

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: P593808

Luminaire Tested: **HC850D010-HM82555950-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593808  
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: HC850D010-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: 5011.5 lumens  
Efficiency: N/A  
Efficacy: 104.4 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

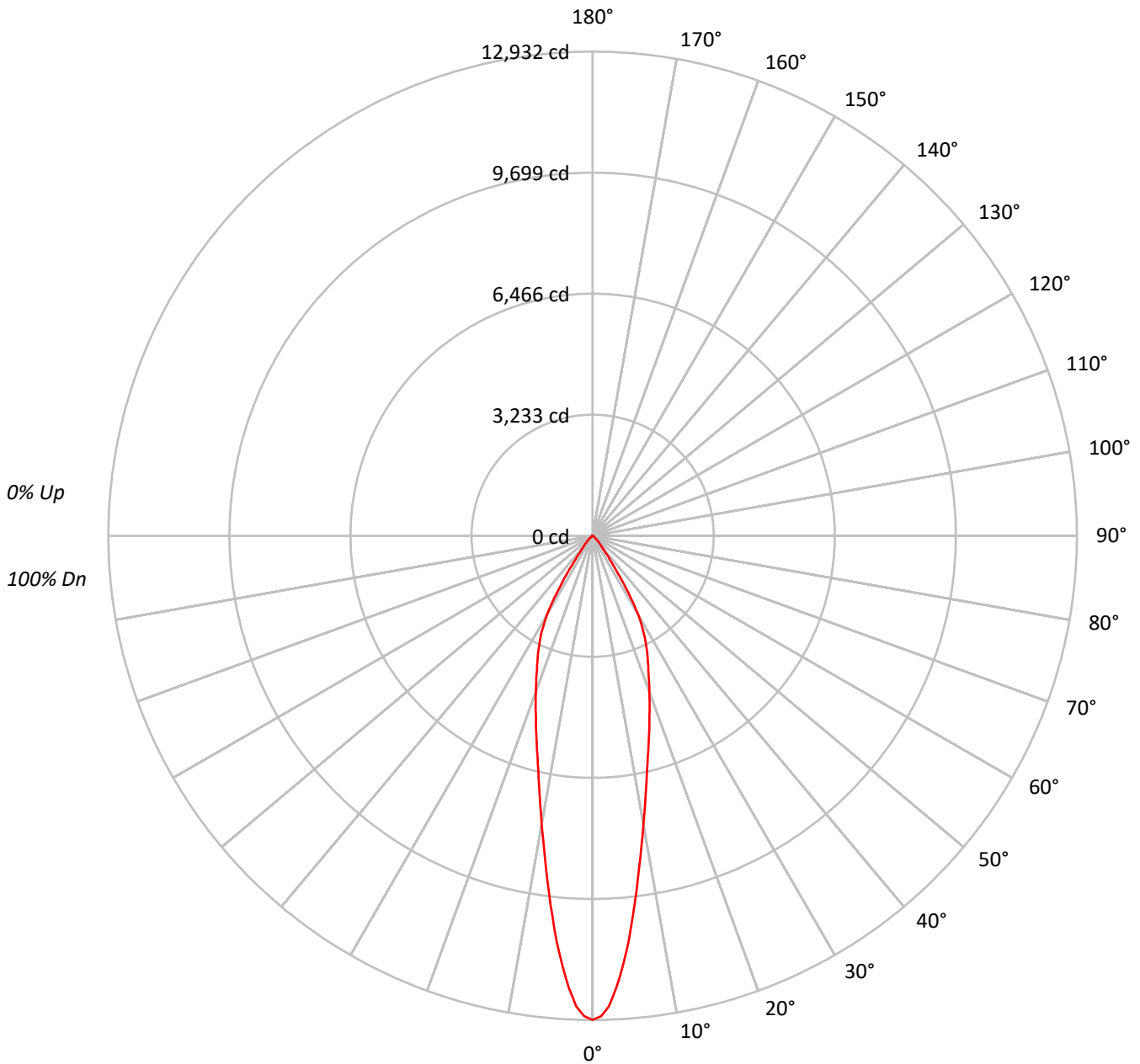
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°
0°	398763
5°	337833
10°	245117
15°	184074
20°	145241
25°	117152
30°	86816
35°	35171
40°	14834
45°	7954
50°	3574
55°	1806
60°	1147
65°	817
70°	676
75°	441
80°	657
85°	1309



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	937.1	18.7
10°-20°	1619.5	32.3
20°-30°	1565.8	31.2
30°-40°	687.7	13.7
40°-50°	148.6	3.0
50°-60°	33.4	0.7
60°-70°	11.5	0.2
70°-80°	4.4	0.1
80°-90°	3.5	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°	4122.3	82.3
0°-40°	4810.0	96.0
0°-60°	4992.1	99.6
0°-90°	5011.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5011.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	12932	
5°	10914	937
15°	5766	1619
25°	3443	1566
35°	934	688
45°	182	149
55°	34	33
65°	11	11
75°	4	4
85°	4	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	12931.6
1°	12834.8
2°	12570.5
3°	12094.1
4°	11524.6
5°	10914.0
6°	10247.8
7°	9577.7
8°	8948.7
9°	8364.2
10°	7828.2
11°	7321.9
12°	6867.9
13°	6454.6
14°	6089.8
15°	5766.0
17.5°	5040.1
20°	4426.0
22.5°	3886.2
25°	3443.2
27.5°	2992.8
30°	2438.2
32.5°	1656.5
35°	934.3
37.5°	550.9
40°	368.5
42.5°	260.6
45°	182.4
47.5°	119.1
50°	74.5
52.5°	44.7
55°	33.6
57.5°	26.1
60°	18.6
62.5°	14.8
65°	11.2
67.5°	7.5
70°	7.5
72.5°	3.7
75°	3.7
77.5°	3.7
80°	3.7
82.5°	3.7



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°	3.7
87.5°	3.7



(END OF REPORT)