

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: P973693

Luminaire Tested: FLR2-22-20-L950-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973693  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-20-L950-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

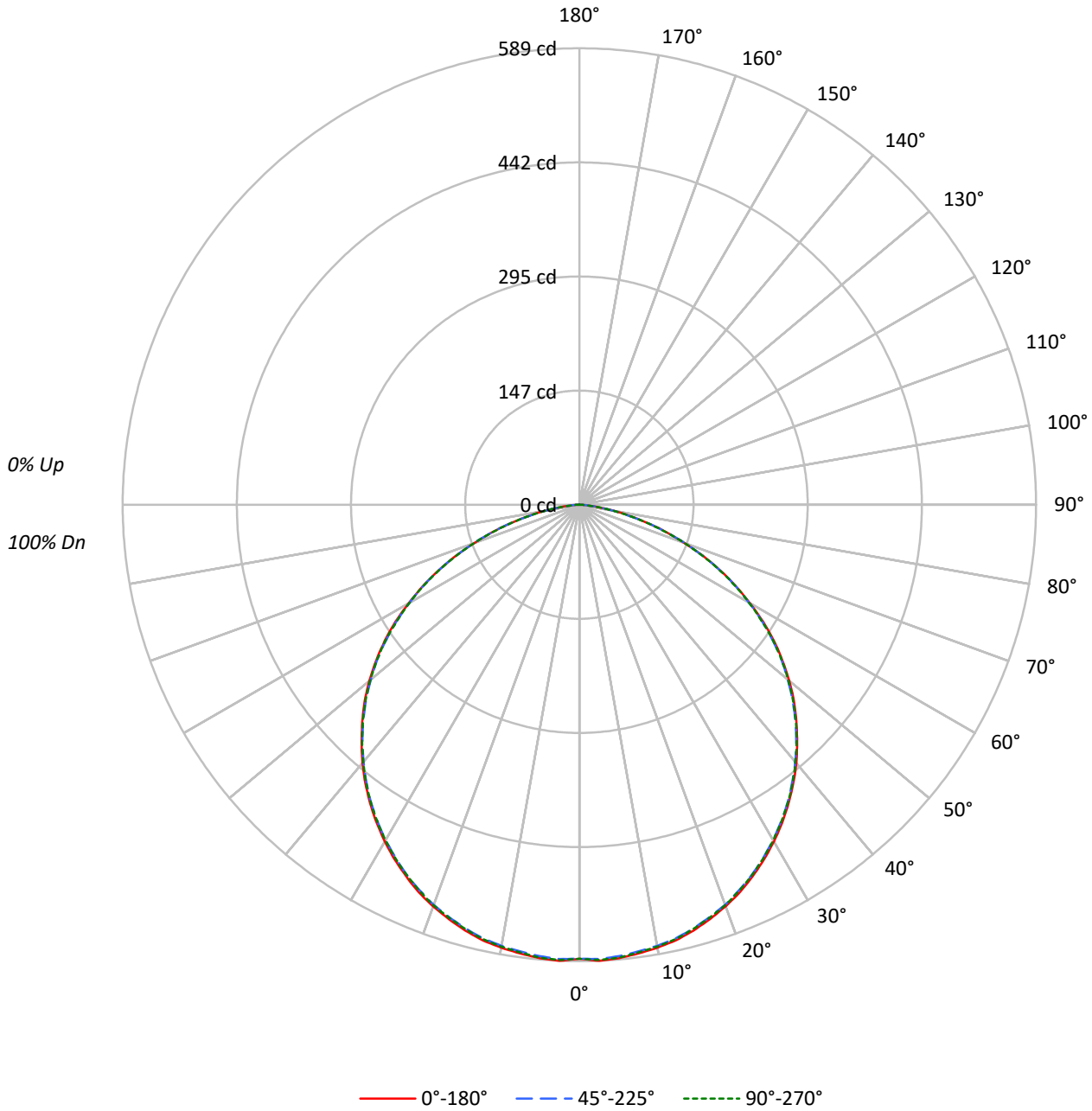
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1638.3 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 15.1  
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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85															
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51															
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44					44															
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39					39															
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34					34															
8	61	47	39	33	59	47	39	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	40	34	29	27					27															
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25					25															

