

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: P580029

Luminaire Tested: **HC420D010-HM40525840-41WDC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580029
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC420D010-HM40525840-41WDC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2367.8 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.11
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

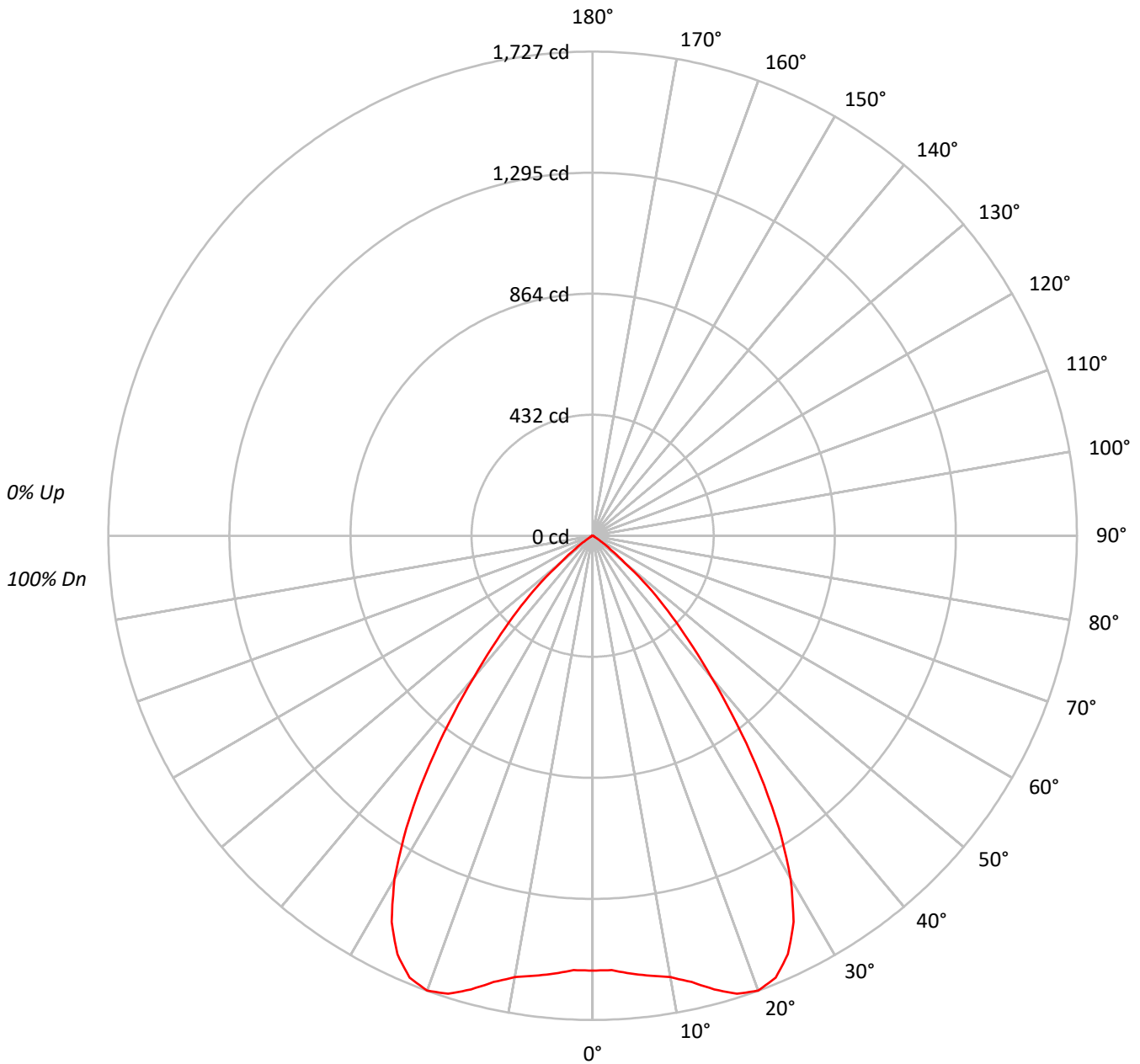
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92			92
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85			85
3	101	93	88	84	98	92	87	83	89	85	82	87	83	80	85	82	79	77			77
4	95	86	80	76	93	85	79	75	83	78	74	81	77	73	79	75	72	71			71
5	89	80	73	69	87	79	73	68	77	72	68	75	71	67	74	70	66	65			65
6	84	74	67	63	82	73	67	62	72	66	62	70	65	62	69	65	61	60			60
7	79	69	62	57	78	68	62	57	67	61	57	65	60	57	64	60	56	55			55
8	75	64	57	53	73	63	57	53	62	57	53	61	56	52	60	56	52	51			51
9	70	60	53	49	69	59	53	49	58	53	49	57	52	48	56	52	48	47			47
10	67	56	50	45	66	55	49	45	55	49	45	54	49	45	53	48	45	43			43

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	191272
5°	194083
10°	200172
15°	213892
20°	226636
25°	224165
30°	201179
35°	156585
40°	106078
45°	66234
50°	28649
55°	9591
60°	2393
65°	1634
70°	1010
75°	667
80°	994
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.6	6.4
10°-20°	475.5	20.1
20°-30°	745.0	31.5
30°-40°	643.0	27.2
40°-50°	295.7	12.5
50°-60°	50.2	2.1
60°-70°	5.7	0.2
70°-80°	2.0	0.1
80°-90°	0.2	0.0
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°	1371.0	57.9
0°-40°	2014.0	85.1
0°-60°	2359.9	99.7
0°-90°	2367.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2367.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1551	
5°	1568	151
15°	1675	475
25°	1647	745
35°	1040	643
45°	380	296
55°	45	50
65°	6	6
75°	1	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1550.7
2.5°	1550.7
5°	1567.5
7.5°	1582.9
10°	1598.2
12.5°	1630.3
15°	1675.0
17.5°	1712.7
20°	1726.6
22.5°	1705.7
25°	1647.1
27.5°	1552.1
30°	1412.5
32.5°	1236.7
35°	1039.9
37.5°	841.7
40°	658.8
42.5°	503.9
45°	379.7
47.5°	266.6
50°	149.3
52.5°	82.4
55°	44.6
57.5°	22.4
60°	9.7
62.5°	7.0
65°	5.6
67.5°	4.2
70°	2.8
72.5°	2.8
75°	1.4
77.5°	1.4
80°	1.4
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)