

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: P974300

Luminaire Tested: FLR2-24-40-L840-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974300
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-L840-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-40-L840-CP187
Ballast/Driver: -

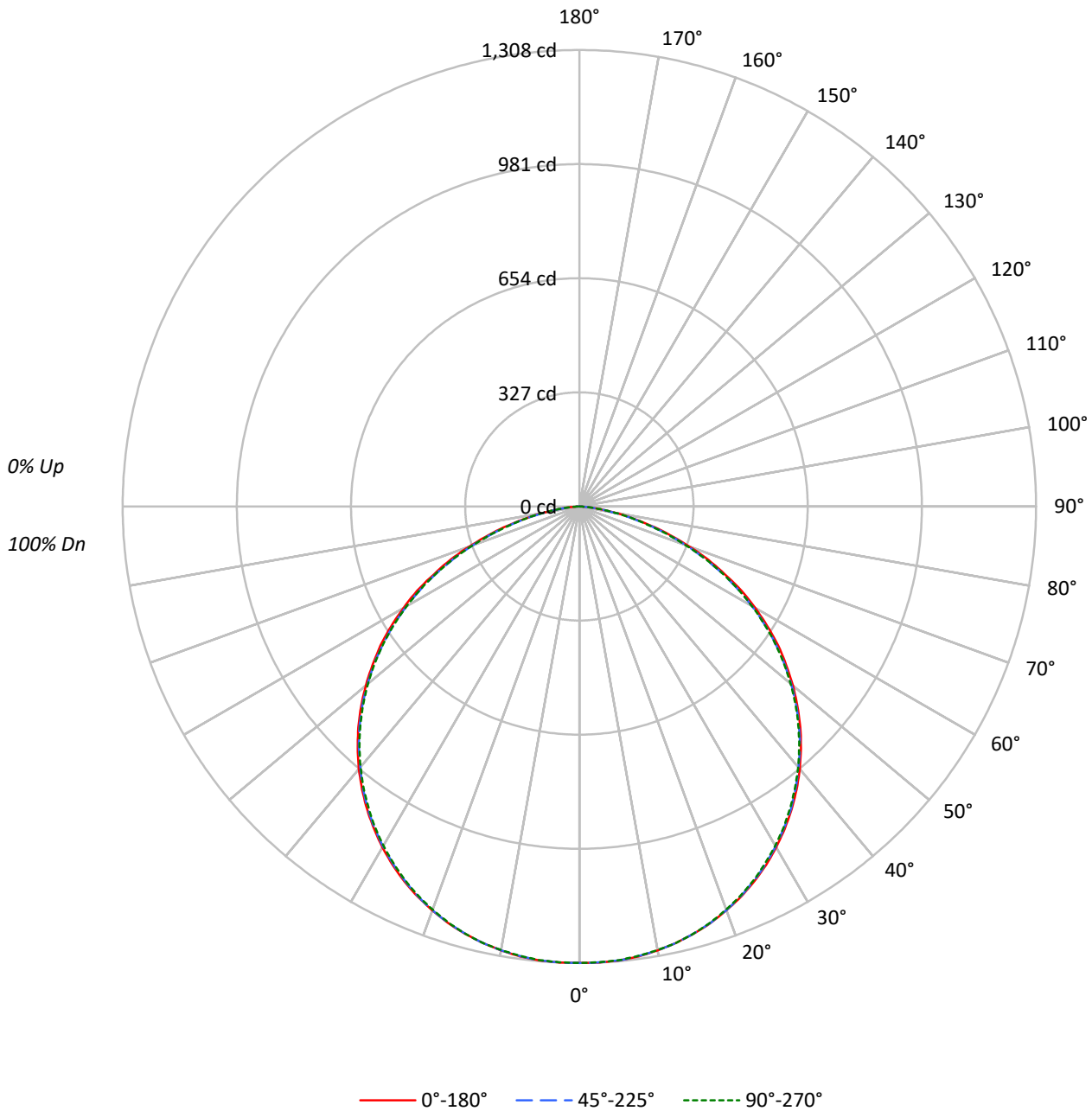
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3697.2 lumens
Efficiency: N/A
Efficacy: 122.0 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°	1760	1760	1760
5°	1764	1764	1762
10°	1765	1764	1764
15°	1765	1765	1765
20°	1764	1763	1760
25°	1760	1757	1754
30°	1752	1747	1744
35°	1741	1736	1730
40°	1725	1715	1712
45°	1703	1693	1688
50°	1671	1658	1654
55°	1632	1609	1606
60°	1564	1536	1536
65°	1463	1429	1433
70°	1317	1276	1272
75°	1105	1062	1056
80°	807	767	800
85°	457	420	428

