ANTENNA SPECIFICATION0

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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**

2400MHz	≦2.5	2400MHz	≧-1.0dBi
2450MHz	≦2.0	2450MHz	≧0.5dBi
2500MHz	≦2.0	2500MHz	≧-1.0dBi

※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: BT-VSWR
Sample No:	
Test Condition: Free Space	Matching: 客供
Confirmation:	Engineer:

2-2-2 BT GAIN&EFF

Passive Test For BT								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)
2400	38.15	-4.18	4.16	-1,15	16.755	21.397	1	-11.33
2410	37.93	-4.21	4.32	-1.17	16.611	21.323	0.98	-11.36
2420	36.91	-4.33	4.17	-1.24	16.003	20.912	0.91	-11.57
2430	35.46	-4.5	4.24	-1.39	15.253	20.212	0.76	-11.84
2440	35.09	-4.55	4.87	-1.43	15.089	20	0.72	-11.91
2450	35.57	-4.61	4.88	-1.46	14.837	19.732	0.69	-11.94
2460	33.34	-4.77	4.20	-1.6	14.206	19.138	0.55	-12.16
2470	33.25	-4.78	4.65	-1.6	14.145	19.101	0.55	-12.11
2480	32.71	-4.85	4.25	-1.67	13.964	18.746	0.48	-12.08
2490	31.93	-4.96	4.27	-1.75	13.566	18.364	0.4	-12.1
2500	32.01	-4.95	5.00	-1.71	13.496	18.512	0.44	-12.12

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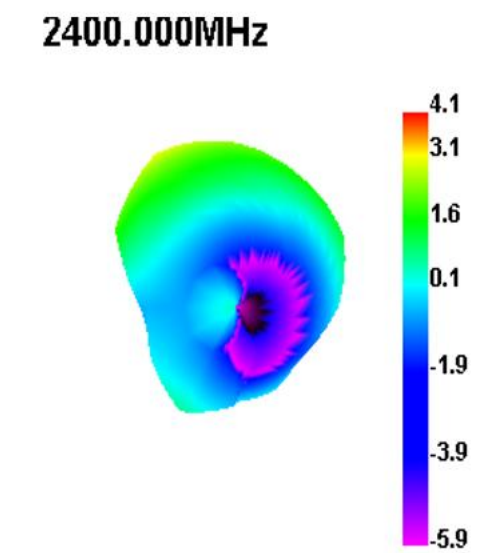

