

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: P579998

Luminaire Tested: **HC420D010-HM40525830-41WDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579998  
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-HM40525830-41WDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2222.9 lumens  
Efficiency: N/A  
Efficacy: 111.1 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

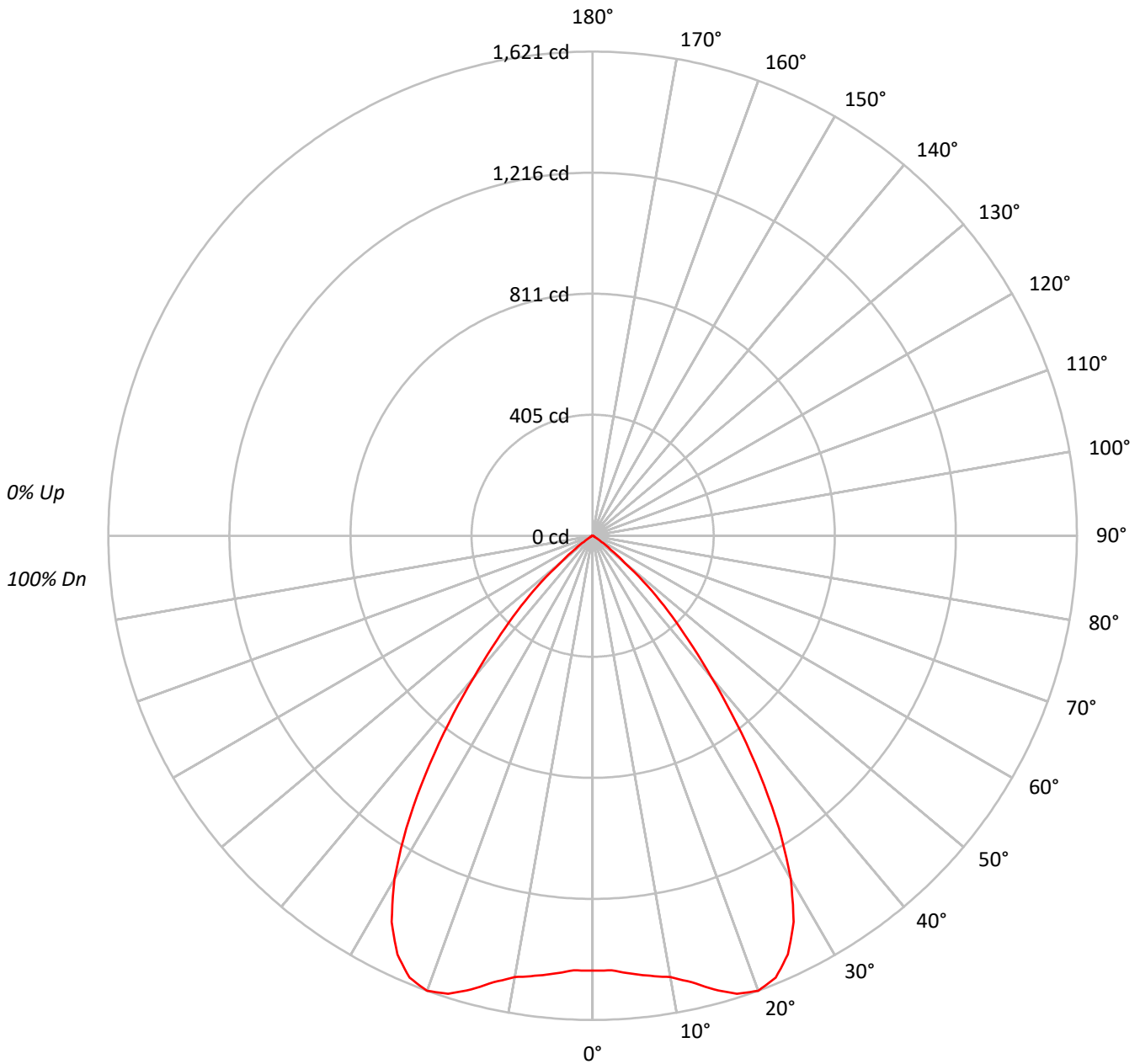
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P579998

CATALOG NUMBER: HC420D010-HM40525830-41WDC

### Luminous Intensity Polar Plot





TEST NUMBER: P579998

CATALOG NUMBER: HC420D010-HM40525830-41WDC

**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	65	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	43	43	43	43

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

	0°
0°	179579
5°	182209
10°	187923
15°	200803
20°	212762
25°	210447
30°	188887
35°	146993
40°	99589
45°	62187
50°	26903
55°	9032
60°	2270
65°	1547
70°	938
75°	620
80°	923
85°	0



TEST NUMBER: P579998

CATALOG NUMBER: HC420D010-HM40525830-41WDC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.4	6.4
10°-20°	446.4	20.1
20°-30°	699.4	31.5
30°-40°	603.6	27.2
40°-50°	277.6	12.5
50°-60°	47.2	2.1
60°-70°	5.3	0.2
70°-80°	1.9	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°	1287.1	57.9
0°-40°	1890.8	85.1
0°-60°	2215.5	99.7
0°-90°	2222.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2222.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1456	
5°	1472	141
15°	1572	446
25°	1546	699
35°	976	604
45°	356	278
55°	42	47
65°	5	5
75°	1	2
85°	0	0
90°	0	



TEST NUMBER: P579998

CATALOG NUMBER: HC420D010-HM40525830-41WDC

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1455.9
2.5°	1455.9
5°	1471.6
7.5°	1486.1
10°	1500.4
12.5°	1530.6
15°	1572.5
17.5°	1607.9
20°	1620.9
22.5°	1601.3
25°	1546.3
27.5°	1457.1
30°	1326.2
32.5°	1161.0
35°	976.2
37.5°	790.2
40°	618.5
42.5°	473.0
45°	356.5
47.5°	250.3
50°	140.2
52.5°	77.3
55°	42.0
57.5°	21.0
60°	9.2
62.5°	6.5
65°	5.3
67.5°	3.9
70°	2.6
72.5°	2.6
75°	1.3
77.5°	1.3
80°	1.3
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)