

Bluetooth antenna of PCB on-board specification

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Antenna manufacturer: Shenzhen Feasycom Co.,Ltd

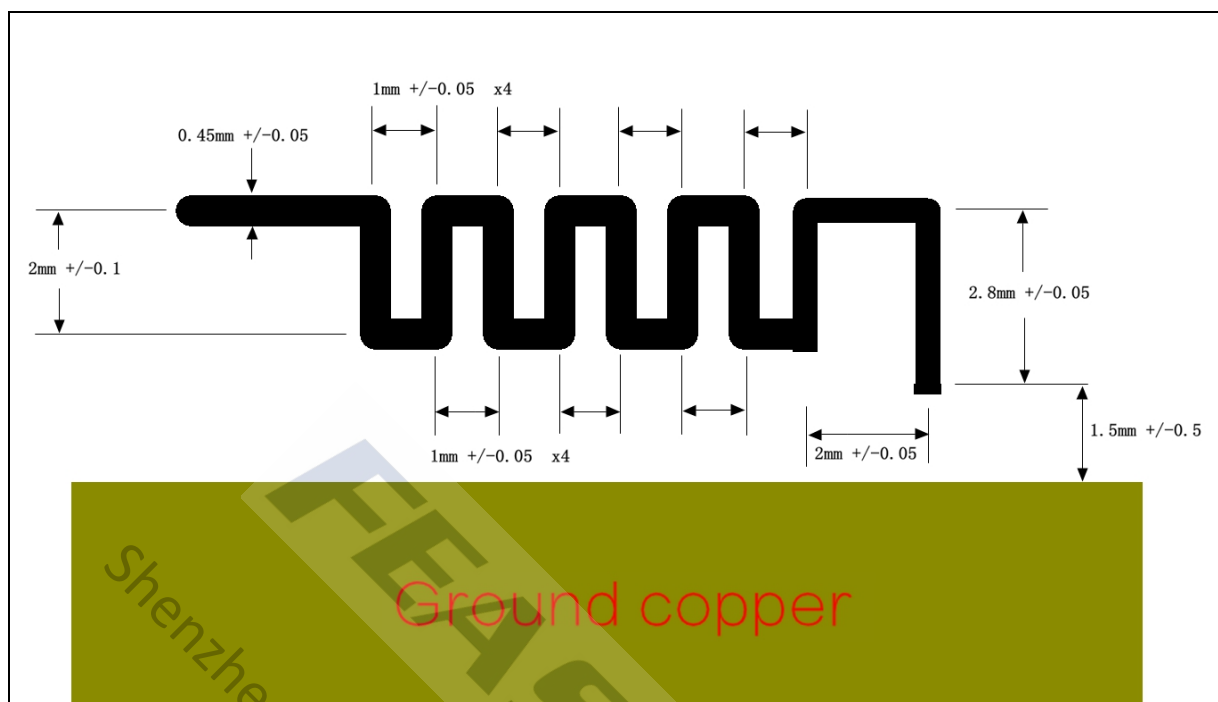
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2, Spec Drawing



3, Specification

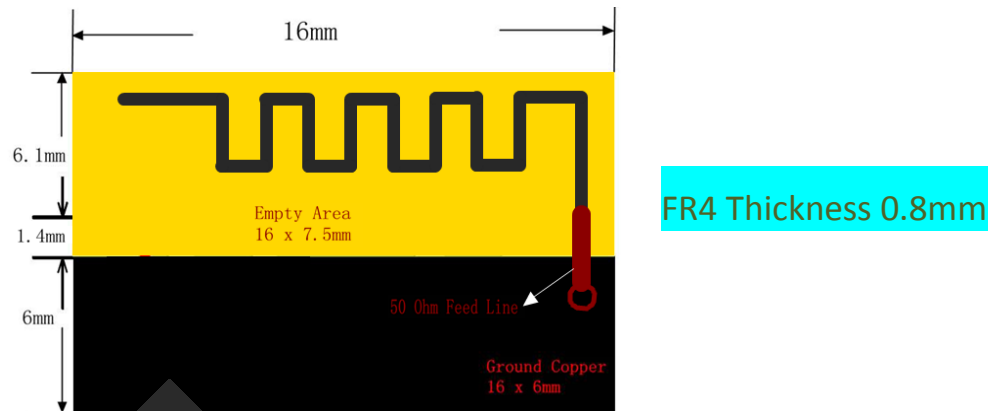
Product Number: 2.4GHZ coil antenna

Sample Photo:

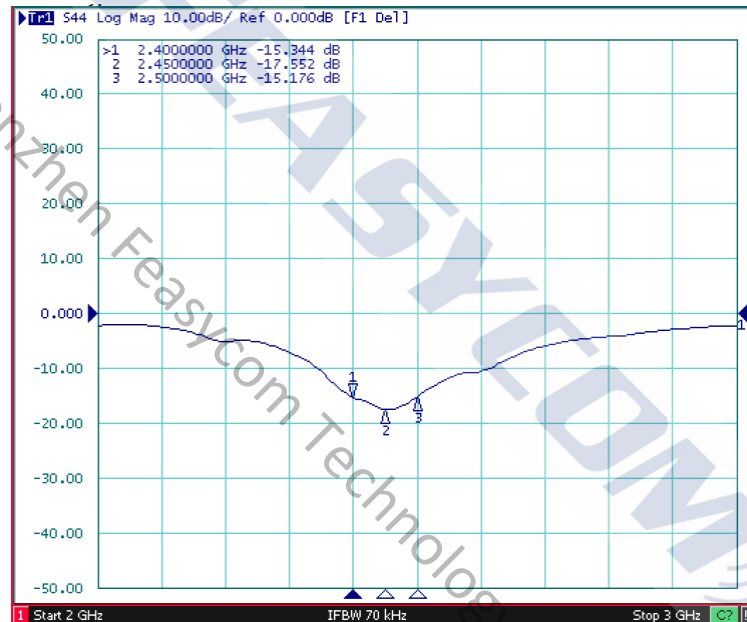


A. Electrical Characteristics	
Frequency	2400 ~ 2500 MHz
S.W.R.	≤ 2.0
Gain	2.0 dBi
Efficiency	$\sim 50\%$
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Gold-plated copper
C. Environmental	
Operation Temperature	- 40°C ~ + 85°C
Storage Temperature	- 40°C ~ + 105°C

