

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: P973097

Luminaire Tested: FLR2-14-70HE-L930-CP187

Issue Date: 3/13/2025

**Test Information**

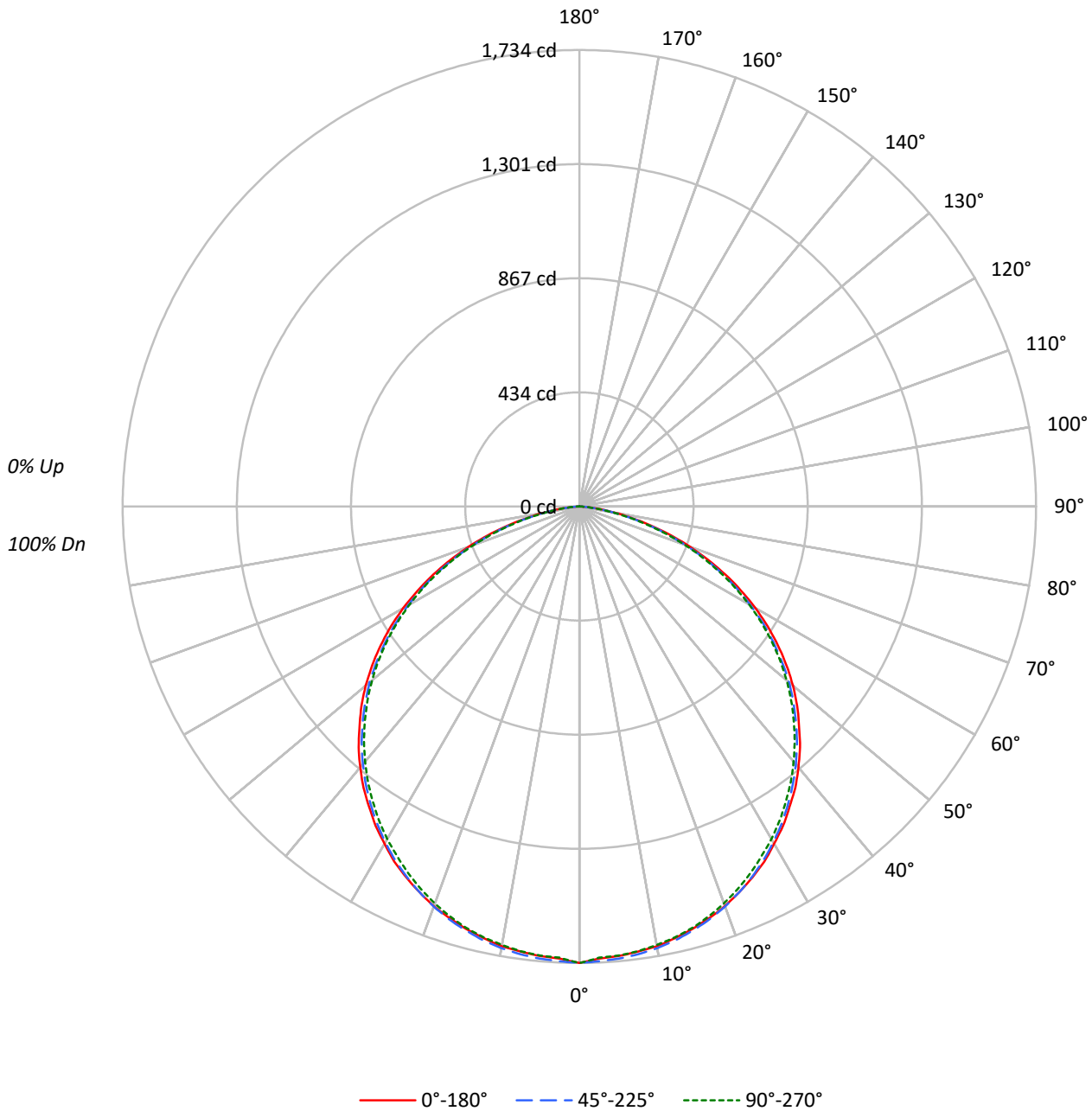
Test Method: LM-79-2019  
Report Number: P973097  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-70HE-L930-CP187  
Description: 1\*4 FLR-2.0 7000 Lumen High Efficacy at 3000CCT & 90 CRI Clear Polycarbonate (0.187" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4854.1 lumens  
Efficiency: N/A  
Efficacy: 92.5 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

