

ART SIGNAL

ANTENNA TOTAL SOLUTION



| **2.4G Antenna Test Data**

Solu-M Newton-PRO 9.7” tag #1 ANT Test Data **- Network & 3D gain & 3D Radiation Pattern**

2024-01-05

Test by : Dong-Kyu Hwang

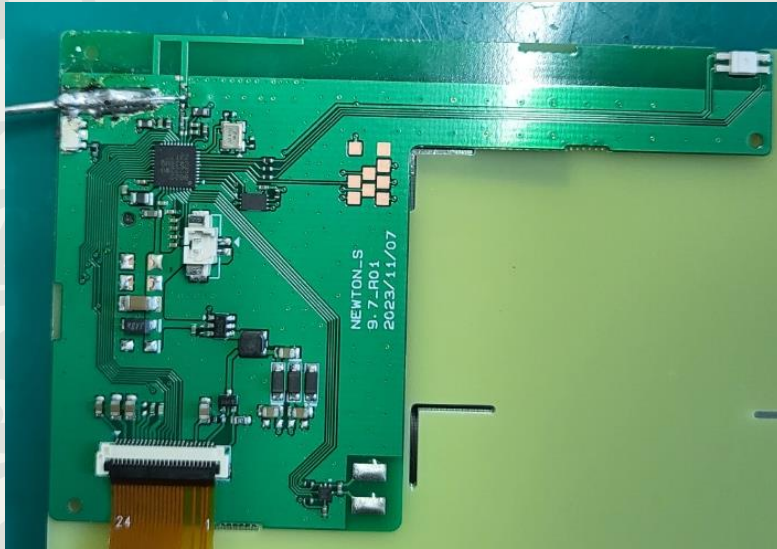
ART SIGNAL CO., LTD.

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

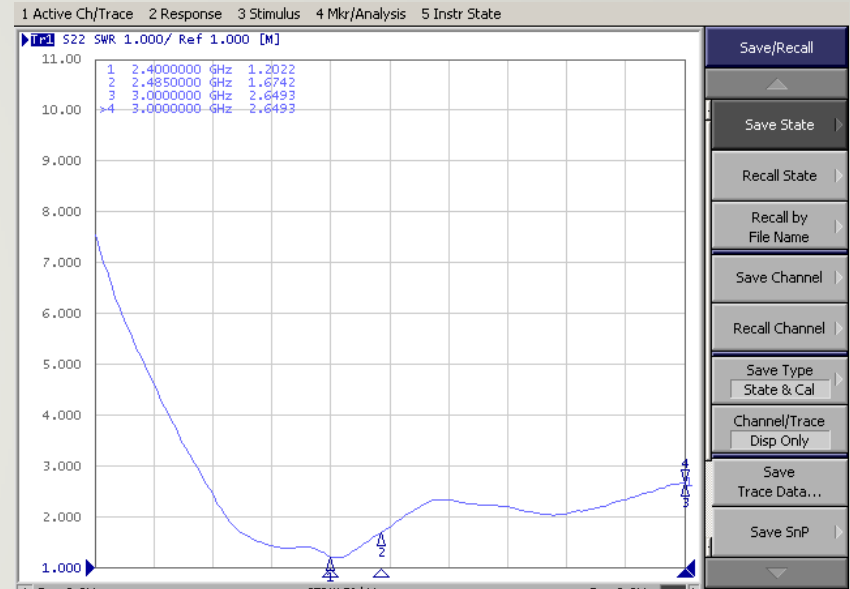
A N T E N N A T O T A L S O L U T I O N

Solu-M Newton-PRO 9.7"tag #1 TEST DATA

Picture



VSWR

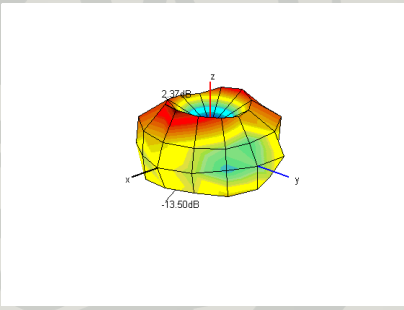
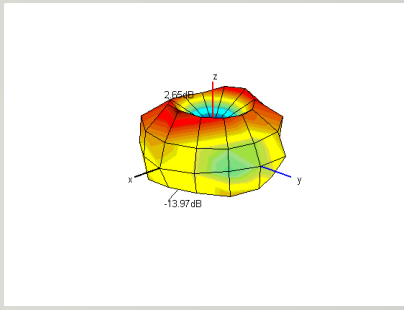
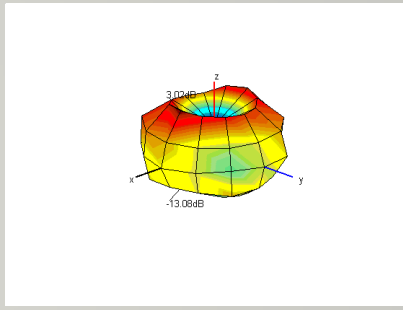
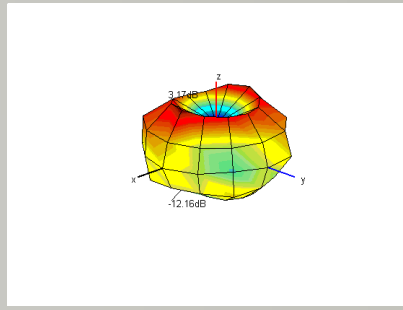
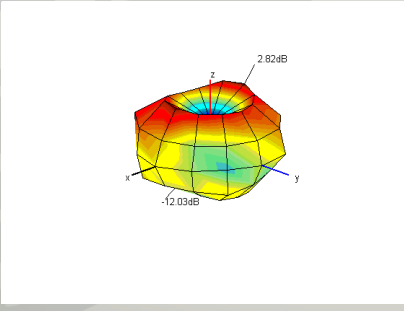


