

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: P580896

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

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580896
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC450D010-HM44560840-41PSMDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" PLASTIC TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5068.7 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.03 / 0.99
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

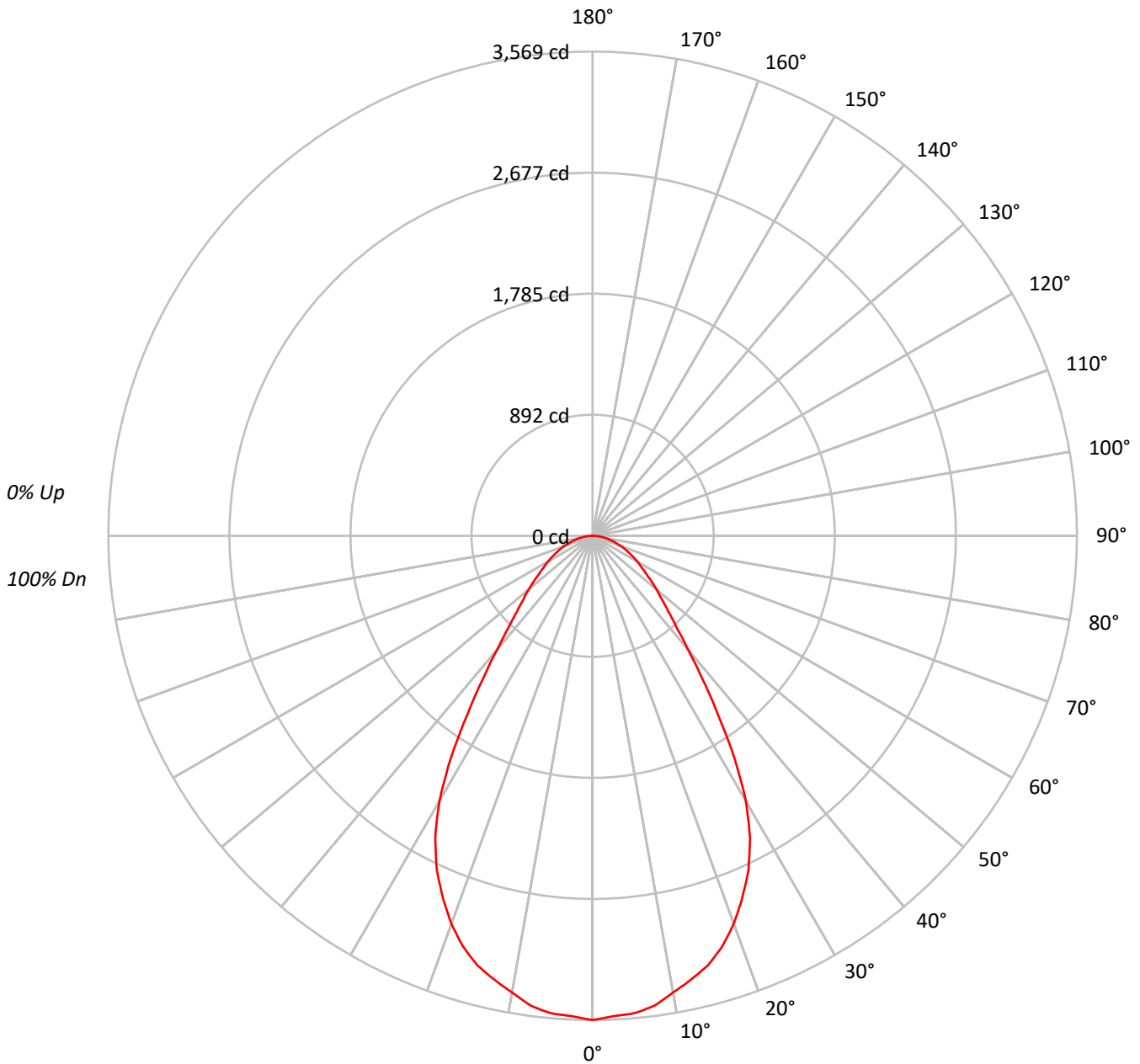
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89			
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70			
4	90	80	73	68	88	79	72	67	77	71	66	74	69	65	72	68	65	63			
5	84	74	66	61	82	72	66	60	71	64	60	69	63	59	67	62	59	57			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47			
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40			
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	440258
5°	437507
10°	428212
15°	418718
20°	399364
25°	369707
30°	321558
35°	242836
40°	176007
45°	137526
50°	117591
55°	101717
60°	93718
65°	85778
70°	80134
75°	73440
80°	68759
85°	65950



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.7	6.6
10°-20°	918.5	18.1
20°-30°	1235.1	24.4
30°-40°	1015.6	20.0
40°-50°	623.7	12.3
50°-60°	431.6	8.5
60°-70°	294.3	5.8
70°-80°	164.0	3.2
80°-90°	52.2	1.0
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°	2487.3	49.1
0°-40°	3502.9	69.1
0°-60°	4558.3	89.9
0°-90°	5068.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5068.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3569	
5°	3534	334
15°	3279	919
25°	2716	1235
35°	1613	1016
45°	788	624
55°	473	432
65°	294	294
75°	154	164
85°	47	52
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	3569.3
2.5°	3544.3
5°	3533.5
7.5°	3494.0
10°	3418.9
12.5°	3350.8
15°	3279.0
17.5°	3175.1
20°	3042.5
22.5°	2884.8
25°	2716.5
27.5°	2512.1
30°	2257.7
32.5°	1945.9
35°	1612.7
37.5°	1326.0
40°	1093.1
42.5°	913.8
45°	788.4
47.5°	691.7
50°	612.8
52.5°	541.1
55°	473.0
57.5°	422.9
60°	379.9
62.5°	336.9
65°	293.9
67.5°	258.0
70°	222.2
72.5°	186.3
75°	154.1
77.5°	121.9
80°	96.8
82.5°	71.6
85°	46.6
87.5°	25.1
90°	0.0



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— 0°-180°







(END OF REPORT)