

Inverted F Antenna Specification

MANUFACTURE : DONGGUAN SENSE LIGHTING TECHNOLOGY CO., LTD

PRODUCT NAME : Y502N PCB Antenna

DATE : 2026-3-26

Address: Nguyen Giap Industrial Complex, Nguyen Giap Commune, Hai Phong City, 180000 Vietnam

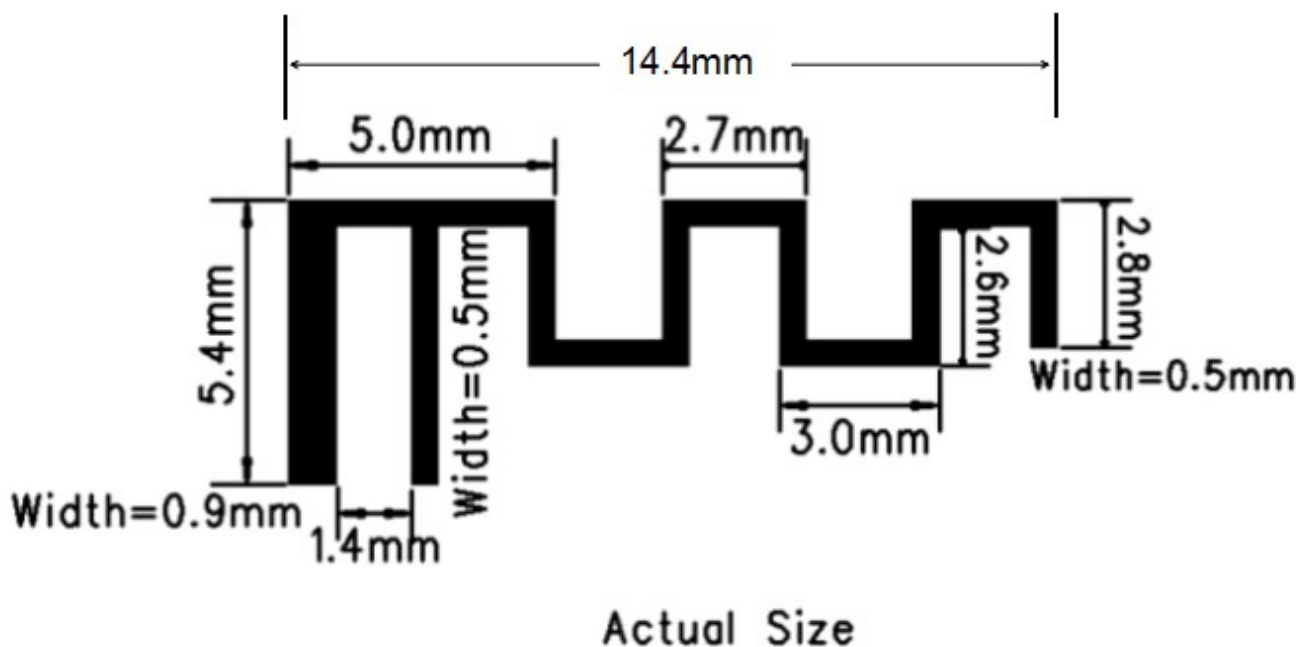
1. Antenna describe

Antenna plate: Inverted F Antenna

Frequency range: 2.4GHz-2.48GHz

ITEM Name	Inverted F Antenna Specification
Model Name	2.4GHz Antenna
Polarization	Horizontal and Vertical
Azimuth Beam Pattern	Omni-directional
Impedance	50 Ohm
Antenna Lengh	14.4mm
Gain(Max)	2.81(± 1 dBi)

