

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P974834

Luminaire Tested: FLR2-24-100HE-L840-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974834
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-100HE-L840-CP125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

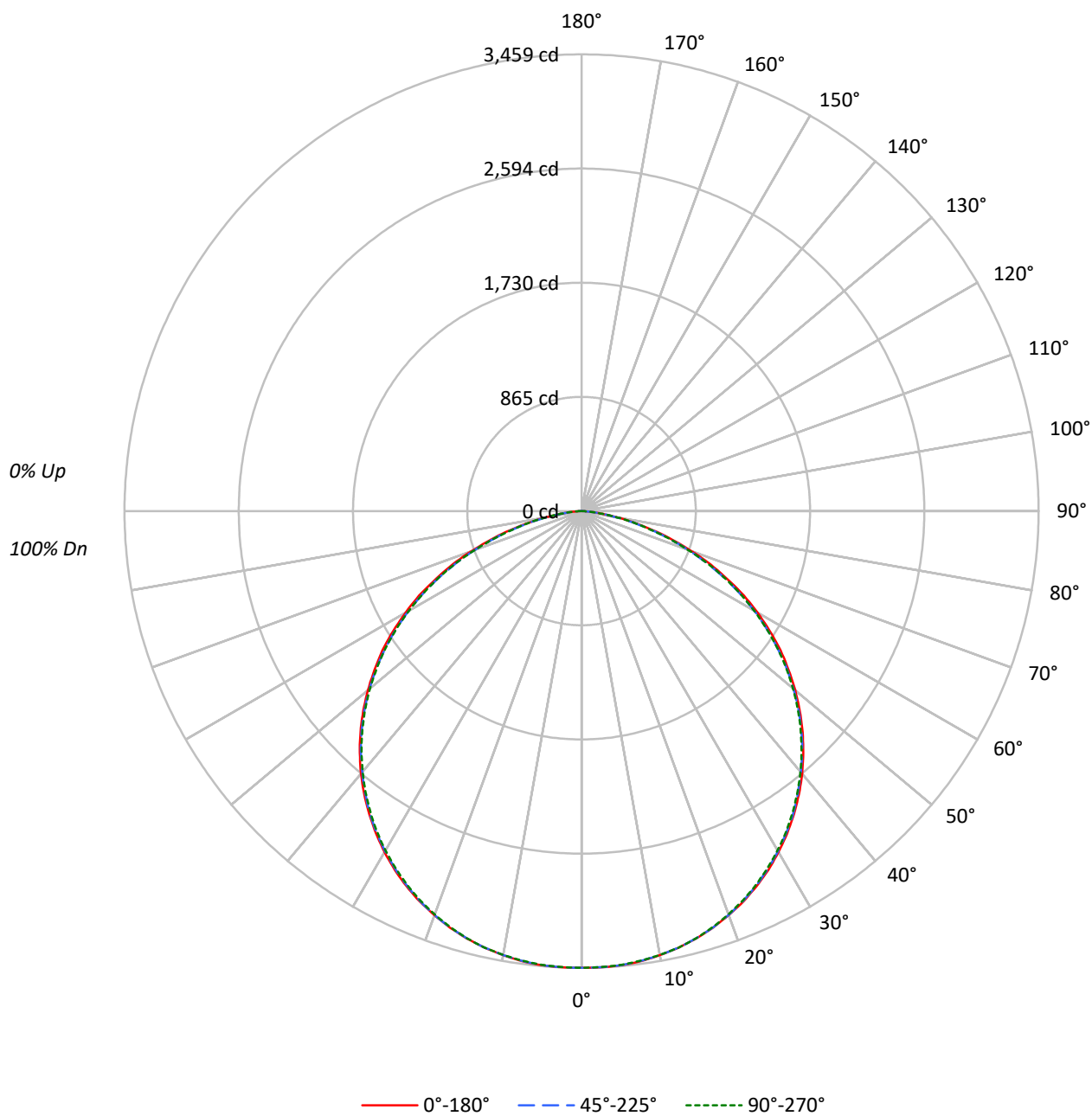
Lumens per Lamp: N/A
Luminaire Lumens: 9775.3 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 82.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor:
Total Harmonic Distortion (THDi):
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 24 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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71		71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60		60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30		30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27		27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4654	4654	4654
5°	4663	4663	4660
10°	4666	4664	4663
15°	4667	4666	4666
20°	4663	4661	4654
25°	4654	4645	4637
30°	4633	4620	4610
35°	4603	4590	4574
40°	4562	4534	4527
45°	4503	4477	4463
50°	4419	4385	4372
55°	4314	4253	4247
60°	4134	4061	4061
65°	3868	3777	3789
70°	3481	3373	3364
75°	2923	2806	2794
80°	2135	2029	2115
85°	1207	1112	1130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4503 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.3	3.4
10°-20°	945.8	9.7
20°-30°	1442.0	14.8
30°-40°	1747.1	17.9
40°-50°	1814.8	18.6
50°-60°	1623.5	16.6
60°-70°	1183.2	12.1
70°-80°	586.0	6.0
80°-90°	104.7	1.1
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°	2716.1	27.8
0°-40°	4463.2	45.7
0°-60°	7901.4	80.8
0°-90°	9775.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9775.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3459	3459	3459	3459	3459	
