

Antenna Test Report

訊動_BT 量測 SBWD1100-PLUS

Version: V 1.0

Released Date: 2020/06/05

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Revision History

| Released Date | Version | Record |
|---------------|---------|---------------------|
| 2020/06/05 | 1.0 | BT Antenna test(量測) |
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Conclusion & Comments

Antenna Performance Summary

- NA

Comments for Further Improvement

- NA

Specification

Requirements of Antenna Design

| RF Function | Number of ANT | Frequency Band | Remark |
|-------------|---------------|-----------------|--------|
| 2G | 1 | 2400~2500 (MHz) | |
| | | | |
| | | | |

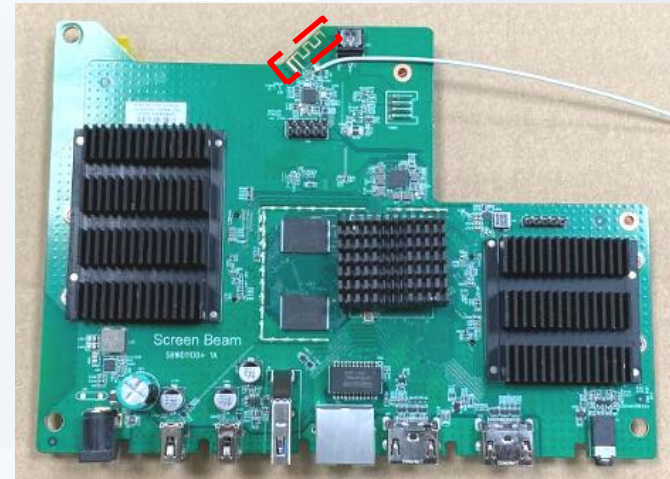
Requirements of Measurement

| Test Item | Specification | Remark |
|-------------------|--|--------|
| Return Loss | NA | |
| Isolation | NA | |
| Peak gain | NA | |
| Efficiency | NA | |
| Radiation pattern | Scale: +10 ~ -40dBi, Angle step size: 2 degree | |

Antenna Placement & Solution

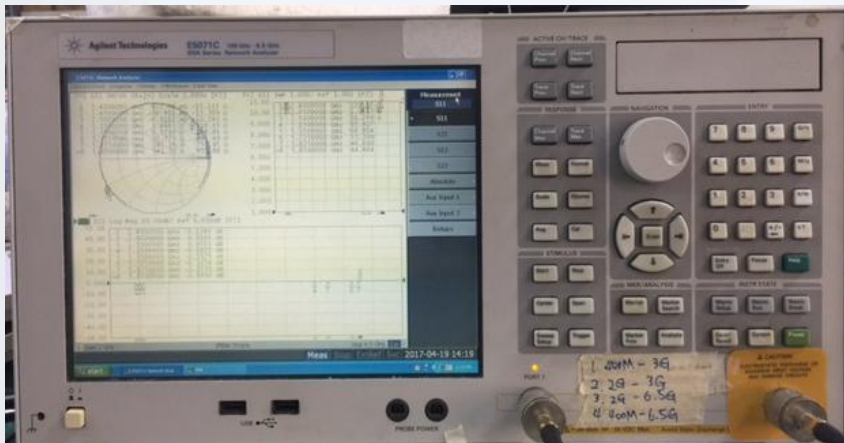


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| Antenna | ANT Type | Size (L * W * H) | Cable Length (mm) | Cable Type |
|---------|----------|------------------|-------------------|-------------|
| BT | Print | 20mm*6mm | 120(By test) | $\Phi=1.13$ |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

