



**artAnt Telecom Co., Ltd.**

6F, No.12, Li-Hsin Road., Science-Based  
Industrial Park, Hsinchu Taiwan, R.O.C.  
Tel: 886-3-5783188 Fax: 886-3-5783189

**Compal BY27**

**Antenna Test Report**

**RD Manager**

**Supervisor**

**RD engineer**

**Sales engineer**

**Leo**

**Sigma**

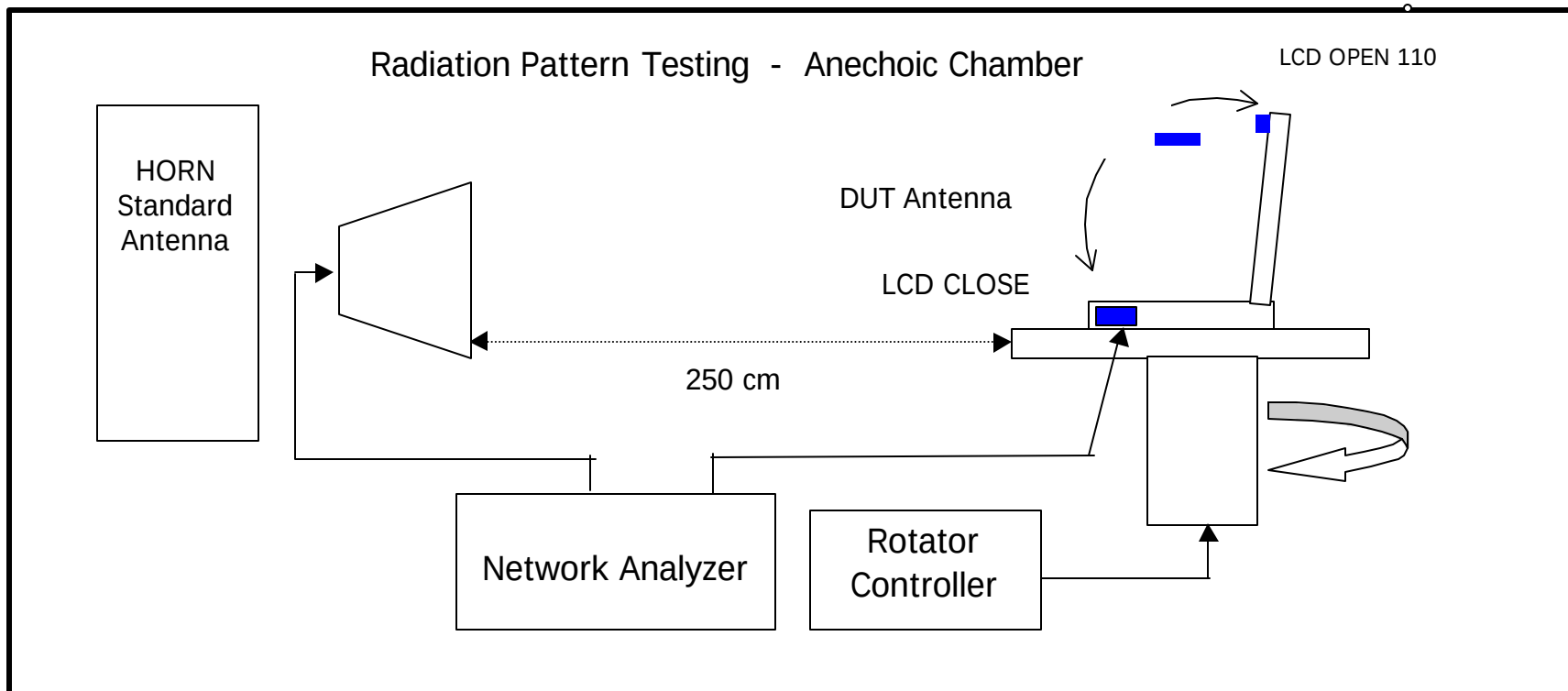
**Romeo**

**Lance**



## 802.11a.b Antenna Testing Conditions:

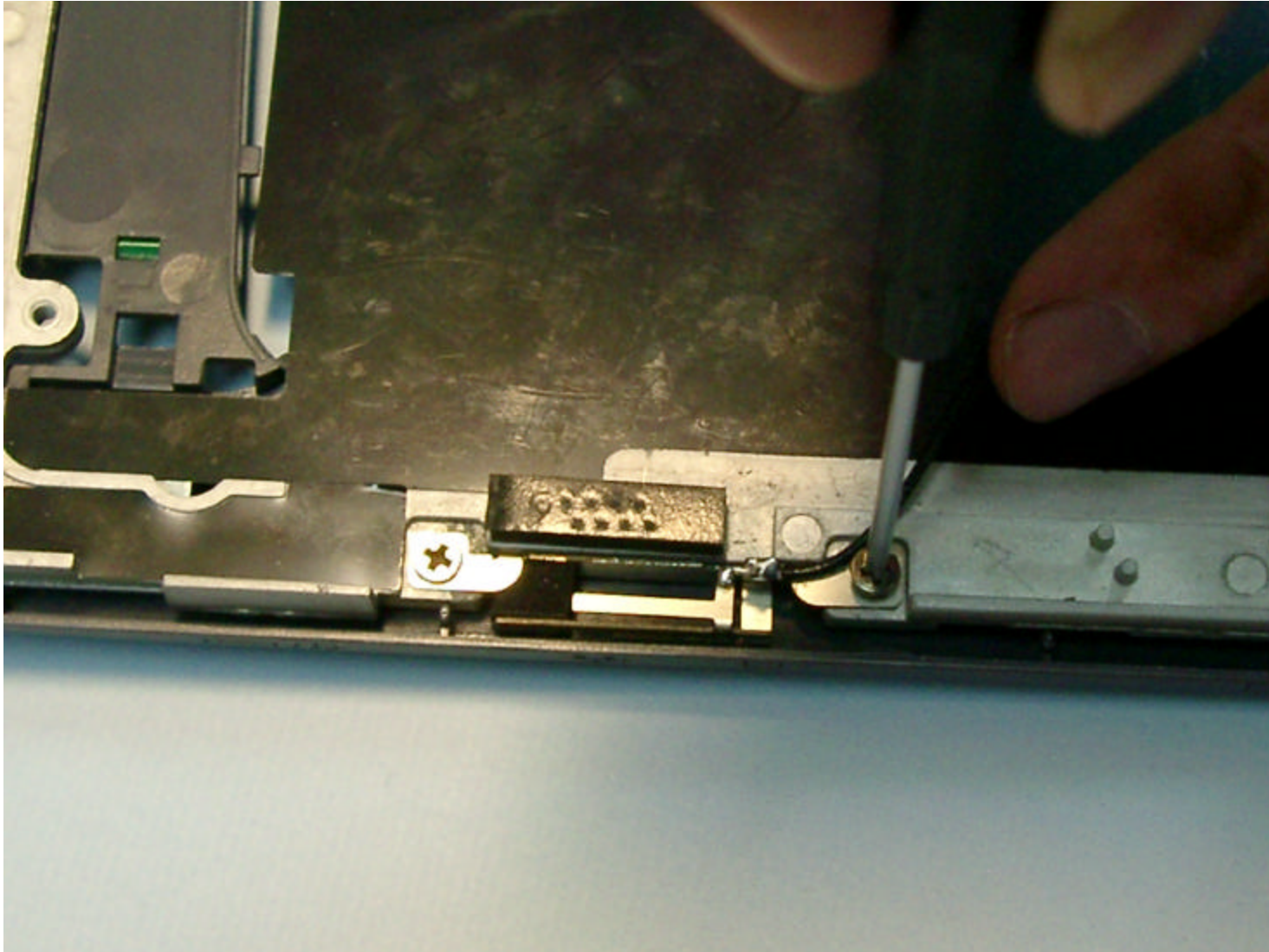
### 1. Testing set up:





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## Test results : Main ANT.

| Antenna | Application | Placement | Cable dia. Ø mm | Material | Cable Vendor | Connector Vendor | Connector type | Impedance |
|---------|-------------|-----------|-----------------|----------|--------------|------------------|----------------|-----------|
| BY27    | 802.11ab    | RIGHT     | 1.13            | Metal    | Nissei       | HIROSE           | HRS            | 50        |

