

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: P973989

Luminaire Tested: FLR2-22-50HE-L850-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973989
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

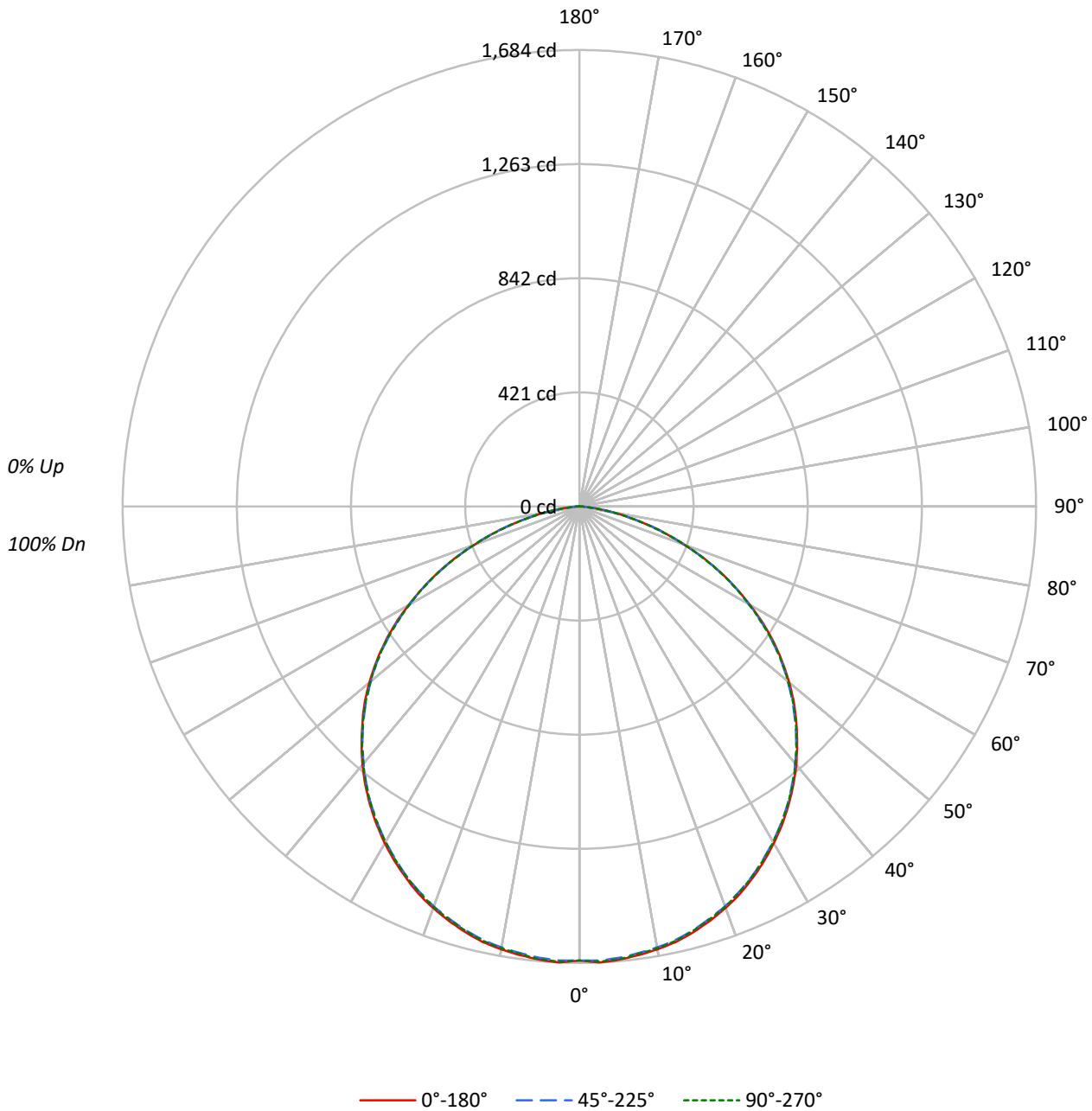
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4683.6 lumens
Efficiency: N/A
Efficacy: 117.1 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): 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°	4507	4507	4507
5°	4535	4516	4530
10°	4534	4514	4523
15°	4530	4510	4516
20°	4515	4497	4503
25°	4491	4472	4475
30°	4458	4439	4442
35°	4418	4401	4404
40°	4372	4350	4353
45°	4307	4287	4295
50°	4231	4201	4209
55°	4111	4077	4092
60°	3908	3892	3892
65°	3649	3643	3629
70°	3231	3248	3239
75°	2721	2699	2678
80°	1956	1923	1908
85°	1022	1022	991

