

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: P973096

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

Issue Date: 3/13/2025

**Test Information**

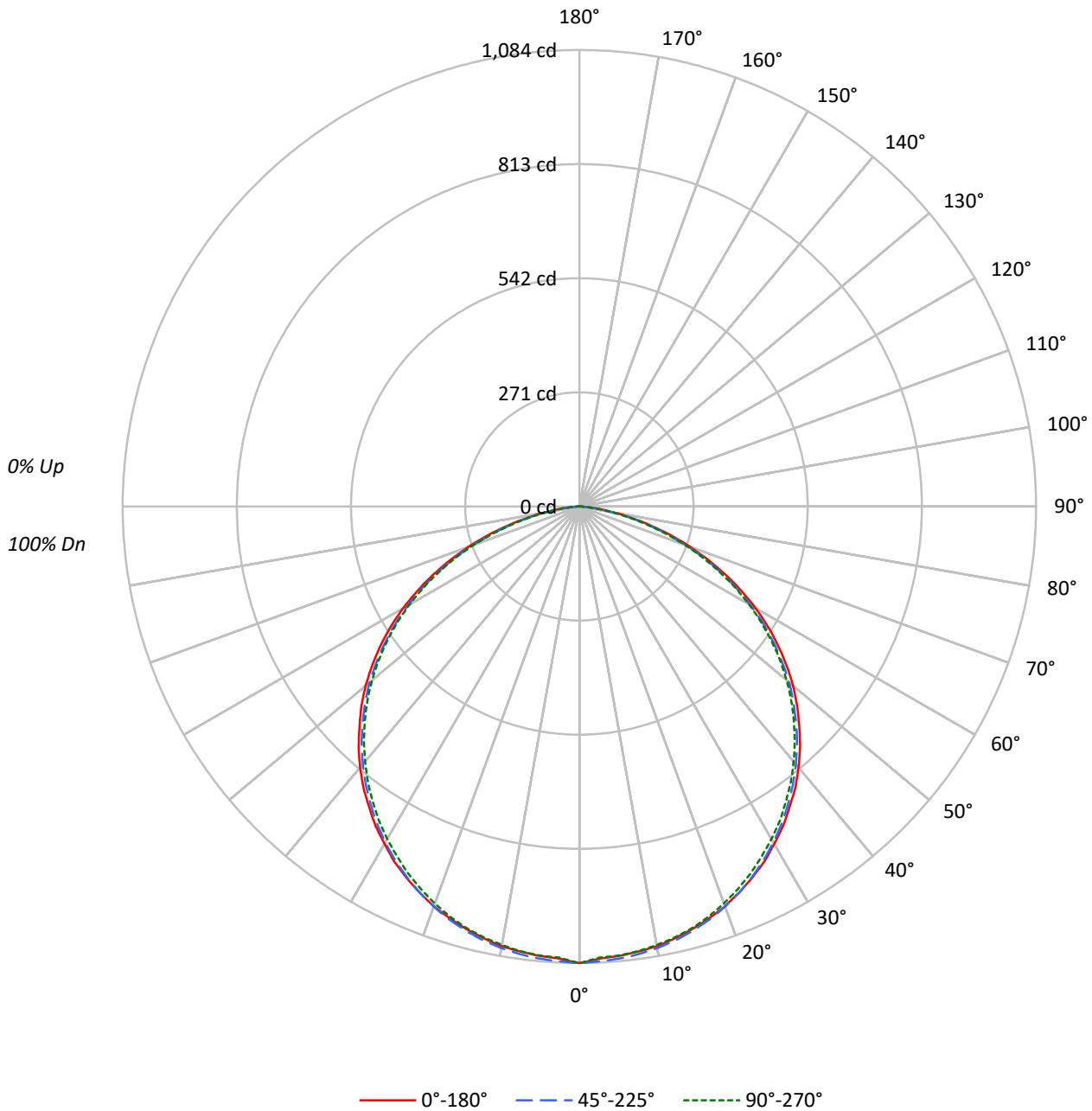
Test Method: LM-79-2019  
Report Number: P973096  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42HE-L930-CP187  
Description: 1\*4 FLR-2.0 4200 Lumen High Efficacy at 3000CCT & 90 CRI with Clear Polycarbonate (0.187" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3035.0 lumens  
Efficiency: N/A  
Efficacy: 95.1 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): 31.9  
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				20	
RC	80				70				50				30				10	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	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	58	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
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	40	34	29	27
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25

