

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: P974141

Luminaire Tested: FLR2-24-45-L930-CP250

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974141  
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-L930-CP250  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-45-L930-CP250  
Ballast/Driver: -

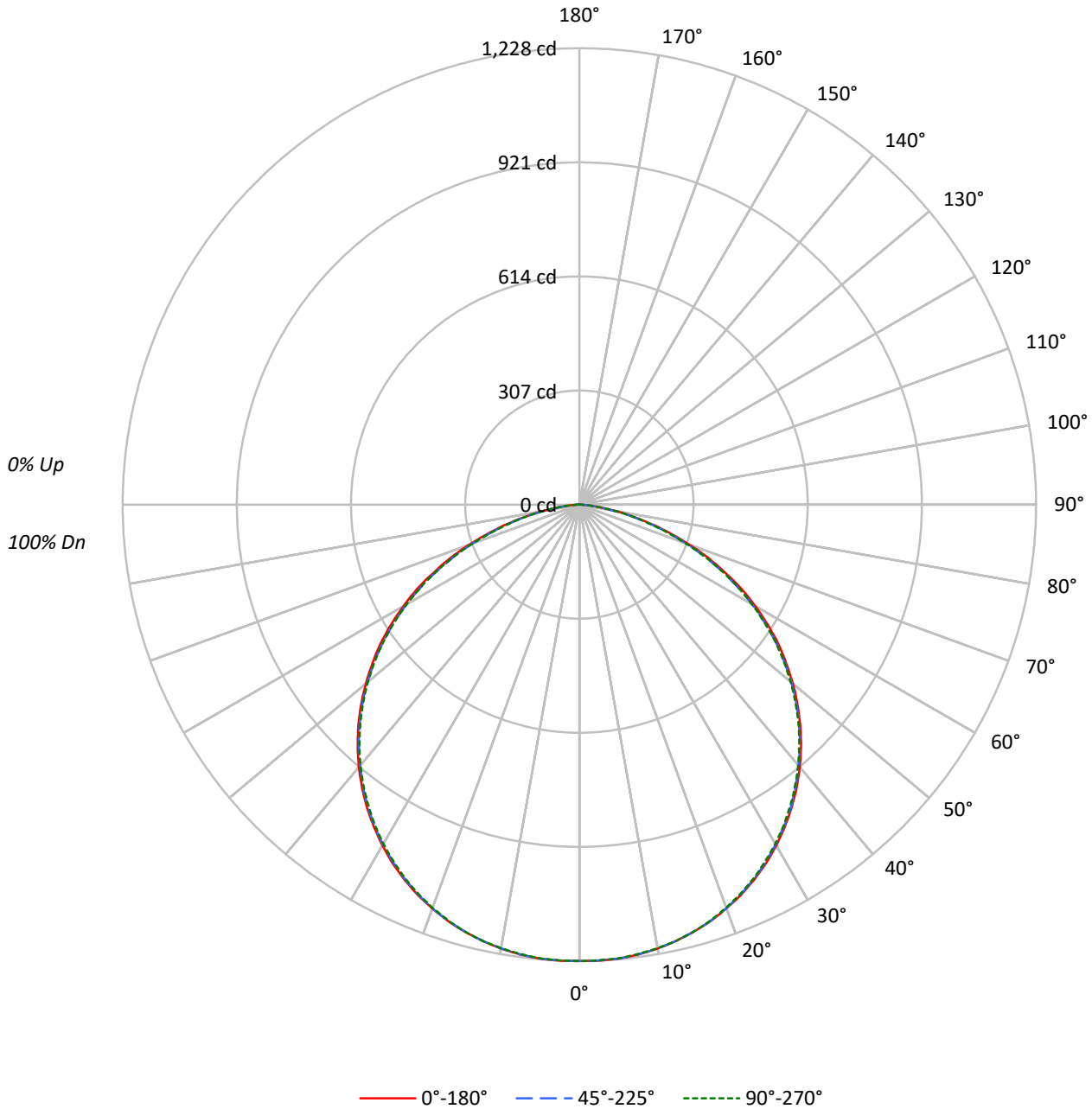
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3471.5 lumens  
Efficiency: N/A  
Efficacy: 97.5 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): 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				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°	1653	1653	1653
5°	1656	1656	1655
10°	1657	1656	1656
15°	1658	1657	1657
20°	1656	1655	1653
25°	1653	1650	1647
30°	1645	1641	1637
35°	1635	1630	1624
40°	1620	1610	1608
45°	1599	1590	1585
50°	1569	1557	1553
55°	1532	1510	1508
60°	1468	1442	1442
65°	1374	1341	1346
70°	1236	1198	1195
75°	1038	997	992
80°	758	721	752
85°	429	395	401

