

# TEST REPORT

**Applicant:** TARRAN INNOVATION LIMITED  
**Address:** 19H Maxgrand plaza, No.3 Tai Yau Street, San Po Kong, Kowloon, Hong Kong  
**Equipment Type:** Radar  
**Model Name:** TRD01  
**Brand Name:** TARRAN  
**FCC ID:** 2BTMKTRD01  
**Test Standard:** 47 CFR Part 95 Subpart M  
(refer to section 3.1)  
**Sample Arrival Date:** Nov. 26, 2025  
**Test Date:** Jan. 10, 2026 - Jan. 14, 2026  
**Date of Issue:** Apr. 29, 2026

**ISSUED BY:**

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Alex Zheng**Checked by:** Ye Hongji**Approved by:** Tolan Tu  
(Testing Director)

### Revision History

| Version        | Issue Date           | Revisions                                                  |
|----------------|----------------------|------------------------------------------------------------|
| <u>Rev. 01</u> | <u>Feb. 28, 2026</u> | <u>Initial Issue</u>                                       |
| <u>Rev. 02</u> | <u>Apr. 29, 2026</u> | <u>1. Page 17, Added the power density test plots.</u>     |
|                |                      | <u>2. Page 19, Added the occupied bandwidth test plot.</u> |

## TABLE OF CONTENTS

|         |                                                          |    |
|---------|----------------------------------------------------------|----|
| 1       | GENERAL INFORMATION .....                                | 4  |
| 1.1     | Test Laboratory .....                                    | 4  |
| 1.2     | Test Location .....                                      | 4  |
| 2       | PRODUCT INFORMATION .....                                | 5  |
| 2.1     | Applicant Information .....                              | 5  |
| 2.2     | Manufacturer Information .....                           | 5  |
| 2.3     | General Description for Equipment under Test (EUT) ..... | 5  |
| 2.4     | Technical Information .....                              | 5  |
| 3       | SUMMARY OF TEST RESULTS .....                            | 6  |
| 4       | GENERAL TEST CONFIGURATIONS .....                        | 7  |
| 4.1     | Test Environments .....                                  | 7  |
| 4.2     | Test Equipment List .....                                | 7  |
| 4.3     | Test Software List .....                                 | 8  |
| 4.4     | Measurement Uncertainty .....                            | 8  |
| 4.5     | Description of Test Setup .....                          | 9  |
| 5       | Test Type and Test Results .....                         | 11 |
| 5.1     | Transmitter Parameters .....                             | 11 |
| ANNEX A | TEST RESULT .....                                        | 17 |
| A.1     | Power density .....                                      | 17 |
| A.2     | Modulation characteristics .....                         | 18 |
| A.3     | Occupied bandwidth .....                                 | 19 |
| A.4     | Field strength of emissions (band edge) .....            | 20 |

|         |                                                      |    |
|---------|------------------------------------------------------|----|
| A.5     | Field strength of emissions (radiated spurious)..... | 21 |
| A.6     | Frequency stability.....                             | 32 |
| ANNEX B | TEST SETUP PHOTOS .....                              | 33 |
| ANNEX C | EUT EXTERNAL PHOTOS.....                             | 33 |
| ANNEX D | EUT INTERNAL PHOTOS.....                             | 33 |

# 1 GENERAL INFORMATION

## 1.1 Test Laboratory

|              |                                                                                                                              |
|--------------|------------------------------------------------------------------------------------------------------------------------------|
| Name         | Shenzhen BALUN Technology Co., Ltd.                                                                                          |
| Address      | Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China |
| Phone Number | +86 755 6685 0100                                                                                                            |

## 1.2 Test Location

|                           |                                                                                                                                                                                                                                    |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name                      | Shenzhen BALUN Technology Co., Ltd.                                                                                                                                                                                                |
| Location                  | <input type="checkbox"/> Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China                                                                              |
|                           | <input checked="" type="checkbox"/> 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China |
|                           | <input type="checkbox"/> Building 2, Intelligent Connected Vehicle Industrial Park, No. 55, Xiangshan Road, Luotian Community, Yanluo Sub-district, Bao'an District, Shenzhen, Guangdong Province, China                           |
| Accreditation Certificate | The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.                                                                                                   |

## 2 PRODUCT INFORMATION

### 2.1 Applicant Information

|           |                                                                          |
|-----------|--------------------------------------------------------------------------|
| Applicant | TARRAN INNOVATION LIMITED                                                |
| Address   | 19H Maxgrand plaza, No.3 Tai Yau Street, San Po Kong, Kowloon, Hong Kong |

### 2.2 Manufacturer Information

|              |                                                                          |
|--------------|--------------------------------------------------------------------------|
| Manufacturer | TARRAN INNOVATION LIMITED                                                |
| Address      | 19H Maxgrand plaza, No.3 Tai Yau Street, San Po Kong, Kowloon, Hong Kong |

### 2.3 General Description for Equipment under Test (EUT)

|                                           |       |
|-------------------------------------------|-------|
| EUT Name                                  | Radar |
| Model Name Under Test                     | TRD01 |
| Series Model Name                         | N/A   |
| Description of Model name differentiation | N/A   |
| Hardware Version                          | N/A   |
| Software Version                          | N/A   |
| Dimensions (Approx.)                      | N/A   |
| Weight (Approx.)                          | N/A   |

### 2.4 Technical Information

General technical information:

|                                   |      |
|-----------------------------------|------|
| Network and Wireless connectivity | FMCW |
|-----------------------------------|------|

The requirement for the following technical information of the EUT was tested in this report:

|                         |                      |
|-------------------------|----------------------|
| Frequency Range         | 76 GHz – 81 GHz      |
| Modulation technology   | FMCW                 |
| Antenna Type            | Encapsulated Antenna |
| Antenna Gain            | 5.0 dBi              |
| The Max RF Output power | 10.96 dBm            |

### 3 SUMMARY OF TEST RESULTS

| No. | Identity                  | Document Title                                                                                    |
|-----|---------------------------|---------------------------------------------------------------------------------------------------|
| 1   | CFR 47 Part 95, Subpart M | The 76-81 GHz Band Radar Service                                                                  |
| 2   | ANSI C63.10-2020          | American National Standard for Procedures for Compliance Testing of Unlicensed Wireless Devices   |
| 3   | ANSI C63.26-2015          | American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services |

Test items and the results are as follows:

| No. | Description                                     | FCC Part No.          | Test Result | Verdict |
|-----|-------------------------------------------------|-----------------------|-------------|---------|
| 1   | Power density                                   | FCC §95.3367 (a) (b)  | ANNEX A.1   | Pass    |
| 2   | Modulation characteristics                      | FCC §2.1047 (d)       | ANNEX A.2   | Pass    |
| 3   | Occupied bandwidth                              | FCC §95.3379 (b)      | ANNEX A.3   | Pass    |
| 4   | Field strength of emissions (band edge)         | FCC §95.3379(a)(2)(i) | ANNEX A.4   | Pass    |
| 5   | Field strength of emissions (radiated spurious) | FCC §95.3379 (a)      | ANNEX A.5   | Pass    |
| 6   | Frequency stability                             | FCC §95.3379 (b)      | ANNEX A.6   | Pass    |

## 4 GENERAL TEST CONFIGURATIONS

### 4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

|                            |                         |                    |
|----------------------------|-------------------------|--------------------|
| Relative Humidity          | 41% to 62%              |                    |
| Atmospheric Pressure       | 98 kPa to 102 kPa       |                    |
| Temperature                | NT (Normal Temperature) | +20.4°C to +22.3°C |
|                            | LT (Low Temperature)    | -40.0°C            |
|                            | HT (High Temperature)   | +85.0°C            |
| Working Voltage of the EUT | NV (Normal Voltage)     | 12.0 V             |
|                            | LV (Low Voltage)        | 10.2 V             |
|                            | HV (High Voltage)       | 13.8 V             |

### 4.2 Test Equipment List

| Description                                               | Manufacturer              | Model       | Serial No.                          | Cal. Date  | Cal. Due   |
|-----------------------------------------------------------|---------------------------|-------------|-------------------------------------|------------|------------|
| Spectrum Analyzer                                         | ROHDE&SCHW<br>ARZ         | FSV-40      | 101544                              | 2025.10.30 | 2026.10.29 |
| Spectrum Analyzer                                         | KEYSIGHT                  | N9020A      | MY54432240                          | 2025.04.29 | 2026.04.28 |
| Test Antenna-Bi-Log                                       | SCHWARZBECK               | VULB 9163   | 01414                               | 2023.11.03 | 2026.11.02 |
| Test Antenna-Horn                                         | SCHWARZBECK               | 3117        | 00108482                            | 2025.10.19 | 2028.10.18 |
| Test Antenna-Horn                                         | A-INFO                    | LB-180400KF | J211060273                          | 2024.06.15 | 2027.06.14 |
| Anechoic Chamber                                          | EMC Electronic<br>Co, Ltd | 9m*6m*6m    | 107                                 | 2024.05.12 | 2027.05.11 |
| DC power supply                                           | ITECH                     | IT6720      | 6000103010717<br>610000             | 2025.06.17 | 2026.06.16 |
| Millimeter Wave<br>Frequency Conversion<br>Receiving Unit | Tonscend                  | MMFC        | 202311090002-<br>MMFC-R190-<br>L0F0 | /          | /          |
| Millimeter Wave<br>Frequency Conversion<br>Receiving Unit | Tonscend                  | MMFC        | 202311090002-<br>MMFC-R120-<br>L0F0 | /          | /          |
| Millimeter Wave<br>Frequency Conversion<br>Receiving Unit | Tonscend                  | MMFC        | 202311090002-<br>MMFC-R100-<br>L0F0 | /          | /          |
| Millimeter Wave<br>Frequency Conversion<br>Receiving Unit | Tonscend                  | MMFC        | 202311090002-<br>MMFC-R60-<br>L0F0  | /          | /          |
| Millimeter Wave<br>Frequency Conversion<br>Receiving Unit | Tonscend                  | MMFC        | 202311090002-<br>MMFC-R40-<br>L0F0  | /          | /          |

