

ART SIGNAL

ANTENNA TOTAL SOLUTION



| 2.4G Antenna Test Data

Solu-M Newton Pro 12.2inch tag #1 ANT Test Data - Network & 3D gain & 3D Radiation Pattern

2024-02-29

Test by : Dong-Kyu Hwang

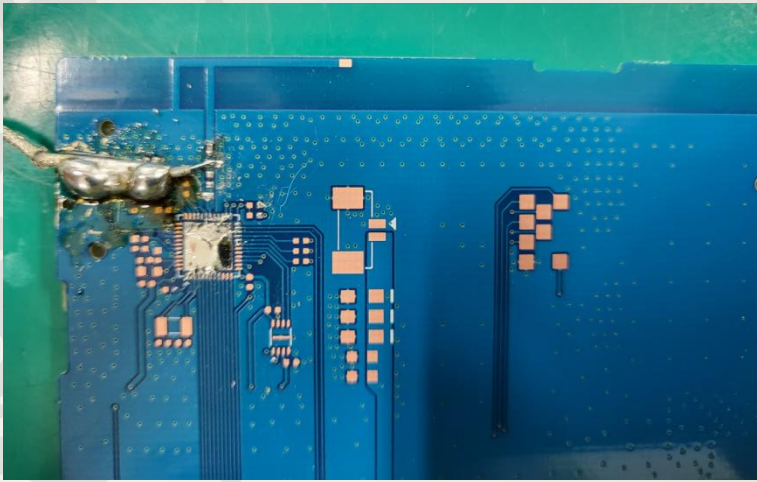
ART SIGNAL CO., LTD.

A-1008, Woolim Lion's Vally 2nd, 14, Sagimakgol-ro 45beon-gil,
Jungwon-gu, Seongnam-si, Gyeonggi-do, KOREA

