



承 认 书

SPECIFICATION APPROVAL SHEET

CUSTOMER \_\_\_\_\_

CUS PART NO \_\_\_\_\_ A150200075 \_\_\_\_\_ REV \_\_\_\_\_ A/0 \_\_\_\_\_

SPECIFICATION \_\_\_\_\_ 2400-2500MHz \_\_\_\_\_  
2.4G Antenna L=60mm(Ø1.13+MHF ) \_\_\_\_\_ weight \_\_\_\_\_

SUP PART NO \_\_\_\_\_ SLEingA202640055 \_\_\_\_\_

DATE \_\_\_\_\_ 2026.05.19 \_\_\_\_\_

SUP APPROVED

| APPROVED | Structure audit | RF<br>CHECKED | QA<br>CHECKED | DESIGNED |
|----------|-----------------|---------------|---------------|----------|
|          |                 |               |               |          |

CUS APPROVED

| APPROVED | CHECKED | QA CHECKED | DESIGNED |
|----------|---------|------------|----------|
|          |         |            |          |

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MODIFICATION RECORD SHEET

| REV. | Modification date | Summary of modification content | Signature | Approval |
|------|-------------------|---------------------------------|-----------|----------|
| X1   | 2026.05.19        | First Issue                     | Jerry     | Jongrei  |
|      |                   |                                 |           |          |
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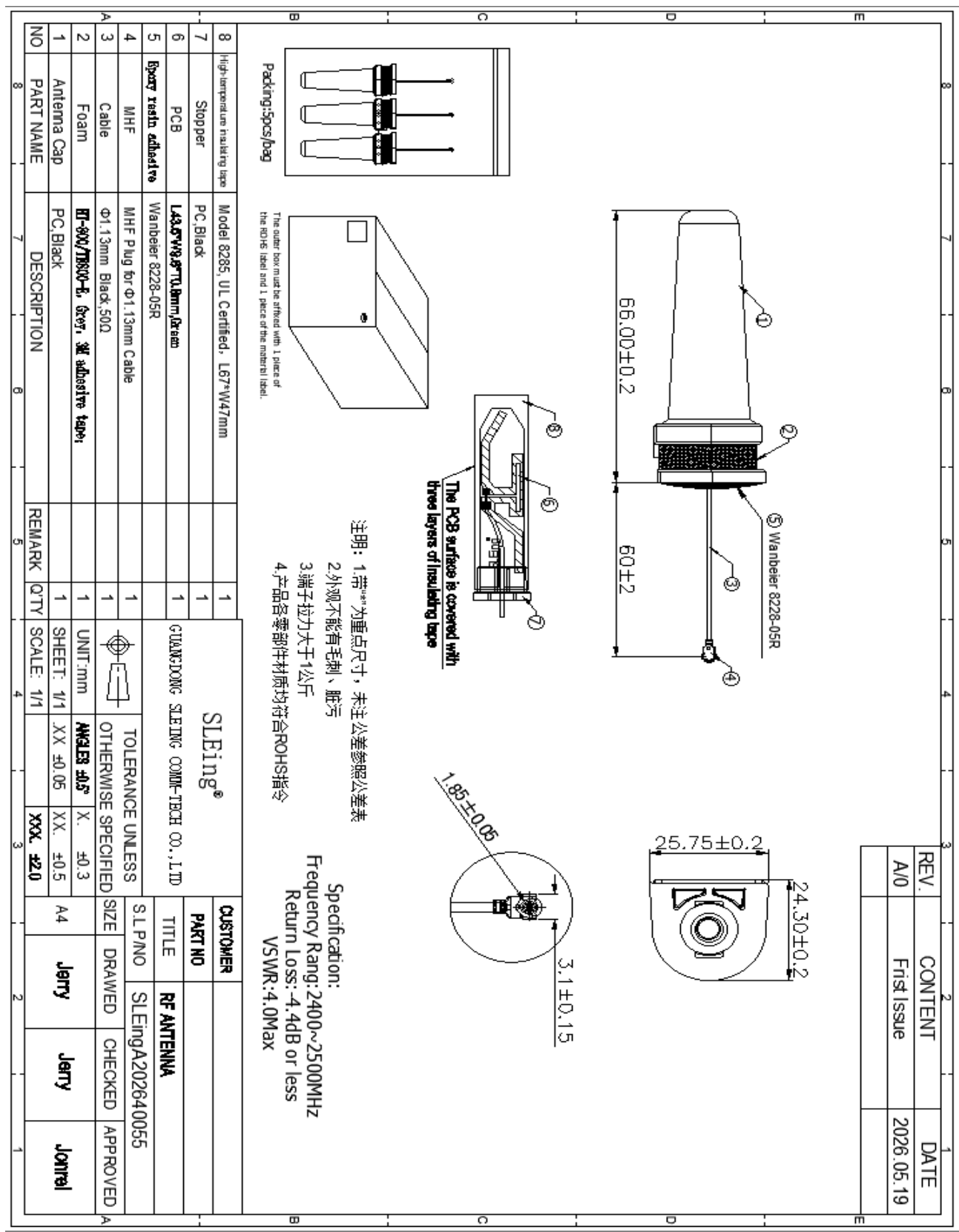


