

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: P580914

Luminaire Tested: **HC450D010-HM44560927-41PSMDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580914
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-HM44560927-41PSMDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" PLASTIC TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3451.6 lumens
Efficiency: N/A
Efficacy: 71.9 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

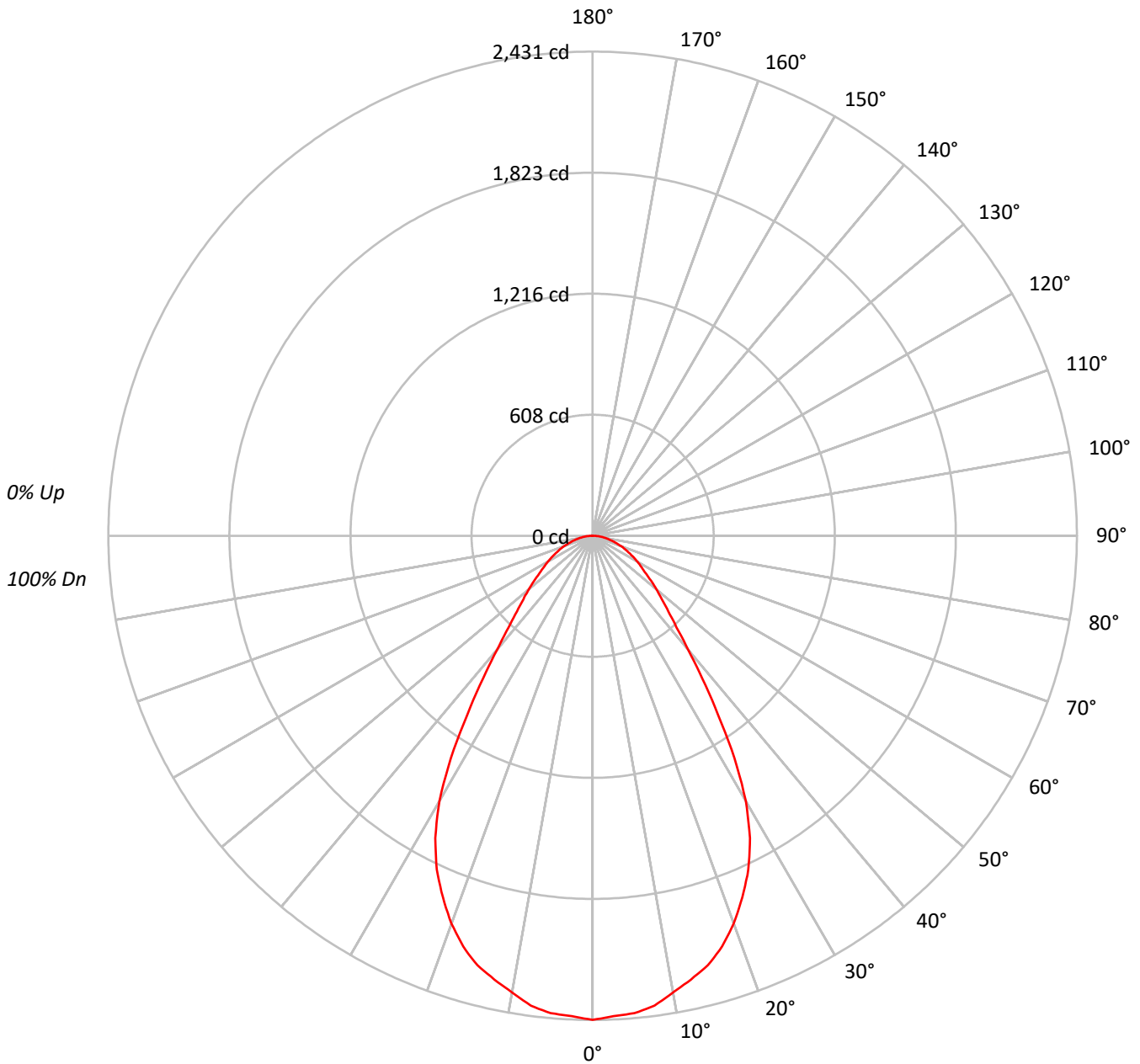
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	299804
5°	297940
10°	291591
15°	285134
20°	271961
25°	251752
30°	218968
35°	165349
40°	119844
45°	93655
50°	80076
55°	69266
60°	63819
65°	58401
70°	54565
75°	49992
80°	46810
85°	45004



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.3	6.6
10°-20°	625.5	18.1
20°-30°	841.1	24.4
30°-40°	691.6	20.0
40°-50°	424.7	12.3
50°-60°	293.9	8.5
60°-70°	200.4	5.8
70°-80°	111.6	3.2
80°-90°	35.5	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°	1693.8	49.1
0°-40°	2385.4	69.1
0°-60°	3104.1	89.9
0°-90°	3451.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3451.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2431	
5°	2406	227
15°	2233	625
25°	1850	841
35°	1098	692
45°	537	425
55°	322	294
65°	200	200
75°	105	112
85°	32	36
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2430.6
2.5°	2413.6
5°	2406.3
7.5°	2379.4
10°	2328.1
12.5°	2281.7
15°	2232.9
17.5°	2162.2
20°	2071.9
22.5°	1964.5
25°	1849.8
27.5°	1710.8
30°	1537.4
32.5°	1325.2
35°	1098.1
37.5°	903.0
40°	744.3
42.5°	622.4
45°	536.9
47.5°	471.0
50°	417.3
52.5°	368.5
55°	322.1
57.5°	287.9
60°	258.7
62.5°	229.4
65°	200.1
67.5°	175.7
70°	151.3
72.5°	126.9
75°	104.9
77.5°	83.0
80°	65.9
82.5°	48.8
85°	31.8
87.5°	17.0
90°	0.0



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— 0°-180°







(END OF REPORT)