

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: P973640

Luminaire Tested: FLR2-22-45-L940-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973640  
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-L940-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

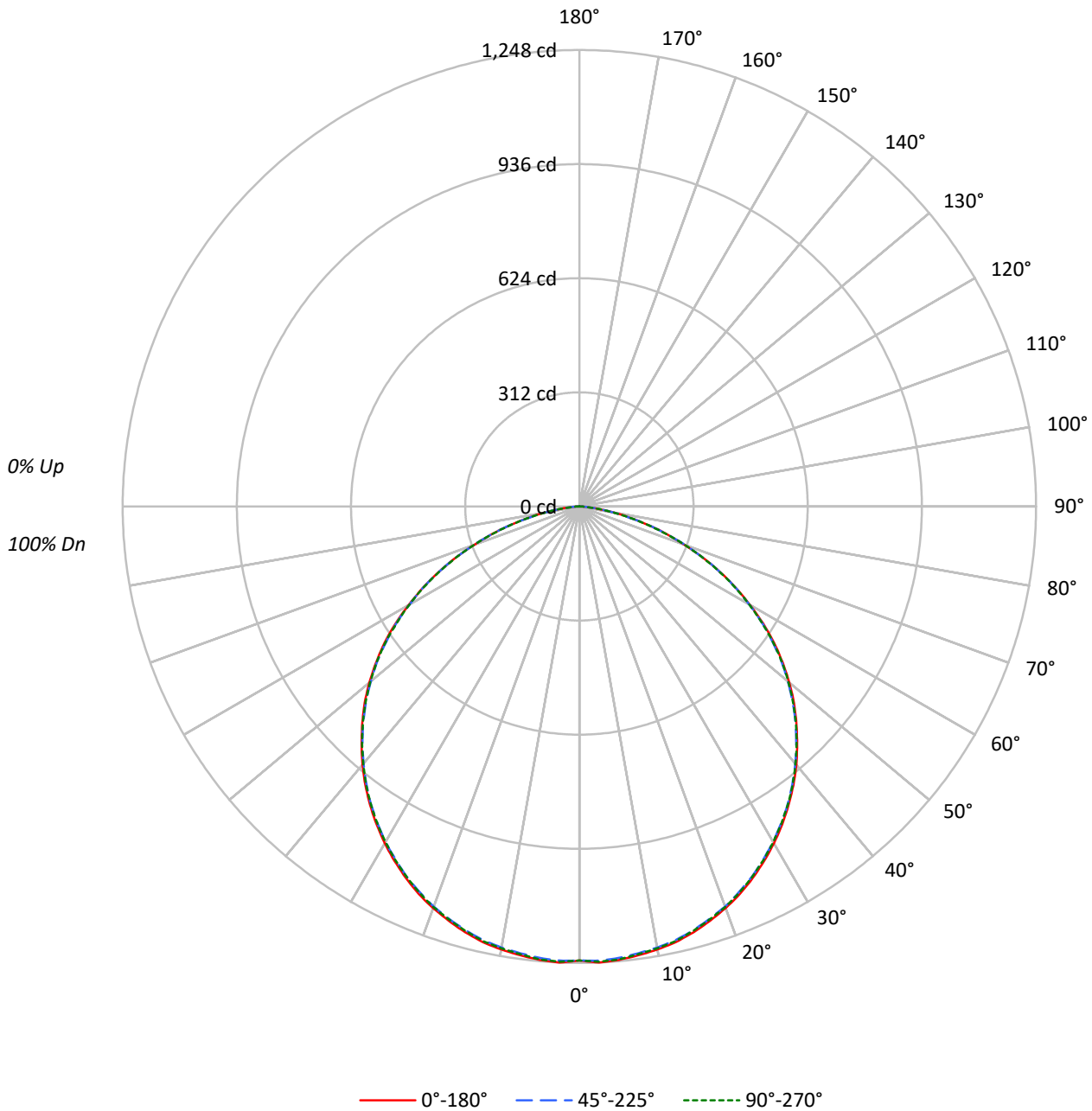
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3471.6 lumens  
Efficiency: N/A  
Efficacy: 96.2 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°	3341	3341	3341
5°	3362	3347	3357
10°	3361	3346	3352
15°	3358	3343	3347
20°	3346	3333	3338
25°	3328	3315	3317
30°	3305	3290	3293
35°	3275	3262	3264
40°	3240	3224	3227
45°	3193	3178	3184
50°	3136	3114	3120
55°	3047	3022	3033
60°	2897	2885	2885
65°	2705	2700	2690
70°	2395	2407	2401
75°	2017	2001	1985
80°	1449	1426	1413
85°	756	756	735

