

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: P973995

Luminaire Tested: FLR2-22-50HE-L850-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973995
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

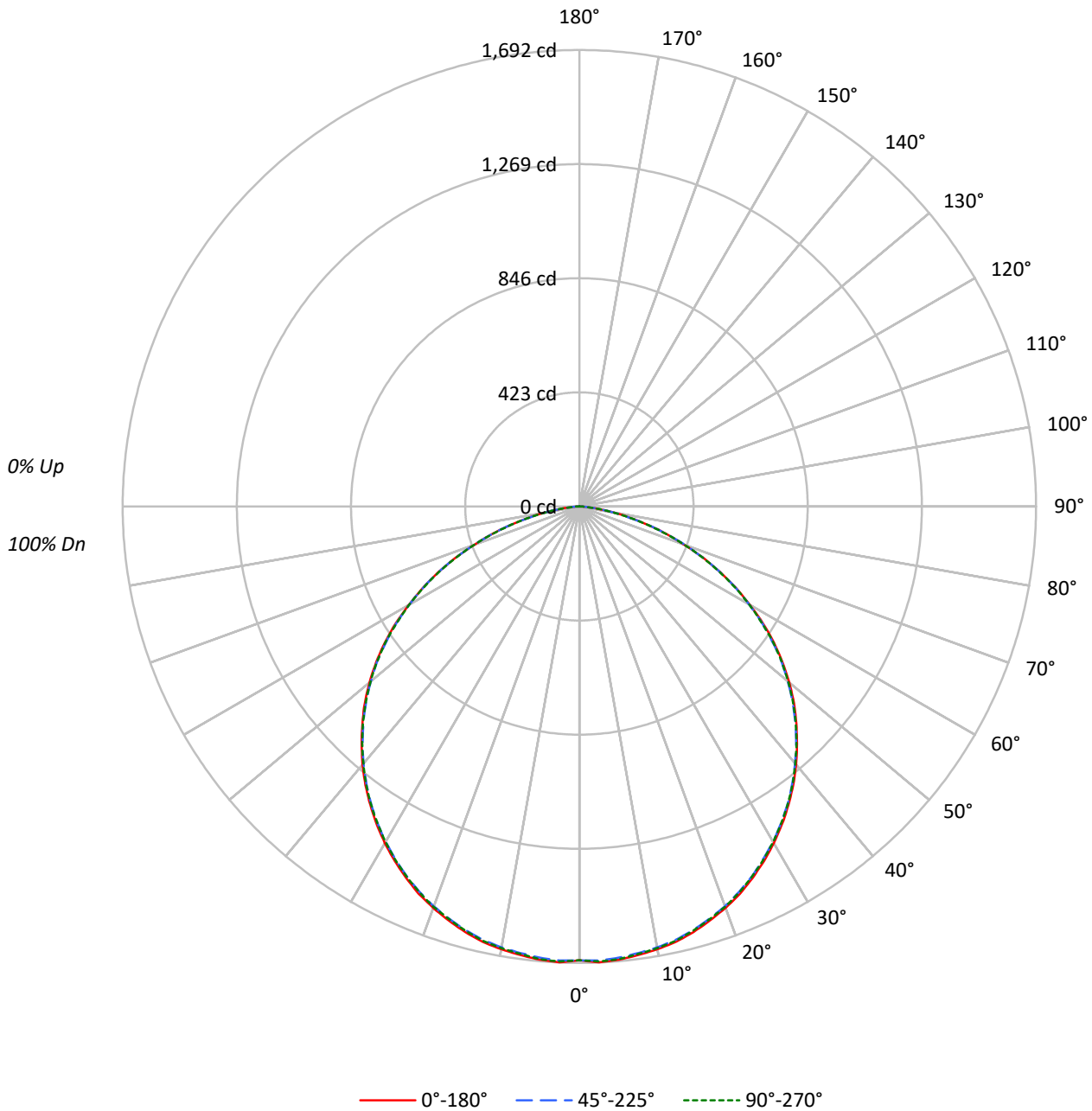
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4704.4 lumens
Efficiency: N/A
Efficacy: 117.6 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°	4527	4527	4527
5°	4555	4536	4550
10°	4554	4534	4543
15°	4550	4530	4536
20°	4535	4517	4523
25°	4510	4492	4495
30°	4478	4459	4462
35°	4437	4420	4424
40°	4391	4369	4373
45°	4326	4306	4314
50°	4250	4219	4228
55°	4129	4095	4109
60°	3926	3909	3909
65°	3665	3659	3645
70°	3246	3262	3253
75°	2733	2712	2690
80°	1965	1932	1915
85°	1025	1025	994

