

PCB BT Antenna Test Report

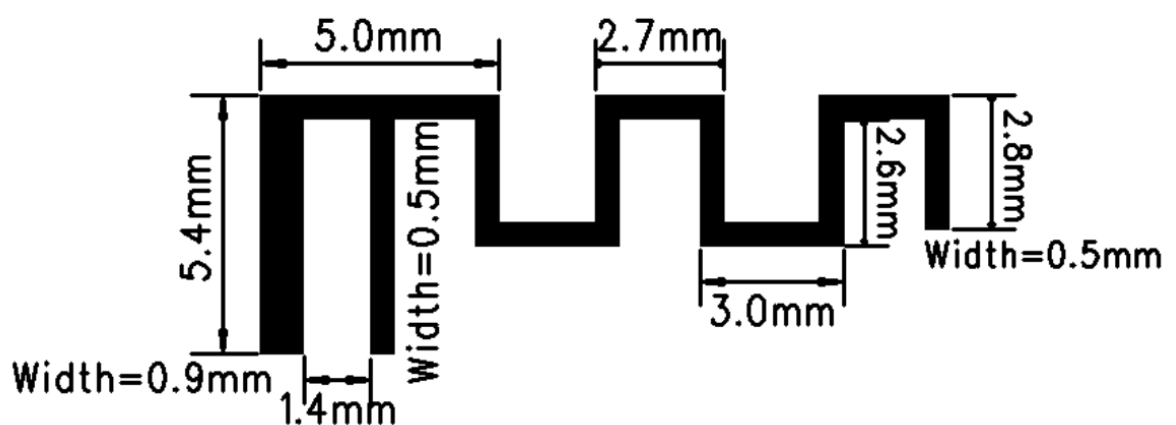
Manufacturer:: Rayleigh Labs Technology(ShenZhen)CO.,LTD.

Introduction of antenna

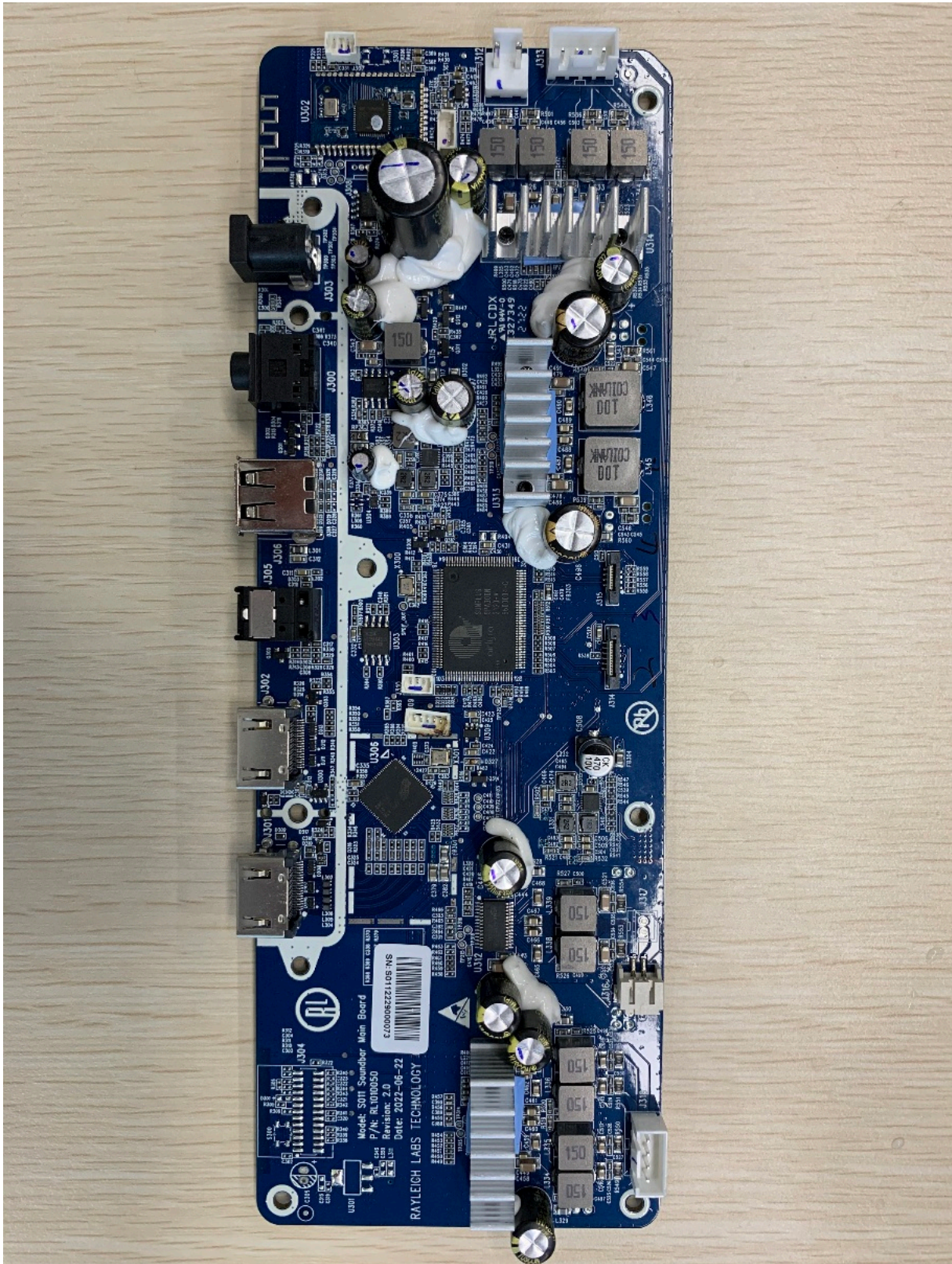
Our Soundbar speaker's antenna is directly made on the Main PCB board. The antenna is copper potable tin injection process, copper foil thickness: 1OZ, sheet material is FR - 4 thickness 1.6mm material.

