

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: P973087

Luminaire Tested: FLR2-14-70HE-L930-CP080

Issue Date: 3/13/2025

**Test Information**

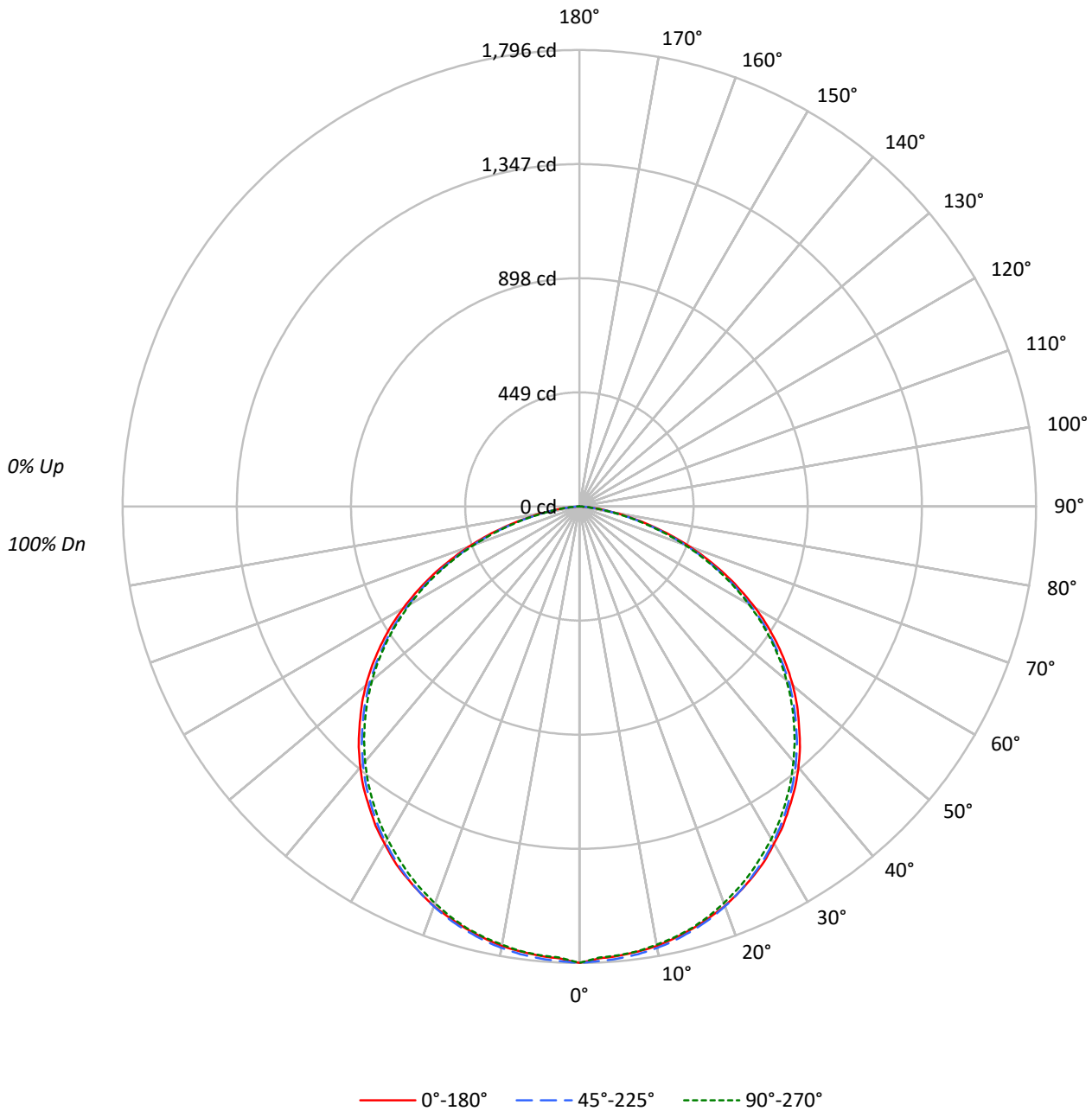
Test Method: LM-79-2019  
Report Number: P973087  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-70HE-L930-CP080  
Description: 1\*4 FLR-2.0 7000 Lumen High Efficacy at 3000CCT & 90 CRI Clear Polycarbonate (0.080" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5026.0 lumens  
Efficiency: N/A  
Efficacy: 95.7 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	4832	4832	4832
5°	4794	4823	4789
10°	4799	4820	4785
15°	4791	4810	4781
20°	4791	4796	4757
25°	4780	4771	4727
30°	4760	4739	4693
35°	4734	4698	4651
40°	4708	4650	4603
45°	4650	4585	4537
50°	4590	4506	4453
55°	4474	4369	4328
60°	4300	4180	4144
65°	4027	3909	3866
70°	3632	3485	3456
75°	3044	2890	2859
80°	2211	2061	2004
85°	1170	1031	942

