

Product specifications Acknowledgment

Recognized manufacturers: Netum (Guangzhou) Intelligent Technology Co., Ltd.

Manufacturer : Shenzhen Bat Wireless Technology Co., Ltd

Description : BW2.4FNX26-10B1L65

Address : 1301,No.8,Langhua Road,Xinshi Community,Dalang Street,Longhua District,Shenzhen

Product Type :

Model	Description	Remarks
BW2.4FNX26-10B1L65	FPC Antenna	Parameters can be customized

Supplier Acceptance		
Prepared by	Reviewed by	Approved by
Lan Fen	WU Xinhan	Wan Duohua

Customer Acceptance	
Reviewed by	Approved by
Zhu Yu	Zhu Yu



ANTENNA DATASHEET

FPC Antenna

Model No:

BW2.4FNX26-10B1L65

Description:

FPC Antenna

Features:

2400-2500MHz

IPEX-1 Connector

Structure: 360° Omnidirectional Radiation

Cable Type: RG1.13

Cable Length: 65mm

Dimension: 25.4mm x 8.9mm

RoHS & REACH Compliant



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BW2.4FNX26-10B1L65

Part Number Description

BW	Company	BAT Wireless
2.4	Frequency	2400-2500MHz
F	Name	FPC Antenna
N	Type	Internal
X	Constant	X
26-10	Approximate Dimensions	26—10mm
B1	Connector	IPEX-1
L	Length	Length
65	Wire Length	65

Selection table

Connector	IPEX-1	IPEX-2	IPEX-3	IPEX-4	IPEX-5	SMA	Customizable
Cable Length	100	150	200	250	300	500	Customizable
Cable Type	RG0.81	RG1.13	RG1.37	RG174	RG178	RG316	Customizable

1. Description

The Bat Wireless BW2.4FNX26-10B1L65 is widely used in wireless communication. Adopting flexible substrates, it can be bent and folded, making it suitable for installation on curved surfaces and narrow spaces. Flexible substrates such as polyimide

Enable circuits to fit complex spatial layouts, ideal for wearable devices and foldable smartphones. With a typical thickness of 0.1 to 0.3 millimeters, it reduces device weight and enhances portability. Featuring outstanding high-frequency performance, flexibility, and high integration, it serves as a core component for the miniaturization and high-performance upgrade of wireless devices.

Classic application scenarios:

Consumer Electronics: Smartphones, Tablets, Laptops

IoT Devices: Vehicle T-Box, Smart Watches, Drones

Industrial Sector: Routers, Monitoring Equipment, Industrial Control Terminals

Bat Wireless provides customized services to optimize your device. We have a mature R&D team that can respond quickly to meet your needs. If you have any requirements, please contact our sales and FAE.



