

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: P973227

Luminaire Tested: FLR2-14-70HE-L940-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973227
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-CP080
Description: 1*4 FLR-2.0 7000 Lumen High Efficacy at 4000CCT & 90 CRI Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

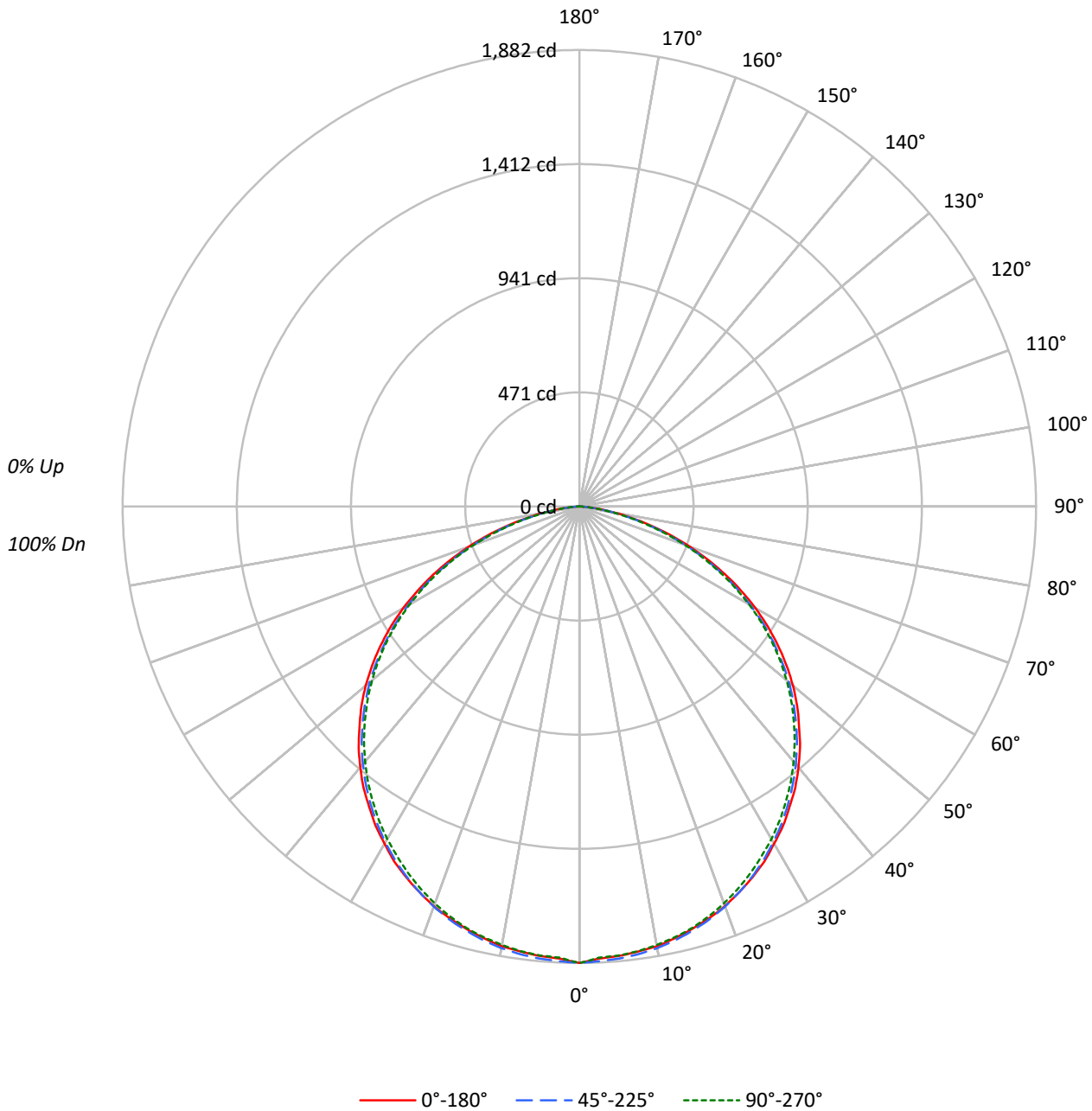
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5268.2 lumens
Efficiency: N/A
Efficacy: 100.3 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°	5065	5065	5065
5°	5026	5055	5019
10°	5031	5052	5015
15°	5022	5042	5012
20°	5022	5027	4987
25°	5010	5001	4955
30°	4989	4968	4919
35°	4963	4924	4876
40°	4934	4874	4825
45°	4874	4806	4756
50°	4811	4723	4667
55°	4690	4580	4536
60°	4507	4381	4344
65°	4222	4097	4053
70°	3806	3653	3622
75°	3192	3030	2997
80°	2318	2162	2101
85°	1226	1084	985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4874 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.3	3.4
10°-20°	512.0	9.7
20°-30°	777.9	14.8
30°-40°	940.9	17.9
40°-50°	977.9	18.6
50°-60°	875.6	16.6
60°-70°	638.6	12.1
70°-80°	314.5	6.0
80°-90°	52.6	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°	1468.2	27.9
0°-40°	2409.1	45.7
0°-60°	4262.6	80.9
0°-90°	5268.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5268.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1882	1882	1882	1882	1882	
5°	1860	1881	1871	1889	1858	177
15°	1803	1819	1810	1825	1799	509
25°	1688	1696	1684	1692	1669	778
35°	1511	1514	1499	1505	1484	946
45°	1281	1279	1263	1265	1250	989
