

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: P593706

Luminaire Tested: **HC835D010-HM82555950-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593706  
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-HM82555950-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3857.7 lumens  
Efficiency: N/A  
Efficacy: 114.5 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

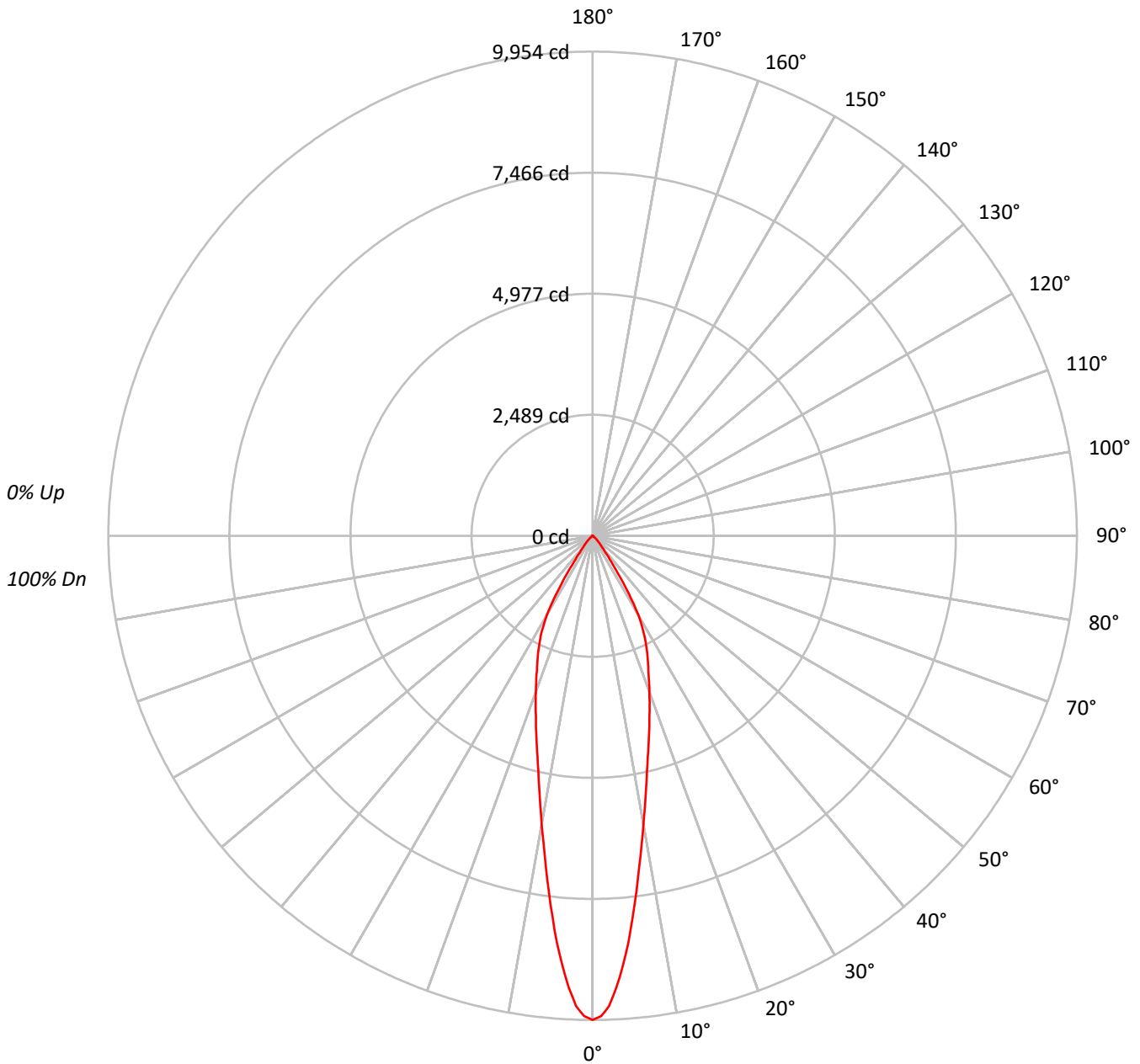
Input Watts (W): 33.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68			68
8	84	76	70	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°	306948
5°	260049
10°	188677
15°	141692
20°	111799
25°	90181
30°	66827
35°	27074
40°	11420
45°	6123
50°	2749
55°	1387
60°	888
65°	627
70°	523
75°	346
80°	515
85°	1026



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	721.3	18.7
10°-20°	1246.6	32.3
20°-30°	1205.3	31.2
30°-40°	529.4	13.7
40°-50°	114.4	3.0
50°-60°	25.7	0.7
60°-70°	8.9	0.2
70°-80°	3.4	0.1
80°-90°	2.8	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°	3173.2	82.3
0°-40°	3702.5	96.0
0°-60°	3842.6	99.6
0°-90°	3857.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3857.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	9954	
5°	8401	721
15°	4438	1247
25°	2650	1205
35°	719	529
45°	140	114
55°	26	26
65°	9	9
75°	3	3
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	9954.1
1°	9879.5
2°	9676.1
3°	9309.4
4°	8871.1
5°	8401.1
6°	7888.2
7°	7372.5
8°	6888.3
9°	6438.4
10°	6025.7
11°	5636.1
12°	5286.5
13°	4968.5
14°	4687.7
15°	4438.4
17.5°	3879.6
20°	3406.9
22.5°	2991.4
25°	2650.5
27.5°	2303.8
30°	1876.8
32.5°	1275.0
35°	719.2
37.5°	424.1
40°	283.7
42.5°	200.5
45°	140.4
47.5°	91.6
50°	57.3
52.5°	34.4
55°	25.8
57.5°	20.0
60°	14.4
62.5°	11.5
65°	8.6
67.5°	5.8
70°	5.8
72.5°	2.9
75°	2.9
77.5°	2.9
80°	2.9
82.5°	2.9



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°	2.9
87.5°	2.9



(END OF REPORT)