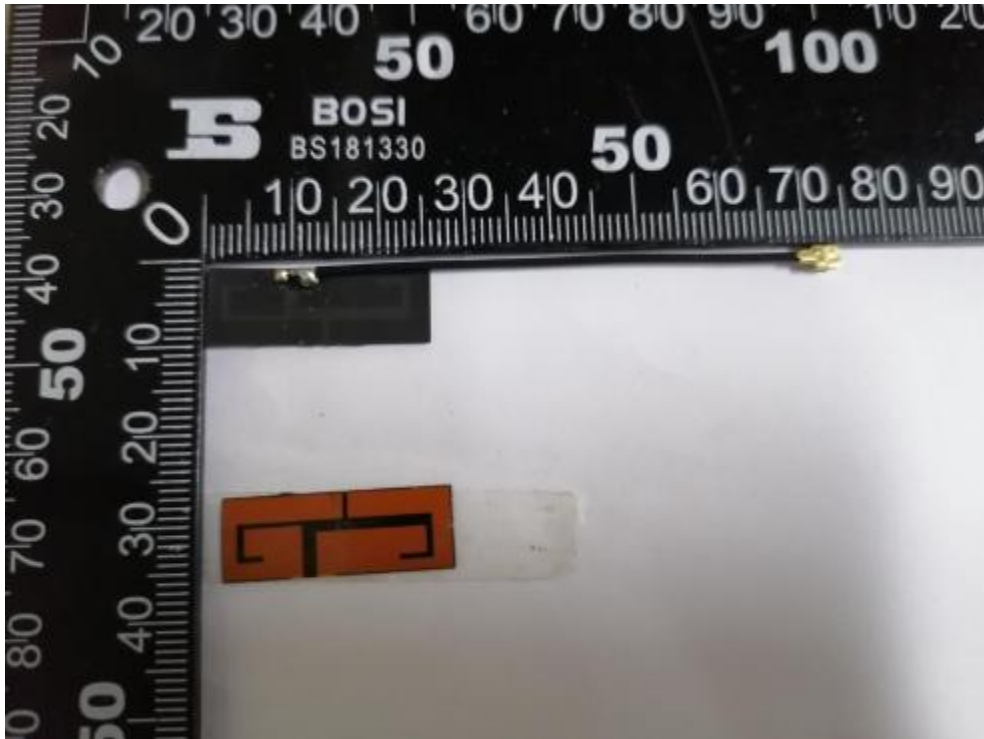
2 Specification

Parameters	Typ.	Unites	Notes
Electrical Characteristics			
Antenna Type	FPC Antenna		
Frequency Range	2400-2500	MHz	
Input Impedence	50	Ω	
V.S.W.R	<2		
Gain	3.41	dBi	
Polarization Type	Vertical		
Power Capacity	50	W	
Lightning Protection	-		
DC Voltage	-	V	
Radiator	-		
Mechanical Characteristics			
Dimensions	25.4 x 8.9	mm	
Connector Type	IPEX-1(Customizable)		
Cable Type	RG1.13(Customizable)		
Cable Length	65(Customizable)	mm	
Mount way	snap fit		
Color	Black		
Material	FPC		
Weight	-	g	
Environmental Characteristics			
Waterproof Rating	-		
ROHS Complaint	Conform		
Operating Temperature	-45~ +85	°C	
Storage Temperature	-45~ +85	°C	

*Note: The above data is for reference only. Since the antenna function is relatively sensitive, please inform us for evaluation if there are any changes to the structural components around the main body of the antenna.



