



TAOGLAS®

Datasheet

PC166.54.0061A

Part No:
PC166.54.0061A

Description

WiFi

Features:

1* WIFI 2.4GHz/5.8 GHz /7.1GHz

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Introduction



WiFi antenna for Portable Box PC

Specification

Electrical					
Frequency (MHz)	2.4GHz	5.8GHz	Band1-3	Band4	7.1GHz
	2400-2500	4900-5850	5150-5725	5725-5850	5925-7125
Efficiency (%)					
PC166	52.6	47.7	47.4	42.8	46.0
Average Gain (dB)					
PC166	-2.79	-3.21	-3.24	-3.68	-3.38
Peak Gain (dBi)					
PC166	4.14	6.76	6.76	6.52	8.93
Impedance	50 Ω				
Polarization	Linear				
Radiation Pattern	Omni				
Max. input power	10W				

Mechanical	
Dimensions	53.2*15.1*0.75 (w/o cable)
Weight	FR4
Material	I-PEX MFH4L
Connector	61mm
Cable	1.13mm coaxial cable
Environmental	
Waterproof Rating	-40°C to 85°C
Temperature Range	-40°C to 85°C
Humidity	40% to 95%

Test Setup

S11 / VSWR / Return Loss

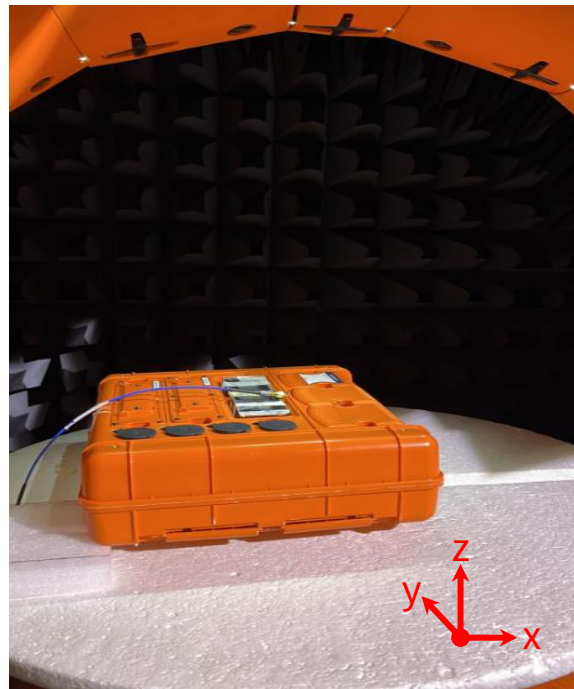
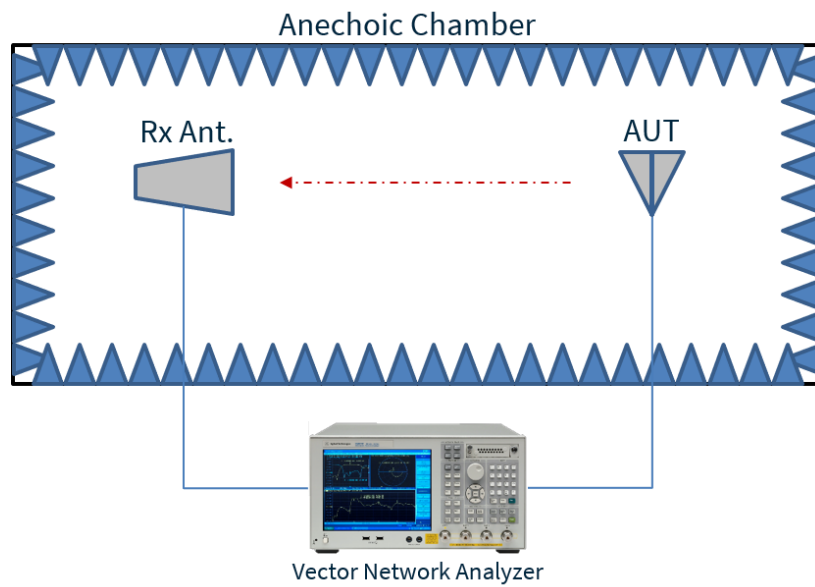
AUT



