

Shenzhen Keesun Technology Co., Ltd.

Antenna Data Sheet

Product P/N FG00078Product Description: 600-6000MHz Omni White FRP antenna.With two RG58 Black cable (cable length:20m) SMA Male

Guest households: _____

Client P/N: _____

KEESUN		
QA	R&D	Marketing Dept
Wu Miaoyan	Liao Haibin	Liu Chenglan

Client		
Affirm	Examine and Verify	Ratify
Bear fruit: : ☐ Accept ☐ Refuse		
Suggestion:		

Catalogue

Project / content	page number
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Outline Summary

● Purpose

Antenna design and test by Keesun. Result as following.

● Agenda

- Test Environment and Equipment
- Antenna Pictures
- Matching Parameter
 - Test Result : Efficiency
 - Test Result : 2D Radiation Pattern
 - Test Result : 3D Radiation Pattern

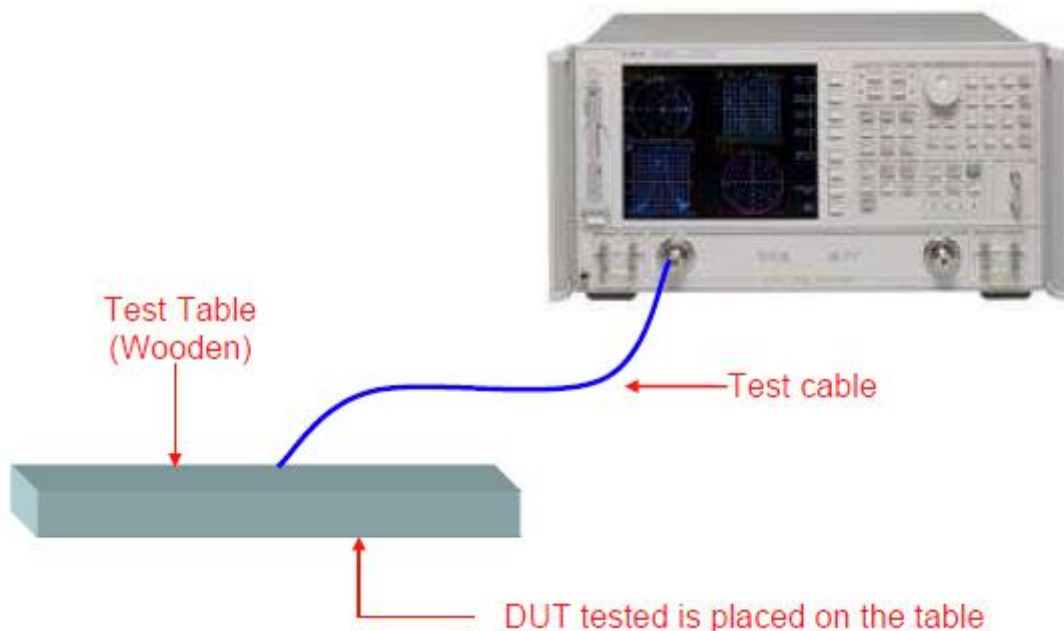
● Result & Suggestions

Test Environment and Equipments

S-Parameter test

Testing range from 9KHz to 8.5GHz or 300KHz~6.5GHz

Network Analyzer(Agilent-E5071C or R&S ZVL)



Product Spec

●Electrical Performance:

1. Frequency Range: 600-6000MHz
2. Impedance: 50 Ohms nominal
3. VSWR: ≤ 2
4. Gain: 18dBi
5. Admitted power radiation: 1W
6. Radiation of Radiation: Toroidal
7. Radiation: Omni
8. Polarization: Vertical
9. Connector1 Type: SMA male
10. Connector2 Type: SMA male

●Mechanical properties:

1. Cable: RG58 Black Cable, 50 Ohm
2. Operation temperature range: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
3. Storage temperature range: $-40^{\circ}\text{C} \sim +88^{\circ}\text{C}$
4. Color: white
5. Cable length: 20m

