

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: P581414

Luminaire Tested: **HC407D010-HM40525827-41NDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581414  
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: HC407D010-HM40525827-41NDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 781.4 lumens  
Efficiency: N/A  
Efficacy: 97.7 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

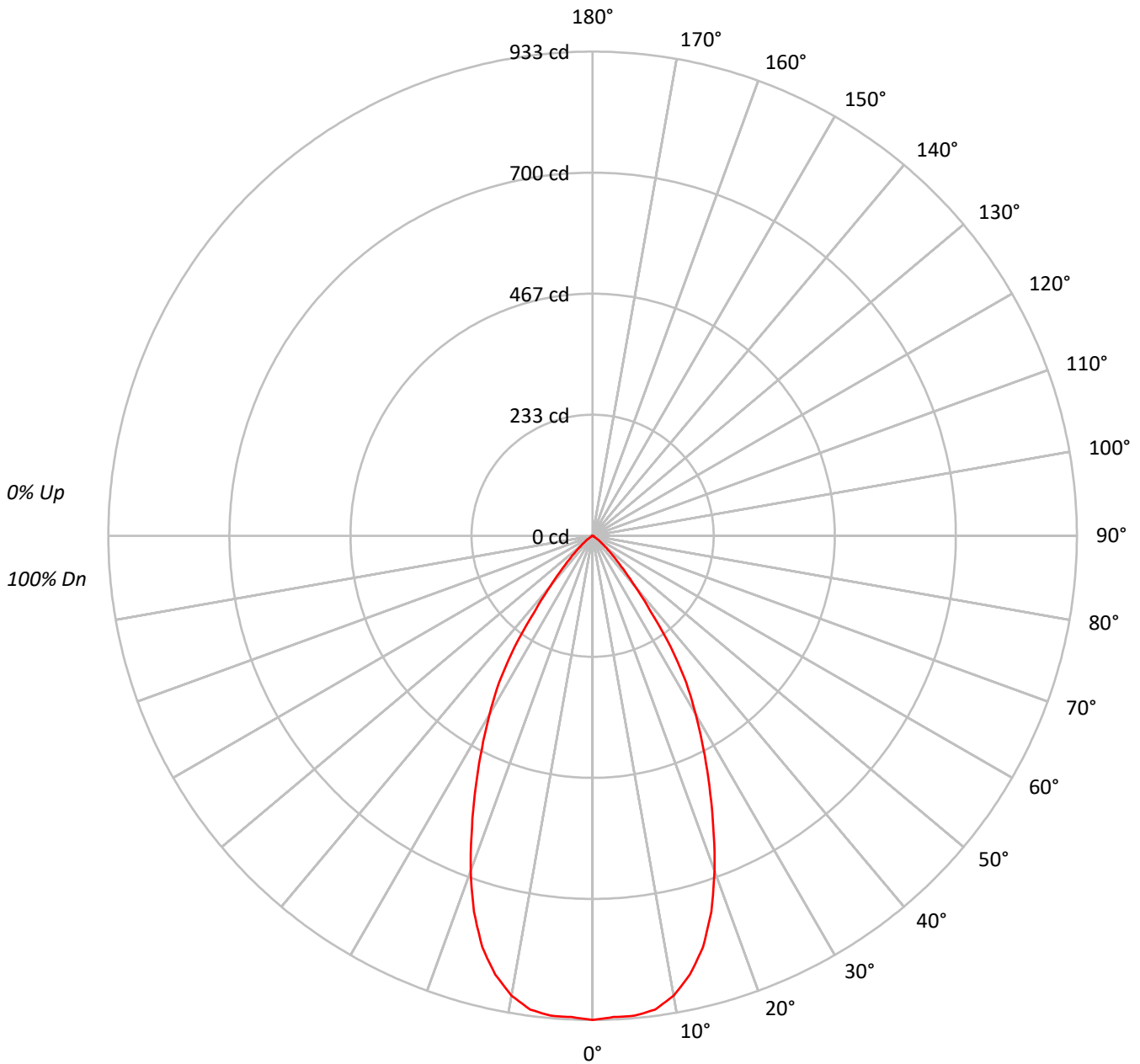
Input Watts (W): 8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
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	99	98	97	96	95	94		
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	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°	115081
5°	114939
10°	112699
15°	104788
20°	90124
25°	72404
30°	56515
35°	39572
40°	20304
45°	10309
50°	5181
55°	1935
60°	789
65°	642
70°	361
75°	286
80°	426
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.8	11.2
10°-20°	226.5	29.0
20°-30°	244.0	31.2
30°-40°	160.3	20.5
40°-50°	49.9	6.4
50°-60°	9.8	1.2
60°-70°	2.1	0.3
70°-80°	0.8	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°	558.3	71.5
0°-40°	718.7	92.0
0°-60°	778.3	99.6
0°-90°	781.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	781.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	933	
5°	928	88
15°	821	227
25°	532	244
35°	263	160
45°	59	50
55°	9	10
65°	2	2
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	933.0
2.5°	928.3
5°	928.3
7.5°	920.9
10°	899.8
12.5°	866.0
15°	820.6
17.5°	760.0
20°	686.6
22.5°	607.5
25°	532.0
27.5°	461.8
30°	396.8
32.5°	335.6
35°	262.8
37.5°	183.1
40°	126.1
42.5°	87.1
45°	59.1
47.5°	40.1
50°	27.0
52.5°	16.8
55°	9.0
57.5°	3.6
60°	3.2
62.5°	2.6
65°	2.2
67.5°	1.6
70°	1.0
72.5°	1.0
75°	0.6
77.5°	0.6
80°	0.6
82.5°	0.6
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)