

Description: 3x3 MiMo dual band WiFi/BT

**FPC** antenna

**PART NUMBER: W6103B0100** 

Series: Gemini



## Features:

- · WiFi, Bluetooth, BLE, ZigBee
- One antenna 3 x dual band 2400-2500MHz, 4900-5900MHz
- · Flexible to fit tight spaces
- High Efficiency over 70%
- Standard and customized cable lengths and connectors

## **Applications:**

- WiFi-6
- 802.11a/b/g/n/ac/ax
- Challenging RF environments
- IoT including security, video, graphics, bluetooth
- IoT SmartGrid, Meters, Sensor Networks
- Transportation
- Bluetooth connections
- 2x2, 3x3 MiMo WiFi devices

All dimensions are in mm / inches

Issue: 2035

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

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## **ELECTRICAL SPECIFICATIONS**

Frequency 2.4-2.5/4.9-5.9 GHz

Nominal Impedance  $50 \Omega$ 

VSWR < 2

Max Gain frequency 4.5 +/-1 dBi

Avg Gain frequency -2 +/-0.5dBi

Efficiency 70%

Radiation Pattern Omni

Polarization Linear

Power withstanding 3 W

Connector type IPEX 20278-112R-13 or equivalent

Cable type Low loss Φ1.13mm Coaxial Cable

Cable length 100mm

\* All RF parameters measured on 2mm thick PC plate



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MECHANICAL SPECIFICATIONS	
Color	Black
Weight	1.8 g
Thickness of FPC with adhesive	0.15mm
Overall Length	3.15 INCHES
Fixing system	Adhesive Tape, 3M6677 PC

## **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature -40~85° C





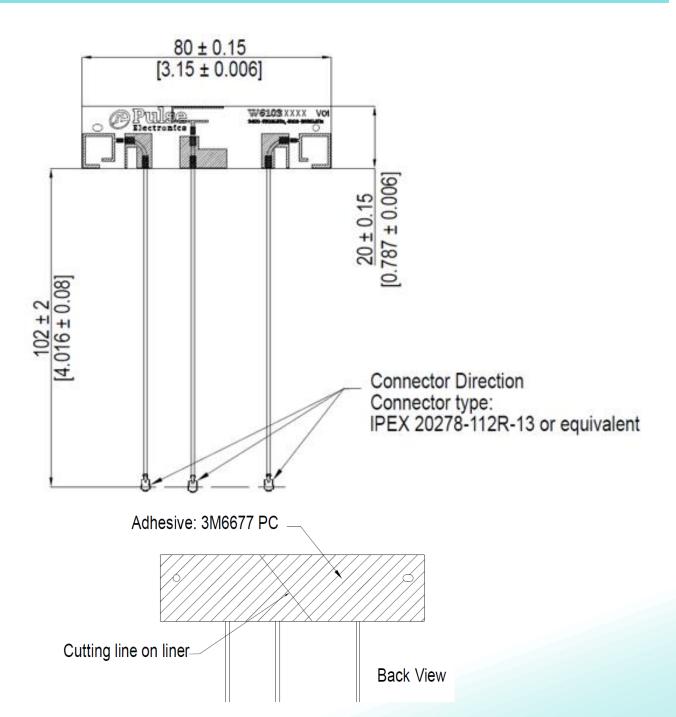
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## **MECHANICAL DRAWING**









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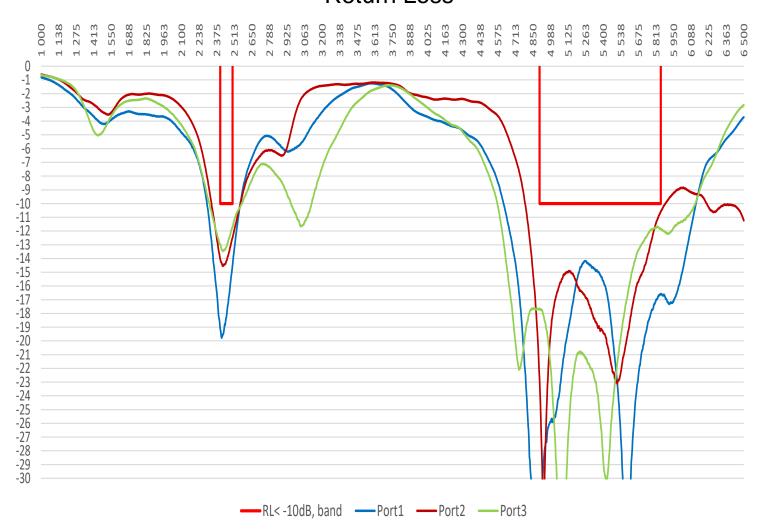
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### **CHARTS**

