



Antenna Specification

Manufacture: SYL

Product Name: SN103A-BT 贵妃二代 Antenna

Antenna Type: PCB Antenna

Test Date: 2025/7/20

Tested by:	Checked By:	Approved By:
ChengMingWei	DuLin	QianCongGen

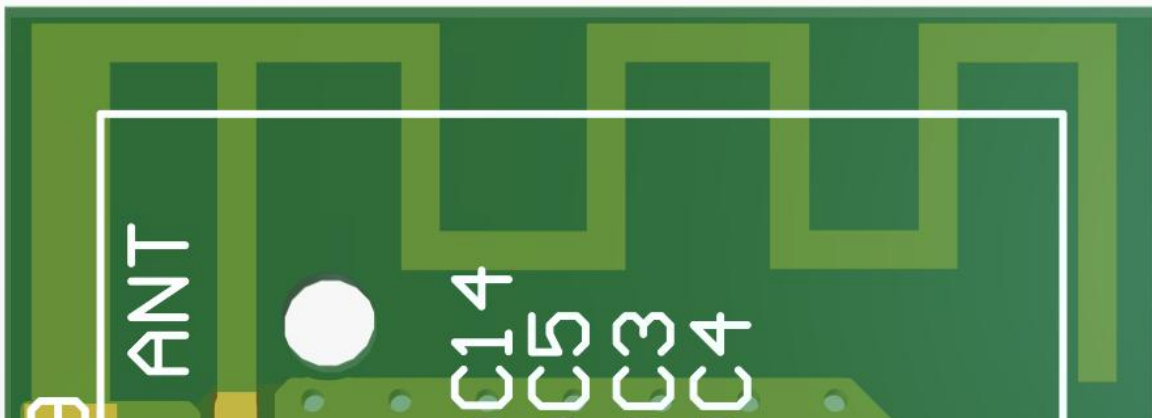


1. General Description

Manufacturer:	Dong Guan SYL Technology CO.,LTD
Address:	Room 203,DongHui Industrial Park,No.198 DaTang Road, DongGuan, Guangdong,China
Product Name:	SN103A-BT 贵妃二代 Antenna
Product model:	SN103A-BT 贵妃二代
Antenna Type:	PCB Antenna
Test Frequency:	2400-2480MHz
Antenna Gain:	2.499dBi
VSWR:	<3.2
Impedance:	50Ω
Polarization:	Linear

Technical drawing of a stepped profile (likely a cross-section of a mechanical part) with dimensions in millimeters (mm). The profile is defined by the following dimensions:

- Overall Width:** 5.3 mm
- Overall Height:** 4.7 mm
- Top Surface Thickness:** 0.5 mm
- Internal Features:**
 - A central rectangular hole with a width of 1.9 mm and a height of 2.7 mm.
 - A rectangular notch on the right side with a width of 1.4 mm and a height of 2.7 mm.
- Segment Dimensions (from left to right):**
 - Segment 1: Width 1.0 mm, Height 1.6 mm.
 - Segment 2: Width 1.4 mm, Height 1.6 mm.
 - Segment 3: Width 0.5 mm, Height 1.6 mm.
 - Segment 4: Width 1.9 mm, Height 1.6 mm.
 - Segment 5: Width 2.9 mm, Height 1.6 mm.
 - Segment 6: Width 1.9 mm, Height 1.6 mm.
 - Segment 7: Width 2.4 mm, Height 1.6 mm.
 - Segment 8: Width 1.6 mm, Height 1.6 mm.
 - Segment 9: Width 0.5 mm, Height 1.6 mm.



