

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: P974446

Luminaire Tested: FLR2-24-55-L850-CA125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974446  
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: FLR2-24-55-L850-CA125  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-55-L850-CA125  
Ballast/Driver: -

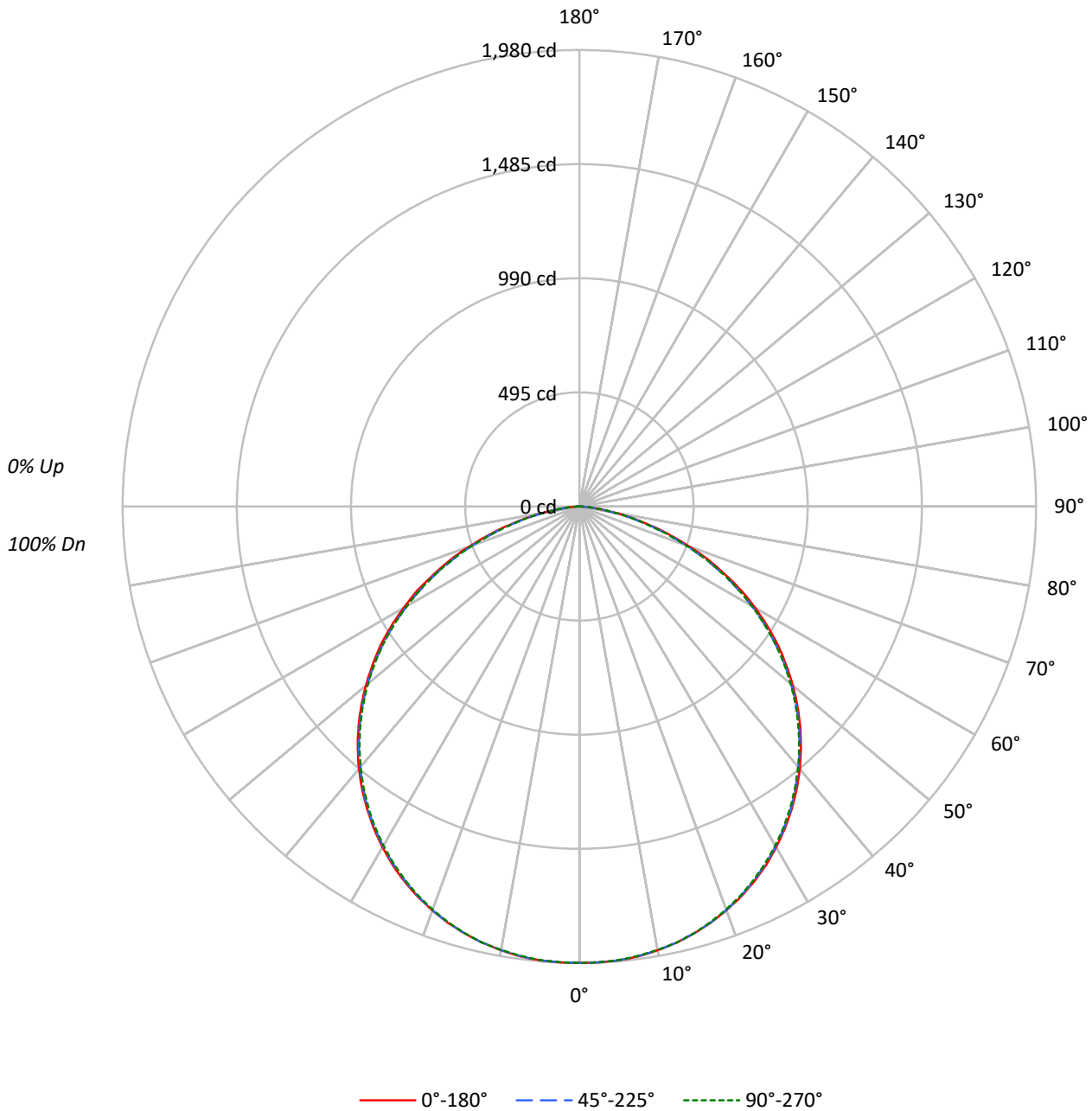
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5595.2 lumens  
Efficiency: N/A  
Efficacy: 126.9 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): 44.1  
Input Voltage (V): 120  
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									
RC	80									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																
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°	2664	2664	2664
5°	2669	2669	2667
10°	2671	2670	2669
15°	2672	2671	2671
20°	2669	2668	2664
25°	2664	2658	2654
30°	2652	2644	2639
35°	2634	2628	2618
40°	2611	2595	2591
45°	2578	2563	2555
50°	2529	2510	2502
55°	2469	2434	2431
60°	2366	2324	2324
65°	2214	2162	2169
70°	1993	1931	1925
75°	1673	1606	1599
80°	1222	1161	1211
85°	692	636	647