### 4.3 Test Software List

| Description | Manufacturer | Software Version | Serial No. |
|-------------|--------------|------------------|------------|
| BL410-E     | BALUN        | V24724           | N/A        |

### 4.4 Measurement Uncertainty

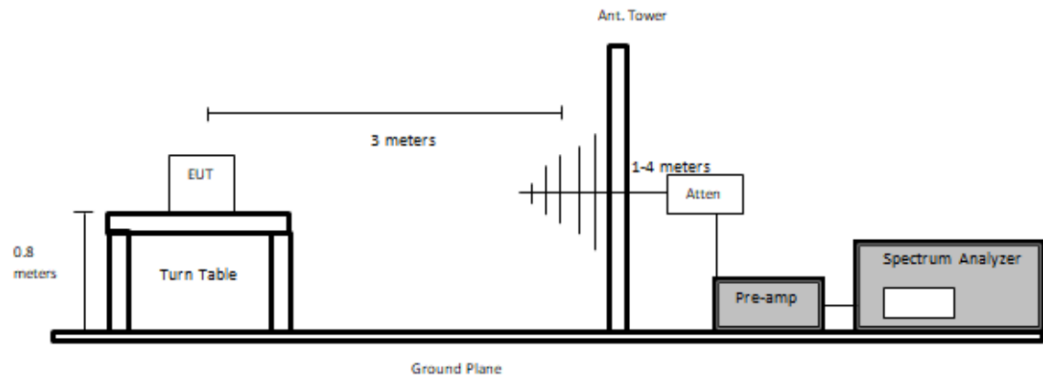
The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

| Parameters                      | Uncertainty |
|---------------------------------|-------------|
| RF frequency                    | 0.093 ppm   |
| RF power                        | 4.830 dB    |
| Emissions, radiated (40G~60G)   | 4.836 dB    |
| Emissions, radiated (60G~90G)   | 4.830 dB    |
| Emissions, radiated (90G~110G)  | 4.830 dB    |
| Emissions, radiated (110G~170G) | 4.835 dB    |
| Emissions, radiated (170G~260G) | 4.835 dB    |
| Emissions, radiated (30M~40G)   | 5.36 dB     |
| Temperature                     | 0.8°C       |
| Voltage (DC)                    | 1%          |
| Humidity                        | 4%          |

## 4.5 Description of Test Setup

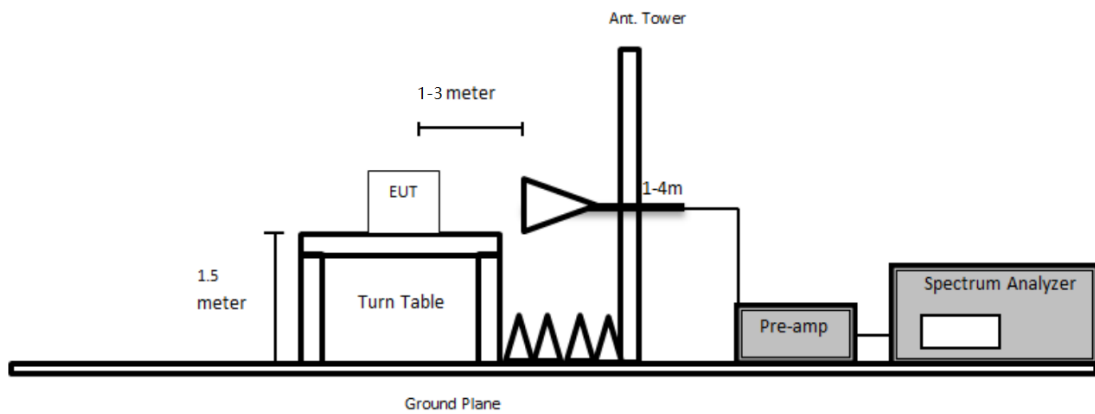
### 4.5.1 For Radiated Test

Below 1GHz:



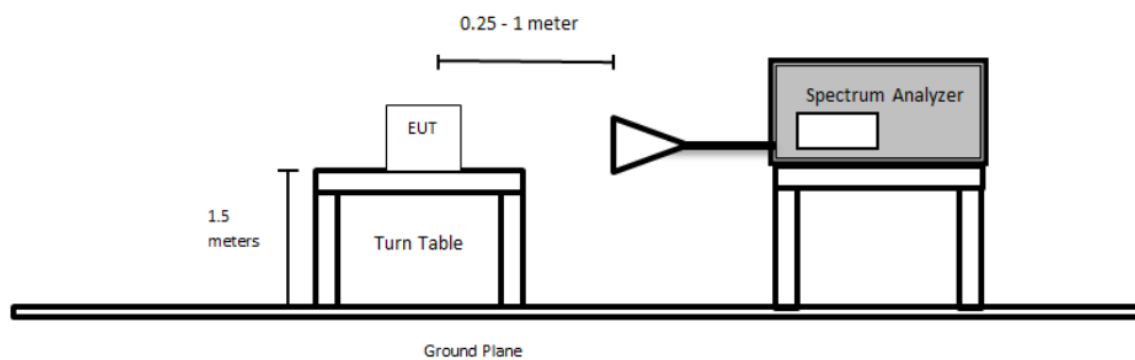
(Diagram 1)

1-40 GHz:



(Diagram 2)

Above 40 GHz:



(Diagram 3)

## 5 Test Type and Test Results

### 5.1 Transmitter Parameters

#### 5.1.1 Power density

##### 5.1.1.1 Limit

The fundamental radiated emission limits within the 76-81 GHz band are expressed in terms of Equivalent Isotropically Radiated Power (EIRP) and are as follows:

According to FCC 95.3367(a&b).

The maximum power (EIRP) within the 76-81 GHz band shall not exceed 50 dBm based on measurements employing a power averaging detector with a 1 MHz Resolution Bandwidth (RBW).

The maximum peak power (EIRP) within the 76-81 GHz band shall not exceed 55 dBm based on measurements employing a peak detector with a 1 MHz RBW.

##### 5.1.1.2 Test Setup

The section 4.5.1 (Diagram 3) test setup description was used for this test.

##### 5.1.1.3 Test Procedure

Reference to ANSI C63.10-2020 & ANSI C63.26-2015.

##### 5.1.1.4 Test Result

Please refer to ANNEX A.1.

## 5.1.2 Modulation characteristics

### 5.1.2.1 Limit

§ 2.1047 (d) Other types of equipment. A curve or equivalent data which shows that the equipment will meet the modulation requirements of the rules under which the equipment is to be licensed.

### 5.1.2.2 Test Result

Please refer to ANNEX A.2.

### 5.1.3 Occupied bandwidth

#### 5.1.3.1 Limit

Frequency range  $f(\text{lowest}) > 76.0 \text{ GHz}$ ,  $f(\text{highest}) < 81.0 \text{ GHz}$

#### 5.1.3.2 Test Setup

The section 4.5.1 (Diagram 3) test setup description was used for this test.

#### 5.1.3.3 Test Procedure

Reference to ANSI C63.10-2020 & ANSI C63.26-2015

#### 5.1.3.4 Test Result

Please refer to ANNEX A.3.

#### 5.1.4 Band edge compliance

##### 5.1.4.1 Limit

| FCC Limit                          |
|------------------------------------|
| 600 pW/cm <sup>2</sup> ~ -1.69 dBm |

##### 5.1.4.2 Test Setup

The section 4.5.1 (Diagram 3) test setup description was used for this test.

##### 5.1.4.3 Test Procedure

Reference to ANSI C63.10-2020 & ANSI C63.26-2015.

##### 5.1.4.4 Test Result

Please refer to ANNEX A.4.

## 5.1.5 Unwanted emissions in the spurious domain

### 5.1.5.1 Limit

Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field Strength ( $\mu\text{V/m}$ ) |
|-----------------|------------------------------------|
| 0.009 - 0.490   | 2400/F(kHz)                        |
| 0.490 - 1.705   | 24000/F(kHz)                       |
| 1.705 - 30.0    | 30                                 |
| 30 - 88         | 100                                |
| 88 - 216        | 150                                |
| 216 - 960       | 200                                |
| 960-40000       | 500                                |

| Frequency Range | Power Density |
|-----------------|---------------|
| 40-200 GHz      | -1.69dBm      |
| 200-231 GHz     | 0.53dBm       |

### 5.1.5.2 Test Setup

See the section 4.5.1 (Diagram 1, 2, 3) for test setup description.

### 5.1.5.3 Test Procedure

Reference to ANSI C63.10-2020 & ANSI C63.26-2015.

### 5.1.5.4 Test Result

Please refer to ANNEX A.5.

## 5.1.6 Frequency stability

### 5.1.6.1 Limit

Frequency range  $f(\text{lowest}) > 76.0 \text{ GHz}$ ,  $f(\text{highest}) < 81.0 \text{ GHz}$

### 5.1.6.2 Test Setup

See the section 4.5.1 (Diagram 2) for test setup description.

### 5.1.6.3 Test Procedure

Reference to ANSI C63.10-2020 & ANSI C63.26-2015

### 5.1.6.4 Test Result

Please refer to ANNEX A.6.

