

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: P973660

Luminaire Tested: FLR2-22-45-L940-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973660  
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-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

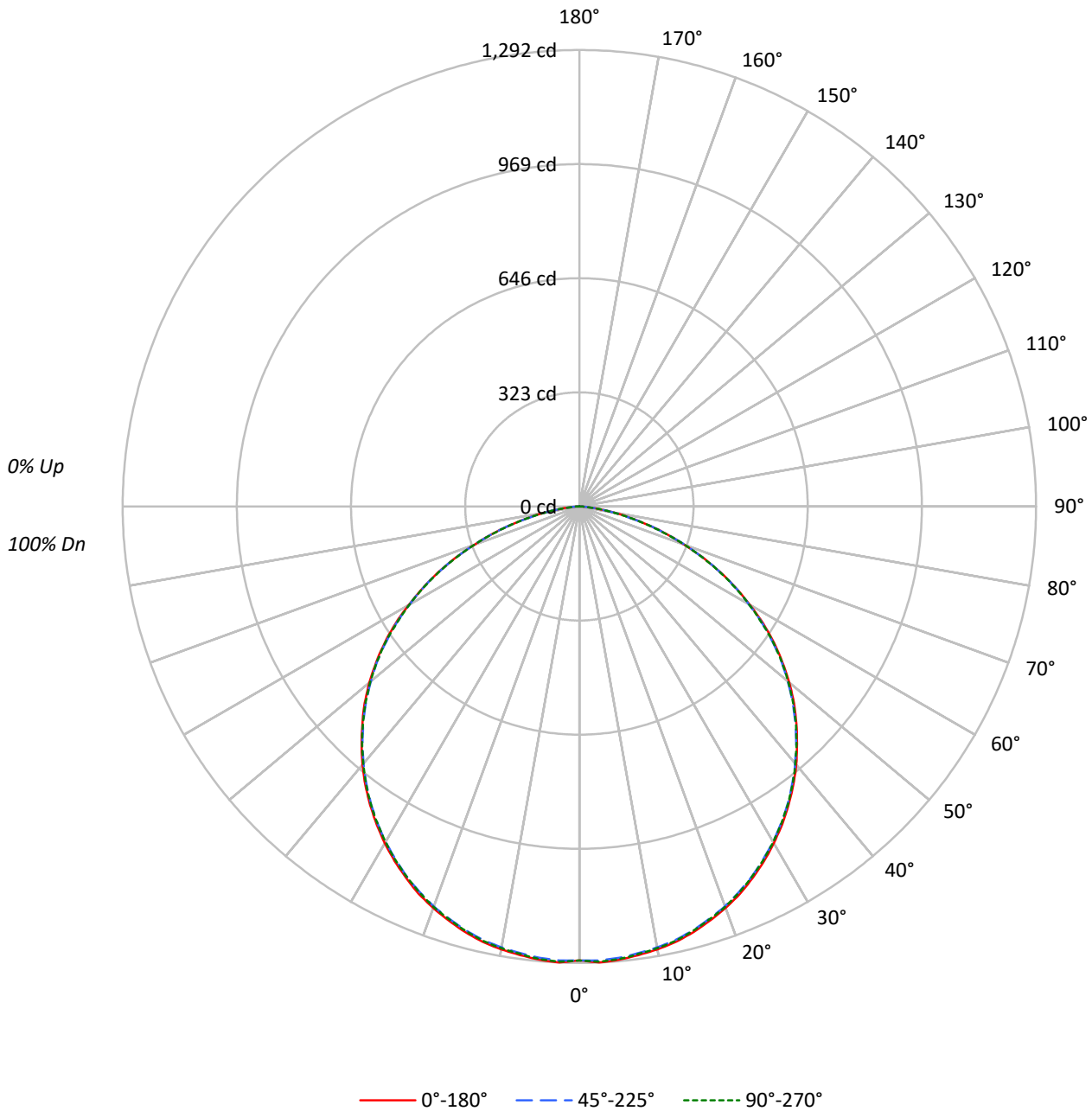
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3593.1 lumens  
Efficiency: N/A  
Efficacy: 99.5 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				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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

