

Antenna Report

APPlications

※Bluetooth Home RF

※ISM band 2.4GHz applications

1. Dimensions



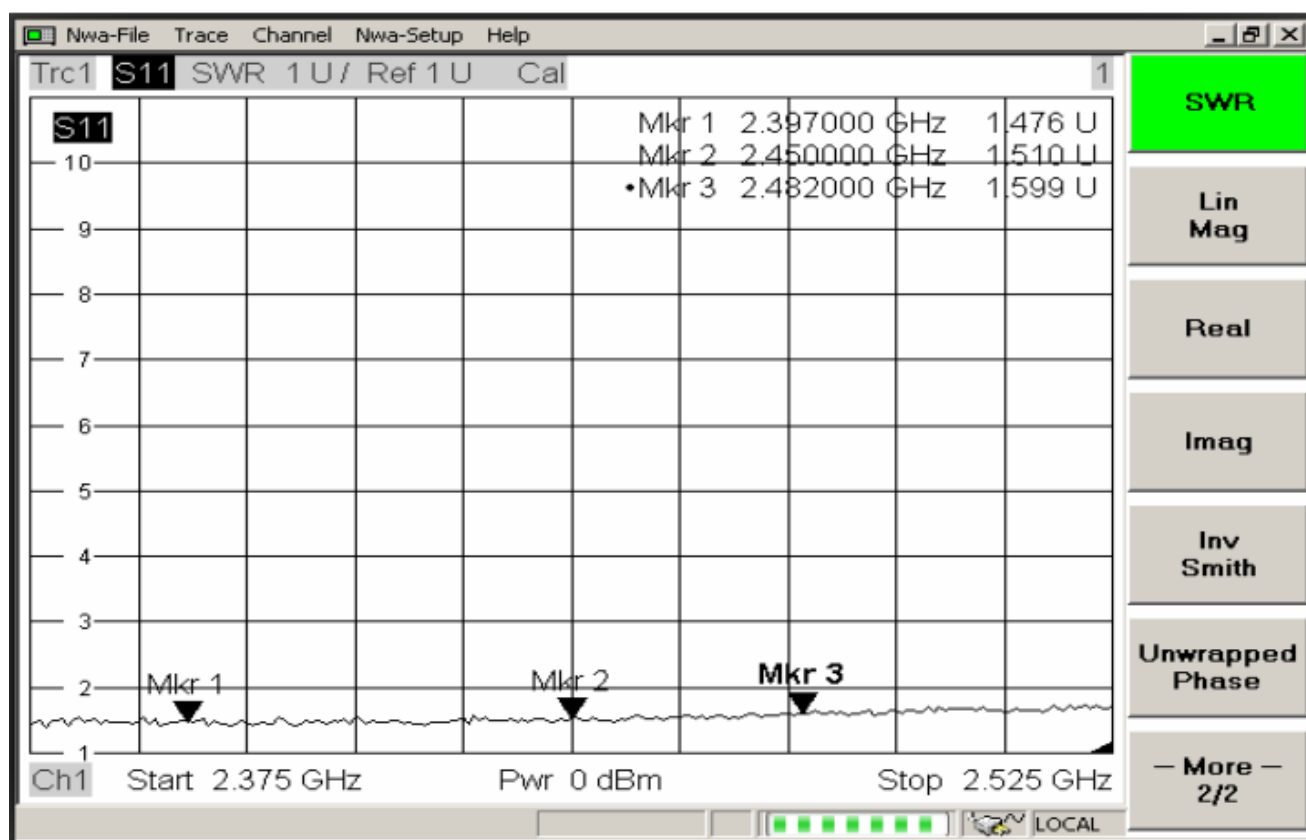
2. Specifications

number	Item	Specifications
1	Working Central Frequency	2441 MHz
2	Band Width	(2402-2480)MHz
3	Gain	0dBi
4	VSWR	≤2.0
5	Antenna type	PCB antenna
6	Azimuth Beam width	Omni - directional
7	Impedance	50ohm
8	Modulation mode	GFSK

