

Antenna Data Sheet

The Main Antenna Sample Confirmation

manufacturer	Dongguan Yinqu Technology Co., Ltd			
ANT Model	B114			2022-09-17
			Date	
Project NO.	SN0946		LDS	
		Notes		
Frequency Range	BT: 2400MHz-2500MHz			
Antenna Gain	-0.35dBi			
Antenna Type	LDS Antenna			
Designed By	RF Engineer		Structural Engineer	
Checked By	Engineering Manager			
Client' s Approval				

Test by: SINAWELL Electronics(Shenzhen) Co., Ltd.

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Data Sheet Overview

This specification describes the TT32B built-in antenna + touch condition in the frequency BT 2400MHz-2500MHz, Gain: **-0.35dBi**。

2. Antenna appearance



3. Electrical

3.1 Antenna frequency

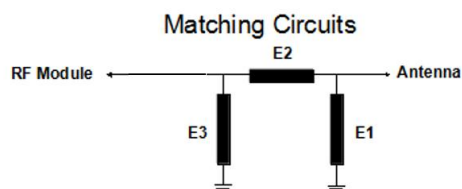
	BT
Transmission frequency(MHz)	2400MHz-2500MHz

3.2 Matching circuit

The test point is behind the antenna connector (RF test port), as shown in the following figure:

1. BT antenna matching

Element	Value
E1(0201)	2.4 PF
E2(0201)	0Ω
E3(0201)	NC

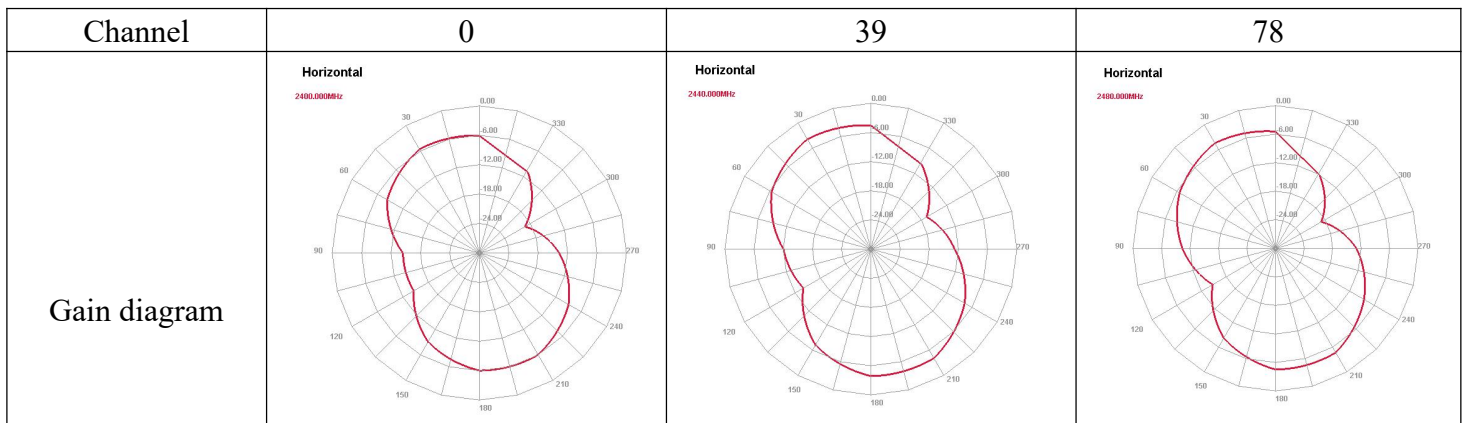


3.3 Return loss

BT VSWR+ Return

	Range of resonant points (MHz)	Frequency (MHz)/ Maximum return loss (dB)		
	2400-2500		2400	2500
		VSWR	3.1	3.3
		Return loss	-5.3	-5.5

3.4 Antenna gain



Passive Test For D4										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	18.96	-7.22	-0.74	-2.89	7.731	11.232	-0.74	-19.26	49.45	48.8
2410	20.72	-6.84	-0.79	-2.94	8.62	12.1	-0.79	-18.8	49.39	48.83
2420	22.92	-6.4	-0.67	-2.82	9.679	13.239	-0.67	-18.29	49.37	48.95
2430	24.88	-6.04	-0.5	-2.65	10.514	14.363	-0.5	-17.3	49.4	48.77
2440	26.23	-5.81	-0.35	-2.5	10.998	15.229	-0.35	-16.75	49.51	48.69
2450	25.79	-5.88	-0.61	-2.76	10.804	14.99	-0.61	-16.66	49.47	48.71
2460	25	-6.02	-0.97	-3.12	10.471	14.526	-0.97	-17.17	49.6	48.83
2470	23.1	-6.36	-1.61	-3.76	9.769	13.33	-1.61	-17.57	49.36	48.8
2480	22.14	-6.55	-1.94	-4.09	9.522	12.617	-1.94	-18.89	49.27	49.25
2490	22.21	-6.53	-1.9	-4.05	9.668	12.542	-1.9	-19.06	49.45	49.67
2500	20.42	-6.9	-2.38	-4.53	8.86	11.564	-2.38	-19.13	49.63	49.25

