

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: P973247

Luminaire Tested: FLR2-14-70HE-L940-CP375

Issue Date: 3/13/2025

**Test Information**

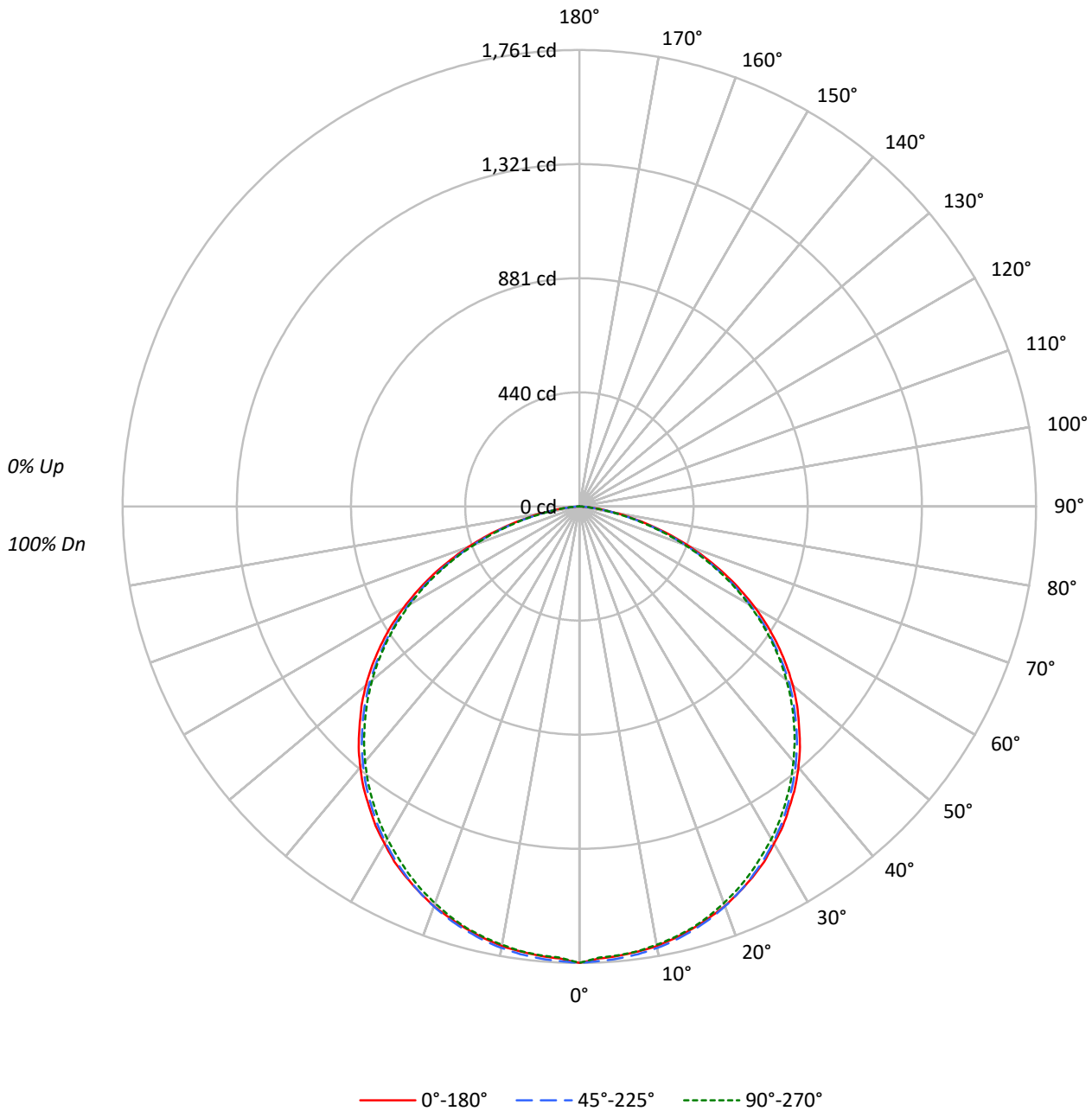
Test Method: LM-79-2019  
Report Number: P973247  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-70HE-L940-CP375  
Description: 1\*4 FLR-2.0 7000 Lumen High Efficacy at 4000CCT & 90 CRI Clear Polycarbonate (0.375" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4928.3 lumens  
Efficiency: N/A  
Efficacy: 93.9 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°	4738	4738	4738
5°	4701	4729	4695
10°	4706	4726	4692
15°	4698	4717	4688
20°	4698	4702	4665
25°	4687	4679	4635
30°	4667	4647	4602
35°	4642	4607	4561
40°	4616	4560	4514
45°	4560	4496	4449
50°	4500	4418	4366
55°	4387	4284	4244
60°	4217	4099	4064
65°	3949	3833	3791
70°	3561	3418	3389
75°	2986	2834	2804
80°	2168	2022	1965
85°	1149	1013	923

