

# Compact 2.4 GHz WiFi/BL FR4 Antenna



ABAR1504-S2450



15.0 x 4.0 x 0.8 mm  
RoHS/RoHS II Compliant  
MSL = NA

## Features

- Most compact cabled 2.4GHz antenna, 15 x 4 mm
- Low Profile of 0.8 mm
- Linear Polarization
- Low VSWR
- Gain of 2.28 dBi
- Easy integration using cable and connector
- Ø1.13 mm cable and IPEX Connector

## Applications

- IoT
- Wearables
- Home automation
- WiFi/Bluetooth/ZigBee
- Appliances
- Security

## Electrical Specifications

Parameters	Min.	Typ.	Max.	Units	Notes
Operating Frequency Range	2400-2484			MHz	
Frequency	2400	2450	2500		
VSWR	2.70	1.63	1.66		
Peak Gain	1.52	2.28	1.89	dBi	
Average Gain	-5.92	-5.16	-5.54		
Efficiency	25.56	30.50	28.50	%	
Polarization	Linear				
Impedance	50			Ω	

## Mechanical Specification

Parameters	Description
Cable Type	Ø1.13 mm
Cable Length	250 mm
Connector	IPEX

## Environmental Specification

Parameters	Description
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Relative Humidity	0 ~ 95 %

