

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: P973548

Luminaire Tested: FLR2-22-45-L930-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973548  
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-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

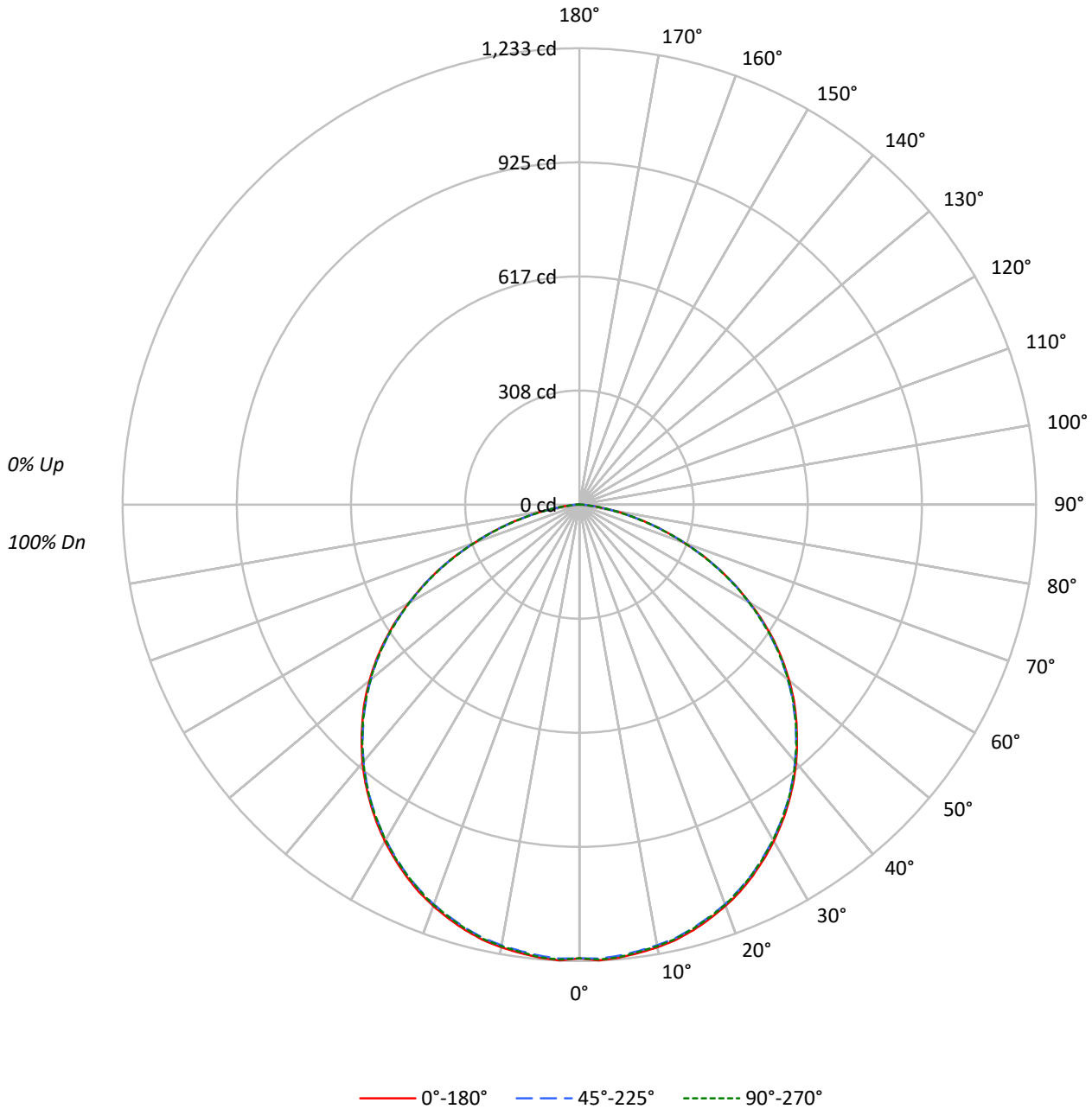
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3427.9 lumens  
Efficiency: N/A  
Efficacy: 95.0 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°	3299	3299	3299
5°	3319	3305	3315
10°	3318	3304	3310
15°	3316	3301	3305
20°	3304	3291	3296
25°	3287	3273	3275
30°	3263	3249	3251
35°	3233	3221	3223
40°	3199	3184	3186
45°	3152	3138	3143
50°	3097	3075	3081
55°	3009	2984	2994
60°	2861	2848	2848
65°	2670	2666	2656
70°	2365	2377	2371
75°	1991	1975	1960
80°	1432	1409	1396
85°	747	747	726