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4560 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.8	3.4
10°-20°	479.0	9.7
20°-30°	727.7	14.8
30°-40°	880.2	17.9
40°-50°	914.8	18.6
50°-60°	819.1	16.6
60°-70°	597.4	12.1
70°-80°	294.2	6.0
80°-90°	49.2	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°	1373.4	27.9
0°-40°	2253.6	45.7
0°-60°	3987.5	80.9
0°-90°	4928.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4928.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1761	1761	1761	1761	1761	
5°	1740	1759	1751	1767	1738	166
15°	1686	1702	1693	1708	1683	476
25°	1579	1587	1576	1583	1561	728
35°	1413	1416	1402	1408	1388	885
45°	1198	1197	1181	1184	1169	925
55°	935	927	913	911	904	835
65°	620	613	602	598	595	613
75°	287	282	273	270	270	306
85°	37	36	33	29	30	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1760.8	1760.8	1760.8	1760.8	1760.8
2.5°	1745.5	1765.2	1755.7	1773.2	1741.9
5°	1740.4	1759.4	1750.6	1767.4	1738.2
7.5°	1731.7	1751.4	1741.9	1757.9	1730.2
10°	1722.2	1739.7	1729.5	1745.5	1717.1
12.5°	1705.4	1722.9	1713.5	1728.0	1701.8
15°	1686.5	1701.8	1693.1	1707.6	1682.9
17.5°	1664.6	1679.2	1669.7	1682.9	1658.1
20°	1640.6	1652.2	1642.0	1653.0	1628.9
22.5°	1610.7	1621.6	1610.7	1618.0	1596.9
25°	1578.6	1586.6	1575.7	1583.0	1561.1
27.5°	1544.4	1548.7	1537.8	1543.6	1521.1
30°	1502.1	1507.2	1495.5	1502.8	1481.0
32.5°	1461.3	1464.2	1451.1	1456.9	1437.2
35°	1413.2	1416.1	1402.3	1408.1	1388.4
37.5°	1367.3	1366.5	1352.0	1355.6	1338.8
40°	1314.1	1313.3	1298.0	1300.9	1284.9
42.5°	1259.4	1256.5	1241.9	1243.4	1228.8
45°	1198.2	1196.7	1181.4	1183.6	1169.0
47.5°	1139.2	1134.8	1119.5	1120.2	1107.8
50°	1075.0	1068.5	1055.3	1053.9	1042.9
52.5°	1006.5	999.2	984.6	983.2	975.2
55°	935.1	927.1	913.2	911.0	904.5
57.5°	861.5	851.3	840.3	836.0	830.9
60°	783.5	774.0	761.6	757.2	755.1
62.5°	702.6	693.1	683.6	679.3	676.3
65°	620.2	612.9	602.0	597.6	595.4
67.5°	536.4	529.9	519.7	514.5	513.8
70°	452.6	446.0	434.4	431.5	430.7
72.5°	368.8	363.0	352.0	349.1	349.1
75°	287.2	282.1	272.6	269.7	269.7
77.5°	209.9	205.5	198.2	194.6	194.6
80°	139.9	137.0	130.5	127.5	126.8
82.5°	80.9	79.4	73.6	70.7	72.2
85°	37.2	35.7	32.8	29.2	29.9
87.5°	9.5	8.7	6.6	5.1	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)