

BT1036B

Bluetooth antenna of PCB on-board specification

1, Index

Item	Content	Page	Remark
1	Index	1	
2	Test Environment	2	
3	Spec Drawing	4	
4	Specification	4	
5	Antenna On Test Board	5	
6	Return Loss	5	
7	Radiation Pattern	5	

Document Type: 2.4GHZ PCB antenna
Document Version: V1.1
Release Date: 2024/9/18
Testing Instrument: Ray Zone 1800 General Test Systems Inc
Testing Software: GTS MaxSign-RayZone1800
Engineer's signature:



Feasycom Technology C.,Ltd.

Telephone: 86-755-27924639

www.feasycom.com

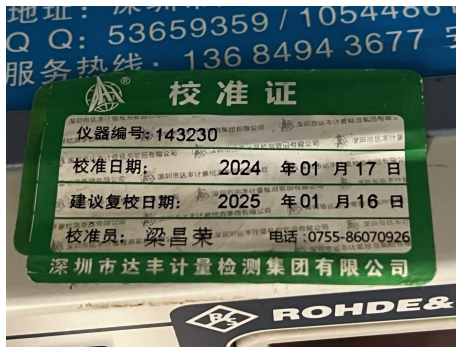


2, Testing Environment

About Instrument

Ray Zone 1800 General Test Systems Inc

CMW500



CMW500 CAL DATE

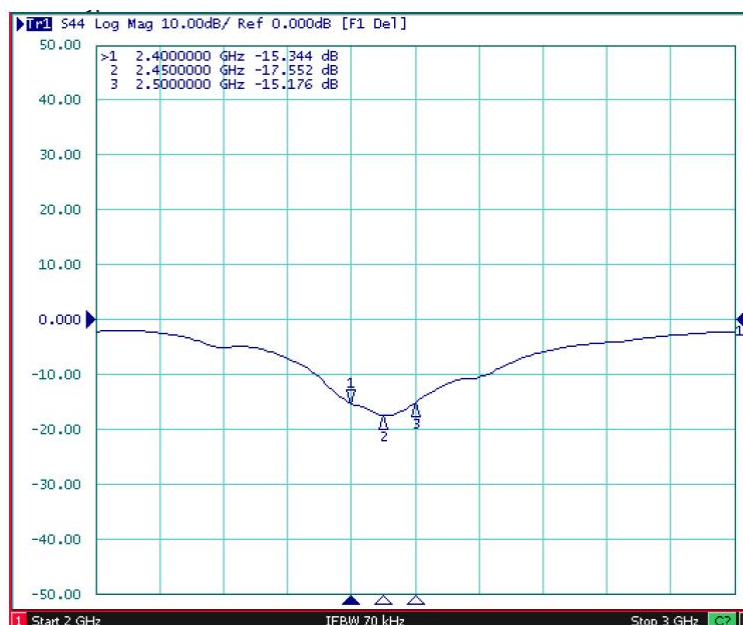
3, Specification

Product Number: 2.4GHZ PCB antenna	
A. Electrical Characteristics	
Frequency	2400 ~ 2500 MHz
S.W.R.	<=2.0
Gain	2.0 dBi
Efficiency	~ 50%
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Gold-plated copper
C. Environmental	
Operation Temperature	- 40℃ ~ + 85℃

5, Antenna On Test Board

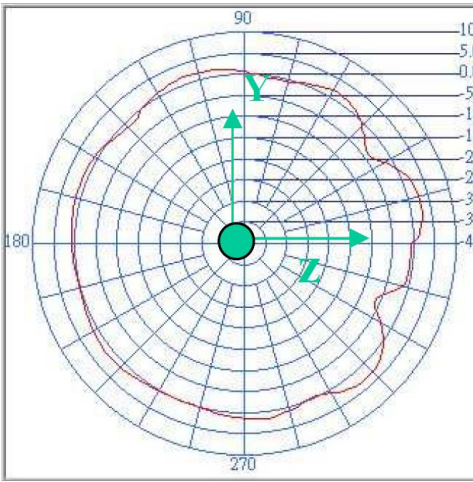
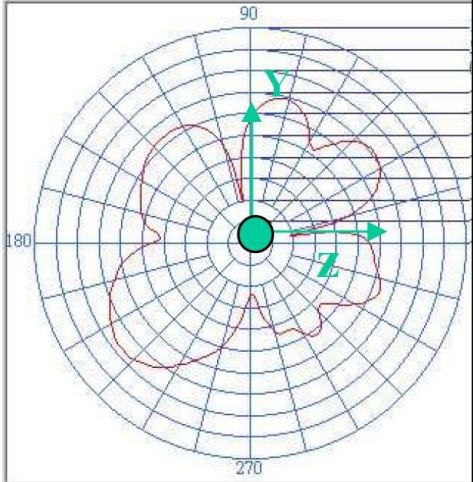
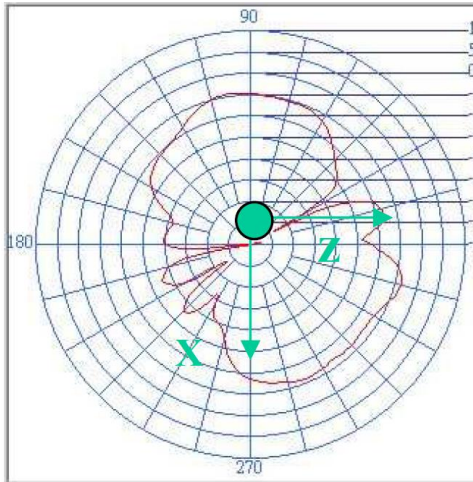
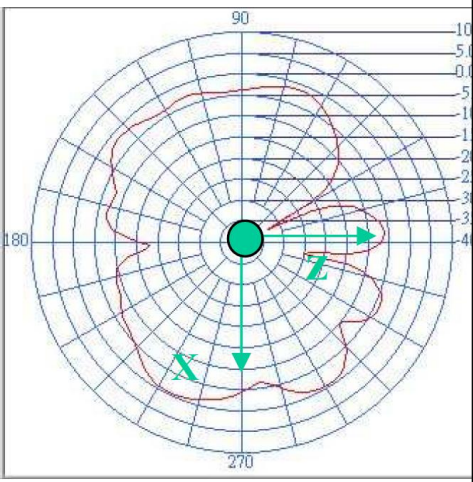
FR4 Thickness 0.8mm

6, Return Loss



7, Radiation Pattern

Radiation Pattern and Gain were dependent on measurement board design. The specification of PCB antenna was measured based on the PCB size and installation position as shown in the below figure Test Board.

	Vertical	Horizontal
Y - Z Plane Average Gain=1.19 dBi		
	Peak Gain = 2 dBi Average Gain = 0.75 dBi	Peak Gain= -1.33 dBi Average Gain=-8.7 dBi
X - Z Plane Average Gain=-2.91dBi		
	Peak Gain= -3.71 dBi Average Gain= -8.76dBi	Peak Gain= -0.29 dBi Average Gain= -4.19dBi