Spec Item

| NO. | Project                   | Remark | Page |
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|     |                           |        |      |

- Give clear indication of:
- 1. The contents of the acknowledgement shall be arranged in order according to the items in the check sheet.
  - 2. The number of copies of the acceptance letter shall be printed according to the customer's requirements, and the SGS report shall be stamped with the engineering seal.
  - 3. All materials shall be confirmed by the customer. Any material/process/changes that may affect product quality and environmental quality must be re-sent to the customer for confirmation before import.
  - 4. SGS report is valid for one year.
  - 5. According to the contents attached to the actual acknowledgement, check the check form: "Yes" is provided, "no" is provided according to customer requirements.

Drawing:





Test Reports

| Electrical Properties |                                  |
|-----------------------|----------------------------------|
| Frequency             | 2.4-2.5GHz （Single antenna test） |
| Impedance             | 50 Ohm Nominal                   |
| V.S.W.R               | ≤4.0                             |
| Return Loss           | -4.5dB Max                       |
| Radiation             | Omni-directional                 |
| Max Gain              | 0.6 dBi                          |
| Polarization          | Linear, Vertical                 |
| Admitted Power        | 2 W                              |
| Connector             | MHF                              |
| Physical Properties   |                                  |
| Antenna Material      | PC                               |
| Cable Type            | Φ1.13 Black                      |
| Operating Temp        | -40℃-85℃                         |
| Storage Temp.         | -40℃-85℃                         |
|                       |                                  |



Test Reports

| Electrical Properties |                               |
|-----------------------|-------------------------------|
| Frequency             | 2.4-2.5GHz（Whole engine test） |
| Impedance             | 50 Ohm Nominal                |
| V.S.W.R               | ≤1.92                         |
| Return Loss           | -10dB Max                     |
| Radiation             | Omni-directional              |
| Max Gain              | 1.63 dBi                      |
| Polarization          | Linear, Vertical              |
| Admitted Power        | 2 W                           |
| Connector             | MHF                           |
| Physical Properties   |                               |
| Antenna Material      | FPC                           |
| Cable Type            | Φ1.13mm Black                 |
| Operating Temp        | -40℃-85℃                      |
| Storage Temp.         | -40℃-85℃                      |
|                       |                               |

