VLG TECHNOLOGY

Shenzhen VLG Wireless Technology Co.,Ltd

Bluetooth antenna specification

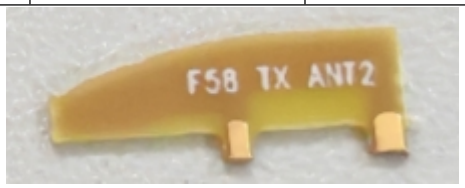
Model Name	F58（TX ANT2）			Frequency band	5720-5850MHZ		
VLG P/N	V1516-007-A-03			Version number	A		
RF engineer	You yan li	verify		Quality engineer	Yu hong	verify	
Structural enginee	He fa rong		何发荣	PM	Bai feng lian		
Date	2024-6-19						
Customer project Name part number	Customer project name:						
	Customer item number:						

Customer confirmation			
RF engineer		Quality engineer	
Structural enginee		PM	
Date			

Customer satisfaction survey (Customers please comment on our research and development or PM management staff to urge us to better serve you)

RF engineer	☐satisfaction	☐Basic satisfaction	☐dissatisfy
Structural enginee	☐satisfaction	☐Basic satisfaction	☐dissatisfy
PM	☐satisfaction	☐Basic satisfaction	☐dissatisfy

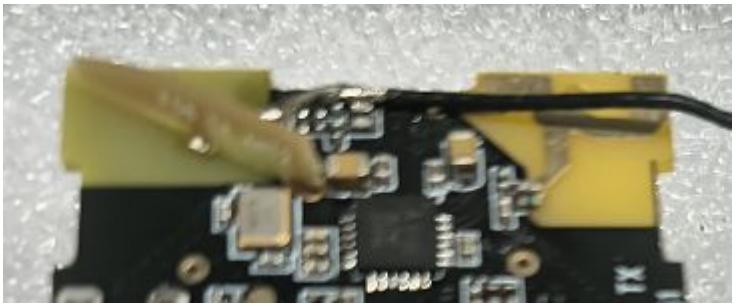
Suggestion statement:



Antenna manufacturer: Fender Musical Instruments
Address: 17600 N. Perimeter Drive, Suite 100, Scottsdale AZ 85255 United States Of America

1、Antenna picture

This report is the RF report of F58，The antenna is a single frequency antenna，The antenna is made of PCB Make up。



2、antenna test environment

Antenna test equipment

4.1 antenna passive test environment

The efficiency of the antenna was measured in the VLG Communication Technology anechoic chamber. SATIMO Star lab： Frequency bands 800MHz—6GHz.The measurement resultsare calibrated using both dipole and leaky wave horn standards

