

Product Specifications

Antenna Name: N74A-Antenna

Antenna Type: PIFA

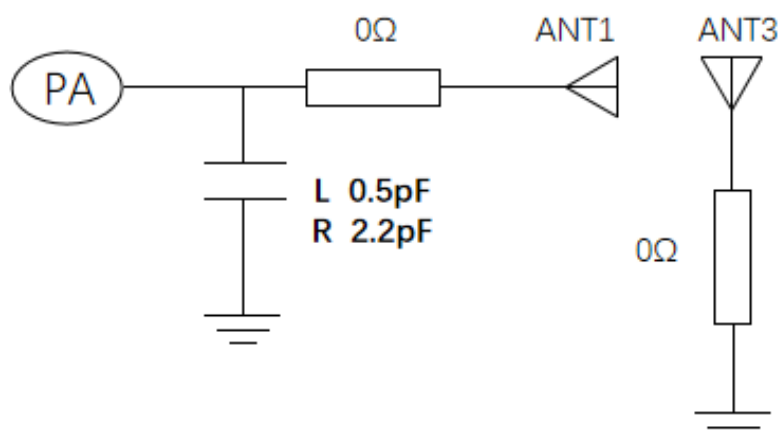
1.1 behaviour of electricity

1.1-1 standard

The N74A antenna resonates at 2400MHz-2480MHz.

1.1-2 Matching circuit of antenna.

The matching circuit is designed to match the motherboard and antenna, so that the mobile phone can achieve the best RF performance in the working frequency band.



Left&Right ear matching circuit

1.2 Test of Return loss ratio

1.2-1 Settings for testing

Return loss The test device is connected in turn as follows: E5071B network analyzer → 50 ohm coaxial Cable → 35mm long copper tube → test fixture

Treatment of test fixture: lead out the SMA-J connector from the antenna 50 ohm test point on the earphone PCB with a hard cable, connect it with the copper tube with choke coil, and then connect

other devices in turn. ◦

1.2-2 Voltage return loss ratio measurement

The following table shows the return loss values of the edge frequency points of the antenna working frequency band.

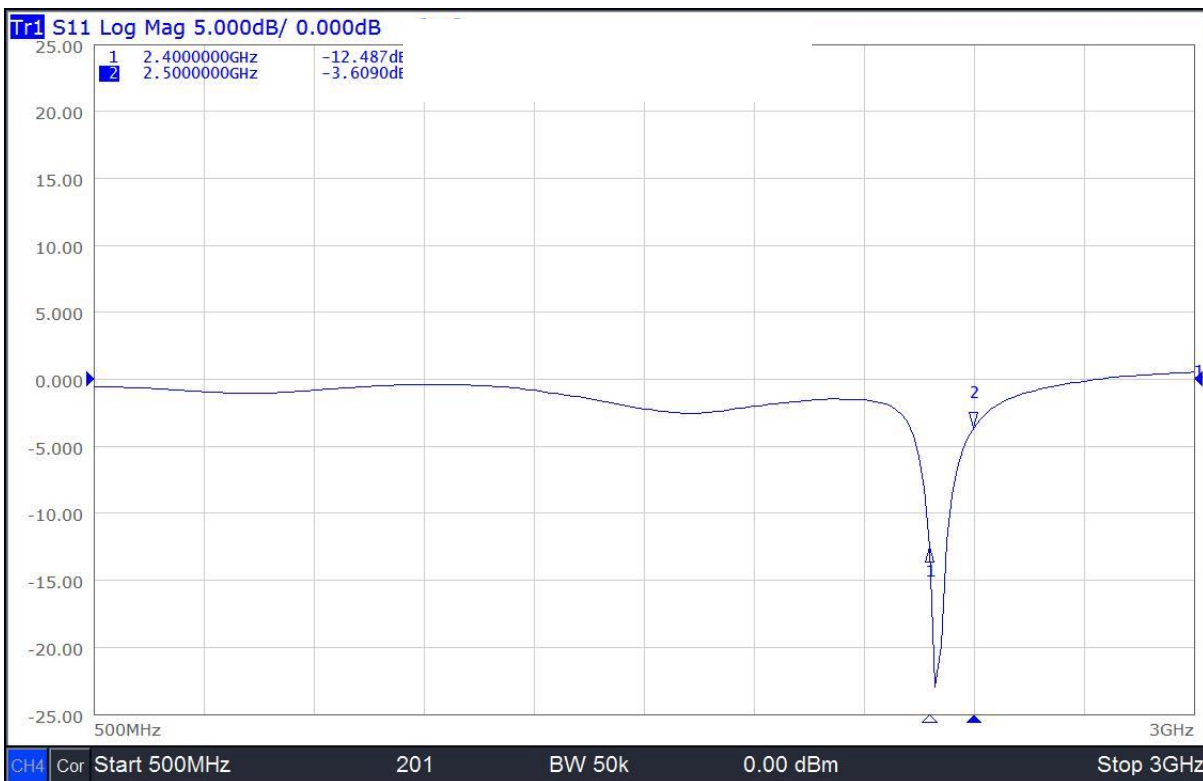
Freq	L-FS			L-EAR		
	Efficiency_dB	Efficiency_Pcent	Gain	Efficiency_dB	Efficiency_Pcent	Gain
2400	-9.52	11.17	-3.86	-13.18	4.81	-6.09
2410	-9.44	11.38	-3.70	-12.86	5.18	-5.84
2420	-9.53	11.14	-3.88	-12.42	5.73	-6.18
2430	-9.62	10.91	-4.10	-12.48	5.65	-5.89
2440	-9.87	10.30	-5.03	-12.1	6.16	-5.25
2450	-10.10	9.77	-4.77	-12.34	5.83	-5.03
2460	-9.91	10.21	-4.36	-12.12	6.14	-4.52
2470	-9.87	10.30	-4.31	-12.42	5.73	-5.43
2480	-10.00	10.00	-4.53	-12.87	5.17	-5.86
2490	-10.25	9.44	-4.79	-12.66	5.42	-5.96
2500	-10.61	8.69	-5.56	-13.22	4.76	-6.52