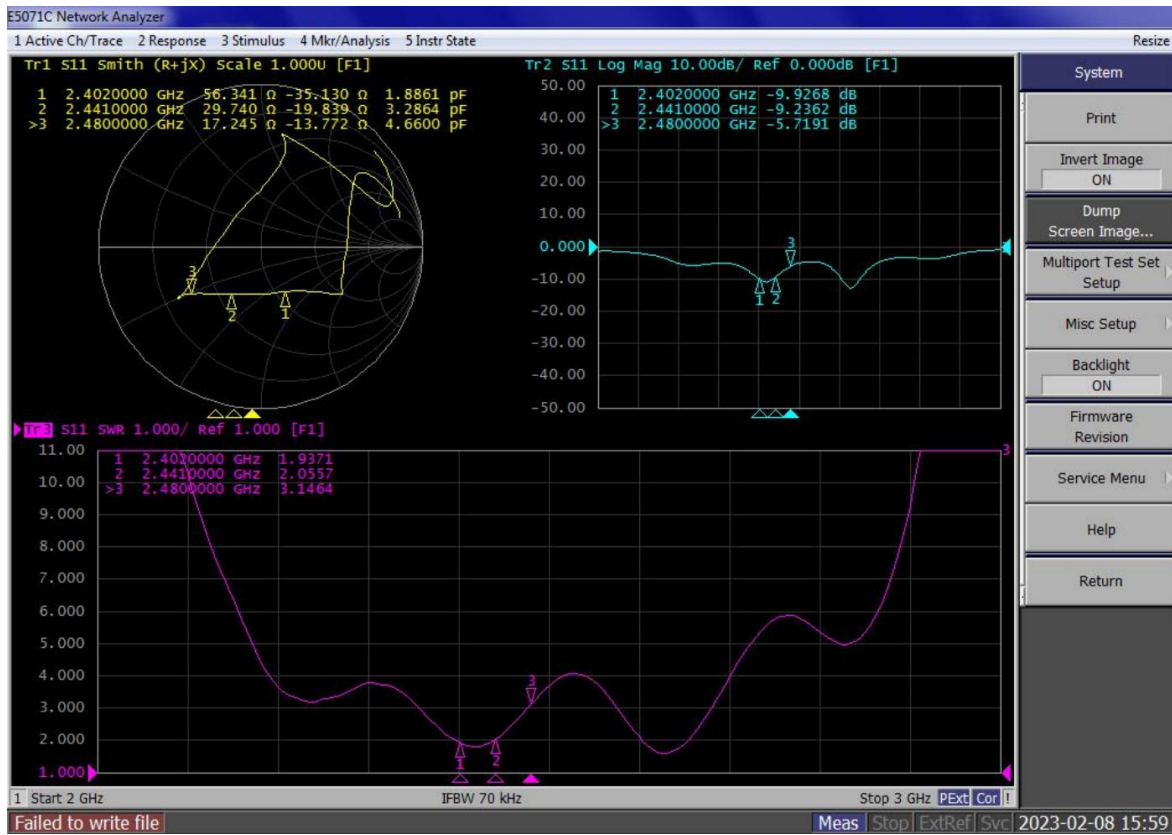


3.Gain and Efficiency

Frequency (MHz)	Gain (dBi)	Efficiency (%)	AverageGain (dBi)	Efficiency (dB)
2400	1.433	59.329%	-2.717	-2.267
2410	0.927	51.861%	-3.416	-2.852
2420	0.829	52.112%	-3.166	-2.831
2430	0.881	49.299%	-3.258	-3.072
2440	1.192	50.672%	-3.144	-2.952
2450	1.688	53.067%	-2.735	-2.752
2460	2.194	59.423%	-2.276	-2.260
2470	2.118	56.680%	-2.438	-2.466
2480	2.499	61.727%	-2.112	-2.095
Average	1.529	54.908%	-2.806	-2.616
Peak	2.499	61.727%	-2.112	-2.095



