

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: P973609

Luminaire Tested: FLR2-22-20-L840-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973609  
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-L840-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

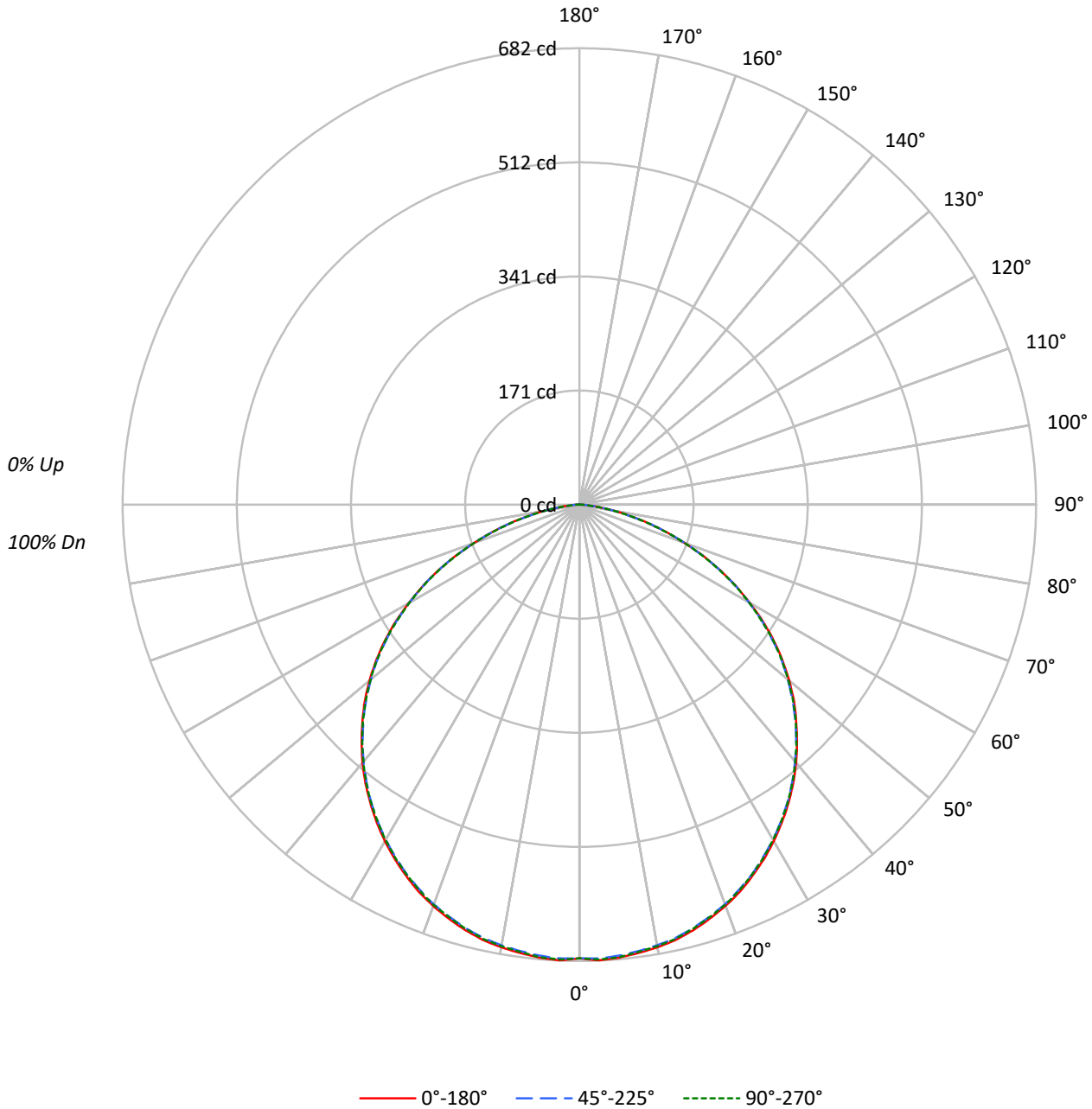
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1896.0 lumens  
Efficiency: N/A  
Efficacy: 125.6 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 (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°	1824	1824	1824
5°	1836	1828	1834
10°	1835	1827	1831
15°	1834	1826	1828
20°	1828	1820	1823
25°	1818	1810	1811
30°	1805	1797	1798
35°	1788	1781	1783
40°	1770	1761	1762
45°	1743	1735	1739
50°	1713	1701	1704
55°	1664	1650	1656
60°	1582	1575	1575
65°	1477	1475	1469
70°	1308	1315	1312
75°	1101	1093	1084
80°	792	779	772
85°	414	414	401

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1743 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.2	3.4
10°-20°	184.6	9.7
20°-30°	280.6	14.8
30°-40°	339.1	17.9
40°-50°	352.0	18.6
50°-60°	314.7	16.6
60°-70°	228.8	12.1
70°-80°	112.5	5.9
80°-90°	19.5	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°	529.4	27.9
0°-40°	868.5	45.8
0°-60°	1535.1	81.0
0°-90°	1896.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1896.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	678	678	678	678	678	
5°	680	672	677	674	679	65
15°	658	651	655	654	656	186
25°	612	606	610	608	610	282
35°	544	541	542	543	543	341
45°	458	456	456	457	457	353
55°	355	353	352	353	353	316
65°	232	233	232	232	231	229
75°	106	107	105	106	104	112
85°	13	14	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°	678.0	678.0	678.0	678.0	678.0
2.5°	681.7	673.8	678.8	675.9	680.5
5°	679.7	671.7	676.7	674.2	678.8
7.5°	675.9	667.9	673.0	670.4	674.2
10°	671.7	663.3	668.8	666.3	670.0
12.5°	666.3	658.3	663.3	661.2	664.6
15°	658.3	650.8	655.4	653.7	656.2
17.5°	648.7	641.1	645.7	644.5	646.6
20°	638.2	631.1	635.7	634.4	636.5
22.5°	626.5	618.9	623.1	622.3	624.0
25°	612.2	605.5	609.7	608.5	610.1
27.5°	597.2	590.9	594.2	594.2	595.1
30°	580.8	575.0	578.3	578.3	578.7
32.5°	563.2	558.6	560.7	561.1	561.1
35°	544.4	540.6	542.3	542.7	542.7
37.5°	524.7	520.9	522.2	523.0	523.0
40°	503.8	500.4	501.3	502.1	501.7
42.5°	481.2	478.6	479.1	479.9	479.9
45°	458.1	456.0	456.0	456.9	456.9
47.5°	434.7	432.6	431.7	432.6	432.6
50°	409.1	407.0	406.2	407.0	407.0
52.5°	382.3	380.2	380.2	380.2	380.7
55°	354.7	352.6	351.8	352.6	353.0
57.5°	325.4	324.5	323.3	323.7	322.4
60°	294.0	294.0	292.7	293.6	292.7
62.5°	263.4	264.2	263.0	263.0	262.1
65°	232.0	232.8	231.6	231.6	230.7
67.5°	199.8	201.0	199.3	199.3	198.5
70°	166.2	168.8	167.1	167.5	166.7
72.5°	136.1	137.4	135.7	135.7	134.8
75°	105.9	106.8	105.1	105.5	104.3
77.5°	76.2	77.5	75.8	76.2	75.8
80°	51.1	51.5	50.3	50.7	49.8
82.5°	29.7	30.2	29.7	29.3	28.9
85°	13.4	13.8	13.4	13.4	13.0
87.5°	3.4	3.4	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)