

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: P973081

Luminaire Tested: FLR2-14-42HE-L830-CA125

Issue Date: 3/13/2025

**Test Information**

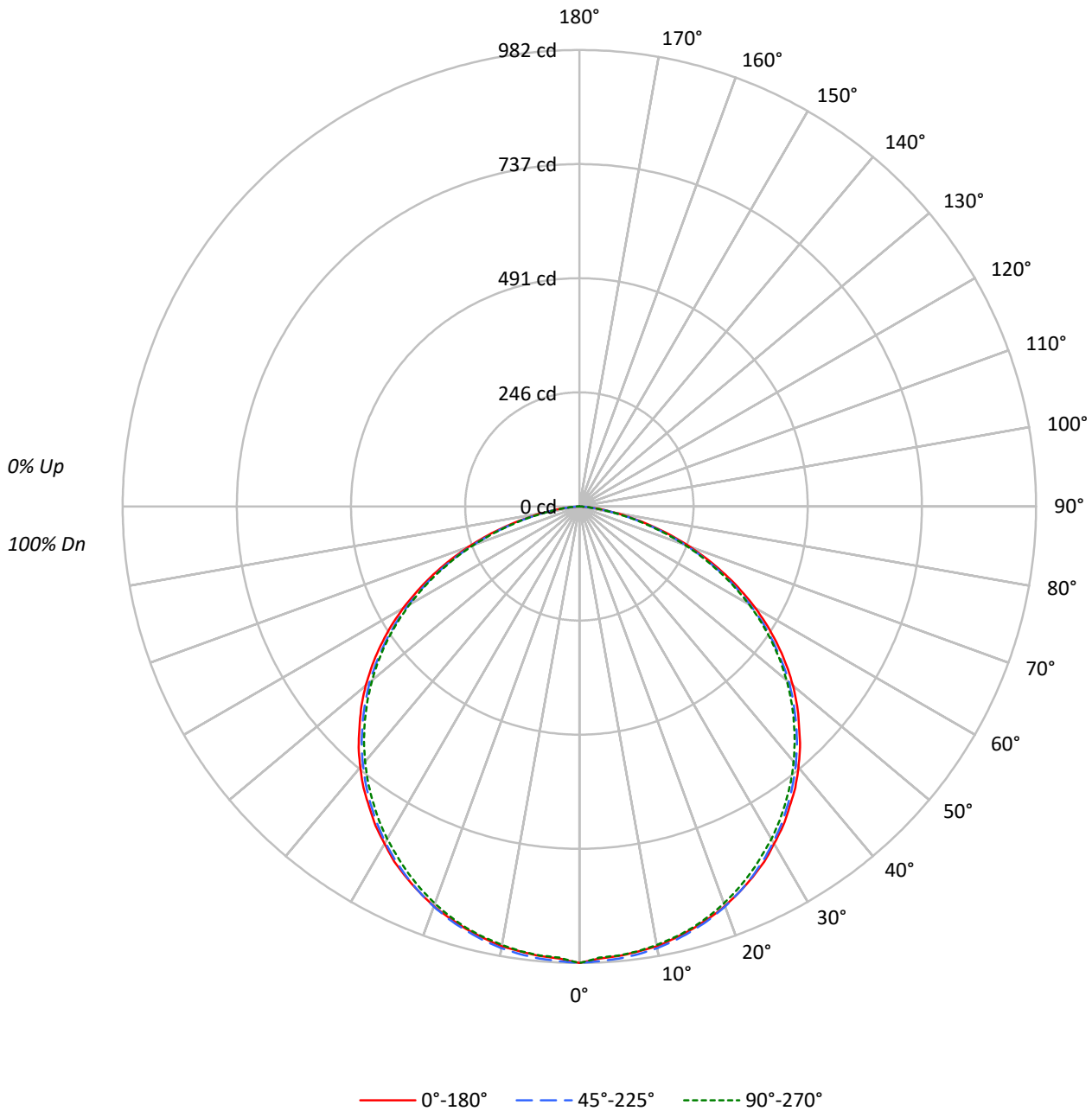
Test Method: LM-79-2019  
Report Number: P973081  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42HE-L830-CA125  
Description: 1\*4 FLR-2.0 4200 Lumen High Efficacy at 3000CCT & 80CRI with Clear Aryalic (0.125" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2748.9 lumens  
Efficiency: N/A  
Efficacy: 86.2 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									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°	2643	2643	2643
5°	2622	2638	2619
10°	2625	2636	2617
15°	2621	2631	2615
20°	2621	2623	2602
25°	2614	2610	2586
30°	2603	2592	2567
35°	2589	2569	2544
40°	2575	2543	2518
45°	2543	2508	2482
50°	2510	2464	2435
55°	2447	2390	2367
60°	2352	2286	2266
65°	2202	2138	2115
70°	1986	1906	1891
75°	1666	1580	1564
80°	1210	1128	1096
85°	639	565	516

