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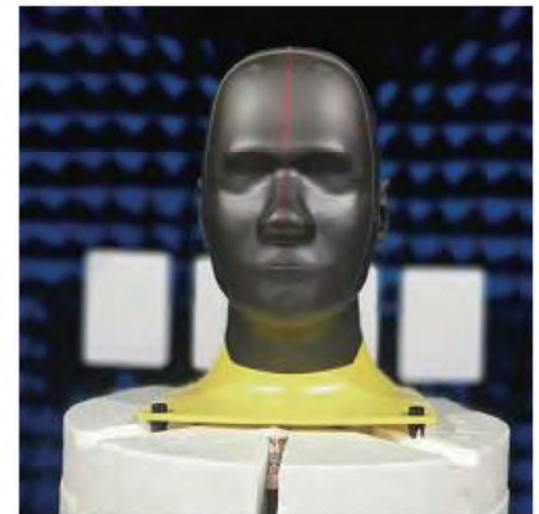
XinHengYang Antenna Test Data Report

◆ 项目信息 (Project information)

客户名CUSTOMER NAME:	恒达睿 Hendarui
项目名PRODUCT NAME:	EP12
研发(R&D):	肖谭平 Xiao Tanping
日期DATE:	2025/09/17

I. Test Equipment

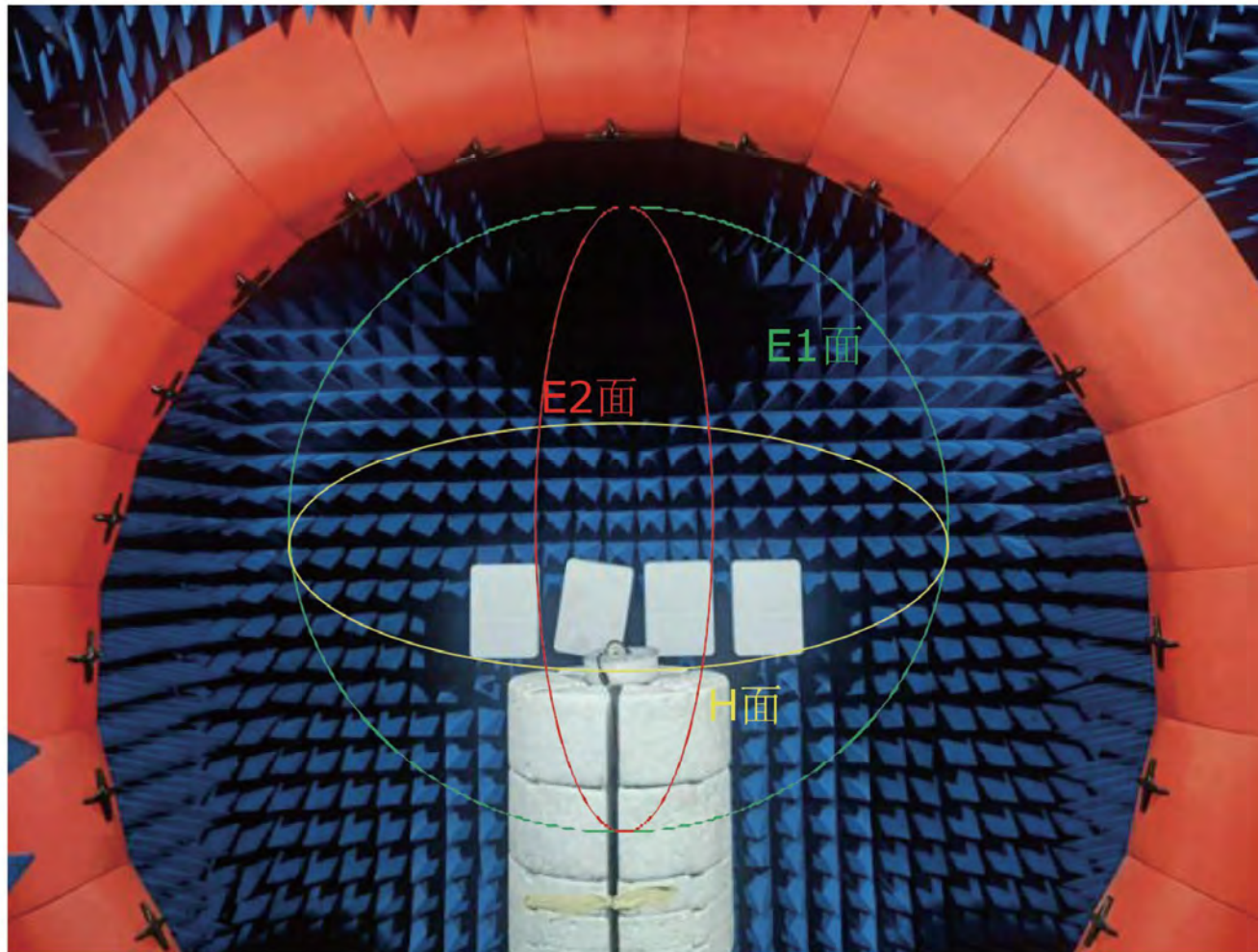
1. Active Test: Supports Multi-Mode Measurement of 2G/3G/4G/5G, NB-IoT, eMTC, CAT-1, Bluetooth 1-5, WIFI 802.11 ABGN; TRP and TIS Testable
2. Passive Test: Gain and Efficiency Testable
3. Full Set of Head and Hand Phantoms for TWS Earphone Testing



