

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: P974294

Luminaire Tested: FLR2-24-55-L840-CP125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974294  
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-CP125  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-55-L840-CP125  
Ballast/Driver: -

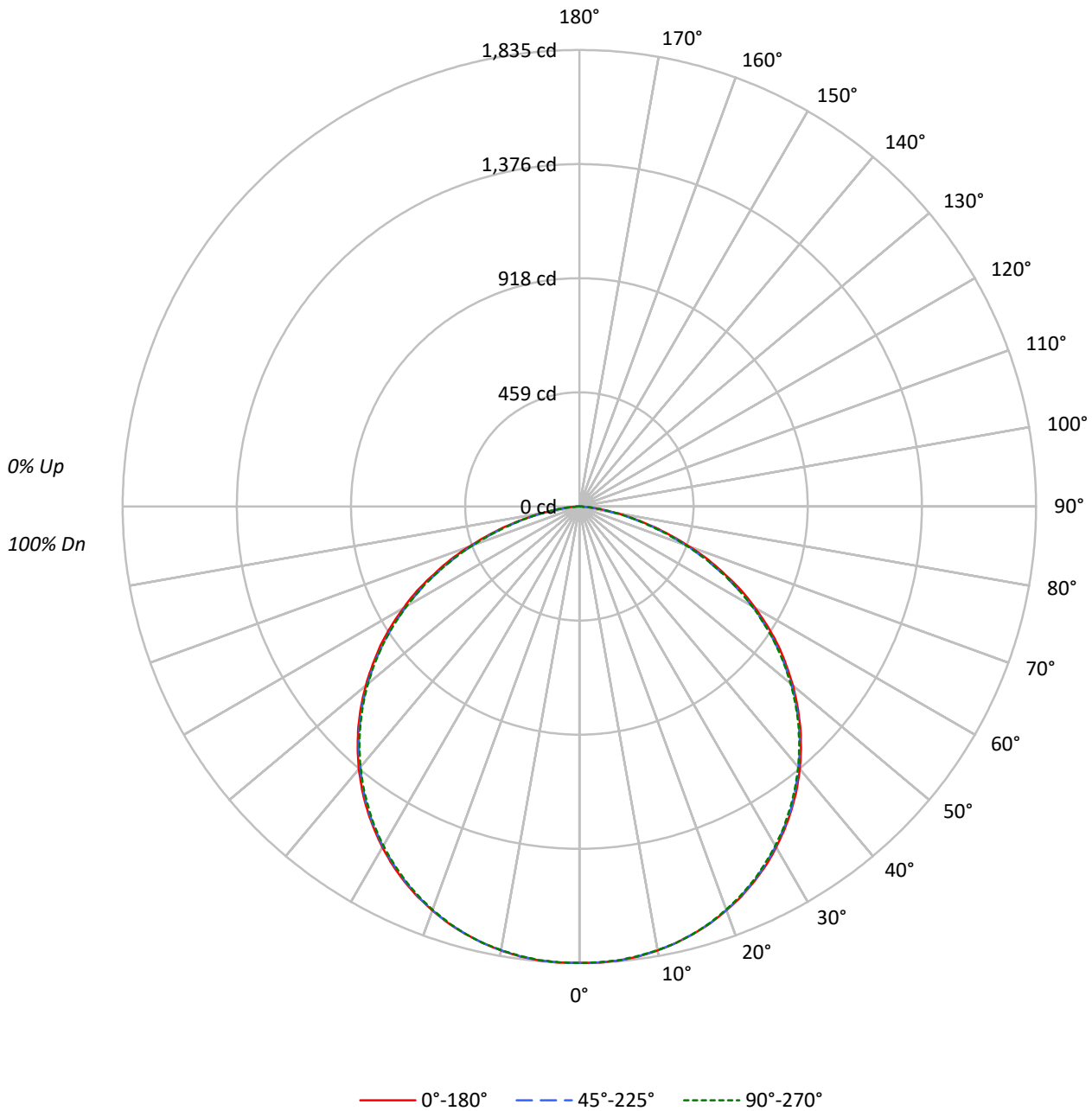
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5187.2 lumens  
Efficiency: N/A  
Efficacy: 117.6 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	100	100	100	100	100														
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85	85	85	85	85														
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71	71	71	71	71	71	71														
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60	60	60	60	60														
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51	51	51	51	51	51	51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44	44	44	44	44	44	44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38	38	38	38	38	38	38														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34	34	34	34	34	34	34														
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30	30	30	30	30	30	30														
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27	27	27	27	27	27	27														
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25	25	25	25	25	25	25														

