

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: P973604

Luminaire Tested: FLR2-22-45-L935-CA080

Issue Date: 3/13/2025

**Test Information**

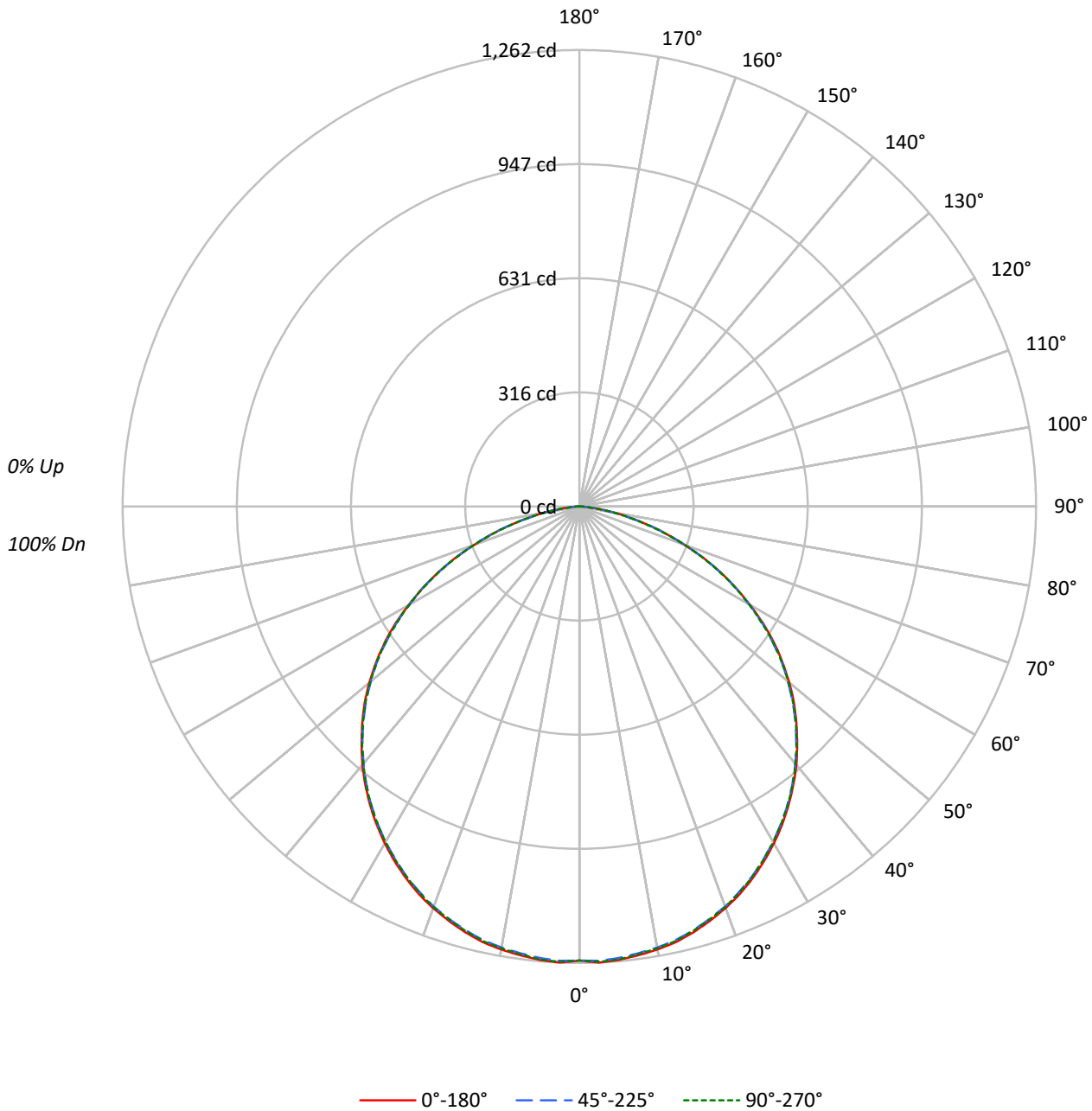
Test Method: LM-79-2019  
Report Number: P973604  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-45-L935-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3510.5 lumens  
Efficiency: N/A  
Efficacy: 97.2 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				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°	3378	3378	3378
5°	3399	3385	3395
10°	3398	3383	3390
15°	3396	3380	3385
20°	3384	3371	3375
25°	3366	3352	3354
30°	3342	3327	3329
35°	3311	3299	3301
40°	3277	3260	3263
45°	3228	3213	3219
50°	3171	3149	3155
55°	3081	3056	3066
60°	2929	2917	2917
65°	2735	2730	2720
70°	2422	2434	2428
75°	2040	2023	2008
80°	1466	1441	1430
85°	766	766	741