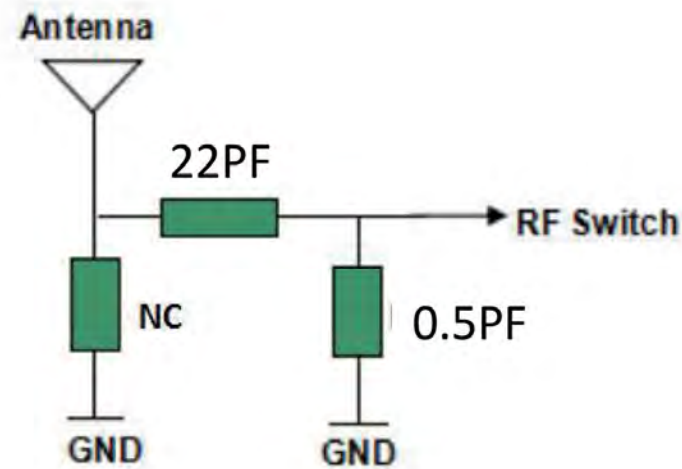
II. Machine image



III. test photo



IV. Main board matching circuit



V. ANT Location



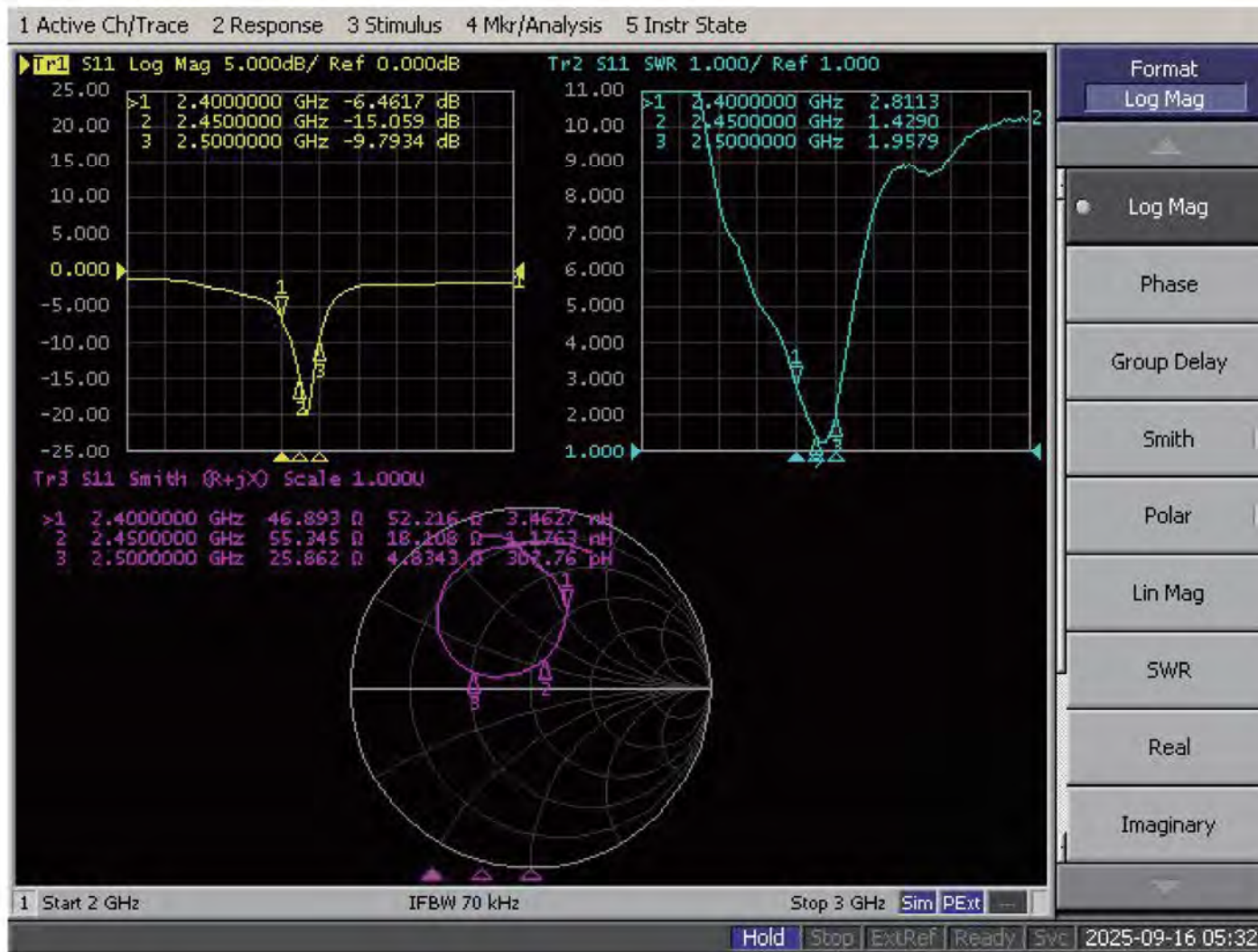
L



R

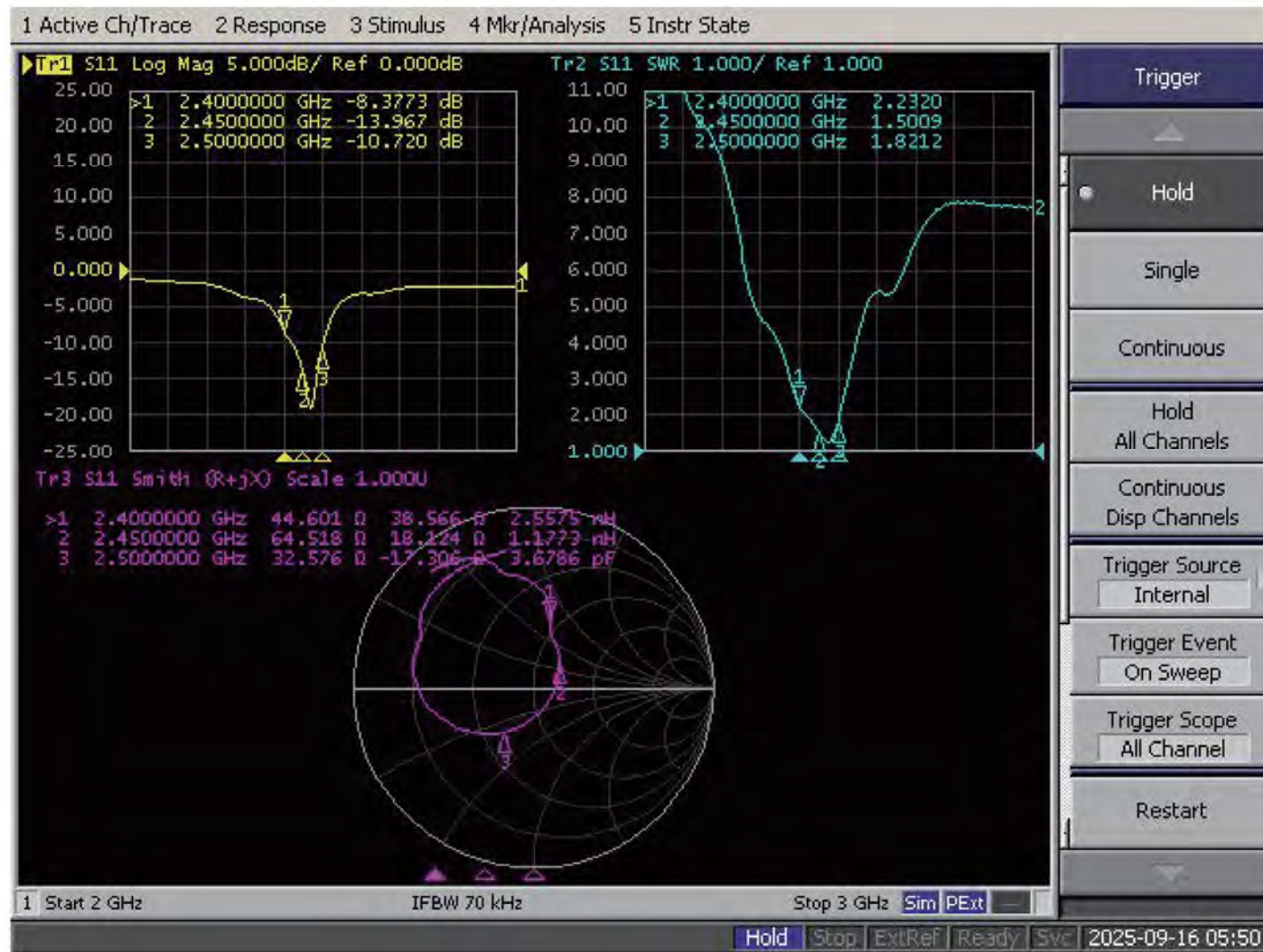
VI. ReturnLoss&VSWR

