

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: P974241

Luminaire Tested: FLR2-24-20-L935-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974241  
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-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-20-L935-CP187  
Ballast/Driver: -

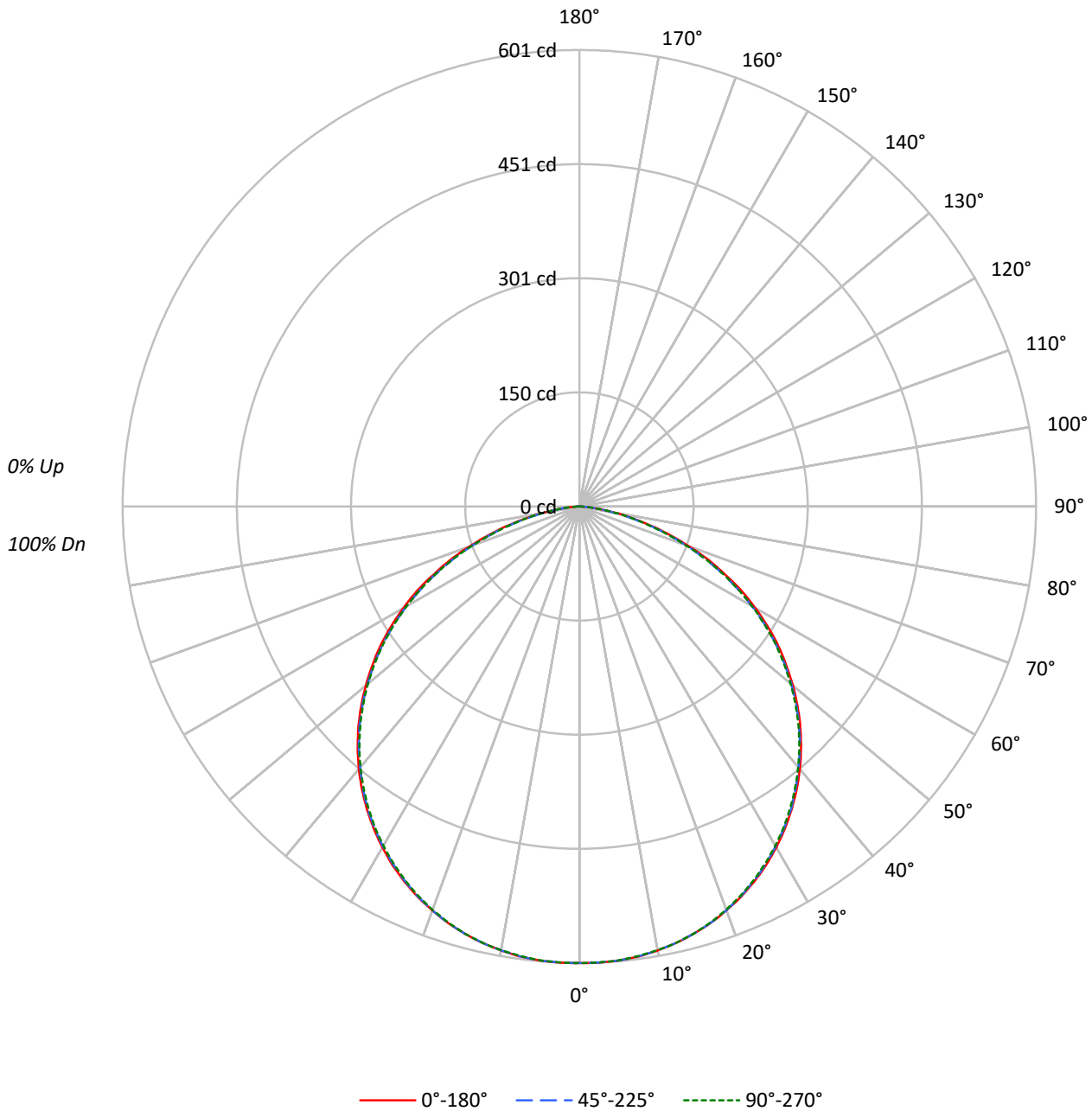
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1699.1 lumens  
Efficiency: N/A  
Efficacy: 101.7 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	100	100	100	100														
	1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85	85	85	85														
	2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71	71	71	71	71	71														
	3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60	60	60	60														
	4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51	51	51	51	51	51														
	5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44	44	44	44	44	44														
	6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38	38	38	38	38	38														
	7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34	34	34	34	34	34														
	8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30	30	30	30	30	30														
	9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27	27	27	27	27	27														
	10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25	25	25	25	25	25														

