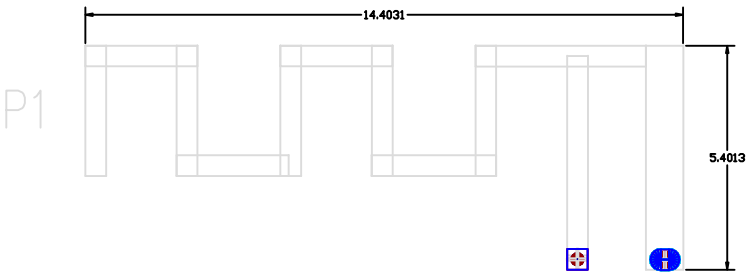
版次	变更内容	设计	日期
A0		李瑶娜	2022-1-4



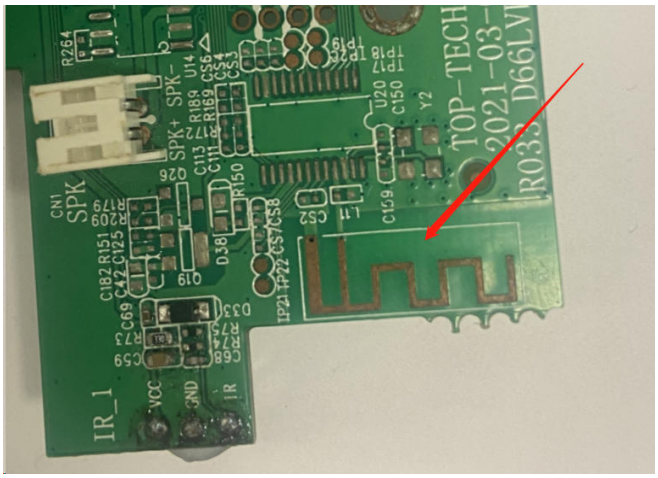
4			名称	BT 天线	客户型号	813				
3	辅料		设 计		成品料号					
2	PCB	Size: 14.4 *5.4 mm	审 核		比例	版次	单位	视图	变更标记	页码
1	线材/端子		批准		FREE		mm		1	1/1

Shenzhen Ruifeng Elec

1. Project information and Electrical Specification

Those specifications were specially definedfor Regel 813, BT 2.4G, and all characteristics were measured under the model's handset testingjig.

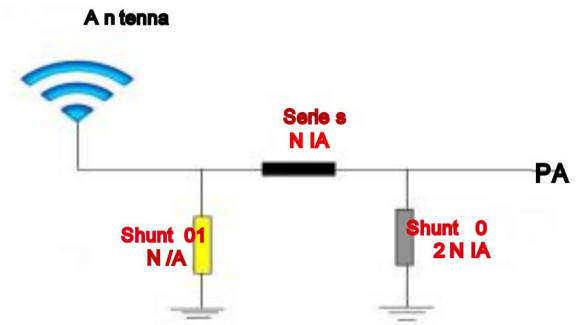
1-1 Antenna picture



1-2 Frequency Band :

Fr equency Band	M Hz
BT 2. 4G	2400-2500 (MHz)

1-3 Imped ance matching



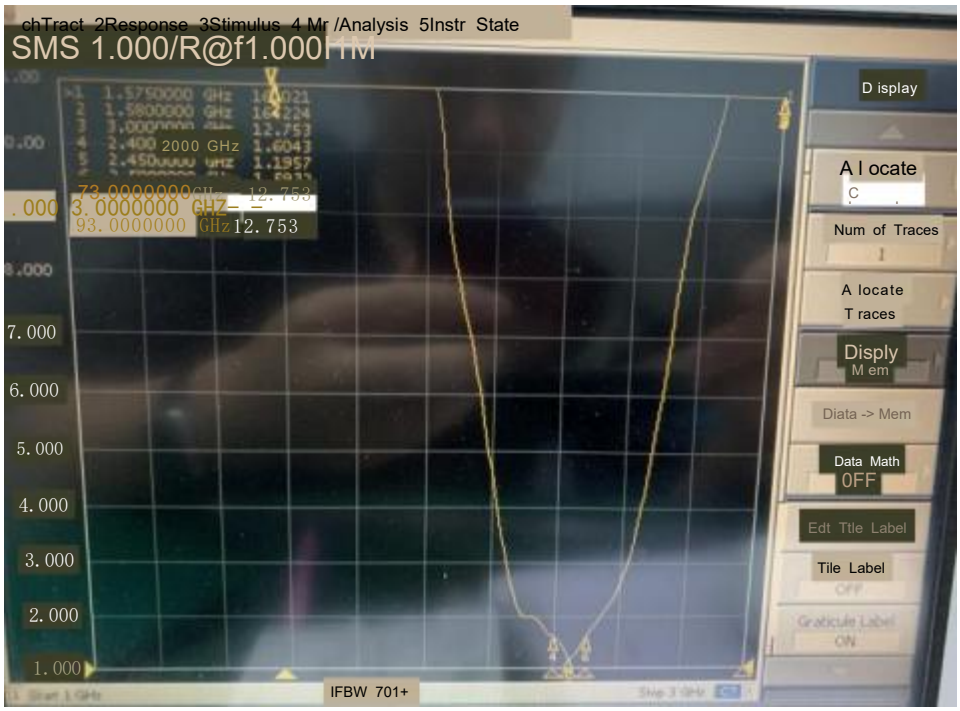
2. VSWR

Measuring Method :