L



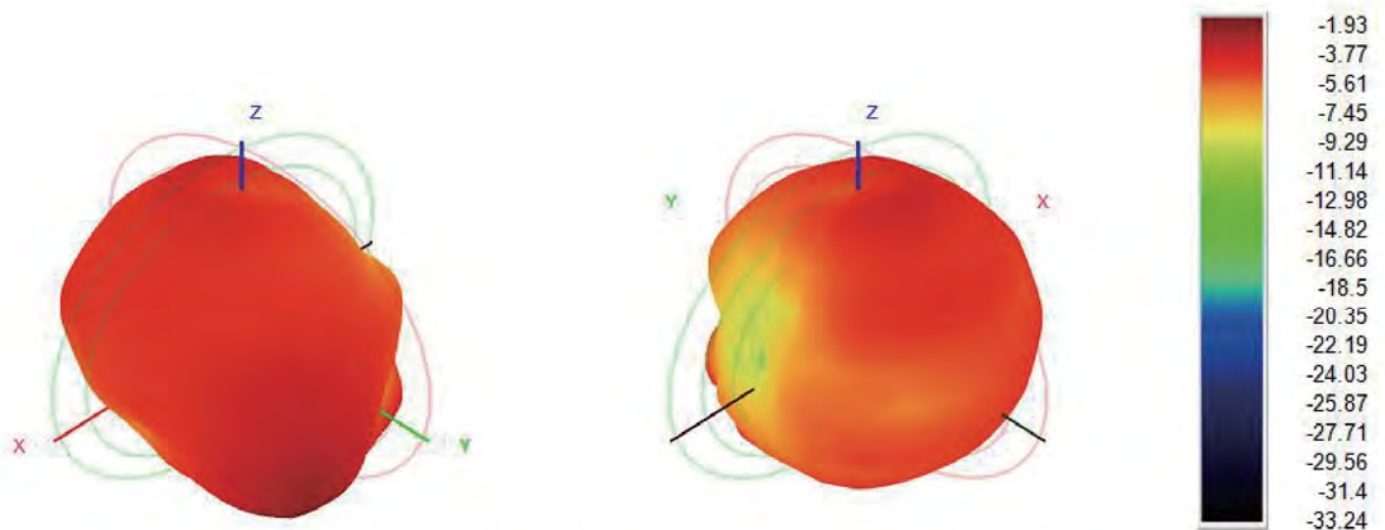
VI. ReturnLoss&VSWR

R



VII. Radiation pattern

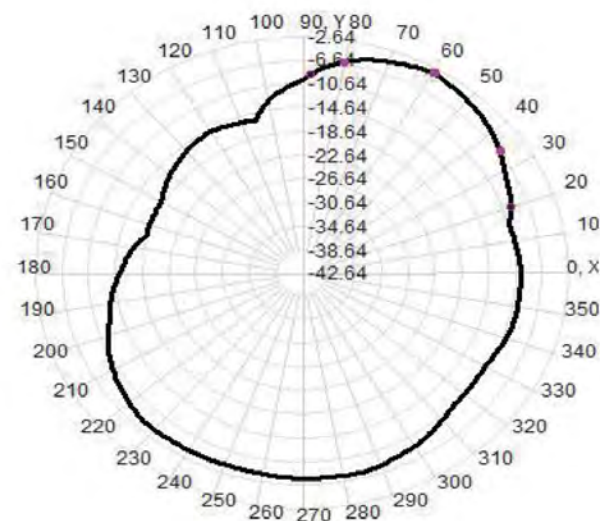
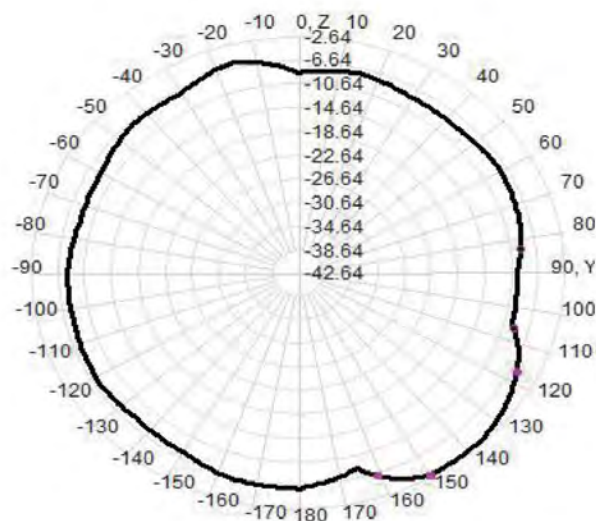
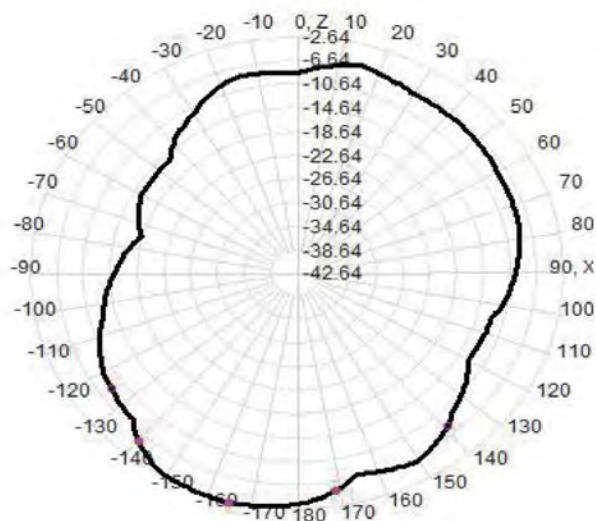
L-2400MHZ



