

Antenna Recognition Certificate

customer name :

Antenna Frequency Range: 2.4–2.5 GHz / 5.15–5.85 GHz

Antenna Model: Triangular Rhombus Antenna

Manufacturer: Dongguan Qiaomu Electronic Technology Co., Ltd.

Address:Lianhu Second Industrial Zone, Tangxia Town, Dongguan City

Manufacturer Recognition Section:

fiction	examine and verify	ratify

Customer Confirmation Field:

affirm	examine and verify	ratify

I. Antenna Specification Table

Specification

1. Electrical Properties

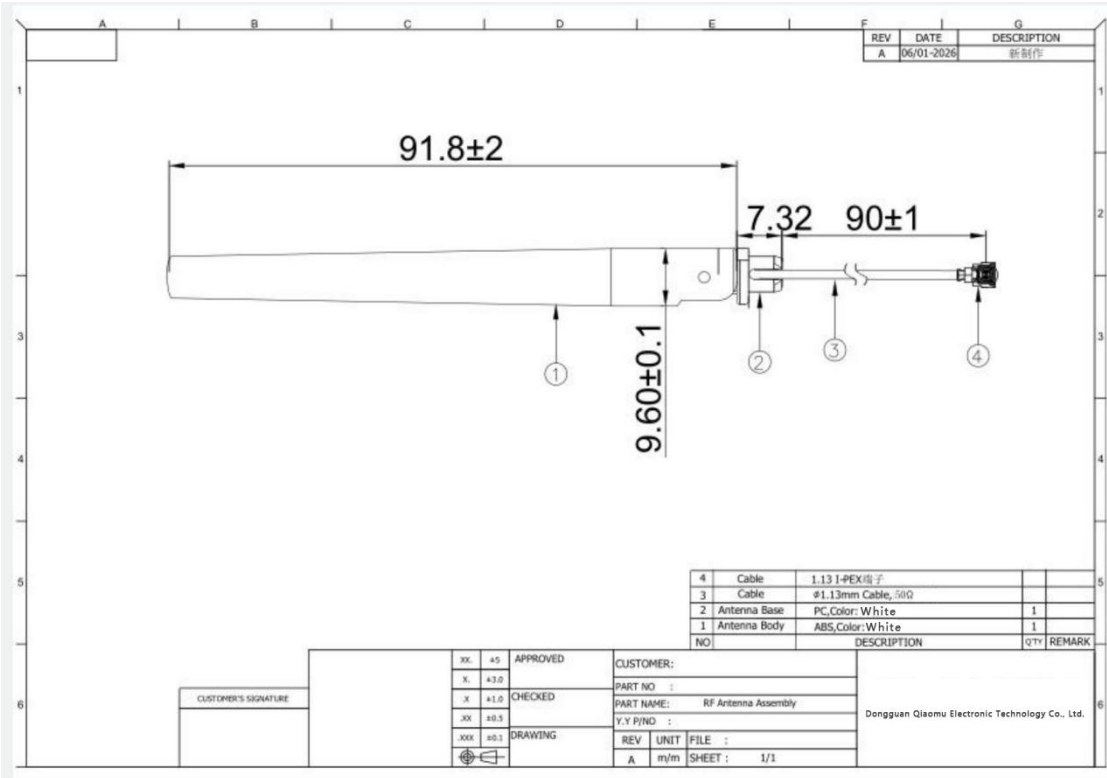
- 1.1 Frequency
Range-----2.4-2.5&5.15-5.85GHz
- 1.2 Impedance-----
50 Ω
- 1.3 VSWR----- 2.0
- 1.4 Return Loss----- 2dB or Less
- 1.5 Radiation----- Omni-directional
- 1.6 Gain ----- 5.21 dBi/5.06 dBi
- 1.7 Polarization ----- Linear polarization
- 1.8 Admitted Power----- 1W
- 1.9 Cable----- RG-113 Cable

