

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: P584831

Luminaire Tested: **HC850D010-HM82555840-81MDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584831  
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-HM82555840-81MDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5743.9 lumens  
Efficiency: N/A  
Efficacy: 119.7 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

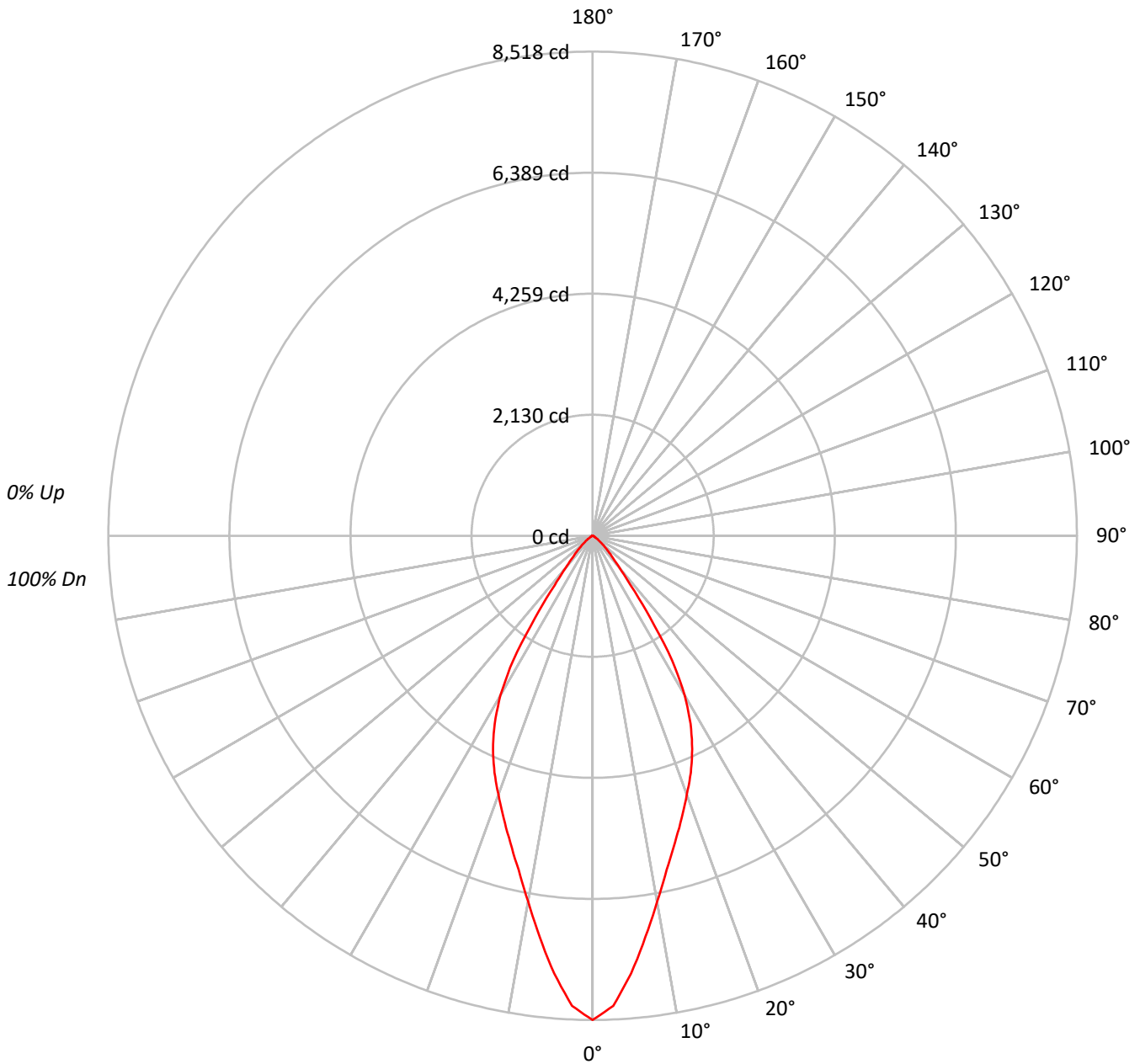
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	262679
5°	239374
10°	204524
15°	178360
20°	158974
25°	141016
30°	115458
35°	66299
40°	29426
45°	17125
50°	9887
55°	5645
60°	3114
65°	1985
70°	1397
75°	929
80°	693
85°	1380



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	700.0	12.2
10°-20°	1570.5	27.3
20°-30°	1879.9	32.7
30°-40°	1137.2	19.8
40°-50°	318.7	5.5
50°-60°	99.0	1.7
60°-70°	28.2	0.5
70°-80°	7.7	0.1
80°-90°	2.7	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°	4150.4	72.3
0°-40°	5287.6	92.1
0°-60°	5705.3	99.3
0°-90°	5743.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5743.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	8518	
5°	7733	700
15°	5587	1570
25°	4145	1880
35°	1761	1137
45°	393	319
55°	105	99
65°	27	28
75°	8	8
85°	4	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	8518.5
2.5°	8277.5
5°	7733.2
7.5°	7118.9
10°	6531.8
12.5°	6018.6
15°	5587.0
17.5°	5206.0
20°	4844.5
22.5°	4510.0
25°	4144.6
27.5°	3732.5
30°	3242.6
32.5°	2608.9
35°	1761.2
37.5°	1096.4
40°	731.0
42.5°	524.9
45°	392.7
47.5°	287.7
50°	206.1
52.5°	143.9
55°	105.0
57.5°	70.0
60°	50.5
62.5°	35.0
65°	27.2
67.5°	19.4
70°	15.5
72.5°	7.8
75°	7.8
77.5°	3.9
80°	3.9
82.5°	3.9
85°	3.9
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)