Antenna physical picture

Antenna

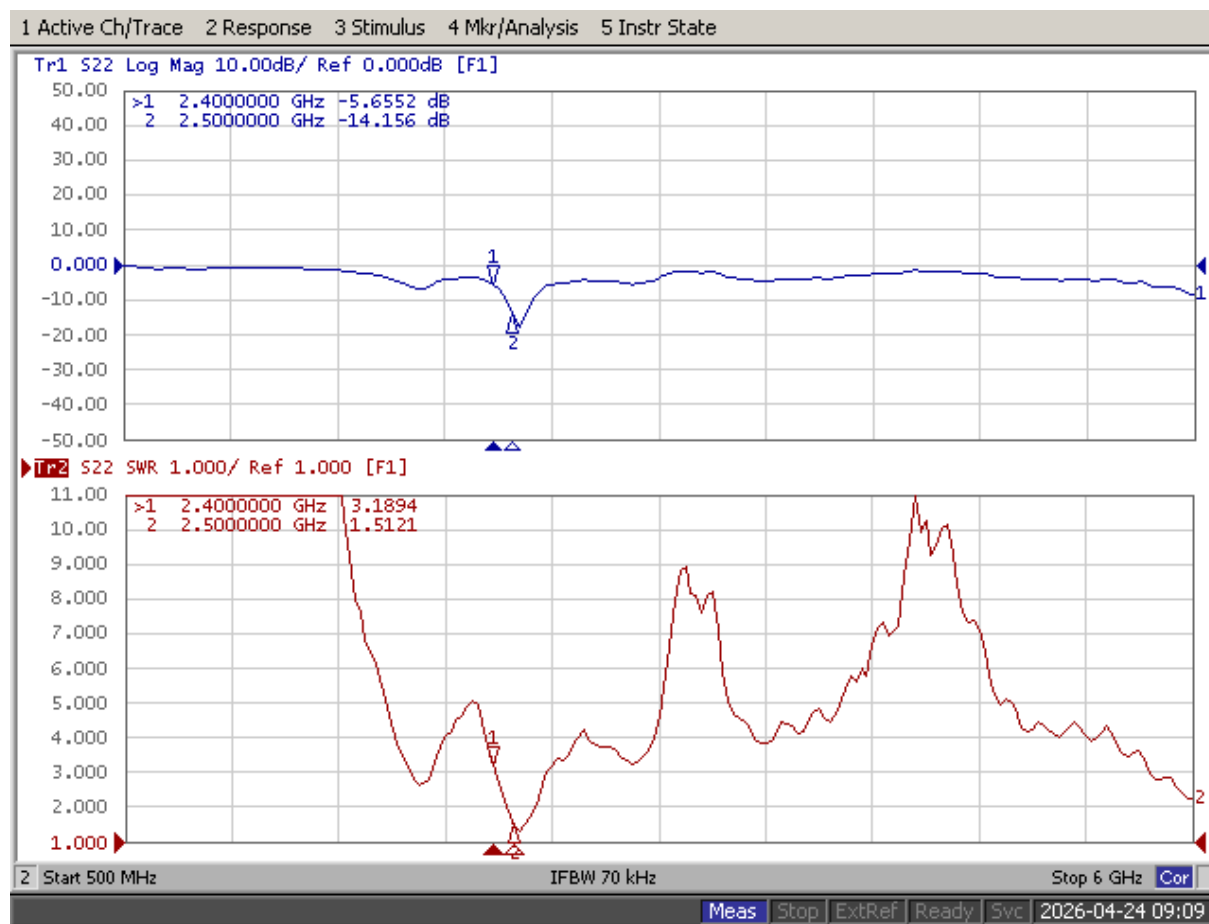


## S Parameter Test

Agilent E5071C Network Analyzer