## SWR

| Antenna | Center freg. @MHz | BW @MHz | VSWR    |         |         |
|---------|-------------------|---------|---------|---------|---------|
| Main    | 2450              | 100     | 2.4GHz  | 2.45GHz | 2.5GHz  |
|         |                   |         | 1.818   | 1.666   | 1.584   |
|         | 5250              | 200     | 5.15GHz | 5.25GHz | 5.35GHz |
|         |                   |         | 1.899   | 1.187   | 1.192   |



## Peak Gain and Average Gain



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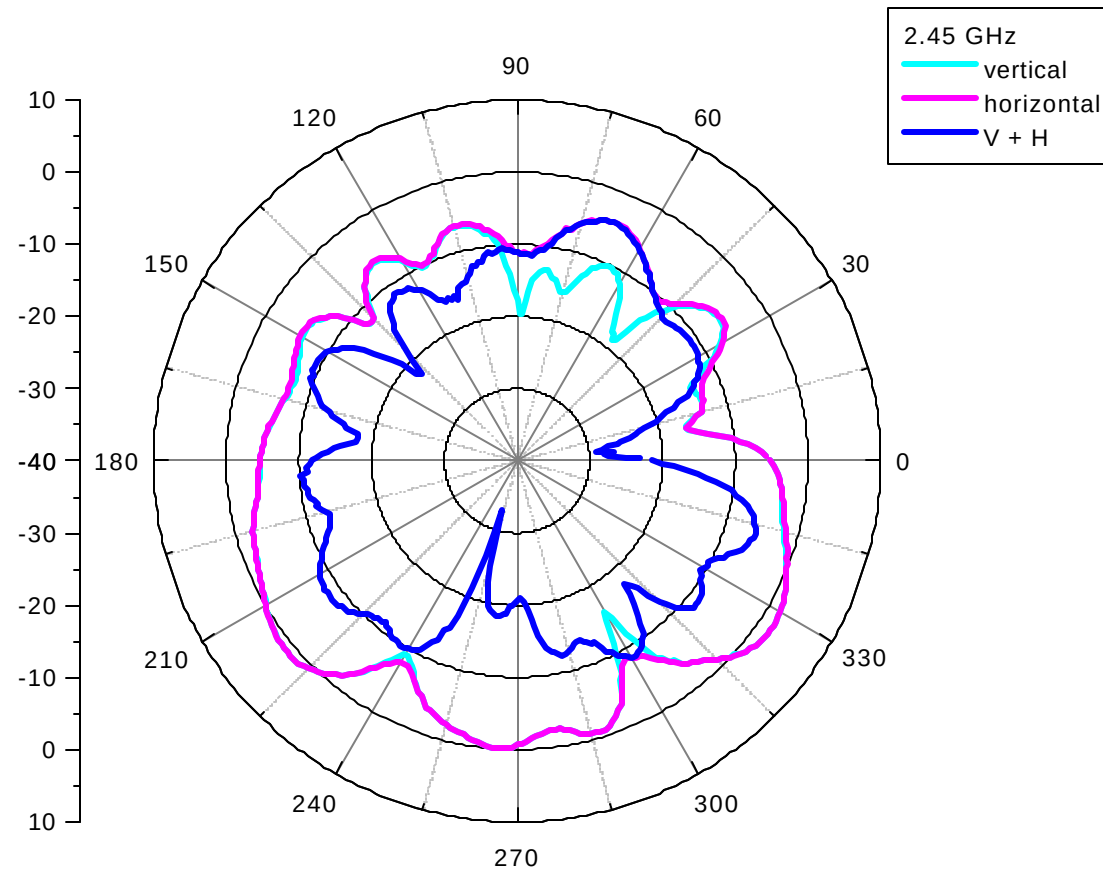
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|                   | 2.4GHz  | 2.45GHz | 2.5GHz  | 5.15GHz | 5.25GHz | 5.35GHz |
|-------------------|---------|---------|---------|---------|---------|---------|
| Peak gain(dBi)    | 1.2669  | 2.0663  | 2.8901  | 2.6022  | 2.2071  | 2.95    |
| Average Gain(dBi) | -4.3046 | -3.5179 | -2.7304 | -2.4523 | -3.2355 | -1.9293 |



