

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: P973052

Luminaire Tested: FLR2-14-70HE-L830-CP080

Issue Date: 3/13/2025

**Test Information**

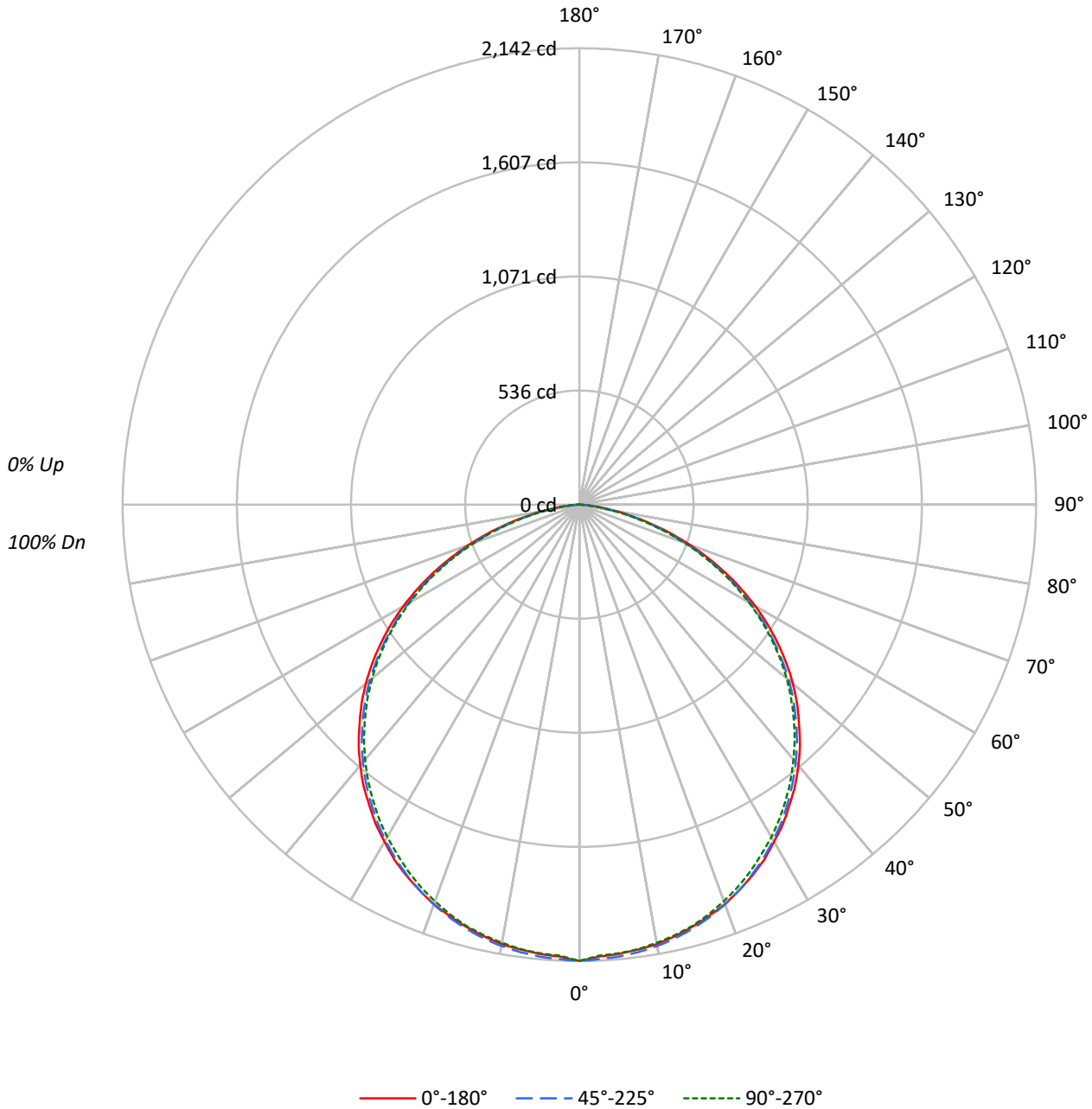
Test Method: LM-79-2019  
Report Number: P973052  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-70HE-L830-CP080  
Description: 1\*4 FLR-2.0 7000 Lumen High Efficacy at 3000CCT & 80CRI Clear Polycarbonate (0.080" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5994.9 lumens  
Efficiency: N/A  
Efficacy: 114.2 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): 52.5  
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°	5764	5764	5764
5°	5719	5752	5712
10°	5724	5749	5707
15°	5715	5738	5703
20°	5715	5720	5674
25°	5702	5691	5638
30°	5678	5653	5598
35°	5647	5603	5548
40°	5615	5546	5491
45°	5547	5469	5412
50°	5475	5374	5311
55°	5336	5211	5162
60°	5129	4986	4943
65°	4804	4663	4612
70°	4331	4157	4122
75°	3632	3448	3410
80°	2638	2459	2391
85°	1396	1232	1121

