

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: P974172

Luminaire Tested: FLR2-24-40-L835-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974172  
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-L835-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-40-L835-CP080  
Ballast/Driver: -

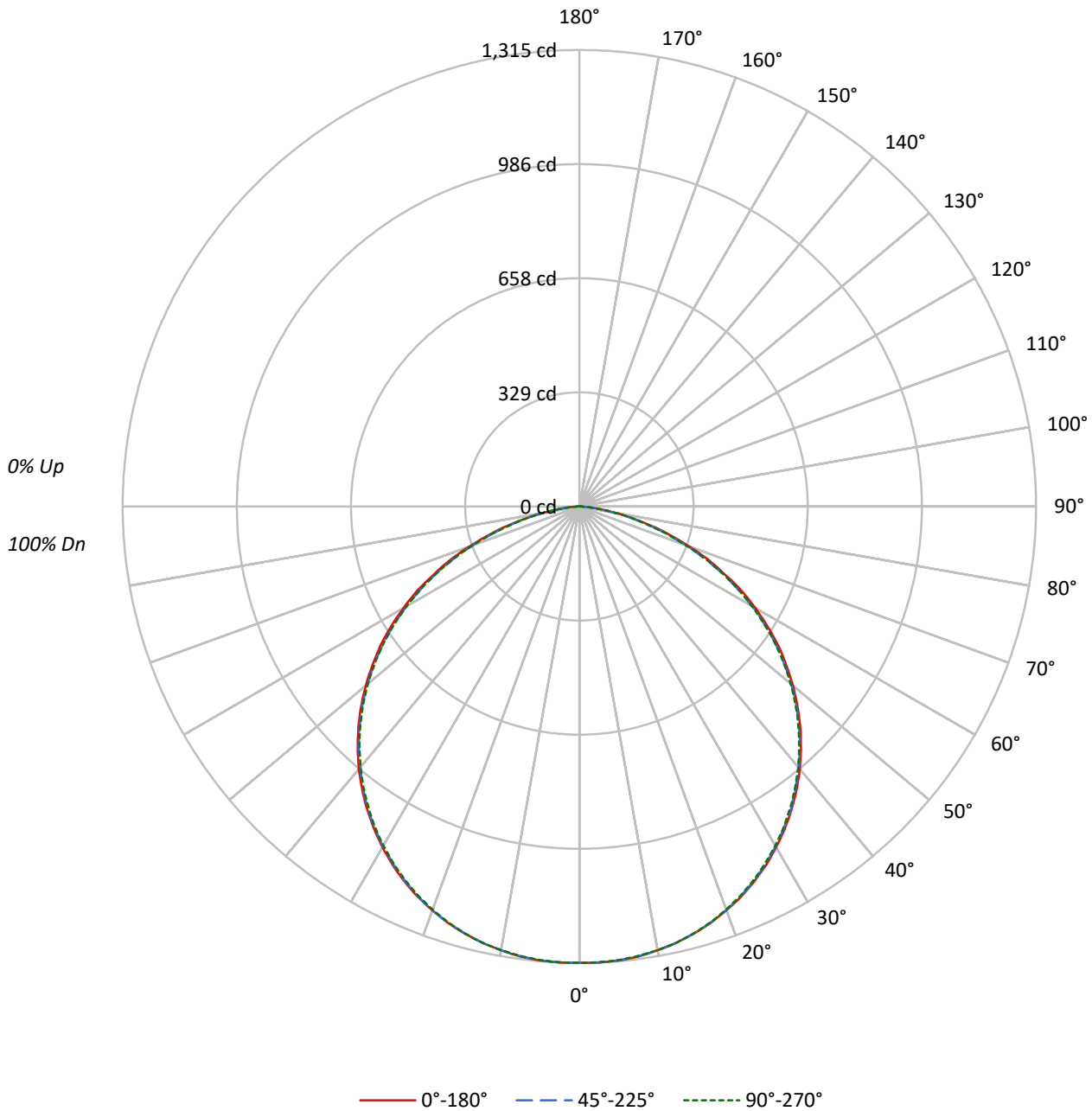
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3716.7 lumens  
Efficiency: N/A  
Efficacy: 122.7 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°	1769	1769	1769
5°	1773	1773	1772
10°	1774	1774	1773
15°	1775	1774	1774
20°	1773	1772	1769
25°	1769	1766	1763
30°	1762	1756	1753
35°	1750	1745	1739
40°	1735	1724	1721
45°	1712	1702	1697
50°	1680	1667	1662
55°	1640	1617	1615
60°	1572	1544	1544
65°	1471	1436	1441
70°	1323	1282	1279
75°	1111	1067	1062
80°	812	772	804
85°	459	423	429

