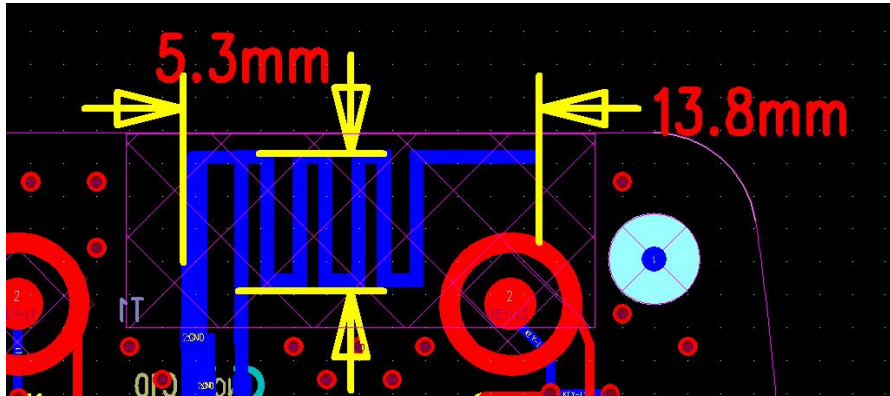


Antenna Specification Sheet

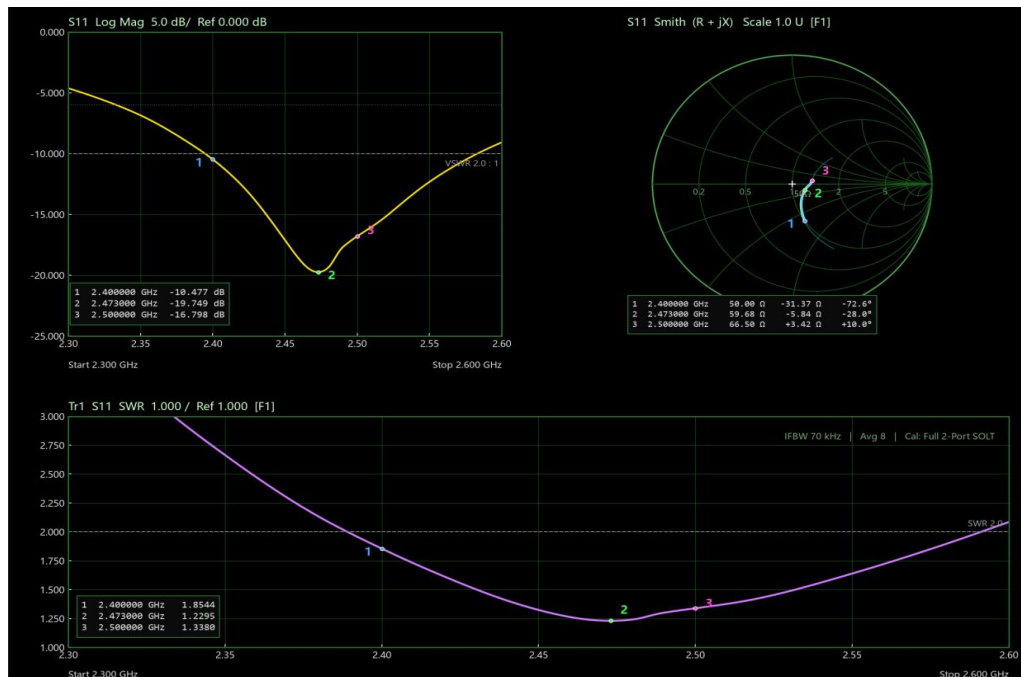
The integral antenna of the product is a PCB trace type. The embedded antenna is not commercially available: it is only intended for use as the self-contained integral antenna of the radio module.

