

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: P973221

Luminaire Tested: FLR2-14-42HE-L840-CA125

Issue Date: 3/13/2025

**Test Information**

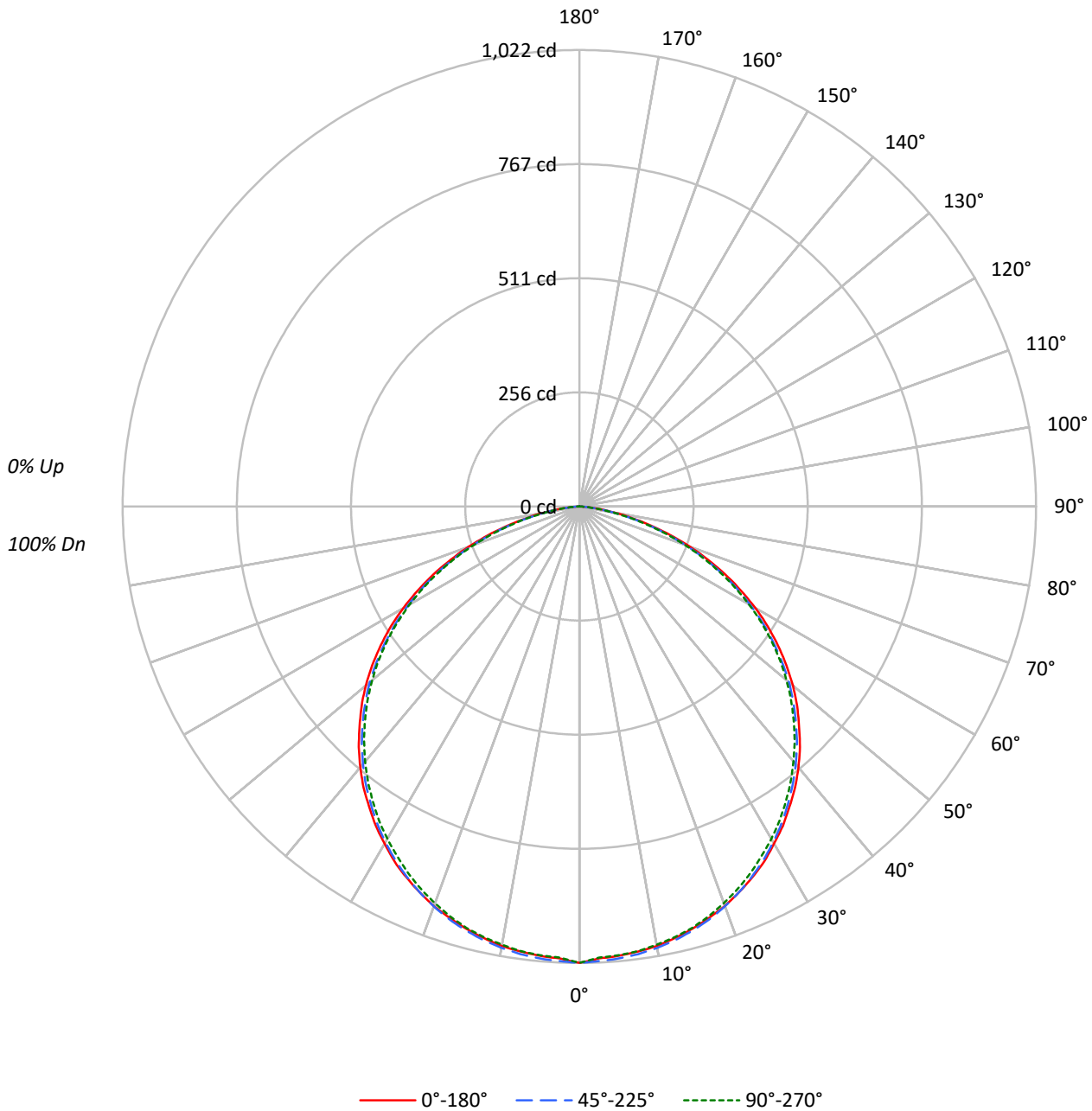
Test Method: LM-79-2019  
Report Number: P973221  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42HE-L840-CA125  
Description: 1\*4 FLR-2.0 4200 Lumen High Efficacy at 4000CCT & 80CRI with Clear Aryalic (0.125" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2859.9 lumens  
Efficiency: N/A  
Efficacy: 89.7 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									
RC	80									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°	2750	2750	2750
5°	2728	2744	2725
10°	2731	2742	2723
15°	2727	2737	2721
20°	2726	2729	2707
25°	2720	2715	2690
30°	2709	2697	2670
35°	2694	2673	2647
40°	2679	2646	2619
45°	2646	2609	2582
50°	2611	2564	2534
55°	2546	2486	2463
60°	2447	2379	2358
65°	2292	2224	2200
70°	2066	1983	1967
75°	1732	1645	1627
80°	1258	1173	1141
85°	667	587	534

