

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: P973101

Luminaire Tested: FLR2-14-42HE-L930-CP250

Issue Date: 3/13/2025

**Test Information**

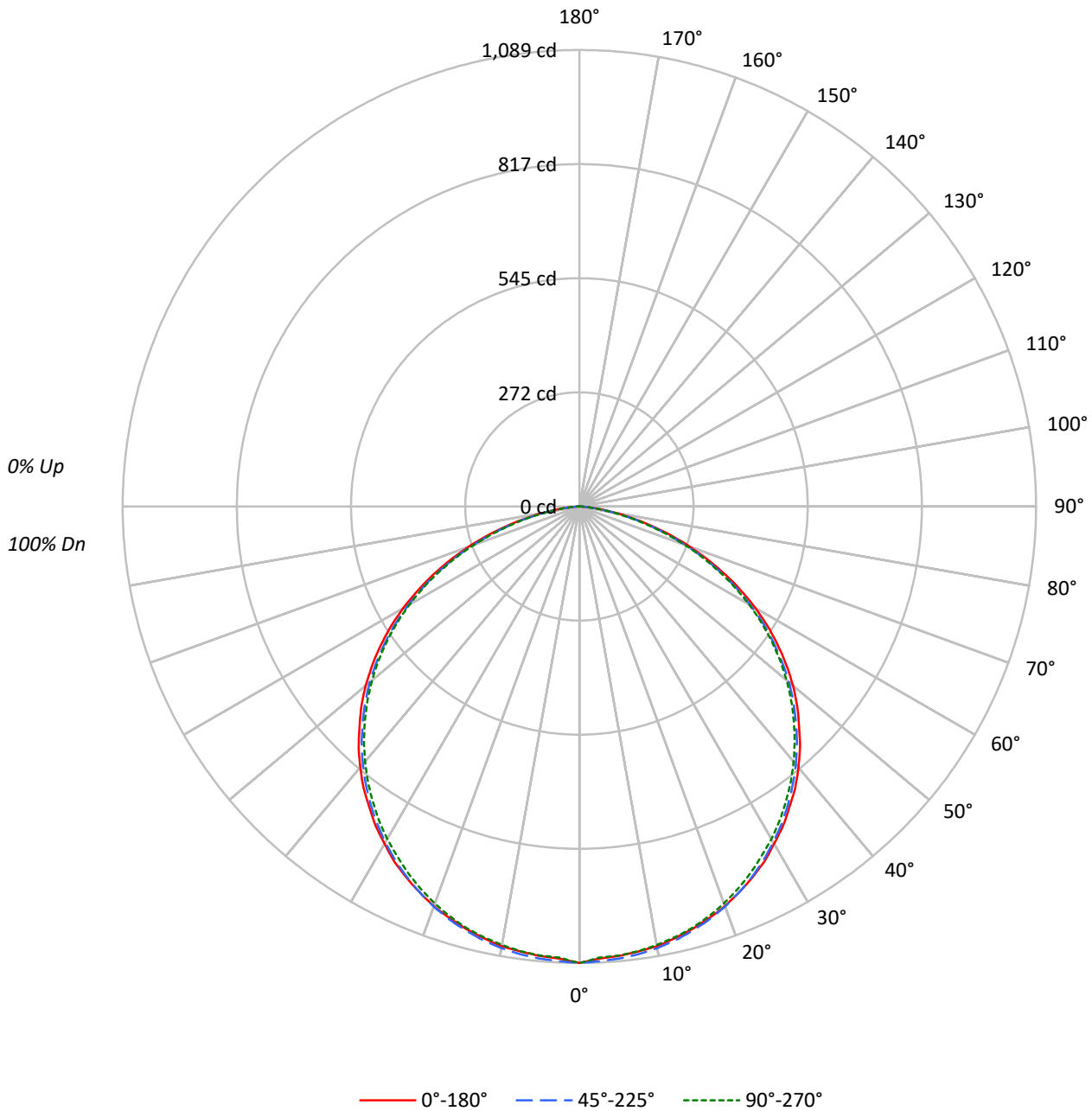
Test Method: LM-79-2019  
Report Number: P973101  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42HE-L930-CP250  
Description: 1\*4 FLR-2.0 4200 Lumen High Efficacy at 3000CCT & 90 CRI with Clear Polycarbonate (0.250" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3048.4 lumens  
Efficiency: N/A  
Efficacy: 95.6 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°	2931	2931	2931
5°	2908	2925	2904
10°	2911	2923	2902
15°	2906	2917	2900
20°	2906	2909	2885
25°	2899	2894	2867
30°	2887	2875	2846
35°	2871	2849	2821
40°	2855	2820	2792
45°	2820	2781	2752
50°	2784	2733	2701
55°	2714	2650	2625
60°	2608	2535	2513
65°	2443	2371	2345
70°	2203	2114	2096
75°	1847	1753	1734
80°	1342	1251	1215
85°	710	627	571

