

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: P973288

Luminaire Tested: FLR2-14-80HE-L850-CA080

Issue Date: 3/13/2025

**Test Information**

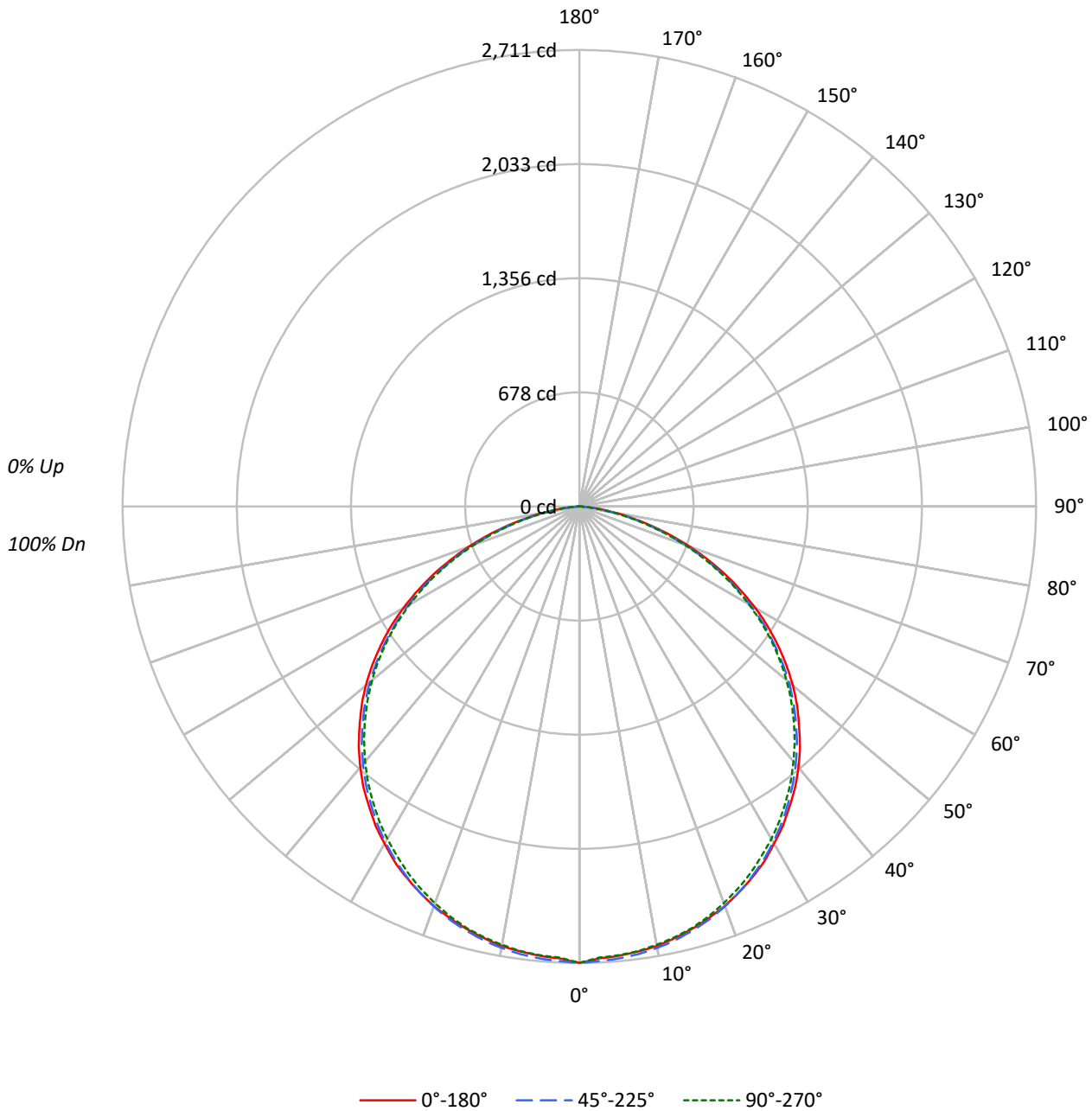
Test Method: LM-79-2019  
Report Number: P973288  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-80HE-L850-CA080  
Description: 1\*4 FLR-2.0 8000 Lumen High Efficacy at 5000CCT & 80CRI with Clear Aryalic (0.080" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7586.5 lumens  
Efficiency: N/A  
Efficacy: 122.6 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): 61.9  
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°	7294	7294	7294
5°	7237	7280	7228
10°	7244	7275	7223
15°	7232	7261	7217
20°	7232	7239	7181
25°	7215	7202	7136
30°	7185	7154	7084
35°	7146	7091	7021
40°	7106	7019	6948
45°	7019	6921	6849
50°	6928	6801	6721
55°	6753	6595	6532
60°	6491	6310	6255
65°	6080	5901	5836
70°	5482	5261	5217
75°	4596	4363	4316
80°	3338	3112	3025
85°	1766	1559	1420