# Compact 2.4 GHz WiFi/BL FR4 Antenna

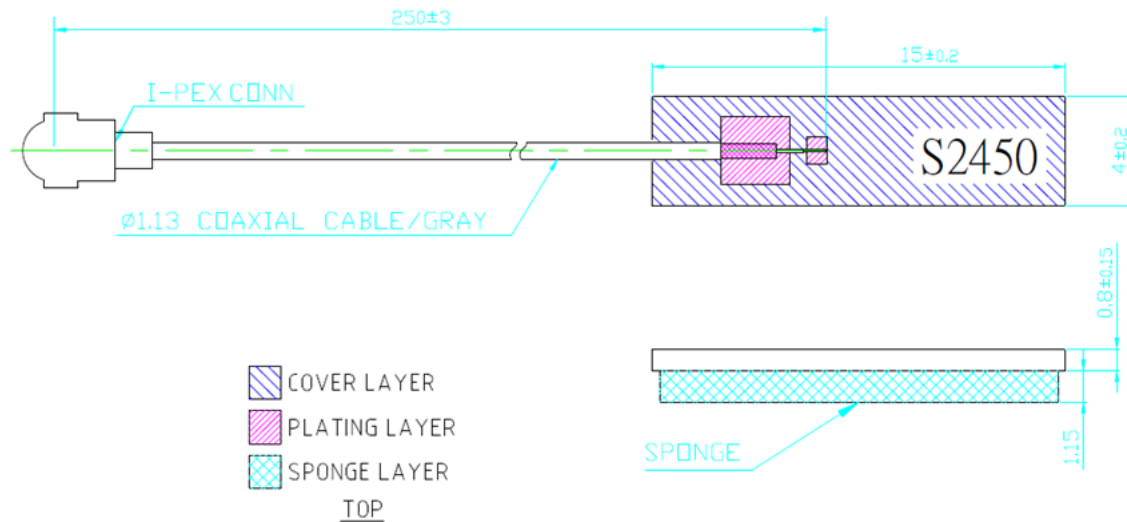


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## Product Dimensions



Dimensions: mm

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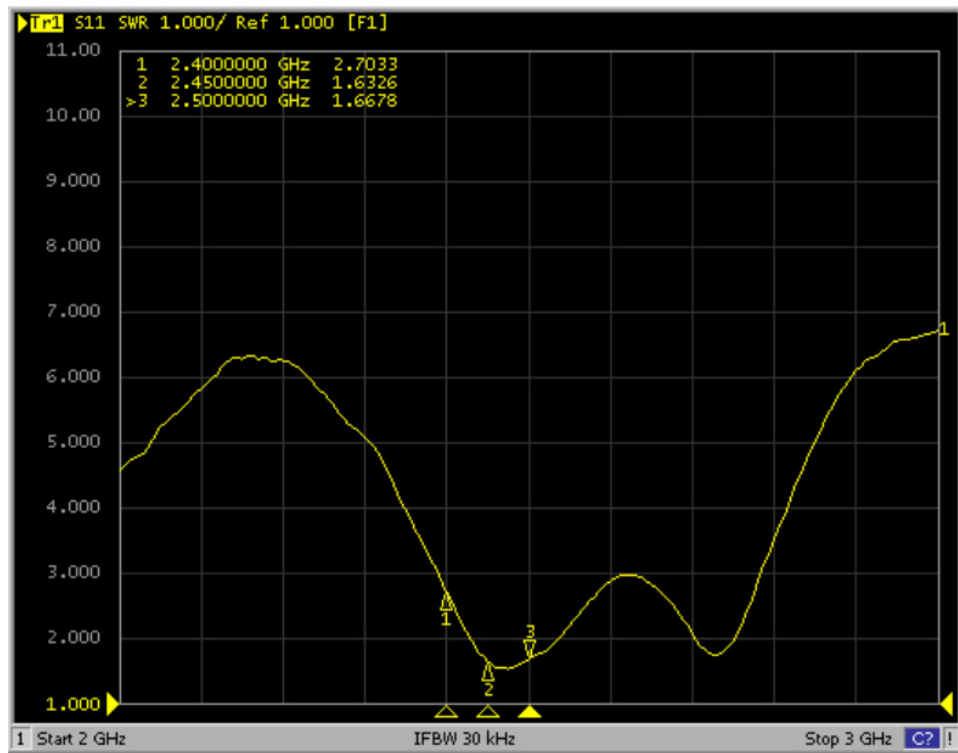


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VSWR



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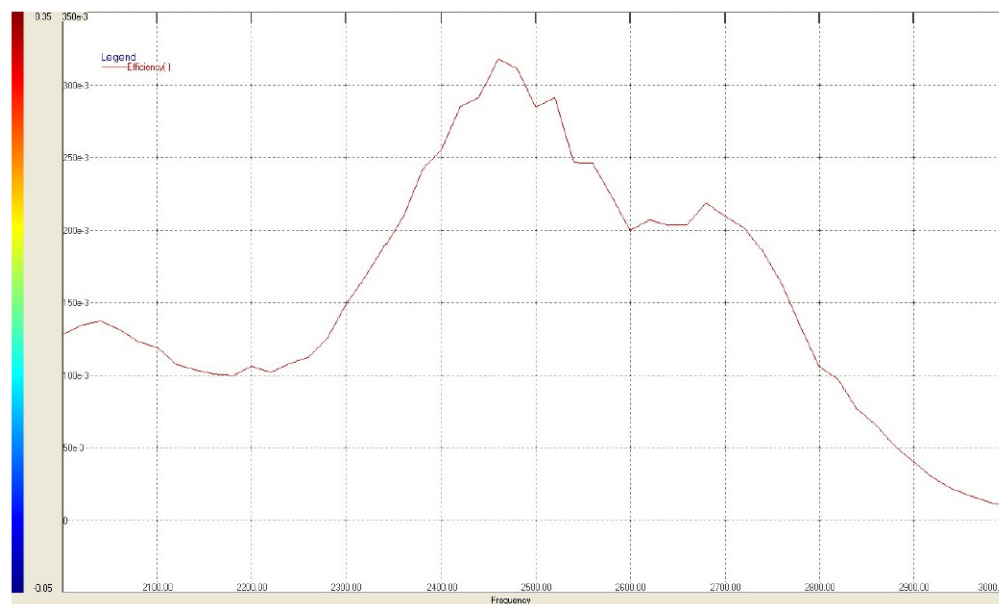