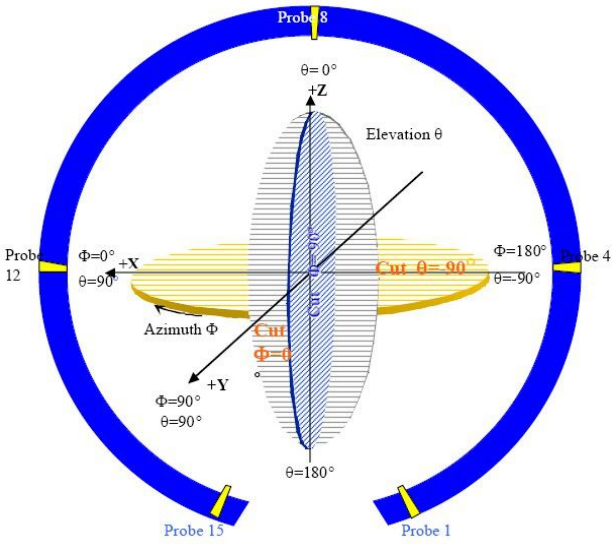


Figure.4.1 SHEN ZHEN VLG chamber system

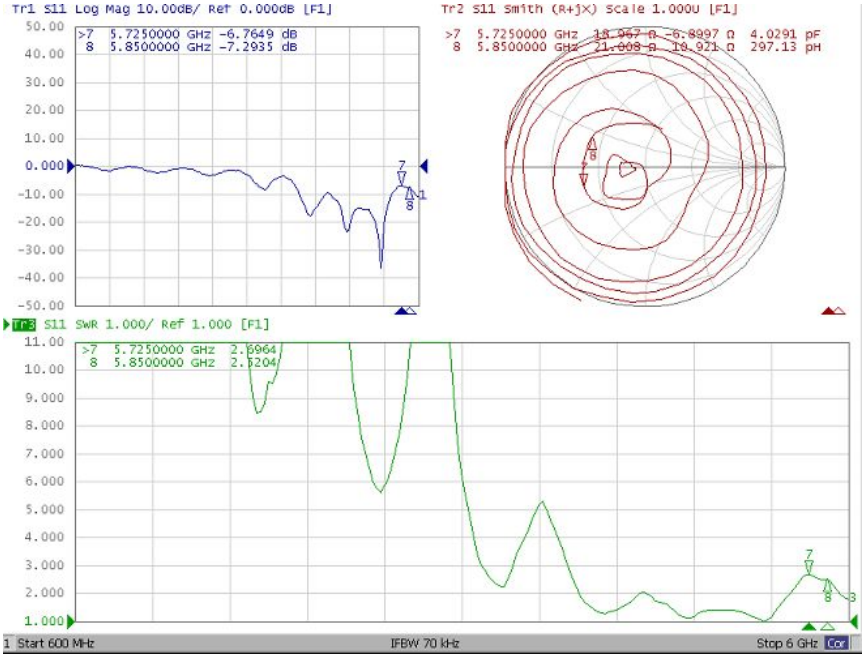
.

3、Matching circuit

Matching circuit provided by customer

4、Electrical performance

4. 1 **S11 argument:** （Return loss）、（Smith chart）、（VSWR）



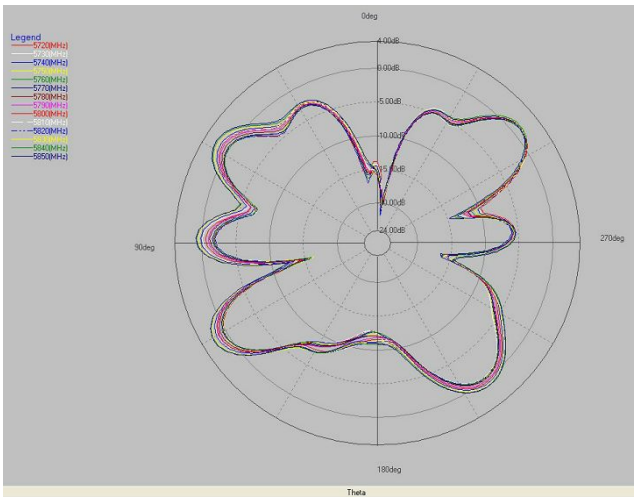
4.2 Efficiency

Frequency (MHZ)	Efficiency (%)	Efficiency . dB	Peak_Gain .dBi
5720	20%	-7.07	1.42
5730	19%	-7.10	1.37
5740	20%	-7.08	1.35
5750	20%	-6.94	1.39
5760	20%	-7.01	1.24
5770	20%	-6.88	1.31
5780	22%	-6.64	1.49
5790	23%	-6.44	1.53
5800	24%	-6.21	1.89
5810	25%	-6.01	2.25
5820	25%	-5.94	2.35
5830	27%	-5.76	2.59
5840	28%	-5.54	2.95
5850	28%	-5.54	2.97

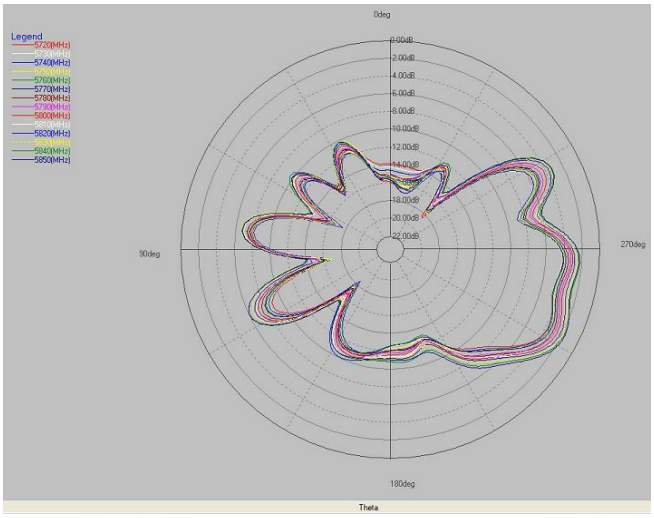
.