5°	3452	3454	3452	3452	3450	328
15°	3351	3350	3350	3352	3350	946
25°	3135	3131	3129	3127	3124	1445
35°	2802	2798	2795	2790	2785	1753
45°	2367	2362	2353	2348	2346	1824
55°	1839	1826	1813	1813	1811	1639
65°	1215	1205	1186	1191	1190	1204
75°	562	554	540	550	537	599
85°	78	72	72	73	73	108
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3458.7	3458.7	3458.7	3458.7	3458.7
2.5°	3458.7	3457.4	3457.4	3458.7	3456.2
5°	3452.5	3453.7	3452.5	3452.5	3450.0
7.5°	3438.8	3437.6	3436.4	3437.6	3433.9
10°	3415.3	3415.3	3414.0	3415.3	3412.8
12.5°	3386.7	3386.7	3386.7	3388.0	3386.7
15°	3350.7	3349.5	3349.5	3352.0	3349.5
17.5°	3308.5	3307.3	3307.3	3306.0	3303.6
20°	3256.4	3256.4	3255.2	3253.9	3250.2
22.5°	3200.6	3199.3	3195.6	3195.6	3190.6
25°	3134.8	3131.1	3128.6	3127.3	3123.6
27.5°	3062.8	3057.8	3054.1	3051.6	3047.9
30°	2982.1	2977.2	2973.5	2969.7	2967.2
32.5°	2895.3	2892.8	2886.6	2885.3	2880.4
35°	2802.2	2798.5	2794.7	2789.8	2784.8
37.5°	2702.9	2699.2	2690.5	2688.0	2684.3
40°	2597.4	2592.5	2581.3	2581.3	2577.6
42.5°	2484.5	2479.5	2472.1	2467.1	2464.6
45°	2366.6	2361.6	2353.0	2348.0	2345.5
47.5°	2241.3	2237.5	2227.6	2223.9	2220.2
50°	2111.0	2106.0	2094.8	2092.3	2088.6
52.5°	1974.4	1972.0	1957.1	1955.8	1952.1
55°	1839.2	1825.5	1813.1	1813.1	1810.6
57.5°	1690.3	1680.3	1664.2	1664.2	1661.7
60°	1536.4	1527.7	1509.1	1511.5	1509.1
62.5°	1386.2	1367.6	1350.2	1357.7	1351.5
65°	1214.9	1205.0	1186.4	1191.4	1190.1
67.5°	1058.6	1040.0	1022.6	1032.5	1027.6
70°	884.8	874.9	857.5	867.5	855.1
72.5°	721.0	712.3	695.0	706.1	693.7
75°	562.2	553.5	539.8	549.8	537.4
77.5°	412.0	405.8	393.4	403.3	405.8
80°	275.5	268.1	261.9	270.5	273.0
82.5°	161.3	156.4	153.9	155.1	161.3
85°	78.2	72.0	72.0	73.2	73.2
87.5°	21.1	18.6	21.1	22.3	23.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)