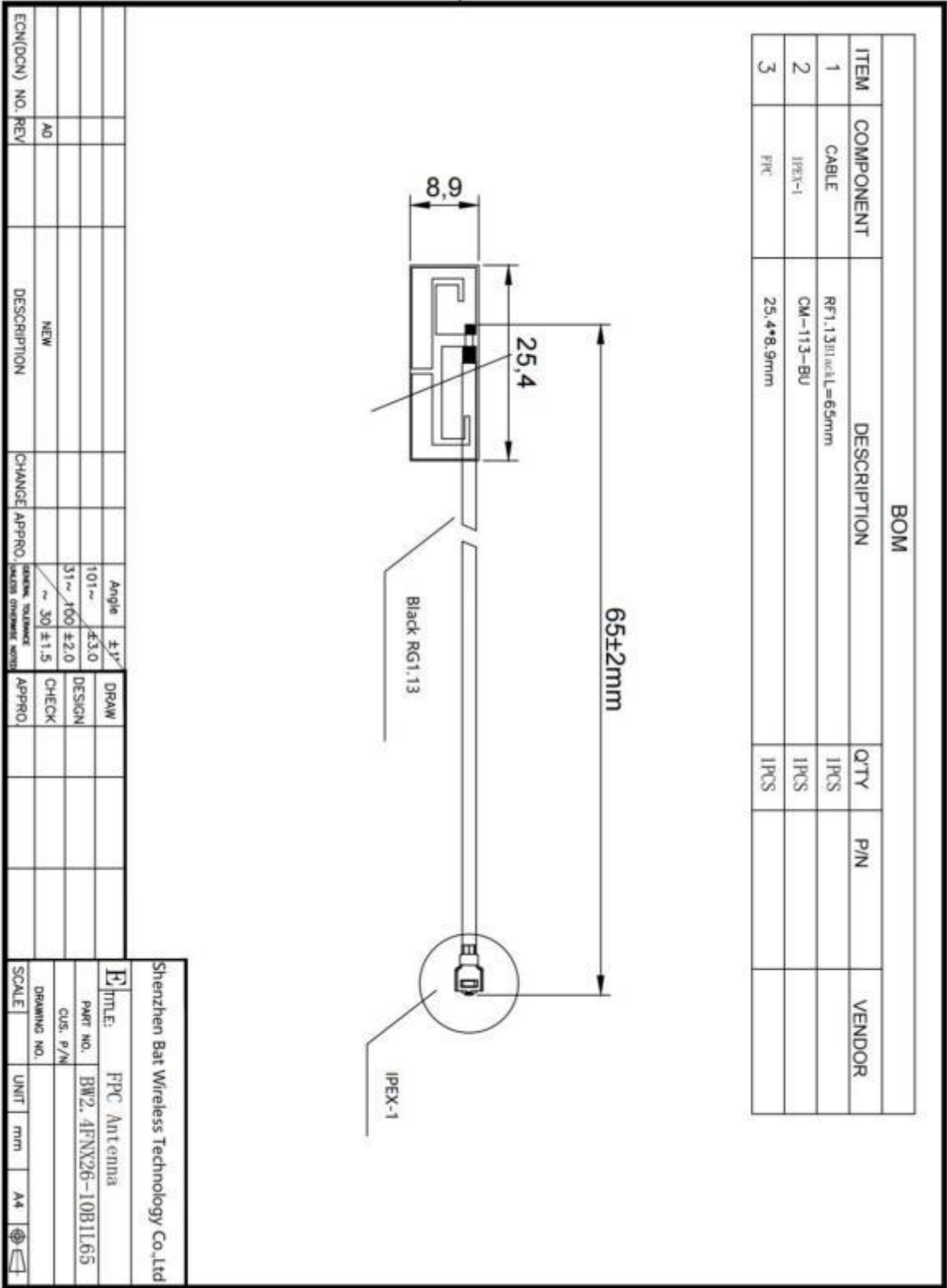
3. Product Picture



* Product images are for reference only



4. Mechanical Drawing





5. Test Equipment



Keysight/E5071C Network Analyzer



R&S/CMW500 Radio Communication Tester



R&S/SMBV100B Vector Signal Generator



DT-3500 Datasheet

Specification:	Description
Test Frequency	400MHz-8.5GHz
System Size	L*W*H=4*3.5*3.5m
Number of Probes	23 (Probe) + 1 (link)
Interval Angle	15°
Sampling Diameter	2200mm
Carring Capacity	≤40 kg

Testing Capability

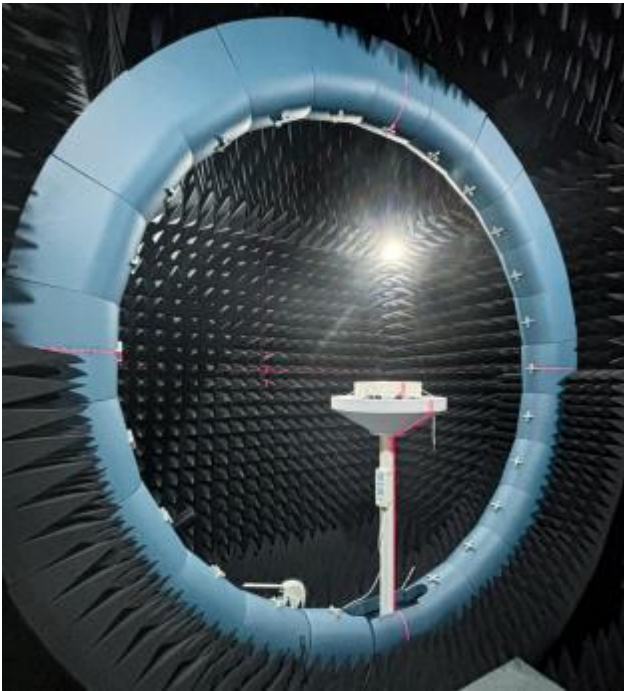
Description

Active measurement

Capability : TRP、TIS、EIRP、EIS,. etc
Mode : 2G/3G/4G/5G、Wi-Fi b/g/n/a/ac/ax、BT、NB-IOT、Cat-M(eMTC)、GPS/BEIDOU/GLONASS、ZigBee、LoRa(Non-Signaling),.etc

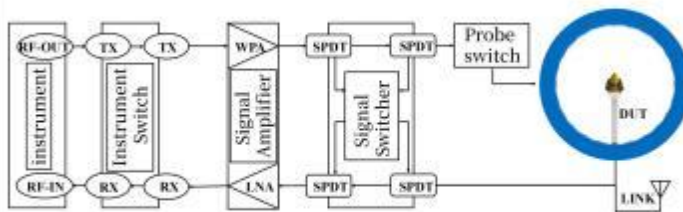
Passive measurement

Test category : Gain、Efficiency、2D pattern、3D pattern、Pattern roundness、Axial Ratio、ECC、Phase center,. etc
Polarization : Circular polarization, linear polarization, elliptical polarization

