

# Sample Recognition Letter

PROJECT NAME : X70

|                |                  |          |          |
|----------------|------------------|----------|----------|
| BAISHUI<br>LAI | ME               | RF       | QC       |
| Signature      | CHENLONG<br>YANG | WANGPING | LIUJIAD  |
| date           | 20240116         | 20240116 | 20240116 |
| CUSTOMER       | ME               | MD       | QC       |
| Signature      |                  |          |          |
| date           |                  |          |          |

|                                                                                                                                                                                   |                                  |                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------|
| Project X70                                                                                                                                                                       | write:<br>Wang ping              | Name : X70 Sample Recognition Letter |
| Date: 2024/01/16                                                                                                                                                                  |                                  |                                      |
| Edition                                                                                                                                                                           | Examine and<br>rify:<br>Qinbilin |                                      |
| A                                                                                                                                                                                 |                                  |                                      |
| Manufacturer :Shenzhen BaiShuiLai Intelligent Technology Co. , Ltd.<br>Address :307.309 ,D Building minle science and Technology Park Meiban Road Longhua district Shenzhen,China |                                  |                                      |

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3.1 standing wave(VSWR) and Reccho reflection(Return Loss) .....

3.2 TRP/TIS make use of Agilent8960(8820C) test in the ETS 5m×4m×4m 3D Chamber .....

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1Summary

This report is mainly used to describe the 《 Baishuilai Electronics 》 X70 Sample antenna

|                                                                                                                                                                                   |  |                                  |                                      |
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| Project X70                                                                                                                                                                       |  | write:<br>Wang ping              | Name : X70 Sample Recognition Letter |
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recognition letter.

2 Name and type of antenna

| MATERIALS             | NAME          | TYPE |
|-----------------------|---------------|------|
| TDDLTE+FDDLTE ANTENNA | X70-MAIN-V1.0 | PIFA |
| DIVERSITY ANTENNA     | X70-DIV-V1.0  | PIFA |
| WIFI/BT ANTENNA       | X70-WIFI-V1.0 | PIFA |

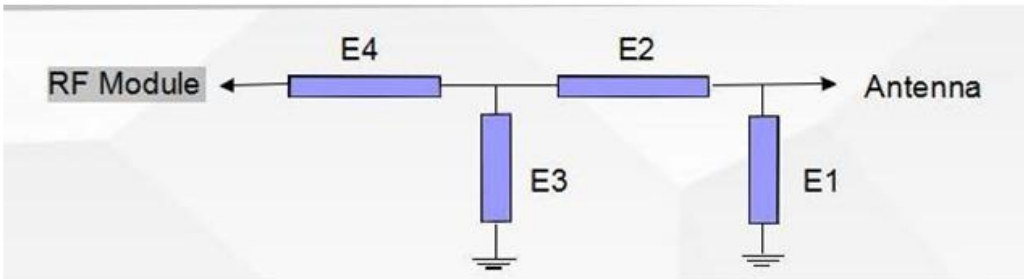
3Debug settings

3.1standing wave(VSWR)and echo reflection(Return Loss)

VSWR is using the HP 8753E connected to the terminal assembly to test, state for free space.