TEST NUMBER: P973097  
CATALOG NUMBER: FLR2-14-70HE-L930-CP187

### Luminous Intensity Polar Plot





TEST NUMBER: P973097  
 CATALOG NUMBER: FLR2-14-70HE-L930-CP187

**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°	4667	4667	4667
5°	4630	4658	4625
10°	4635	4655	4621
15°	4628	4646	4618
20°	4627	4631	4594
25°	4617	4608	4565
30°	4597	4577	4533
35°	4573	4537	4492
40°	4547	4491	4446
45°	4491	4428	4382
50°	4433	4351	4300
55°	4321	4220	4179
60°	4153	4037	4003
65°	3890	3775	3734
70°	3508	3366	3338
75°	2940	2792	2761
80°	2135	1991	1936
85°	1130	997	908

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4491 cd/sqm



TEST NUMBER: P973097  
 CATALOG NUMBER: FLR2-14-70HE-L930-CP187

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.3	3.4
10°-20°	471.8	9.7
20°-30°	716.7	14.8
30°-40°	867.0	17.9
40°-50°	901.0	18.6
50°-60°	806.7	16.6
60°-70°	588.4	12.1
70°-80°	289.7	6.0
80°-90°	48.4	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°	1352.7	27.9
0°-40°	2219.7	45.7
0°-60°	3927.5	80.9
0°-90°	4854.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4854.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1734	1734	1734	1734	1734	
5°	1714	1733	1724	1741	1712	163
15°	1661	1676	1668	1682	1658	469
25°	1555	1563	1552	1559	1538	717
35°	1392	1395	1381	1387	1368	872
45°	1180	1179	1164	1166	1151	911
55°	921	913	900	897	891	822
65°	611	604	593	589	586	603
75°	283	278	268	266	266	301
85°	37	35	32	29	29	53
90°	0	0	0	0	0	



TEST NUMBER: P973097  
 CATALOG NUMBER: FLR2-14-70HE-L930-CP187

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1734.3	1734.3	1734.3	1734.3	1734.3
2.5°	1719.2	1738.6	1729.3	1746.5	1715.7
5°	1714.2	1732.9	1724.3	1740.8	1712.1
7.5°	1705.6	1725.0	1715.7	1731.4	1704.2
10°	1696.3	1713.5	1703.4	1719.2	1691.2
12.5°	1679.8	1697.0	1687.7	1702.0	1676.2
15°	1661.1	1676.2	1667.6	1681.9	1657.5
17.5°	1639.6	1653.9	1644.6	1657.5	1633.1
20°	1615.9	1627.4	1617.3	1628.1	1604.4
22.5°	1586.4	1597.2	1586.4	1593.6	1572.8
25°	1554.9	1562.8	1552.0	1559.2	1537.6
27.5°	1521.1	1525.4	1514.7	1520.4	1498.1
30°	1479.5	1484.5	1473.0	1480.2	1458.7
32.5°	1439.3	1442.2	1429.2	1435.0	1415.6
35°	1391.9	1394.8	1381.1	1386.9	1367.5
37.5°	1346.7	1346.0	1331.6	1335.2	1318.7
40°	1294.3	1293.6	1278.5	1281.4	1265.6
42.5°	1240.4	1237.6	1223.2	1224.6	1210.3
45°	1180.1	1178.7	1163.6	1165.8	1151.4
47.5°	1122.0	1117.7	1102.6	1103.3	1091.1
50°	1058.8	1052.4	1039.4	1038.0	1027.2
52.5°	991.3	984.2	969.8	968.4	960.5
55°	921.0	913.1	899.5	897.3	890.8
57.5°	848.5	838.4	827.7	823.4	818.3
60°	771.7	762.4	750.1	745.8	743.7
62.5°	692.0	682.7	673.3	669.0	666.2
65°	610.9	603.7	592.9	588.6	586.5
67.5°	528.3	521.9	511.8	506.8	506.1
70°	445.8	439.3	427.8	425.0	424.2
72.5°	363.2	357.5	346.7	343.8	343.8
75°	282.8	277.8	268.5	265.6	265.6
77.5°	206.7	202.4	195.3	191.7	191.7
80°	137.8	135.0	128.5	125.6	124.9
82.5°	79.7	78.2	72.5	69.6	71.1
85°	36.6	35.2	32.3	28.7	29.4
87.5°	9.3	8.6	6.5	5.0	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)