

Shenzhen Yuandongli Digital Technology Co., Ltd

Address: Room 901, Building A, Baolong Building, No. 2 Longguan West Road, Gaofeng Community,
Dalang, Longhua, Shenzhen
telephone:86-755-8326-6570 fax: 86-755-8325 5400

BT Antenna Product Approval

time: 2025-10-21

1.Antenna Introduction

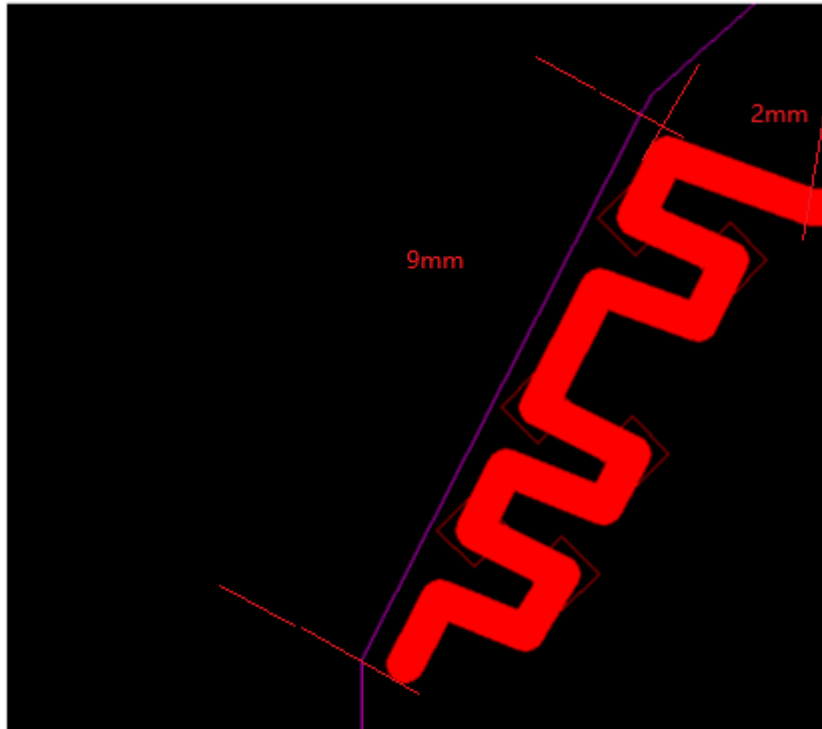
Our Bluetooth antenna is directly integrated onto the PCB board, utilizing a copper foil and tin-spraying process. The copper foil thickness is H/HOZ, and the board material is FR-4 with a thickness of 1.0mm

2.antenna shape

Shenzhen Yuandongli Digital Technology Co., Ltd

Address: Room 901, Building A, Baolong Building, No. 2 Longguan West Road, Gaofeng Community,
Dalang, Longhua, Shenzhen
telephone:86-755-8326-6570 fax: 86-755-8325 5400

Size chart : 9*2mm



2.、 antenna parameters

The Bluetooth antenna operates at a frequency of 2402-2480 MHz, where resonance occurs. The main parameters of the antenna are listed in the table below。

Shenzhen Yuandongli Digital Technology Co., Ltd

Address: Room 901, Building A, Baolong Building, No. 2 Longguan West Road, Gaofeng Community,
Dalang, Longhua, Shenzhen
telephone:86-755-8326-6570 fax: 86-755-8325 5400

Bluetooth built-in antenna	
Frequency (MHz)	2402 ~ 2480 MHz
VSWR	≤ 1.92
Impedance	50 Ohm Nominal
Return Loss	-10 dB Max
Radiation	Omni-directional
Gain (Peak)	-0.347 dBi
Polarization	Linear, Vertical
Admitted Power	2W
Connector	Tin

3.、Antenna gain test report

Spectrum Detector:

PK

Test Date :

June 8, 2013

Test By:

Andy

Temperature :

28°C

Test Result:

PASS

Humidity :

