

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: P974229

Luminaire Tested: FLR2-24-45-L935-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974229  
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-L935-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-45-L935-CP080  
Ballast/Driver: -

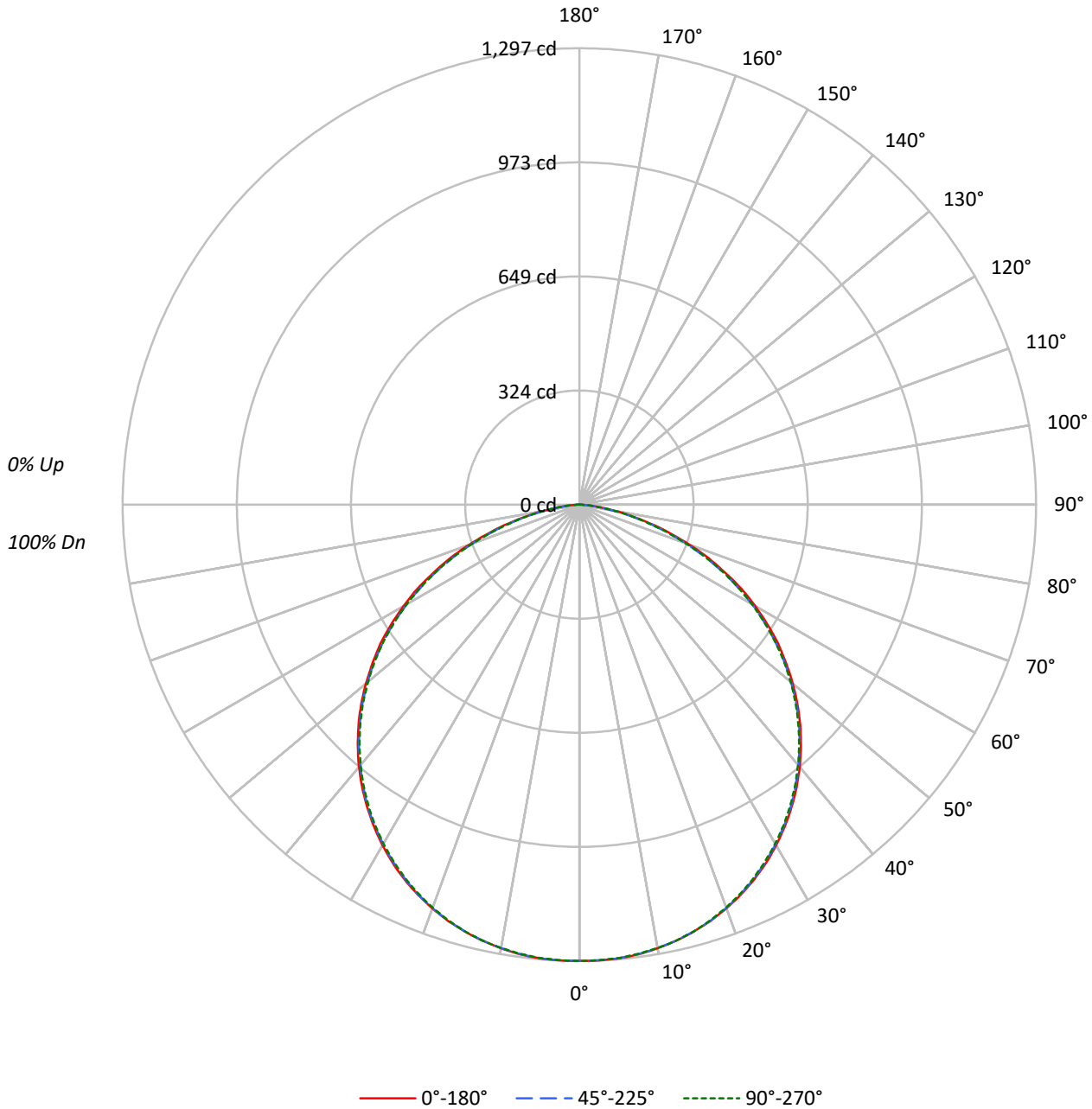
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3664.9 lumens  
Efficiency: N/A  
Efficacy: 102.9 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): 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°	1745	1745	1745
5°	1748	1748	1747
10°	1749	1749	1748
15°	1750	1749	1749
20°	1748	1747	1745
25°	1745	1741	1739
30°	1737	1732	1728
35°	1726	1721	1715
40°	1710	1700	1697
45°	1688	1678	1673
50°	1657	1644	1639
55°	1617	1595	1592
60°	1550	1523	1523
65°	1450	1416	1421
70°	1305	1265	1261
75°	1096	1052	1048
80°	800	761	793
85°	452	417	425