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3228 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.9	3.4
10°-20°	341.8	9.7
20°-30°	519.5	14.8
30°-40°	627.9	17.9
40°-50°	651.7	18.6
50°-60°	582.6	16.6
60°-70°	423.6	12.1
70°-80°	208.3	5.9
80°-90°	36.1	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°	980.2	27.9
0°-40°	1608.1	45.8
0°-60°	2842.4	81.0
0°-90°	3510.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3510.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1255	1255	1255	1255	1255	
5°	1258	1244	1253	1248	1257	120
15°	1219	1205	1213	1210	1215	344
25°	1134	1121	1129	1127	1130	522
35°	1008	1001	1004	1005	1005	631
45°	848	844	844	846	846	654
55°	657	653	651	653	654	585
65°	430	431	429	429	427	424
75°	196	198	195	195	193	208
85°	25	26	25	25	24	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1255.3	1255.3	1255.3	1255.3	1255.3
2.5°	1262.3	1247.5	1256.9	1251.4	1260.0
5°	1258.4	1243.7	1253.0	1248.3	1256.9
7.5°	1251.4	1236.7	1246.0	1241.3	1248.3
10°	1243.7	1228.2	1238.2	1233.6	1240.6
12.5°	1233.6	1218.9	1228.2	1224.3	1230.5
15°	1218.9	1204.9	1213.4	1210.3	1215.0
17.5°	1201.0	1187.1	1195.6	1193.3	1197.1
20°	1181.6	1168.5	1177.0	1174.7	1178.5
22.5°	1159.9	1146.0	1153.7	1152.2	1155.3
25°	1133.6	1121.2	1128.9	1126.6	1129.7
27.5°	1105.7	1094.0	1100.2	1100.2	1101.8
30°	1075.4	1064.6	1070.8	1070.8	1071.5
32.5°	1042.9	1034.3	1038.2	1039.0	1039.0
35°	1008.0	1001.0	1004.1	1004.9	1004.9
37.5°	971.5	964.5	966.9	968.4	968.4
40°	932.8	926.5	928.1	929.7	928.9
42.5°	890.9	886.2	887.0	888.6	888.6
45°	848.2	844.4	844.4	845.9	845.9
47.5°	804.8	800.9	799.4	800.9	800.9
50°	757.5	753.6	752.1	753.6	753.6
52.5°	707.9	704.0	704.0	704.0	704.8
55°	656.7	652.8	651.3	652.8	653.6
57.5°	602.5	600.9	598.6	599.3	597.0
60°	544.3	544.3	542.0	543.5	542.0
62.5°	487.7	489.2	486.9	486.9	485.4
65°	429.5	431.1	428.8	428.8	427.2
67.5°	369.8	372.2	369.1	369.1	367.5
70°	307.8	312.5	309.4	310.1	308.6
72.5°	252.0	254.3	251.2	251.2	249.7
75°	196.2	197.7	194.6	195.4	193.1
77.5°	141.1	143.4	140.3	141.1	140.3
80°	94.6	95.4	93.0	93.8	92.3
82.5°	55.1	55.8	55.1	54.3	53.5
85°	24.8	25.6	24.8	24.8	24.0
87.5°	6.2	6.2	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)