

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: P974361

Luminaire Tested: FLR2-24-20-L940-CP250

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974361  
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-L940-CP250  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-20-L940-CP250  
Ballast/Driver: -

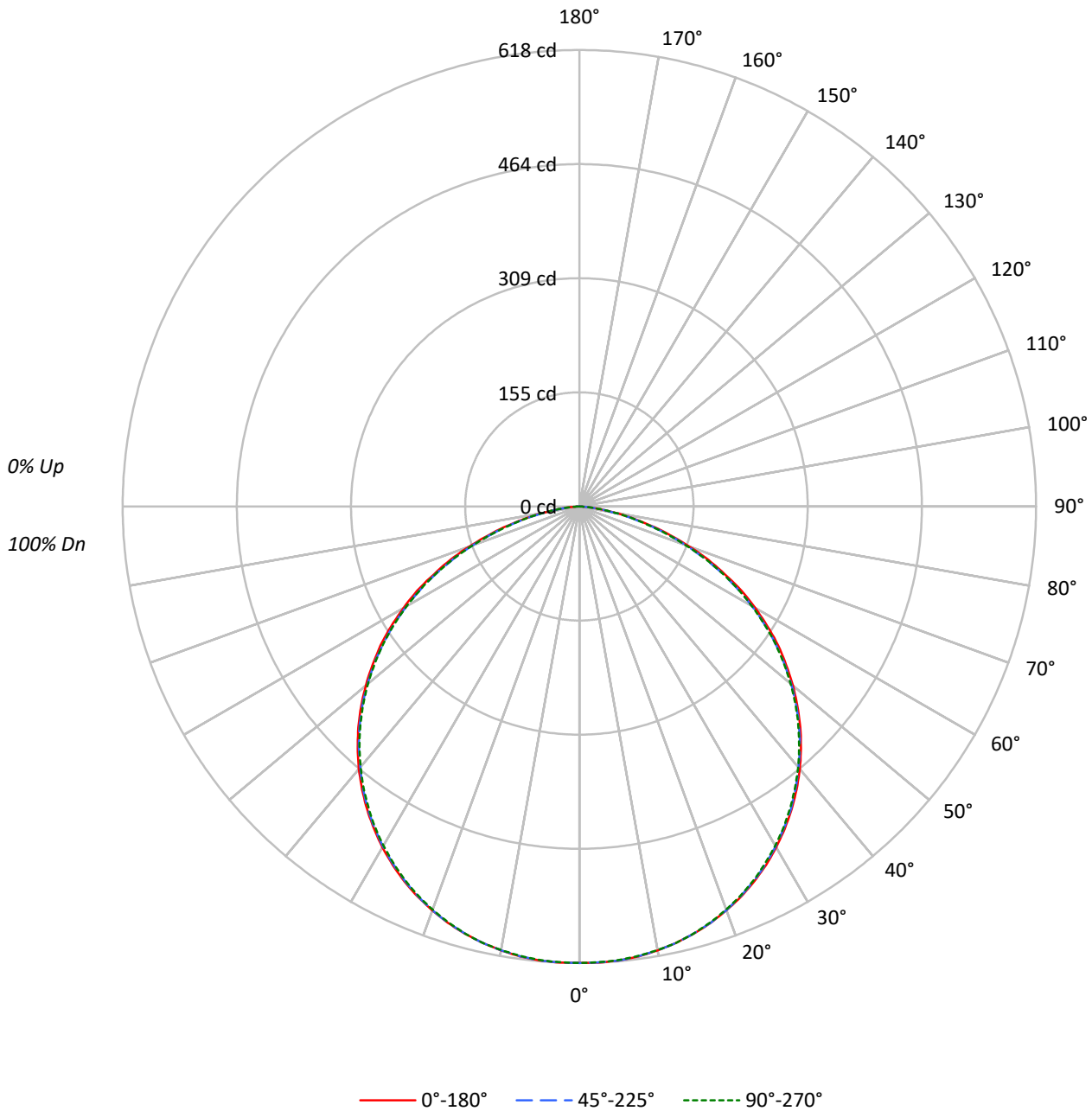
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1746.8 lumens  
Efficiency: N/A  
Efficacy: 104.6 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										
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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44						44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38						38														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	38	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	39	33	29	27						27														
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25						25														

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

	0°	45°	90°
0°	832	832	832
5°	833	833	833
10°	834	834	833
15°	834	834	834
20°	833	833	832
25°	832	830	829
30°	828	826	824
35°	822	820	817
40°	815	810	809
45°	805	800	797
50°	790	783	781
55°	771	760	759
60°	739	726	726
65°	691	675	677
70°	622	603	601
75°	522	502	499
80°	381	363	378
85°	216	199	202

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 805 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.7	3.4
10°-20°	169.0	9.7
20°-30°	257.7	14.8
30°-40°	312.2	17.9
40°-50°	324.3	18.6
50°-60°	290.1	16.6
60°-70°	211.4	12.1
70°-80°	104.7	6.0
80°-90°	18.7	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°	485.4	27.8
0°-40°	797.6	45.7
0°-60°	1412.0	80.8
0°-90°	1746.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1746.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	617	617	617	617	616	59
15°	599	598	598	599	598	169
25°	560	560	559	559	558	258
35°	501	500	499	498	498	313
45°	423	422	420	420	419	326
55°	329	326	324	324	324	293
65°	217	215	212	213	213	215
75°	100	99	96	98	96	107
85°	14	13	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°	618.1	618.1	618.1	618.1	618.1
2.5°	618.1	617.8	617.8	618.1	617.6
5°	617.0	617.2	617.0	617.0	616.5
7.5°	614.5	614.3	614.1	614.3	613.6
10°	610.3	610.3	610.1	610.3	609.9
12.5°	605.2	605.2	605.2	605.4	605.2
15°	598.8	598.5	598.5	599.0	598.5
17.5°	591.2	591.0	591.0	590.8	590.3
20°	581.9	581.9	581.7	581.5	580.8
22.5°	571.9	571.7	571.0	571.0	570.2
25°	560.2	559.5	559.1	558.9	558.2
27.5°	547.3	546.4	545.8	545.3	544.7
30°	532.9	532.0	531.4	530.7	530.2
32.5°	517.4	516.9	515.8	515.6	514.7
35°	500.7	500.1	499.4	498.5	497.6
37.5°	483.0	482.3	480.8	480.3	479.7
40°	464.2	463.3	461.3	461.3	460.6
42.5°	444.0	443.1	441.8	440.9	440.4
45°	422.9	422.0	420.5	419.6	419.1
47.5°	400.5	399.8	398.1	397.4	396.7
50°	377.2	376.3	374.3	373.9	373.2
52.5°	352.8	352.4	349.7	349.5	348.8
55°	328.7	326.2	324.0	324.0	323.6
57.5°	302.0	300.3	297.4	297.4	296.9
60°	274.5	273.0	269.7	270.1	269.7
62.5°	247.7	244.4	241.3	242.6	241.5
65°	217.1	215.3	212.0	212.9	212.7
67.5°	189.2	185.8	182.7	184.5	183.6
70°	158.1	156.3	153.2	155.0	152.8
72.5°	128.8	127.3	124.2	126.2	124.0
75°	100.5	98.9	96.5	98.2	96.0
77.5°	73.6	72.5	70.3	72.1	72.5
80°	49.2	47.9	46.8	48.3	48.8
82.5°	28.8	27.9	27.5	27.7	28.8
85°	14.0	12.9	12.9	13.1	13.1
87.5°	3.8	3.3	3.8	4.0	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)