## **Return Loss**





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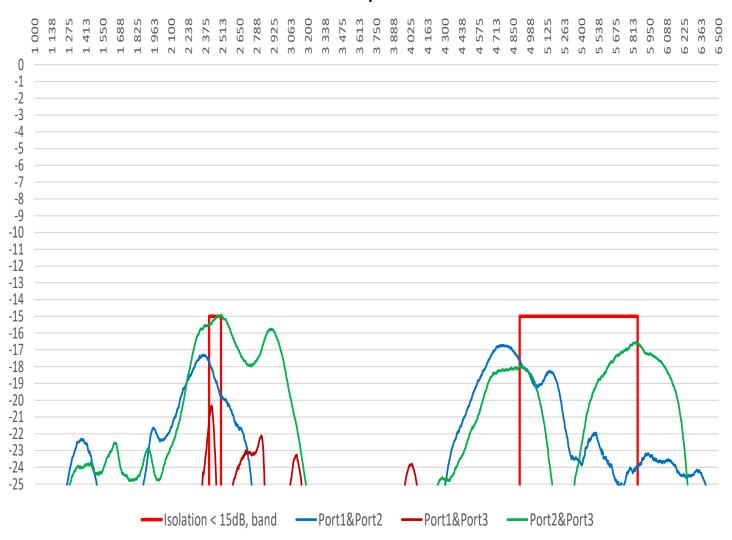
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### **CHARTS**

## Port to port isolation









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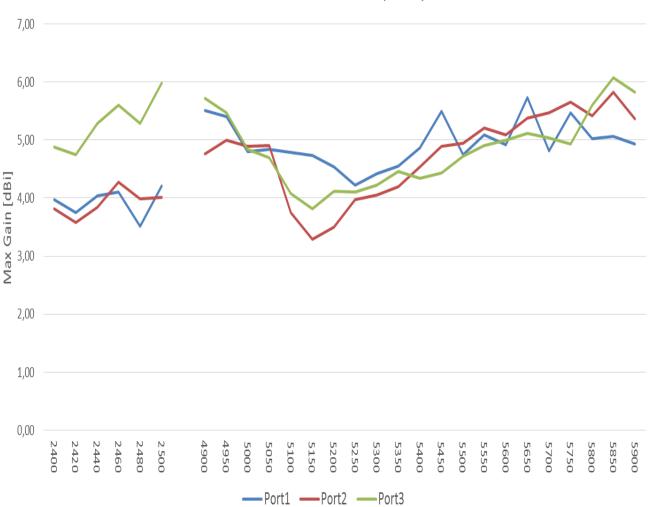
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## **CHARTS**

# Peak Gain(dBi)









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## **CHARTS**

# Average Gain(dBi)





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## **CHARTS**

## Efficiency(%)









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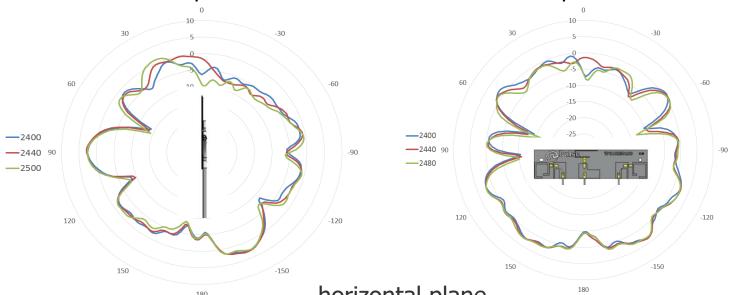
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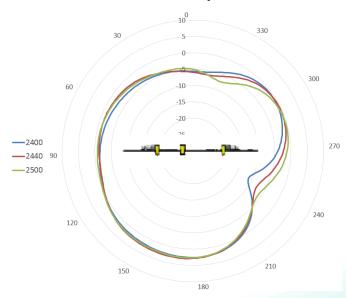
### **CHARTS**

Typical free space radiation pattern—port1: 2.4-2.5GHz

Vertical plane, Phi0

Vertical plane, Phi90







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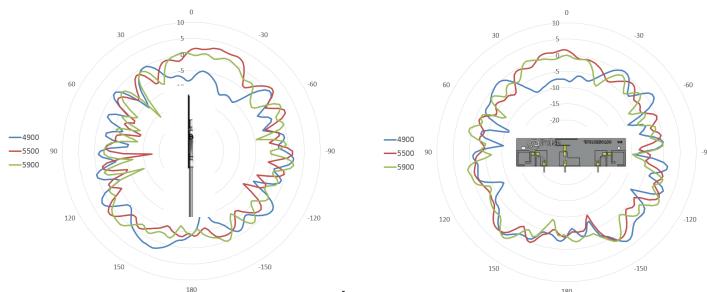
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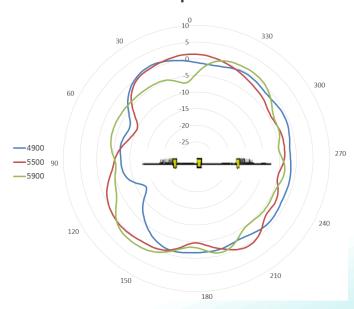
### **CHARTS**