RF Antenna(VSWR/Return Loss)Single antenna test

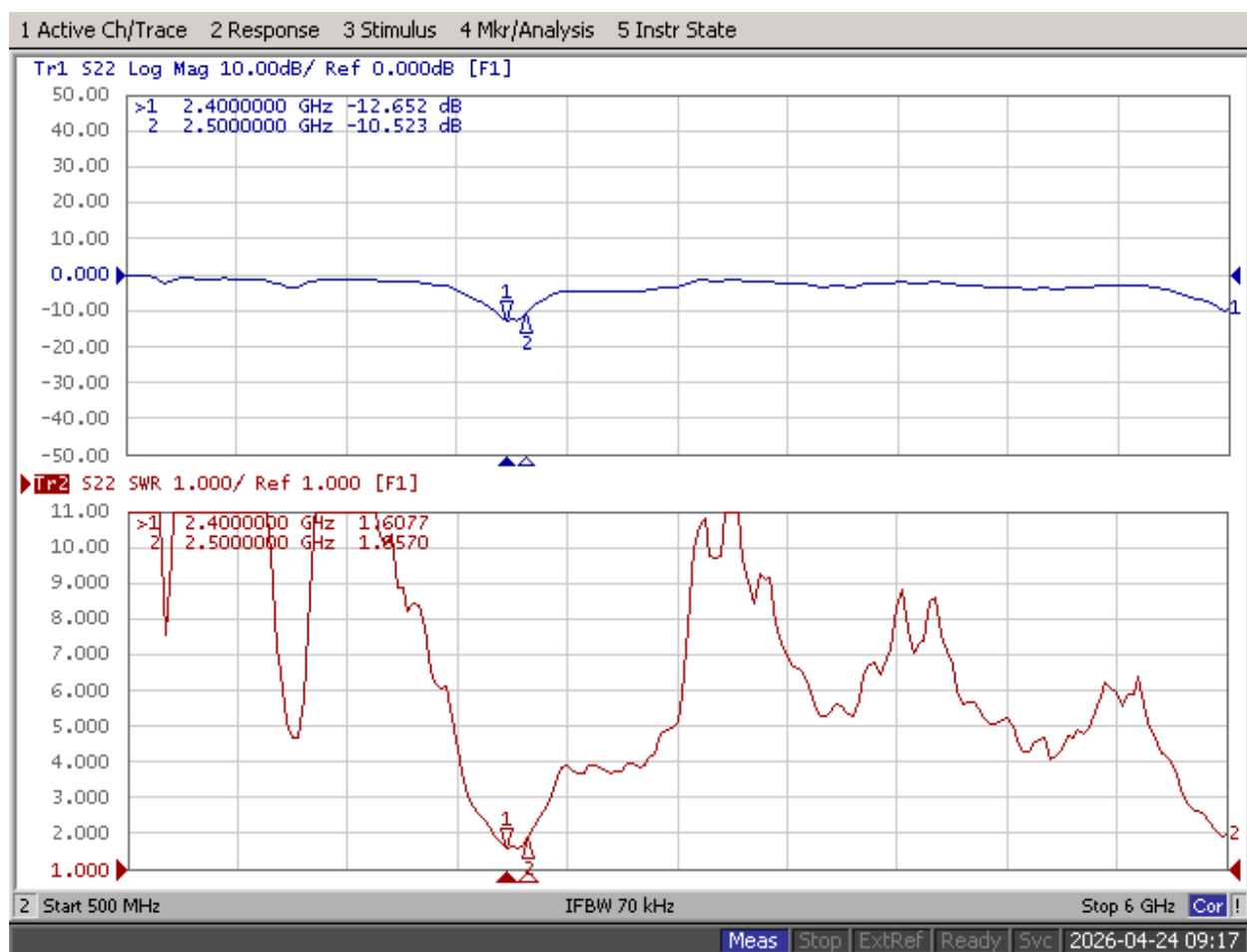


