
Antenna specifications

Electrical Characteristics Description

Model:	Pamir BLE antenna		
Transmitter Frequency:	2400MHz-2483.5MHz		
Receiver Frequency:	2400MHz-2483.5MHz		
Antenna information:	Antenna Name	Model(s)/Type(s)	
	RF Antenna Assembly	Model/Part Number:	Pamir BLE
		Manufacturer:	Anhui Huami Information Technology Co., Ltd.
		Frequency Range:	2400MHz-2483.5MHz
		Connector Type/ Maximum Gain	-6.84dBi
		Antenna Type/ Pattern:	metal antenna
		Antenna Size	C=46.26×40.17mm
		Measurement:	See below

Dimensions

Dimensions See Fig.1 .

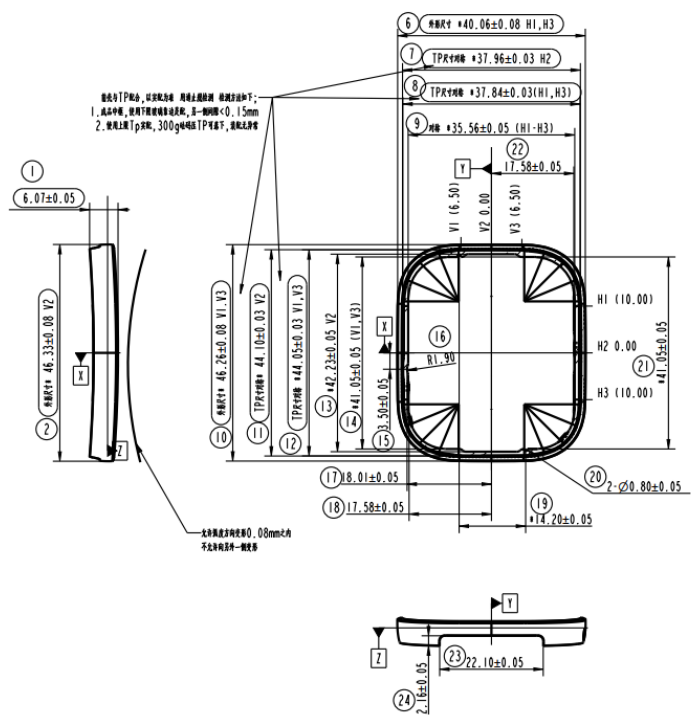


Fig. 1 Antenna Dimensions (示例)

Electrical Performance

S11 parameter test result as Fig.2.

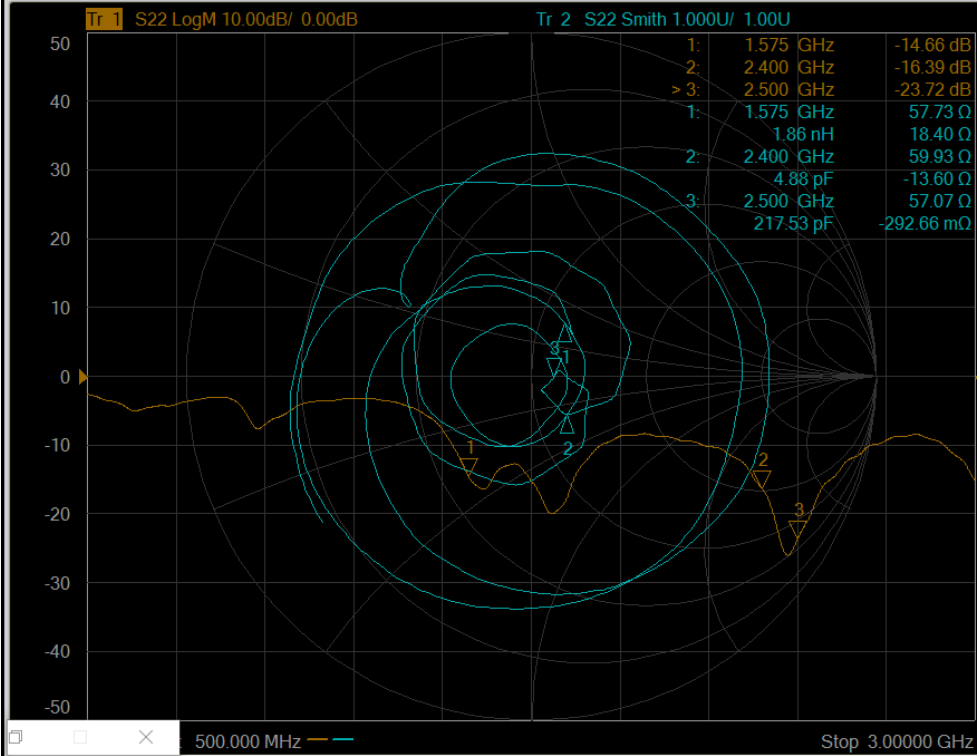


Fig. 2 S11 Parameter test result

Table 1 shows the emission efficiency and the maximum gain of the antenna at different frequencies changes. The antenna radiation pattern diagram show in Fig.3.

