昊一源科技有限公司

编号:	
版本:	

Component Approval Sheet

Product Name:	M71T		
Part Number:	3002040261		
Product Model:	A6701		
Vendor:	SPEED		
P/N:	F-KA-N2-0003-000-K0		

SPEED TECHNOLOGY

Manufacturer: SPEED Communication Technology Limited Manufacturer Address: Room 202, 1F, Building A, Guoren Building, No. 5 Keji Middle Third Road, Science Park, Yuehai Street, Nanshan District, Shenzhen.

Approval sheet of A6701-TX Internal Antenna

Customer/Project		M71T	Frequency Band		BT	
3002040261		3002040261	Version		T3.2	
Date		12/12/2024				
Material Code		F-KA-N2-0003-000-K0				
SPEED						
Checked by	RF	ERICGUO	Design by	RF	LIZHENGQUAN	
	ME	ERICGUO		ME	QIUHONG	
	QC	JINGCHUNMEI	Remark		ERICGUO	
Customer						
Date						
Confirmed by		RF				
		ME				
Remark						

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1. Indication

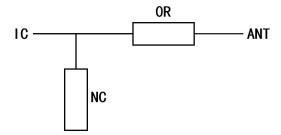
This report summarizes the electrical performance structure diagram confirmed by the user of the lower antenna of the 6701 TX project. The antenna bracket is a component inside the microphone (see Figure 1).



Figure 1: Proposed Antenn

2. Matching Circuit Description

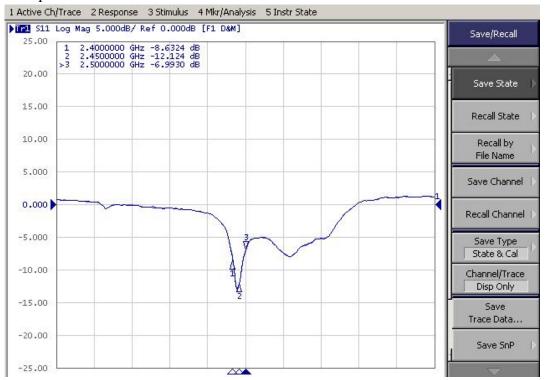
Matching circuit provided by customers.



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2.2.1 VSWR

Use Agilent 5071C network analyzer and the described test fixture to measure VSWR (S11). Testing in frees pace.

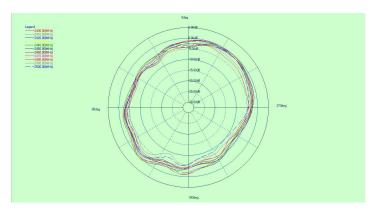


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2.2.2 Gain & Radiation Patterns

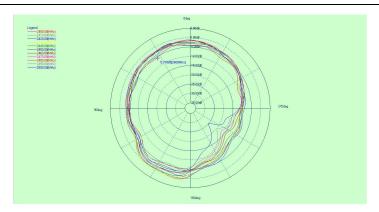
The gain and efficiency of the antenna are measured in a microwave anechoic room system. The measurement range from 600MHz to 6GHz can be provided. The measurement results are calibrated by dipole and horn standards.

Frequency(MHZ)	Efficiency(db)	Efficiency(%)	Peak Gain (dbi)
2400	-4.22	37.9	1.98
2410	-3.85	41.3	2.22
2420	-3.34	46.3	2.59
2430	-3.27	47.1	2.75
2440	-3.35	46.2	2.56
2450	-3.35	46.3	2.36
2460	-3.59	43.8	2.10
2470	-3.86	41.1	1.88
2480	-3.91	40.6	1.56
2490	-4.21	38	1.32
2500	-4.57	34.9	1.12

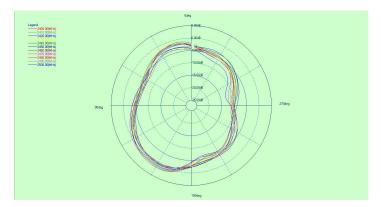


Phi=0

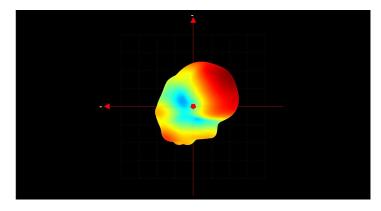
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Phi=90°

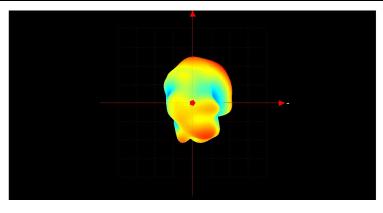


Theta=90°

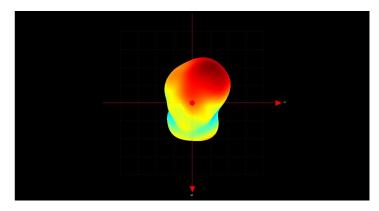


3D:XOZ

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3D:YOZ



3D:XOY

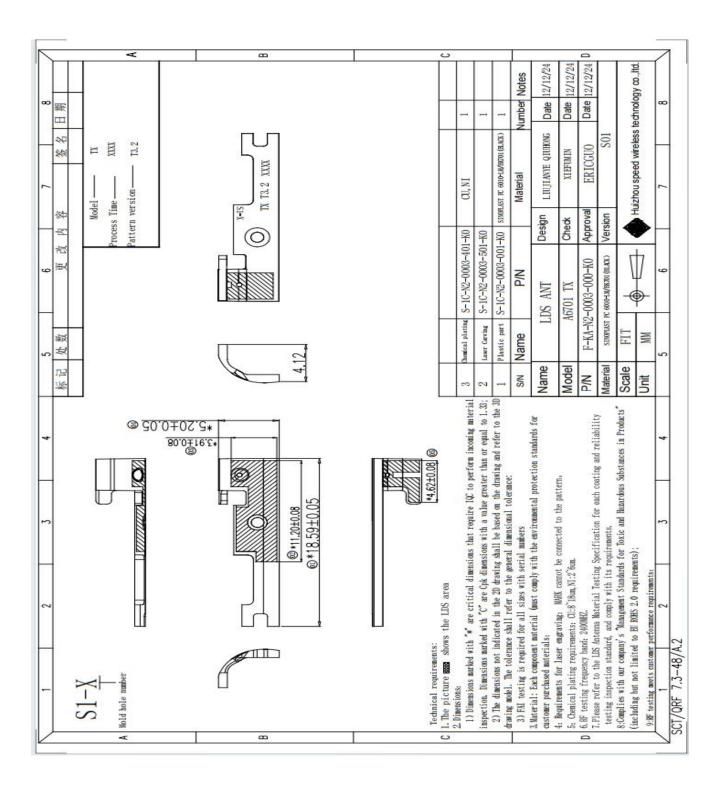
3. Suggestions and Conclusion

This paper summarizes the electrical performance and structure diagram of the antenna confirmed by the customer, and tests the antenna with the prototype microphone test fixture provided by the customer.

4.Attachment

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4.1Appearance drawing:



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4.2 Appearance drawing(2D/3D)