Freq	R-FS			R-EAR		
	Efficiency_dB	Efficiency_Pcent	Gain	Efficiency_dB	Efficiency_Pcent	Gain
2400	-9.96	10.09	-5.31	-13.14	4.85	-5.99
2410	-9.53	11.14	-4.71	-12.78	5.27	-5.69
2420	-9.41	11.47	-4.03	-12.46	5.68	-5.44
2430	-9.41	11.45	-3.94	-12.02	6.28	-5.78
2440	-9.17	12.09	-3.59	-12.08	6.19	-5.49
2450	-9.10	12.30	-3.50	-11.7	6.76	-4.85
2460	-9.25	11.89	-3.79	-11.94	6.40	-4.63
2470	-9.73	10.65	-3.88	-11.72	6.73	-4.12
2480	-10.01	9.98	-4.64	-12.02	6.28	-5.03
2490	-10.63	8.65	-4.99	-12.47	5.66	-5.46
2500	-10.88	8.16	-5.34	-13.26	4.72	-6.56

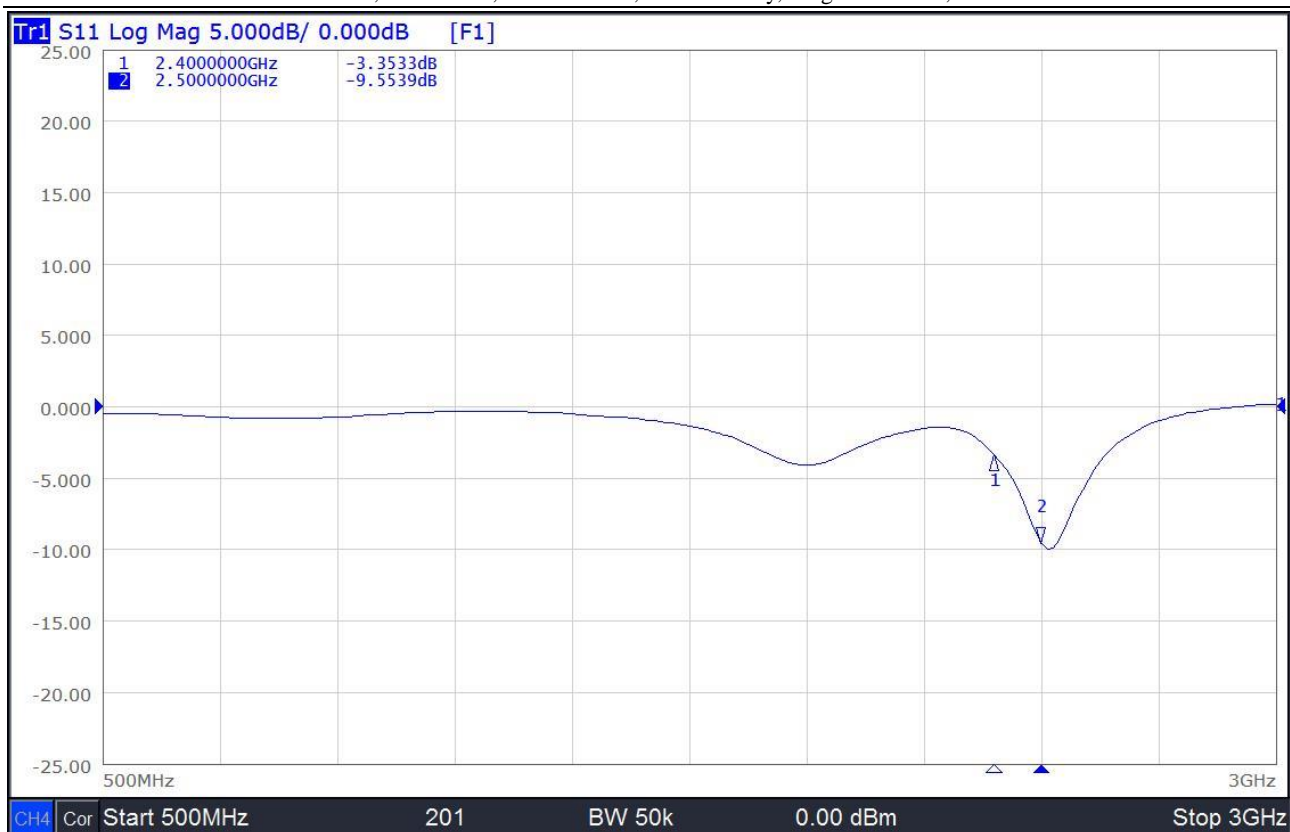
1.2-3 S11



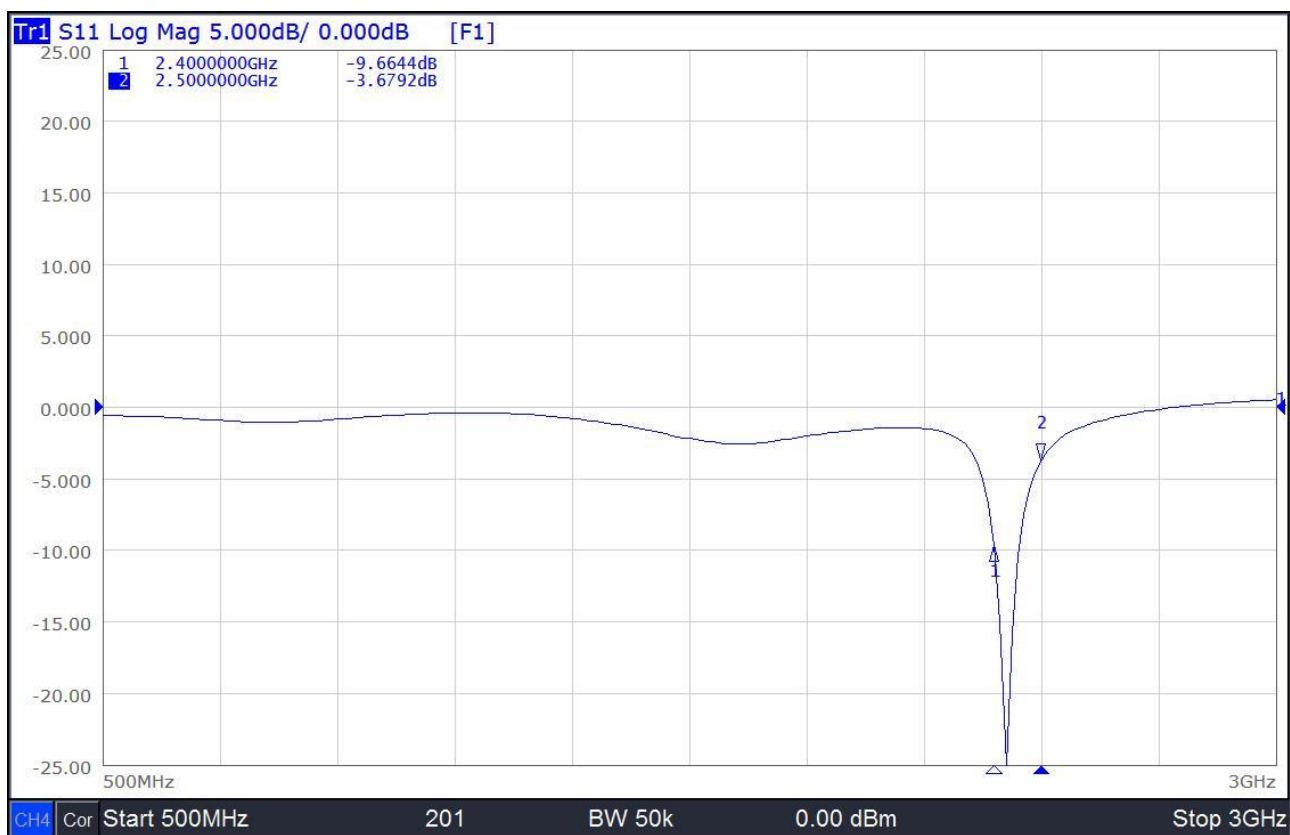
Left FS



Right FS

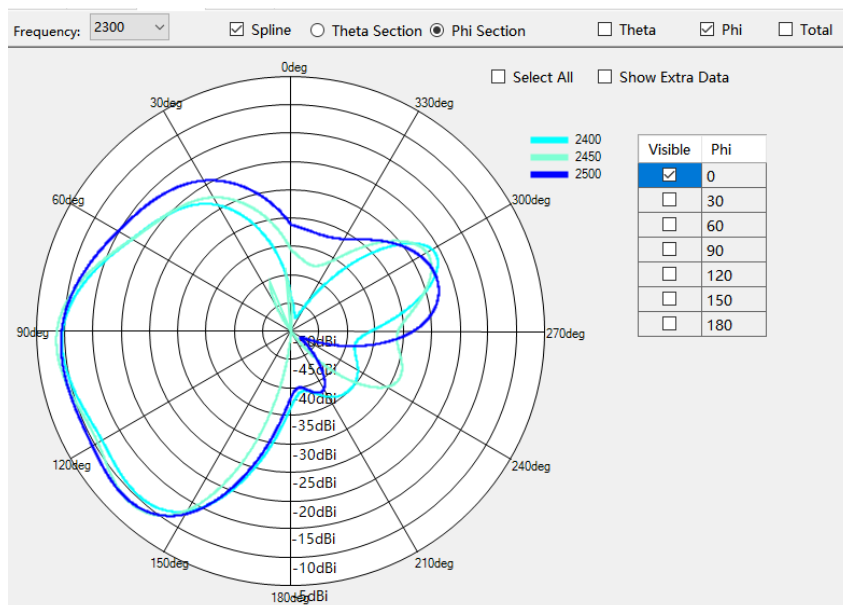
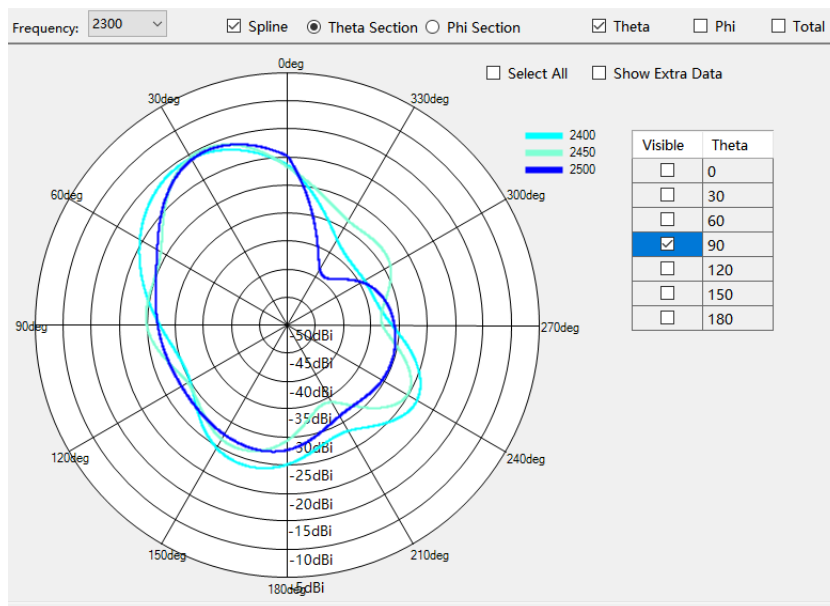


