

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: P973716

Luminaire Tested: FLR2-22-45-L950-CA080

Issue Date: 3/13/2025



**Test Information**

Test Method: LM-79-2019  
Report Number: P973716  
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: FLR2-22-45-L950-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

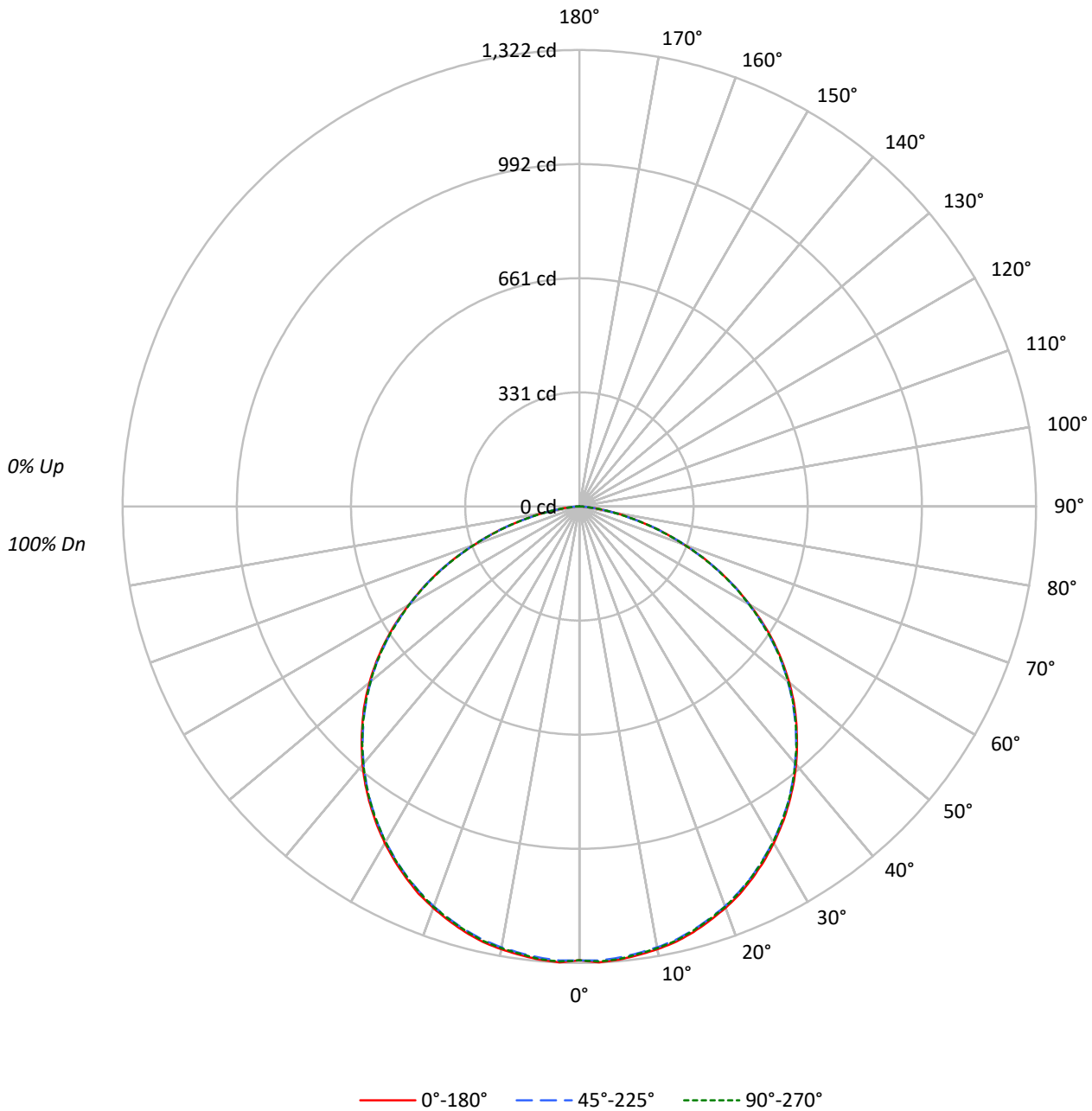
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3675.7 lumens  
Efficiency: N/A  
Efficacy: 101.8 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): 36.1  
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	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°	3537	3537	3537
5°	3559	3544	3555
10°	3558	3543	3549
15°	3555	3539	3544
20°	3543	3529	3534
25°	3524	3510	3512
30°	3499	3484	3486
35°	3467	3454	3456
40°	3431	3414	3417
45°	3380	3365	3371
50°	3321	3297	3304
55°	3226	3199	3211
60°	3067	3054	3054
65°	2864	2858	2848
70°	2536	2548	2542
75°	2136	2119	2101
80°	1534	1509	1497
85°	803	803	778

