



# TAOGLAS®



# Datasheet

**Part No:**  
FG.26.A

**Description**

Super Compact 7dBi 2.4GHz Directional Panel Antenna  
300mm of RG-58 Pigtail with N Type Male Connector

**Features:**

Super Compact, High-Gain Panel Antenna  
2.4GHz Coverage  
7dBi Peak Gain  
Multiple Mounting Options  
IP65 Rated Enclosure  
Cable: 300mm of RG-58  
Connector: N-Type (Male)  
Dimensions: 122 x 122 x 47mm  
RoHS & Reach Compliant

<b>1.</b>	<b>Introduction</b>	<b>3</b>
<b>2.</b>	<b>Specification</b>	<b>4</b>
<b>3.</b>	<b>Mechanical Drawing</b>	<b>5</b>
<b>4.</b>	<b>Installation Guide</b>	<b>6</b>
<b>5.</b>	<b>Packaging</b>	<b>7</b>
<b>6.</b>	<b>Antenna Characteristics</b>	<b>9</b>
<b>7.</b>	<b>Radiation Patterns</b>	<b>13</b>
<hr/>		
	Changelog	16

Ireland & USA  
ISO 9001:2015  
Certified



Taiwan  
ISO 9001:2015  
Certified



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

# 1. Introduction



The Taoglas **FG.2x Series** of compact 2.4GHz Panel antennas are specially designed to provide directional wireless communication. The panel design combines a sleek, low-profile design with high-performance, delivering superior performance characteristics. Focused on high-performance signal transmission and reception, they are perfect for applications requiring long range, faster data rates and more resilient connections. The FG.26 offers a peak gain of up to 7dBi and the FG.27 reaches up to 12dBi, both with great efficiency of over 60%.

Typical Applications Include:

- Point to Point and Point to Multipoint Wireless Networks
- In-building and Backhaul Networks
- Long Range Wi-Fi Coverage for Smart City Applications
- Wireless Surveillance Systems
- Wi-Fi Hotspot Expansion, e.g. Factories and Dockyards

The IP65 waterproof rated antenna enclosure is made from UV resistant ABS making it ideal for use in challenging environments and wide temperature ranges. It is supplied with a mounting bracket that allows for positional tilt and swivel to optimise the directionality of the antenna. The FG Series is supplied with RG-58 cable and N-Type connectors as standard, both of which can be fully customised to suit your requirements pending MOQ.

For further information or samples, please contact your regional Taoglas customer support team.

## 2. Specification

### Wi-Fi Electrical

Band	Frequency (MHz)	Efficiency (%)	Average Gain (dB)	Peak Gain (dBi)	Impedance	Polarization	Radiation Pattern	Max. input power
Wi-Fi 2.4GHz	2400-2500	62.9	-2.01	7.05	50 $\Omega$	Linear	Omni directional	2W

