

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: P579973

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

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579973  
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-HM40525827-41WDWB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1951.9 lumens  
Efficiency: N/A  
Efficacy: 97.6 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

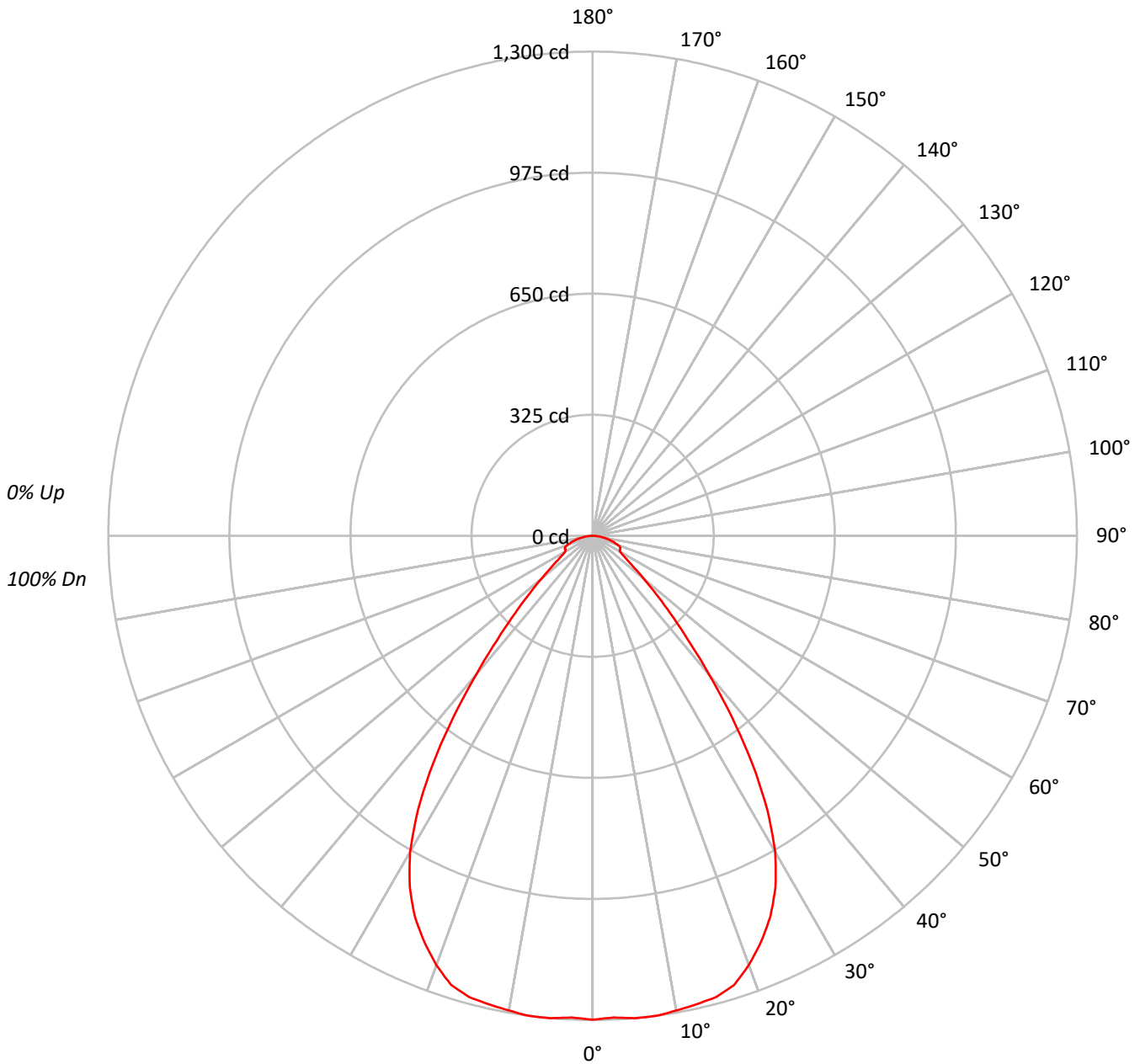
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	160251
5°	161011
10°	162122
15°	163733
20°	161006
25°	153599
30°	139564
35°	112572
40°	78109
45°	51284
50°	34349
55°	24451
60°	20870
65°	23991
70°	25714
75°	24782
80°	22304
85°	20662



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.9	6.3
10°-20°	360.2	18.5
20°-30°	514.6	26.4
30°-40°	459.7	23.6
40°-50°	235.8	12.1
50°-60°	107.2	5.5
60°-70°	79.9	4.1
70°-80°	54.4	2.8
80°-90°	16.1	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°	998.8	51.2
0°-40°	1458.5	74.7
0°-60°	1801.5	92.3
0°-90°	1951.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1951.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1299	
5°	1300	124
15°	1282	360
25°	1129	515
35°	748	460
45°	294	236
55°	114	107
65°	82	80
75°	52	54
85°	15	16
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1299.2
2.5°	1294.4
5°	1300.4
7.5°	1300.4
10°	1294.4
12.5°	1288.3
15°	1282.2
17.5°	1264.1
20°	1226.6
22.5°	1180.6
25°	1128.6
27.5°	1063.3
30°	979.9
32.5°	873.3
35°	747.6
37.5°	613.3
40°	485.1
42.5°	378.6
45°	294.0
47.5°	229.9
50°	179.0
52.5°	140.3
55°	113.7
57.5°	95.5
60°	84.6
62.5°	82.2
65°	82.2
67.5°	79.8
70°	71.3
72.5°	61.7
75°	52.0
77.5°	41.2
80°	31.4
82.5°	22.9
85°	14.6
87.5°	6.1
90°	0.0



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— 0°-180°







(END OF REPORT)