

SPECIFICATION

Part No. : **GW26.0151**

Product Name : 2.4GHz Miniature Screw mount Monopole Antenna

Feature : RP-SMA(M) Connector
IP65
Peak Gain Max 1.8dBi
Height 30.3mm Diameter 7.9mm
ROHS Compliant



1 Introduction

The GW.26 2.4 GHz Monopole RP-SMA(M) mount antenna is ideal for 2.4 GHz wireless applications such as Bluetooth and Wireless LAN.

Many module manufacturers specify peak gain limits for any antennas that are to be connected to that module. Those peak gain limits are based on free-space conditions. In practice, the peak gain of an antenna tested in free-space can degrade by at least 1 or 2dBi when put inside a device. So ideally you should go for a slightly higher peak gain antenna than mentioned on the module specification to compensate for this effect, giving you better performance.

Upon testing of any of our antennas with your device and a selection of appropriate layout, integration technique, or cable, Taoglas can make sure any of our antennas' peak gain will be below the peak gain limits. Taoglas can then issue a specification and/or report for the selected antenna in your device that will clearly show it complying with the peak gain limits, so you can be assured you are meeting regulatory requirements for that module.

For example, a module manufacturer may state that the antenna must have less than 2dBi peak gain, but you don't need to select an embedded antenna that has a peak gain of less than 2dBi in free-space. This will give you a less optimized solution. It is better to go for a slightly higher free-space peak gain of 3dBi or more if available. Once that antenna gets integrated into your device, performance will degrade below this 2dBi peak gain due to the effects of GND plane, surrounding components, and device housing. If you want to be absolutely sure, contact Taoglas and we will test. Choosing a Taoglas antenna with a higher peak gain than what is specified by the module manufacturer and enlisting our help will ensure you are getting the best performance possible without exceeding the peak gain limits.

Connector mount is fully customizable.

2 Specification

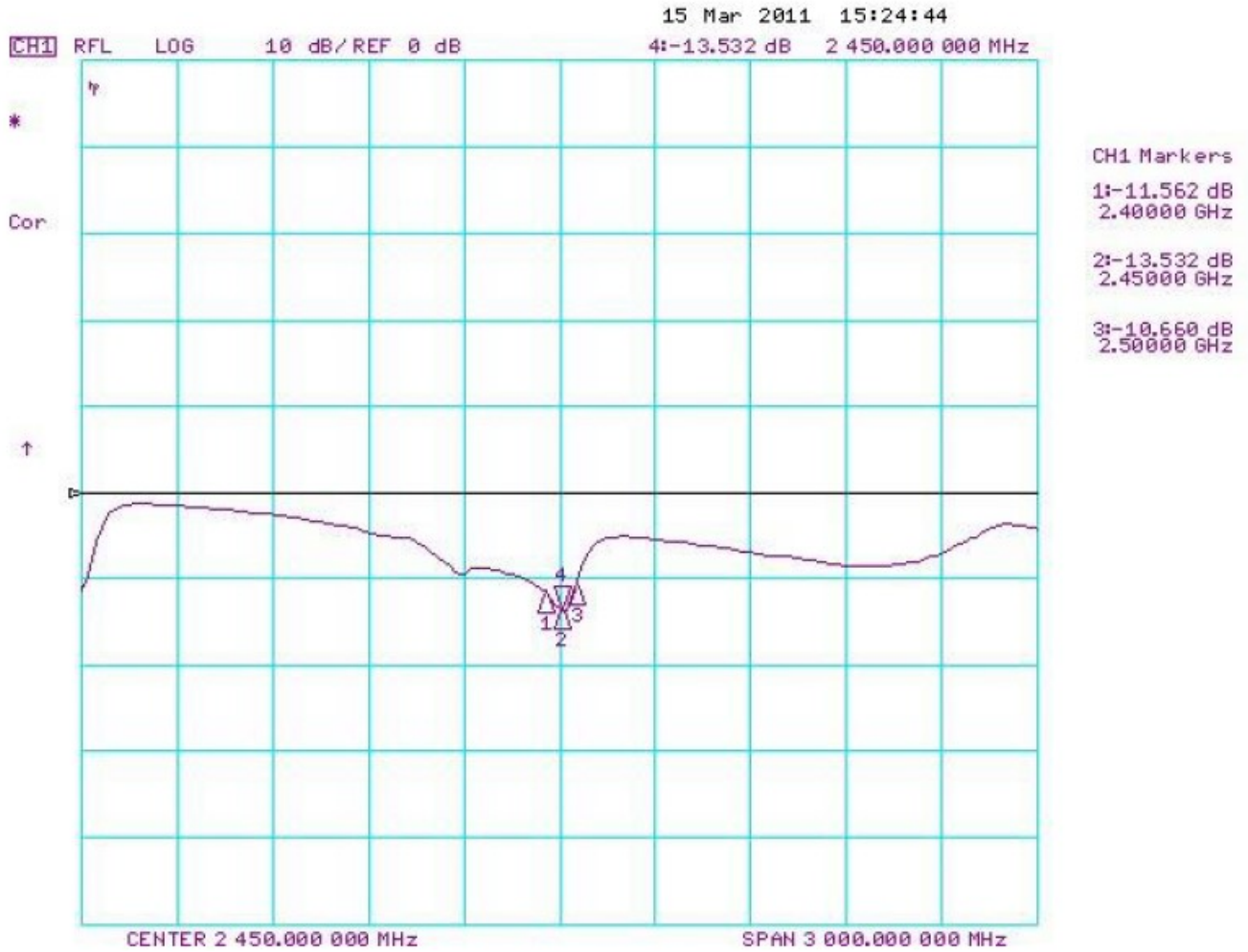
| Wi-Fi 2.4GHz | |
|-----------------------|-----------------------|
| Frequency | 2400~2500MHz |
| Bandwidth | 100MHz |
| Peak Gain | Max 1.8dBi |
| Radiation Efficiency | > 40% |
| Radiation | Omni-directional |
| Polarization | Vertical |
| Power Handling 1W Max | Power Handling 1W Max |
| Electrical Wave | 1/2 Monopole |
| Impedance | 50Ω |
| Operating Temperature | -40°C ~ +85°C |
| Storage Temperature | -40°C ~ +85°C |

