

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: P973517

Luminaire Tested: FLR2-22-20-L830-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973517  
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-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

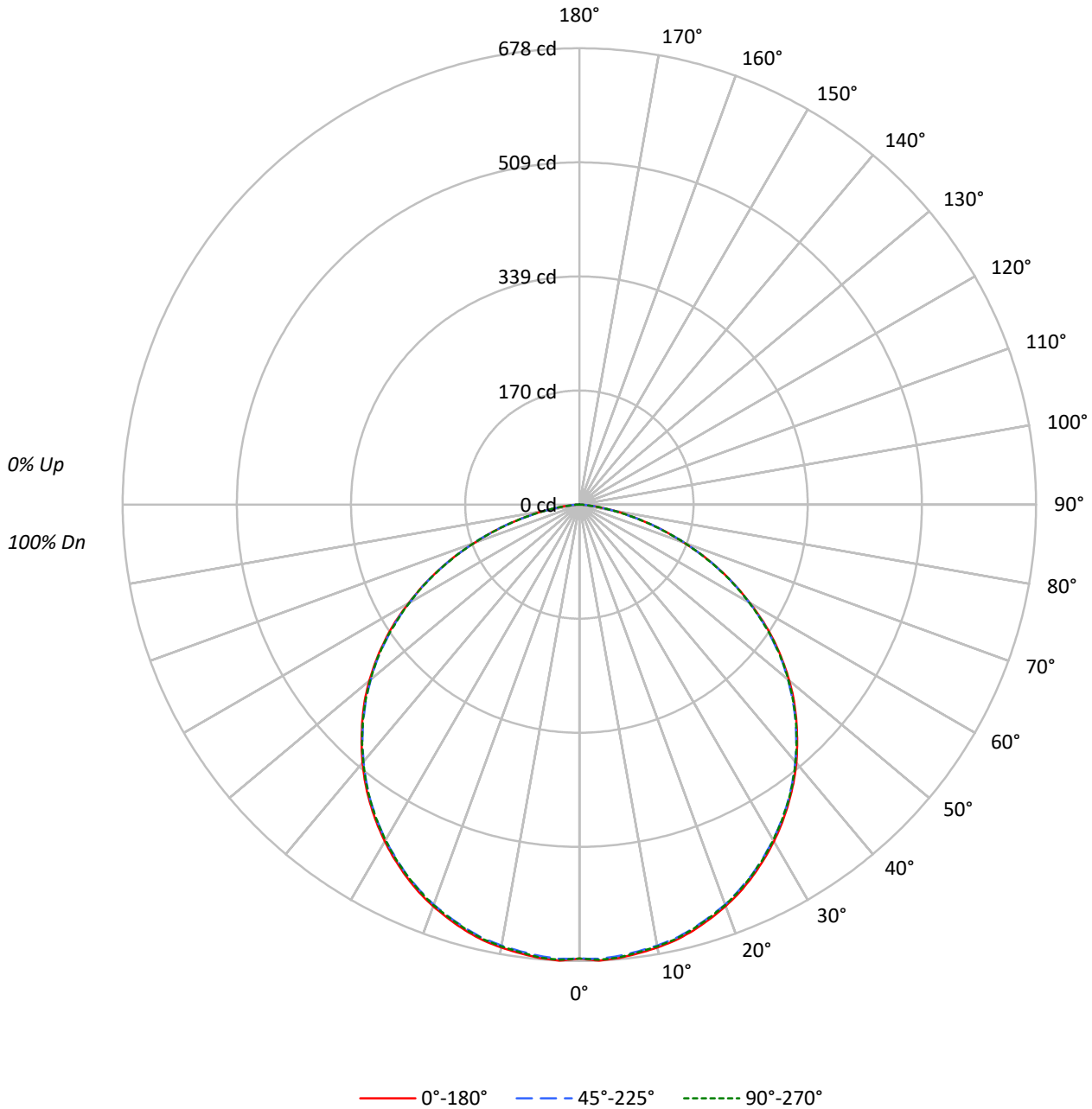
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1886.1 lumens  
Efficiency: N/A  
Efficacy: 124.9 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°	1815	1815	1815
5°	1826	1818	1824
10°	1826	1818	1821
15°	1824	1816	1819
20°	1818	1811	1813
25°	1808	1801	1802
30°	1795	1788	1789
35°	1779	1772	1774
40°	1760	1751	1753
45°	1734	1727	1730
50°	1704	1692	1695
55°	1655	1642	1648
60°	1574	1567	1567
65°	1470	1467	1461
70°	1301	1308	1304
75°	1096	1088	1078
80°	787	775	769
85°	411	411	398

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1734 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.9	3.4
10°-20°	183.7	9.7
20°-30°	279.1	14.8
30°-40°	337.3	17.9
40°-50°	350.2	18.6
50°-60°	313.1	16.6
60°-70°	227.6	12.1
70°-80°	111.9	5.9
80°-90°	19.4	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°	526.6	27.9
0°-40°	864.0	45.8
0°-60°	1527.2	81.0
0°-90°	1886.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1886.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	676	668	673	671	675	64
15°	655	647	652	650	653	185
25°	609	602	606	605	607	281
35°	542	538	540	540	540	339
45°	456	454	454	454	454	352
55°	353	351	350	351	351	314
65°	231	232	230	230	230	228
75°	105	106	105	105	104	112
85°	13	14	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°	674.4	674.4	674.4	674.4	674.4
2.5°	678.2	670.3	675.3	672.4	676.9
5°	676.1	668.2	673.2	670.7	675.3
7.5°	672.4	664.4	669.4	666.9	670.7
10°	668.2	659.9	665.3	662.8	666.5
12.5°	662.8	654.9	659.9	657.8	661.1
15°	654.9	647.4	652.0	650.3	652.8
17.5°	645.3	637.8	642.4	641.1	643.2
20°	634.9	627.8	632.4	631.1	633.2
22.5°	623.2	615.7	619.9	619.0	620.7
25°	609.0	602.4	606.5	605.3	607.0
27.5°	594.0	587.8	591.1	591.1	592.0
30°	577.8	572.0	575.3	575.3	575.7
32.5°	560.3	555.7	557.8	558.2	558.2
35°	541.6	537.8	539.5	539.9	539.9
37.5°	522.0	518.2	519.5	520.3	520.3
40°	501.1	497.8	498.6	499.5	499.1
42.5°	478.7	476.2	476.6	477.4	477.4
45°	455.7	453.7	453.7	454.5	454.5
47.5°	432.4	430.3	429.5	430.3	430.3
50°	407.0	404.9	404.1	404.9	404.9
52.5°	380.3	378.3	378.3	378.3	378.7
55°	352.8	350.8	349.9	350.8	351.2
57.5°	323.7	322.9	321.6	322.0	320.8
60°	292.4	292.4	291.2	292.0	291.2
62.5°	262.0	262.9	261.6	261.6	260.8
65°	230.8	231.6	230.4	230.4	229.5
67.5°	198.7	200.0	198.3	198.3	197.5
70°	165.4	167.9	166.2	166.6	165.8
72.5°	135.4	136.6	135.0	135.0	134.1
75°	105.4	106.2	104.6	105.0	103.7
77.5°	75.8	77.1	75.4	75.8	75.4
80°	50.8	51.2	50.0	50.4	49.6
82.5°	29.6	30.0	29.6	29.2	28.7
85°	13.3	13.7	13.3	13.3	12.9
87.5°	3.3	3.3	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)