Vector Network Analyzer

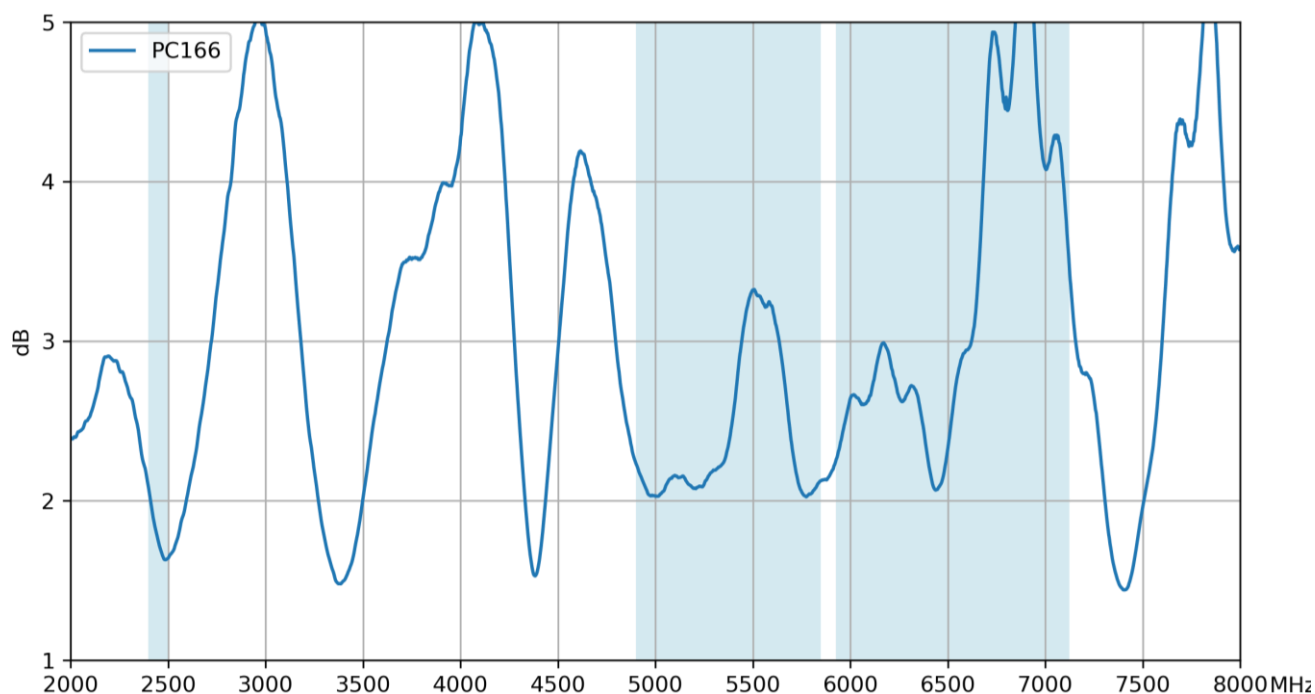


Radiation Performance

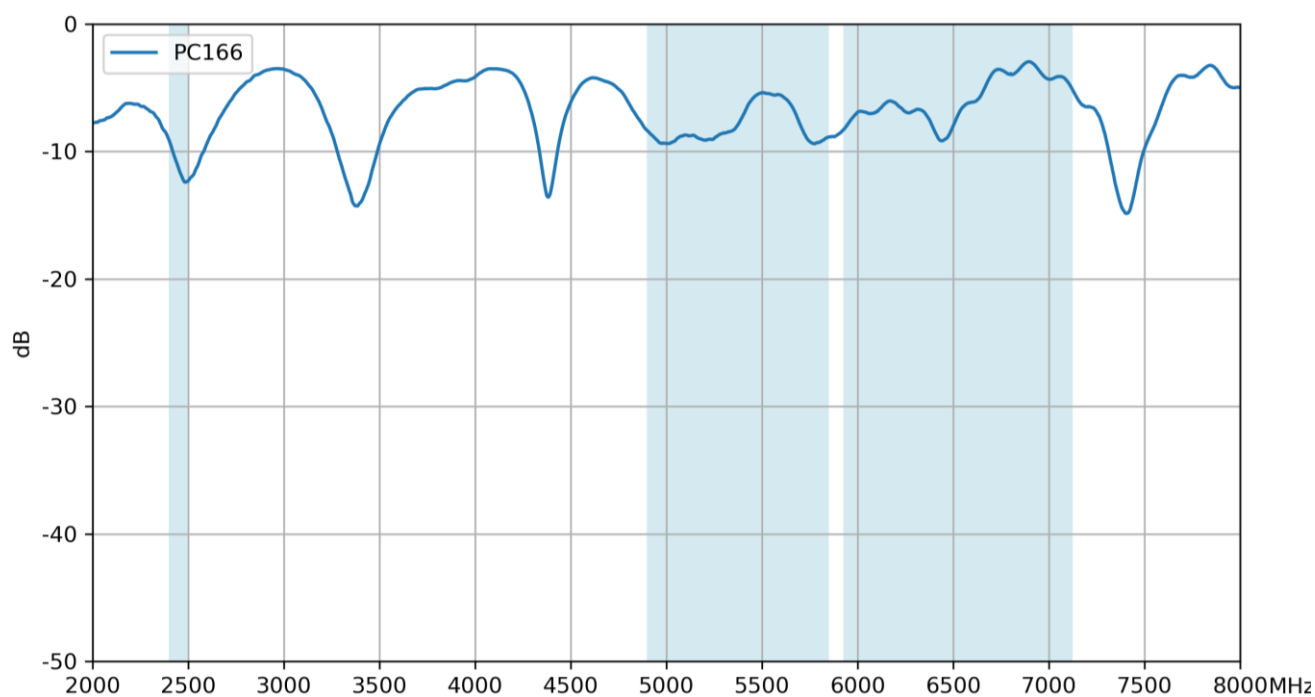


Antenna Characteristics

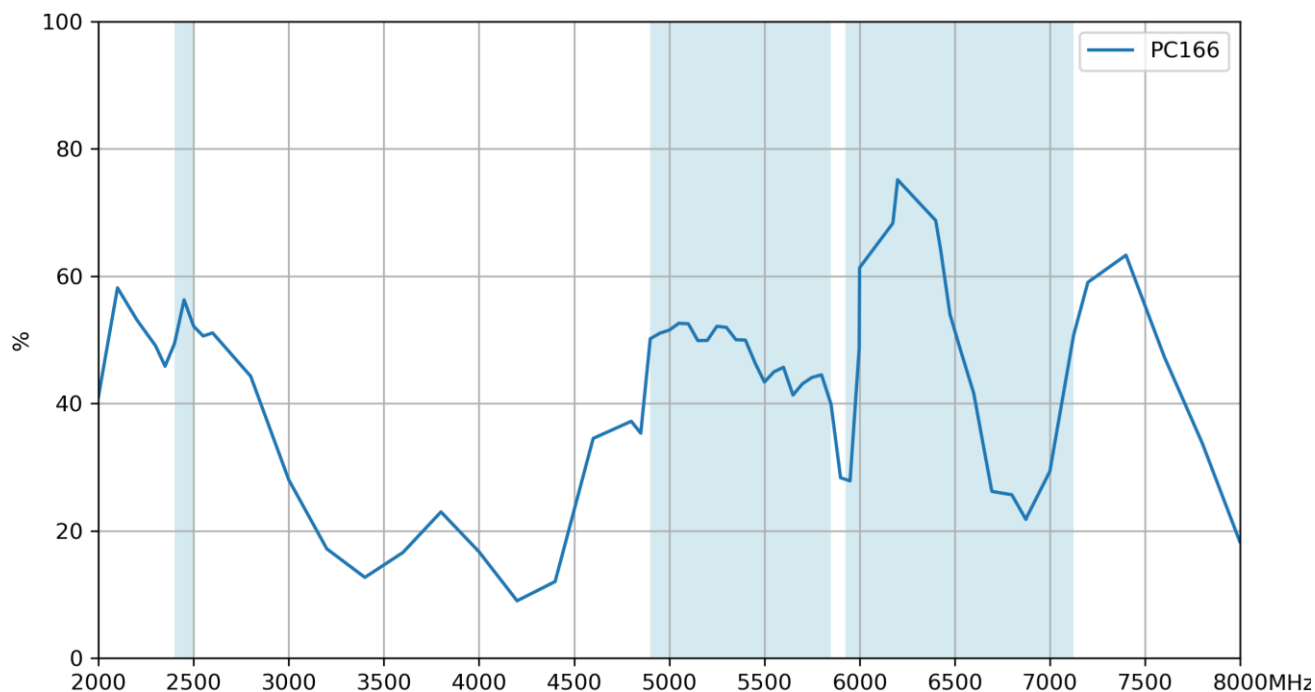
VSWR



