

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: P973797

Luminaire Tested: FLR2-22-50HE-L930-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973797  
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: FLR2-22-50HE-L930-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

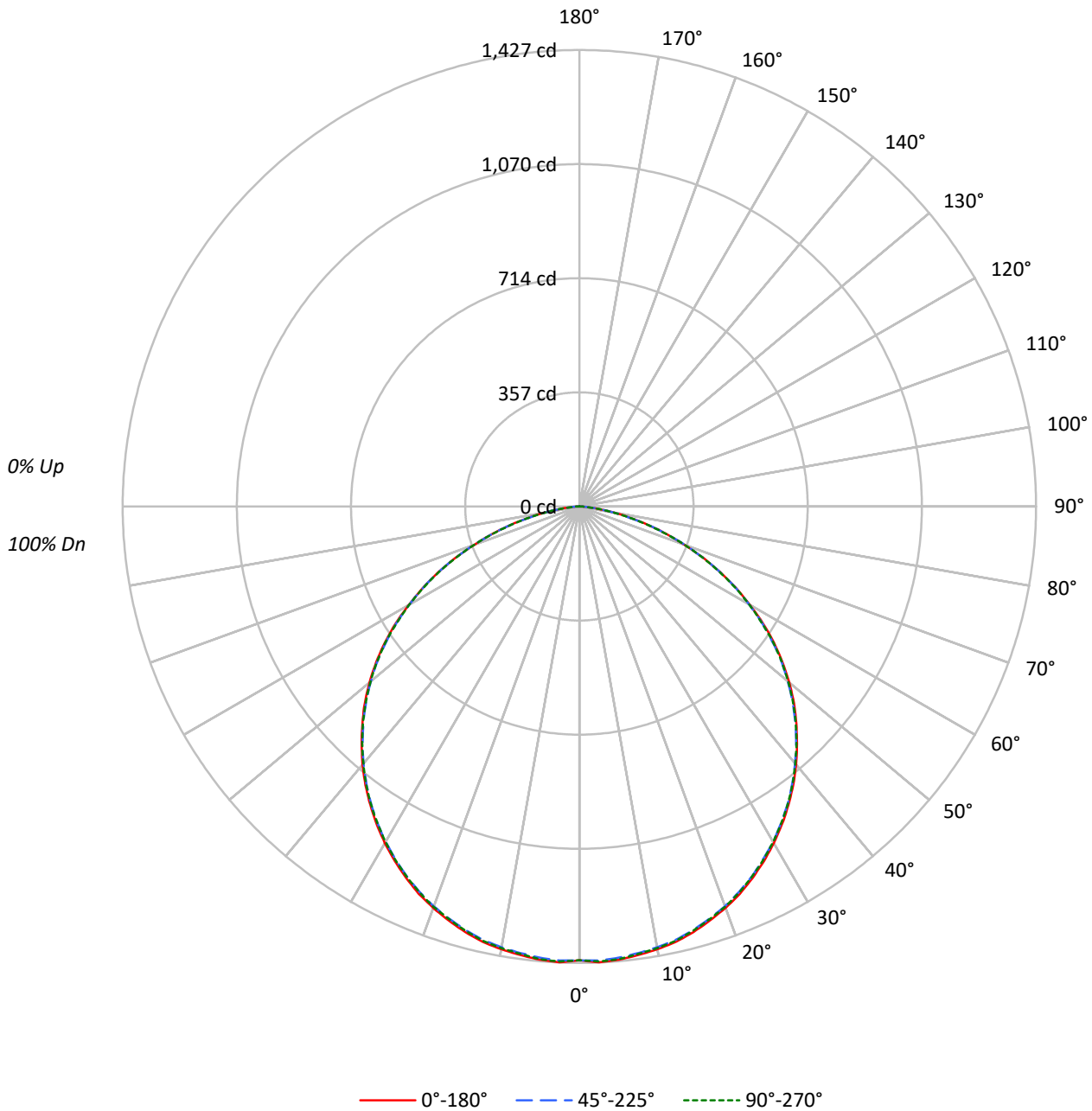
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3967.5 lumens  
Efficiency: N/A  
Efficacy: 99.2 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): 40  
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									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	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°	3818	3818	3818
5°	3842	3825	3837
10°	3841	3824	3831
15°	3838	3821	3826
20°	3824	3809	3814
25°	3804	3788	3791
30°	3777	3760	3763
35°	3742	3728	3731
40°	3703	3685	3688
45°	3648	3632	3638
50°	3584	3558	3566
55°	3482	3453	3466
60°	3311	3296	3296
65°	3091	3086	3074
70°	2737	2751	2744
75°	2305	2286	2269
80°	1657	1630	1616
85°	865	865	840