2. Antenna Photo& Lengh (mm)



3. Gain

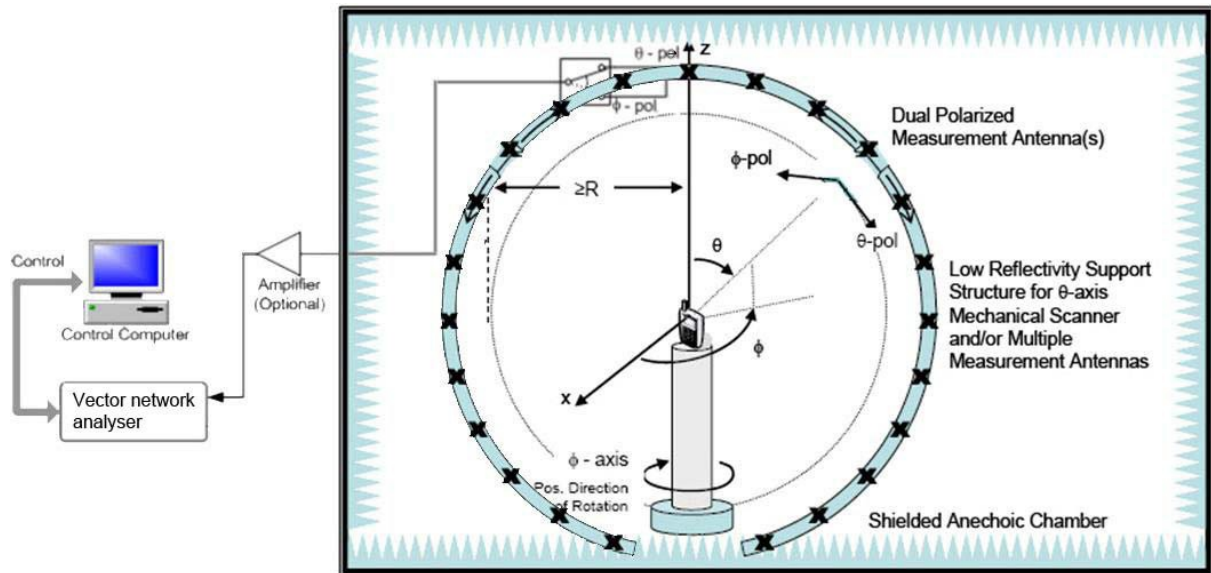
Frequency	Gain (dBi)
2400MHz	2.81
2410MHz	2.74
2420MHz	2.70
2430MHz	2.73
2440MHz	1.01
2450MHz	1.26
2460MHz	1.50
2470MHz	1.49
2480MHz	1.42
2490MHz	0.36
2500MHz	0.33

4. Return Loss/VSWR/Input Impedance

Frequency	Return Loss (dB)	VSWR	Input Impedance(Ω)
2400MHz	-7.23	2.53	25.37
2400MHz	-6.47	2.80	17.99
2450MHz	-6.22	2.90	17.18
2480MHz	-5.18	3.44	15.55
2500MHz	-4.56	3.89	15.48