3 Mechanical Properties

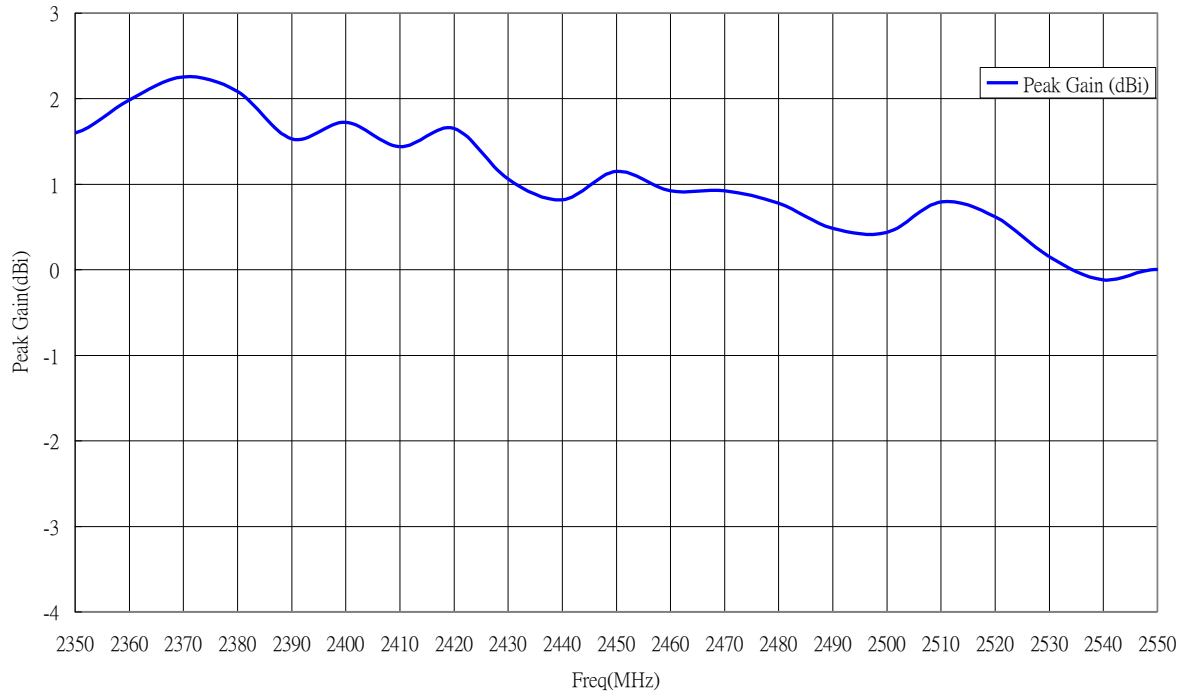
| Mechanical Properties | |
|-----------------------|-----------------|
| Colour | Black and Green |
| IP rating | IP-65 |
| Connector | RP-SMA(M) |