3. Instrument test and software simulation parameters

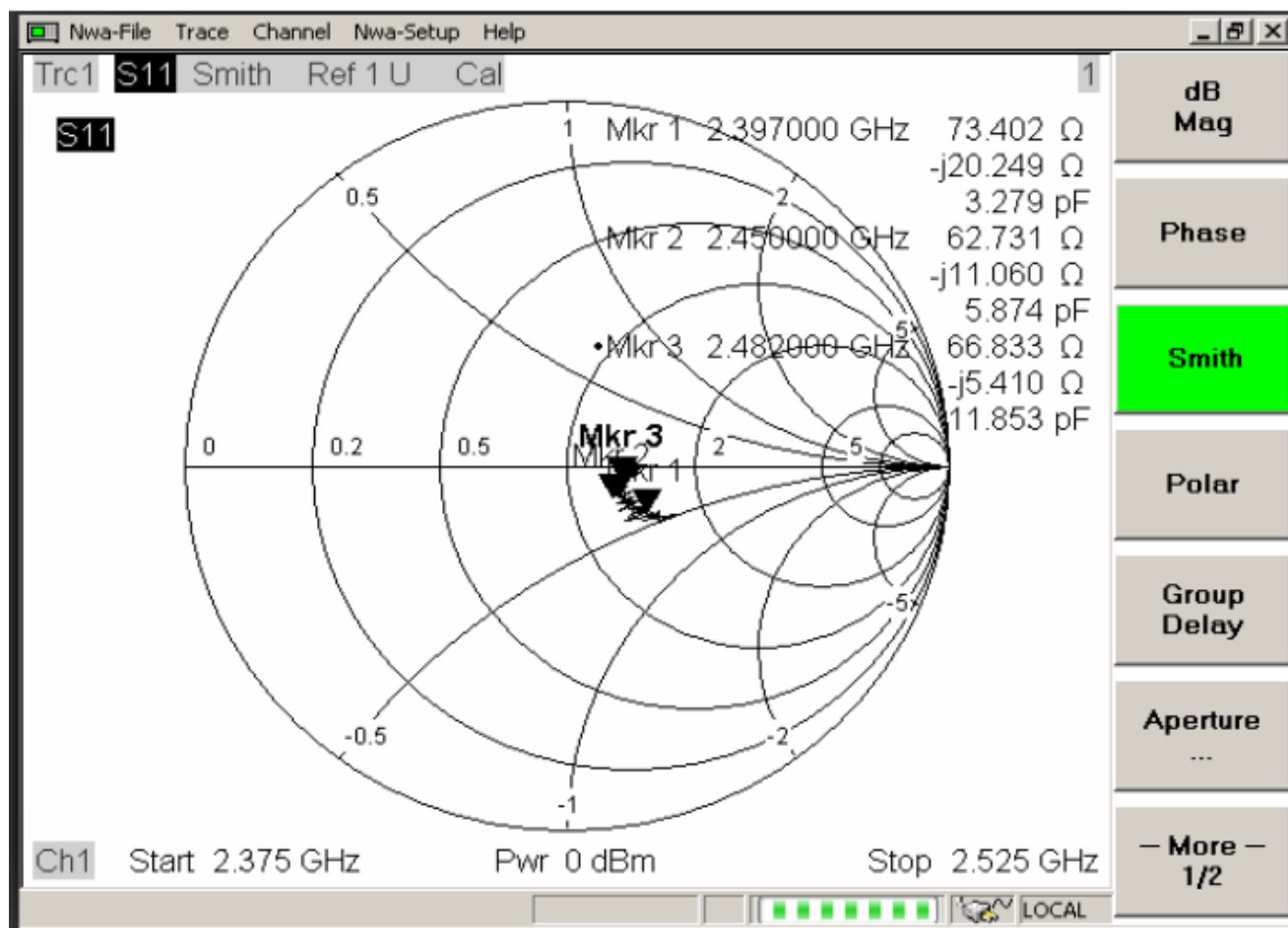
① VSWR

Mkr1: 2397MHz 1.47 Mkr2: 2450MHz 1.51 Mkr3: 2482 MHz 1.59