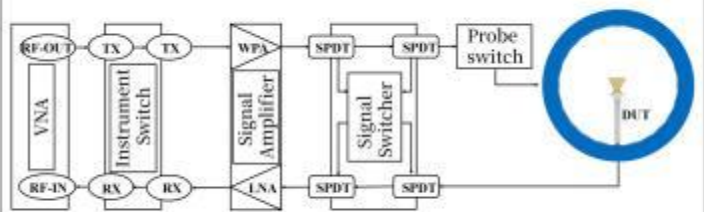


RF Link diagram of multi-probe spherical near-field testing system

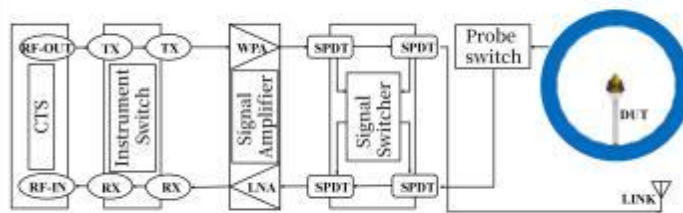
RF Link Overview



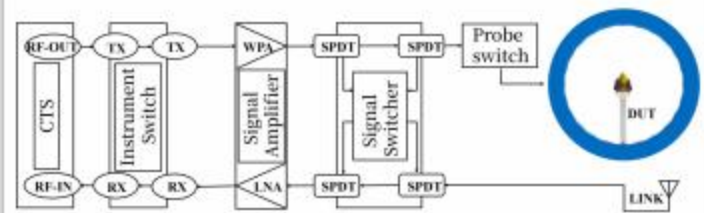
RF Link of Passive measurement