3.2 TRP/TRS Tested in the ETS 5m× 4 m× 3 m 3D Chamber using Agilent8960 (8820 C) 。

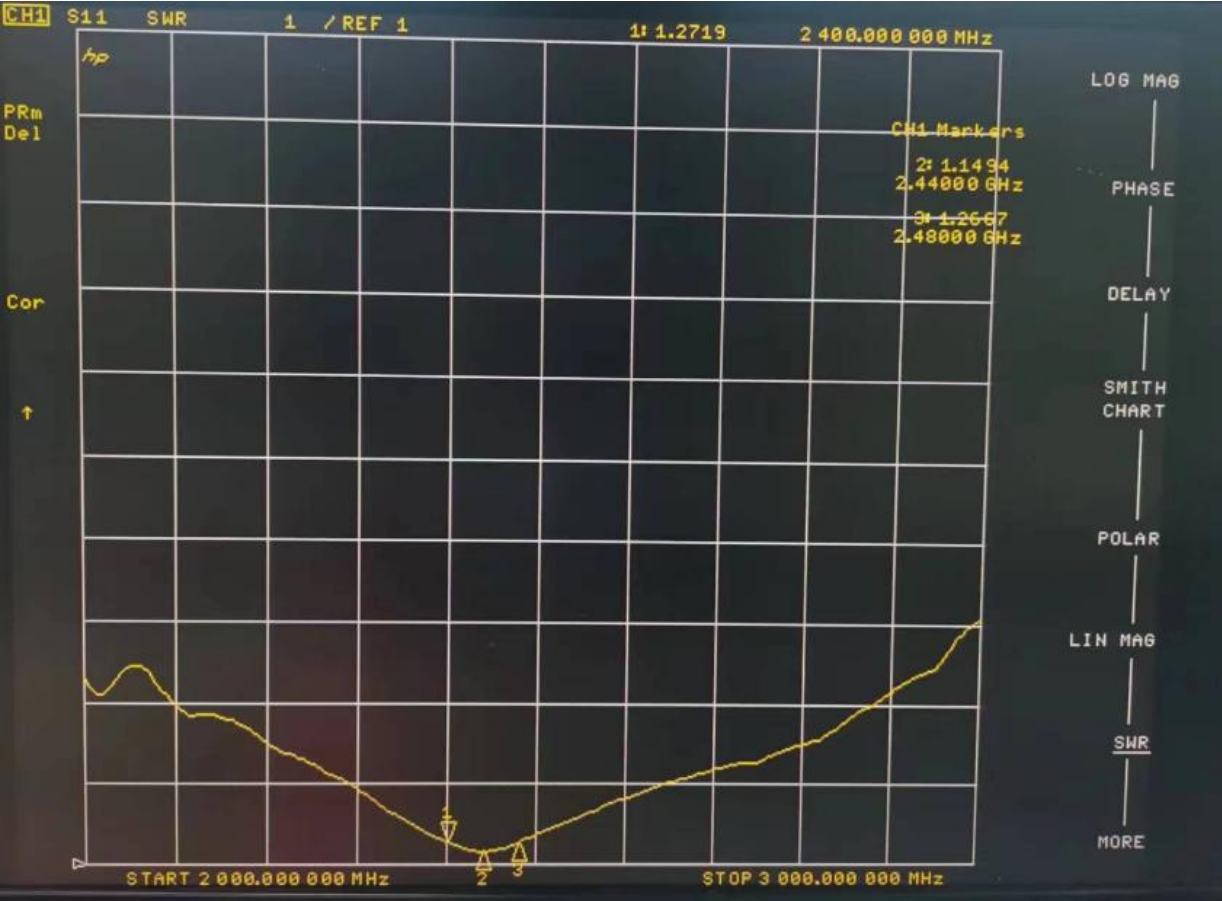
3.3Matching Circuit Description Match have no change



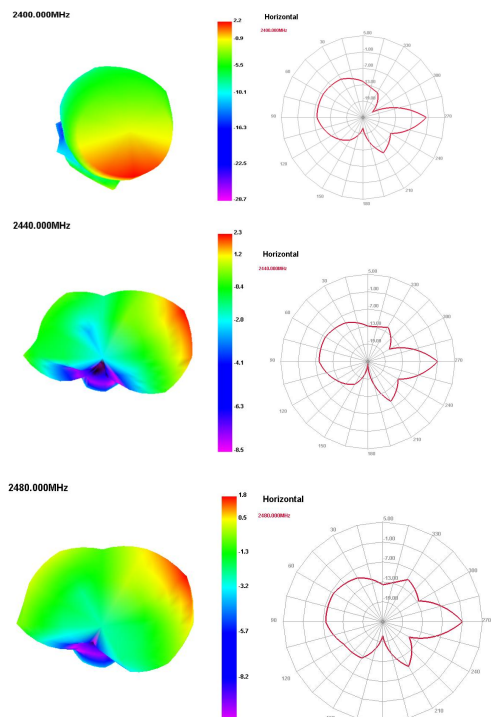
|                               |  | Element  | Value | Press the motherboard original matching circuit is not modified |
|-------------------------------|--|----------|-------|-----------------------------------------------------------------|
| 2.4G bt<br>TDD LTE<br>FDD LTE |  | E1(0201) |       |                                                                 |
|                               |  | E2(0201) |       |                                                                 |
|                               |  | E3(0201) |       |                                                                 |
|                               |  | E4(0201) |       |                                                                 |
|                               |  |          |       |                                                                 |

