

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: P973755

Luminaire Tested: FLR2-22-50HE-L830-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973755  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-50HE-L830-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

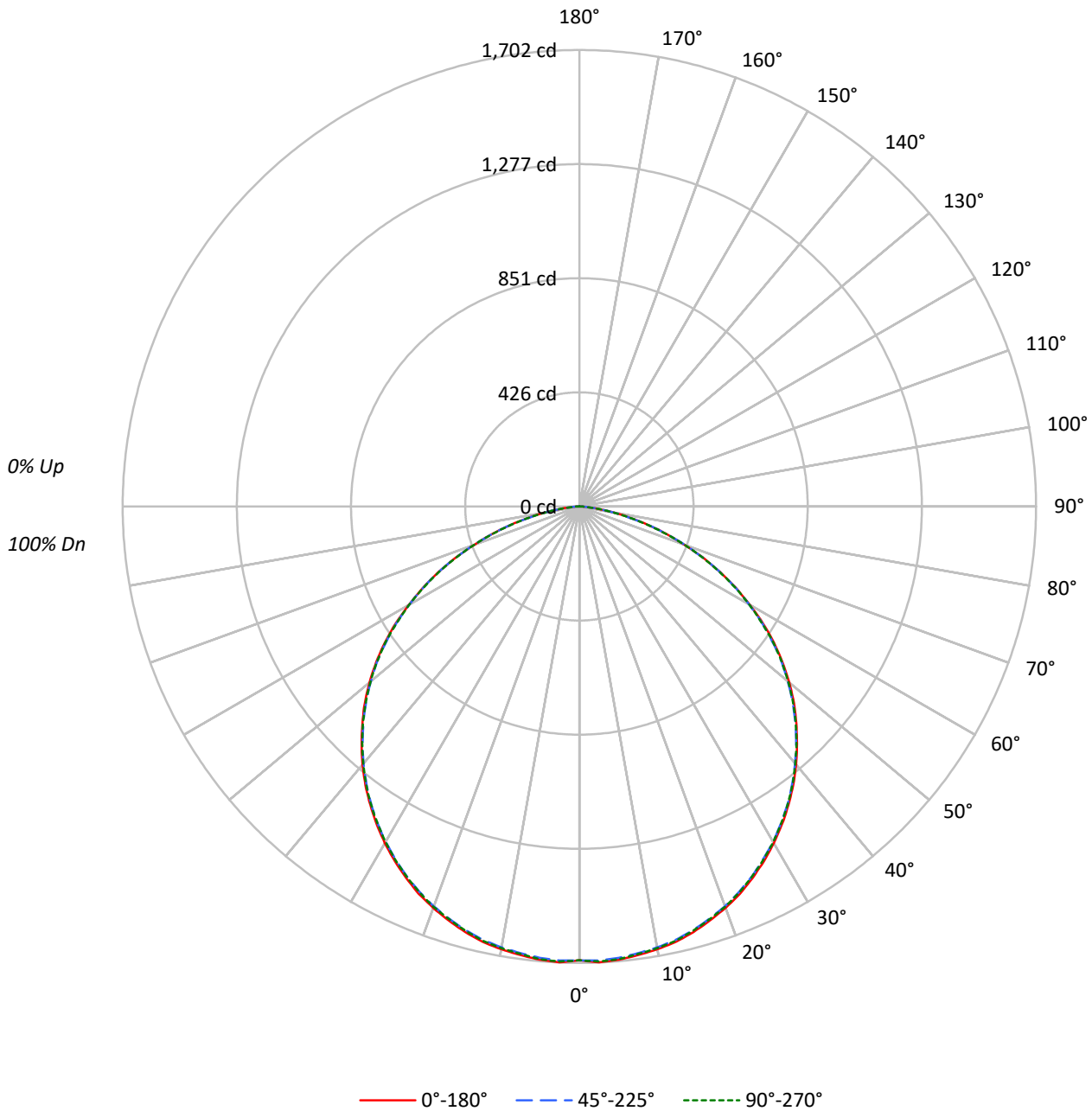
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4732.3 lumens  
Efficiency: N/A  
Efficacy: 118.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 40  
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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85															
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51															
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44					44															
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39					39															
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34					34															
8	61	47	39	33	59	47	39	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	40	34	29	27					27															
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25					25															