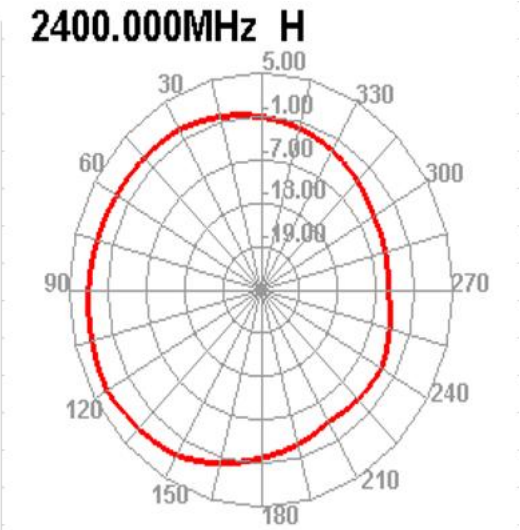

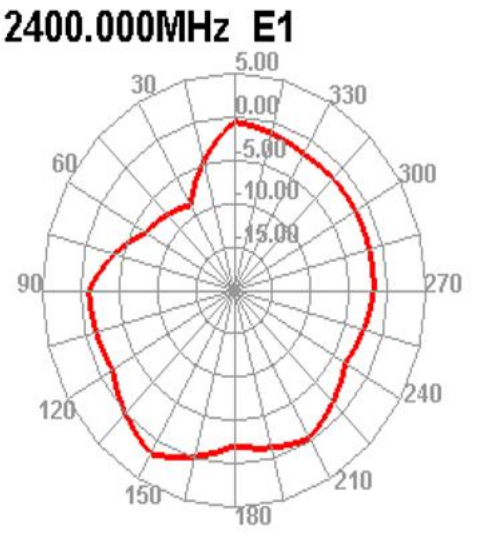

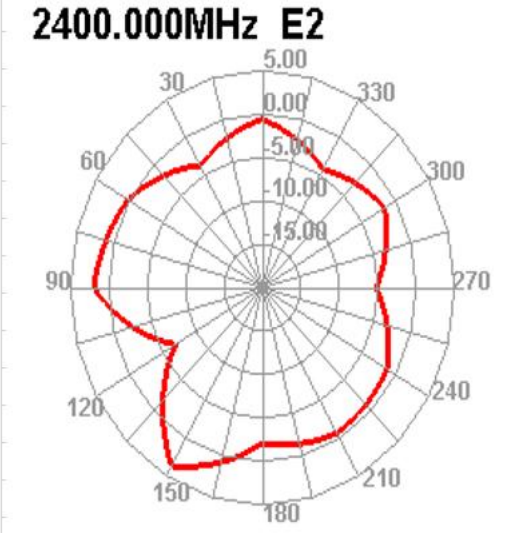

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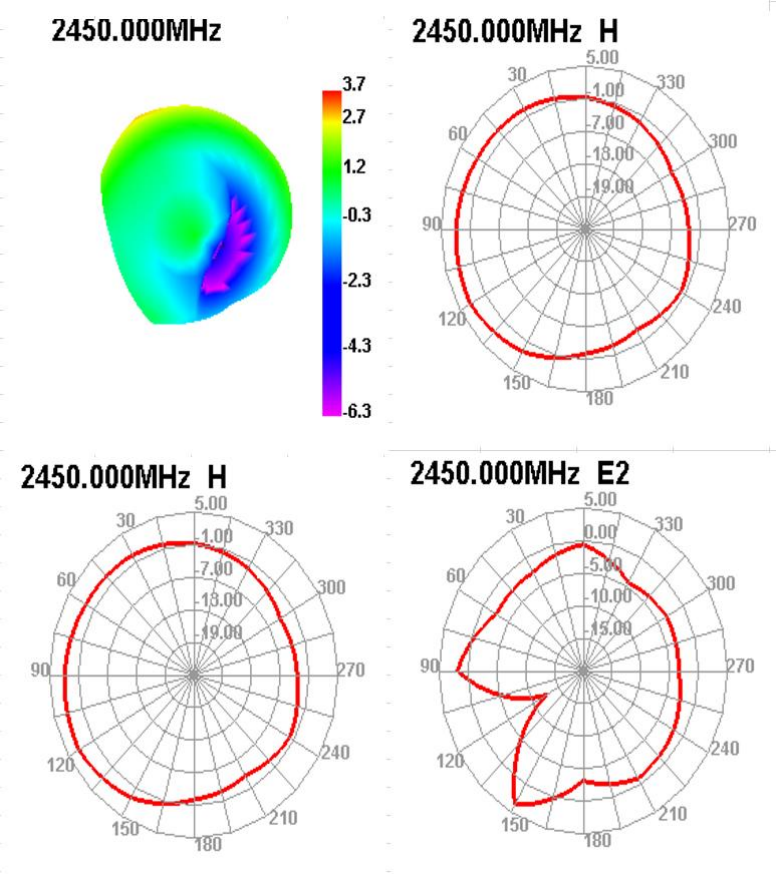

