

# 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

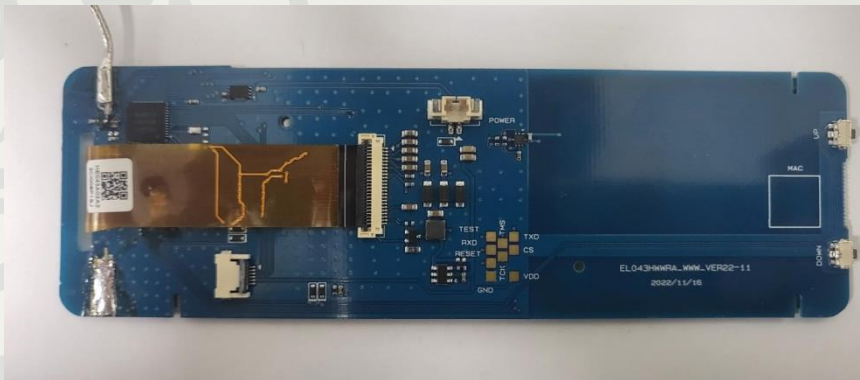
2023-01-17  
Test by : DongKyu Hwang

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

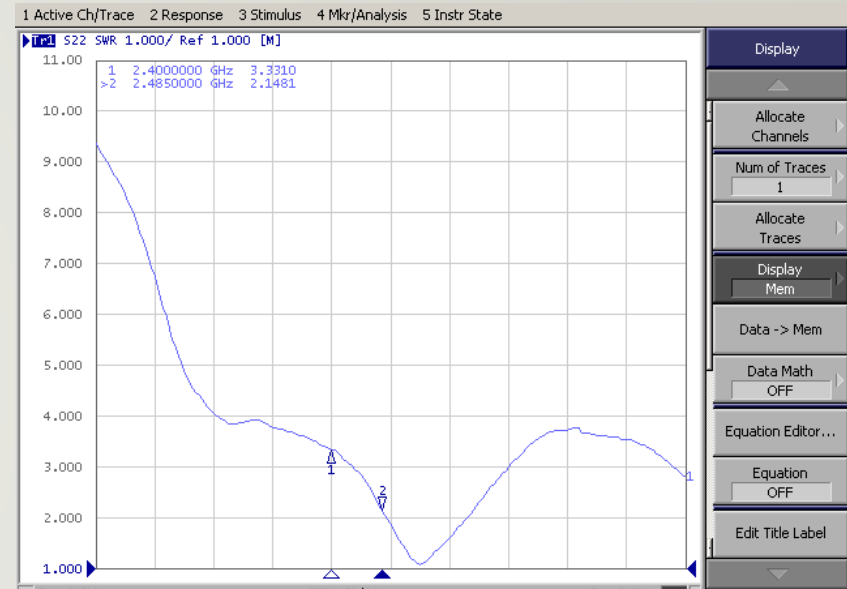
A N T E N N A T O T A L S O L U T I O N

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

Picture



VSWR

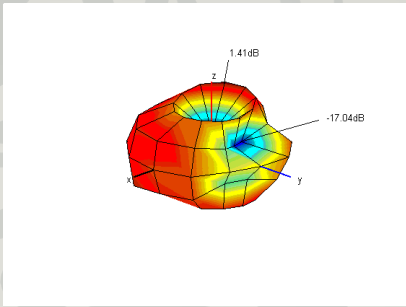
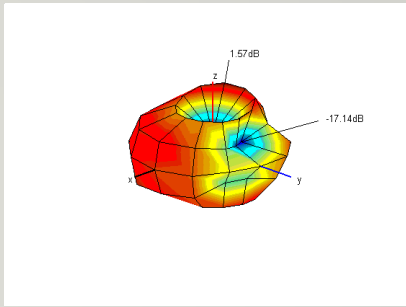
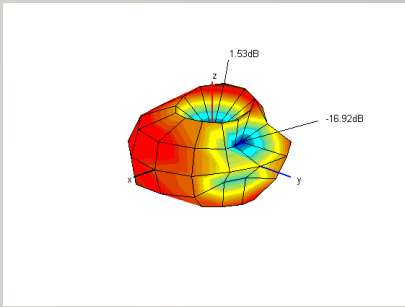
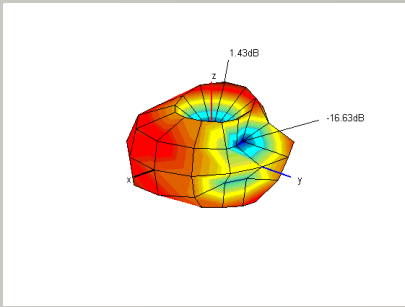
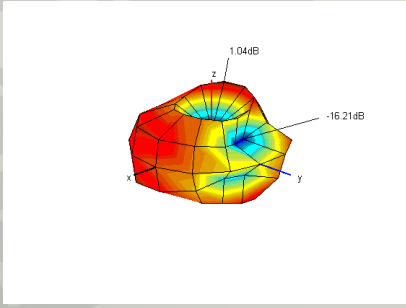