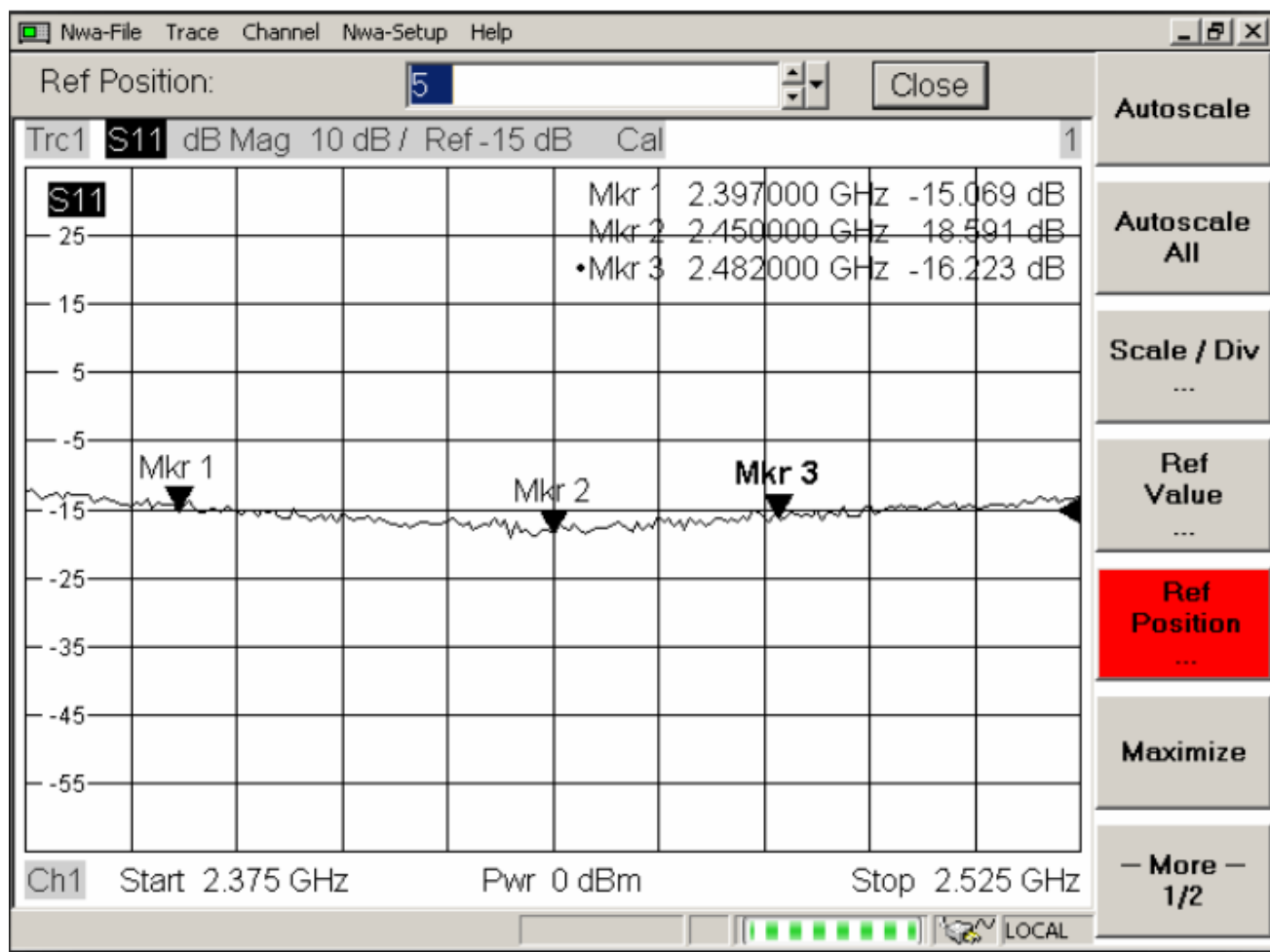
②Smith Char

Mkr1: 2397MHz 73.4 Mkr2: 2450MHz 62.7 Mkr3: 2482MHz 66.8



③Return Loss

