

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: P974291

Luminaire Tested: FLR2-24-35-L840-CP125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974291  
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: FLR2-24-35-L840-CP125  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-35-L840-CP125  
Ballast/Driver: -

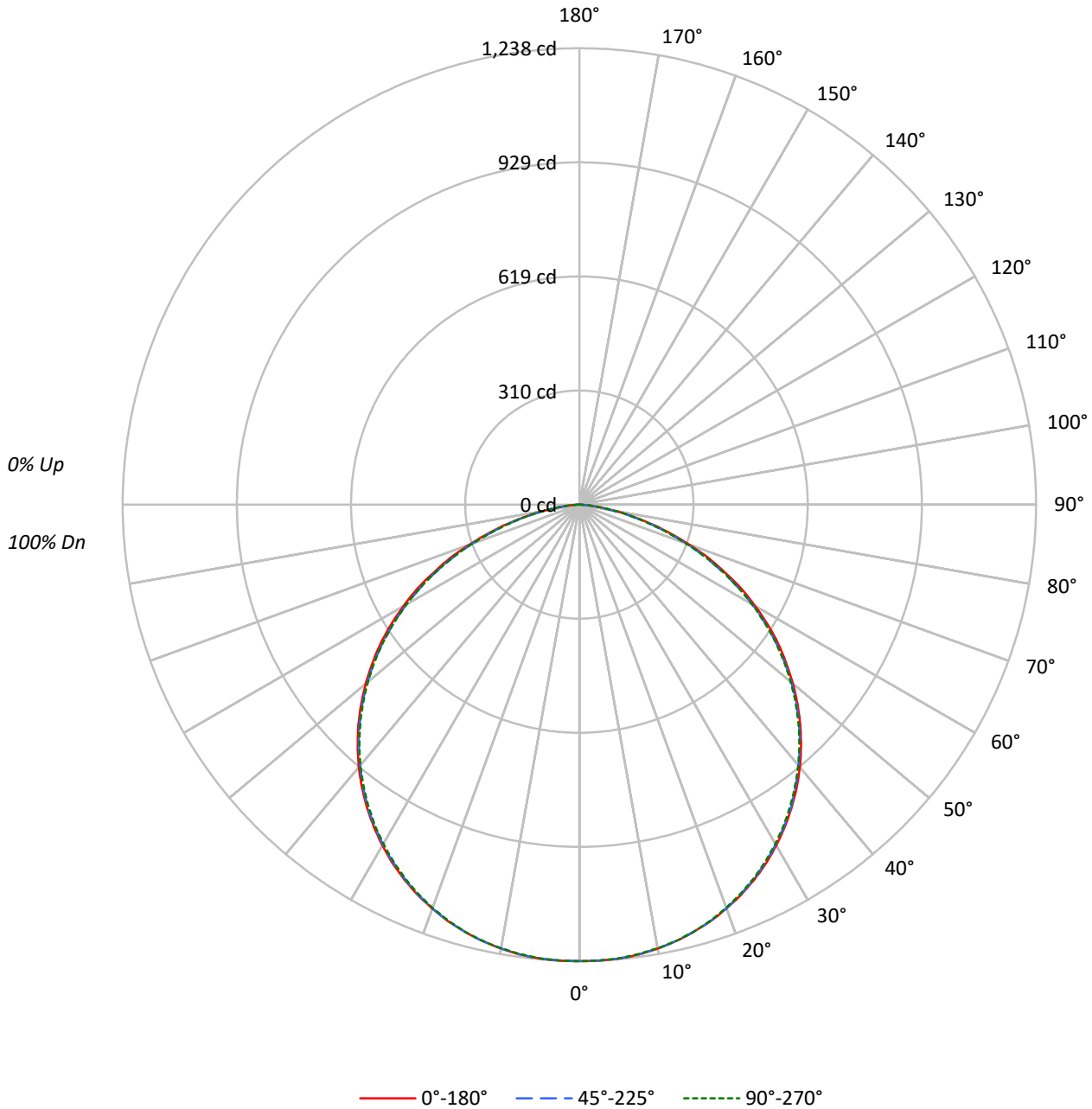
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3500.3 lumens  
Efficiency: N/A  
Efficacy: 123.3 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): 28.4  
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°	1666	1666	1666
5°	1670	1670	1669
10°	1671	1670	1670
15°	1671	1671	1671
20°	1670	1669	1666
25°	1666	1663	1661
30°	1659	1654	1651
35°	1648	1644	1638
40°	1634	1623	1621
45°	1612	1603	1598
50°	1582	1570	1566
55°	1545	1523	1521
60°	1480	1454	1454
65°	1385	1352	1357
70°	1246	1208	1205
75°	1046	1005	1000
80°	765	727	758
85°	432	398	404