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1599 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.6	3.4
10°-20°	335.9	9.7
20°-30°	512.1	14.8
30°-40°	620.5	17.9
40°-50°	644.5	18.6
50°-60°	576.5	16.6
60°-70°	420.2	12.1
70°-80°	208.1	6.0
80°-90°	37.2	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°	964.6	27.8
0°-40°	1585.0	45.7
0°-60°	2806.1	80.8
0°-90°	3471.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3471.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1228	1228	1228	1228	1228	
5°	1226	1226	1226	1226	1225	117
15°	1190	1190	1190	1190	1190	336
25°	1113	1112	1111	1111	1109	513
35°	995	994	992	991	989	622
45°	840	839	836	834	833	648
55°	653	648	644	644	643	582
65°	432	428	421	423	423	428
75°	200	197	192	195	191	213
85°	28	26	26	26	26	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1228.3	1228.3	1228.3	1228.3	1228.3
2.5°	1228.3	1227.9	1227.9	1228.3	1227.4
5°	1226.1	1226.5	1226.1	1226.1	1225.2
7.5°	1221.2	1220.8	1220.4	1220.8	1219.5
10°	1212.9	1212.9	1212.4	1212.9	1212.0
12.5°	1202.7	1202.7	1202.7	1203.2	1202.7
15°	1190.0	1189.5	1189.5	1190.4	1189.5
17.5°	1175.0	1174.5	1174.5	1174.1	1173.2
20°	1156.5	1156.5	1156.0	1155.6	1154.3
22.5°	1136.6	1136.2	1134.9	1134.9	1133.1
25°	1113.3	1111.9	1111.1	1110.6	1109.3
27.5°	1087.7	1085.9	1084.6	1083.7	1082.4
30°	1059.1	1057.3	1056.0	1054.7	1053.8
32.5°	1028.2	1027.3	1025.1	1024.7	1022.9
35°	995.2	993.8	992.5	990.7	989.0
37.5°	959.9	958.6	955.5	954.6	953.3
40°	922.4	920.7	916.7	916.7	915.4
42.5°	882.3	880.6	877.9	876.2	875.3
45°	840.5	838.7	835.6	833.8	833.0
47.5°	795.9	794.6	791.1	789.8	788.5
50°	749.7	747.9	743.9	743.1	741.7
52.5°	701.2	700.3	695.0	694.6	693.3
55°	653.2	648.3	643.9	643.9	643.0
57.5°	600.3	596.7	591.0	591.0	590.1
60°	545.6	542.5	535.9	536.8	535.9
62.5°	492.3	485.7	479.5	482.2	479.9
65°	431.5	427.9	421.3	423.1	422.7
67.5°	375.9	369.3	363.2	366.7	364.9
70°	314.2	310.7	304.5	308.1	303.7
72.5°	256.1	253.0	246.8	250.8	246.4
75°	199.6	196.6	191.7	195.2	190.8
77.5°	146.3	144.1	139.7	143.2	144.1
80°	97.8	95.2	93.0	96.1	97.0
82.5°	57.3	55.5	54.6	55.1	57.3
85°	27.8	25.6	25.6	26.0	26.0
87.5°	7.5	6.6	7.5	7.9	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)