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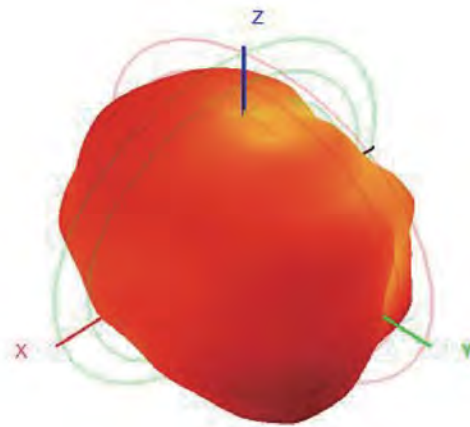
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Total(H-XY)

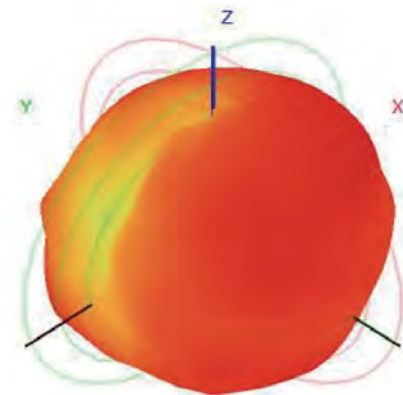


VII. Radiation pattern

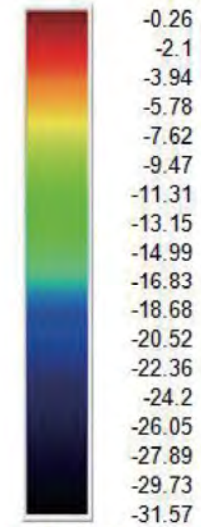
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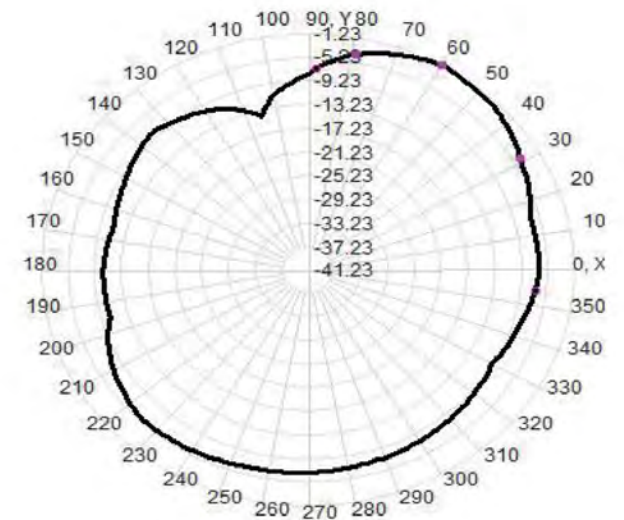
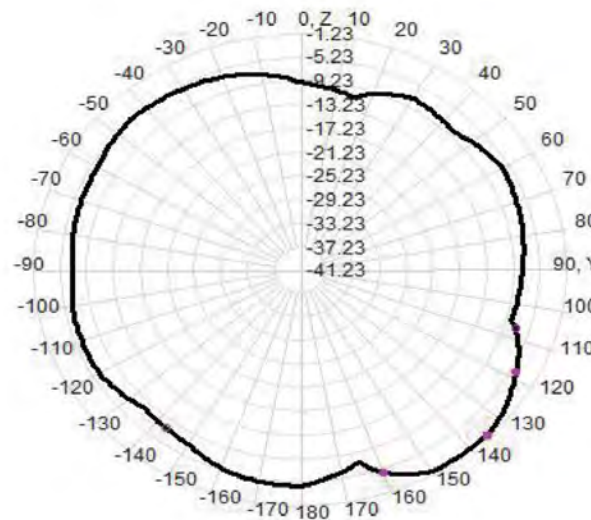
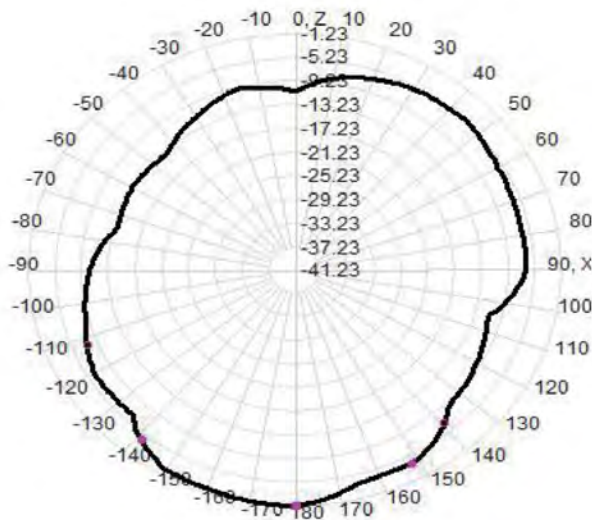
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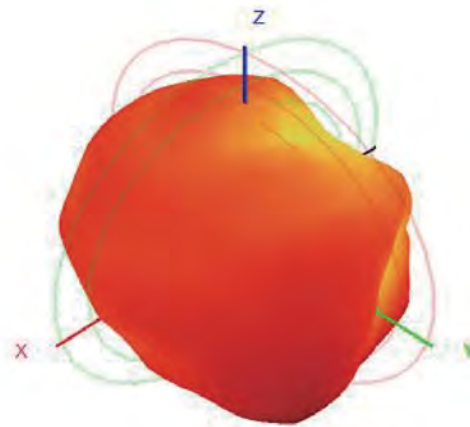