## ANNEX A TEST RESULT

### A.1 Power density

#### Peak Data

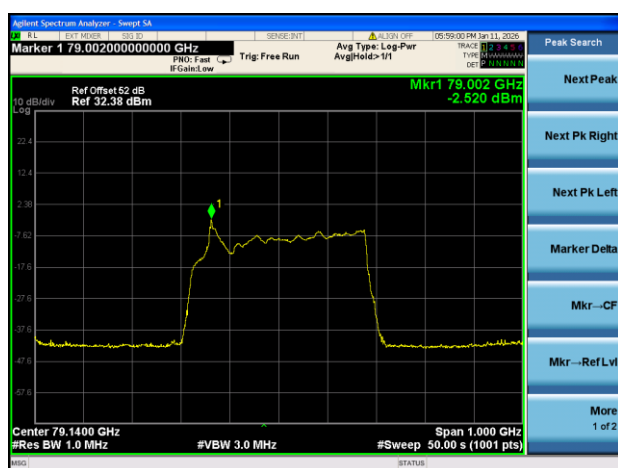
|                                                                                    |                 |         |                      |                                         |                         |
|------------------------------------------------------------------------------------|-----------------|---------|----------------------|-----------------------------------------|-------------------------|
| Modulation Mode                                                                    |                 |         | FMCW                 |                                         |                         |
| Limit (dBm/MHz)                                                                    |                 |         | 55                   |                                         |                         |
| Test Result                                                                        |                 |         |                      |                                         |                         |
| Test Method                                                                        | Test Conditions |         | PSA Reading<br>(dBm) | Duty Cycle<br>Correction<br>Factor (dB) | Peak Power<br>(dBm/MHz) |
| <input checked="" type="checkbox"/> Radiated<br><input type="checkbox"/> Conducted | Temperature     | Voltage |                      |                                         |                         |
|                                                                                    | NT              | NV      | -2.52                | 10.36                                   | 7.84                    |
| Test Verdict                                                                       |                 |         | Pass                 |                                         |                         |

#### Average Data

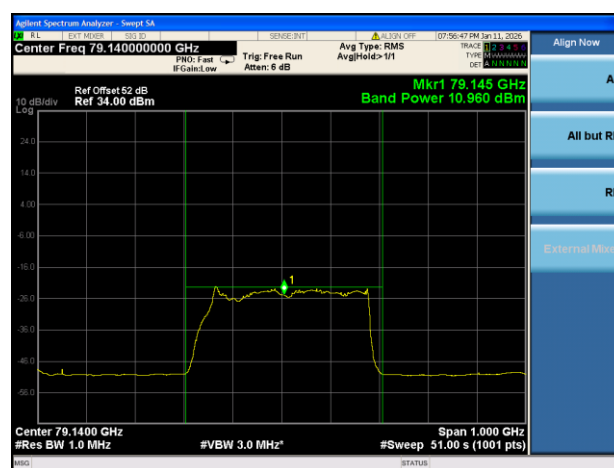
|                                              |                 |         |                     |  |  |
|----------------------------------------------|-----------------|---------|---------------------|--|--|
| Modulation Mode                              |                 |         | FMCW                |  |  |
| Limit (dBm)                                  |                 |         | 50                  |  |  |
| Test Result                                  |                 |         |                     |  |  |
| Test Method                                  | Test Conditions |         | Average Power (dBm) |  |  |
| <input checked="" type="checkbox"/> Radiated | Temperature     | Voltage |                     |  |  |
| <input type="checkbox"/> Conducted           | NT              | NV      | 10.96               |  |  |
| Test Verdict                                 |                 |         | Pass                |  |  |

#### Test Plots

##### PSA Reading



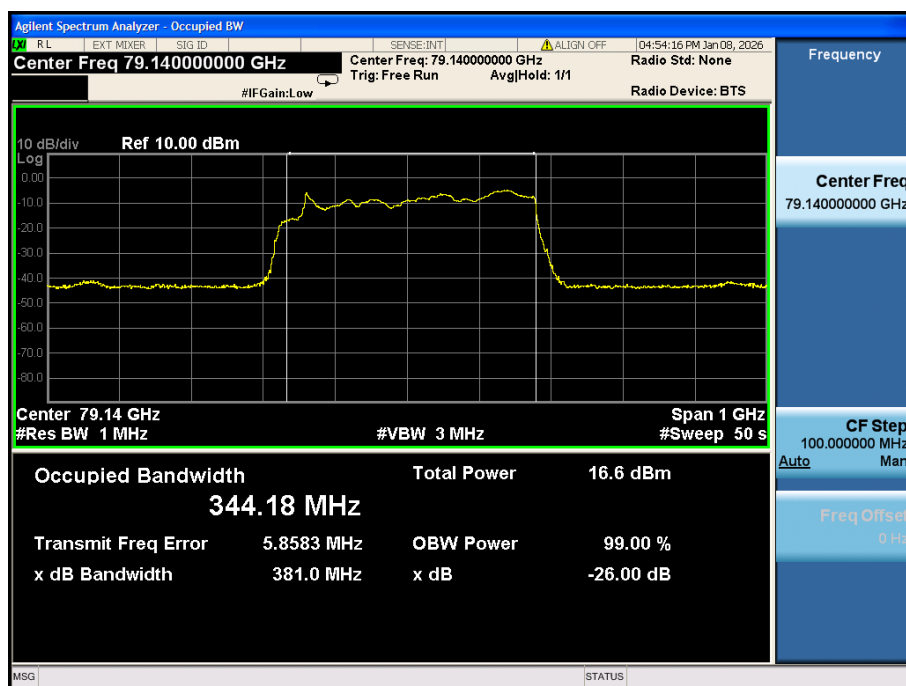
##### Average Power



## A.2 Modulation characteristics

### Test Plots

FMCW is mainly characterized by start and stop frequency resp. the occupied bandwidth

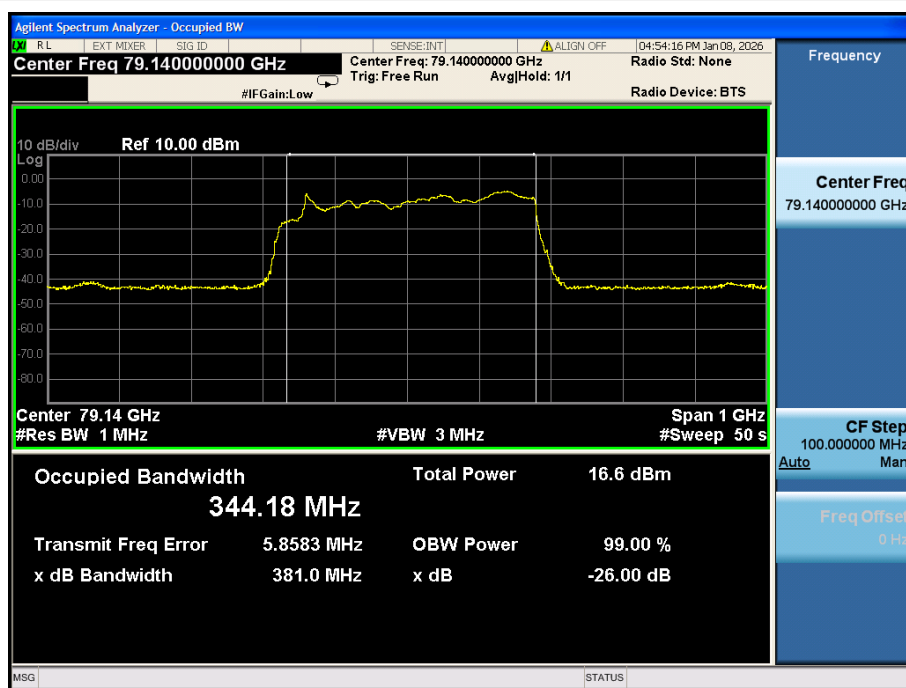


### A.3 Occupied bandwidth

#### Test Data

| FL (GHz) | FH (GHz) | FCC Limit (GHz) | Test Result |
|----------|----------|-----------------|-------------|
| 78.9738  | 79.3179  | 76-81           | Pass        |

