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NUPHIZ

让无线电波助力未来生活



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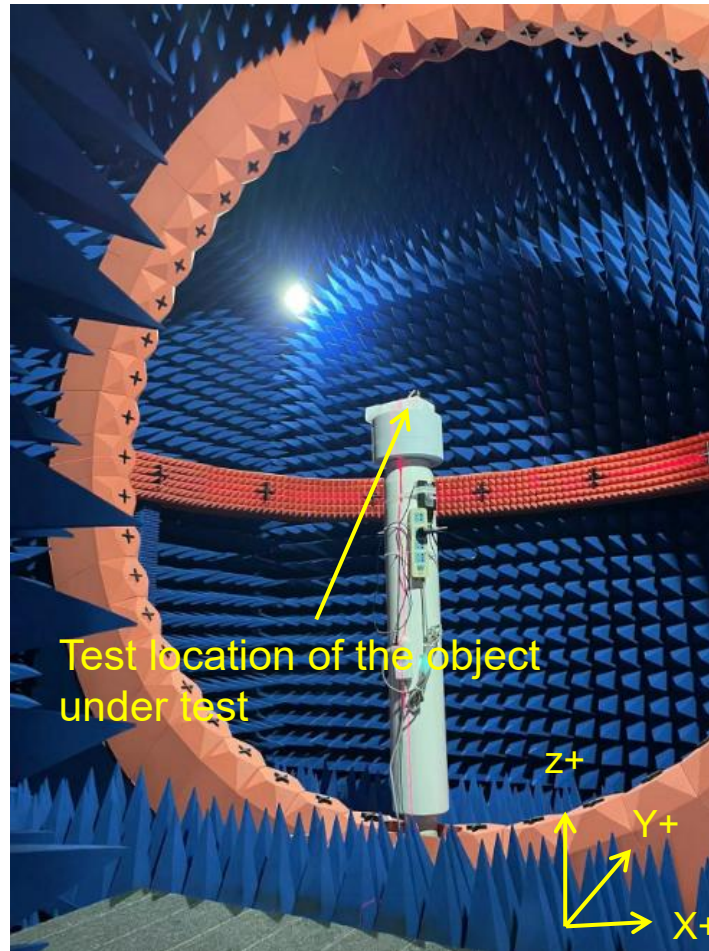
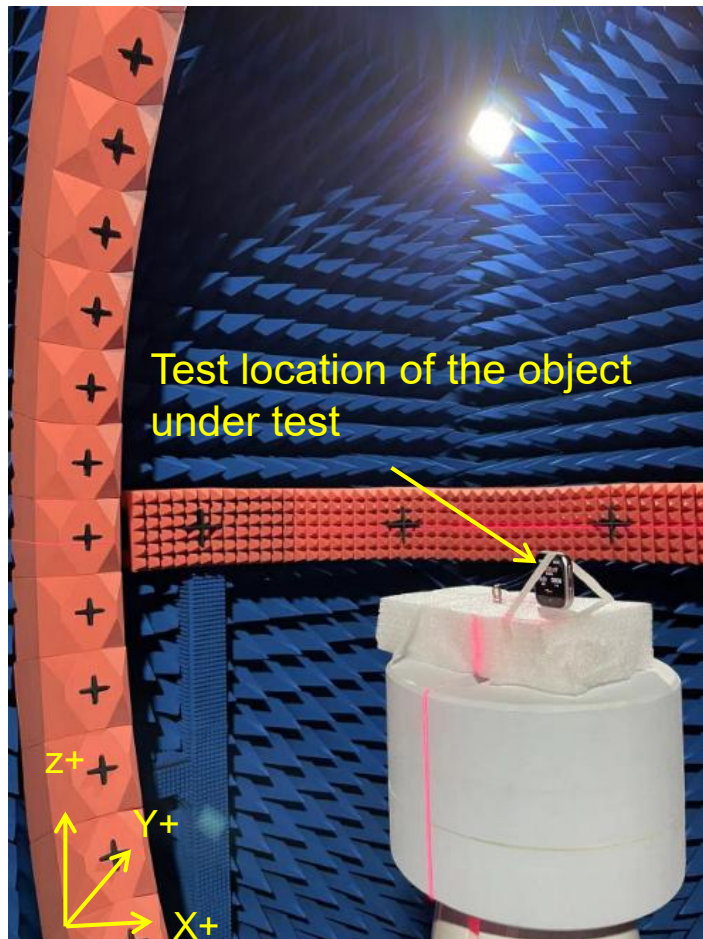
Smartwatch BT Antenna performancereport

