

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: P974113

Luminaire Tested: FLR2-24-20-L930-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974113
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: FLR2-24-20-L930-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L930-CP080
Ballast/Driver: -

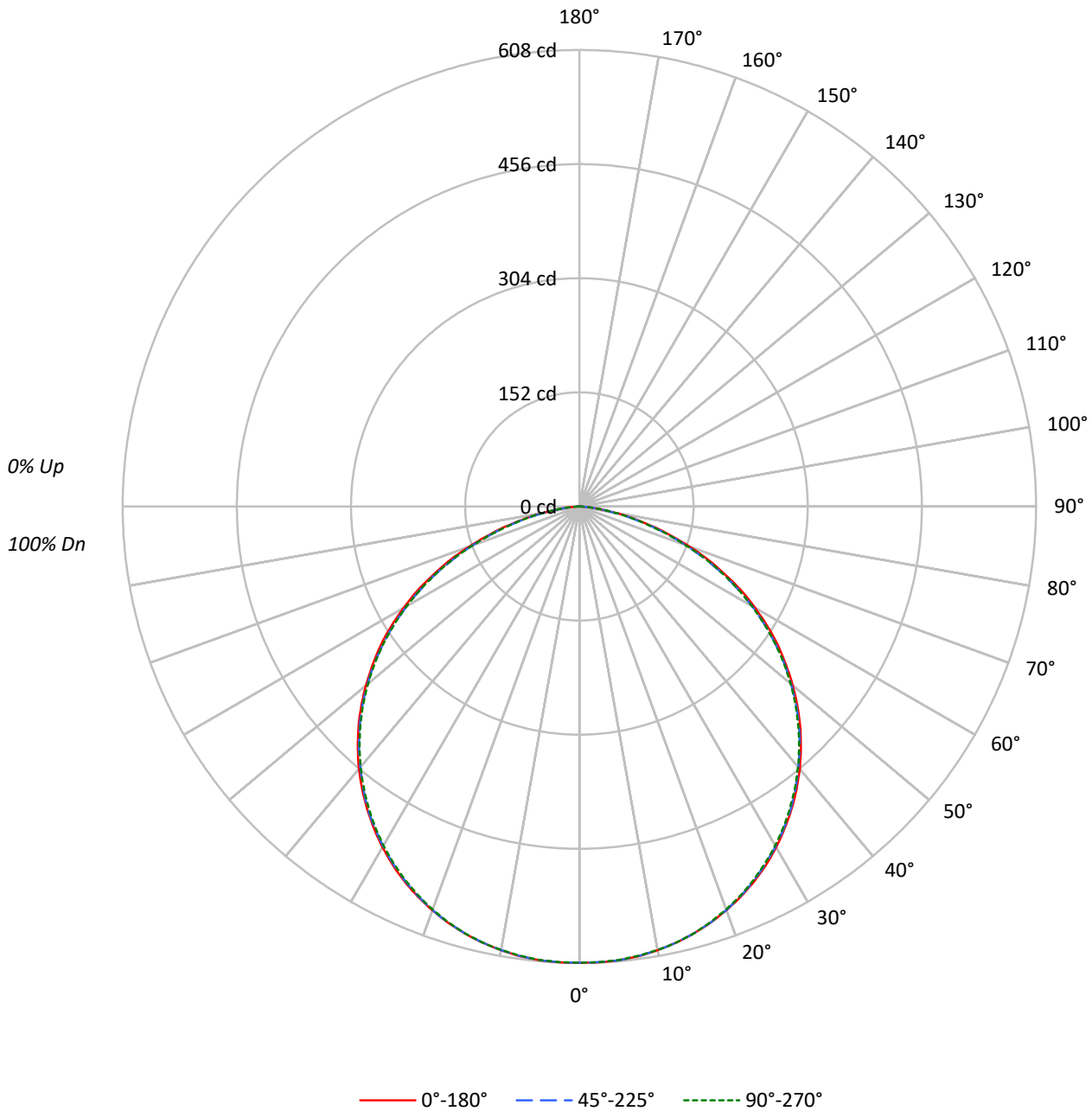
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1717.9 lumens
Efficiency: N/A
Efficacy: 102.9 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): 16.7
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