4 Antenna Characteristics

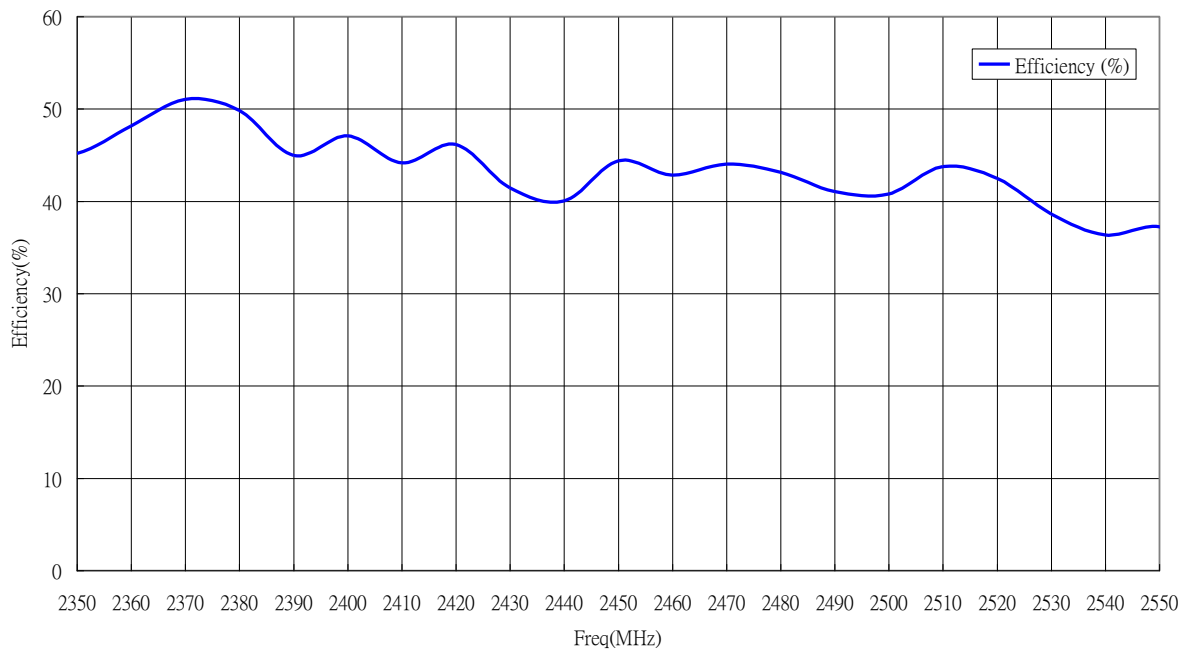
