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Bluetooth antenna of PCB on-board specification

V1.0

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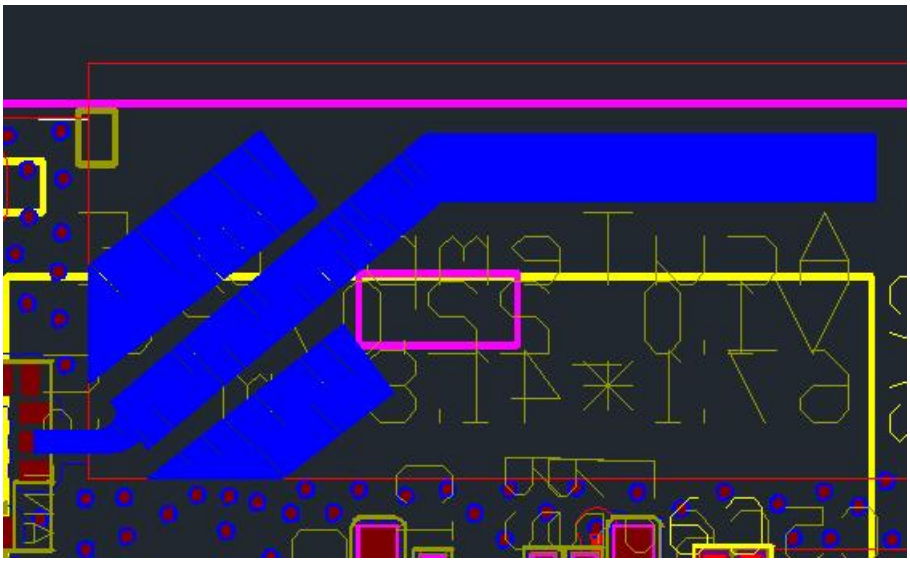
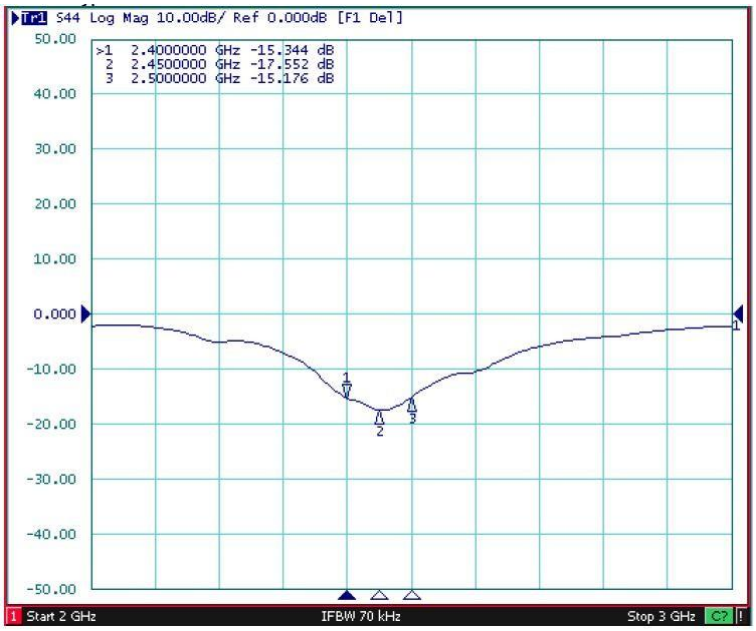
2、Specification

Product Number: PCB Antenna
Sample Photo:



