

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: P593722

Luminaire Tested: **HC850D010-HM82555850-81MDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593722  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC850D010-HM82555850-81MDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5122.7 lumens  
Efficiency: N/A  
Efficacy: 124.9 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.81  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

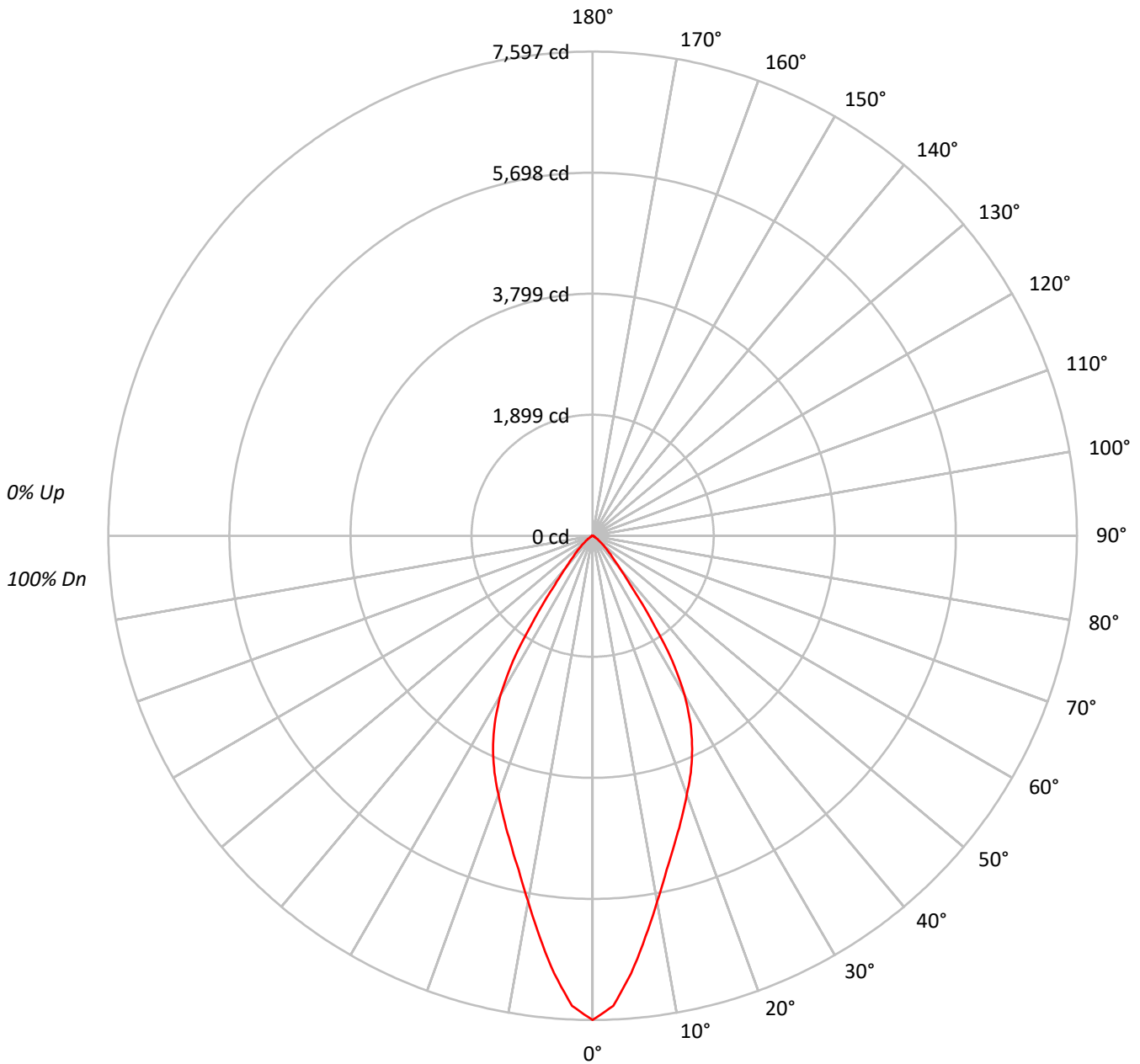
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	94			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	90	89	87			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81			
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	78	75	72	71			
6	88	79	73	69	87	78	73	69	77	72	68	76	71	68	74	70	67	66			
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62			
8	80	70	64	60	79	70	64	60	69	64	60	68	63	60	67	63	60	58			
9	76	67	61	57	75	66	61	57	65	60	56	64	60	56	63	59	56	55			
10	73	63	57	54	72	63	57	53	62	57	53	61	56	53	60	56	53	52			

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

	0°
0°	234273
5°	213487
10°	182405
15°	159071
20°	141779
25°	125767
30°	102971
35°	59131
40°	26242
45°	15272
50°	8813
55°	5037
60°	2781
65°	1773
70°	1253
75°	822
80°	622
85°	1238



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	624.3	12.2
10°-20°	1400.6	27.3
20°-30°	1676.6	32.7
30°-40°	1014.3	19.8
40°-50°	284.2	5.5
50°-60°	88.3	1.7
60°-70°	25.2	0.5
70°-80°	6.8	0.1
80°-90°	2.4	0.0
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°	3701.5	72.3
0°-40°	4715.8	92.1
0°-60°	5088.3	99.3
0°-90°	5122.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5122.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	7597	
5°	6897	624
15°	4983	1401
25°	3696	1677
35°	1571	1014
45°	350	284
55°	94	88
65°	24	25
75°	7	7
85°	4	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	7597.3
2.5°	7382.3
5°	6896.9
7.5°	6349.0
10°	5825.4
12.5°	5367.7
15°	4982.8
17.5°	4643.0
20°	4320.5
22.5°	4022.3
25°	3696.4
27.5°	3328.8
30°	2891.9
32.5°	2326.7
35°	1570.8
37.5°	977.8
40°	651.9
42.5°	468.1
45°	350.2
47.5°	256.6
50°	183.7
52.5°	128.3
55°	93.7
57.5°	62.4
60°	45.1
62.5°	31.2
65°	24.3
67.5°	17.4
70°	13.9
72.5°	6.9
75°	6.9
77.5°	3.5
80°	3.5
82.5°	3.5
85°	3.5
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)