

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: P974310

Luminaire Tested: FLR2-24-55-L840-CP250

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974310  
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-L840-CP250  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-55-L840-CP250  
Ballast/Driver: -

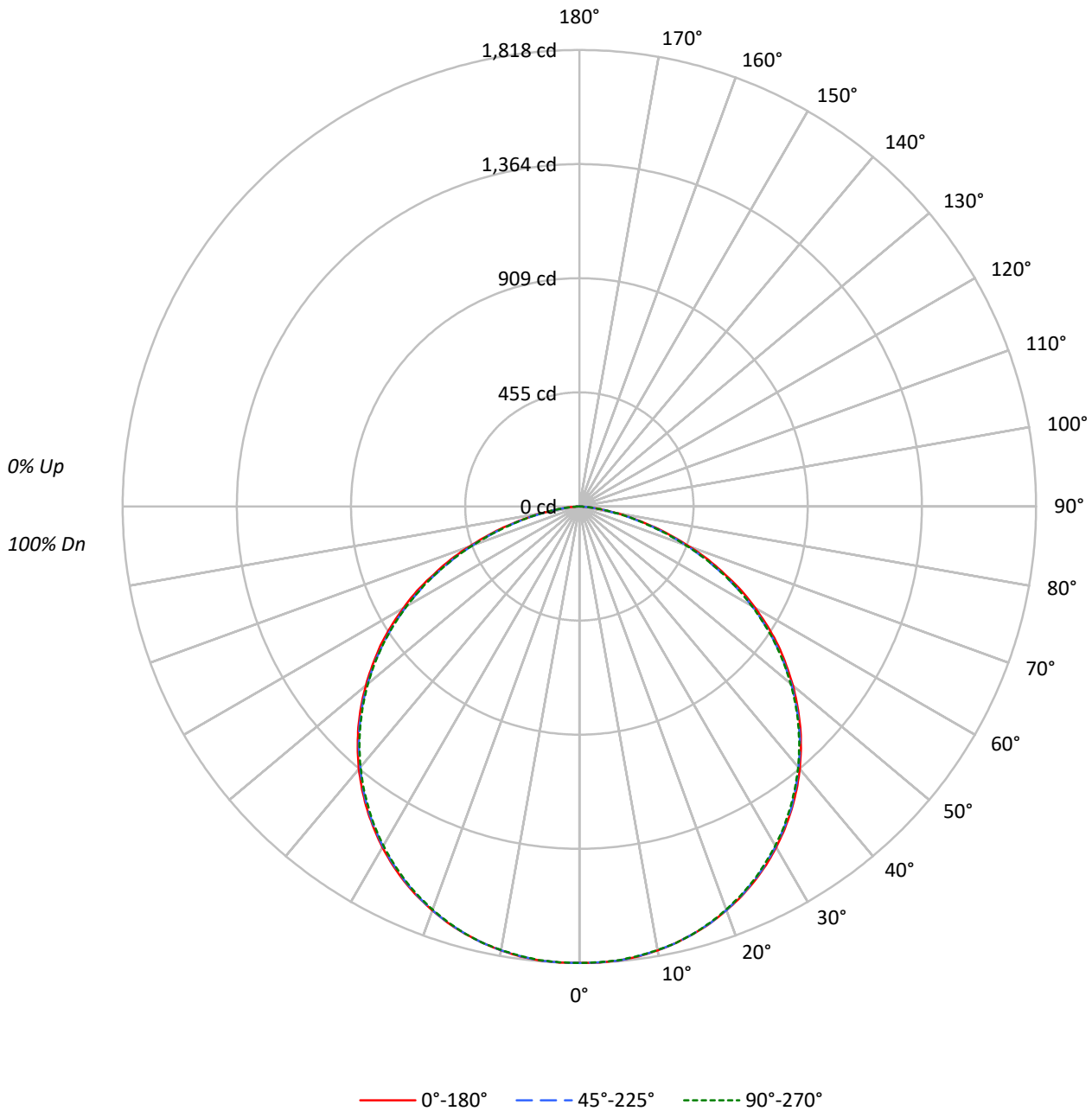
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5138.9 lumens  
Efficiency: N/A  
Efficacy: 116.5 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): 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										
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°	2446	2446	2446
5°	2451	2451	2450
10°	2453	2452	2451
15°	2454	2453	2453
20°	2451	2450	2446
25°	2447	2442	2438
30°	2436	2429	2424
35°	2420	2413	2405
40°	2398	2383	2380
45°	2367	2354	2346
50°	2323	2305	2298
55°	2268	2236	2233
60°	2174	2135	2135
65°	2033	1986	1992
70°	1830	1773	1768
75°	1536	1475	1469
80°	1122	1067	1112
85°	634	584	594

