

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: P974353

Luminaire Tested: FLR2-24-20-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974353
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-L940-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L940-CP187
Ballast/Driver: -

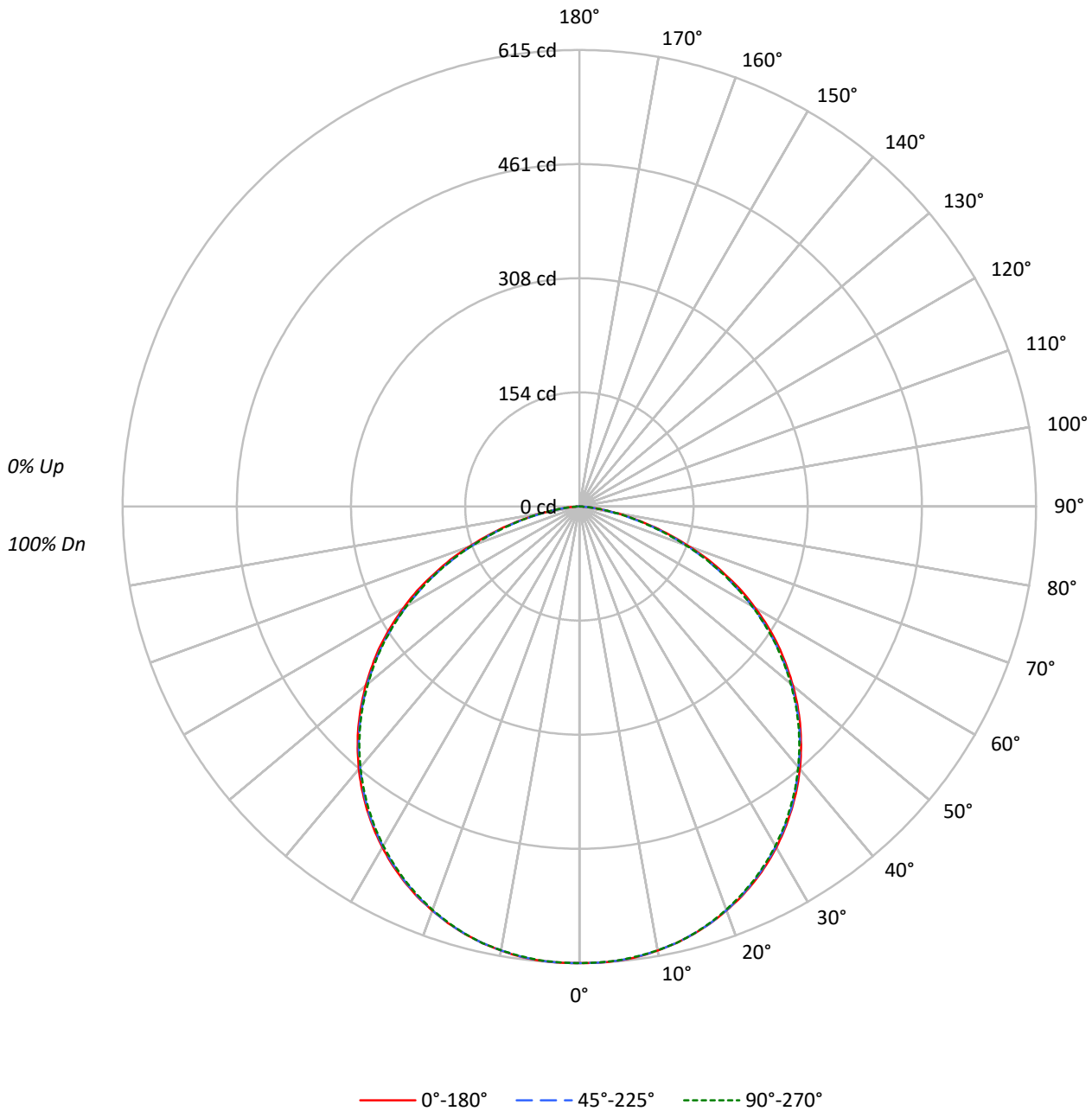
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1739.1 lumens
Efficiency: N/A
Efficacy: 104.1 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): 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: P974353
CATALOG NUMBER: FLR2-24-20-L940-CP187