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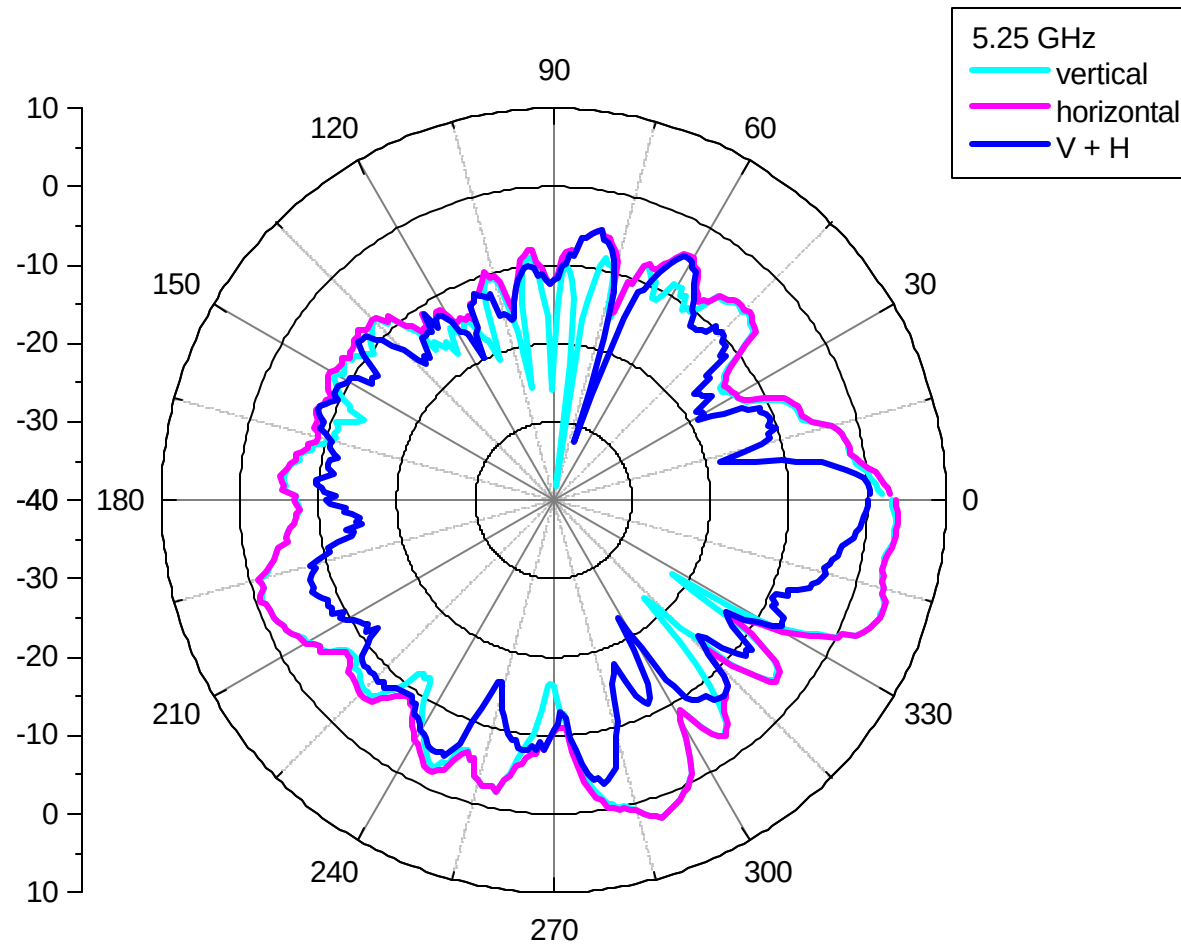
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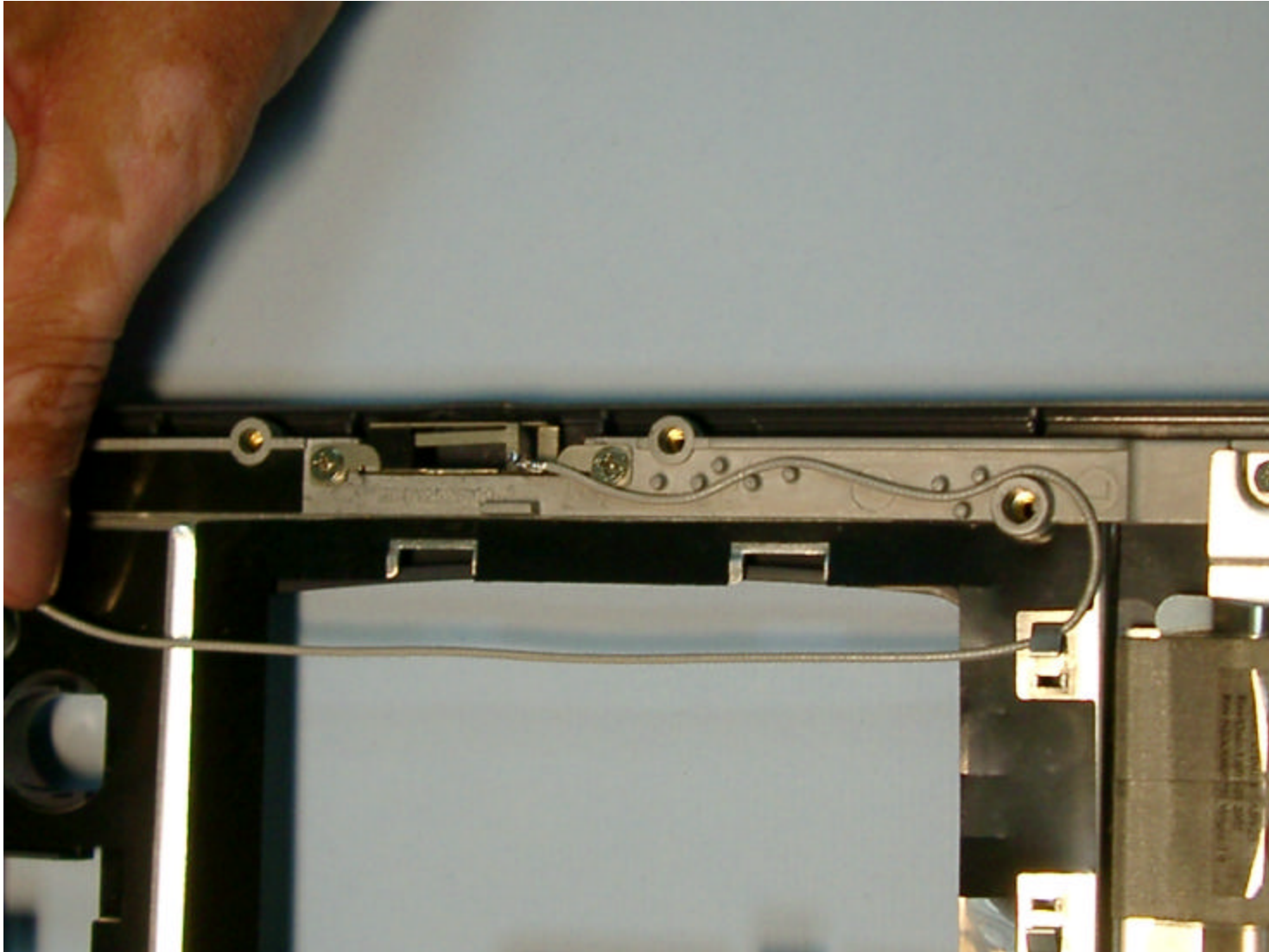