Project name	smartwatch	
Client	N/A	
Antenna name	BT	
Testing personnel	SEAN	
Contact information	15813808853	
Date	2024/3/2	
Test equipment	Keysight 5071C	
Item information	Prototype status	produce
	Mainboard	
	Bluetooth name	
	Else	

Test scene



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Project debugging prototype display



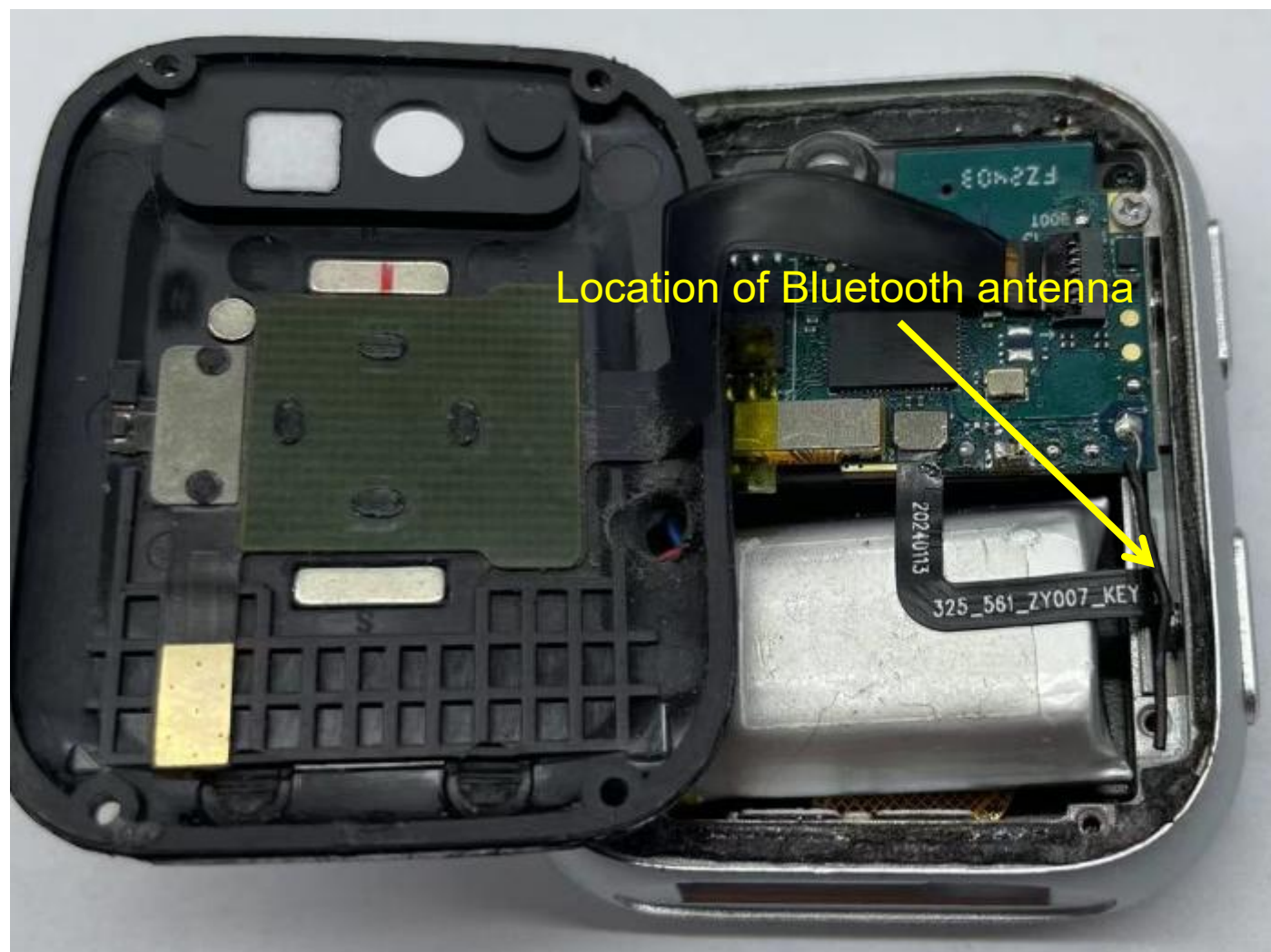
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Antenna placement



