

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: P974357

Luminaire Tested: FLR2-24-45-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974357
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-L940-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L940-CP187
Ballast/Driver: -

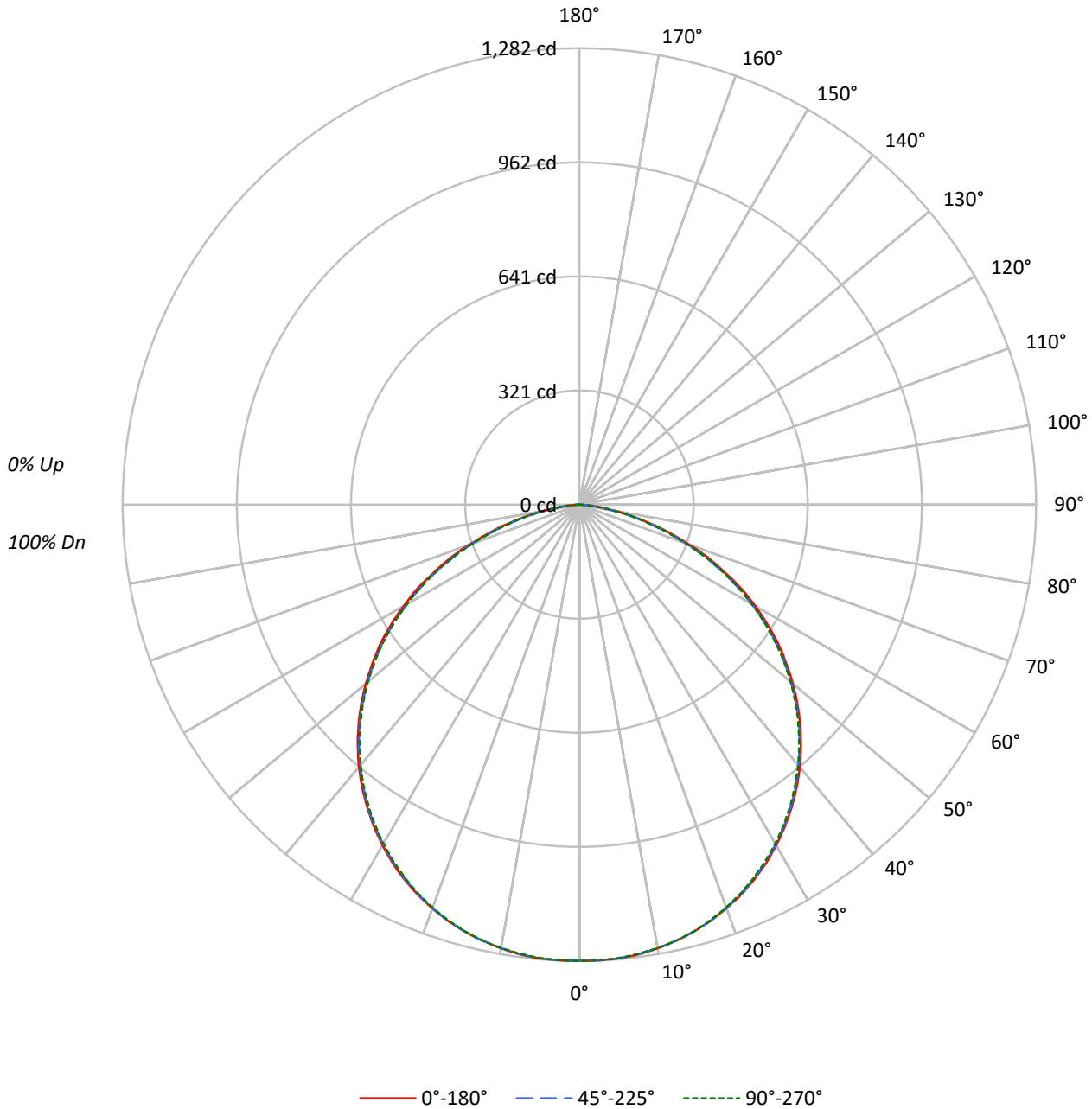
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3622.8 lumens
Efficiency: N/A
Efficacy: 101.8 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										
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	100	100	100	100	100														
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85	85	85	85	85														
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71	71	71	71	71	71	71														
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60	60	60	60	60														
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51	51	51	51	51	51	51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44	44	44	44	44	44	44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38	38	38	38	38	38	38														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34	34	34	34	34	34	34														
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30	30	30	30	30	30	30														
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27	27	27	27	27	27	27														
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25	25	25	25	25	25	25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1725	1725	1725
5°	1728	1728	1727
10°	1729	1729	1728
15°	1730	1729	1729
20°	1728	1727	1725
25°	1725	1721	1719
30°	1717	1712	1709
35°	1706	1701	1695
40°	1691	1680	1678
45°	1669	1659	1654
50°	1638	1625	1620
55°	1599	1576	1574
60°	1532	1505	1505
65°	1434	1400	1404
70°	1290	1250	1247
75°	1083	1040	1035
80°	791	752	784
85°	448	412	418

