

# Datasheet



**TAOGLAS®**

2.4GHz Miniature Screw Terminal Mount Monopole Antenna

**Part No:**  
**GW26.0151**

#### **Description**

2.4GHz Miniature Terminal Mount Monopole Antenna

#### **Features:**

2.4GHz Wi-Fi® Bluetooth® Operational  
RP-SMA(M) Connector  
IP Rating: IP65  
Height 30.3mm Diameter 7.9mm  
ROHS & REACH Compliant

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## Changelog

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## 1. Introduction



The **GW.26** 2.4 GHz Monopole RP-SMA(M) terminal 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.

It has a fully IP65 rated waterproof robust housing, ensuring high reliability. Connector is fully customizable.

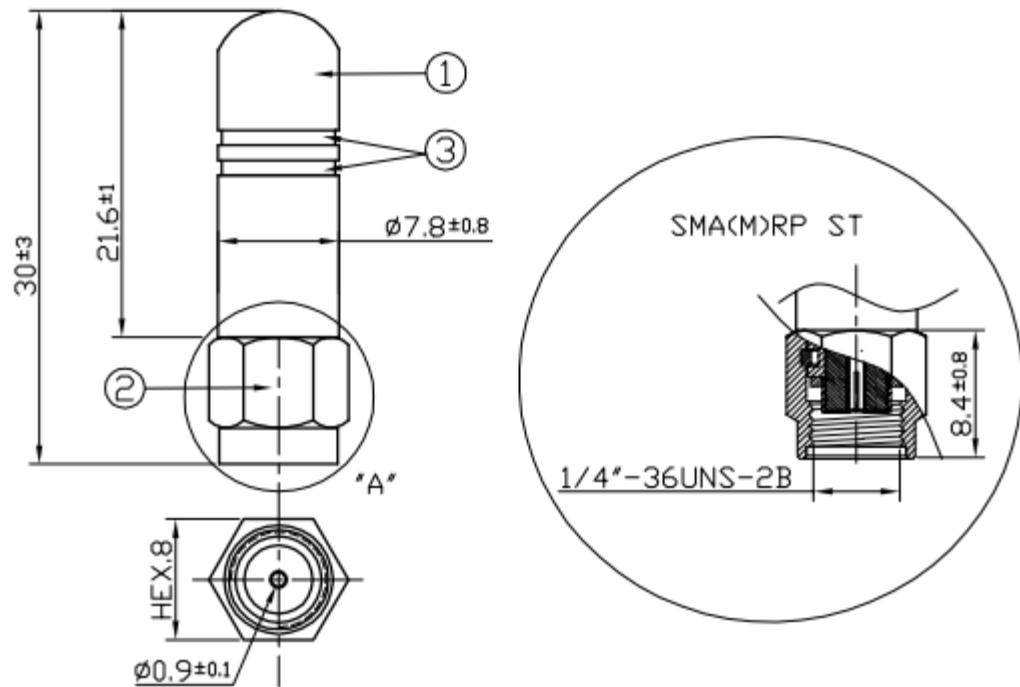
## 2. Specification

Electrical								
Band	Frequency (MHz)	Efficiency (%)	Average Gain (dB)	Peak Gain (dBi)	Impedance	Polarization	Radiation Pattern	Power consumption
Wi-Fi 2.4 GHz	2400-2500	48.7	-3.12	2.24	50 Ω	Linear	Omni directional	10W

Mechanical	
Dimensions	30mm x ø7.9mm
Material	TPU
Connector	RP-SMA(M)

Environmental	
Operating Temperature	-40°C ~ +85°C
Storage Temperature	-40°C ~ +85°C
IP Rating	IP65

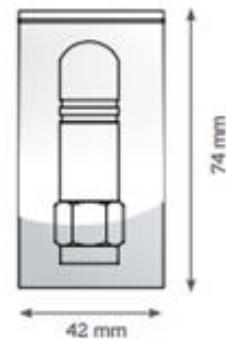
### 3. Mechanical Drawing



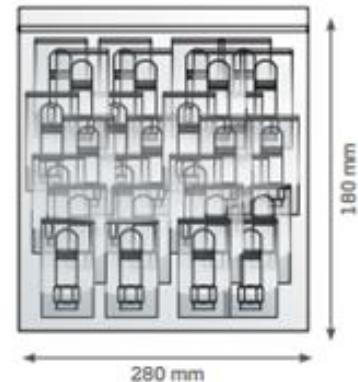
	Name	Material	Finish	QTY
(1)	Antenna Housing	TPEE	Black	1
(2)	SMA(M)RP ST	Brass	Gold	1
(3)	Colour Stripes	Acrylic Paint	Green	1

## 4. Packaging

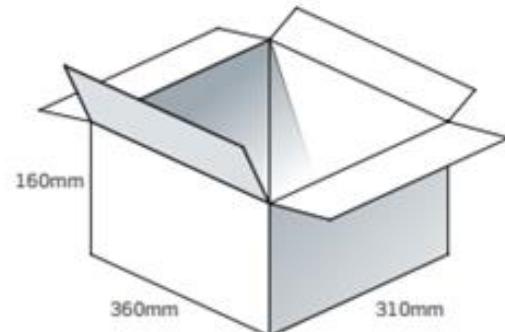
1 pcs GW.26.0151 per PE Bag  
 Bag Dimensions - 74 x 42 mm  
 Weight - 4g



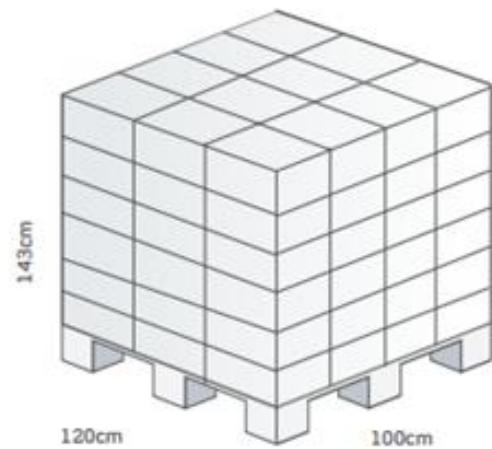
100 pcs GW.26.0151 per PE Large Bag  
 Bag Dimensions - 280x 180mm  
 Weight - 400g