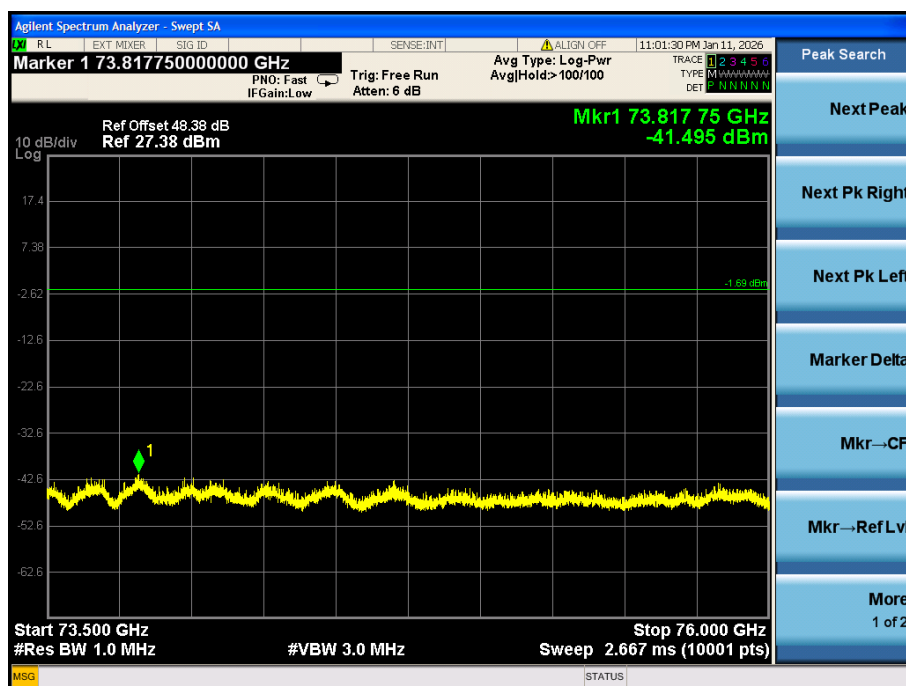
#### Test Plot



## A.4 Field strength of emissions (band edge)

### Test Plot

73.5-76 GHz (Band Edge), Measured at 1 meter

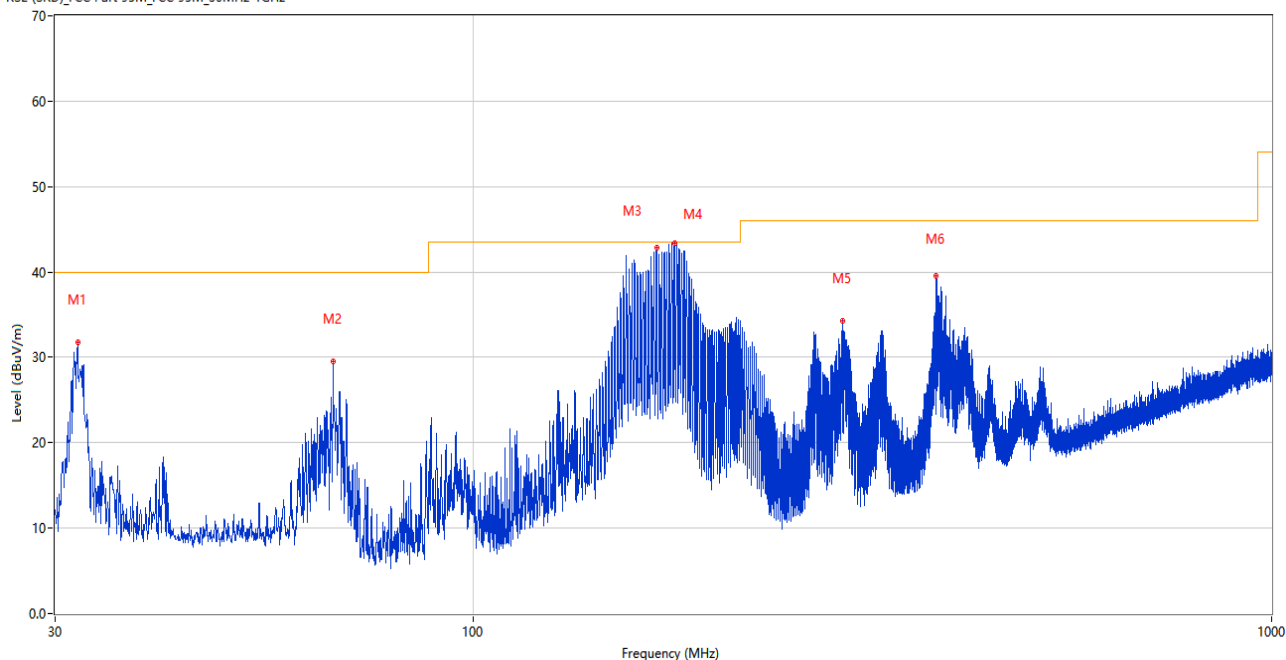


## A.5 Field strength of emissions (radiated spurious)

### Test Data and Plots

30 MHz to 1 GHz, ANT H

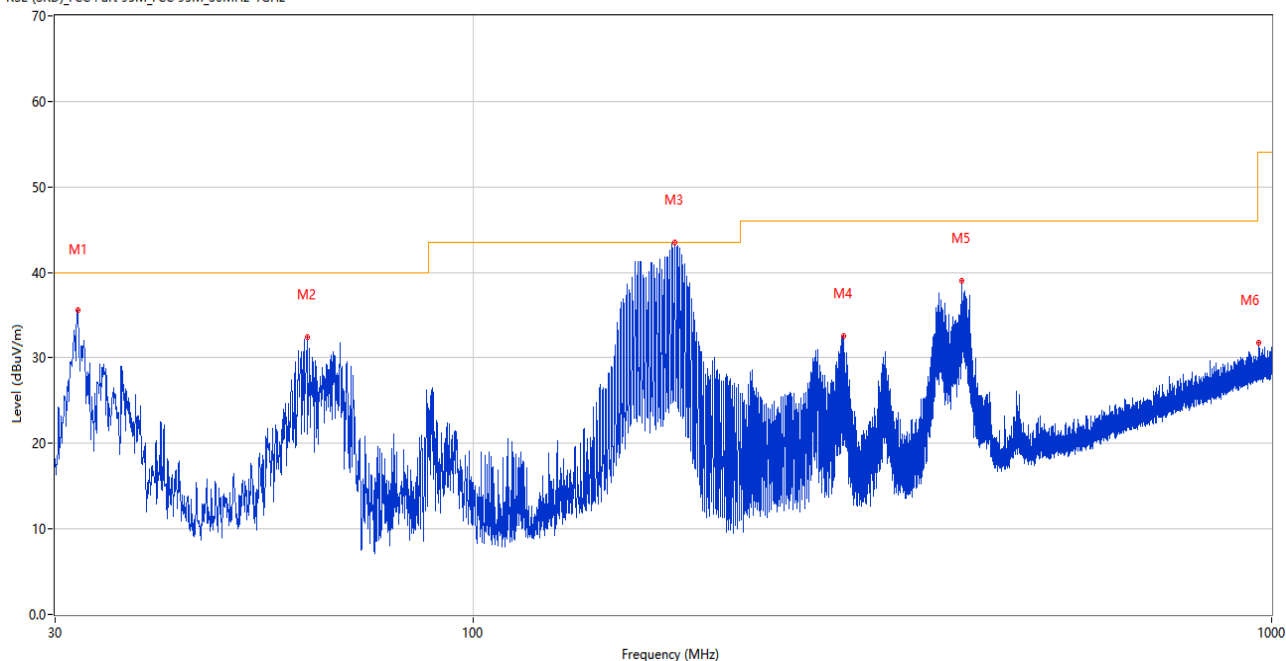
RSE (SRD)\_FCC Part 95M\_FCC 95M\_30MHz-1GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 32.037          | 31.76            | 40.0           | 8.24        | Peak     | 99.00          | 150         | Horizontal | Pass    |
| 2   | 66.909          | 29.51            | 40.0           | 10.49       | Peak     | 273.00         | 150         | Horizontal | Pass    |
| 3   | 169.826         | 42.84            | 43.5           | 0.66        | Peak     | 282.00         | 150         | Horizontal | Pass    |
| 4   | 178.750         | 43.40            | 43.5           | 0.10        | Peak     | 279.00         | 150         | Horizontal | N/A     |
| 4*  | 178.750         | 42.82            | 43.5           | 0.68        | Peak     | 279.00         | 150         | Horizontal | Pass    |
| 5   | 290.639         | 34.24            | 46.0           | 11.76       | Peak     | 82.00          | 150         | Horizontal | Pass    |
| 6   | 380.558         | 39.49            | 46.0           | 6.51        | Peak     | 251.00         | 150         | Horizontal | Pass    |

## 30 MHz to 1 GHz, ANT V

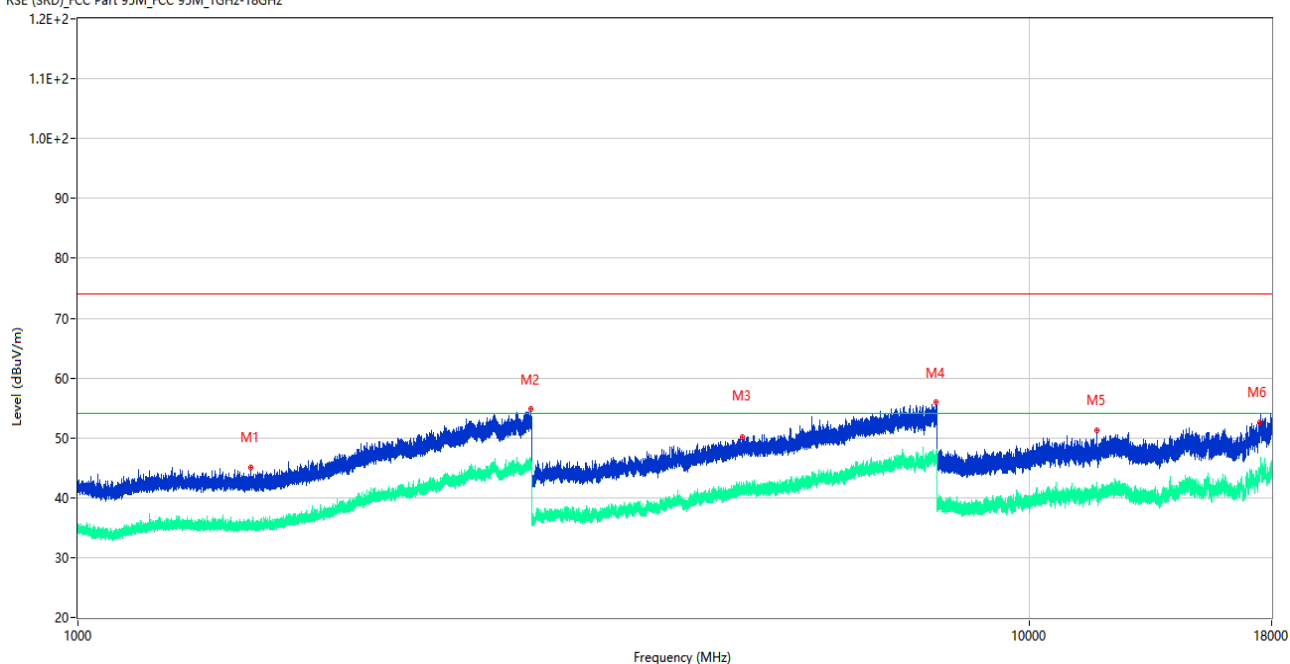
RSE (SRD)\_FCC Part 95M\_FCC 95M\_30MHz-1GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 32.085          | 35.66            | 40.0           | 4.34        | Peak     | 91.00          | 150         | Vertical | Pass    |
| 2   | 62.010          | 32.41            | 40.0           | 7.59        | Peak     | 241.00         | 150         | Vertical | Pass    |
| 3   | 178.944         | 43.50            | 43.5           | 0.00        | Peak     | 356.00         | 150         | Vertical | N/A     |
| 3*  | 178.944         | 42.90            | 43.5           | 0.60        | QP       | 356.00         | 150         | Vertical | Pass    |
| 4   | 291.075         | 32.54            | 46.0           | 13.46       | Peak     | 62.00          | 150         | Vertical | Pass    |
| 5   | 409.415         | 38.96            | 46.0           | 7.04        | Peak     | 55.00          | 150         | Vertical | Pass    |
| 6   | 964.838         | 31.83            | 54.0           | 22.17       | Peak     | 270.00         | 150         | Vertical | Pass    |

