

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: P974419

Luminaire Tested: FLR2-24-35-L850-CP250

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974419  
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-L850-CP250  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-35-L850-CP250  
Ballast/Driver: -

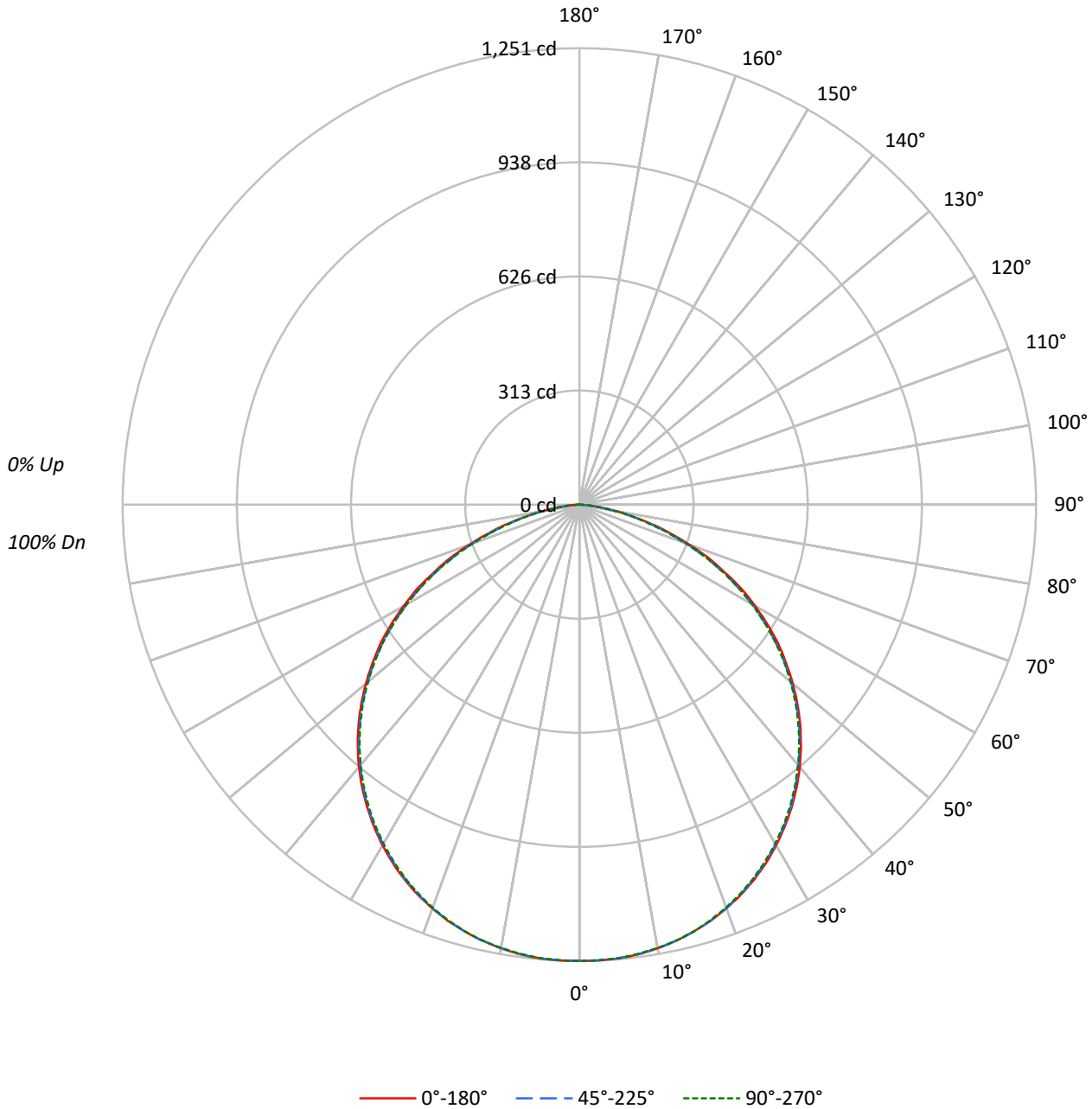
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3535.0 lumens  
Efficiency: N/A  
Efficacy: 124.5 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				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°	1683	1683	1683
5°	1686	1686	1685
10°	1687	1687	1686
15°	1688	1687	1687
20°	1686	1686	1683
25°	1683	1680	1677
30°	1675	1671	1667
35°	1665	1660	1654
40°	1650	1640	1637
45°	1628	1619	1614
50°	1598	1586	1581
55°	1560	1538	1536
60°	1495	1468	1468
65°	1399	1366	1370
70°	1259	1220	1216
75°	1057	1015	1010
80°	772	734	765
85°	437	401	409

