

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: P579871

Luminaire Tested: **HC415D010-HM40525835-41NDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579871  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC415D010-HM40525835-41NDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1477.4 lumens  
Efficiency: N/A  
Efficacy: 105.5 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 0.84 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

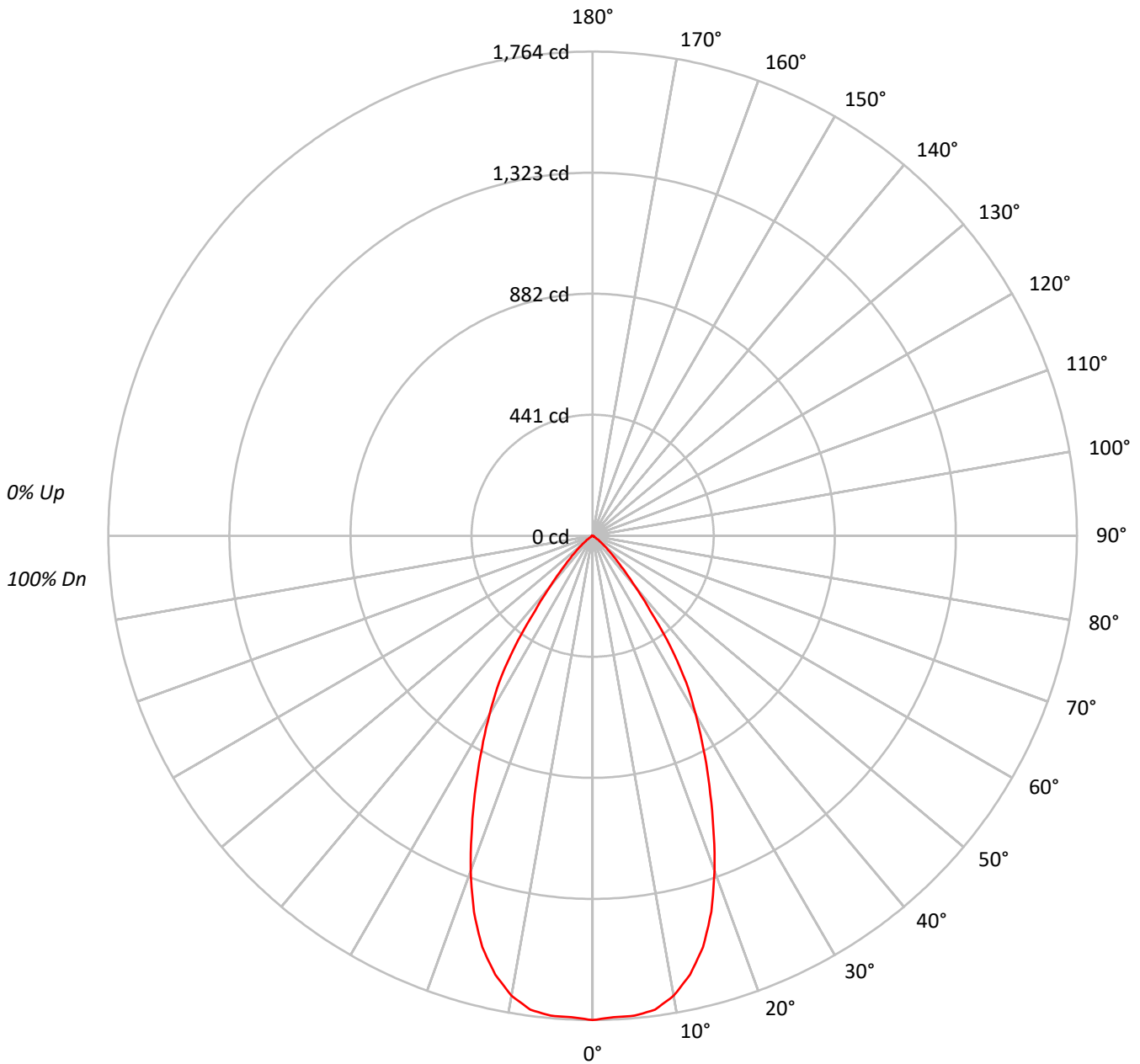
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
1	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	93	91	89	87			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81			
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	78	75	72	71			
6	88	79	73	69	87	78	73	69	77	72	68	75	71	68	74	70	67	66			
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62			
8	80	70	64	60	78	70	64	60	69	64	60	68	63	60	67	62	59	58			
9	76	66	61	57	75	66	60	57	65	60	56	64	59	56	63	59	56	55			
10	72	63	57	53	71	62	57	53	62	57	53	61	56	53	60	56	53	51			

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

	0°
0°	217619
5°	217336
10°	213098
15°	198160
20°	170404
25°	136900
30°	106877
35°	74837
40°	38402
45°	19502
50°	9767
55°	3634
60°	1480
65°	1167
70°	721
75°	477
80°	710
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.0	11.2
10°-20°	428.3	29.0
20°-30°	461.4	31.2
30°-40°	303.2	20.5
40°-50°	94.3	6.4
50°-60°	18.5	1.3
60°-70°	3.9	0.3
70°-80°	1.4	0.1
80°-90°	0.4	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°	1055.7	71.5
0°-40°	1358.9	92.0
0°-60°	1471.6	99.6
0°-90°	1477.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1477.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1764	
5°	1755	166
15°	1552	428
25°	1006	461
35°	497	303
45°	112	94
55°	17	18
65°	4	4
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1764.3
2.5°	1755.3
5°	1755.3
7.5°	1741.3
10°	1701.4
12.5°	1637.5
15°	1551.8
17.5°	1436.9
20°	1298.2
22.5°	1148.6
25°	1005.9
27.5°	873.2
30°	750.4
32.5°	634.7
35°	497.0
37.5°	346.2
40°	238.5
42.5°	164.6
45°	111.8
47.5°	75.8
50°	50.9
52.5°	31.9
55°	16.9
57.5°	6.9
60°	6.0
62.5°	5.0
65°	4.0
67.5°	3.0
70°	2.0
72.5°	2.0
75°	1.0
77.5°	1.0
80°	1.0
82.5°	1.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)