Annex A Photographs

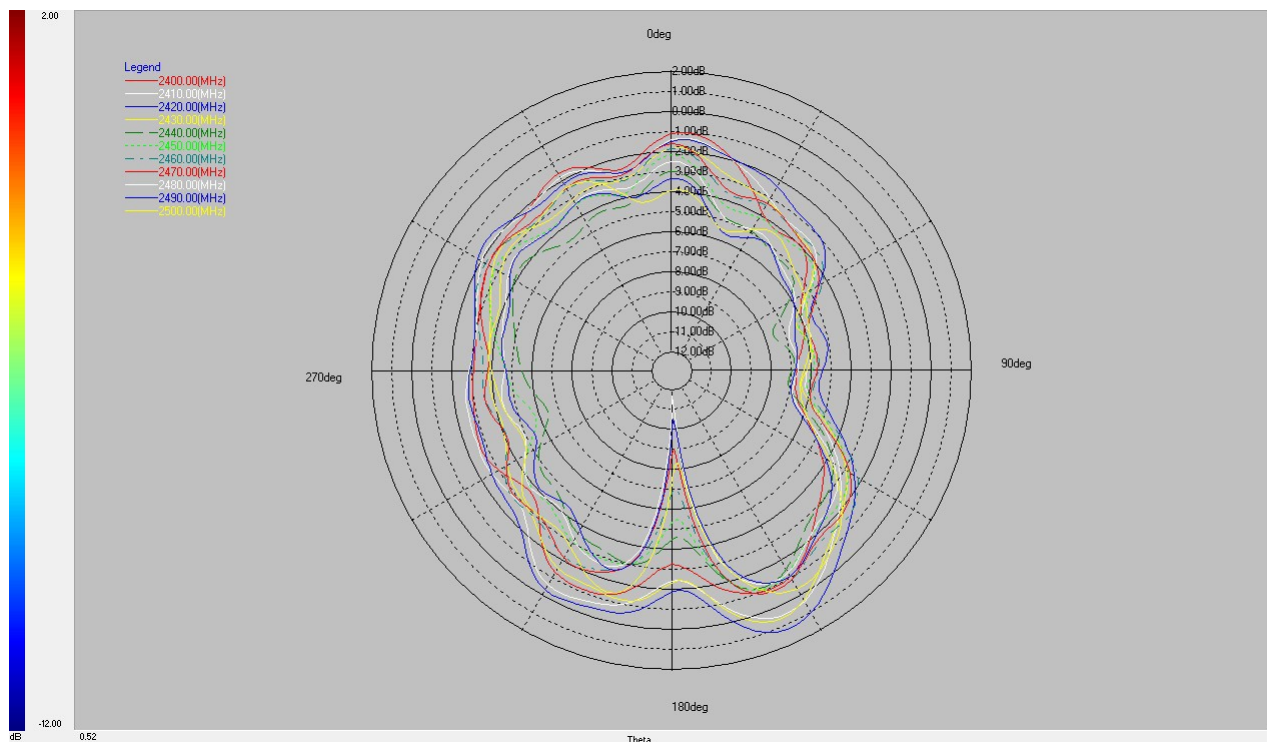
1. Test Setup



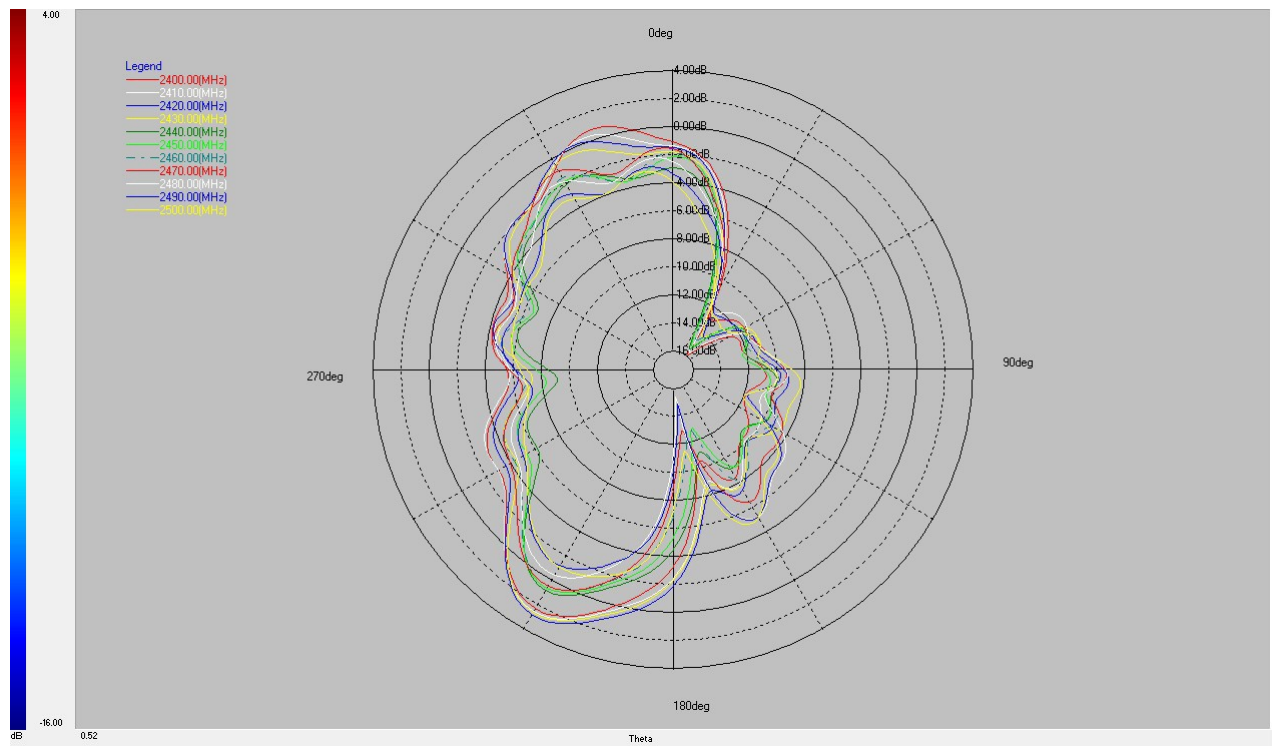
Annex B Figures

