

ANTENNA SPECIFICATION0

CUS P/N : T2970
CREDITS P/N :

ApplicationDate: 2022-12-9
Editor:

Rev: R:A0
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1. General Description

This report summarizes the electrical performance results of the proposed Internal antenna to support the F12 (BT) program. The antenna is an assembly BT 2.4G.



2. Electrical Specifications

2-1 Set-up

2-1-1 Frequency Band

Frequency Band	Tx(MHz)	Rx(MHz)
GSM900	880 ~ 915	925 ~ 960
DCS1800	1710 ~ 1785	1805 ~ 1880
WIFI	2400-2450-2500	

2-1-2 Impedance

Nominal Impedance(including matching circuit) : **50** ohms

2-1-3 Matching Requirements

The matching circuit on the PCB of the handset is according to Figure 1

Optimum matching circuit is highly dependent on the handset and thus.

Final matching circuit layout and values will be defined when handset is available.

2-1-4 VSWR And GAIN

VSWR			GAIN			
Freq. Band	OPEN	SPEC	Band	Freq.	OPEN	SPEC

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2400MHz	≤ 2.5	2400MHz	$\geq -1.0\text{dBi}$
2450MHz	≤ 2.0	2450MHz	$\geq 0.5\text{dBi}$
2500MHz	≤ 2.0	2500MHz	$\geq -1.0\text{dBi}$

※Measuring a 50Ω test jig is connected to a network analyzer to measure the VSWR

※※All test value is done in customer approval fixture.

2-2 Test Data

2-2-1 BT VSWR

Model No:	File:
CREDITS NO:	Note:
Sample No:	BT-VSWR
Test Condition: Free Space	Matching: 客供
Confirmation:	Engineer:

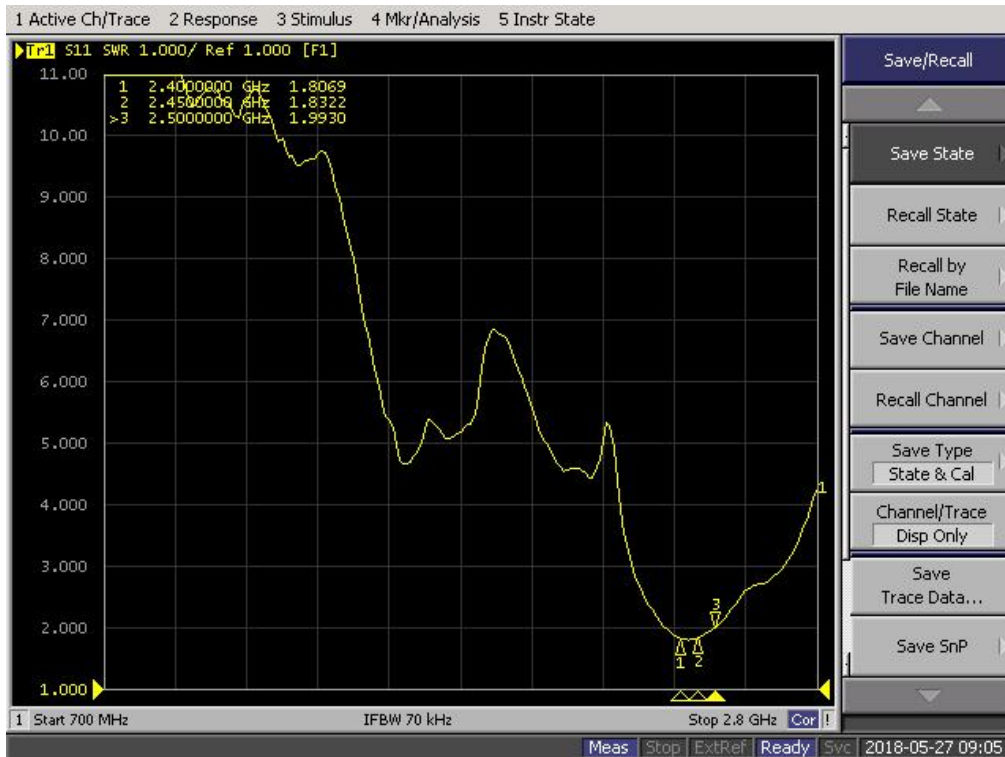
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2-2-2 BT GAIN&EFF