55 %

Modulation:

GFSK

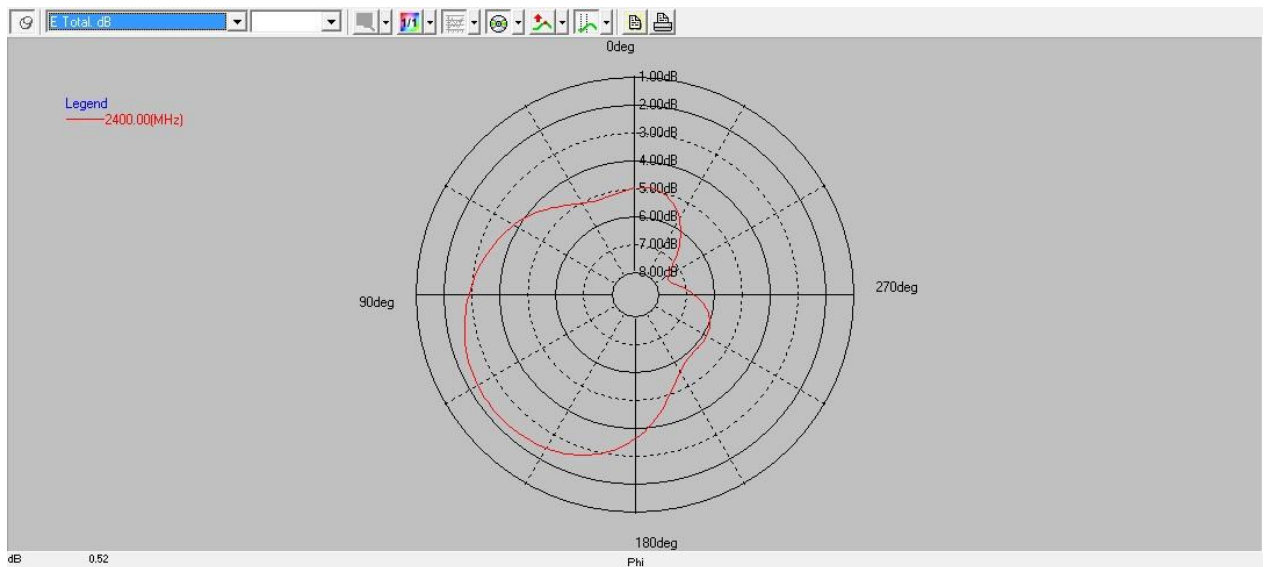
maximum gain value

Frequency VNA (MHz)	E Total. dB(dB)
2400MHz	-0.347483
2410MHz	-0.502625
2420MHz	-0.772879
2430MHz	-0.955555
2440MHz	-1.23072
2450MHz	-1.94066
2460MHz	-1.90725
2470MHz	-2.01968
2480MHz	-2.30721
2490MHz	-2.28333
2500MHz	-2.8728

