

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: P974329

Luminaire Tested: FLR2-24-20-L840-CA125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974329  
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-L840-CA125  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-20-L840-CA125  
Ballast/Driver: -

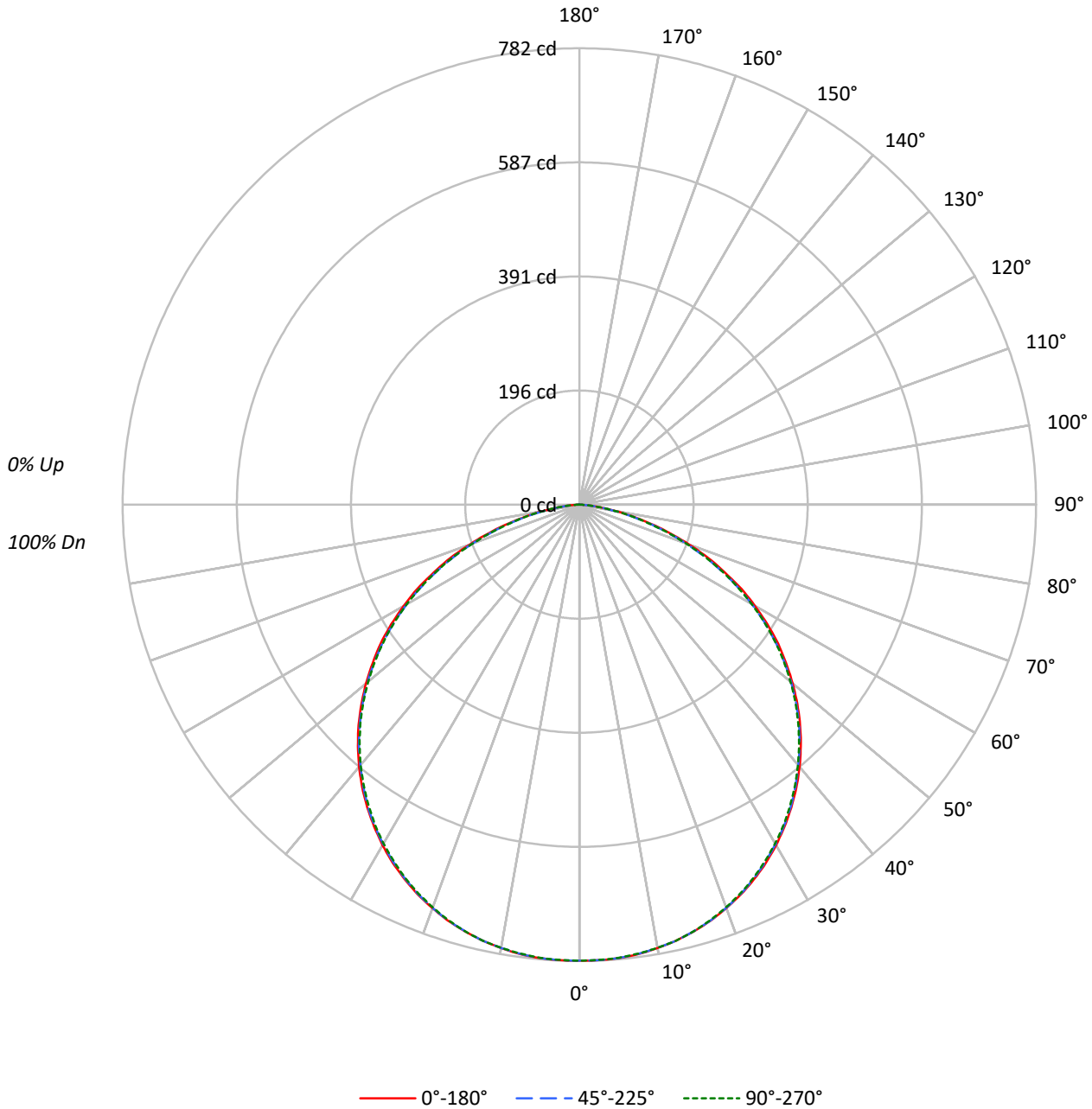
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2208.9 lumens  
Efficiency: N/A  
Efficacy: 132.3 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				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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	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	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

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

	0°	45°	90°
0°	1051	1051	1051
5°	1054	1054	1053
10°	1054	1054	1054
15°	1055	1054	1054
20°	1054	1053	1052
25°	1052	1049	1048
30°	1047	1044	1042
35°	1040	1037	1034
40°	1031	1025	1023
45°	1018	1012	1008
50°	998	991	988
55°	975	961	960
60°	934	918	918
65°	874	854	856
70°	786	762	760
75°	660	634	631
80°	483	459	478
85°	273	252	255

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1018 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.2	3.4
10°-20°	213.7	9.7
20°-30°	325.8	14.8
30°-40°	394.8	17.9
40°-50°	410.1	18.6
50°-60°	366.8	16.6
60°-70°	267.4	12.1
70°-80°	132.4	6.0
80°-90°	23.7	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°	613.7	27.8
0°-40°	1008.5	45.7
0°-60°	1785.4	80.8
0°-90°	2208.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2208.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	780	780	780	780	780	74
15°	757	757	757	757	757	214
25°	708	708	707	707	706	326
35°	633	632	632	630	629	396
45°	535	534	532	531	530	412
55°	416	412	410	410	409	370
65°	274	272	268	269	269	272
75°	127	125	122	124	121	135
85°	18	16	16	16	16	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	781.5	781.5	781.5	781.5	781.5
2.5°	781.5	781.3	781.3	781.5	781.0
5°	780.1	780.4	780.1	780.1	779.6
7.5°	777.0	776.8	776.5	776.8	775.9
10°	771.7	771.7	771.4	771.7	771.2
12.5°	765.3	765.3	765.3	765.5	765.3
15°	757.1	756.9	756.9	757.4	756.9
17.5°	747.6	747.3	747.3	747.0	746.5
20°	735.8	735.8	735.5	735.3	734.4
22.5°	723.2	722.9	722.1	722.1	721.0
25°	708.3	707.5	706.9	706.7	705.8
27.5°	692.1	691.0	690.1	689.6	688.7
30°	673.9	672.7	671.9	671.0	670.5
32.5°	654.2	653.7	652.3	652.0	650.9
35°	633.2	632.3	631.5	630.4	629.3
37.5°	610.8	609.9	608.0	607.4	606.5
40°	586.9	585.8	583.3	583.3	582.4
42.5°	561.4	560.3	558.6	557.5	556.9
45°	534.8	533.6	531.7	530.6	530.0
47.5°	506.4	505.6	503.4	502.5	501.7
50°	477.0	475.9	473.3	472.8	471.9
52.5°	446.1	445.6	442.2	441.9	441.1
55°	415.6	412.5	409.7	409.7	409.1
57.5°	381.9	379.7	376.0	376.0	375.5
60°	347.2	345.2	341.0	341.6	341.0
62.5°	313.2	309.0	305.1	306.8	305.4
65°	274.5	272.3	268.1	269.2	268.9
67.5°	239.2	235.0	231.1	233.3	232.2
70°	199.9	197.7	193.8	196.0	193.2
72.5°	162.9	161.0	157.0	159.6	156.8
75°	127.0	125.1	122.0	124.2	121.4
77.5°	93.1	91.7	88.9	91.1	91.7
80°	62.3	60.6	59.2	61.1	61.7
82.5°	36.5	35.3	34.8	35.1	36.5
85°	17.7	16.3	16.3	16.5	16.5
87.5°	4.8	4.2	4.8	5.0	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)