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2367 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.6	3.4
10°-20°	497.2	9.7
20°-30°	758.1	14.8
30°-40°	918.5	17.9
40°-50°	954.0	18.6
50°-60°	853.5	16.6
60°-70°	622.0	12.1
70°-80°	308.0	6.0
80°-90°	55.1	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°	1427.8	27.8
0°-40°	2346.3	45.7
0°-60°	4153.8	80.8
0°-90°	5138.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5138.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1818	1818	1818	1818	1818	
5°	1815	1816	1815	1815	1814	173
15°	1762	1761	1761	1762	1761	497
25°	1648	1646	1645	1644	1642	760
35°	1473	1471	1469	1467	1464	921
45°	1244	1242	1237	1234	1233	959
55°	967	960	953	953	952	861
65°	639	634	624	626	626	633
75°	296	291	284	289	282	315
85°	41	38	38	38	38	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1818.2	1818.2	1818.2	1818.2	1818.2
2.5°	1818.2	1817.6	1817.6	1818.2	1816.9
5°	1815.0	1815.6	1815.0	1815.0	1813.7
7.5°	1807.8	1807.1	1806.5	1807.1	1805.2
10°	1795.4	1795.4	1794.8	1795.4	1794.1
12.5°	1780.4	1780.4	1780.4	1781.1	1780.4
15°	1761.5	1760.8	1760.8	1762.1	1760.8
17.5°	1739.3	1738.6	1738.6	1738.0	1736.7
20°	1711.9	1711.9	1711.2	1710.6	1708.6
22.5°	1682.5	1681.9	1679.9	1679.9	1677.3
25°	1648.0	1646.0	1644.7	1644.0	1642.1
27.5°	1610.1	1607.5	1605.6	1604.3	1602.3
30°	1567.7	1565.1	1563.2	1561.2	1559.9
32.5°	1522.0	1520.7	1517.5	1516.8	1514.2
35°	1473.1	1471.2	1469.2	1466.6	1464.0
37.5°	1420.9	1419.0	1414.4	1413.1	1411.1
40°	1365.5	1362.9	1357.0	1357.0	1355.0
42.5°	1306.1	1303.5	1299.6	1297.0	1295.7
45°	1244.1	1241.5	1237.0	1234.3	1233.0
47.5°	1178.2	1176.3	1171.1	1169.1	1167.1
50°	1109.7	1107.1	1101.3	1099.9	1098.0
52.5°	1038.0	1036.7	1028.8	1028.2	1026.2
55°	966.9	959.7	953.2	953.2	951.9
57.5°	888.6	883.3	874.9	874.9	873.6
60°	807.7	803.1	793.3	794.6	793.3
62.5°	728.7	718.9	709.8	713.7	710.5
65°	638.7	633.5	623.7	626.3	625.7
67.5°	556.5	546.7	537.6	542.8	540.2
70°	465.2	459.9	450.8	456.0	449.5
72.5°	379.0	374.5	365.3	371.2	364.7
75°	295.5	291.0	283.8	289.0	282.5
77.5°	216.6	213.3	206.8	212.0	213.3
80°	144.8	140.9	137.7	142.2	143.5
82.5°	84.8	82.2	80.9	81.5	84.8
85°	41.1	37.8	37.8	38.5	38.5
87.5°	11.1	9.8	11.1	11.7	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)