

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: P973157

Luminaire Tested: FLR2-14-70HE-L935-CP080

Issue Date: 3/13/2025

**Test Information**

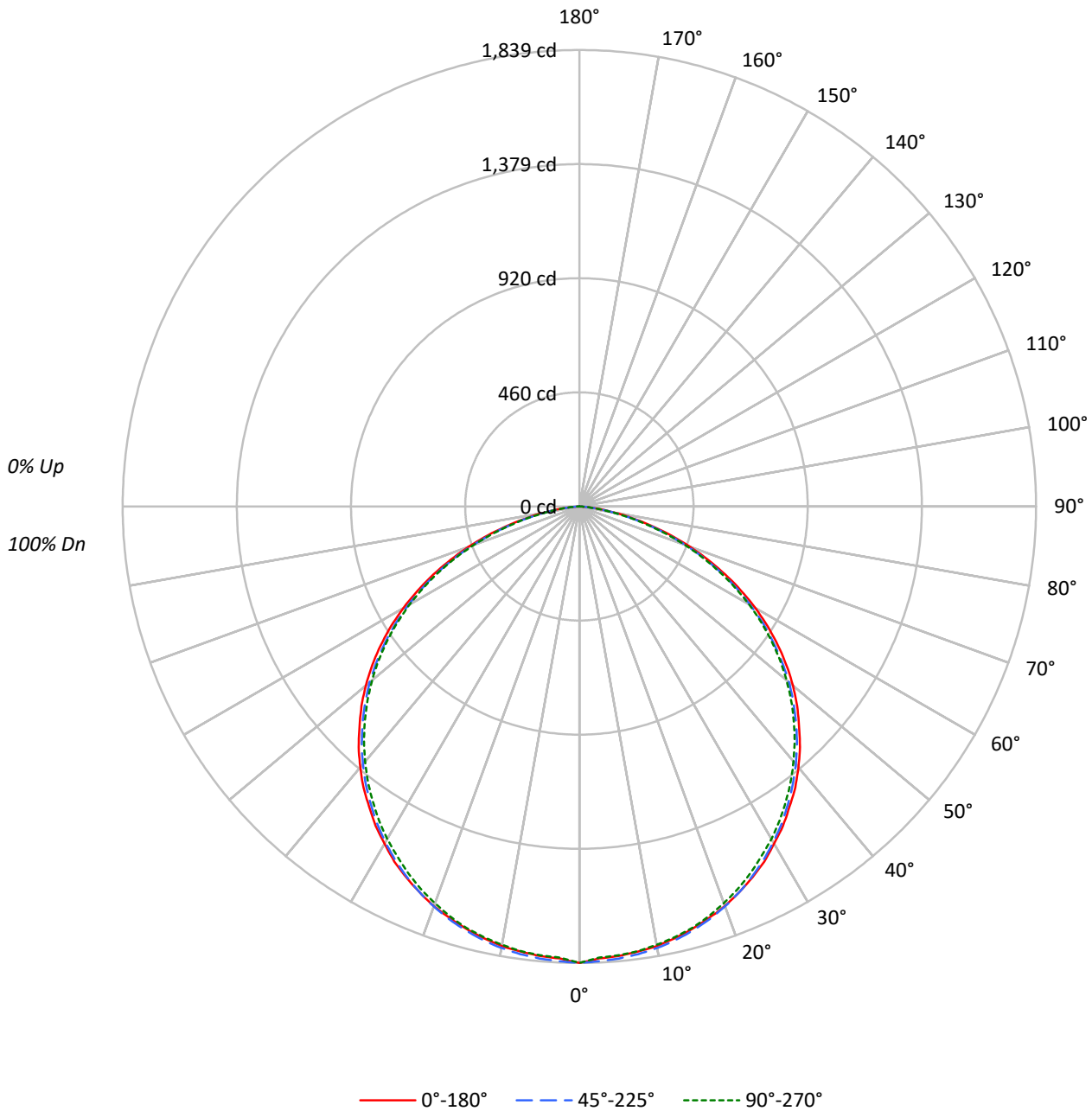
Test Method: LM-79-2019  
Report Number: P973157  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-70HE-L935-CP080  
Description: 1\*4 FLR-2.0 7000 Lumen High Efficacy at 3500CCT & 90 CRI Clear Polycarbonate (0.080" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5147.1 lumens  
Efficiency: N/A  
Efficacy: 98.0 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°	4949	4949	4949
5°	4910	4939	4904
10°	4915	4936	4900
15°	4907	4926	4897
20°	4907	4911	4872
25°	4895	4886	4841
30°	4875	4853	4806
35°	4848	4811	4763
40°	4821	4762	4714
45°	4762	4696	4646
50°	4700	4614	4560
55°	4582	4475	4432
60°	4404	4281	4244
65°	4125	4003	3960
70°	3719	3570	3540
75°	3118	2960	2928
80°	2264	2112	2052
85°	1198	1059	963

