

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: P973067

Luminaire Tested: FLR2-14-70HE-L830-CP250

Issue Date: 3/13/2025

**Test Information**

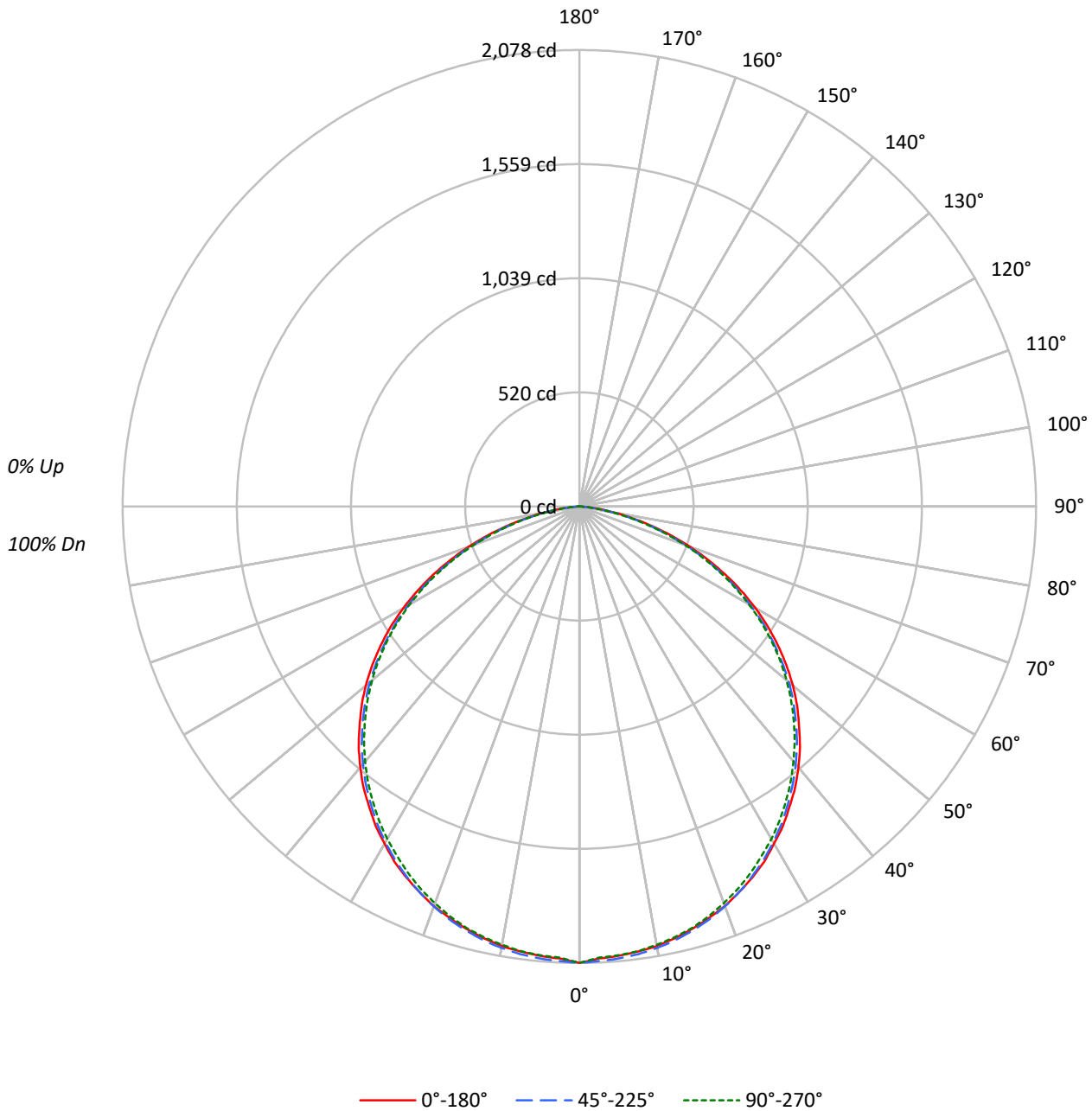
Test Method: LM-79-2019  
Report Number: P973067  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-70HE-L830-CP250  
Description: 1\*4 FLR-2.0 7000 Lumen High Efficacy at 3000CCT & 80CRI Clear Polycarbonate (0.250" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5815.5 lumens  
Efficiency: N/A  
Efficacy: 110.8 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					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	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	
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73				71	
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62				60	
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53				51	
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46				44	
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41				39	
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36				34	
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32				30	
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29				27	
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26				25	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5591	5591	5591
5°	5548	5580	5541
10°	5553	5576	5537
15°	5544	5566	5532
20°	5544	5549	5504
25°	5531	5521	5470
30°	5508	5484	5430
35°	5478	5436	5382
40°	5447	5381	5326
45°	5381	5305	5250
50°	5310	5213	5152
55°	5177	5056	5007
60°	4976	4837	4795
65°	4660	4523	4474
70°	4202	4033	3999
75°	3523	3344	3308
80°	2559	2385	2318
85°	1355	1195	1090

