

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: P973505

Luminaire Tested: FLR2-22-20-L830-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973505  
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-L830-CP187  
Description: SHAPER SENSE CIRCLE  
LIGHT LEVEL 2  
Light Source:  
Ballast/Driver: -

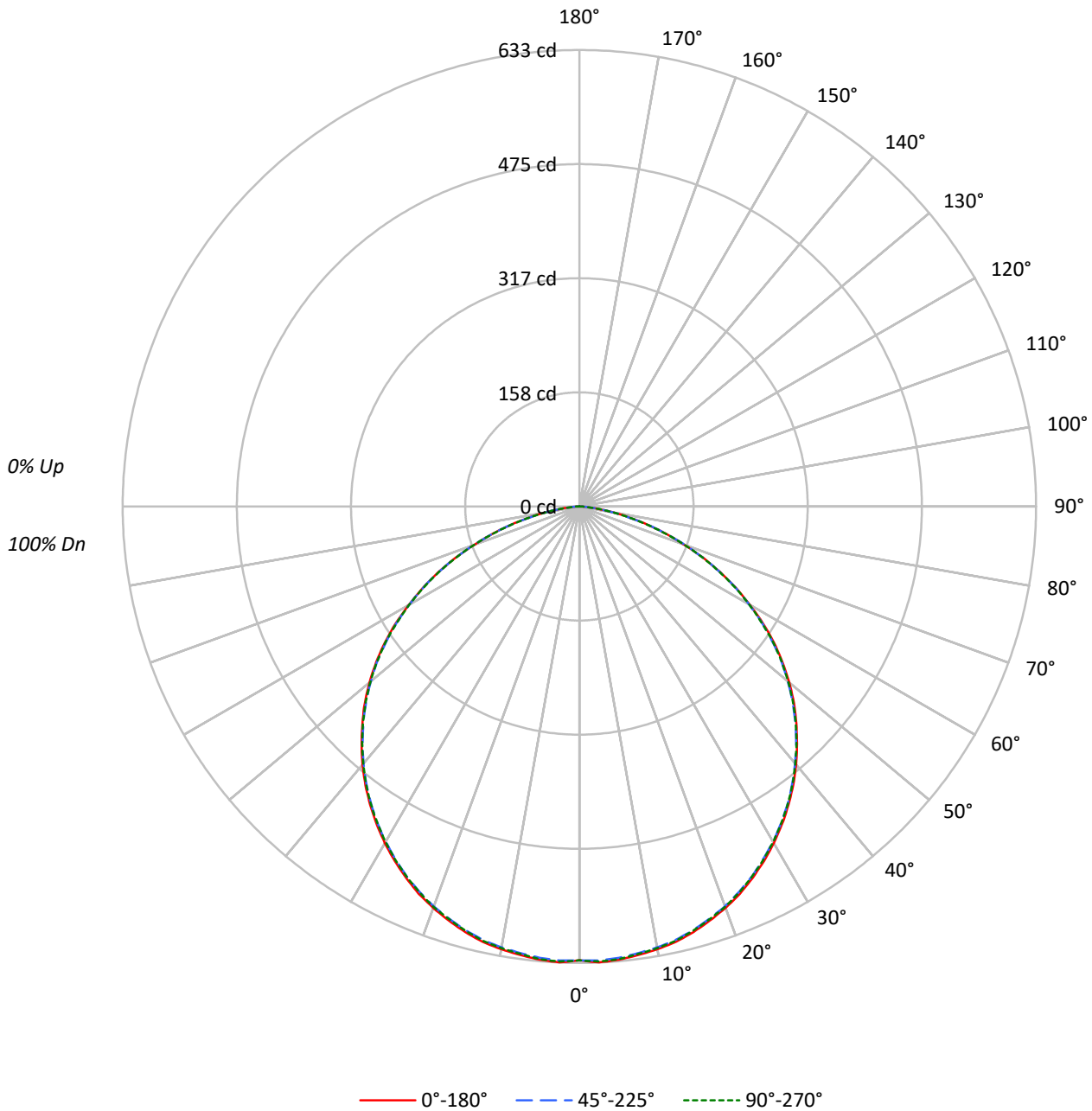
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1760.0 lumens  
Efficiency: N/A  
Efficacy: 116.6 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 (A<sub>in</sub>): 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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	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	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

