

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: P580043

Luminaire Tested: **HC420D010-HM40525927-41WDH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580043
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-8)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC420D010-HM40525927-41WDH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1652.4 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.11
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

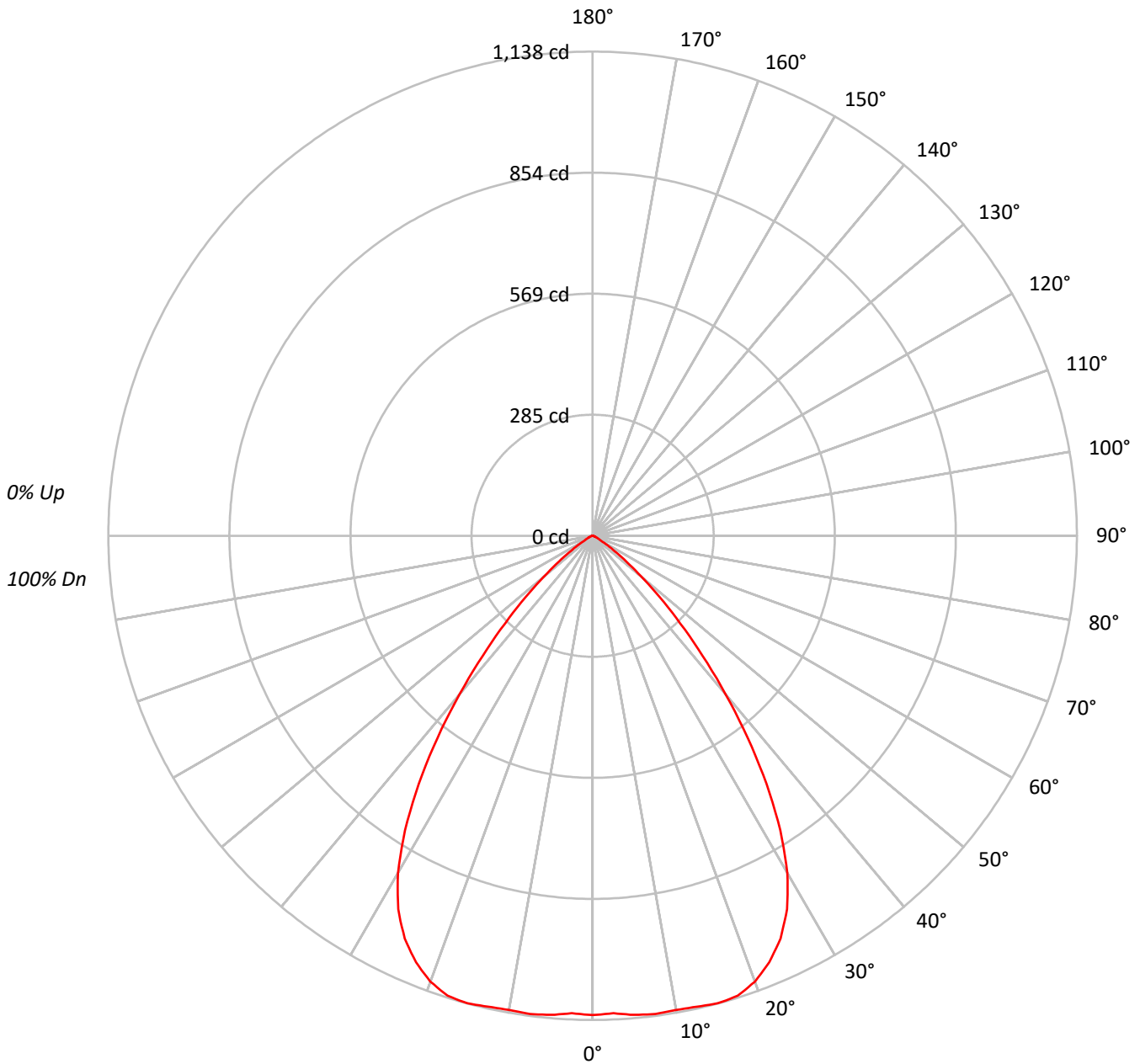
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100
1	113	110	107	104	110	108	105	103	103	101	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	86	84	84	84	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76	76	76	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69	69	69	69
5	88	79	72	67	86	78	72	67	76	70	66	74	69	66	72	68	65	63	63	63	63
6	83	73	66	61	81	72	66	61	70	65	61	69	64	60	68	63	60	58	58	58	58
7	78	68	61	56	77	67	60	56	65	60	55	64	59	55	63	58	55	53	53	53	53
8	74	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	51	49	49	49	49
9	69	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45	45	45	45
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42	42	42	42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	138937
5°	139975
10°	141719
15°	145281
20°	146357
25°	142167
30°	130349
35°	107256
40°	78173
45°	50744
50°	28611
55°	13591
60°	5378
65°	3327
70°	2236
75°	1477
80°	710
85°	1415



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.9	6.5
10°-20°	320.8	19.4
20°-30°	475.7	28.8
30°-40°	439.4	26.6
40°-50°	229.4	13.9
50°-60°	62.9	3.8
60°-70°	12.1	0.7
70°-80°	3.4	0.2
80°-90°	0.7	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°	904.4	54.7
0°-40°	1343.9	81.3
0°-60°	1636.2	99.0
0°-90°	1652.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1652.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1126	
5°	1130	108
15°	1138	321
25°	1045	476
35°	712	439
45°	291	229
55°	63	63
65°	11	12
75°	3	3
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1126.4
2.5°	1123.3
5°	1130.5
7.5°	1133.6
10°	1131.5
12.5°	1133.6
15°	1137.7
17.5°	1133.6
20°	1115.0
22.5°	1084.9
25°	1044.6
27.5°	989.6
30°	915.2
32.5°	820.9
35°	712.3
37.5°	598.4
40°	485.5
42.5°	382.0
45°	290.9
47.5°	213.2
50°	149.1
52.5°	99.3
55°	63.2
57.5°	37.3
60°	21.8
62.5°	15.5
65°	11.4
67.5°	8.3
70°	6.2
72.5°	4.1
75°	3.1
77.5°	2.1
80°	1.0
82.5°	1.0
85°	1.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)