Antenna shape

1. Size :



2. Picture :



Antenna parameters

The Bluetooth antenna operates at 2402-2480MHz and generates resonance in this frequency band. The next table is the main parameter of the antenna.

Bluetooth built-in antenna	
Frequency (MHz)	2402 ~ 2480 MHz
VSWR	≤ 1.92
Impedance	50 Ohm Nominal
Return Loss	-8.5 dB Max
Radiation	Omni-directional
Gain (Peak)	0 dBi
Polarization	Linear, Vertical
Admitted Power	2W
Connector	Tin

Antenna gain detection report

Spectrum Detector:	Agilent E5071B	Test Date :	Mar 15, 2019
Test By:	Tang	Temperature :	21°C
Test Result:	PASS	Humidity :	65 %
Modulation:	GFSK		

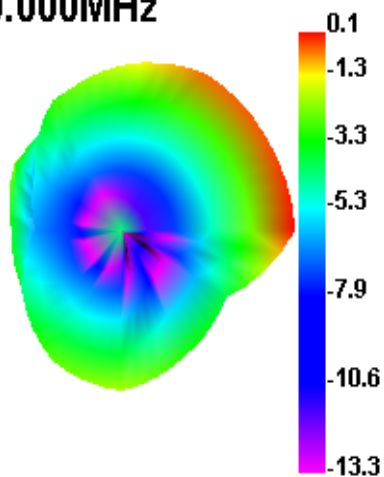
Maximum gain value

Frequency VNA (MHz)	Max Gain (dB)
2400	-0.45
2410	-0.35
2420	-0.1
2430	-1.19

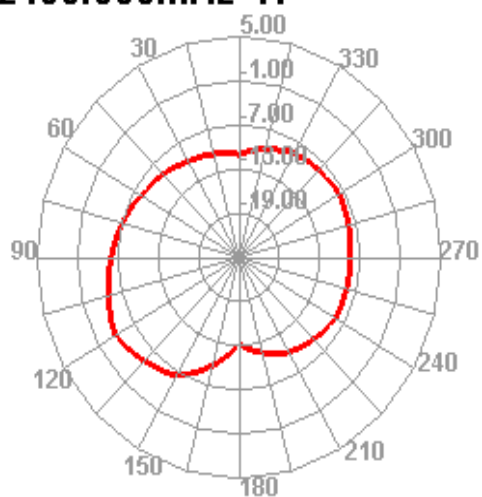
2440	-1.64
2450	-0.39
2460	-1.12
2470	-1.18
2480	0.00
2490	-1.28
2500	-1.32

Directional map:

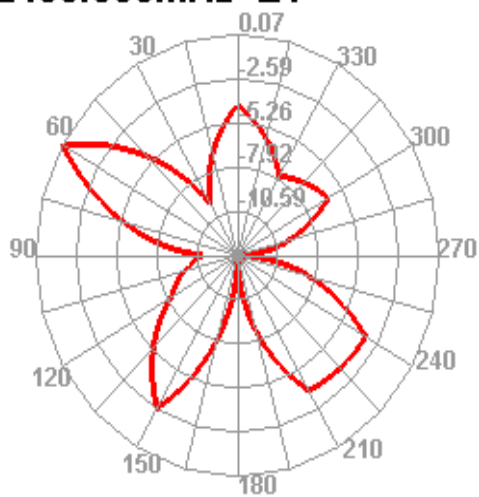
2400.000MHz



2400.000MHz H



2400.000MHz E1



2400.000MHz E2