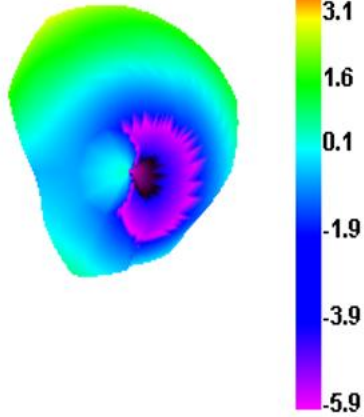
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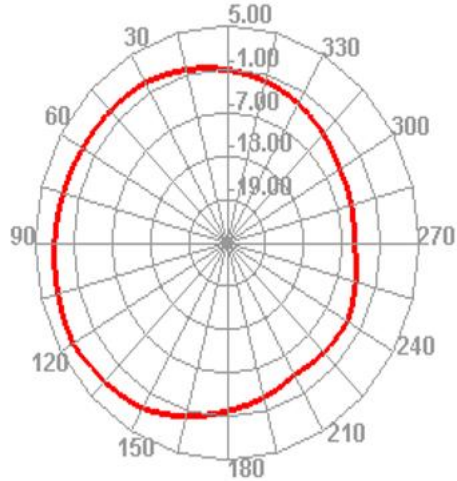
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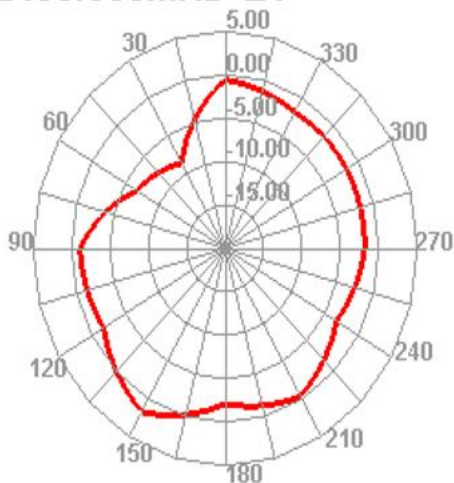
2400.000MHz



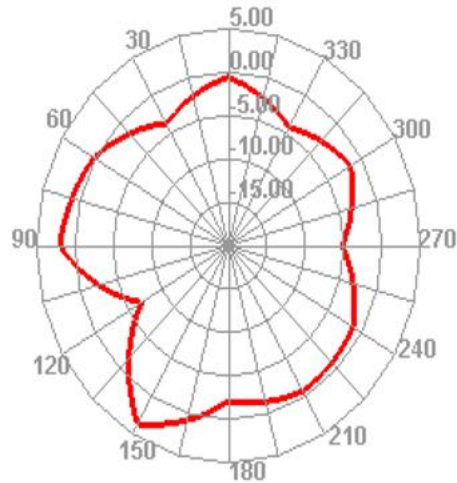
2400.000MHz H



2400.000MHz E1



2400.000MHz E2



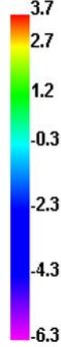
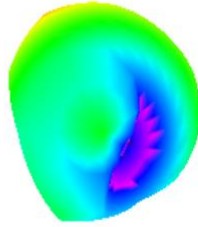
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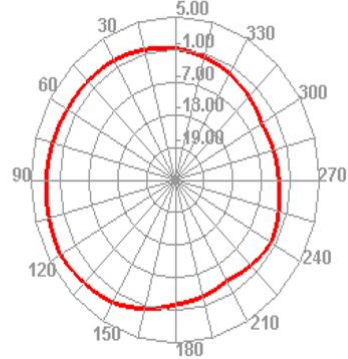
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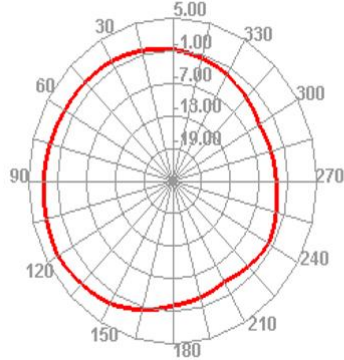
2450.000MHz



