



Tengxiang Technology.Inc

Product Number: AN2450-15BC11SM-B

Product Name: Antenna

Specification For Approval

Customer: _____

Customer P/N: _____

Tengxiang P/N: AN2450-15BC11SM-B

Description : 2.4/5G ANTENNA BLACK

Tengxiang Checked By:	Customer Approved By:
工程: HC 射频: 韦佳 	



Tengxiang Technology.Inc

NO.53 Shatou ShaChong Road, ChangAn Town, Guangdong province, China

TEL:86-769-81873082 FAX:86-769-82663788

<http://www.tenxiang.cn>

Product Number: AN2450-15BC11SM-B

Product Name: Antenna

1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400-2500 / 5150-5850 MHz
V.S.W.R.	≤ 2.0
Antenna Gain	4.54dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	PCB
Material of Plastic	ABS / POM
Cable Type	RG178
Connector Type	SMA Plug
C. Environmental	
Operation Temperature	- 40 °C ~ + 80 °C
Storage Temperature	- 40 °C ~ + 80 °C

2. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements
C1	V.S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification

Product Number: AN2450-15BC11SM-B

Product Name: Antenna

C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	MIL-STD-202G, 201A Amplitude: 0.03 inch (0.76mm); Freq: 10 to 55 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	Height: 1.5 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	MIL-STD-202G, 210F, cond. A Solder iron: 350±10°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	MIL-STD-202G, 211A, cond. A Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Terminal-Torque Test	MIL-STD-202G, 211A, cond. E Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M6	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	MIL-STD-202G, 101E, cond. B Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	MIL-STD-202G, 103B, cond. B Temp: 40°C; RH: >= 95%; Time: 48 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	MIL-STD-202G, 108A, cond. A Temp: 85°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2015/863/EU