55°	1000	991	976	974	967	892
65°	663	655	644	639	636	655
75°	307	302	291	288	288	327
85°	40	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°	1882.3	1882.3	1882.3	1882.3	1882.3
2.5°	1865.9	1887.0	1876.8	1895.5	1862.0
5°	1860.5	1880.7	1871.4	1889.3	1858.1
7.5°	1851.1	1872.1	1862.0	1879.2	1849.6
10°	1841.0	1859.7	1848.8	1865.9	1835.5
12.5°	1823.1	1841.8	1831.6	1847.2	1819.2
15°	1802.8	1819.2	1809.8	1825.4	1798.9
17.5°	1779.4	1795.0	1784.9	1798.9	1772.4
20°	1753.7	1766.2	1755.3	1767.0	1741.3
22.5°	1721.8	1733.5	1721.8	1729.6	1707.0
25°	1687.5	1696.1	1684.4	1692.2	1668.8
27.5°	1650.9	1655.6	1643.9	1650.1	1626.0
30°	1605.7	1611.2	1598.7	1606.5	1583.1
32.5°	1562.1	1565.2	1551.2	1557.4	1536.4
35°	1510.7	1513.8	1499.0	1505.2	1484.2
37.5°	1461.6	1460.8	1445.2	1449.1	1431.2
40°	1404.7	1403.9	1387.6	1390.7	1373.5
42.5°	1346.3	1343.1	1327.6	1329.1	1313.5
45°	1280.8	1279.3	1262.9	1265.2	1249.7
47.5°	1217.7	1213.0	1196.7	1197.5	1184.2
50°	1149.2	1142.1	1128.1	1126.6	1114.9
52.5°	1075.9	1068.1	1052.5	1051.0	1042.4
55°	999.6	991.0	976.2	973.9	966.8
57.5°	920.9	910.0	898.3	893.6	888.2
60°	837.5	827.4	814.1	809.5	807.1
62.5°	751.0	740.9	730.8	726.1	723.0
65°	663.0	655.2	643.5	638.9	636.5
67.5°	573.4	566.4	555.5	550.0	549.3
70°	483.8	476.8	464.3	461.2	460.4
72.5°	394.2	388.0	376.3	373.2	373.2
75°	307.0	301.5	291.4	288.3	288.3
77.5°	224.4	219.7	211.9	208.0	208.0
80°	149.6	146.5	139.5	136.3	135.6
82.5°	86.5	84.9	78.7	75.6	77.1
85°	39.7	38.2	35.1	31.2	31.9
87.5°	10.1	9.3	7.0	5.5	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)