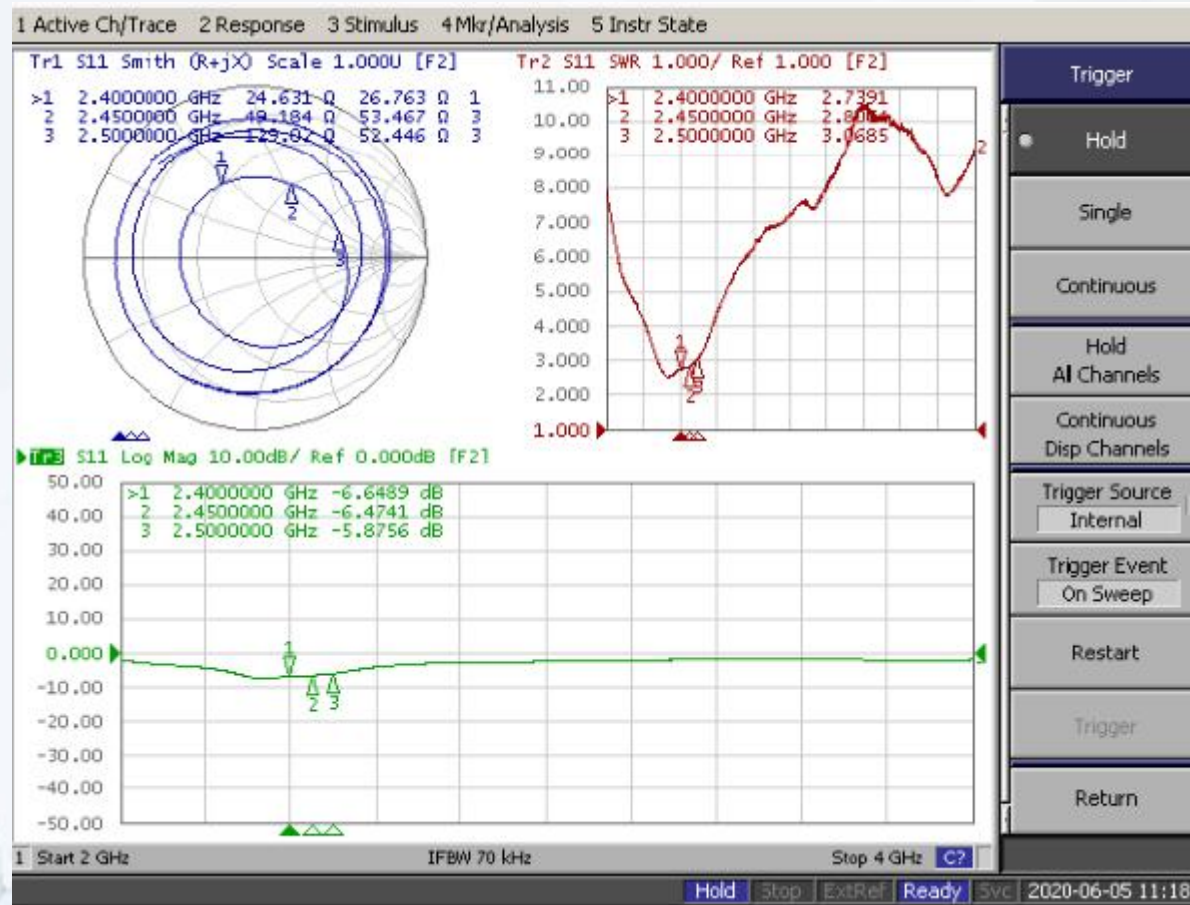
Test Setup for S-parameter Measurement



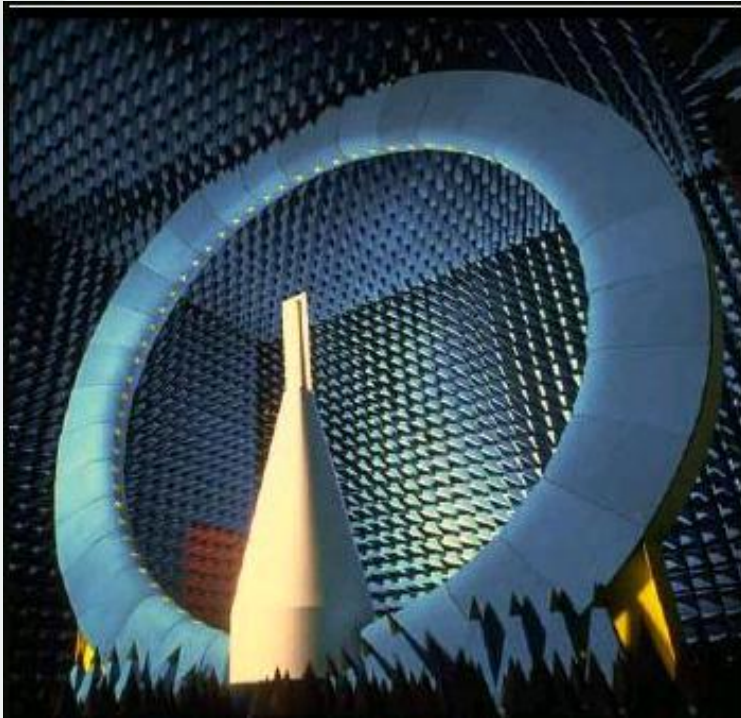
| Equipment | Brand | Model | S/N |
|------------------|----------|--------|------------|
