

## PCB antenna specification

### 1. Product model

PCB antenna

### 2. Features

- \*Stable and reliable in performances
- \*Low temperature coefficient of frequency
- \*Low profile, compact size
- \*RoHS compliance

### 3.Applications

- \*Bluetooth earphone systems
- \*Hand-held devices when Bluetooth functions are needed, e.g., Smart phone.

### 4. Description

The antenna are specially designed for Bluetooth applications.  
Based on proprietary design and processes, this antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency

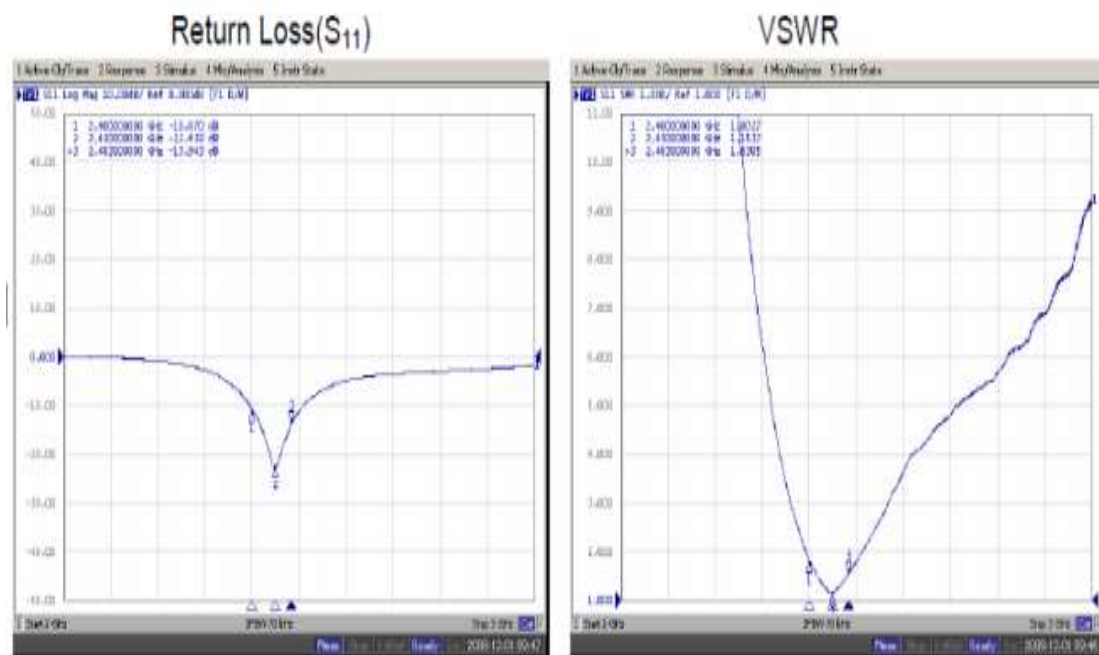
### 5. Electrical Specifications

5-1

Characteristics		Specifications	Unit
Outline Dimensions		5.6×8.5	mm
Working Frequency		2442	MHz
Bandwidth (under -10dB return loss)		100min	MHz
VSWR		2MAX.	
Impedance		50	Ω
Polarization		Linear Polarization	
Gain**	Peak	0.95 (typical)	dBi
	Efficiency	84 (typical)	%
Temperature Coefficient of Frequency		0±20max (@-40℃~85℃)	ppm/℃
** Working frequency will be offset to another frequency according to the conditions of users ground plane and radome.			
**The data was measured by A Test Lab Techno Corp.(CTIA Authorized Test Lab).			

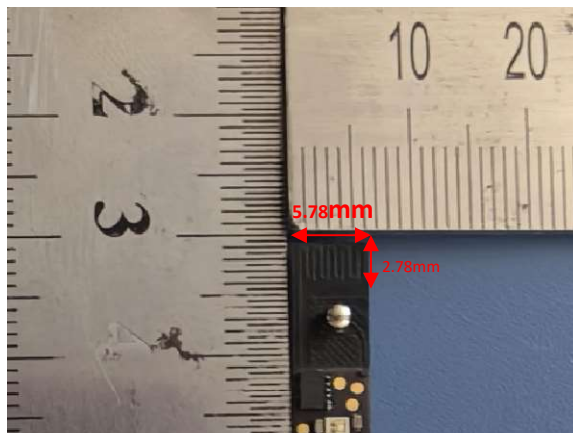
Xiamen Linktop Technology Co., Ltd.  
Room 501-2,502,503, North Building, Torch Hi-Tech Zone, No.56-58 Huojia Road, Xiamen, 361000, Fujian, P.R. China

