

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: P973400

Luminaire Tested: FLR2-14-42-L935-CP187

Issue Date: 3/13/2025

**Test Information**

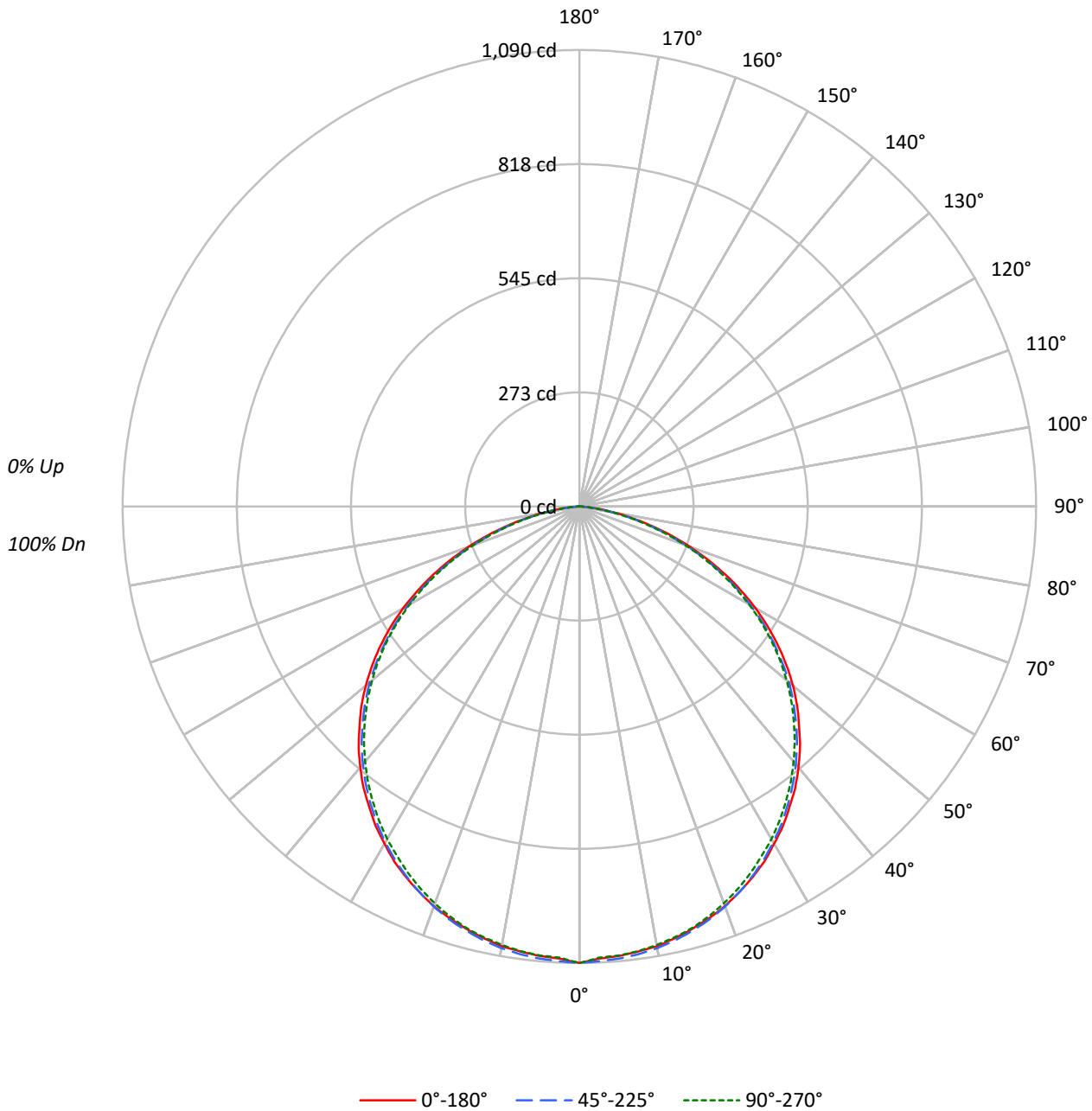
Test Method: LM-79-2019  
Report Number: P973400  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42-L935-CP187  
Description: 1\*4 FLR-2.0 4200 LUMEN at 3500 CCT & 90 CRI with Clear Polycarbonate (0.187" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3051.1 lumens  
Efficiency: N/A  
Efficacy: 96.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.7  
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

