

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: P974133

Luminaire Tested: FLR2-24-45-L930-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974133
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-L930-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L930-CP187
Ballast/Driver: -

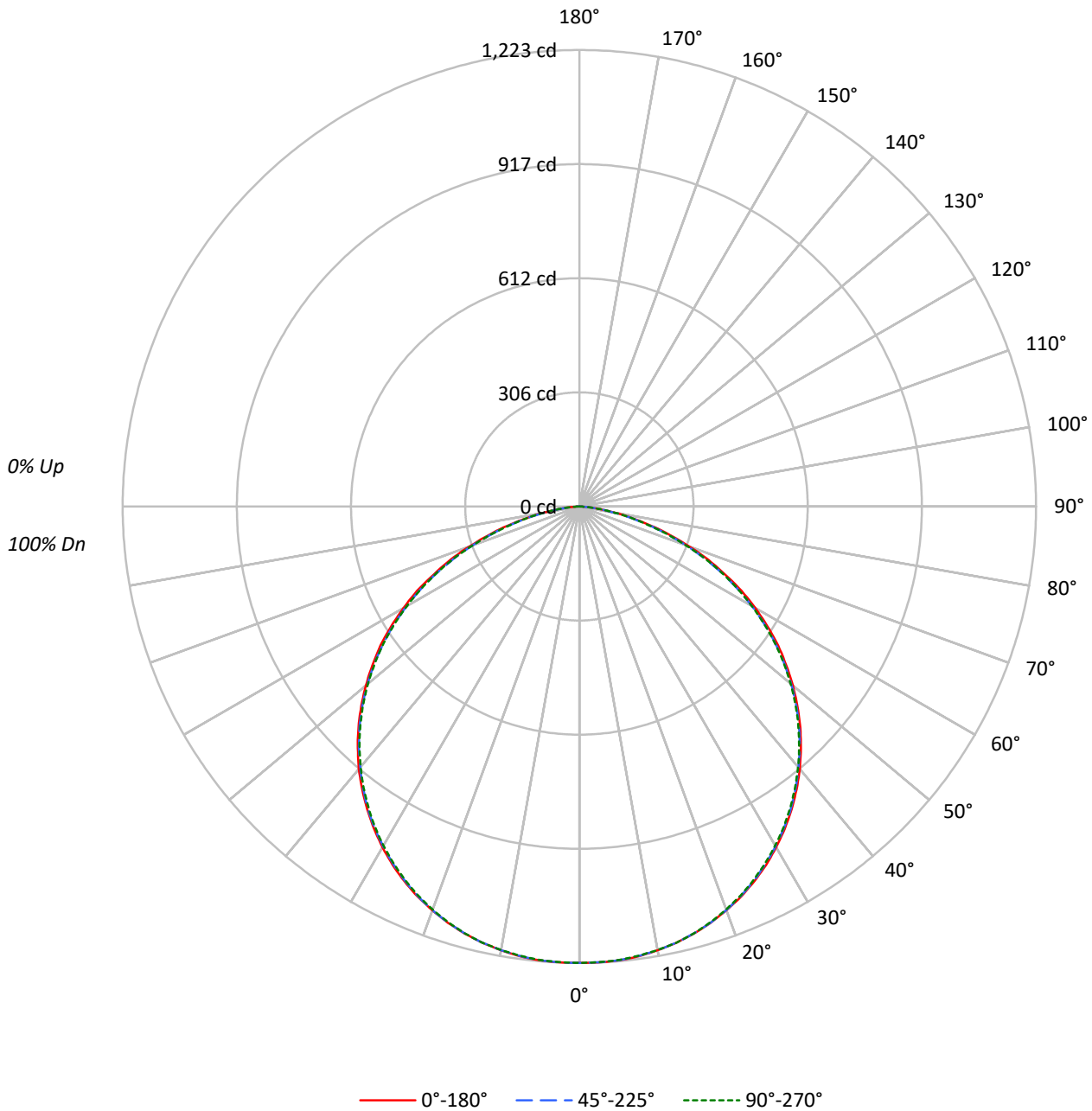
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3456.2 lumens
Efficiency: N/A
Efficacy: 97.1 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										
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°	1645	1645	1645
5°	1649	1649	1647
10°	1650	1649	1649
15°	1650	1650	1650
20°	1649	1648	1645
25°	1646	1642	1640
30°	1638	1633	1630
35°	1627	1623	1617
40°	1613	1603	1601
45°	1592	1583	1578
50°	1562	1550	1546
55°	1525	1504	1502
60°	1462	1436	1436
65°	1368	1336	1340
70°	1231	1193	1189
75°	1033	992	988
80°	755	717	748
85°	426	392	400

