Specification For Approval

Client:	**Geomax AG** Espenstrasse 135, 9443 Widnau Switzerland
Supplier	Beijing Radiocraft Technology Co.,LTD 253, Floor 5, Unit 2, Building 5, Hounancang, Tongzhou District, Beijing
Production Number	RACL-GP-00-3I-001

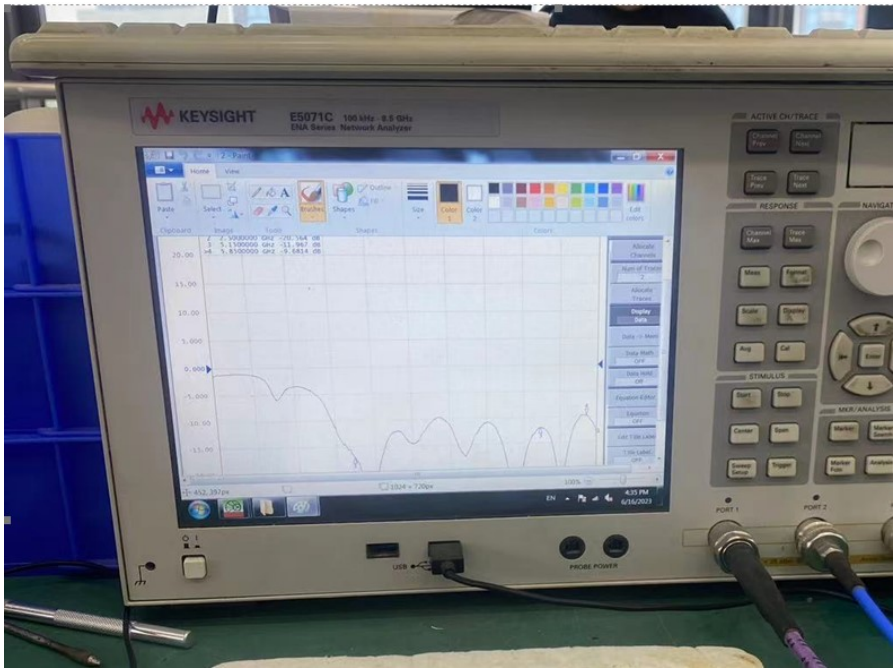
1.3 Antenna Type

FPC antenna.

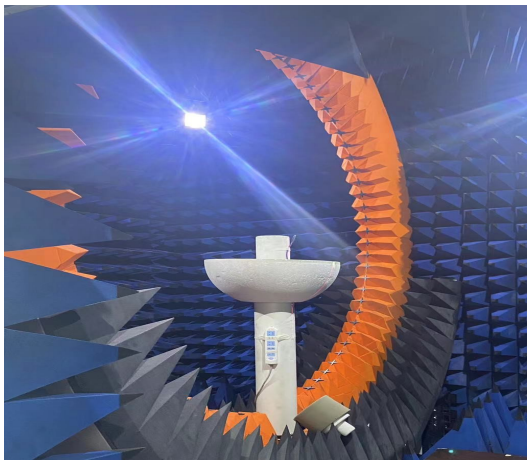
2 TEST

2.1 Test setup

① The return loss was measured with Agilent E5071.



② The efficiency and gain were measured in MVG-SATIMO Chamber



MVG chamber and measurement system

③ Measurement equipment description

Description Manufacturer	Model No	Serial No	Calibrated Date	Calibrated Until
Agilent	E5071C	MY46316132	2023/1/13	2024/1/13
SATIMO MVG	SG64	1103277-0001	2023/1/16	2024/1/16
测试软件	WaveStudio	2020.2.8		
分析软件	satenv	3.0.3.0.23		

2.2 Test step

① The instrument is powered on and preheated for more than 30 minutes;

