

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: P974358

Luminaire Tested: FLR2-24-55-L940-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974358  
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-L940-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-55-L940-CP187  
Ballast/Driver: -

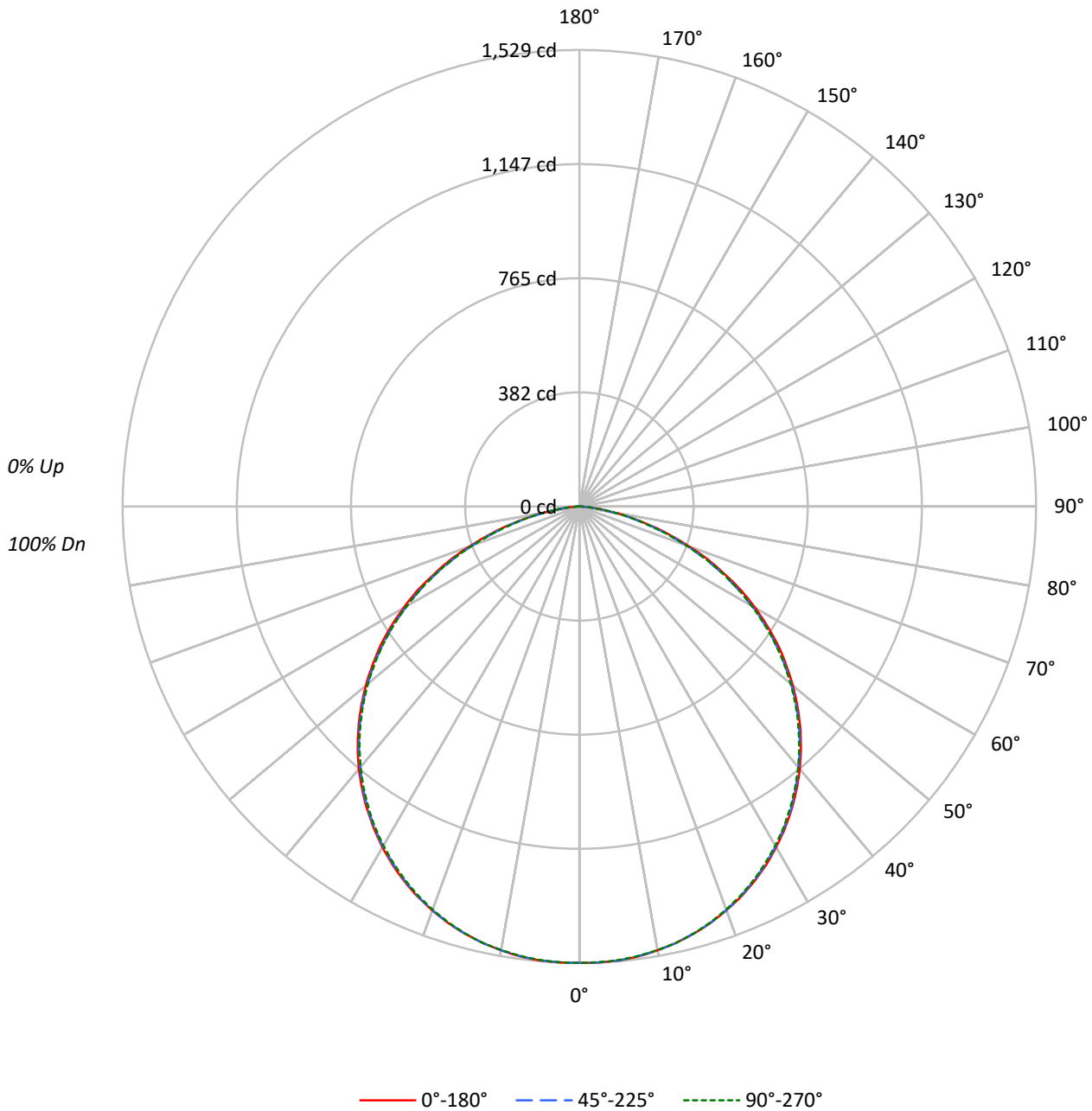
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4321.5 lumens  
Efficiency: N/A  
Efficacy: 98.0 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				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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2057	2057	2057
5°	2061	2061	2060
10°	2063	2062	2061
15°	2063	2063	2063
20°	2061	2060	2057
25°	2057	2053	2050
30°	2048	2042	2038
35°	2035	2029	2022
40°	2017	2004	2001
45°	1991	1979	1973
50°	1953	1939	1933
55°	1907	1880	1878
60°	1828	1795	1795
65°	1710	1670	1675
70°	1539	1491	1487
75°	1292	1241	1235
80°	944	897	935
85°	534	491	500