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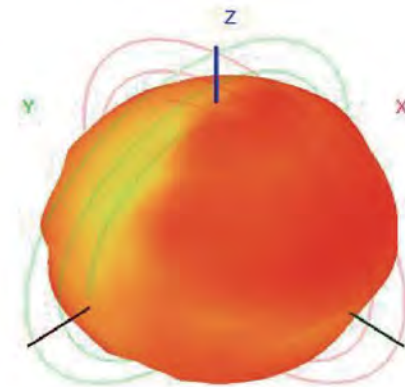


VII. Radiation pattern

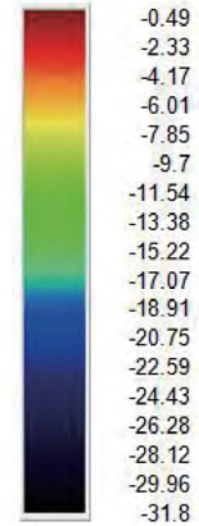
L-2500MHZ



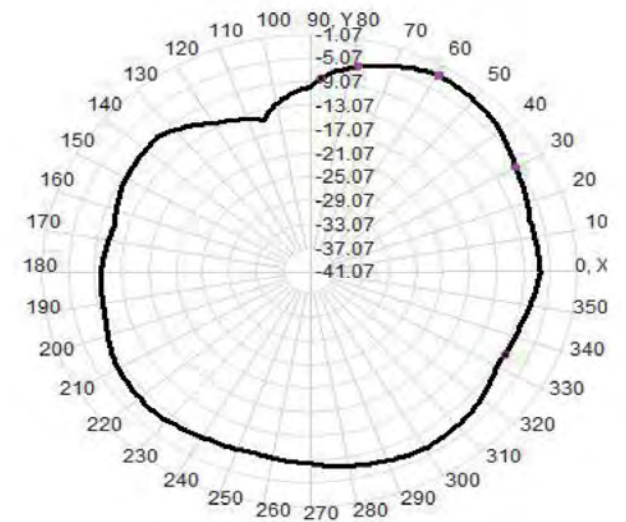
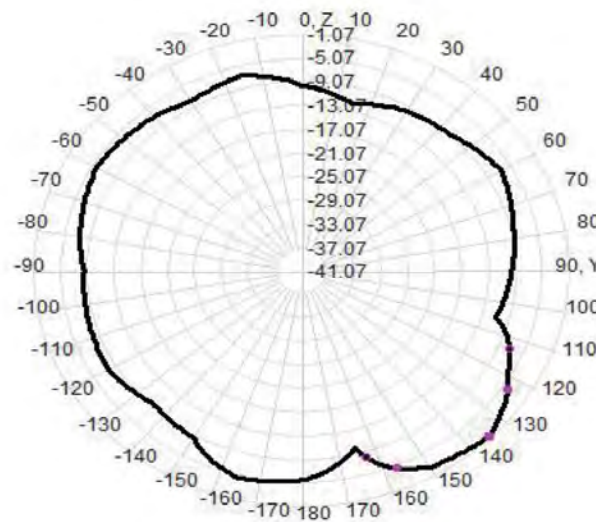
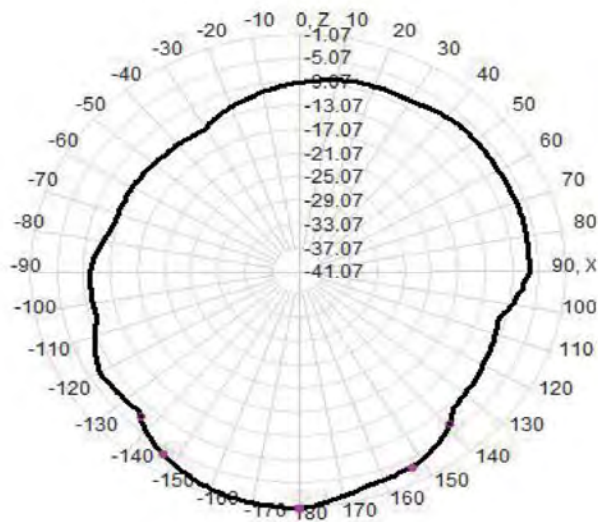
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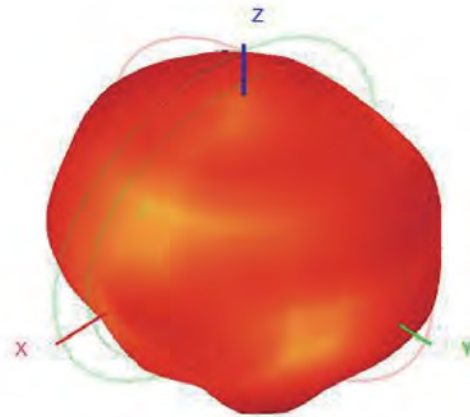


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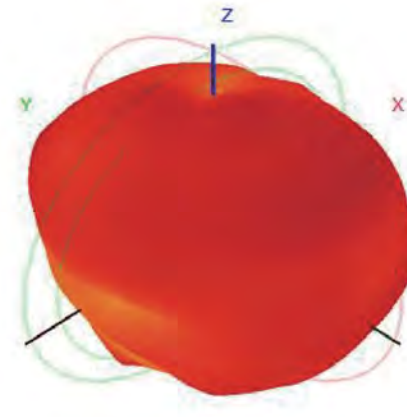


