

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: P974445

Luminaire Tested: FLR2-24-45-L850-CA125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974445  
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: FLR2-24-45-L850-CA125  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-45-L850-CA125  
Ballast/Driver: -

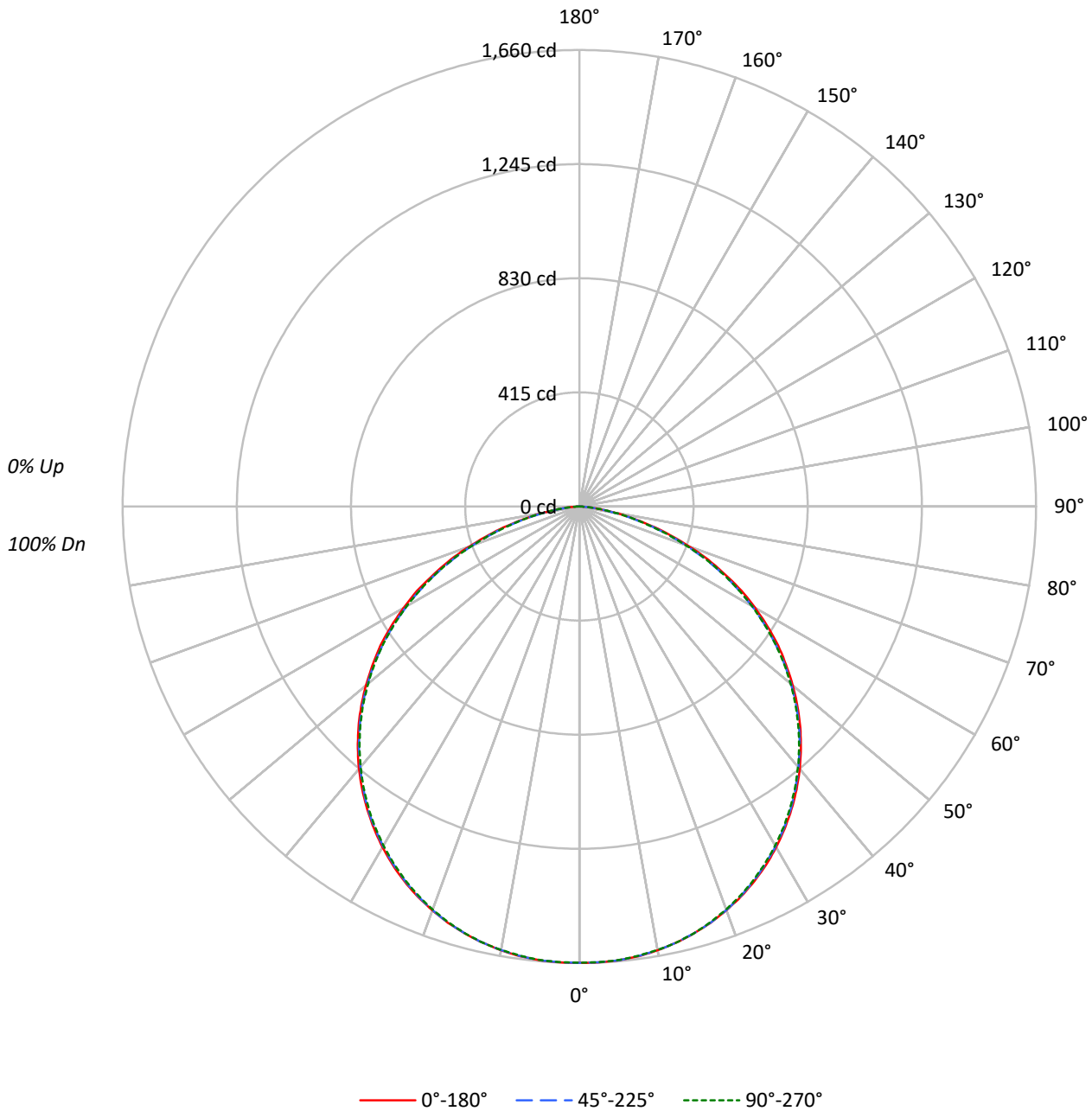
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4690.6 lumens  
Efficiency: N/A  
Efficacy: 131.8 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): 35.6  
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: P974445  
CATALOG NUMBER: FLR2-24-45-L850-CA125