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4307 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.6	3.4
10°-20°	456.1	9.7
20°-30°	693.1	14.8
30°-40°	837.7	17.9
40°-50°	869.5	18.6
50°-60°	777.4	16.6
60°-70°	565.2	12.1
70°-80°	277.9	5.9
80°-90°	48.2	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°	1307.7	27.9
0°-40°	2145.4	45.8
0°-60°	3792.3	81.0
0°-90°	4683.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4683.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1675	1675	1675	1675	1675	
5°	1679	1659	1672	1666	1677	160
15°	1626	1608	1619	1615	1621	459
25°	1512	1496	1506	1503	1507	697
35°	1345	1336	1340	1341	1341	841
45°	1132	1126	1126	1129	1129	873
55°	876	871	869	871	872	781
65°	573	575	572	572	570	565
75°	262	264	260	261	258	278
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°	1674.8	1674.8	1674.8	1674.8	1674.8
2.5°	1684.1	1664.4	1676.9	1669.6	1681.0
5°	1678.9	1659.3	1671.7	1665.5	1676.9
7.5°	1669.6	1650.0	1662.4	1656.2	1665.5
10°	1659.3	1638.6	1652.0	1645.8	1655.1
12.5°	1645.8	1626.2	1638.6	1633.4	1641.7
15°	1626.2	1607.6	1618.9	1614.8	1621.0
17.5°	1602.4	1583.8	1595.1	1592.0	1597.2
20°	1576.5	1558.9	1570.3	1567.2	1572.4
22.5°	1547.6	1528.9	1539.3	1537.2	1541.3
25°	1512.4	1495.8	1506.2	1503.1	1507.2
27.5°	1475.1	1459.6	1467.9	1467.9	1470.0
30°	1434.8	1420.3	1428.6	1428.6	1429.6
32.5°	1391.4	1380.0	1385.1	1386.2	1386.2
35°	1344.8	1335.5	1339.6	1340.7	1340.7
37.5°	1296.2	1286.9	1290.0	1292.0	1292.0
40°	1244.5	1236.2	1238.3	1240.3	1239.3
42.5°	1188.6	1182.4	1183.4	1185.5	1185.5
45°	1131.7	1126.5	1126.5	1128.6	1128.6
47.5°	1073.8	1068.6	1066.5	1068.6	1068.6
50°	1010.7	1005.5	1003.4	1005.5	1005.5
52.5°	944.5	939.3	939.3	939.3	940.3
55°	876.2	871.0	868.9	871.0	872.1
57.5°	803.8	801.7	798.6	799.6	796.5
60°	726.2	726.2	723.1	725.2	723.1
62.5°	650.7	652.7	649.6	649.6	647.6
65°	573.1	575.2	572.1	572.1	570.0
67.5°	493.4	496.5	492.4	492.4	490.3
70°	410.7	416.9	412.8	413.8	411.7
72.5°	336.2	339.3	335.2	335.2	333.1
75°	261.7	263.8	259.6	260.7	257.6
77.5°	188.3	191.4	187.2	188.3	187.2
80°	126.2	127.2	124.1	125.2	123.1
82.5°	73.4	74.5	73.4	72.4	71.4
85°	33.1	34.1	33.1	33.1	32.1
87.5°	8.3	8.3	8.3	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)