| Network Analyzer | Keysight | E5071C | MY46107744 |

Return Loss Results

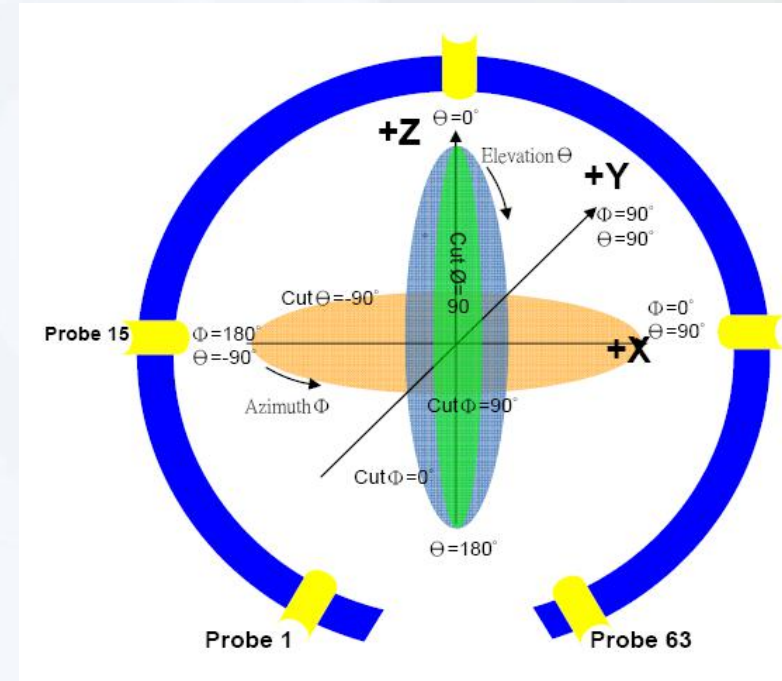
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Chamber Information

