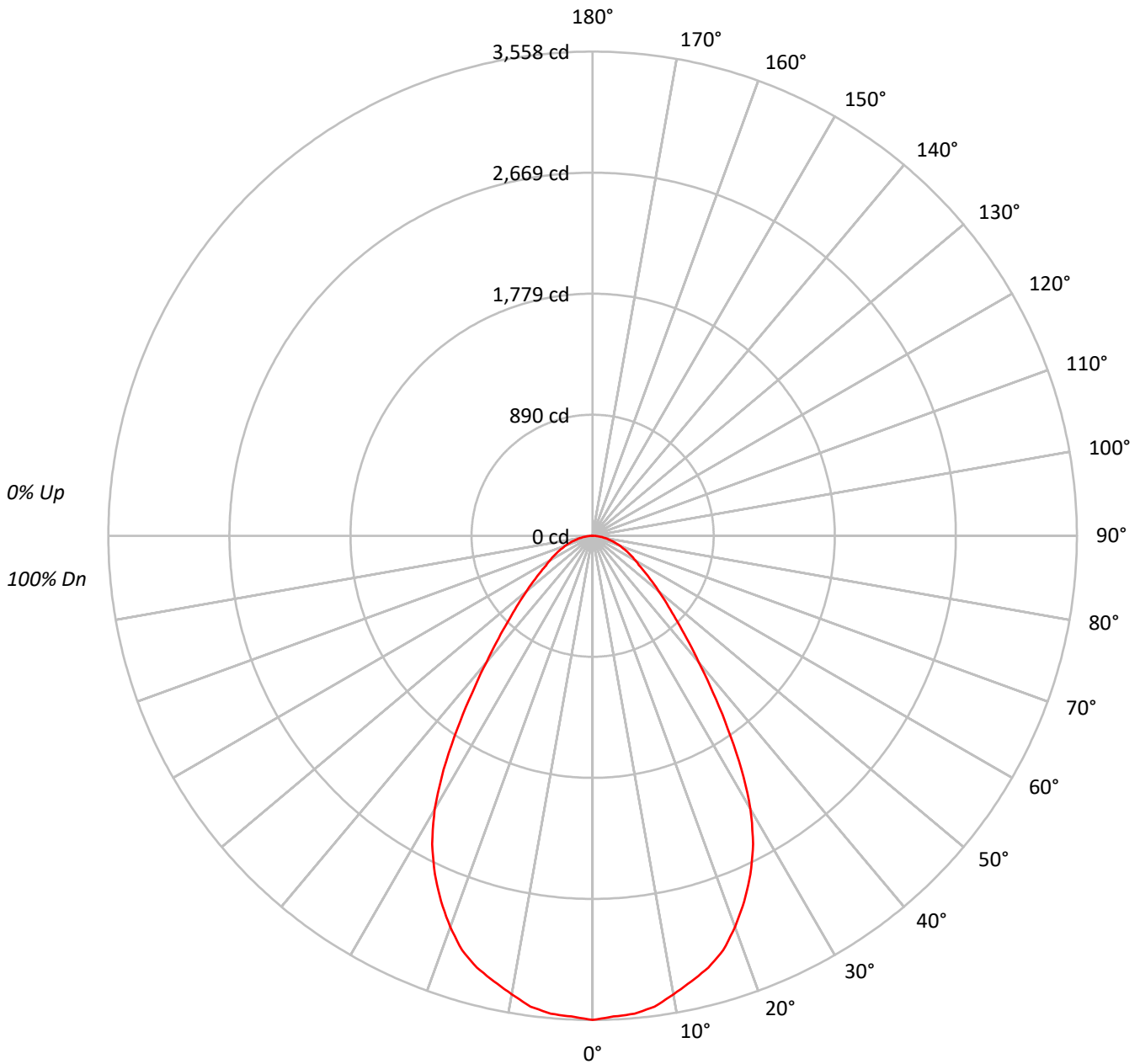
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P580894

CATALOG NUMBER: HC450D010-HM44560840-41MDW

### Luminous Intensity Polar Plot





TEST NUMBER: P580894

CATALOG NUMBER: HC450D010-HM44560840-41MDW

**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°	438839
5°	436516
10°	428538
15°	419497
20°	401556
25°	373395
30°	330488
35°	260830
40°	195184
45°	150138
50°	121813
55°	101029
60°	89352
65°	82684
70°	76275
75°	70056
80°	63716
85°	50807



TEST NUMBER: P580894

CATALOG NUMBER: HC450D010-HM44560840-41MDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	333.3	6.4
10°-20°	921.3	17.8
20°-30°	1250.9	24.2
30°-40°	1083.6	20.9
40°-50°	680.3	13.1
50°-60°	428.0	8.3
60°-70°	281.1	5.4
70°-80°	155.1	3.0
80°-90°	42.5	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°	2505.5	48.4
0°-40°	3589.1	69.3
0°-60°	4697.4	90.8
0°-90°	5176.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5176.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3558	
5°	3526	333
15°	3285	921
25°	2744	1251
35°	1732	1084
45°	861	680
55°	470	428
65°	283	281
75°	147	155
85°	36	42
90°	0	



TEST NUMBER: P580894

CATALOG NUMBER: HC450D010-HM44560840-41MDW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3557.8
2.5°	3536.2
5°	3525.5
7.5°	3489.6
10°	3421.5
12.5°	3353.3
15°	3285.1
17.5°	3191.9
20°	3059.2
22.5°	2908.6
25°	2743.6
27.5°	2553.5
30°	2320.4
32.5°	2037.1
35°	1732.2
37.5°	1452.5
40°	1212.2
42.5°	1022.1
45°	860.7
47.5°	738.8
50°	634.8
52.5°	545.1
55°	469.8
57.5°	405.3
60°	362.2
62.5°	322.8
65°	283.3
67.5°	243.9
70°	211.5
72.5°	175.7
75°	147.0
77.5°	114.8
80°	89.7
82.5°	61.0
85°	35.9
87.5°	14.4
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)