

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: P973899

Luminaire Tested: FLR2-22-50HE-L840-CP125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973899  
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-L840-CP125  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

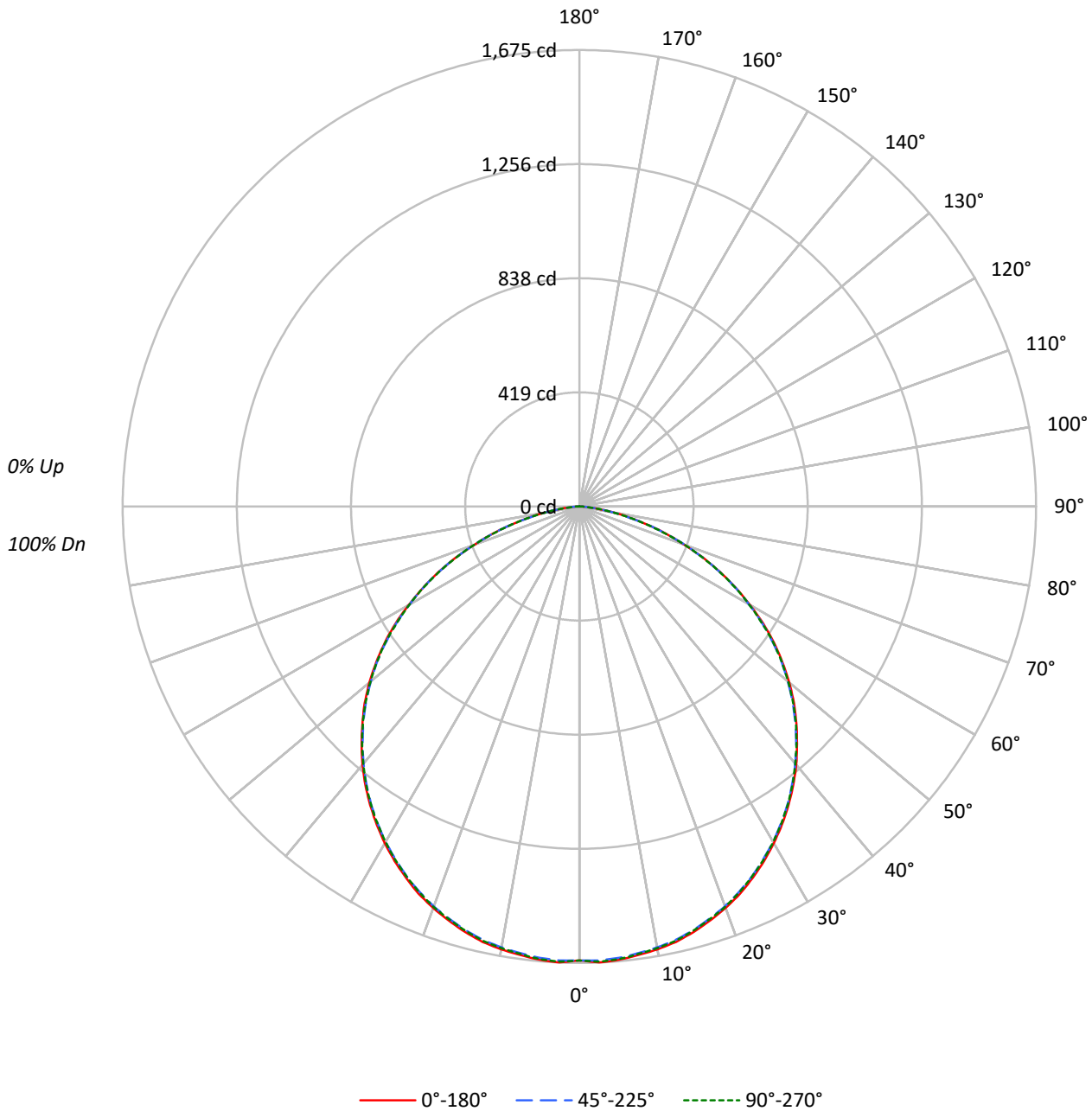
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4658.1 lumens  
Efficiency: N/A  
Efficacy: 116.5 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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CATALOG NUMBER: FLR2-22-50HE-L840-CP125