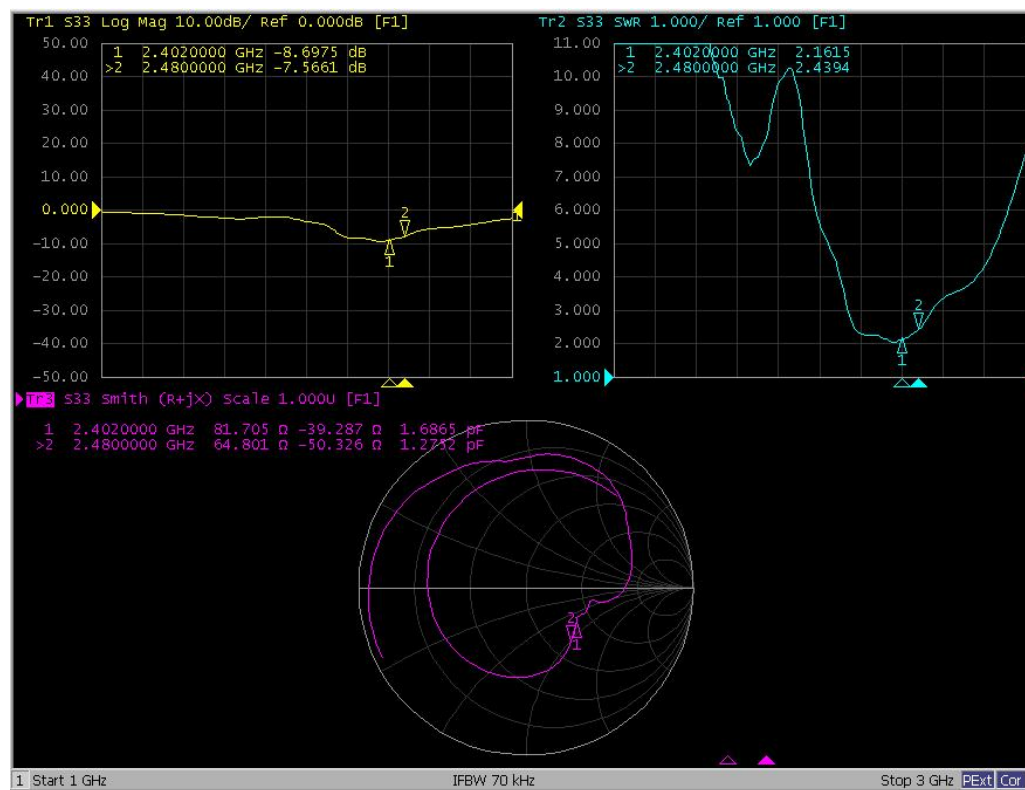
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S11 Test data



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Fre(GHz)	Return loss(dB)	SWR
2.402	-8.7	2.2
2.48	-7.6	2.4

Passive test data



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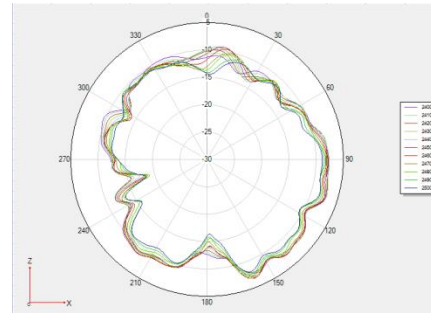