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

	0°	45°	90°
0°	2918	2918	2918
5°	2895	2912	2891
10°	2898	2910	2889
15°	2893	2905	2887
20°	2893	2896	2873
25°	2887	2881	2855
30°	2874	2862	2834
35°	2859	2837	2809
40°	2843	2808	2780
45°	2808	2769	2740
50°	2771	2721	2689
55°	2701	2639	2613
60°	2597	2524	2503
65°	2432	2360	2335
70°	2193	2105	2087
75°	1838	1746	1727
80°	1336	1244	1210
85°	707	624	568

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2808 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.7	3.4
10°-20°	295.0	9.7
20°-30°	448.1	14.8
30°-40°	542.1	17.9
40°-50°	563.4	18.6
50°-60°	504.4	16.6
60°-70°	367.9	12.1
70°-80°	181.2	6.0
80°-90°	30.3	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°	845.8	27.9
0°-40°	1387.8	45.7
0°-60°	2455.6	80.9
0°-90°	3035.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3035.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1084	1084	1084	1084	1084	
5°	1072	1084	1078	1088	1070	102
15°	1039	1048	1043	1052	1036	293
25°	972	977	970	975	961	448
35°	870	872	864	867	855	545
45°	738	737	728	729	720	570
55°	576	571	562	561	557	514
65°	382	378	371	368	367	377
75°	177	174	168	166	166	189
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°	1084.4	1084.4	1084.4	1084.4	1084.4
2.5°	1074.9	1087.0	1081.2	1092.0	1072.7
5°	1071.8	1083.5	1078.1	1088.4	1070.4
7.5°	1066.4	1078.5	1072.7	1082.6	1065.5
10°	1060.6	1071.3	1065.1	1074.9	1057.4
12.5°	1050.2	1061.0	1055.2	1064.2	1048.0
15°	1038.6	1048.0	1042.6	1051.6	1036.3
17.5°	1025.1	1034.1	1028.3	1036.3	1021.1
20°	1010.3	1017.5	1011.2	1017.9	1003.1
22.5°	991.9	998.6	991.9	996.4	983.4
25°	972.2	977.1	970.4	974.8	961.4
27.5°	951.1	953.7	947.0	950.6	936.7
30°	925.0	928.2	921.0	925.5	912.0
32.5°	899.9	901.7	893.6	897.2	885.1
35°	870.3	872.1	863.5	867.1	855.0
37.5°	842.0	841.5	832.6	834.8	824.5
40°	809.2	808.8	799.4	801.1	791.3
42.5°	775.6	773.8	764.8	765.7	756.7
45°	737.9	737.0	727.5	728.9	719.9
47.5°	701.5	698.8	689.4	689.8	682.2
50°	662.0	658.0	649.9	649.0	642.3
52.5°	619.8	615.3	606.4	605.5	600.5
55°	575.8	570.9	562.4	561.0	557.0
57.5°	530.5	524.2	517.5	514.8	511.7
60°	482.5	476.6	469.0	466.3	465.0
62.5°	432.7	426.8	421.0	418.3	416.5
65°	381.9	377.5	370.7	368.0	366.7
67.5°	330.3	326.3	320.0	316.9	316.4
70°	278.7	274.7	267.5	265.7	265.3
72.5°	227.1	223.5	216.8	215.0	215.0
75°	176.8	173.7	167.9	166.1	166.1
77.5°	129.3	126.6	122.1	119.8	119.8
80°	86.2	84.4	80.3	78.5	78.1
82.5°	49.8	48.9	45.3	43.5	44.4
85°	22.9	22.0	20.2	18.0	18.4
87.5°	5.8	5.4	4.0	3.1	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)