

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: P580102

Luminaire Tested: **HC420D010-HM40525940-41MDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580102
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC420D010-HM40525940-41MDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1814.3 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.04 / 1.04 / 1.01
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

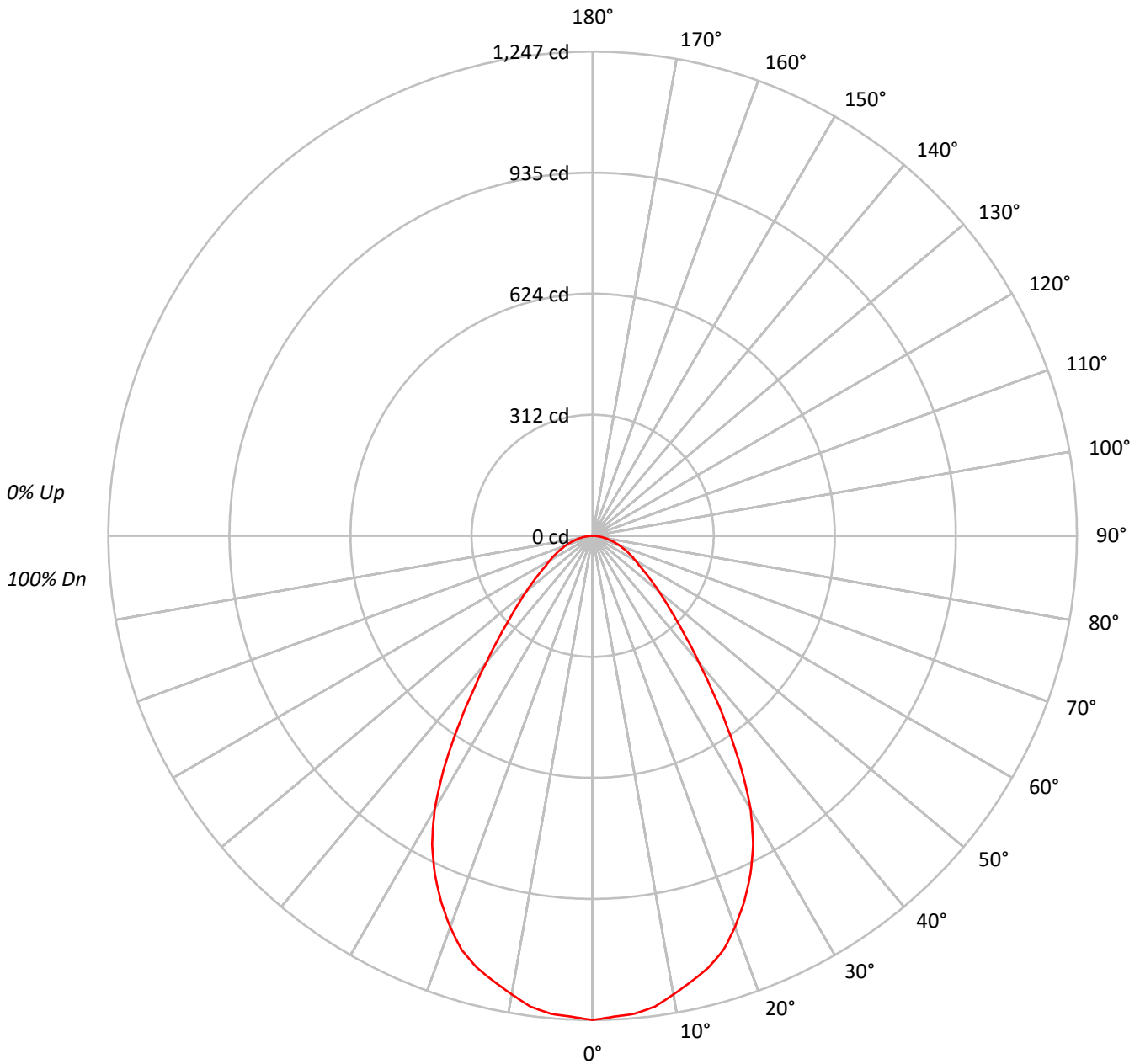
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	153812
5°	153013
10°	150210
15°	147043
20°	140752
25°	130871
30°	115836
35°	91430
40°	68400
45°	52628
50°	42696
55°	35418
60°	31330
65°	28982
70°	26759
75°	24543
80°	22304
85°	17832



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	6.4
10°-20°	322.9	17.8
20°-30°	438.5	24.2
30°-40°	379.8	20.9
40°-50°	238.5	13.1
50°-60°	150.0	8.3
60°-70°	98.5	5.4
70°-80°	54.4	3.0
80°-90°	14.9	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°	878.2	48.4
0°-40°	1258.1	69.3
0°-60°	1646.5	90.8
0°-90°	1814.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1814.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1247	
5°	1236	117
15°	1152	323
25°	962	438
35°	607	380
45°	302	238
55°	165	150
65°	99	99
75°	52	54
85°	13	15
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1247.0
2.5°	1239.6
5°	1235.8
7.5°	1223.2
10°	1199.3
12.5°	1175.4
15°	1151.5
17.5°	1118.8
20°	1072.3
22.5°	1019.6
25°	961.6
27.5°	895.1
30°	813.3
32.5°	714.0
35°	607.2
37.5°	509.2
40°	424.8
42.5°	358.3
45°	301.7
47.5°	259.0
50°	222.5
52.5°	191.1
55°	164.7
57.5°	142.0
60°	127.0
62.5°	113.1
65°	99.3
67.5°	85.5
70°	74.2
72.5°	61.6
75°	51.5
77.5°	40.3
80°	31.4
82.5°	21.3
85°	12.6
87.5°	5.0
90°	0.0



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— 0°-180°







(END OF REPORT)