

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: P974382

Luminaire Tested: FLR2-24-55-L940-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974382  
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: FLR2-24-55-L940-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-55-L940-CA080  
Ballast/Driver: -

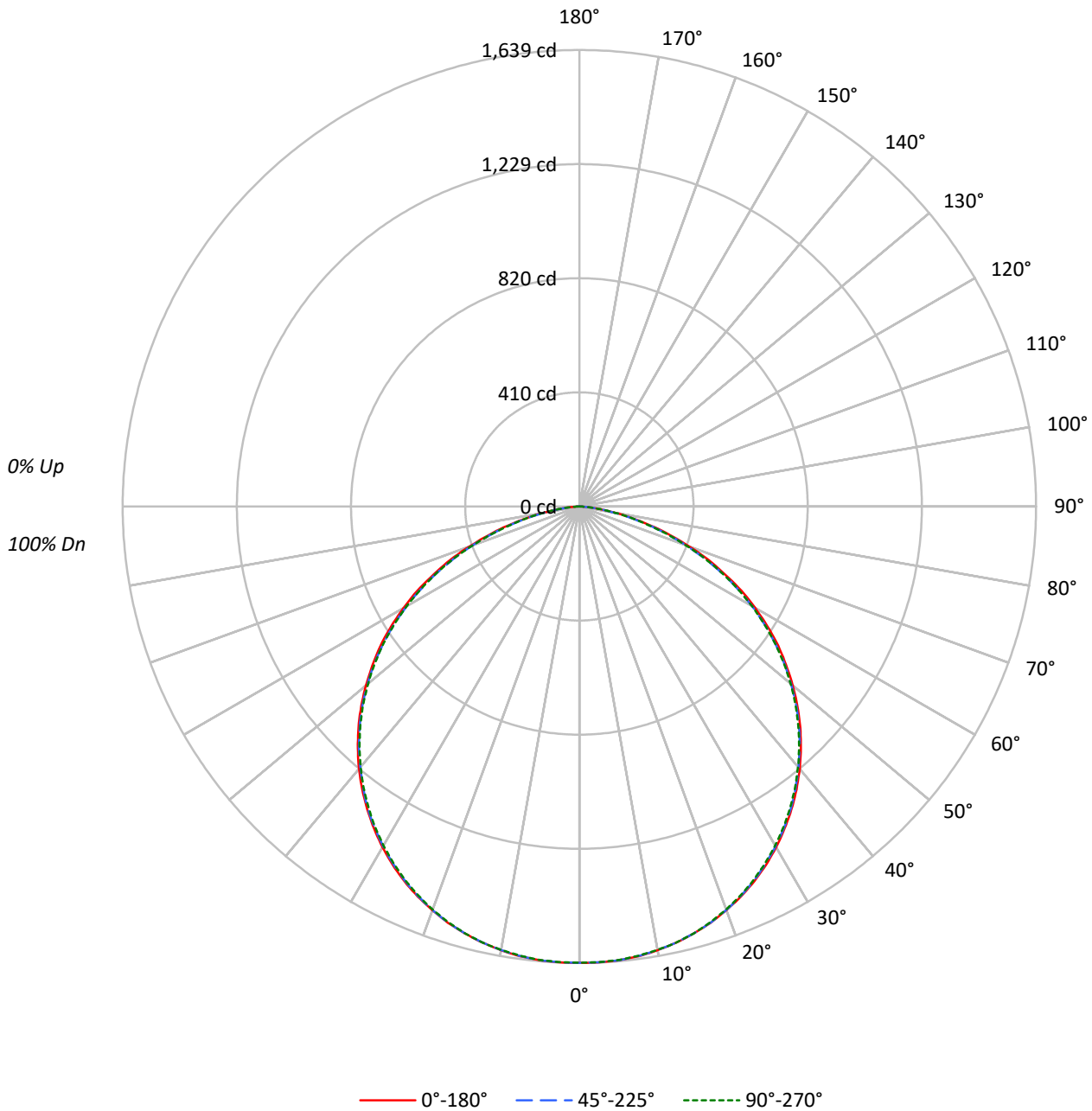
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4631.1 lumens  
Efficiency: N/A  
Efficacy: 105.0 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): 44.1  
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°	2205	2205	2205
5°	2209	2209	2207
10°	2211	2210	2209
15°	2211	2210	2210
20°	2209	2208	2205
25°	2205	2200	2197
30°	2195	2189	2184
35°	2180	2175	2167
40°	2161	2148	2145
45°	2133	2121	2114
50°	2093	2077	2071
55°	2044	2015	2012
60°	1959	1924	1924
65°	1833	1790	1795
70°	1649	1598	1594
75°	1384	1329	1324
80°	1011	962	1002
85°	571	526	536