Product Number: AN2450-15BC11SM-B

Product Name: Antenna

3. Antenna - S Parameter Test Data

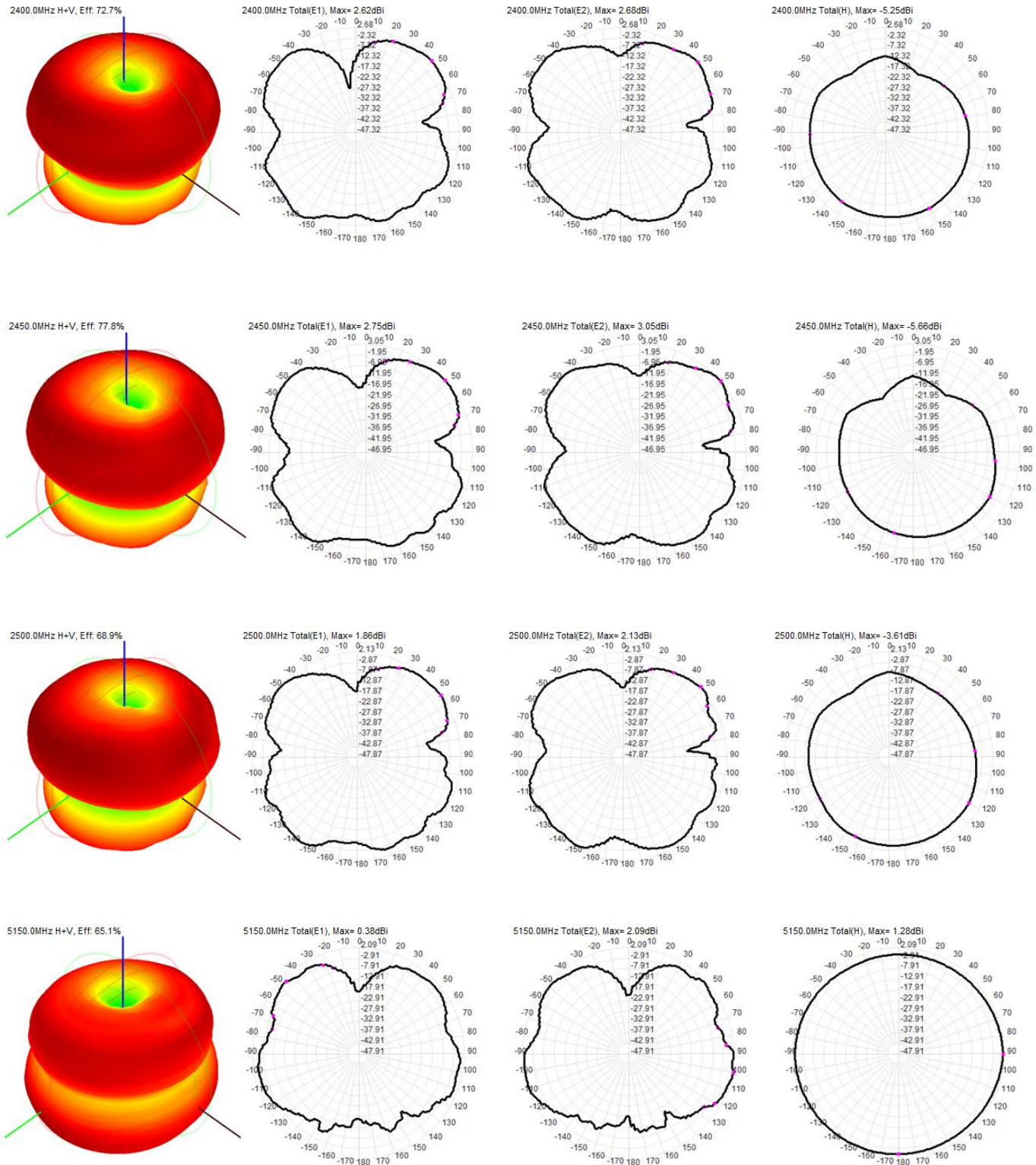


4. Antenna - Radiation Pattern Test Data

Frequency ID	1	6	11	12	20	26
Frequency (MHz)	2400.0	2450.0	2500.0	5150.0	5550.0	5850.0
Efficiency (dBi)	-1.39	-1.09	-1.62	-1.87	-1.32	-1.55
Gain (dBi)	2.74	3.05	2.21	2.09	3.84	4.54
Efficiency (%)	72.67	77.83	68.94	65.07	73.82	69.91
Directivity (dB)	4.13	4.14	3.83	3.96	5.16	6.09
Peak Gain Position (Theta)	135.00	131.00	128.00	80.00	90.00	98.00
Peak Gain Position (Phi)	300.00	90.00	300.00	90.00	90.00	90.00
Efficiency ThetaPol (%)	69.65	74.82	66.38	64.22	71.69	65.64
Efficiency PhiPol (%)	3.03	3.01	2.56	0.85	2.12	4.27
Upper Hem. Efficiency (%)	43.29	44.23	36.87	33.05	36.29	44.12
Lower Hem. Efficiency (%)	29.38	33.60	32.07	32.03	37.52	25.79