Mkr1: 2397MHz -15 Mkr2: 2450MHz -18 Mkr3: 2482 MHz -16

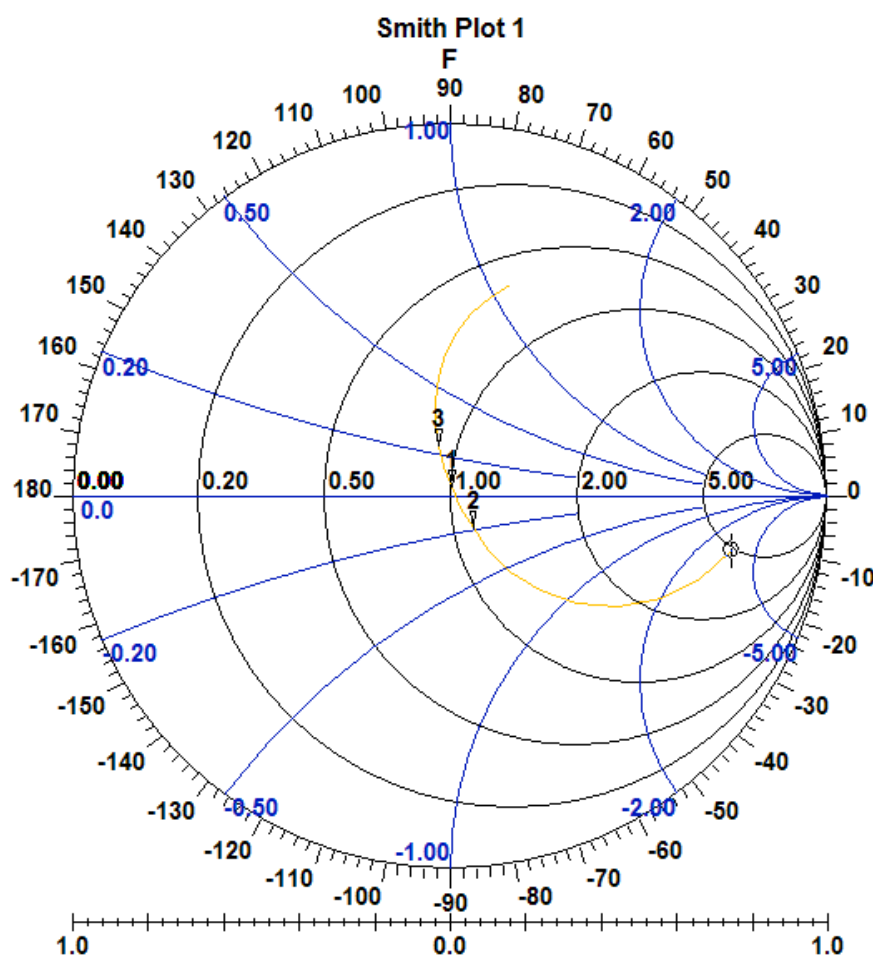


④Smith Char Simulation

Mkr1: 2400MHz 1.234