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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															
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85															
2	99	91	85	79	97	90	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	58	53	51					51															
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44					44															
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39					39															
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	40	34	29	27					27															
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25					25															

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2933	2933	2933
5°	2911	2928	2907
10°	2913	2926	2905
15°	2909	2920	2903
20°	2909	2911	2888
25°	2902	2896	2870
30°	2890	2877	2849
35°	2874	2852	2824
40°	2858	2823	2794
45°	2823	2783	2755
50°	2786	2735	2703
55°	2716	2653	2627
60°	2611	2538	2516
65°	2445	2373	2347
70°	2205	2116	2098
75°	1849	1755	1735
80°	1342	1252	1216
85°	710	627	571

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2823 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.3	3.4
10°-20°	296.5	9.7
20°-30°	450.5	14.8
30°-40°	544.9	17.9
40°-50°	566.4	18.6
50°-60°	507.1	16.6
60°-70°	369.8	12.1
70°-80°	182.1	6.0
80°-90°	30.5	1.0
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°	850.3	27.9
0°-40°	1395.2	45.7
0°-60°	2468.7	80.9
0°-90°	3051.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3051.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1090	1090	1090	1090	1090	
5°	1078	1089	1084	1094	1076	103
15°	1044	1054	1048	1057	1042	295
25°	977	982	976	980	966	451
35°	875	877	868	872	860	548
45°	742	741	731	733	724	573
55°	579	574	565	564	560	517
65°	384	380	373	370	369	379
75°	178	175	169	167	167	190
85°	23	22	20	18	18	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1090.1	1090.1	1090.1	1090.1	1090.1
2.5°	1080.7	1092.8	1087.0	1097.8	1078.4
5°	1077.5	1089.2	1083.8	1094.2	1076.1
7.5°	1072.1	1084.3	1078.4	1088.3	1071.2
10°	1066.2	1077.1	1070.7	1080.7	1063.1
12.5°	1055.8	1066.7	1060.8	1069.8	1053.6
15°	1044.1	1053.6	1048.2	1057.2	1041.9
17.5°	1030.6	1039.6	1033.7	1041.9	1026.5
20°	1015.7	1022.9	1016.6	1023.4	1008.5
22.5°	997.2	1004.0	997.2	1001.7	988.6
25°	977.3	982.3	975.5	980.0	966.5
27.5°	956.1	958.8	952.1	955.7	941.7
30°	930.0	933.1	925.9	930.4	916.9
32.5°	904.7	906.5	898.4	902.0	889.8
35°	874.9	876.7	868.1	871.7	859.6
37.5°	846.5	846.0	837.0	839.3	828.9
40°	813.5	813.1	803.6	805.4	795.5
42.5°	779.7	777.9	768.9	769.8	760.7
45°	741.8	740.9	731.4	732.8	723.8
47.5°	705.3	702.5	693.1	693.5	685.8
50°	665.5	661.5	653.4	652.5	645.7
52.5°	623.1	618.6	609.6	608.7	603.7
55°	578.9	573.9	565.4	564.0	560.0
57.5°	533.3	527.0	520.3	517.5	514.4
60°	485.1	479.2	471.5	468.8	467.5
62.5°	435.0	429.1	423.2	420.5	418.7
65°	384.0	379.5	372.7	370.0	368.6
67.5°	332.1	328.0	321.7	318.6	318.1
70°	280.2	276.1	268.9	267.1	266.7
72.5°	228.3	224.7	217.9	216.1	216.1
75°	177.8	174.6	168.8	166.9	166.9
77.5°	130.0	127.2	122.7	120.5	120.5
80°	86.6	84.8	80.8	79.0	78.5
82.5°	50.1	49.2	45.6	43.8	44.7
85°	23.0	22.1	20.3	18.0	18.5
87.5°	5.9	5.4	4.1	3.2	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)