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2469	2469	2469
5°	2474	2474	2473
10°	2476	2475	2474
15°	2477	2476	2476
20°	2474	2473	2469
25°	2469	2465	2461
30°	2458	2451	2446
35°	2442	2436	2427
40°	2421	2406	2402
45°	2390	2376	2368
50°	2345	2327	2320
55°	2289	2257	2254
60°	2194	2155	2155
65°	2053	2004	2011
70°	1847	1790	1785
75°	1551	1489	1482
80°	1133	1076	1123
85°	641	590	601

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2390 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.2	3.4
10°-20°	501.9	9.7
20°-30°	765.2	14.8
30°-40°	927.1	17.9
40°-50°	963.0	18.6
50°-60°	861.5	16.6
60°-70°	627.8	12.1
70°-80°	310.9	6.0
80°-90°	55.6	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°	1441.3	27.8
0°-40°	2368.3	45.7
0°-60°	4192.8	80.8
0°-90°	5187.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5187.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1835	1835	1835	1835	1835	
5°	1832	1833	1832	1832	1831	174
15°	1778	1777	1777	1779	1777	502
25°	1663	1662	1660	1660	1658	767
35°	1487	1485	1483	1480	1478	930
45°	1256	1253	1249	1246	1245	968
55°	976	969	962	962	961	869
65°	645	639	630	632	632	639
75°	298	294	286	292	285	318
85°	42	38	38	39	39	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1835.3	1835.3	1835.3	1835.3	1835.3
2.5°	1835.3	1834.7	1834.7	1835.3	1834.0
5°	1832.0	1832.7	1832.0	1832.0	1830.7
7.5°	1824.8	1824.1	1823.5	1824.1	1822.1
10°	1812.3	1812.3	1811.6	1812.3	1811.0
12.5°	1797.1	1797.1	1797.1	1797.8	1797.1
15°	1778.0	1777.4	1777.4	1778.7	1777.4
17.5°	1755.6	1755.0	1755.0	1754.3	1753.0
20°	1728.0	1728.0	1727.3	1726.7	1724.7
22.5°	1698.3	1697.7	1695.7	1695.7	1693.1
25°	1663.4	1661.5	1660.2	1659.5	1657.5
27.5°	1625.2	1622.6	1620.6	1619.3	1617.3
30°	1582.4	1579.8	1577.8	1575.9	1574.5
32.5°	1536.3	1535.0	1531.7	1531.1	1528.4
35°	1487.0	1485.0	1483.0	1480.4	1477.7
37.5°	1434.3	1432.3	1427.7	1426.4	1424.4
40°	1378.3	1375.7	1369.7	1369.7	1367.8
42.5°	1318.4	1315.7	1311.8	1309.2	1307.8
45°	1255.8	1253.2	1248.6	1245.9	1244.6
47.5°	1189.3	1187.3	1182.1	1180.1	1178.1
50°	1120.2	1117.5	1111.6	1110.3	1108.3
52.5°	1047.7	1046.4	1038.5	1037.8	1035.9
55°	975.9	968.7	962.1	962.1	960.8
57.5°	896.9	891.6	883.1	883.1	881.8
60°	815.3	810.6	800.8	802.1	800.8
62.5°	735.6	725.7	716.5	720.4	717.1
65°	644.7	639.4	629.6	632.2	631.5
67.5°	561.7	551.8	542.6	547.9	545.3
70°	469.5	464.3	455.0	460.3	453.7
72.5°	382.6	378.0	368.8	374.7	368.1
75°	298.3	293.7	286.5	291.7	285.1
77.5°	218.6	215.3	208.8	214.0	215.3
80°	146.2	142.2	138.9	143.6	144.9
82.5°	85.6	83.0	81.7	82.3	85.6
85°	41.5	38.2	38.2	38.9	38.9
87.5°	11.2	9.9	11.2	11.9	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)