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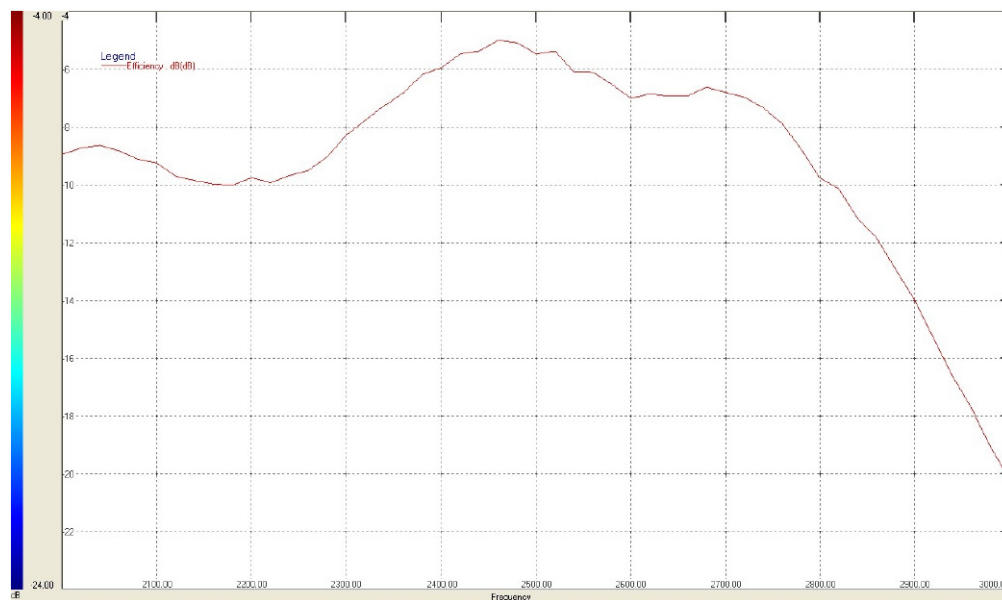


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## Efficiency



## Average Gain



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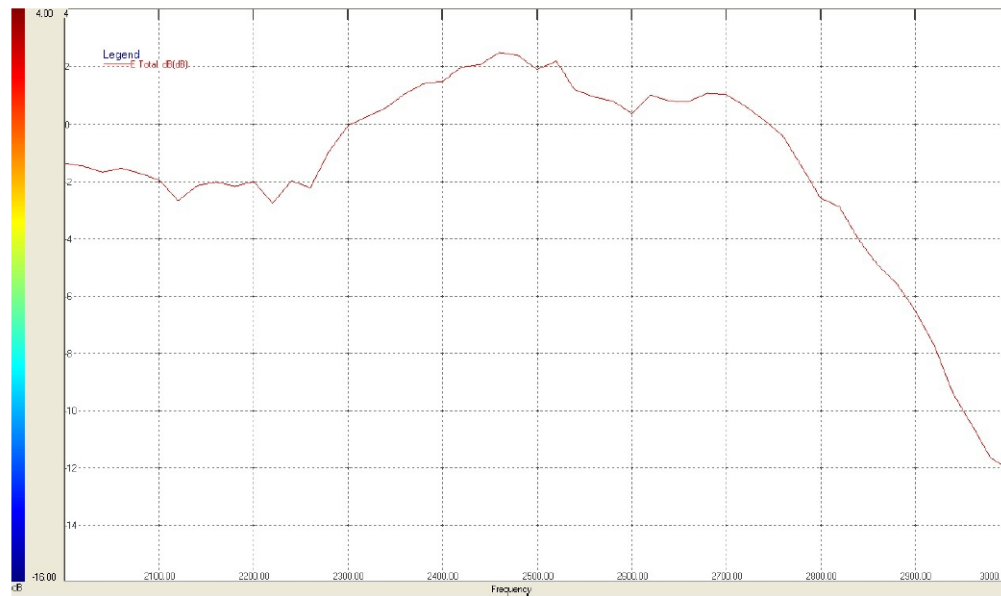


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## Peak Gain



BT	2400 MHz	2450 MHz	2500 MHz
Efficiency (%)	25.56	30.50	28.50
Average Gain (dBi)	-5.92	-5.16	-5.54
Peak Gain (dBi)	1.52	2.28	1.89

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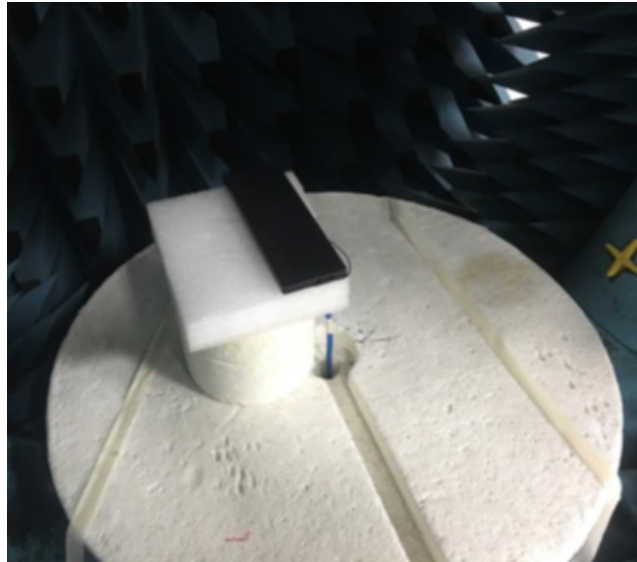


