

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: P974137

Luminaire Tested: FLR2-24-20-L930-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974137
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L930-CP250
Ballast/Driver: -

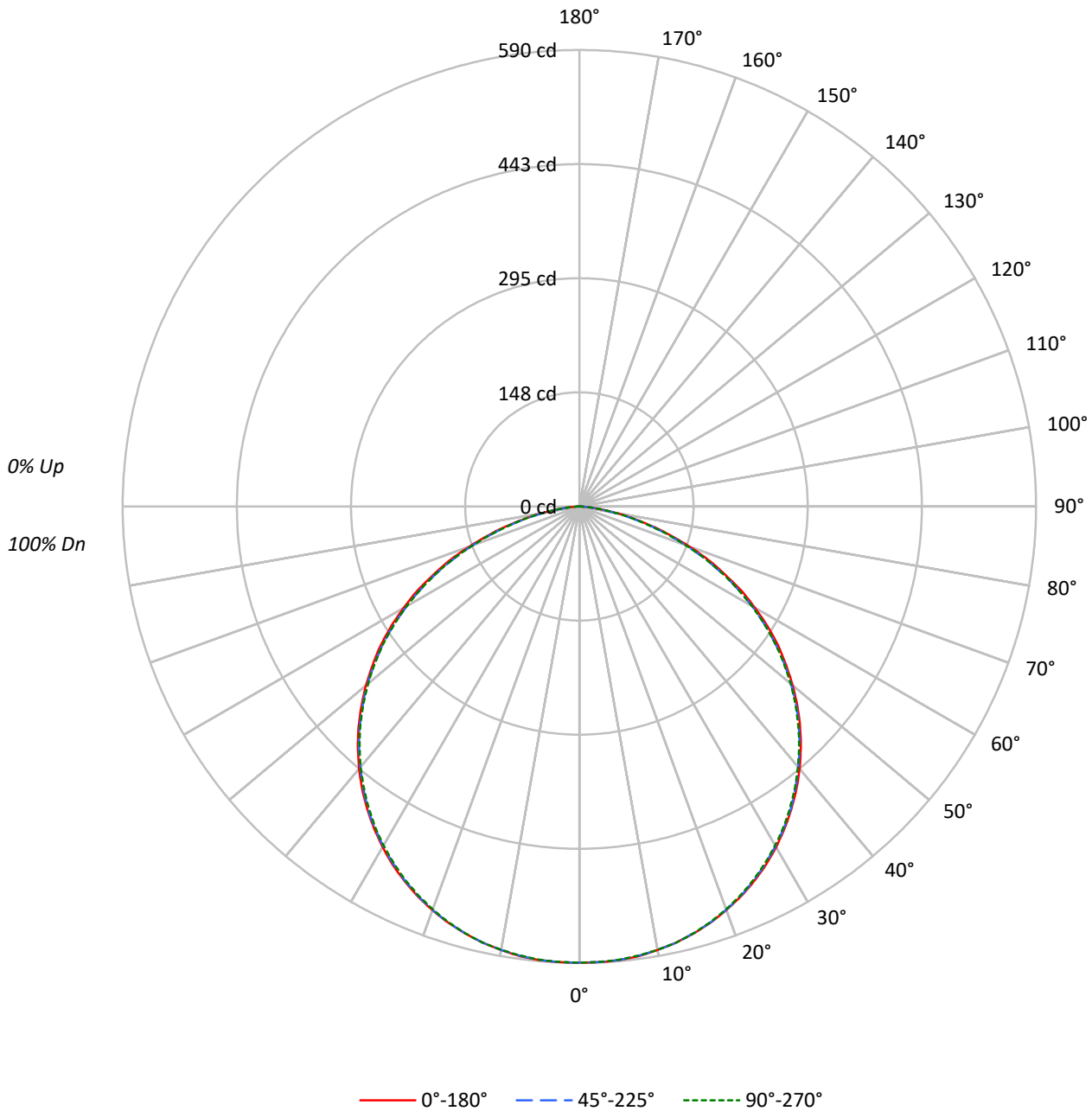
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1666.5 lumens
Efficiency: N/A
Efficacy: 99.8 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): 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: P974137
CATALOG NUMBER: FLR2-24-20-L930-CP250

