

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: P974084

Luminaire Tested: FLR2-24-40-L830-CP250

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974084  
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: FLR2-24-40-L830-CP250  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-40-L830-CP250  
Ballast/Driver: -

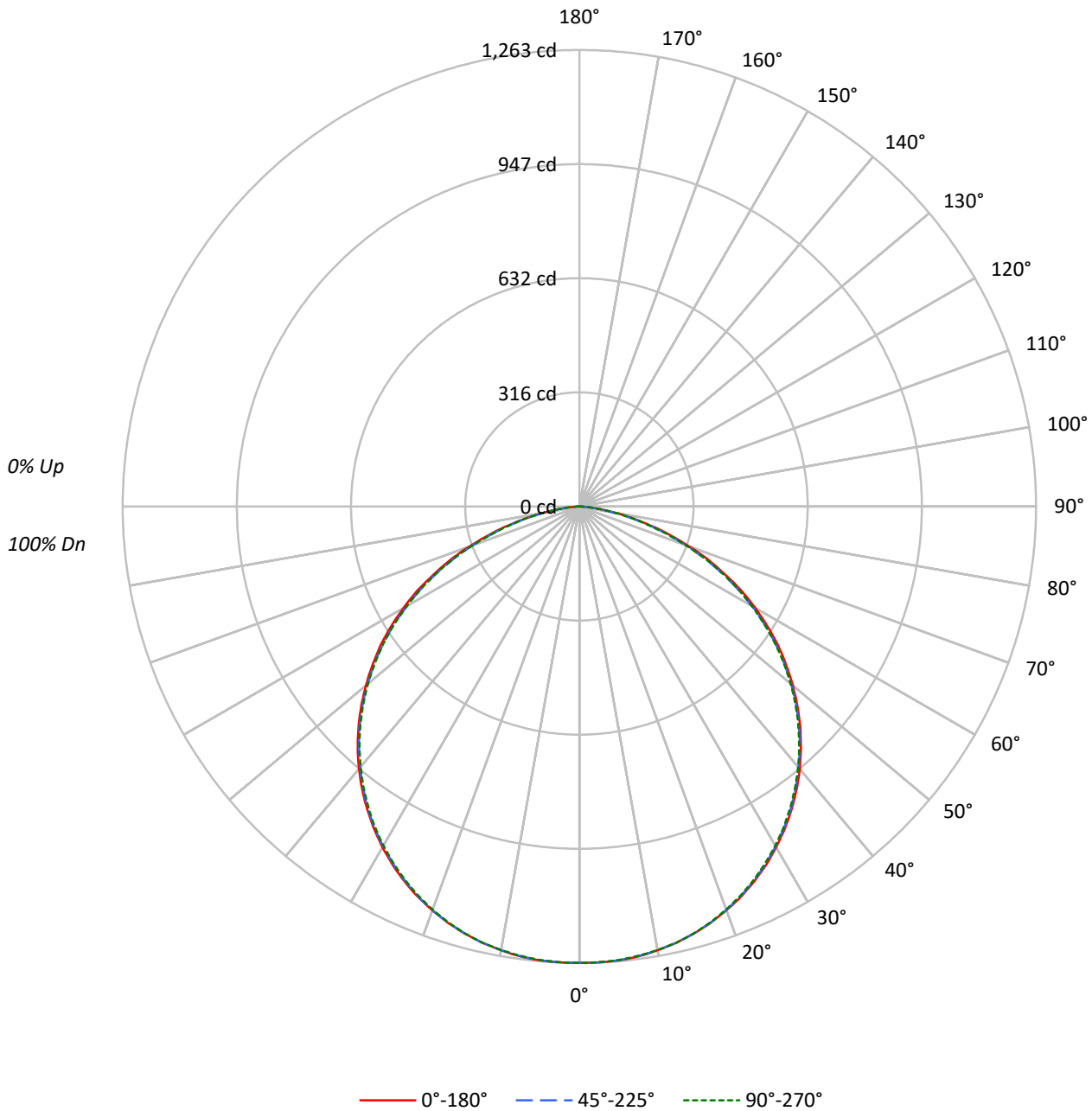
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3569.4 lumens  
Efficiency: N/A  
Efficacy: 117.8 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): 30.3  
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°	1699	1699	1699
5°	1703	1703	1702
10°	1704	1703	1703
15°	1704	1704	1704
20°	1703	1702	1699
25°	1699	1696	1693
30°	1692	1687	1683
35°	1681	1676	1670
40°	1666	1656	1653
45°	1644	1635	1630
50°	1613	1601	1596
55°	1575	1553	1551
60°	1510	1483	1483
65°	1412	1379	1384
70°	1271	1232	1228
75°	1067	1025	1020
80°	779	741	773
85°	440	406	412

