

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: P593774

Luminaire Tested: **HC845D010-HM82555950-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593774  
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-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: 4757.8 lumens  
Efficiency: N/A  
Efficacy: 108.1 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

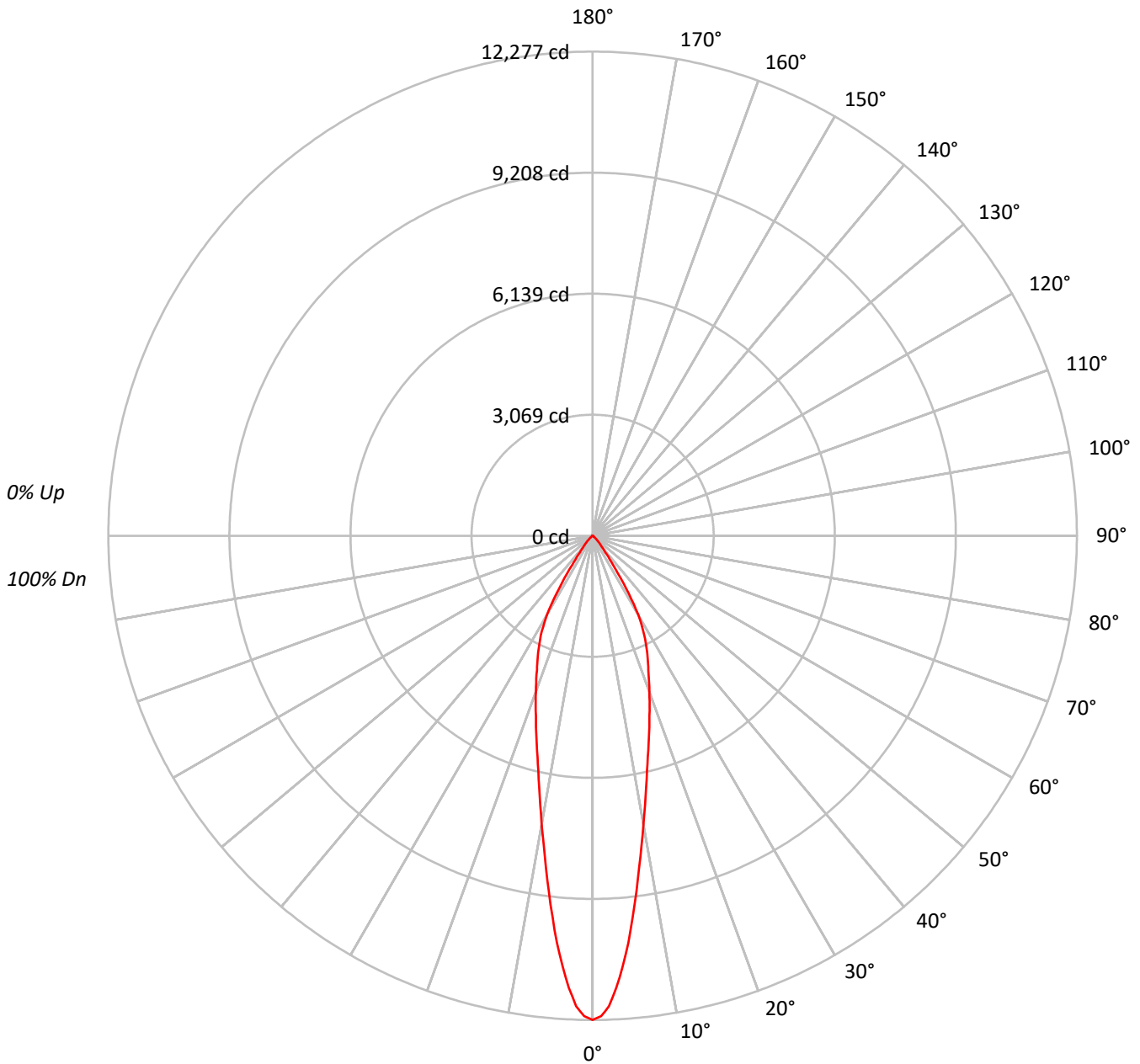
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°
0°	378581
5°	320737
10°	232711
15°	174759
20°	137887
25°	111221
30°	82422
35°	33390
40°	14085
45°	7549
50°	3392
55°	1710
60°	1092
65°	773
70°	631
75°	417
80°	622
85°	1238



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	889.6	18.7
10°-20°	1537.5	32.3
20°-30°	1486.5	31.2
30°-40°	652.9	13.7
40°-50°	141.1	3.0
50°-60°	31.7	0.7
60°-70°	10.9	0.2
70°-80°	4.2	0.1
80°-90°	3.3	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°	3913.7	82.3
0°-40°	4566.5	96.0
0°-60°	4739.4	99.6
0°-90°	4757.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4757.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	12277	
5°	10362	890
15°	5474	1537
25°	3269	1487
35°	887	653
45°	173	141
55°	32	32
65°	11	11
75°	4	4
85°	4	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	12277.1
1°	12185.2
2°	11934.3
3°	11481.9
4°	10941.3
5°	10361.7
6°	9729.1
7°	9093.0
8°	8495.7
9°	7940.9
10°	7432.0
11°	6951.3
12°	6520.2
13°	6128.0
14°	5781.6
15°	5474.2
17.5°	4785.0
20°	4201.9
22.5°	3689.4
25°	3268.9
27.5°	2841.4
30°	2314.8
32.5°	1572.6
35°	887.0
37.5°	523.0
40°	349.9
42.5°	247.4
45°	173.1
47.5°	113.1
50°	70.7
52.5°	42.5
55°	31.8
57.5°	24.8
60°	17.7
62.5°	14.2
65°	10.6
67.5°	7.0
70°	7.0
72.5°	3.5
75°	3.5
77.5°	3.5
80°	3.5
82.5°	3.5



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CANDELA DISTRIBUTION (continued):

0°  
90° | 0.0



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— 0°-180°







85°	3.5
87.5°	3.5



(END OF REPORT)