

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: P580047

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

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580047
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-HM40525927-41WDC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1755.8 lumens
Efficiency: N/A
Efficacy: 87.8 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

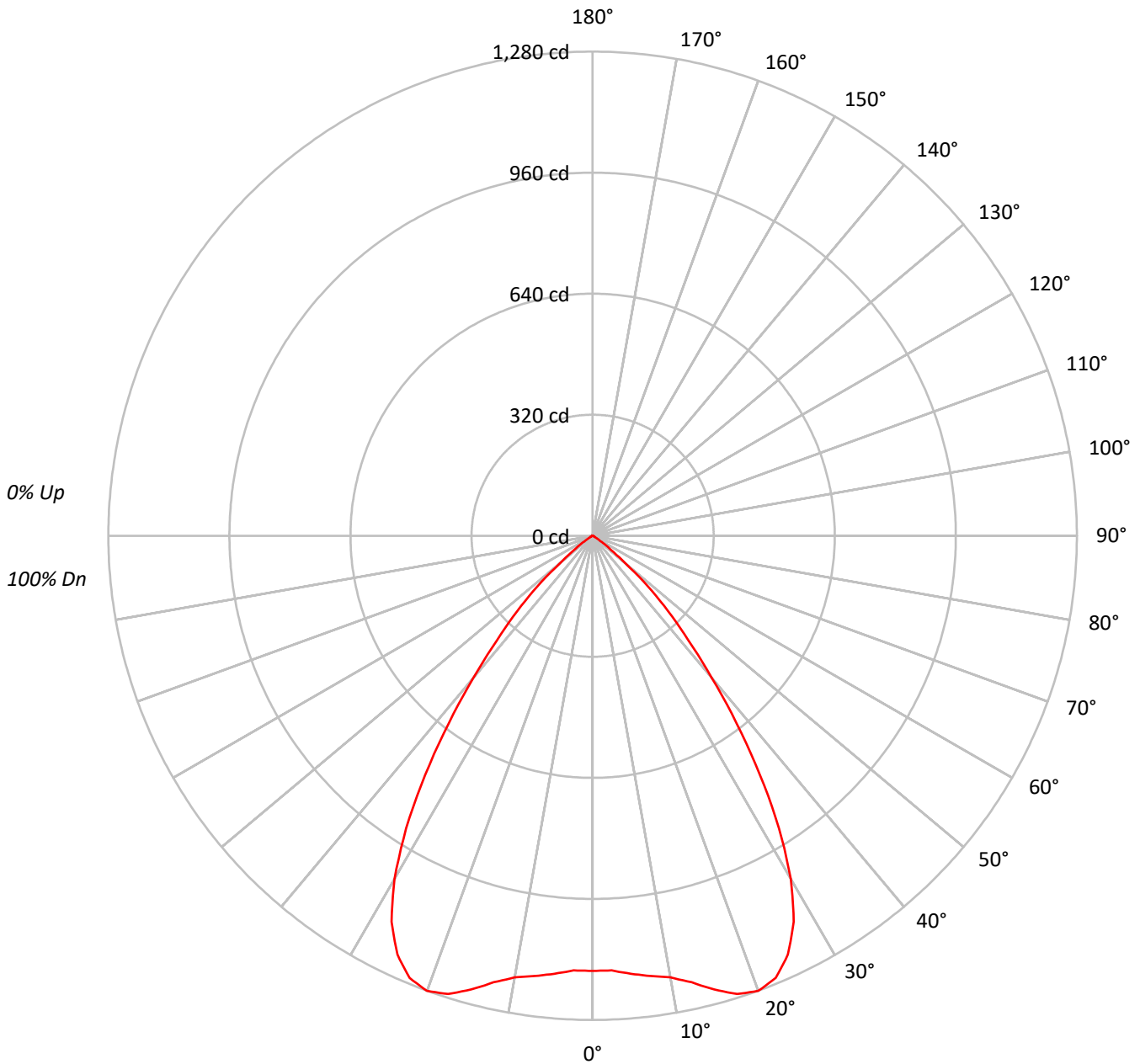
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92	92	92	92
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85	85	85	85
3	101	93	88	84	98	92	87	83	89	85	82	87	83	80	85	82	79	77	77	77	77
4	95	86	80	76	93	85	79	75	83	78	74	81	77	73	79	75	72	71	71	71	71
5	89	80	73	69	87	79	73	68	77	72	68	75	71	67	74	70	66	65	65	65	65
6	84	74	67	63	82	73	67	62	72	66	62	70	65	62	69	65	61	60	60	60	60
7	79	69	62	57	78	68	62	57	67	61	57	66	60	57	64	60	56	55	55	55	55
8	75	64	57	53	73	63	57	53	62	57	53	61	56	52	60	56	52	51	51	51	51
9	70	60	53	49	69	59	53	49	58	53	49	57	52	48	56	52	48	47	47	47	47
10	67	56	50	45	66	55	49	45	55	49	45	54	49	45	53	48	45	44	44	44	44

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	141847
5°	143925
10°	148444
15°	158612
20°	168067
25°	166229
30°	149207
35°	116110
40°	78656
45°	49121
50°	21262
55°	7118
60°	1776
65°	1197
70°	757
75°	477
80°	710
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.7	6.4
10°-20°	352.6	20.1
20°-30°	552.5	31.5
30°-40°	476.8	27.2
40°-50°	219.3	12.5
50°-60°	37.2	2.1
60°-70°	4.2	0.2
70°-80°	1.5	0.1
80°-90°	0.1	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°	1016.7	57.9
0°-40°	1493.5	85.1
0°-60°	1750.0	99.7
0°-90°	1755.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1755.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1150	
5°	1162	112
15°	1242	353
25°	1221	552
35°	771	477
45°	282	219
55°	33	37
65°	4	4
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1150.0
2.5°	1150.0
5°	1162.4
7.5°	1173.8
10°	1185.2
12.5°	1208.9
15°	1242.1
17.5°	1270.1
20°	1280.4
22.5°	1264.9
25°	1221.4
27.5°	1151.0
30°	1047.6
32.5°	917.1
35°	771.1
37.5°	624.2
40°	488.5
42.5°	373.7
45°	281.6
47.5°	197.7
50°	110.8
52.5°	61.0
55°	33.1
57.5°	16.5
60°	7.2
62.5°	5.2
65°	4.1
67.5°	3.1
70°	2.1
72.5°	2.1
75°	1.0
77.5°	1.0
80°	1.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)