1. 2D Radiation Pattern

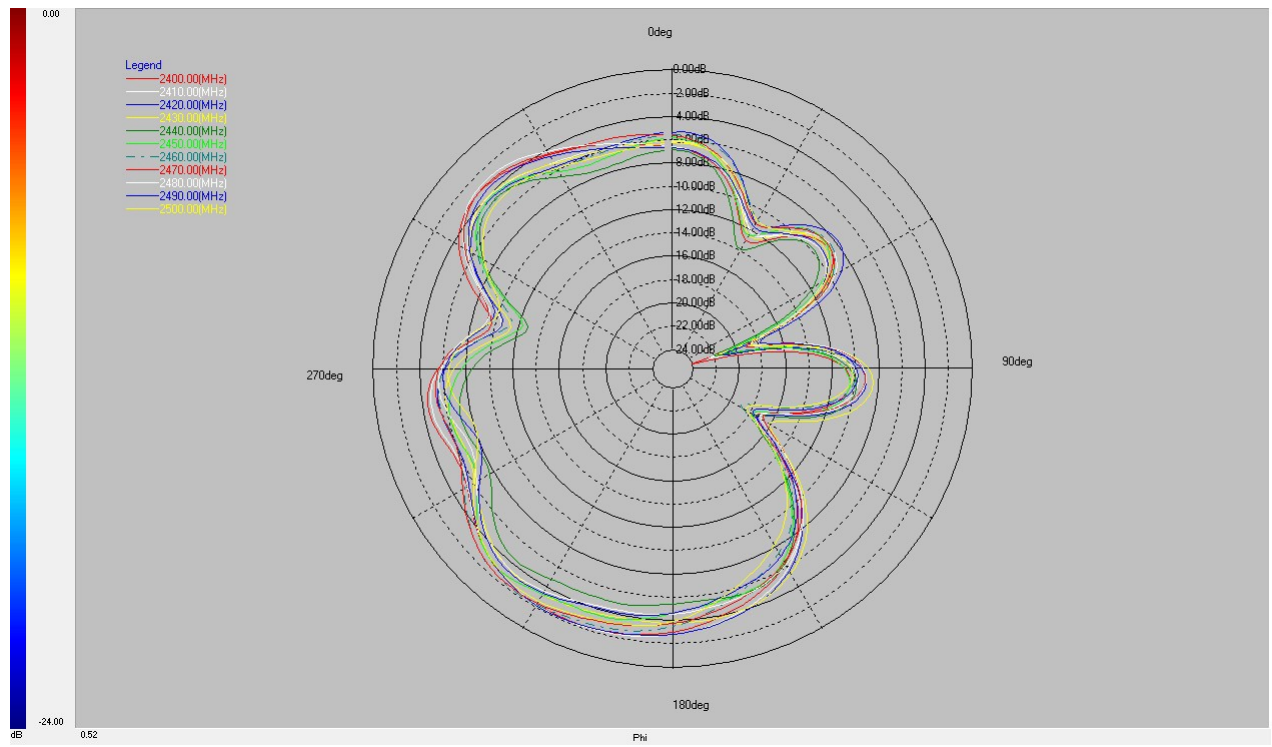
$\Phi=0^\circ$



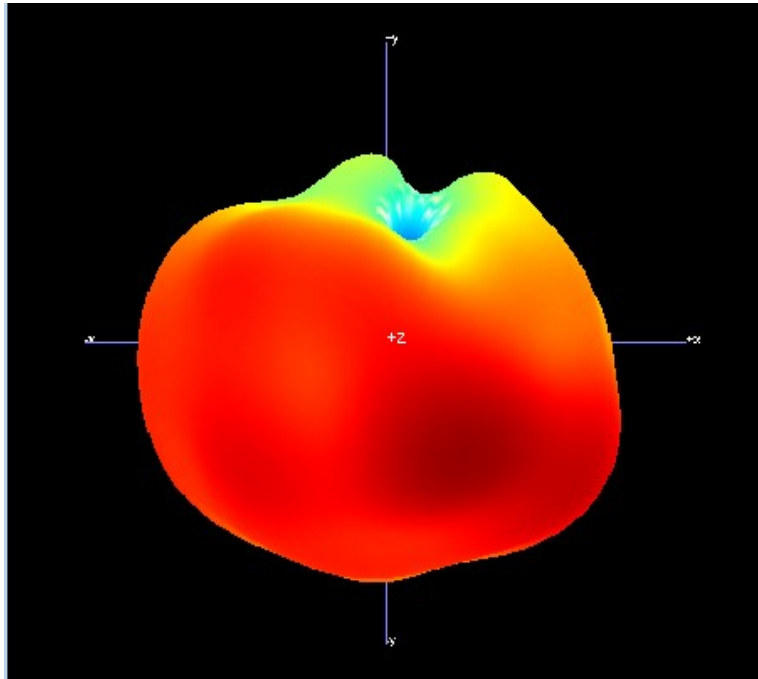
Phi=90°