|                                                                                                            |  |             |                                      |
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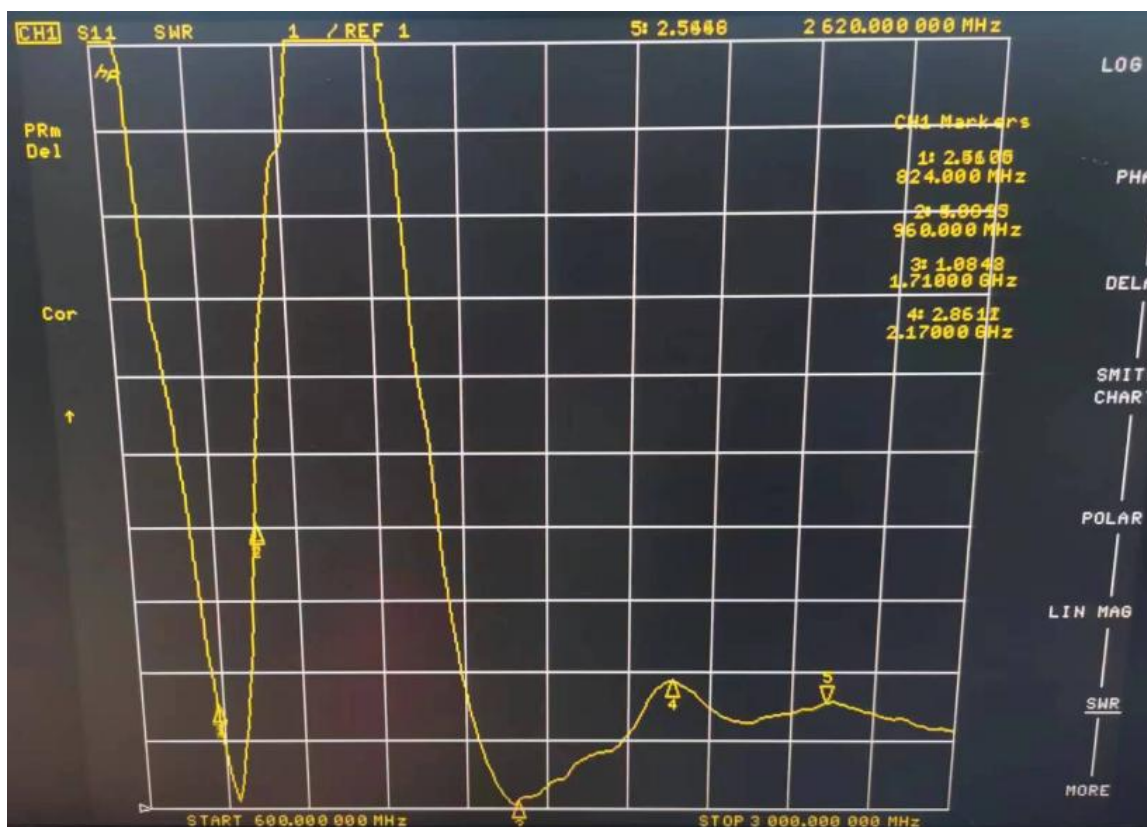
4 Effective Radiated Power And Isotopic Sensitivity Summation



