

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: P973358

Luminaire Tested: FLR2-14-42-L930-CP187

Issue Date: 3/13/2025

**Test Information**

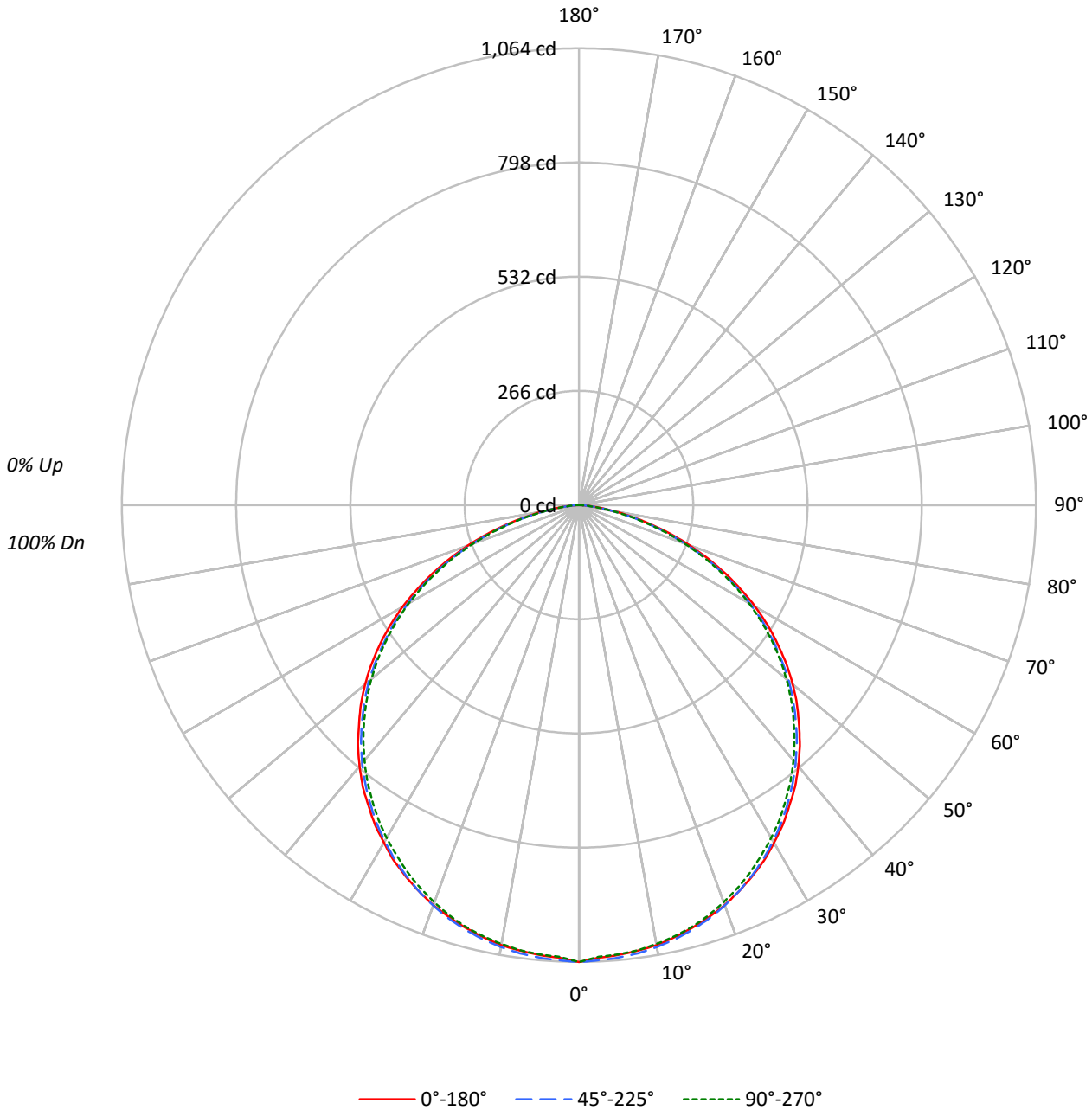
Test Method: LM-79-2019  
Report Number: P973358  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42-L930-CP187  
Description: 1\*4 FLR-2.0 4200 LUMEN at 3000CCT & 80CRI with Clear Polycarbonate (0.187" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2979.3 lumens  
Efficiency: N/A  
Efficacy: 94.0 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°	2865	2865	2865
5°	2842	2859	2838
10°	2845	2857	2837
15°	2840	2851	2834
20°	2840	2843	2820
25°	2833	2828	2802
30°	2822	2809	2782
35°	2806	2785	2757
40°	2791	2757	2729
45°	2756	2718	2689
50°	2721	2671	2640
55°	2652	2590	2565
60°	2549	2478	2457
65°	2387	2317	2292
70°	2153	2066	2049
75°	1805	1713	1695
80°	1311	1223	1189
85°	695	611	559

