

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: P973977

Luminaire Tested: FLR2-22-50HE-L850-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973977  
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-L850-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

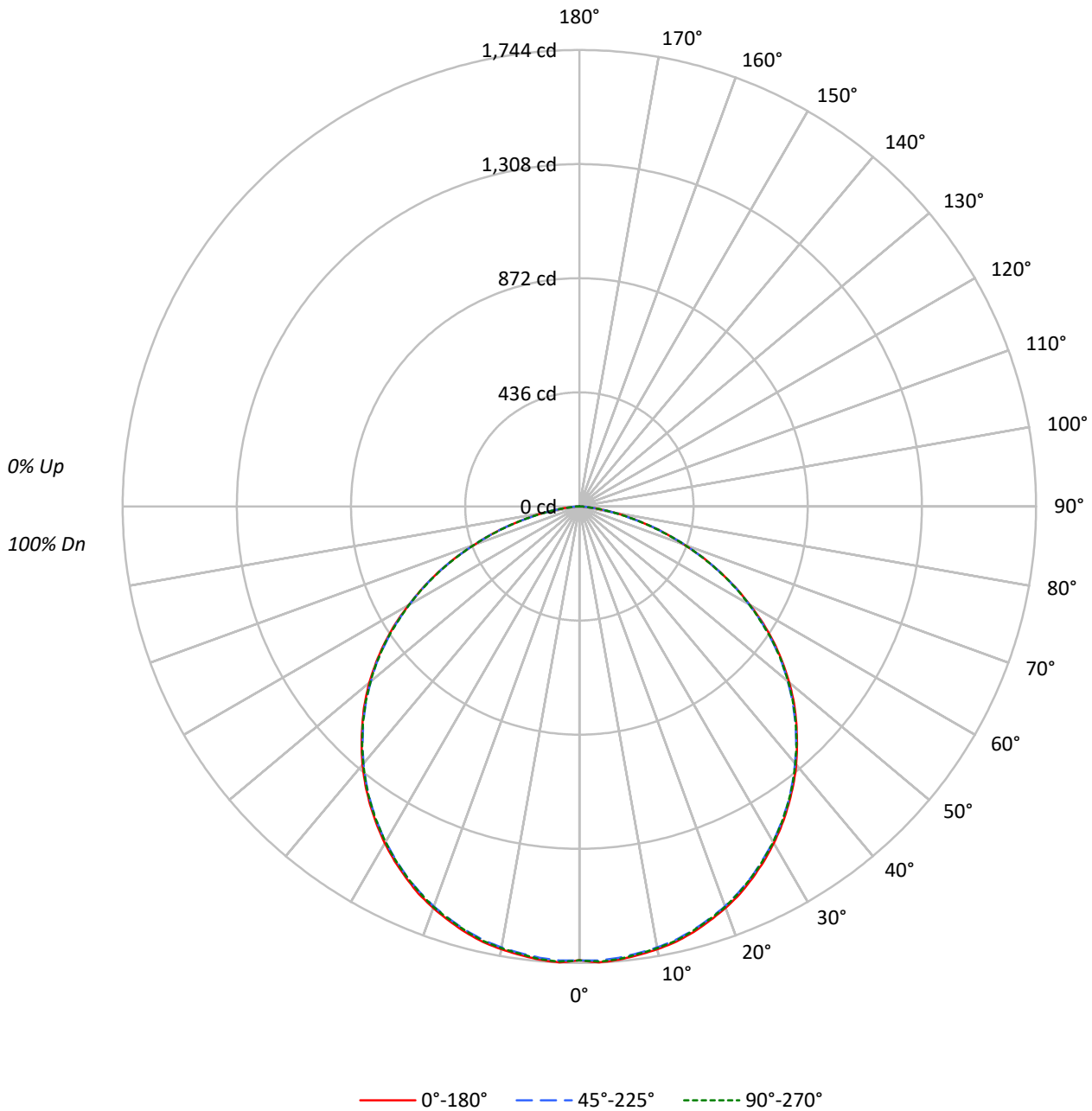
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4849.5 lumens  
Efficiency: N/A  
Efficacy: 121.2 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				20	
RC	80				70				50				30				10	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	4666	4666	4666
5°	4696	4676	4690
10°	4694	4674	4683
15°	4691	4670	4676
20°	4675	4656	4662
25°	4649	4630	4634
30°	4616	4596	4600
35°	4574	4557	4560
40°	4526	4504	4508
45°	4459	4439	4447
50°	4381	4350	4358
55°	4256	4221	4236
60°	4047	4029	4029
65°	3778	3771	3758
70°	3345	3363	3354
75°	2818	2795	2773
80°	2025	1991	1976
85°	1059	1059	1025