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3193 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.6	3.4
10°-20°	338.1	9.7
20°-30°	513.7	14.8
30°-40°	620.9	17.9
40°-50°	644.5	18.6
50°-60°	576.2	16.6
60°-70°	418.9	12.1
70°-80°	206.0	5.9
80°-90°	35.7	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°	969.3	27.9
0°-40°	1590.3	45.8
0°-60°	2811.0	81.0
0°-90°	3471.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3471.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1241	1241	1241	1241	1241	
5°	1244	1230	1239	1234	1243	118
15°	1205	1192	1200	1197	1202	340
25°	1121	1109	1116	1114	1117	517
35°	997	990	993	994	994	624
45°	839	835	835	837	837	647
55°	650	646	644	646	646	579
65°	425	426	424	424	422	419
75°	194	196	192	193	191	206
85°	24	25	24	24	24	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1241.4	1241.4	1241.4	1241.4	1241.4
2.5°	1248.3	1233.7	1242.9	1237.6	1246.0
5°	1244.5	1229.9	1239.1	1234.5	1242.9
7.5°	1237.6	1223.0	1232.2	1227.6	1234.5
10°	1229.9	1214.6	1224.5	1219.9	1226.8
12.5°	1219.9	1205.4	1214.6	1210.7	1216.9
15°	1205.4	1191.6	1200.0	1196.9	1201.5
17.5°	1187.7	1173.9	1182.4	1180.1	1183.9
20°	1168.6	1155.5	1164.0	1161.7	1165.5
22.5°	1147.1	1133.3	1141.0	1139.4	1142.5
25°	1121.0	1108.8	1116.4	1114.1	1117.2
27.5°	1093.4	1081.9	1088.1	1088.1	1089.6
30°	1063.5	1052.8	1058.9	1058.9	1059.7
32.5°	1031.3	1022.9	1026.7	1027.5	1027.5
35°	996.8	989.9	993.0	993.7	993.7
37.5°	960.8	953.9	956.2	957.7	957.7
40°	922.4	916.3	917.8	919.4	918.6
42.5°	881.0	876.4	877.2	878.7	878.7
45°	838.9	835.0	835.0	836.6	836.6
47.5°	795.9	792.1	790.5	792.1	792.1
50°	749.1	745.3	743.8	745.3	745.3
52.5°	700.1	696.2	696.2	696.2	697.0
55°	649.5	645.6	644.1	645.6	646.4
57.5°	595.8	594.3	592.0	592.7	590.4
60°	538.3	538.3	536.0	537.5	536.0
62.5°	482.3	483.8	481.5	481.5	480.0
65°	424.8	426.3	424.0	424.0	422.5
67.5°	365.8	368.1	365.0	365.0	363.5
70°	304.4	309.0	305.9	306.7	305.2
72.5°	249.2	251.5	248.4	248.4	246.9
75°	194.0	195.5	192.5	193.2	190.9
77.5°	139.6	141.9	138.8	139.6	138.8
80°	93.5	94.3	92.0	92.8	91.2
82.5°	54.4	55.2	54.4	53.7	52.9
85°	24.5	25.3	24.5	24.5	23.8
87.5°	6.1	6.1	6.1	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)