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4326 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.3	3.4
10°-20°	458.1	9.7
20°-30°	696.1	14.8
30°-40°	841.4	17.9
40°-50°	873.3	18.6
50°-60°	780.8	16.6
60°-70°	567.7	12.1
70°-80°	279.2	5.9
80°-90°	48.4	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°	1313.5	27.9
0°-40°	2154.9	45.8
0°-60°	3809.1	81.0
0°-90°	4704.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4704.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	1686	1667	1679	1673	1684	160
15°	1633	1615	1626	1622	1628	461
25°	1519	1502	1513	1510	1514	700
35°	1351	1341	1346	1347	1347	845
45°	1137	1132	1132	1134	1134	877
55°	880	875	873	875	876	784
65°	576	578	575	575	572	568
75°	263	265	261	262	259	279
85°	33	34	33	33	32	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1682.2	1682.2	1682.2	1682.2	1682.2
2.5°	1691.6	1671.8	1684.3	1677.0	1688.4
5°	1686.4	1666.6	1679.1	1672.9	1684.3
7.5°	1677.0	1657.3	1669.7	1663.5	1672.9
10°	1666.6	1645.8	1659.4	1653.1	1662.5
12.5°	1653.1	1633.4	1645.8	1640.7	1649.0
15°	1633.4	1614.7	1626.1	1621.9	1628.2
17.5°	1609.5	1590.8	1602.2	1599.1	1604.3
20°	1583.5	1565.8	1577.3	1574.2	1579.3
22.5°	1554.4	1535.7	1546.1	1544.0	1548.2
25°	1519.1	1502.5	1512.8	1509.7	1513.9
27.5°	1481.7	1466.1	1474.4	1474.4	1476.5
30°	1441.2	1426.6	1434.9	1434.9	1436.0
32.5°	1397.5	1386.1	1391.3	1392.3	1392.3
35°	1350.8	1341.4	1345.6	1346.6	1346.6
37.5°	1301.9	1292.6	1295.7	1297.8	1297.8
40°	1250.0	1241.7	1243.7	1245.8	1244.8
42.5°	1193.9	1187.6	1188.7	1190.7	1190.7
45°	1136.7	1131.5	1131.5	1133.6	1133.6
47.5°	1078.5	1073.3	1071.3	1073.3	1073.3
50°	1015.1	1010.0	1007.9	1010.0	1010.0
52.5°	948.6	943.5	943.5	943.5	944.5
55°	880.1	874.9	872.8	874.9	875.9
57.5°	807.3	805.3	802.1	803.2	800.1
60°	729.4	729.4	726.3	728.4	726.3
62.5°	653.6	655.6	652.5	652.5	650.4
65°	575.6	577.7	574.6	574.6	572.5
67.5°	495.6	498.7	494.6	494.6	492.5
70°	412.5	418.7	414.6	415.6	413.5
72.5°	337.7	340.8	336.7	336.7	334.6
75°	262.9	265.0	260.8	261.8	258.7
77.5°	189.1	192.2	188.1	189.1	188.1
80°	126.8	127.8	124.7	125.7	123.6
82.5°	73.8	74.8	73.8	72.7	71.7
85°	33.2	34.3	33.2	33.2	32.2
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)