

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: P581432

Luminaire Tested: **HC407D010-HM40525830-41NDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581432  
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-HM40525830-41NDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 846.3 lumens  
Efficiency: N/A  
Efficacy: 105.8 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

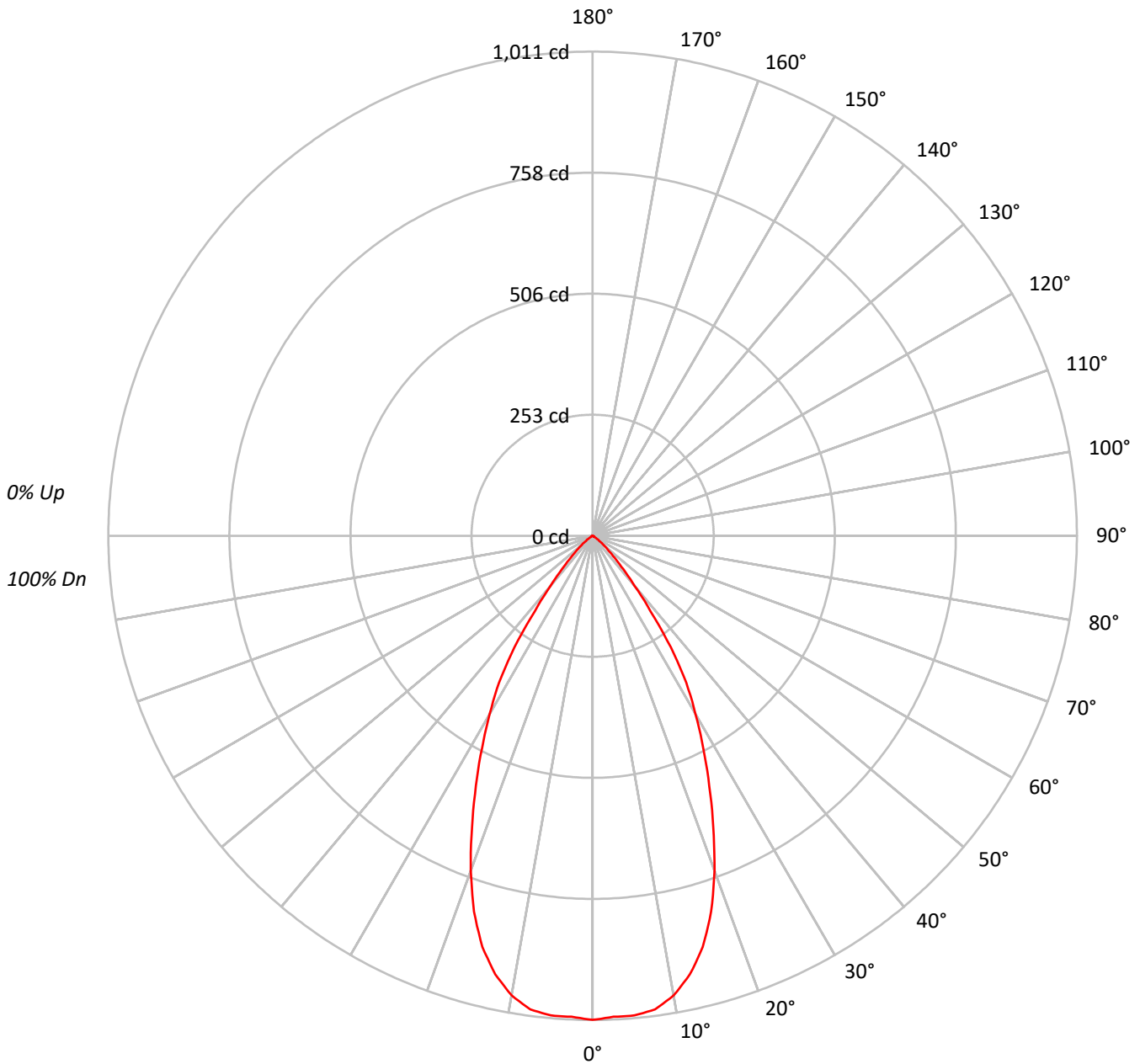
Input Watts (W): 8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	124665
5°	124485
10°	122067
15°	113510
20°	97619
25°	78419
30°	61215
35°	42854
40°	21995
45°	11181
50°	5584
55°	2086
60°	839
65°	671
70°	397
75°	286
80°	426
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.1	11.2
10°-20°	245.4	29.0
20°-30°	264.3	31.2
30°-40°	173.7	20.5
40°-50°	54.0	6.4
50°-60°	10.6	1.3
60°-70°	2.2	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°	604.7	71.5
0°-40°	778.4	92.0
0°-60°	843.0	99.6
0°-90°	846.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	846.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1011	
5°	1005	95
15°	889	245
25°	576	264
35°	285	174
45°	64	54
55°	10	11
65°	2	2
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1010.7
2.5°	1005.4
5°	1005.4
7.5°	997.5
10°	974.6
12.5°	938.1
15°	888.9
17.5°	823.1
20°	743.7
22.5°	657.9
25°	576.2
27.5°	500.2
30°	429.8
32.5°	363.6
35°	284.6
37.5°	198.4
40°	136.6
42.5°	94.3
45°	64.1
47.5°	43.5
50°	29.1
52.5°	18.3
55°	9.7
57.5°	4.0
60°	3.4
62.5°	2.8
65°	2.3
67.5°	1.7
70°	1.1
72.5°	1.1
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)