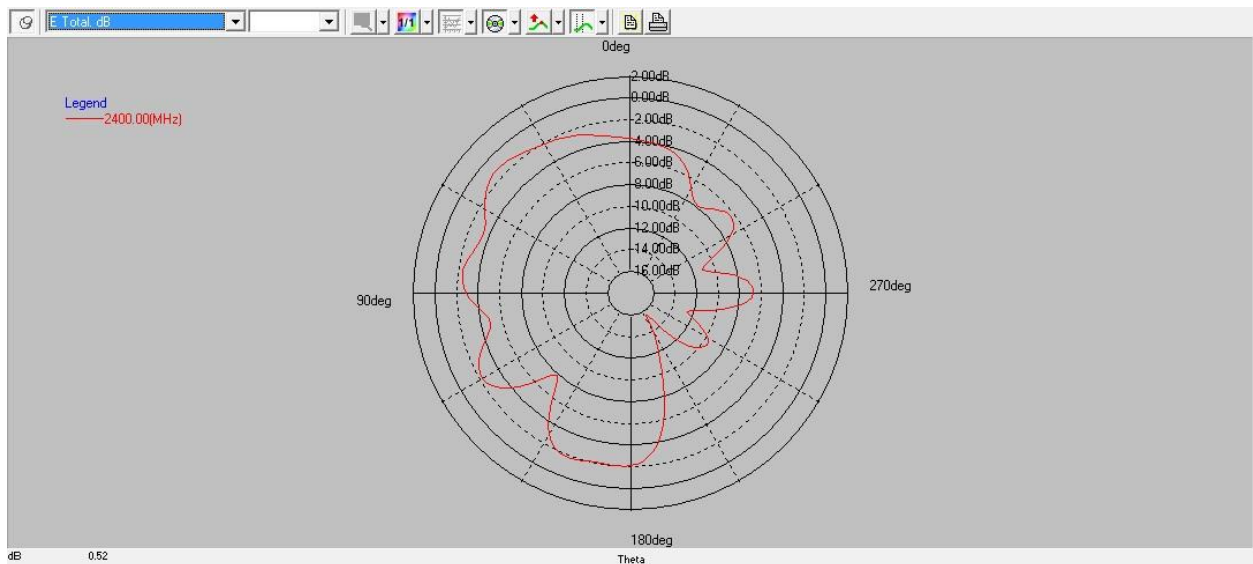
Shenzhen Yuandongli Digital Technology Co., Ltd

Address: Room 901, Building A, Baolong Building, No. 2 Longguan West Road, Gaofeng Community,
Dalang, Longhua, Shenzhen
telephone:86-755-8326-6570 fax: 86-755-8325 5400

radiation pattern:



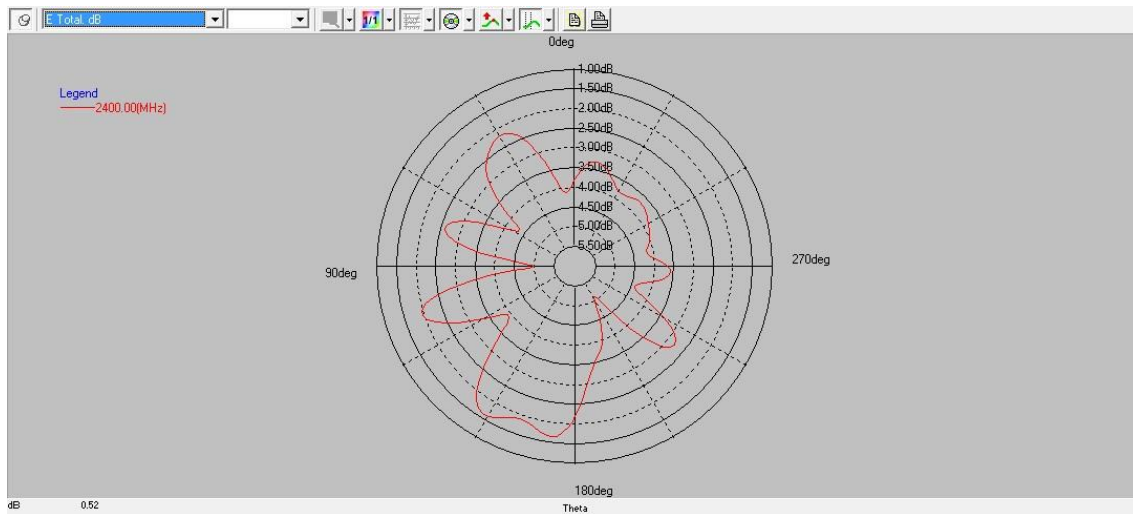
PHI 0 degree



PHI 90 degree

Shenzhen Yuandongli Digital Technology Co., Ltd

Address: Room 901, Building A, Baolong Building, No. 2 Longguan West Road, Gaofeng Community,
Dalang, Longhua, Shenzhen
telephone:86-755-8326-6570 fax: 86-755-8325 5400



THETA 90 degree

Standing Wave Ratio (SWR) Diagram:

