



深圳市昱晟通讯设备有限公司

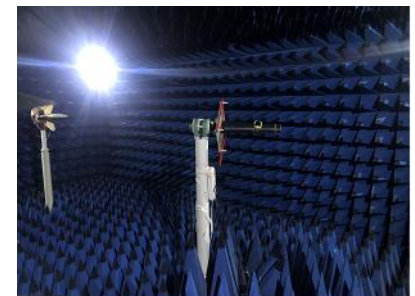
Yusheng Communications-equipment Co.,LTD

Kenaixin Z1357-01 debugging report

Radio: Lin Shaokun

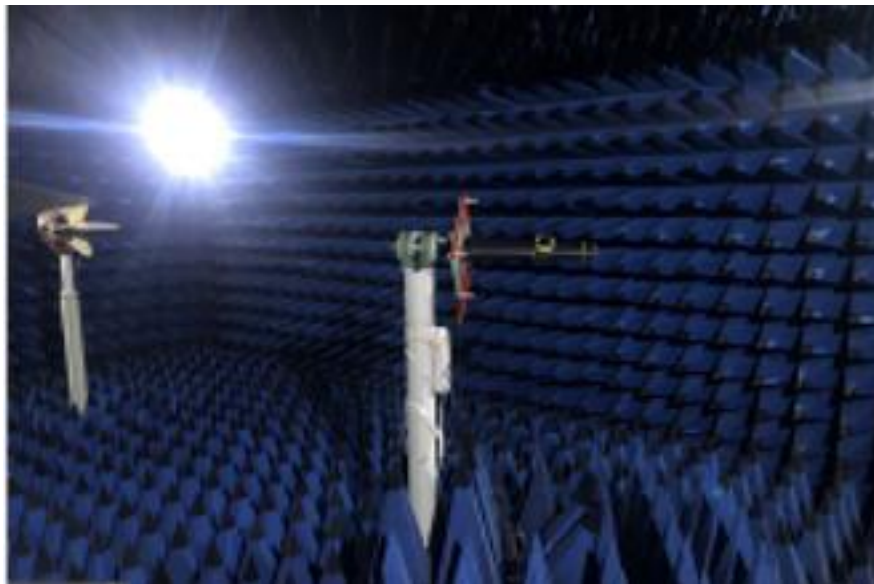
Date: 2025-8-15

Contact: 18476607352



Project development environment

As we transition from the internet era to the intelligent age, China is actively developing digital societies and smart cities. Over the next 5-10 years, both consumer electronics and IoT markets will demonstrate tremendous growth potential. The wireless communications sector remains highly diversified. Leveraging its core strengths in antenna technology and comprehensive capabilities, Yusheng is committed to delivering competitive professional-grade product solutions that meet market demands.



Yusheng Communications product portfolio covers nearly all antenna applications for wireless terminal devices, including automotive antennas, high-precision surveying and mapping antennas, UAV ground and satellite navigation data transmission systems, high-precision positioning antennas, medical device wireless transmission systems, consumer-grade antennas (mobile phone antennas, PADs, laptop antennas), base station/indoor distribution antennas, smart wearable antennas (smartwatches, TWS earbuds), security home automation antennas, and various smart devices utilizing wireless data transmission and control technologies.