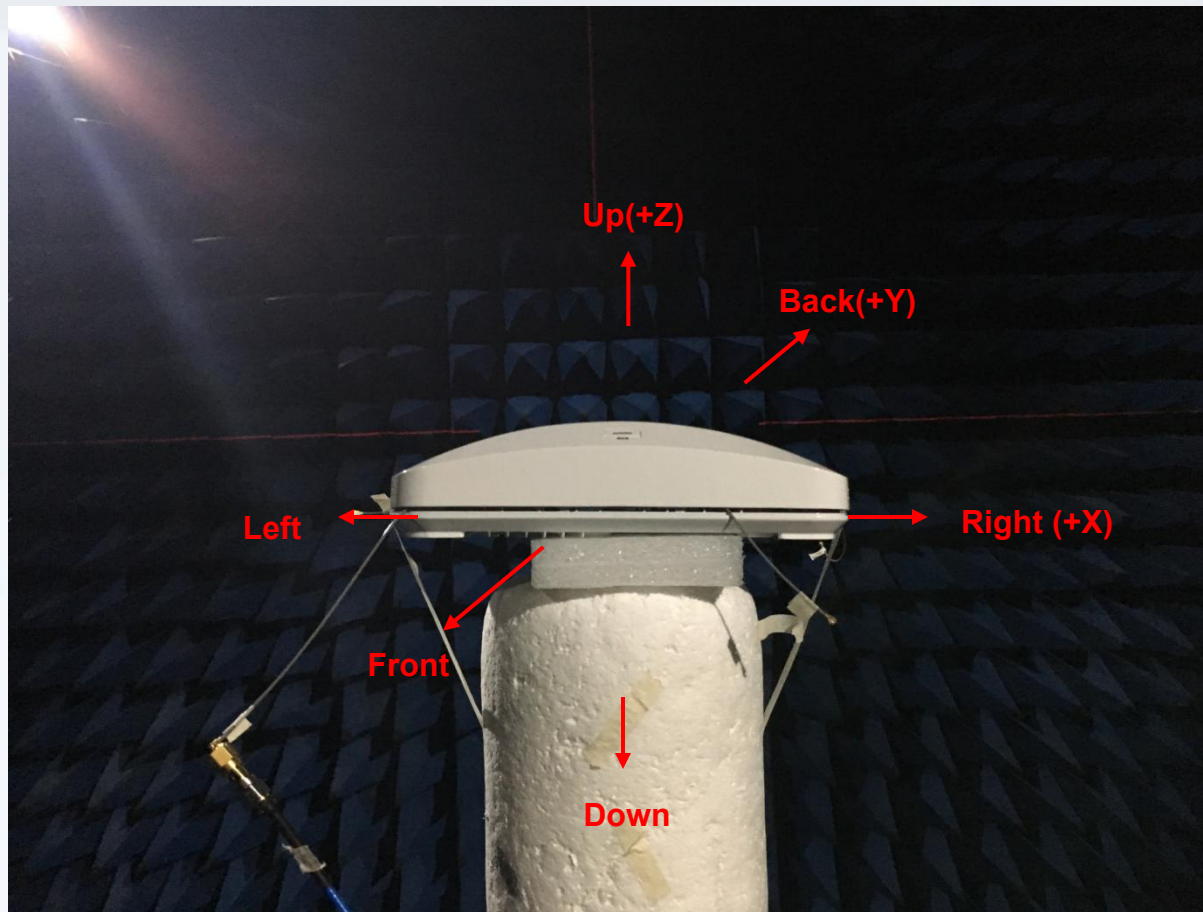


| Chamber | Brand | Model | Location |
|---------|--------|-------|----------------|
| SATIMO | SATIMO | SG-64 | Taiwan HsinChu |