RF Link Overview



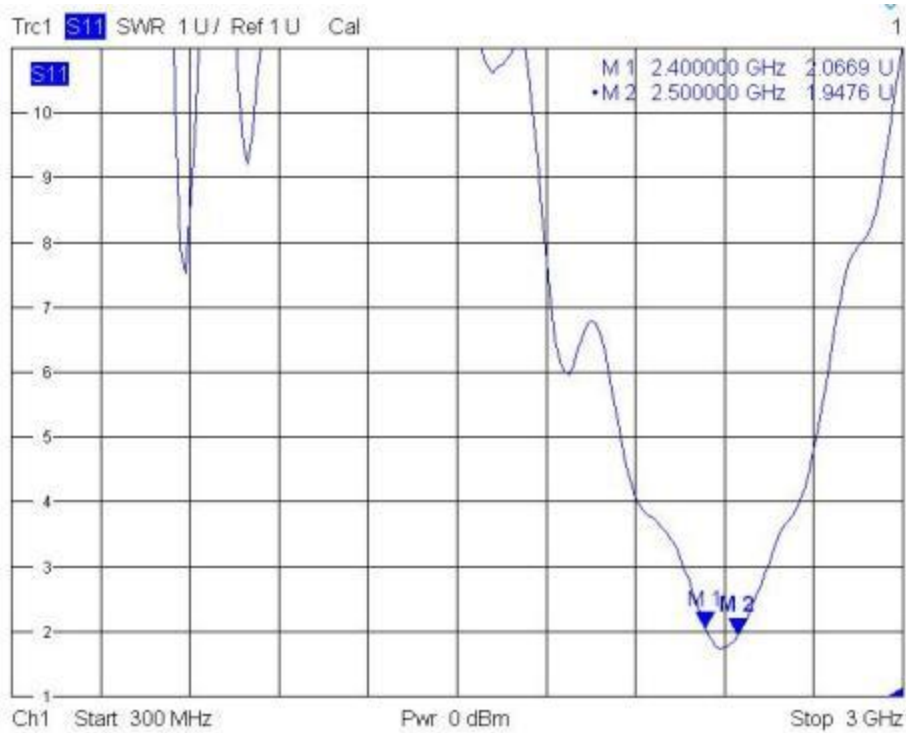
RF Link of Passive measurement



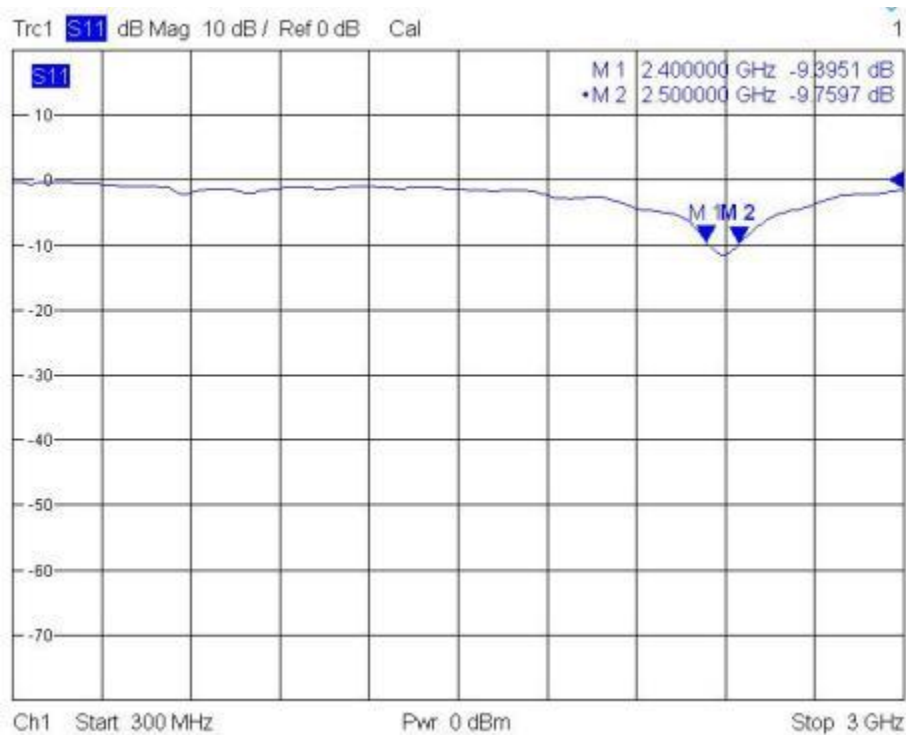


6. Performance Data

6.1 VSWR



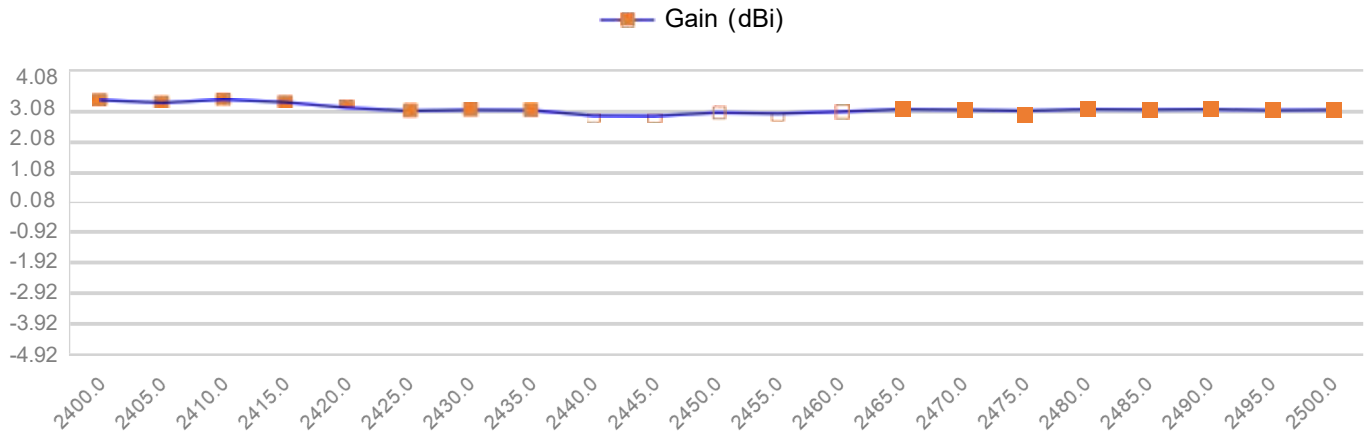
6.2 Return Loss



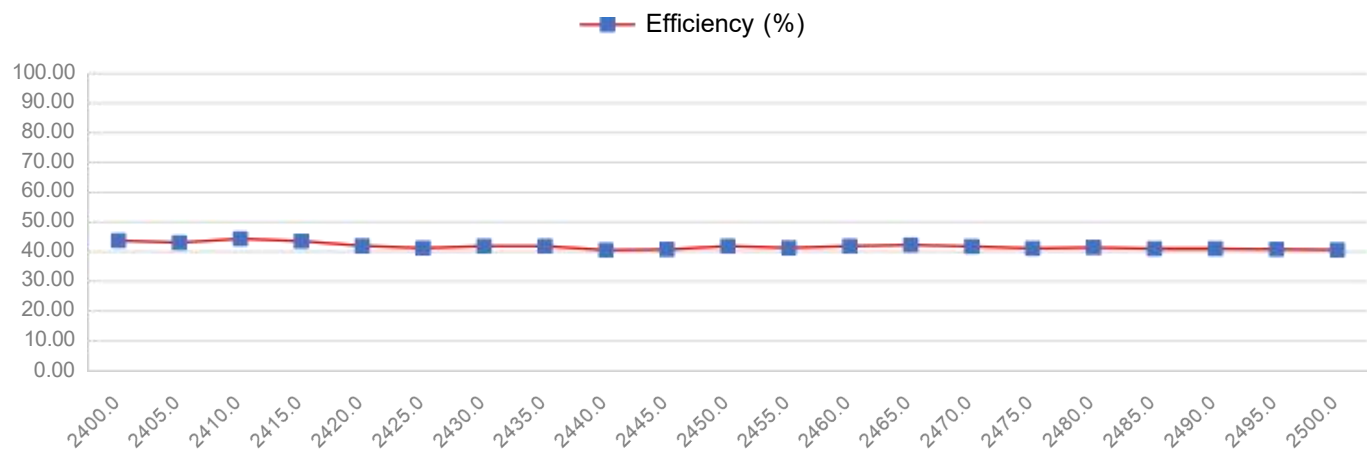