4. Appearance structure

4.1 The antenna material LDS

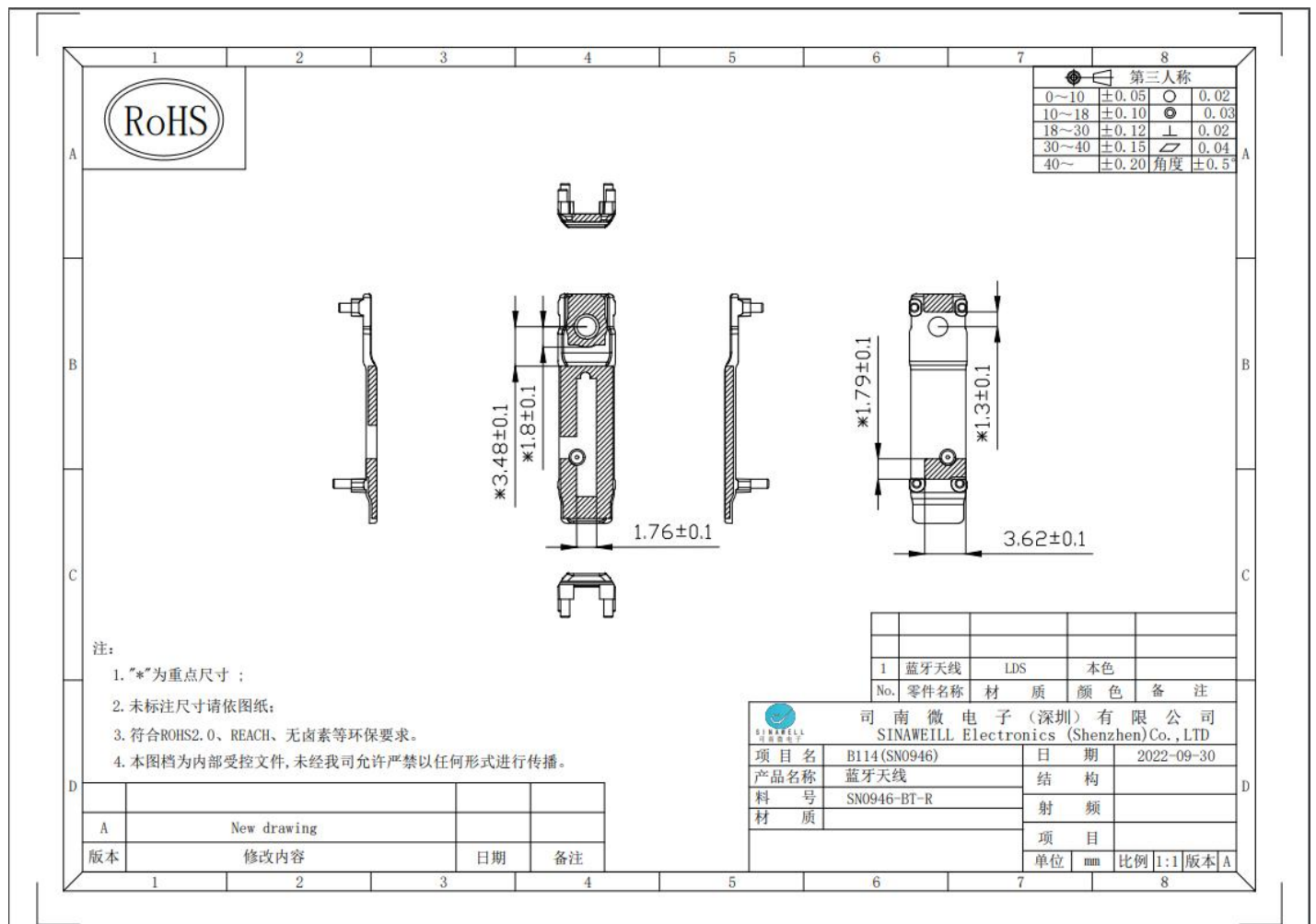
5. Note

(Electrical performance test report)

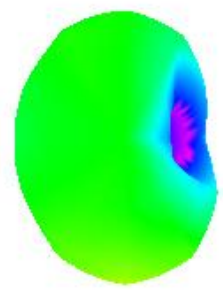
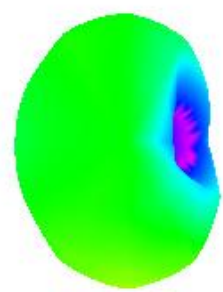
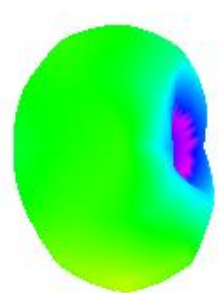
In the electrical performance test report, the 3D darkroom data provided for the manufacturer are in the following table format.

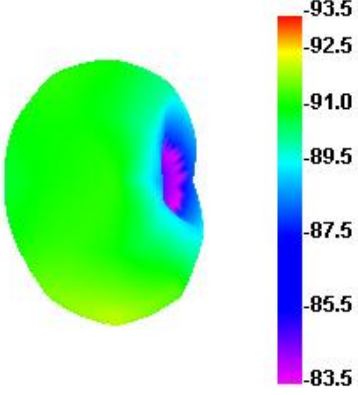
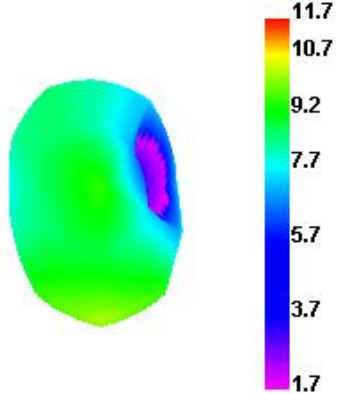
6. Appendix I: Structural drawings

Structural drawings



7. 3D Test Report

BT	Channel	3D Coupling test	Field strength figure
TRP	0	5.29	Bluetooth 0 TRP 
TIS	0	-89.61	Bluetooth 0 TIS 
TRP	39	5.94	Bluetooth 39 TRP 

TIS	39	-89.71	Bluetooth 39 TIS 
TRP	78	6.17	Bluetooth 78 TRP 
TIS	78	-89.65	Bluetooth 78 TIS 