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5381 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	196.8	3.4
10°-20°	565.2	9.7
20°-30°	858.7	14.8
30°-40°	1038.7	17.9
40°-50°	1079.5	18.6
50°-60°	966.5	16.6
60°-70°	704.9	12.1
70°-80°	347.1	6.0
80°-90°	58.0	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°	1620.7	27.9
0°-40°	2659.3	45.7
0°-60°	4705.3	80.9
0°-90°	5815.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5815.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2078	2078	2078	2078	2078	
5°	2054	2076	2066	2086	2051	195
15°	1990	2008	1998	2015	1986	562
25°	1863	1872	1859	1868	1842	859
35°	1668	1671	1655	1662	1638	1044
45°	1414	1412	1394	1397	1380	1092
55°	1103	1094	1078	1075	1067	985
65°	732	723	710	705	703	723
75°	339	333	322	318	318	361
85°	44	42	39	34	35	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2077.8	2077.8	2077.8	2077.8	2077.8
2.5°	2059.7	2083.0	2071.8	2092.4	2055.4
5°	2053.7	2076.1	2065.8	2085.5	2051.1
7.5°	2043.4	2066.6	2055.4	2074.4	2041.7
10°	2032.2	2052.9	2040.8	2059.7	2026.2
12.5°	2012.4	2033.1	2021.9	2039.1	2008.1
15°	1990.1	2008.1	1997.8	2015.0	1985.8
17.5°	1964.3	1981.5	1970.3	1985.8	1956.5
20°	1935.9	1949.7	1937.6	1950.5	1922.1
22.5°	1900.6	1913.5	1900.6	1909.2	1884.3
25°	1862.8	1872.3	1859.4	1868.0	1842.2
27.5°	1822.4	1827.5	1814.6	1821.5	1794.9
30°	1772.5	1778.5	1764.8	1773.4	1747.6
32.5°	1724.3	1727.8	1712.3	1719.2	1696.0
35°	1667.6	1671.0	1654.7	1661.6	1638.3
37.5°	1613.4	1612.5	1595.3	1599.6	1579.9
40°	1550.6	1549.8	1531.7	1535.1	1516.2
42.5°	1486.1	1482.7	1465.5	1467.2	1450.0
45°	1413.9	1412.2	1394.1	1396.7	1379.5
47.5°	1344.2	1339.0	1321.0	1321.8	1307.2
50°	1268.5	1260.8	1245.3	1243.6	1230.7
52.5°	1187.7	1179.1	1161.9	1160.2	1150.7
55°	1103.4	1093.9	1077.6	1075.0	1067.3
57.5°	1016.5	1004.5	991.6	986.4	980.4
60°	924.5	913.3	898.7	893.6	891.0
62.5°	829.1	817.9	806.7	801.5	798.1
65°	731.9	723.3	710.4	705.2	702.6
67.5°	633.0	625.2	613.2	607.2	606.3
70°	534.1	526.3	512.6	509.1	508.3
72.5°	435.2	428.3	415.4	411.9	411.9
75°	338.8	332.8	321.6	318.2	318.2
77.5°	247.7	242.5	233.9	229.6	229.6
80°	165.1	161.7	153.9	150.5	149.6
82.5°	95.5	93.7	86.9	83.4	85.1
85°	43.9	42.1	38.7	34.4	35.3
87.5°	11.2	10.3	7.7	6.0	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)