## S Parameter Test

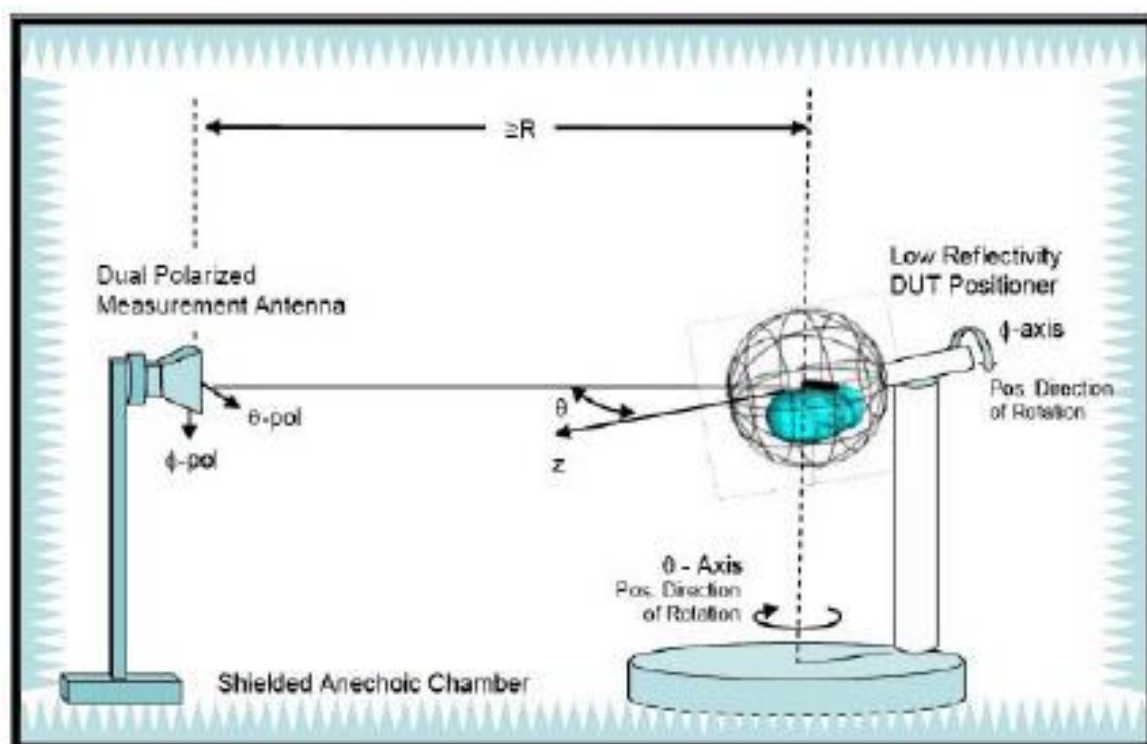
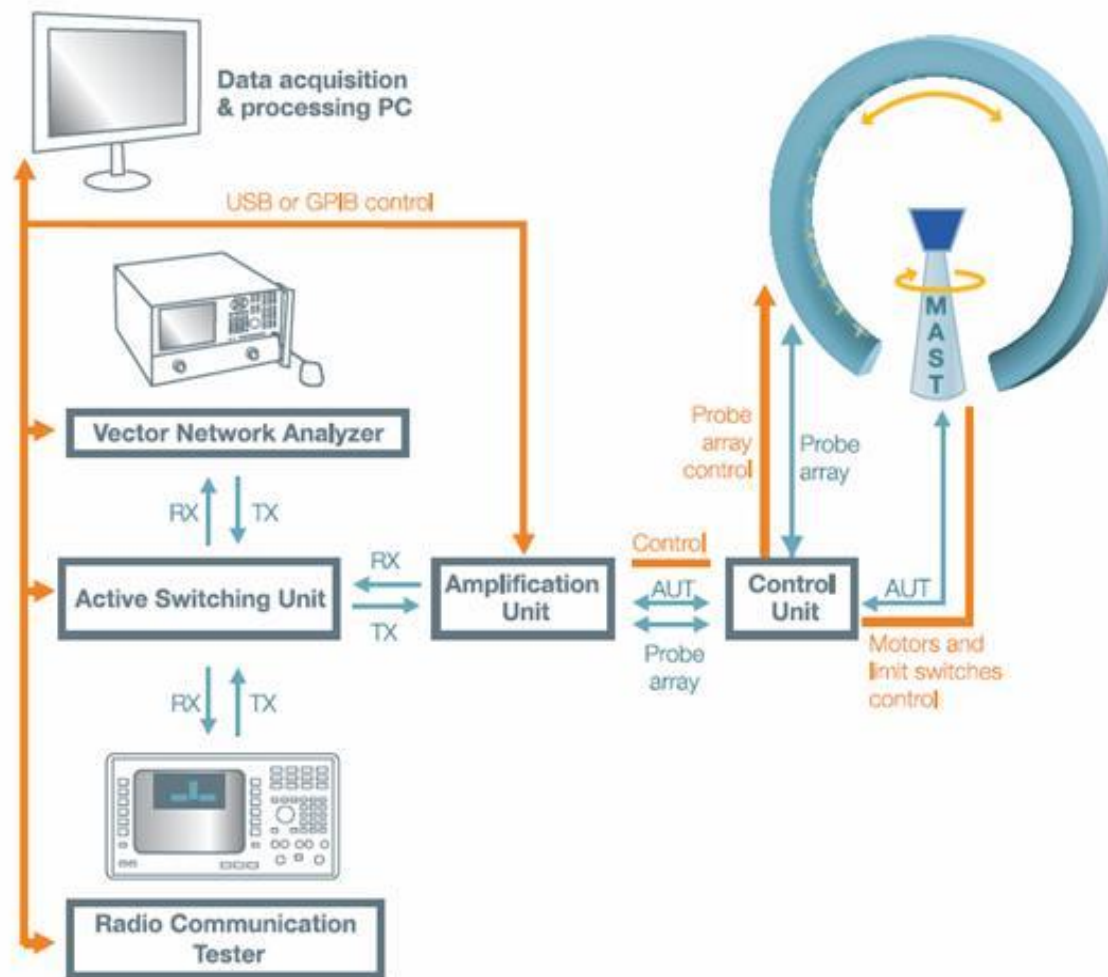
Agilent E5071C Network Analyzer