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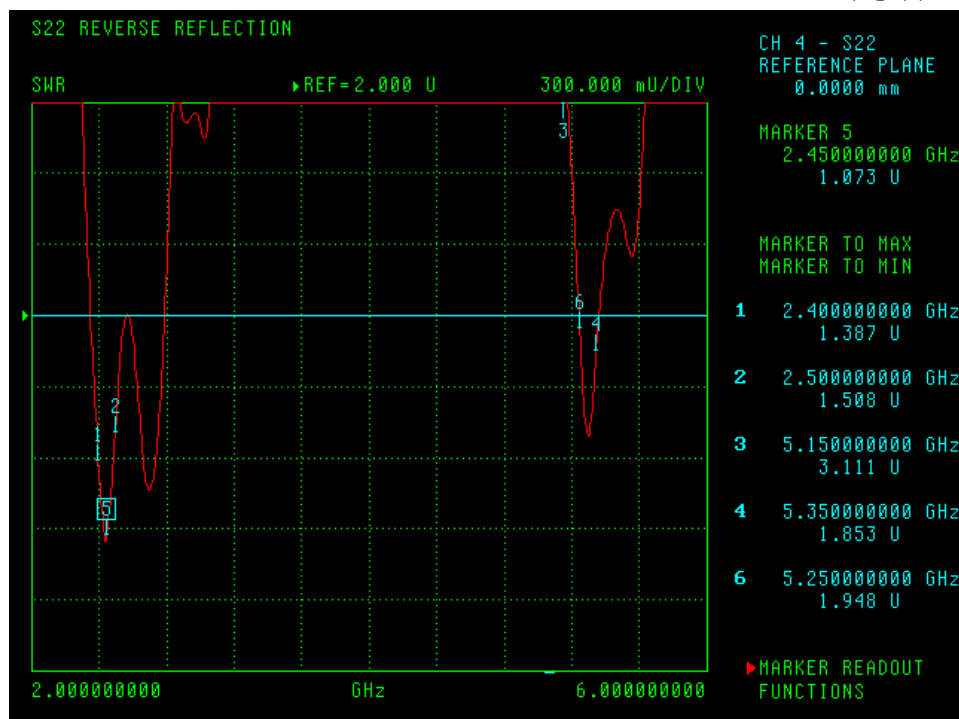
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**Test results : Sec. ANT.**

