

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: P974225

Luminaire Tested: FLR2-24-20-L935-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974225  
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: FLR2-24-20-L935-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-20-L935-CP080  
Ballast/Driver: -

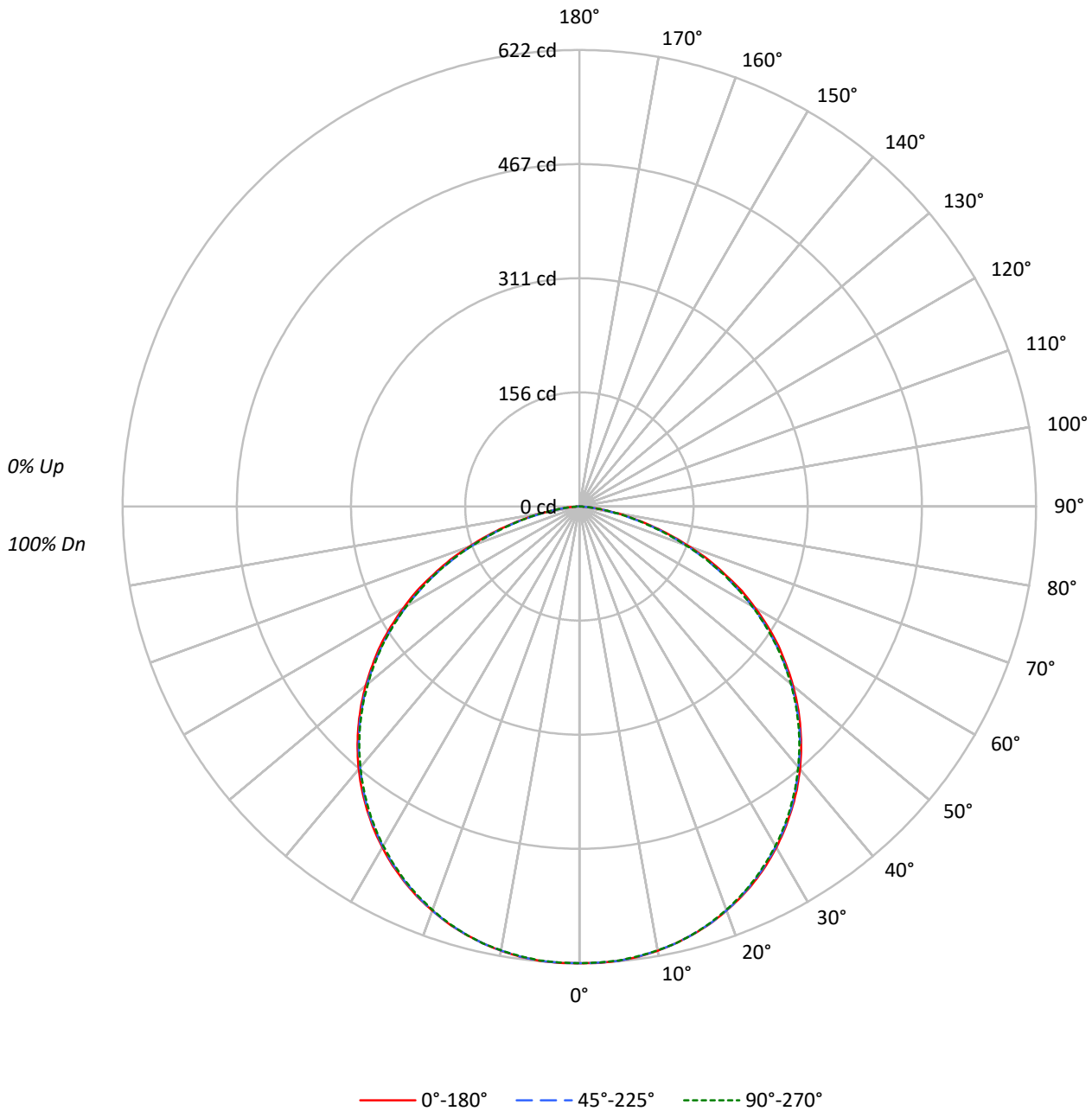
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1759.3 lumens  
Efficiency: N/A  
Efficacy: 105.3 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): 16.7  
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°	838	838	838
5°	839	839	839
10°	840	839	839
15°	840	840	840
20°	839	839	838
25°	838	836	835
30°	834	832	830
35°	828	826	823
40°	821	816	815
45°	810	806	803
50°	795	789	787
55°	776	765	764
60°	744	731	731
65°	696	680	682
70°	627	607	605
75°	526	505	503
80°	384	365	380
85°	218	201	204

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 810 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.1	3.4
10°-20°	170.2	9.7
20°-30°	259.5	14.8
30°-40°	314.4	17.9
40°-50°	326.6	18.6
50°-60°	292.2	16.6
60°-70°	212.9	12.1
70°-80°	105.5	6.0
80°-90°	18.9	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°	488.8	27.8
0°-40°	803.3	45.7
0°-60°	1422.1	80.8
0°-90°	1759.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1759.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	621	622	621	621	621	59
15°	603	603	603	603	603	170
25°	564	564	563	563	562	260
35°	504	504	503	502	501	315
45°	426	425	424	423	422	328
55°	331	329	326	326	326	295
65°	219	217	214	214	214	217
75°	101	100	97	99	97	108
85°	14	13	13	13	13	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	622.5	622.5	622.5	622.5	622.5
2.5°	622.5	622.3	622.3	622.5	622.0
5°	621.4	621.6	621.4	621.4	620.9
7.5°	618.9	618.7	618.5	618.7	618.0
10°	614.7	614.7	614.4	614.7	614.2
12.5°	609.5	609.5	609.5	609.8	609.5
15°	603.1	602.8	602.8	603.3	602.8
17.5°	595.5	595.2	595.2	595.0	594.6
20°	586.1	586.1	585.9	585.6	585.0
22.5°	576.0	575.8	575.1	575.1	574.2
25°	564.2	563.5	563.1	562.8	562.2
27.5°	551.2	550.3	549.7	549.2	548.6
30°	536.7	535.8	535.2	534.5	534.0
32.5°	521.1	520.6	519.5	519.3	518.4
35°	504.3	503.7	503.0	502.1	501.2
37.5°	486.5	485.8	484.2	483.8	483.1
40°	467.5	466.6	464.6	464.6	463.9
42.5°	447.2	446.3	444.9	444.0	443.6
45°	425.9	425.0	423.5	422.6	422.1
47.5°	403.4	402.7	400.9	400.2	399.6
50°	379.9	379.0	377.0	376.6	375.9
52.5°	355.4	354.9	352.2	352.0	351.3
55°	331.0	328.6	326.3	326.3	325.9
57.5°	304.2	302.4	299.5	299.5	299.1
60°	276.5	274.9	271.6	272.0	271.6
62.5°	249.5	246.1	243.0	244.3	243.2
65°	218.7	216.9	213.5	214.4	214.2
67.5°	190.5	187.2	184.0	185.8	184.9
70°	159.3	157.5	154.3	156.1	153.9
72.5°	129.8	128.2	125.1	127.1	124.9
75°	101.2	99.6	97.2	98.9	96.7
77.5°	74.2	73.0	70.8	72.6	73.0
80°	49.6	48.2	47.1	48.7	49.1
82.5°	29.0	28.1	27.7	27.9	29.0
85°	14.1	13.0	13.0	13.2	13.2
87.5°	3.8	3.4	3.8	4.0	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)