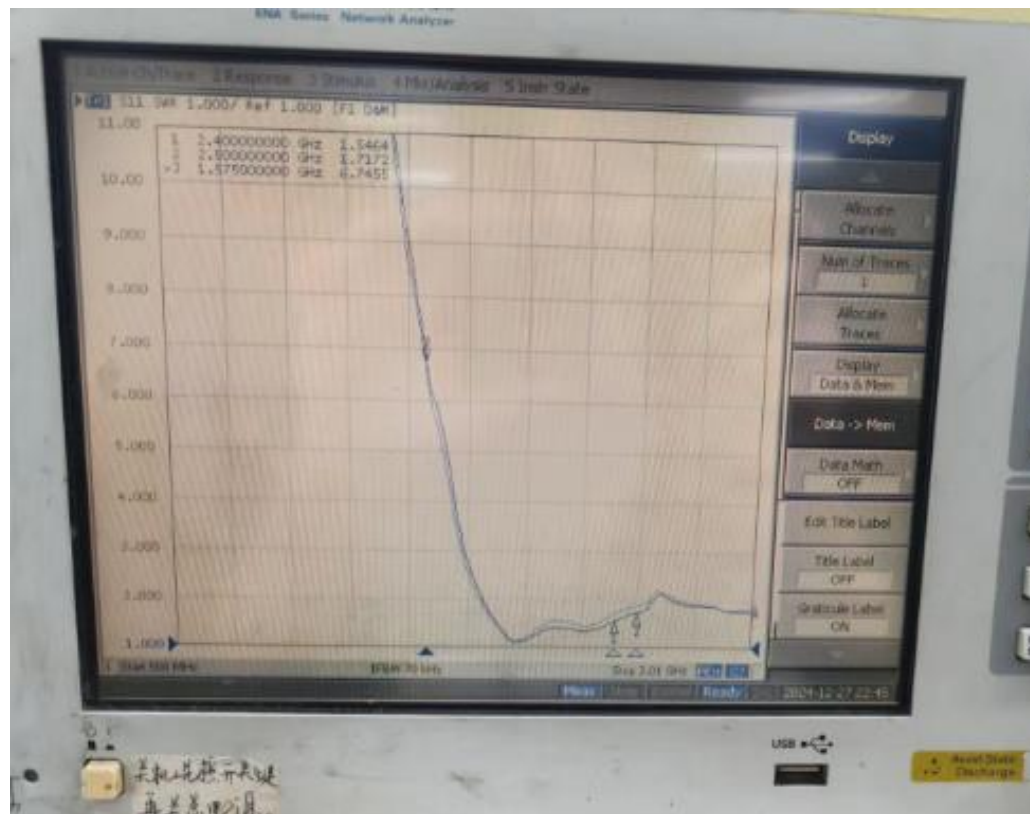


Project debugging
introduction

type	earphone			
Band and antenna material	main antenna	frequency range		material quality
		BT	2400MHZ-2500MHZ	FPC
performance requirement				

Presently unparameterized-
BT

Freq. (MHz)	Efficiency (%)	Gain dBi
2400	58.09	1.17
2410	56.6	1.22
2420	55.11	1.37
2430	54.01	1.49
2440	53.17	1.56
2450	52.54	1.68
2460	51.36	1.52
2470	49.29	1.40
2480	48.17	1.33
2490	48.13	1.29
2500	47.63	1.21