4.1 Antenna S11



4.2 Antenna Peak Gain

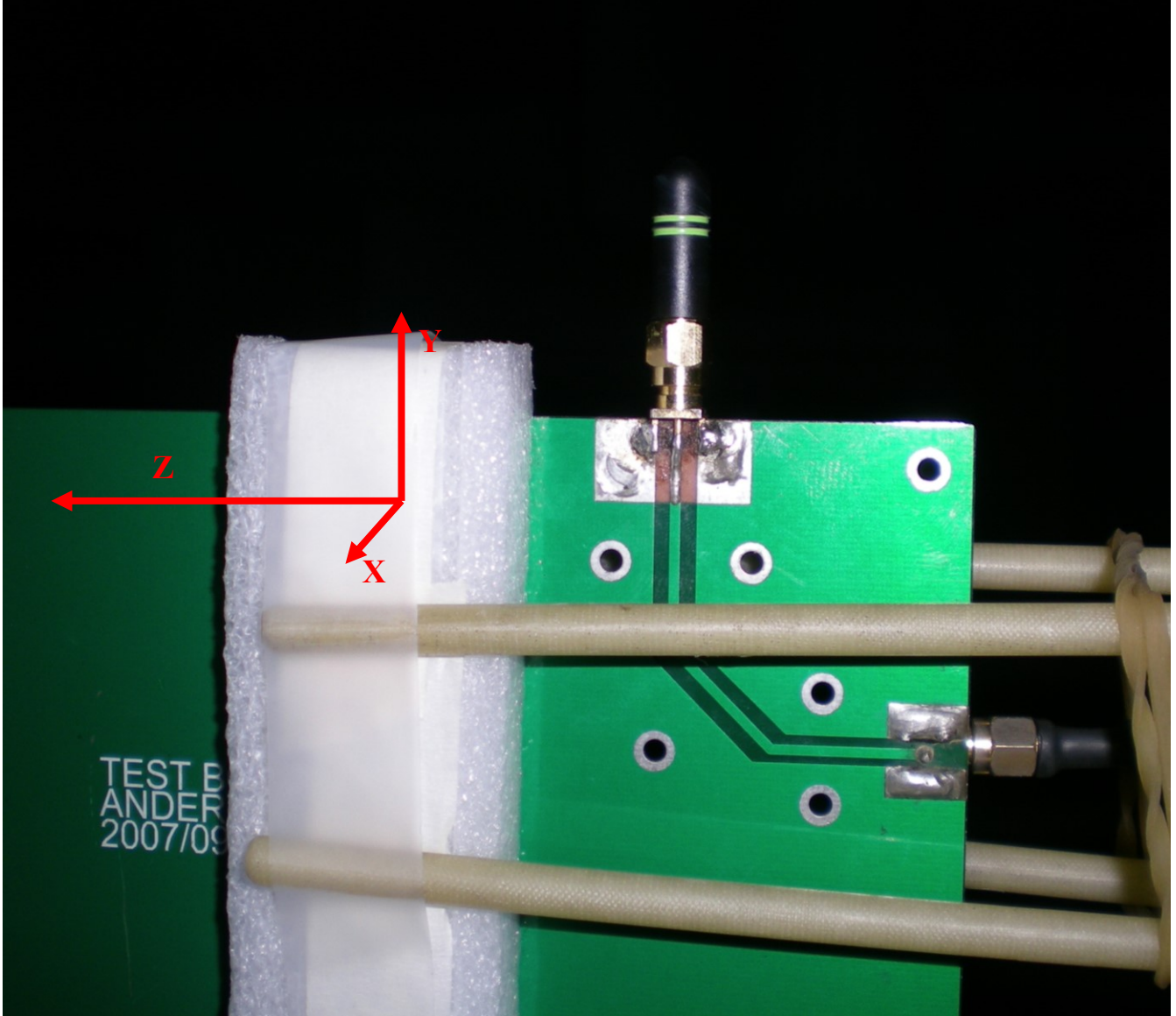


