

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: P580961

Luminaire Tested: **HC450D010-HM44560940-41WDH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580961
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-8)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC450D010-HM44560940-41WDH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4373.4 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.11
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

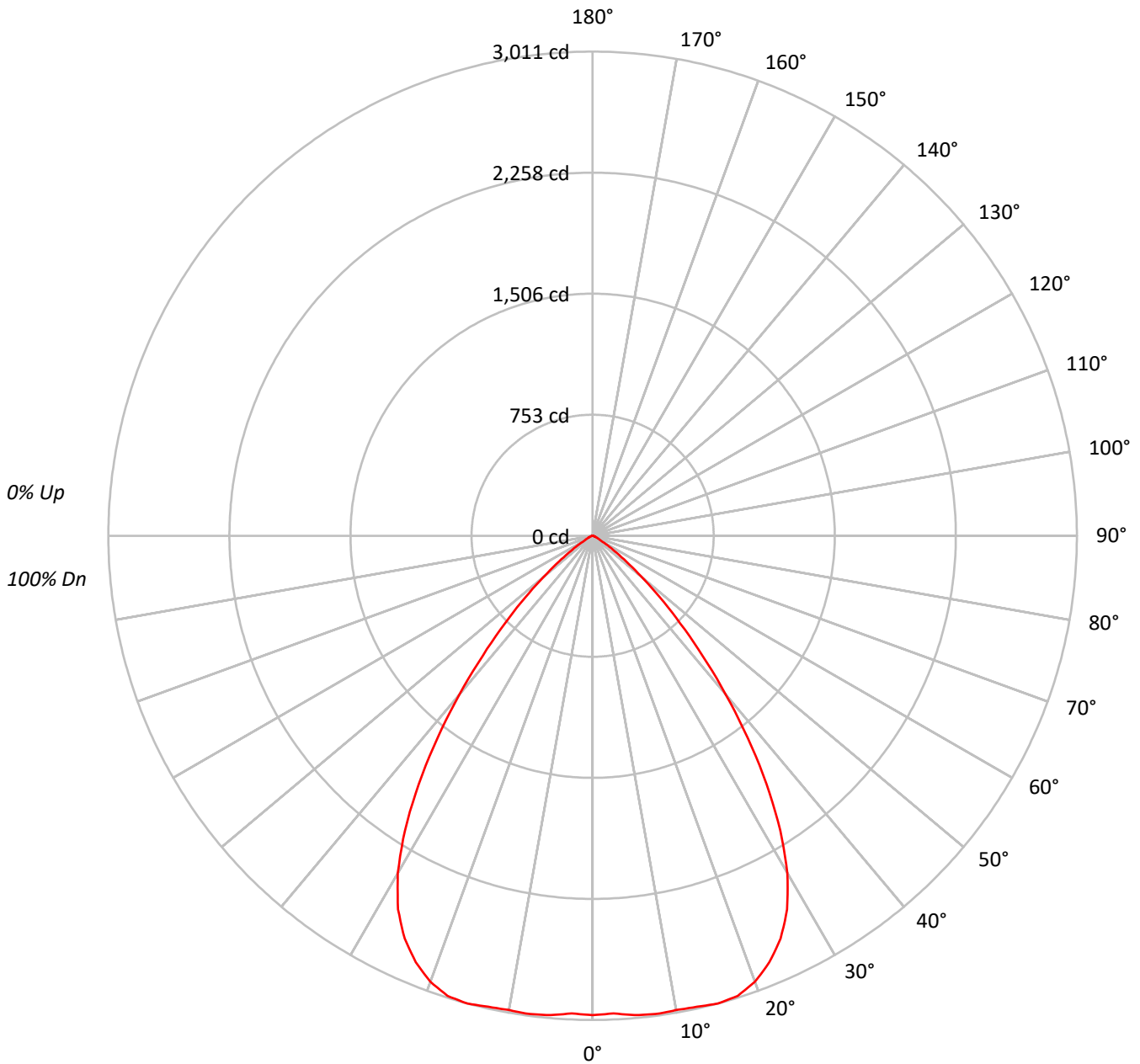
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	104	110	108	105	103	103	101	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	86	84	84	84	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76	76	76	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69	69	69	69
5	88	79	72	67	86	78	72	67	76	70	66	74	69	66	72	68	65	63	63	63	63
6	83	73	66	61	81	72	66	61	70	65	61	69	64	60	68	63	60	58	58	58	58
7	78	68	61	56	77	67	60	56	65	60	55	64	59	55	63	58	55	53	53	53	53
8	74	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	51	49	49	49	49
9	69	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45	45	45	45
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42	42	42	42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	367693
5°	370460
10°	375094
15°	384521
20°	387340
25°	376253
30°	344973
35°	283853
40°	206906
45°	134299
50°	75701
55°	35956
60°	14209
65°	8785
70°	5951
75°	3908
80°	1989
85°	3963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.7	6.5
10°-20°	848.9	19.4
20°-30°	1259.1	28.8
30°-40°	1163.0	26.6
40°-50°	607.2	13.9
50°-60°	166.4	3.8
60°-70°	32.0	0.7
70°-80°	9.0	0.2
80°-90°	1.9	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°	2393.8	54.7
0°-40°	3556.7	81.3
0°-60°	4330.4	99.0
0°-90°	4373.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4373.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2981	
5°	2992	286
15°	3011	849
25°	2765	1259
35°	1885	1163
45°	770	607
55°	167	166
65°	30	32
75°	8	9
85°	3	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2981.0
2.5°	2972.8
5°	2992.0
7.5°	3000.2
10°	2994.8
12.5°	3000.2
15°	3011.2
17.5°	3000.2
20°	2950.9
22.5°	2871.4
25°	2764.6
27.5°	2619.4
30°	2422.1
32.5°	2172.8
35°	1885.1
37.5°	1583.7
40°	1285.0
42.5°	1011.0
45°	769.9
47.5°	564.5
50°	394.5
52.5°	263.0
55°	167.2
57.5°	98.6
60°	57.6
62.5°	41.1
65°	30.1
67.5°	21.9
70°	16.5
72.5°	11.0
75°	8.2
77.5°	5.5
80°	2.8
82.5°	2.8
85°	2.8
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)