

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: P974174

Luminaire Tested: FLR2-24-55-L835-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974174  
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-L835-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-55-L835-CP080  
Ballast/Driver: -

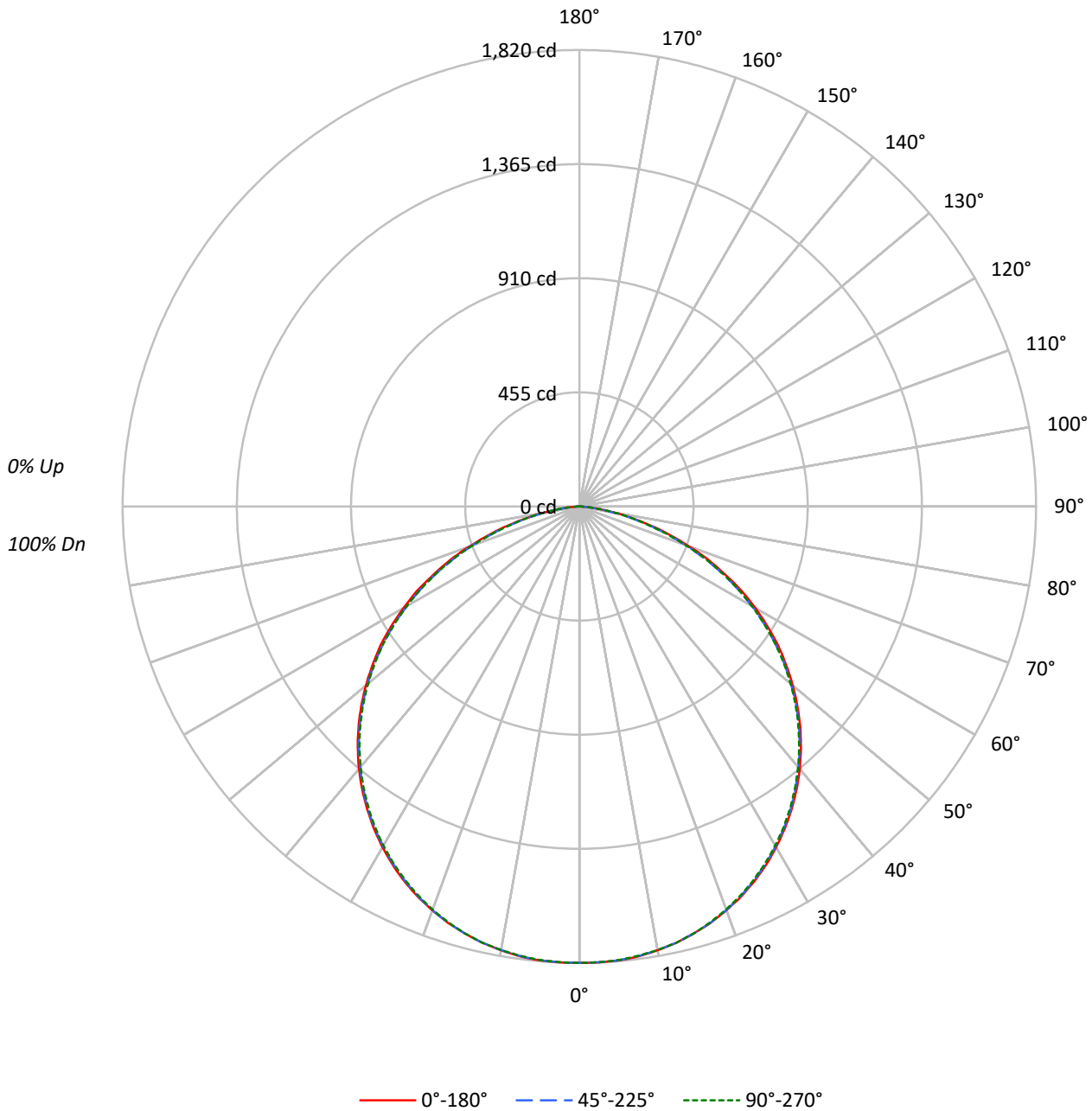
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5143.1 lumens  
Efficiency: N/A  
Efficacy: 116.6 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°	2448	2448	2448
5°	2453	2453	2452
10°	2455	2454	2453
15°	2456	2455	2455
20°	2453	2452	2448
25°	2449	2444	2440
30°	2438	2431	2426
35°	2422	2415	2407
40°	2400	2385	2382
45°	2369	2356	2348
50°	2325	2307	2300
55°	2270	2238	2235
60°	2175	2137	2137
65°	2035	1987	1994
70°	1831	1775	1770
75°	1538	1476	1470
80°	1124	1068	1113
85°	634	585	594

