

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: P580040

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

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580040  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC420D010-HM40525927-41WDWB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1670.0 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.14 / 1.07  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

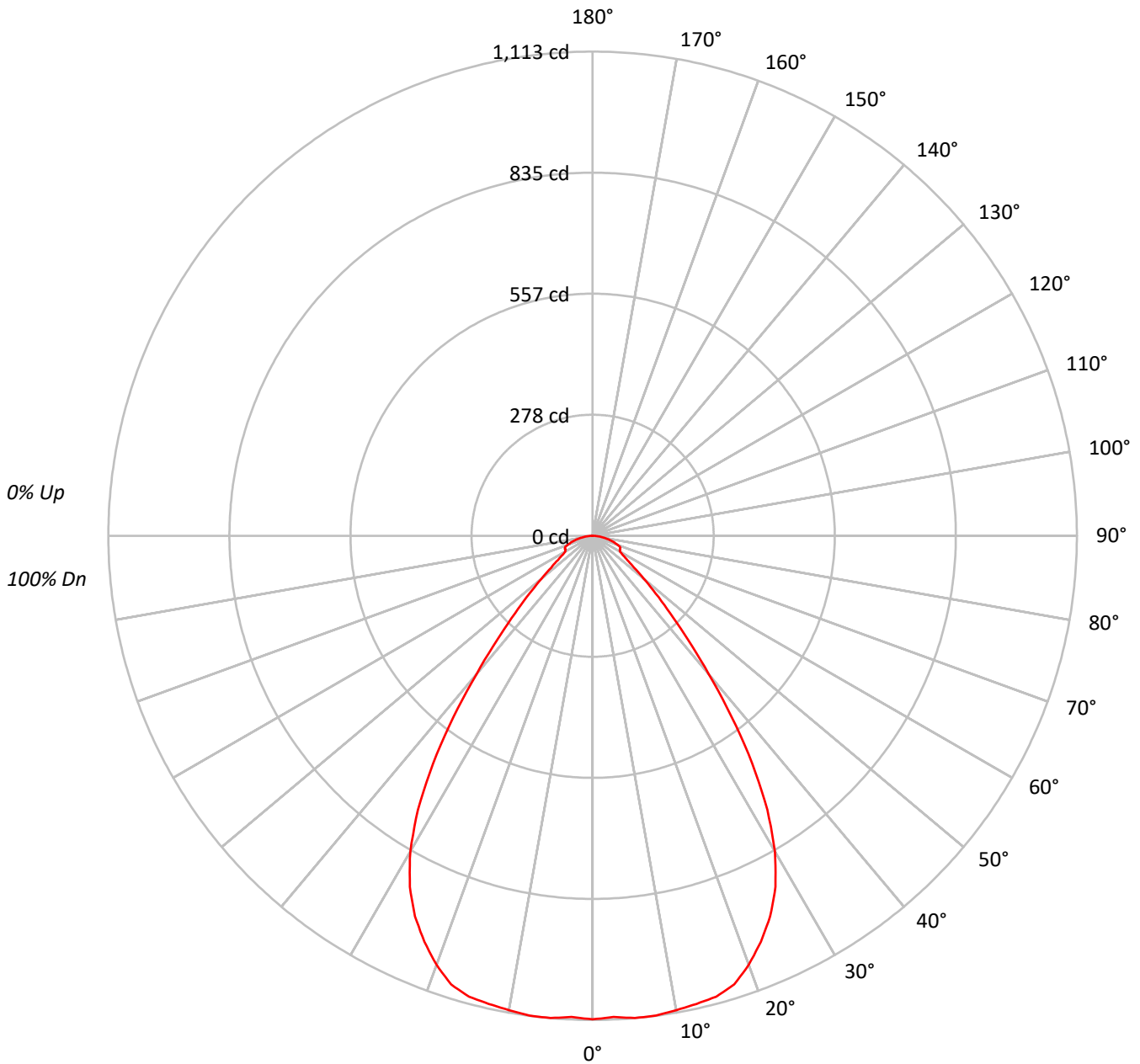
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80			80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72			72
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65			65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59			59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	49			49
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46			46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42			42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39			39

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	137111
5°	137759
10°	138688
15°	140083
20°	137746
25°	131402
30°	119383
35°	96309
40°	66822
45°	43871
50°	29379
55°	20924
60°	17885
65°	20547
70°	21999
75°	21207
80°	19179
85°	17549



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.0	6.3
10°-20°	308.2	18.5
20°-30°	440.3	26.4
30°-40°	393.3	23.6
40°-50°	201.7	12.1
50°-60°	91.7	5.5
60°-70°	68.4	4.1
70°-80°	46.5	2.8
80°-90°	13.8	0.8
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°	854.5	51.2
0°-40°	1247.8	74.7
0°-60°	1541.3	92.3
0°-90°	1670.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1670.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1112	
5°	1113	106
15°	1097	308
25°	966	440
35°	640	393
45°	252	202
55°	97	92
65°	70	68
75°	44	47
85°	12	14
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1111.6
2.5°	1107.3
5°	1112.6
7.5°	1112.6
10°	1107.3
12.5°	1102.2
15°	1097.0
17.5°	1081.5
20°	1049.4
22.5°	1010.0
25°	965.5
27.5°	909.7
30°	838.2
32.5°	747.2
35°	639.6
37.5°	524.8
40°	415.0
42.5°	323.9
45°	251.5
47.5°	196.6
50°	153.1
52.5°	120.1
55°	97.3
57.5°	81.8
60°	72.5
62.5°	70.4
65°	70.4
67.5°	68.4
70°	61.0
72.5°	52.8
75°	44.5
77.5°	35.2
80°	27.0
82.5°	19.6
85°	12.4
87.5°	5.2
90°	0.0



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— 0°-180°







(END OF REPORT)