

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: P592879

Luminaire Tested: **HC450D010-HM44560850-41NDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592879  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC450D010-HM44560850-41NDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5305.1 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 0.84 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

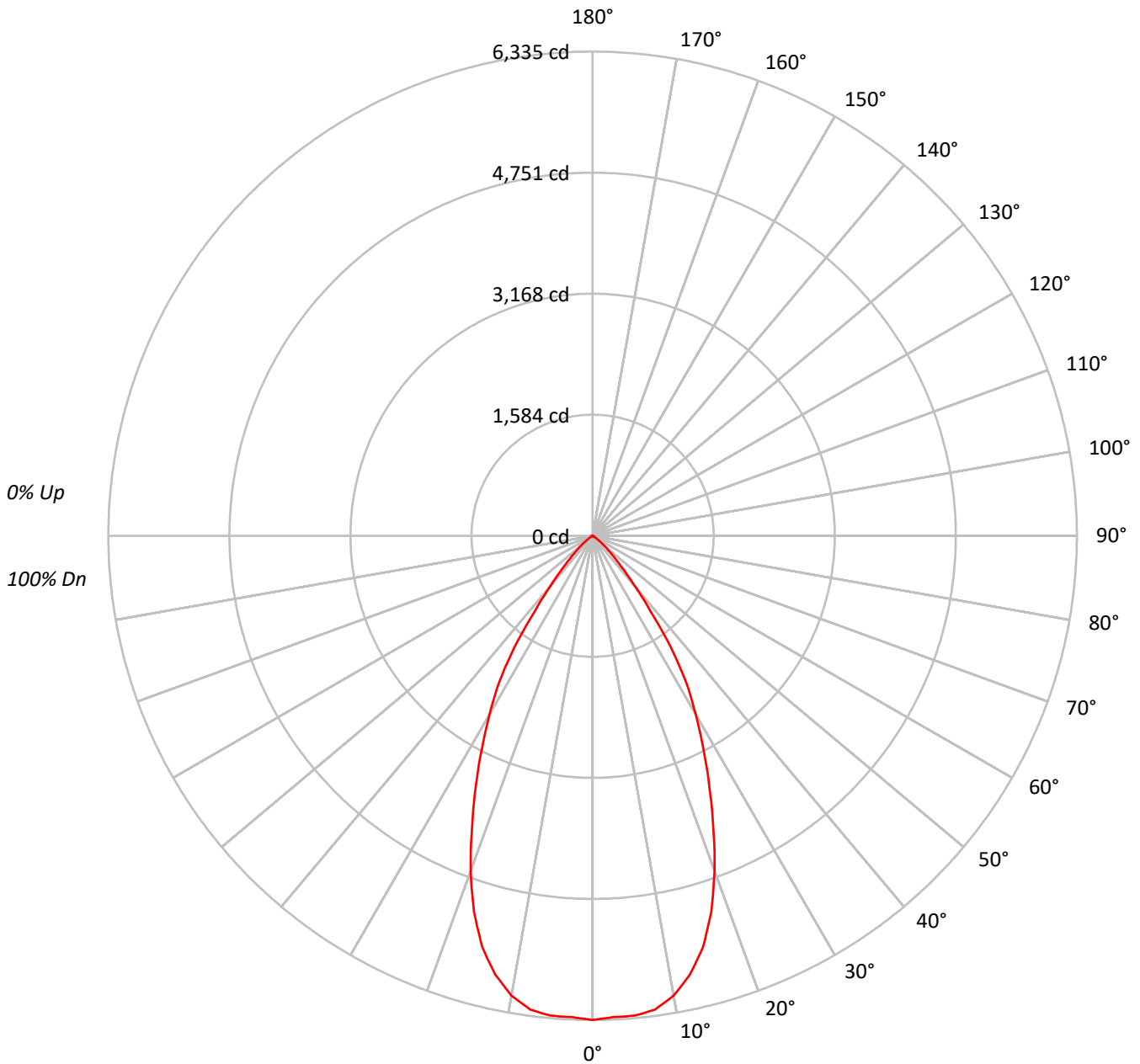
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P592879

CATALOG NUMBER: HC450D010-HM44560850-41NDC

### Luminous Intensity Polar Plot





TEST NUMBER: P592879

CATALOG NUMBER: HC450D010-HM44560850-41NDC

**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	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94			94
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	93	91	89	87			87
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81			81
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			76
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	78	75	72	71			71
6	88	79	73	69	87	78	73	69	77	72	68	75	71	68	74	70	67	66			66
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62			62
8	80	70	64	60	78	70	64	60	69	64	60	68	63	60	67	62	59	58			58
9	76	66	61	57	75	66	60	57	65	60	56	64	59	56	63	59	56	55			55
10	72	63	57	53	71	62	57	53	62	57	53	61	56	53	60	56	53	51			51

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

	0°
0°	781395
5°	780392
10°	765180
15°	711514
20°	611903
25°	491555
30°	383770
35°	268690
40°	137894
45°	70002
50°	35078
55°	13096
60°	5304
65°	4174
70°	2597
75°	1668
80°	2486
85°	0



TEST NUMBER: P592879

CATALOG NUMBER: HC450D010-HM44560850-41NDC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	595.9	11.2
10°-20°	1538.0	29.0
20°-30°	1656.9	31.2
30°-40°	1088.6	20.5
40°-50°	338.5	6.4
50°-60°	66.5	1.3
60°-70°	14.1	0.3
70°-80°	5.2	0.1
80°-90°	1.4	0.0
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°	3790.8	71.5
0°-40°	4879.4	92.0
0°-60°	5284.4	99.6
0°-90°	5305.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5305.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	6335	
5°	6303	596
15°	5572	1538
25°	3612	1657
35°	1784	1089
45°	401	338
55°	61	66
65°	14	14
75°	4	5
85°	0	1
90°	0	



TEST NUMBER: P592879

CATALOG NUMBER: HC450D010-HM44560850-41NDC

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	6335.0
2.5°	6302.8
5°	6302.8
7.5°	6252.7
10°	6109.3
12.5°	5880.1
15°	5571.9
17.5°	5159.8
20°	4661.7
22.5°	4124.2
25°	3611.8
27.5°	3135.2
30°	2694.5
32.5°	2278.9
35°	1784.4
37.5°	1243.4
40°	856.4
42.5°	591.2
45°	401.3
47.5°	272.3
50°	182.8
52.5°	114.7
55°	60.9
57.5°	25.1
60°	21.5
62.5°	17.9
65°	14.3
67.5°	10.7
70°	7.2
72.5°	7.2
75°	3.5
77.5°	3.5
80°	3.5
82.5°	3.5
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)