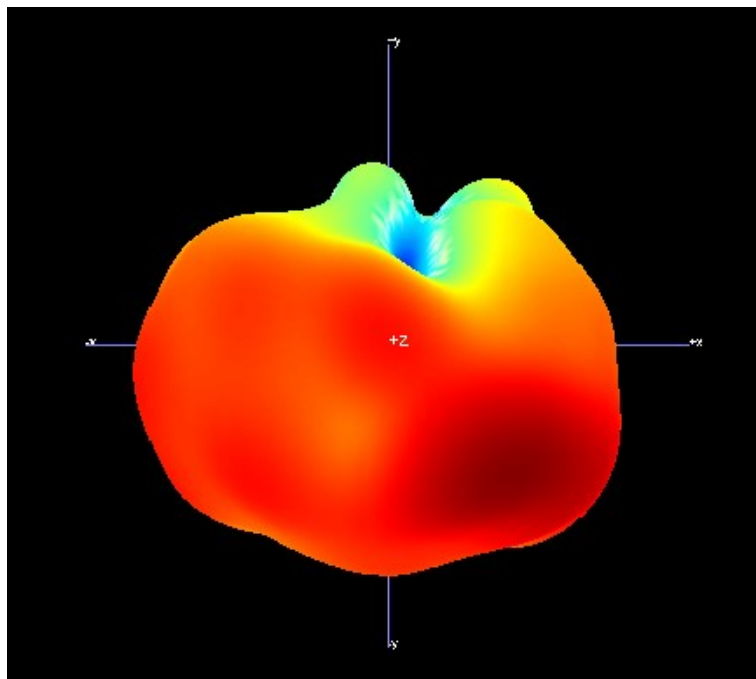
Theta=90°



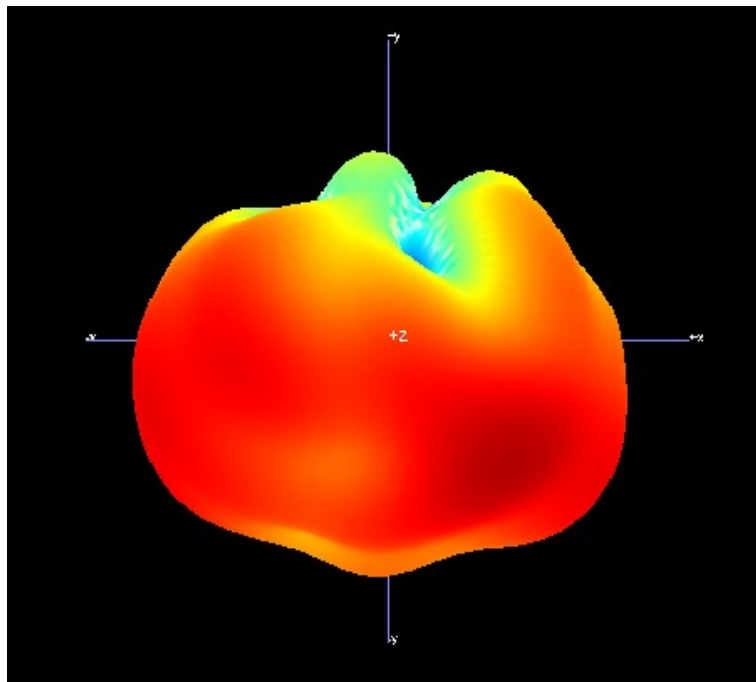
2. 3D Radiation Pattern



2400MHz

