

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: P579975

Luminaire Tested: **HC420D010-HM40525827-41NDH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579975
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC420D010-HM40525827-41NDH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1678.7 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

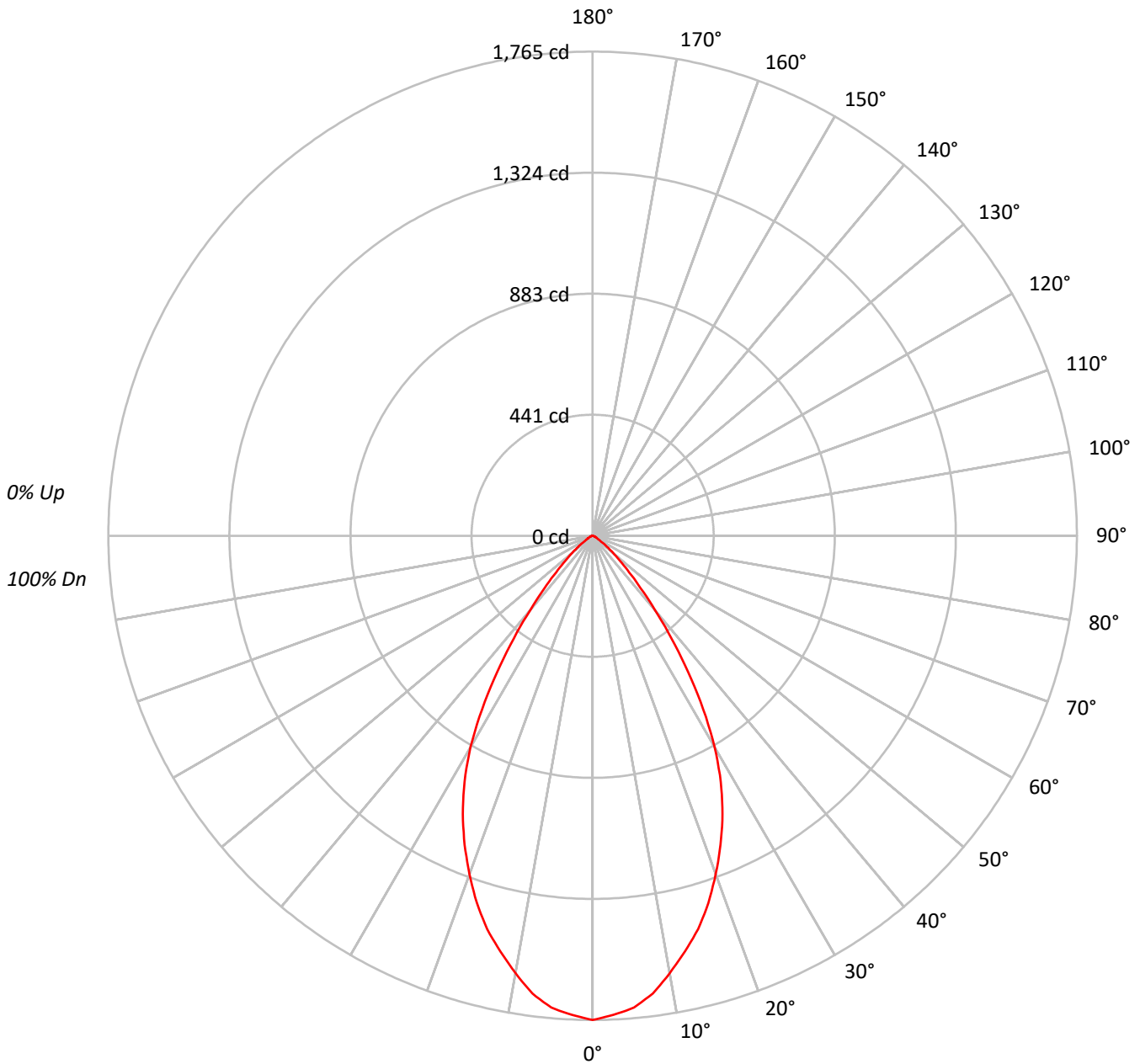
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86	86	86	86
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79	79	79	79
4	96	88	82	78	94	87	81	77	85	80	76	82	79	75	81	77	74	73	73	73	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63	63	63	63
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54	54	54	54
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51	51	51	51
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48	48	48	48

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	217717
5°	213770
10°	202765
15°	189591
20°	172189
25°	152374
30°	126732
35°	91385
40°	57032
45°	32899
50°	18556
55°	8838
60°	5057
65°	3882
70°	2597
75°	1763
80°	1705
85°	1840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.4	9.6
10°-20°	414.2	24.7
20°-30°	509.4	30.3
30°-40°	378.3	22.5
40°-50°	153.8	9.2
50°-60°	42.6	2.5
60°-70°	13.3	0.8
70°-80°	4.5	0.3
80°-90°	1.4	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°	1084.9	64.6
0°-40°	1463.2	87.2
0°-60°	1659.6	98.9
0°-90°	1678.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1678.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1765	
5°	1726	161
15°	1485	414
25°	1120	509
35°	607	378
45°	189	154
55°	41	43
65°	13	13
75°	4	4
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1765.1
2.5°	1748.3
5°	1726.5
7.5°	1683.0
10°	1618.9
12.5°	1552.3
15°	1484.7
17.5°	1403.7
20°	1311.8
22.5°	1218.7
25°	1119.6
27.5°	1012.0
30°	889.8
32.5°	750.8
35°	606.9
37.5°	471.5
40°	354.2
42.5°	258.8
45°	188.6
47.5°	135.5
50°	96.7
52.5°	66.5
55°	41.1
57.5°	26.6
60°	20.5
62.5°	17.0
65°	13.3
67.5°	9.6
70°	7.2
72.5°	6.1
75°	3.7
77.5°	2.4
80°	2.4
82.5°	1.3
85°	1.3
87.5°	1.3
90°	0.0



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— 0°-180°







(END OF REPORT)