

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: P974132

Luminaire Tested: FLR2-24-40-L930-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974132  
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-L930-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-40-L930-CP187  
Ballast/Driver: -

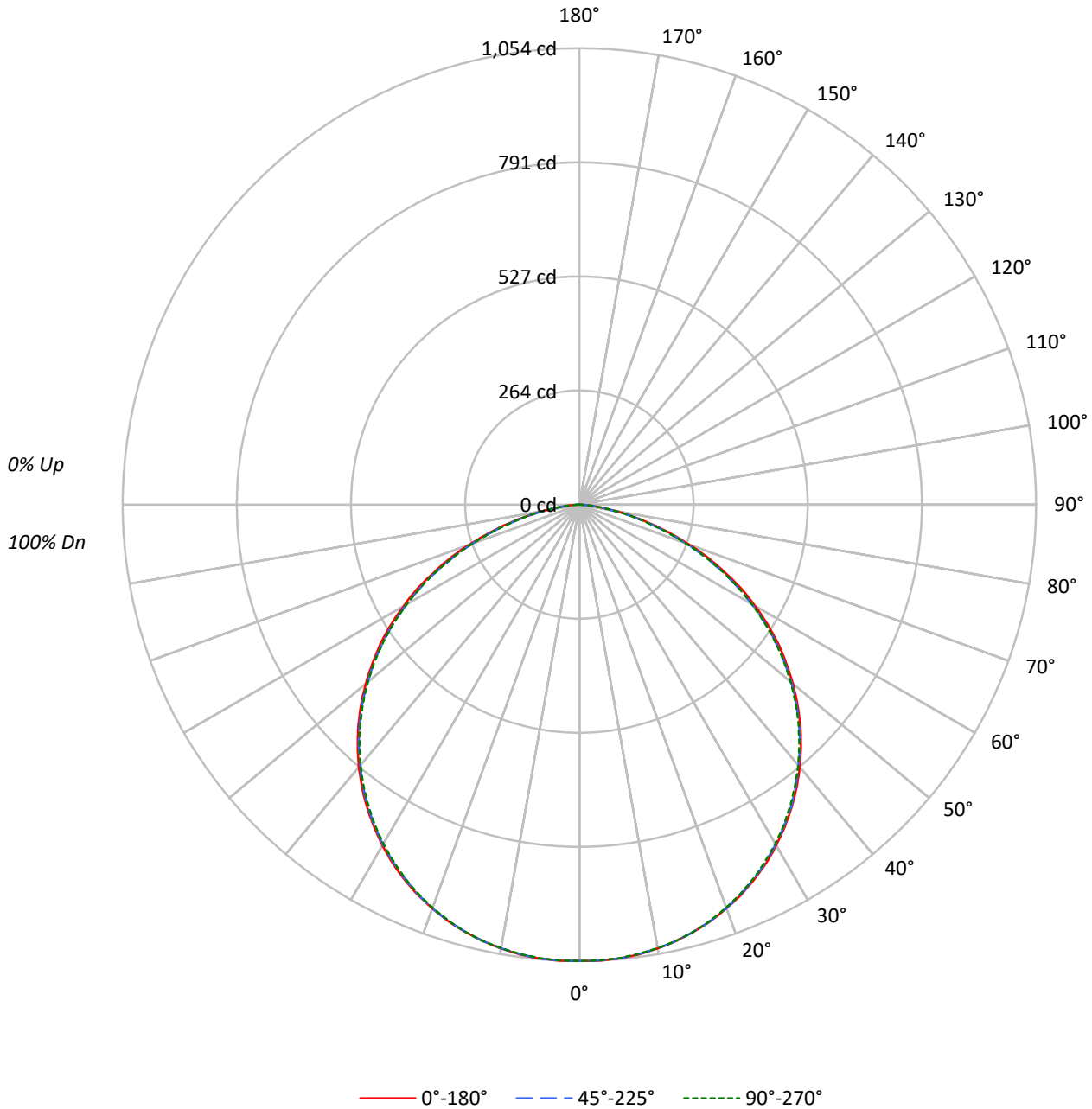
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2979.4 lumens  
Efficiency: N/A  
Efficacy: 98.3 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°	1418	1418	1418
5°	1421	1421	1420
10°	1422	1422	1421
15°	1422	1422	1422
20°	1421	1421	1418
25°	1418	1416	1413
30°	1412	1408	1405
35°	1403	1399	1394
40°	1391	1382	1380
45°	1372	1365	1360
50°	1347	1337	1333
55°	1315	1296	1294
60°	1260	1238	1238
65°	1179	1151	1155
70°	1061	1028	1025
75°	891	855	852
80°	651	618	645
85°	367	338	344

