
Wi-Fi antenna of PCB on-board specification

V1.0

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2、Specification

Product Number: PCB Antenna

Sample Photo:



A. Electrical Characteristics

Frequency	2400 ~ 2500 MHz
S.W.R.	≤ 2.0
Gain	≈ 2.02 dBi
Efficiency	$\approx 50\%$
Polarization	Linear
Impedance	50 Ohm
Admitted Power	2W(33dBm)
Radiation	Omni-directional
Connector Type	PCB line connect

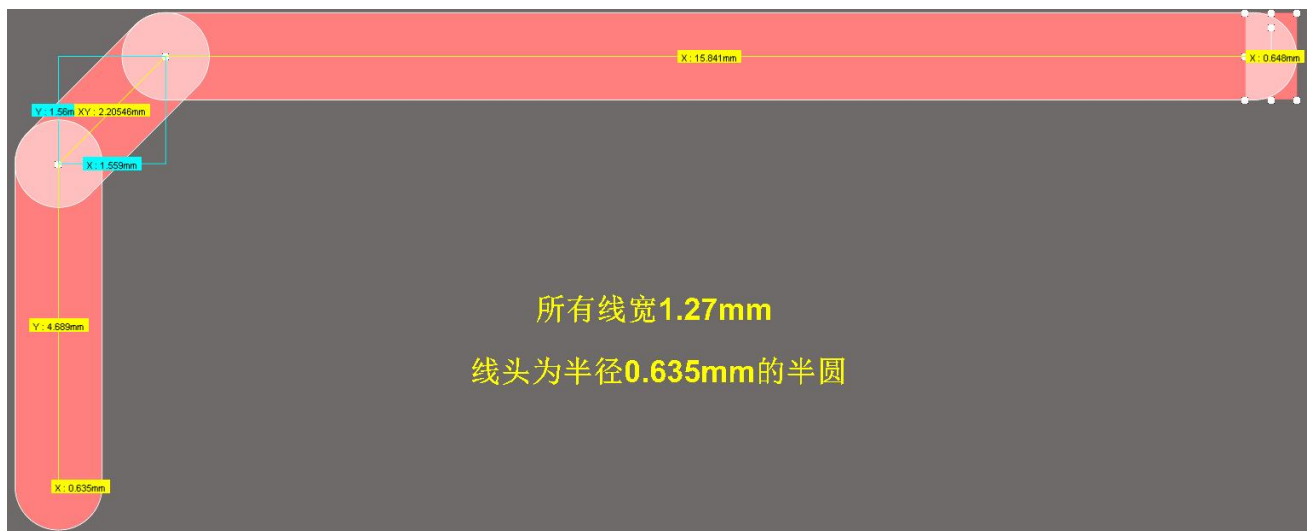
B. Material & Mechanical Characteristics

Material of Radiator	PCB plated copper
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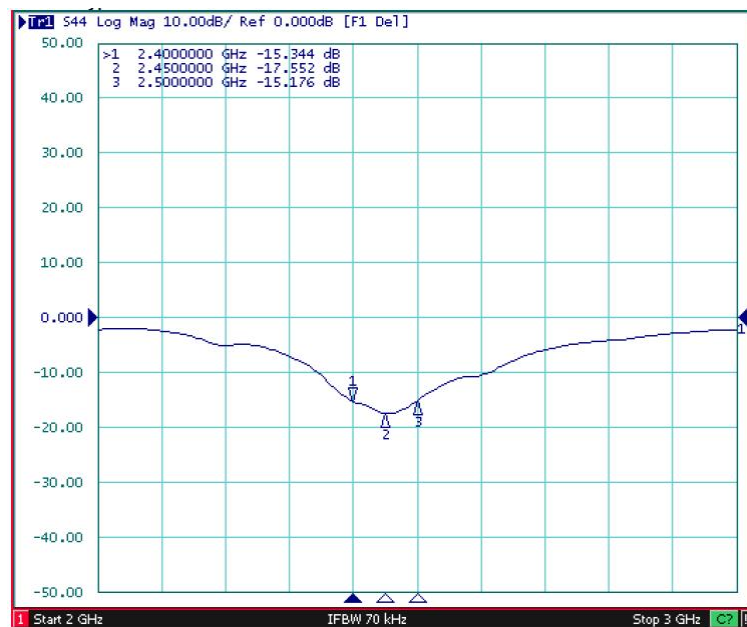
C. Environmental

