

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: P974411

Luminaire Tested: FLR2-24-35-L850-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974411  
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-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-35-L850-CP187  
Ballast/Driver: -

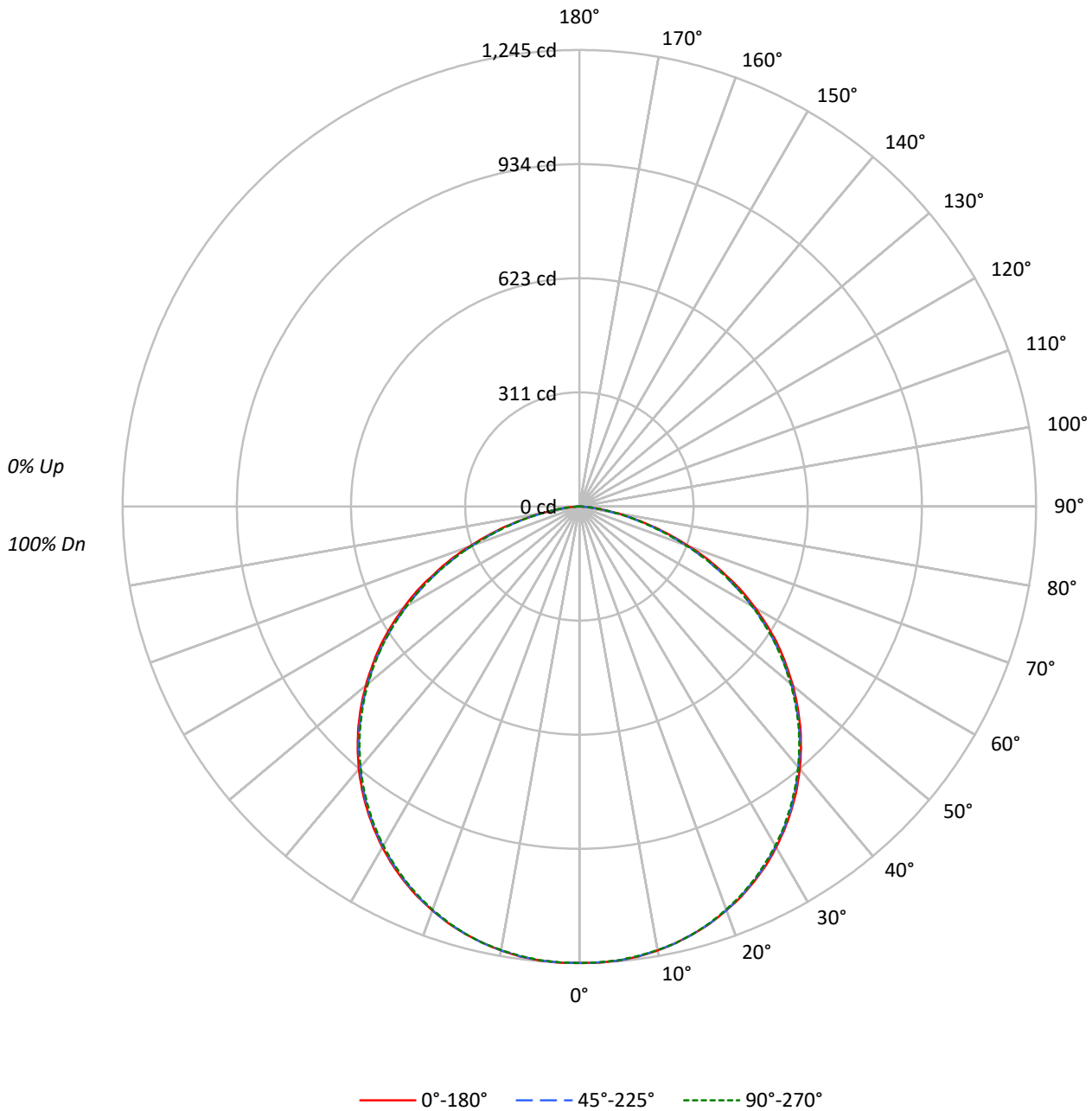
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3519.4 lumens  
Efficiency: N/A  
Efficacy: 123.9 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