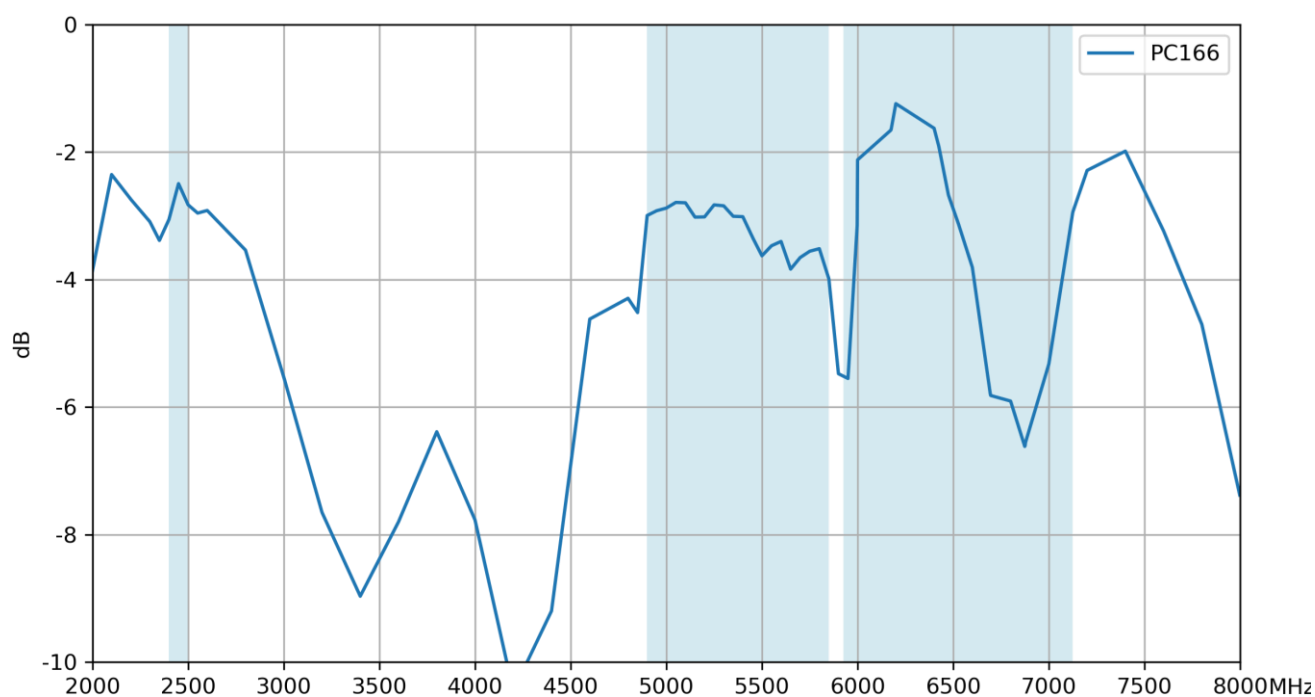
Return Loss



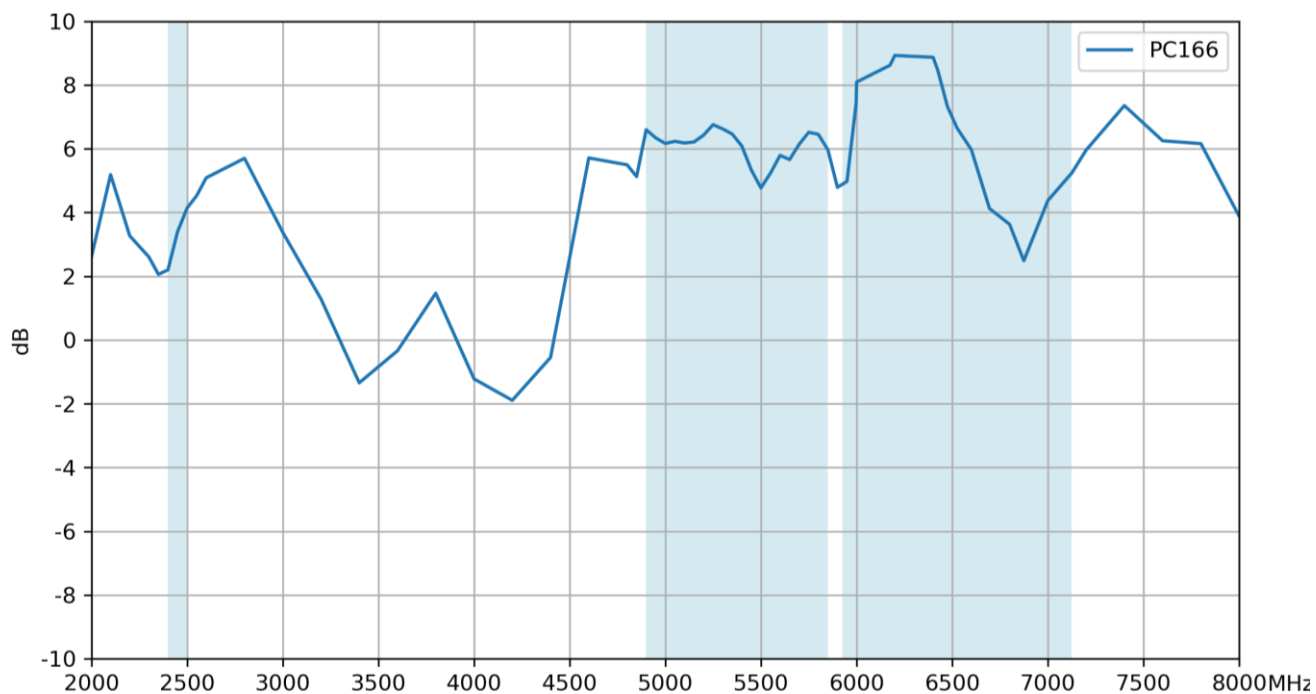
Efficiency



Average Gain



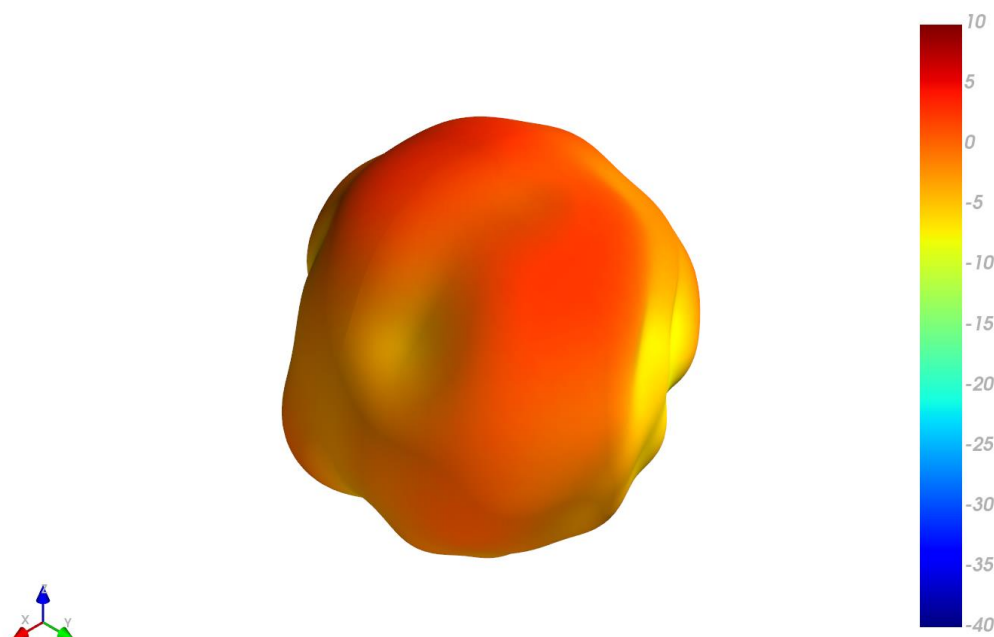
Peak Gain



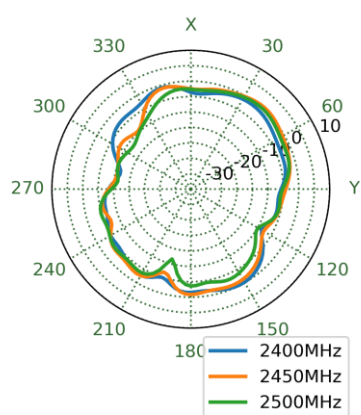
Radiation Patterns

