

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: P584375

Luminaire Tested: **HC835D010-HM82555827-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584375  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC835D010-HM82555827-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3615.1 lumens  
Efficiency: N/A  
Efficacy: 107.3 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.57  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

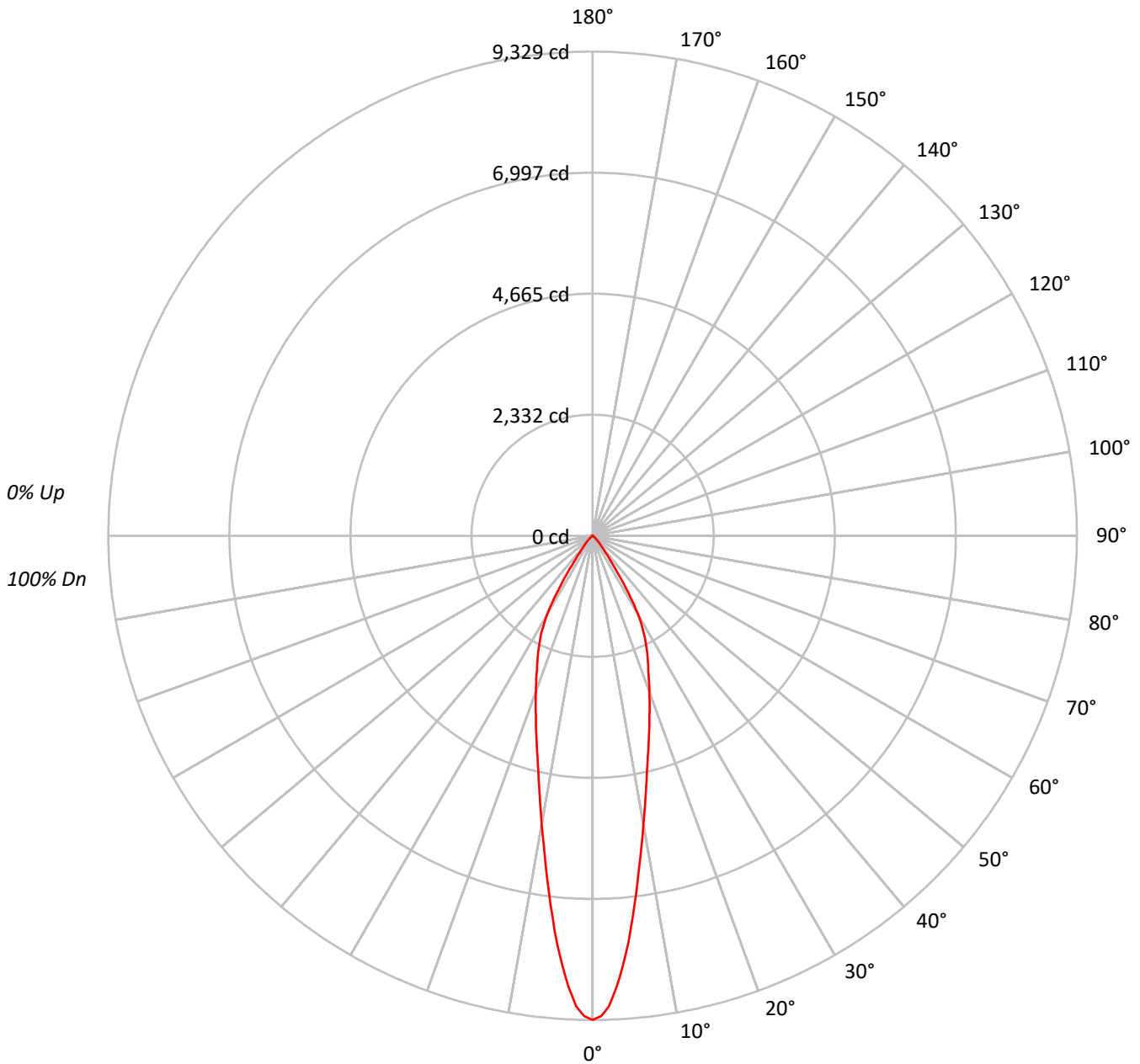
Input Watts (W): 33.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95			95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89			89
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84			84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80			80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75			75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72			72
7	88	80	74	71	87	79	74	70	78	73	70	77	73	70	76	72	69	68			68
8	84	76	71	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65			65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62			62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59			59

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

	0°
0°	287669
5°	243717
10°	176831
15°	132791
20°	104776
25°	84512
30°	62629
35°	25372
40°	10699
45°	5735
50°	2576
55°	1301
60°	826
65°	584
70°	487
75°	310
80°	462
85°	920



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	676.0	18.7
10°-20°	1168.3	32.3
20°-30°	1129.5	31.2
30°-40°	496.1	13.7
40°-50°	107.2	3.0
50°-60°	24.1	0.7
60°-70°	8.3	0.2
70°-80°	3.1	0.1
80°-90°	2.5	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°	2973.8	82.3
0°-40°	3470.0	96.0
0°-60°	3601.2	99.6
0°-90°	3615.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3615.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	9329	
5°	7874	676
15°	4160	1168
25°	2484	1130
35°	674	496
45°	132	107
55°	24	24
65°	8	8
75°	3	3
85°	3	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	9328.9
1°	9259.1
2°	9068.5
3°	8724.8
4°	8313.9
5°	7873.5
6°	7392.9
7°	6909.5
8°	6455.7
9°	6034.0
10°	5647.4
11°	5282.1
12°	4954.4
13°	4656.4
14°	4393.3
15°	4159.6
17.5°	3635.9
20°	3192.9
22.5°	2803.6
25°	2483.9
27.5°	2159.0
30°	1758.9
32.5°	1195.0
35°	674.0
37.5°	397.4
40°	265.8
42.5°	188.0
45°	131.5
47.5°	85.9
50°	53.7
52.5°	32.2
55°	24.2
57.5°	18.8
60°	13.4
62.5°	10.8
65°	8.0
67.5°	5.4
70°	5.4
72.5°	2.6
75°	2.6
77.5°	2.6
80°	2.6
82.5°	2.6



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°	2.6
87.5°	2.6



(END OF REPORT)