VII. Radiation pattern

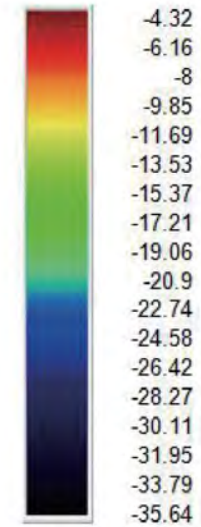
R-2400MHZ



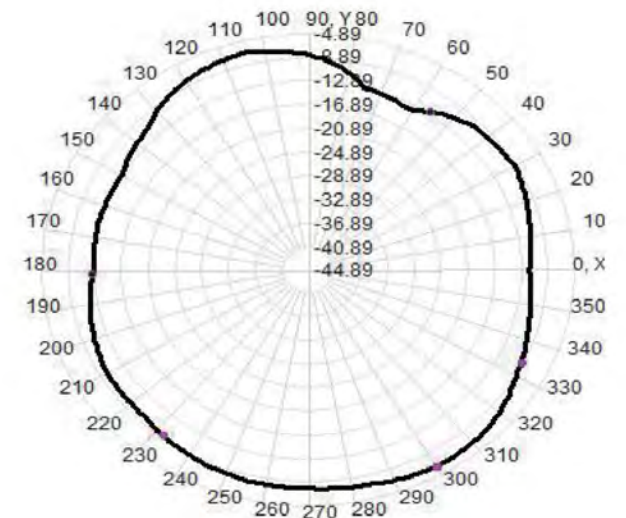
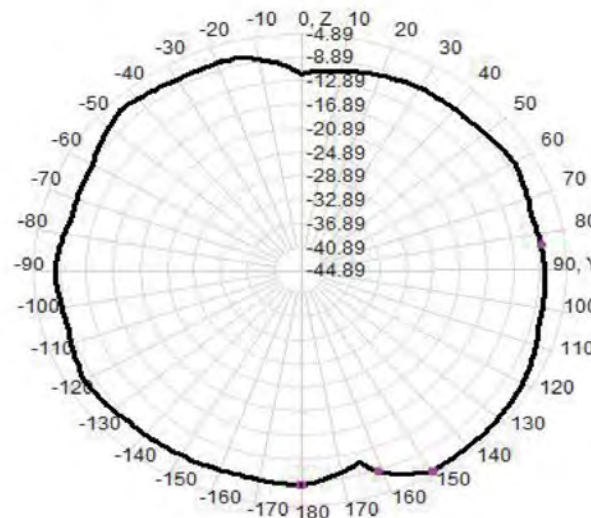
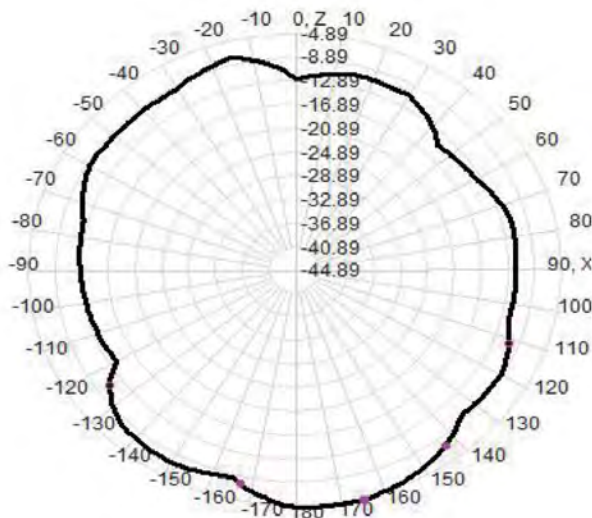
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Total(E2-YZ)

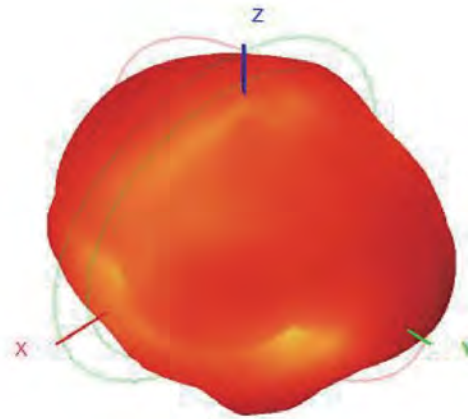


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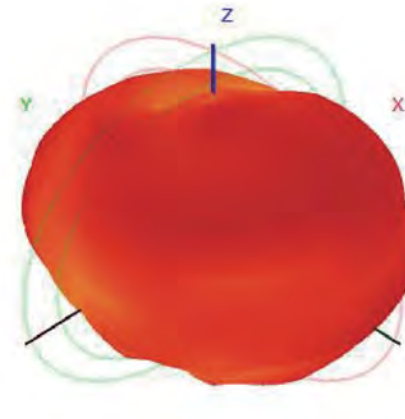