1500 pcs GW.26.0151 per carton  
 Carton - 360x 310 x 160mm  
 Weight - 6.1Kg

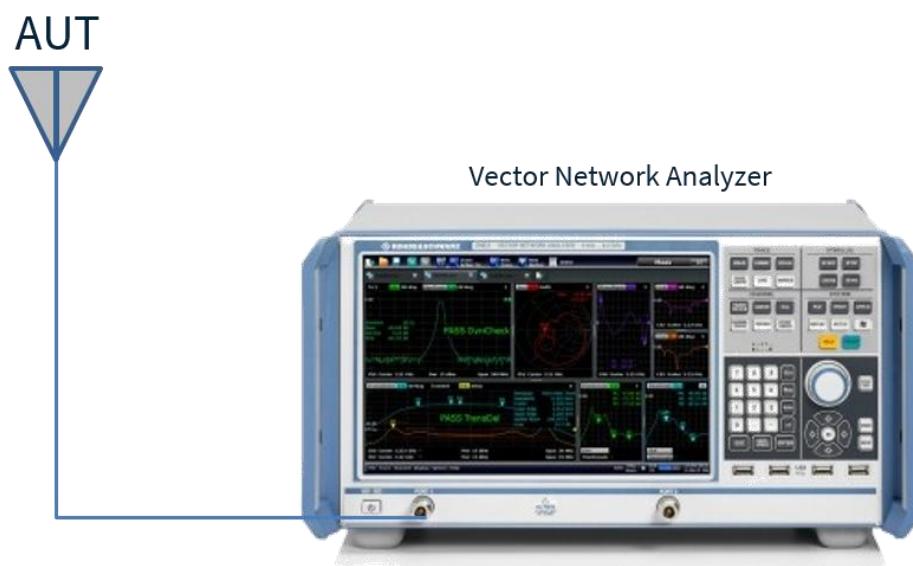


Pallet Dimensions 120x 100 x 143cm  
 72 Cartons per Pallet  
 12 Cartons per layer  
 6 Layers



