

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: P974019

Luminaire Tested: FLR2-22-50HE-L950-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974019  
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-L950-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

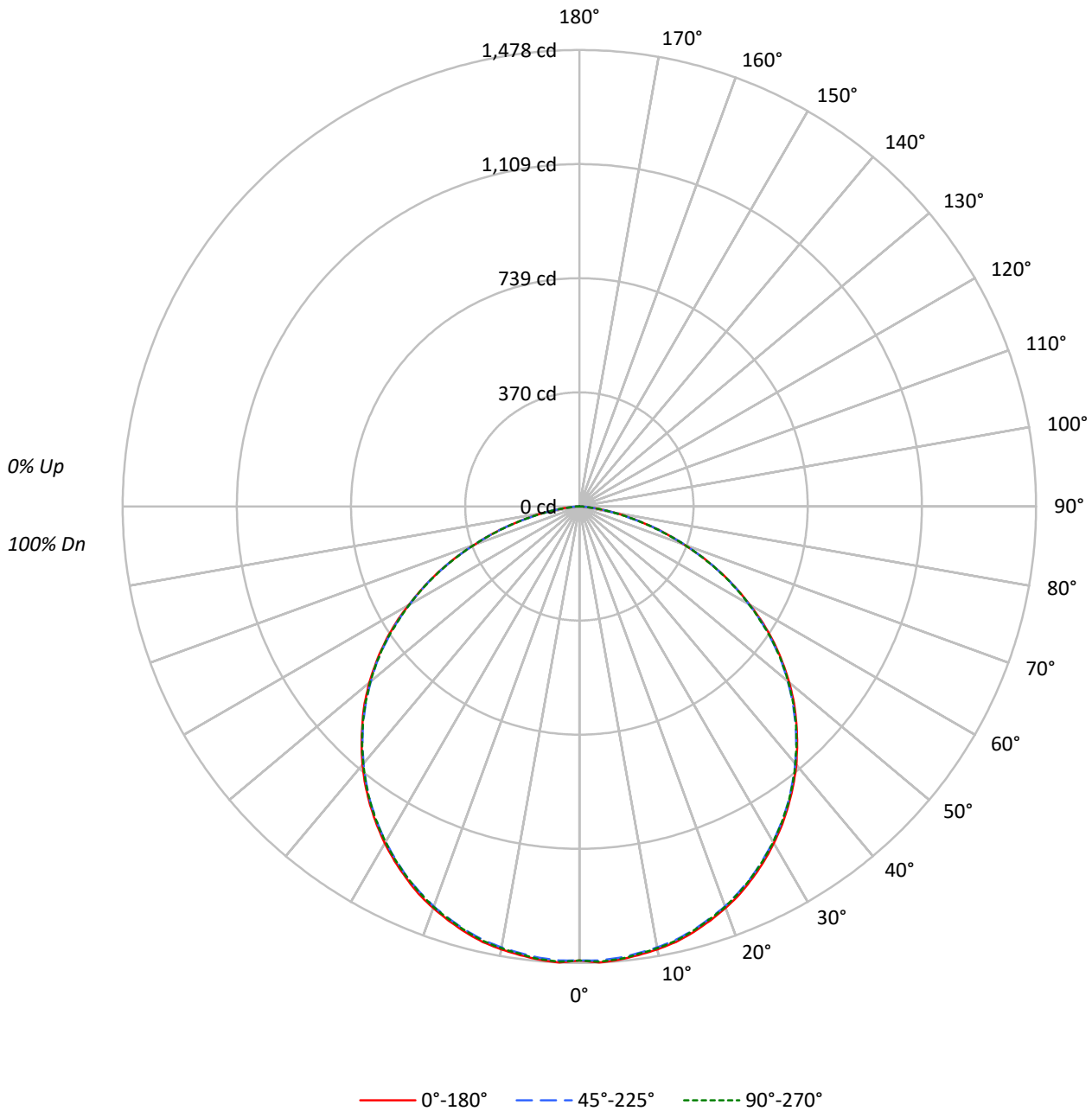
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4110.5 lumens  
Efficiency: N/A  
Efficacy: 102.8 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									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°	3955	3955	3955
5°	3980	3963	3975
10°	3979	3962	3969
15°	3976	3958	3964
20°	3962	3947	3952
25°	3941	3925	3928
30°	3913	3896	3899
35°	3877	3862	3865
40°	3837	3817	3821
45°	3780	3763	3769
50°	3713	3687	3695
55°	3608	3578	3590
60°	3430	3415	3415
65°	3203	3197	3185
70°	2836	2850	2843
75°	2388	2370	2351
80°	1717	1688	1674
85°	898	898	868