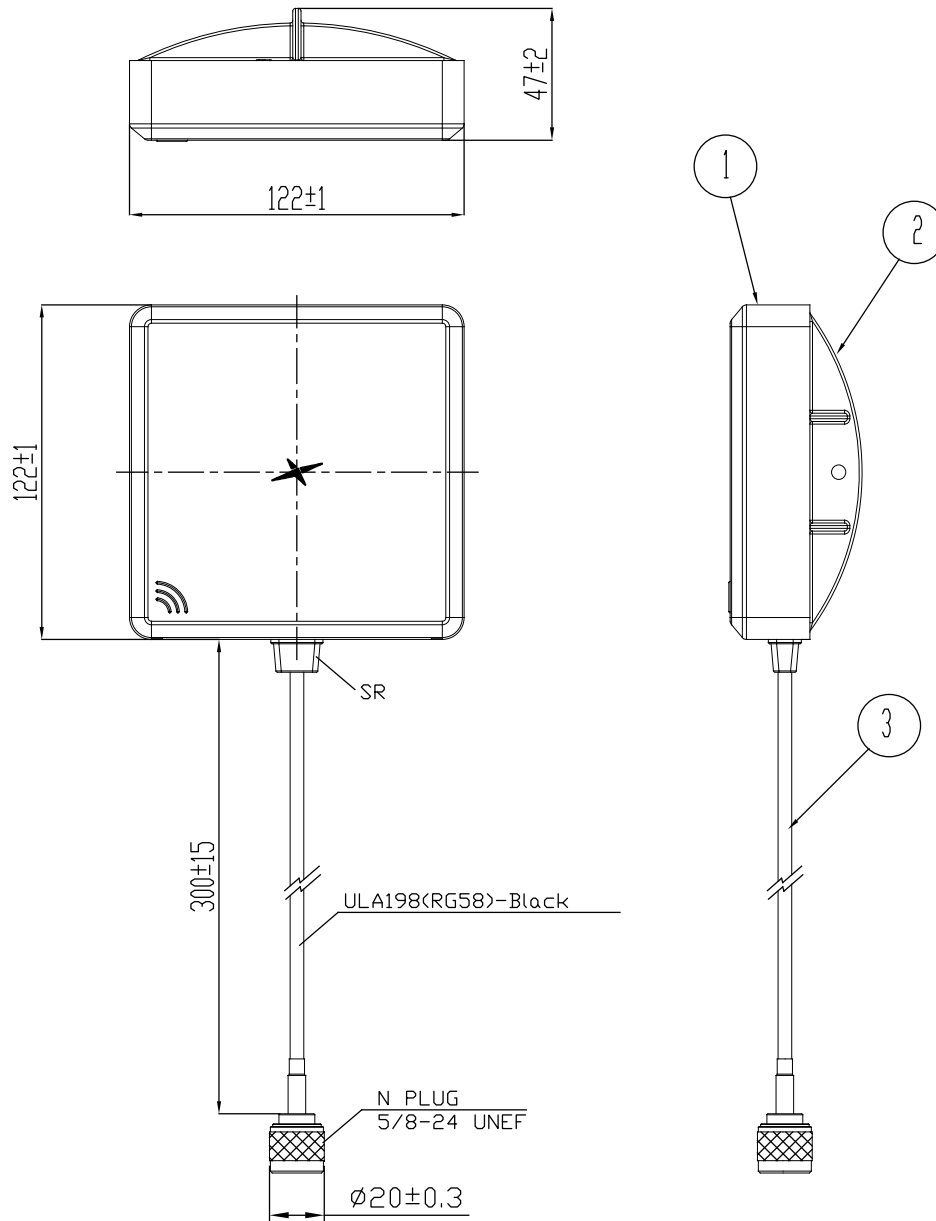
### Mechanical

Dimensions	210 x 210 x 74mm
Material	ABS PA-777B+UV
Connector	N Type (M)
Cable	300mm of RG-58

### Environmental

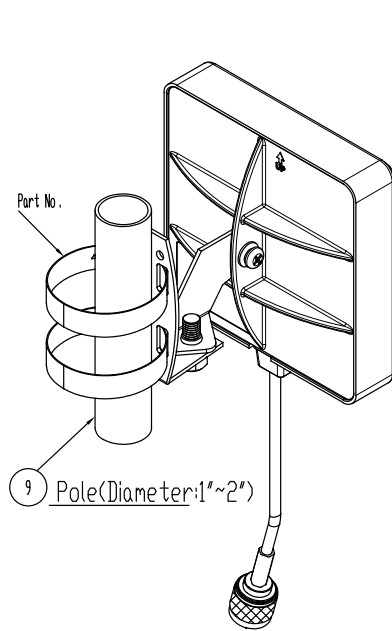
Operation Temperature	-40°C to 85°C
Storage Temperature	-40°C to 85°C
Relative Humidity	Non-condensing 65°C 95% RH

### 3. Mechanical Drawing

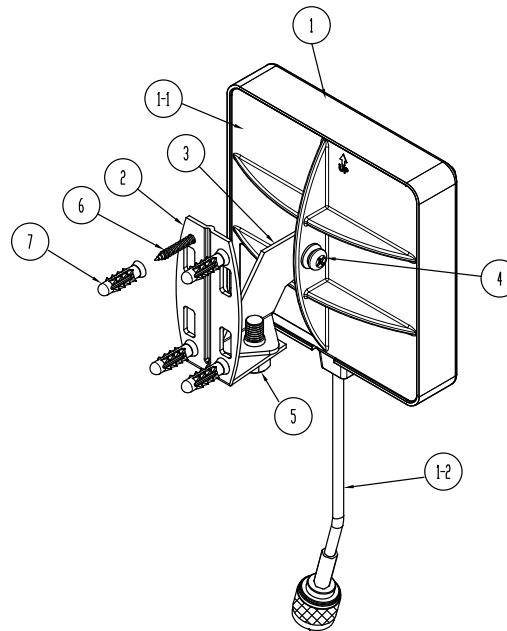


	Name	Material	Finish	QTY
1	Front Cover	ABS PA-77/8HV	Black	1
2	Rear Cover	ABS PA-77/8HV	Black	1
3	Cable ASSY (D) -N PlugSR 300mm	ULA198 RG58Black Cable	Black	1

# 4. Installation Guide



POLE MOUNT



WALL MOUNT

⑤		M8-12.9x20mm(screw) M8-Ø12.2x1.5mm(s/w) M8-Ø12.5x1.5mm(w)	1set
④		M5-Ø10x111.5MM	1pc
③		26(w)x5(t)mm	1pc
②		80x40x40mm	1pc
⑧		2-1/2"(40~63mm) 12.7(w)x0.6(t)mm	2pcs
⑦		Ø8x25mm	4pcs
⑥		TH5/32"-16#3/4" (Ø9x19mm)	4pcs
ITEM	Graphics	Size(LxWxH)	Q'TY

⑧	Hose Clamp 2-1/2"(40~63mm)	SUS304	2
⑥	Anchor	PP	4
	TH5/32"-16#3/4"TP-A screw	SUS302	4
⑤	M8 S/W	SUS304	2
	M8 W	SUS304	1
④	XH M8-12.90#20mm screw	SUS304	4
	BH M5 (S/W+W) Screw	SUS302HQ	4
③	Mounting Adaptor	SUS304	4
②	L Type Mounting	SUS430	1
①-③	Antenna Body-Cable Assy(N Plug)	ULAI98RCS0Black	1
①-②	Antenna Body-Rear Cover	ABS PA-777#HV	1
①	Antenna Body-Front Cover	ABS PA-777#HV	1
ITEM	DESCRIPTION	MATERIAL	Q'TY