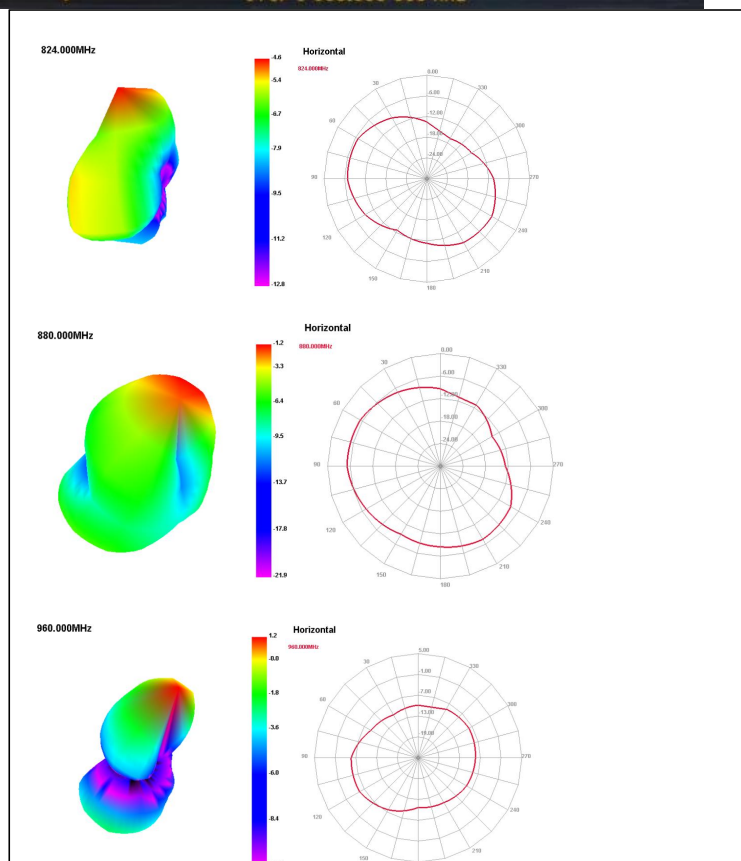
| Channel | Gain(dBi) | Efficiency (%) |
|---------|-----------|----------------|
| 2400    | 2.20      | 38.4           |
| 2410    | 2.06      | 39.2           |
| 2420    | 2.18      | 39.5           |
| 2430    | 2.18      | 39.4           |
| 2440    | 2.22      | 40.1           |
| 2450    | 2.01      | 38.8           |
| 2460    | 2.05      | 39.6           |
| 2470    | 1.96      | 37.4           |
| 2480    | 1.81      | 35.4           |
|         |           |                |
|         |           |                |
|         |           |                |
|         |           |                |
|         |           |                |



|                                                                                                            |                     |                                      |
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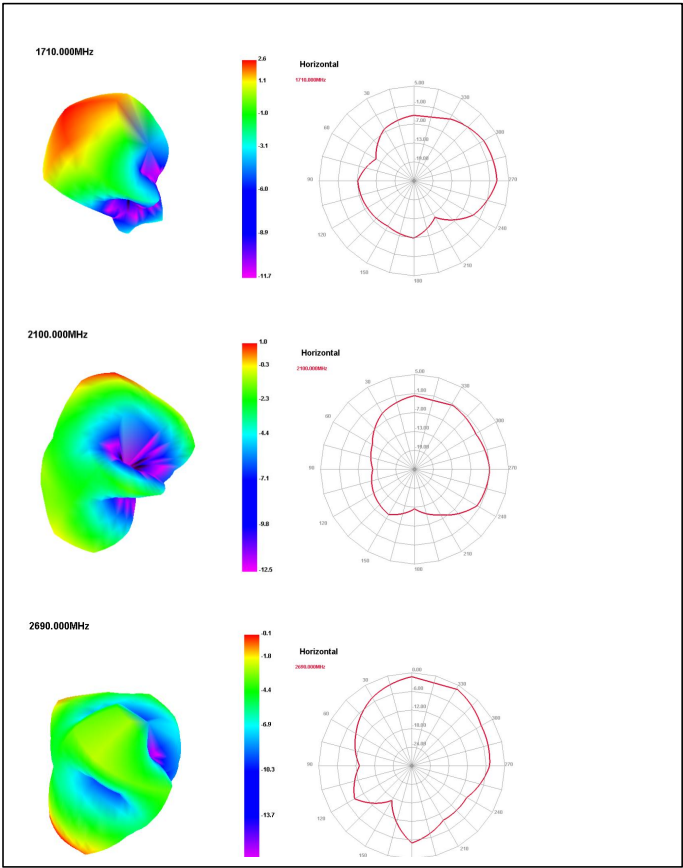


