

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: P973536

Luminaire Tested: FLR2-22-45-L930-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973536  
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-L930-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

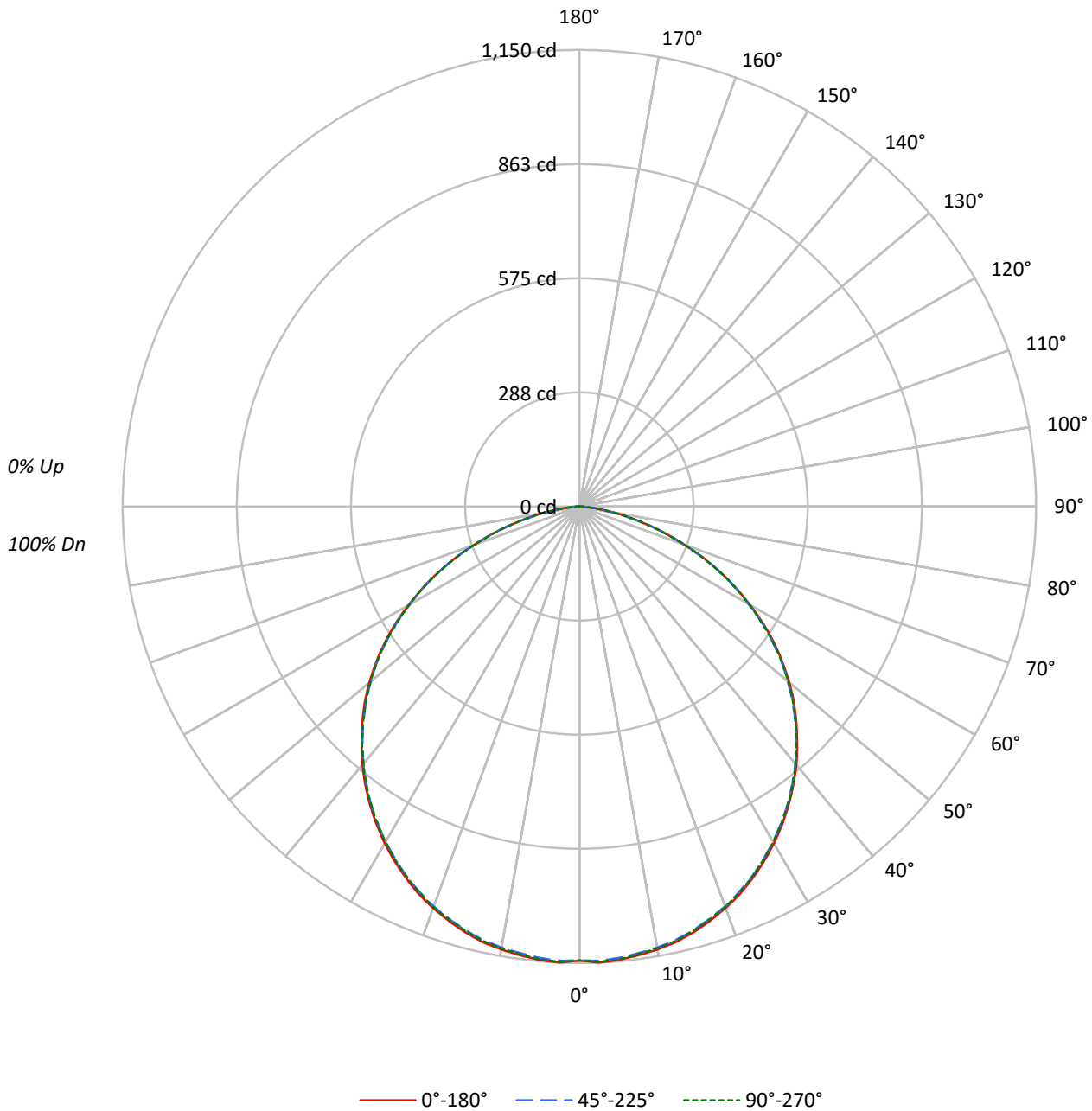
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3198.8 lumens  
Efficiency: N/A  
Efficacy: 88.6 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°	3078	3078	3078
5°	3098	3084	3093
10°	3096	3083	3089
15°	3094	3080	3084
20°	3083	3071	3075
25°	3067	3054	3056
30°	3045	3032	3034
35°	3017	3006	3008
40°	2986	2971	2973
45°	2941	2928	2933
50°	2890	2869	2875
55°	2807	2784	2794
60°	2669	2658	2658
65°	2492	2488	2479
70°	2207	2218	2212
75°	1858	1843	1829
80°	1336	1314	1303
85°	698	698	676