3D gain

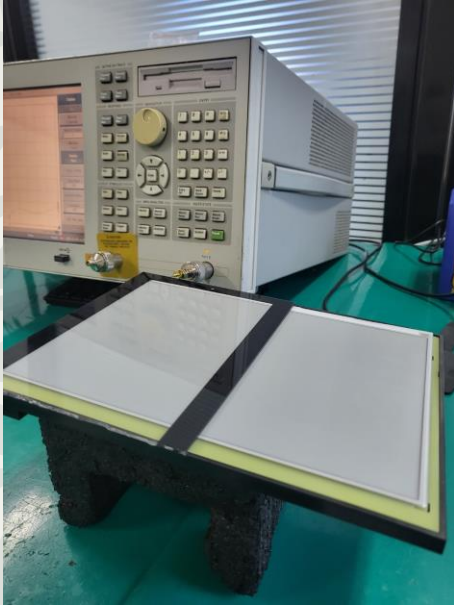
	1	2	3	4	5
Frequency [MHz]	2400	2420	2440	2460	2485
Efficiency [dB]	-3.89	-3.39	-2.83	-2.54	-2.67
Efficiency [%]	40.8	45.9	52.2	55.7	54.1
Peak Gain [dB]	2.37	2.65	3.02	3.17	2.82
Directivity [dB]	6.26	6.03	5.84	5.71	5.49
Minimum Gain [dB]	-13.50	-13.97	-13.08	-12.16	-12.03

2.4G ANT DATA - 3D Radiation Pattern

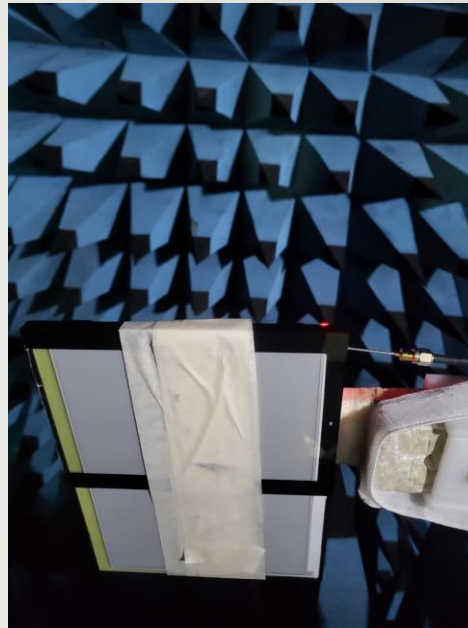
3D Radiation Pattern

2400	2420	2440	2460
 <p>3D radiation pattern for 2400 MHz. The plot shows a main lobe with a peak gain of 2.37dB and a side lobe level of -13.50dB. The axes are labeled x, y, and z.</p>	 <p>3D radiation pattern for 2420 MHz. The plot shows a main lobe with a peak gain of 2.65dB and a side lobe level of -13.97dB. The axes are labeled x, y, and z.</p>	 <p>3D radiation pattern for 2440 MHz. The plot shows a main lobe with a peak gain of 3.00dB and a side lobe level of -13.09dB. The axes are labeled x, y, and z.</p>	 <p>3D radiation pattern for 2460 MHz. The plot shows a main lobe with a peak gain of 3.17dB and a side lobe level of -12.16dB. The axes are labeled x, y, and z.</p>
2485			
 <p>3D radiation pattern for 2485 MHz. The plot shows a main lobe with a peak gain of 2.82dB and a side lobe level of -12.03dB. The axes are labeled x, y, and z.</p>			

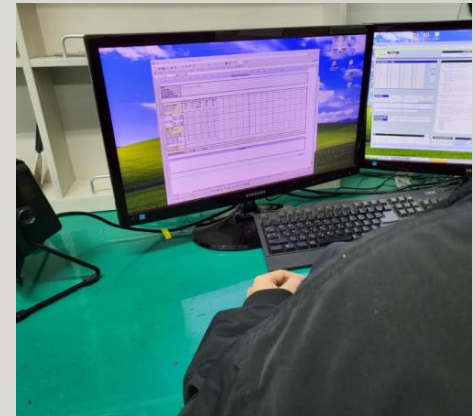
Measurement Procedure



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)