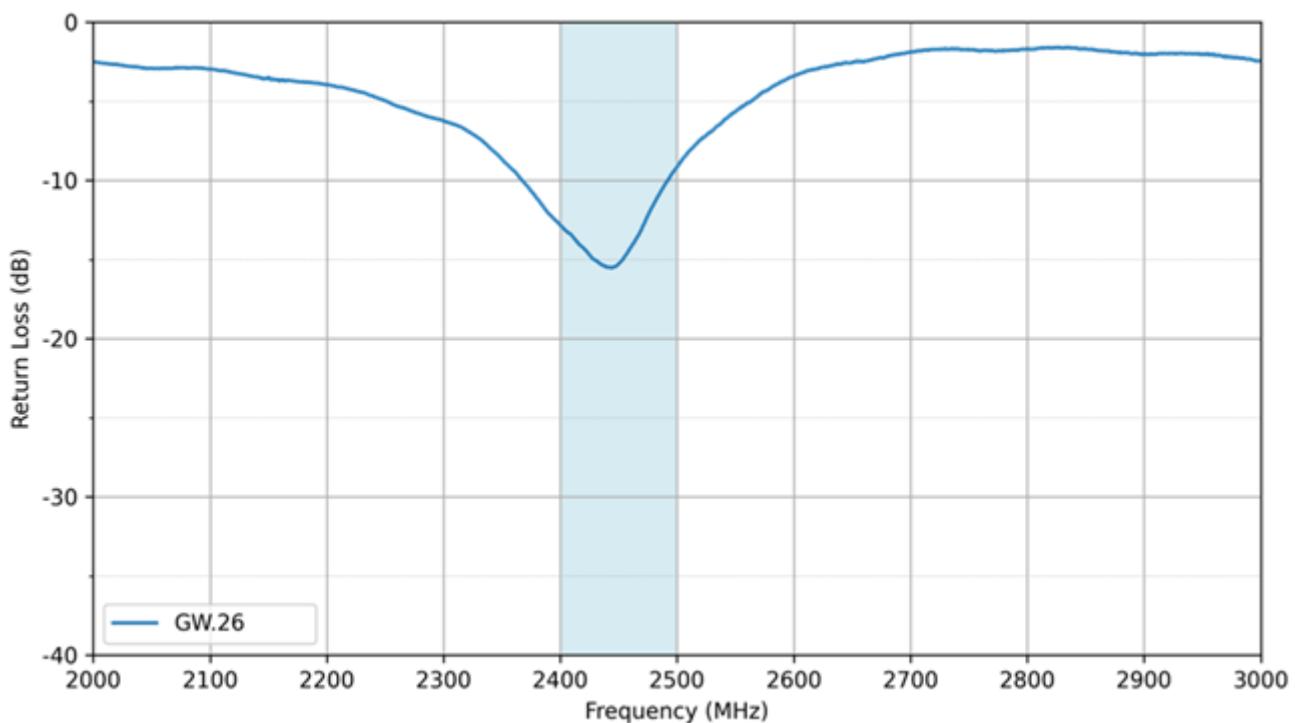
## 5. Antenna Characteristics

### 5.1 Test Setup

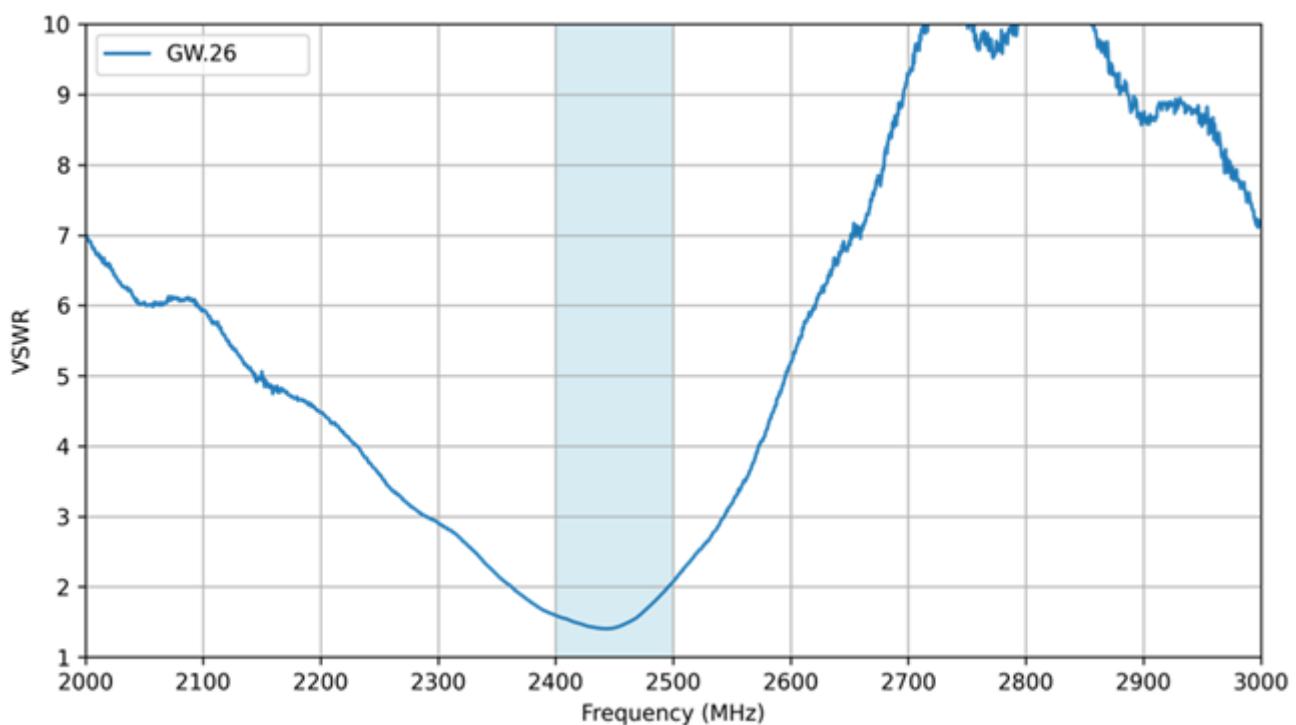


Tested on 150x90mm Ground Plane

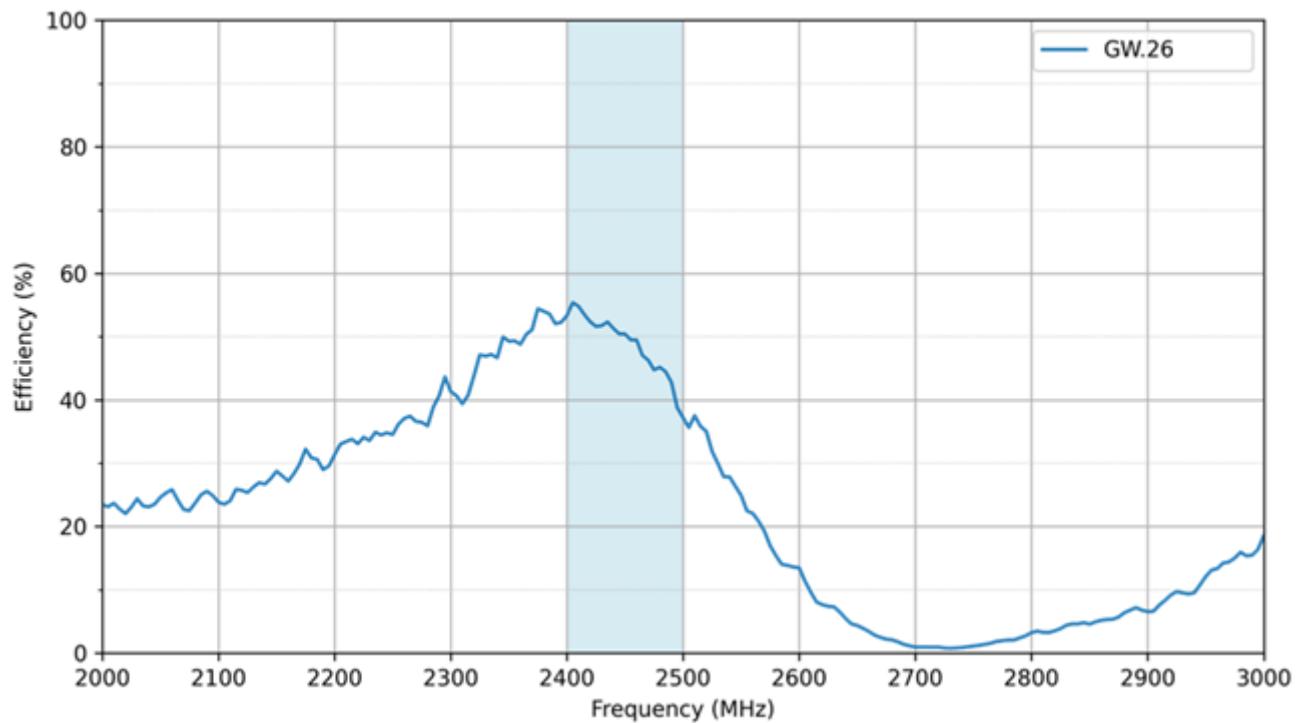