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3152 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.1	3.4
10°-20°	333.8	9.7
20°-30°	507.2	14.8
30°-40°	613.1	17.9
40°-50°	636.4	18.6
50°-60°	568.9	16.6
60°-70°	413.7	12.1
70°-80°	203.4	5.9
80°-90°	35.3	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°	957.1	27.9
0°-40°	1570.2	45.8
0°-60°	2775.5	81.0
0°-90°	3427.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3427.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1226	1226	1226	1226	1226	
5°	1229	1214	1224	1219	1227	117
15°	1190	1177	1185	1182	1186	336
25°	1107	1095	1102	1100	1103	510
35°	984	977	980	981	981	616
45°	828	824	824	826	826	639
55°	641	638	636	638	638	572
65°	419	421	419	419	417	414
75°	192	193	190	191	188	203
85°	24	25	24	24	24	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1225.8	1225.8	1225.8	1225.8	1225.8
2.5°	1232.6	1218.2	1227.3	1222.0	1230.3
5°	1228.8	1214.4	1223.5	1218.9	1227.3
7.5°	1222.0	1207.6	1216.7	1212.1	1218.9
10°	1214.4	1199.3	1209.1	1204.6	1211.4
12.5°	1204.6	1190.2	1199.3	1195.5	1201.5
15°	1190.2	1176.6	1184.9	1181.9	1186.4
17.5°	1172.8	1159.1	1167.5	1165.2	1169.0
20°	1153.8	1141.0	1149.3	1147.0	1150.8
22.5°	1132.6	1119.0	1126.6	1125.1	1128.1
25°	1106.9	1094.8	1102.4	1100.1	1103.1
27.5°	1079.6	1068.3	1074.3	1074.3	1075.9
30°	1050.1	1039.5	1045.6	1045.6	1046.3
32.5°	1018.3	1010.0	1013.8	1014.5	1014.5
35°	984.2	977.4	980.5	981.2	981.2
37.5°	948.7	941.8	944.1	945.6	945.6
40°	910.8	904.7	906.3	907.8	907.0
42.5°	869.9	865.4	866.1	867.6	867.6
45°	828.3	824.5	824.5	826.0	826.0
47.5°	785.9	782.1	780.6	782.1	782.1
50°	739.7	735.9	734.4	735.9	735.9
52.5°	691.2	687.5	687.5	687.5	688.2
55°	641.3	637.5	636.0	637.5	638.2
57.5°	588.3	586.8	584.5	585.2	583.0
60°	531.5	531.5	529.2	530.7	529.2
62.5°	476.2	477.7	475.5	475.5	474.0
65°	419.4	421.0	418.7	418.7	417.2
67.5°	361.1	363.4	360.4	360.4	358.9
70°	300.6	305.1	302.1	302.8	301.3
72.5°	246.1	248.3	245.3	245.3	243.8
75°	191.5	193.1	190.0	190.8	188.5
77.5°	137.8	140.1	137.0	137.8	137.0
80°	92.4	93.1	90.9	91.6	90.1
82.5°	53.8	54.5	53.8	53.0	52.2
85°	24.2	25.0	24.2	24.2	23.5
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)