

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: P974334

Luminaire Tested: FLR2-24-55-L840-CA125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974334  
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-L840-CA125  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-55-L840-CA125  
Ballast/Driver: -

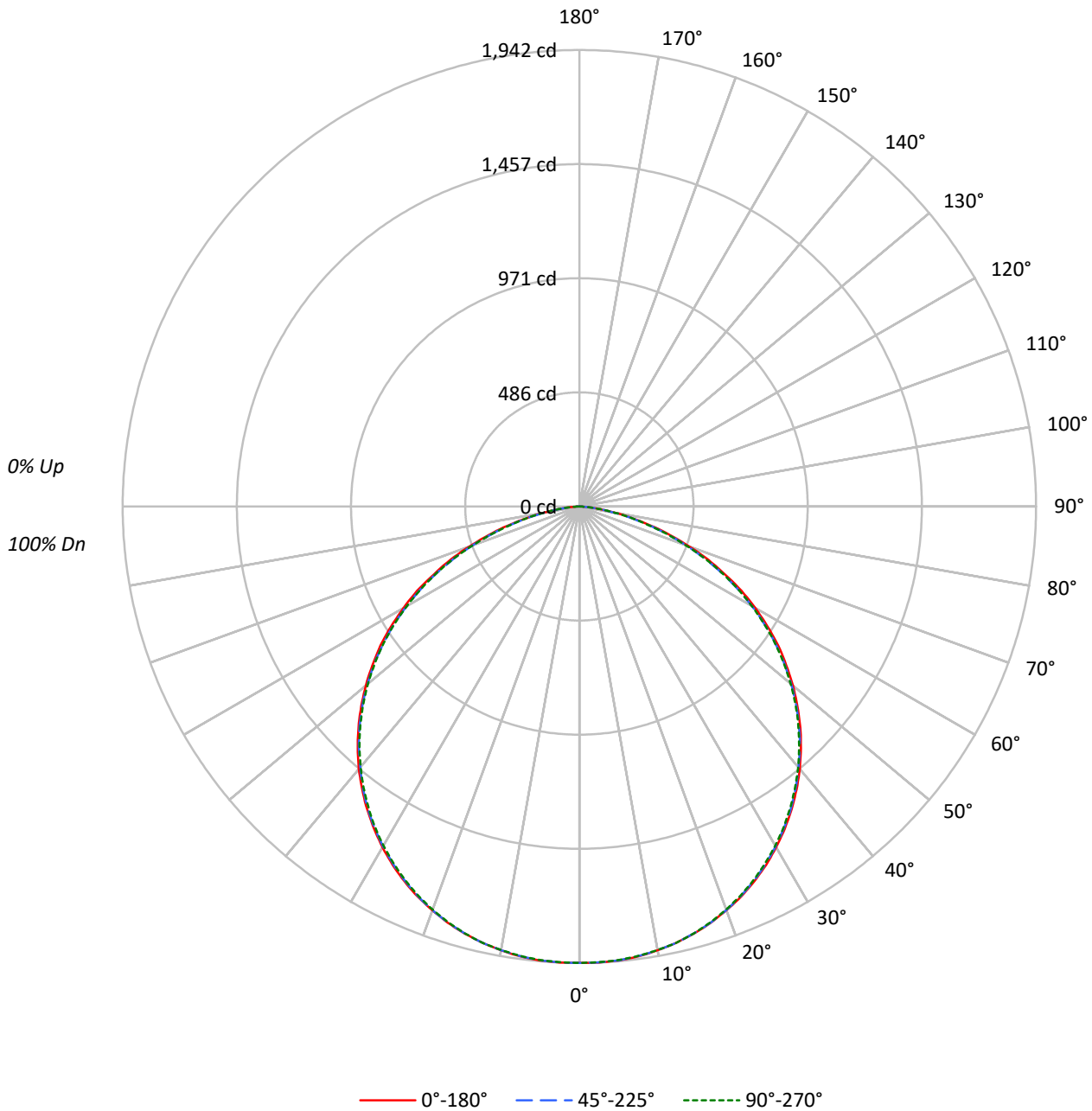
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5488.6 lumens  
Efficiency: N/A  
Efficacy: 124.5 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°	2613	2613	2613
5°	2618	2618	2616
10°	2620	2619	2618
15°	2621	2620	2620
20°	2618	2617	2613
25°	2613	2608	2604
30°	2601	2594	2589
35°	2584	2577	2568
40°	2562	2546	2542
45°	2528	2514	2506
50°	2481	2462	2455
55°	2422	2388	2385
60°	2321	2280	2280
65°	2172	2121	2127
70°	1954	1894	1889
75°	1641	1576	1568
80°	1199	1139	1188
85°	678	624	634

