# **SPECIFICATION**

## APPLICATION FOR APPROVAL

PART NAME: PCB ANTENNA/ANTP1-CC1350B5

**DATE** : 2022/08/08

Release: Full release

Customer Approval		
Program Manager	R & D director	
Supplier	Approval	
Program Manager	R & D director	
郝井强	孙高鹤	

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## REVISION

REV. NO.	DATE	DESCRIPTION
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#### 0. DEFINITIONS

dBi Decibel relative isotropic antenna

Tx Transmit frequency
Rx Receive frequency

VSWR Voltage Standing Wave Ratio

GSM Global Service for Mobile communication

DCS Digital Communication System
PCS Personal Communication System
CDMA Code Division Multiple Access

WCDMA Wideband Code Division Multiple Access

PHS Personal Handly-phone System SAR Specific Absorption Rate

PCB Printed Circuit Board

TBD To Be Defined

P Parallel connection
S Series connection

## 1. ELECTRICAL SPECIFICATIONS

#### 1-1 FREQUENCY BAND

Freq. Band	Freq.(MHz)
WiFi	2400-2500

#### 1-2 IMPEDANCE

Nominal Impedance (including matching circuit) : 50 ohms

#### 1-3 MATCHING REQUIREMENTS

The matching circuit on the PCB of the handset is according to Figure 1-3. Optimum matching circuit is highly dependent on the handset and thus.

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

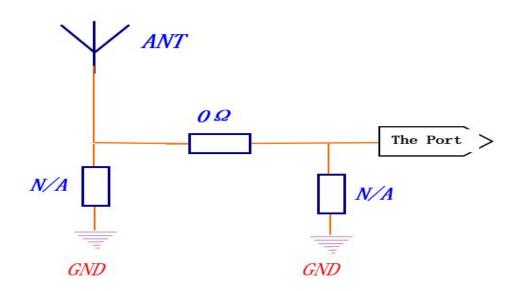


Figure 1-3

#### 1-4 VSWR

#### FREE SPAC

Freq. Band	spec
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%Measuring a 50  $\Omega$  test jig is connected to a network analyzer to measure the VSWR.

\*\*\*All test value is done in customer approval fixture.

#### 2. MECHANICAL SPECIFICATIONS

#### 2-1 MECHANICAL CONFIGURATION

The appearance of the antenna is according to Figure 2-1

#### 3. ENVIRONMENTAL CHARACTERISTICS

NO.	ITEM	TEST CONDITION	SPECIFICATION
3-1	Low Temperature Test	1. Temperature: $-40\pm2^{\circ}$ C 2. Time: 48hrs	
3-2	High Temperature Test	1. Tempearture: $+85^{\circ}$ C $\pm 2^{\circ}$ C 2. Time: 48hrs	No material deformation is allowed.
3-3	High Temperature/Humidity Storage Test(non operating)	1. Temperature: +60 ±2°C 2. Humidity: 93%±2%RH 3. Time: 48hrss	
3-4		35°C, 85%RH, 48Hours(According to MIL-STD-810E) The salt-spray is generated from a 5% salt(NaCl) solution.,	NO appear rusting phenomenon is allowed

## 4. PACKAGING

Antenna to be packed in a PE bag. Each 100 pcs per bag.

## 5. <u>APPENDIX</u>

All of the specifications are shown as the attached files.

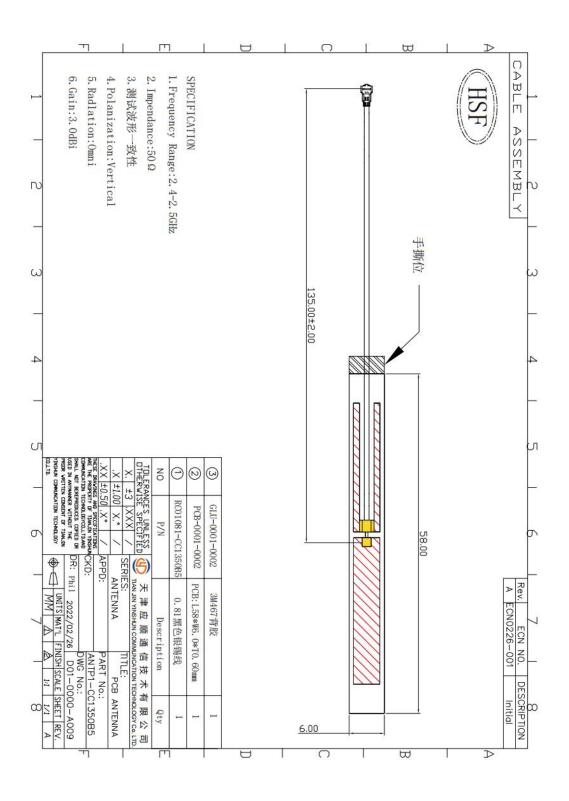
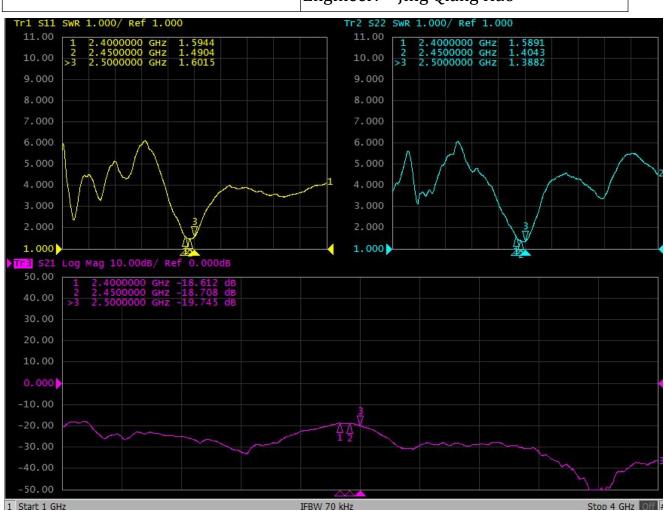


Figure 2-1

Customer No: 天津华来	File: 2022/08/08	
Supplier NO:	Note: VSWR/ISO	
Sample No:		
Test Condition:		
FREE SPACE	Matching: N/A	
Confirmation: Jing Qiang Hao	Engineer: Jing Qiang Hao	

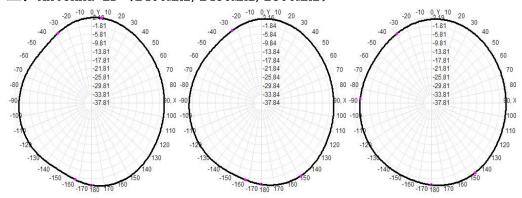


# Antenna Test Date

#### -: Antenna Efficiency&PeakGain

Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	70.09	2. 23
2410	72. 67	2. 34
2420	72. 21	2. 32
2430	70.63	2. 14
2440	70. 42	2. 13
2450	73. 65	2. 27
2460	75. 35	2. 31
2470	73. 75	2. 28
2480	71.40	2. 21
2490	70.88	2. 27
2500	70.66	2. 26

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## 三: Antenna 3D (2400MHz/2450MHz/2500MHz)