4.3 Antenna Efficiency

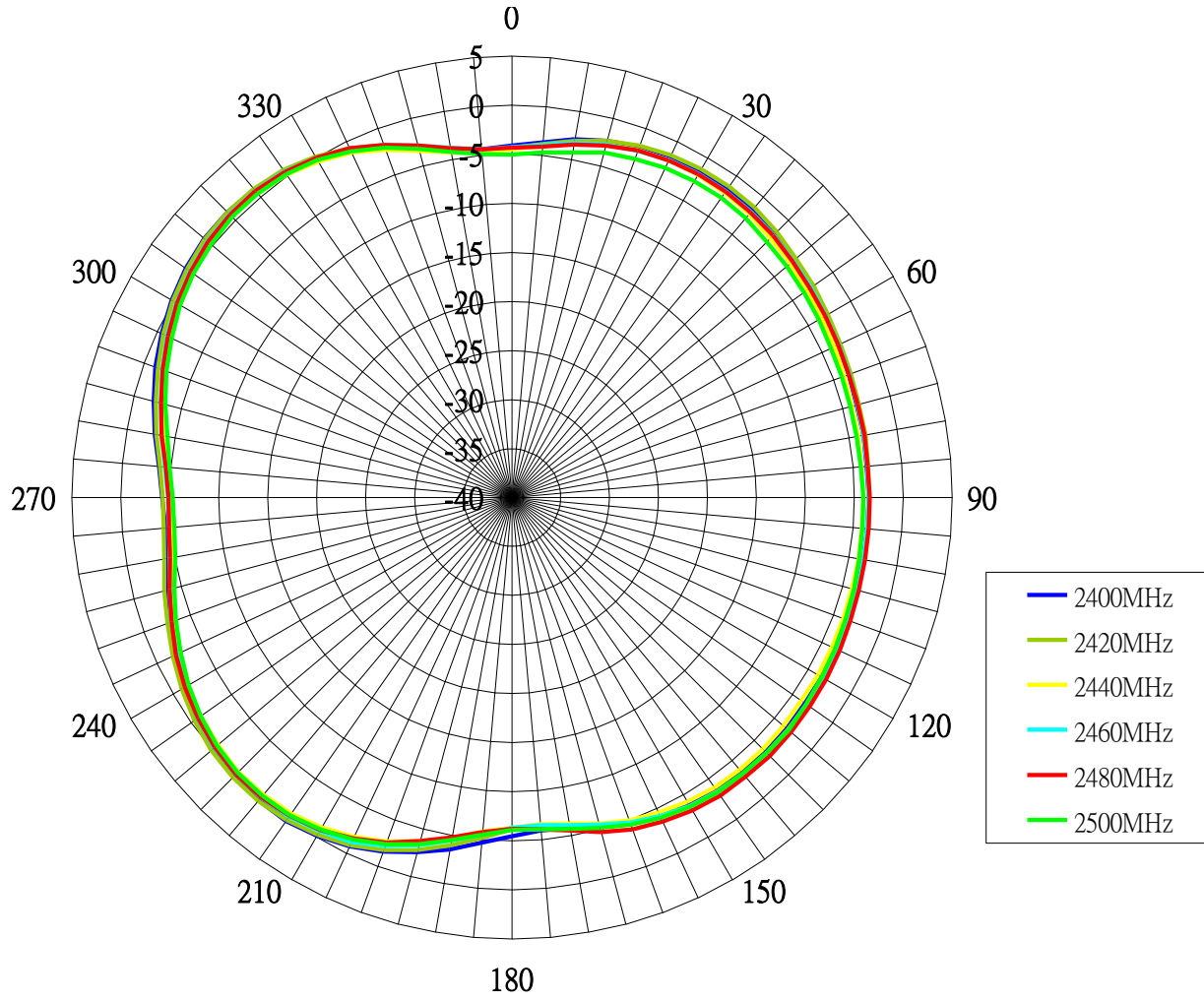




