

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: P593794

Luminaire Tested: **HC850D010-HM82555850-81NDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593794
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-HM82555850-81NDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5775.0 lumens
Efficiency: N/A
Efficacy: 120.3 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

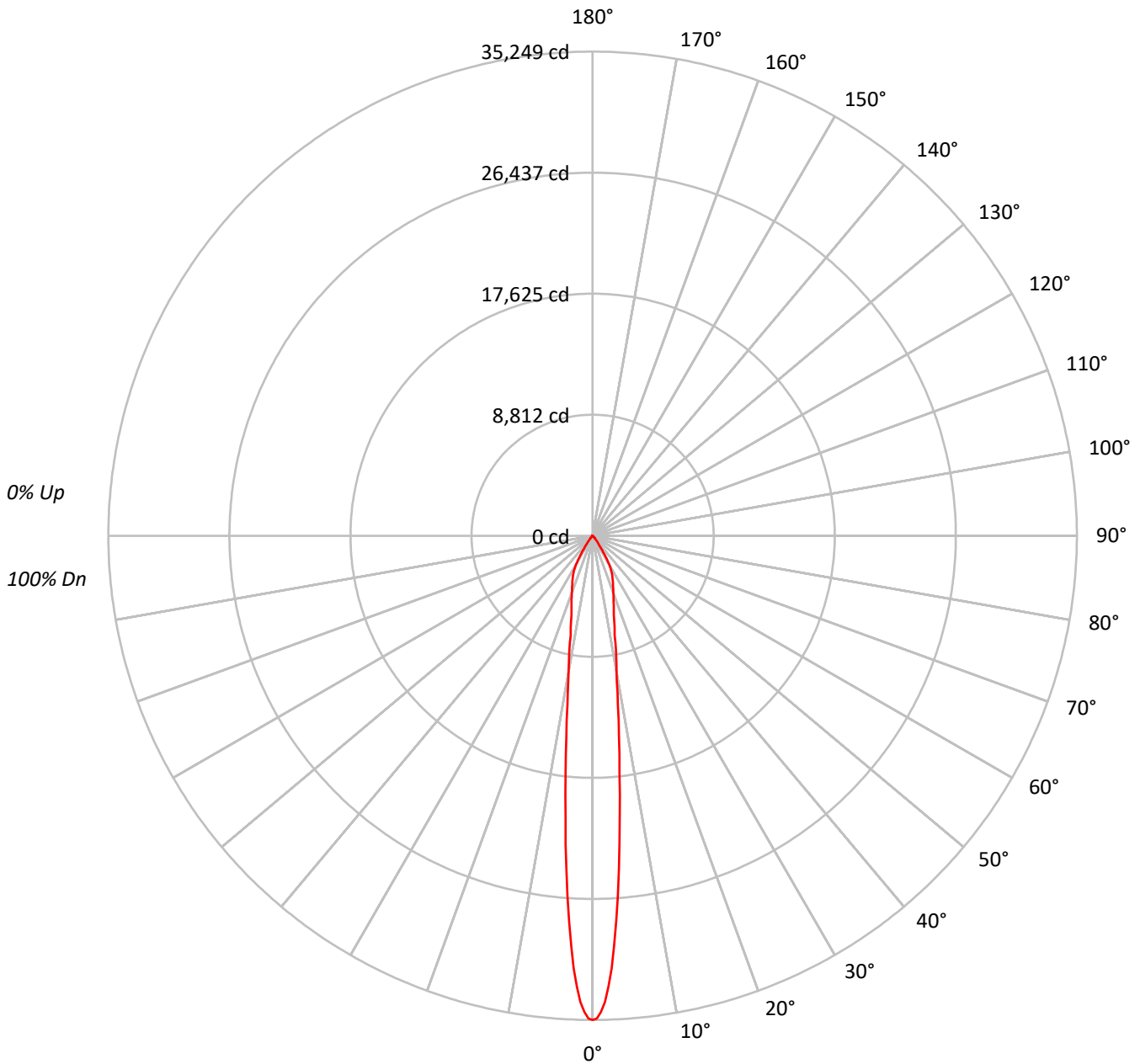
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1086958
5°	697198
10°	314949
15°	190035
20°	144814
25°	116944
30°	85695
35°	31030
40°	11581
45°	5255
50°	1679
55°	419
60°	241
65°	285
70°	0
75°	0
80°	693
85°	1380



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1717.8	29.7
10°-20°	1744.8	30.2
20°-30°	1561.9	27.0
30°-40°	629.2	10.9
40°-50°	103.2	1.8
50°-60°	9.4	0.2
60°-70°	3.4	0.1
70°-80°	2.6	0.0
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°	5024.6	87.0
0°-40°	5653.8	97.9
0°-60°	5766.3	99.9
0°-90°	5776.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5775.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	35249	
5°	22524	###
15°	5953	1745
25°	3437	1562
35°	824	629
45°	120	103
55°	8	9
65°	4	3
75°	0	3
85°	4	4
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	35249.3
0.5°	35140.4
1°	34685.5
1.5°	33954.5
2°	32846.4
2.5°	31536.2
3°	29895.4
3.5°	28095.3
4°	26314.5
4.5°	24319.9
5°	22523.6
5.5°	20568.0
6°	18981.6
6.5°	17329.1
7°	16030.5
7.5°	14658.1
8°	13553.9
8.5°	12445.8
9°	11613.7
9.5°	10696.1
10°	10058.4
12.5°	7418.5
15°	5952.7
17.5°	5085.6
20°	4413.0
22.5°	3876.4
25°	3437.1
27.5°	2997.7
30°	2406.7
32.5°	1547.4
35°	824.3
37.5°	454.9
40°	287.7
42.5°	190.5
45°	120.5
47.5°	73.9
50°	35.0
52.5°	11.7
55°	7.8
57.5°	3.9
60°	3.9
62.5°	3.9
65°	3.9



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CANDELA DISTRIBUTION (continued):

	0°
72.5°	0.0
75°	0.0
77.5°	3.9
80°	3.9
82.5°	3.9
85°	3.9
87.5°	3.9
90°	0.0



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— 0°-180°







67.5°		3.9
70°		0.0



(END OF REPORT)