TEST NUMBER: P974411  
CATALOG NUMBER: FLR2-24-35-L850-CP187

### Luminous Intensity Polar Plot





TEST NUMBER: P974411  
 CATALOG NUMBER: FLR2-24-35-L850-CP187

**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°	1676	1676	1676
5°	1679	1679	1678
10°	1680	1679	1679
15°	1680	1680	1680
20°	1679	1678	1676
25°	1676	1672	1670
30°	1668	1663	1660
35°	1657	1653	1647
40°	1643	1632	1630
45°	1621	1612	1607
50°	1591	1579	1574
55°	1553	1531	1529
60°	1488	1462	1462
65°	1393	1360	1364
70°	1253	1214	1211
75°	1052	1011	1006
80°	769	731	762
85°	434	400	408

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1621 cd/sqm



TEST NUMBER: P974411  
 CATALOG NUMBER: FLR2-24-35-L850-CP187

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.2	3.4
10°-20°	340.5	9.7
20°-30°	519.2	14.8
30°-40°	629.0	17.9
40°-50°	653.4	18.6
50°-60°	584.5	16.6
60°-70°	426.0	12.1
70°-80°	211.0	6.0
80°-90°	37.7	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°	977.9	27.8
0°-40°	1606.9	45.7
0°-60°	2844.8	80.8
0°-90°	3519.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3519.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1245	1245	1245	1245	1245	
5°	1243	1244	1243	1243	1242	118
15°	1206	1206	1206	1207	1206	341
25°	1129	1127	1126	1126	1125	520
35°	1009	1008	1006	1004	1003	631
45°	852	850	847	845	844	657
55°	662	657	653	653	652	590
65°	437	434	427	429	428	434
75°	202	199	194	198	194	216
85°	28	26	26	26	26	39
90°	0	0	0	0	0	



TEST NUMBER: P974411  
 CATALOG NUMBER: FLR2-24-35-L850-CP187

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1245.3	1245.3	1245.3	1245.3	1245.3
2.5°	1245.3	1244.8	1244.8	1245.3	1244.4
5°	1243.0	1243.5	1243.0	1243.0	1242.1
7.5°	1238.1	1237.7	1237.2	1237.7	1236.3
10°	1229.6	1229.6	1229.2	1229.6	1228.7
12.5°	1219.3	1219.3	1219.3	1219.8	1219.3
15°	1206.4	1205.9	1205.9	1206.8	1205.9
17.5°	1191.2	1190.7	1190.7	1190.3	1189.4
20°	1172.4	1172.4	1172.0	1171.5	1170.2
22.5°	1152.3	1151.9	1150.5	1150.5	1148.7
25°	1128.6	1127.3	1126.4	1126.0	1124.6
27.5°	1102.7	1100.9	1099.6	1098.7	1097.4
30°	1073.7	1071.9	1070.5	1069.2	1068.3
32.5°	1042.4	1041.5	1039.3	1038.8	1037.0
35°	1008.9	1007.5	1006.2	1004.4	1002.6
37.5°	973.1	971.8	968.7	967.8	966.4
40°	935.2	933.4	929.4	929.4	928.0
42.5°	894.5	892.7	890.0	888.3	887.4
45°	852.1	850.3	847.1	845.4	844.5
47.5°	806.9	805.6	802.0	800.7	799.3
50°	760.0	758.2	754.2	753.3	752.0
52.5°	710.9	710.0	704.6	704.2	702.8
55°	662.2	657.3	652.8	652.8	651.9
57.5°	608.6	605.0	599.2	599.2	598.3
60°	553.1	550.0	543.3	544.2	543.3
62.5°	499.1	492.4	486.1	488.8	486.6
65°	437.4	433.8	427.1	428.9	428.5
67.5°	381.1	374.4	368.2	371.7	370.0
70°	318.6	315.0	308.7	312.3	307.8
72.5°	259.6	256.5	250.2	254.2	249.8
75°	202.4	199.3	194.4	197.9	193.5
77.5°	148.3	146.1	141.6	145.2	146.1
80°	99.2	96.5	94.3	97.4	98.3
82.5°	58.1	56.3	55.4	55.9	58.1
85°	28.1	25.9	25.9	26.4	26.4
87.5°	7.6	6.7	7.6	8.0	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)