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1644 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.9	3.4
10°-20°	345.4	9.7
20°-30°	526.5	14.8
30°-40°	638.0	17.9
40°-50°	662.7	18.6
50°-60°	592.8	16.6
60°-70°	432.0	12.1
70°-80°	214.0	6.0
80°-90°	38.2	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°	991.8	27.8
0°-40°	1629.7	45.7
0°-60°	2885.2	80.8
0°-90°	3569.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3569.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1263	1263	1263	1263	1263	
5°	1261	1261	1261	1261	1260	120
15°	1224	1223	1223	1224	1223	345
25°	1145	1143	1142	1142	1141	528
35°	1023	1022	1020	1019	1017	640
45°	864	862	859	857	856	666
55°	672	667	662	662	661	598
65°	444	440	433	435	435	440
75°	205	202	197	201	196	219
85°	28	26	26	27	27	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1262.9	1262.9	1262.9	1262.9	1262.9
2.5°	1262.9	1262.5	1262.5	1262.9	1262.0
5°	1260.7	1261.1	1260.7	1260.7	1259.8
7.5°	1255.7	1255.2	1254.8	1255.2	1253.9
10°	1247.1	1247.1	1246.6	1247.1	1246.2
12.5°	1236.6	1236.6	1236.6	1237.1	1236.6
15°	1223.5	1223.1	1223.1	1224.0	1223.1
17.5°	1208.1	1207.6	1207.6	1207.2	1206.3
20°	1189.1	1189.1	1188.6	1188.2	1186.8
22.5°	1168.7	1168.2	1166.9	1166.9	1165.0
25°	1144.7	1143.3	1142.4	1141.9	1140.6
27.5°	1118.4	1116.6	1115.2	1114.3	1112.9
30°	1088.9	1087.1	1085.7	1084.4	1083.5
32.5°	1057.2	1056.3	1054.0	1053.6	1051.8
35°	1023.2	1021.9	1020.5	1018.7	1016.9
37.5°	987.0	985.6	982.4	981.5	980.2
40°	948.4	946.6	942.6	942.6	941.2
42.5°	907.2	905.4	902.7	900.9	900.0
45°	864.2	862.3	859.2	857.4	856.5
47.5°	818.4	817.0	813.4	812.0	810.7
50°	770.8	769.0	764.9	764.0	762.7
52.5°	721.0	720.1	714.6	714.2	712.8
55°	671.6	666.6	662.1	662.1	661.1
57.5°	617.2	613.6	607.7	607.7	606.8
60°	561.0	557.8	551.0	551.9	551.0
62.5°	506.2	499.4	493.0	495.7	493.5
65°	443.6	440.0	433.2	435.0	434.6
67.5°	386.5	379.7	373.4	377.0	375.2
70°	323.1	319.5	313.1	316.8	312.2
72.5°	263.3	260.1	253.8	257.8	253.3
75°	205.3	202.1	197.1	200.7	196.2
77.5°	150.4	148.2	143.6	147.3	148.2
80°	100.6	97.9	95.6	98.8	99.7
82.5°	58.9	57.1	56.2	56.6	58.9
85°	28.5	26.3	26.3	26.7	26.7
87.5°	7.7	6.8	7.7	8.2	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)