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1372 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.1	3.4
10°-20°	288.3	9.7
20°-30°	439.5	14.8
30°-40°	532.5	17.9
40°-50°	553.1	18.6
50°-60°	494.8	16.6
60°-70°	360.6	12.1
70°-80°	178.6	6.0
80°-90°	31.9	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°	827.8	27.8
0°-40°	1360.3	45.7
0°-60°	2408.2	80.8
0°-90°	2979.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2979.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1052	1053	1052	1052	1052	100
15°	1021	1021	1021	1022	1021	288
25°	955	954	954	953	952	440
35°	854	853	852	850	849	534
45°	721	720	717	716	715	556
55°	560	556	553	553	552	499
65°	370	367	362	363	363	367
75°	171	169	164	168	164	183
85°	24	22	22	22	22	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1054.2	1054.2	1054.2	1054.2	1054.2
2.5°	1054.2	1053.8	1053.8	1054.2	1053.4
5°	1052.3	1052.6	1052.3	1052.3	1051.5
7.5°	1048.1	1047.7	1047.3	1047.7	1046.6
10°	1040.9	1040.9	1040.5	1040.9	1040.2
12.5°	1032.2	1032.2	1032.2	1032.6	1032.2
15°	1021.2	1020.9	1020.9	1021.6	1020.9
17.5°	1008.4	1008.0	1008.0	1007.6	1006.9
20°	992.5	992.5	992.1	991.7	990.6
22.5°	975.5	975.1	974.0	974.0	972.5
25°	955.4	954.3	953.5	953.2	952.0
27.5°	933.5	932.0	930.8	930.1	929.0
30°	908.9	907.4	906.3	905.1	904.4
32.5°	882.4	881.7	879.8	879.4	877.9
35°	854.1	852.9	851.8	850.3	848.8
37.5°	823.8	822.7	820.0	819.3	818.1
40°	791.7	790.1	786.7	786.7	785.6
42.5°	757.2	755.7	753.5	751.9	751.2
45°	721.3	719.8	717.1	715.6	714.9
47.5°	683.1	682.0	678.9	677.8	676.7
50°	643.4	641.9	638.5	637.7	636.6
52.5°	601.8	601.0	596.5	596.1	595.0
55°	560.5	556.4	552.6	552.6	551.8
57.5°	515.2	512.1	507.2	507.2	506.5
60°	468.3	465.6	459.9	460.7	459.9
62.5°	422.5	416.8	411.5	413.8	411.9
65°	370.3	367.3	361.6	363.1	362.7
67.5°	322.6	317.0	311.7	314.7	313.2
70°	269.7	266.7	261.4	264.4	260.6
72.5°	219.8	217.1	211.8	215.2	211.4
75°	171.3	168.7	164.5	167.6	163.8
77.5°	125.6	123.7	119.9	122.9	123.7
80°	84.0	81.7	79.8	82.5	83.2
82.5°	49.2	47.7	46.9	47.3	49.2
85°	23.8	21.9	21.9	22.3	22.3
87.5°	6.4	5.7	6.4	6.8	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)