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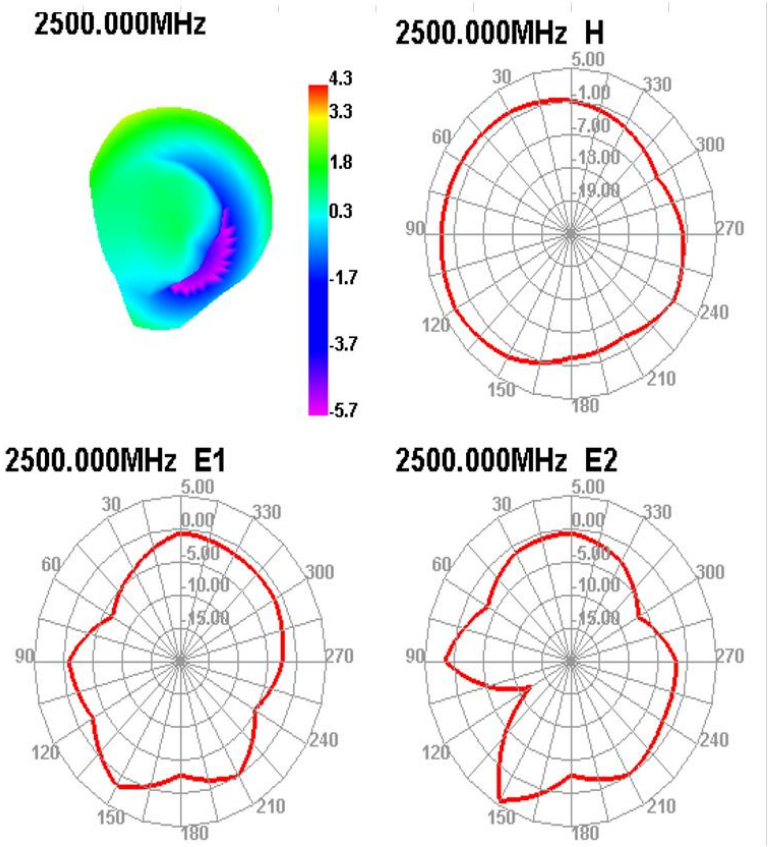


3. Mechanical Specification

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

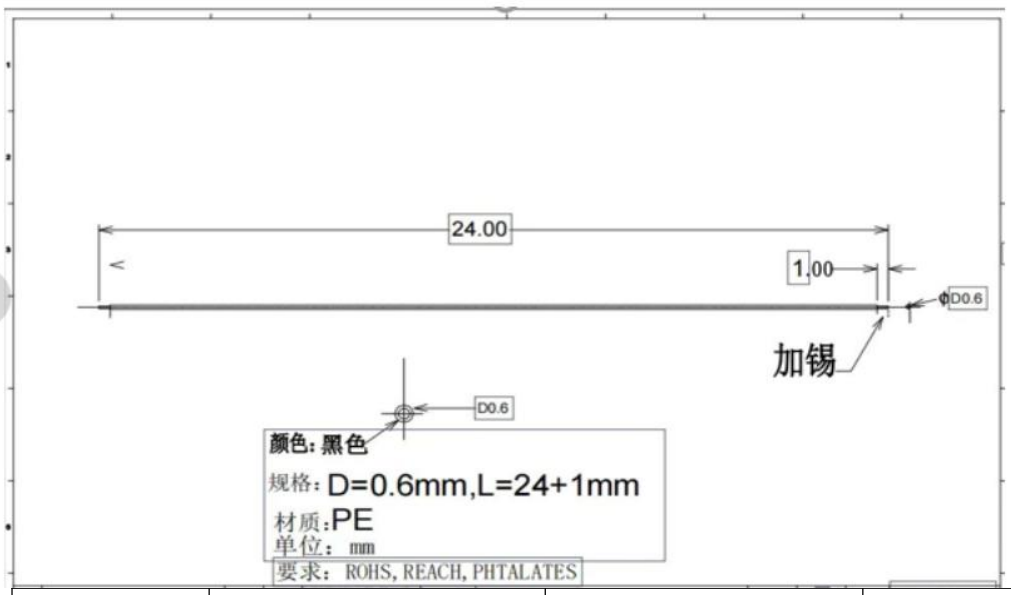
3-2 ***Measurement Data***

3-3 ***Salt-Spray test***

35℃, 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℃ 2.Humidity: 90~95%RH 3.Time: 48hrs	No material deformation is allowed.



Gain, Radiation

be met

after these test.

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