PC166 3D and 2D Radiation Patterns

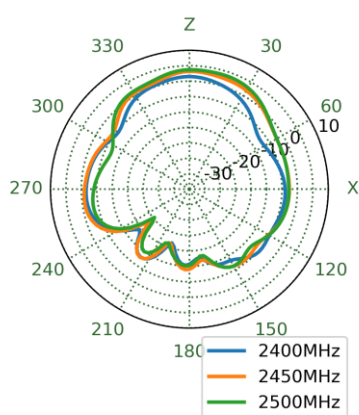
Gain total, 2450MHz



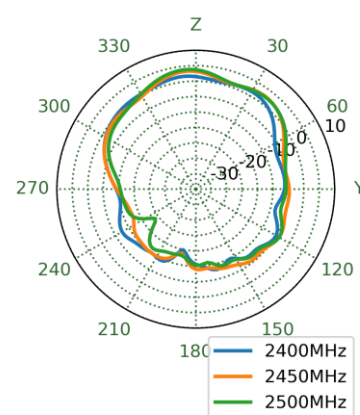
XY Plane



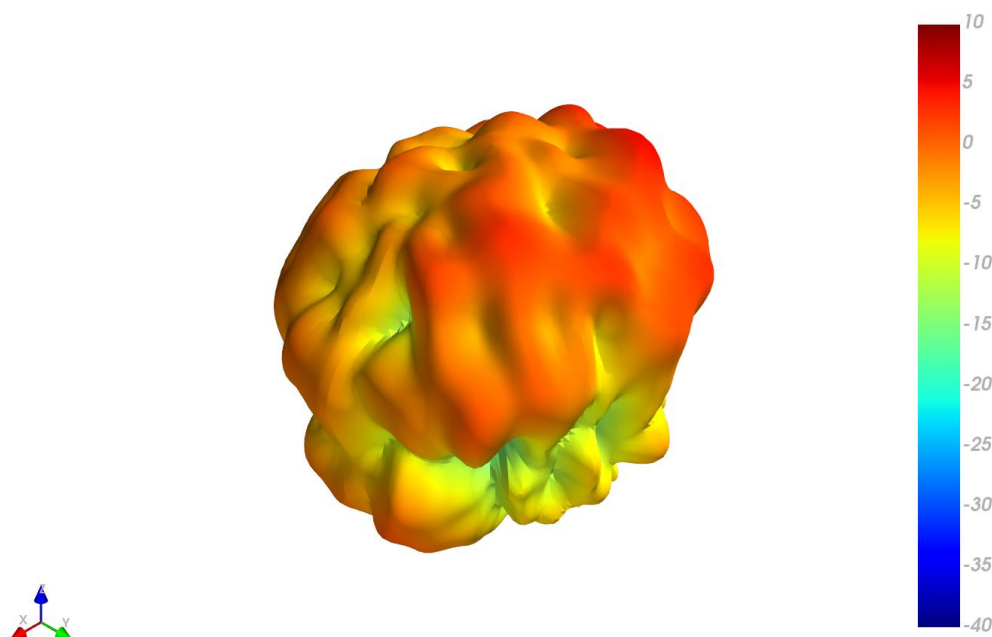
XZ Plane



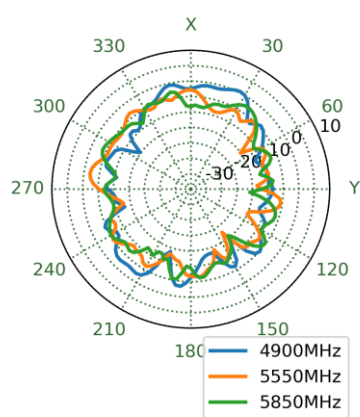