## 1 GHz to 18 GHz, ANT H

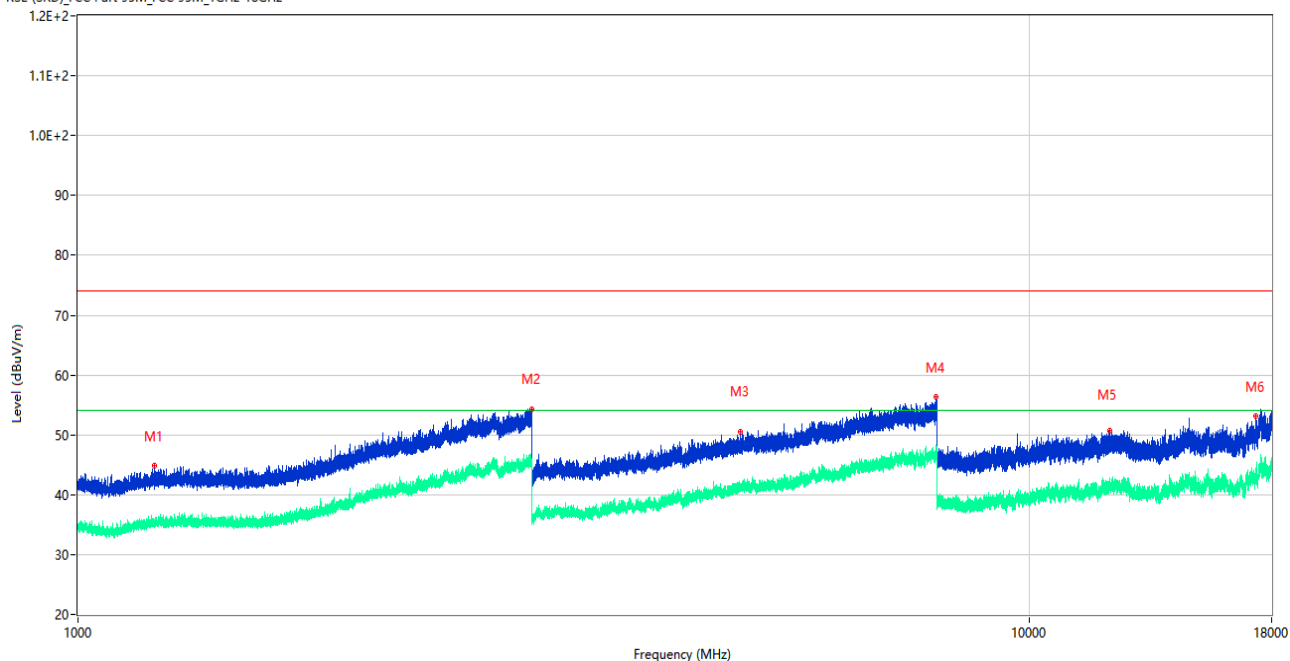
RSE (SRD)\_FCC Part 95M\_FCC 95M\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1519.900        | 45.09            | 74.0           | 28.91       | Peak     | 294.00         | 100         | Horizontal | Pass    |
| 1** | 1519.900        | 35.54            | 54.0           | 18.46       | AV       | 294.00         | 100         | Horizontal | Pass    |
| 2   | 2995.000        | 54.78            | 74.0           | 19.22       | Peak     | 236.00         | 200         | Horizontal | Pass    |
| 2** | 2995.000        | 44.83            | 54.0           | 9.17        | AV       | 236.00         | 200         | Horizontal | Pass    |
| 3   | 4994.000        | 50.10            | 74.0           | 23.90       | Peak     | 302.00         | 100         | Horizontal | Pass    |
| 3** | 4994.000        | 40.69            | 54.0           | 13.31       | AV       | 302.00         | 100         | Horizontal | Pass    |
| 4   | 7988.500        | 55.90            | 74.0           | 18.10       | Peak     | 90.00          | 100         | Horizontal | Pass    |
| 4** | 7988.500        | 47.02            | 54.0           | 6.98        | AV       | 90.00          | 100         | Horizontal | Pass    |
| 5   | 11787.650       | 51.27            | 74.0           | 22.73       | Peak     | 179.00         | 100         | Horizontal | Pass    |
| 5** | 11787.650       | 41.16            | 54.0           | 12.84       | AV       | 179.00         | 100         | Horizontal | Pass    |
| 6   | 17482.875       | 52.61            | 74.0           | 21.39       | Peak     | 279.00         | 100         | Horizontal | Pass    |
| 6** | 17482.875       | 43.44            | 54.0           | 10.56       | AV       | 279.00         | 100         | Horizontal | Pass    |

## 1 GHz to 18 GHz, ANT V

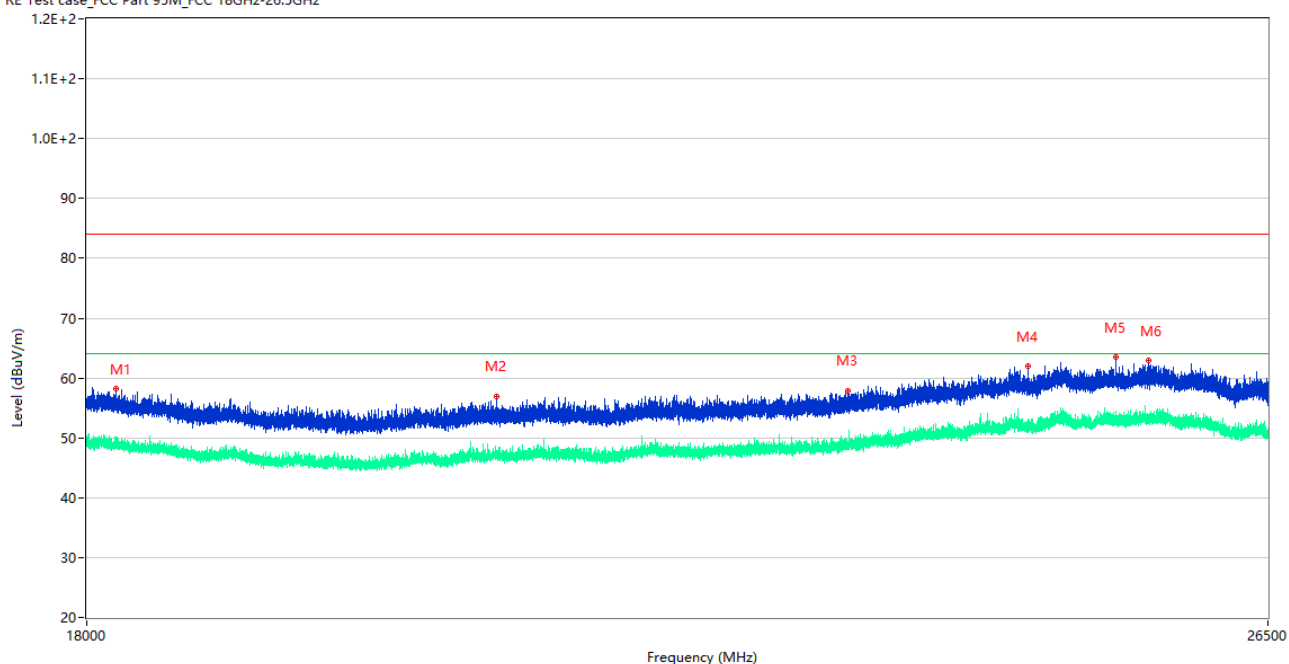
RSE (SRD)\_FCC Part 95M\_FCC 95M\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1204.000        | 44.81            | 74.0           | 29.19       | Peak     | 192.00         | 100         | Vertical | Pass    |
| 1** | 1204.000        | 35.53            | 54.0           | 18.47       | AV       | 192.00         | 100         | Vertical | Pass    |
| 2   | 2999.200        | 54.33            | 74.0           | 19.67       | Peak     | 308.00         | 100         | Vertical | Pass    |
| 2** | 2999.200        | 44.56            | 54.0           | 9.44        | AV       | 308.00         | 100         | Vertical | Pass    |
| 3   | 4976.000        | 50.49            | 74.0           | 23.51       | Peak     | 0.00           | 100         | Vertical | Pass    |
| 3** | 4976.000        | 40.96            | 54.0           | 13.04       | AV       | 0.00           | 100         | Vertical | Pass    |
| 4   | 7990.000        | 56.33            | 74.0           | 17.67       | Peak     | 349.00         | 300         | Vertical | Pass    |
| 4** | 7990.000        | 46.84            | 54.0           | 7.16        | AV       | 349.00         | 300         | Vertical | Pass    |
| 5   | 12150.313       | 50.75            | 74.0           | 23.25       | Peak     | 242.00         | 100         | Vertical | Pass    |
| 5** | 12150.313       | 41.35            | 54.0           | 12.65       | AV       | 242.00         | 100         | Vertical | Pass    |
| 6   | 17335.349       | 53.13            | 74.0           | 20.87       | Peak     | 1.00           | 400         | Vertical | Pass    |
| 6** | 17335.349       | 43.39            | 54.0           | 10.61       | AV       | 1.00           | 400         | Vertical | Pass    |

