

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: P584476

Luminaire Tested: **HC835D010-HM82555935-81NDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584476  
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-HM82555935-81NDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3827.6 lumens  
Efficiency: N/A  
Efficacy: 113.6 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

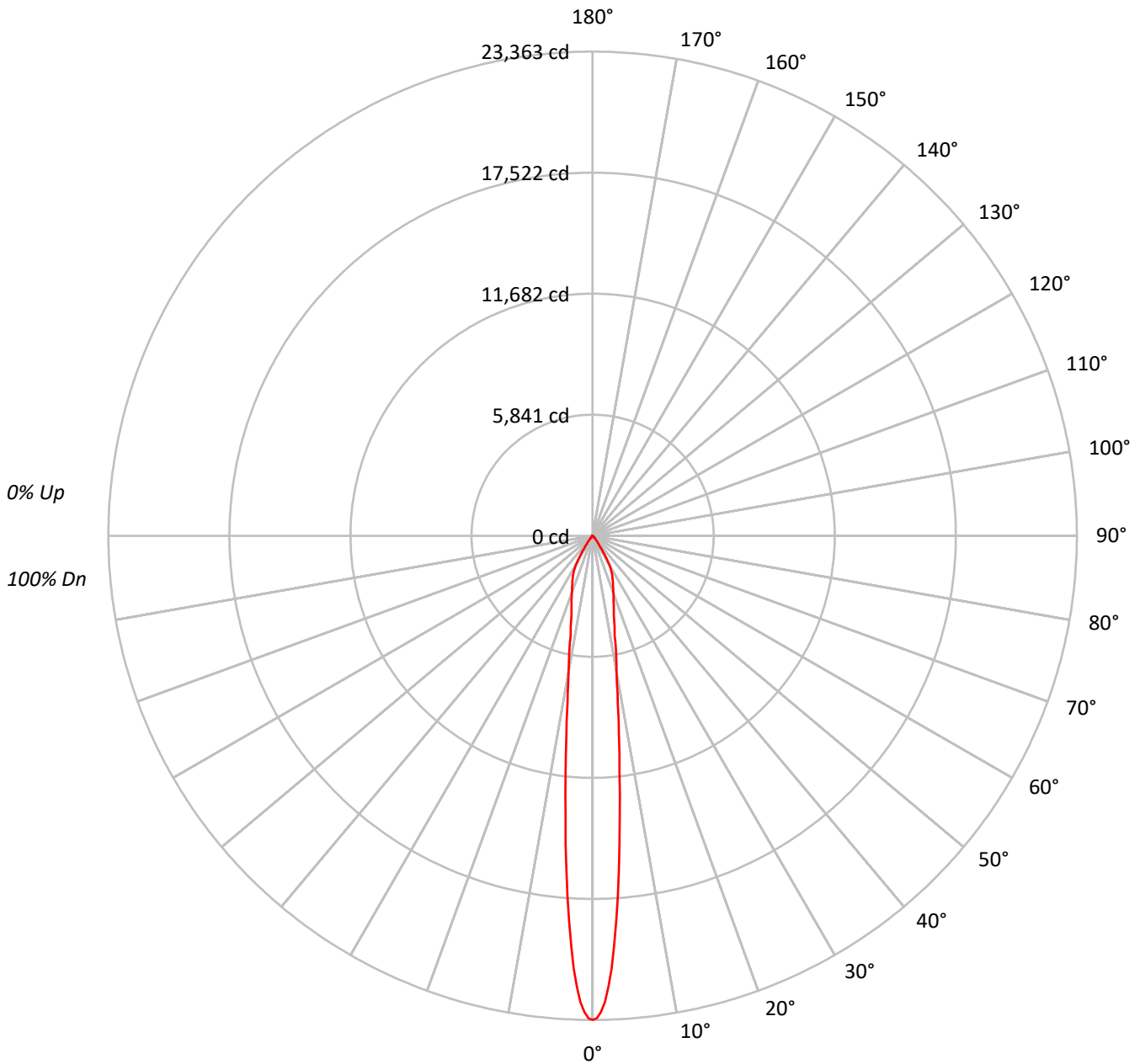
Input Watts (W): 33.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
1	115	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96			96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91			91
3	106	101	97	93	104	99	96	93	97	94	91	95	92	90	92	90	89	87			87
4	102	96	91	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83			83
5	98	92	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80			80
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	76			76
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73			73
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71			71
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	72	69	68			68
10	83	75	70	67	82	75	70	67	74	70	67	73	69	67	73	69	67	66			66

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

	0°
0°	720423
5°	462095
10°	208745
15°	125953
20°	95978
25°	77507
30°	56796
35°	20565
40°	7676
45°	3484
50°	1113
55°	280
60°	160
65°	190
70°	0
75°	0
80°	462
85°	920



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1138.6	29.7
10°-20°	1156.4	30.2
20°-30°	1035.2	27.0
30°-40°	417.0	10.9
40°-50°	68.4	1.8
50°-60°	6.2	0.2
60°-70°	2.2	0.1
70°-80°	1.7	0.0
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°	3330.2	87.0
0°-40°	3747.2	97.9
0°-60°	3821.9	99.8
0°-90°	3828.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3827.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	23363	
5°	14928	###
15°	3945	1156
25°	2278	1035
35°	546	417
45°	80	68
55°	5	6
65°	3	2
75°	0	2
85°	3	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	23362.8
0.5°	23290.6
1°	22989.1
1.5°	22504.7
2°	21770.2
2.5°	20901.7
3°	19814.3
3.5°	18621.1
4°	17440.8
4.5°	16118.9
5°	14928.4
5.5°	13632.2
6°	12580.7
6.5°	11485.5
7°	10624.8
7.5°	9715.2
8°	8983.3
8.5°	8248.8
9°	7697.4
9.5°	7089.2
10°	6666.6
12.5°	4916.8
15°	3945.4
17.5°	3370.7
20°	2924.8
22.5°	2569.2
25°	2278.0
27.5°	1986.9
30°	1595.1
32.5°	1025.6
35°	546.3
37.5°	301.5
40°	190.7
42.5°	126.3
45°	79.9
47.5°	49.0
50°	23.2
52.5°	7.8
55°	5.2
57.5°	2.6
60°	2.6
62.5°	2.6
65°	2.6



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**CANDELA DISTRIBUTION (continued):**

	0°
72.5°	0.0
75°	0.0
77.5°	2.6
80°	2.6
82.5°	2.6
85°	2.6
87.5°	2.6
90°	0.0



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— 0°-180°







67.5°		2.6
70°		0.0



(END OF REPORT)