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															
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°	828	828	828
5°	830	830	829
10°	830	830	830
15°	830	830	830
20°	829	829	828
25°	828	826	825
30°	824	822	820
35°	819	817	814
40°	812	807	805
45°	801	797	794
50°	786	780	778
55°	768	757	756
60°	735	723	723
65°	688	672	674
70°	619	600	598
75°	520	499	497
80°	380	361	377
85°	215	198	201

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 801 cd/sqm



TEST NUMBER: P974353
 CATALOG NUMBER: FLR2-24-20-L940-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.4	3.4
10°-20°	168.3	9.7
20°-30°	256.5	14.8
30°-40°	310.8	17.9
40°-50°	322.9	18.6
50°-60°	288.8	16.6
60°-70°	210.5	12.1
70°-80°	104.2	6.0
80°-90°	18.6	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°	483.2	27.8
0°-40°	794.0	45.7
0°-60°	1405.7	80.8
0°-90°	1739.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1739.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	615	615	615	615	615	
5°	614	614	614	614	614	58
15°	596	596	596	596	596	168
25°	558	557	557	556	556	257
35°	498	498	497	496	495	312
45°	421	420	419	418	417	324
55°	327	325	323	323	322	292
65°	216	214	211	212	212	214
75°	100	98	96	98	96	107
85°	14	13	13	13	13	19
90°	0	0	0	0	0	



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 CATALOG NUMBER: FLR2-24-20-L940-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	615.3	615.3	615.3	615.3	615.3
2.5°	615.3	615.1	615.1	615.3	614.9
5°	614.2	614.5	614.2	614.2	613.8
7.5°	611.8	611.6	611.4	611.6	610.9
10°	607.6	607.6	607.4	607.6	607.2
12.5°	602.5	602.5	602.5	602.8	602.5
15°	596.1	595.9	595.9	596.4	595.9
17.5°	588.6	588.4	588.4	588.2	587.7
20°	579.3	579.3	579.1	578.9	578.2
22.5°	569.4	569.2	568.5	568.5	567.6
25°	557.7	557.0	556.6	556.4	555.7
27.5°	544.9	544.0	543.4	542.9	542.3
30°	530.6	529.7	529.0	528.3	527.9
32.5°	515.1	514.7	513.6	513.3	512.5
35°	498.5	497.9	497.2	496.3	495.4
37.5°	480.9	480.2	478.7	478.2	477.6
40°	462.1	461.2	459.2	459.2	458.6
42.5°	442.0	441.1	439.8	438.9	438.5
45°	421.0	420.2	418.6	417.7	417.3
47.5°	398.7	398.1	396.3	395.7	395.0
50°	375.6	374.7	372.7	372.2	371.6
52.5°	351.3	350.8	348.2	348.0	347.3
55°	327.2	324.8	322.6	322.6	322.1
57.5°	300.7	298.9	296.1	296.1	295.6
60°	273.3	271.8	268.5	268.9	268.5
62.5°	246.6	243.3	240.2	241.5	240.4
65°	216.2	214.4	211.1	212.0	211.7
67.5°	188.3	185.0	181.9	183.7	182.8
70°	157.4	155.7	152.6	154.3	152.1
72.5°	128.3	126.7	123.6	125.6	123.4
75°	100.0	98.5	96.0	97.8	95.6
77.5°	73.3	72.2	70.0	71.8	72.2
80°	49.0	47.7	46.6	48.1	48.6
82.5°	28.7	27.8	27.4	27.6	28.7
85°	13.9	12.8	12.8	13.0	13.0
87.5°	3.8	3.3	3.8	4.0	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)