## 18 GHz to 26.5 GHz, ANT H

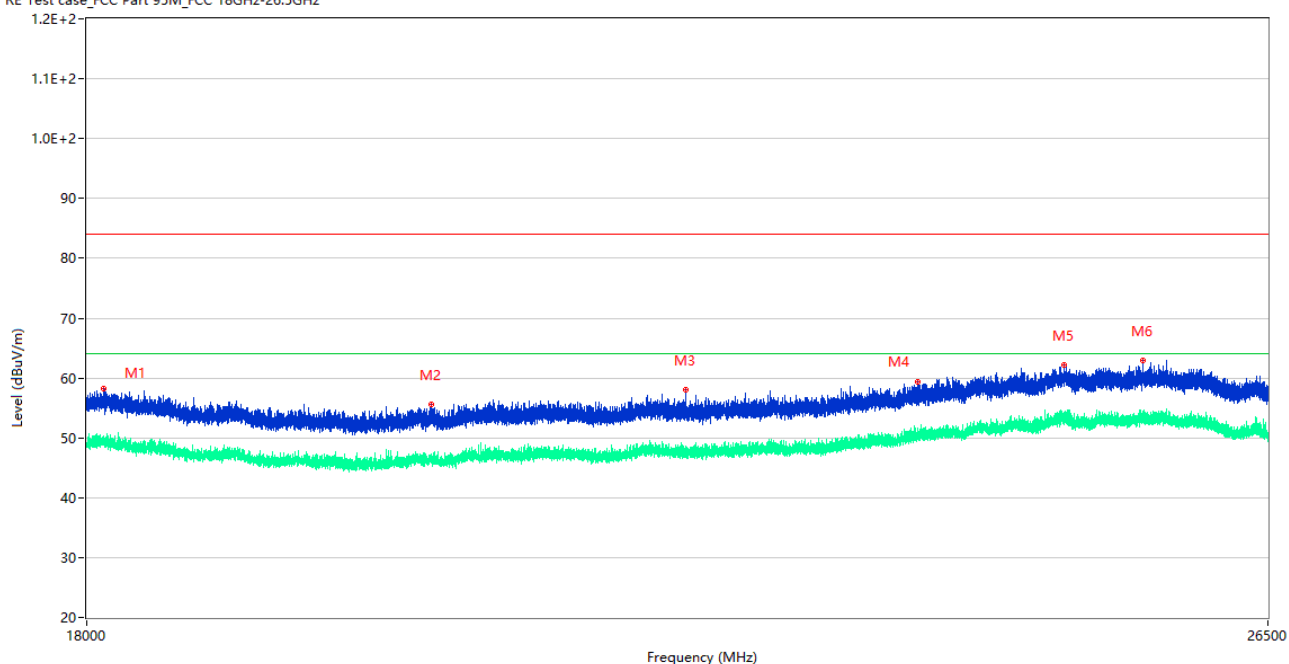
RE Test case\_FCC Part 95M\_FCC 18GHz-26.5GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 18171.275       | 58.22            | 84.0           | 25.78       | Peak     | 341.00         | 150         | Horizontal | Pass    |
| 1** | 18171.275       | 48.63            | 64.0           | 15.37       | AV       | 341.00         | 150         | Horizontal | Pass    |
| 2   | 20583.150       | 56.83            | 84.0           | 27.17       | Peak     | 115.00         | 150         | Horizontal | Pass    |
| 2** | 20583.150       | 47.05            | 64.0           | 16.95       | AV       | 115.00         | 150         | Horizontal | Pass    |
| 3   | 23095.751       | 57.86            | 84.0           | 26.14       | Peak     | 157.00         | 150         | Horizontal | Pass    |
| 3** | 23095.751       | 49.35            | 64.0           | 14.65       | AV       | 157.00         | 150         | Horizontal | Pass    |
| 4   | 24499.100       | 62.02            | 84.0           | 21.98       | Peak     | 23.00          | 150         | Horizontal | Pass    |
| 4** | 24499.100       | 52.57            | 64.0           | 11.43       | AV       | 23.00          | 150         | Horizontal | Pass    |
| 5   | 25214.376       | 63.44            | 84.0           | 20.56       | Peak     | 334.00         | 150         | Horizontal | Pass    |
| 5** | 25214.376       | 53.02            | 64.0           | 10.98       | AV       | 334.00         | 150         | Horizontal | Pass    |
| 6   | 25482.551       | 62.91            | 84.0           | 21.09       | Peak     | 140.00         | 150         | Horizontal | Pass    |
| 6** | 25482.551       | 52.74            | 64.0           | 11.26       | AV       | 140.00         | 150         | Horizontal | Pass    |

## 18 GHz to 26.5 GHz, ANT V

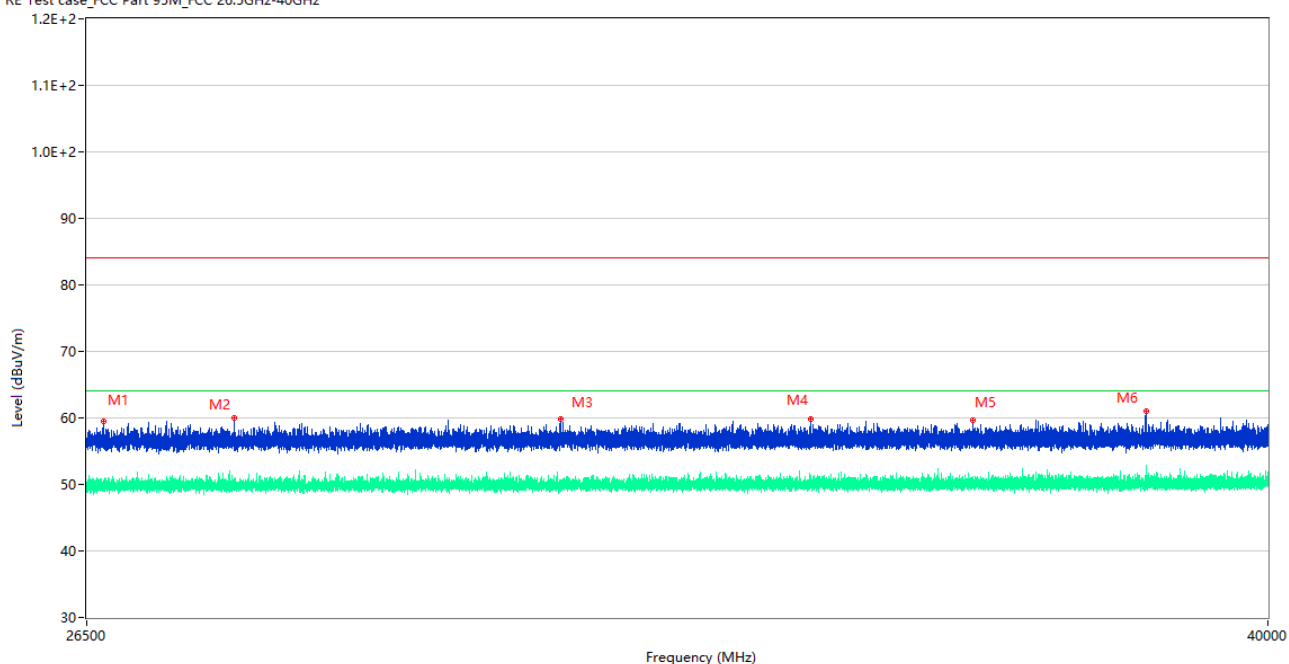
RE Test case\_FCC Part 95M\_FCC 18GHz-26.5GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 18097.324       | 58.30            | 84.0           | 25.70       | Peak     | 248.00         | 150         | Vertical | Pass    |
| 1** | 18097.324       | 49.84            | 64.0           | 14.16       | AV       | 248.00         | 150         | Vertical | Pass    |
| 2   | 20150.925       | 55.52            | 84.0           | 28.48       | Peak     | 3.00           | 150         | Vertical | Pass    |
| 2** | 20150.925       | 46.42            | 64.0           | 17.58       | AV       | 3.00           | 150         | Vertical | Pass    |
| 3   | 21896.825       | 58.00            | 84.0           | 26.00       | Peak     | 160.00         | 150         | Vertical | Pass    |
| 3** | 21896.825       | 47.32            | 64.0           | 16.68       | AV       | 160.00         | 150         | Vertical | Pass    |
| 4   | 23628.700       | 59.43            | 84.0           | 24.57       | Peak     | 202.00         | 150         | Vertical | Pass    |
| 4** | 23628.700       | 50.37            | 64.0           | 13.63       | AV       | 202.00         | 150         | Vertical | Pass    |
| 5   | 24790.225       | 62.11            | 84.0           | 21.89       | Peak     | 201.00         | 150         | Vertical | Pass    |
| 5** | 24790.225       | 54.02            | 64.0           | 9.98        | AV       | 201.00         | 150         | Vertical | Pass    |
| 6   | 25433.250       | 62.86            | 84.0           | 21.14       | Peak     | 278.00         | 150         | Vertical | Pass    |
| 6** | 25433.250       | 53.18            | 64.0           | 10.82       | AV       | 278.00         | 150         | Vertical | Pass    |