4.3 Radiation Pattern：

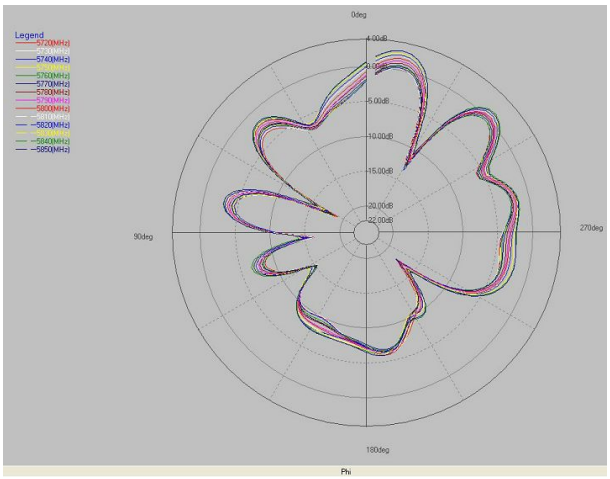
Phi=0



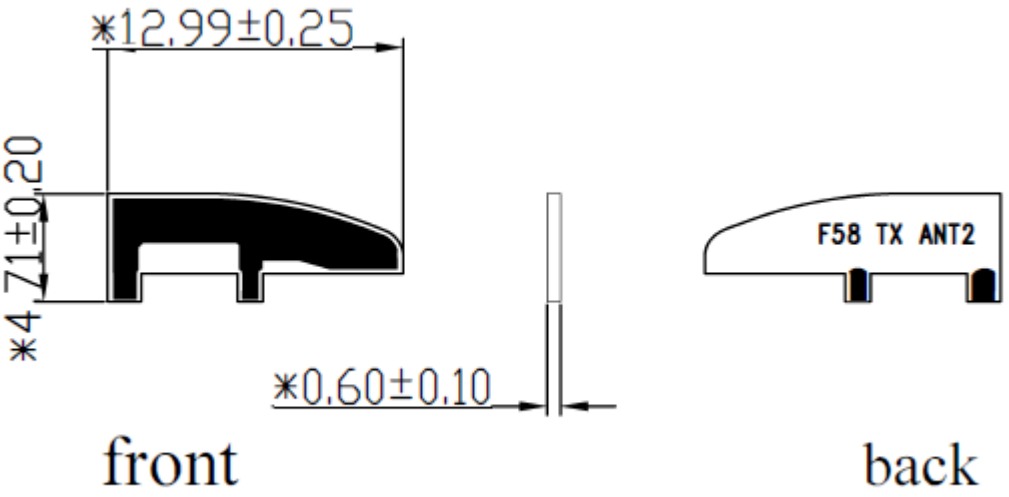
Phi=90



Theta=90



.



front back

5、尺寸报告

size report

深圳市维力谷无线技术股份有限公司

ShenZhen VLG Wireless Technology Co,.Ltd

Sample size test report

customer name		furong				product name		F58				product type		TX antenna ANT2	
name of the supplier		VLG				Part number		V1516-007-A-03				inspection personnel		Jiang Tao	
drawing version		R: A				units		MM				date of survey		2023.03.08	
numerical order	test item	test standard				actual measurement size					judgement result	detecting instrument		remark	
						1	2	3	4	5					
1	appearance	see description of appearance defects				OK	OK	OK	OK	OK	PASS	eyeballing			
2	size		12.99	±	0.25	13.12	13.18	13.20	13.15	13.11	PASS	callipers			
3	size		4.71	±	0.20	4.76	4.78	4.80	4.75	4.76	PASS	callipers			
4	size		0.60	±	0.10	0.59	0.60	0.60	0.59	0.60	PASS	callipers			
最终判定 final verdict: OK■ NG□															

检验 test：Jiang Tao 审核 check：Yu Jiang

www.vlg.com.cn

.