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1991 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.1	3.4
10°-20°	418.1	9.7
20°-30°	637.5	14.8
30°-40°	772.4	17.9
40°-50°	802.3	18.6
50°-60°	717.7	16.6
60°-70°	523.1	12.1
70°-80°	259.0	6.0
80°-90°	46.3	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°	1200.7	27.8
0°-40°	1973.1	45.7
0°-60°	3493.1	80.8
0°-90°	4321.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4321.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1529	1529	1529	1529	1529	
5°	1526	1527	1526	1526	1525	145
15°	1481	1481	1481	1482	1481	418
25°	1386	1384	1383	1382	1381	639
35°	1239	1237	1236	1233	1231	775
45°	1046	1044	1040	1038	1037	806
55°	813	807	802	802	800	724
65°	537	533	524	527	526	532
75°	248	245	239	243	238	265
85°	35	32	32	32	32	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1529.0	1529.0	1529.0	1529.0	1529.0
2.5°	1529.0	1528.5	1528.5	1529.0	1527.9
5°	1526.3	1526.8	1526.3	1526.3	1525.2
7.5°	1520.2	1519.7	1519.1	1519.7	1518.0
10°	1509.8	1509.8	1509.3	1509.8	1508.7
12.5°	1497.2	1497.2	1497.2	1497.7	1497.2
15°	1481.3	1480.7	1480.7	1481.8	1480.7
17.5°	1462.6	1462.1	1462.1	1461.5	1460.4
20°	1439.6	1439.6	1439.0	1438.5	1436.9
22.5°	1414.9	1414.4	1412.7	1412.7	1410.5
25°	1385.8	1384.2	1383.1	1382.5	1380.9
27.5°	1354.0	1351.8	1350.2	1349.1	1347.4
30°	1318.3	1316.2	1314.5	1312.9	1311.8
32.5°	1279.9	1278.8	1276.1	1275.6	1273.4
35°	1238.8	1237.2	1235.5	1233.3	1231.1
37.5°	1194.9	1193.3	1189.4	1188.3	1186.7
40°	1148.3	1146.1	1141.1	1141.1	1139.5
42.5°	1098.3	1096.2	1092.9	1090.7	1089.6
45°	1046.2	1044.0	1040.2	1038.0	1036.9
47.5°	990.8	989.2	984.8	983.1	981.5
50°	933.2	931.0	926.1	925.0	923.3
52.5°	872.9	871.8	865.2	864.6	863.0
55°	813.1	807.0	801.5	801.5	800.4
57.5°	747.2	742.8	735.7	735.7	734.6
60°	679.2	675.4	667.1	668.2	667.1
62.5°	612.8	604.6	596.9	600.2	597.5
65°	537.1	532.7	524.5	526.7	526.1
67.5°	468.0	459.7	452.1	456.5	454.3
70°	391.2	386.8	379.1	383.5	378.0
72.5°	318.8	314.9	307.2	312.2	306.7
75°	248.5	244.7	238.7	243.0	237.6
77.5°	182.1	179.4	173.9	178.3	179.4
80°	121.8	118.5	115.8	119.6	120.7
82.5°	71.3	69.1	68.0	68.6	71.3
85°	34.6	31.8	31.8	32.4	32.4
87.5°	9.3	8.2	9.3	9.9	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)