Match change



Source data-charging tank

Channel No.		
	TRP (dBm)	TIS (dBm)
0	5.64	-90.6
39	5.46	-90.9
78	5.16	-90.7

**Source data-
headphones**

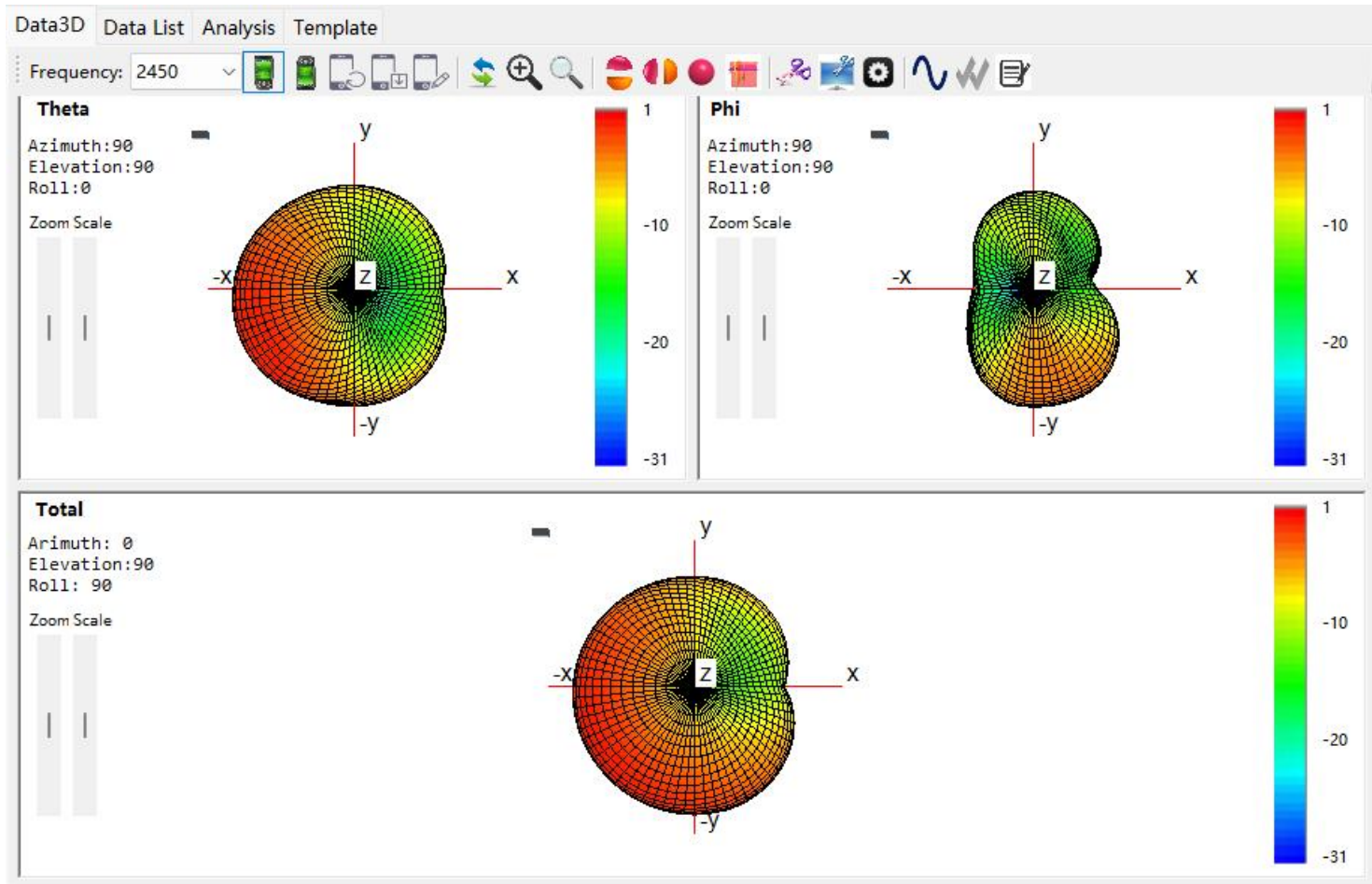
Channel No.	L- freedom	
	TRP (dBm)	TIS (dBm)
0	6.17	-88.98
39	6.83	-88.91
78	6.49	-87.99

Channel No.	R- freedom	
	TRP (dBm)	TIS (dBm)
0	6.78	-89.46
39	6.93	-89.57
78	6.45	-89.07

Channel No.	L- headform	
	TRP (dBm)	TIS (dBm)
0	-1.74	-82.18
39	-0.91	-82.04
78	-1.05	-81.37