## 5. Packaging

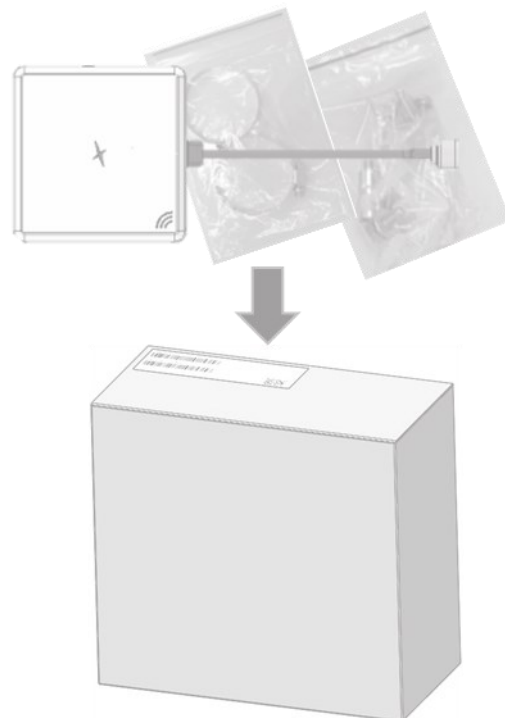
1 Pcs per PE bag



1 pcs per zipper bag



1pcs per box  
 Box dimensions: 180 x 70 x 145mm  
 Weight: 0.44Kg







