
Bluetooth antenna specification

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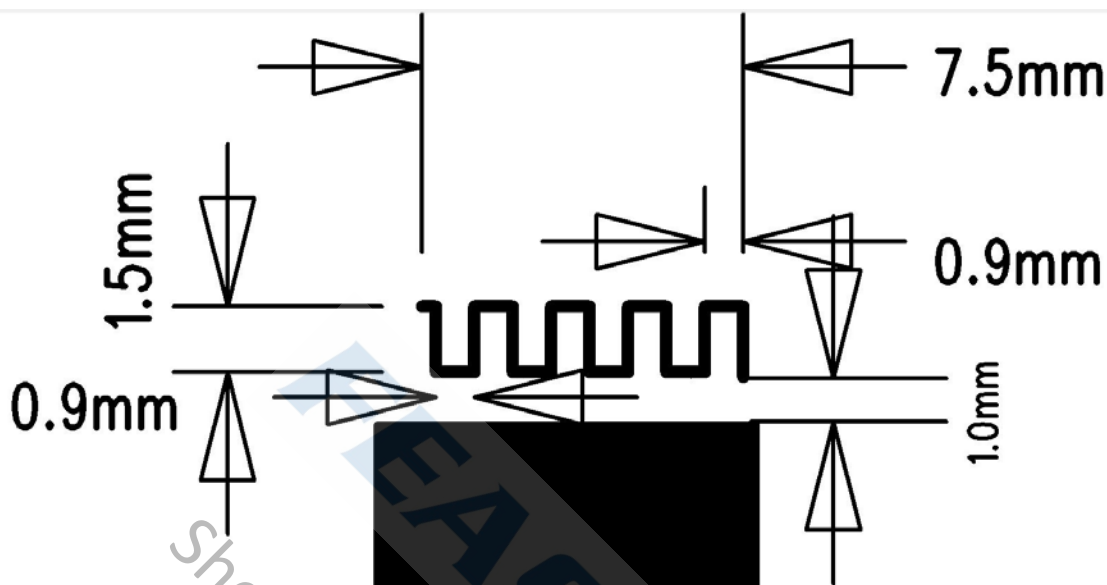
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2, Spec Drawing

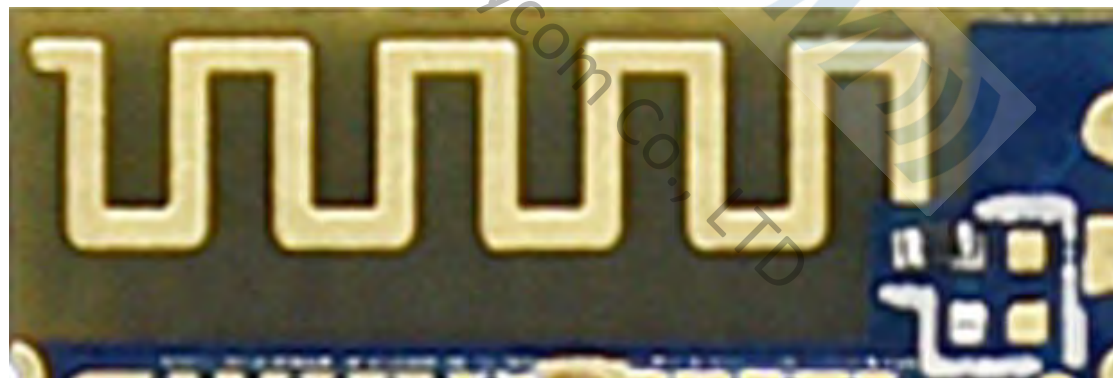
Unit: mm



3, Specification

Product Number: 2.4GHZ PCB antenna

Sample Photo:



A. Electrical Characteristics

Frequency	2400 ~ 2500 MHz
S.W.R.	≤ 2.0
Gain	2.0 dBi
Efficiency	~ 40%
Polarization	Linear
Impedance	50 Ohm

B. Material & Mechanical Characteristics

Material of Radiator	copper
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C. Environmental

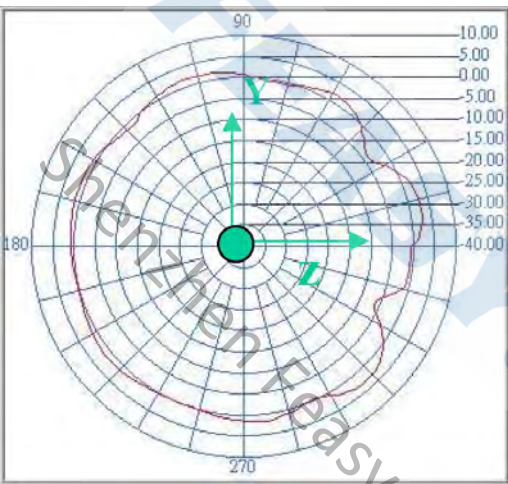
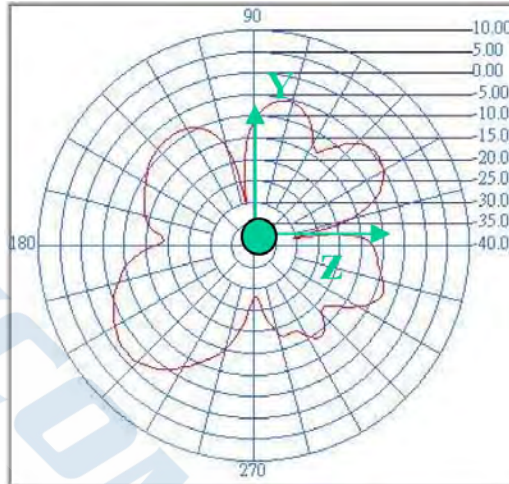
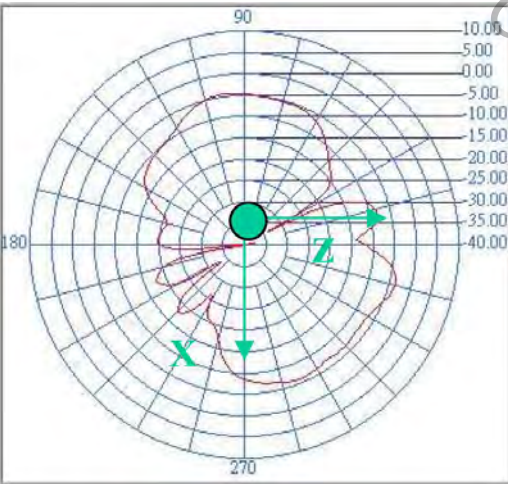
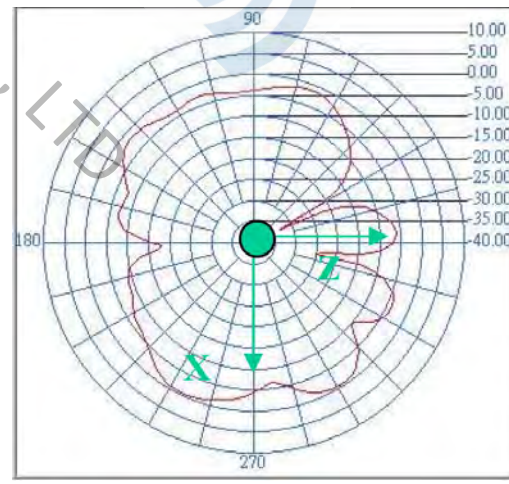
Operation Temperature	- 40℃ ~ + 85℃
Storage Temperature	- 40℃ ~ + 105℃

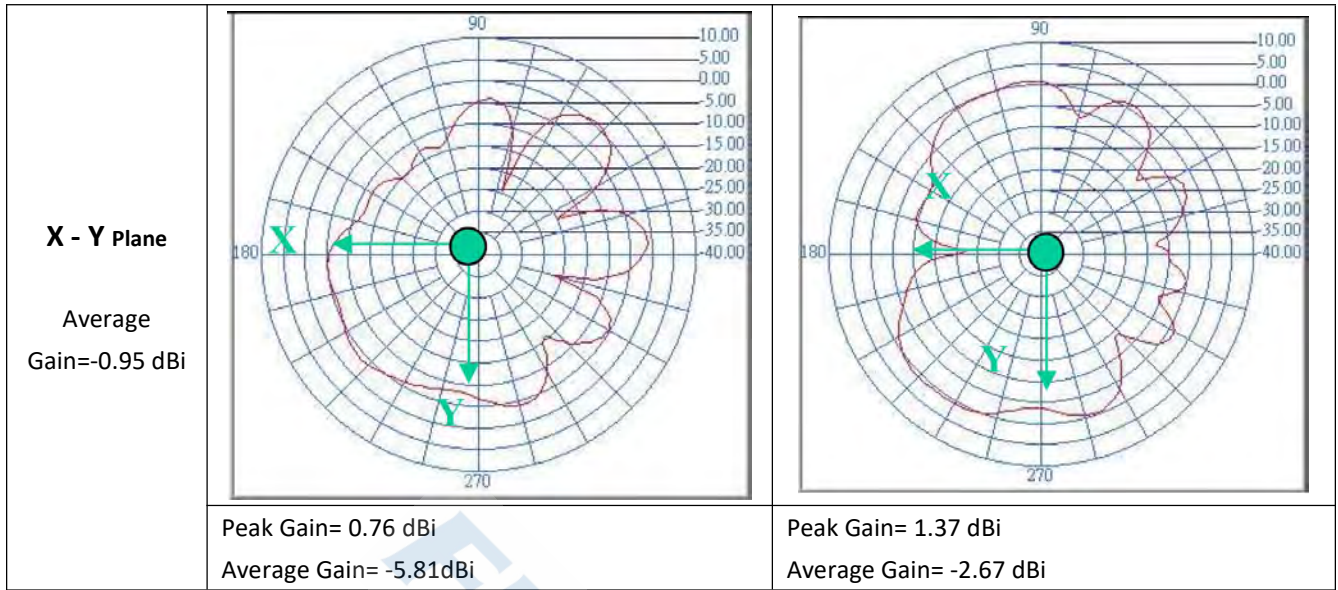
4. Return Loss



5, 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=1.86 dBi		
	Peak Gain = 2.00 dBi Average Gain = 0.71 dBi	Peak Gain= -1.37 dBi Average Gain= - 4.6 dBi
X - Z Plane Average Gain=-2.91dBi		
	Peak Gain= -3.76 dBi Average Gain= -8.72dBi	Peak Gain= -0.25 dBi Average Gain= -4.24 dBi



Frequency VNA	E Total. dB(dBi)	Efficiency
2400MHz	0.685894	41.02%
2410MHz	1.15142	47.04%
2420MHz	0.286467	40.52%
2430MHz	-0.12167	34.03%
2440MHz	0.35326	37.82%
2450MHz	1.036794	42.67%
2460MHz	2.00013	50.27%
2470MHz	0.645693	41.90%
2480MHz	-0.268034	37.96%
2490MHz	-0.468054	34.25%
2500MHz	0.727933	41.32%