3D gain

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

## 2.4G ANT DATA - 3D Radiation Pattern

### 3D Radiation Pattern

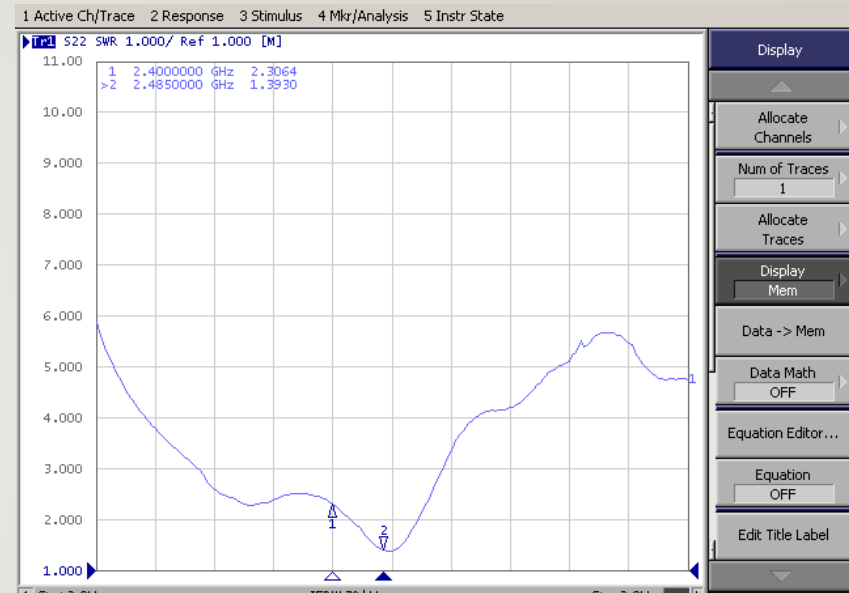
2400	2420	2440	2460
			
2485			
			

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

Picture



VSWR

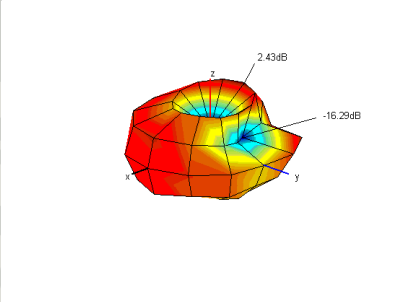
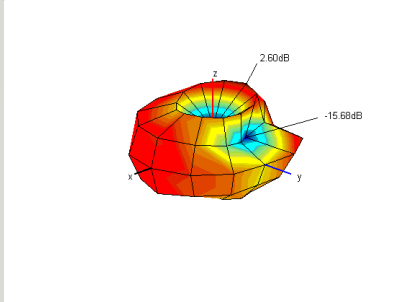
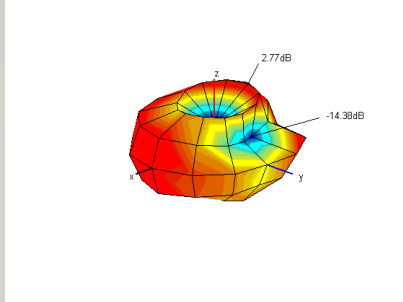
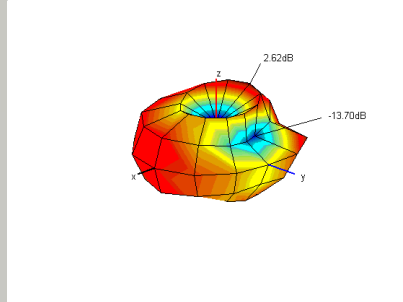
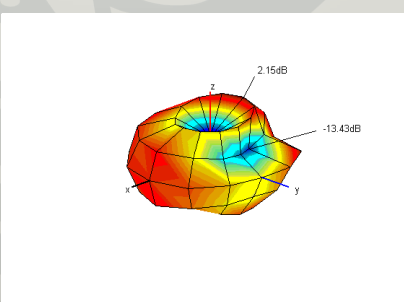


3D gain

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

## 2.4G ANT DATA - 3D Radiation Pattern

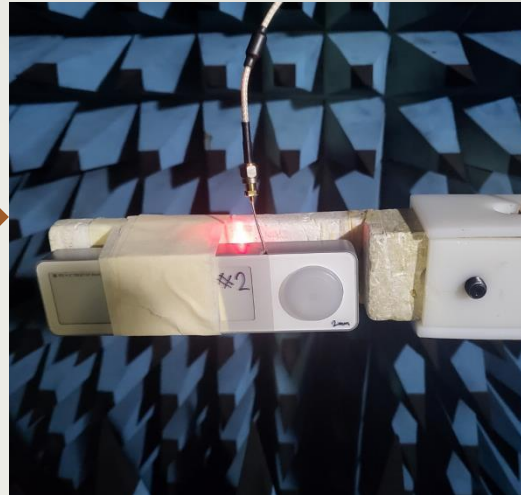
### 3D Radiation Pattern

2400	2420	2440	2460
			
2485			
			

## Measurement Procedure



Network Analyzer을  
이용하여 VSWR 측정



3D Chamber에 Set 거치



Program을 이용하여  
Gain 측정

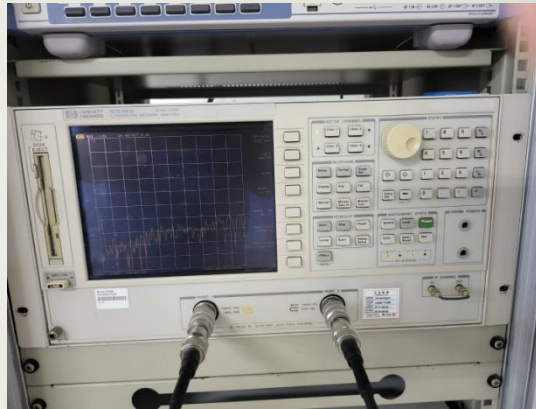


# Measurement Equipment

## Network Analyzer



**E5071B (Agilent)**



**8753ES (Agilent)**



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



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A leader in ANTENNA.

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