6. Performance Data

6.4 Gain



6.5 Efficiency



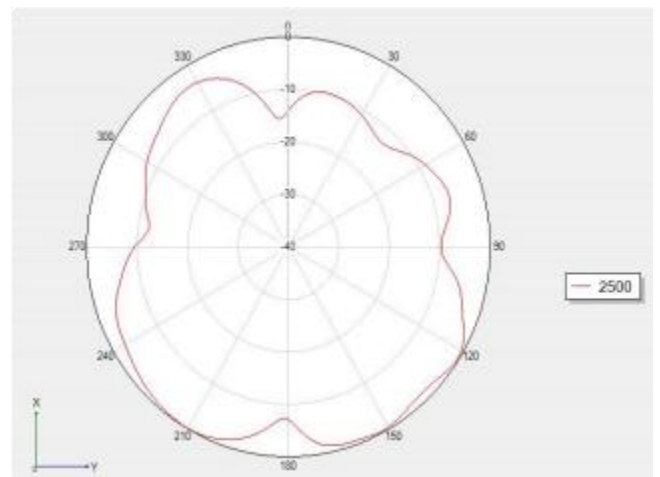
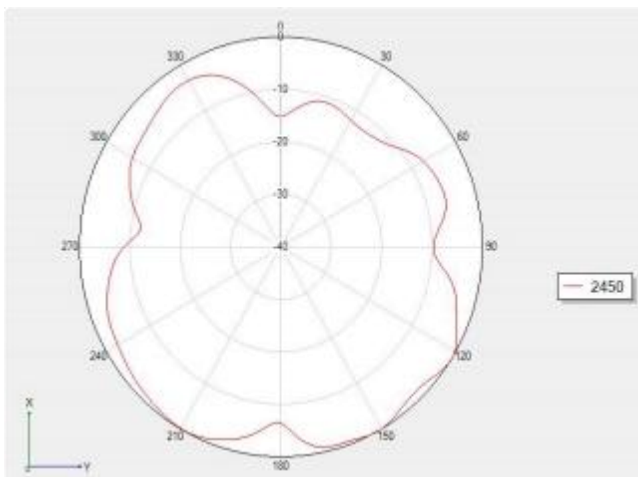
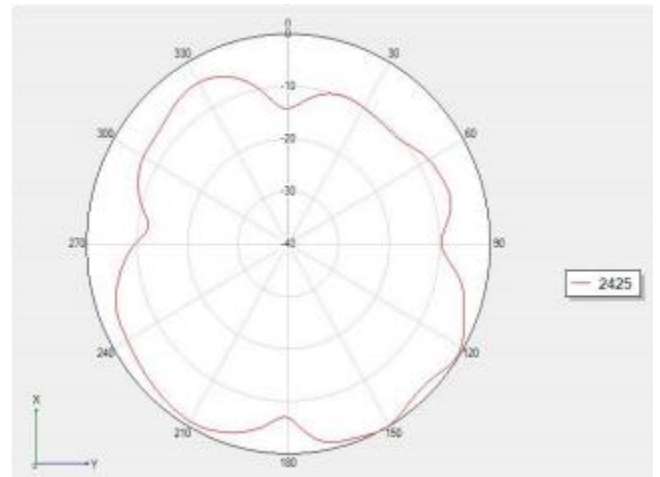
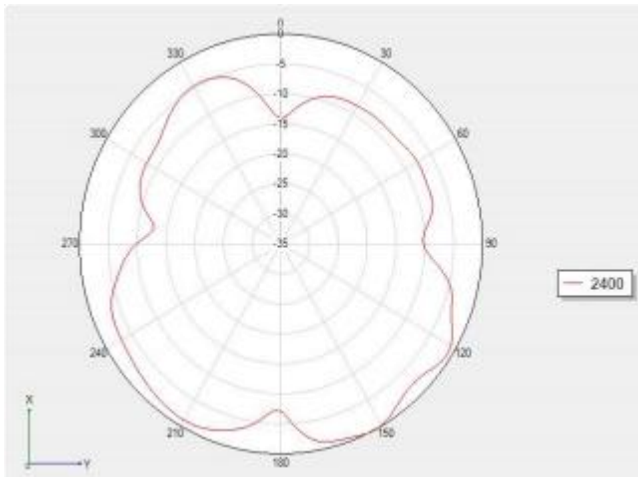
6.6 Gain & Efficiency

