

HAD04-Bluetooth headset antenna specification

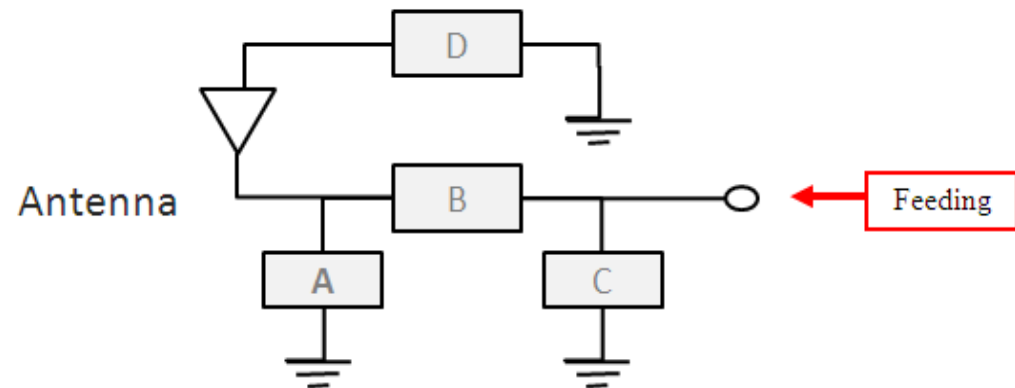
Tanney
2024-7-29

Project Information

- Customer:
- Model : **HAD04**
- End Product : **Bluetooth headset**
- RF (work Freq.) : **Bluetooth (2400M-2484MHz)**

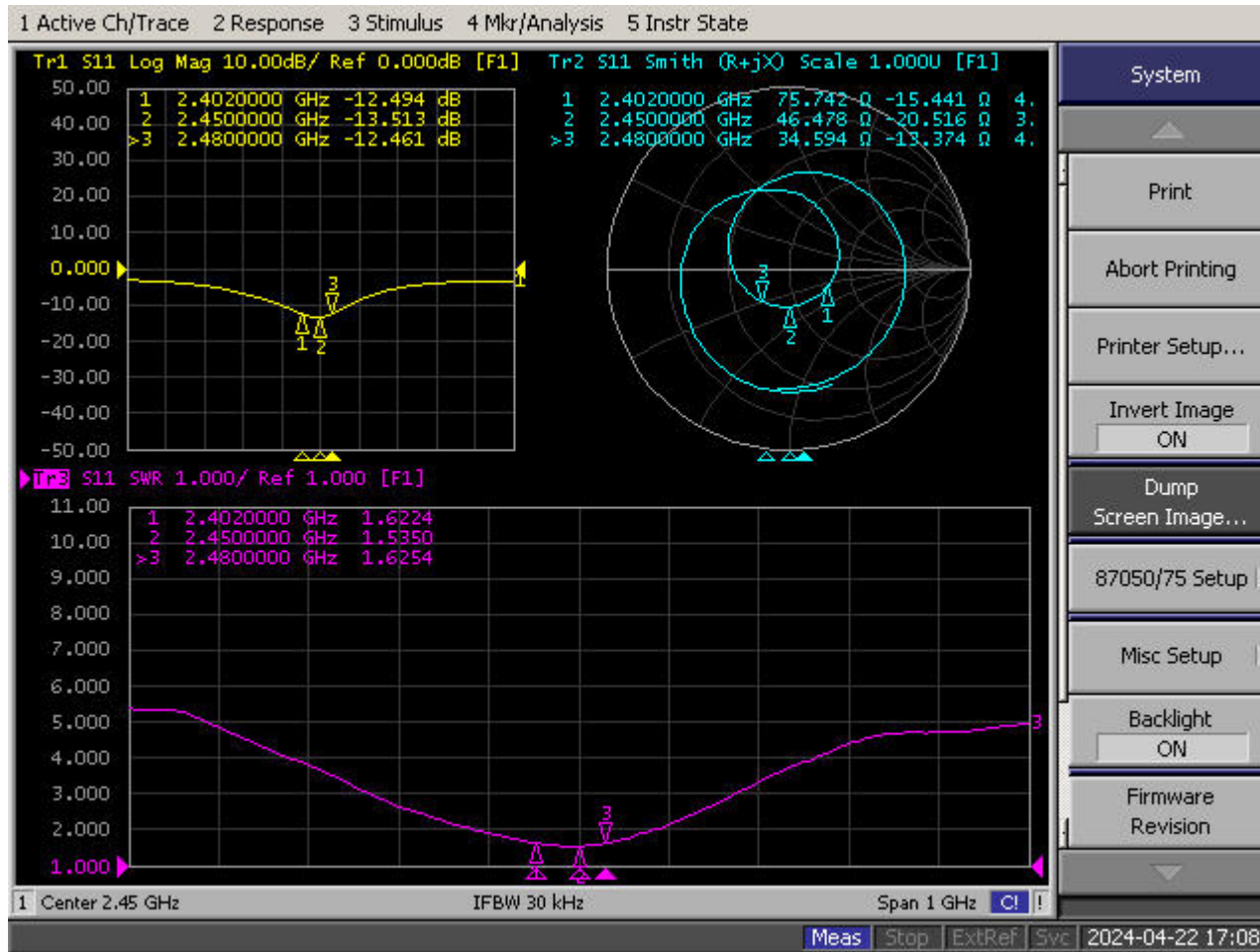
- Type: **PCB Antenna**
- Phase: **Matching for Machine**
- Date: **2023/7/29**
- Version: **Ver.01**