YZ Plane



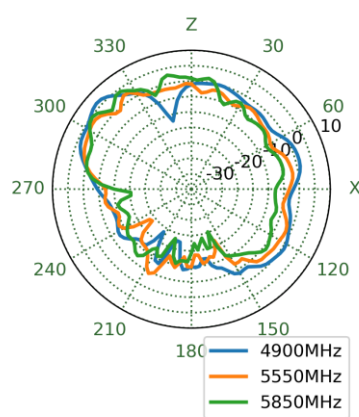
Gain total, 5550MHz



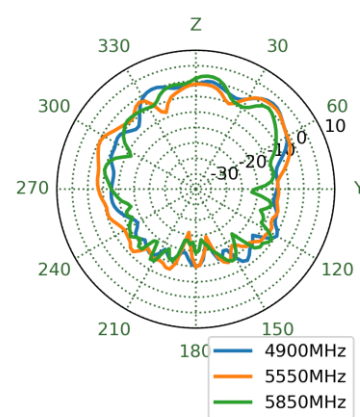
XY Plane



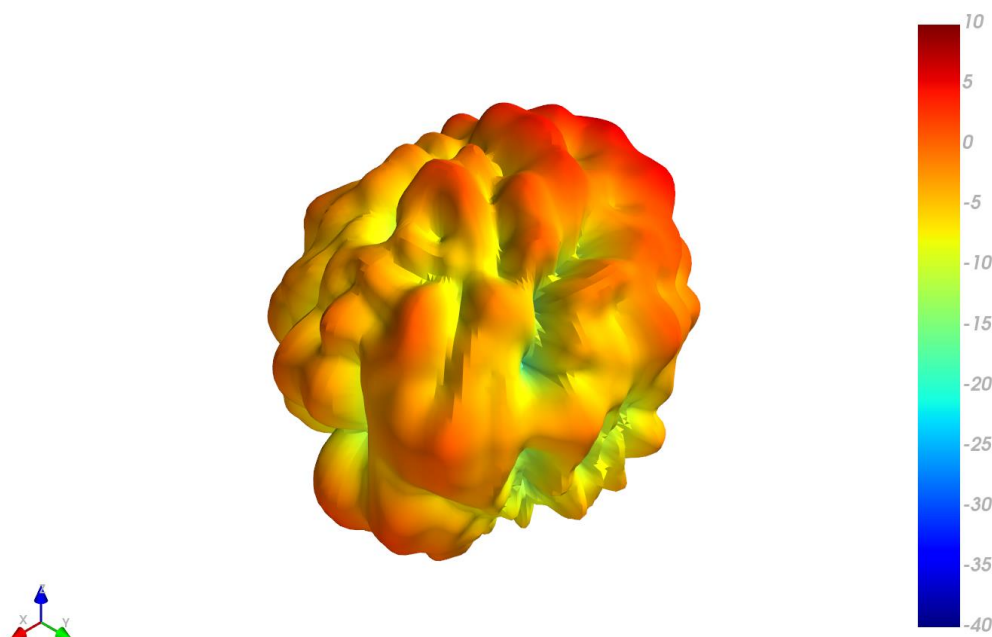
XZ Plane



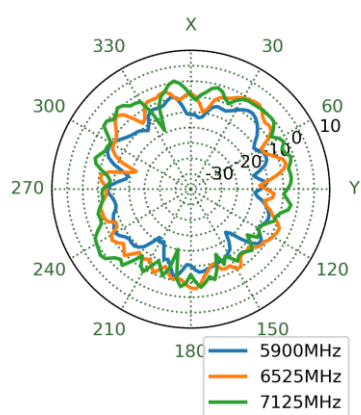