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5547 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.9	3.4
10°-20°	582.6	9.7
20°-30°	885.1	14.8
30°-40°	1070.7	17.9
40°-50°	1112.8	18.6
50°-60°	996.3	16.6
60°-70°	726.7	12.1
70°-80°	357.8	6.0
80°-90°	59.8	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°	1670.7	27.9
0°-40°	2741.4	45.7
0°-60°	4850.5	80.9
0°-90°	5994.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5994.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2142	2142	2142	2142	2142	
5°	2117	2140	2130	2150	2114	201
15°	2052	2070	2060	2077	2047	579
25°	1920	1930	1917	1926	1899	885
35°	1719	1723	1706	1713	1689	1077
45°	1458	1456	1437	1440	1422	1125
55°	1137	1128	1111	1108	1100	1015
65°	754	746	732	727	724	745
75°	349	343	332	328	328	372
85°	45	43	40	36	36	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2141.9	2141.9	2141.9	2141.9	2141.9
2.5°	2123.3	2147.2	2135.7	2157.0	2118.9
5°	2117.1	2140.1	2129.5	2149.9	2114.4
7.5°	2106.4	2130.4	2118.9	2138.4	2104.7
10°	2094.9	2116.2	2103.8	2123.3	2088.7
12.5°	2074.5	2095.8	2084.3	2102.0	2070.1
15°	2051.5	2070.1	2059.5	2077.2	2047.0
17.5°	2024.9	2042.6	2031.1	2047.0	2016.9
20°	1995.6	2009.8	1997.4	2010.7	1981.4
22.5°	1959.3	1972.6	1959.3	1968.1	1942.4
25°	1920.3	1930.0	1916.7	1925.6	1899.0
27.5°	1878.6	1883.9	1870.6	1877.7	1850.2
30°	1827.2	1833.4	1819.2	1828.1	1801.5
32.5°	1777.5	1781.1	1765.1	1772.2	1748.3
35°	1719.0	1722.6	1705.7	1712.8	1688.9
37.5°	1663.2	1662.3	1644.5	1649.0	1628.6
40°	1598.4	1597.6	1578.9	1582.5	1563.0
42.5°	1532.0	1528.4	1510.7	1512.5	1494.7
45°	1457.5	1455.7	1437.1	1439.8	1422.0
47.5°	1385.7	1380.4	1361.7	1362.6	1347.6
50°	1307.7	1299.7	1283.7	1281.9	1268.7
52.5°	1224.3	1215.5	1197.7	1196.0	1186.2
55°	1137.4	1127.7	1110.8	1108.2	1100.2
57.5°	1047.9	1035.5	1022.2	1016.9	1010.7
60°	953.0	941.5	926.4	921.1	918.5
62.5°	854.6	843.1	831.6	826.3	822.7
65°	754.5	745.6	732.3	727.0	724.3
67.5°	652.5	644.5	632.1	625.9	625.0
70°	550.5	542.6	528.4	524.8	523.9
72.5°	448.6	441.5	428.2	424.7	424.7
75°	349.3	343.1	331.6	328.0	328.0
77.5°	255.3	250.0	241.1	236.7	236.7
80°	170.2	166.7	158.7	155.1	154.3
82.5°	98.4	96.6	89.5	86.0	87.8
85°	45.2	43.4	39.9	35.5	36.3
87.5°	11.5	10.6	8.0	6.2	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)