

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: P974356

Luminaire Tested: FLR2-24-40-L940-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974356  
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: FLR2-24-40-L940-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-40-L940-CP187  
Ballast/Driver: -

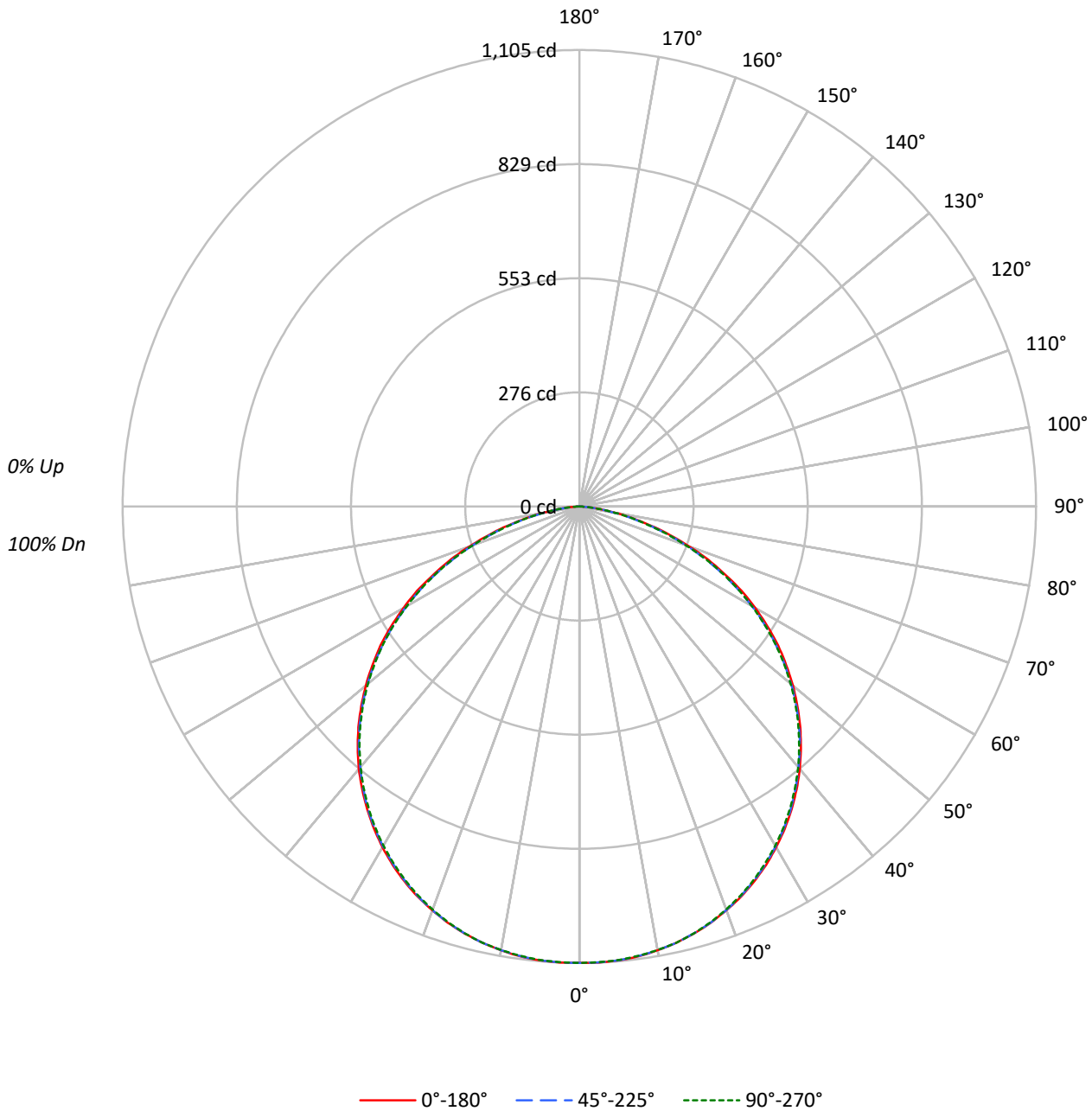
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3122.9 lumens  
Efficiency: N/A  
Efficacy: 103.1 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): 30.3  
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	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	1487	1487	1487
5°	1490	1490	1489
10°	1491	1490	1490
15°	1491	1491	1491
20°	1490	1489	1487
25°	1487	1484	1481
30°	1480	1476	1473
35°	1470	1466	1461
40°	1457	1449	1446
45°	1439	1430	1426
50°	1412	1401	1397
55°	1378	1359	1357
60°	1321	1297	1297
65°	1236	1207	1210
70°	1112	1078	1075
75°	934	897	893
80°	682	649	676
85°	386	355	361

