

ART SIGNAL

ANTENNA TOTAL SOLUTION



| **2.4G Antenna Test Data**

Soul-M Newton 4.3" LED 버튼 TAG #1 2.4G Antenna Test Data
- Network & 3D gain & 3D Radiation Pattern

Soul-M Newton 4.3" LED 버튼 TAG#2 2.4G Antenna Test Data
- Network & 3D gain & 3D Radiation Pattern

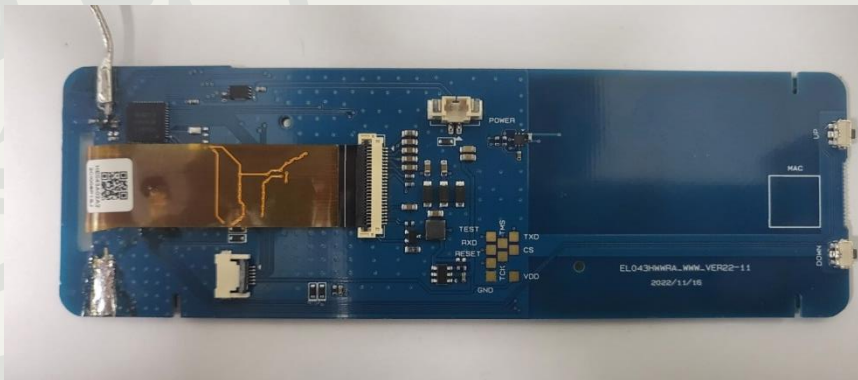
2023-01-17
Test by : DongKyu Hwang

Address : ART SIGNAL Co.,LTD. 1008-A, Woolim Lion's Valley 2nd, 146-8, Sangdaewon-dong,
Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea.

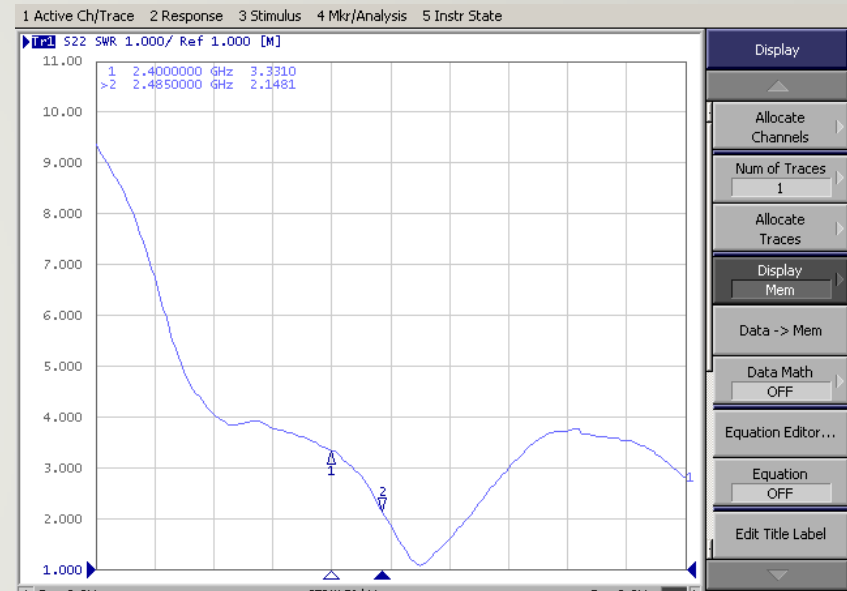
A N T E N N A T O T A L S O L U T I O N

Solu-M Newton 4.3" LED **버튼** TAG #1 TEST DATA

Picture



VSWR

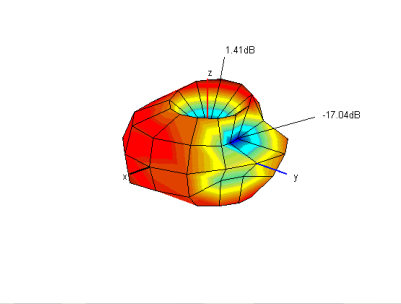
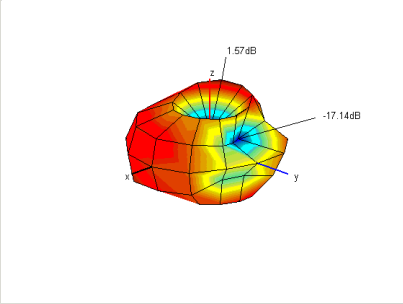
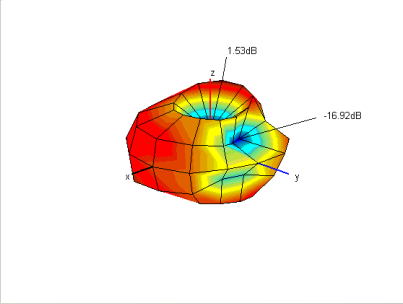
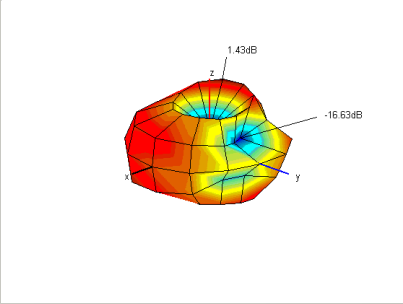
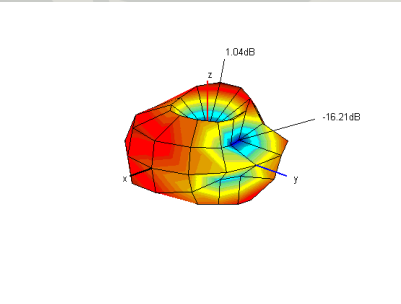