## 5.2 Return Loss



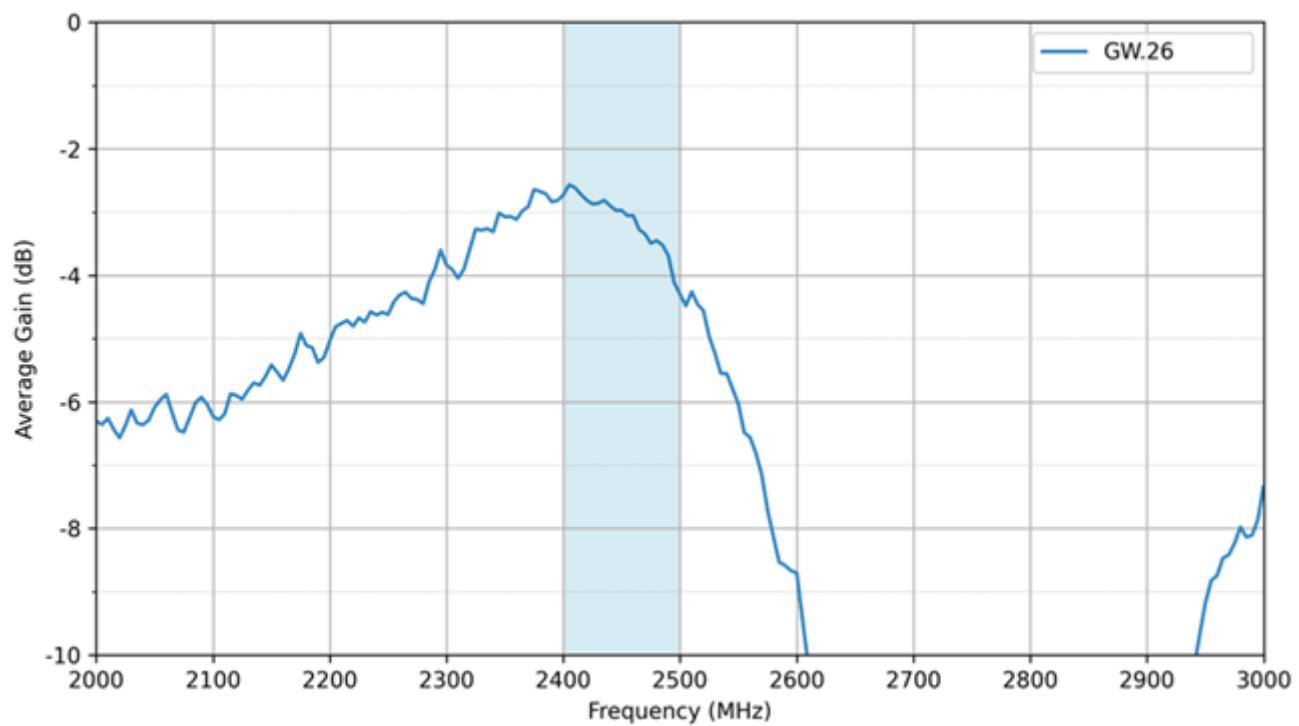
## 5.3 VSWR



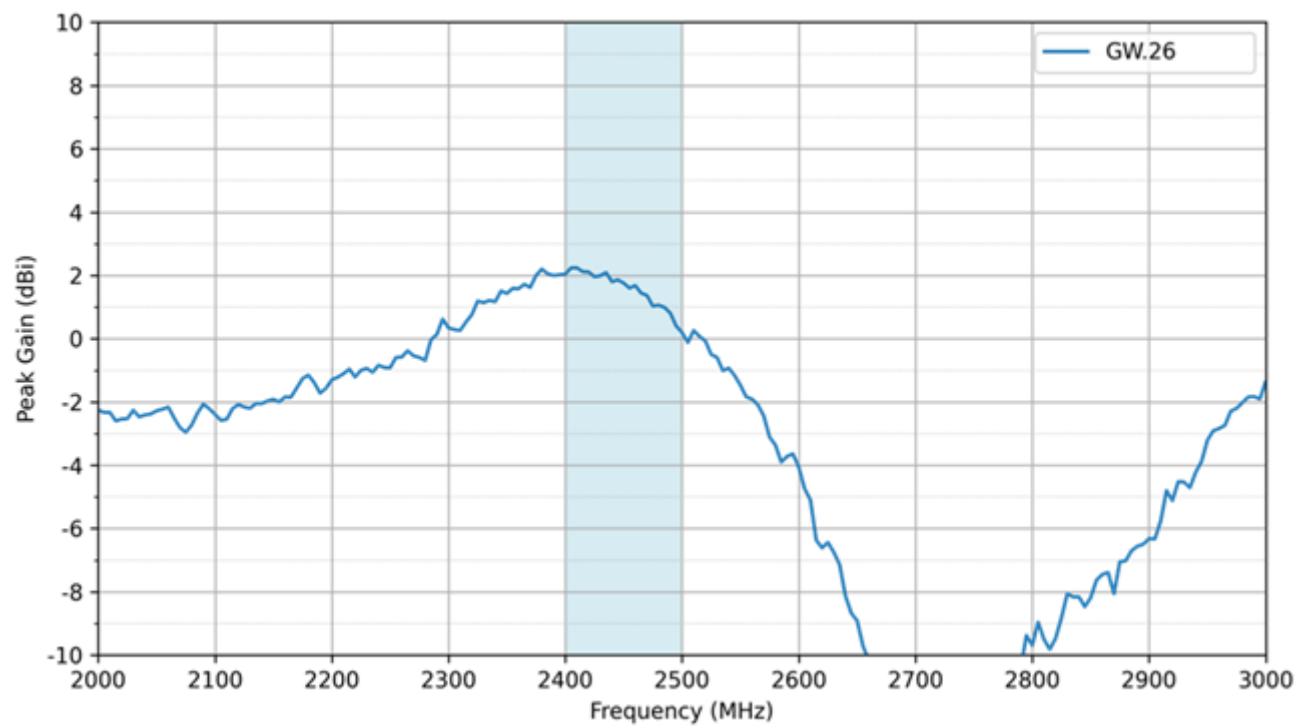
## 5.4 Efficiency



## 5.5 Average Gain

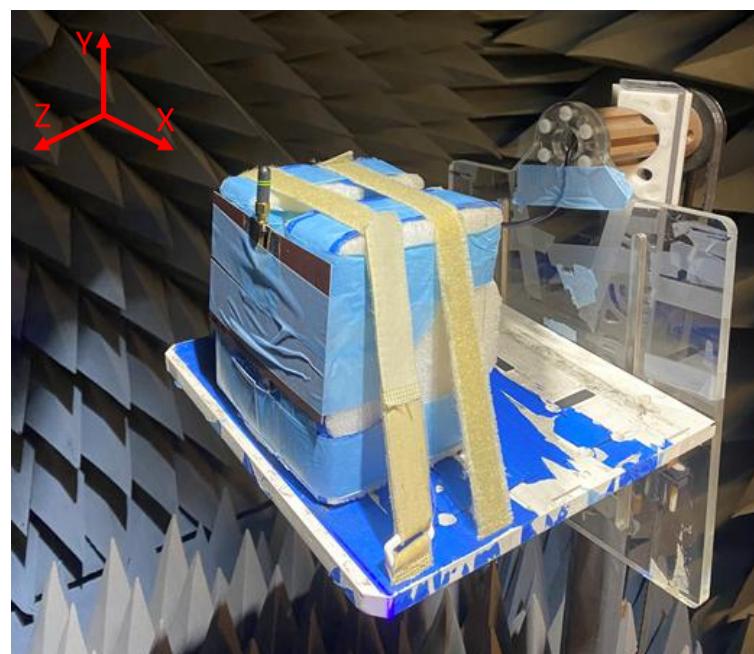