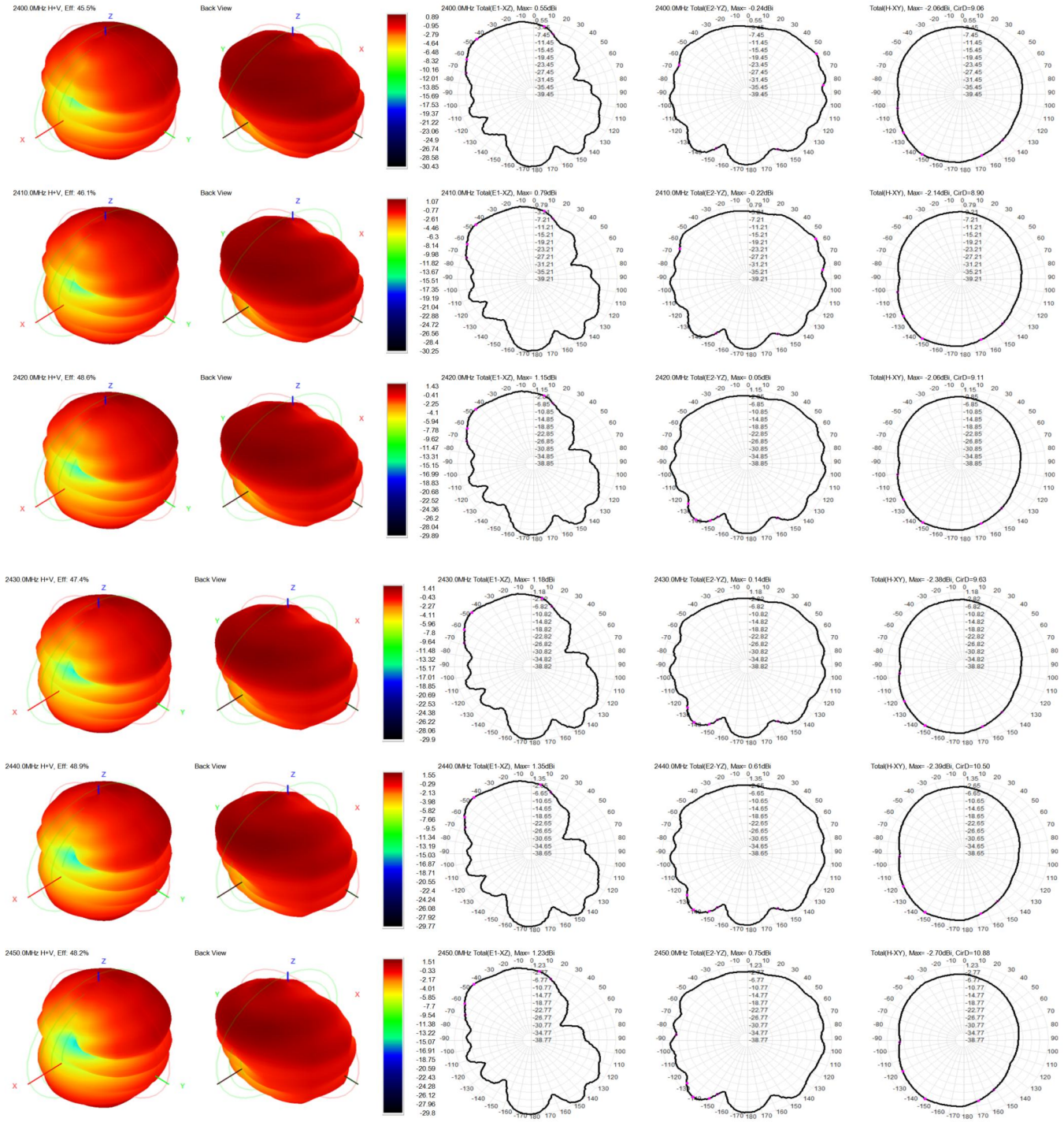
A. Electrical Characteristics	
Frequency	2400 ~ 2500 MHz
S.W.R.	≤2.0
Gain	Max ≤ 1.99 dBi
Efficiency	~ 45%
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	plated copper
C. Environmental	
Operation Temperature	- 40℃ ~ + 85℃
Storage Temperature	- 40℃ ~ + 105℃

