

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: P973307

Luminaire Tested: FLR2-14-70HE-L950-CP187

Issue Date: 3/13/2025

**Test Information**

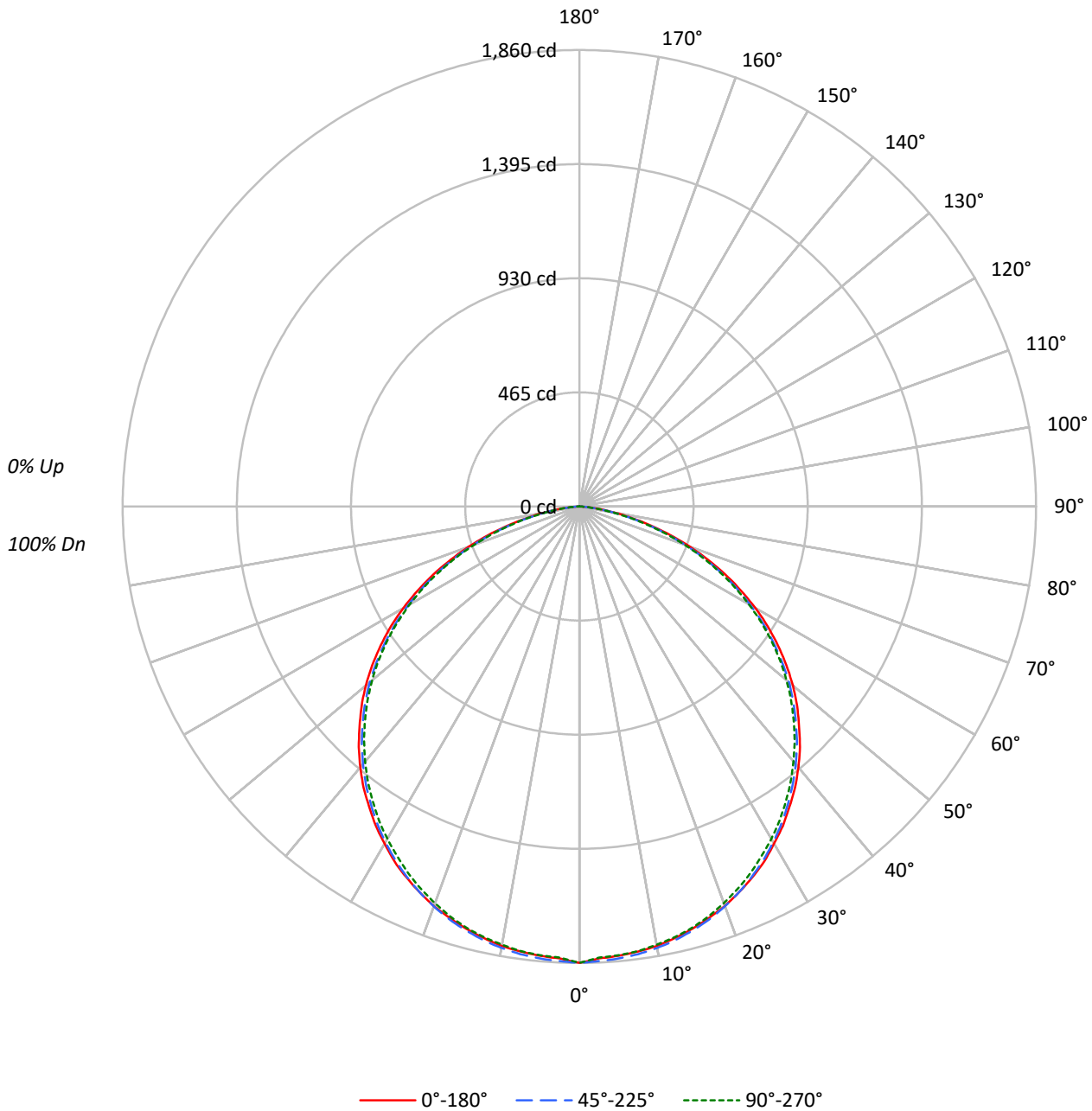
Test Method: LM-79-2019  
Report Number: P973307  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-70HE-L950-CP187  
Description: 1\*4 FLR-2.0 7000 Lumen High Efficacy at 5000CCT & 90 CRI Clear Polycarbonate (0.187" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5205.0 lumens  
Efficiency: N/A  
Efficacy: 99.1 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°	5004	5004	5004
5°	4965	4994	4959
10°	4970	4991	4955
15°	4962	4981	4951
20°	4962	4966	4927
25°	4950	4941	4896
30°	4929	4908	4860
35°	4903	4865	4817
40°	4875	4816	4767
45°	4816	4748	4699
50°	4753	4666	4611
55°	4633	4525	4481
60°	4454	4329	4292
65°	4171	4048	4004
70°	3761	3610	3579
75°	3153	2993	2961
80°	2290	2135	2075
85°	1213	1068	976