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3780 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.2	3.4
10°-20°	400.3	9.7
20°-30°	608.3	14.8
30°-40°	735.2	17.9
40°-50°	763.1	18.6
50°-60°	682.2	16.6
60°-70°	496.0	12.1
70°-80°	243.9	5.9
80°-90°	42.3	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°	1147.7	27.9
0°-40°	1882.9	45.8
0°-60°	3328.2	81.0
0°-90°	4110.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4110.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1470	1470	1470	1470	1470	
5°	1474	1456	1467	1462	1472	140
15°	1427	1411	1421	1417	1423	403
25°	1327	1313	1322	1319	1323	612
35°	1180	1172	1176	1177	1177	738
45°	993	989	989	990	990	766
55°	769	764	763	764	765	685
65°	503	505	502	502	500	496
75°	230	232	228	229	226	244
85°	29	30	29	29	28	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1469.9	1469.9	1469.9	1469.9	1469.9
2.5°	1478.0	1460.8	1471.7	1465.3	1475.3
5°	1473.5	1456.2	1467.1	1461.7	1471.7
7.5°	1465.3	1448.1	1459.0	1453.5	1461.7
10°	1456.2	1438.1	1449.9	1444.4	1452.6
12.5°	1444.4	1427.2	1438.1	1433.5	1440.8
15°	1427.2	1410.8	1420.8	1417.2	1422.7
17.5°	1406.3	1390.0	1400.0	1397.2	1401.8
20°	1383.6	1368.2	1378.2	1375.4	1380.0
22.5°	1358.2	1341.8	1350.9	1349.1	1352.7
25°	1327.3	1312.8	1321.9	1319.2	1322.8
27.5°	1294.6	1281.0	1288.3	1288.3	1290.1
30°	1259.2	1246.5	1253.8	1253.8	1254.7
32.5°	1221.1	1211.1	1215.7	1216.6	1216.6
35°	1180.2	1172.1	1175.7	1176.6	1176.6
37.5°	1137.6	1129.4	1132.1	1133.9	1133.9
40°	1092.2	1084.9	1086.7	1088.5	1087.6
42.5°	1043.2	1037.7	1038.6	1040.4	1040.4
45°	993.2	988.7	988.7	990.5	990.5
47.5°	942.4	937.8	936.0	937.8	937.8
50°	887.0	882.5	880.6	882.5	882.5
52.5°	828.9	824.4	824.4	824.4	825.3
55°	769.0	764.4	762.6	764.4	765.3
57.5°	705.4	703.6	700.9	701.8	699.1
60°	637.3	637.3	634.6	636.4	634.6
62.5°	571.1	572.9	570.1	570.1	568.3
65°	503.0	504.8	502.1	502.1	500.2
67.5°	433.1	435.8	432.2	432.2	430.3
70°	360.4	365.9	362.2	363.2	361.3
72.5°	295.1	297.8	294.2	294.2	292.3
75°	229.7	231.5	227.9	228.8	226.1
77.5°	165.2	168.0	164.3	165.2	164.3
80°	110.8	111.7	108.9	109.9	108.0
82.5°	64.5	65.4	64.5	63.6	62.6
85°	29.1	30.0	29.1	29.1	28.1
87.5°	7.3	7.3	7.3	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)