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4762 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.2	3.4
10°-20°	500.2	9.7
20°-30°	760.0	14.8
30°-40°	919.3	17.9
40°-50°	955.4	18.6
50°-60°	855.4	16.6
60°-70°	623.9	12.1
70°-80°	307.2	6.0
80°-90°	51.4	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°	1434.4	27.9
0°-40°	2353.7	45.7
0°-60°	4164.6	80.9
0°-90°	5147.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5147.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1839	1839	1839	1839	1839	
5°	1818	1838	1828	1846	1815	173
15°	1761	1777	1768	1783	1758	497
25°	1649	1657	1646	1653	1630	760
35°	1476	1479	1464	1471	1450	924
45°	1251	1250	1234	1236	1221	966
55°	977	968	954	952	945	872
65°	648	640	629	624	622	640
75°	300	295	285	282	282	320
85°	39	37	34	30	31	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1839.0	1839.0	1839.0	1839.0	1839.0
2.5°	1823.0	1843.6	1833.7	1851.9	1819.2
5°	1817.7	1837.5	1828.3	1845.9	1815.4
7.5°	1808.6	1829.1	1819.2	1836.0	1807.0
10°	1798.7	1816.9	1806.3	1823.0	1793.3
12.5°	1781.2	1799.4	1789.5	1804.8	1777.4
15°	1761.4	1777.4	1768.2	1783.4	1757.6
17.5°	1738.5	1753.8	1743.9	1757.6	1731.7
20°	1713.4	1725.6	1714.9	1726.4	1701.2
22.5°	1682.2	1693.6	1682.2	1689.8	1667.7
25°	1648.7	1657.1	1645.7	1653.3	1630.4
27.5°	1612.9	1617.5	1606.1	1612.2	1588.6
30°	1568.8	1574.1	1561.9	1569.5	1546.7
32.5°	1526.2	1529.2	1515.5	1521.6	1501.0
35°	1475.9	1479.0	1464.5	1470.6	1450.0
37.5°	1428.0	1427.2	1412.0	1415.8	1398.3
40°	1372.4	1371.6	1355.7	1358.7	1342.0
42.5°	1315.3	1312.3	1297.0	1298.6	1283.3
45°	1251.4	1249.9	1233.9	1236.2	1220.9
47.5°	1189.7	1185.2	1169.2	1169.9	1157.0
50°	1122.7	1115.9	1102.2	1100.7	1089.2
52.5°	1051.2	1043.6	1028.4	1026.8	1018.5
55°	976.6	968.2	953.8	951.5	944.6
57.5°	899.7	889.1	877.6	873.1	867.7
60°	818.3	808.4	795.4	790.9	788.6
62.5°	733.8	723.9	714.0	709.4	706.4
65°	647.8	640.2	628.7	624.2	621.9
67.5°	560.2	553.4	542.7	537.4	536.6
70°	472.7	465.8	453.7	450.6	449.9
72.5°	385.2	379.1	367.6	364.6	364.6
75°	299.9	294.6	284.7	281.6	281.6
77.5°	219.2	214.7	207.0	203.2	203.2
80°	146.1	143.1	136.3	133.2	132.4
82.5°	84.5	83.0	76.9	73.8	75.4
85°	38.8	37.3	34.3	30.4	31.2
87.5°	9.9	9.1	6.9	5.3	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)