## 26.5 GHz to 40 GHz, ANT H

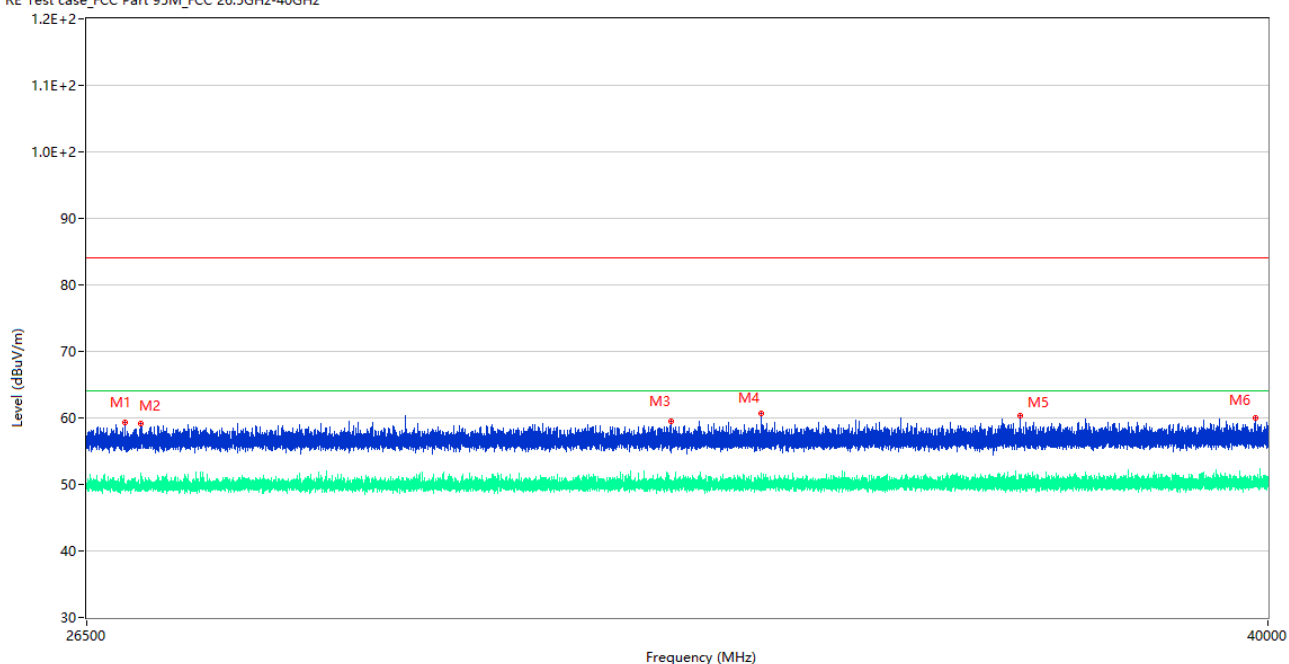
RE Test case\_FCC Part 95M\_FCC 26.5GHz-40GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 26654.575       | 59.41            | 84.0           | 24.59       | Peak     | 126.00         | 150         | Horizontal | Pass    |
| 1** | 26654.575       | 50.70            | 64.0           | 13.30       | AV       | 126.00         | 150         | Horizontal | Pass    |
| 2   | 27902.650       | 59.93            | 84.0           | 24.07       | Peak     | 350.00         | 150         | Horizontal | Pass    |
| 2** | 27902.650       | 49.56            | 64.0           | 14.44       | AV       | 350.00         | 150         | Horizontal | Pass    |
| 3   | 31258.075       | 59.76            | 84.0           | 24.24       | Peak     | 9.00           | 150         | Horizontal | Pass    |
| 3** | 31258.075       | 48.99            | 64.0           | 15.01       | AV       | 9.00           | 150         | Horizontal | Pass    |
| 4   | 34103.200       | 59.81            | 84.0           | 24.19       | Peak     | 344.00         | 150         | Horizontal | Pass    |
| 4** | 34103.200       | 49.44            | 64.0           | 14.56       | AV       | 344.00         | 150         | Horizontal | Pass    |
| 5   | 36097.823       | 59.70            | 84.0           | 24.30       | Peak     | 87.00          | 150         | Horizontal | Pass    |
| 5** | 36097.823       | 49.69            | 64.0           | 14.31       | AV       | 87.00          | 150         | Horizontal | Pass    |
| 6   | 38340.174       | 60.94            | 84.0           | 23.06       | Peak     | 211.00         | 150         | Horizontal | Pass    |
| 6** | 38340.174       | 49.38            | 64.0           | 14.62       | AV       | 211.00         | 150         | Horizontal | Pass    |

## 26.5 GHz to 40 GHz, ANT V

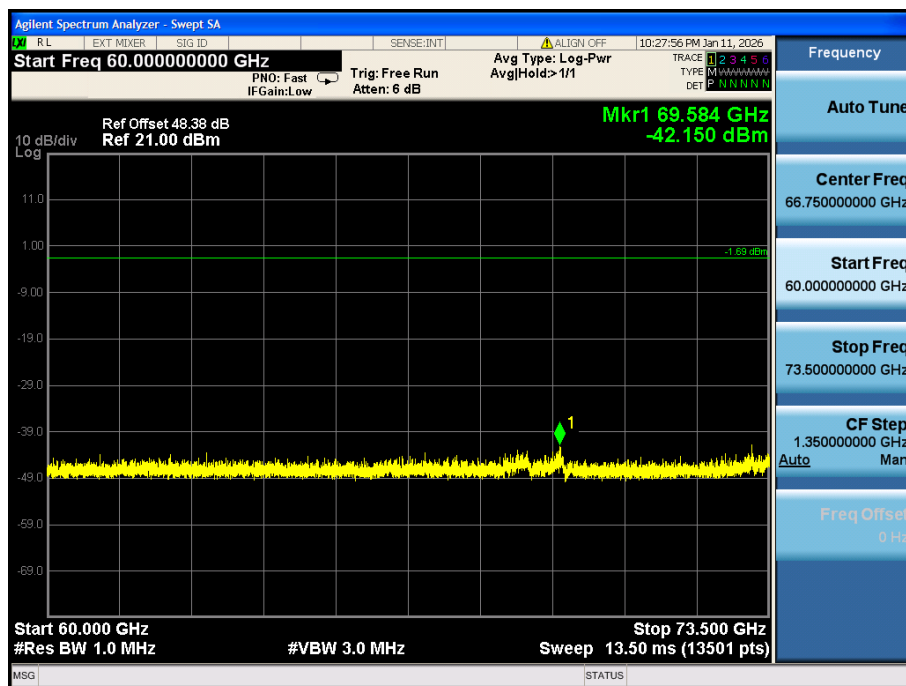
RE Test case\_FCC Part 95M\_FCC 26.5GHz-40GHz



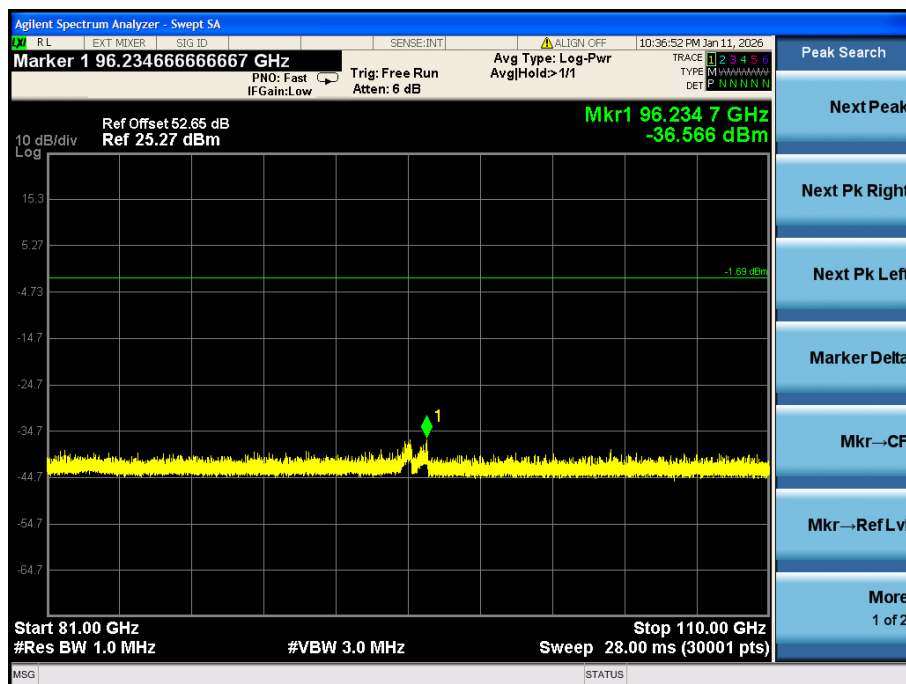
| No. | Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 26856.401       | 59.33            | 84.0           | 24.67       | Peak     | 80.00          | 150         | Vertical | Pass    |
| 1** | 26856.401       | 50.01            | 64.0           | 13.99       | AV       | 80.00          | 150         | Vertical | Pass    |
| 2   | 27006.925       | 59.22            | 84.0           | 24.78       | Peak     | 8.00           | 150         | Vertical | Pass    |
| 2** | 27006.925       | 51.65            | 64.0           | 12.35       | AV       | 8.00           | 150         | Vertical | Pass    |
| 3   | 32483.199       | 59.53            | 84.0           | 24.47       | Peak     | 340.00         | 150         | Vertical | Pass    |
| 3** | 32483.199       | 49.68            | 64.0           | 14.32       | AV       | 340.00         | 150         | Vertical | Pass    |
| 4   | 33520.675       | 60.70            | 84.0           | 23.30       | Peak     | 251.00         | 150         | Vertical | Pass    |
| 4** | 33520.675       | 50.75            | 64.0           | 13.25       | AV       | 251.00         | 150         | Vertical | Pass    |
| 5   | 36697.899       | 60.41            | 84.0           | 23.59       | Peak     | 50.00          | 150         | Vertical | Pass    |
| 5** | 36697.899       | 48.82            | 64.0           | 15.18       | AV       | 50.00          | 150         | Vertical | Pass    |
| 6   | 39827.874       | 60.03            | 84.0           | 23.97       | Peak     | 165.00         | 150         | Vertical | Pass    |
| 6** | 39827.874       | 50.24            | 64.0           | 13.76       | AV       | 165.00         | 150         | Vertical | Pass    |