4, Antenna On Test Board



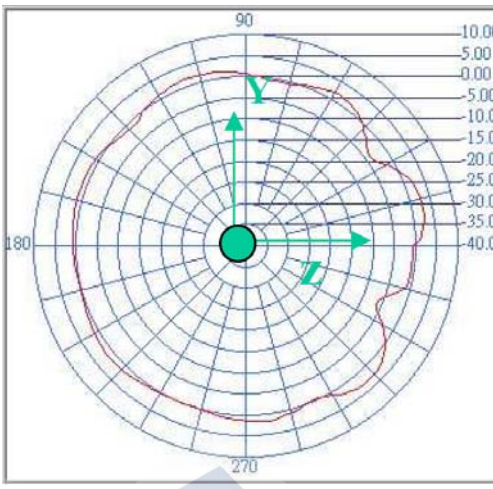
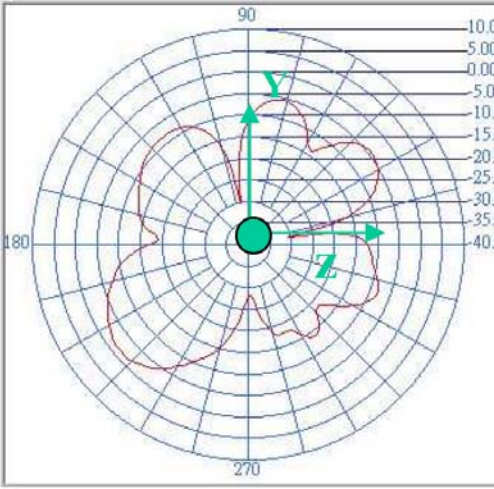
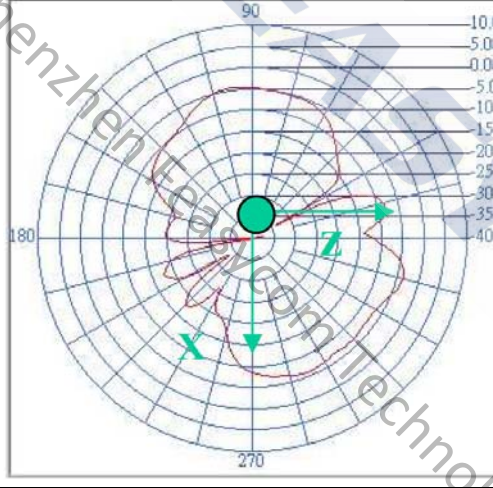
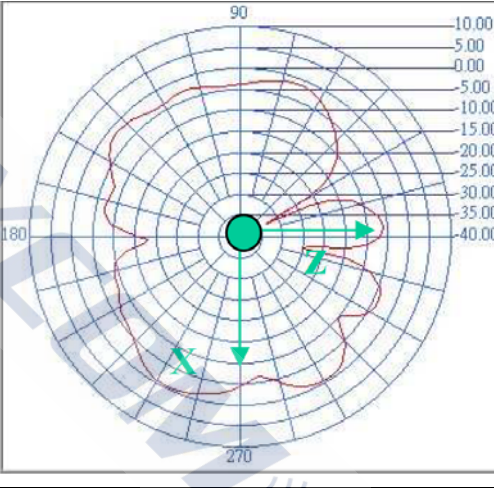
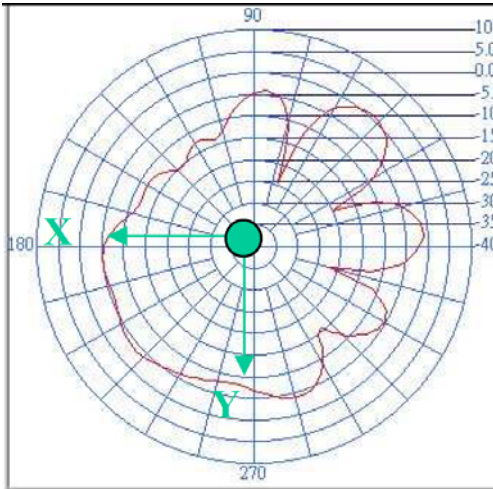
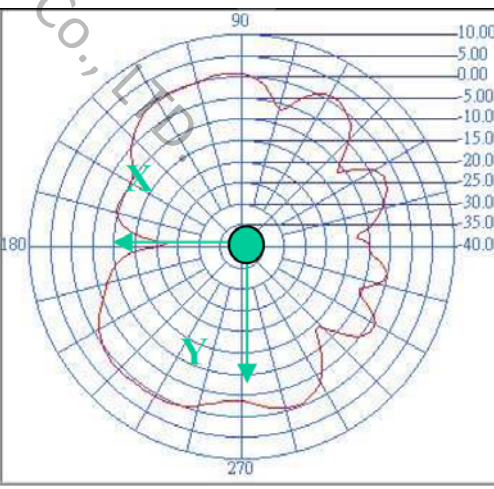
5, Return Loss



6, Radiation Pattern

Radiation Pattern and Gain were dependent on measurement board design. The specification of coil 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 = 3.12 dBi Average Gain = 0.75 dBi	Peak Gain= -1.33 dBi Average Gain=-8.7 dBi
X - Z Plane Average Gain=-2.91 dBi		
	Peak Gain= -3.71 dBi Average Gain= -8.76dBi	Peak Gain= -0.29 dBi Average Gain= -4.19dBi
X - Y Plane Average Gain=-0.95 dBi		
	Peak Gain= 0.77 dBi Average Gain= -5.86dBi	Peak Gain= 1.35 dBi Average Gain= -2.62 dBi