Item	Specification
Manufacturer	HANGZHOU ZHIYUAN TECHNOLOGY CO., LTD.
Address	No. 10 Naxian Street, Liangzhu Subdistrict, Yuhang District, Hangzhou, Zhejiang, China
Frequency Range (MHz)	2400 – 2500 MHz
Input Impedance	50 Ω
Types of Antennas	On-board Antenna (PCB trace)

Antenna size



Antenna impedance



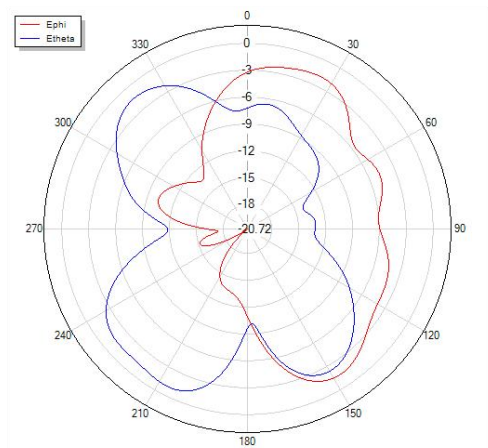
Passive efficiency, gain, directionality, roundness

Frequency (MHz)	Gain (dBi)	Efficiency (%)	Efficiency (dB)	Directivity (dB)	T90(H) Roundness
2400	1.81	50.78	-2.94	4.75	10.49
2410	1.88	53.19	-2.74	4.62	12.92
2420	1.59	49.32	-3.07	4.66	16.88
2430	1.36	45.65	-3.41	4.77	25.96
2440	1.24	44.07	-3.56	4.80	21.40
2450	1.08	40.73	-3.90	4.98	13.46
2460	1.09	40.30	-3.95	5.04	12.25
2470	1.14	40.16	-3.96	5.10	14.37
2480	0.94	37.53	-4.26	5.20	10.49
2490	0.81	37.57	-4.25	5.06	23.04
2500	0.62	36.94	-4.33	4.95	13.71