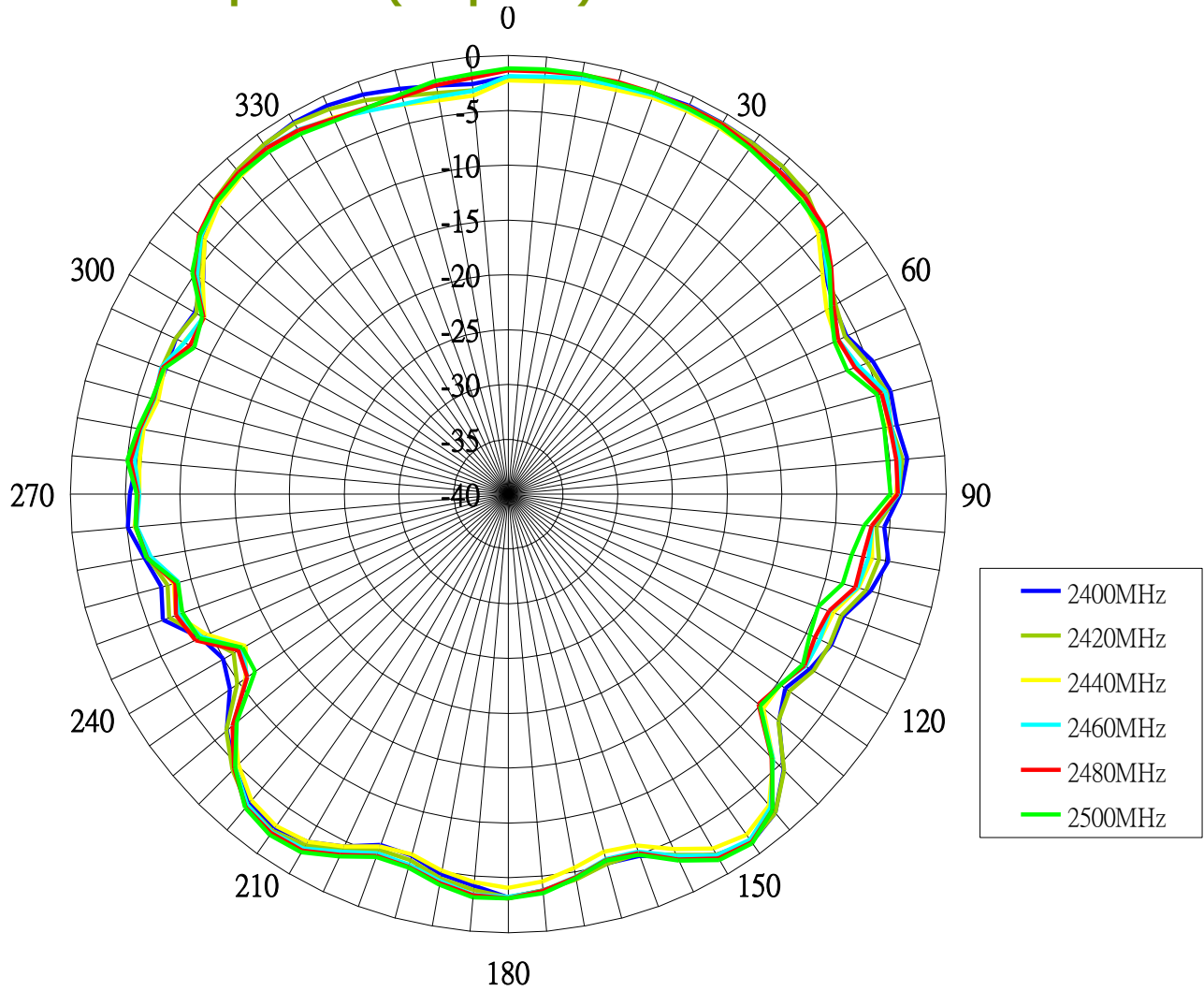
4.4 Antenna pattern (XY plane)



