

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: P584834

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

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584834
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-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: 5265.5 lumens
Efficiency: N/A
Efficacy: 109.7 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

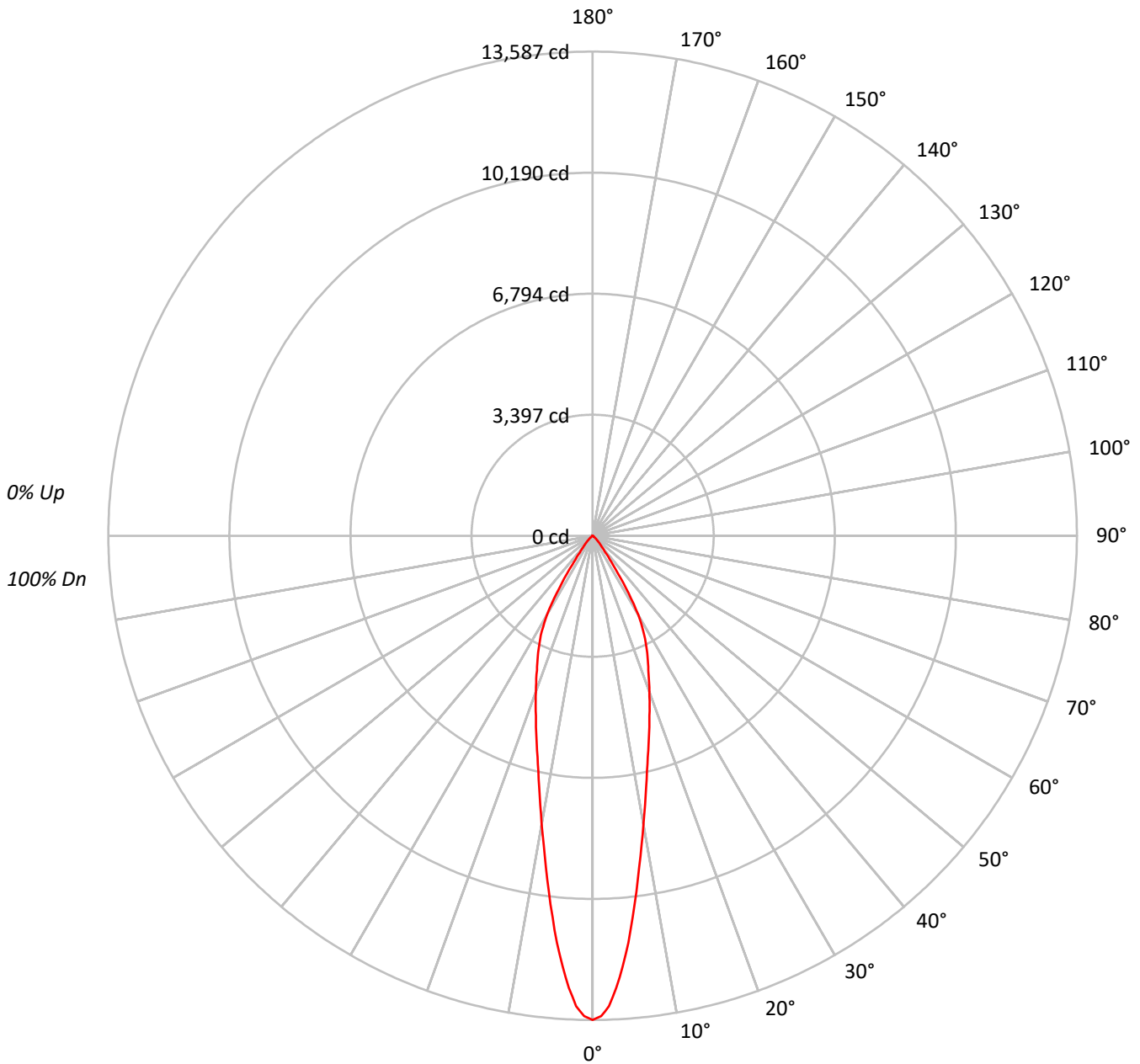
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	418976
5°	354960
10°	257541
15°	193403
20°	152601
25°	123089
30°	91214
35°	36955
40°	15586
45°	8356
50°	3751
55°	1892
60°	1203
65°	854
70°	703
75°	465
80°	693
85°	1380



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	984.6	18.7
10°-20°	1701.5	32.3
20°-30°	1645.1	31.2
30°-40°	722.6	13.7
40°-50°	156.2	3.0
50°-60°	35.1	0.7
60°-70°	12.0	0.2
70°-80°	4.6	0.1
80°-90°	3.7	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°	4331.2	82.3
0°-40°	5053.8	96.0
0°-60°	5245.1	99.6
0°-90°	5265.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5265.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	13587	
5°	11467	985
15°	6058	1702
25°	3618	1645
35°	982	723
45°	192	156
55°	35	35
65°	12	12
75°	4	5
85°	4	4
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	13587.1
1°	13485.4
2°	13207.7
3°	12707.0
4°	12108.7
5°	11467.3
6°	10767.2
7°	10063.2
8°	9402.3
9°	8788.2
10°	8225.0
11°	7693.1
12°	7215.9
13°	6781.8
14°	6398.5
15°	6058.2
17.5°	5295.6
20°	4650.3
22.5°	4083.2
25°	3617.7
27.5°	3144.5
30°	2561.7
32.5°	1740.4
35°	981.7
37.5°	578.9
40°	387.2
42.5°	273.8
45°	191.6
47.5°	125.2
50°	78.2
52.5°	46.9
55°	35.2
57.5°	27.4
60°	19.5
62.5°	15.7
65°	11.7
67.5°	7.8
70°	7.8
72.5°	3.9
75°	3.9
77.5°	3.9
80°	3.9
82.5°	3.9



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CANDELA DISTRIBUTION (continued):

0°
90° | 0.0



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— 0°-180°







85°	3.9
87.5°	3.9



(END OF REPORT)