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2820 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.2	3.4
10°-20°	296.3	9.7
20°-30°	450.1	14.8
30°-40°	544.5	17.9
40°-50°	565.9	18.6
50°-60°	506.6	16.6
60°-70°	369.5	12.1
70°-80°	182.0	6.0
80°-90°	30.4	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°	849.5	27.9
0°-40°	1394.0	45.7
0°-60°	2466.5	80.9
0°-90°	3048.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3048.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1076	1088	1083	1093	1075	102
15°	1043	1053	1047	1056	1041	295
25°	976	981	975	979	966	450
35°	874	876	867	871	859	547
45°	741	740	731	732	723	572
55°	578	573	565	564	560	516
65°	384	379	372	370	368	379
75°	178	174	169	167	167	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°	1089.2	1089.2	1089.2	1089.2	1089.2
2.5°	1079.7	1091.9	1086.0	1096.8	1077.4
5°	1076.5	1088.3	1082.8	1093.2	1075.2
7.5°	1071.1	1083.3	1077.4	1087.4	1070.2
10°	1065.3	1076.1	1069.8	1079.7	1062.1
12.5°	1054.9	1065.7	1059.9	1068.9	1052.6
15°	1043.2	1052.6	1047.2	1056.2	1040.9
17.5°	1029.7	1038.7	1032.8	1040.9	1025.6
20°	1014.8	1022.0	1015.7	1022.4	1007.6
22.5°	996.3	1003.1	996.3	1000.8	987.7
25°	976.5	981.4	974.7	979.2	965.6
27.5°	955.3	958.0	951.2	954.8	940.8
30°	929.1	932.3	925.1	929.6	916.0
32.5°	903.9	905.7	897.6	901.2	889.0
35°	874.1	875.9	867.4	871.0	858.8
37.5°	845.7	845.3	836.3	838.5	828.1
40°	812.8	812.4	802.9	804.7	794.8
42.5°	779.0	777.2	768.2	769.1	760.1
45°	741.1	740.2	730.8	732.1	723.1
47.5°	704.6	701.9	692.4	692.9	685.2
50°	664.9	660.9	652.8	651.9	645.1
52.5°	622.6	618.1	609.0	608.1	603.2
55°	578.4	573.4	564.9	563.5	559.5
57.5°	532.9	526.5	519.8	517.1	513.9
60°	484.6	478.8	471.1	468.4	467.0
62.5°	434.6	428.7	422.9	420.2	418.4
65°	383.6	379.1	372.4	369.7	368.3
67.5°	331.8	327.7	321.4	318.3	317.8
70°	280.0	275.9	268.7	266.9	266.4
72.5°	228.1	224.5	217.7	215.9	215.9
75°	177.6	174.5	168.6	166.8	166.8
77.5°	129.8	127.1	122.6	120.4	120.4
80°	86.6	84.8	80.7	78.9	78.4
82.5°	50.0	49.1	45.5	43.7	44.6
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)