### 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°	4482	4482	4482
5°	4511	4491	4505
10°	4509	4489	4498
15°	4506	4486	4491
20°	4490	4472	4478
25°	4466	4448	4451
30°	4434	4415	4418
35°	4394	4377	4380
40°	4348	4326	4330
45°	4283	4264	4272
50°	4208	4178	4186
55°	4088	4054	4069
60°	3887	3871	3871
65°	3629	3622	3610
70°	3213	3230	3222
75°	2706	2685	2664
80°	1945	1914	1897
85°	1016	1016	985

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4283 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.7	3.4
10°-20°	453.6	9.7
20°-30°	689.3	14.8
30°-40°	833.1	17.9
40°-50°	864.8	18.6
50°-60°	773.1	16.6
60°-70°	562.1	12.1
70°-80°	276.4	5.9
80°-90°	47.9	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°	1300.6	27.9
0°-40°	2133.7	45.8
0°-60°	3771.6	81.0
0°-90°	4658.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4658.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1666	1666	1666	1666	1666	
5°	1670	1650	1663	1656	1668	159
15°	1617	1599	1610	1606	1612	456
25°	1504	1488	1498	1495	1499	693
35°	1338	1328	1332	1333	1333	837
45°	1126	1120	1120	1122	1122	868
55°	871	866	864	866	867	777
65°	570	572	569	569	567	562
75°	260	262	258	259	256	276
85°	33	34	33	33	32	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1665.7	1665.7	1665.7	1665.7	1665.7
2.5°	1674.9	1655.4	1667.7	1660.5	1671.8
5°	1669.8	1650.2	1662.6	1656.4	1667.7
7.5°	1660.5	1641.0	1653.3	1647.2	1656.4
10°	1650.2	1629.7	1643.0	1636.9	1646.1
12.5°	1636.9	1617.3	1629.7	1624.5	1632.7
15°	1617.3	1598.8	1610.1	1606.0	1612.2
17.5°	1593.7	1575.1	1586.5	1583.4	1588.5
20°	1567.9	1550.4	1561.8	1558.7	1563.8
22.5°	1539.1	1520.6	1530.9	1528.8	1533.0
25°	1504.1	1487.7	1498.0	1494.9	1499.0
27.5°	1467.1	1451.7	1459.9	1459.9	1462.0
30°	1427.0	1412.6	1420.8	1420.8	1421.8
32.5°	1383.8	1372.5	1377.6	1378.6	1378.6
35°	1337.5	1328.2	1332.3	1333.4	1333.4
37.5°	1289.1	1279.9	1282.9	1285.0	1285.0
40°	1237.7	1229.4	1231.5	1233.6	1232.5
42.5°	1182.1	1175.9	1177.0	1179.0	1179.0
45°	1125.5	1120.4	1120.4	1122.5	1122.5
47.5°	1067.9	1062.8	1060.7	1062.8	1062.8
50°	1005.2	1000.0	998.0	1000.0	1000.0
52.5°	939.3	934.2	934.2	934.2	935.2
55°	871.4	866.3	864.2	866.3	867.3
57.5°	799.4	797.3	794.3	795.3	792.2
60°	722.2	722.2	719.2	721.2	719.2
62.5°	647.1	649.2	646.1	646.1	644.0
65°	570.0	572.0	568.9	568.9	566.9
67.5°	490.8	493.8	489.7	489.7	487.7
70°	408.4	414.6	410.5	411.5	409.5
72.5°	334.4	337.5	333.3	333.3	331.3
75°	260.3	262.4	258.2	259.3	256.2
77.5°	187.2	190.3	186.2	187.2	186.2
80°	125.5	126.5	123.5	124.5	122.4
82.5°	73.0	74.1	73.0	72.0	71.0
85°	32.9	34.0	32.9	32.9	31.9
87.5°	8.2	8.2	8.2	8.2	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)