Antenna efficiency and gain

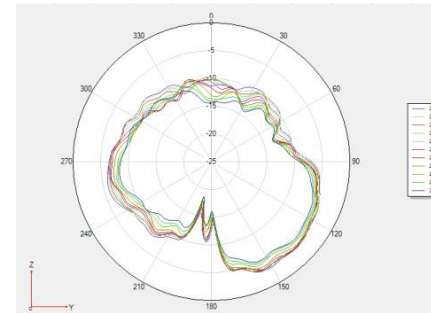
Frequenc y/Mhz	Efficiency / %	MaxGain/ dBi
2400	14.26	-2.77
2410	13.93	-2.62
2420	13.34	-2.55
2430	13.09	-2.51
2440	12.59	-2.53
2450	12.25	-2.68
2460	11.91	-2.77
2470	11.48	-3.07
2480	10.81	-3.48
2490	10.33	-3.79
2500	9.86	-4.07

2D Radition pattern

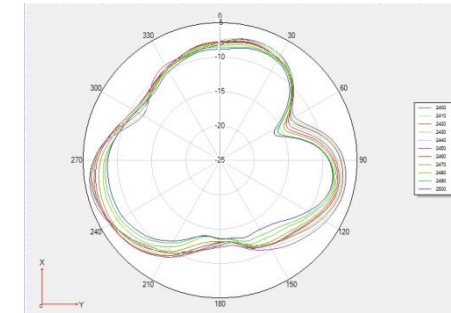
Phi 0 2D



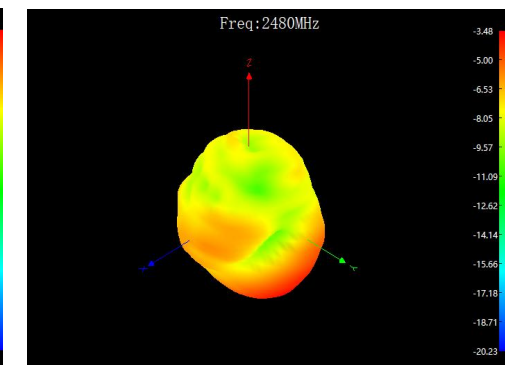
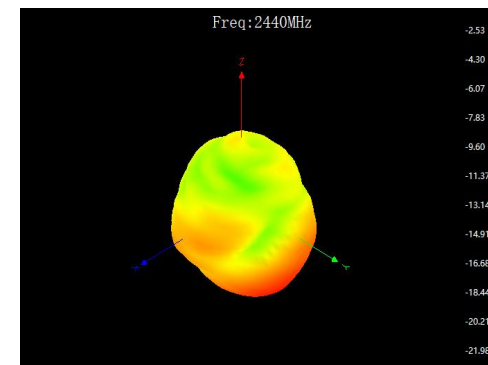
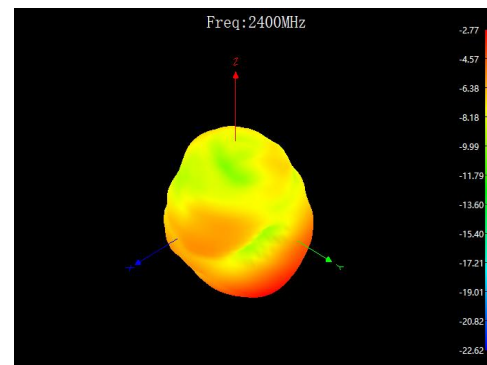
Phi 90 2D



Theta 90 2D



3D Radition pattern



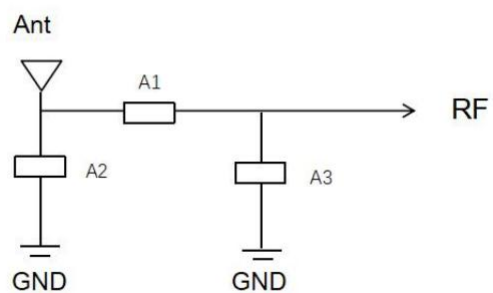
Match circuit



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匹配电路：



Bit number	Matched value
A1	No modification
A2	NC
A3	NC

Conclusion



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Bluetooth antenna performance to meet customer use



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Thanks