SWS002



PN:SW21020IA67

Features:

- Antenna for 2400~25000MHz.
- Maintains high performance on device.
- High gain.
- Impedance 50 Ohm.

Applications:

- Remote monitoring
- Network Devices
- Gateway
- Router
- Others

Sunnyway Technology

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1. Electrical Specifications

Frequency range(MHz)	2400~2500 MHz	2450 MHz
Peak Gain (dBi)	4.0~4.6	4.3
Average Gain (dB)	-2.4~-1.9	-2.1
VSWR	< 2.0	1.2
Return Loss	< -15.0	-17.7
Efficiency (%)	57~65	61.8
Polarization mode	Linear	Linear
Radiation pattern	Omni-Directional	Omni-Directional
Output impedance (Ω)	50	50
Max. Input Power(W)	25	25

Note: Parameters are measured with Sunnyway's EVK which size is 40*50mm

2. Mechanical and Environmental Specification

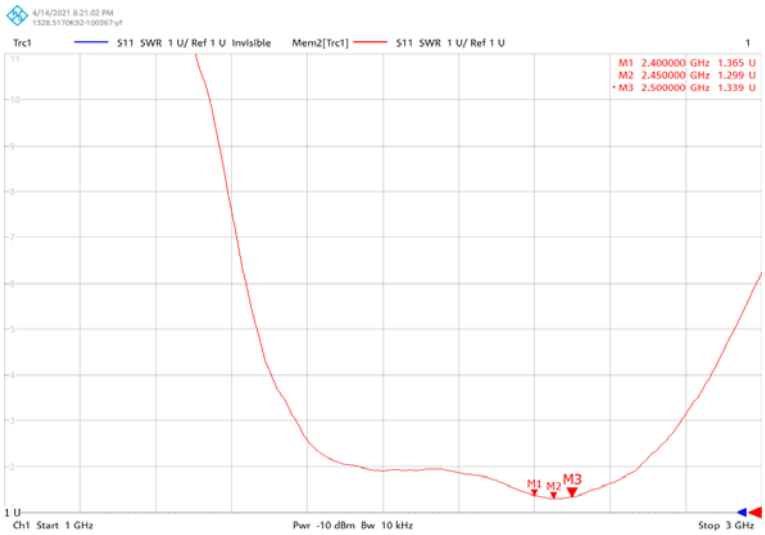
Mounting Type	Welding
Antenna size(mm)	18.21*φ5
Material	Nickel plating on stainless steel
Operating Temperature (˚C)	-40 ˚C ~ + 85 ˚C
Storage Temperature(˚C)	-40 ˚C ~ + 85 ˚C

3. Antenna parameters

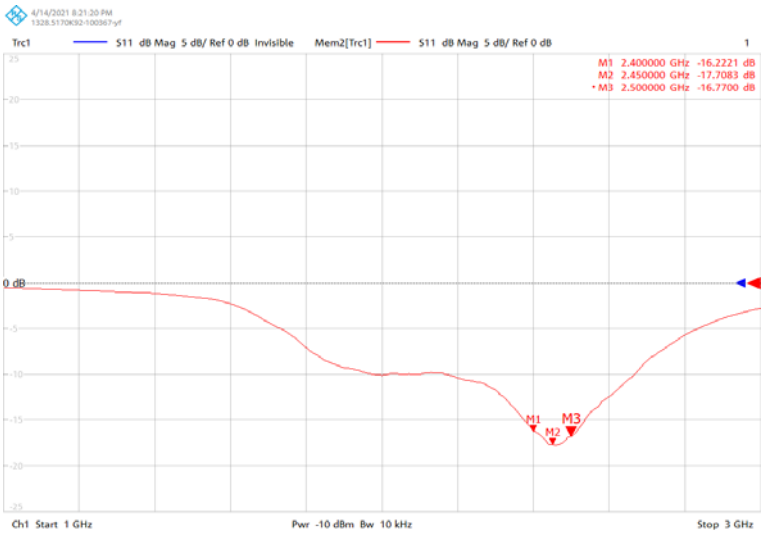
3.1 General Data: Parameters are measured with Sunnyway's EVK which size is 40*50mm

FRE (MHz)	2400	2450	2500
VSWR	1.3	1.2	1.3
Return Loss	-16.2	-17.7	-16.7
Eff (%)	65.1	61.8	57.5
Average Gain(dB)	-1.9	-2.1	-2.4