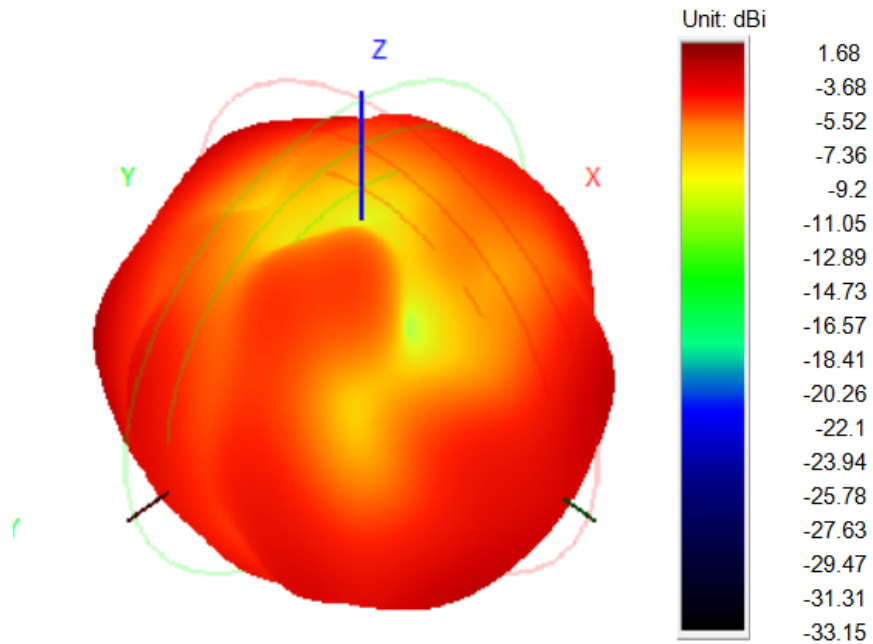
Channel No.	L- headform	
	TRP (dBm)	TIS (dBm)
0	-1	-82.02
39	-0.82	-81.99
78	-1.18	-81.65

Apple illustration



chamber directional diagram

2450.0MHz H+V, Eff. 23.2%



antenna diagram file

由 Autodesk 教育版产品制作		THOT-V0.2 Z1357-01		*16.25±0.15 *6.63±0.15 *0.12±0.03																				
		skills requirement: <table border="1"> <tr> <td>1.FPC substrate specifications:</td> <td>PI substrate:</td> <td>Electrolytic copper (1 to half)</td> </tr> <tr> <td></td> <td>Electrolytic copper:</td> <td>0.5oz (ED)</td> </tr> <tr> <td></td> <td>Double-sided tape:</td> <td>3M-9471LSE</td> </tr> <tr> <td>2.Electroplating specifications:</td> <td>Nickel plated; 3"8um;</td> <td>Gilded; 0.025um</td> </tr> <tr> <td></td> <td>Surface ink color:</td> <td>Matt black</td> </tr> <tr> <td>3.Surface ink requirements:</td> <td>Printing font color:</td> <td>white</td> </tr> <tr> <td></td> <td>Printing font height:</td> <td>According to drawings</td> </tr> </table>		1.FPC substrate specifications:	PI substrate:	Electrolytic copper (1 to half)		Electrolytic copper:	0.5oz (ED)		Double-sided tape:	3M-9471LSE	2.Electroplating specifications:	Nickel plated; 3"8um;	Gilded; 0.025um		Surface ink color:	Matt black	3.Surface ink requirements:	Printing font color:	white		Printing font height:	According to drawings
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	Printing font height:	According to drawings																						
D		5.Tolerance requirements: 1. Shape tolerance ±0.10; 2. Copper foil circuit tolerance ±0.05; 3. The position of the copper foil to the shape is ±0.15; 4. Hole-to-hole position tolerance ±0.10; hole-to-shape position tolerance ±0.15; 5.The size tolerance of gold finger is ±0.20. 6. For other unmarked dimensions, refer to 2D drawings.		6.Key control size: The dimensions marked with numbers are regarded as important dimensions, and the others refer to 2D drawings																				
		7.Environmental requirements: Parts meet ROHS2.0/HP/Reach/GP environmental protection requirements		8.Packaging requirements: Packed in PE bags, the quantity of each bag is 100PCS, there is a mark on the outside of the bag																				
DATE		Modify the content		Version																				
1		2		3																				
4		5		6																				
7		8		9																				

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Thank you!



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