3D gain

	1	2	3	4	5
Frequency [MHz]	2400	2420	2440	2460	2485
Efficiency [dB]	-3.13	-3.01	-3.03	-3.06	-3.26
Efficiency [%]	48.7	50.0	49.8	49.5	47.2
Peak Gain [dB]	1.41	1.57	1.53	1.43	1.04
Directivity [dB]	4.54	4.59	4.56	4.48	4.31
Minimum Gain [dB]	-17.04	-17.14	-16.92	-16.63	-16.21

2.4G ANT DATA – 3D Radiation Pattern

3D Radiation Pattern

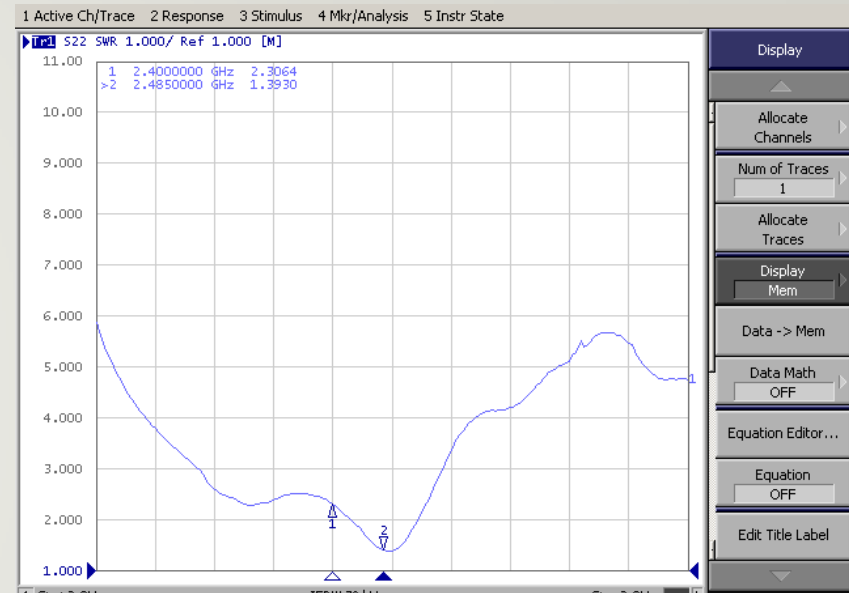
2400	2420	2440	2460
 3D Radiation Pattern for 2400 MHz. The main lobe is centered around 1.41dB, and the side lobes are at -17.04dB. The plot shows a color-coded surface representing the radiation intensity in the x-y-z space.	 3D Radiation Pattern for 2420 MHz. The main lobe is centered around 1.57dB, and the side lobes are at -17.14dB. The plot shows a color-coded surface representing the radiation intensity in the x-y-z space.	 3D Radiation Pattern for 2440 MHz. The main lobe is centered around 1.53dB, and the side lobes are at -16.92dB. The plot shows a color-coded surface representing the radiation intensity in the x-y-z space.	 3D Radiation Pattern for 2460 MHz. The main lobe is centered around 1.43dB, and the side lobes are at -16.63dB. The plot shows a color-coded surface representing the radiation intensity in the x-y-z space.
2485			
 3D Radiation Pattern for 2485 MHz. The main lobe is centered around 1.04dB, and the side lobes are at -16.21dB. The plot shows a color-coded surface representing the radiation intensity in the x-y-z space.			

Solu-M Newton 4.3" LED **버튼** TAG#2 TEST DATA

Picture



VSWR

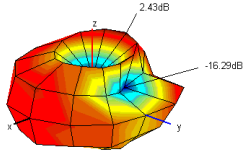
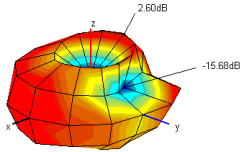
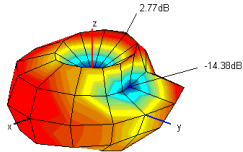
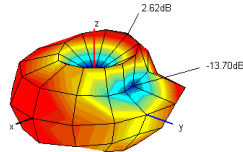
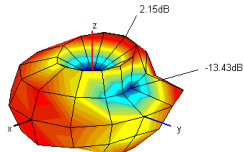