Mkr2: 2500MHz 1.051

Mkr3: 2600MHz 1.322



VSWR1= 1.051
2.500GHz

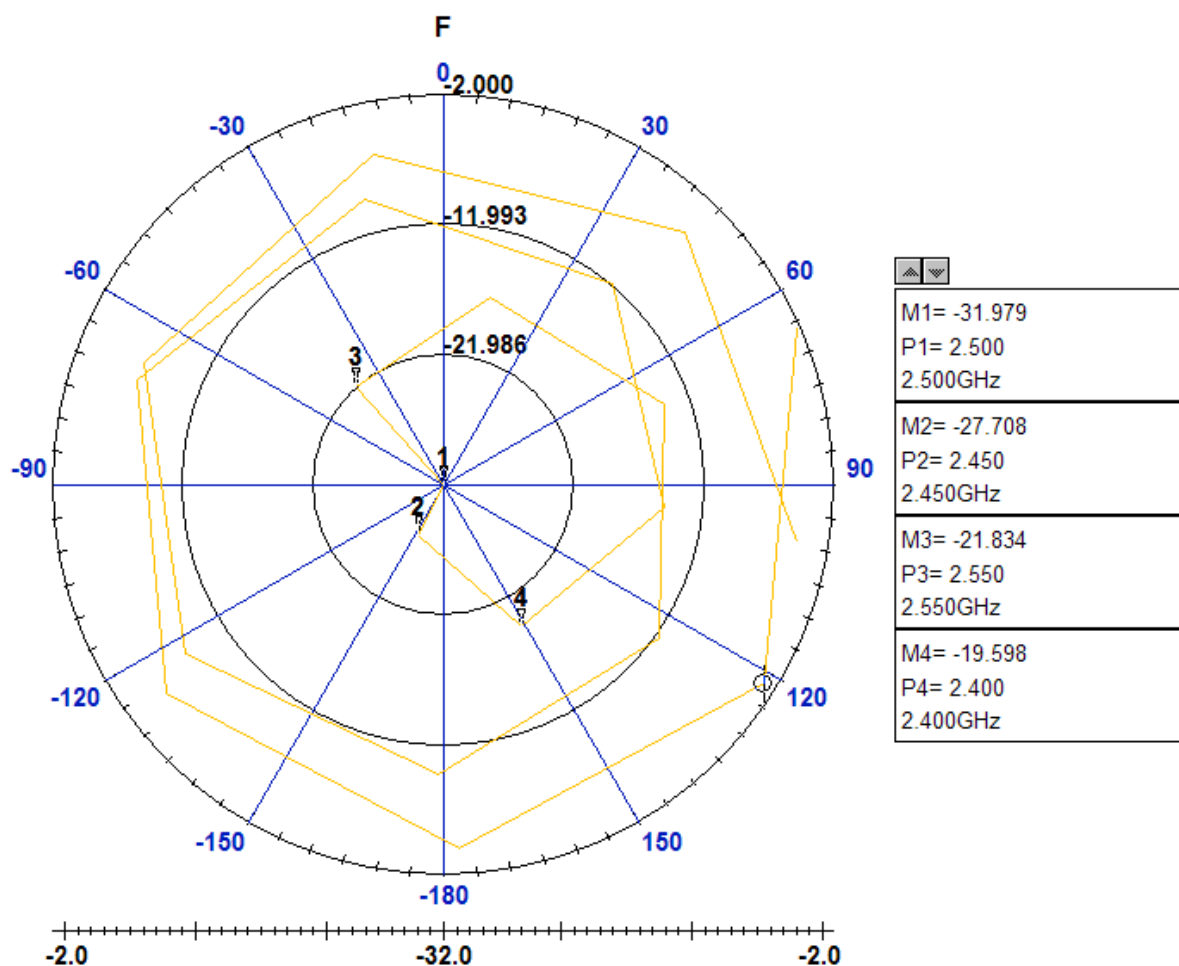
VSWR2= 1.234
2.400GHz

VSWR3= 1.322
