

Antenna

FG00124 Datasheet

Antenna Services

Version:1.0

Date: 2025-11-05

Status: Released



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Overall Performance

1)Test Environment

The Gain, Efficiency, Directivity and 2/3D Pattern

3D Anechoic Chamber

Testing range from 300MHz to 8.5GHz

Chamber Room Size: L*W*H=9*4.7*4.7 M

VSWR

Testing range from 300KHz~8.5GHz

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



2) Product Specifications

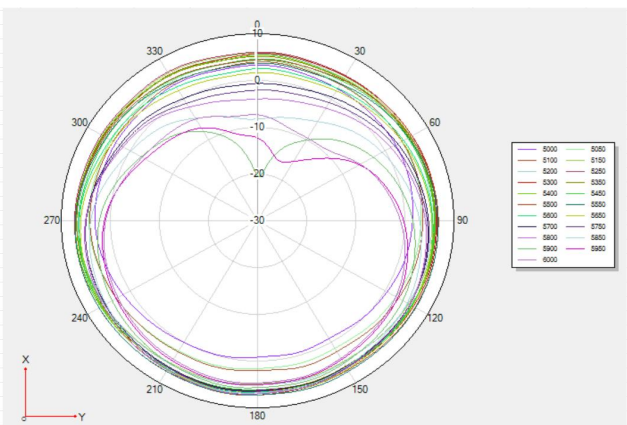
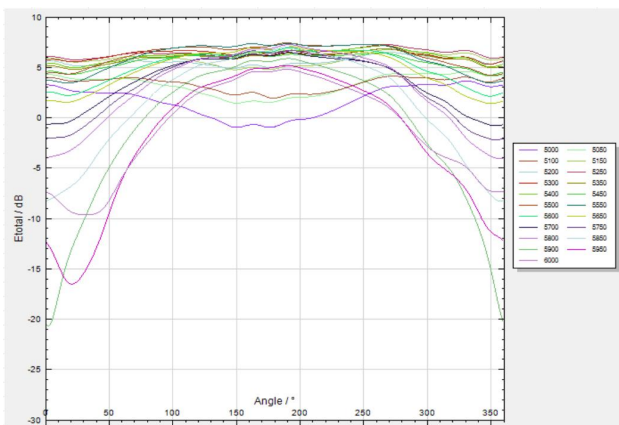
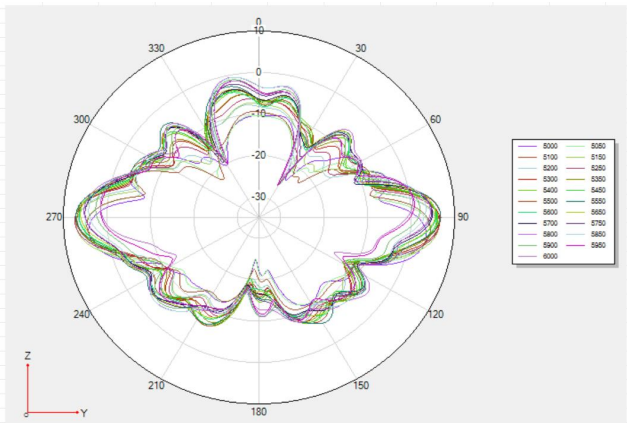
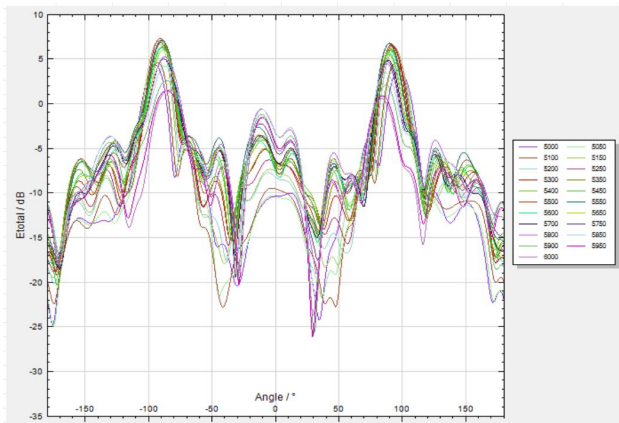
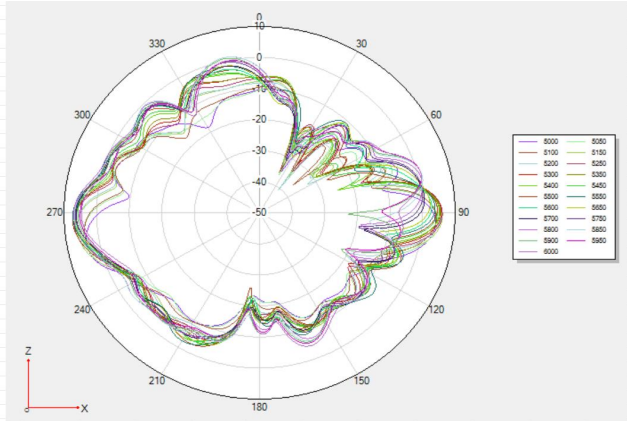
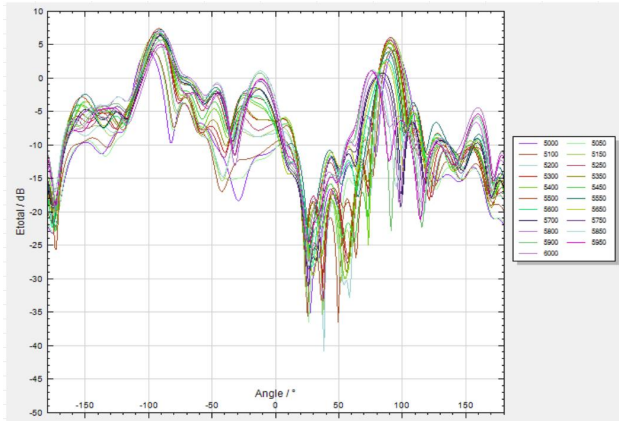
Electrical Specifications	
Model	FG00124
Frequency band	5000~6000MHz
Gain	7dBi
Horizontal Beamwidth	360°
VSWR	≤1.92
Ovality	≤2dB
Impedance	50Ω
Polarization	Vertical
Max. Power	100W
Lightning Protection	Dc ground
Connector	N-female
Mechanical Specifications	
Dimension(mm)	φ25*700 mm
Weight(kg)	0.326Kg
Internal material	Copper tube
Radome Color	Black
Operational Humidity	<95%
Rated Wind Velocity	36.9 m/s
Radome material	Glass fiber reinforced plastic
Operating temperature	-40~55℃

