

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: P974420

Luminaire Tested: FLR2-24-40-L850-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974420
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-40-L850-CP250
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-40-L850-CP250
Ballast/Driver: -

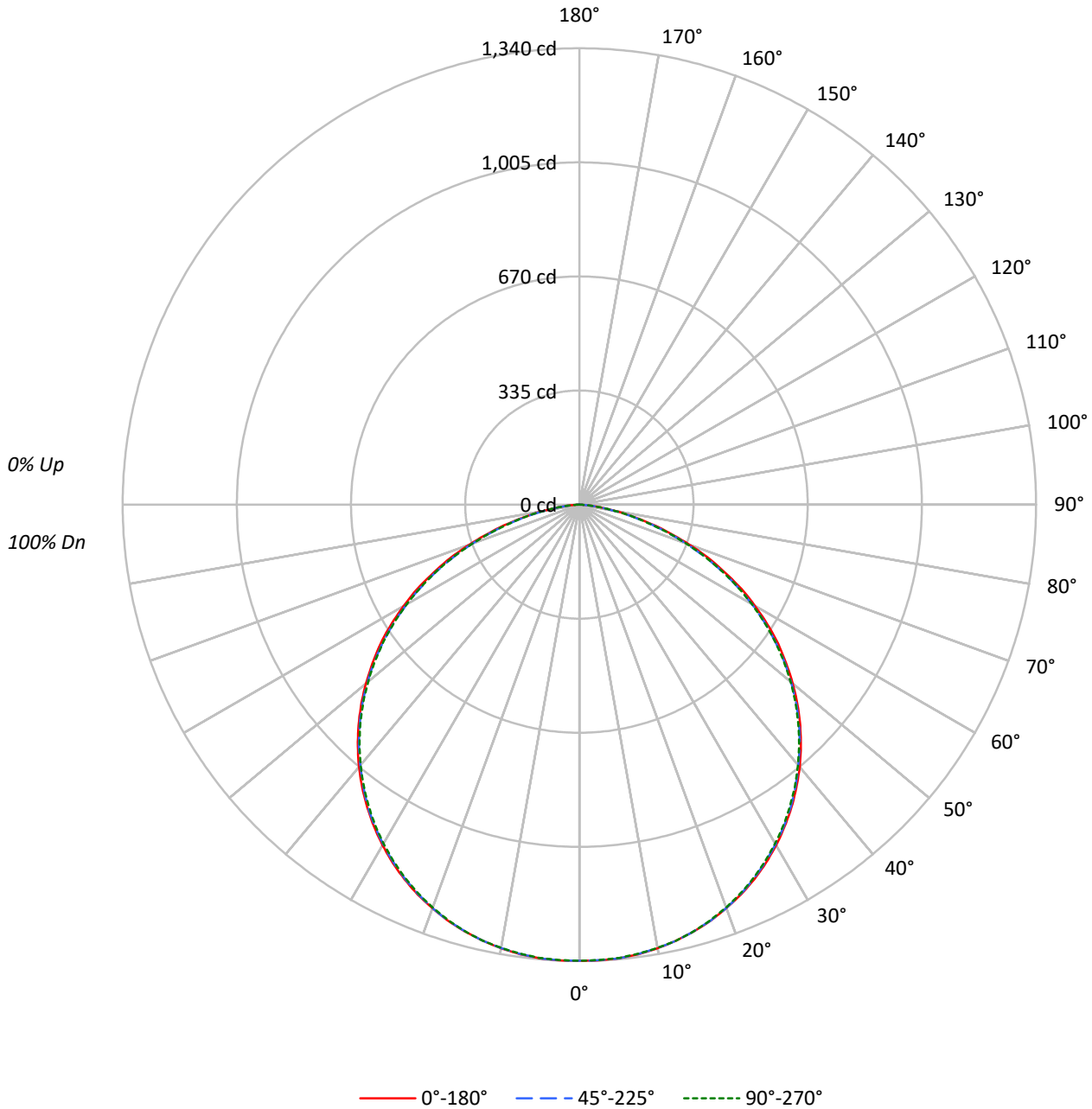
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3785.8 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 30.3
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	0
RW	70	50	30	10	70	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
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	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	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1802	1802	1802
5°	1806	1806	1805
10°	1807	1806	1806
15°	1808	1807	1807
20°	1806	1805	1802
25°	1802	1799	1796
30°	1794	1789	1785
35°	1782	1778	1771
40°	1767	1756	1753
45°	1744	1734	1729
50°	1711	1698	1693
55°	1671	1647	1645
60°	1601	1573	1573
65°	1498	1463	1467
70°	1348	1306	1303
75°	1132	1087	1082
80°	827	786	819
85°	468	431	438

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1744 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.1	3.4
10°-20°	366.3	9.7
20°-30°	558.5	14.8
30°-40°	676.6	17.9
40°-50°	702.8	18.6
50°-60°	628.7	16.6
60°-70°	458.2	12.1
70°-80°	226.9	6.0
80°-90°	40.6	1.1
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°	1051.9	27.8
0°-40°	1728.5	45.7
0°-60°	3060.0	80.8
0°-90°	3785.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3785.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1337	1338	1337	1337	1336	127
15°	1298	1297	1297	1298	1297	366
25°	1214	1213	1212	1211	1210	560
35°	1085	1084	1082	1080	1078	679
45°	916	915	911	909	908	706
55°	712	707	702	702	701	635
65°	470	467	460	461	461	466
75°	218	214	209	213	208	232
85°	30	28	28	28	28	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1339.5	1339.5	1339.5	1339.5	1339.5
2.5°	1339.5	1339.0	1339.0	1339.5	1338.5
5°	1337.1	1337.5	1337.1	1337.1	1336.1
7.5°	1331.8	1331.3	1330.8	1331.3	1329.9
10°	1322.6	1322.6	1322.2	1322.6	1321.7
12.5°	1311.6	1311.6	1311.6	1312.1	1311.6
15°	1297.7	1297.2	1297.2	1298.1	1297.2
17.5°	1281.3	1280.8	1280.8	1280.4	1279.4
20°	1261.1	1261.1	1260.6	1260.2	1258.7
22.5°	1239.5	1239.0	1237.6	1237.6	1235.7
25°	1214.0	1212.6	1211.6	1211.1	1209.7
27.5°	1186.2	1184.2	1182.8	1181.8	1180.4
30°	1154.9	1153.0	1151.5	1150.1	1149.1
32.5°	1121.3	1120.3	1117.9	1117.4	1115.5
35°	1085.2	1083.8	1082.3	1080.4	1078.5
37.5°	1046.8	1045.3	1042.0	1041.0	1039.6
40°	1005.9	1004.0	999.7	999.7	998.2
42.5°	962.2	960.3	957.4	955.5	954.5
45°	916.5	914.6	911.2	909.3	908.4
47.5°	868.0	866.5	862.7	861.3	859.8
50°	817.5	815.6	811.3	810.3	808.9
52.5°	764.7	763.7	757.9	757.4	756.0
55°	712.3	707.0	702.2	702.2	701.2
57.5°	654.6	650.8	644.5	644.5	643.5
60°	595.0	591.6	584.4	585.4	584.4
62.5°	536.8	529.6	522.9	525.8	523.4
65°	470.5	466.7	459.5	461.4	460.9
67.5°	410.0	402.8	396.0	399.9	397.9
70°	342.7	338.8	332.1	335.9	331.1
72.5°	279.2	275.9	269.1	273.5	268.7
75°	217.7	214.4	209.1	212.9	208.1
77.5°	159.6	157.2	152.4	156.2	157.2
80°	106.7	103.8	101.4	104.8	105.7
82.5°	62.5	60.6	59.6	60.1	62.5
85°	30.3	27.9	27.9	28.4	28.4
87.5°	8.2	7.2	8.2	8.7	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)