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

	0°	45°	90°
0°	4554	4554	4554
5°	4582	4563	4577
10°	4581	4561	4570
15°	4578	4557	4563
20°	4562	4544	4550
25°	4537	4518	4522
30°	4505	4485	4488
35°	4464	4447	4450
40°	4417	4395	4399
45°	4352	4332	4340
50°	4275	4245	4253
55°	4153	4119	4134
60°	3949	3932	3932
65°	3687	3680	3667
70°	3265	3281	3273
75°	2749	2727	2706
80°	1976	1943	1928
85°	1031	1031	1000

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4352 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	160.2	3.4
10°-20°	460.8	9.7
20°-30°	700.3	14.8
30°-40°	846.4	17.9
40°-50°	878.5	18.6
50°-60°	785.5	16.6
60°-70°	571.1	12.1
70°-80°	280.8	5.9
80°-90°	48.7	1.0
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°	1321.3	27.9
0°-40°	2167.7	45.8
0°-60°	3831.7	81.0
0°-90°	4732.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4732.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1692	1692	1692	1692	1692	
5°	1696	1676	1689	1683	1694	161
15°	1643	1624	1636	1632	1638	464
25°	1528	1511	1522	1519	1523	704
35°	1359	1349	1354	1355	1355	850
45°	1144	1138	1138	1140	1140	882
55°	885	880	878	880	881	789
65°	579	581	578	578	576	571
75°	264	266	262	263	260	281
85°	33	34	33	33	32	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1692.2	1692.2	1692.2	1692.2	1692.2
2.5°	1701.6	1681.8	1694.3	1687.0	1698.5
5°	1696.4	1676.5	1689.1	1682.8	1694.3
7.5°	1687.0	1667.1	1679.7	1673.4	1682.8
10°	1676.5	1655.6	1669.2	1662.9	1672.4
12.5°	1662.9	1643.1	1655.6	1650.4	1658.8
15°	1643.1	1624.3	1635.8	1631.6	1637.9
17.5°	1619.0	1600.2	1611.7	1608.6	1613.8
20°	1592.9	1575.1	1586.6	1583.5	1588.7
22.5°	1563.6	1544.8	1555.3	1553.2	1557.4
25°	1528.1	1511.4	1521.8	1518.7	1522.9
27.5°	1490.5	1474.8	1483.2	1483.2	1485.3
30°	1449.7	1435.1	1443.4	1443.4	1444.5
32.5°	1405.8	1394.3	1399.5	1400.6	1400.6
35°	1358.8	1349.4	1353.6	1354.6	1354.6
37.5°	1309.7	1300.3	1303.4	1305.5	1305.5
40°	1257.4	1249.0	1251.1	1253.2	1252.2
42.5°	1201.0	1194.7	1195.7	1197.8	1197.8
45°	1143.5	1138.2	1138.2	1140.3	1140.3
47.5°	1084.9	1079.7	1077.6	1079.7	1079.7
50°	1021.2	1016.0	1013.9	1016.0	1016.0
52.5°	954.3	949.1	949.1	949.1	950.1
55°	885.3	880.1	878.0	880.1	881.1
57.5°	812.1	810.0	806.9	808.0	804.8
60°	733.7	733.7	730.6	732.7	730.6
62.5°	657.4	659.5	656.4	656.4	654.3
65°	579.1	581.1	578.0	578.0	575.9
67.5°	498.6	501.7	497.5	497.5	495.4
70°	415.0	421.2	417.0	418.1	416.0
72.5°	339.7	342.8	338.7	338.7	336.6
75°	264.4	266.5	262.3	263.4	260.3
77.5°	190.2	193.4	189.2	190.2	189.2
80°	127.5	128.6	125.4	126.5	124.4
82.5°	74.2	75.3	74.2	73.2	72.1
85°	33.4	34.5	33.4	33.4	32.4
87.5°	8.4	8.4	8.4	8.4	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)