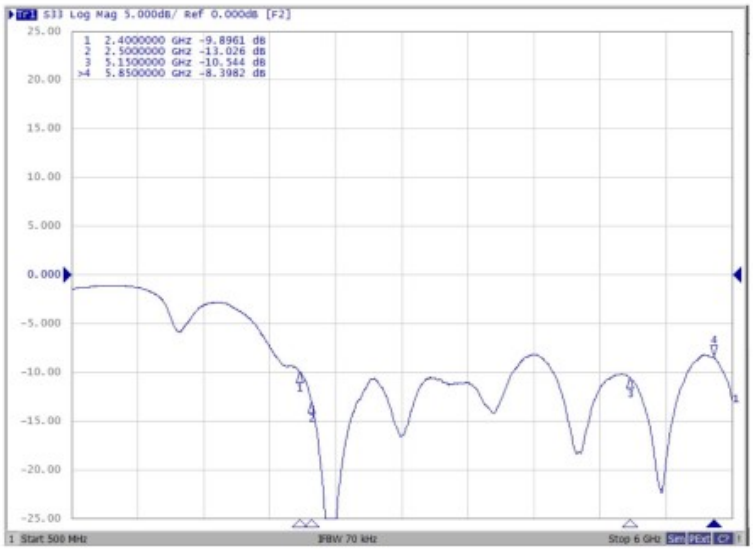
② Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard;

③ Outline sets the test content objectives and conducts calibration tests;

④ Run the software, when the test is completed, export the corresponding test diagram and testdata, and save to the corresponding directory.

3.Electrical Performance

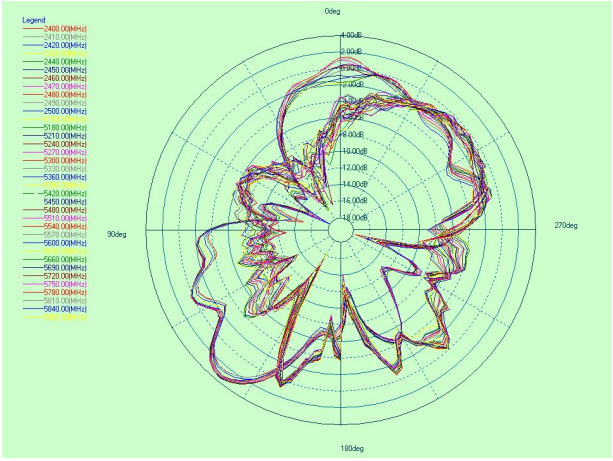
3.1. Return Loss



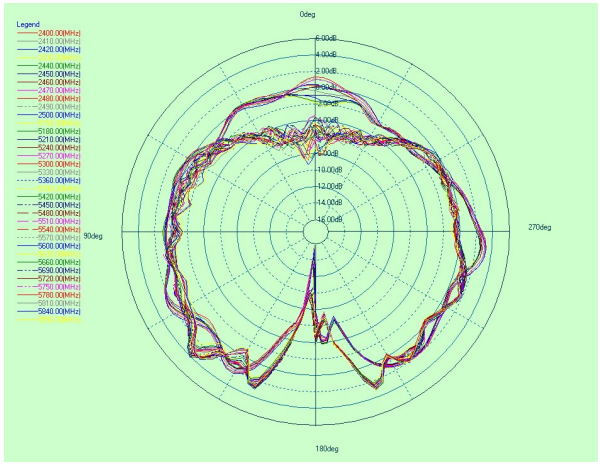
3.2 Efficiency and Peak Gain

Frequency(MHz)	Efficiency(%)	Peak gain	Frequency(MHz)	Efficiency(%)	Peak gain
2400	69%	3.01	5360	64%	3.67
2410	68%	2.93	5390	64%	3.51
2420	69%	2.87	5420	65%	3.81
2430	70%	3.08	5450	66%	3.75
2440	72%	3.48	5480	64%	3.83
2450	72%	3.54	5510	66%	3.98
2460	73%	3.52	5540	63%	3.86
2470	75%	3.44	5570	63%	3.86
2480	76%	3.64	5600	64%	4.02
2490	76%	3.63	5630	61%	3.78
2500	74%	3.58	5660	63%	3.97
5150	61%	3.08	5690	63%	3.88
5180	63%	3.32	5720	59%	3.76
5210	64%	3.13	5750	59%	3.80
5240	64%	3.21	5780	58%	3.72
5270	63%	3.29	5810	58%	3.88
5300	62%	3.27	5840	59%	3.82
5330	62%	3.37	5850	58%	3.75