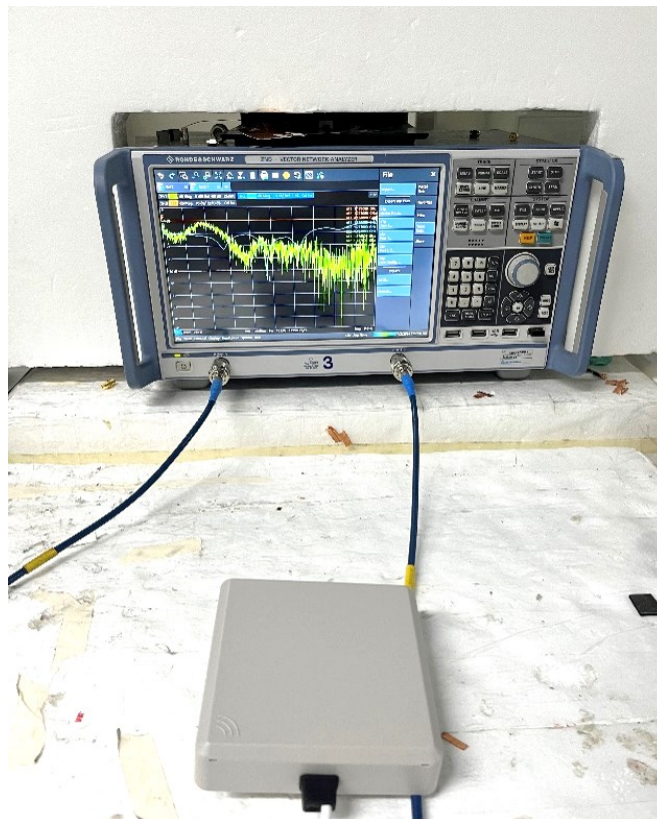
## 6. Antenna Characteristics

### 6.1 Test Setup

AUT

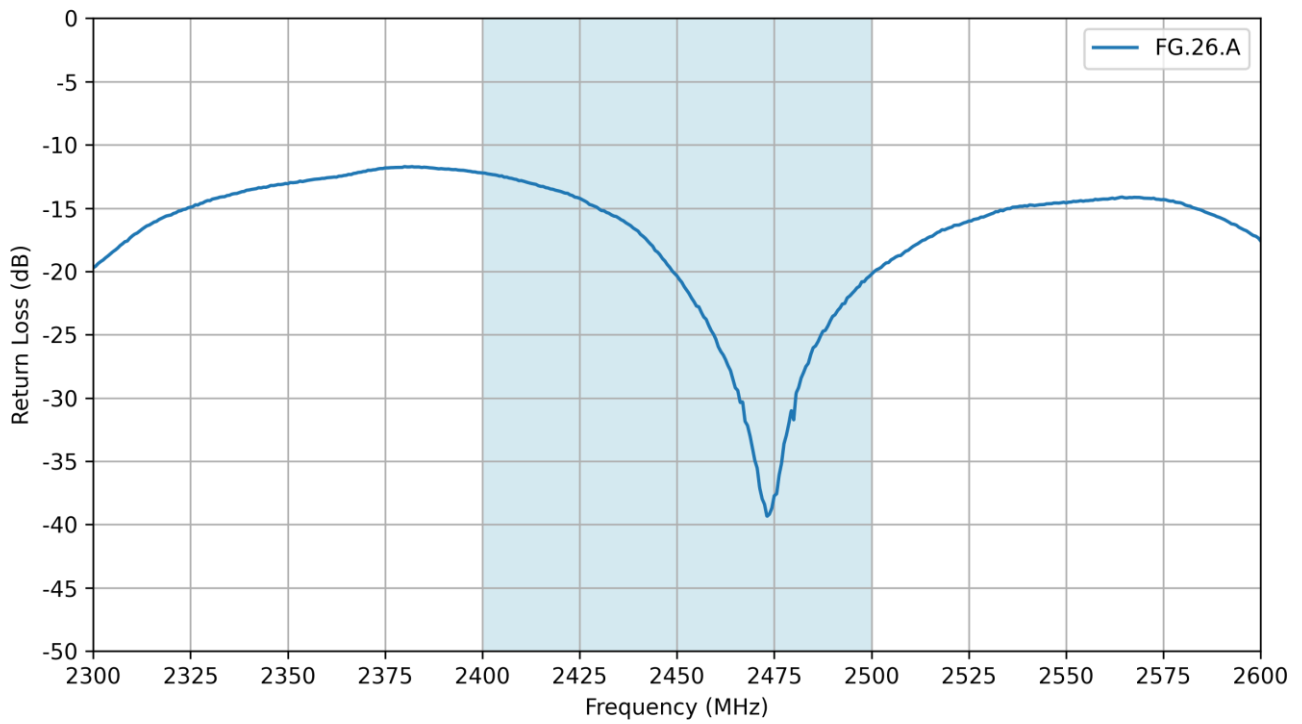


Vector Network Analyzer