3) VSWR

Frequency (MHz)	5000	6000
VSWR	1.9137	1.8412



4) Antenna 2D Report

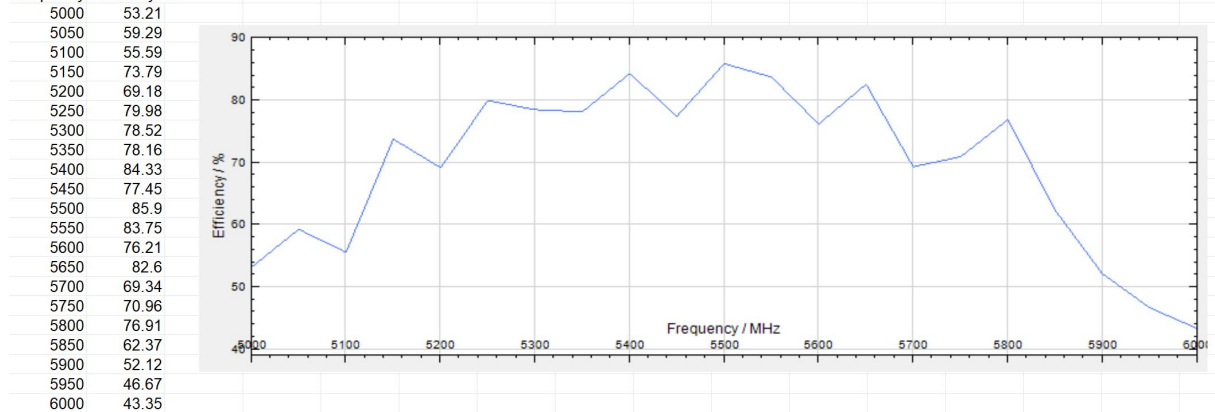


5) Total Efficiency& Gain:

Frequency(MHz)	Gain(dBi)	Efficiency(%)
5000	4.32	53.21
5050	5.11	59.29
5100	4.65	55.59
5150	7.09	73.79
5200	6.67	69.18
5250	7.38	79.98
5300	6.93	78.52
5350	6.9	78.16
5400	7.18	84.33
5450	6.49	77.45
5500	7.61	85.9
5550	7.45	83.75
5600	7.03	76.21
5650	7.13	82.6
5700	6.55	69.34
5750	6.72	70.96
5800	7.29	76.91
5850	7.09	62.37
5900	5.92	52.12
5950	5.26	46.67
6000	4.84	43.35

