

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: P974465

Luminaire Tested: FLR2-24-20-L950-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974465  
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-L950-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-20-L950-CP187  
Ballast/Driver: -

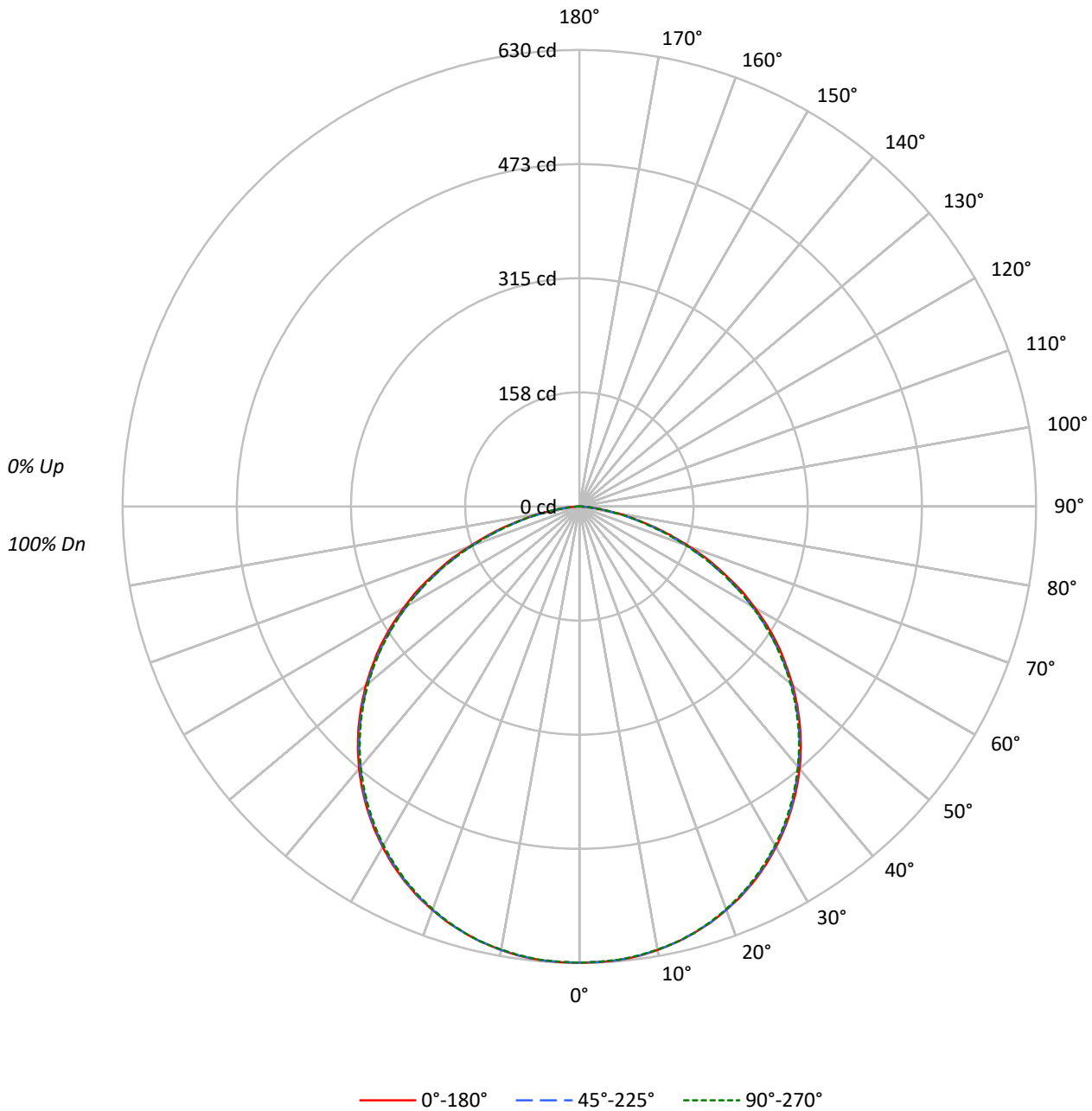
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1779.1 lumens  
Efficiency: N/A  
Efficacy: 106.5 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): 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				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°	847	847	847
5°	849	849	848
10°	849	849	849
15°	849	849	849
20°	849	848	847
25°	847	845	844
30°	843	841	839
35°	838	835	832
40°	830	825	824
45°	820	815	812
50°	804	798	796
55°	785	774	773
60°	752	739	739
65°	704	687	690
70°	633	614	612
75°	532	511	508
80°	388	370	385
85°	219	202	205

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 820 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.8	3.4
10°-20°	172.1	9.7
20°-30°	262.4	14.8
30°-40°	318.0	17.9
40°-50°	330.3	18.6
50°-60°	295.5	16.6
60°-70°	215.3	12.1
70°-80°	106.7	6.0
80°-90°	19.1	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°	494.3	27.8
0°-40°	812.3	45.7
0°-60°	1438.0	80.8
0°-90°	1779.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1779.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	630	630	630	630	630	
5°	628	629	628	628	628	60
15°	610	610	610	610	610	172
25°	570	570	569	569	568	263
35°	510	509	509	508	507	319
45°	431	430	428	427	427	332
55°	335	332	330	330	330	298
65°	221	219	216	217	217	219
75°	102	101	98	100	98	109
85°	14	13	13	13	13	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	629.5	629.5	629.5	629.5	629.5
2.5°	629.5	629.3	629.3	629.5	629.0
5°	628.4	628.6	628.4	628.4	627.9
7.5°	625.9	625.6	625.4	625.6	625.0
10°	621.6	621.6	621.4	621.6	621.1
12.5°	616.4	616.4	616.4	616.6	616.4
15°	609.8	609.6	609.6	610.1	609.6
17.5°	602.2	601.9	601.9	601.7	601.3
20°	592.7	592.7	592.4	592.2	591.5
22.5°	582.5	582.3	581.6	581.6	580.7
25°	570.5	569.9	569.4	569.2	568.5
27.5°	557.4	556.5	555.9	555.4	554.7
30°	542.8	541.8	541.2	540.5	540.0
32.5°	526.9	526.5	525.4	525.1	524.2
35°	510.0	509.3	508.6	507.7	506.8
37.5°	491.9	491.3	489.7	489.2	488.5
40°	472.7	471.8	469.8	469.8	469.1
42.5°	452.2	451.3	449.9	449.0	448.6
45°	430.7	429.8	428.2	427.3	426.9
47.5°	407.9	407.2	405.4	404.7	404.1
50°	384.2	383.3	381.3	380.8	380.1
52.5°	359.3	358.9	356.2	356.0	355.3
55°	334.7	332.2	330.0	330.0	329.5
57.5°	307.6	305.8	302.9	302.9	302.4
60°	279.6	278.0	274.7	275.1	274.7
62.5°	252.3	248.9	245.7	247.1	246.0
65°	221.1	219.3	215.9	216.8	216.6
67.5°	192.7	189.3	186.1	187.9	187.0
70°	161.0	159.2	156.1	157.9	155.6
72.5°	131.2	129.6	126.5	128.5	126.3
75°	102.3	100.7	98.3	100.1	97.8
77.5°	75.0	73.9	71.6	73.4	73.9
80°	50.1	48.8	47.7	49.2	49.7
82.5°	29.4	28.5	28.0	28.2	29.4
85°	14.2	13.1	13.1	13.3	13.3
87.5°	3.8	3.4	3.8	4.1	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)