

# RF & Antenna Testing Services Capability

WiWo Tech Systems Pvt Ltd



### Company Profile

- WiWoTech Systems Private Ltd is an Engineering design services company located in Bangalore
- WiWoTech supports Engineering design services in the areas of RF design, Antenna design,IC and SIP Package design,PCB design,RF and Antenna testing,EM CAD tool based simulations that include SI analysis, PI analysis, EMI/EMC analysis
- Servicing industries include Consumer Electronics, Defence, Medical, Avionics, Tele-Communication, Industrial
- Our esteemed clients list include PayPal, Marvell, Ineda, Rangson, Kaynes
- Our vision is to be your first choice partner in RF/Electronic design ,Antenna design,IC
   Package/SIP design and prototyping services



# Servicing Industries





RF/Wireless system Testing

Post silicon system validation testing

FCC/ETSI Regulatory Testing

EMI/EMC Testing

- WiWoTech Systems Private Ltd can be your one stop destination for all your RF Testing requirements
- WiWo Tech can carry out the RF testing of Wireless modules, RF circuits and RF/Wireless systems up to 12 GHz frequency range
- WiWo Tech has the necessary expertise in setting up the measurement equipment's for accurate RF measurement



- ☐ Expertise in carrying out RF testing of wireless modules and systems
  - ☐ Bluetooth / Bluetooth low energy
  - ZigBee
  - □ Wi-Fi (802.11a/b/q/n/ac)
  - □ RFID
  - □ NFC
  - □ GPS
  - □ Cellular Technologies(3G/4G)
  - □ WiMAX
- ☐ Expertise in carrying out RF testing of Circuits
  - Amplifiers / Low noise amplifiers
  - ☐ Frequency synthesizer
  - Mixer
  - ☐ Filters/ Balun
  - □ T/R Switch
  - □ Power divider/combiner
  - □ Couplers/ Diplexers / Duplexer
- ☐ Expertise in carrying out post silicon system validation testing for RF chipsets







Intermodulation Harmonics/Spurious Peak/Average Gain C/I Receiver Selectivity Blocking Spectral mask **Receiver Sensitivity** Transmit power/EVM **Insertion loss** Return loss/VSWR Phase noise



- WiWoTech team has expertise in handling the following measurement equipment's for carrying out the RF testing
  - Network analyser
  - Spectrum analyser
  - □ RF power meter
  - Noise figure analyser
  - □ Phase noise analyser
  - LCR meter
  - □ Vector signal generator
  - □ Vector signal analyser
  - VSWR meter
  - □ Frequency counter
  - Oscilloscope

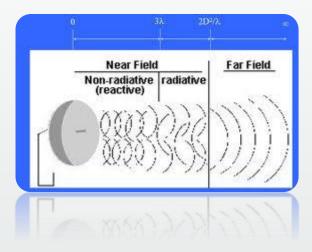






#### Antenna Testing Capability

- □ WiWo Tech has rich expertise in testing different types of antenna in near field ranges as well as in far field ranges
  - □ Low profile wireless antenna
  - Chip antenna
  - □ High gain antenna
  - Multi band antenna
  - Wide band antenna
  - Array antenna
  - Beam forming antenna
  - MIMO antenna
  - Diversity antenna
  - Active antenna
  - Phased array antenna
- Expertise in selection of near field ranges (Spherical, Planar..) and far field range for testing depending on antenna type
- ☐ Expertise in impedance matching, antenna tuning

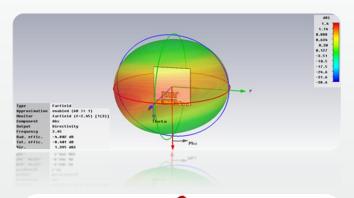


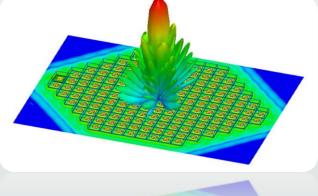




#### Antenna Testing Capability

- □ WiWo Tech has expertise in testing the following antenna performance metric parameters
  - Beam width
  - Directivity
  - □ Gain
  - □ Radiation efficiency
  - Impedance
  - Return loss
  - Bandwidth
  - □ Radiation pattern
  - Cross polarization
  - Co-polarization







#### RF & Antenna Test Services Offered

RF Testing of Wireless Modules RF Testing of Circuits System validation testing of chips RF testing of Wireless System RF Tuning of circuits and systems Near field range antenna testing Antenna tuning FCC /ETSI regulatory testing EMI/EMC testing Radio Range Testing **Production Testing** 



#### Why WiWo Tech

- Competitive market rates for carrying out RF and Antenna testing
- Experienced engineering team with rich expertise in handling RF and Antenna measurement equipment's and carrying out error free RF and antenna measurements
- Guaranteed customer satisfaction
- Requirements met on time with high quality of work
- Expertise in having carried out RF testing for modules, systems, circuits
- Expertise in RF tuning and antenna tuning
- Flexible business models
- Complete documentation package of work carried out





WiWoTech Systems Pvt Ltd No 342,4<sup>th</sup>Main,HAL3<sup>rd</sup>Stage Bangalore-560075,India Email: <u>info@wiwo-tech·com</u>

Phone:+91-80-40976388