

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: P973688

Luminaire Tested: FLR2-22-45-L850-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973688  
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-L850-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

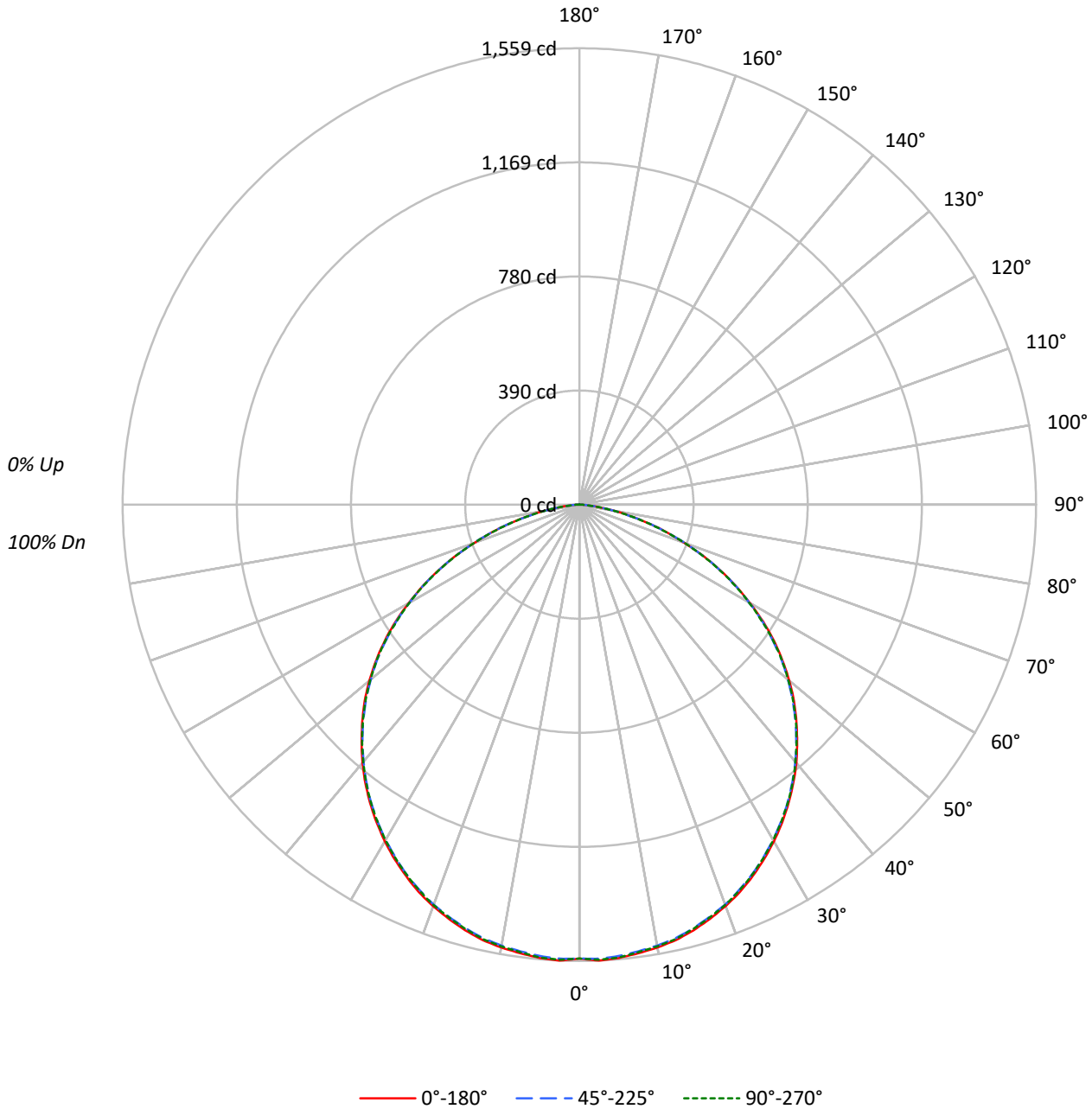
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4336.5 lumens  
Efficiency: N/A  
Efficacy: 120.1 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°	4173	4173	4173
5°	4199	4181	4194
10°	4198	4180	4188
15°	4194	4176	4181
20°	4180	4164	4169
25°	4158	4141	4143
30°	4128	4110	4113
35°	4090	4074	4078
40°	4047	4027	4031
45°	3988	3969	3977
50°	3918	3890	3898
55°	3806	3774	3788
60°	3619	3603	3603
65°	3379	3373	3360
70°	2991	3007	2999
75°	2519	2499	2480
80°	1812	1781	1767
85°	945	945	917