Frequency (MHz)	2400-2450	2450-2500
Gain (dBi)	3.41	3.09
Efficiency (%)	44.36	30.06



7. Radiation Patterns

7.1 2D Radiation Patterns

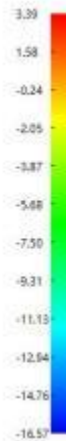
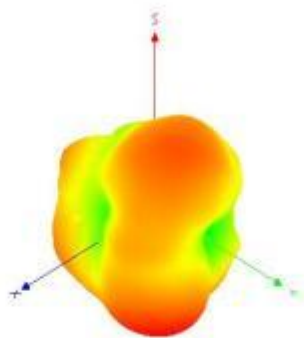




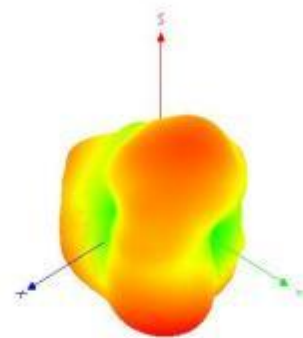
7. Radiation Patterns

7.3 3D Radiation Patterns

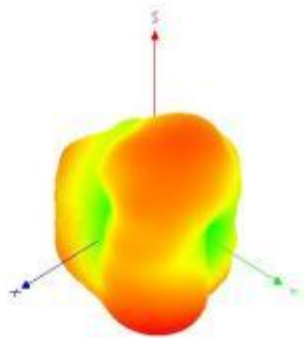
Frequency (MHz) : 2400



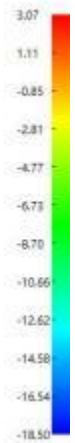
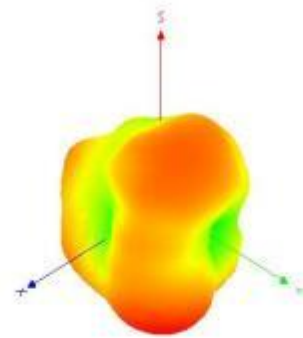
Frequency (MHz) : 2425



Frequency (MHz) : 2450



Frequency (MHz) : 2500





Documentation	
Version:	April-14-2025-A01
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Note:	First update
Editor:	Carly

Change Log



BAT WIRELESS

DECLARATION:

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