

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: P580834

Luminaire Tested: **HC450D010-HM44560827-41NDH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580834
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-HM44560827-41NDH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3909.5 lumens
Efficiency: N/A
Efficacy: 81.4 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

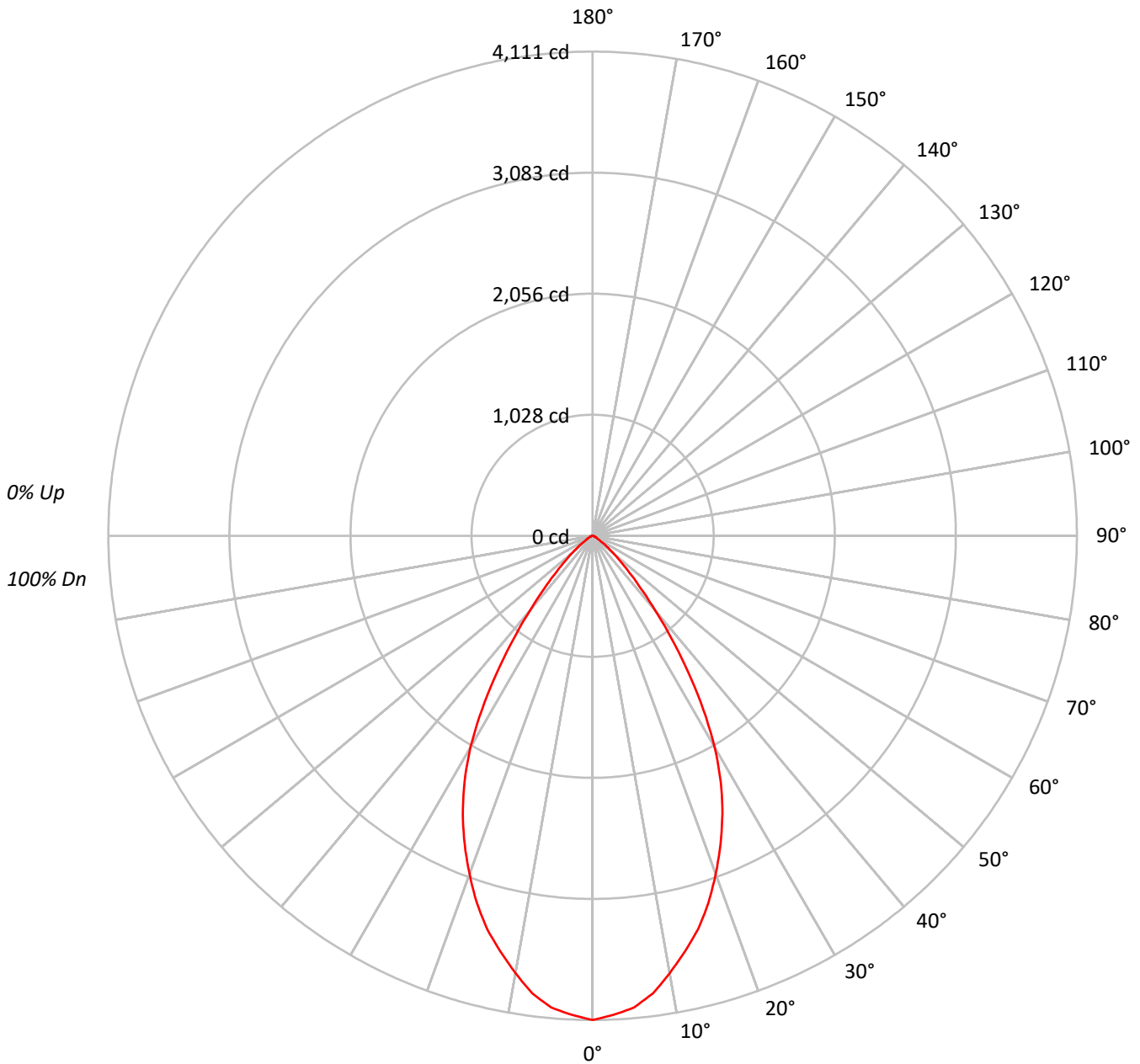
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	83	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°	507074
5°	497843
10°	472212
15°	441537
20°	401018
25°	354859
30°	295166
35°	212841
40°	132838
45°	76630
50°	43233
55°	20601
60°	11792
65°	9048
70°	6095
75°	4003
80°	3978
85°	3963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.8	9.6
10°-20°	964.6	24.7
20°-30°	1186.3	30.3
30°-40°	881.0	22.5
40°-50°	358.2	9.2
50°-60°	99.2	2.5
60°-70°	30.9	0.8
70°-80°	10.4	0.3
80°-90°	3.1	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°	2526.8	64.6
0°-40°	3407.8	87.2
0°-60°	3865.2	98.9
0°-90°	3909.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3909.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	4111	
5°	4021	376
15°	3458	965
25°	2607	1186
35°	1414	881
45°	439	358
55°	96	99
65°	31	31
75°	8	10
85°	3	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	4111.0
2.5°	4071.5
5°	4020.8
7.5°	3919.6
10°	3770.2
12.5°	3615.5
15°	3457.7
17.5°	3269.1
20°	3055.1
22.5°	2838.2
25°	2607.4
27.5°	2356.8
30°	2072.4
32.5°	1748.6
35°	1413.5
37.5°	1098.1
40°	825.0
42.5°	602.5
45°	439.3
47.5°	315.4
50°	225.3
52.5°	154.9
55°	95.8
57.5°	62.0
60°	47.8
62.5°	39.4
65°	31.0
67.5°	22.5
70°	16.9
72.5°	14.1
75°	8.4
77.5°	5.6
80°	5.6
82.5°	2.8
85°	2.8
87.5°	2.8
90°	0.0



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— 0°-180°







(END OF REPORT)