

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: P973297

Luminaire Tested: FLR2-14-70HE-L950-CP080

Issue Date: 3/13/2025

**Test Information**

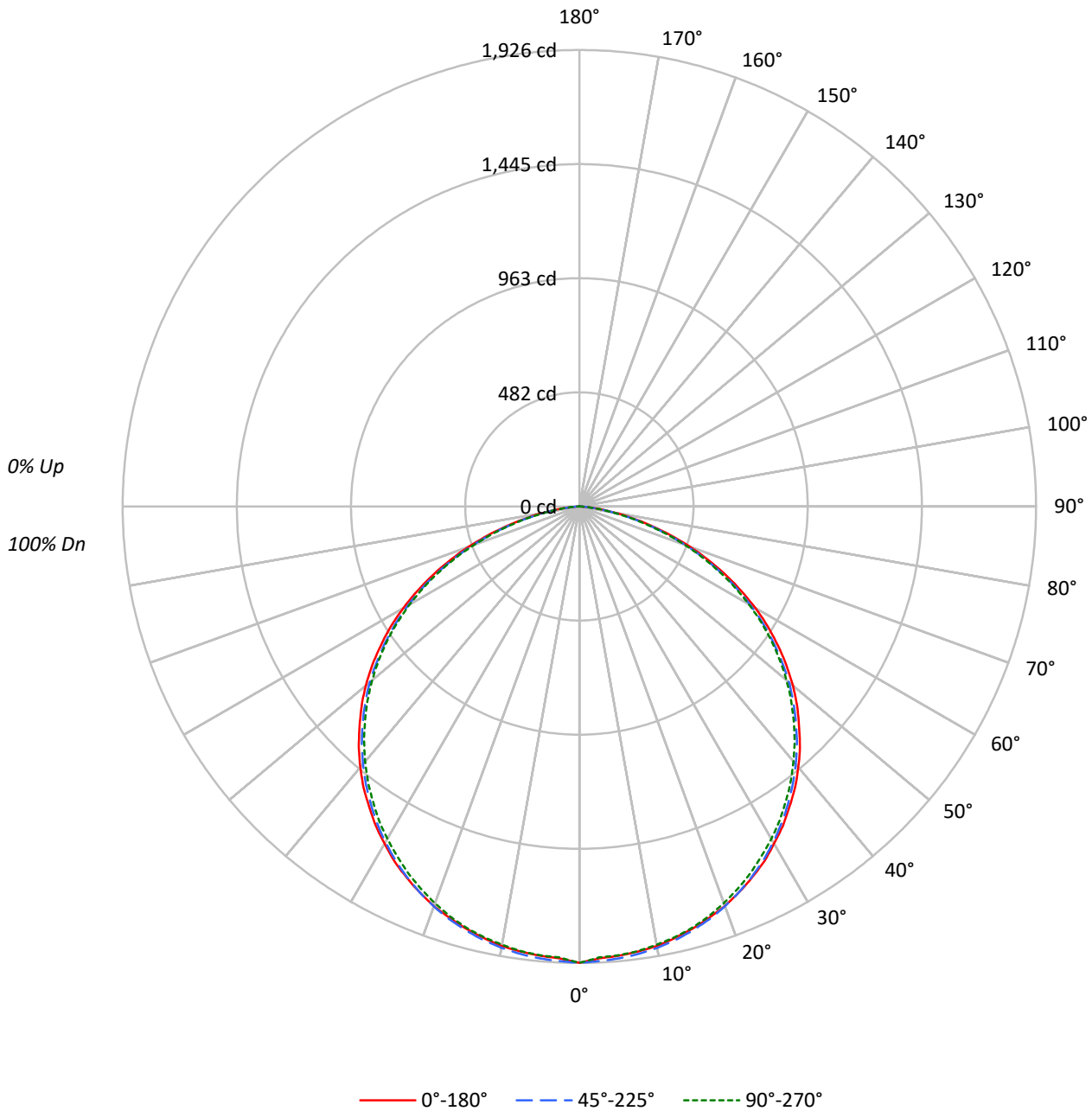
Test Method: LM-79-2019  
Report Number: P973297  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-70HE-L950-CP080  
Description: 1\*4 FLR-2.0 7000 Lumen High Efficacy at 5000CCT & 90 CRI Clear Polycarbonate (0.080" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5389.4 lumens  
Efficiency: N/A  
Efficacy: 102.7 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

