

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: P580841

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

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC450D010-HM44560827-41NDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3875.7 lumens
Efficiency: N/A
Efficacy: 80.7 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.01
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

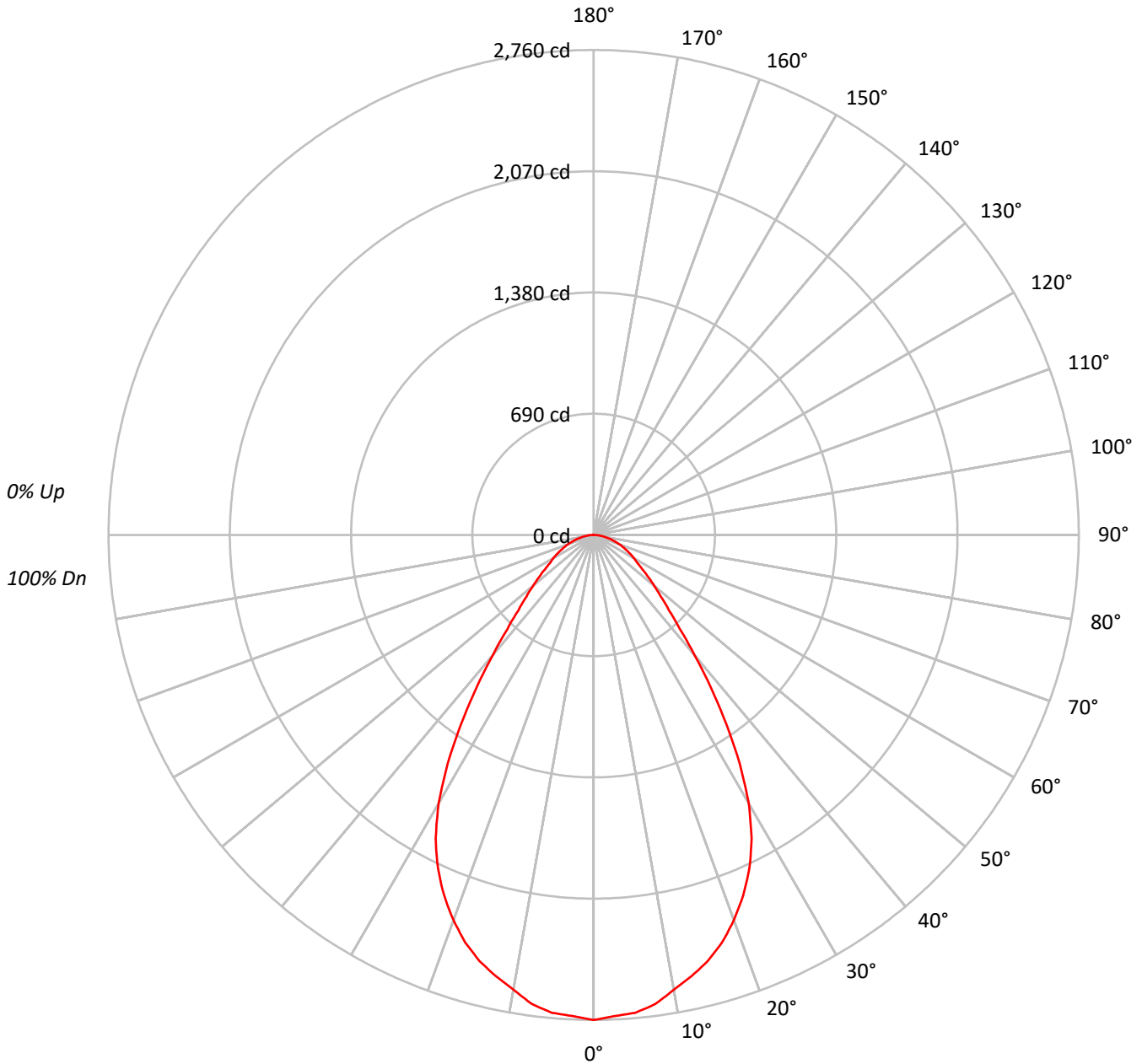
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
1	111	108	104	101	109	105	102	100	101	99	97	98	96	94	94	92	91	89			89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79			79
3	97	88	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71			71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64			64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58			58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	55	63	58	54	52			52
7	75	63	56	51	73	62	56	51	61	55	50	60	54	50	59	53	50	48			48
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44			44
9	66	55	48	43	65	54	47	43	53	47	43	52	47	43	51	46	42	41			41
10	63	51	44	40	62	51	44	40	50	44	40	49	43	39	48	43	39	38			38

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	340496
5°	337958
10°	329165
15°	320493
20°	306142
25°	285232
30°	251142
35°	198069
40°	143771
45°	105639
50°	85948
55°	72084
60°	65324
65°	60036
70°	55899
75°	50993
80°	46029
85°	39768



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.4	6.6
10°-20°	704.0	18.2
20°-30°	954.3	24.6
30°-40°	818.8	21.1
40°-50°	483.5	12.5
50°-60°	306.4	7.9
60°-70°	205.9	5.3
70°-80°	113.6	2.9
80°-90°	31.8	0.8
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°	1915.6	49.4
0°-40°	2734.4	70.6
0°-60°	3524.3	90.9
0°-90°	3875.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3875.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2760	
5°	2730	257
15°	2510	704
25°	2096	954
35°	1315	819
45°	606	483
55°	335	306
65°	206	206
75°	107	114
85°	28	32
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2760.5
2.5°	2740.8
5°	2729.5
7.5°	2692.9
10°	2628.1
12.5°	2571.8
15°	2509.8
17.5°	2431.0
20°	2332.3
22.5°	2222.5
25°	2095.8
27.5°	1946.4
30°	1763.3
32.5°	1546.5
35°	1315.4
37.5°	1092.9
40°	892.9
42.5°	726.7
45°	605.6
47.5°	518.3
50°	447.9
52.5°	388.8
55°	335.2
57.5°	292.9
60°	264.8
62.5°	236.6
65°	205.7
67.5°	180.3
70°	155.0
72.5°	129.6
75°	107.0
77.5°	84.5
80°	64.8
82.5°	45.1
85°	28.1
87.5°	11.3
90°	0.0



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— 0°-180°







(END OF REPORT)