5-2



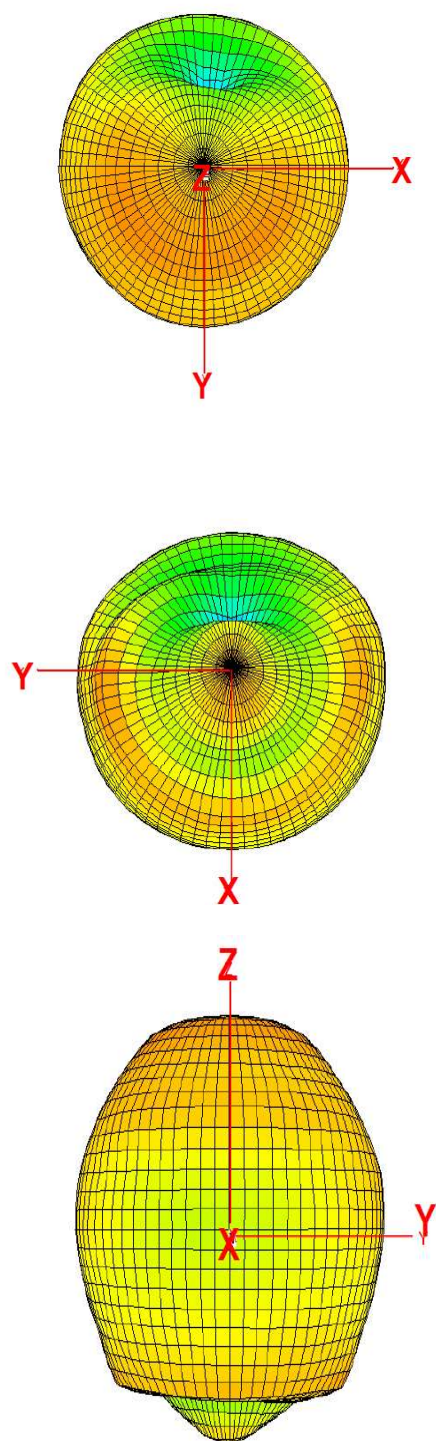
## 6. Antenna Dimensions(unit:mm)

a.AntennaDimensions



## 7.Radiation Pattern

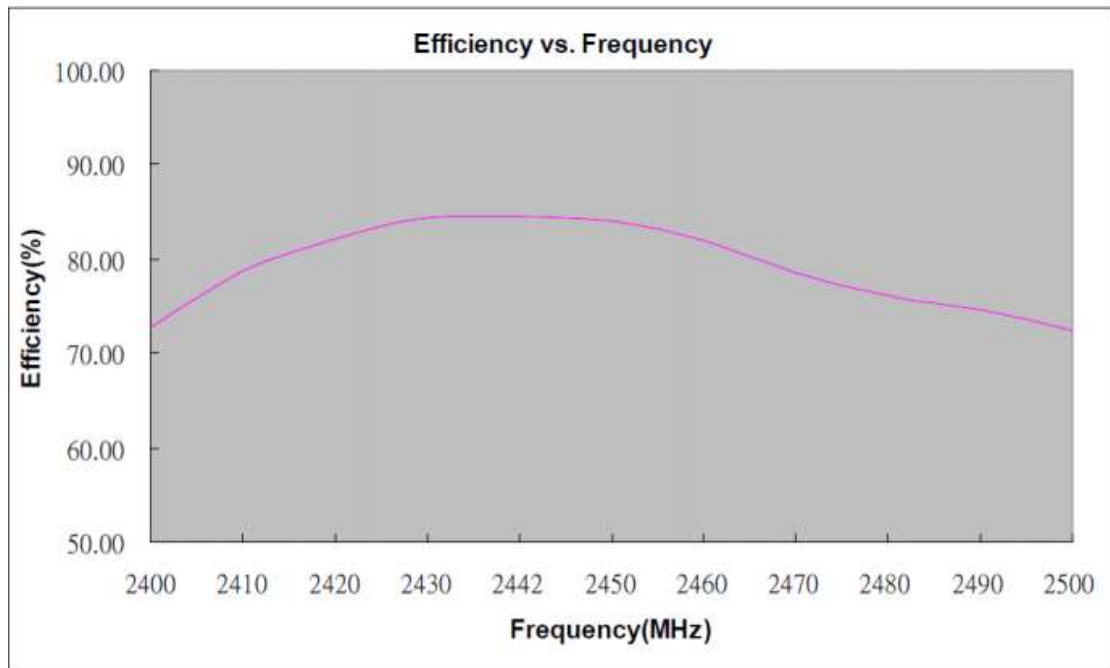
7-1.3D Gain Pattern at (2442MHz)