TEST NUMBER: P973297  
CATALOG NUMBER: FLR2-14-70HE-L950-CP080

### Luminous Intensity Polar Plot





TEST NUMBER: P973297  
 CATALOG NUMBER: FLR2-14-70HE-L950-CP080

**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°	5181	5181	5181
5°	5141	5171	5135
10°	5146	5168	5131
15°	5138	5158	5127
20°	5137	5142	5101
25°	5126	5116	5069
30°	5104	5082	5032
35°	5077	5037	4988
40°	5048	4986	4936
45°	4987	4916	4865
50°	4922	4832	4775
55°	4797	4685	4640
60°	4611	4483	4444
65°	4318	4192	4146
70°	3894	3737	3706
75°	3265	3099	3066
80°	2371	2211	2149
85°	1254	1108	1010

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4987 cd/sqm



TEST NUMBER: P973297  
 CATALOG NUMBER: FLR2-14-70HE-L950-CP080

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.4	3.4
10°-20°	523.8	9.7
20°-30°	795.7	14.8
30°-40°	962.6	17.9
40°-50°	1000.4	18.6
50°-60°	895.7	16.6
60°-70°	653.3	12.1
70°-80°	321.7	6.0
80°-90°	53.8	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°	1501.9	27.9
0°-40°	2464.5	45.7
0°-60°	4360.6	80.9
0°-90°	5389.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5389.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1926	1926	1926	1926	1926	
5°	1903	1924	1914	1933	1901	181
15°	1844	1861	1851	1867	1840	521
25°	1726	1735	1723	1731	1707	796
35°	1545	1549	1533	1540	1518	968
45°	1310	1309	1292	1294	1278	1012
55°	1022	1014	999	996	989	913
65°	678	670	658	654	651	670
75°	314	308	298	295	295	335
85°	41	39	36	32	33	59
90°	0	0	0	0	0	



TEST NUMBER: P973297  
 CATALOG NUMBER: FLR2-14-70HE-L950-CP080

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1925.5	1925.5	1925.5	1925.5	1925.5
2.5°	1908.8	1930.3	1920.0	1939.1	1904.8
5°	1903.2	1924.0	1914.4	1932.7	1900.8
7.5°	1893.7	1915.2	1904.8	1922.4	1892.1
10°	1883.3	1902.4	1891.3	1908.8	1877.7
12.5°	1865.0	1884.1	1873.7	1889.7	1861.0
15°	1844.3	1861.0	1851.4	1867.4	1840.3
17.5°	1820.3	1836.3	1825.9	1840.3	1813.2
20°	1794.0	1806.8	1795.6	1807.6	1781.3
22.5°	1761.4	1773.3	1761.4	1769.3	1746.2
25°	1726.3	1735.1	1723.1	1731.1	1707.2
27.5°	1688.8	1693.6	1681.7	1688.0	1663.3
30°	1642.6	1648.2	1635.4	1643.4	1619.5
32.5°	1598.0	1601.2	1586.8	1593.2	1571.7
35°	1545.4	1548.6	1533.4	1539.8	1518.3
37.5°	1495.2	1494.4	1478.4	1482.4	1464.1
40°	1437.0	1436.2	1419.5	1422.6	1405.1
42.5°	1377.2	1374.0	1358.1	1359.7	1343.7
45°	1310.3	1308.7	1291.9	1294.3	1278.4
47.5°	1245.7	1240.9	1224.2	1225.0	1211.4
50°	1175.6	1168.4	1154.1	1152.5	1140.5
52.5°	1100.7	1092.7	1076.7	1075.2	1066.4
55°	1022.5	1013.8	998.6	996.2	989.1
57.5°	942.1	930.9	918.9	914.2	908.6
60°	856.8	846.4	832.9	828.1	825.7
62.5°	768.3	757.9	747.6	742.8	739.6
65°	678.2	670.3	658.3	653.5	651.1
67.5°	586.6	579.4	568.3	562.7	561.9
70°	494.9	487.8	475.0	471.8	471.0
72.5°	403.3	396.9	384.9	381.8	381.8
75°	314.0	308.4	298.1	294.9	294.9
77.5°	229.5	224.8	216.8	212.8	212.8
80°	153.0	149.8	142.7	139.5	138.7
82.5°	88.5	86.9	80.5	77.3	78.9
85°	40.6	39.1	35.9	31.9	32.7
87.5°	10.4	9.6	7.2	5.6	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)