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

	0°	45°	90°
0°	1576	1576	1576
5°	1586	1579	1585
10°	1586	1579	1582
15°	1585	1578	1580
20°	1579	1573	1575
25°	1571	1564	1565
30°	1560	1553	1554
35°	1545	1539	1541
40°	1529	1521	1523
45°	1507	1499	1502
50°	1480	1469	1472
55°	1438	1426	1431
60°	1367	1361	1361
65°	1277	1274	1270
70°	1131	1136	1133
75°	951	944	937
80°	683	673	668
85°	358	358	346

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1507 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.5	3.4
10°-20°	159.5	9.7
20°-30°	242.4	14.8
30°-40°	293.0	17.9
40°-50°	304.2	18.6
50°-60°	271.9	16.6
60°-70°	197.7	12.1
70°-80°	97.2	5.9
80°-90°	16.9	1.0
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°	457.4	27.9
0°-40°	750.5	45.8
0°-60°	1326.5	81.0
0°-90°	1638.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1638.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	586	586	586	586	586	
5°	587	580	585	583	587	56
15°	569	562	566	565	567	161
25°	529	523	527	526	527	244
35°	470	467	469	469	469	294
45°	396	394	394	395	395	305
55°	306	305	304	305	305	273
65°	200	201	200	200	199	198
75°	92	92	91	91	90	97
85°	12	12	12	12	11	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	585.8	585.8	585.8	585.8	585.8
2.5°	589.1	582.2	586.6	584.0	588.0
5°	587.3	580.4	584.7	582.6	586.6
7.5°	584.0	577.1	581.5	579.3	582.6
10°	580.4	573.2	577.9	575.7	579.0
12.5°	575.7	568.8	573.2	571.4	574.2
15°	568.8	562.3	566.3	564.8	567.0
17.5°	560.5	554.0	558.0	556.9	558.7
20°	551.5	545.3	549.3	548.2	550.0
22.5°	541.3	534.8	538.4	537.7	539.1
25°	529.0	523.2	526.8	525.8	527.2
27.5°	516.0	510.6	513.5	513.5	514.2
30°	501.9	496.8	499.7	499.7	500.1
32.5°	486.7	482.7	484.5	484.9	484.9
35°	470.4	467.1	468.6	469.0	469.0
37.5°	453.4	450.1	451.2	451.9	451.9
40°	435.3	432.4	433.1	433.9	433.5
42.5°	415.8	413.6	414.0	414.7	414.7
45°	395.9	394.0	394.0	394.8	394.8
47.5°	375.6	373.8	373.1	373.8	373.8
50°	353.5	351.7	351.0	351.7	351.7
52.5°	330.4	328.6	328.6	328.6	328.9
55°	306.5	304.7	303.9	304.7	305.0
57.5°	281.2	280.4	279.3	279.7	278.6
60°	254.0	254.0	252.9	253.7	252.9
62.5°	227.6	228.3	227.2	227.2	226.5
65°	200.5	201.2	200.1	200.1	199.4
67.5°	172.6	173.7	172.2	172.2	171.5
70°	143.7	145.8	144.4	144.7	144.0
72.5°	117.6	118.7	117.2	117.2	116.5
75°	91.5	92.3	90.8	91.2	90.1
77.5°	65.9	66.9	65.5	65.9	65.5
80°	44.1	44.5	43.4	43.8	43.1
82.5°	25.7	26.1	25.7	25.3	25.0
85°	11.6	11.9	11.6	11.6	11.2
87.5°	2.9	2.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)