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1712 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.8	3.4
10°-20°	359.6	9.7
20°-30°	548.3	14.8
30°-40°	664.3	17.9
40°-50°	690.0	18.6
50°-60°	617.3	16.6
60°-70°	449.9	12.1
70°-80°	222.8	6.0
80°-90°	39.8	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°	1032.7	27.8
0°-40°	1697.0	45.7
0°-60°	3004.2	80.8
0°-90°	3716.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3716.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1315	1315	1315	1315	1315	
5°	1313	1313	1313	1313	1312	125
15°	1274	1274	1274	1274	1274	360
25°	1192	1190	1190	1189	1188	549
35°	1065	1064	1063	1061	1059	666
45°	900	898	895	893	892	693
55°	699	694	689	689	688	623
65°	462	458	451	453	452	458
75°	214	210	205	209	204	228
85°	30	27	27	28	28	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1315.0	1315.0	1315.0	1315.0	1315.0
2.5°	1315.0	1314.6	1314.6	1315.0	1314.1
5°	1312.7	1313.2	1312.7	1312.7	1311.7
7.5°	1307.5	1307.0	1306.5	1307.0	1305.6
10°	1298.5	1298.5	1298.1	1298.5	1297.6
12.5°	1287.7	1287.7	1287.7	1288.1	1287.7
15°	1274.0	1273.5	1273.5	1274.5	1273.5
17.5°	1257.9	1257.5	1257.5	1257.0	1256.1
20°	1238.1	1238.1	1237.7	1237.2	1235.8
22.5°	1216.9	1216.4	1215.0	1215.0	1213.1
25°	1191.9	1190.5	1189.5	1189.1	1187.6
27.5°	1164.5	1162.6	1161.2	1160.3	1158.9
30°	1133.8	1132.0	1130.5	1129.1	1128.2
32.5°	1100.8	1099.9	1097.5	1097.0	1095.2
35°	1065.4	1064.0	1062.6	1060.7	1058.8
37.5°	1027.7	1026.3	1023.0	1022.0	1020.6
40°	987.6	985.7	981.4	981.4	980.0
42.5°	944.6	942.8	939.9	938.0	937.1
45°	899.8	897.9	894.6	892.7	891.8
47.5°	852.2	850.7	847.0	845.5	844.1
50°	802.6	800.7	796.5	795.5	794.1
52.5°	750.7	749.8	744.1	743.6	742.2
55°	699.3	694.1	689.4	689.4	688.4
57.5°	642.7	638.9	632.7	632.7	631.8
60°	584.1	580.8	573.8	574.7	573.8
62.5°	527.1	520.0	513.4	516.2	513.8
65°	461.9	458.2	451.1	453.0	452.5
67.5°	402.5	395.4	388.8	392.6	390.7
70°	336.4	332.7	326.0	329.8	325.1
72.5°	274.1	270.8	264.2	268.5	263.8
75°	213.7	210.4	205.3	209.0	204.3
77.5°	156.7	154.3	149.6	153.4	154.3
80°	104.8	101.9	99.6	102.9	103.8
82.5°	61.3	59.5	58.5	59.0	61.3
85°	29.7	27.4	27.4	27.8	27.8
87.5°	8.0	7.1	8.0	8.5	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)