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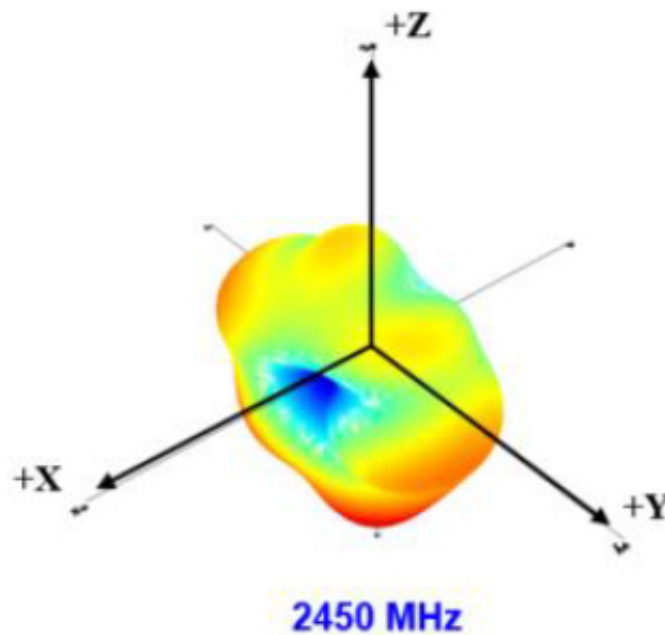


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## Radiation Pattern @ 2450MHz



### 3D Pattern



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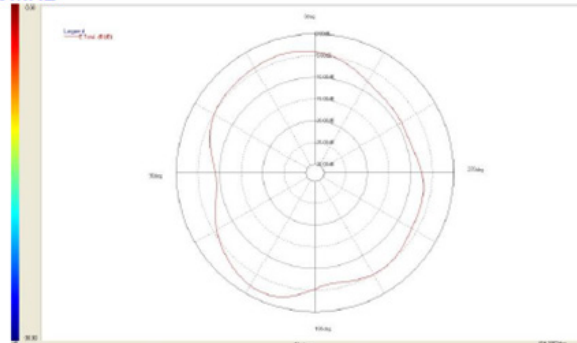


15.0 x 4.0 x 0.8 mm  
RoHS/RoHS II Compliant  
MSL = NA

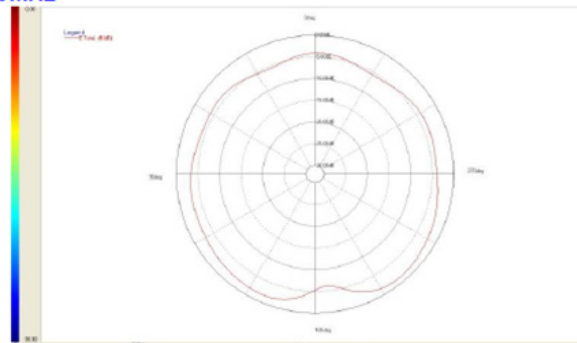
## 2D Pattern

Measurement Plane	XZ	YZ	XY
2450 MHz	-1.91 dBi	-1.24 dBi	-3.25 dBi

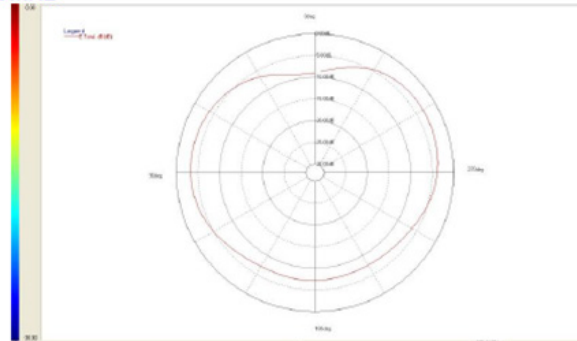
XZ-Plane 2450MHz



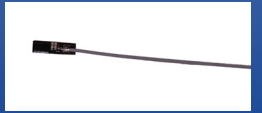
YZ-Plane 2450MHz



XY-Plane 2450MHz



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## Packaging

Each carton is 330 x 280 x 254 mm and has 3600 pcs of antenna.

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