

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: P973083

Luminaire Tested: FLR2-14-80HE-L830-CA125

Issue Date: 3/13/2025

**Test Information**

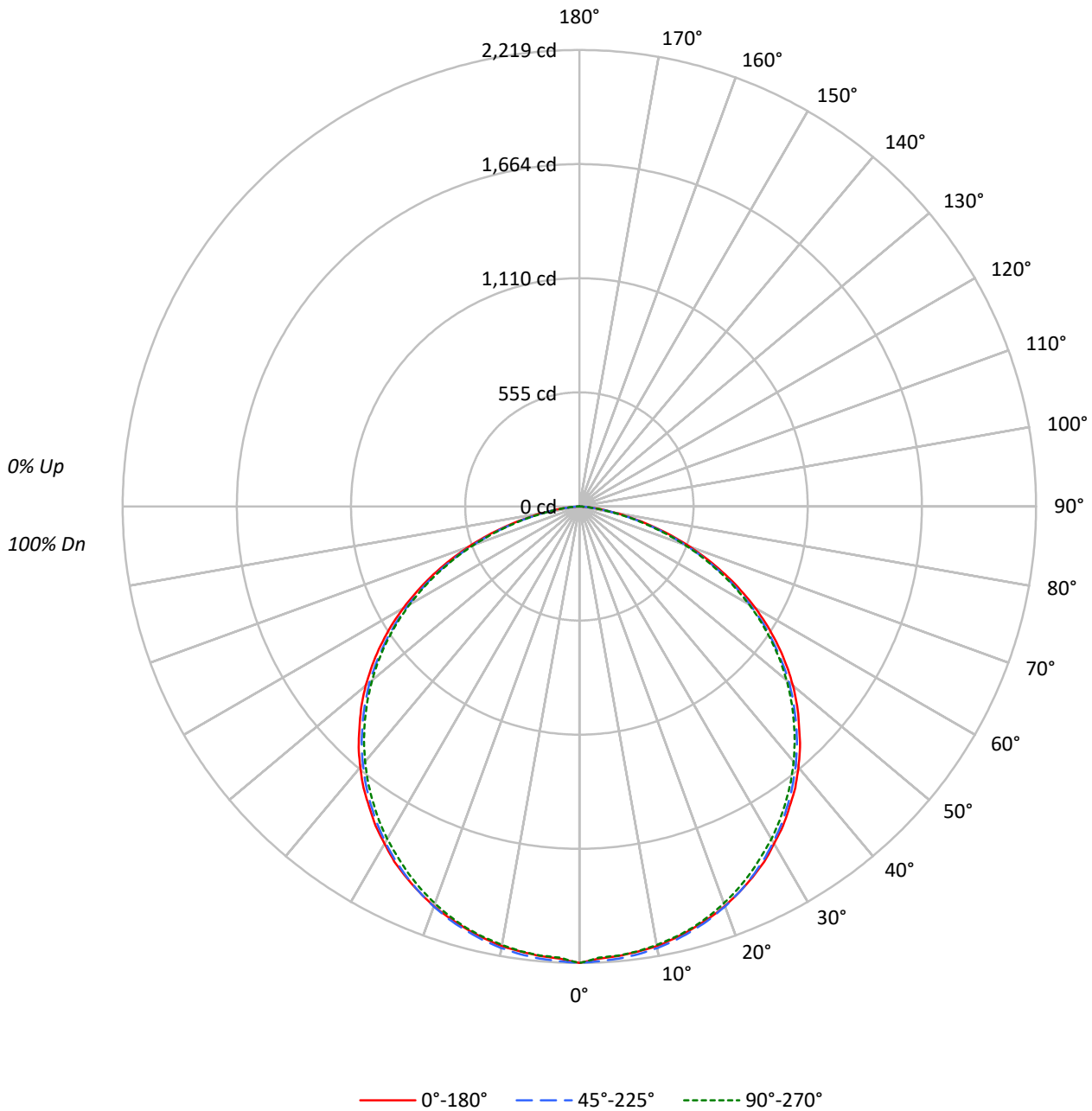
Test Method: LM-79-2019  
Report Number: P973083  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-80HE-L830-CA125  
Description: 1\*4 FLR-2.0 8000 Lumen High Efficacy at 3000CCT & 80CRI with Clear Aryalic (0.125" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6211.3 lumens  
Efficiency: N/A  
Efficacy: 100.3 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									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	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°	5972	5972	5972
5°	5925	5960	5918
10°	5931	5956	5913
15°	5921	5945	5909
20°	5921	5926	5879
25°	5907	5896	5842
30°	5882	5857	5800
35°	5851	5806	5748
40°	5818	5747	5689
45°	5747	5667	5607
50°	5672	5568	5503
55°	5529	5400	5348
60°	5314	5166	5121
65°	4977	4831	4779
70°	4488	4308	4271
75°	3763	3571	3534
80°	2734	2548	2476
85°	1445	1275	1164