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4459 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.2	3.4
10°-20°	472.2	9.7
20°-30°	717.6	14.8
30°-40°	867.4	17.9
40°-50°	900.3	18.6
50°-60°	804.9	16.6
60°-70°	585.2	12.1
70°-80°	287.8	5.9
80°-90°	49.9	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°	1354.0	27.9
0°-40°	2221.4	45.8
0°-60°	3926.6	81.0
0°-90°	4849.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4849.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1734	1734	1734	1734	1734	
5°	1738	1718	1731	1724	1736	165
15°	1684	1664	1676	1672	1678	475
25°	1566	1549	1560	1556	1561	722
35°	1392	1383	1387	1388	1388	871
45°	1172	1166	1166	1169	1169	904
55°	907	902	900	902	903	809
65°	593	596	592	592	590	585
75°	271	273	269	270	267	288
85°	34	35	34	34	33	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1734.1	1734.1	1734.1	1734.1	1734.1
2.5°	1743.7	1723.4	1736.2	1728.7	1740.5
5°	1738.4	1718.0	1730.9	1724.5	1736.2
7.5°	1728.7	1708.4	1721.3	1714.8	1724.5
10°	1718.0	1696.6	1710.5	1704.1	1713.8
12.5°	1704.1	1683.8	1696.6	1691.3	1699.8
15°	1683.8	1664.5	1676.3	1672.0	1678.4
17.5°	1659.1	1639.8	1651.6	1648.4	1653.8
20°	1632.4	1614.1	1625.9	1622.7	1628.1
22.5°	1602.4	1583.1	1593.8	1591.6	1595.9
25°	1565.9	1548.8	1559.5	1556.3	1560.6
27.5°	1527.4	1511.3	1519.9	1519.9	1522.0
30°	1485.6	1470.6	1479.2	1479.2	1480.3
32.5°	1440.6	1428.8	1434.2	1435.3	1435.3
35°	1392.4	1382.8	1387.1	1388.1	1388.1
37.5°	1342.1	1332.4	1335.7	1337.8	1337.8
40°	1288.5	1280.0	1282.1	1284.2	1283.2
42.5°	1230.7	1224.3	1225.3	1227.5	1227.5
45°	1171.8	1166.4	1166.4	1168.6	1168.6
47.5°	1111.8	1106.4	1104.3	1106.4	1106.4
50°	1046.5	1041.1	1039.0	1041.1	1041.1
52.5°	977.9	972.6	972.6	972.6	973.6
55°	907.2	901.9	899.7	901.9	902.9
57.5°	832.2	830.1	826.9	828.0	824.7
60°	751.9	751.9	748.7	750.8	748.7
62.5°	673.7	675.9	672.6	672.6	670.5
65°	593.4	595.5	592.3	592.3	590.2
67.5°	510.9	514.1	509.8	509.8	507.7
70°	425.2	431.7	427.4	428.4	426.3
72.5°	348.1	351.3	347.0	347.0	344.9
75°	271.0	273.1	268.8	269.9	266.7
77.5°	194.9	198.2	193.9	194.9	193.9
80°	130.7	131.7	128.5	129.6	127.5
82.5°	76.0	77.1	76.0	75.0	73.9
85°	34.3	35.3	34.3	34.3	33.2
87.5°	8.6	8.6	8.6	8.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)