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2578 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.9	3.4
10°-20°	541.3	9.7
20°-30°	825.4	14.8
30°-40°	1000.0	17.9
40°-50°	1038.7	18.6
50°-60°	929.2	16.6
60°-70°	677.2	12.1
70°-80°	335.4	6.0
80°-90°	60.0	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°	1554.6	27.8
0°-40°	2554.6	45.7
0°-60°	4522.6	80.8
0°-90°	5595.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5595.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1980	1980	1980	1980	1980	
5°	1976	1977	1976	1976	1975	188
15°	1918	1917	1917	1919	1917	541
25°	1794	1792	1791	1790	1788	827
35°	1604	1602	1600	1597	1594	1003
45°	1355	1352	1347	1344	1342	1044
55°	1053	1045	1038	1038	1036	938
65°	695	690	679	682	681	689
75°	322	317	309	315	308	343
85°	45	41	41	42	42	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1979.7	1979.7	1979.7	1979.7	1979.7
2.5°	1979.7	1979.0	1979.0	1979.7	1978.3
5°	1976.1	1976.9	1976.1	1976.1	1974.7
7.5°	1968.3	1967.6	1966.9	1967.6	1965.5
10°	1954.8	1954.8	1954.1	1954.8	1953.4
12.5°	1938.5	1938.5	1938.5	1939.2	1938.5
15°	1917.9	1917.2	1917.2	1918.6	1917.2
17.5°	1893.7	1893.0	1893.0	1892.3	1890.9
20°	1863.9	1863.9	1863.2	1862.5	1860.4
22.5°	1831.9	1831.2	1829.1	1829.1	1826.3
25°	1794.3	1792.2	1790.7	1790.0	1787.9
27.5°	1753.1	1750.3	1748.1	1746.7	1744.6
30°	1706.9	1704.1	1702.0	1699.8	1698.4
32.5°	1657.2	1655.8	1652.2	1651.5	1648.7
35°	1603.9	1601.8	1599.7	1596.8	1594.0
37.5°	1547.1	1545.0	1540.0	1538.6	1536.4
40°	1486.7	1483.9	1477.5	1477.5	1475.4
42.5°	1422.1	1419.2	1415.0	1412.1	1410.7
45°	1354.6	1351.8	1346.8	1343.9	1342.5
47.5°	1282.9	1280.7	1275.0	1272.9	1270.8
50°	1208.3	1205.4	1199.0	1197.6	1195.5
52.5°	1130.1	1128.7	1120.2	1119.5	1117.4
55°	1052.7	1044.9	1037.8	1037.8	1036.4
57.5°	967.5	961.8	952.6	952.6	951.1
60°	879.4	874.4	863.8	865.2	863.8
62.5°	793.4	782.8	772.8	777.1	773.6
65°	695.4	689.7	679.1	681.9	681.2
67.5°	605.9	595.3	585.3	591.0	588.2
70°	506.5	500.8	490.8	496.5	489.4
72.5°	412.7	407.7	397.8	404.2	397.1
75°	321.8	316.8	309.0	314.7	307.6
77.5°	235.8	232.3	225.2	230.9	232.3
80°	157.7	153.4	149.9	154.9	156.3
82.5°	92.3	89.5	88.1	88.8	92.3
85°	44.8	41.2	41.2	41.9	41.9
87.5°	12.1	10.7	12.1	12.8	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)