| Antenna | Application | Placement | Cable dia. Ø mm | Material | Cable Vendor | Connector Vendor | Connector type | Impedance |
|---------|-------------|-----------|-----------------|----------|--------------|------------------|----------------|-----------|
| 3y27    | 802.11ab    | LEFT      | 1.13            | Metal    | Nissei       | HIROSE           | HRS            | 50        |

VSWR

| Antenna | Center freg. @MHz | BW @MHz | VSWR    |         |         |
|---------|-------------------|---------|---------|---------|---------|
| Sec.    | 2450              | 100     | 2.4GHz  | 2.45GHz | 2.5GHz  |
|         |                   |         | 1.387   | 1.073   | 1.500   |
|         | 5250              | 200     | 5.15GHz | 5.25GHz | 5.35GHz |
|         |                   |         | 3.111   | 1.948   | 1.853   |



**Peak Gain and Average Gain**



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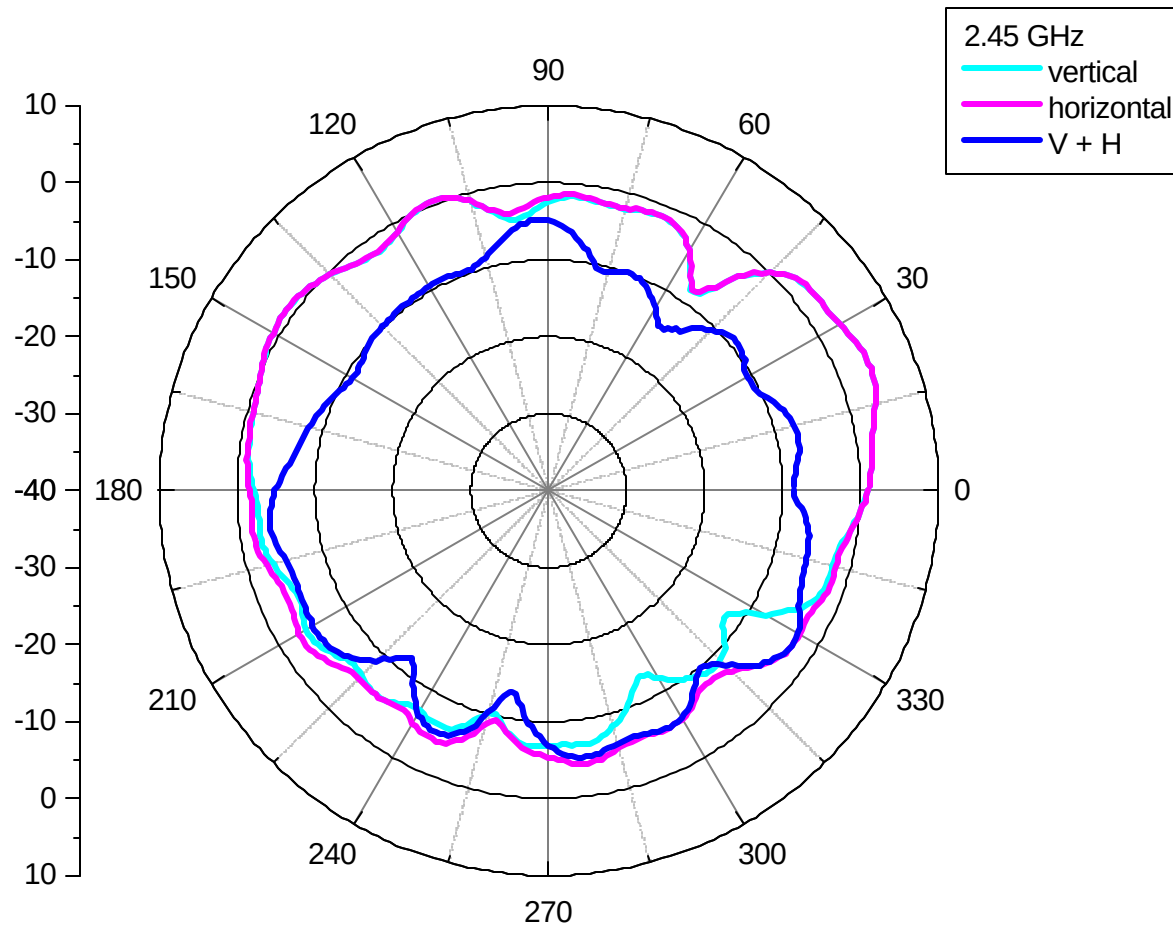
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|                   | 2.4GHz | 2.45GHz | 2.5GHz  | 5.15GHz | 5.25GHz | 5.35GHz |
|-------------------|--------|---------|---------|---------|---------|---------|
| Peak gain(dBi)    | 1.0762 | 1.2872  | 1.349   | 1.3031  | 1.1985  | 2.1777  |
| Average Gain(dBi) | -2.136 | -2.3424 | -2.9396 | -3.7837 | -3.8182 | -1.9663 |



