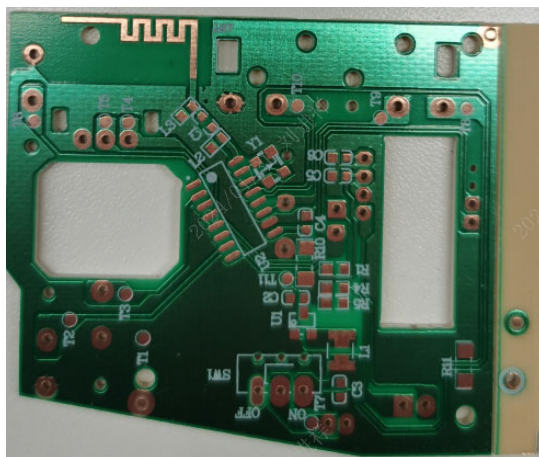


Antenna Specification

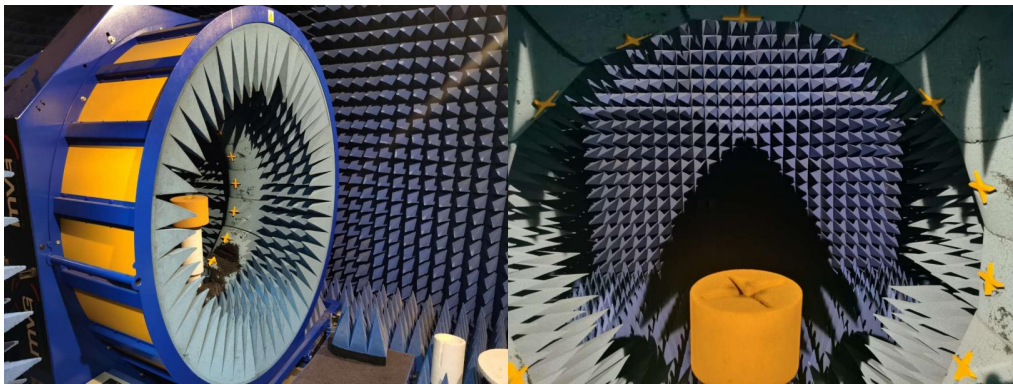
Project name	M511
ITEM	SPEC.
Model Name	BT2.4G
Polarization	Vertical
Gain	2.4G<1.86
Impedance	50 Ω
Weight	/
Product description	PCB onboard antenna
Antenna Length	22.5*8.7mm
Manufacturer	Lisinson electronics
Address	No. 9, No. 2 Longshan Road, Low Mountain Village, Longgang District new life community, Shenzhen City