2 . Physical Properties

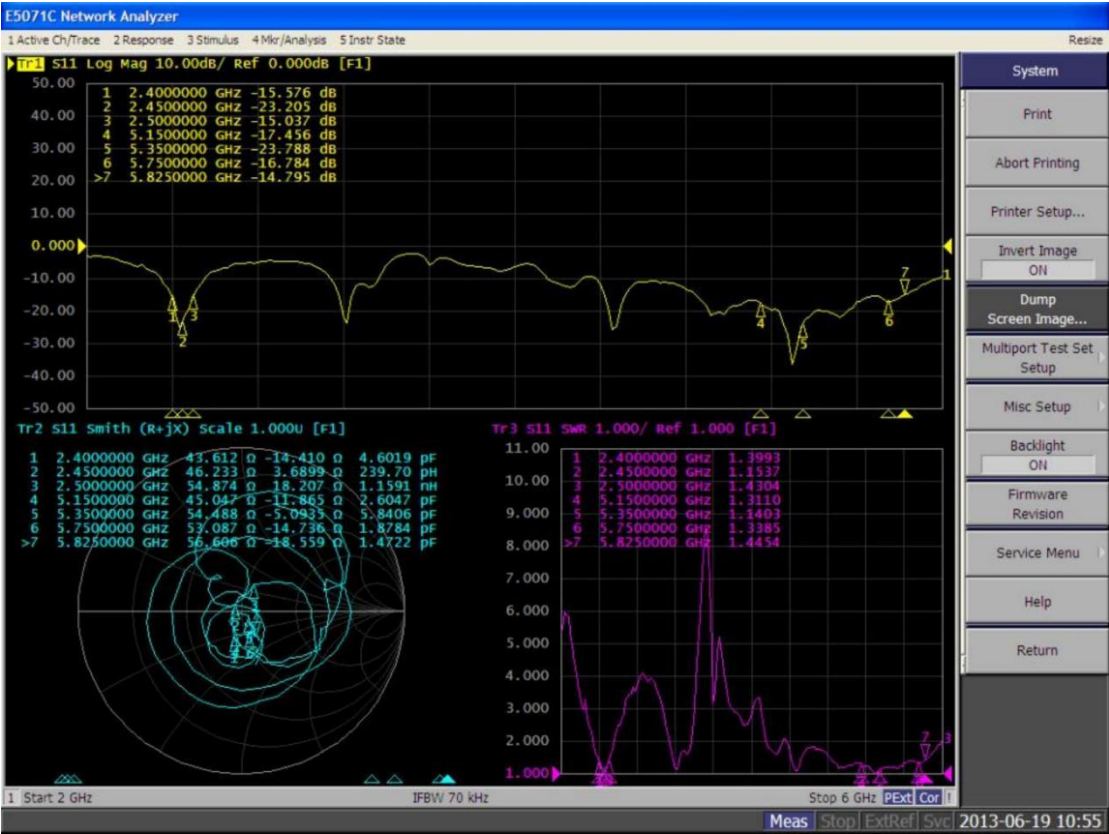
- 2.1 Antenna Cover-----ABS
- 2.2 Antenna Base----- ABS
- 2.3 Operating Temp----- -10°C~+60°C
- 2.4 Storage Temp----- -10°C~+60°C
- 2.4 Color----- White

Dongguan Qiaomu Electronic Technology Co., Ltd.

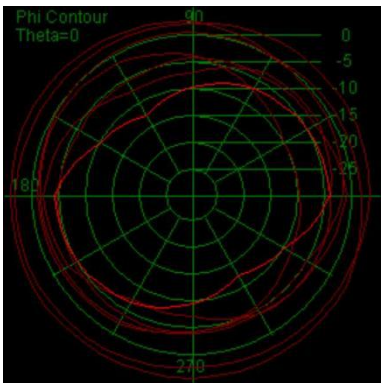
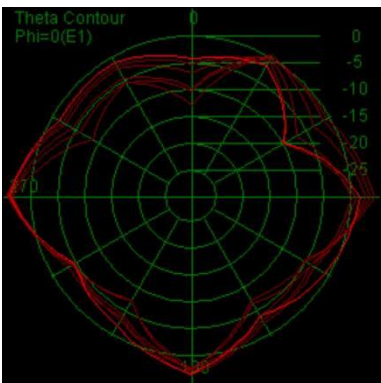
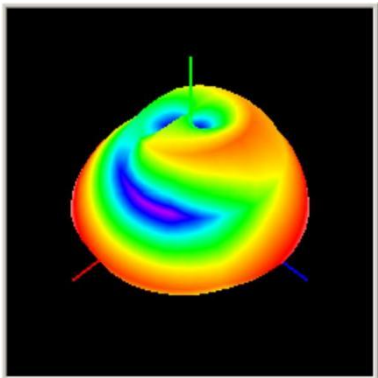
II. Final Product Diagram:



III. Test Report
Return loss:



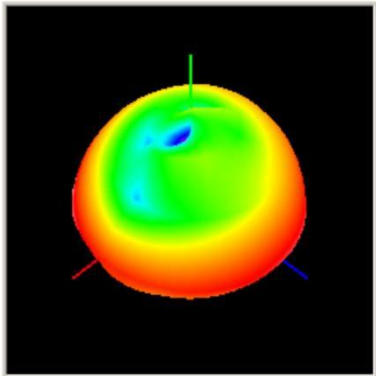
2D 、3DRaditation Pattern:



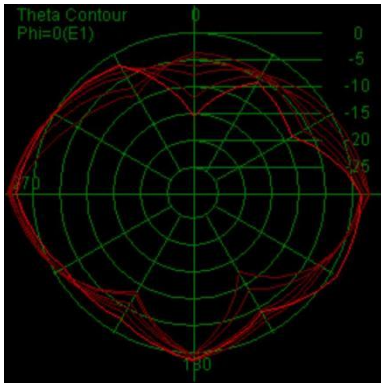
2.4GHz Gain: 5.21dBi
Efficiency:84.5% 2.4GHz

Efficiency:84.5% Gain: 5.21dBi

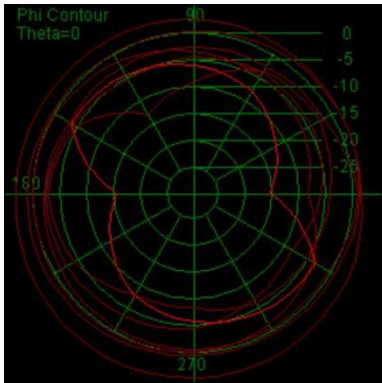
2.4GHz Gain: 5.21dBi
Efficiency:84.5%



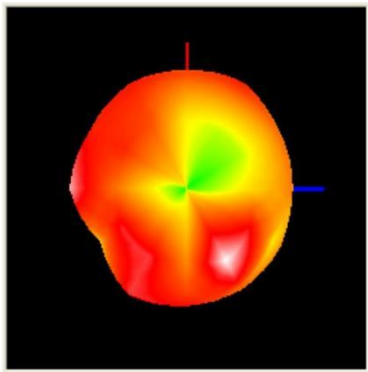
2.5GHz Gain:5. 14dBi
Efficiency:85.3% 2.5GHz