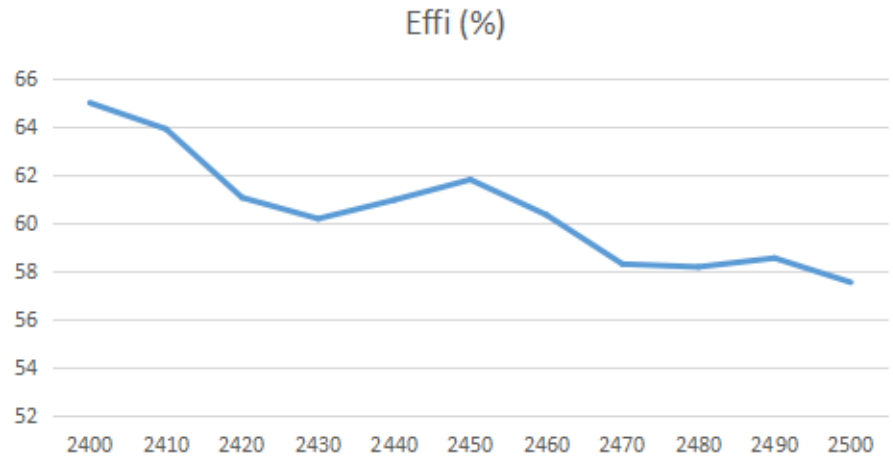
3.2 VSWR



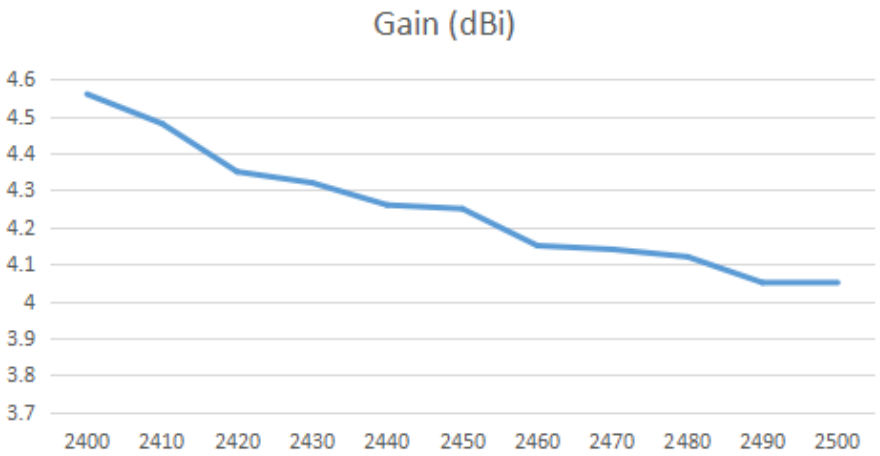
3.3 Return Loss



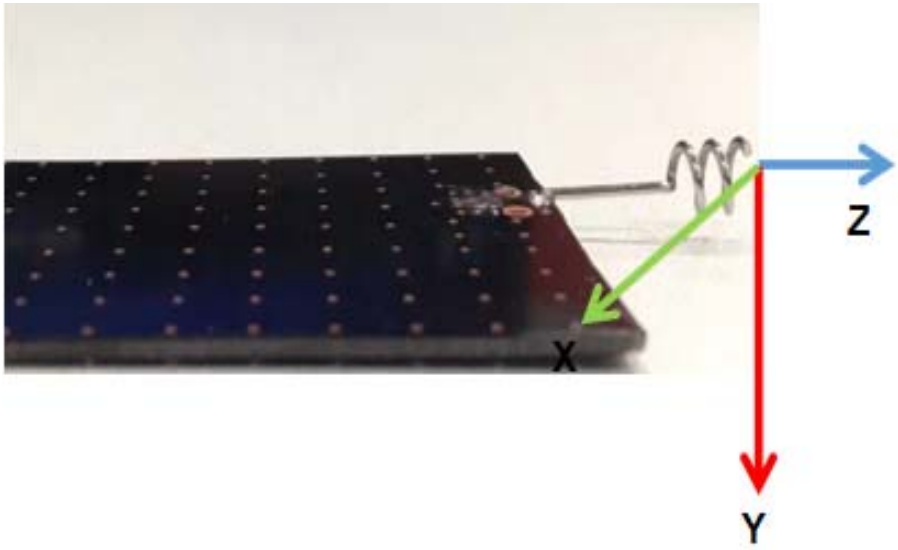
3.4 Efficiency

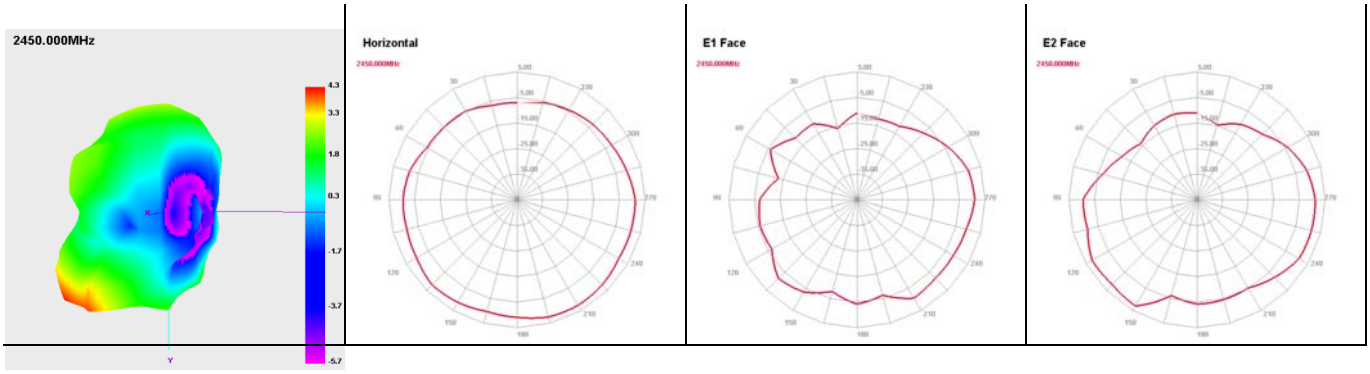


3.5 Gain



3.6 Directional pattern





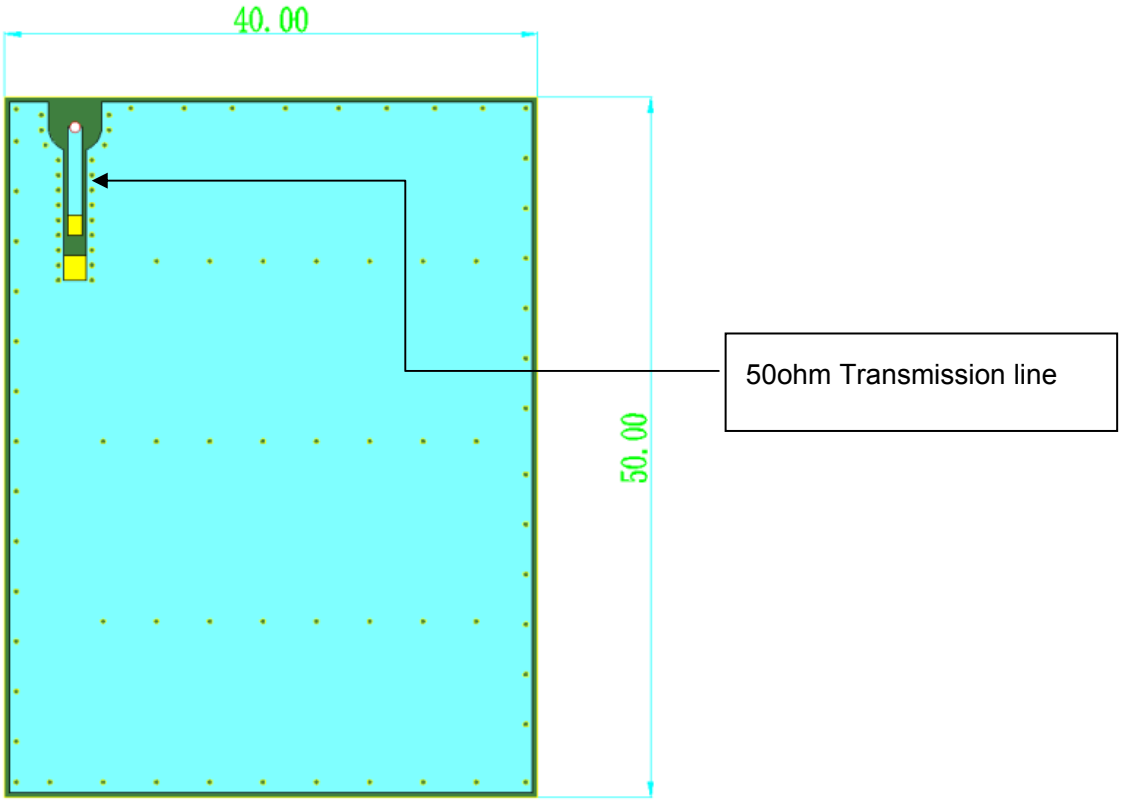
4. Design board and Transmission Line

• Development and design based on 40 * 50mm PCB board

• The characteristic impedance of all transmission lines shall be designed as 50 Ω.

• The length of the transmission lines should be kept to as short as possible

• Any other part of the RF system, such as transceiver, power amplifiers, etc., shall also be designed with an impedance of 50 Ω



5.Antenna Drawings(unit:mm)