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1669 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.7	3.4
10°-20°	350.5	9.7
20°-30°	534.4	14.8
30°-40°	647.5	17.9
40°-50°	672.6	18.6
50°-60°	601.7	16.6
60°-70°	438.5	12.1
70°-80°	217.2	6.0
80°-90°	38.8	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°	1006.6	27.8
0°-40°	1654.1	45.7
0°-60°	2928.3	80.8
0°-90°	3622.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3622.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1282	1282	1282	1282	1282	
5°	1280	1280	1280	1280	1279	122
15°	1242	1241	1241	1242	1241	351
25°	1162	1160	1160	1159	1158	535
35°	1038	1037	1036	1034	1032	650
45°	877	875	872	870	869	676
55°	682	677	672	672	671	607
65°	450	447	440	442	441	446
75°	208	205	200	204	199	222
85°	29	27	27	27	27	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1281.8	1281.8	1281.8	1281.8	1281.8
2.5°	1281.8	1281.4	1281.4	1281.8	1280.9
5°	1279.5	1280.0	1279.5	1279.5	1278.6
7.5°	1274.5	1274.0	1273.5	1274.0	1272.6
10°	1265.7	1265.7	1265.3	1265.7	1264.8
12.5°	1255.1	1255.1	1255.1	1255.6	1255.1
15°	1241.8	1241.3	1241.3	1242.3	1241.3
17.5°	1226.2	1225.7	1225.7	1225.2	1224.3
20°	1206.8	1206.8	1206.4	1205.9	1204.5
22.5°	1186.1	1185.7	1184.3	1184.3	1182.5
25°	1161.8	1160.4	1159.5	1159.0	1157.6
27.5°	1135.1	1133.3	1131.9	1131.0	1129.6
30°	1105.2	1103.4	1102.0	1100.6	1099.7
32.5°	1073.0	1072.1	1069.8	1069.3	1067.5
35°	1038.5	1037.1	1035.8	1033.9	1032.1
37.5°	1001.7	1000.3	997.1	996.2	994.8
40°	962.6	960.8	956.6	956.6	955.3
42.5°	920.8	918.9	916.2	914.3	913.4
45°	877.1	875.2	872.0	870.2	869.3
47.5°	830.6	829.2	825.6	824.2	822.8
50°	782.3	780.5	776.4	775.4	774.1
52.5°	731.7	730.8	725.3	724.8	723.5
55°	681.6	676.6	672.0	672.0	671.0
57.5°	626.4	622.7	616.8	616.8	615.8
60°	569.4	566.2	559.3	560.2	559.3
62.5°	513.7	506.8	500.4	503.2	500.9
65°	450.3	446.6	439.7	441.5	441.1
67.5°	392.3	385.4	379.0	382.7	380.8
70°	327.9	324.2	317.8	321.5	316.9
72.5°	267.2	264.0	257.6	261.7	257.1
75°	208.3	205.1	200.1	203.7	199.1
77.5°	152.7	150.4	145.8	149.5	150.4
80°	102.1	99.3	97.0	100.3	101.2
82.5°	59.8	58.0	57.0	57.5	59.8
85°	29.0	26.7	26.7	27.1	27.1
87.5°	7.8	6.9	7.8	8.3	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)