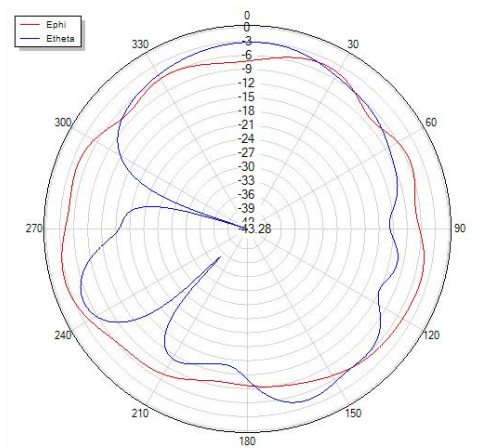
Antenna 2D pattern

2400 MHz

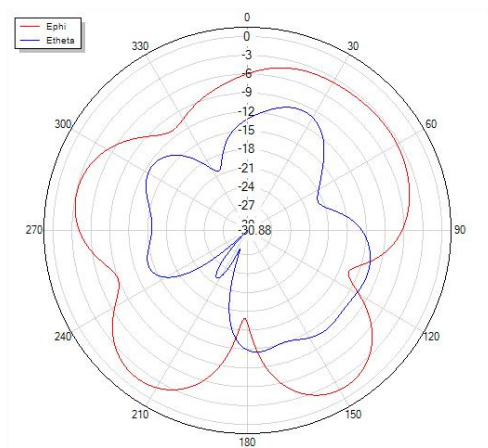
Phi=0 freq=2400MHz



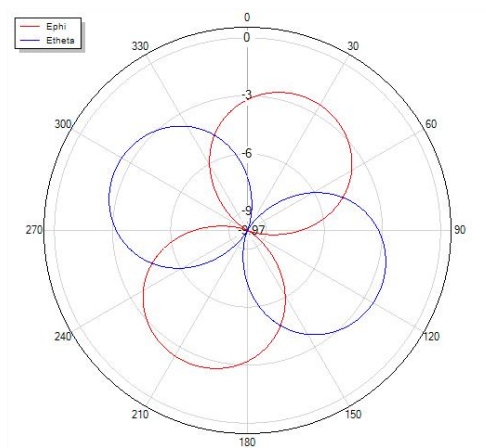
Phi=90 freq=2400MHz



Theta=90 freq=2400MHz

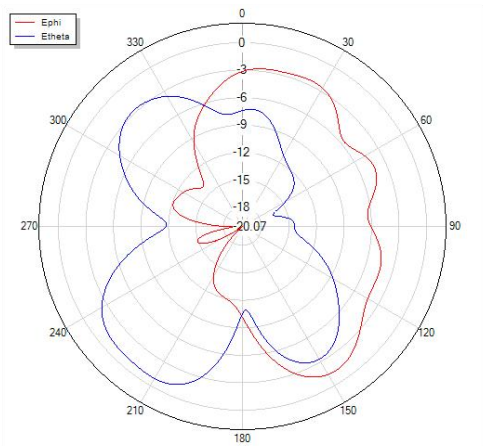


Theta=0 freq=2400MHz

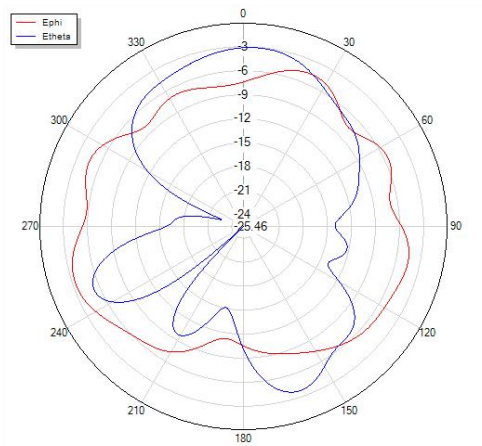


2440 MHz

