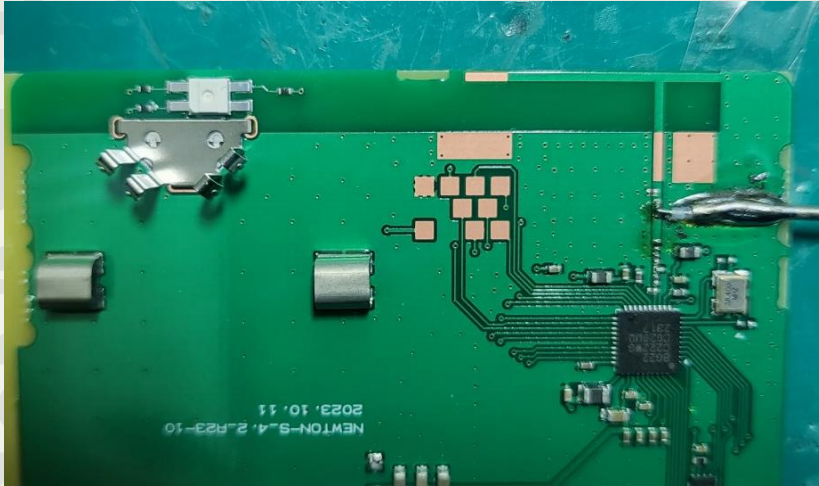
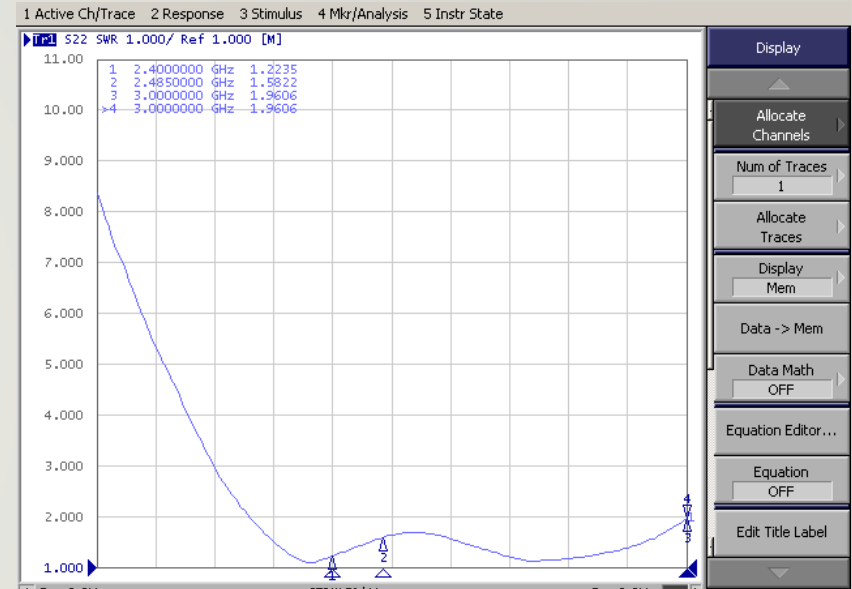


# Solu-M Newton-S 4.2" #1 TEST DATA

Picture



VSWR

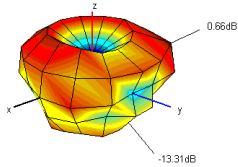
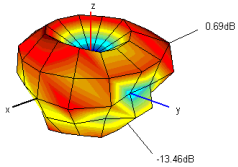
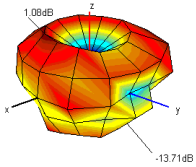
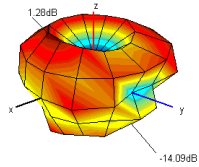
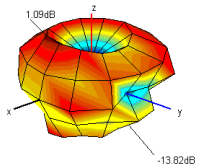