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	809	809	809
5°	811	811	810
10°	811	811	810
15°	811	811	811
20°	810	810	809
25°	809	807	806
30°	805	803	801
35°	800	798	795
40°	793	788	787
45°	783	778	776
50°	768	762	760
55°	750	739	738
60°	719	706	706
65°	672	656	659
70°	605	587	585
75°	508	488	486
80°	371	353	368
85°	210	193	196

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 783 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.1	3.4
10°-20°	164.4	9.7
20°-30°	250.6	14.8
30°-40°	303.7	17.9
40°-50°	315.4	18.6
50°-60°	282.2	16.6
60°-70°	205.7	12.1
70°-80°	101.8	6.0
80°-90°	18.2	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°	472.1	27.8
0°-40°	775.8	45.7
0°-60°	1373.4	80.8
0°-90°	1699.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1699.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	601	601	601	601	601	
5°	600	600	600	600	600	57
15°	582	582	582	583	582	164
25°	545	544	544	544	543	251
35°	487	486	486	485	484	305
45°	411	410	409	408	408	317
55°	320	317	315	315	315	285
65°	211	210	206	207	207	209
75°	98	96	94	96	93	104
85°	14	12	12	13	13	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	601.2	601.2	601.2	601.2	601.2
2.5°	601.2	601.0	601.0	601.2	600.8
5°	600.1	600.3	600.1	600.1	599.7
7.5°	597.7	597.5	597.3	597.5	596.9
10°	593.6	593.6	593.4	593.6	593.2
12.5°	588.7	588.7	588.7	588.9	588.7
15°	582.4	582.2	582.2	582.6	582.2
17.5°	575.1	574.9	574.9	574.7	574.2
20°	566.0	566.0	565.8	565.6	565.0
22.5°	556.3	556.1	555.5	555.5	554.6
25°	544.9	544.2	543.8	543.6	542.9
27.5°	532.4	531.5	530.9	530.4	529.8
30°	518.4	517.5	516.8	516.2	515.8
32.5°	503.3	502.8	501.7	501.5	500.7
35°	487.1	486.4	485.8	484.9	484.1
37.5°	469.8	469.2	467.7	467.2	466.6
40°	451.5	450.6	448.7	448.7	448.0
42.5°	431.9	431.0	429.7	428.8	428.4
45°	411.4	410.5	409.0	408.1	407.7
47.5°	389.6	388.9	387.2	386.6	385.9
50°	366.9	366.1	364.1	363.7	363.0
52.5°	343.2	342.8	340.2	340.0	339.3
55°	319.7	317.3	315.2	315.2	314.7
57.5°	293.8	292.1	289.3	289.3	288.8
60°	267.1	265.5	262.3	262.7	262.3
62.5°	241.0	237.7	234.7	236.0	234.9
65°	211.2	209.5	206.2	207.1	206.9
67.5°	184.0	180.8	177.7	179.5	178.6
70°	153.8	152.1	149.1	150.8	148.6
72.5°	125.3	123.8	120.8	122.7	120.6
75°	97.7	96.2	93.8	95.6	93.4
77.5°	71.6	70.5	68.4	70.1	70.5
80°	47.9	46.6	45.5	47.0	47.5
82.5°	28.0	27.2	26.7	27.0	28.0
85°	13.6	12.5	12.5	12.7	12.7
87.5°	3.7	3.2	3.7	3.9	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)