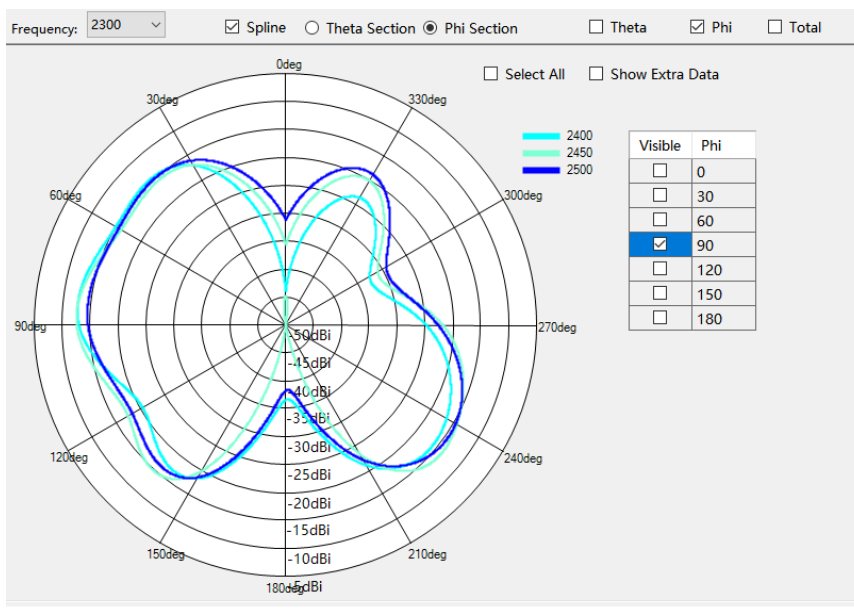
Left EAR



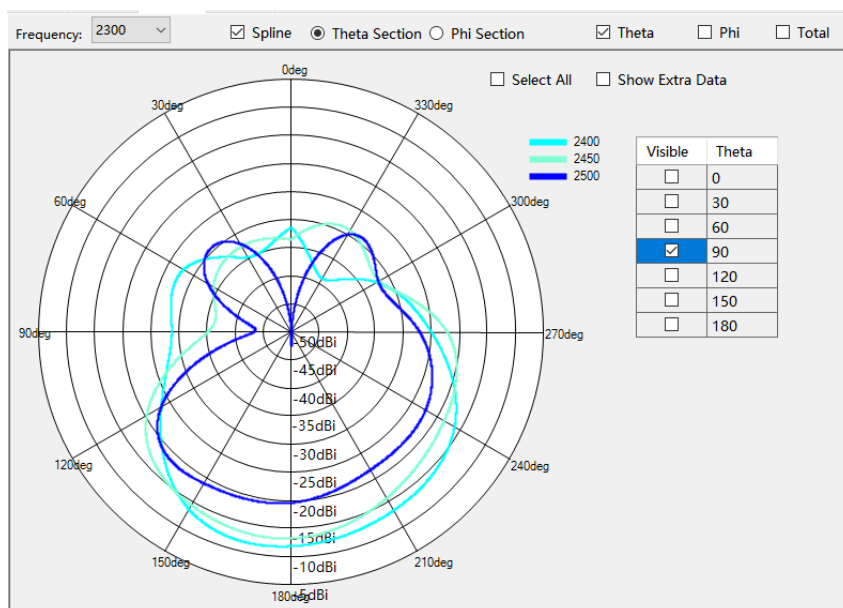
Right EAR

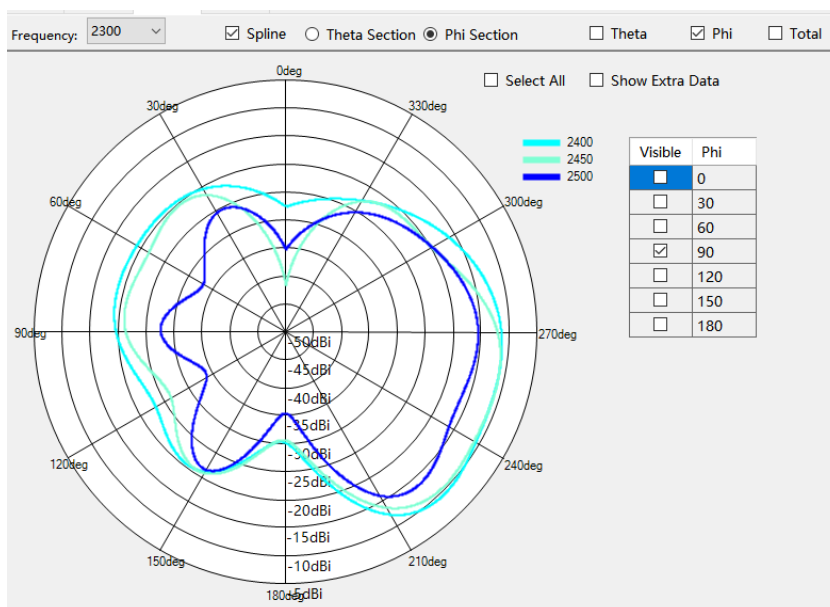
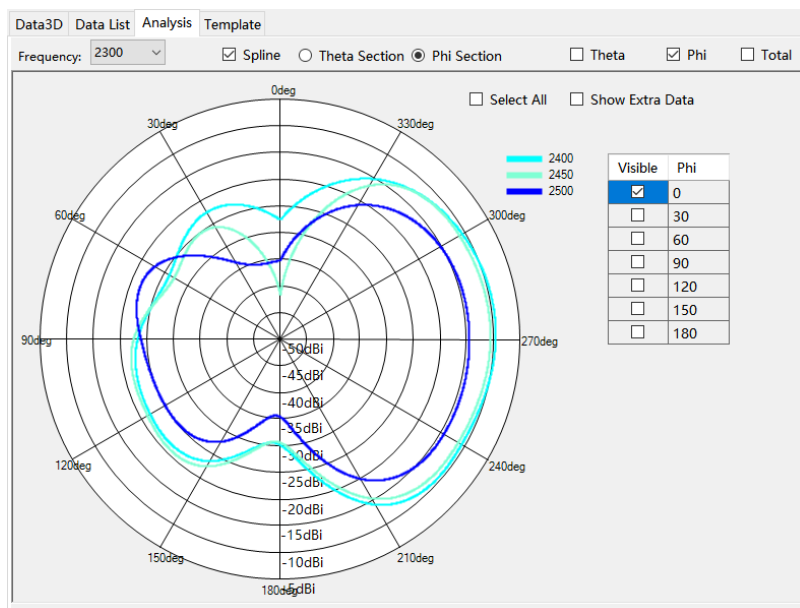