Frequency(MHz)	Efficiency	Max. Gain dBi
2400	5.41	-6.96
2410	5.68	-6.85
2420	5.5	-6.84
2430	5.29	-7.12
2440	5.38	-7.06
2450	5.5	-7.03
2460	5.5	-7.04
2470	5.55	-7.2
2480	5.51	-7.1
2490	5.59	-7.17
2500	5.58	-7.07

Table 1Max. Gain and Efficiency Vs. Frequency(Free space)

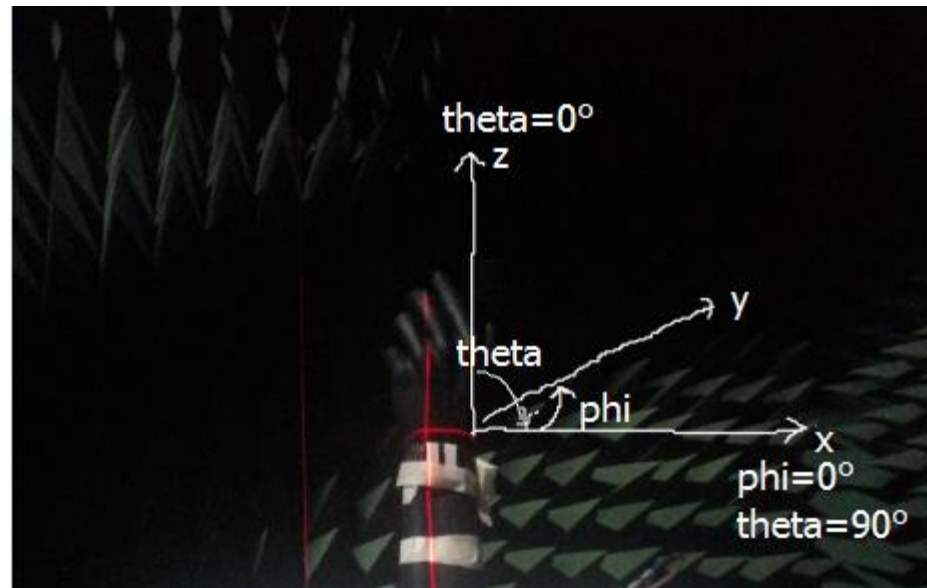
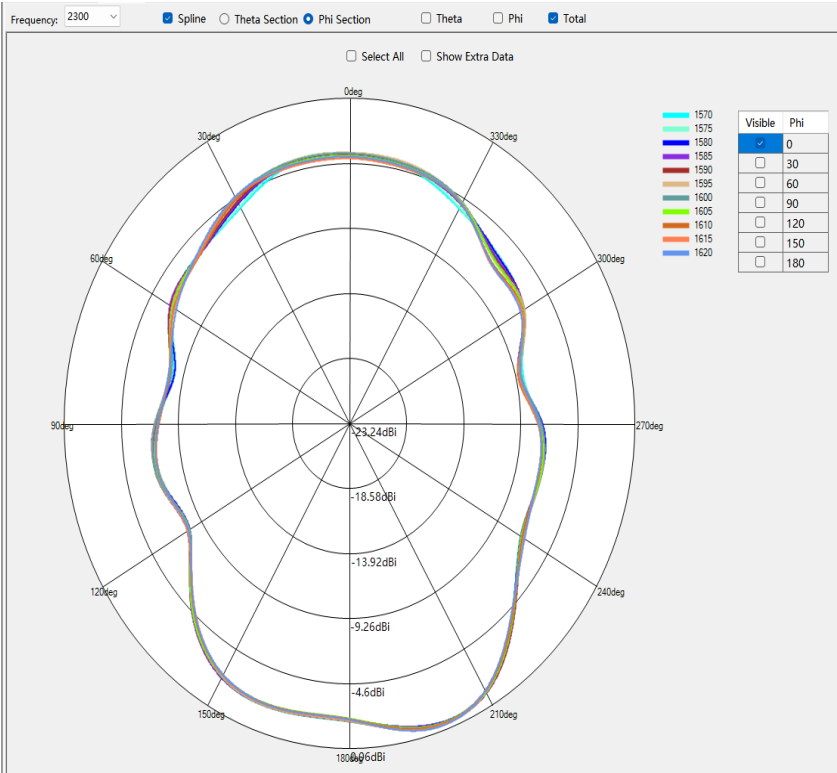
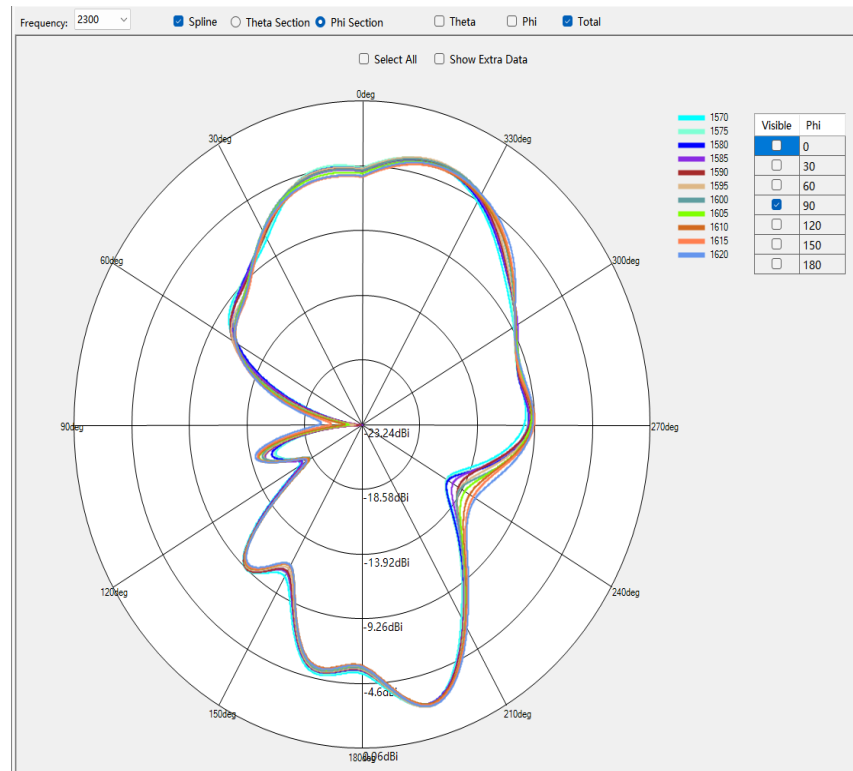