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3648 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.3	3.4
10°-20°	386.3	9.7
20°-30°	587.1	14.8
30°-40°	709.6	17.9
40°-50°	736.6	18.6
50°-60°	658.5	16.6
60°-70°	478.8	12.1
70°-80°	235.4	5.9
80°-90°	40.8	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°	1107.8	27.9
0°-40°	1817.4	45.8
0°-60°	3212.5	81.0
0°-90°	3967.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3967.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1419	1419	1419	1419	1419	
5°	1422	1406	1416	1411	1420	135
15°	1378	1362	1371	1368	1373	389
25°	1281	1267	1276	1273	1277	590
35°	1139	1131	1135	1136	1136	713
45°	959	954	954	956	956	740
55°	742	738	736	738	739	662
65°	486	487	485	485	483	479
75°	222	224	220	221	218	235
85°	28	29	28	28	27	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1418.7	1418.7	1418.7	1418.7	1418.7
2.5°	1426.6	1410.0	1420.5	1414.3	1424.0
5°	1422.2	1405.6	1416.1	1410.8	1420.5
7.5°	1414.3	1397.7	1408.2	1402.9	1410.8
10°	1405.6	1388.1	1399.4	1394.2	1402.1
12.5°	1394.2	1377.5	1388.1	1383.7	1390.7
15°	1377.5	1361.8	1371.4	1367.9	1373.2
17.5°	1357.4	1341.6	1351.2	1348.6	1353.0
20°	1335.5	1320.6	1330.2	1327.6	1332.0
22.5°	1310.9	1295.2	1303.9	1302.2	1305.7
25°	1281.1	1267.1	1275.9	1273.3	1276.8
27.5°	1249.6	1236.5	1243.5	1243.5	1245.2
30°	1215.4	1203.2	1210.2	1210.2	1211.0
32.5°	1178.6	1169.0	1173.4	1174.2	1174.2
35°	1139.2	1131.3	1134.8	1135.7	1135.7
37.5°	1098.0	1090.1	1092.7	1094.5	1094.5
40°	1054.2	1047.2	1048.9	1050.7	1049.8
42.5°	1006.9	1001.6	1002.5	1004.2	1004.2
45°	958.7	954.3	954.3	956.0	956.0
47.5°	909.6	905.2	903.5	905.2	905.2
50°	856.1	851.8	850.0	851.8	851.8
52.5°	800.1	795.7	795.7	795.7	796.6
55°	742.2	737.8	736.1	737.8	738.7
57.5°	680.9	679.1	676.5	677.4	674.7
60°	615.2	615.2	612.5	614.3	612.5
62.5°	551.2	552.9	550.3	550.3	548.6
65°	485.5	487.2	484.6	484.6	482.8
67.5°	418.0	420.6	417.1	417.1	415.4
70°	347.9	353.1	349.6	350.5	348.8
72.5°	284.8	287.4	283.9	283.9	282.2
75°	221.7	223.5	219.9	220.8	218.2
77.5°	159.5	162.1	158.6	159.5	158.6
80°	106.9	107.8	105.2	106.0	104.3
82.5°	62.2	63.1	62.2	61.3	60.5
85°	28.0	28.9	28.0	28.0	27.2
87.5°	7.0	7.0	7.0	7.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)