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2543 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.0	3.4
10°-20°	267.2	9.7
20°-30°	405.9	14.8
30°-40°	491.0	17.9
40°-50°	510.3	18.6
50°-60°	456.9	16.6
60°-70°	333.2	12.1
70°-80°	164.1	6.0
80°-90°	27.4	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°	766.1	27.9
0°-40°	1257.0	45.7
0°-60°	2224.1	80.9
0°-90°	2748.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2748.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	971	981	976	986	970	92
15°	941	949	944	952	939	266
25°	880	885	879	883	871	406
35°	788	790	782	785	774	494
45°	668	668	659	660	652	516
55°	522	517	509	508	504	466
65°	346	342	336	333	332	342
75°	160	157	152	150	150	171
85°	21	20	18	16	17	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	982.1	982.1	982.1	982.1	982.1
2.5°	973.6	984.6	979.3	989.1	971.6
5°	970.8	981.3	976.4	985.8	969.5
7.5°	965.9	976.9	971.6	980.5	965.1
10°	960.6	970.4	964.7	973.6	957.7
12.5°	951.2	961.0	955.7	963.8	949.2
15°	940.7	949.2	944.3	952.5	938.6
17.5°	928.5	936.6	931.3	938.6	924.8
20°	915.1	921.6	915.9	922.0	908.6
22.5°	898.4	904.5	898.4	902.5	890.7
25°	880.5	885.0	878.9	883.0	870.8
27.5°	861.4	863.8	857.7	861.0	848.4
30°	837.8	840.7	834.2	838.2	826.0
32.5°	815.1	816.7	809.4	812.6	801.6
35°	788.2	789.9	782.1	785.4	774.4
37.5°	762.6	762.2	754.1	756.1	746.8
40°	732.9	732.5	724.0	725.6	716.7
42.5°	702.5	700.8	692.7	693.5	685.4
45°	668.3	667.5	659.0	660.2	652.1
47.5°	635.4	632.9	624.4	624.8	617.9
50°	599.6	596.0	588.6	587.8	581.7
52.5°	561.4	557.3	549.2	548.4	543.9
55°	521.6	517.1	509.4	508.1	504.5
57.5°	480.5	474.8	468.7	466.3	463.4
60°	437.0	431.7	424.8	422.4	421.1
62.5°	391.9	386.6	381.3	378.9	377.2
65°	345.9	341.9	335.8	333.3	332.1
67.5°	299.2	295.5	289.8	287.0	286.6
70°	252.4	248.8	242.3	240.7	240.3
72.5°	205.7	202.4	196.3	194.7	194.7
75°	160.2	157.3	152.0	150.4	150.4
77.5°	117.1	114.6	110.6	108.5	108.5
80°	78.1	76.4	72.8	71.1	70.7
82.5°	45.1	44.3	41.1	39.4	40.2
85°	20.7	19.9	18.3	16.3	16.7
87.5°	5.3	4.9	3.7	2.8	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)