| Channel | Gain(dBi) | Efficiency (%) |
|---------|-----------|----------------|
| 820     | -4.59     | 18.5           |
| 840     | -3.15     | 19.9           |
| 860     | -2.31     | 22.7           |
| 880     | -1.24     | 26.3           |
| 900     | -0.98     | 28.7           |
| 920     | -0.18     | 30.2           |
| 940     | 0.76      | 33.2           |
| 960     | 1.17      | 35.5           |
| 1700    | 2.57      | 45.8           |
| 1750    | 2.44      | 43.0           |
| 1800    | 2.38      | 42.7           |
| 1850    | 2.38      | 42.5           |
| 1900    | 1.85      | 39.0           |
| 1950    | 2.15      | 39.7           |
| 2000    | 1.95      | 36.6           |
| 2050    | 0.58      | 33.9           |
| 2100    | 1.04      | 38.3           |



|                                                                                                                                                                                                   |                     |                                      |
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| Channel | Gain(dBi) | Efficiency (%) |
|---------|-----------|----------------|
| 2150    | -1.21     | 24.0           |
| 2200    | -1.52     | 24.4           |
| 2250    | 0.16      | 28.5           |
| 2300    | -0.18     | 28.3           |
| 2350    | -0.15     | 31.6           |
| 2400    | -0.07     | 34.6           |
| 2450    | 0.60      | 40.9           |
| 2500    | 0.63      | 38.2           |
| 2550    | 0.58      | 36.2           |
| 2600    | 0.98      | 37.2           |
| 2650    | 0.58      | 32.1           |
| 2700    | -0.14     | 30.9           |
|         |           |                |
|         |           |                |
|         |           |                |
|         |           |                |



| Frequency band | Channel | TRP(dBm) | TIS(dBm) | Frequency band | Channel | TRP(dBm) | TIS(dBm) |
|----------------|---------|----------|----------|----------------|---------|----------|----------|
| LTE B38 20M    | Low     | 18.5     |          | LTE B39 20M    | Low     | 18.7     |          |
|                | Mid     | 18.4     |          |                | Mid     | 17.8     |          |
|                | Hig     | 17.8     | -88.2    |                | Hig     | 17.6     | -90.1    |
| LTE B40 20M    | Low     | 18.8     |          | LTE B41 20M    | Low     | 18.2     |          |
|                | Mid     | 18.3     |          |                | Mid     | 17.9     |          |
|                | Hig     | 18.9     | -88.4    |                | Hig     | 17.5     | -89.8    |
| LTE B1 10M     | Low     | 17.1     |          | LTE B3 10M     | Low     | 18.9     |          |
|                | Mid     | 18.3     |          |                | Mid     | 18.5     |          |
|                | Hig     | 18.1     | -90.3    |                | Hig     | 19.3     | -92.2    |
| LTE B5 10M     | Low     | 16.1     |          | LTE B7 10M     | Low     | 18.9     |          |
|                | Mid     | 17.2     |          |                | Mid     | 18.7     |          |
|                | Hig     | 18.3     | -89.3    |                | Hig     | 18.0     | -90.6    |
| LTE B8 10M     | Low     | 18.1     |          | LTE B20 10M    | Low     | 16.2     |          |
|                | Mid     | 16.8     |          |                | Mid     | 16.7     |          |
|                | Hig     | 16.6     | -87.8    |                | Hig     | 17.5     | -90.5    |

|                                                                                                                                                                                   |  |                                  |                                      |
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