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4816 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.2	3.4
10°-20°	505.9	9.7
20°-30°	768.5	14.8
30°-40°	929.6	17.9
40°-50°	966.2	18.6
50°-60°	865.1	16.6
60°-70°	630.9	12.1
70°-80°	310.7	6.0
80°-90°	51.9	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°	1450.5	27.9
0°-40°	2380.2	45.7
0°-60°	4211.4	80.9
0°-90°	5205.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5205.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1860	1860	1860	1860	1860	
5°	1838	1858	1849	1867	1836	175
15°	1781	1797	1788	1804	1777	503
25°	1667	1676	1664	1672	1649	769
35°	1492	1496	1481	1487	1466	935
45°	1266	1264	1248	1250	1235	977
55°	988	979	964	962	955	881
65°	655	647	636	631	629	647
75°	303	298	288	285	285	323
85°	39	38	35	31	32	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1859.7	1859.7	1859.7	1859.7	1859.7
2.5°	1843.5	1864.3	1854.3	1872.8	1839.7
5°	1838.1	1858.1	1848.9	1866.6	1835.8
7.5°	1828.9	1849.7	1839.7	1856.6	1827.4
10°	1818.9	1837.4	1826.6	1843.5	1813.5
12.5°	1801.2	1819.7	1809.7	1825.1	1797.3
15°	1781.2	1797.3	1788.1	1803.5	1777.3
17.5°	1758.1	1773.5	1763.5	1777.3	1751.2
20°	1732.7	1745.0	1734.2	1745.8	1720.4
22.5°	1701.1	1712.7	1701.1	1708.8	1686.5
25°	1667.3	1675.7	1664.2	1671.9	1648.8
27.5°	1631.1	1635.7	1624.1	1630.3	1606.4
30°	1586.4	1591.8	1579.5	1587.2	1564.1
32.5°	1543.3	1546.4	1532.5	1538.7	1517.9
35°	1492.5	1495.6	1481.0	1487.1	1466.4
37.5°	1444.0	1443.3	1427.9	1431.7	1414.0
40°	1387.8	1387.1	1370.9	1374.0	1357.0
42.5°	1330.1	1327.0	1311.6	1313.2	1297.8
45°	1265.5	1263.9	1247.7	1250.1	1234.7
47.5°	1203.1	1198.5	1182.3	1183.1	1170.0
50°	1135.4	1128.4	1114.6	1113.0	1101.5
52.5°	1063.0	1055.3	1039.9	1038.4	1029.9
55°	987.6	979.1	964.5	962.2	955.2
57.5°	909.8	899.1	887.5	882.9	877.5
60°	827.5	817.5	804.4	799.8	797.4
62.5°	742.0	732.0	722.0	717.4	714.3
65°	655.0	647.4	635.8	631.2	628.9
67.5°	566.5	559.6	548.8	543.4	542.7
70°	478.0	471.1	458.8	455.7	454.9
72.5°	389.5	383.3	371.8	368.7	368.7
75°	303.3	297.9	287.9	284.8	284.8
77.5°	221.7	217.1	209.4	205.5	205.5
80°	147.8	144.7	137.8	134.7	133.9
82.5°	85.4	83.9	77.7	74.7	76.2
85°	39.3	37.7	34.6	30.8	31.6
87.5°	10.0	9.2	6.9	5.4	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)