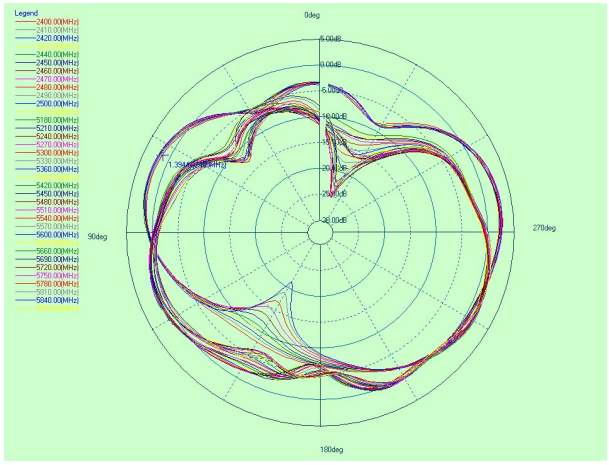
3.3 2D Pattern



Phi=0

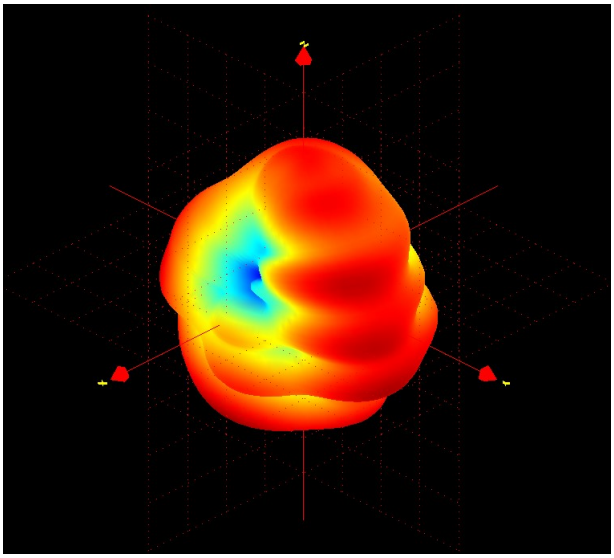


Phi=90

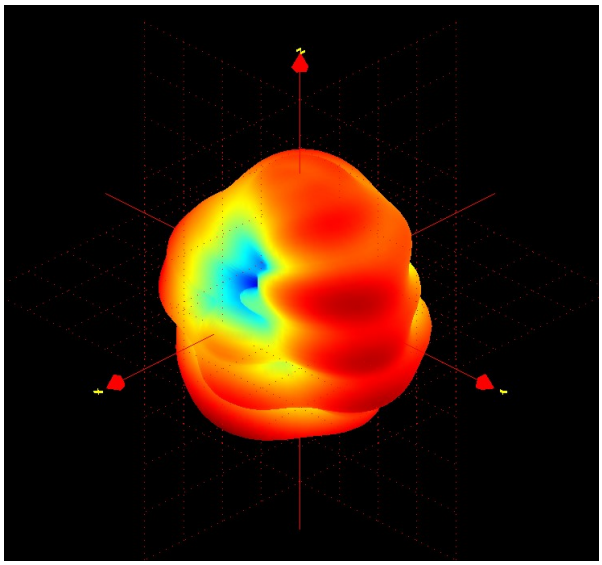


Theta=90

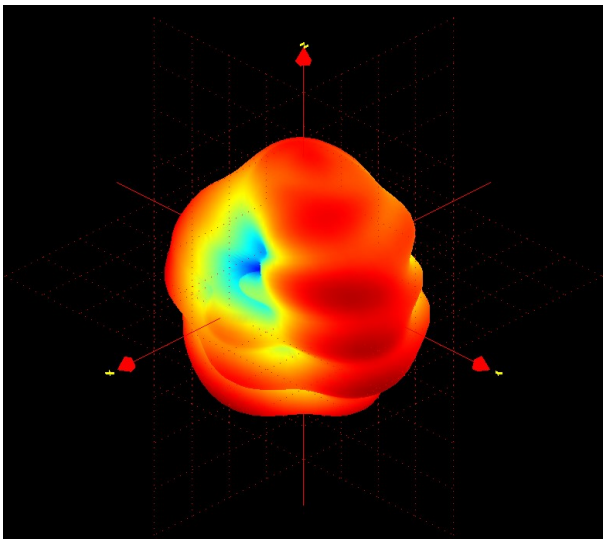
3.4 3D Pattern



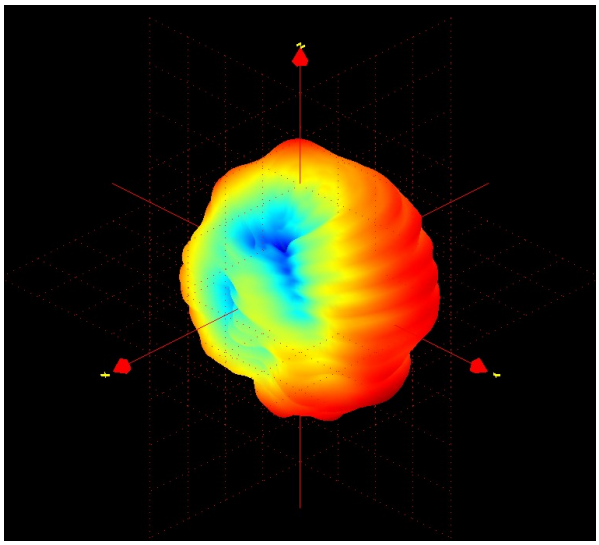
2400MHz



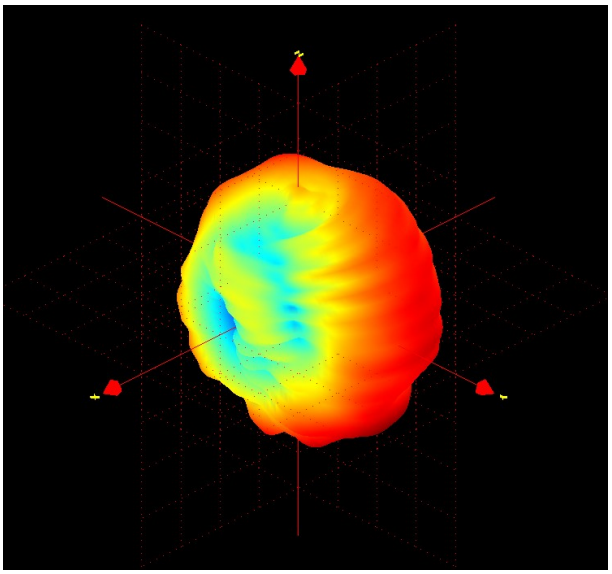
2450MHz



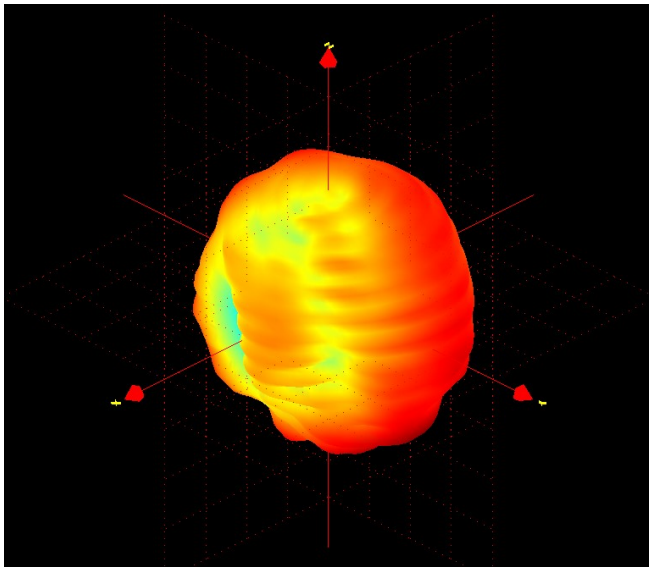
2500MHz



5150MHz



5510Mhz



5850Mhz

4.Parameter

Electrical

Antenna Model	**2.4G&5G FPC antenna**
Frequency	**2400-2500MHz&5150-5850 MHz**
Impedance	**50 Ω**
Polarization	**Omnidirectional**
Antenna Gain	**Max Gain 2.4G: 3.64 & 5G Max Gain: 4.02**
S.W.R	**<2**

Mechanical

Cable	**RF113**
Connector	**I-PEX 20278-112R-13**
Length	**120mm**
Operation Temperature	**-40° C ～80° C**