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2941 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.3	3.4
10°-20°	311.5	9.7
20°-30°	473.3	14.8
30°-40°	572.1	17.9
40°-50°	593.8	18.6
50°-60°	530.9	16.6
60°-70°	386.0	12.1
70°-80°	189.8	5.9
80°-90°	32.9	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°	893.1	27.9
0°-40°	1465.2	45.8
0°-60°	2590.0	81.0
0°-90°	3198.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3198.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1147	1133	1142	1138	1145	109
15°	1111	1098	1106	1103	1107	313
25°	1033	1022	1029	1026	1029	476
35°	918	912	915	916	916	575
45°	773	769	769	771	771	596
55°	598	595	594	595	596	533
65°	391	393	391	391	389	386
75°	179	180	177	178	176	190
85°	23	23	23	23	22	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1143.8	1143.8	1143.8	1143.8	1143.8
2.5°	1150.2	1136.8	1145.2	1140.3	1148.1
5°	1146.7	1133.2	1141.7	1137.5	1145.2
7.5°	1140.3	1126.9	1135.3	1131.1	1137.5
10°	1133.2	1119.1	1128.3	1124.0	1130.4
12.5°	1124.0	1110.6	1119.1	1115.6	1121.2
15°	1110.6	1097.9	1105.7	1102.8	1107.1
17.5°	1094.4	1081.7	1089.4	1087.3	1090.8
20°	1076.7	1064.7	1072.5	1070.3	1073.9
22.5°	1056.9	1044.2	1051.3	1049.9	1052.7
25°	1032.9	1021.6	1028.7	1026.5	1029.4
27.5°	1007.5	996.9	1002.5	1002.5	1003.9
30°	979.9	970.0	975.7	975.7	976.4
32.5°	950.2	942.5	946.0	946.7	946.7
35°	918.5	912.1	914.9	915.6	915.6
37.5°	885.2	878.9	881.0	882.4	882.4
40°	849.9	844.3	845.7	847.1	846.4
42.5°	811.8	807.5	808.2	809.7	809.7
45°	772.9	769.4	769.4	770.8	770.8
47.5°	733.3	729.8	728.4	729.8	729.8
50°	690.3	686.7	685.3	686.7	686.7
52.5°	645.0	641.5	641.5	641.5	642.2
55°	598.4	594.9	593.5	594.9	595.6
57.5°	549.0	547.5	545.4	546.1	544.0
60°	496.0	496.0	493.8	495.3	493.8
62.5°	444.4	445.8	443.7	443.7	442.3
65°	391.4	392.8	390.7	390.7	389.3
67.5°	337.0	339.1	336.3	336.3	334.9
70°	280.5	284.7	281.9	282.6	281.2
72.5°	229.6	231.7	228.9	228.9	227.5
75°	178.7	180.2	177.3	178.0	175.9
77.5°	128.6	130.7	127.9	128.6	127.9
80°	86.2	86.9	84.8	85.5	84.1
82.5°	50.2	50.9	50.2	49.5	48.7
85°	22.6	23.3	22.6	22.6	21.9
87.5°	5.7	5.7	5.7	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)