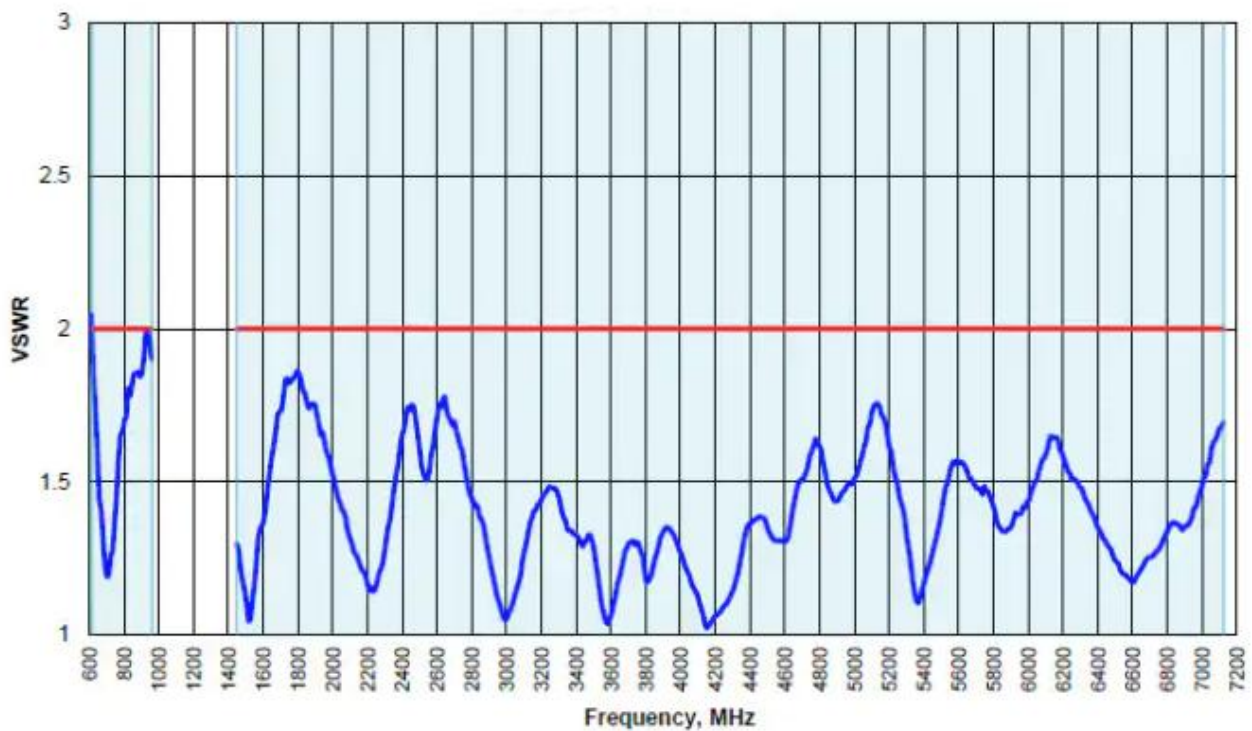


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Part Number:FG00078

Product name and specifications: Outdoor antenna

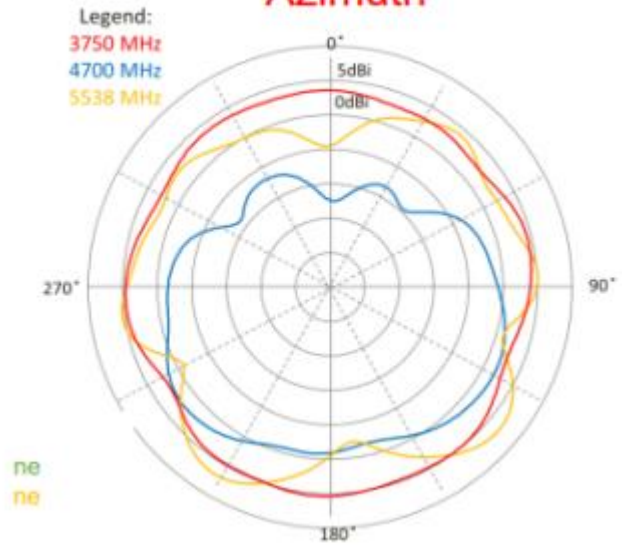
Test value:Return Loss/VSWR



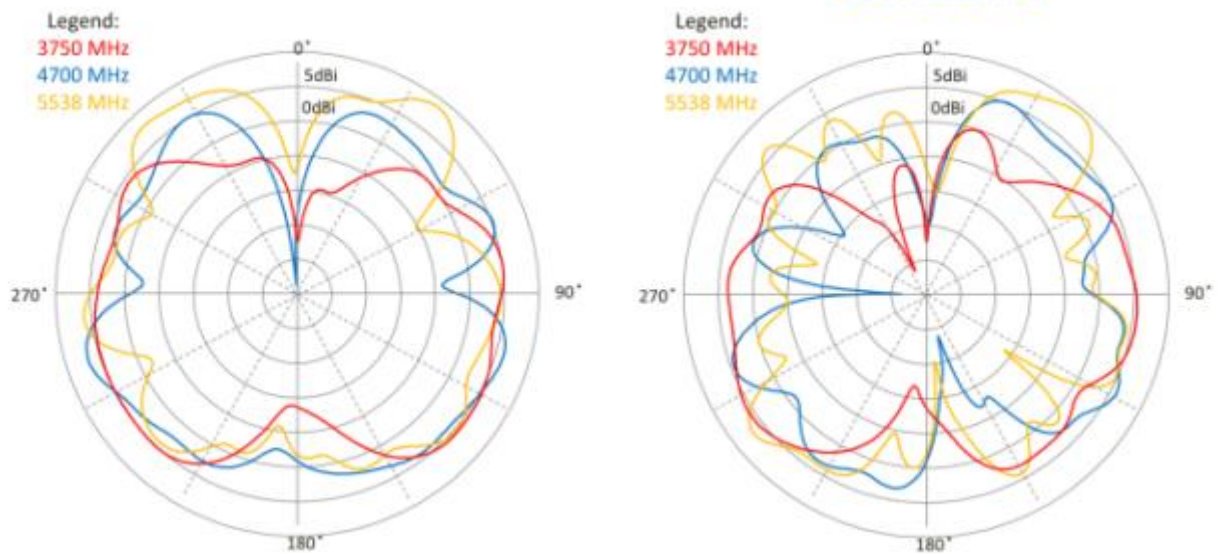
Test setup



Azimuth



Elevation 2



Antenna standard parameters

一、 Technical specifications	
Operating frequency range	600-6000MHz
S.W.R	≤ 1.92
Antenna gain	18~20dBi
Switching mode	SMA (male)
Impedance	50 Ohm

二、 Reliability test

Project	Test condition	Specifications
Storage environment	Temperature, humidity, and air pressure are tested in the absence of specified conditions: 1 temperature is -30 degrees C to +80 2 relative humidity is 45%-85% 3 air pressure is 86kpa-106kpa	Normal electrical and mechanical properties
High and low temperature test	Between 70 and 40 degrees C for 5 cycles, and then under normal conditions 1-2H, check the appearance quality.	The dimensions shall meet the requirements and shall meet the requirements of the mechanical and electrical properties.
Resistance to constant damp heat test	Relative humidity 95 + 3%, the test temperature: 40 degrees C, after continuing the 2H effect, the test sample after taking out the electrical performance of 5min, test product under normal conditions 1-2H, check the appearance quality	The dimensions shall meet the requirements and shall meet the requirements of the mechanical and electrical properties.
Voltage resistance	1 insulation spark voltage 1.5KV 2 sheath spark voltage 1.5KV 3 insulation resistance to sheath voltage 0.5KV	Normal electrical and mechanical properties
Attenuation value	2.0(nominal) 1.0GHz 2.9(nominal) 2.0GHz 3.2(nominal) 2.4GHz 3.7(nominal) 3.0GHz 4.3(nominal) 4.0GHz 4.8(nominal) 5.0GHz 5.3(nominal) 6.0GHz	3.3dB/m (at20°C)