YZ Plane



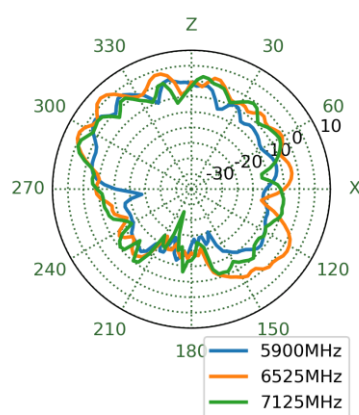
Gain total, 6525MHz



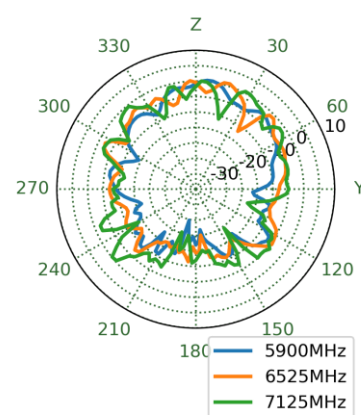
XY Plane



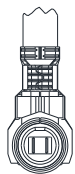
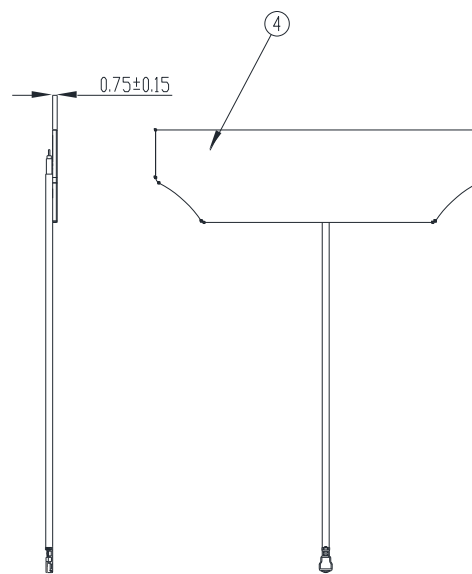
