

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: P593743

Luminaire Tested: **HC840D010-HM82555950-81NDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593743
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC840D010-HM82555950-81NDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4902.0 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.27
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

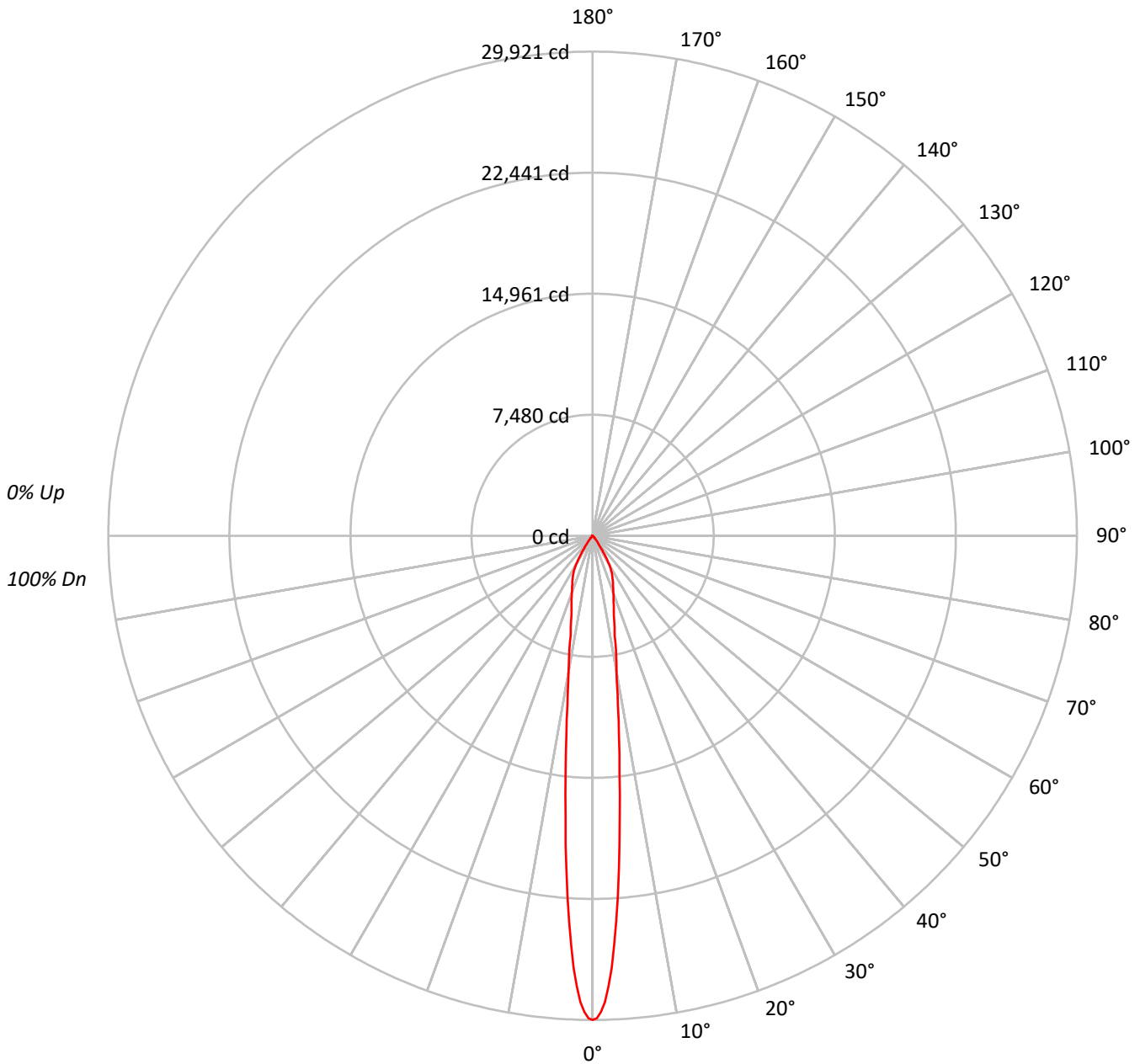
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100	100
1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96	96	96	96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91
3	106	101	97	93	104	99	96	93	97	94	91	95	92	90	92	90	89	87	87	87	87
4	102	96	91	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83	83	83	83
5	98	92	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80	80	80	80
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	76	76	76	76
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73	73	73	73
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71	71	71	71
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	72	69	68	68	68	68
10	83	75	70	67	82	75	70	67	74	70	67	73	69	67	73	69	67	66	66	66	66

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	922641
5°	591805
10°	267339
15°	161303
20°	122923
25°	99265
30°	72741
35°	26340
40°	9830
45°	4461
50°	1430
55°	349
60°	204
65°	241
70°	0
75°	0
80°	586
85°	1168



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1458.2	29.7
10°-20°	1481.1	30.2
20°-30°	1325.8	27.0
30°-40°	534.1	10.9
40°-50°	87.6	1.8
50°-60°	7.9	0.2
60°-70°	2.9	0.1
70°-80°	2.2	0.0
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°	4265.0	87.0
0°-40°	4799.1	97.9
0°-60°	4894.6	99.9
0°-90°	4902.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4902.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	29921	
5°	19119	###
15°	5053	1481
25°	2918	1326
35°	700	534
45°	102	88
55°	6	8
65°	3	3
75°	0	2
85°	3	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	29920.6
0.5°	29828.3
1°	29442.1
1.5°	28821.7
2°	27881.1
2.5°	26768.8
3°	25376.2
3.5°	23848.1
4°	22336.5
4.5°	20643.5
5°	19118.8
5.5°	17458.7
6°	16112.1
6.5°	14709.5
7°	13607.2
7.5°	12442.2
8°	11504.9
8.5°	10564.3
9°	9858.1
9.5°	9079.2
10°	8537.9
12.5°	6297.0
15°	5052.7
17.5°	4316.8
20°	3745.9
22.5°	3290.5
25°	2917.5
27.5°	2544.6
30°	2042.9
32.5°	1313.5
35°	699.7
37.5°	386.2
40°	244.2
42.5°	161.7
45°	102.3
47.5°	62.7
50°	29.8
52.5°	9.9
55°	6.5
57.5°	3.3
60°	3.3
62.5°	3.3
65°	3.3



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CANDELA DISTRIBUTION (continued):

	0°
72.5°	0.0
75°	0.0
77.5°	3.3
80°	3.3
82.5°	3.3
85°	3.3
87.5°	3.3
90°	0.0



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— 0°-180°







67.5°		3.3
70°		0.0



(END OF REPORT)