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1688 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.1	3.4
10°-20°	354.6	9.7
20°-30°	540.6	14.8
30°-40°	655.0	17.9
40°-50°	680.4	18.6
50°-60°	608.7	16.6
60°-70°	443.6	12.1
70°-80°	219.7	6.0
80°-90°	39.3	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°	1018.3	27.8
0°-40°	1673.3	45.7
0°-60°	2962.3	80.8
0°-90°	3664.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3664.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1294	1295	1294	1294	1293	123
15°	1256	1256	1256	1257	1256	355
25°	1175	1174	1173	1172	1171	542
35°	1051	1049	1048	1046	1044	657
45°	887	885	882	880	879	684
55°	690	684	680	680	679	614
65°	456	452	445	447	446	452
75°	211	208	202	206	202	225
85°	29	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°	1296.7	1296.7	1296.7	1296.7	1296.7
2.5°	1296.7	1296.2	1296.2	1296.7	1295.8
5°	1294.4	1294.8	1294.4	1294.4	1293.4
7.5°	1289.3	1288.8	1288.3	1288.8	1287.4
10°	1280.4	1280.4	1279.9	1280.4	1279.5
12.5°	1269.7	1269.7	1269.7	1270.2	1269.7
15°	1256.2	1255.8	1255.8	1256.7	1255.8
17.5°	1240.4	1239.9	1239.9	1239.5	1238.5
20°	1220.9	1220.9	1220.4	1219.9	1218.5
22.5°	1199.9	1199.5	1198.1	1198.1	1196.2
25°	1175.3	1173.9	1172.9	1172.5	1171.1
27.5°	1148.3	1146.4	1145.0	1144.1	1142.7
30°	1118.0	1116.2	1114.8	1113.4	1112.5
32.5°	1085.5	1084.5	1082.2	1081.7	1079.9
35°	1050.6	1049.2	1047.8	1045.9	1044.1
37.5°	1013.3	1012.0	1008.7	1007.8	1006.4
40°	973.8	971.9	967.8	967.8	966.4
42.5°	931.5	929.6	926.8	924.9	924.0
45°	887.3	885.4	882.1	880.3	879.4
47.5°	840.3	838.9	835.2	833.8	832.4
50°	791.4	789.6	785.4	784.4	783.0
52.5°	740.2	739.3	733.7	733.3	731.9
55°	689.5	684.4	679.8	679.8	678.8
57.5°	633.7	630.0	623.9	623.9	623.0
60°	576.0	572.7	565.8	566.7	565.8
62.5°	519.7	512.7	506.2	509.0	506.7
65°	455.5	451.8	444.8	446.7	446.2
67.5°	396.9	389.9	383.4	387.1	385.2
70°	331.7	328.0	321.5	325.2	320.6
72.5°	270.3	267.1	260.5	264.7	260.1
75°	210.8	207.5	202.4	206.1	201.5
77.5°	154.5	152.1	147.5	151.2	152.1
80°	103.3	100.5	98.2	101.4	102.4
82.5°	60.5	58.6	57.7	58.2	60.5
85°	29.3	27.0	27.0	27.5	27.5
87.5°	7.9	7.0	7.9	8.4	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)