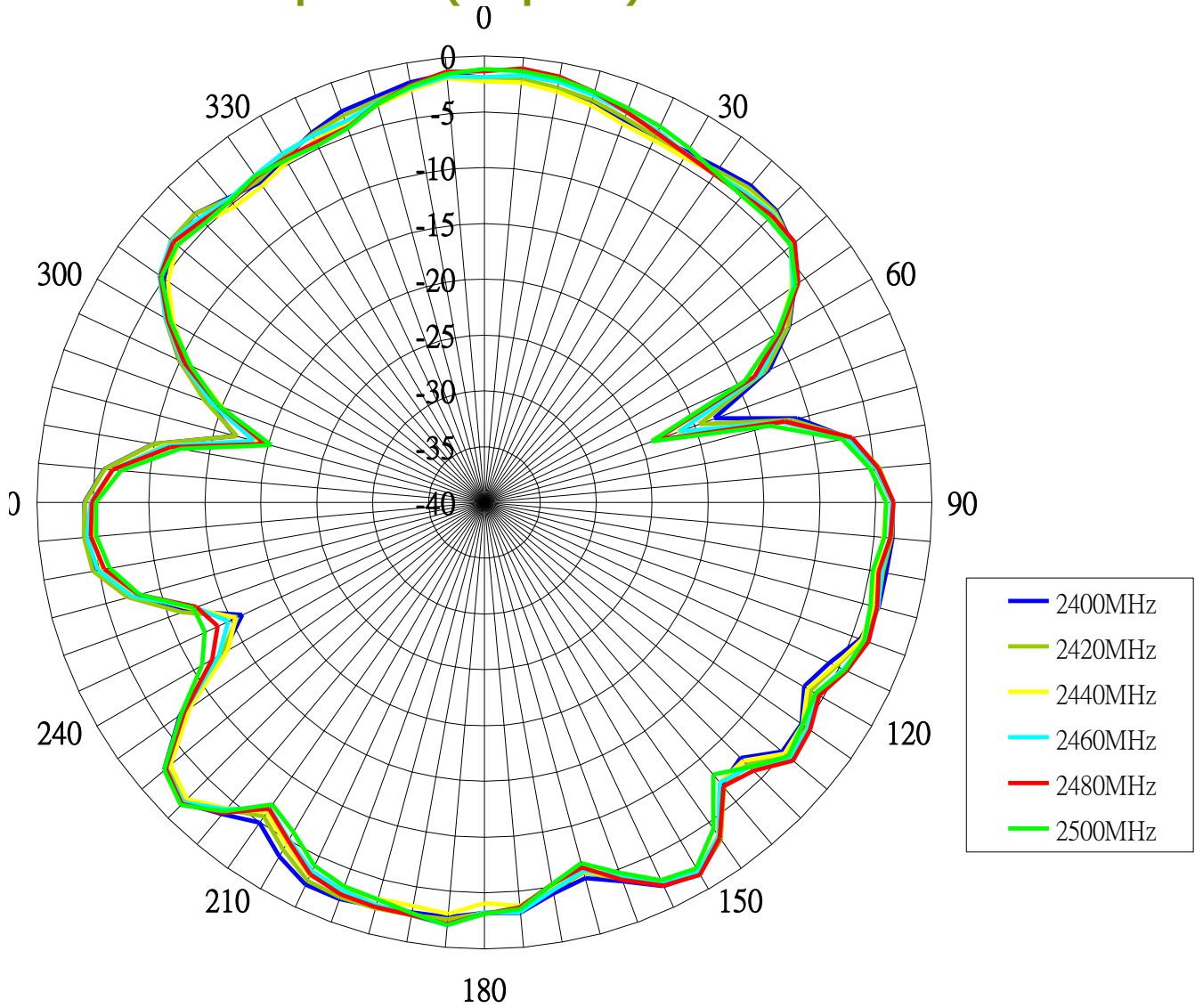
4.5 Antenna pattern (XY plane)



