

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: P584442

Luminaire Tested: **HC835D010-HM82555927-81NDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584442  
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: HC835D010-HM82555927-81NDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3197.2 lumens  
Efficiency: N/A  
Efficacy: 94.9 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

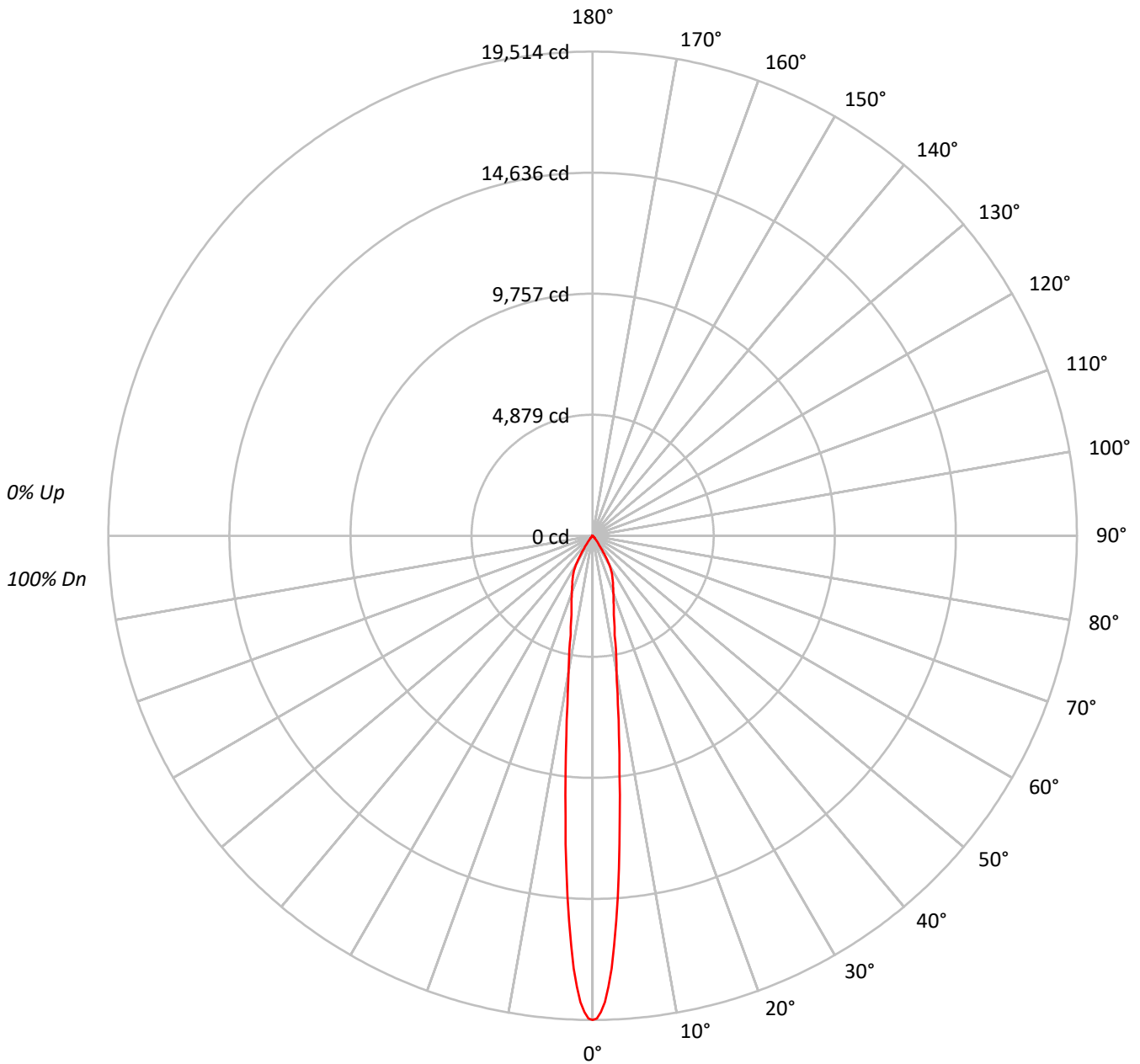
Input Watts (W): 33.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	601743
5°	385970
10°	174358
15°	105206
20°	80171
25°	64741
30°	47442
35°	17177
40°	6412
45°	2909
50°	931
55°	231
60°	136
65°	161
70°	0
75°	0
80°	391
85°	778



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	951.0	29.7
10°-20°	966.0	30.2
20°-30°	864.7	27.0
30°-40°	348.3	10.9
40°-50°	57.1	1.8
50°-60°	5.2	0.2
60°-70°	1.9	0.1
70°-80°	1.5	0.0
80°-90°	2.1	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°	2781.7	87.0
0°-40°	3130.0	97.9
0°-60°	3192.3	99.8
0°-90°	3197.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3197.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	19514	
5°	12469	951
15°	3296	966
25°	1903	865
35°	456	348
45°	67	57
55°	4	5
65°	2	2
75°	0	1
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	19514.1
0.5°	19453.8
1°	19202.0
1.5°	18797.3
2°	18184.0
2.5°	17458.6
3°	16550.3
3.5°	15553.6
4°	14567.8
4.5°	13463.6
5°	12469.1
5.5°	11386.5
6°	10508.3
6.5°	9593.5
7°	8874.5
7.5°	8114.8
8°	7503.4
8.5°	6890.1
9°	6429.4
9.5°	5921.4
10°	5568.4
12.5°	4106.9
15°	3295.5
17.5°	2815.4
20°	2443.1
22.5°	2146.0
25°	1902.8
27.5°	1659.6
30°	1332.4
32.5°	856.7
35°	456.3
37.5°	251.8
40°	159.3
42.5°	105.4
45°	66.7
47.5°	40.9
50°	19.4
52.5°	6.5
55°	4.3
57.5°	2.2
60°	2.2
62.5°	2.2
65°	2.2



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**CANDELA DISTRIBUTION (continued):**

	0°
72.5°	0.0
75°	0.0
77.5°	2.2
80°	2.2
82.5°	2.2
85°	2.2
87.5°	2.2
90°	0.0



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— 0°-180°







67.5°		2.2
70°		0.0



(END OF REPORT)