2.600GHz

⑤Return Losss Simulation

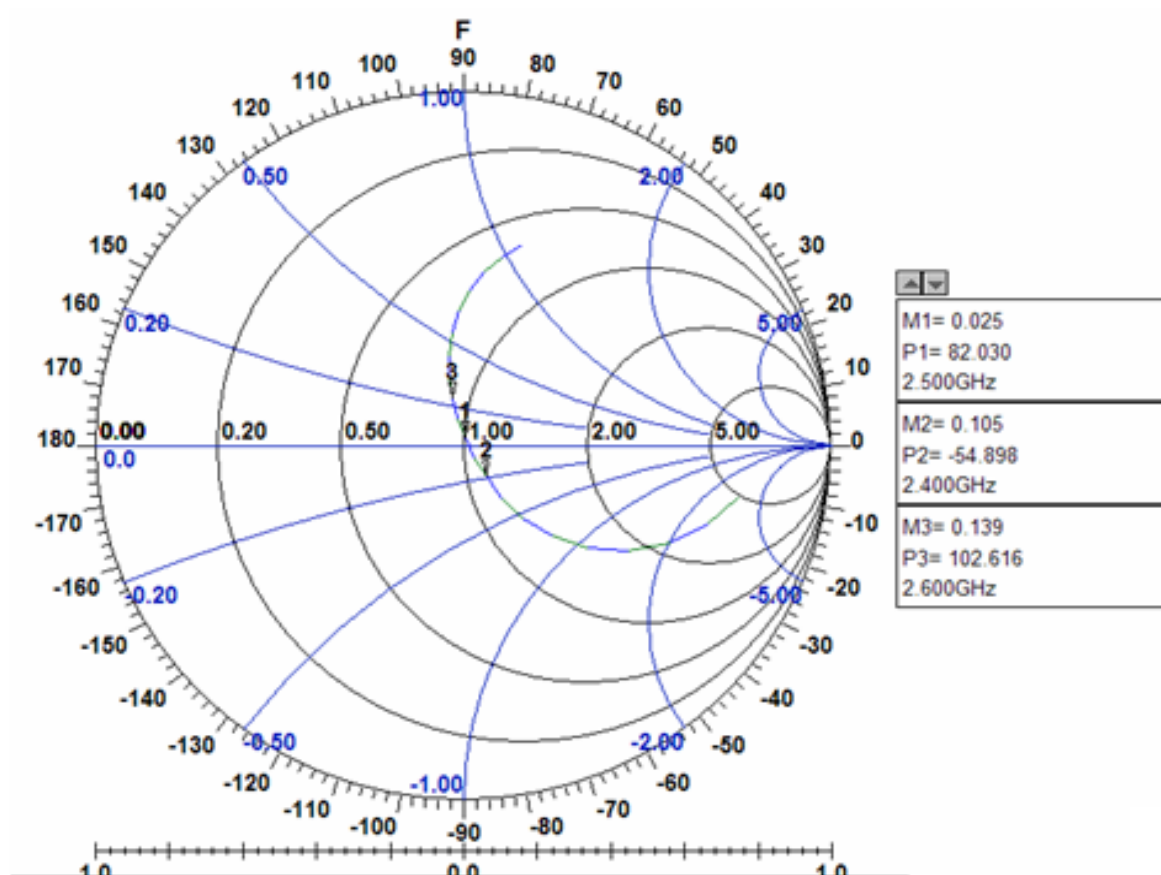
Mkr1: 2400MHz -19.59 Mkr2: 2450MHz -27.70 Mkr3: 2500MHz -31.97

