

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: P585071

Luminaire Tested: **HC860D010-HM86080830-81NDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P585071  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC860D010-HM86080830-81NDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" 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: 5140.2 lumens  
Efficiency: N/A  
Efficacy: 91.8 lumens/watt  
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.27  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

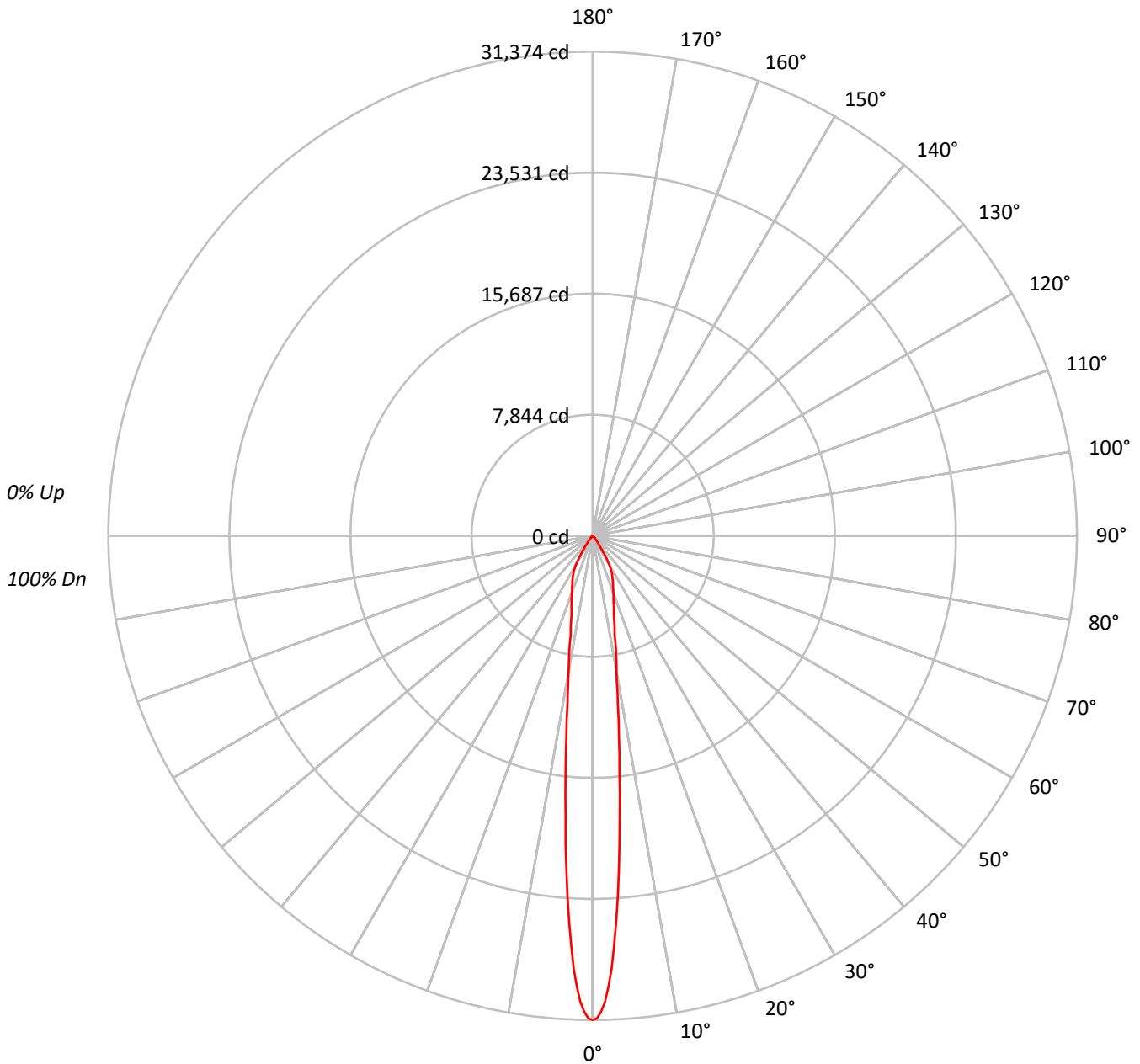
Input Watts (W): 56  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	115	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96	96	96	96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91
3	106	101	97	93	104	99	96	93	97	94	91	95	92	90	92	90	89	87	87	87	87
4	102	96	91	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83	83	83	83
5	98	92	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80	80	80	80
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	76	76	76	76
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73	73	73	73
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71	71	71	71
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	72	69	68	68	68	68
10	83	75	70	67	82	75	70	67	74	70	67	73	69	67	73	69	67	66	66	66	66

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

	0°
0°	967465
5°	620552
10°	280327
15°	169143
20°	128892
25°	104087
30°	76273
35°	27620
40°	10309
45°	4679
50°	1492
55°	371
60°	216
65°	255
70°	0
75°	0
80°	622
85°	1238



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1529.0	29.7
10°-20°	1553.0	30.2
20°-30°	1390.2	27.0
30°-40°	560.0	10.9
40°-50°	91.8	1.8
50°-60°	8.4	0.2
60°-70°	3.0	0.1
70°-80°	2.3	0.0
80°-90°	3.3	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°	4472.2	87.0
0°-40°	5032.2	97.9
0°-60°	5132.4	99.8
0°-90°	5141.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5140.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	31374	
5°	20048	###
15°	5298	1553
25°	3059	1390
35°	734	560
45°	107	92
55°	7	8
65°	4	3
75°	0	2
85°	4	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	31374.2
0.5°	31277.3
1°	30872.4
1.5°	30221.8
2°	29235.6
2.5°	28069.3
3°	26608.9
3.5°	25006.6
4°	23421.6
4.5°	21646.3
5°	20047.5
5.5°	18306.8
6°	16894.9
6.5°	15424.1
7°	14268.3
7.5°	13046.7
8°	12063.8
8.5°	11077.5
9°	10337.0
9.5°	9520.3
10°	8952.7
12.5°	6602.9
15°	5298.3
17.5°	4526.5
20°	3927.8
22.5°	3450.3
25°	3059.2
27.5°	2668.2
30°	2142.1
32.5°	1377.4
35°	733.7
37.5°	404.8
40°	256.1
42.5°	169.5
45°	107.3
47.5°	65.7
50°	31.1
52.5°	10.4
55°	6.9
57.5°	3.5
60°	3.5
62.5°	3.5
65°	3.5



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**CANDELA DISTRIBUTION (continued):**

	0°
72.5°	0.0
75°	0.0
77.5°	3.5
80°	3.5
82.5°	3.5
85°	3.5
87.5°	3.5
90°	0.0



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— 0°-180°







67.5°		3.5
70°		0.0



(END OF REPORT)