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2369 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.7	3.4
10°-20°	497.6	9.7
20°-30°	758.7	14.8
30°-40°	919.2	17.9
40°-50°	954.8	18.6
50°-60°	854.2	16.6
60°-70°	622.5	12.1
70°-80°	308.3	6.0
80°-90°	55.1	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°	1429.0	27.8
0°-40°	2348.2	45.7
0°-60°	4157.2	80.8
0°-90°	5143.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5143.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1820	1820	1820	1820	1820	
5°	1816	1817	1816	1816	1815	173
15°	1763	1762	1762	1764	1762	498
25°	1649	1647	1646	1645	1643	760
35°	1474	1472	1470	1468	1465	922
45°	1245	1242	1238	1235	1234	960
55°	968	960	954	954	953	862
65°	639	634	624	627	626	634
75°	296	291	284	289	283	315
85°	41	38	38	38	38	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1819.7	1819.7	1819.7	1819.7	1819.7
2.5°	1819.7	1819.1	1819.1	1819.7	1818.4
5°	1816.5	1817.1	1816.5	1816.5	1815.2
7.5°	1809.3	1808.6	1808.0	1808.6	1806.7
10°	1796.9	1796.9	1796.2	1796.9	1795.6
12.5°	1781.9	1781.9	1781.9	1782.5	1781.9
15°	1762.9	1762.3	1762.3	1763.6	1762.3
17.5°	1740.7	1740.1	1740.1	1739.4	1738.1
20°	1713.3	1713.3	1712.7	1712.0	1710.0
22.5°	1683.9	1683.3	1681.3	1681.3	1678.7
25°	1649.3	1647.4	1646.1	1645.4	1643.4
27.5°	1611.4	1608.8	1606.9	1605.6	1603.6
30°	1569.0	1566.4	1564.4	1562.5	1561.2
32.5°	1523.3	1522.0	1518.7	1518.1	1515.5
35°	1474.3	1472.4	1470.4	1467.8	1465.2
37.5°	1422.1	1420.1	1415.6	1414.3	1412.3
40°	1366.6	1364.0	1358.1	1358.1	1356.2
42.5°	1307.2	1304.6	1300.7	1298.0	1296.7
45°	1245.2	1242.5	1238.0	1235.4	1234.1
47.5°	1179.2	1177.2	1172.0	1170.1	1168.1
50°	1110.6	1108.0	1102.2	1100.9	1098.9
52.5°	1038.8	1037.5	1029.7	1029.0	1027.1
55°	967.7	960.5	953.9	953.9	952.6
57.5°	889.3	884.1	875.6	875.6	874.3
60°	808.3	803.8	794.0	795.3	794.0
62.5°	729.3	719.5	710.4	714.3	711.0
65°	639.2	634.0	624.2	626.8	626.2
67.5°	557.0	547.2	538.0	543.2	540.6
70°	465.5	460.3	451.2	456.4	449.9
72.5°	379.4	374.8	365.6	371.5	365.0
75°	295.8	291.2	284.0	289.3	282.7
77.5°	216.8	213.5	207.0	212.2	213.5
80°	145.0	141.0	137.8	142.3	143.6
82.5°	84.9	82.3	81.0	81.6	84.9
85°	41.1	37.9	37.9	38.5	38.5
87.5°	11.1	9.8	11.1	11.8	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)