

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: P579903

Luminaire Tested: **HC415D010-HM40525927-41NDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579903  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC415D010-HM40525927-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1055.9 lumens  
Efficiency: N/A  
Efficacy: 75.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

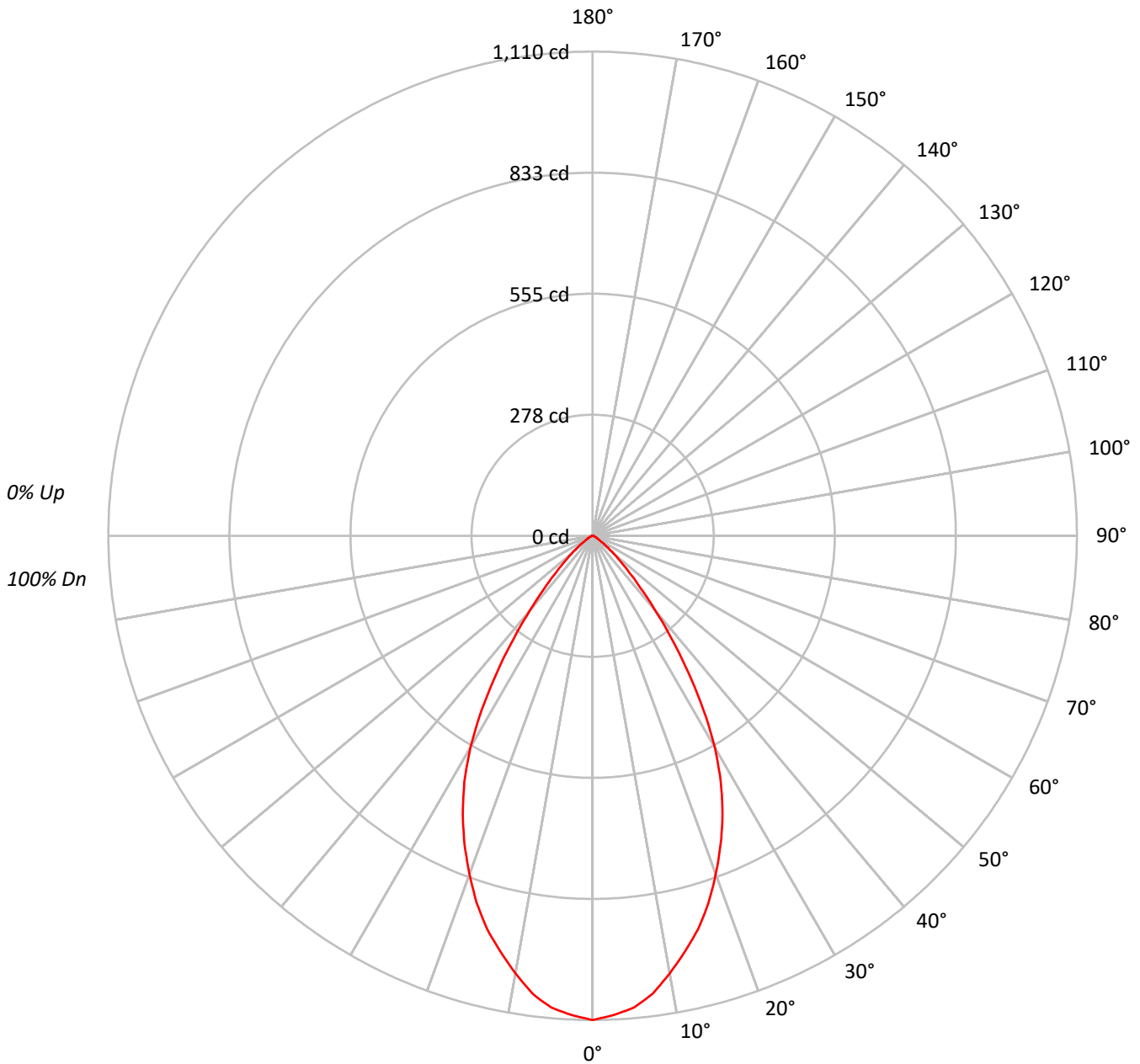
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P579903

CATALOG NUMBER: HC415D010-HM40525927-41NDH

### Luminous Intensity Polar Plot





TEST NUMBER: P579903

CATALOG NUMBER: HC415D010-HM40525927-41NDH

**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	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86	86	86	86
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79	79	79	79
4	96	88	82	78	94	87	81	77	85	80	76	82	79	75	81	77	74	73	73	73	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63	63	63	63
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54	54	54	54
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51	51	51	51
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48	48	48	48

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

	0°
0°	136951
5°	134453
10°	127540
15°	119256
20°	108304
25°	95853
30°	79717
35°	57490
40°	35891
45°	20688
50°	11667
55°	5548
60°	3207
65°	2452
70°	1623
75°	1096
80°	1065
85°	1132



TEST NUMBER: P579903

CATALOG NUMBER: HC415D010-HM40525927-41NDH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.5	9.6
10°-20°	260.5	24.7
20°-30°	320.4	30.3
30°-40°	238.0	22.5
40°-50°	96.7	9.2
50°-60°	26.8	2.5
60°-70°	8.4	0.8
70°-80°	2.8	0.3
80°-90°	0.9	0.1
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°	682.5	64.6
0°-40°	920.4	87.2
0°-60°	1043.9	98.9
0°-90°	1055.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1055.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1110	
5°	1086	102
15°	934	261
25°	704	320
35°	382	238
45°	119	97
55°	26	27
65°	8	8
75°	2	3
85°	1	1
90°	0	



TEST NUMBER: P579903

CATALOG NUMBER: HC415D010-HM40525927-41NDH

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1110.3
2.5°	1099.7
5°	1085.9
7.5°	1058.7
10°	1018.3
12.5°	976.5
15°	933.9
17.5°	883.0
20°	825.1
22.5°	766.6
25°	704.3
27.5°	636.5
30°	559.7
32.5°	472.3
35°	381.8
37.5°	296.6
40°	222.9
42.5°	162.7
45°	118.6
47.5°	85.2
50°	60.8
52.5°	41.8
55°	25.8
57.5°	16.7
60°	13.0
62.5°	10.7
65°	8.4
67.5°	6.1
70°	4.5
72.5°	3.8
75°	2.3
77.5°	1.5
80°	1.5
82.5°	0.8
85°	0.8
87.5°	0.8
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)