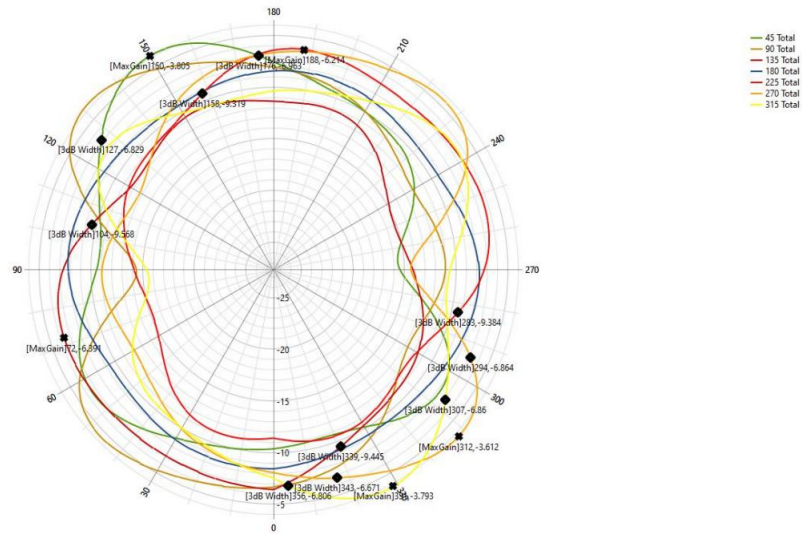
4.ReturnLoss





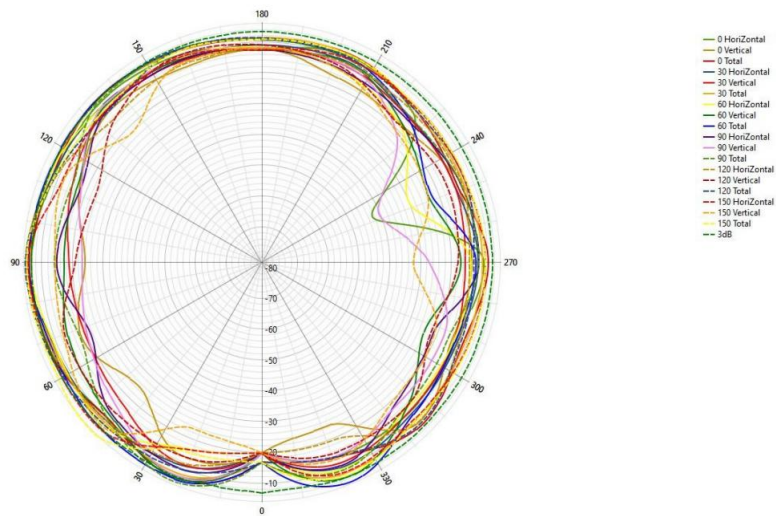
5. Antenna2440MHz2D-ThetaPattern

2D-Theta 2DLine-Theta 2D-Phi 2DLine-Phi DataLine HeatMap 3D

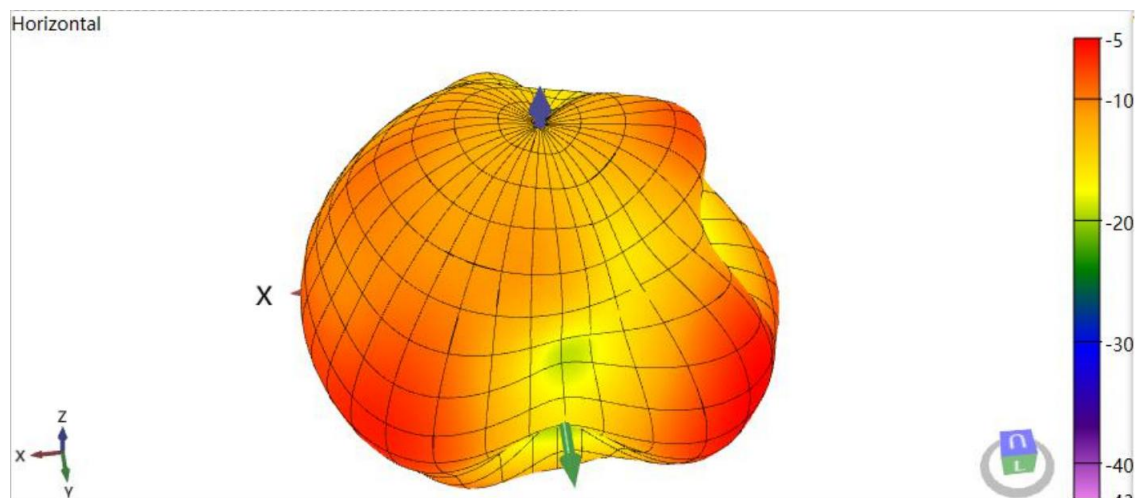


6. Antenna2440MHz2D-PhiPattern