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1592 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	3.4
10°-20°	334.4	9.7
20°-30°	509.8	14.8
30°-40°	617.7	17.9
40°-50°	641.6	18.6
50°-60°	574.0	16.6
60°-70°	418.3	12.1
70°-80°	207.2	6.0
80°-90°	37.0	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°	960.3	27.8
0°-40°	1578.0	45.7
0°-60°	2793.7	80.8
0°-90°	3456.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3456.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1223	1223	1223	1223	1223	
5°	1221	1221	1221	1221	1220	116
15°	1185	1184	1184	1185	1184	334
25°	1108	1107	1106	1106	1104	511
35°	991	989	988	986	985	620
45°	837	835	832	830	829	645
55°	650	645	641	641	640	579
65°	430	426	420	421	421	426
75°	199	196	191	194	190	212
85°	28	25	25	26	26	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1222.9	1222.9	1222.9	1222.9	1222.9
2.5°	1222.9	1222.4	1222.4	1222.9	1222.0
5°	1220.7	1221.1	1220.7	1220.7	1219.8
7.5°	1215.9	1215.4	1215.0	1215.4	1214.1
10°	1207.5	1207.5	1207.1	1207.5	1206.6
12.5°	1197.4	1197.4	1197.4	1197.9	1197.4
15°	1184.7	1184.3	1184.3	1185.1	1184.3
17.5°	1169.8	1169.3	1169.3	1168.9	1168.0
20°	1151.4	1151.4	1150.9	1150.5	1149.2
22.5°	1131.6	1131.2	1129.9	1129.9	1128.1
25°	1108.4	1107.0	1106.2	1105.7	1104.4
27.5°	1082.9	1081.2	1079.8	1079.0	1077.6
30°	1054.4	1052.6	1051.3	1050.0	1049.1
32.5°	1023.7	1022.8	1020.6	1020.2	1018.4
35°	990.8	989.4	988.1	986.4	984.6
37.5°	955.7	954.3	951.3	950.4	949.1
40°	918.4	916.6	912.7	912.7	911.3
42.5°	878.4	876.7	874.0	872.3	871.4
45°	836.8	835.0	831.9	830.2	829.3
47.5°	792.4	791.1	787.6	786.3	785.0
50°	746.4	744.6	740.7	739.8	738.5
52.5°	698.1	697.2	692.0	691.5	690.2
55°	650.3	645.4	641.1	641.1	640.2
57.5°	597.6	594.1	588.4	588.4	587.5
60°	543.2	540.1	533.6	534.4	533.6
62.5°	490.1	483.5	477.4	480.0	477.8
65°	429.6	426.1	419.5	421.2	420.8
67.5°	374.3	367.7	361.6	365.1	363.3
70°	312.8	309.3	303.2	306.7	302.3
72.5°	254.9	251.9	245.7	249.7	245.3
75°	198.8	195.7	190.9	194.4	190.0
77.5°	145.7	143.5	139.1	142.6	143.5
80°	97.4	94.8	92.6	95.7	96.5
82.5°	57.0	55.3	54.4	54.8	57.0
85°	27.6	25.4	25.4	25.9	25.9
87.5°	7.5	6.6	7.5	7.9	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)