

深圳市极速技术有限公司

CF22 蓝牙天线样品承认书  
BT Antenna Product Approval

**时间：2023-02-20**

**深圳市极速技术有限公司**

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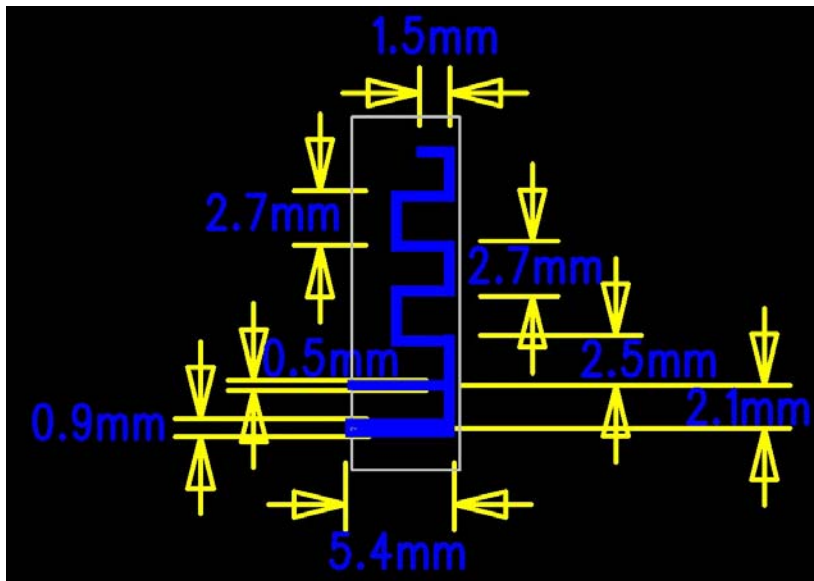
**地址：深圳市龙华区民治大道嘉熙业广场 1246**

## 1. Antenna introduction

Our Bluetooth antenna is directly made on the PCB board, the antenna is copper and spray tin process, copper foil thickness: H/H0Z, the plate is FR-4 thickness 1.0mm material.

## 2. Antenna configuration

1.size : 14.5\*5.5\*2.5\*0.5mm



2.real picture:



## 3. antenna parameter

The Bluetooth antenna operates at 2402-2480 MHz, and resonates in this band. The following table shows the main parameters of the antenna.

Bluetooth PCB antenna	
Frequency (MHz)	2402 ~ 2480 MHz
VSWR	$\leq 1.53$
Impedance	50 Ohm Nominal
Radiation	Omni-directional
Gain (Peak)	2.10 dBi
Polarization	Linear, Vertical
Admitted Power	2W
Connector	Tin

#### 4、Antenna gain detection

Spectrum Detector:

PK

Test Date :

Oct 15, 2021

Test By:

Andy

Temperature:

28°C

Test Result:

PASS

Humidity :

55 %

Modulation:

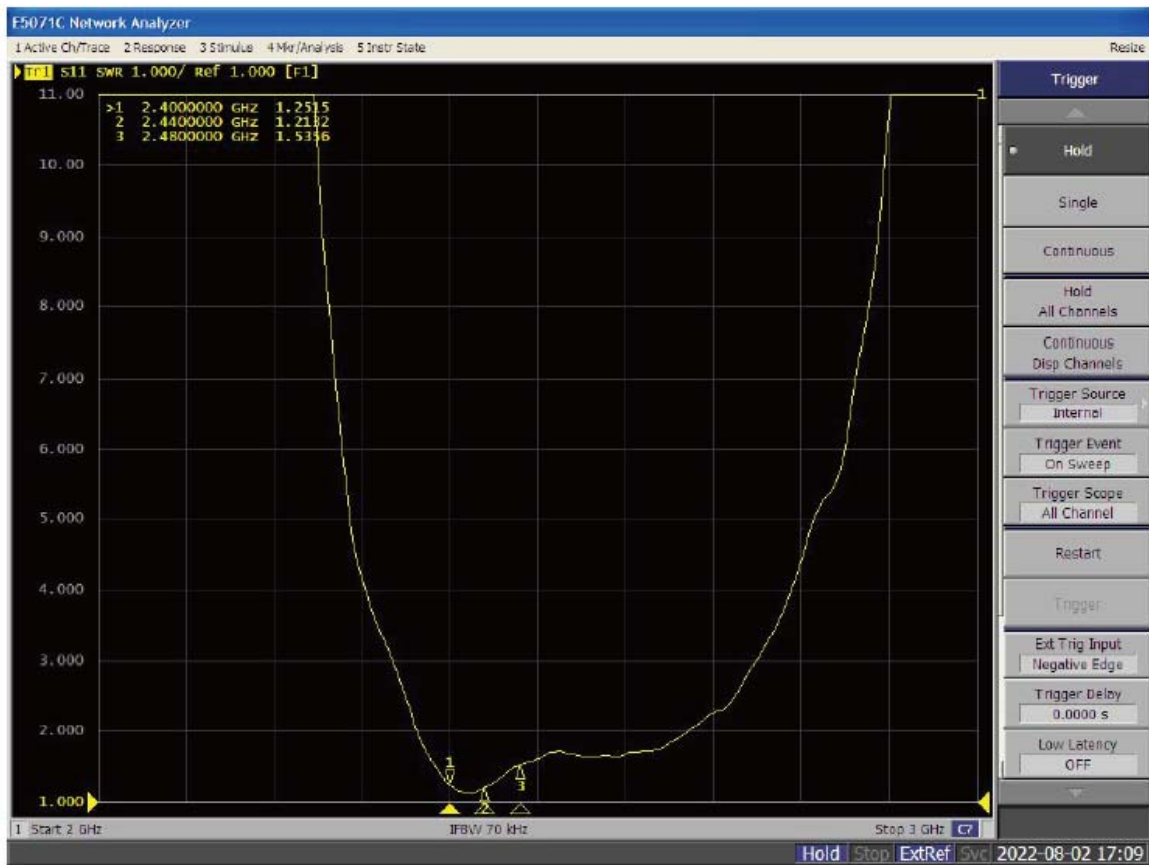
GFSK

最大增益值

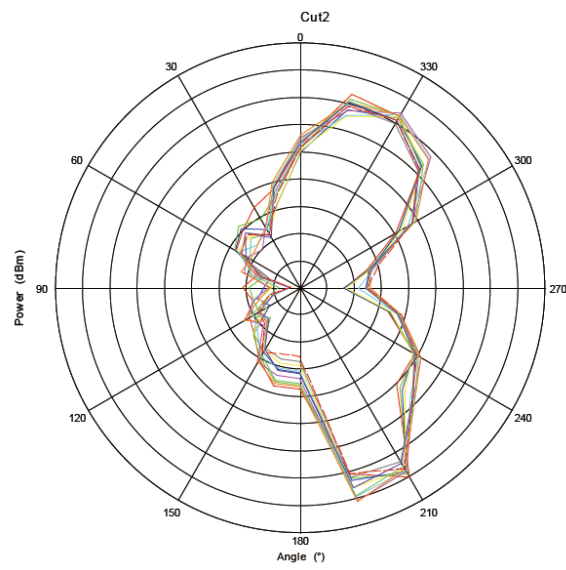
Frequency(MHz)	Gain(dBi)
2400	1.91
2410	2.01
2420	1.90
2430	1.86
2440	1.94
2450	2.04
2460	2.08
2470	2.10
2480	2.07
2490	2.07
2500	2.12

## 5 . VSWR

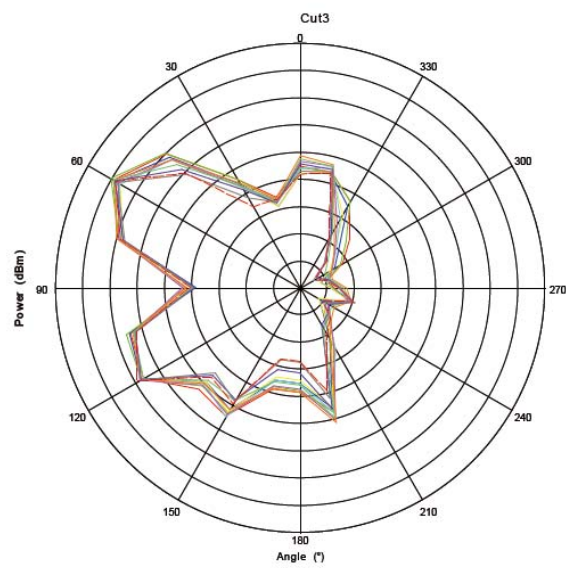
Frequency(MHz)	VSWR
2400	1.25
2440	1.21
2480	1.53