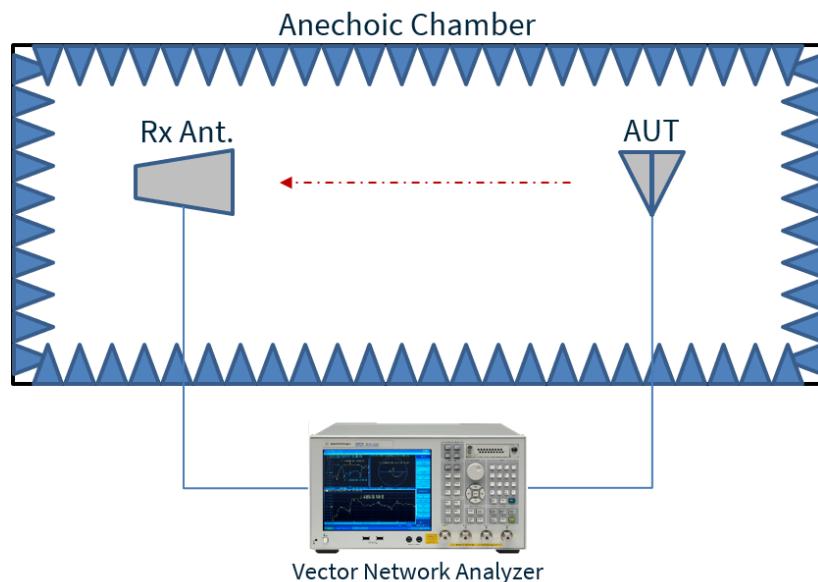


## 5.6 Peak Gain



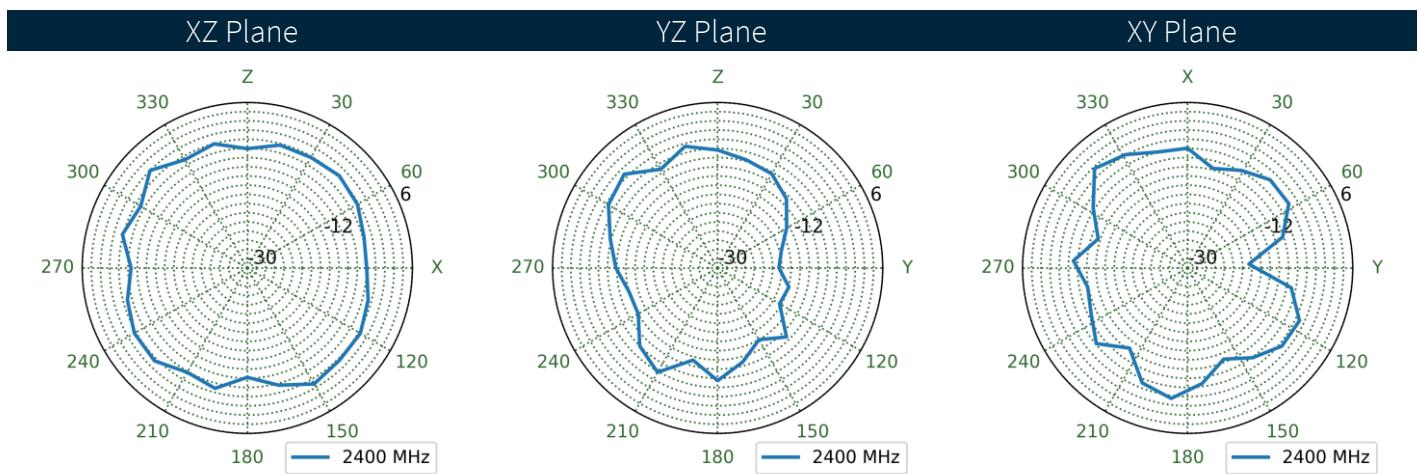
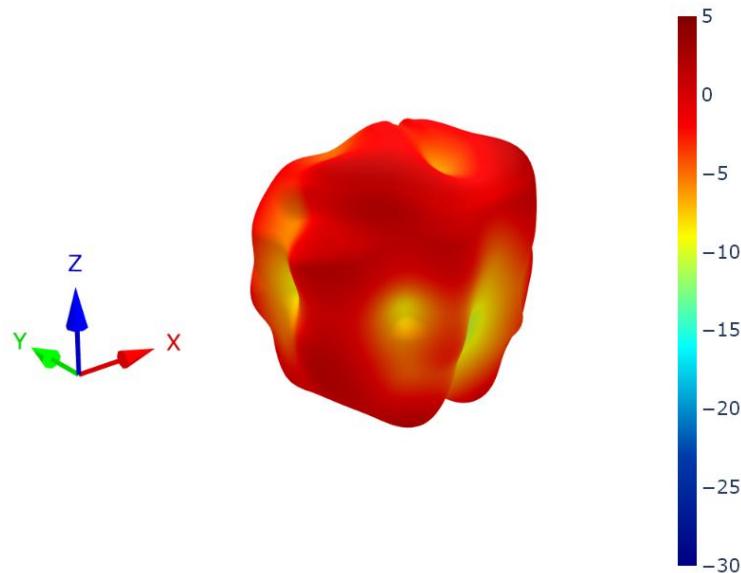
## 6. Radiation Patterns