TEST NUMBER: P974113
CATALOG NUMBER: FLR2-24-20-L930-CP080

Luminous Intensity Polar Plot





TEST NUMBER: P974113
 CATALOG NUMBER: FLR2-24-20-L930-CP080

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	818	818	818
5°	819	819	819
10°	820	820	819
15°	820	820	820
20°	819	819	818
25°	818	816	815
30°	814	812	810
35°	809	807	804
40°	802	797	796
45°	791	787	784
50°	777	771	768
55°	758	747	746
60°	727	714	714
65°	680	664	666
70°	612	593	591
75°	514	493	491
80°	375	356	372
85°	211	195	199

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 791 cd/sqm



TEST NUMBER: P974113
 CATALOG NUMBER: FLR2-24-20-L930-CP080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	3.4
10°-20°	166.2	9.7
20°-30°	253.4	14.8
30°-40°	307.0	17.9
40°-50°	318.9	18.6
50°-60°	285.3	16.6
60°-70°	207.9	12.1
70°-80°	103.0	6.0
80°-90°	18.4	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°	477.3	27.8
0°-40°	784.4	45.7
0°-60°	1388.6	80.8
0°-90°	1717.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1717.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	607	607	607	607	606	58
15°	589	589	589	589	589	166
25°	551	550	550	550	549	254
35°	492	492	491	490	489	308
45°	416	415	414	413	412	321
55°	323	321	319	319	318	288
65°	214	212	208	209	209	212
75°	99	97	95	97	94	105
85°	14	13	13	13	13	19
90°	0	0	0	0	0	



TEST NUMBER: P974113
 CATALOG NUMBER: FLR2-24-20-L930-CP080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	607.8	607.8	607.8	607.8	607.8
2.5°	607.8	607.6	607.6	607.8	607.4
5°	606.7	607.0	606.7	606.7	606.3
7.5°	604.3	604.1	603.9	604.1	603.5
10°	600.2	600.2	600.0	600.2	599.8
12.5°	595.2	595.2	595.2	595.4	595.2
15°	588.9	588.6	588.6	589.1	588.6
17.5°	581.4	581.2	581.2	581.0	580.6
20°	572.3	572.3	572.1	571.8	571.2
22.5°	562.5	562.3	561.6	561.6	560.7
25°	550.9	550.3	549.8	549.6	548.9
27.5°	538.3	537.4	536.7	536.3	535.6
30°	524.1	523.2	522.6	521.9	521.5
32.5°	508.8	508.4	507.3	507.1	506.2
35°	492.5	491.8	491.2	490.3	489.4
37.5°	475.0	474.4	472.8	472.4	471.7
40°	456.5	455.6	453.6	453.6	453.0
42.5°	436.6	435.8	434.4	433.6	433.1
45°	415.9	415.0	413.5	412.6	412.2
47.5°	393.9	393.2	391.5	390.8	390.2
50°	371.0	370.1	368.1	367.7	367.1
52.5°	347.0	346.6	343.9	343.7	343.1
55°	323.2	320.8	318.6	318.6	318.2
57.5°	297.0	295.3	292.5	292.5	292.0
60°	270.0	268.5	265.2	265.6	265.2
62.5°	243.6	240.3	237.3	238.6	237.5
65°	213.5	211.8	208.5	209.4	209.2
67.5°	186.0	182.8	179.7	181.5	180.6
70°	155.5	153.8	150.7	152.4	150.3
72.5°	126.7	125.2	122.1	124.1	121.9
75°	98.8	97.3	94.9	96.6	94.4
77.5°	72.4	71.3	69.1	70.9	71.3
80°	48.4	47.1	46.0	47.5	48.0
82.5°	28.4	27.5	27.0	27.3	28.4
85°	13.7	12.6	12.6	12.9	12.9
87.5°	3.7	3.3	3.7	3.9	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)