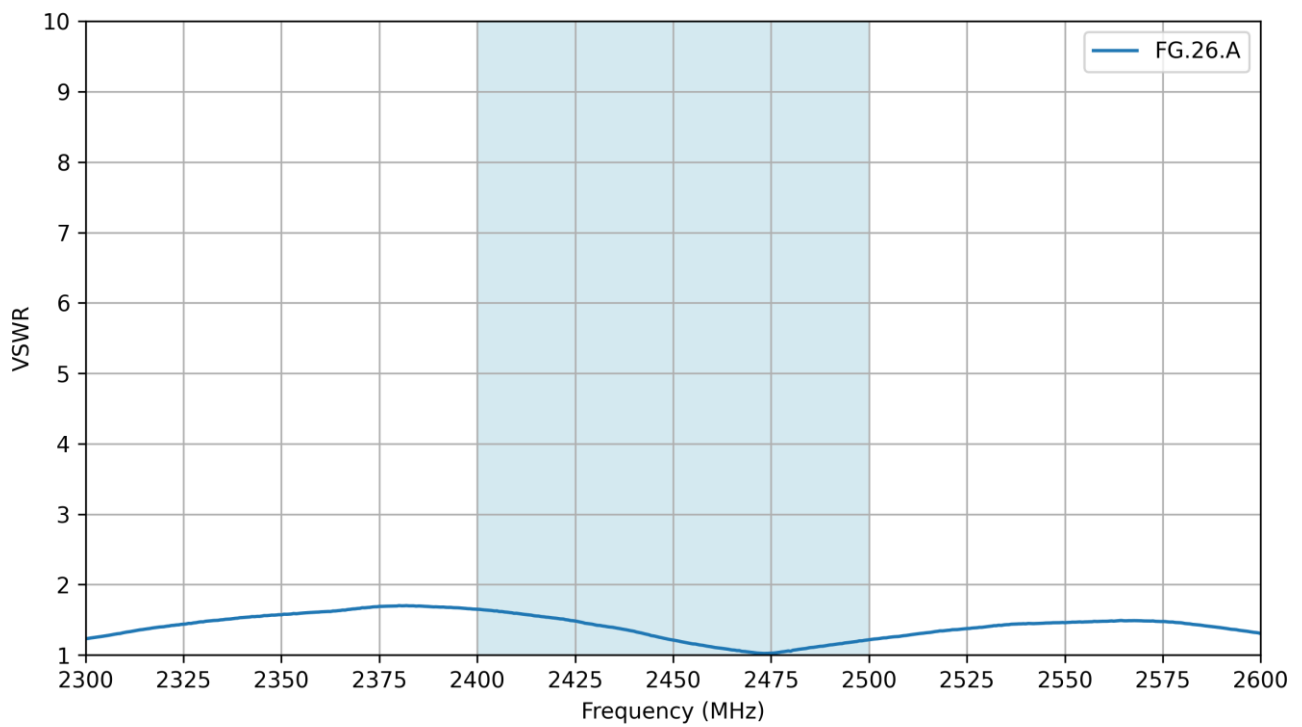


VNA Setup

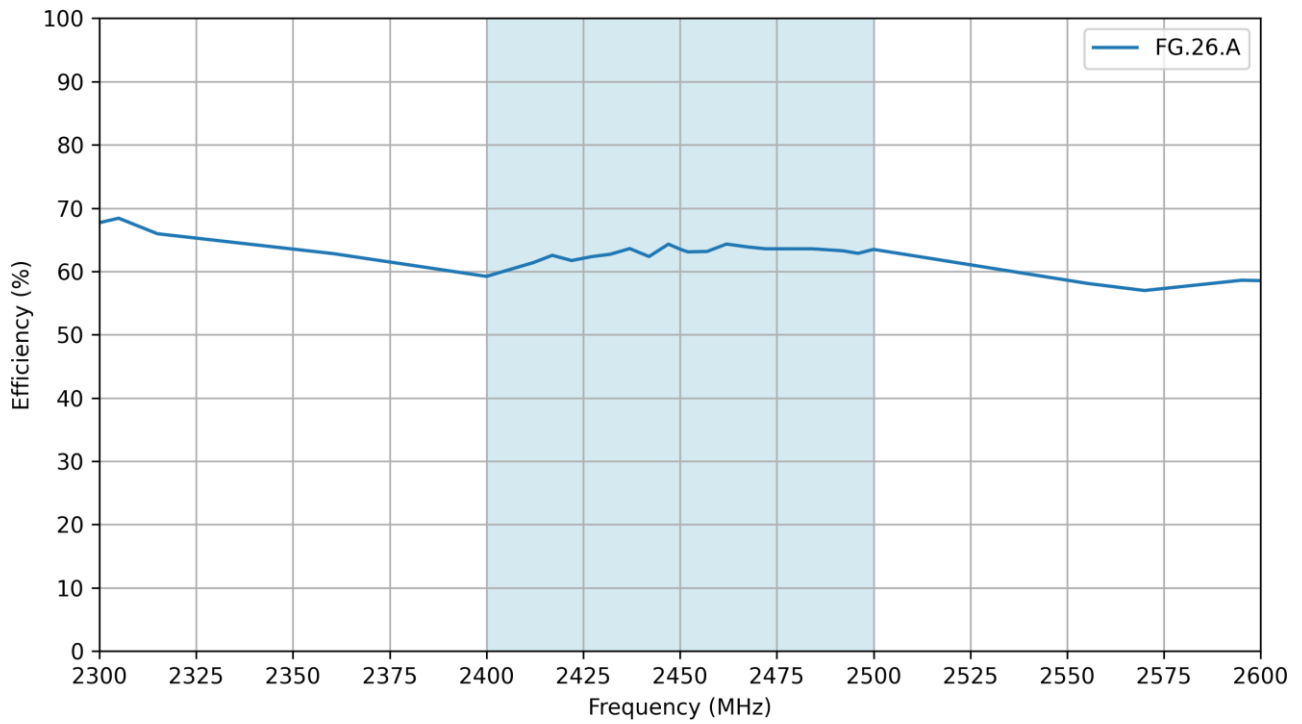
## 6.2 Return Loss



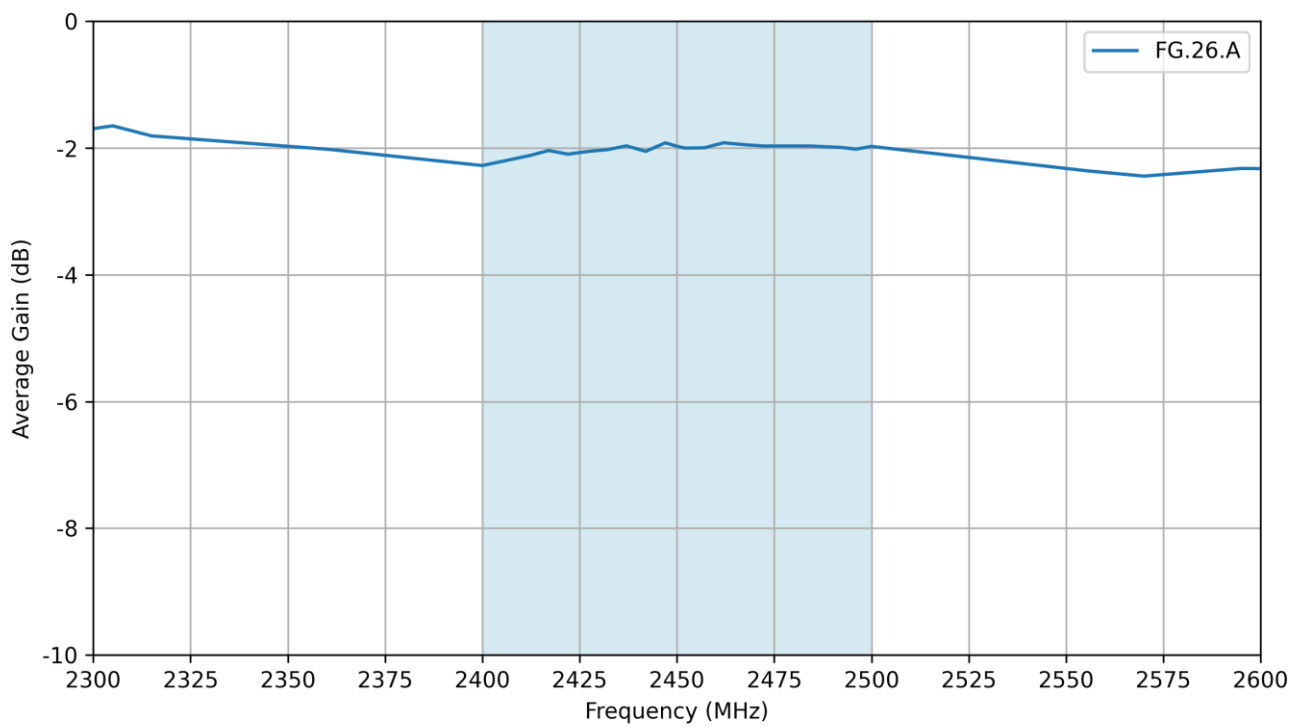