### 6.1 Test Setup

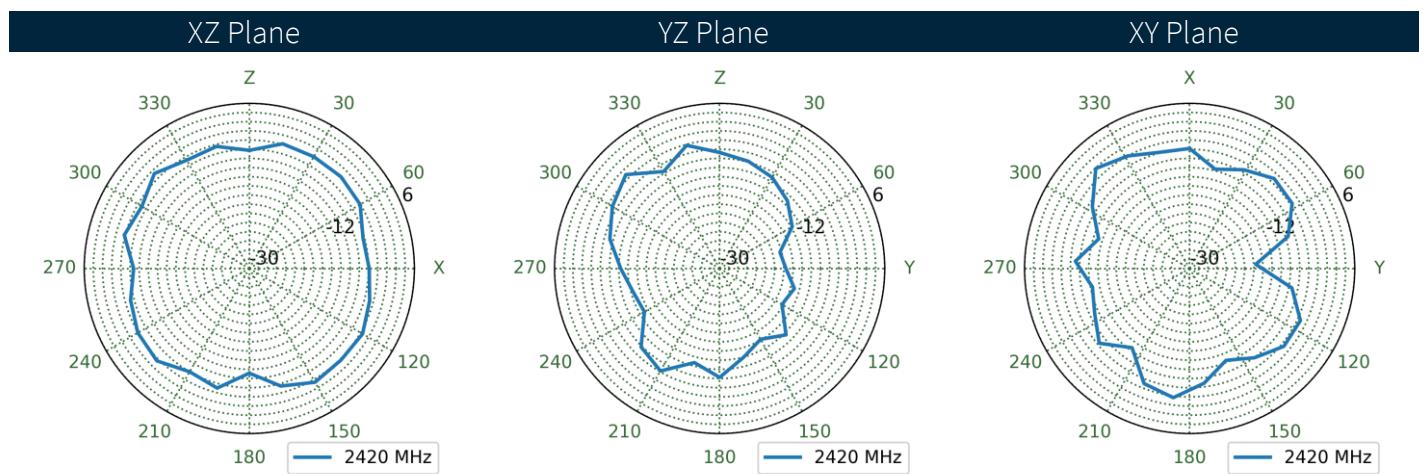
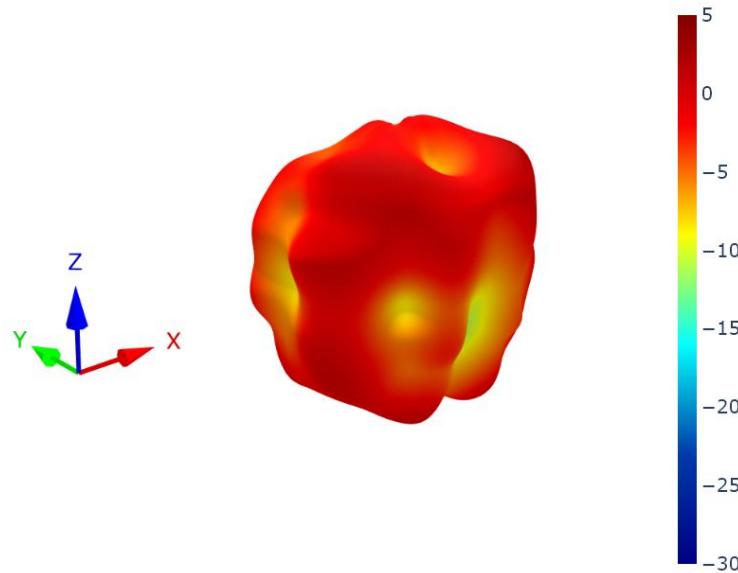


Tested on 150x90mm Ground Plane

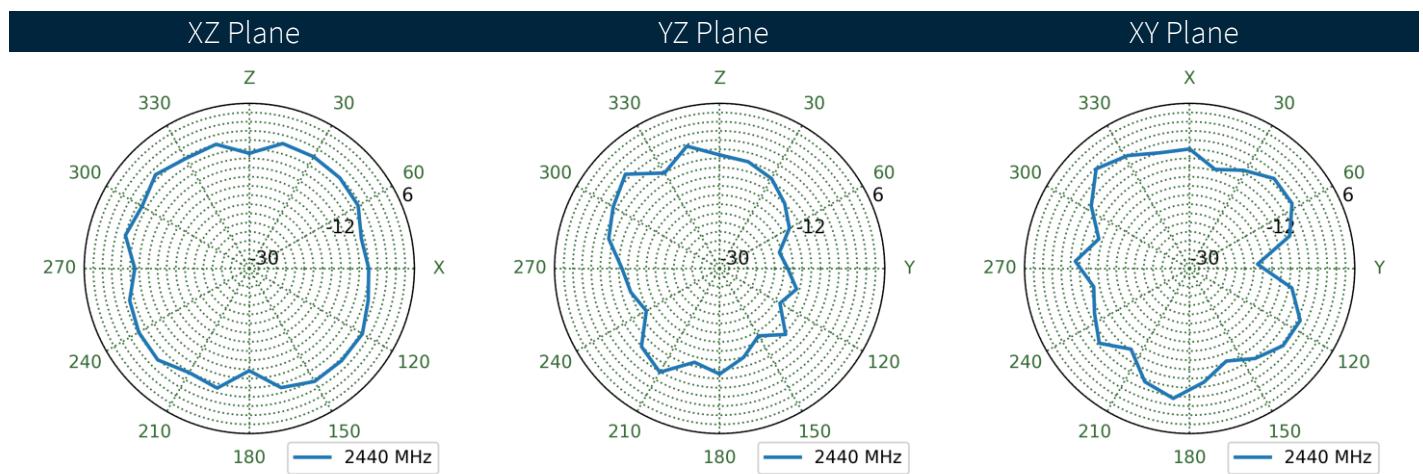
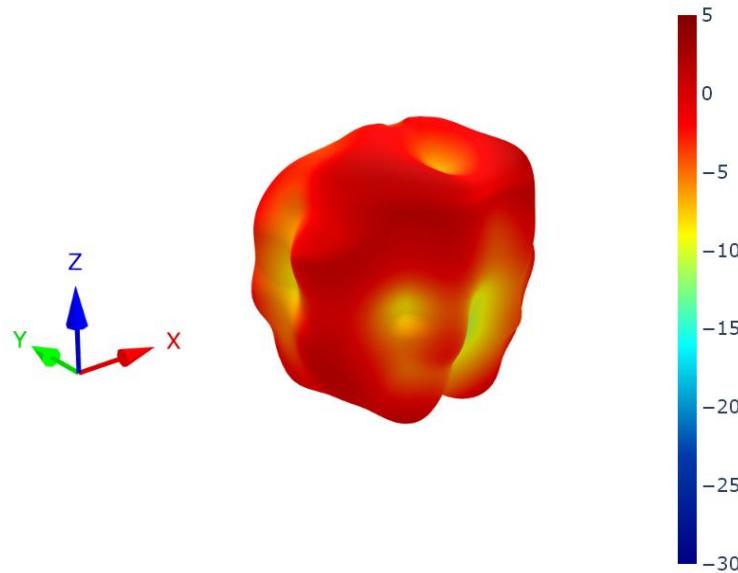
## 6.2 Patterns at 2400 MHz