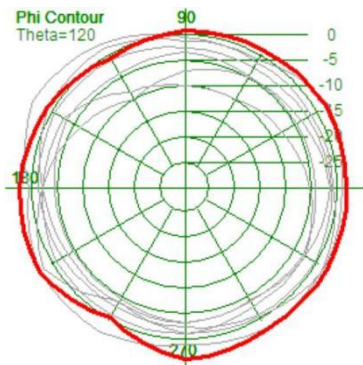
Efficiency:85.3% Gain:5. 14dBi



2.5GHz Gain:5. 14dBi
Efficiency:85.3%



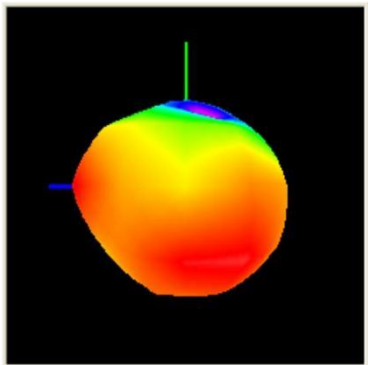
5.15GHz
Gain: 4.89dBi
Efficiency: 73.7%



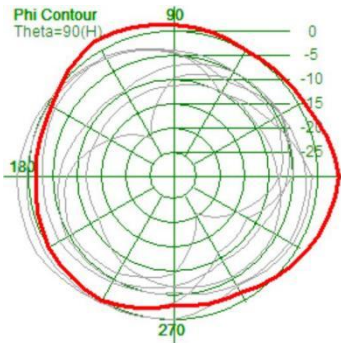
Gain: 4.89dBi
Efficiency: 73.7%

Efficiency: 73.7%
5.15GHz

5.15GHz
Gain: 4.89dBi



5.85GHz
Gain: 5.06dBi
Efficiency: 75.8%



Gain: 5.06dBi
Efficiency: 75.8%

Efficiency: 75.8%
5.85GHz

5.85GHz
Gain: 5.06dBi

IV. Material Requirements

1. Body: ■ABS; white
2. Base: ■ABS; White
3.Cable: 1.13 BLACK

V. Visual Inspection

1. Exterior Color: ■White
2. Visual inspection criteria: No burr edges; no damage; no scratches; no color discrepancy; no detachment or loosening of the internal conductor, or other defects.

VI. Electrical Performance

project	Test Methods and Conditions	Specifications and Requirements	Experim ental Results
1. Characteri stic Impedanc e	Use TDR to test the characteristic impedance of the antenna	Impedance: $50\ \Omega \pm 10\ \Omega$	OK
2. Standing Wave Ratio	Test the standing wave ratio using a network analyzer at frequencies of 2.4–2.5 GHz and 5.15–5.85 GHz.	VSWR (駐波比): 2.0MAX	OK
3. Echo Loss	Test the return loss using a network analyzer at frequencies of 2.4–2.5 GHz and 5.15–5.85 GHz.	Echo loss: -10 dB MAX	OK
4. Gain	Gain and field pattern plots for microwave anechoic chamber tests at frequencies of 2.4–2.5 GHz and 5.15–5.85 GHz	The gain of the waveform diagram meets the specified requirements.	OK

VII. Reliability Testing

project	Test Methods and Conditions	Specifications and Requirements	Experimental Results
Salt Spray Test	Salt concentration: 50 ± 10 g/L (approximately 5%); pH: 6.5–7.2; Test temperature: 35 ± 1 °C; Corrosion time: 16 h.	determination method: After testing, observe under a 20x magnifying glass; absence of oxidation indicates compliance.	OK
Vibration Test	Frequency: 10–2000 Hz; Amplitude: 1.52 mm; Applied 10 times in each of the X, Y, and Z directions.	No significant changes in appearance All electrical parameters comply with the specified tolerance limits.	OK
drop test	Fell from 1 M onto a wooden board	No significant changes in appearance All electrical parameters comply with the specified tolerance limits.	OK
Temperature Cycle Test	High temperature: 60°C; Low temperature: -20°C Duration: 30 minutes at each temperature Conversion Time: 10 minutes Number of iterations: 5 Recovery time: 4 to 6 hours	No significant changes in appearance All electrical parameters comply with the specified tolerance limits.	OK
Constant Temperature and Humidity Test	Temperature and Humidity: 40°C ± 2 °C, 90–95% RH Duration: 500hrs Recovery time: 4 to 6 hours Detection Time: 240 & 500hrs	No significant changes in appearance All electrical parameters comply with the specified tolerance limits.	OK
High Temperature Test	temperature : 60°C Duration: 240hrs Recovery time: 4 to 6 hours Detection Time: 240 hours	No significant changes in appearance All electrical parameters comply with the specified tolerance limits.	OK
Low Temperature Test	temperature : -20°C Duration: 240hrs Recovery time: 4 to 6 hours Detection Time: 240 hours	No significant changes in appearance All electrical parameters comply with the specified tolerance limits.	OK

8. Packaging Requirements:

■Plastic Bag■Carton Box



Packing: 20pcs/bag