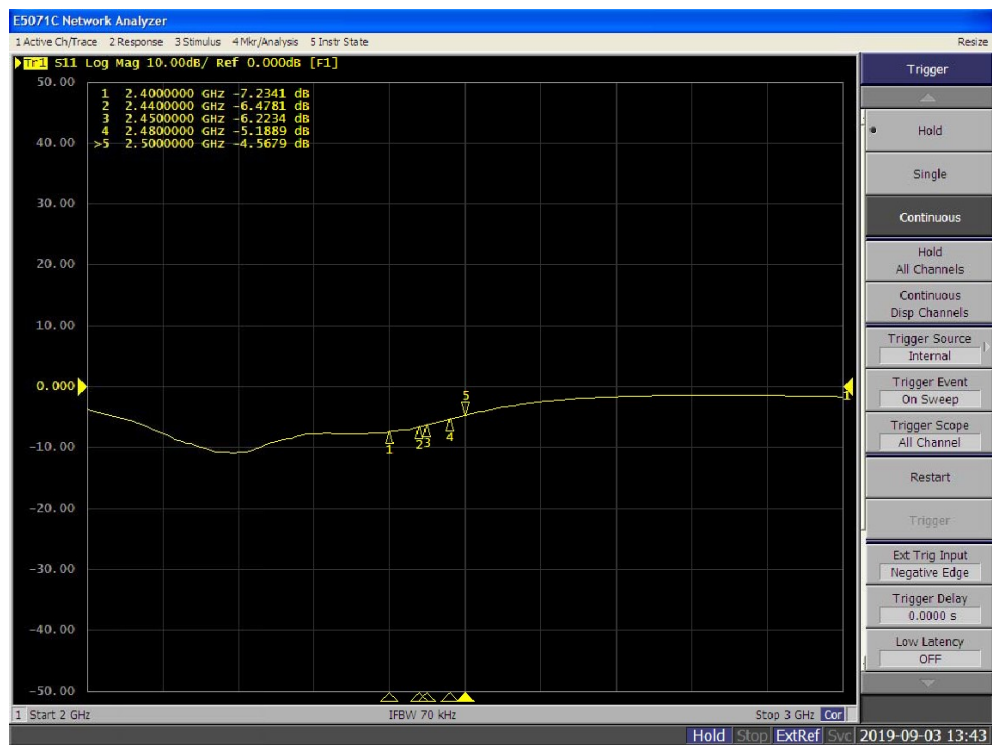


2450MHz

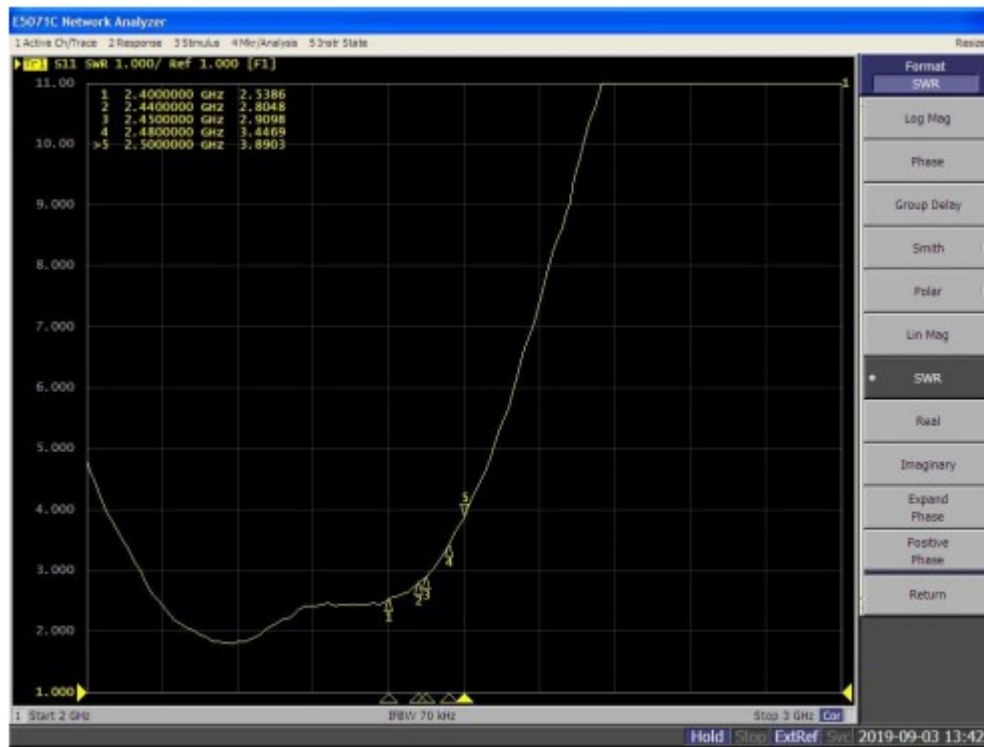


2500MH

3. Return Loss



4. VSWR



END