Typical free space radiation pattern—port1: 4.9-5.9GHz

Vertical plane, Phi0 Vertical plane, Phi90



## horizontai piane





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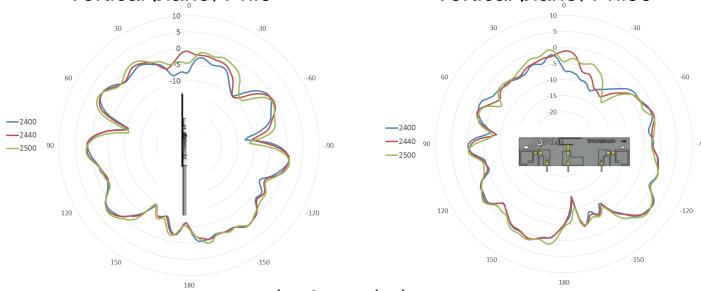
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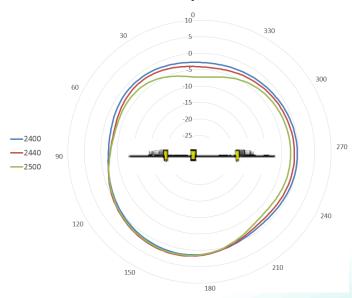
### **CHARTS**

Typical free space radiation pattern—port2: 2.4-2.5GHz

Vertical plane, Phi0

Vertical plane, Phi90







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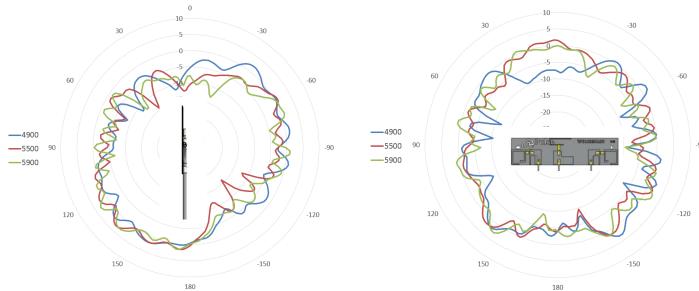
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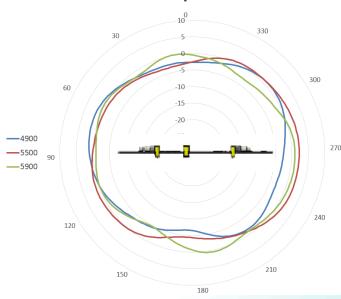
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## **CHARTS**

Typical free space radiation pattern—port2: 4.9-5.9GHz

Vertical plane, Phi0 Vertical plane, Phi90







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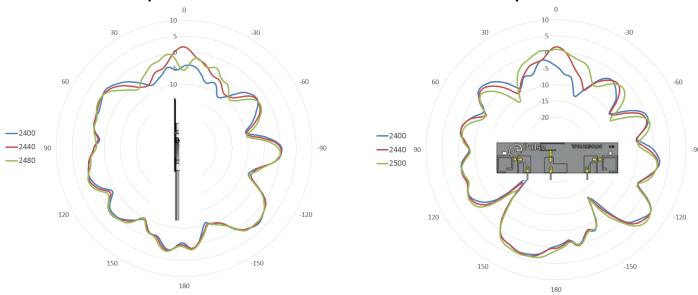
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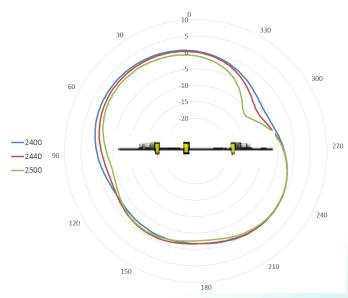
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Typical free space radiation pattern—port3: 2.4-2.5GHz

Vertical plane, Phi0

Vertical plane, Phi90







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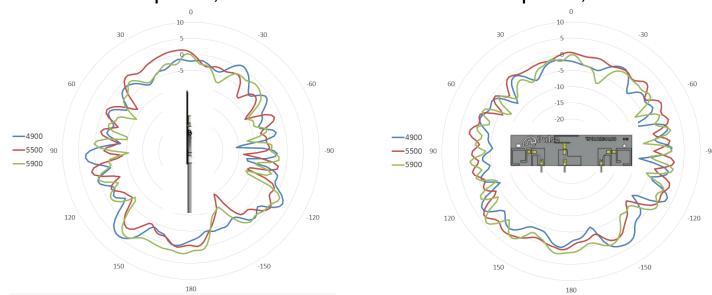
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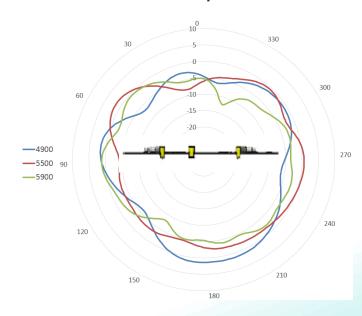
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### **CHARTS**

Typical free space radiation pattern—port3: 4.9-5.9GHz

Vertical plane, Phi0 Vertical plane, Phi90







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## **PACKAGING**

5 antennas packed in one plastic bag

100 bags(TBD) of antennas packed in a cardboard box

1 label on each box with qty, part number, date code.