

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: P974469

Luminaire Tested: FLR2-24-45-L950-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974469
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: FLR2-24-45-L950-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L950-CP187
Ballast/Driver: -

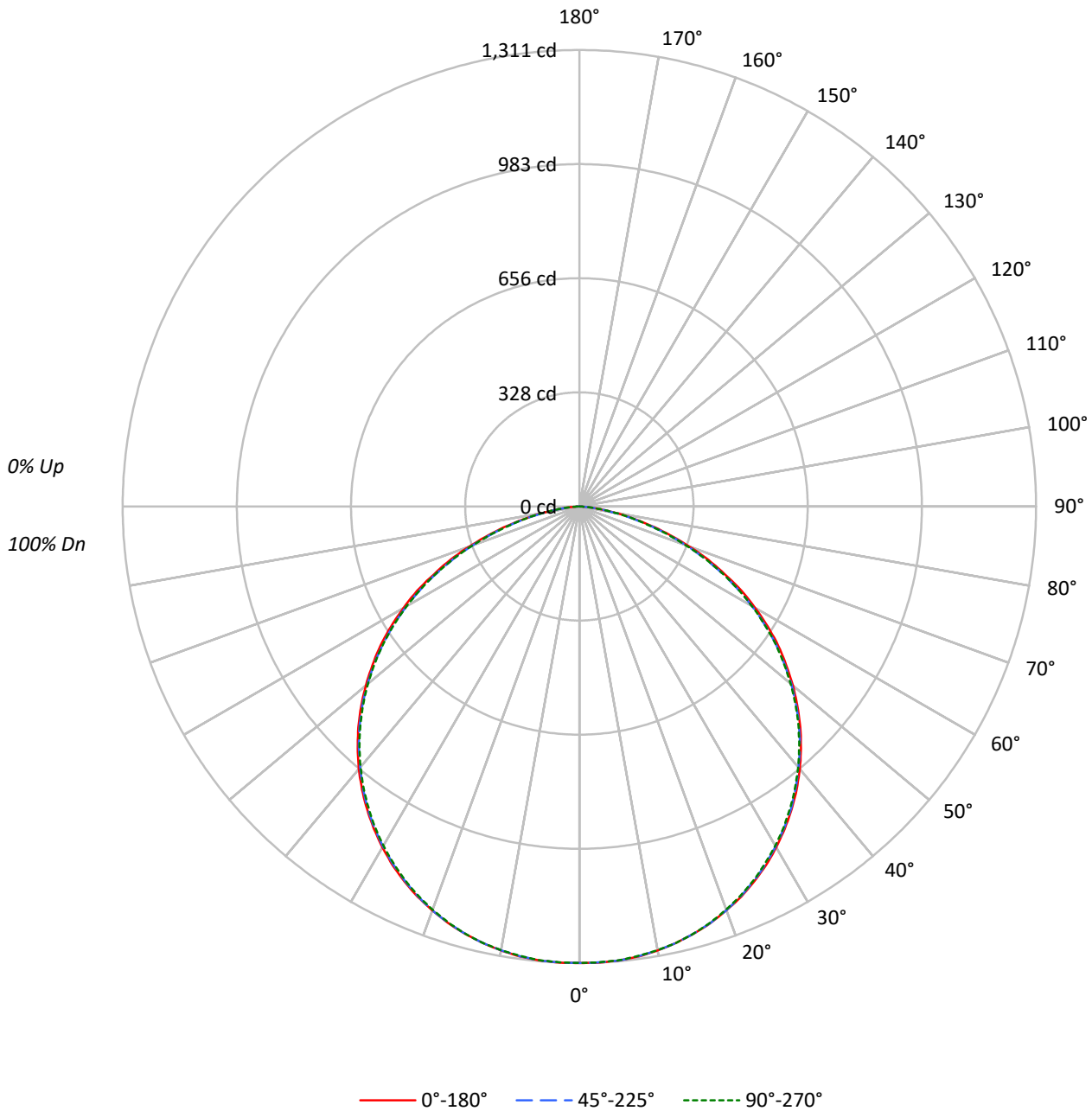
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3706.1 lumens
Efficiency: N/A
Efficacy: 104.1 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): 35.6
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°	1764	1764	1764
5°	1768	1768	1767
10°	1769	1768	1768
15°	1769	1769	1769
20°	1768	1767	1764
25°	1764	1761	1758
30°	1757	1751	1748
35°	1745	1740	1734
40°	1730	1719	1716
45°	1707	1697	1692
50°	1675	1662	1657
55°	1636	1612	1610
60°	1567	1540	1540
65°	1466	1432	1436
70°	1320	1279	1275
75°	1108	1064	1059
80°	810	769	802
85°	457	421	429