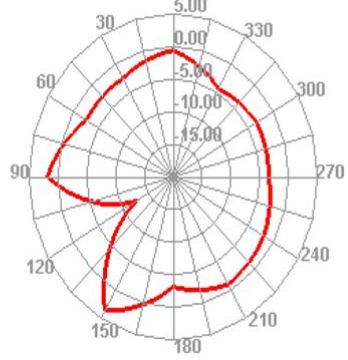
2450.000MHz H



2450.000MHz H



2450.000MHz E2

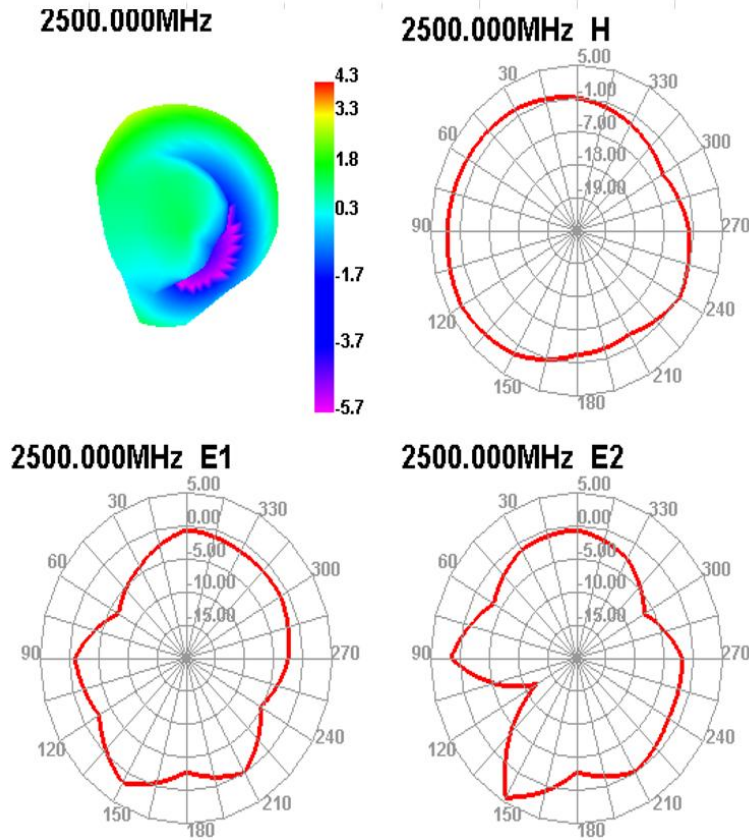


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3. Mechanical Specification

3-1-1 **Mechanical Configuration**(组装图)

3-2 **Measurement Data**

3-3 **Salt-Spray test**

35°C, 85%RH, 48Hours(According to MIL-STD-810E)The

salt-spray is generated from a 5% salt solution., The VSWR, Gain, Radiation Pattern must be met specifications after the salt-spray test.

4. Environment Characteristic

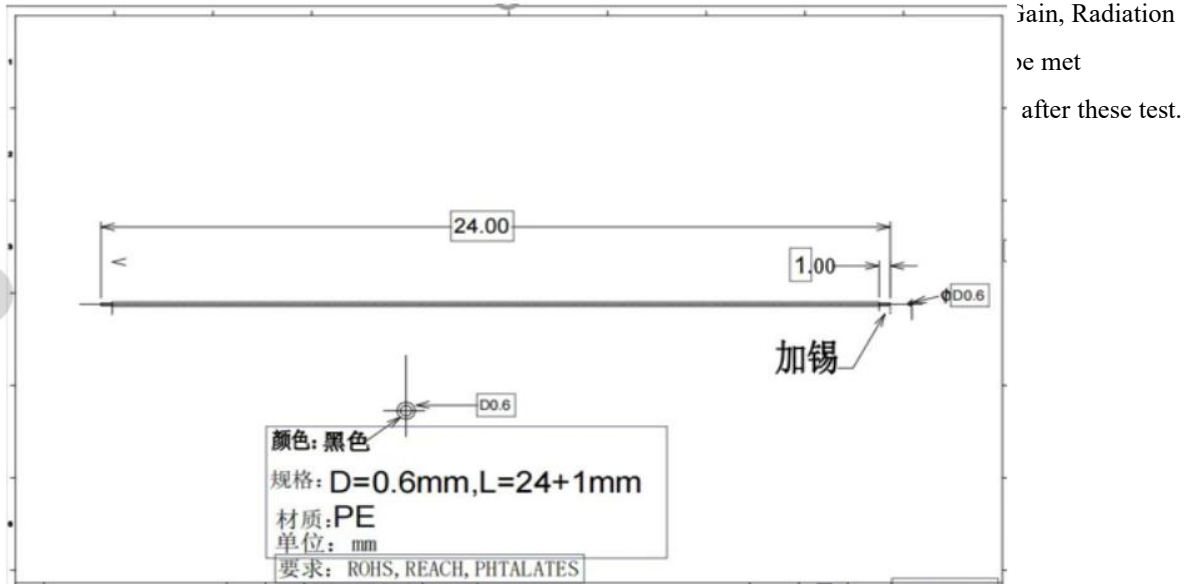
NO.	ITEM	TEST CONDITION	SPECIFICATION
4-1	High Temperature/Humidity Storage Test(non operating)	1.Temperature: +70 ±2°C 2.Humidity: 90~95%RH 3.Time: 48hrs	No material deformation is allowed.

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Gain, Radiation
 be met
 after these test.

4-2	Low Temperature/Humidity Storage Test(non operating)	1. Temperature: -30±2°C 2. Humidity: 0%RH 3. Time: 48hrs	
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