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2133 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.5	3.4
10°-20°	448.1	9.7
20°-30°	683.1	14.8
30°-40°	827.7	17.9
40°-50°	859.8	18.6
50°-60°	769.1	16.6
60°-70°	560.6	12.1
70°-80°	277.6	6.0
80°-90°	49.6	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°	1286.7	27.8
0°-40°	2114.4	45.7
0°-60°	3743.3	80.8
0°-90°	4631.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4631.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1639	1639	1639	1639	1639	
5°	1636	1636	1636	1636	1634	156
15°	1587	1587	1587	1588	1587	448
25°	1485	1483	1482	1482	1480	684
35°	1328	1326	1324	1322	1319	830
45°	1121	1119	1115	1112	1111	864
55°	871	865	859	859	858	776
65°	576	571	562	564	564	571
75°	266	262	256	260	255	284
85°	37	34	34	35	35	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1638.6	1638.6	1638.6	1638.6	1638.6
2.5°	1638.6	1638.0	1638.0	1638.6	1637.4
5°	1635.6	1636.2	1635.6	1635.6	1634.4
7.5°	1629.1	1628.6	1628.0	1628.6	1626.8
10°	1618.0	1618.0	1617.4	1618.0	1616.8
12.5°	1604.5	1604.5	1604.5	1605.0	1604.5
15°	1587.4	1586.8	1586.8	1588.0	1586.8
17.5°	1567.4	1566.8	1566.8	1566.2	1565.1
20°	1542.7	1542.7	1542.1	1541.5	1539.8
22.5°	1516.3	1515.7	1513.9	1513.9	1511.6
25°	1485.1	1483.3	1482.2	1481.6	1479.8
27.5°	1451.0	1448.7	1446.9	1445.7	1443.9
30°	1412.8	1410.4	1408.7	1406.9	1405.7
32.5°	1371.6	1370.5	1367.5	1366.9	1364.6
35°	1327.5	1325.8	1324.0	1321.7	1319.3
37.5°	1280.5	1278.7	1274.6	1273.5	1271.7
40°	1230.5	1228.2	1222.9	1222.9	1221.1
42.5°	1177.0	1174.7	1171.2	1168.8	1167.6
45°	1121.2	1118.8	1114.7	1112.4	1111.2
47.5°	1061.8	1060.0	1055.3	1053.6	1051.8
50°	1000.1	997.7	992.4	991.2	989.5
52.5°	935.4	934.2	927.2	926.6	924.8
55°	871.3	864.8	859.0	859.0	857.8
57.5°	800.8	796.1	788.4	788.4	787.2
60°	727.9	723.7	714.9	716.1	714.9
62.5°	656.7	647.9	639.7	643.2	640.3
65°	575.6	570.9	562.1	564.4	563.8
67.5°	501.5	492.7	484.5	489.2	486.8
70°	419.2	414.5	406.3	411.0	405.1
72.5°	341.6	337.5	329.2	334.5	328.7
75°	266.3	262.2	255.7	260.5	254.6
77.5°	195.2	192.3	186.4	191.1	192.3
80°	130.5	127.0	124.1	128.2	129.3
82.5°	76.4	74.1	72.9	73.5	76.4
85°	37.0	34.1	34.1	34.7	34.7
87.5°	10.0	8.8	10.0	10.6	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)