

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: P580924

Luminaire Tested: **HC450D010-HM44560930-41NDH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580924
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC450D010-HM44560930-41NDH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3680.5 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

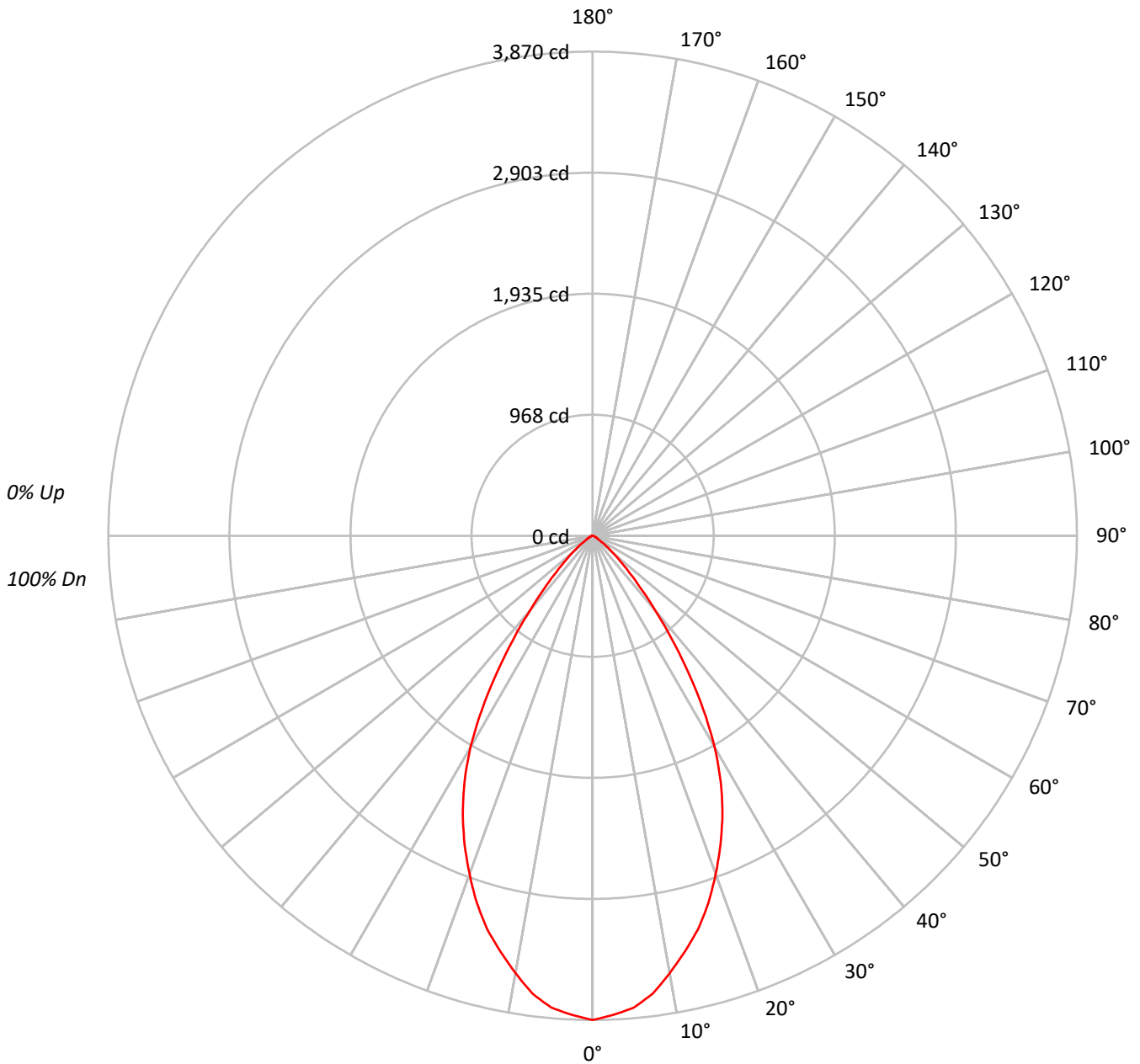
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P580924

CATALOG NUMBER: HC450D010-HM44560930-41NDH

Luminous Intensity Polar Plot





TEST NUMBER: P580924

CATALOG NUMBER: HC450D010-HM44560930-41NDH

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	100	100
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86	86	86	86
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79	79	79	79
4	96	88	82	78	94	87	81	77	85	80	76	82	79	75	81	77	74	73	73	73	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63	63	63	63
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54	54	54	54
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51	51	51	51
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48	48	48	48

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	477360
5°	468684
10°	444544
15°	415666
20°	377509
25°	334063
30°	277876
35°	200358
40°	125061
45°	72130
50°	40700
55°	19376
60°	11126
65°	8493
70°	5734
75°	3813
80°	3765
85°	3821



TEST NUMBER: P580924

CATALOG NUMBER: HC450D010-HM44560930-41NDH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.8	9.6
10°-20°	908.0	24.7
20°-30°	1116.8	30.3
30°-40°	829.4	22.5
40°-50°	337.2	9.2
50°-60°	93.4	2.5
60°-70°	29.1	0.8
70°-80°	9.8	0.3
80°-90°	2.9	0.1
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°	2378.7	64.6
0°-40°	3208.1	87.2
0°-60°	3638.7	98.9
0°-90°	3680.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3680.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3870	
5°	3785	354
15°	3255	908
25°	2455	1117
35°	1331	829
45°	414	337
55°	90	93
65°	29	29
75°	8	10
85°	3	3
90°	0	



TEST NUMBER: P580924

CATALOG NUMBER: HC450D010-HM44560930-41NDH

CANDELA DISTRIBUTION (FULL):

	0°
0°	3870.1
2.5°	3833.0
5°	3785.3
7.5°	3689.9
10°	3549.3
12.5°	3403.5
15°	3255.1
17.5°	3077.5
20°	2876.0
22.5°	2672.0
25°	2454.6
27.5°	2218.6
30°	1951.0
32.5°	1646.1
35°	1330.6
37.5°	1033.8
40°	776.7
42.5°	567.2
45°	413.5
47.5°	296.9
50°	212.1
52.5°	145.8
55°	90.1
57.5°	58.3
60°	45.1
62.5°	37.1
65°	29.1
67.5°	21.3
70°	15.9
72.5°	13.3
75°	8.0
77.5°	5.3
80°	5.3
82.5°	2.7
85°	2.7
87.5°	2.7
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)