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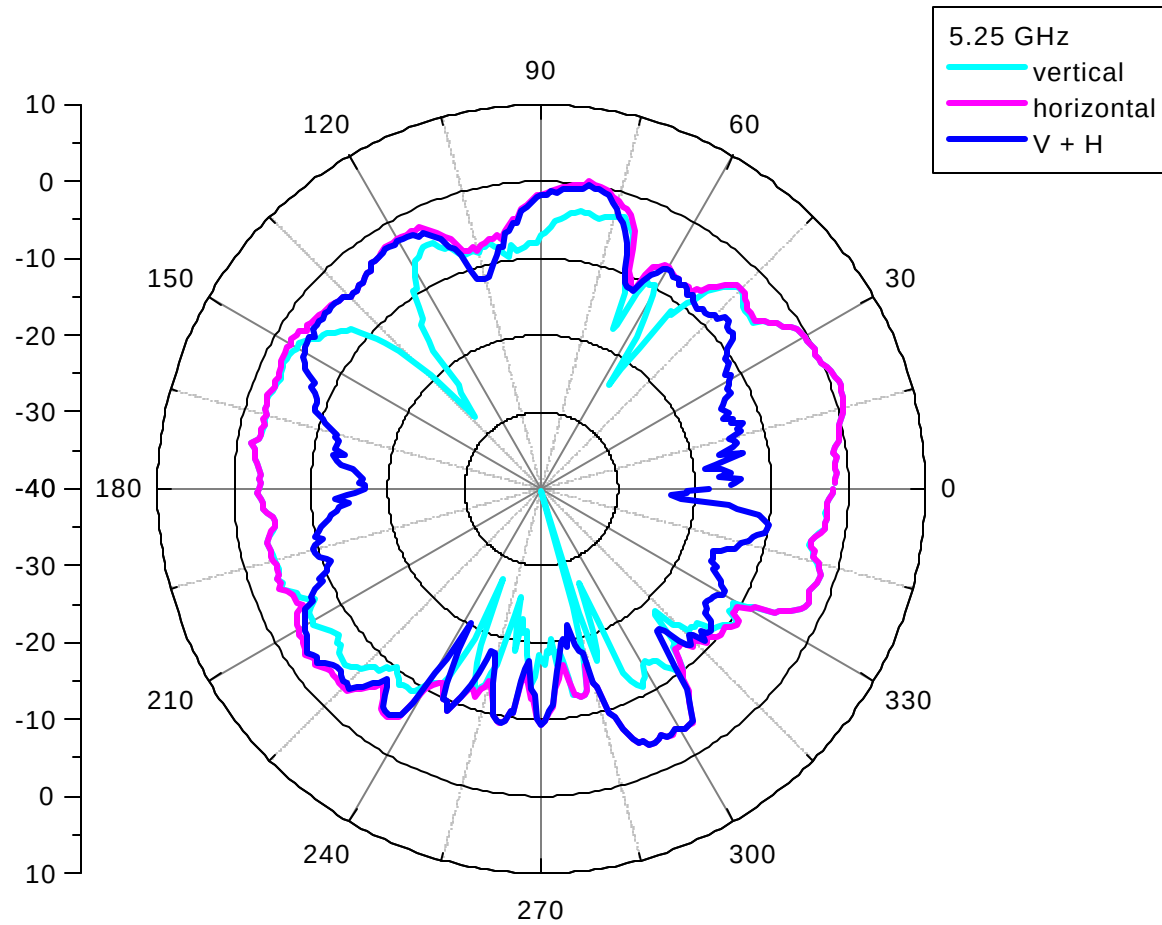
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Test results : **BLUETOOTH**