3D gain

|                          | 1      | 2      | 3      | 4      | 5      |
|--------------------------|--------|--------|--------|--------|--------|
| <b>Frequency [MHz]</b>   | 2400   | 2420   | 2440   | 2460   | 2485   |
| <b>Efficiency [dB]</b>   | -3.20  | -2.92  | -2.61  | -2.60  | -2.95  |
| <b>Efficiency [%]</b>    | 47.8   | 51.0   | 54.8   | 54.9   | 50.7   |
| <b>Peak Gain [dB]</b>    | 0.66   | 0.69   | 1.08   | 1.28   | 1.09   |
| <b>Directivity [dB]</b>  | 3.87   | 3.61   | 3.69   | 3.88   | 4.04   |
| <b>Minimum Gain [dB]</b> | -13.31 | -13.46 | -13.71 | -14.09 | -13.82 |

## 2.4G ANT DATA – 3D Radiation Pattern

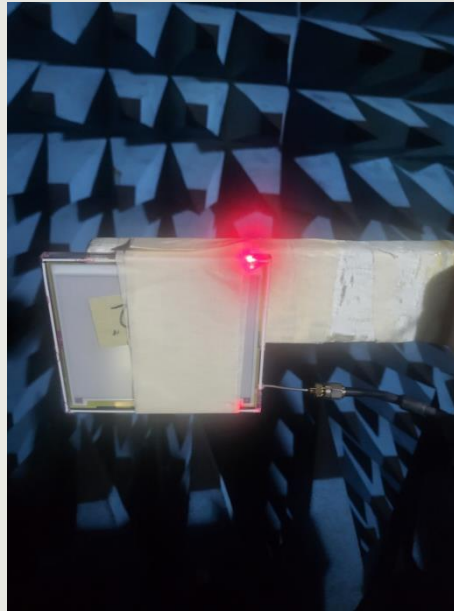
### 3D Radiation Pattern

| 2400                                                                                                                                                                                                                                                                                          | 2420                                                                                                                                                                                                                                                                                        | 2440                                                                                                                                                                                                                                                                                          | 2460                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>3D Radiation Pattern for 2400 MHz. The main lobe is centered at 0.66 dB, and the side lobes are at -13.31 dB. The plot shows a toroidal shape with a color gradient from blue (low) to red (high).</p>   |  <p>3D Radiation Pattern for 2420 MHz. The main lobe is centered at 0.69 dB, and the side lobes are at -13.46 dB. The plot shows a toroidal shape with a color gradient from blue (low) to red (high).</p> |  <p>3D Radiation Pattern for 2440 MHz. The main lobe is centered at 1.08 dB, and the side lobes are at -13.71 dB. The plot shows a toroidal shape with a color gradient from blue (low) to red (high).</p> |  <p>3D Radiation Pattern for 2460 MHz. The main lobe is centered at 1.28 dB, and the side lobes are at -14.09 dB. The plot shows a toroidal shape with a color gradient from blue (low) to red (high).</p> |
| 2485                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                               |
|  <p>3D Radiation Pattern for 2485 MHz. The main lobe is centered at 1.09 dB, and the side lobes are at -13.82 dB. The plot shows a toroidal shape with a color gradient from blue (low) to red (high).</p> |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                               |

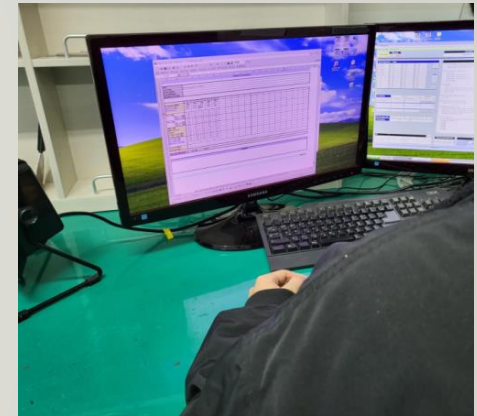
## Measurement Procedure



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)**