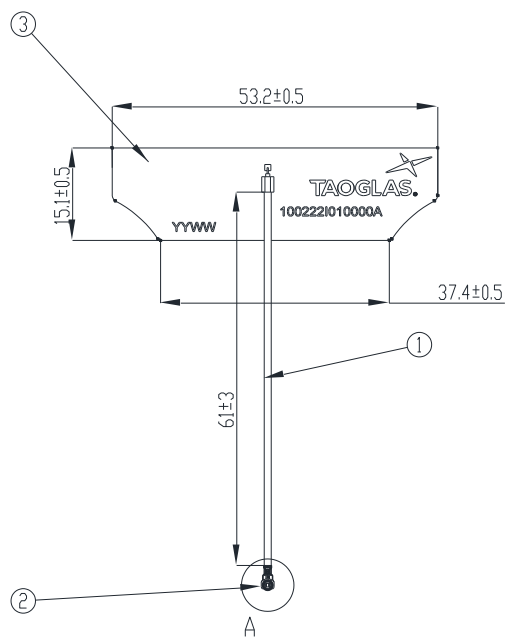
XZ Plane



YZ Plane



Mechanical Drawing



細部放大圖 A
比例 5:1

	Name	Material	Finish	QTY
1	1/13 Coaxial Cable	FEP	Gray	1
2	IPEX,MHF4L	Brass	Au Plated	1
3	Main PCB	PCB	Black	1
4	3M VHB	3M 5906	Black	1

Packaging



- ☑ 25 PCS / PE bag
- (Connector needs protective cover)
- ☑ SPQ Label



- ☑ 2500 PCS / Carton
- ☑ Carton(mm): 360x310x160
- ☑ Carton Label



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