

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: P579957

Luminaire Tested: **HC415D010-HM40525940-41NDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579957  
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-HM40525940-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1282.2 lumens  
Efficiency: N/A  
Efficacy: 91.6 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

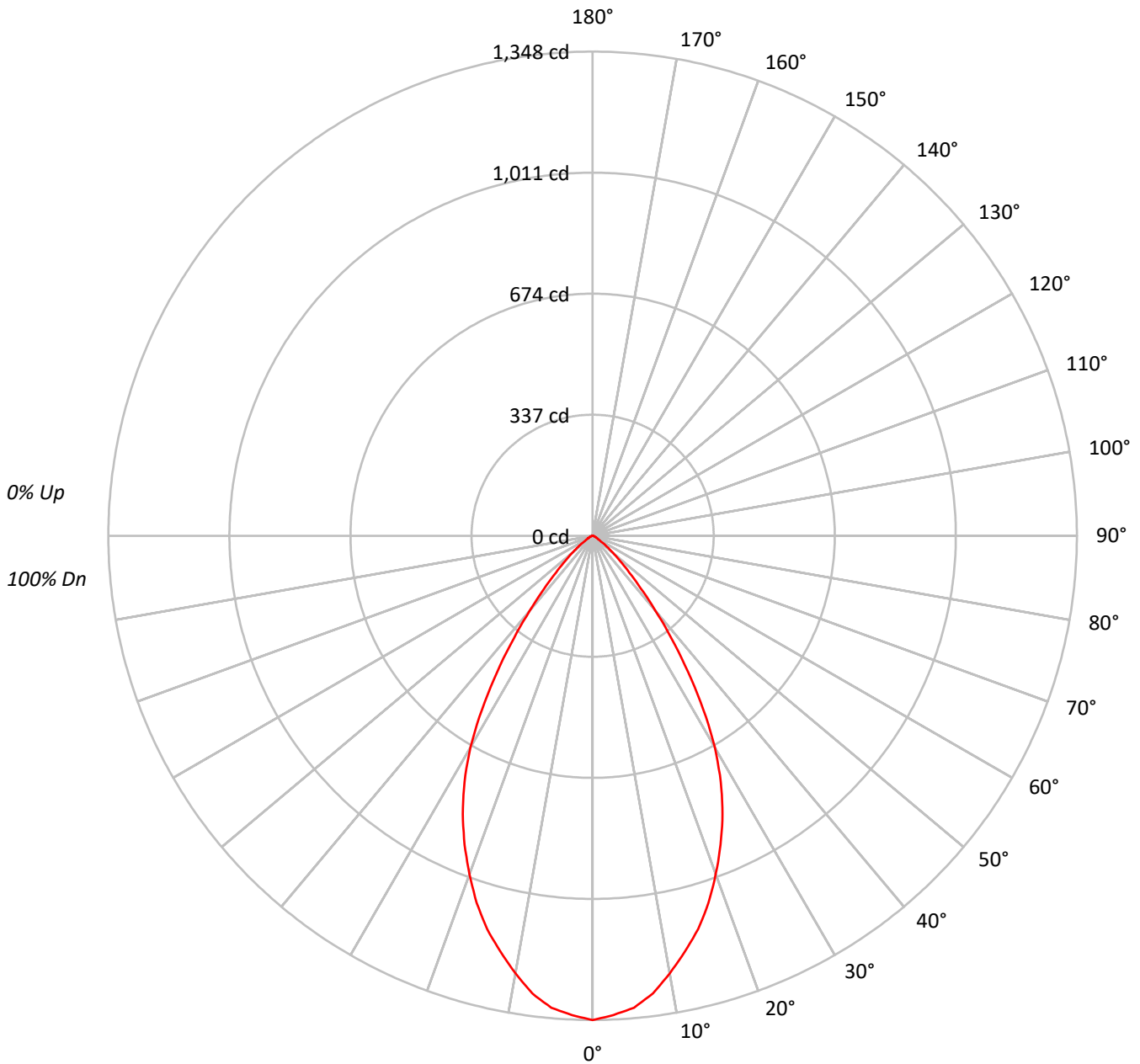
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	166319
5°	163290
10°	154882
15°	144808
20°	131524
25°	116376
30°	96808
35°	69808
40°	43571
45°	25136
50°	14181
55°	6752
60°	3873
65°	2948
70°	2020
75°	1287
80°	1279
85°	1274



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.3	9.6
10°-20°	316.4	24.7
20°-30°	389.1	30.3
30°-40°	289.0	22.5
40°-50°	117.5	9.2
50°-60°	32.5	2.5
60°-70°	10.1	0.8
70°-80°	3.4	0.3
80°-90°	1.0	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°	828.7	64.6
0°-40°	1117.7	87.2
0°-60°	1267.7	98.9
0°-90°	1282.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1282.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1348	
5°	1319	123
15°	1134	316
25°	855	389
35°	464	289
45°	144	117
55°	31	33
65°	10	10
75°	3	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1348.4
2.5°	1335.4
5°	1318.8
7.5°	1285.5
10°	1236.6
12.5°	1185.8
15°	1134.0
17.5°	1072.2
20°	1002.0
22.5°	930.9
25°	855.1
27.5°	772.9
30°	679.7
32.5°	573.5
35°	463.6
37.5°	360.2
40°	270.6
42.5°	197.6
45°	144.1
47.5°	103.5
50°	73.9
52.5°	50.8
55°	31.4
57.5°	20.4
60°	15.7
62.5°	13.0
65°	10.1
67.5°	7.4
70°	5.6
72.5°	4.7
75°	2.7
77.5°	1.8
80°	1.8
82.5°	0.9
85°	0.9
87.5°	0.9
90°	0.0



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— 0°-180°







(END OF REPORT)