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5747 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.2	3.4
10°-20°	603.7	9.7
20°-30°	917.1	14.8
30°-40°	1109.4	17.9
40°-50°	1153.0	18.6
50°-60°	1032.3	16.6
60°-70°	752.9	12.1
70°-80°	370.8	6.0
80°-90°	62.0	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°	1731.0	27.9
0°-40°	2840.3	45.7
0°-60°	5025.6	80.9
0°-90°	6211.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6211.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2219	2219	2219	2219	2219	
5°	2194	2217	2206	2228	2191	209
15°	2126	2145	2134	2152	2121	600
25°	1990	2000	1986	1995	1968	917
35°	1781	1785	1767	1775	1750	1115
45°	1510	1508	1489	1492	1473	1166
55°	1178	1168	1151	1148	1140	1052
65°	782	772	759	753	750	772
75°	362	356	344	340	340	386
85°	47	45	41	37	38	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2219.2	2219.2	2219.2	2219.2	2219.2
2.5°	2199.9	2224.7	2212.8	2234.8	2195.3
5°	2193.5	2217.4	2206.4	2227.5	2190.7
7.5°	2182.5	2207.3	2195.3	2215.5	2180.6
10°	2170.5	2192.6	2179.7	2199.9	2164.1
12.5°	2149.4	2171.5	2159.5	2177.9	2144.8
15°	2125.5	2144.8	2133.8	2152.2	2120.9
17.5°	2098.0	2116.3	2104.4	2120.9	2089.7
20°	2067.7	2082.4	2069.5	2083.3	2053.0
22.5°	2030.0	2043.8	2030.0	2039.2	2012.5
25°	1989.6	1999.7	1985.9	1995.1	1967.5
27.5°	1946.4	1951.9	1938.1	1945.5	1917.0
30°	1893.1	1899.6	1884.9	1894.1	1866.5
32.5°	1841.7	1845.4	1828.8	1836.2	1811.4
35°	1781.1	1784.7	1767.3	1774.6	1749.8
37.5°	1723.2	1722.3	1703.9	1708.5	1687.4
40°	1656.1	1655.2	1635.9	1639.6	1619.4
42.5°	1587.3	1583.6	1565.2	1567.0	1548.7
45°	1510.1	1508.3	1489.0	1491.7	1473.4
47.5°	1435.7	1430.2	1410.9	1411.8	1396.2
50°	1354.9	1346.6	1330.1	1328.2	1314.4
52.5°	1268.5	1259.3	1241.0	1239.1	1229.0
55°	1178.5	1168.4	1150.9	1148.2	1139.9
57.5°	1085.7	1072.9	1059.1	1053.6	1047.1
60°	987.4	975.5	959.9	954.4	951.6
62.5°	885.5	873.5	861.6	856.1	852.4
65°	781.7	772.5	758.7	753.2	750.5
67.5°	676.1	667.8	654.9	648.5	647.6
70°	570.4	562.2	547.5	543.8	542.9
72.5°	464.8	457.4	443.7	440.0	440.0
75°	361.9	355.5	343.5	339.9	339.9
77.5°	264.5	259.0	249.8	245.3	245.3
80°	176.4	172.7	164.4	160.7	159.8
82.5°	102.0	100.1	92.8	89.1	90.9
85°	46.8	45.0	41.3	36.7	37.7
87.5°	11.9	11.0	8.3	6.4	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)