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1628 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.7	3.4
10°-20°	342.0	9.7
20°-30°	521.5	14.8
30°-40°	631.8	17.9
40°-50°	656.3	18.6
50°-60°	587.1	16.6
60°-70°	427.9	12.1
70°-80°	211.9	6.0
80°-90°	37.9	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°	982.2	27.8
0°-40°	1614.0	45.7
0°-60°	2857.4	80.8
0°-90°	3535.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3535.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1251	1251	1251	1251	1251	
5°	1248	1249	1248	1248	1248	119
15°	1212	1211	1211	1212	1211	342
25°	1134	1132	1131	1131	1130	522
35°	1013	1012	1011	1009	1007	634
45°	856	854	851	849	848	660
55°	665	660	656	656	655	593
65°	439	436	429	431	430	436
75°	203	200	195	199	194	217
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°	1250.8	1250.8	1250.8	1250.8	1250.8
2.5°	1250.8	1250.3	1250.3	1250.8	1249.9
5°	1248.5	1249.0	1248.5	1248.5	1247.6
7.5°	1243.6	1243.1	1242.7	1243.1	1241.8
10°	1235.1	1235.1	1234.6	1235.1	1234.2
12.5°	1224.7	1224.7	1224.7	1225.2	1224.7
15°	1211.7	1211.3	1211.3	1212.2	1211.3
17.5°	1196.5	1196.0	1196.0	1195.6	1194.7
20°	1177.6	1177.6	1177.2	1176.7	1175.4
22.5°	1157.4	1157.0	1155.6	1155.6	1153.8
25°	1133.6	1132.3	1131.4	1130.9	1129.6
27.5°	1107.6	1105.8	1104.5	1103.6	1102.2
30°	1078.4	1076.6	1075.3	1073.9	1073.0
32.5°	1047.0	1046.1	1043.9	1043.4	1041.6
35°	1013.4	1012.0	1010.7	1008.9	1007.1
37.5°	977.5	976.1	973.0	972.1	970.7
40°	939.3	937.5	933.5	933.5	932.1
42.5°	898.5	896.7	894.0	892.2	891.3
45°	855.8	854.0	850.9	849.1	848.2
47.5°	810.5	809.2	805.6	804.2	802.9
50°	763.4	761.6	757.6	756.7	755.3
52.5°	714.0	713.1	707.7	707.3	705.9
55°	665.1	660.2	655.7	655.7	654.8
57.5°	611.2	607.7	601.8	601.8	600.9
60°	555.6	552.5	545.7	546.6	545.7
62.5°	501.3	494.6	488.3	491.0	488.7
65°	439.4	435.8	429.0	430.8	430.4
67.5°	382.8	376.1	369.8	373.4	371.6
70°	320.0	316.4	310.1	313.7	309.2
72.5°	260.7	257.6	251.3	255.4	250.9
75°	203.3	200.2	195.2	198.8	194.3
77.5°	149.0	146.8	142.3	145.9	146.8
80°	99.6	96.9	94.7	97.8	98.7
82.5°	58.3	56.5	55.6	56.1	58.3
85°	28.3	26.0	26.0	26.5	26.5
87.5°	7.6	6.7	7.6	8.1	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)