

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: P584561

Luminaire Tested: **HC840D010-HM82555840-81NDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584561
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-HM82555840-81NDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5150.5 lumens
Efficiency: N/A
Efficacy: 125.6 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

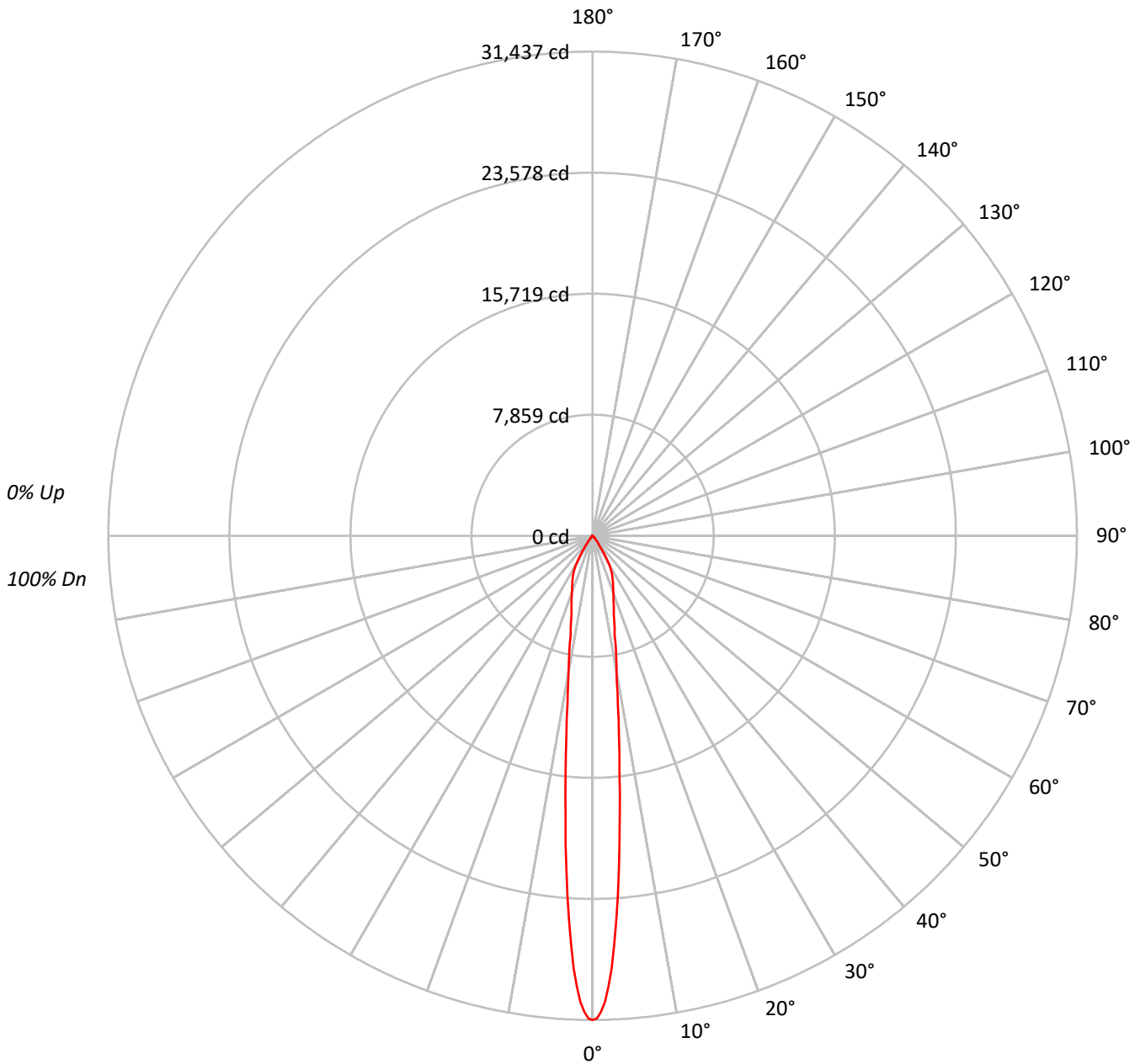
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	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°	969407
5°	621800
10°	280891
15°	169482
20°	129151
25°	104294
30°	76426
35°	27676
40°	10329
45°	4688
50°	1497
55°	371
60°	216
65°	255
70°	0
75°	0
80°	622
85°	1238



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1532.1	29.7
10°-20°	1556.1	30.2
20°-30°	1393.0	27.0
30°-40°	561.1	10.9
40°-50°	92.0	1.8
50°-60°	8.4	0.2
60°-70°	3.0	0.1
70°-80°	2.3	0.0
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°	4481.2	87.0
0°-40°	5042.3	97.9
0°-60°	5142.7	99.8
0°-90°	5151.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5150.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	31437	
5°	20088	###
15°	5309	1556
25°	3065	1393
35°	735	561
45°	108	92
55°	7	8
65°	4	3
75°	0	2
85°	4	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	31437.2
0.5°	31340.2
1°	30934.4
1.5°	30282.5
2°	29294.2
2.5°	28125.6
3°	26662.3
3.5°	25056.9
4°	23468.7
4.5°	21689.8
5°	20087.8
5.5°	18343.6
6°	16928.8
6.5°	15455.1
7°	14296.9
7.5°	13072.9
8°	12088.0
8.5°	11099.7
9°	10357.8
9.5°	9539.4
10°	8970.7
12.5°	6616.2
15°	5308.9
17.5°	4535.6
20°	3935.7
22.5°	3457.2
25°	3065.3
27.5°	2673.6
30°	2146.4
32.5°	1380.2
35°	735.2
37.5°	405.7
40°	256.6
42.5°	169.9
45°	107.5
47.5°	65.9
50°	31.2
52.5°	10.4
55°	6.9
57.5°	3.5
60°	3.5
62.5°	3.5
65°	3.5



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CANDELA DISTRIBUTION (continued):

	0°
72.5°	0.0
75°	0.0
77.5°	3.5
80°	3.5
82.5°	3.5
85°	3.5
87.5°	3.5
90°	0.0



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— 0°-180°







67.5°		3.5
70°		0.0



(END OF REPORT)