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2528 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.3	3.4
10°-20°	531.0	9.7
20°-30°	809.7	14.8
30°-40°	981.0	17.9
40°-50°	1019.0	18.6
50°-60°	911.5	16.6
60°-70°	664.3	12.1
70°-80°	329.0	6.0
80°-90°	58.8	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°	1525.0	27.8
0°-40°	2506.0	45.7
0°-60°	4436.5	80.8
0°-90°	5488.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5488.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1942	1942	1942	1942	1942	
5°	1938	1939	1938	1938	1937	184
15°	1881	1881	1881	1882	1881	531
25°	1760	1758	1757	1756	1754	811
35°	1573	1571	1569	1566	1564	984
45°	1329	1326	1321	1318	1317	1024
55°	1033	1025	1018	1018	1017	920
65°	682	677	666	669	668	676
75°	316	311	303	309	302	337
85°	44	40	40	41	41	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1942.0	1942.0	1942.0	1942.0	1942.0
2.5°	1942.0	1941.3	1941.3	1942.0	1940.6
5°	1938.5	1939.2	1938.5	1938.5	1937.1
7.5°	1930.8	1930.1	1929.4	1930.1	1928.1
10°	1917.6	1917.6	1916.9	1917.6	1916.2
12.5°	1901.6	1901.6	1901.6	1902.3	1901.6
15°	1881.4	1880.7	1880.7	1882.1	1880.7
17.5°	1857.7	1857.0	1857.0	1856.3	1854.9
20°	1828.4	1828.4	1827.7	1827.0	1824.9
22.5°	1797.1	1796.4	1794.3	1794.3	1791.5
25°	1760.1	1758.0	1756.6	1755.9	1753.9
27.5°	1719.7	1716.9	1714.8	1713.4	1711.3
30°	1674.4	1671.6	1669.5	1667.4	1666.1
32.5°	1625.6	1624.2	1620.8	1620.1	1617.3
35°	1573.4	1571.3	1569.2	1566.4	1563.6
37.5°	1517.6	1515.5	1510.7	1509.3	1507.2
40°	1458.4	1455.6	1449.3	1449.3	1447.3
42.5°	1395.0	1392.2	1388.0	1385.2	1383.8
45°	1328.8	1326.0	1321.1	1318.3	1317.0
47.5°	1258.4	1256.3	1250.8	1248.7	1246.6
50°	1185.3	1182.5	1176.2	1174.8	1172.7
52.5°	1108.6	1107.2	1098.9	1098.2	1096.1
55°	1032.7	1025.0	1018.0	1018.0	1016.6
57.5°	949.0	943.5	934.4	934.4	933.0
60°	862.6	857.8	847.3	848.7	847.3
62.5°	778.3	767.9	758.1	762.3	758.8
65°	682.2	676.6	666.1	668.9	668.2
67.5°	594.4	583.9	574.2	579.7	577.0
70°	496.8	491.2	481.5	487.1	480.1
72.5°	404.8	400.0	390.2	396.5	389.5
75°	315.7	310.8	303.1	308.7	301.7
77.5°	231.3	227.9	220.9	226.5	227.9
80°	154.7	150.5	147.0	151.9	153.3
82.5°	90.6	87.8	86.4	87.1	90.6
85°	43.9	40.4	40.4	41.1	41.1
87.5°	11.8	10.5	11.8	12.5	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)