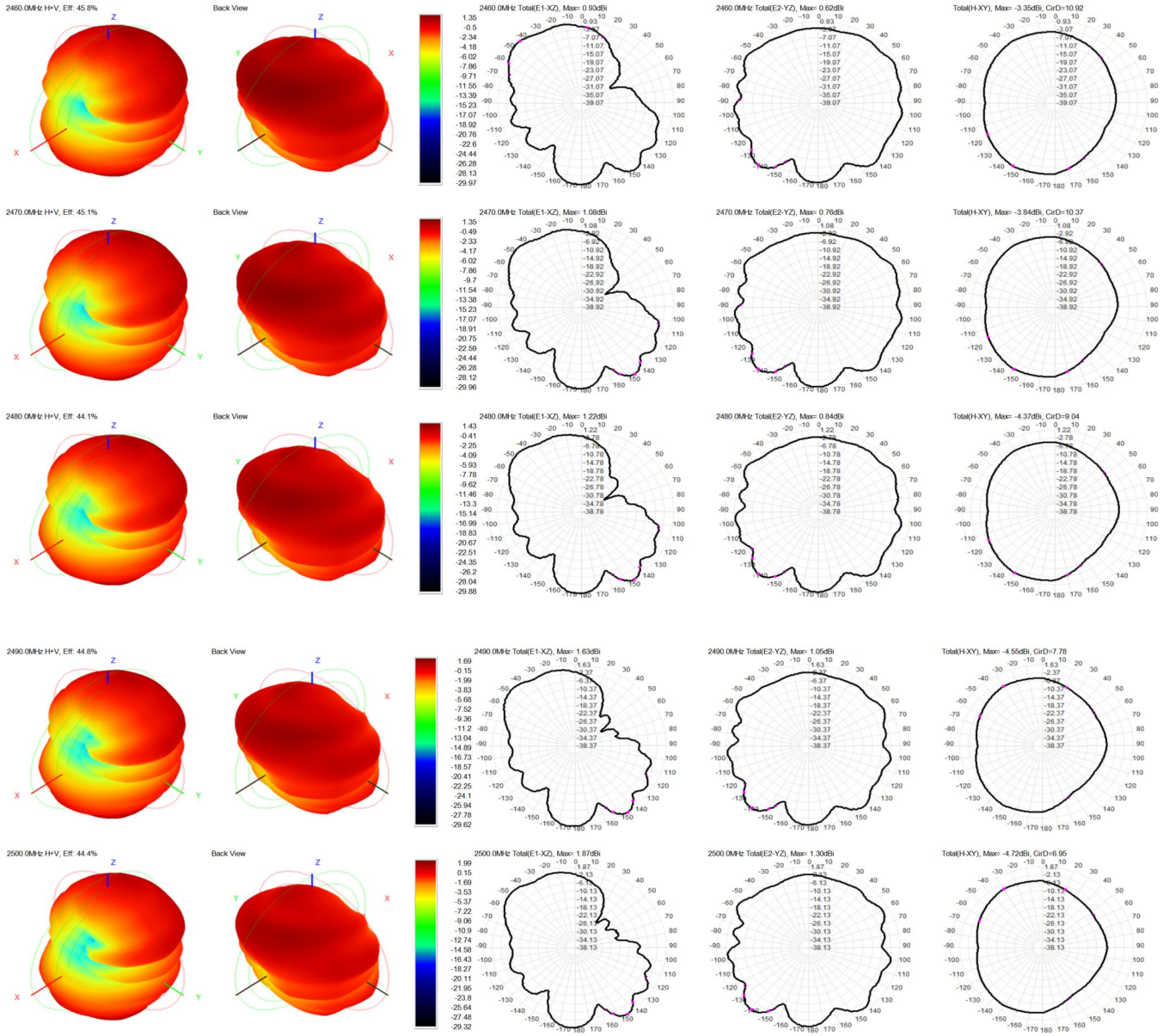
3、 Return Loss



4、Radiation Patter

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




2460.0MHz H+V, Eff: 45.8%
Back View
2460.0MHz Total(E1-XZ), Max= 0.93dBi
2460.0MHz Total(E2-YZ), Max= 0.62dBi
Total(H-XY), Max= -3.35dBi, CirD=10.92
2470.0MHz H+V, Eff: 45.1%
Back View
2470.0MHz Total(E1-XZ), Max= 1.08dBi
2470.0MHz Total(E2-YZ), Max= 0.76dBi
Total(H-XY), Max= -3.84dBi, CirD=10.37
2480.0MHz H+V, Eff: 44.1%
Back View
2480.0MHz Total(E1-XZ), Max= 1.22dBi
2480.0MHz Total(E2-YZ), Max= 0.84dBi
Total(H-XY), Max= -4.37dBi, CirD=9.04
2490.0MHz H+V, Eff: 44.8%
Back View
2490.0MHz Total(E1-XZ), Max= 1.63dBi
2490.0MHz Total(E2-YZ), Max= 1.05dBi
Total(H-XY), Max= -4.55dBi, CirD=7.78
2500.0MHz H+V, Eff: 44.4%
Back View
2500.0MHz Total(E1-XZ), Max= 1.87dBi
2500.0MHz Total(E2-YZ), Max= 1.30dBi
Total(H-XY), Max= -4.72dBi, CirD=6.95