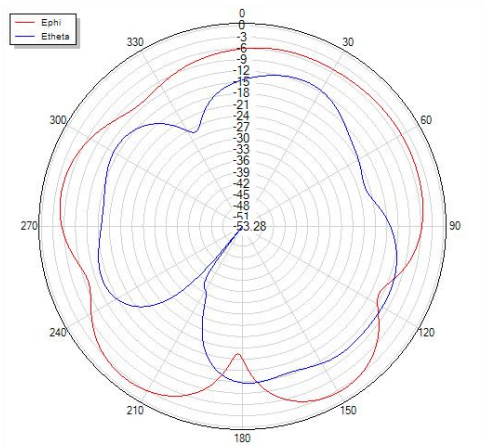
Phi=0 freq=2440MHz



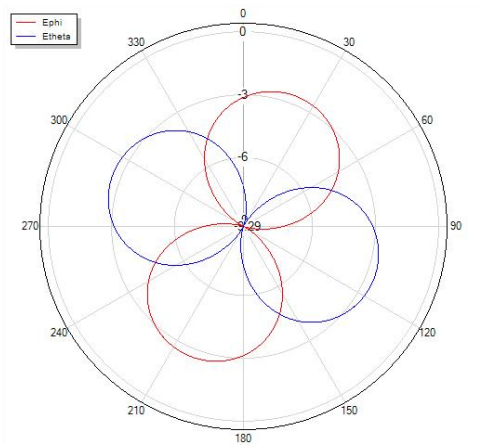
Phi=90 freq=2440MHz



Theta=90 freq=2440MHz

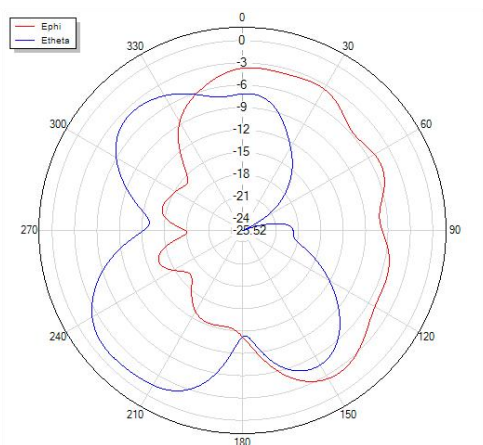


Theta=0 freq=2440MHz

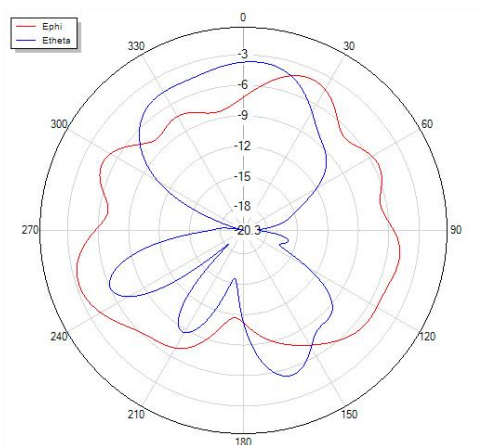


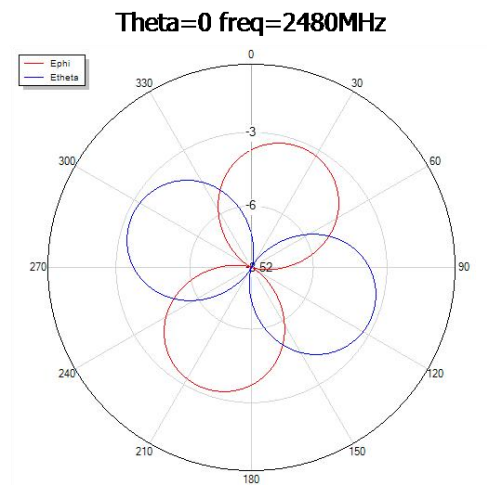
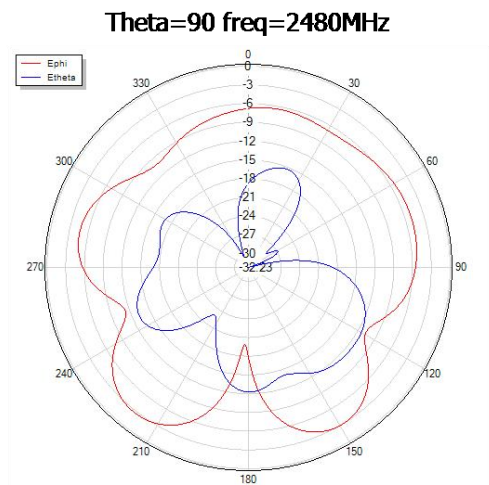
2480 MHz