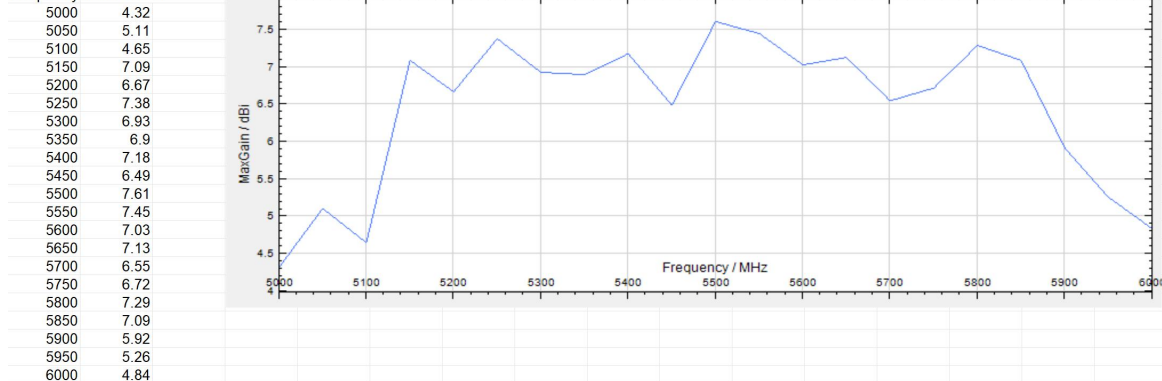
Efficiency

Frequency, Efficiency / %

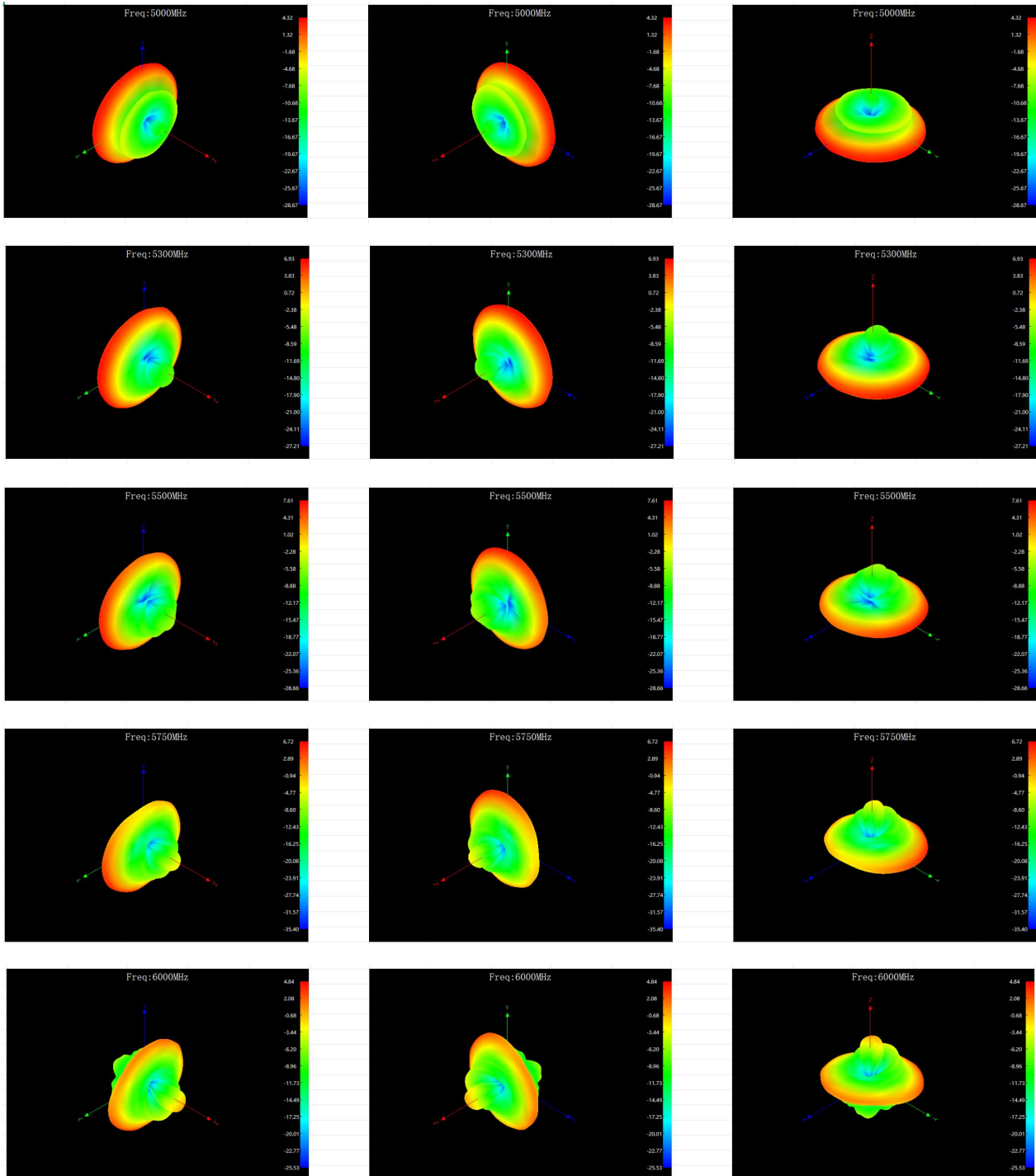


Gain

Frequency, MaxGain/dBi



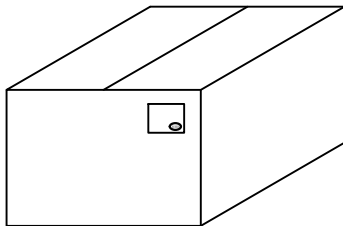
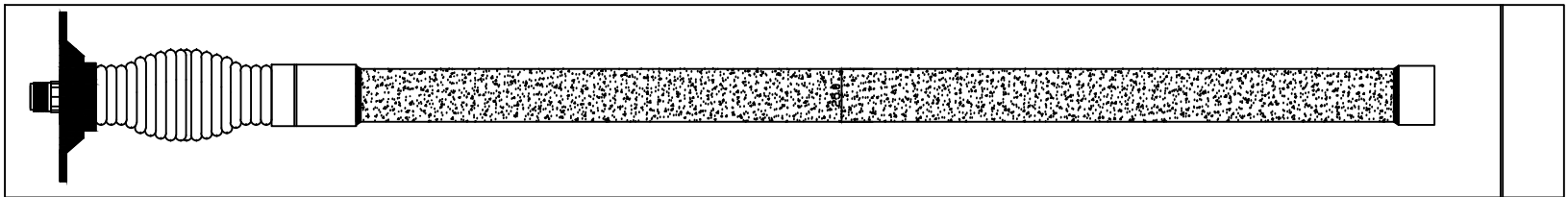
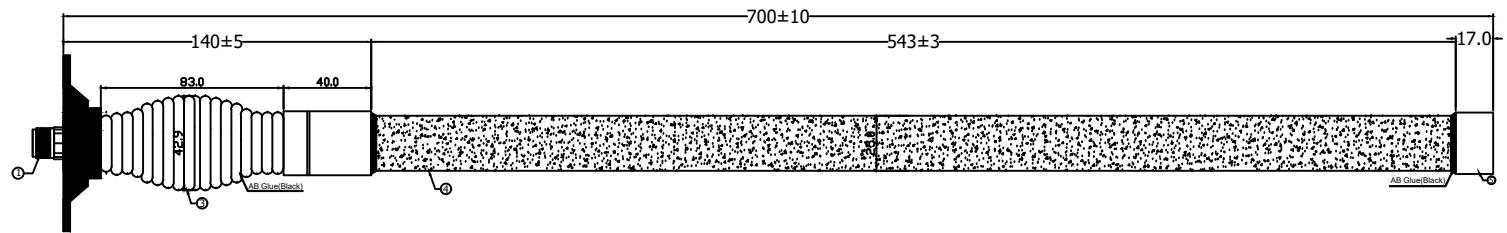
6) Antenna 3D Report



ROHS

Technical drawing of a circular component showing concentric circles and dimensions. The dimensions are labeled as follows:

- R40.0 (Outermost circle)
- R32.5 (Second circle from outside)
- R25.0 (Third circle from outside)
- R6.0 (Innermost circle)
- R19.5 (Circle between R6.0 and R25.0)
- R3.3 (Small circle at the top)



- Specification:
Frequency Rang:4000~5000MHZ
Return Loss:-10.0 dB or less
VSWR:1.92 Max
Gain:7±1dBi

5	Cap	Antenna cap (Plastic)	1	Black
4	Sleeve 2	Antenna sleeve (Glass fibre reinforced plastic)	1	Black
3	Sleeve 1	Sleeve (Stainless steel)	1	
2	Connector	N-Female	1	
1	Protective sleeve	PVC White Transparent	1	
NO	DESCRIPTION		Q'TY	REMARK

TITLE:		Omni Antenna		 KEESUN 深圳市麒新弘泽科技有限公司 Shenzhen keesun Technology Co., Ltd					
P/N:		FG00124							
CUSTOMER:									
DRAW NO.:									
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED								APPROVED	
一般公差 TOLERANCE		.XXX	±0.05	XX	±1.0	SHEET: 1/1	SCALE: 1:1	CHECKED	
		.XX	±0.1						
		.X	±0.2			UNIT: mm	REV.A	DRAWED	Julia
		X	±0.5						