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3380 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.5	3.4
10°-20°	357.9	9.7
20°-30°	543.9	14.8
30°-40°	657.4	17.9
40°-50°	682.4	18.6
50°-60°	610.1	16.6
60°-70°	443.5	12.1
70°-80°	218.1	5.9
80°-90°	37.8	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°	1026.3	27.9
0°-40°	1683.7	45.8
0°-60°	2976.2	81.0
0°-90°	3675.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3675.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1314	1314	1314	1314	1314	
5°	1318	1302	1312	1307	1316	125
15°	1276	1262	1270	1267	1272	360
25°	1187	1174	1182	1180	1183	547
35°	1055	1048	1051	1052	1052	660
45°	888	884	884	886	886	685
55°	688	684	682	684	684	613
65°	450	451	449	449	447	444
75°	205	207	204	205	202	218
85°	26	27	26	26	25	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1314.4	1314.4	1314.4	1314.4	1314.4
2.5°	1321.7	1306.3	1316.0	1310.3	1319.2
5°	1317.6	1302.2	1311.9	1307.1	1316.0
7.5°	1310.3	1294.9	1304.6	1299.8	1307.1
10°	1302.2	1286.0	1296.5	1291.6	1298.9
12.5°	1291.6	1276.2	1286.0	1281.9	1288.4
15°	1276.2	1261.6	1270.5	1267.3	1272.2
17.5°	1257.5	1242.9	1251.9	1249.4	1253.5
20°	1237.2	1223.4	1232.4	1229.9	1234.0
22.5°	1214.5	1199.9	1208.0	1206.4	1209.6
25°	1186.9	1173.9	1182.0	1179.6	1182.9
27.5°	1157.7	1145.5	1152.0	1152.0	1153.6
30°	1126.0	1114.7	1121.2	1121.2	1122.0
32.5°	1091.9	1083.0	1087.1	1087.9	1087.9
35°	1055.4	1048.1	1051.3	1052.1	1052.1
37.5°	1017.2	1009.9	1012.4	1014.0	1014.0
40°	976.6	970.2	971.8	973.4	972.6
42.5°	932.8	927.9	928.7	930.4	930.4
45°	888.2	884.1	884.1	885.7	885.7
47.5°	842.7	838.6	837.0	838.6	838.6
50°	793.2	789.1	787.5	789.1	789.1
52.5°	741.2	737.2	737.2	737.2	738.0
55°	687.6	683.6	681.9	683.6	684.4
57.5°	630.8	629.2	626.7	627.6	625.1
60°	569.9	569.9	567.5	569.1	567.5
62.5°	510.6	512.3	509.8	509.8	508.2
65°	449.8	451.4	448.9	448.9	447.3
67.5°	387.2	389.7	386.4	386.4	384.8
70°	322.3	327.2	323.9	324.7	323.1
72.5°	263.8	266.3	263.0	263.0	261.4
75°	205.4	207.0	203.8	204.6	202.1
77.5°	147.8	150.2	146.9	147.8	146.9
80°	99.0	99.9	97.4	98.2	96.6
82.5°	57.6	58.5	57.6	56.8	56.0
85°	26.0	26.8	26.0	26.0	25.2
87.5°	6.5	6.5	6.5	6.5	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)