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1612 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.6	3.4
10°-20°	338.7	9.7
20°-30°	516.3	14.8
30°-40°	625.6	17.9
40°-50°	649.8	18.6
50°-60°	581.3	16.6
60°-70°	423.7	12.1
70°-80°	209.8	6.0
80°-90°	37.5	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°	972.6	27.8
0°-40°	1598.2	45.7
0°-60°	2829.3	80.8
0°-90°	3500.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3500.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1238	1238	1238	1238	1238	
5°	1236	1237	1236	1236	1235	118
15°	1200	1199	1199	1200	1199	339
25°	1122	1121	1120	1120	1118	517
35°	1003	1002	1001	999	997	628
45°	847	846	842	841	840	653
55°	659	654	649	649	648	587
65°	435	432	425	427	426	431
75°	201	198	193	197	192	215
85°	28	26	26	26	26	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1238.5	1238.5	1238.5	1238.5	1238.5
2.5°	1238.5	1238.0	1238.0	1238.5	1237.6
5°	1236.2	1236.7	1236.2	1236.2	1235.4
7.5°	1231.4	1230.9	1230.5	1230.9	1229.6
10°	1222.9	1222.9	1222.5	1222.9	1222.0
12.5°	1212.7	1212.7	1212.7	1213.1	1212.7
15°	1199.8	1199.4	1199.4	1200.3	1199.4
17.5°	1184.7	1184.3	1184.3	1183.8	1182.9
20°	1166.0	1166.0	1165.6	1165.1	1163.8
22.5°	1146.0	1145.6	1144.3	1144.3	1142.5
25°	1122.5	1121.2	1120.3	1119.8	1118.5
27.5°	1096.7	1094.9	1093.6	1092.7	1091.4
30°	1067.8	1066.1	1064.7	1063.4	1062.5
32.5°	1036.7	1035.8	1033.6	1033.2	1031.4
35°	1003.4	1002.1	1000.7	999.0	997.2
37.5°	967.8	966.5	963.4	962.5	961.2
40°	930.1	928.3	924.3	924.3	923.0
42.5°	889.6	887.9	885.2	883.4	882.5
45°	847.4	845.6	842.5	840.8	839.9
47.5°	802.5	801.2	797.6	796.3	795.0
50°	755.9	754.1	750.1	749.2	747.9
52.5°	707.0	706.1	700.8	700.3	699.0
55°	658.6	653.7	649.2	649.2	648.3
57.5°	605.2	601.7	595.9	595.9	595.0
60°	550.1	547.0	540.4	541.2	540.4
62.5°	496.4	489.7	483.5	486.1	483.9
65°	435.0	431.5	424.8	426.6	426.2
67.5°	379.1	372.4	366.2	369.7	367.9
70°	316.8	313.3	307.1	310.6	306.2
72.5°	258.2	255.1	248.8	252.8	248.4
75°	201.3	198.2	193.3	196.9	192.4
77.5°	147.5	145.3	140.9	144.4	145.3
80°	98.7	96.0	93.8	96.9	97.8
82.5°	57.8	56.0	55.1	55.5	57.8
85°	28.0	25.8	25.8	26.2	26.2
87.5°	7.6	6.7	7.6	8.0	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)