

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: P974477

Luminaire Tested: FLR2-24-45-L950-CP250

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974477  
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: FLR2-24-45-L950-CP250  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-45-L950-CP250  
Ballast/Driver: -

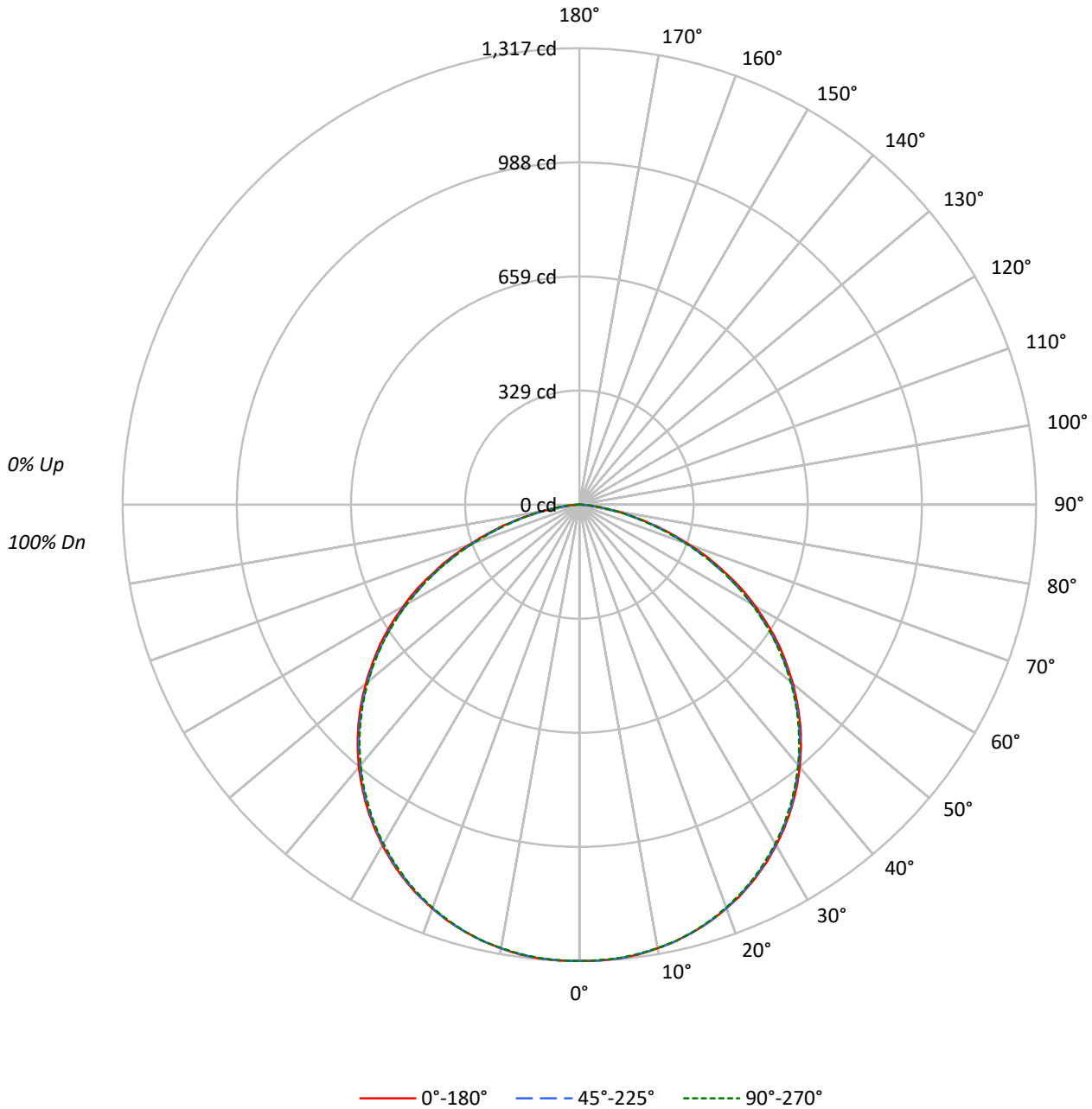
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3722.5 lumens  
Efficiency: N/A  
Efficacy: 104.6 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): 35.6  
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									70									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	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°	1772	1772	1772
5°	1776	1776	1774
10°	1777	1776	1776
15°	1777	1777	1777
20°	1776	1775	1772
25°	1772	1769	1766
30°	1764	1759	1755
35°	1753	1748	1742
40°	1737	1727	1724
45°	1715	1705	1700
50°	1683	1670	1665
55°	1643	1620	1617
60°	1574	1547	1547
65°	1473	1438	1443
70°	1326	1285	1281
75°	1113	1069	1064
80°	813	773	806
85°	460	423	431