Product picture



Testing environment

Satimo



CMW-500 Integrated measuring instrument

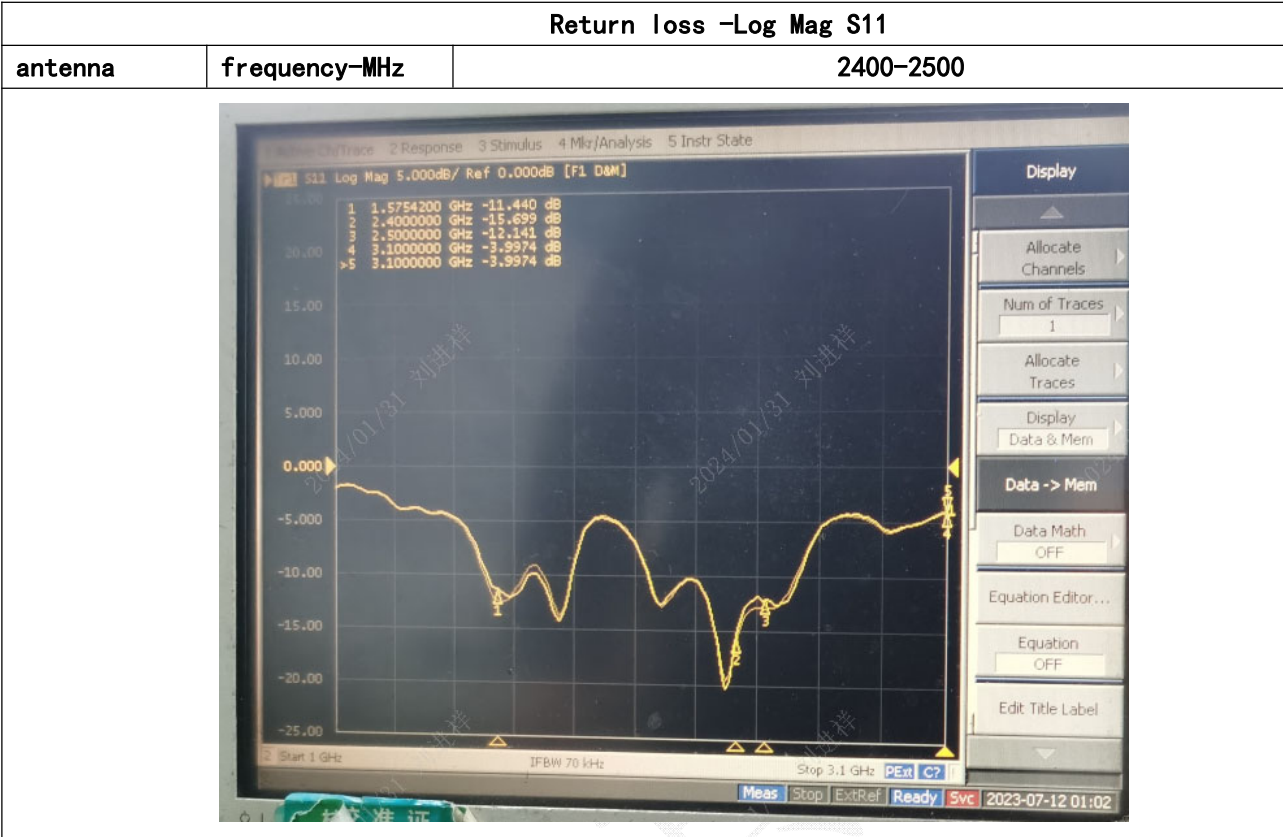


Agilent network analyzer

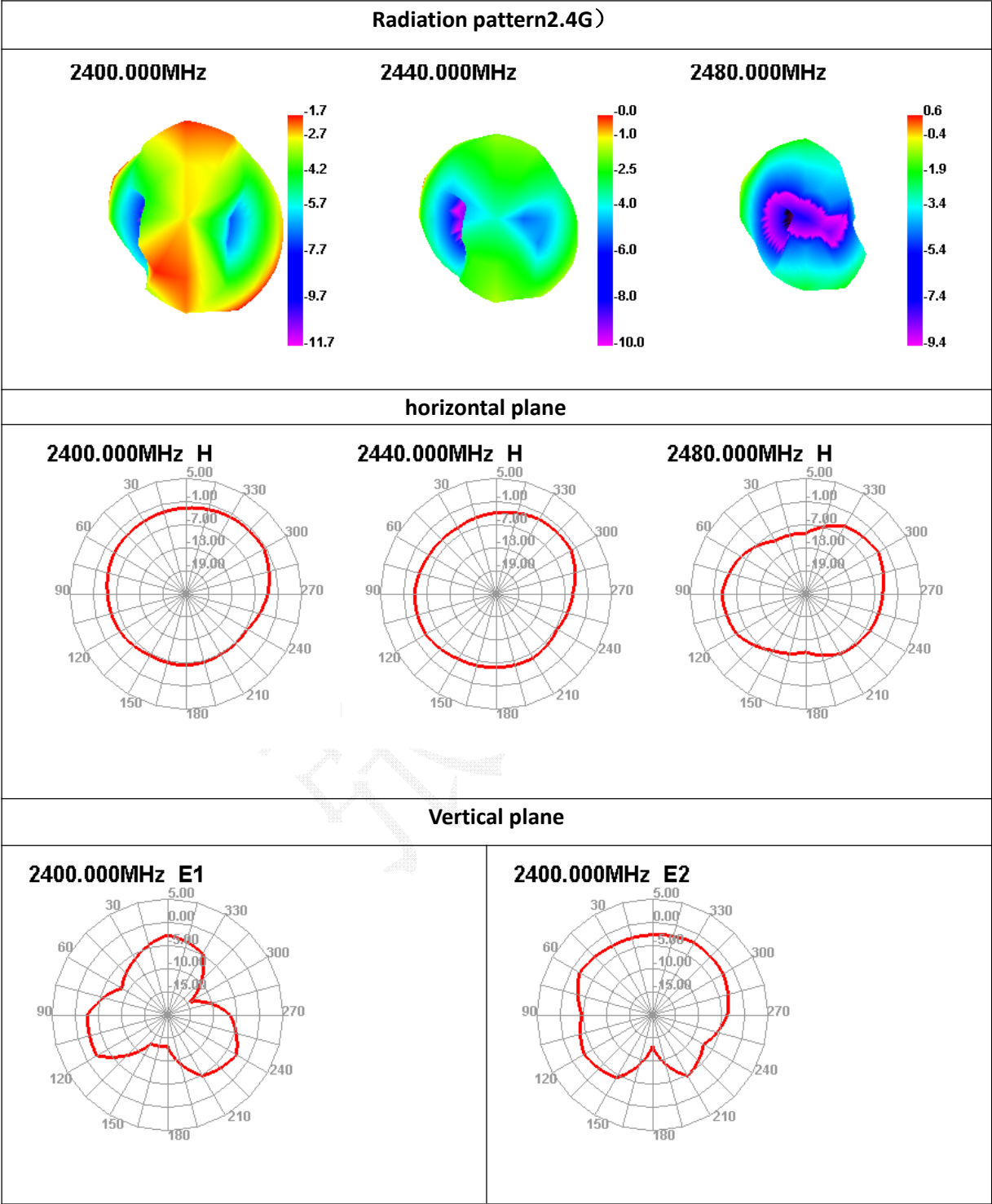


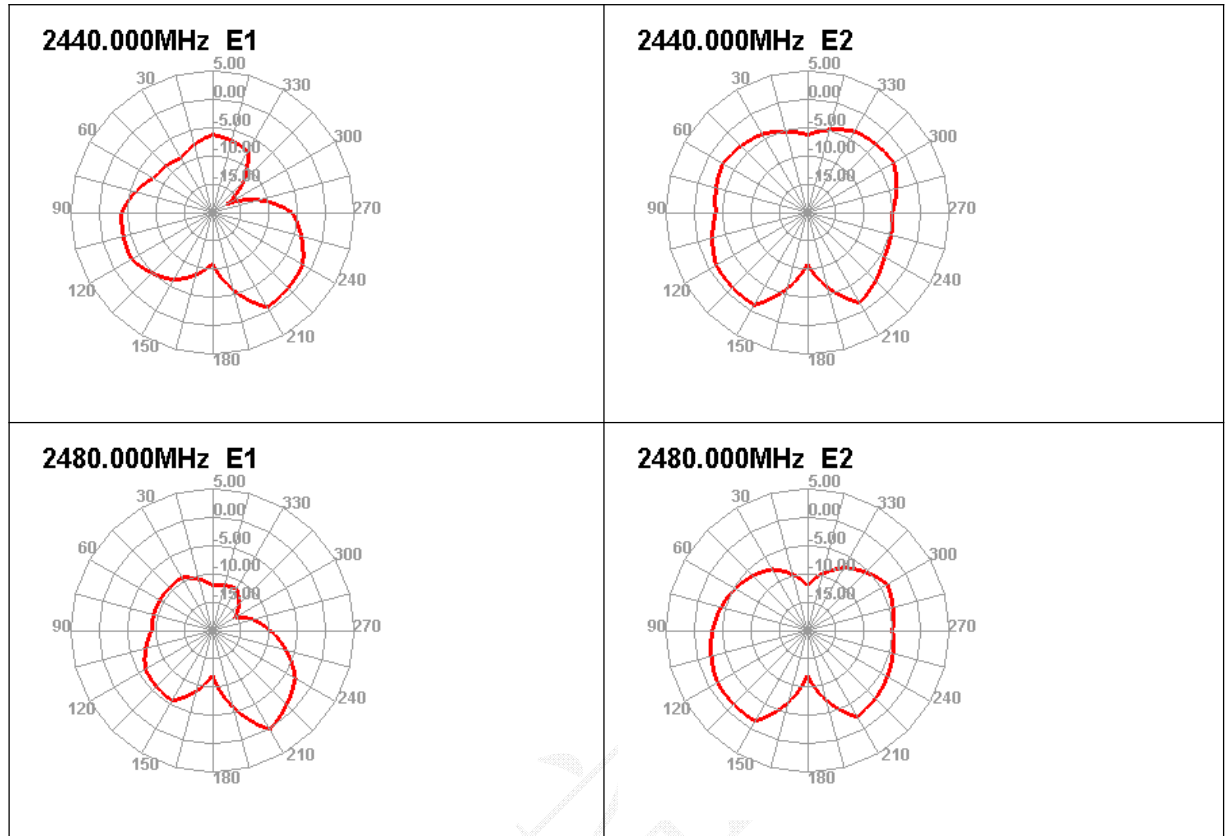
Electrical performance test results

Antenna					
Number	Inspection items	unit	Performance indicator requirements	Inspection results	
1	frequency range	MHz	2412-2483.5	2400-2483.5	
2	Gain	dBi	/	2400	1.79
				2440	1.71
				2480	1.15
4	Return loss	dB	≤ -10	2400	-15.6
				2440	/
				2500	-12.1
4	Standing wave ratio	dB	/	2400	1.39
				2440	/
				2500	1.64



Radiation parameter testing





Passive efficiency of antenna

Frequency	E Total. dB(dBi)	Efficiency(%)
2400MHz	1. 79	48. 46
2410MHz	1. 67	45. 68
2420MHz	1. 86	47. 78
2430MHz	1. 58	45. 43
2440MHz	1. 71	48. 44
2450MHz	1. 59	48. 69
2460MHz	1. 34	48. 19
2470MHz	0. 87	43. 15
2480MHz	1. 15	48. 44
2490MHz	1. 49	55. 29
2500MHz	1. 22	55. 04