1.2-4 Left ear pattern



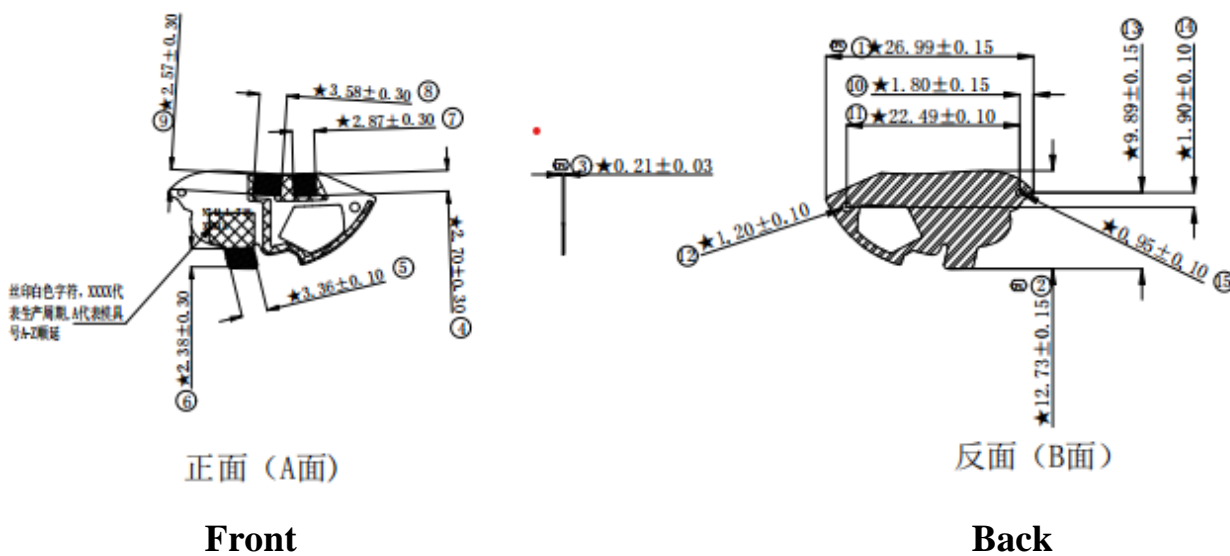


1.2-5 Right ear pattern





1.2-6 Left ear antenna size



1.2-6 Right ear antenna size