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7019 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.8	3.4
10°-20°	737.3	9.7
20°-30°	1120.1	14.8
30°-40°	1355.0	17.9
40°-50°	1408.2	18.6
50°-60°	1260.9	16.6
60°-70°	919.6	12.1
70°-80°	452.9	6.0
80°-90°	75.7	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°	2114.2	27.9
0°-40°	3469.2	45.7
0°-60°	6138.3	80.9
0°-90°	7586.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7586.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2711	2711	2711	2711	2711	
5°	2679	2708	2695	2721	2676	255
15°	2596	2620	2606	2629	2590	733
25°	2430	2442	2426	2437	2403	1120
35°	2175	2180	2159	2168	2137	1362
45°	1844	1842	1819	1822	1800	1424
55°	1439	1427	1406	1402	1392	1285
65°	955	944	927	920	917	943
75°	442	434	420	415	415	471
85°	57	55	50	45	46	83
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2710.6	2710.6	2710.6	2710.6	2710.6
2.5°	2687.0	2717.3	2702.7	2729.6	2681.4
5°	2679.2	2708.3	2694.9	2720.7	2675.8
7.5°	2665.7	2696.0	2681.4	2706.1	2663.5
10°	2651.1	2678.0	2662.3	2687.0	2643.3
12.5°	2625.3	2652.2	2637.7	2660.1	2619.7
15°	2596.1	2619.7	2606.2	2628.7	2590.5
17.5°	2562.5	2584.9	2570.3	2590.5	2552.4
20°	2525.5	2543.4	2527.7	2544.5	2507.5
22.5°	2479.5	2496.3	2479.5	2490.7	2458.1
25°	2430.1	2442.4	2425.6	2436.8	2403.2
27.5°	2377.4	2384.1	2367.3	2376.2	2341.5
30°	2312.3	2320.1	2302.2	2313.4	2279.8
32.5°	2249.5	2254.0	2233.8	2242.7	2212.4
35°	2175.4	2179.9	2158.6	2167.6	2137.3
37.5°	2104.7	2103.6	2081.2	2086.8	2061.0
40°	2022.8	2021.7	1998.2	2002.6	1978.0
42.5°	1938.7	1934.2	1911.8	1914.0	1891.6
45°	1844.4	1842.2	1818.6	1822.0	1799.6
47.5°	1753.6	1746.8	1723.3	1724.4	1705.3
50°	1654.8	1644.7	1624.6	1622.3	1605.5
52.5°	1549.4	1538.2	1515.7	1513.5	1501.1
55°	1439.4	1427.1	1405.8	1402.4	1392.3
57.5°	1326.1	1310.4	1293.6	1286.9	1279.0
60°	1206.1	1191.5	1172.4	1165.7	1162.3
62.5°	1081.5	1067.0	1052.4	1045.6	1041.1
65°	954.8	943.5	926.7	920.0	916.6
67.5°	825.7	815.6	799.9	792.1	791.0
70°	696.7	686.6	668.7	664.2	663.1
72.5°	567.7	558.7	541.9	537.4	537.4
75°	442.0	434.2	419.6	415.1	415.1
77.5°	323.1	316.4	305.2	299.6	299.6
80°	215.4	210.9	200.8	196.3	195.2
82.5°	124.5	122.3	113.3	108.8	111.1
85°	57.2	55.0	50.5	44.9	46.0
87.5°	14.6	13.5	10.1	7.9	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)