VII. Radiation pattern

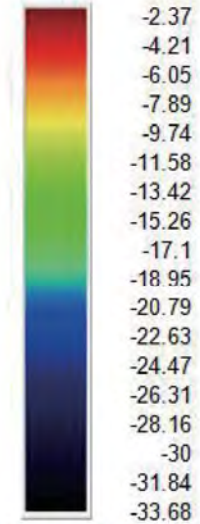
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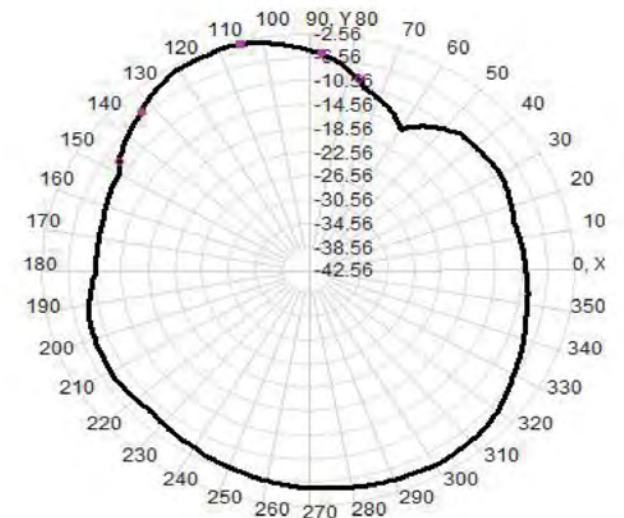
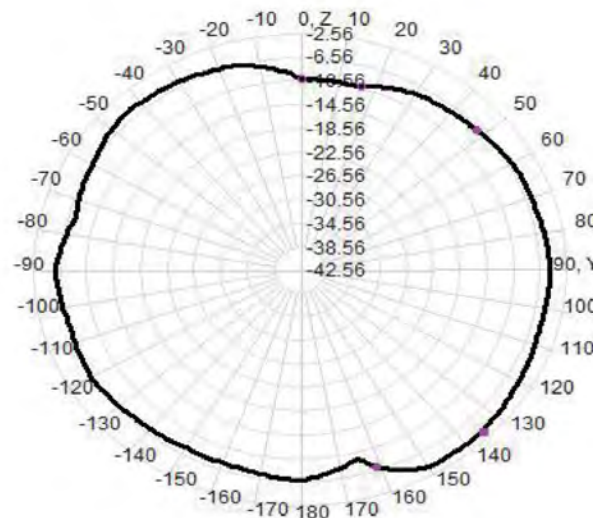
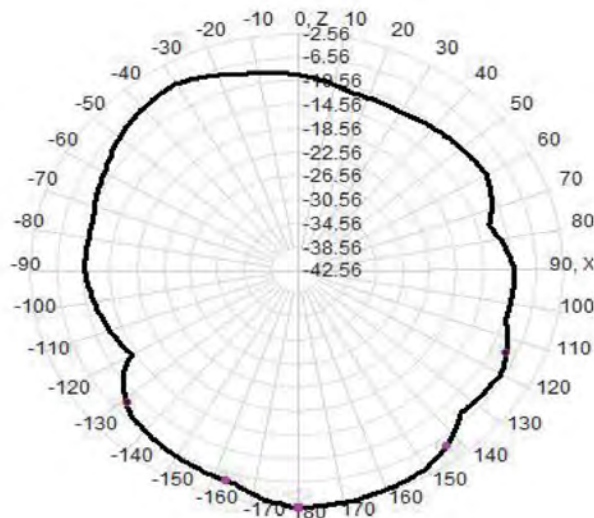
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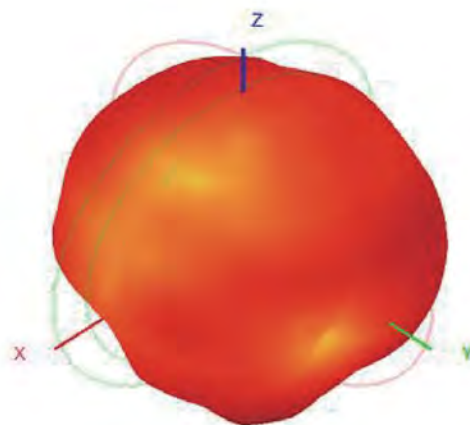


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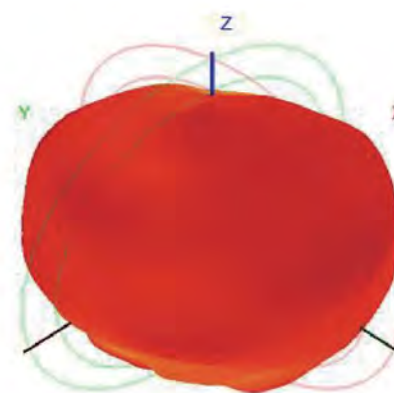


VII. Radiation pattern

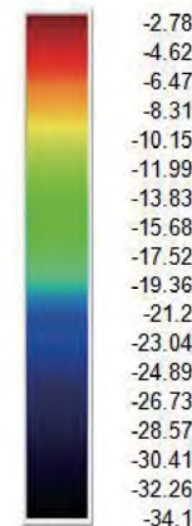
R-2500MHZ



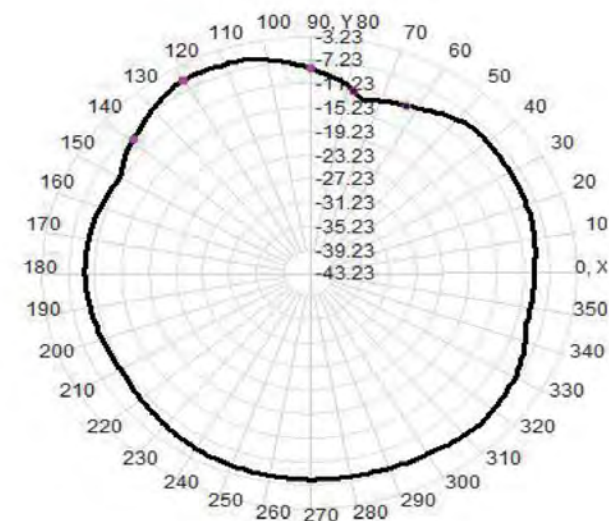
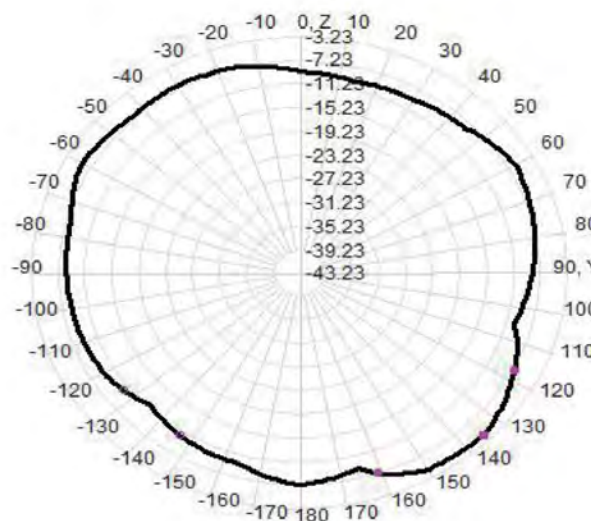
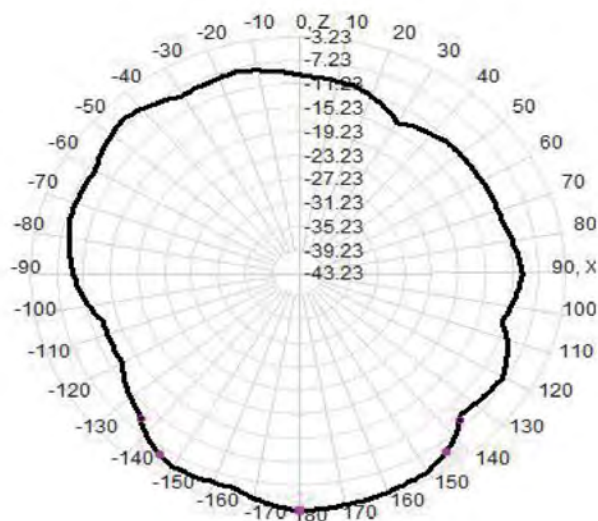
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Total(E2-YZ)