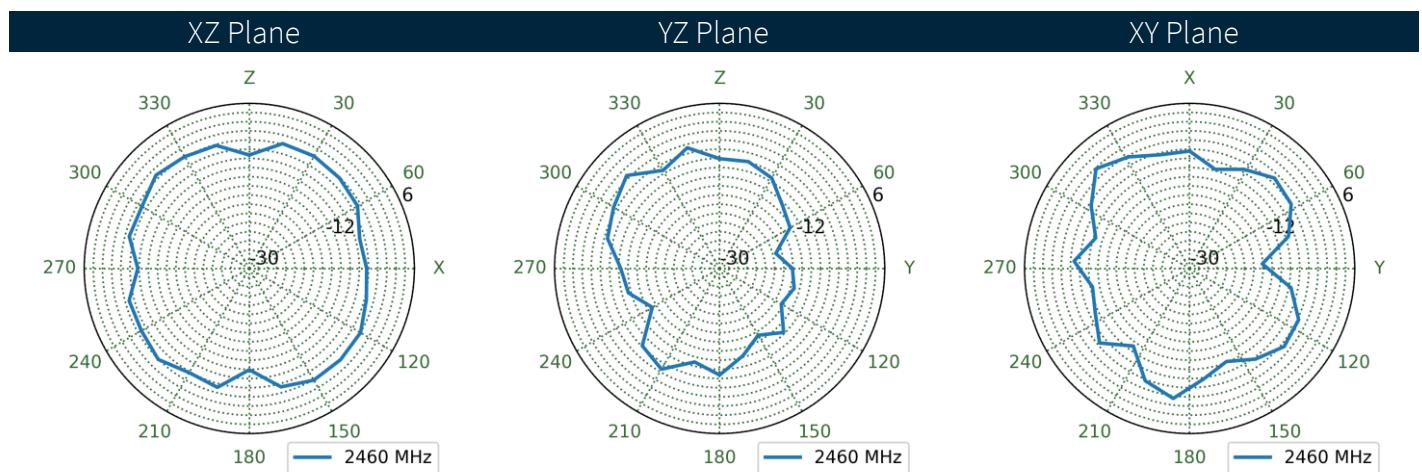
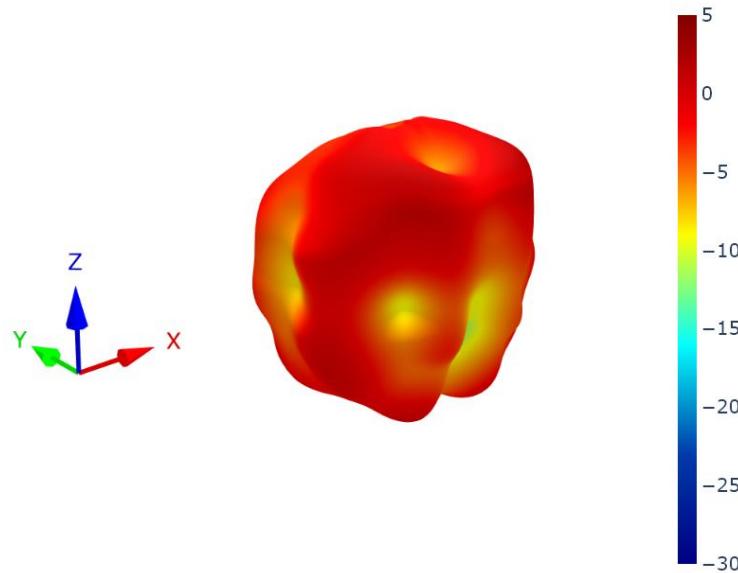
## 6.3 Patterns at 2420 MHz



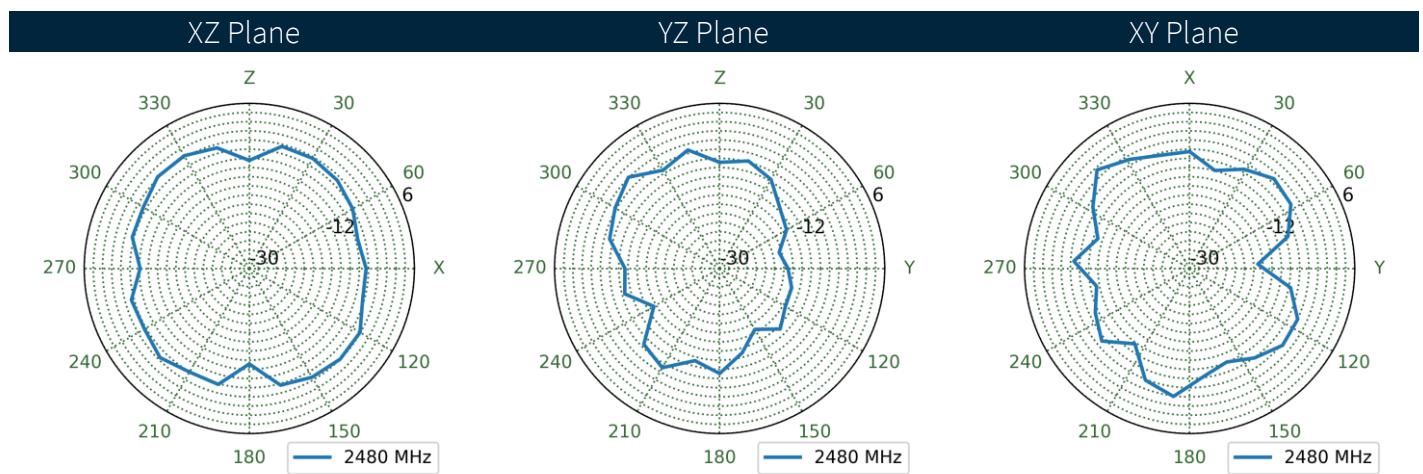
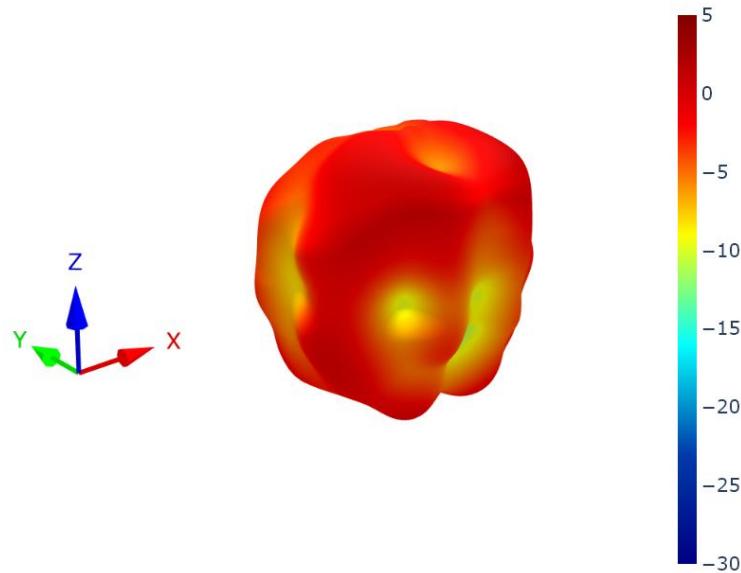
## 6.4 Patterns at 2440 MHz