## 6.3 VSWR



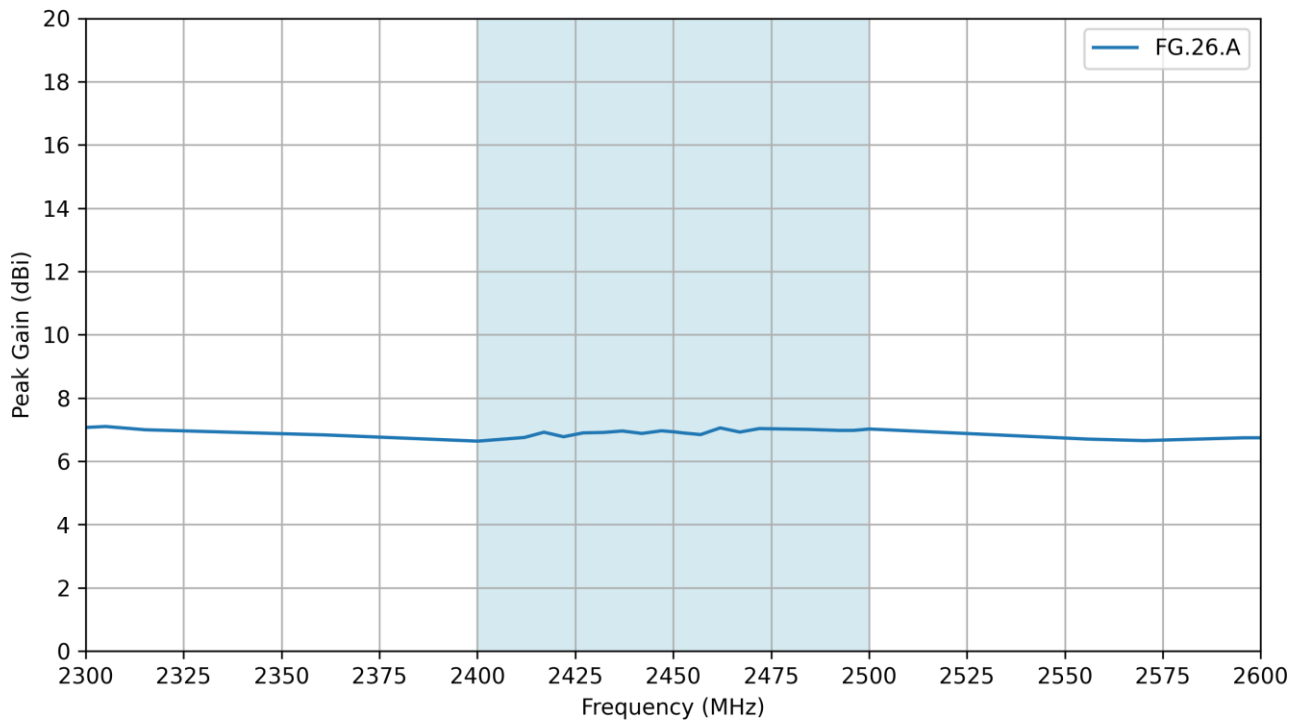
## 6.4 Efficiency



## 6.5 Average Gain

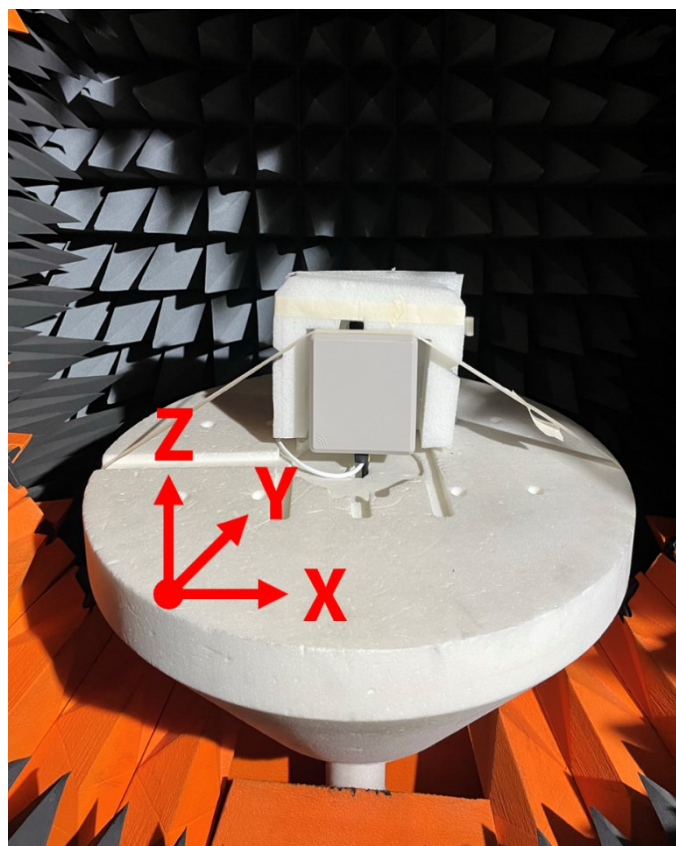
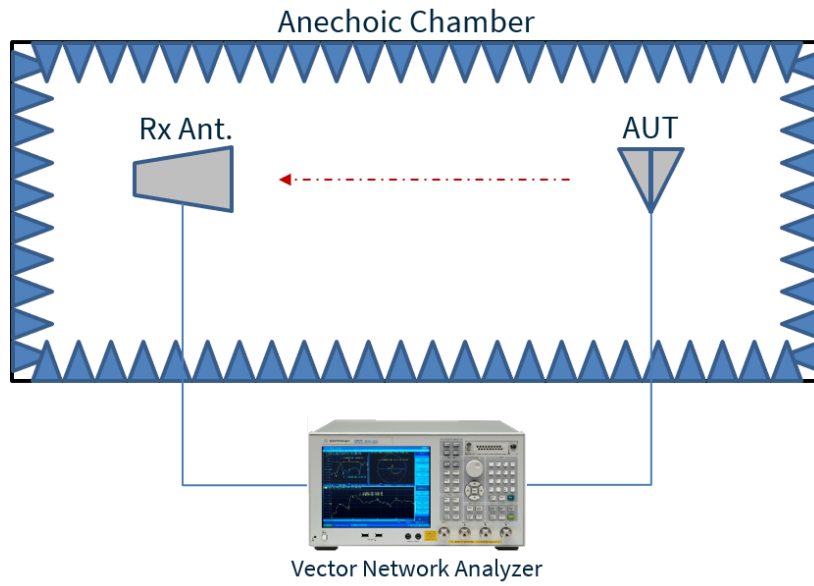