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2756 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.8	3.4
10°-20°	289.6	9.7
20°-30°	439.9	14.8
30°-40°	532.1	17.9
40°-50°	553.0	18.6
50°-60°	495.2	16.6
60°-70°	361.1	12.1
70°-80°	177.8	6.0
80°-90°	29.7	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°	830.3	27.9
0°-40°	1362.4	45.7
0°-60°	2410.6	80.9
0°-90°	2979.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2979.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1052	1064	1058	1068	1051	100
15°	1020	1029	1024	1032	1017	288
25°	954	959	953	957	944	440
35°	854	856	848	851	839	535
45°	724	724	714	716	707	559
55°	565	560	552	551	547	505
65°	375	370	364	361	360	370
75°	174	170	165	163	163	185
85°	22	22	20	18	18	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1064.5	1064.5	1064.5	1064.5	1064.5
2.5°	1055.2	1067.1	1061.4	1072.0	1053.0
5°	1052.2	1063.6	1058.3	1068.5	1050.8
7.5°	1046.9	1058.8	1053.0	1062.7	1046.0
10°	1041.1	1051.7	1045.5	1055.2	1038.1
12.5°	1031.0	1041.6	1035.8	1044.7	1028.8
15°	1019.5	1028.8	1023.5	1032.3	1017.3
17.5°	1006.3	1015.1	1009.4	1017.3	1002.4
20°	991.8	998.8	992.7	999.3	984.7
22.5°	973.7	980.3	973.7	978.1	965.4
25°	954.3	959.2	952.6	957.0	943.8
27.5°	933.6	936.3	929.7	933.2	919.5
30°	908.1	911.2	904.1	908.5	895.3
32.5°	883.4	885.2	877.2	880.8	868.9
35°	854.3	856.1	847.7	851.2	839.3
37.5°	826.6	826.1	817.3	819.5	809.4
40°	794.4	794.0	784.7	786.5	776.8
42.5°	761.4	759.6	750.8	751.7	742.8
45°	724.3	723.5	714.2	715.5	706.7
47.5°	688.7	686.0	676.8	677.2	669.7
50°	649.9	645.9	638.0	637.1	630.5
52.5°	608.5	604.1	595.2	594.4	589.5
55°	565.3	560.4	552.1	550.7	546.8
57.5°	520.8	514.6	508.0	505.4	502.3
60°	473.6	467.9	460.4	457.8	456.5
62.5°	424.7	419.0	413.3	410.6	408.9
65°	374.9	370.5	363.9	361.3	360.0
67.5°	324.3	320.3	314.1	311.1	310.6
70°	273.6	269.6	262.6	260.8	260.4
72.5°	222.9	219.4	212.8	211.0	211.0
75°	173.6	170.5	164.8	163.0	163.0
77.5°	126.9	124.2	119.8	117.6	117.6
80°	84.6	82.8	78.9	77.1	76.7
82.5°	48.9	48.0	44.5	42.7	43.6
85°	22.5	21.6	19.8	17.6	18.1
87.5°	5.7	5.3	4.0	3.1	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)