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1715 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.0	3.4
10°-20°	360.2	9.7
20°-30°	549.1	14.8
30°-40°	665.3	17.9
40°-50°	691.1	18.6
50°-60°	618.2	16.6
60°-70°	450.6	12.1
70°-80°	223.1	6.0
80°-90°	39.9	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°	1034.3	27.8
0°-40°	1699.6	45.7
0°-60°	3008.9	80.8
0°-90°	3722.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3722.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1317	1317	1317	1317	1317	
5°	1315	1315	1315	1315	1314	125
15°	1276	1276	1276	1276	1276	360
25°	1194	1192	1191	1191	1190	550
35°	1067	1066	1064	1062	1060	667
45°	901	899	896	894	893	695
55°	700	695	690	690	690	624
65°	463	459	452	454	453	459
75°	214	211	206	209	205	228
85°	30	27	27	28	28	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1317.1	1317.1	1317.1	1317.1	1317.1
2.5°	1317.1	1316.6	1316.6	1317.1	1316.1
5°	1314.7	1315.2	1314.7	1314.7	1313.8
7.5°	1309.5	1309.1	1308.6	1309.1	1307.6
10°	1300.5	1300.5	1300.1	1300.5	1299.6
12.5°	1289.7	1289.7	1289.7	1290.2	1289.7
15°	1276.0	1275.5	1275.5	1276.4	1275.5
17.5°	1259.9	1259.4	1259.4	1259.0	1258.0
20°	1240.1	1240.1	1239.6	1239.1	1237.7
22.5°	1218.8	1218.3	1216.9	1216.9	1215.0
25°	1193.7	1192.3	1191.4	1190.9	1189.5
27.5°	1166.3	1164.4	1163.0	1162.1	1160.7
30°	1135.6	1133.7	1132.3	1130.9	1129.9
32.5°	1102.5	1101.6	1099.2	1098.8	1096.9
35°	1067.1	1065.7	1064.3	1062.4	1060.5
37.5°	1029.3	1027.9	1024.6	1023.6	1022.2
40°	989.1	987.2	983.0	983.0	981.6
42.5°	946.1	944.2	941.4	939.5	938.5
45°	901.2	899.3	896.0	894.1	893.2
47.5°	853.5	852.1	848.3	846.9	845.5
50°	803.9	802.0	797.7	796.8	795.4
52.5°	751.9	750.9	745.3	744.8	743.4
55°	700.4	695.2	690.4	690.4	689.5
57.5°	643.7	639.9	633.7	633.7	632.8
60°	585.1	581.7	574.7	575.6	574.7
62.5°	527.9	520.8	514.2	517.0	514.6
65°	462.7	458.9	451.8	453.7	453.2
67.5°	403.1	396.0	389.4	393.2	391.3
70°	337.0	333.2	326.6	330.3	325.6
72.5°	274.6	271.3	264.6	268.9	264.2
75°	214.1	210.8	205.6	209.4	204.6
77.5°	156.9	154.5	149.8	153.6	154.5
80°	104.9	102.1	99.7	103.0	104.0
82.5°	61.4	59.5	58.6	59.1	61.4
85°	29.8	27.4	27.4	27.9	27.9
87.5°	8.0	7.1	8.0	8.5	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)