6.6 Peak Gain



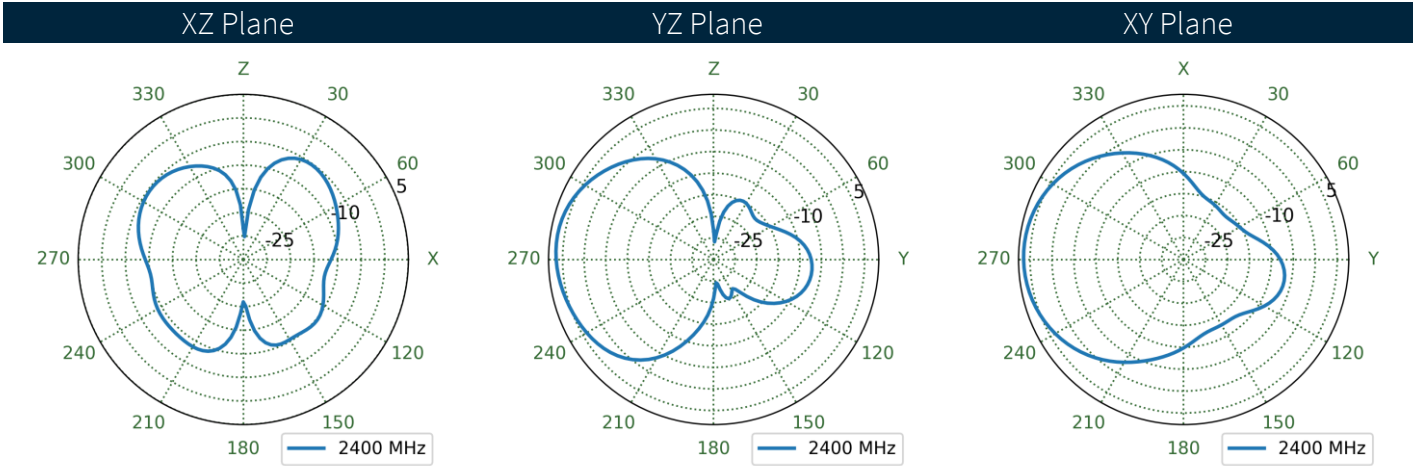
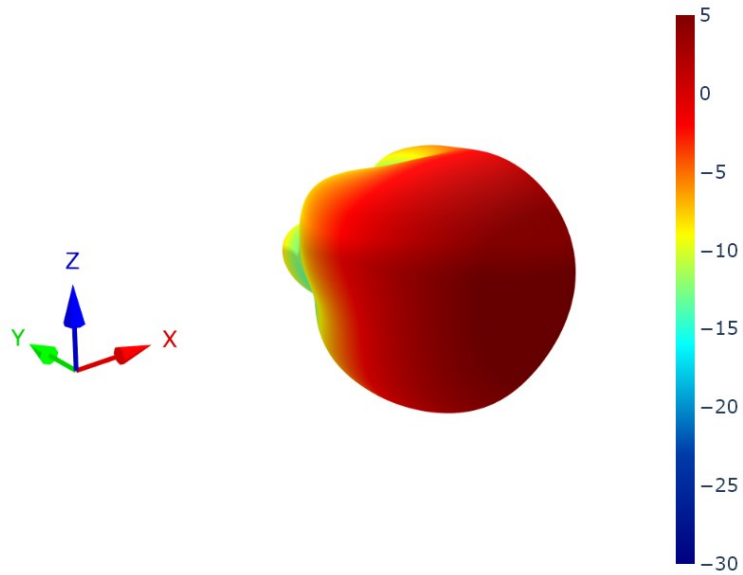
# 7. Radiation Patterns

## 7.1 Test Setup

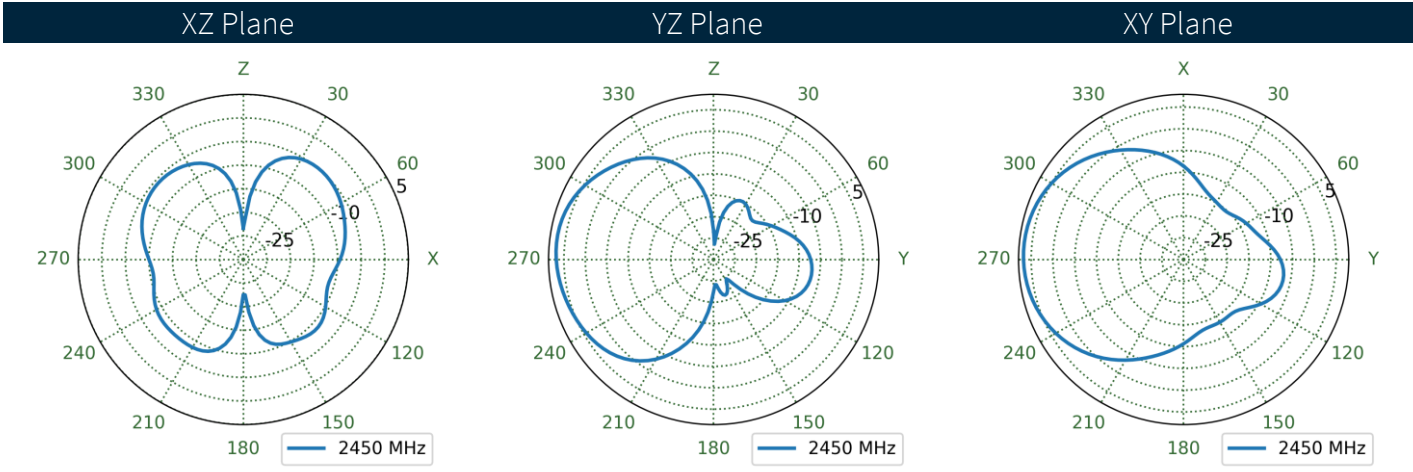
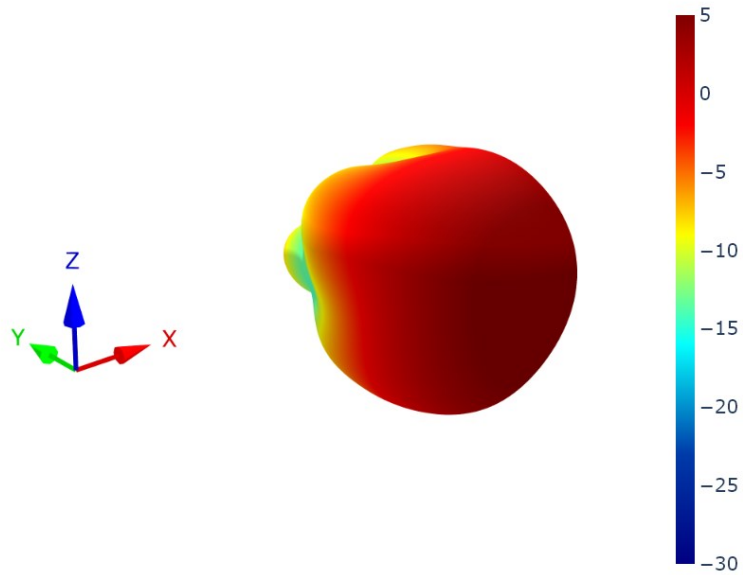