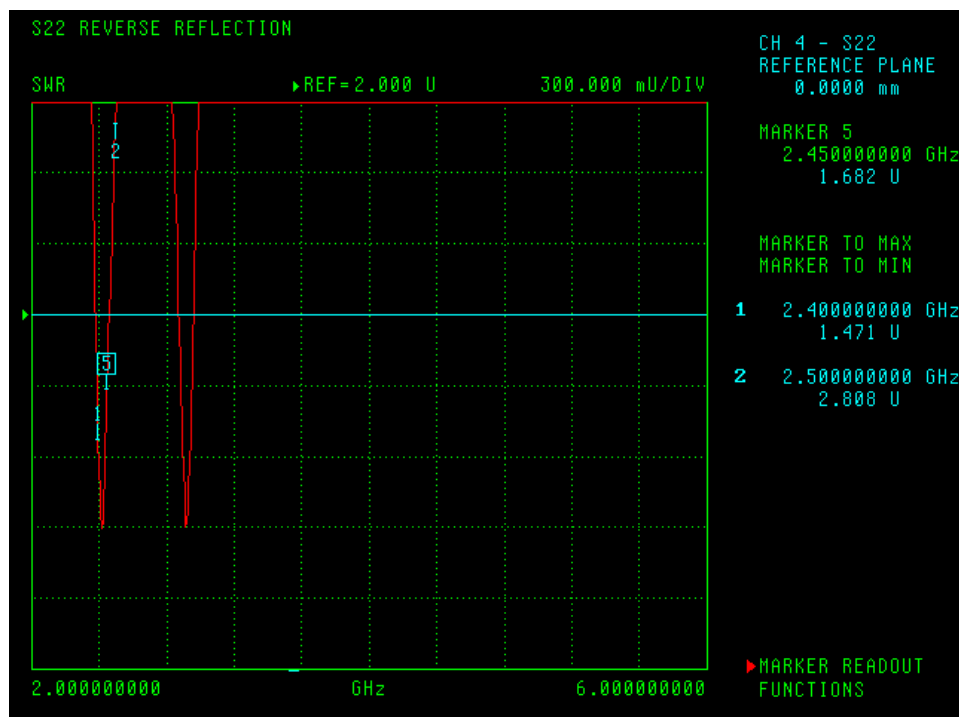
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| Antenna | Application | Placement | Cable dia. Ø mm | Material | Cable Vendor | Connector Vendor | Connector type | Impedance |
|---------|-------------|-----------|-----------------|----------|--------------|------------------|----------------|-----------|
| 3y27    | bluetooth   | hinge     | 1.13            | Metal    | Nissei       | HIROSE           | HRS            | 50        |

VSWR

| Antenna | Center freg. @MHz | BW @MHz | VSWR   |         |        |
|---------|-------------------|---------|--------|---------|--------|
| BT      | 2450              | 100     | 2.4GHz | 2.45GHz | 2.5GHz |
|         |                   |         | 1.471  | 1.682   | 2.808  |



**Peak Gain and Average Gain**



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|                   | 2.4GHz  | 2.45GHz | 2.5GHz  |
|-------------------|---------|---------|---------|
| Peak gain(dBi)    | -1.7997 | -0.6418 | -2.5316 |
| Average Gain(dBi) | -6.325  | -5.8838 | -6.764  |



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