Luminous Intensity Polar Plot





TEST NUMBER: P974137
 CATALOG NUMBER: FLR2-24-20-L930-CP250

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°	793	793	793
5°	795	795	794
10°	795	795	795
15°	796	795	795
20°	795	795	793
25°	793	792	791
30°	790	788	786
35°	785	783	780
40°	778	773	772
45°	768	763	761
50°	753	747	745
55°	735	725	724
60°	705	692	692
65°	659	644	646
70°	593	575	574
75°	498	478	476
80°	364	346	360
85°	205	190	193

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 768 cd/sqm



TEST NUMBER: P974137
 CATALOG NUMBER: FLR2-24-20-L930-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.0	3.4
10°-20°	161.2	9.7
20°-30°	245.8	14.8
30°-40°	297.9	17.9
40°-50°	309.4	18.6
50°-60°	276.8	16.6
60°-70°	201.7	12.1
70°-80°	99.9	6.0
80°-90°	17.9	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°	463.0	27.8
0°-40°	760.9	45.7
0°-60°	1347.1	80.8
0°-90°	1666.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1666.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	589	589	589	589	588	56
15°	571	571	571	572	571	161
25°	534	534	533	533	532	246
35°	478	477	476	476	475	299
45°	404	403	401	400	400	311
55°	314	311	309	309	309	279
65°	207	205	202	203	203	205
75°	96	94	92	94	92	102
85°	13	12	12	12	12	18
90°	0	0	0	0	0	



TEST NUMBER: P974137
 CATALOG NUMBER: FLR2-24-20-L930-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	589.6	589.6	589.6	589.6	589.6
2.5°	589.6	589.4	589.4	589.6	589.2
5°	588.6	588.8	588.6	588.6	588.2
7.5°	586.3	586.0	585.8	586.0	585.4
10°	582.2	582.2	582.0	582.2	581.8
12.5°	577.4	577.4	577.4	577.6	577.4
15°	571.2	571.0	571.0	571.5	571.0
17.5°	564.0	563.8	563.8	563.6	563.2
20°	555.2	555.2	554.9	554.7	554.1
22.5°	545.6	545.4	544.8	544.8	543.9
25°	534.4	533.8	533.4	533.2	532.5
27.5°	522.2	521.3	520.7	520.3	519.6
30°	508.4	507.6	506.9	506.3	505.9
32.5°	493.6	493.2	492.1	491.9	491.1
35°	477.7	477.1	476.5	475.6	474.8
37.5°	460.8	460.2	458.7	458.3	457.6
40°	442.8	442.0	440.1	440.1	439.4
42.5°	423.6	422.7	421.4	420.6	420.2
45°	403.5	402.6	401.1	400.3	399.9
47.5°	382.1	381.5	379.8	379.1	378.5
50°	359.9	359.0	357.1	356.7	356.1
52.5°	336.6	336.2	333.6	333.4	332.8
55°	313.5	311.2	309.1	309.1	308.7
57.5°	288.2	286.5	283.7	283.7	283.3
60°	261.9	260.4	257.3	257.7	257.3
62.5°	236.3	233.2	230.2	231.5	230.4
65°	207.1	205.4	202.3	203.1	202.9
67.5°	180.5	177.3	174.3	176.0	175.2
70°	150.8	149.2	146.2	147.9	145.8
72.5°	122.9	121.4	118.5	120.4	118.3
75°	95.8	94.4	92.0	93.7	91.6
77.5°	70.2	69.2	67.1	68.8	69.2
80°	47.0	45.7	44.6	46.1	46.5
82.5°	27.5	26.7	26.2	26.4	27.5
85°	13.3	12.3	12.3	12.5	12.5
87.5°	3.6	3.2	3.6	3.8	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)