Mkr4: 2550MHz -21.83



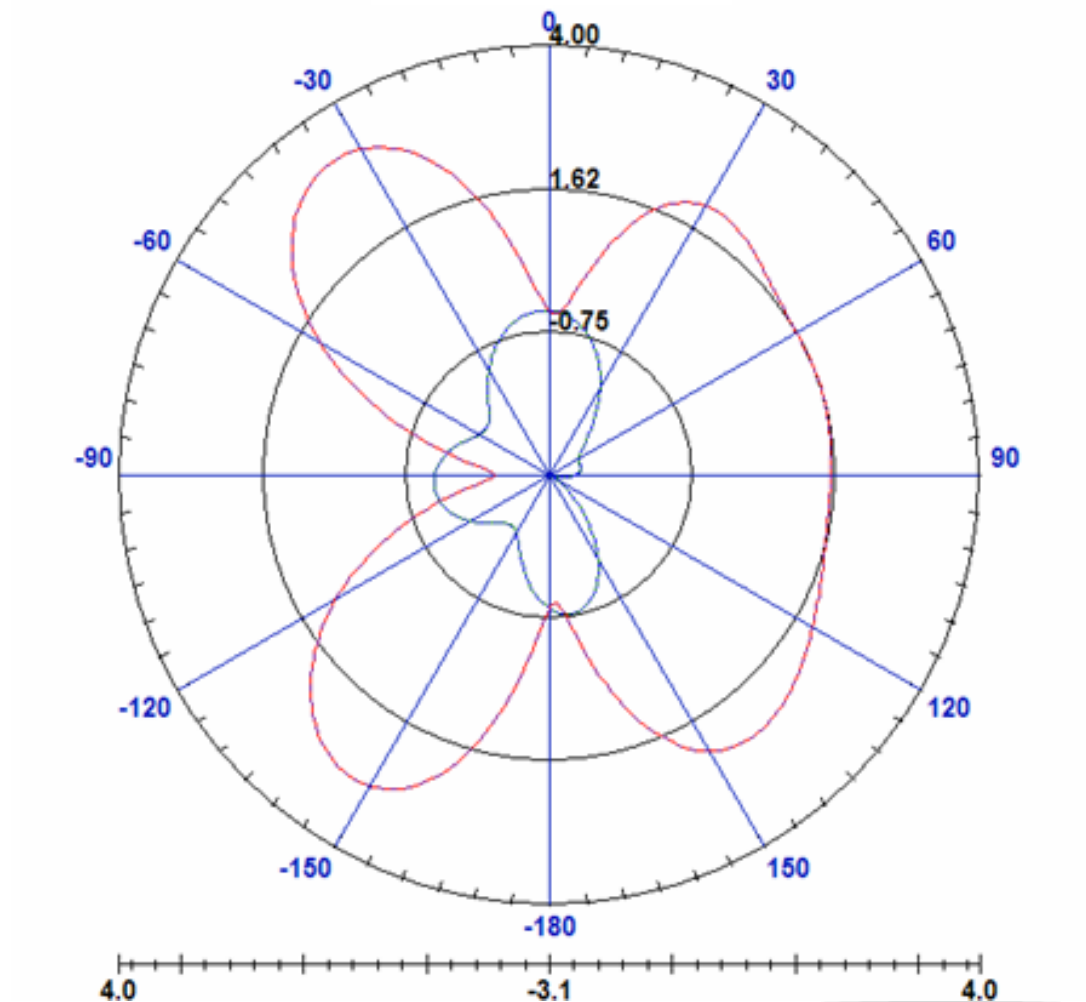
⑥Phase Simulation

Mkr1: 2400MHz -54.89 Mkr2: 2500MHz -82.03 Mkr3: 2600MHz -102.6

