# BT Audio Antenna Report

# 1.Gain and Efficiency

Frequency E Total. dB(dB)	Efficiency()
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2402MHz 0.937002 29% 2441MHz -0.40394 27% 2480MHz -1.27924 25%

#### 2.VSWR



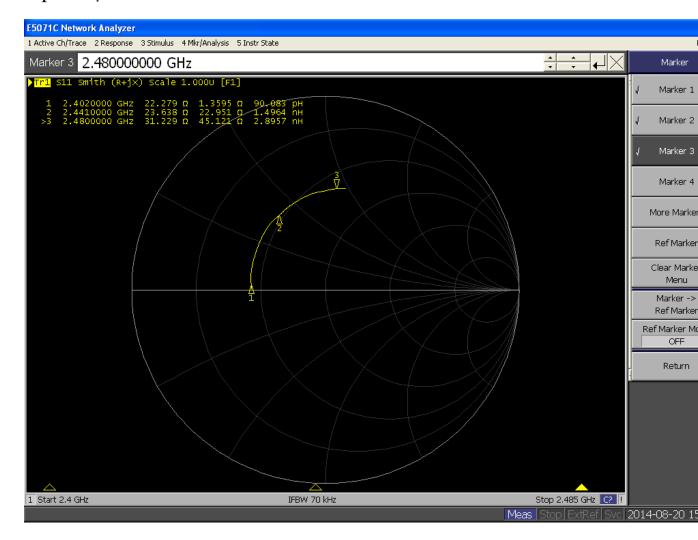
Frequnce: VSWR

2.402Ghz 2.2510

2.441Ghz 2.6813

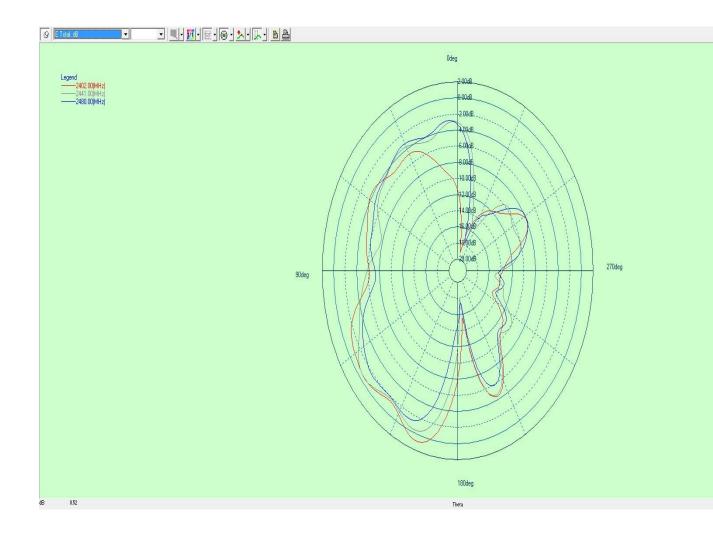
2.480Ghz 3.2046

# Input impedance:

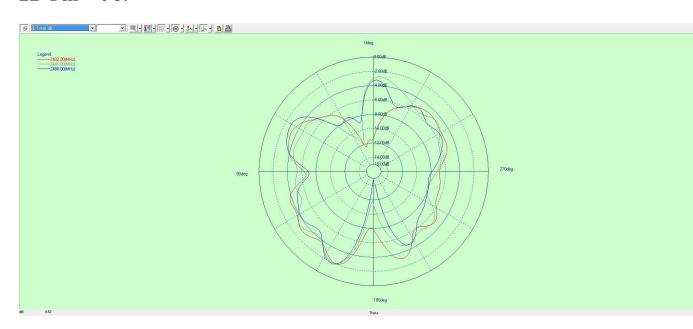


#### 3. Radiation Pattern

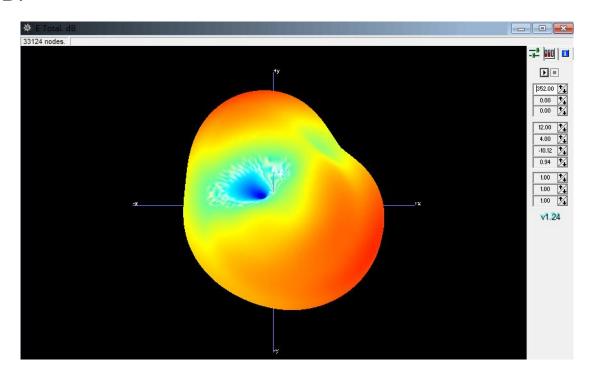
2D phi = 0:



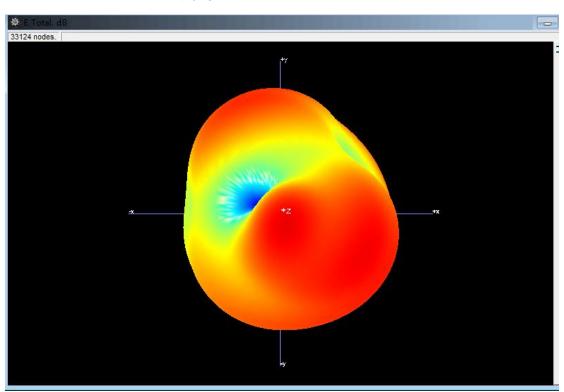
# 2D Phi = 90:



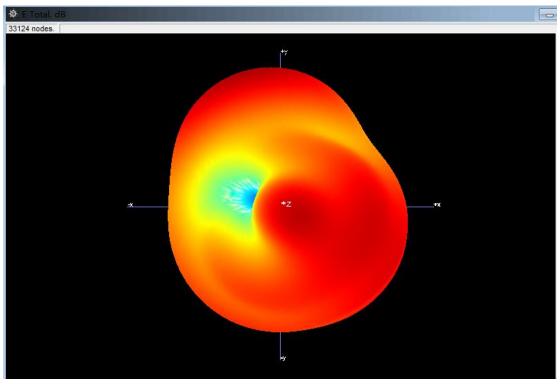
# 3D:



2.402G

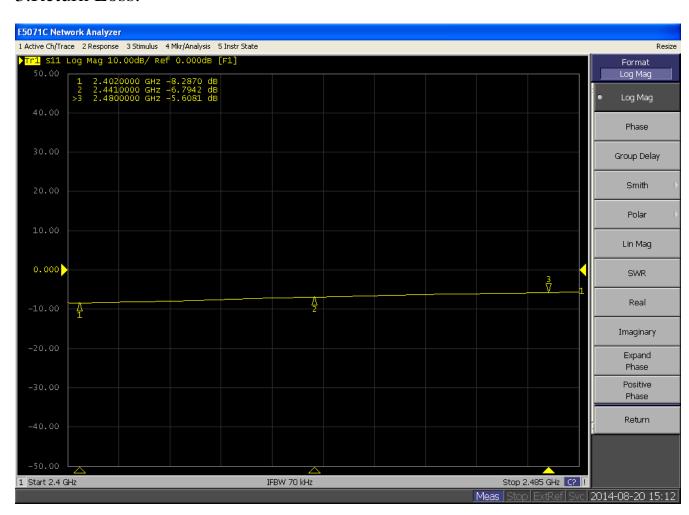


2.441Ghz

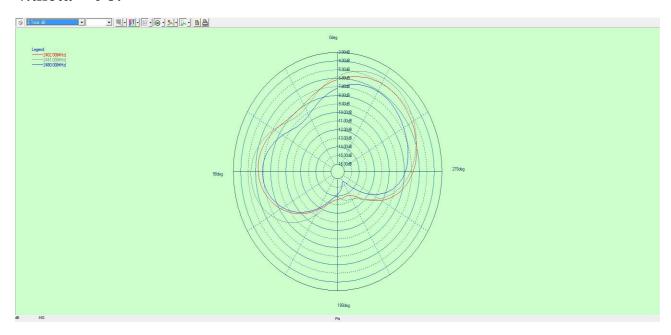


2.480Ghz

#### 3.Return Loss:



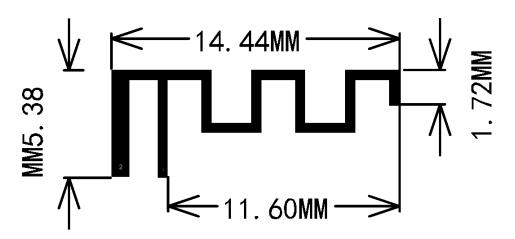
# 4.theta = 90:



# 5.Inverted F Antenna Photo

L

# Antenna Photo&Length (mm)



#### Quick Reference

	Antenna model information	
Antenna Type	PCB	
Frequency	2.44GHz	
Ant. Port Input Pwr.(dBm)	0(Typ.BT class 2 output power)	
Tot.Rad.Pwr.(dBm)	-5.8(Input pwr-loss pwr)	
Peak EIRP(dBm)	-2.9	
Directivity(dBi)	1(all direction antenna)	
Efficiency(dB)	-5.8(26.03%)	
Gain(dBi)	-2.9(Peak Gain XY-plane)	
Maximum Power(dBm)	-2.9(XY-plane)	
Minimum Power(dBm)	-7.9(XY-plane)	
Average Power(dBm)	-4.5(XY-plane)	
Max/Min Ratio(dB)	5(XY-plane)	
Max/Avg Ratio(dB)	1.6(XY-plane)	
Min/Avg Ratio(dB)	-3.4(XY-plane)	
Average Gain(dB)	-4.5(Avg Gain XY-plane)	

#### Antenna Gain

#### Gain Table

Unit in dB@ 2.44GHz	XY-plane		Y-plane XZ-plane		YZ-plane		Efficiency
	Peak	Avg	Peak	Avg	Peak	Avg	
	-4.5	-2.9	-3.7	-6.9	-2.9	-6.1	26.03%

#### 6. Manufacturer and model#

Manufacturer: Foshan LianYu Electronics Factory

Address: No. 9, Building 1, Lianhe Meiguang Industrial Zone, Luocun, Shilin Town, Nanhai

District, Foshan City

Model#: LY-AT01