

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: P584816

Luminaire Tested: **HC850D010-HM82555835-81NDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584816
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: HC850D010-HM82555835-81NDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5332.1 lumens
Efficiency: N/A
Efficacy: 111.1 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

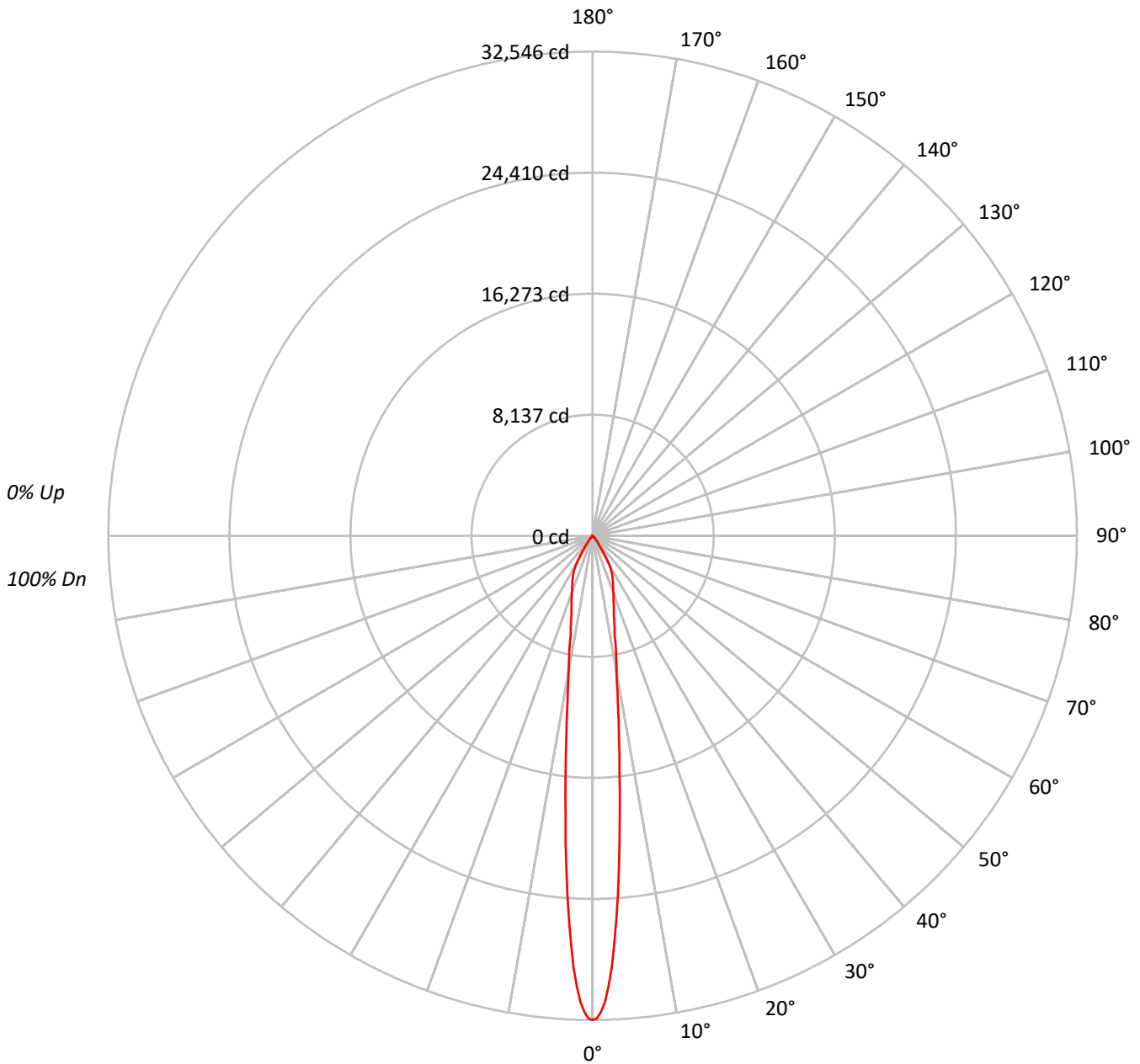
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1003602
5°	643734
10°	290798
15°	175461
20°	133706
25°	107976
30°	79125
35°	28647
40°	10691
45°	4854
50°	1550
55°	382
60°	222
65°	263
70°	0
75°	0
80°	639
85°	1274



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1586.1	29.7
10°-20°	1611.0	30.2
20°-30°	1442.1	27.0
30°-40°	580.9	10.9
40°-50°	95.3	1.8
50°-60°	8.6	0.2
60°-70°	3.1	0.1
70°-80°	2.4	0.0
80°-90°	3.4	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°	4639.3	87.0
0°-40°	5220.2	97.9
0°-60°	5324.1	99.9
0°-90°	5333.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5332.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	32546	
5°	20796	###
15°	5496	1611
25°	3174	1442
35°	761	581
45°	111	95
55°	7	9
65°	4	3
75°	0	2
85°	4	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	32546.1
0.5°	32445.6
1°	32025.6
1.5°	31350.7
2°	30327.6
2.5°	29117.8
3°	27602.8
3.5°	25940.7
4°	24296.5
4.5°	22454.9
5°	20796.4
5.5°	18990.6
6°	17526.0
6.5°	16000.2
7°	14801.2
7.5°	13534.0
8°	12514.4
8.5°	11491.3
9°	10723.1
9.5°	9875.8
10°	9287.1
12.5°	6849.5
15°	5496.2
17.5°	4695.6
20°	4074.5
22.5°	3579.1
25°	3173.5
27.5°	2767.8
30°	2222.2
32.5°	1428.8
35°	761.0
37.5°	420.0
40°	265.6
42.5°	175.9
45°	111.3
47.5°	68.2
50°	32.3
52.5°	10.8
55°	7.1
57.5°	3.6
60°	3.6
62.5°	3.6
65°	3.6



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CANDELA DISTRIBUTION (continued):

	0°
72.5°	0.0
75°	0.0
77.5°	3.6
80°	3.6
82.5°	3.6
85°	3.6
87.5°	3.6
90°	0.0



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— 0°-180°







67.5°		3.6
70°		0.0



(END OF REPORT)