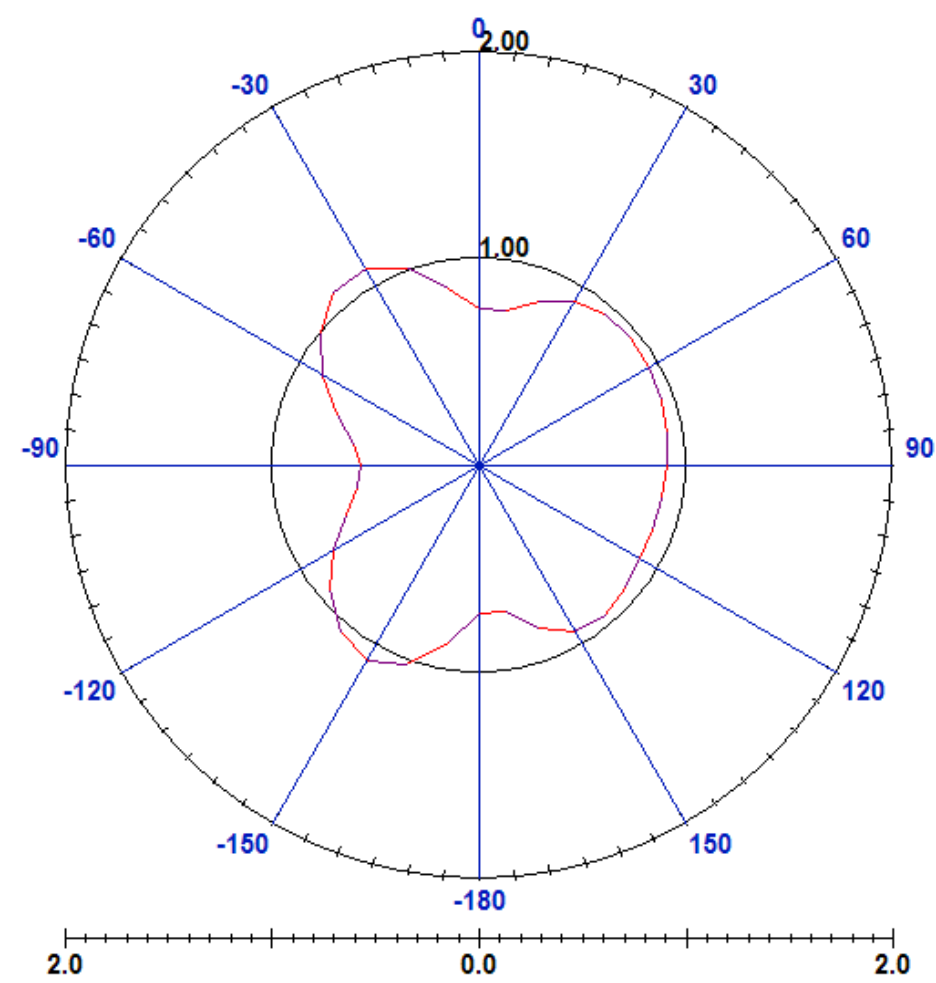


4. Radiation Patterns

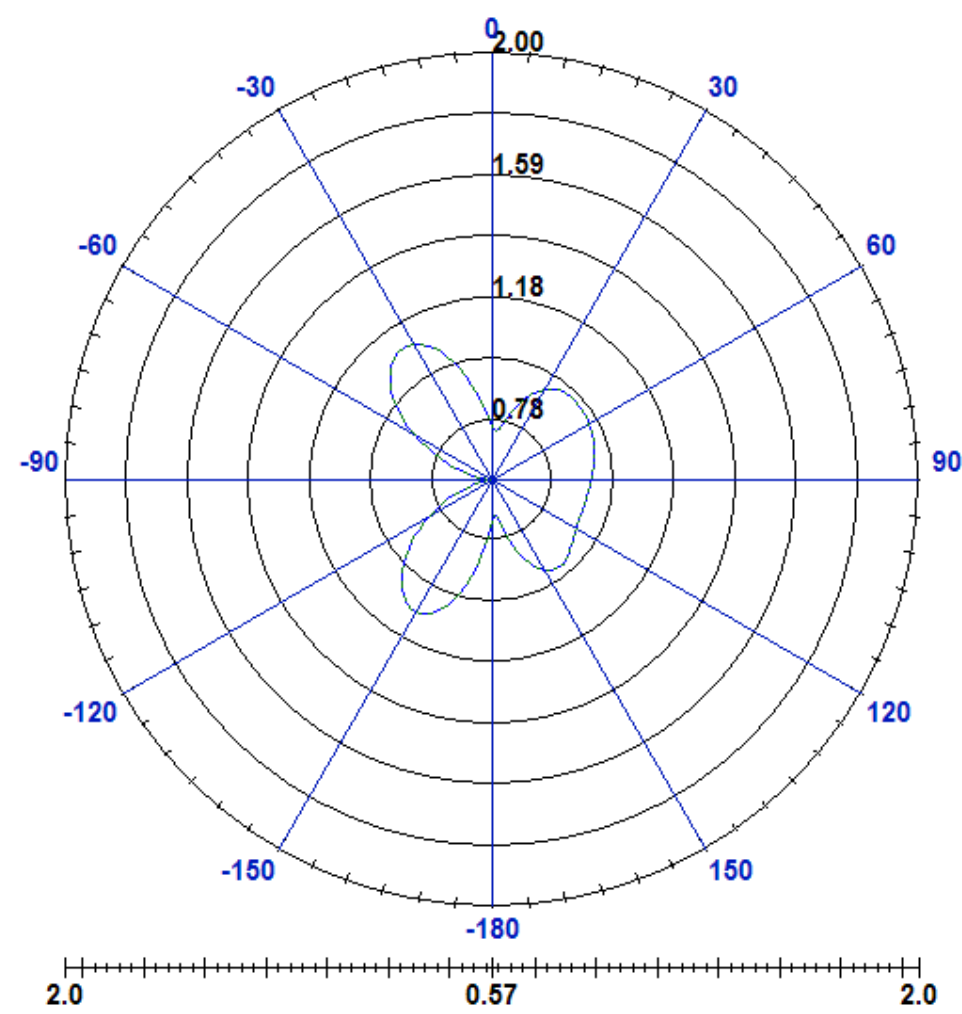
XY-plane



XZ-plane



YZ-plane



3D Radiation Field Pattern