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1439 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.9	3.4
10°-20°	302.2	9.7
20°-30°	460.7	14.8
30°-40°	558.1	17.9
40°-50°	579.8	18.6
50°-60°	518.6	16.6
60°-70°	378.0	12.1
70°-80°	187.2	6.0
80°-90°	33.5	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°	867.7	27.8
0°-40°	1425.9	45.7
0°-60°	2524.3	80.8
0°-90°	3122.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3122.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1103	1103	1103	1103	1102	105
15°	1070	1070	1070	1071	1070	302
25°	1002	1000	1000	999	998	462
35°	895	894	893	891	890	560
45°	756	754	752	750	749	583
55°	588	583	579	579	578	523
65°	388	385	379	381	380	385
75°	180	177	172	176	172	191
85°	25	23	23	23	23	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1105.0	1105.0	1105.0	1105.0	1105.0
2.5°	1105.0	1104.6	1104.6	1105.0	1104.2
5°	1103.0	1103.4	1103.0	1103.0	1102.2
7.5°	1098.6	1098.2	1097.8	1098.2	1097.0
10°	1091.1	1091.1	1090.7	1091.1	1090.3
12.5°	1082.0	1082.0	1082.0	1082.4	1082.0
15°	1070.5	1070.1	1070.1	1070.9	1070.1
17.5°	1057.0	1056.6	1056.6	1056.2	1055.4
20°	1040.3	1040.3	1039.9	1039.5	1038.3
22.5°	1022.5	1022.1	1020.9	1020.9	1019.3
25°	1001.5	1000.3	999.5	999.1	997.9
27.5°	978.5	976.9	975.7	974.9	973.7
30°	952.7	951.1	949.9	948.7	948.0
32.5°	925.0	924.2	922.2	921.8	920.2
35°	895.2	894.0	892.8	891.3	889.7
37.5°	863.5	862.3	859.5	858.7	857.6
40°	829.8	828.2	824.7	824.7	823.5
42.5°	793.7	792.1	789.8	788.2	787.4
45°	756.1	754.5	751.7	750.1	749.3
47.5°	716.0	714.8	711.7	710.5	709.3
50°	674.4	672.8	669.2	668.4	667.3
52.5°	630.8	630.0	625.2	624.8	623.6
55°	587.6	583.2	579.2	579.2	578.4
57.5°	540.0	536.8	531.7	531.7	530.9
60°	490.8	488.1	482.1	482.9	482.1
62.5°	442.9	436.9	431.4	433.7	431.8
65°	388.1	385.0	379.0	380.6	380.2
67.5°	338.2	332.2	326.7	329.9	328.3
70°	282.7	279.5	274.0	277.1	273.2
72.5°	230.3	227.6	222.0	225.6	221.6
75°	179.6	176.8	172.5	175.6	171.7
77.5°	131.6	129.6	125.7	128.9	129.6
80°	88.0	85.6	83.7	86.4	87.2
82.5°	51.5	50.0	49.2	49.6	51.5
85°	25.0	23.0	23.0	23.4	23.4
87.5°	6.7	5.9	6.7	7.1	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)