1. A 50Ω coaxial cable is connected to the antenna .Then this cable is connected to a network analyzer to measure the VSWR ,

2. Keeping thisjig awayfrom metal at least 20cm .VSWR parameter value

Frequency (MHZ)	2400	2450	2500
standing wave	1.59	1.18	1.6



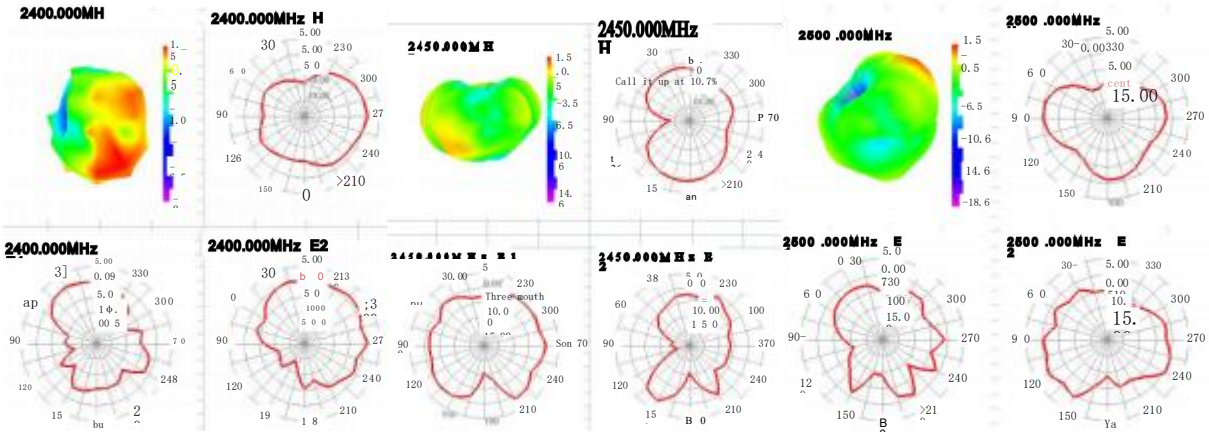
3. Efficiency and Gain *measuring and test instruments :

Microwave Dark Room, Agilent Network Analyzer, Agilent Spectrum Analyzer, 8960, Integrated Tester, standard antenna * test method:

The equipment is fixed at the center of the turntable with the H surface, on the same horizontal line as the center of the horn antenna.

Efficiency /Gain - BT 2.4G

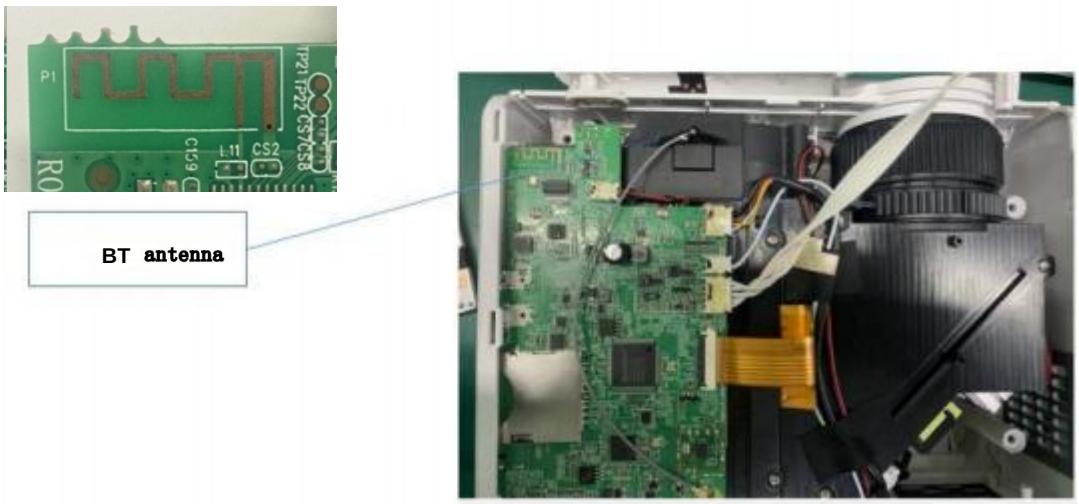
Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	46.52	1.49
2450	46.21	1.53
2500	45.47	1.49



4.The production index

When the antenna is in mass production, the resident wave ratio is used as the standard for mass production test.

Based on the differences of the project itself, the following criteria are given:

frequency	Mass production standards
BT 2.4G	VSWR (mass production product) <VSWR (design sample) + / -0.5

5.Antenna Assembly & environmental processing