Phi=0 freq=2480MHz



Phi=90 freq=2480MHz

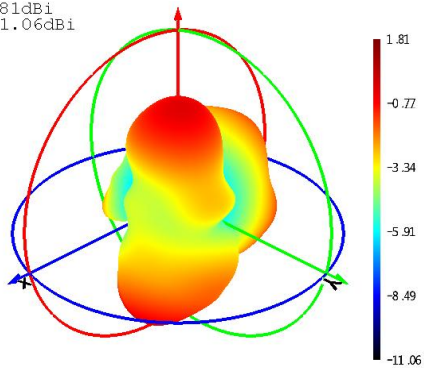




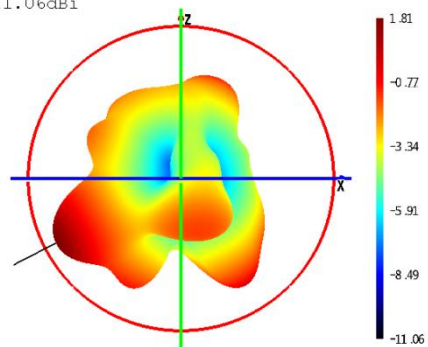
Antenna 3D pattern

2400 MHz

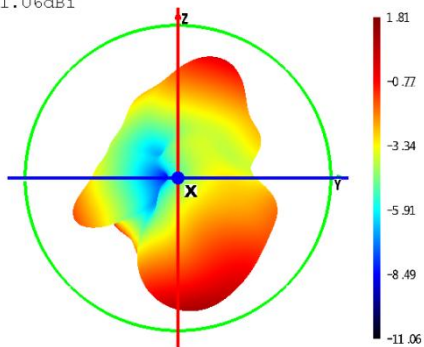
MAX: 1.81dBi
MIN: -11.06dBi



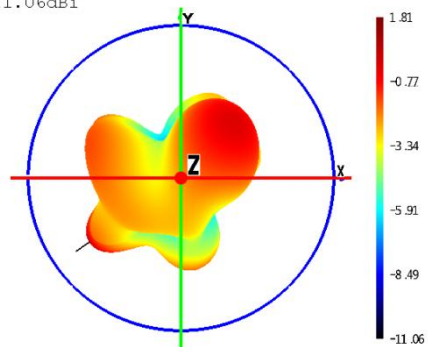
MAX: 1.81dBi
MIN: -11.06dBi



MAX: 1.81dBi
MIN: -11.06dBi

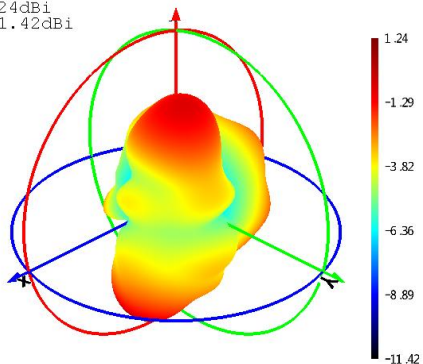


MAX: 1.81dBi
MIN: -11.06dBi

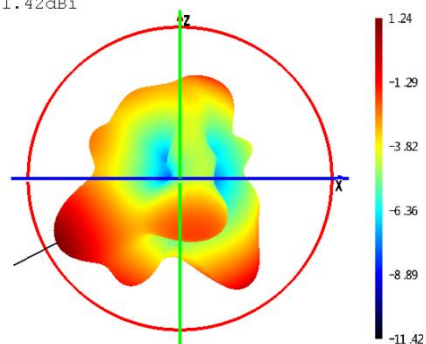


2440 MHz

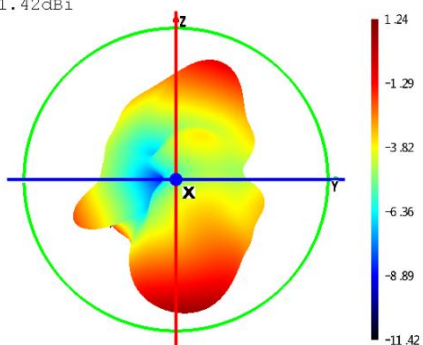
MAX:1.24dBi
MIN:-11.42dBi



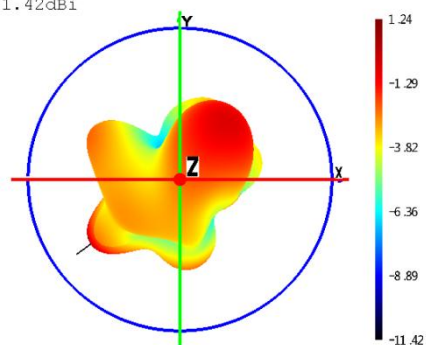
MAX:1.24dBi
MIN:-11.42dBi



MAX:1.24dBi
MIN:-11.42dBi

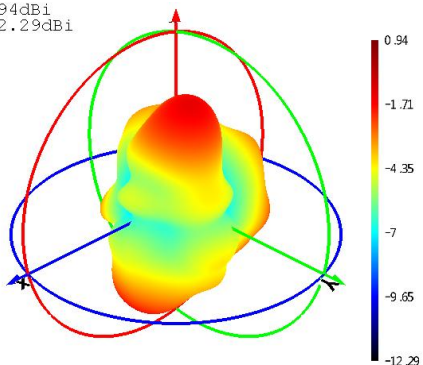


MAX:1.24dBi
MIN:-11.42dBi

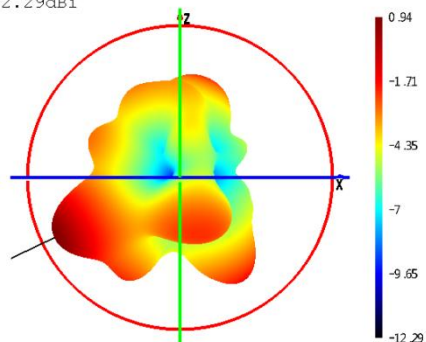


2480 MHz

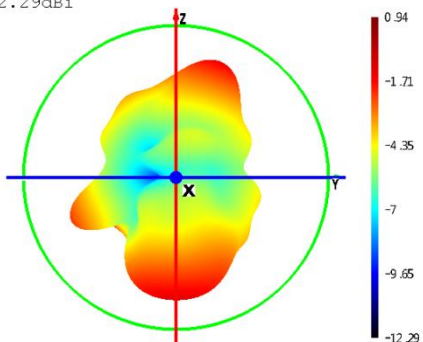
MAX:0.94dBi
MIN:-12.29dBi



MAX:0.94dBi
MIN:-12.29dBi



MAX:0.94dBi
MIN:-12.29dBi



MAX:0.94dBi
MIN:-12.29dBi

