

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: P579990

Luminaire Tested: **HC420D010-HM40525830-41WDBB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579990
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC420D010-HM40525830-41WDBB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1698.9 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.03
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

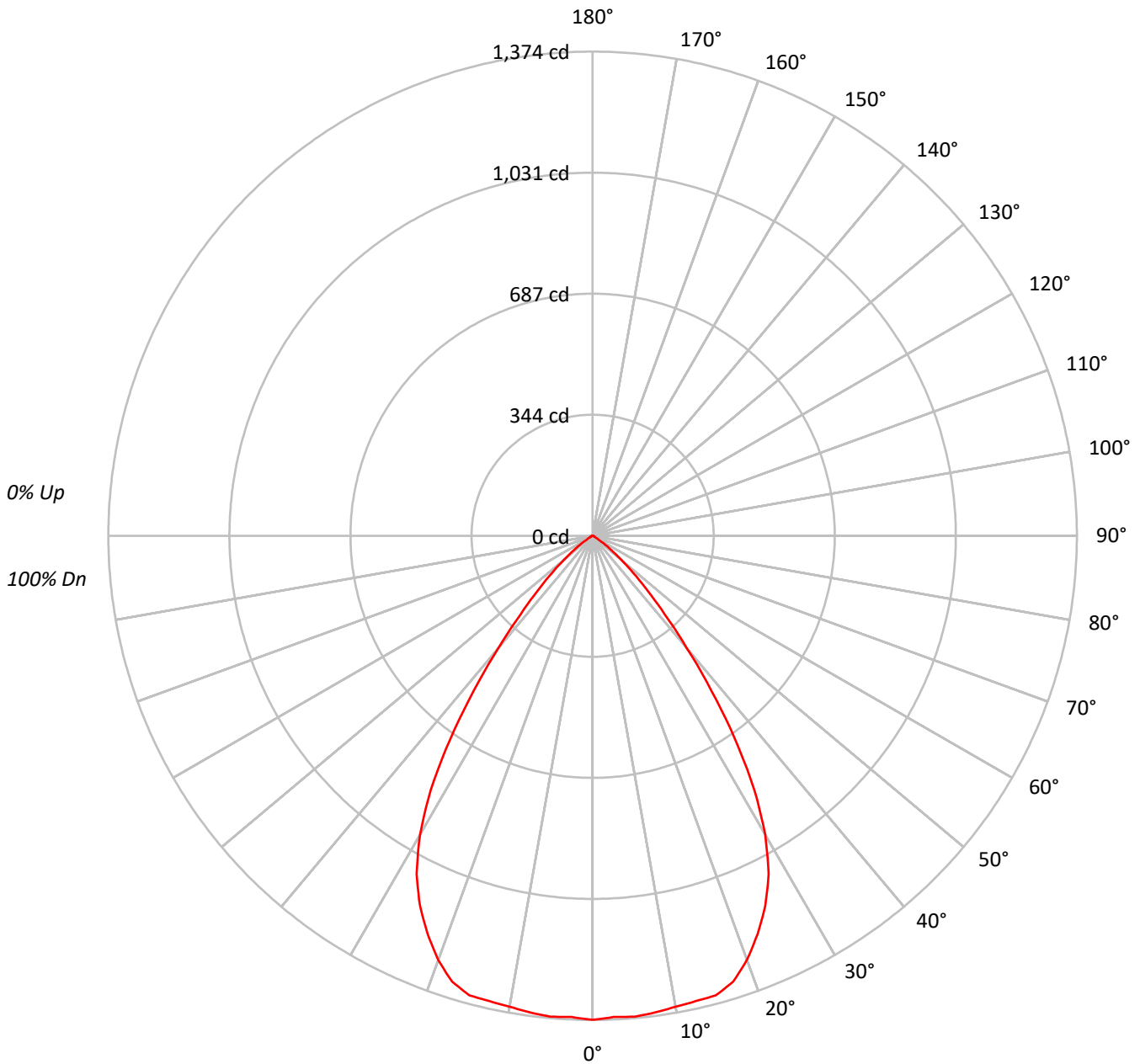
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78	78	78	78
4	95	87	81	77	93	86	80	76	84	79	75	82	78	74	80	76	73	72	72	72	72
5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66	66	66	66
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	62	61	61	61	61
7	80	70	64	59	79	69	63	59	68	63	59	67	62	58	66	61	58	56	56	56	56
8	76	65	59	55	74	65	59	54	64	58	54	63	58	54	62	57	54	52	52	52	52
9	72	61	55	51	71	61	55	51	60	54	50	59	54	50	58	53	50	49	49	49	49
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45	45	45	45

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	169428
5°	169592
10°	169925
15°	172403
20°	168107
25°	157723
30°	139508
35°	106082
40°	66838
45°	38376
50°	20360
55°	8451
60°	2270
65°	1897
70°	1406
75°	1239
80°	923
85°	1840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.3	7.7
10°-20°	378.0	22.3
20°-30°	527.6	31.1
30°-40°	434.2	25.6
40°-50°	178.8	10.5
50°-60°	40.3	2.4
60°-70°	6.5	0.4
70°-80°	2.4	0.1
80°-90°	0.9	0.1
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°	1035.9	61.0
0°-40°	1470.0	86.5
0°-60°	1689.2	99.4
0°-90°	1698.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1698.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1374	
5°	1370	130
15°	1350	378
25°	1159	528
35°	704	434
45°	220	179
55°	39	40
65°	6	6
75°	3	2
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1373.6
2.5°	1367.1
5°	1369.7
7.5°	1364.5
10°	1356.7
12.5°	1352.7
15°	1350.1
17.5°	1326.5
20°	1280.7
22.5°	1223.0
25°	1158.9
27.5°	1081.6
30°	979.5
32.5°	853.8
35°	704.5
37.5°	553.9
40°	415.1
42.5°	302.5
45°	220.0
47.5°	157.1
50°	106.1
52.5°	66.8
55°	39.3
57.5°	19.6
60°	9.2
62.5°	7.9
65°	6.5
67.5°	5.3
70°	3.9
72.5°	2.6
75°	2.6
77.5°	1.3
80°	1.3
82.5°	1.3
85°	1.3
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)