

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: P584850

Luminaire Tested: **HC850D010-HM82555927-81NDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584850
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-HM82555927-81NDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4153.3 lumens
Efficiency: N/A
Efficacy: 86.5 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

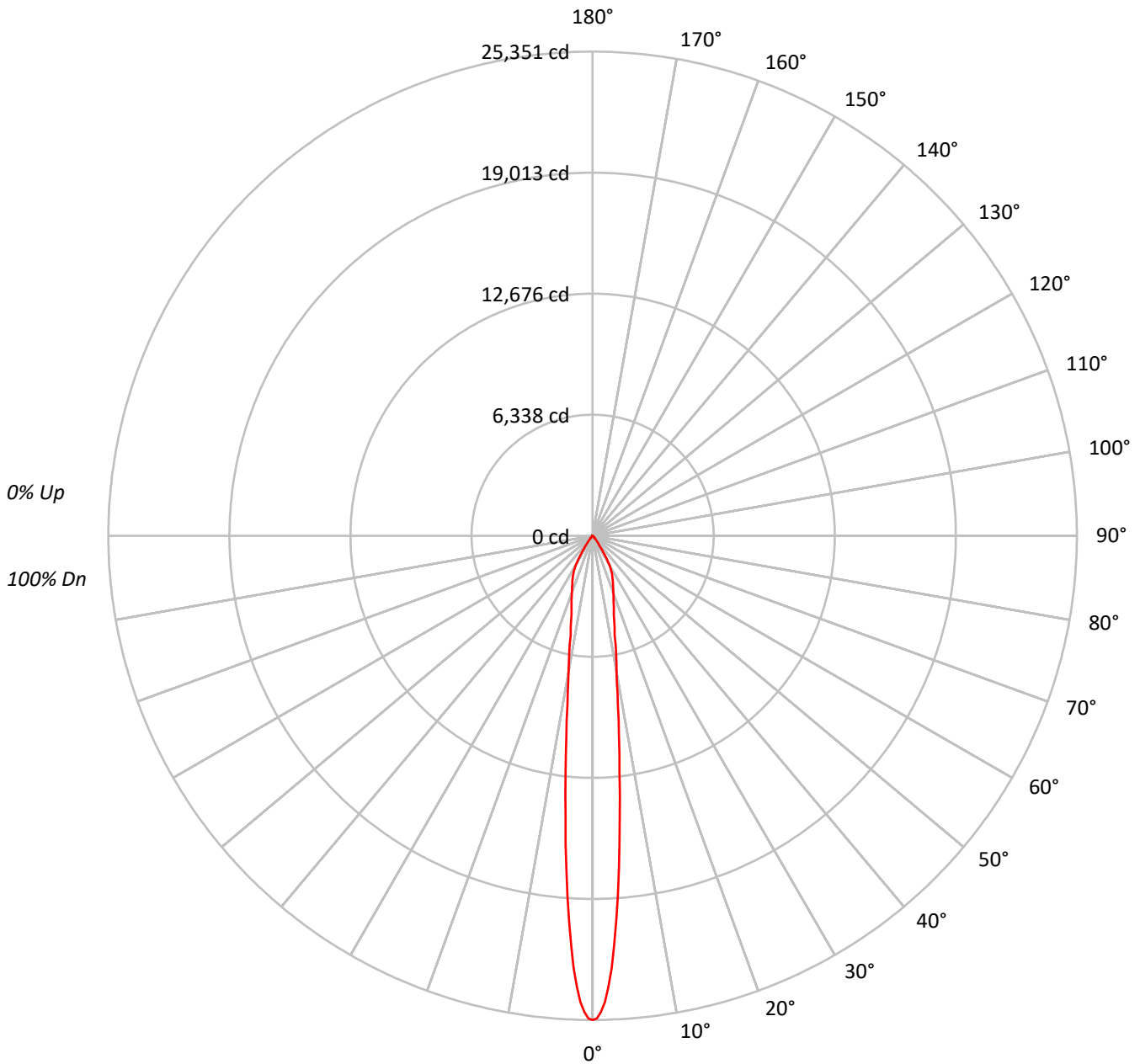
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	781741
5°	501422
10°	226511
15°	136670
20°	104149
25°	84108
30°	61632
35°	22315
40°	8329
45°	3781
50°	1204
55°	301
60°	173
65°	204
70°	0
75°	0
80°	497
85°	991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1235.5	29.7
10°-20°	1254.9	30.2
20°-30°	1123.3	27.0
30°-40°	452.5	10.9
40°-50°	74.2	1.8
50°-60°	6.7	0.2
60°-70°	2.4	0.1
70°-80°	1.9	0.0
80°-90°	2.7	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°	3613.7	87.0
0°-40°	4066.2	97.9
0°-60°	4147.1	99.9
0°-90°	4154.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4153.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	25351	
5°	16199	###
15°	4281	1255
25°	2472	1123
35°	593	452
45°	87	74
55°	6	7
65°	3	2
75°	0	2
85°	3	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	25351.3
0.5°	25273.0
1°	24945.9
1.5°	24420.2
2°	23623.2
2.5°	22680.8
3°	21500.8
3.5°	20206.0
4°	18925.4
4.5°	17490.9
5°	16198.9
5.5°	14792.4
6°	13651.6
6.5°	12463.2
7°	11529.1
7.5°	10542.0
8°	9747.9
8.5°	8950.9
9°	8352.5
9.5°	7692.6
10°	7234.0
12.5°	5335.3
15°	4281.1
17.5°	3657.6
20°	3173.8
22.5°	2787.9
25°	2472.0
27.5°	2156.0
30°	1730.9
32.5°	1112.9
35°	592.8
37.5°	327.2
40°	206.9
42.5°	137.0
45°	86.7
47.5°	53.1
50°	25.1
52.5°	8.4
55°	5.6
57.5°	2.8
60°	2.8
62.5°	2.8
65°	2.8



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CANDELA DISTRIBUTION (continued):

	0°
72.5°	0.0
75°	0.0
77.5°	2.8
80°	2.8
82.5°	2.8
85°	2.8
87.5°	2.8
90°	0.0



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— 0°-180°







67.5°		2.8
70°		0.0



(END OF REPORT)