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4650 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.1	3.4
10°-20°	488.5	9.7
20°-30°	742.1	14.8
30°-40°	897.7	17.9
40°-50°	933.0	18.6
50°-60°	835.3	16.6
60°-70°	609.2	12.1
70°-80°	300.0	6.0
80°-90°	50.2	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°	1400.6	27.9
0°-40°	2298.3	45.7
0°-60°	4066.6	80.9
0°-90°	5026.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5026.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1796	1796	1796	1796	1796	
5°	1775	1794	1785	1802	1773	169
15°	1720	1736	1727	1742	1716	486
25°	1610	1618	1607	1614	1592	742
35°	1441	1444	1430	1436	1416	903
45°	1222	1220	1205	1207	1192	943
55°	954	945	931	929	922	851
65°	632	625	614	610	607	625
75°	293	288	278	275	275	312
85°	38	36	33	30	30	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1795.7	1795.7	1795.7	1795.7	1795.7
2.5°	1780.1	1800.2	1790.5	1808.4	1776.4
5°	1774.9	1794.2	1785.3	1802.4	1772.7
7.5°	1766.0	1786.1	1776.4	1792.8	1764.5
10°	1756.3	1774.2	1763.8	1780.1	1751.1
12.5°	1739.2	1757.1	1747.4	1762.3	1735.5
15°	1719.9	1735.5	1726.6	1741.5	1716.2
17.5°	1697.6	1712.5	1702.8	1716.2	1690.9
20°	1673.1	1685.0	1674.6	1685.7	1661.2
22.5°	1642.6	1653.8	1642.6	1650.1	1628.5
25°	1609.9	1618.1	1606.9	1614.4	1592.1
27.5°	1575.0	1579.4	1568.3	1574.2	1551.2
30°	1531.9	1537.1	1525.2	1532.6	1510.3
32.5°	1490.3	1493.2	1479.8	1485.8	1465.7
35°	1441.2	1444.2	1430.0	1436.0	1415.9
37.5°	1394.4	1393.6	1378.8	1382.5	1365.4
40°	1340.1	1339.4	1323.8	1326.7	1310.4
42.5°	1284.4	1281.4	1266.5	1268.0	1253.1
45°	1221.9	1220.4	1204.8	1207.1	1192.2
47.5°	1161.7	1157.3	1141.7	1142.4	1129.8
50°	1096.3	1089.6	1076.3	1074.8	1063.6
52.5°	1026.5	1019.0	1004.2	1002.7	994.5
55°	953.6	945.4	931.3	929.1	922.4
57.5°	878.5	868.1	857.0	852.5	847.3
60°	799.0	789.4	776.7	772.3	770.0
62.5°	716.5	706.8	697.2	692.7	689.8
65°	632.5	625.1	613.9	609.5	607.2
67.5°	547.0	540.4	529.9	524.7	524.0
70°	461.6	454.9	443.0	440.0	439.3
72.5°	376.1	370.1	359.0	356.0	356.0
75°	292.8	287.6	278.0	275.0	275.0
77.5°	214.1	209.6	202.2	198.5	198.5
80°	142.7	139.7	133.0	130.1	129.3
82.5°	82.5	81.0	75.1	72.1	73.6
85°	37.9	36.4	33.4	29.7	30.5
87.5°	9.7	8.9	6.7	5.2	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)