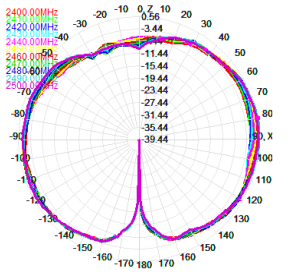
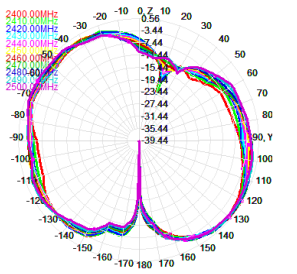
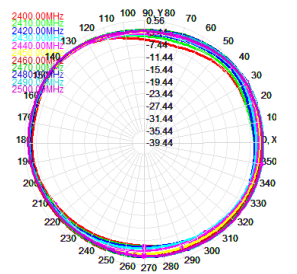
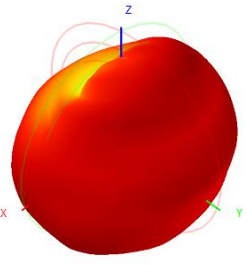
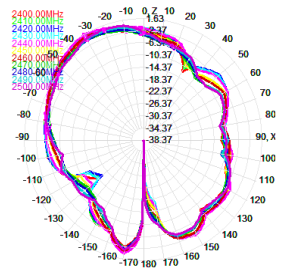
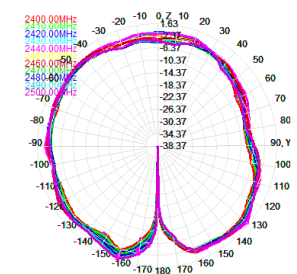
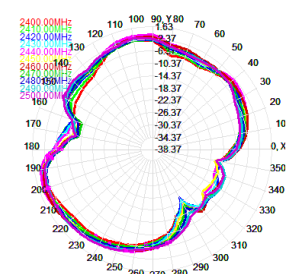
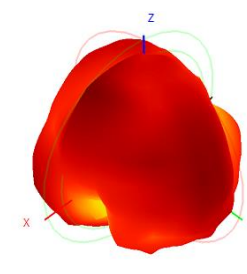
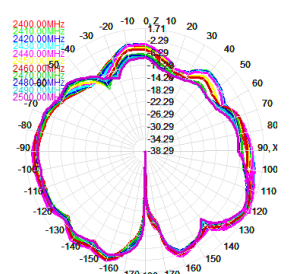
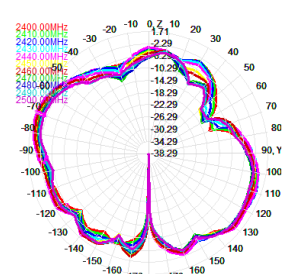
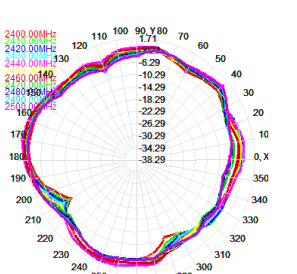
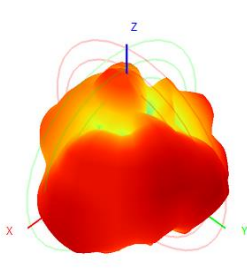
RF Antenna (VSWR/Return Loss) (Whole engine test)