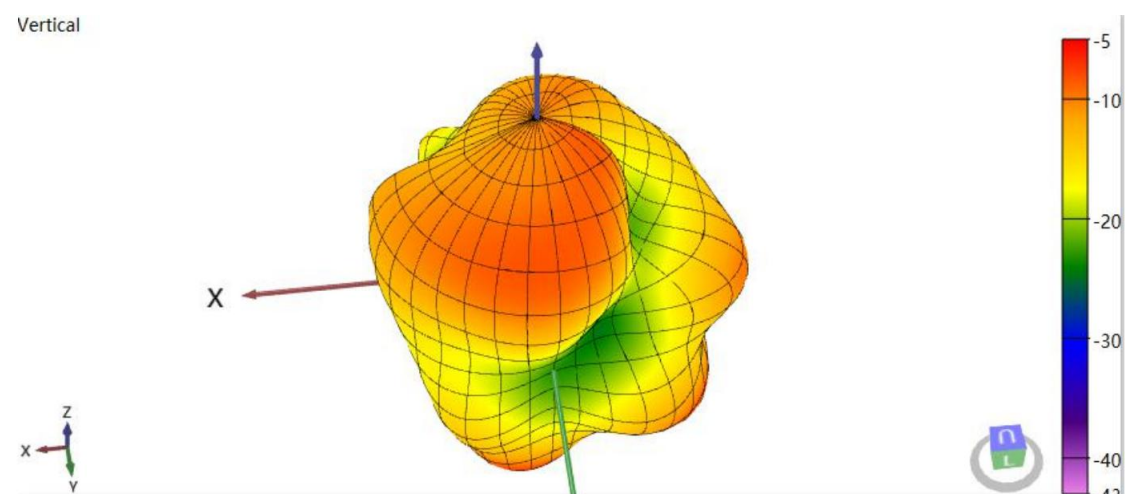
2D-Theta 2DLine-Theta 2D-Phi 2DLine-Phi DataLine HeatMap 3D



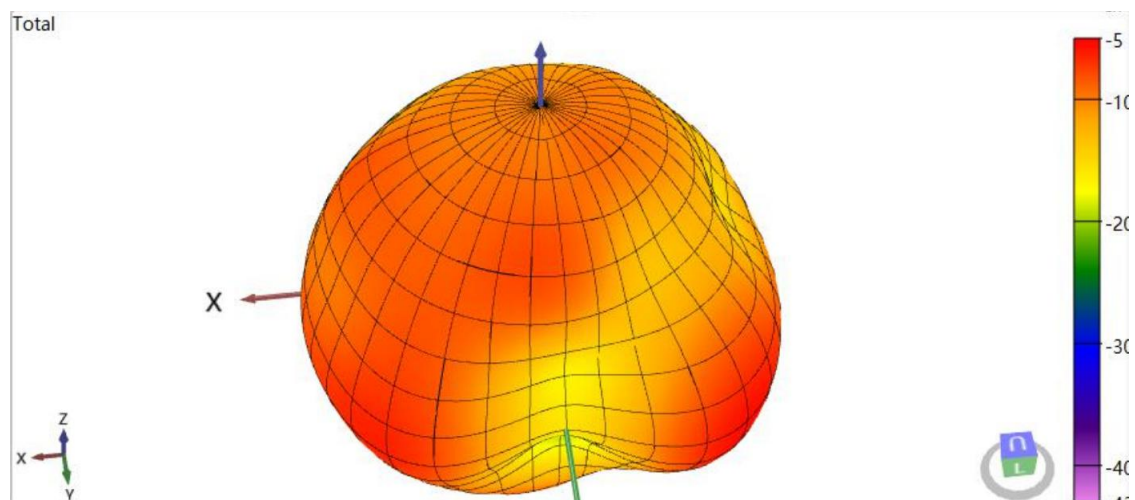
7. Antenna2440MHz3D-HorizontalPattern



8. Antenna2440MHz3D-VerticalPattern



9. Antenna2440MHz3D-TotalPattern



10.Test Setup Photo