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

3、PCB ANT Dimensional Drawing



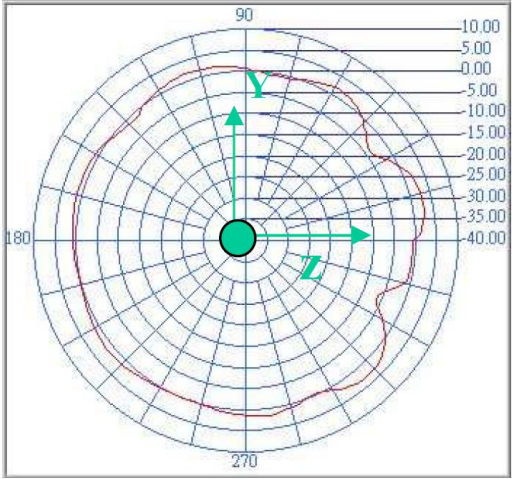
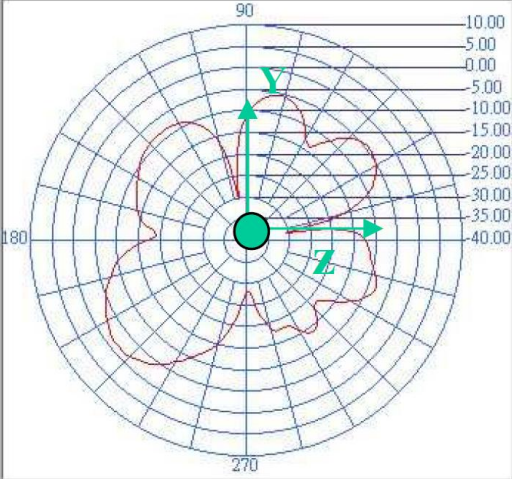
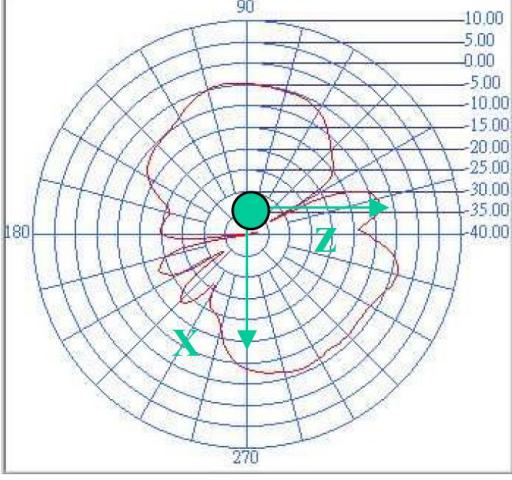
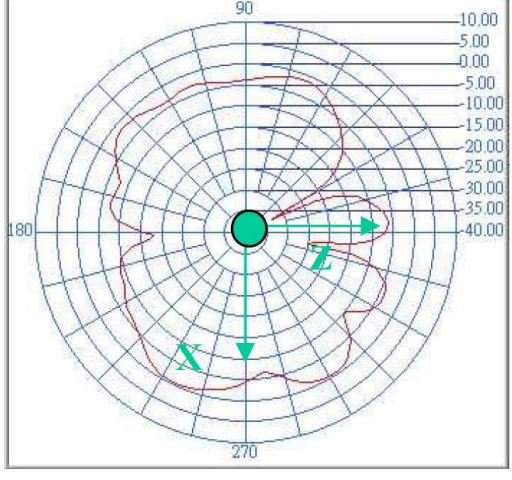
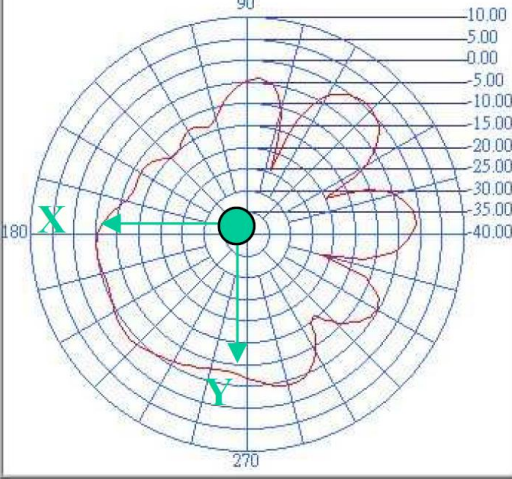
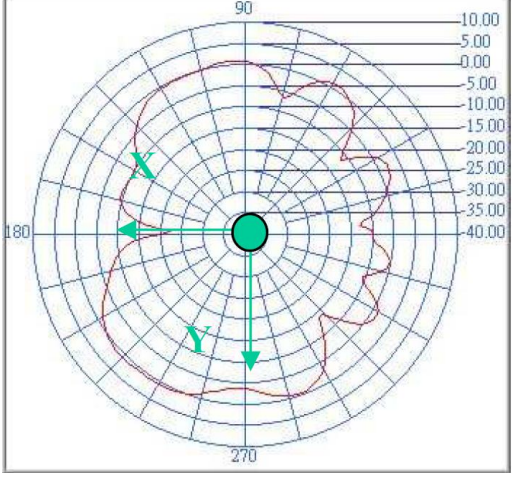
4、Return Loss



5、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
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Y - Z Plane Average Gain=1.19 dBi	 Peak Gain = 2.02 dBi Average Gain = 0.71 dBi	 Peak Gain= -1.37 dBi Average Gain=-8.6 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
X - Y Plane Average Gain=-0.95 dBi	 Peak Gain= 0.76 dBi Average Gain= -5.81dBi	 Peak Gain= 1.37 dBi Average Gain= -2.67 dBi