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

	0°	45°	90°
0°	3457	3457	3457
5°	3479	3464	3475
10°	3478	3463	3470
15°	3475	3460	3465
20°	3463	3450	3454
25°	3445	3431	3433
30°	3420	3406	3408
35°	3389	3376	3379
40°	3354	3337	3340
45°	3304	3289	3295
50°	3246	3223	3229
55°	3154	3127	3139
60°	2998	2985	2985
65°	2800	2795	2784
70°	2479	2491	2485
75°	2088	2071	2054
80°	1500	1475	1463
85°	784	784	760

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3304 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.7	3.4
10°-20°	349.9	9.7
20°-30°	531.7	14.8
30°-40°	642.7	17.9
40°-50°	667.0	18.6
50°-60°	596.4	16.6
60°-70°	433.6	12.1
70°-80°	213.2	5.9
80°-90°	37.0	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°	1003.2	27.9
0°-40°	1645.9	45.8
0°-60°	2909.3	81.0
0°-90°	3593.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3593.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1285	1285	1285	1285	1285	
5°	1288	1273	1282	1278	1286	122
15°	1248	1233	1242	1239	1244	352
25°	1160	1148	1156	1153	1156	535
35°	1032	1024	1028	1028	1028	645
45°	868	864	864	866	866	670
55°	672	668	667	668	669	599
65°	440	441	439	439	437	434
75°	201	202	199	200	198	213
85°	25	26	25	25	25	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1284.8	1284.8	1284.8	1284.8	1284.8
2.5°	1292.0	1276.9	1286.4	1280.9	1289.6
5°	1288.0	1272.9	1282.5	1277.7	1286.4
7.5°	1280.9	1265.8	1275.3	1270.6	1277.7
10°	1272.9	1257.1	1267.4	1262.6	1269.8
12.5°	1262.6	1247.5	1257.1	1253.1	1259.4
15°	1247.5	1233.3	1242.0	1238.8	1243.6
17.5°	1229.3	1215.0	1223.7	1221.3	1225.3
20°	1209.4	1196.0	1204.7	1202.3	1206.3
22.5°	1187.2	1172.9	1180.9	1179.3	1182.5
25°	1160.2	1147.5	1155.5	1153.1	1156.3
27.5°	1131.7	1119.8	1126.1	1126.1	1127.7
30°	1100.7	1089.6	1096.0	1096.0	1096.8
32.5°	1067.4	1058.7	1062.6	1063.4	1063.4
35°	1031.7	1024.5	1027.7	1028.5	1028.5
37.5°	994.4	987.2	989.6	991.2	991.2
40°	954.7	948.4	949.9	951.5	950.7
42.5°	911.8	907.1	907.9	909.5	909.5
45°	868.2	864.2	864.2	865.8	865.8
47.5°	823.8	819.8	818.2	819.8	819.8
50°	775.3	771.4	769.8	771.4	771.4
52.5°	724.6	720.6	720.6	720.6	721.4
55°	672.2	668.2	666.6	668.2	669.0
57.5°	616.6	615.0	612.7	613.5	611.1
60°	557.1	557.1	554.7	556.3	554.7
62.5°	499.2	500.8	498.4	498.4	496.8
65°	439.7	441.2	438.9	438.9	437.3
67.5°	378.5	380.9	377.8	377.8	376.2
70°	315.1	319.8	316.6	317.4	315.9
72.5°	257.9	260.3	257.1	257.1	255.5
75°	200.8	202.4	199.2	200.0	197.6
77.5°	144.4	146.8	143.6	144.4	143.6
80°	96.8	97.6	95.2	96.0	94.4
82.5°	56.3	57.1	56.3	55.6	54.8
85°	25.4	26.2	25.4	25.4	24.6
87.5°	6.3	6.3	6.3	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)