## Test Setup



Pattern

|                     | XoZ                                                                                 | YoZ                                                                                 | XoY                                                                                  | 3D                                                                                    |
|---------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Single antenna test |    |    |    |    |
| With C6 module      |   |   |   |   |
| With C61 module     |  |  |  |  |
|                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |



# Test Efficiency

## Single antenna test

|                 |       |       |       |       |       |       |       |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Frequency ID    | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    |
| Frequency (MHz) | 2400  | 2410  | 2420  | 2430  | 2440  | 2450  | 2460  | 2470  | 2480  | 2490  | 2500  |
| Gain (dBi)      | -0.44 | -0.05 | 0.22  | 0.20  | 0.11  | 0.02  | 0.29  | 0.42  | 0.52  | 0.60  | 0.33  |
| Efficiency (%)  | 45.84 | 49.09 | 51.42 | 51.97 | 53.42 | 55.91 | 58.12 | 59.03 | 59.79 | 61.35 | 60.20 |

## With C6 module

|                 |       |       |       |       |       |       |       |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Frequency ID    | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    |
| Frequency (MHz) | 2400  | 2410  | 2420  | 2430  | 2440  | 2450  | 2460  | 2470  | 2480  | 2490  | 2500  |
| Gain (dBi)      | 0.78  | 1.34  | 1.63  | 1.63  | 1.56  | 1.63  | 1.09  | 1.63  | 1.03  | 1.36  | 1.35  |
| Efficiency (%)  | 42.68 | 46.23 | 49.54 | 51.98 | 55.10 | 48.76 | 51.13 | 48.13 | 45.80 | 48.49 | 49.74 |

## With C61 module

|                 |       |       |       |       |       |       |       |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Frequency ID    | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    |
| Frequency (MHz) | 2400  | 2410  | 2420  | 2430  | 2440  | 2450  | 2460  | 2470  | 2480  | 2490  | 2500  |
| Gain (dBi)      | 0.78  | 1.34  | 1.63  | 1.63  | 1.56  | 1.63  | 1.09  | 1.63  | 1.03  | 1.36  | 1.35  |
| Efficiency (%)  | 42.68 | 46.23 | 49.54 | 51.98 | 55.10 | 48.76 | 51.13 | 48.13 | 45.80 | 48.49 | 49.74 |

Test TRP/ TIS

| Module C6 |            |     |       |        |
|-----------|------------|-----|-------|--------|
| Channel   | Conduction |     | OTA   |        |
|           | TRP        | TIS | TRP   | TIS    |
| 1         | 16.55      | -87 | 13.53 | -83.09 |
| 6         | 16.5       | -86 | 13.31 | -83.7  |
| 11        | 17.02      | -88 | 15.14 | -85.55 |

| Module C61 |            |       |       |        |
|------------|------------|-------|-------|--------|
| channel    | Conduction |       | OTA   |        |
|            | TRP        | TIS   | TRP   | TIS    |
| 1          | 19.16      | -85   | 16.29 | -83.37 |
| 6          | 18.88      | -84   | 16.18 | -84.44 |
| 11         | 19.66      | -88.3 | 17.67 | -86.23 |