## 7-2. Efficiency Table

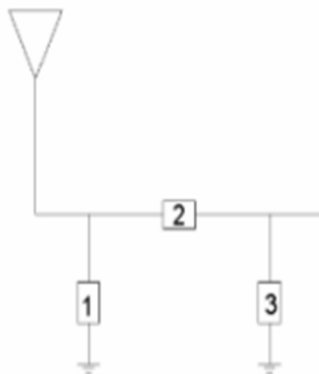
Frequency(MHz)	2400	2410	2420	2430	2442	2450	2460	2470	2480	2490	2500
Efficiency (dB)	-1.38	-1.04	-0.85	-0.74	-0.73	-0.76	-0.86	-1.05	-1.18	-1.27	-1.40
Efficiency (%)	72.83	78.71	82.27	84.39	84.53	84.04	82.00	78.60	76.14	74.64	72.50
Gain (dBi)	0.55	0.6	0.71	0.82	0.95	0.95	0.8	0.69	0.65	0.63	0.59

### 7-3.Efficiency vs.Frequency



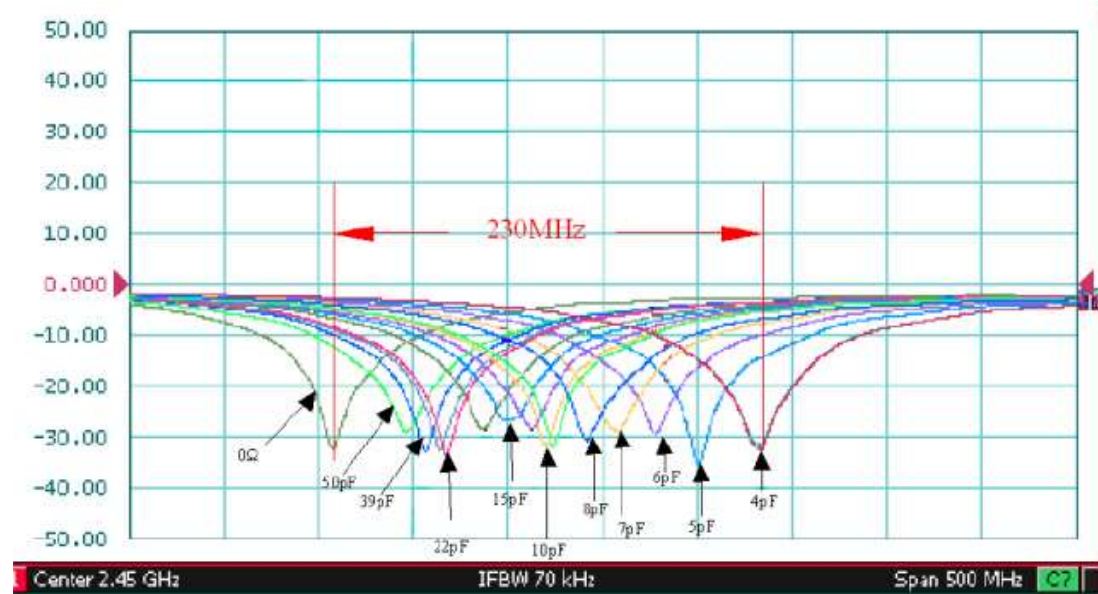
### 8. Matching circuit:

Antenna



System Matching Circuit Component		
Location	Description	Vendor
1	N/A	-
2	2.2uH	(0402)
3	0.7PF	0402

### 9. Fine tuning element vs. Center frequency



## 10.Storage Conditions:

- 1) Temperature:-25 to 85
- (2) Relative Humidity:20% to 70%