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1707 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	3.4
10°-20°	358.6	9.7
20°-30°	546.7	14.8
30°-40°	662.4	17.9
40°-50°	688.0	18.6
50°-60°	615.5	16.6
60°-70°	448.6	12.1
70°-80°	222.2	6.0
80°-90°	39.7	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°	1029.7	27.8
0°-40°	1692.1	45.7
0°-60°	2995.6	80.8
0°-90°	3706.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3706.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1311	1311	1311	1311	1311	
5°	1309	1309	1309	1309	1308	125
15°	1270	1270	1270	1271	1270	359
25°	1188	1187	1186	1186	1184	548
35°	1062	1061	1060	1058	1056	664
45°	897	895	892	890	889	691
55°	697	692	687	687	686	621
65°	461	457	450	452	451	457
75°	213	210	205	208	204	227
85°	30	27	27	28	28	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1311.3	1311.3	1311.3	1311.3	1311.3
2.5°	1311.3	1310.8	1310.8	1311.3	1310.3
5°	1308.9	1309.4	1308.9	1308.9	1308.0
7.5°	1303.8	1303.3	1302.8	1303.3	1301.9
10°	1294.8	1294.8	1294.3	1294.8	1293.9
12.5°	1284.0	1284.0	1284.0	1284.5	1284.0
15°	1270.3	1269.9	1269.9	1270.8	1269.9
17.5°	1254.3	1253.9	1253.9	1253.4	1252.5
20°	1234.6	1234.6	1234.1	1233.6	1232.2
22.5°	1213.4	1212.9	1211.5	1211.5	1209.7
25°	1188.5	1187.1	1186.1	1185.7	1184.2
27.5°	1161.2	1159.3	1157.9	1157.0	1155.5
30°	1130.6	1128.7	1127.3	1125.9	1125.0
32.5°	1097.7	1096.7	1094.4	1093.9	1092.0
35°	1062.4	1061.0	1059.6	1057.7	1055.8
37.5°	1024.7	1023.3	1020.0	1019.1	1017.7
40°	984.8	982.9	978.6	978.6	977.2
42.5°	941.9	940.1	937.2	935.4	934.4
45°	897.2	895.4	892.1	890.2	889.2
47.5°	849.7	848.3	844.5	843.1	841.7
50°	800.3	798.4	794.2	793.3	791.8
52.5°	748.6	747.6	742.0	741.5	740.1
55°	697.3	692.1	687.4	687.4	686.5
57.5°	640.8	637.1	630.9	630.9	630.0
60°	582.5	579.2	572.1	573.1	572.1
62.5°	525.5	518.5	511.9	514.7	512.4
65°	460.6	456.9	449.8	451.7	451.2
67.5°	401.3	394.3	387.7	391.5	389.6
70°	335.5	331.7	325.1	328.9	324.2
72.5°	273.4	270.1	263.5	267.7	263.0
75°	213.1	209.8	204.7	208.4	203.7
77.5°	156.2	153.9	149.1	152.9	153.9
80°	104.5	101.6	99.3	102.6	103.5
82.5°	61.2	59.3	58.3	58.8	61.2
85°	29.6	27.3	27.3	27.8	27.8
87.5°	8.0	7.1	8.0	8.5	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)