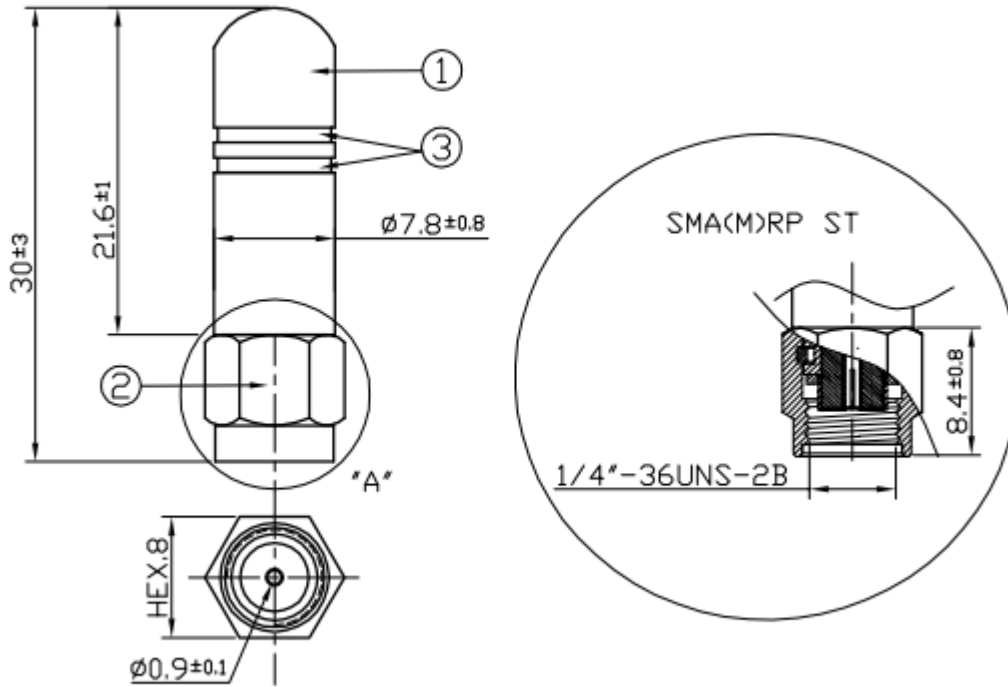
4.6 Antenna pattern (XZ plane)



4.7 Antenna pattern (YZ plane)



5. Outline Drawings and Structure

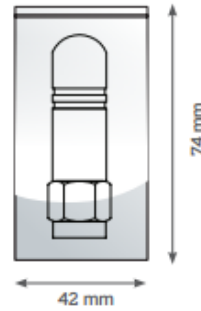


| | Name | Material | Finish | QTY |
|---|-----------------|---------------|--------|-----|
| ① | Antenna Housing | TPEE | Black | 1 |
| ② | SMA(M)RP ST | Brass | Gold | 1 |
| ③ | Colour Stripes | Acrylic Paint | Green | 1 |

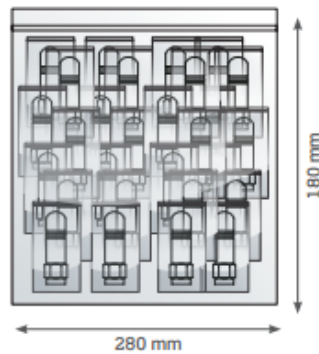
6. Packaging

GW.26.0151 Packaging Specifications

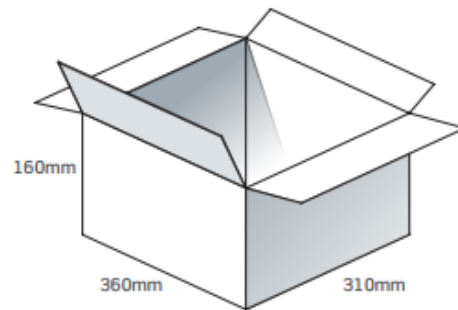
1 pcs GW.26.0151 per PE Bag
Bag Dimensions - 74 x 42 mm
Weight - 4g



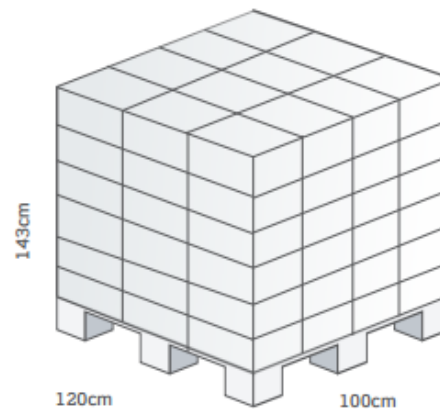
100 pcs GW.26.0151 per PE Large Bag
Bag Dimensions - 280x 180mm
Weight - 400kg



1500 pcs GW.26.0151 per carton
Carton - 360x 310 x 160mm
Weight - 6.5Kg



Pallet Dimensions 120x 100 x 143cm
72 Cartons per Pallet
12 Cartons per layer
6 Layers





Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice.

Taoglas reserves the rights to this document and the information contained herein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited.

Copyright © Taoglas Ltd.