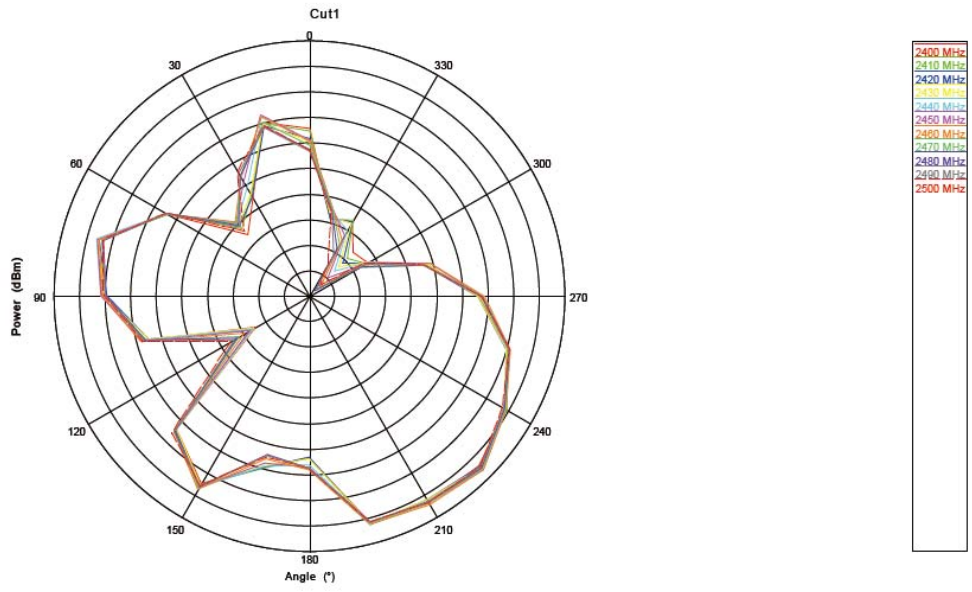
## 6 . 2D Radiation Pattern



Phi=0°

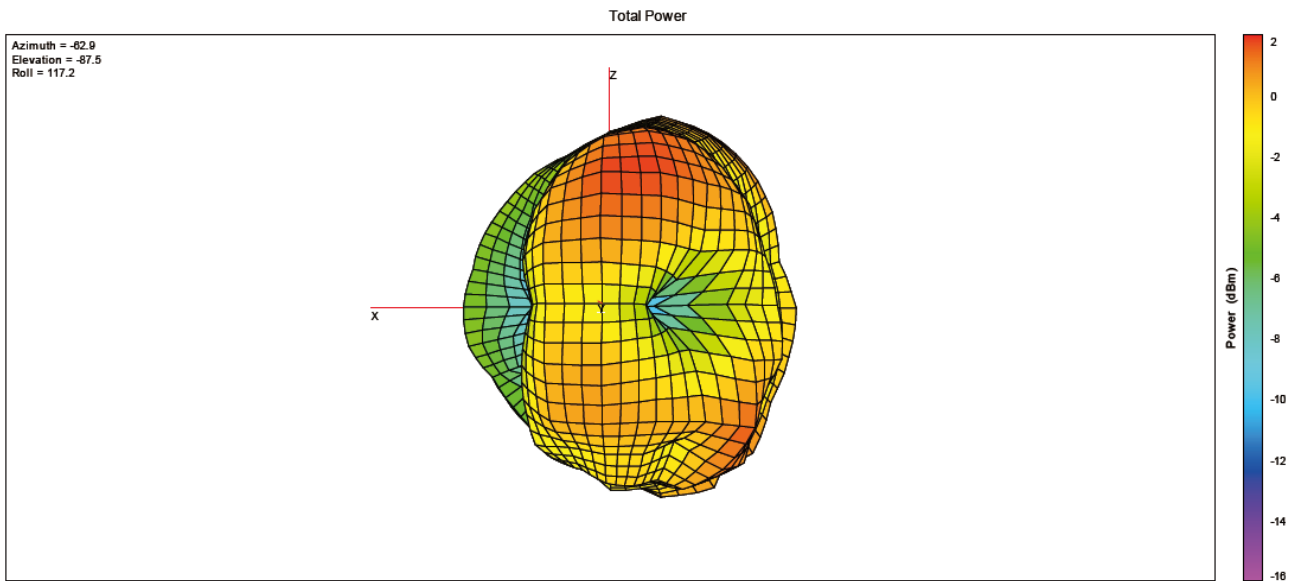


Phi=90°



Theta=90°

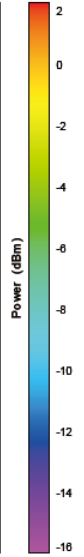
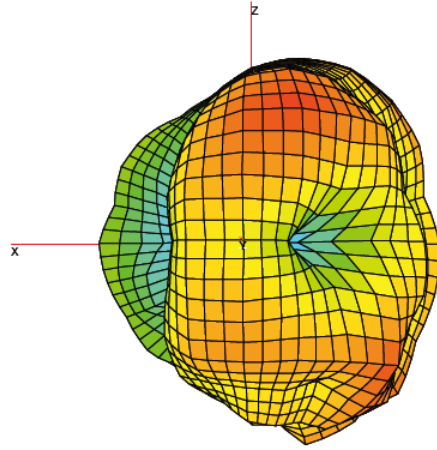
## 7 . 3D Radiation Pattern



2400MHz

Total Power

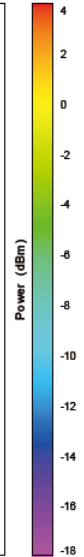
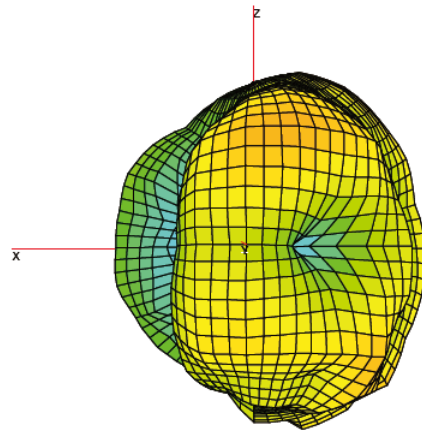
Azimuth = -62.9  
Elevation = -87.5  
Roll = 117.2



2440MHz

Total Power

Azimuth = -62.9  
Elevation = -87.5  
Roll = 117.2



2480MHz