

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: P584647

Luminaire Tested: **HC845D010-HM82555827-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584647  
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-HM82555827-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4459.0 lumens  
Efficiency: N/A  
Efficacy: 101.3 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

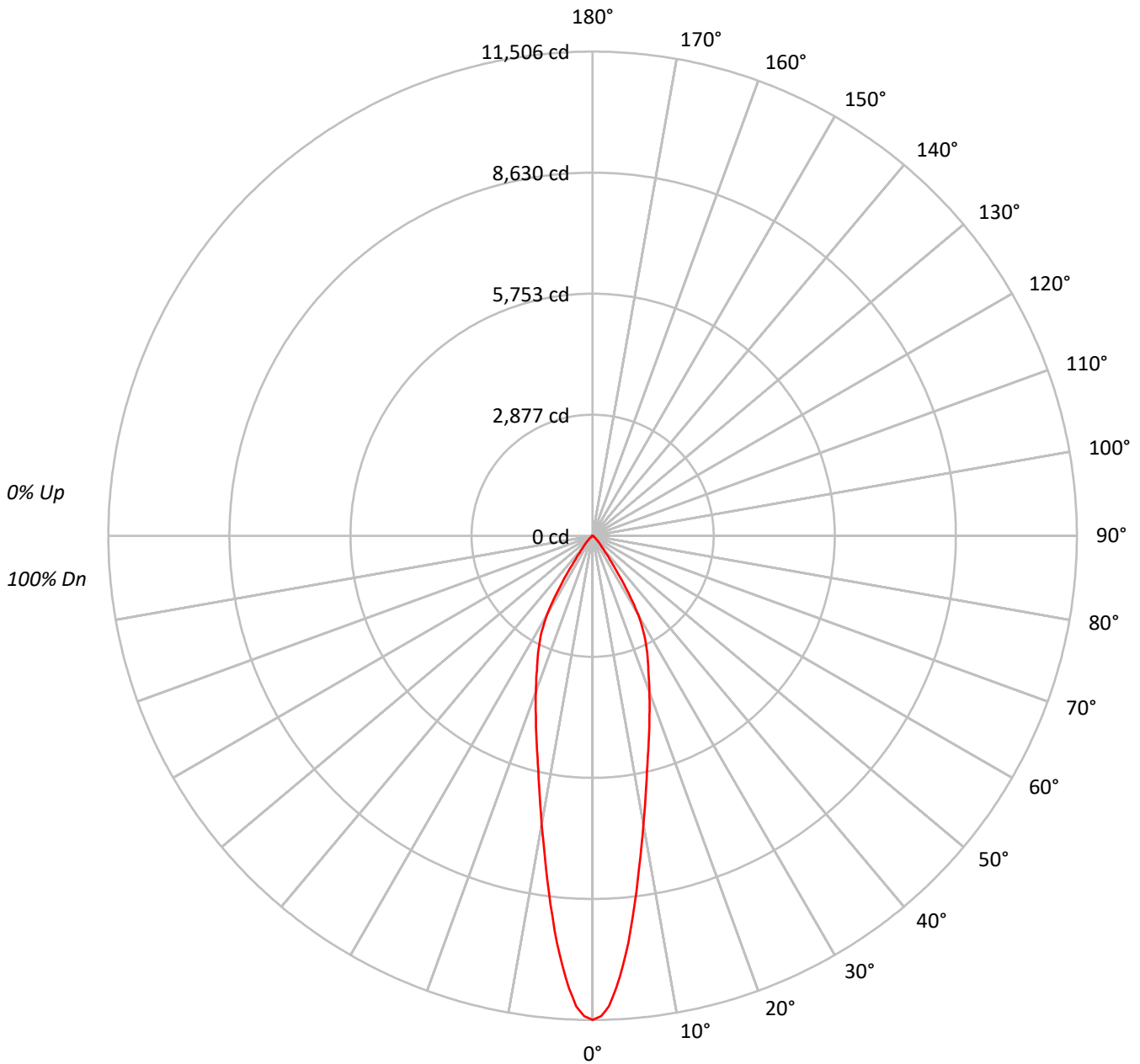
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	71	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°	354806
5°	300592
10°	218098
15°	163783
20°	129227
25°	104236
30°	77242
35°	31294
40°	13199
45°	7078
50°	3181
55°	1602
60°	1018
65°	730
70°	595
75°	393
80°	586
85°	1168



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	833.8	18.7
10°-20°	1440.9	32.3
20°-30°	1393.1	31.2
30°-40°	611.9	13.7
40°-50°	132.3	3.0
50°-60°	29.7	0.7
60°-70°	10.2	0.2
70°-80°	3.9	0.1
80°-90°	3.1	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°	3667.9	82.3
0°-40°	4279.8	96.0
0°-60°	4441.8	99.6
0°-90°	4459.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4459.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	11506	
5°	9711	834
15°	5130	1441
25°	3064	1393
35°	831	612
45°	162	132
55°	30	30
65°	10	10
75°	3	4
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	11506.1
1°	11420.0
2°	11184.8
3°	10760.9
4°	10254.1
5°	9710.9
6°	9118.1
7°	8522.0
8°	7962.2
9°	7442.2
10°	6965.3
11°	6514.8
12°	6110.7
13°	5743.1
14°	5418.6
15°	5130.4
17.5°	4484.5
20°	3938.0
22.5°	3457.8
25°	3063.6
27.5°	2662.9
30°	2169.3
32.5°	1473.9
35°	831.3
37.5°	490.2
40°	327.9
42.5°	231.9
45°	162.3
47.5°	106.0
50°	66.3
52.5°	39.8
55°	29.8
57.5°	23.2
60°	16.5
62.5°	13.3
65°	10.0
67.5°	6.6
70°	6.6
72.5°	3.3
75°	3.3
77.5°	3.3
80°	3.3
82.5°	3.3



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°	3.3
87.5°	3.3



(END OF REPORT)