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2646 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.8	3.4
10°-20°	278.0	9.7
20°-30°	422.3	14.8
30°-40°	510.8	17.9
40°-50°	530.9	18.6
50°-60°	475.3	16.6
60°-70°	346.7	12.1
70°-80°	170.7	6.0
80°-90°	28.5	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°	797.0	27.9
0°-40°	1307.8	45.7
0°-60°	2314.0	80.9
0°-90°	2859.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2859.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1022	1022	1022	1022	1022	
5°	1010	1021	1016	1026	1009	96
15°	979	988	982	991	977	276
25°	916	921	914	919	906	422
35°	820	822	814	817	806	514
45°	695	694	686	687	678	537
55°	543	538	530	529	525	484
65°	360	356	349	347	346	356
75°	167	164	158	156	156	178
85°	22	21	19	17	17	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1021.8	1021.8	1021.8	1021.8	1021.8
2.5°	1012.9	1024.4	1018.9	1029.0	1010.8
5°	1010.0	1021.0	1015.9	1025.6	1008.7
7.5°	1004.9	1016.3	1010.8	1020.1	1004.1
10°	999.4	1009.6	1003.6	1012.9	996.4
12.5°	989.7	999.8	994.3	1002.8	987.6
15°	978.7	987.6	982.5	990.9	976.6
17.5°	966.0	974.5	969.0	976.6	962.2
20°	952.0	958.8	952.9	959.2	945.3
22.5°	934.7	941.0	934.7	938.9	926.7
25°	916.1	920.7	914.4	918.6	905.9
27.5°	896.2	898.7	892.4	895.8	882.7
30°	871.7	874.6	867.9	872.1	859.4
32.5°	848.0	849.7	842.1	845.5	834.0
35°	820.1	821.8	813.7	817.1	805.7
37.5°	793.4	793.0	784.6	786.7	776.9
40°	762.6	762.1	753.3	754.9	745.6
42.5°	730.8	729.1	720.7	721.5	713.1
45°	695.3	694.5	685.6	686.9	678.4
47.5°	661.1	658.5	649.6	650.1	642.9
50°	623.8	620.0	612.4	611.6	605.2
52.5°	584.1	579.9	571.4	570.5	565.9
55°	542.6	538.0	529.9	528.7	524.9
57.5°	499.9	494.0	487.6	485.1	482.2
60°	454.7	449.2	442.0	439.4	438.2
62.5°	407.7	402.2	396.7	394.2	392.5
65°	359.9	355.7	349.3	346.8	345.5
67.5°	311.3	307.5	301.6	298.6	298.2
70°	262.6	258.8	252.1	250.4	250.0
72.5°	214.0	210.6	204.3	202.6	202.6
75°	166.6	163.7	158.2	156.5	156.5
77.5°	121.8	119.3	115.0	112.9	112.9
80°	81.2	79.5	75.7	74.0	73.6
82.5°	46.9	46.1	42.7	41.0	41.9
85°	21.6	20.7	19.0	16.9	17.3
87.5°	5.5	5.1	3.8	3.0	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)