

Antenna Data Sheet

The Main Antenna Sample Confirmation

manufacturer	Dongguan Yinqu Technology Co., Ltd		
ANT Model	B114	Date	2022-09-17
Project NO.	SN0946	Notes	LDS
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.

Add: 712-717, Block A Jinfulai Building,49-1 Dabao Road,Xinan 28th area,Baoan District,Shenzhen,China

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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

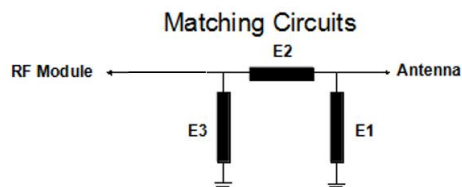
	BT
Transmission frequency(MHz)	2400MHz-2500MHz

3.2 Matching circuit

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

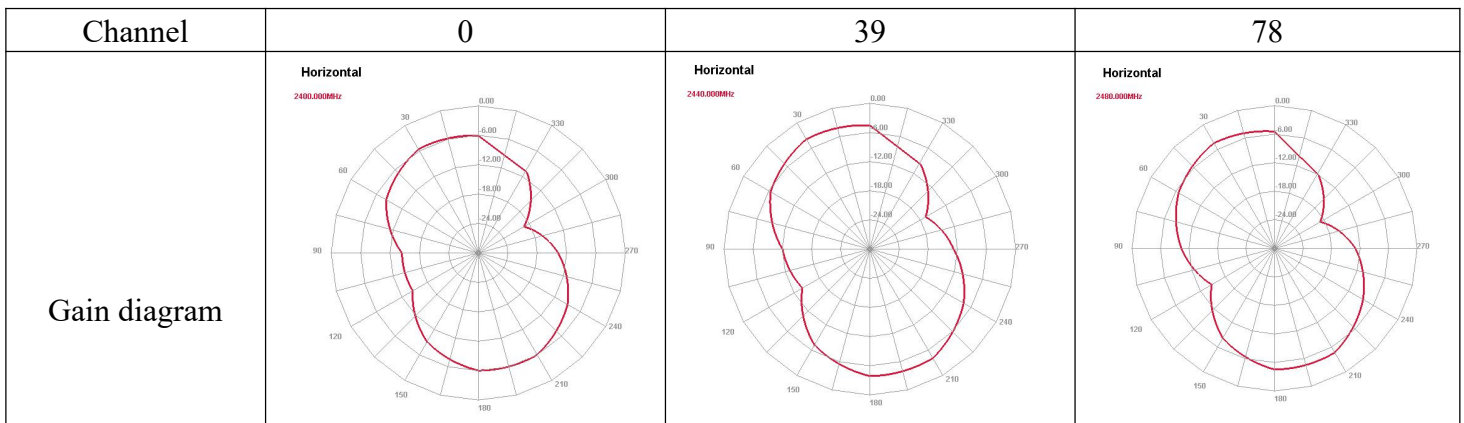
1. BT antenna matching

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)

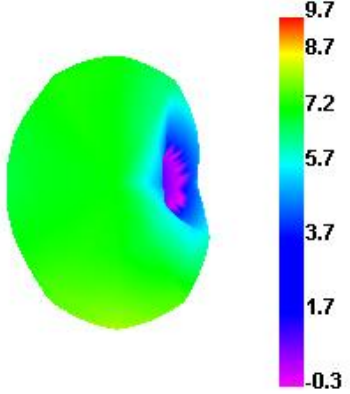
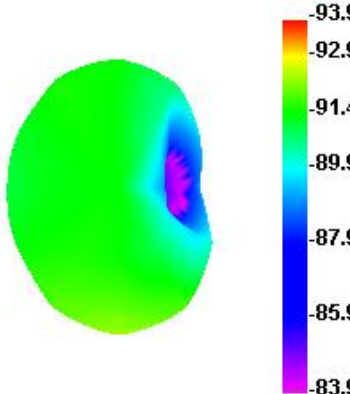
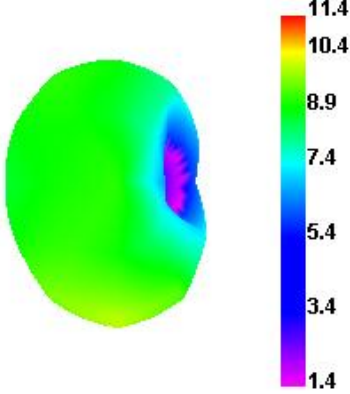
In the electrical performance test report, the 3D darkroom data provided for the manufacturer are in the following table format.

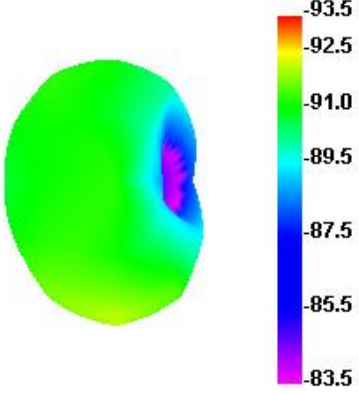
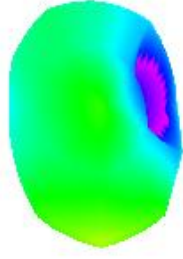
6. Appendix I: Structural drawings

Structural drawings

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<table border="1" style="float: right; margin-right: 20px;"> <tr> <th colspan="4">第三人称</th> </tr> <tr> <td>0~10</td> <td>±0.05</td> <td>○</td> <td>0.02</td> </tr> <tr> <td>10~18</td> <td>±0.10</td> <td>●</td> <td>0.03</td> </tr> <tr> <td>18~30</td> <td>±0.12</td> <td>⊥</td> <td>0.02</td> </tr> <tr> <td>30~40</td> <td>±0.15</td> <td>∠</td> <td>0.04</td> </tr> <tr> <td>40~</td> <td>±0.20</td> <td>角度</td> <td>±0.5°</td> </tr> </table>								第三人称				0~10	±0.05	○	0.02	10~18	±0.10	●	0.03	18~30	±0.12	⊥	0.02	30~40	±0.15	∠	0.04	40~	±0.20	角度	±0.5°				
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<p>注:</p> <ol style="list-style-type: none"> 1. “*”为重点尺寸； 2. 未标注尺寸请依图纸； 3. 符合ROHS2.0、REACH、无卤素等环保要求。 4. 本图档为内部受控文件, 未经我司允许严禁以任何形式进行传播。 																																			
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7. 3D Test Report

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

TIS	39	-89.71	<p>Bluetooth 39 TIS</p> 
TRP	78	6.17	<p>Bluetooth 78 TRP</p> 
TIS	78	-89.65	<p>Bluetooth 78 TIS</p> 