VNA Setup

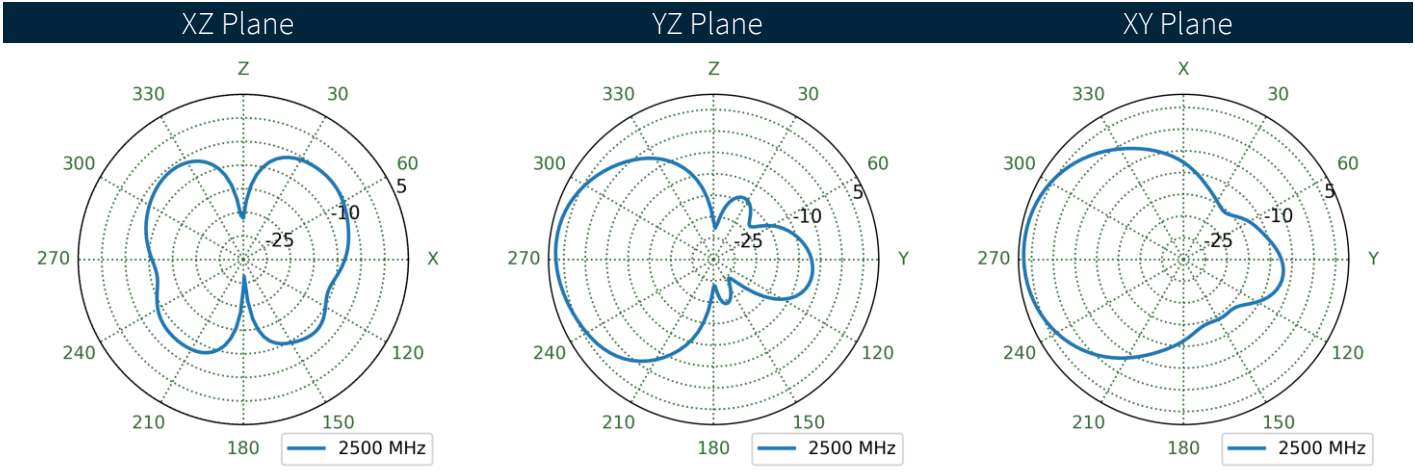
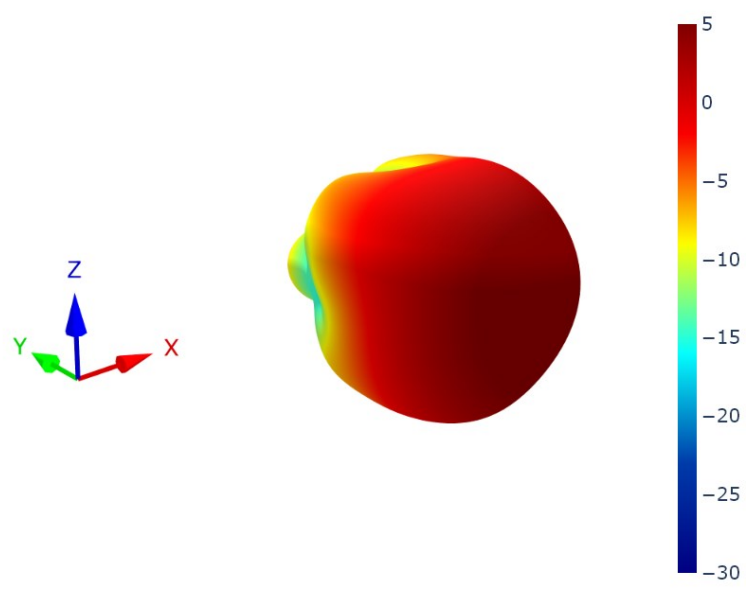
7.2 Patterns at 2400 MHz



7.3 Patterns at 2450 MHz



7.4 Patterns at 2500 MHz





Changelog for the datasheet

**SPE-24-8-242 – FG.26.A**

**Revision: A (Initial Release)**

Date: 2024-09-26

Notes: Initial Datasheet Release

Author: Gary West

**Previous Revisions**




[www.taoglas.com](http://www.taoglas.com)

