

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: P580891

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

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580891  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC450D010-HM44560840-41MDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5534.6 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1 / 0.96  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

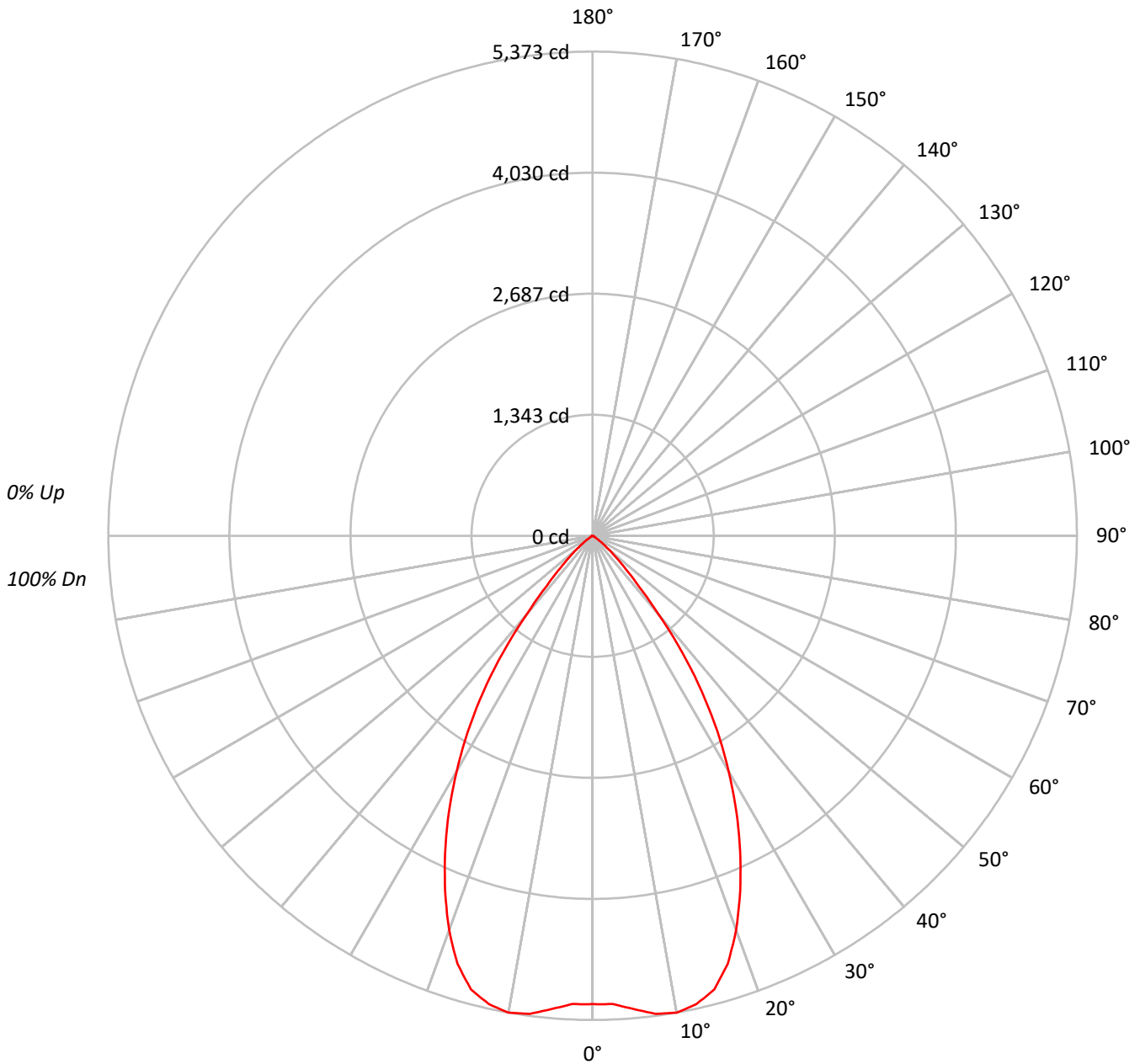
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P580891

CATALOG NUMBER: HC450D010-HM44560840-41MDC

### Luminous Intensity Polar Plot





TEST NUMBER: P580891

CATALOG NUMBER: HC450D010-HM44560840-41MDC

**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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86			
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80			
4	97	89	83	79	95	88	82	78	86	81	77	84	80	77	82	78	76	74			
5	91	83	77	72	90	82	76	72	80	75	72	78	74	71	77	73	70	69			
6	87	78	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64			
7	82	73	66	62	81	72	66	62	71	65	62	69	65	61	68	64	61	60			
8	78	68	62	58	77	68	62	58	67	61	57	65	61	57	65	60	57	56			
9	74	64	58	54	73	64	58	54	63	57	54	62	57	54	61	57	53	52			
10	70	61	55	51	69	60	54	51	59	54	50	58	54	50	58	53	50	49			

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

	0°
0°	641077
5°	652861
10°	672985
15°	665530
20°	611115
25°	527212
30°	429646
35°	318124
40°	182512
45°	88230
50°	42005
55°	14666
60°	5304
65°	3123
70°	2597
75°	1668
80°	0
85°	0



TEST NUMBER: P580891

CATALOG NUMBER: HC450D010-HM44560840-41MDC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	507.1	9.2
10°-20°	1444.9	26.1
20°-30°	1764.4	31.9
30°-40°	1297.1	23.4
40°-50°	430.0	7.8
50°-60°	75.9	1.4
60°-70°	11.5	0.2
70°-80°	3.7	0.1
80°-90°	0.0	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°	3716.4	67.1
0°-40°	5013.5	90.6
0°-60°	5519.4	99.7
0°-90°	5534.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5534.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5197	
5°	5273	507
15°	5212	1445
25°	3874	1764
35°	2113	1297
45°	506	430
55°	68	76
65°	11	11
75°	4	4
85°	0	0
90°	0	



TEST NUMBER: P580891

CATALOG NUMBER: HC450D010-HM44560840-41MDC

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	5197.4
2.5°	5200.9
5°	5272.8
7.5°	5351.6
10°	5373.2
12.5°	5322.9
15°	5211.8
17.5°	4982.2
20°	4655.7
22.5°	4275.6
25°	3873.8
27.5°	3454.2
30°	3016.6
32.5°	2579.0
35°	2112.7
37.5°	1639.2
40°	1133.5
42.5°	749.7
45°	505.8
47.5°	337.2
50°	218.9
52.5°	129.1
55°	68.2
57.5°	28.7
60°	21.5
62.5°	14.4
65°	10.7
67.5°	7.2
70°	7.2
72.5°	3.5
75°	3.5
77.5°	3.5
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)