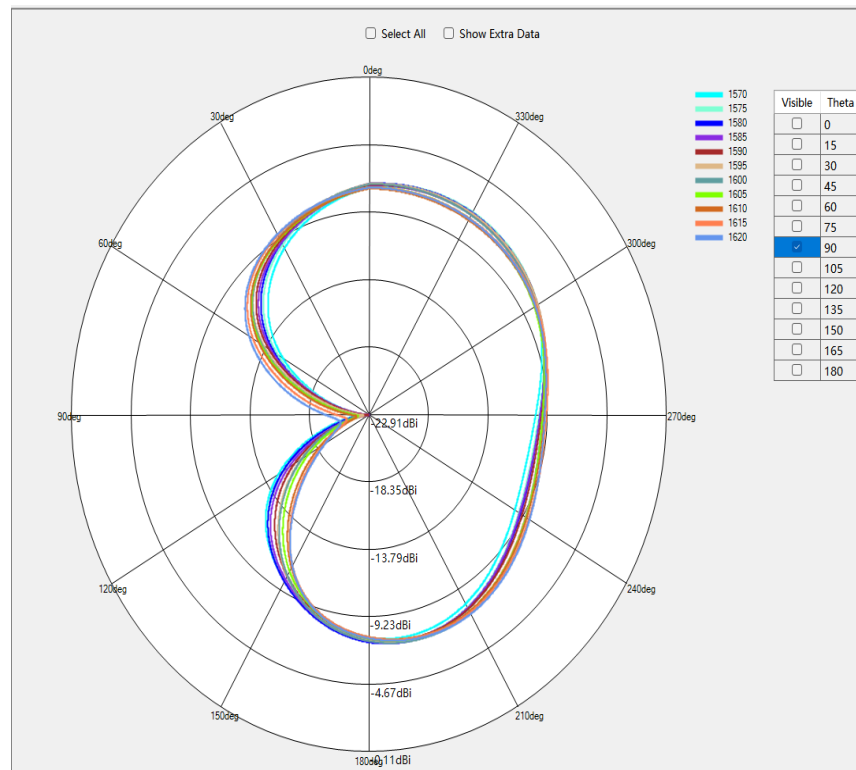
Fig. 3 Operating diagram



Phi=0.00deg



Phi=90.00deg



Theta=90.00deg

Fig. 4 antenna radiation pattern diagram

Phi = 0deg

Frequency(MHz)	Max Gain (dB)	Degree
2400	-8.65	165
2410	-8.51	165
2420	-8.51	165
2430	-8.92	165
2440	-8.84	165
2450	-8.86	165
2460	-8.96	165
2470	-8.92	165
2480	-8.94	165
2490	-8.88	165
2500	-8.77	165

Phi = 90deg

Frequency(MHz)	Max Gain (dB)	Degree
2400	-9.01	165
2410	-8.75	165
2420	-8.75	165
2430	-8.99	165
2440	-8.75	165
2450	-8.73	165
2460	-8.63	165
2470	-8.61	165
2480	-8.38	165
2490	-8.49	165
2500	-8.38	165

Theta = 90deg

Frequency(MHz)	Max Gain (dB)	Degree
2400	-13.28	90
2410	-12.88	90
2420	-13.17	90
2430	-13.26	90
2440	-13.19	90
2450	-13.18	90
2460	-13.19	90
2470	-13.1	90
2480	-13.1	90
2490	-13.12	90
2500	-12.89	90