

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: P584698

Luminaire Tested: **HC845D010-HM82555840-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584698  
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: HC845D010-HM82555840-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4999.1 lumens  
Efficiency: N/A  
Efficacy: 113.6 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

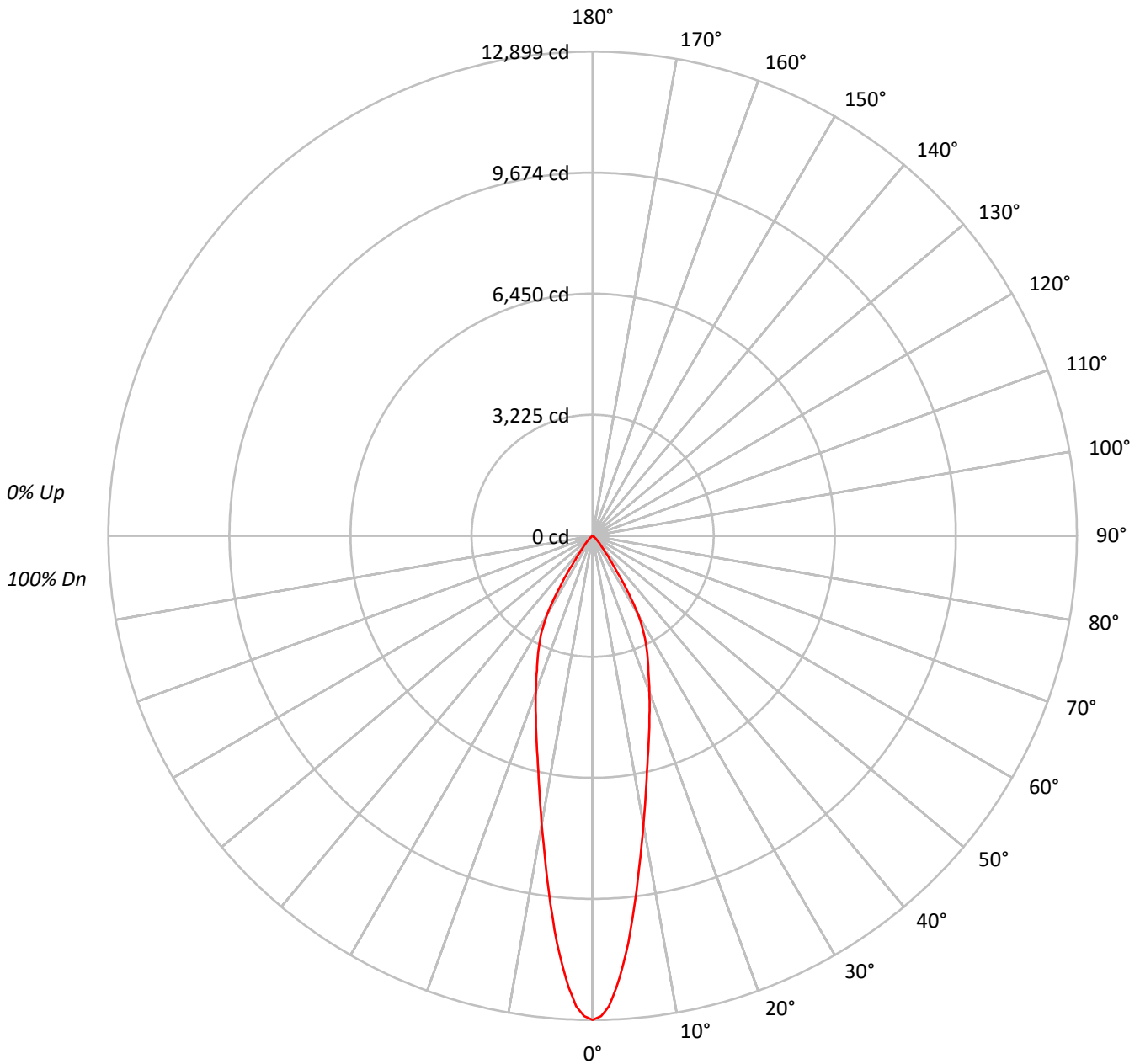
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100
1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95	95	95	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89	89	89	89
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84	84	84	84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80	80	80	80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75	75	75	75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72	72	72	72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68	68	68	68
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65	65	65	65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62	62	62	62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59	59	59	59

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

	0°
0°	397770
5°	336991
10°	244506
15°	183615
20°	144876
25°	116863
30°	86599
35°	35081
40°	14797
45°	7933
50°	3564
55°	1796
60°	1141
65°	810
70°	667
75°	453
80°	675
85°	1344



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	934.7	18.7
10°-20°	1615.4	32.3
20°-30°	1561.9	31.2
30°-40°	686.0	13.7
40°-50°	148.3	3.0
50°-60°	33.3	0.7
60°-70°	11.4	0.2
70°-80°	4.5	0.1
80°-90°	3.6	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°	4112.0	82.3
0°-40°	4798.0	96.0
0°-60°	4979.6	99.6
0°-90°	4999.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4999.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	12899	
5°	10887	935
15°	5752	1615
25°	3435	1562
35°	932	686
45°	182	148
55°	33	33
65°	11	11
75°	4	4
85°	4	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	12899.4
1°	12802.8
2°	12539.3
3°	12064.0
4°	11495.9
5°	10886.8
6°	10222.2
7°	9553.9
8°	8926.3
9°	8343.4
10°	7808.7
11°	7303.7
12°	6850.7
13°	6438.6
14°	6074.6
15°	5751.6
17.5°	5027.6
20°	4414.9
22.5°	3876.5
25°	3434.7
27.5°	2985.4
30°	2432.1
32.5°	1652.3
35°	931.9
37.5°	549.6
40°	367.6
42.5°	259.9
45°	181.9
47.5°	118.8
50°	74.3
52.5°	44.6
55°	33.4
57.5°	26.0
60°	18.5
62.5°	14.9
65°	11.1
67.5°	7.4
70°	7.4
72.5°	3.8
75°	3.8
77.5°	3.8
80°	3.8
82.5°	3.8



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°	3.8
87.5°	3.8



(END OF REPORT)