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3988 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.8	3.4
10°-20°	422.3	9.7
20°-30°	641.7	14.8
30°-40°	775.6	17.9
40°-50°	805.1	18.6
50°-60°	719.8	16.6
60°-70°	523.3	12.1
70°-80°	257.3	5.9
80°-90°	44.6	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°	1210.8	27.9
0°-40°	1986.4	45.8
0°-60°	3511.2	81.0
0°-90°	4336.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4336.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1551	1551	1551	1551	1551	
5°	1554	1536	1548	1542	1553	148
15°	1506	1488	1499	1495	1501	425
25°	1400	1385	1394	1392	1396	645
35°	1245	1236	1240	1241	1241	779
45°	1048	1043	1043	1045	1045	808
55°	811	806	804	806	807	723
65°	531	532	530	530	528	523
75°	242	244	240	241	238	257
85°	31	32	31	31	30	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1550.7	1550.7	1550.7	1550.7	1550.7
2.5°	1559.3	1541.1	1552.6	1545.9	1556.4
5°	1554.5	1536.3	1547.8	1542.0	1552.6
7.5°	1545.9	1527.7	1539.2	1533.4	1542.0
10°	1536.3	1517.1	1529.6	1523.8	1532.5
12.5°	1523.8	1505.6	1517.1	1512.4	1520.0
15°	1505.6	1488.4	1498.9	1495.1	1500.9
17.5°	1483.6	1466.4	1476.9	1474.0	1478.8
20°	1459.7	1443.4	1453.9	1451.1	1455.8
22.5°	1432.9	1415.6	1425.2	1423.3	1427.1
25°	1400.3	1385.0	1394.5	1391.7	1395.5
27.5°	1365.8	1351.4	1359.1	1359.1	1361.0
30°	1328.5	1315.0	1322.7	1322.7	1323.7
32.5°	1288.2	1277.7	1282.5	1283.4	1283.4
35°	1245.1	1236.5	1240.3	1241.3	1241.3
37.5°	1200.1	1191.5	1194.4	1196.3	1196.3
40°	1152.2	1144.6	1146.5	1148.4	1147.4
42.5°	1100.5	1094.8	1095.7	1097.6	1097.6
45°	1047.8	1043.0	1043.0	1045.0	1045.0
47.5°	994.2	989.4	987.5	989.4	989.4
50°	935.8	931.0	929.1	931.0	931.0
52.5°	874.5	869.7	869.7	869.7	870.6
55°	811.2	806.5	804.5	806.5	807.4
57.5°	744.2	742.3	739.4	740.4	737.5
60°	672.4	672.4	669.5	671.4	669.5
62.5°	602.5	604.4	601.5	601.5	599.6
65°	530.6	532.5	529.7	529.7	527.7
67.5°	456.9	459.7	455.9	455.9	454.0
70°	380.2	386.0	382.2	383.1	381.2
72.5°	311.3	314.2	310.3	310.3	308.4
75°	242.3	244.2	240.4	241.4	238.5
77.5°	174.3	177.2	173.4	174.3	173.4
80°	116.9	117.8	114.9	115.9	114.0
82.5°	68.0	69.0	68.0	67.0	66.1
85°	30.6	31.6	30.6	30.6	29.7
87.5°	7.7	7.7	7.7	7.7	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)