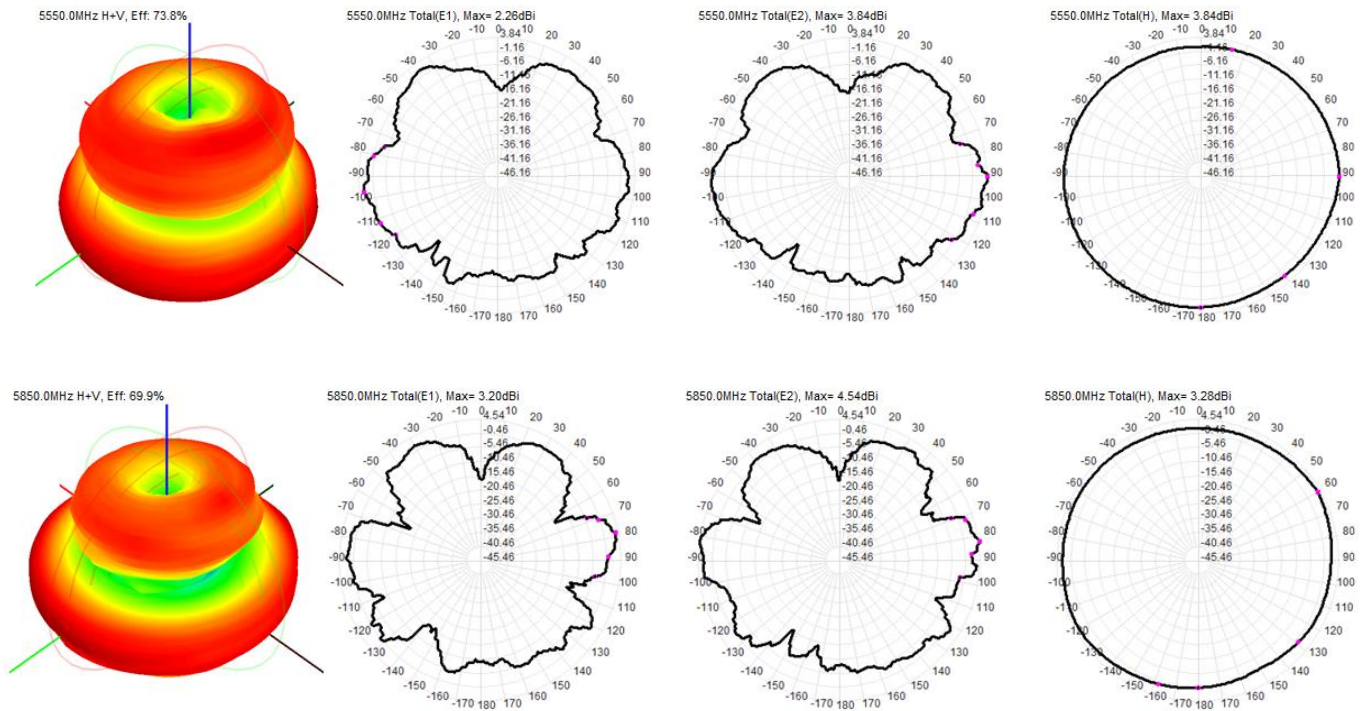
Product Number: AN2450-15BC11SM-B

Product Name: Antenna



Product Number: AN2450-15BC11SM-B

Product Name: Antenna

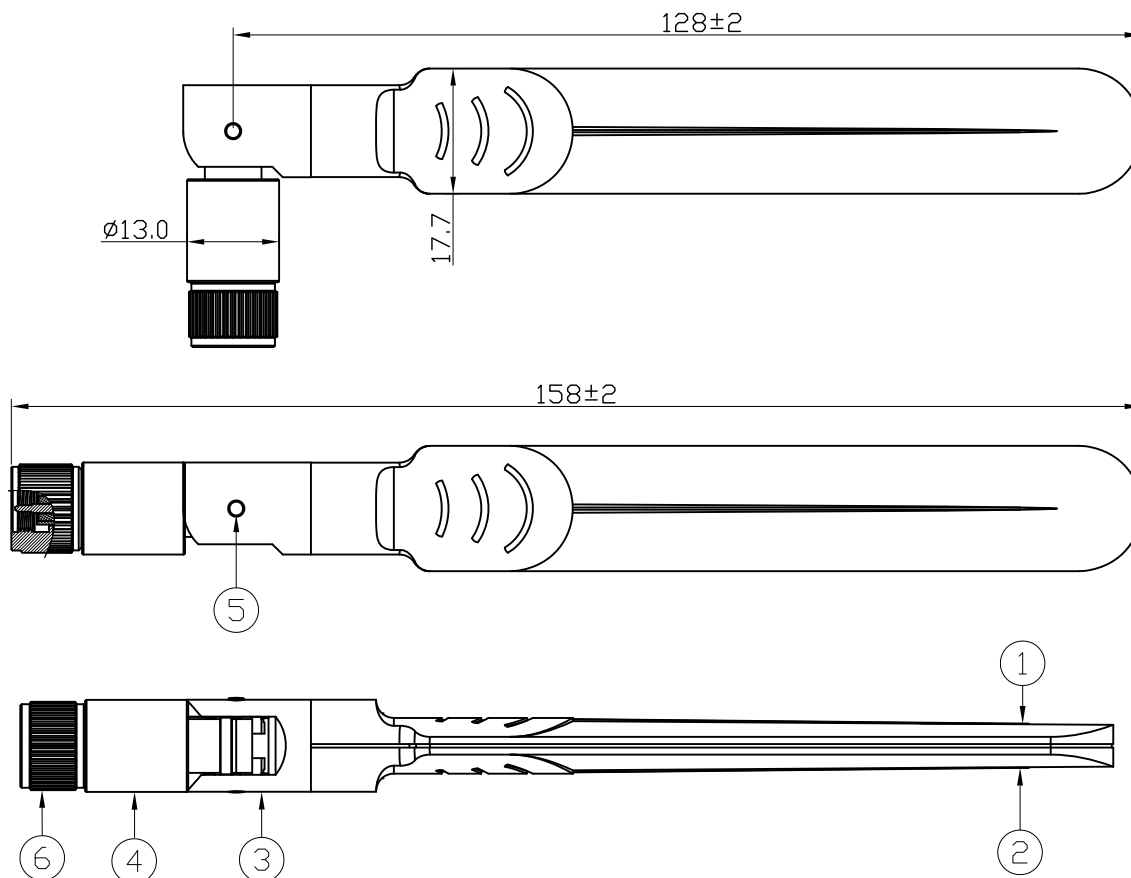


5. Mechanical Drawing (See attached files)

RoHS

Compatible

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



6	SMA512	SMA Plug	POM	Black	1
5	AN03-514PB	Hinge Pin	POM	Black	2
4	AN1201-05B	Body3	ABS	Black	1
3	AN9203-02B	Body2	ABS	Black	1
2	ANT15-02B	Body-B	ABS	Black	1
1	ANT15-01B	Body-A	ABS	Black	1
No.	Part Number	Name	Material	Finish	Q'ty



Tengxiang Technology Inc.

TITLE: 2.4/5.0GHz Antenna

PART NO.:AN2450-15BC11SM-B

DWG NAME:

APP BY

CHK BY

RF BY

DES BY

UNITS: mm

Tolerance

HC

SCALE: 1/1

X.X ±0.3

2020.11.21

REVISION: A

X.XX ±0.1

X° ±1

產品包裝規範

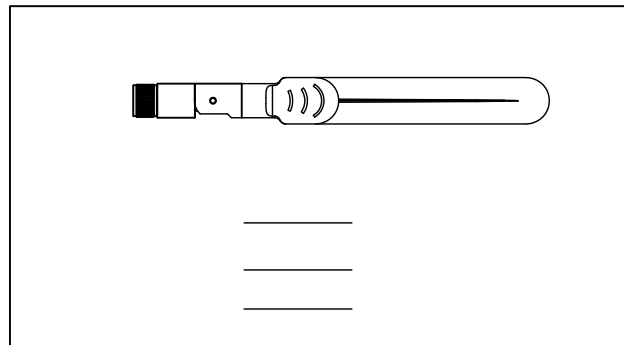
PACKING CRITERION

Date: 2020.11.21

Page: 1 of 1

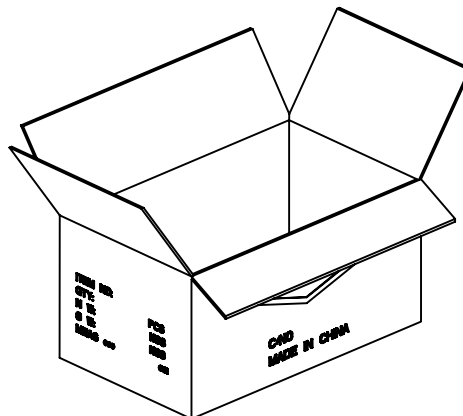
Part Number : AN2450-15BC11SM-B	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



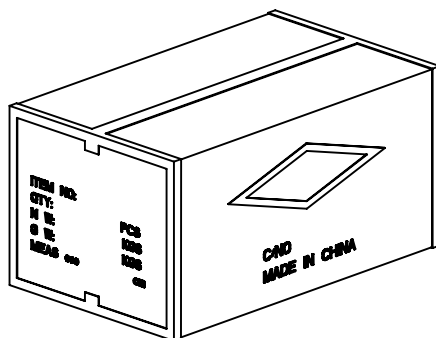
20PCS/PE BAG

2.PACKING 。

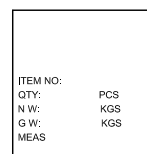


1000PCS/CARTON

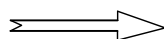
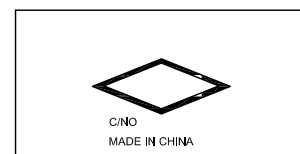
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX CHECKED BY : PEAK DESIGNED BY : HC