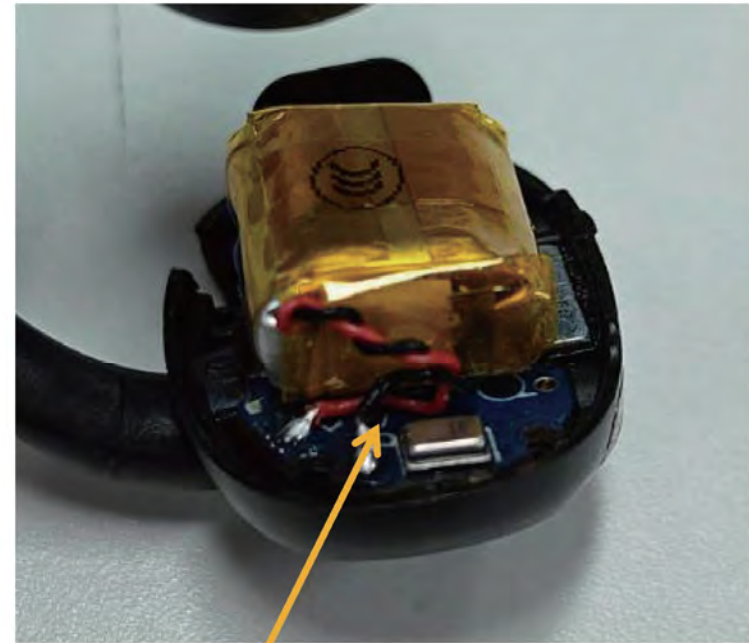
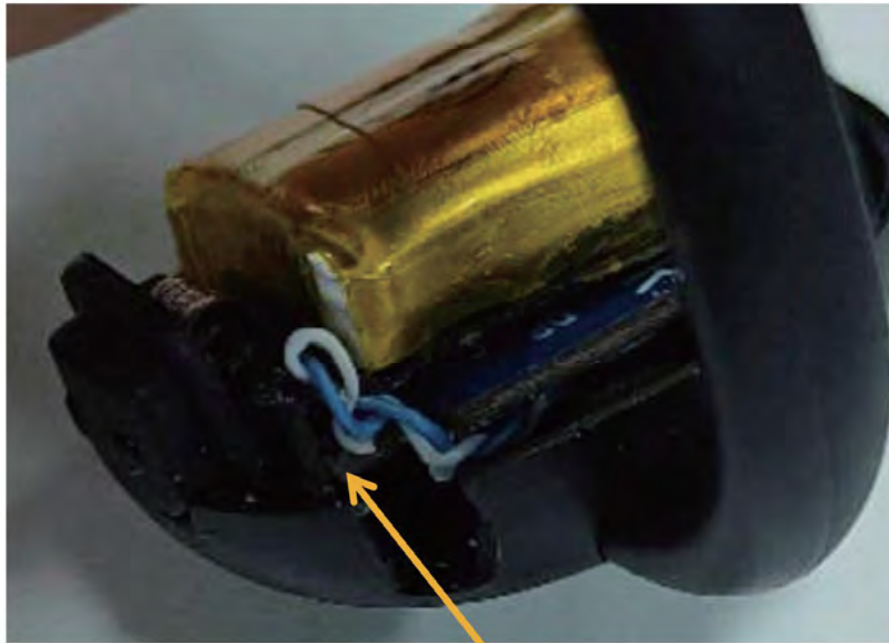
Total(H-XY)



VIII. Passive efficiency and gain

L			R		
Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400	-1.93	15.90	2400	-4.32	12.30
2410	-1.67	16.66	2410	-3.76	12.80
2420	-1.15	18.65	2420	-3.21	14.03
2430	-0.73	20.96	2430	-2.83	15.74
2440	-0.56	22.30	2440	-2.78	16.78
2450	-0.26	24.21	2450	-2.37	18.60
2460	-0.21	24.35	2460	-2.17	19.18
2470	-0.47	22.55	2470	-2.29	18.26
2480	-0.32	22.68	2480	-2.09	18.51
2490	-0.23	22.49	2490	-2.25	17.61
2500	-0.49	20.61	2500	-2.78	15.78

IX. Environmental treatment



As Shown In The Figure, The Speaker Cable And Battery Cable Are Twisted Together And Routed Vertically



ShenZhen XinHengYang Technology co.,Ltd

X. Actual distance

Date: September 17, 2025

Weather: Sunny

Test Environment: Outdoor Parking lot of the Aerospace Micro Motor Building

Test Phone: Samsung S8

Test Distance: Approximately 9 Meters, no Lag/Stuttering

XI. Summary

- 1.The Above Data Were Obtained from Testing The Initial Version of The Tuned Antenna And Copper Foil Samples.
- 2.Since The Device Cannot Be Entered into DUT, Only Passive And Measured Data Can Be Provided for Now.
- 3.Currently, The Measured Distance with The Samsung S8 Is Approximately 9 Meters. Our Company Will Continue to Attempt Further Optimization.



ShenZhen XinHengYang Technology co.,Ltd

Thank you

For any questions, please communicate by phone.

RF Engineer: Xiao Tanping

Mobile: 17347352784

Phone: 0755-83600916 R&D Department: 0755-86715202

Fax: 0755-88355591 Website: <http://XHY-2008.com>

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