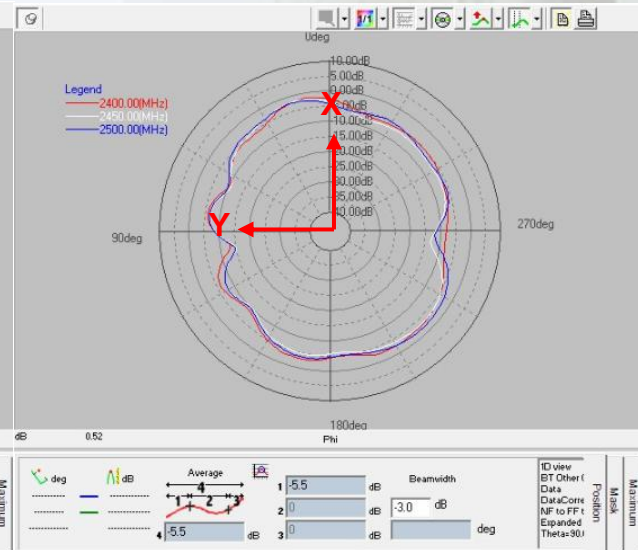
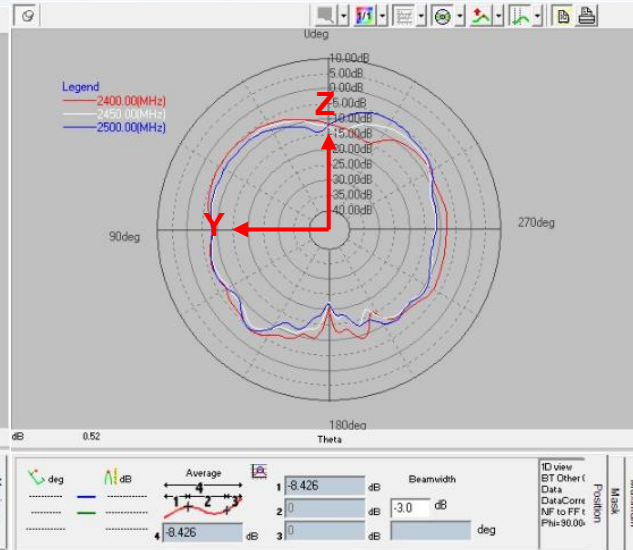
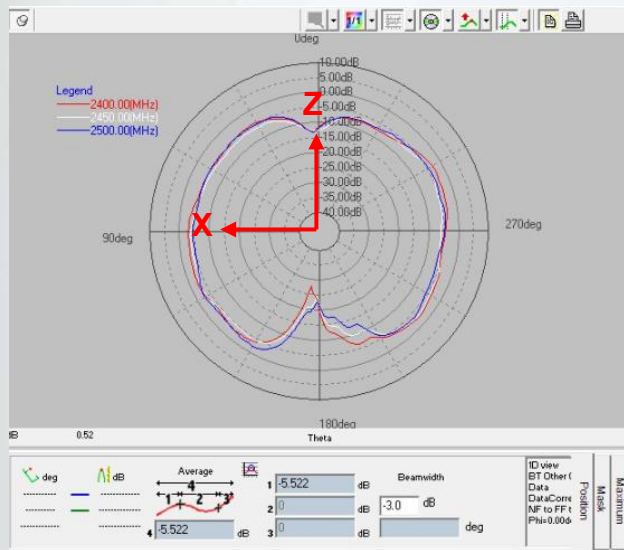
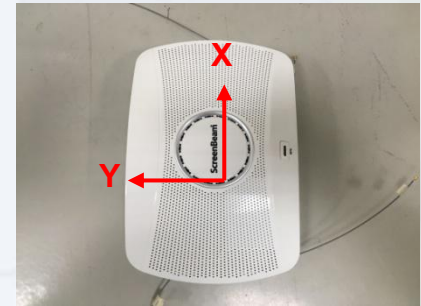
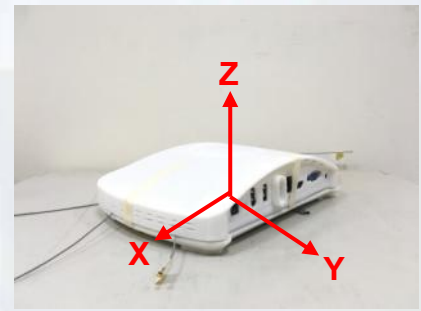
| | θ | ϕ |
|-------------------------------|----------|--------|
| Total angle | 175° | 360° |
| How many angle scan one point | 2° | 2° |
| Total scan point | 90 | 180 |

Test Setup for Radiation Pattern Measurement



2D Radiation Pattern Results

BT



Results Summary

Peak gain & Efficiency – BT

| Frequency (MHz) | Peak Gain (dBi) | Efficiency (%) |
|-----------------|-----------------|----------------|
| 2400MHz | -0.37 | 29 |
| 2450MHz | -0.86 | 23 |
| 2500MHz | -1.34 | 26 |