3D gain

	1	2	3	4	5
Frequency [MHz]	2400	2420	2440	2460	2485
Efficiency [dB]	-1.81	-1.56	-1.26	-1.28	-1.70
Efficiency [%]	65.9	69.8	74.9	74.5	67.5
Peak Gain [dB]	2.43	2.60	2.77	2.62	2.15
Directivity [dB]	4.23	4.16	4.02	3.90	3.85
Minimum Gain [dB]	-16.29	-15.68	-14.38	-13.70	-13.43

2.4G ANT DATA – 3D Radiation Pattern

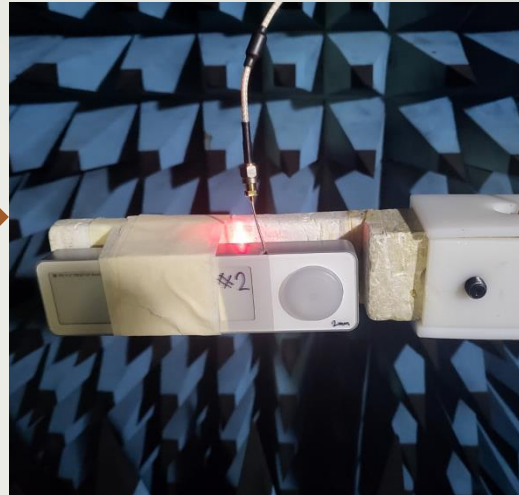
3D Radiation Pattern

2400	2420	2440	2460
 3D Radiation Pattern for 2400 MHz. The main lobe is centered at 2.43 dB, and the side lobes are at -16.29 dB. The plot shows a color-coded surface representing the radiation intensity in the x-y-z space.	 3D Radiation Pattern for 2420 MHz. The main lobe is centered at 2.60 dB, and the side lobes are at -15.68 dB. The plot shows a color-coded surface representing the radiation intensity in the x-y-z space.	 3D Radiation Pattern for 2440 MHz. The main lobe is centered at 2.77 dB, and the side lobes are at -14.38 dB. The plot shows a color-coded surface representing the radiation intensity in the x-y-z space.	 3D Radiation Pattern for 2460 MHz. The main lobe is centered at 2.62 dB, and the side lobes are at -13.70 dB. The plot shows a color-coded surface representing the radiation intensity in the x-y-z space.
2485			
 3D Radiation Pattern for 2485 MHz. The main lobe is centered at 2.15 dB, and the side lobes are at -13.43 dB. The plot shows a color-coded surface representing the radiation intensity in the x-y-z space.			

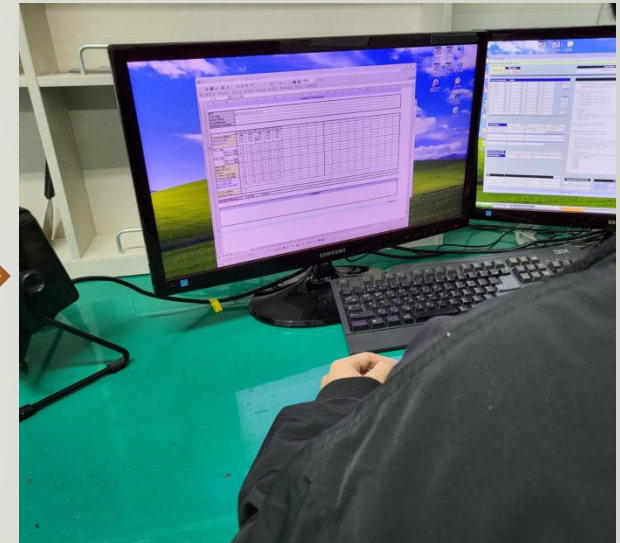
Measurement Procedure



Network Analyzer을
이용하여 VSWR 측정



3D Chamber에 Set 거치



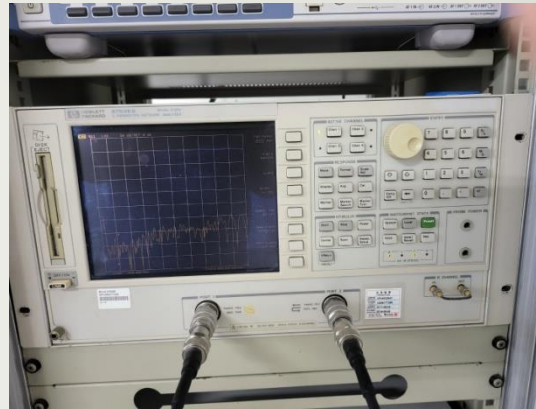
Program을 이용하여
Gain 측정

Measurement Equipment

Network Analyzer



E5071B (Agilent)



8753ES (Agilent)



**CTIA 3D OTA
Chamber(A+Tech)**

We make the world 's best companies.
A leader in ANTENNA.

ART SIGNAL
ANTENNA TOTAL SOLUTION