Photo



Matching		Value
A	Inductor	NC
B	Resistor	0 Ω
C	Inductor	NC

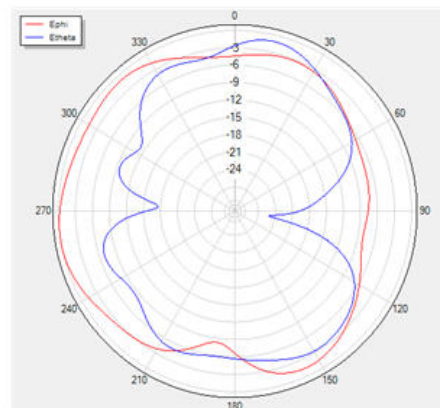
Antenna characteristic



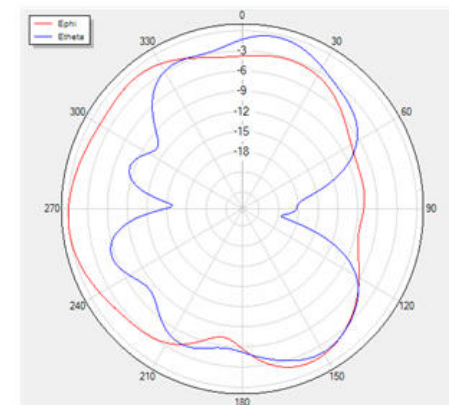
Antenna characteristic

frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)
2400	-0.55	-3.84	41.31
2410	-0.89	-4.01	39.71
2420	-0.09	-3.62	43.46
2430	0.12	-3.61	43.51
2440	-0.38	-3.65	43.12
2450	0.22	-3.51	44.54
2460	0.39	-3.51	44.54
2470	0.28	-3.42	45.51
2480	0.78	-3.27	47.14

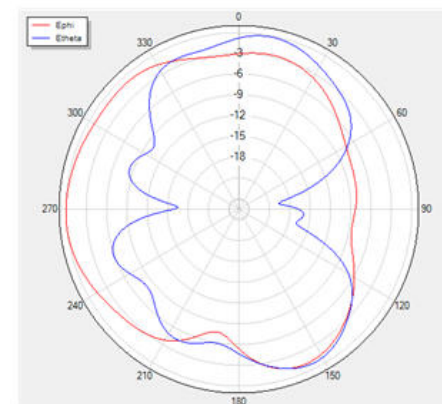
Phi=90 freq=2400MHz



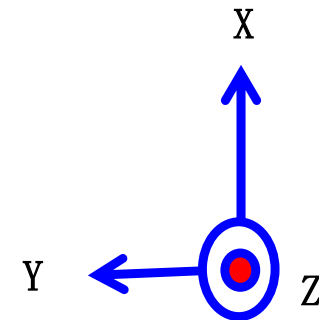
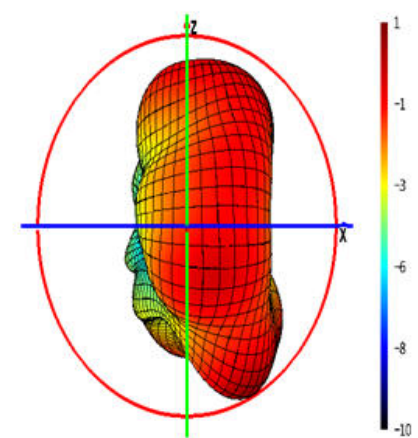
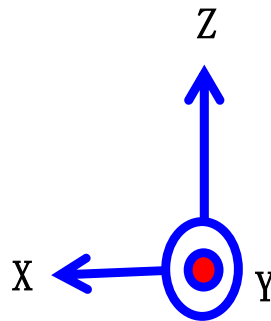
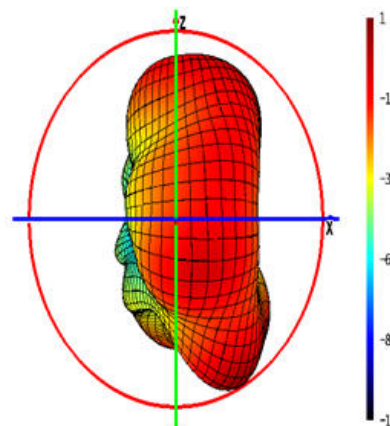
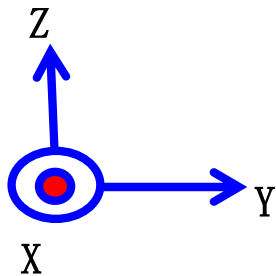
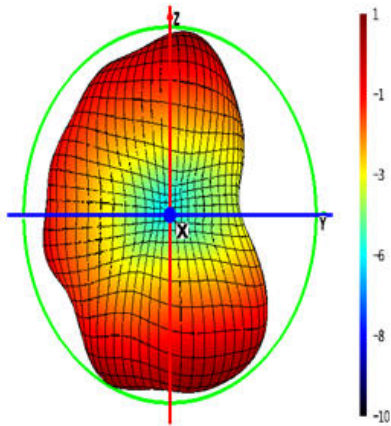
Phi=90 freq=2450MHz



Phi=90 freq=2480MHz



Antenna field pattern diagram



Active test data

Band	Channel	Frequency (MHz)	TRP/TIS (dBm)	Peak EIS	Min EIS
Classic	0	2402	-93.38184391	-97.16917339	-83.45878593
Classic	39	2441	-93.17620182	-96.73281115	-82.50877583
Classic	78	2480	-92.9442188	-96.41163863	-79.73556695
Classic	0	2402	8.969175923	12.7565054	-0.953882063
Classic	39	2441	9.948014204	13.50462353	-0.719411792
Classic	78	2480	9.931830804	13.39925063	-3.276821046

RF main test equipment

E5071C



CMW500



Microwave darkroom