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

	0°	45°	90°
0°	1694	1694	1694
5°	1704	1697	1702
10°	1704	1696	1700
15°	1702	1695	1697
20°	1696	1690	1692
25°	1687	1681	1682
30°	1675	1668	1669
35°	1660	1654	1655
40°	1643	1635	1636
45°	1619	1611	1614
50°	1590	1579	1582
55°	1545	1532	1537
60°	1469	1462	1462
65°	1372	1369	1364
70°	1214	1220	1217
75°	1022	1015	1006
80°	735	722	717
85°	383	383	374

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1619 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.6	3.4
10°-20°	171.4	9.7
20°-30°	260.4	14.8
30°-40°	314.8	17.9
40°-50°	326.7	18.6
50°-60°	292.1	16.6
60°-70°	212.4	12.1
70°-80°	104.4	5.9
80°-90°	18.1	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°	491.4	27.9
0°-40°	806.2	45.8
0°-60°	1425.1	81.0
0°-90°	1760.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1760.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	629	629	629	629	629	
5°	631	624	628	626	630	60
15°	611	604	608	607	609	172
25°	568	562	566	565	566	262
35°	505	502	503	504	504	316
45°	425	423	423	424	424	328
55°	329	327	326	327	328	293
65°	215	216	215	215	214	212
75°	98	99	98	98	97	104
85°	12	13	12	12	12	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	629.4	629.4	629.4	629.4	629.4
2.5°	632.9	625.5	630.1	627.4	631.7
5°	630.9	623.5	628.2	625.9	630.1
7.5°	627.4	620.0	624.7	622.4	625.9
10°	623.5	615.8	620.8	618.5	622.0
12.5°	618.5	611.1	615.8	613.8	616.9
15°	611.1	604.1	608.4	606.8	609.1
17.5°	602.2	595.2	599.4	598.3	600.2
20°	592.4	585.8	590.1	588.9	590.9
22.5°	581.5	574.6	578.4	577.7	579.2
25°	568.3	562.1	566.0	564.8	566.4
27.5°	554.3	548.5	551.6	551.6	552.4
30°	539.2	533.7	536.8	536.8	537.2
32.5°	522.8	518.6	520.5	520.9	520.9
35°	505.4	501.9	503.4	503.8	503.8
37.5°	487.1	483.6	484.8	485.5	485.5
40°	467.6	464.5	465.3	466.1	465.7
42.5°	446.7	444.3	444.7	445.5	445.5
45°	425.3	423.3	423.3	424.1	424.1
47.5°	403.5	401.6	400.8	401.6	401.6
50°	379.8	377.9	377.1	377.9	377.9
52.5°	354.9	353.0	353.0	353.0	353.4
55°	329.3	327.3	326.5	327.3	327.7
57.5°	302.0	301.3	300.1	300.5	299.3
60°	272.9	272.9	271.7	272.5	271.7
62.5°	244.5	245.3	244.1	244.1	243.3
65°	215.4	216.1	215.0	215.0	214.2
67.5°	185.4	186.6	185.0	185.0	184.3
70°	154.3	156.7	155.1	155.5	154.7
72.5°	126.3	127.5	126.0	126.0	125.2
75°	98.3	99.1	97.6	98.0	96.8
77.5°	70.7	71.9	70.4	70.7	70.4
80°	47.4	47.8	46.6	47.0	46.3
82.5°	27.6	28.0	27.6	27.2	26.8
85°	12.4	12.8	12.4	12.4	12.1
87.5°	3.1	3.1	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)