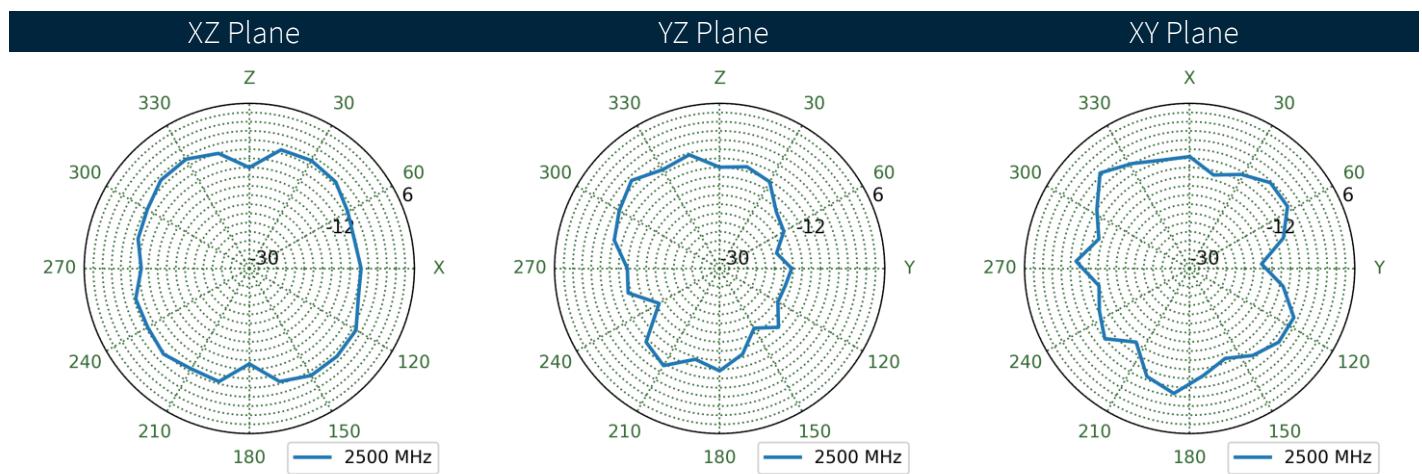
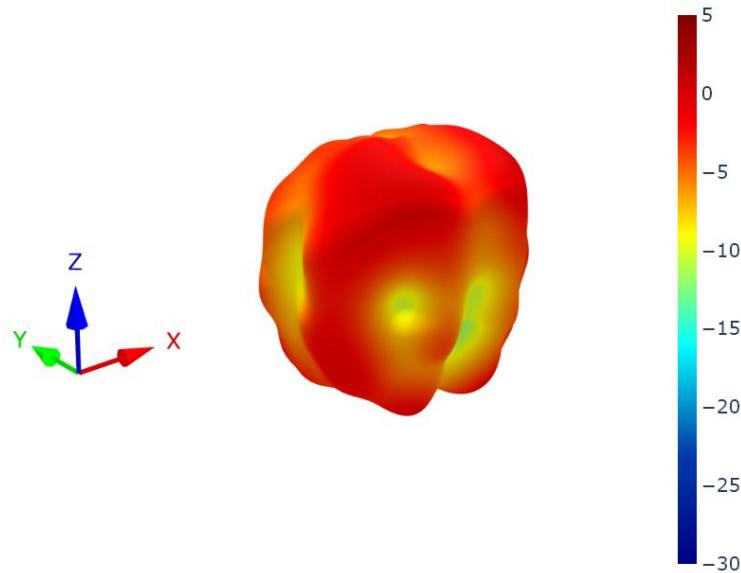
## 6.5 Patterns at 2460 MHz



## 6.6 Patterns at 2480 MHz



## 6.7 Patterns at 2500 MHz



## Changelog for the datasheet

### SPE-11-8-003 - GW.26.0151

#### Revision: M (Current Version)

Date:	2025-11-18
Notes:	Updated weights in packaging.
Author:	Gary West

#### Previous Revisions

#### Revision: L

Date:	2025-03-28
Notes:	Added mention of IP65 to introduction.
Author:	Conor McGrath

#### Revision: G

Date:	2014-12-03
Notes:	amended Bandwidth to 100MHz
Author:	Aine Doyle

#### Revision: K

Date:	2023-08-31
Notes:	Updated Format
Author:	Thomas Doyle

#### Revision: F

Date:	2013-09-16
Notes:	amended table heading o Page 2 - general formatting
Author:	Aine Doyle

#### Revision: J

Date:	2017-02-13
Notes:	Updated dB
Author:	Jack Conroy

#### Revision: E

Date:	2013-02-22
Notes:	
Author:	Unknown

#### Revision: I

Date:	2017-01-05
Notes:	Updated with Packaging and disclaimer info
Author:	Andy Mahoney

#### Revision: D

Date:	2012-03-26
Notes:	
Author:	Unknown

#### Revision: H

Date:	2016-003-12
Notes:	Amended Peak Gain
Author:	Aine Doyle

#### Revision: C

Date:	2011-07-20
Notes:	
Author:	Unknown

**Previous Revisions**

<b>Revision: B</b> Date: 2011-10-05 Notes: Author: Unknown		
<b>Revision: A (First Release)</b> Date: 2011-04-28 Notes: Author: Unknown		



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