### Luminous Intensity Polar Plot





TEST NUMBER: P974445  
 CATALOG NUMBER: FLR2-24-45-L850-CA125

**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°	2233	2233	2233
5°	2237	2237	2236
10°	2239	2238	2237
15°	2240	2239	2239
20°	2237	2237	2233
25°	2233	2229	2225
30°	2223	2217	2212
35°	2209	2203	2195
40°	2189	2175	2172
45°	2161	2148	2142
50°	2120	2104	2098
55°	2070	2041	2038
60°	1984	1949	1949
65°	1856	1812	1818
70°	1670	1619	1614
75°	1403	1346	1340
80°	1024	973	1015
85°	579	533	542

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2161 cd/sqm



TEST NUMBER: P974445  
 CATALOG NUMBER: FLR2-24-45-L850-CA125

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.5	3.4
10°-20°	453.8	9.7
20°-30°	691.9	14.8
30°-40°	838.3	17.9
40°-50°	870.8	18.6
50°-60°	779.0	16.6
60°-70°	567.7	12.1
70°-80°	281.2	6.0
80°-90°	50.2	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°	1303.3	27.8
0°-40°	2141.6	45.7
0°-60°	3791.4	80.8
0°-90°	4690.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4690.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1660	1660	1660	1660	1660	
5°	1657	1657	1657	1657	1656	158
15°	1608	1607	1607	1608	1607	454
25°	1504	1502	1501	1501	1499	693
35°	1345	1343	1341	1339	1336	841
45°	1136	1133	1129	1127	1126	875
55°	882	876	870	870	869	786
65°	583	578	569	572	571	578
75°	270	266	259	264	258	288
85°	38	34	34	35	35	52
90°	0	0	0	0	0	



TEST NUMBER: P974445  
 CATALOG NUMBER: FLR2-24-45-L850-CA125

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1659.6	1659.6	1659.6	1659.6	1659.6
2.5°	1659.6	1659.0	1659.0	1659.6	1658.4
5°	1656.6	1657.2	1656.6	1656.6	1655.5
7.5°	1650.1	1649.5	1648.9	1649.5	1647.7
10°	1638.8	1638.8	1638.2	1638.8	1637.6
12.5°	1625.1	1625.1	1625.1	1625.7	1625.1
15°	1607.8	1607.2	1607.2	1608.4	1607.2
17.5°	1587.6	1587.0	1587.0	1586.4	1585.2
20°	1562.6	1562.6	1562.0	1561.4	1559.6
22.5°	1535.8	1535.2	1533.4	1533.4	1531.0
25°	1504.2	1502.4	1501.2	1500.6	1498.8
27.5°	1469.7	1467.3	1465.5	1464.3	1462.5
30°	1431.0	1428.6	1426.8	1425.0	1423.8
32.5°	1389.3	1388.1	1385.1	1384.5	1382.1
35°	1344.6	1342.8	1341.0	1338.7	1336.3
37.5°	1297.0	1295.2	1291.0	1289.8	1288.0
40°	1246.4	1244.0	1238.6	1238.6	1236.8
42.5°	1192.2	1189.8	1186.2	1183.8	1182.6
45°	1135.6	1133.2	1129.0	1126.7	1125.5
47.5°	1075.5	1073.7	1068.9	1067.1	1065.3
50°	1012.9	1010.5	1005.2	1004.0	1002.2
52.5°	947.4	946.2	939.1	938.5	936.7
55°	882.5	876.0	870.0	870.0	868.8
57.5°	811.1	806.3	798.5	798.5	797.4
60°	737.2	733.0	724.1	725.3	724.1
62.5°	665.2	656.2	647.9	651.5	648.5
65°	583.0	578.2	569.3	571.7	571.1
67.5°	508.0	499.0	490.7	495.4	493.1
70°	424.6	419.8	411.5	416.2	410.3
72.5°	346.0	341.8	333.5	338.8	332.9
75°	269.8	265.6	259.0	263.8	257.8
77.5°	197.7	194.7	188.8	193.5	194.7
80°	132.2	128.6	125.6	129.8	131.0
82.5°	77.4	75.0	73.8	74.4	77.4
85°	37.5	34.5	34.5	35.1	35.1
87.5°	10.1	8.9	10.1	10.7	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)