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1703 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.2	3.4
10°-20°	357.7	9.7
20°-30°	545.4	14.8
30°-40°	660.8	17.9
40°-50°	686.4	18.6
50°-60°	614.0	16.6
60°-70°	447.5	12.1
70°-80°	221.6	6.0
80°-90°	39.6	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°	1027.3	27.8
0°-40°	1688.1	45.7
0°-60°	2988.5	80.8
0°-90°	3697.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3697.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1306	1306	1306	1306	1305	124
15°	1267	1267	1267	1268	1267	358
25°	1186	1184	1183	1183	1181	546
35°	1060	1058	1057	1055	1053	663
45°	895	893	890	888	887	690
55°	696	690	686	686	685	620
65°	460	456	449	451	450	456
75°	213	209	204	208	203	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°	1308.2	1308.2	1308.2	1308.2	1308.2
2.5°	1308.2	1307.7	1307.7	1308.2	1307.2
5°	1305.8	1306.3	1305.8	1305.8	1304.9
7.5°	1300.7	1300.2	1299.7	1300.2	1298.8
10°	1291.7	1291.7	1291.3	1291.7	1290.8
12.5°	1280.9	1280.9	1280.9	1281.4	1280.9
15°	1267.3	1266.9	1266.9	1267.8	1266.9
17.5°	1251.4	1250.9	1250.9	1250.4	1249.5
20°	1231.7	1231.7	1231.2	1230.7	1229.3
22.5°	1210.5	1210.1	1208.7	1208.7	1206.8
25°	1185.7	1184.2	1183.3	1182.8	1181.4
27.5°	1158.4	1156.6	1155.1	1154.2	1152.8
30°	1127.9	1126.0	1124.6	1123.2	1122.3
32.5°	1095.1	1094.1	1091.8	1091.3	1089.4
35°	1059.9	1058.5	1057.0	1055.2	1053.3
37.5°	1022.3	1020.9	1017.6	1016.7	1015.3
40°	982.4	980.5	976.3	976.3	974.9
42.5°	939.7	937.8	935.0	933.1	932.2
45°	895.1	893.2	889.9	888.1	887.1
47.5°	847.7	846.3	842.5	841.1	839.7
50°	798.4	796.5	792.3	791.4	790.0
52.5°	746.8	745.8	740.2	739.7	738.3
55°	695.6	690.5	685.8	685.8	684.8
57.5°	639.3	635.5	629.4	629.4	628.5
60°	581.1	577.8	570.8	571.7	570.8
62.5°	524.3	517.3	510.7	513.5	511.2
65°	459.5	455.8	448.7	450.6	450.1
67.5°	400.4	393.3	386.8	390.5	388.6
70°	334.7	330.9	324.3	328.1	323.4
72.5°	272.7	269.4	262.9	267.1	262.4
75°	212.6	209.3	204.2	207.9	203.2
77.5°	155.8	153.5	148.8	152.5	153.5
80°	104.2	101.4	99.0	102.3	103.3
82.5°	61.0	59.1	58.2	58.7	61.0
85°	29.6	27.2	27.2	27.7	27.7
87.5°	8.0	7.0	8.0	8.4	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)