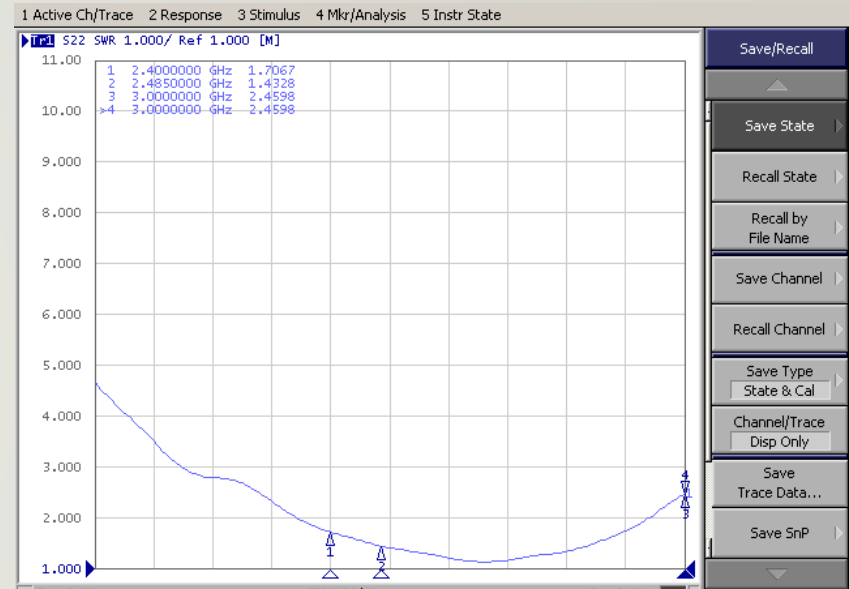
A N T E N N A T O T A L S O L U T I O N

Solu-M Newton Pro 12.2inch tag #1 TEST DATA

Picture



VSWR

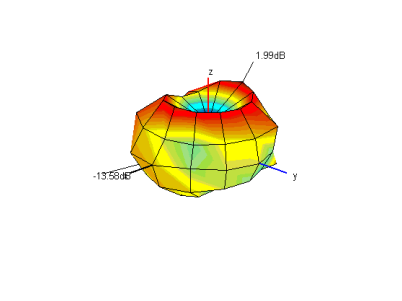
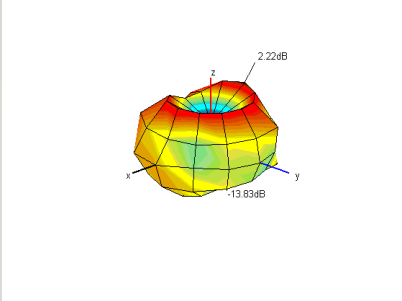
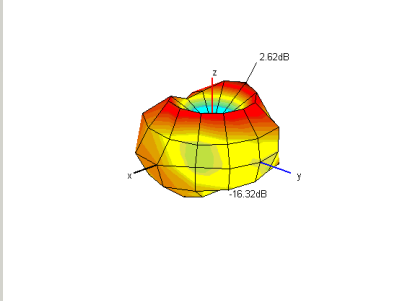
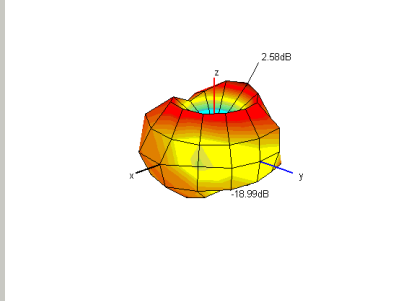
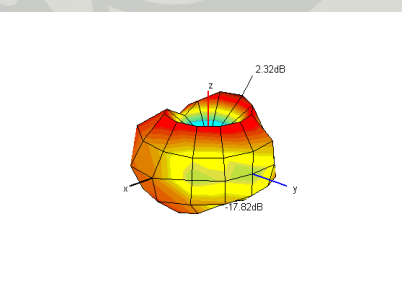


3D gain

	1	2	3	4	5
Frequency [MHz]	2400	2420	2440	2460	2485
Efficiency [dB]	-3.85	-3.70	-3.40	-3.54	-3.45
Efficiency [%]	41.2	42.7	45.7	44.3	45.2
Peak Gain [dB]	1.99	2.22	2.62	2.58	2.32
Directivity [dB]	5.84	5.91	6.02	6.11	5.76
Minimum Gain [dB]	-13.58	-13.83	-16.32	-18.99	-17.82

2.4G ANT DATA - 3D Radiation Pattern

3D Radiation Pattern

2400	2420	2440	2460
 <p>3D radiation pattern for 2400 MHz. The main lobe is centered at the top (z-axis) with a peak gain of 1.99dB. The side lobes are at approximately -13.58dB. The x, y, and z axes are shown.</p>	 <p>3D radiation pattern for 2420 MHz. The main lobe is centered at the top (z-axis) with a peak gain of 2.22dB. The side lobes are at approximately -13.63dB. The x, y, and z axes are shown.</p>	 <p>3D radiation pattern for 2440 MHz. The main lobe is centered at the top (z-axis) with a peak gain of 2.62dB. The side lobes are at approximately -16.32dB. The x, y, and z axes are shown.</p>	 <p>3D radiation pattern for 2460 MHz. The main lobe is centered at the top (z-axis) with a peak gain of 2.58dB. The side lobes are at approximately -18.99dB. The x, y, and z axes are shown.</p>
2485			
 <p>3D radiation pattern for 2485 MHz. The main lobe is centered at the top (z-axis) with a peak gain of 2.32dB. The side lobes are at approximately -17.82dB. The x, y, and z axes are shown.</p>			

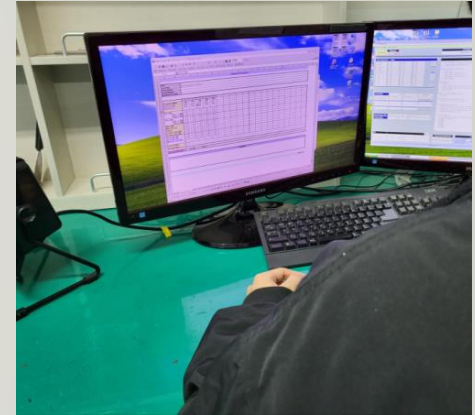
Measurement Procedure



Network Analyzer을
이용하여 VSWR 측정



3D Chamber에 Set 거치



Program을 이용하여
Gain 측정

Measurement Equipment

Network Analyzer



E5071B (Agilent)



8753ES (Agilent)



CTIA 3D OTA Chamber(A+Tech)