## Test Plots

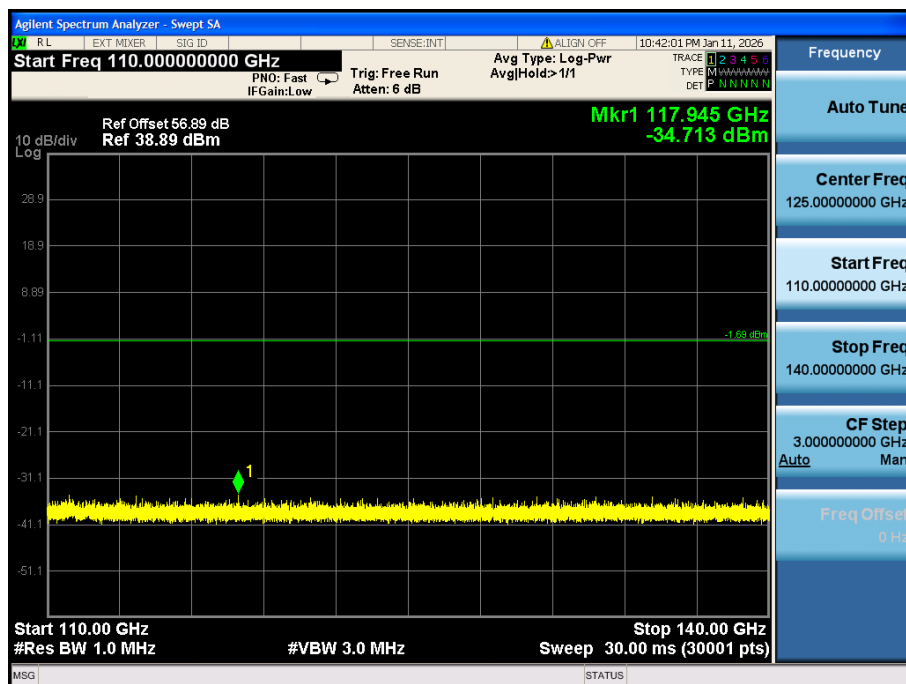
### 60-73.5 GHz, Measured at 1 meter



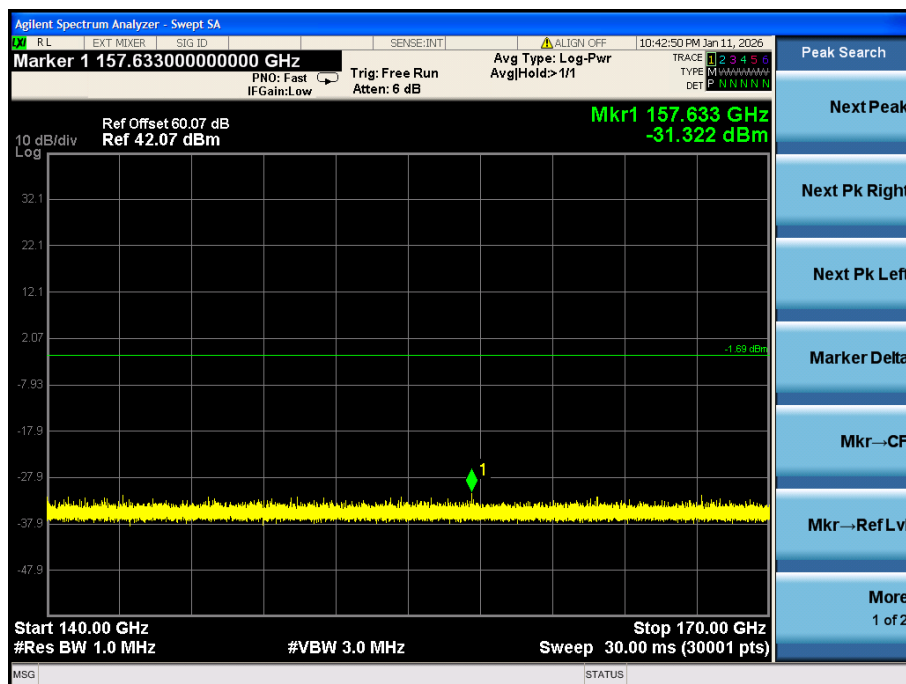
### 81-110 GHz, Measured at 1 meter



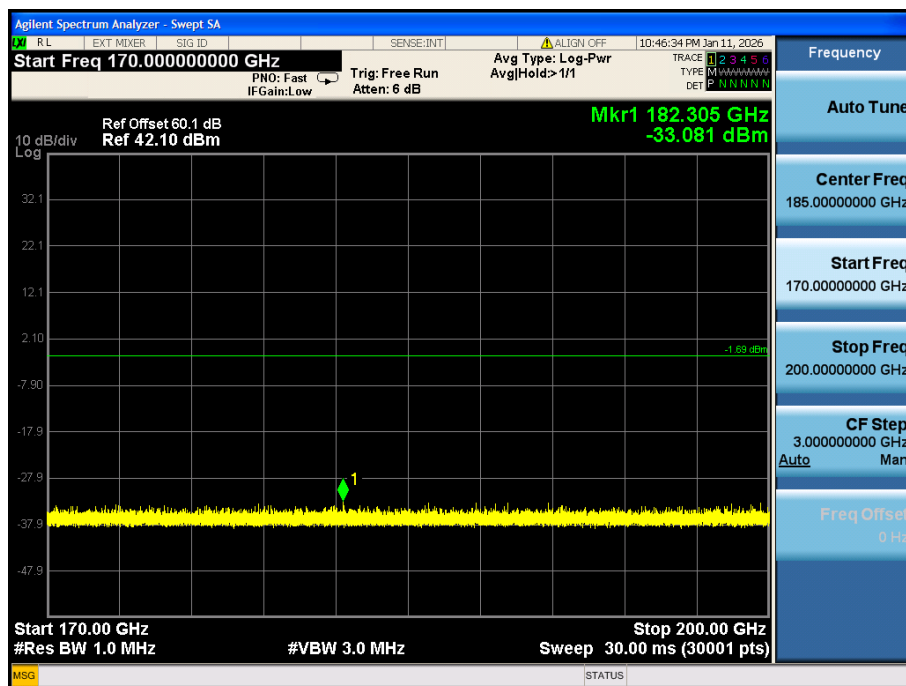
## 110-140 GHz, Measured at 0.5 meter



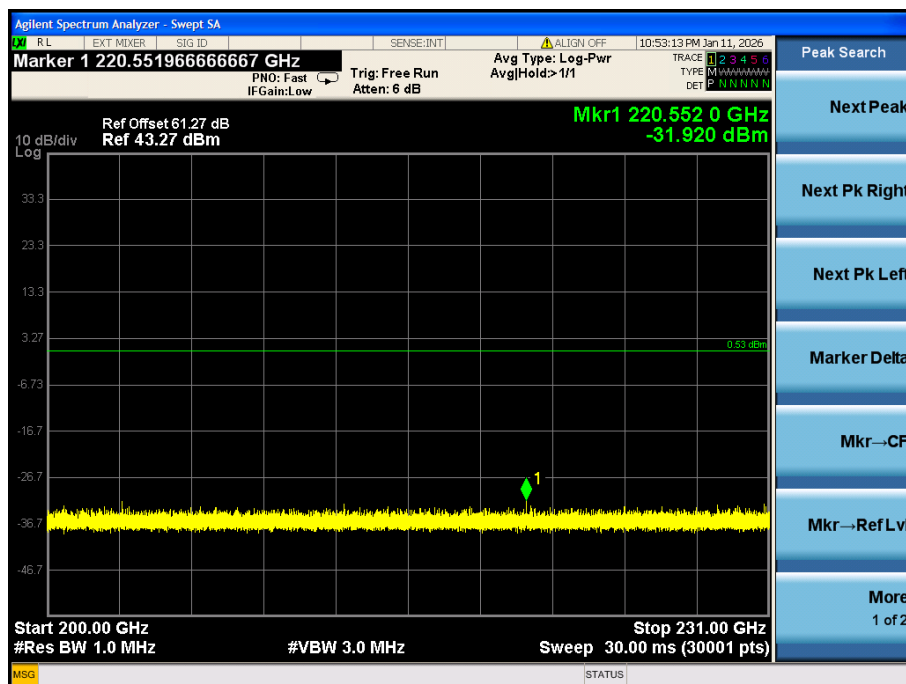
## 140-170 GHz, Measured at 0.5 meter



## 170-200 GHz, Measured at 0.25 meter



## 200-231 GHz, Measured at 0.25 meter



## A.6 Frequency stability

### Test Data

| Environment Temperature (°C) | Voltage (V) | FL (GHz) | FH (GHz) | Limit (GHz) | Test Result |
|------------------------------|-------------|----------|----------|-------------|-------------|
| 85                           | 12          | 78.9692  | 79.3176  | 76-81       | Pass        |
| 80                           |             | 78.9737  | 79.3177  |             | Pass        |
| 70                           |             | 78.9733  | 79.3175  |             | Pass        |
| 60                           |             | 78.9740  | 79.3180  |             | Pass        |
| 50                           |             | 78.9736  | 79.3178  |             | Pass        |
| 40                           |             | 78.9745  | 79.3178  |             | Pass        |
| 30                           |             | 78.9743  | 79.3178  |             | Pass        |
| 20                           |             | 78.9738  | 79.3179  |             | Pass        |
| 10                           |             | 78.9745  | 79.3179  |             | Pass        |
| 0                            |             | 78.9740  | 79.3179  |             | Pass        |
| -10                          |             | 78.9691  | 79.3178  |             | Pass        |
| -20                          |             | 78.9694  | 79.3176  |             | Pass        |
| -30                          |             | 78.9695  | 79.3179  |             | Pass        |
| -40                          |             | 78.9697  | 79.3179  |             | Pass        |

| Environment Temperature (°C) | Voltage (V) | FL (GHz) | FH (GHz) | Limit (GHz) | Test Result |
|------------------------------|-------------|----------|----------|-------------|-------------|
| 20                           | 13.8        | 78.9697  | 79.3142  | 76-81       | Pass        |
|                              | 12          | 78.9742  | 79.3104  |             | Pass        |
|                              | 10.2        | 78.9643  | 79.3401  |             | Pass        |

## **ANNEX B TEST SETUP PHOTOS**

Please refer the document “BL-SZ25B1336-AR.PDF”.

## **ANNEX C EUT EXTERNAL PHOTOS**

Please refer the document “BL-SZ25B1336-AW.PDF”.

## **ANNEX D EUT INTERNAL PHOTOS**

Please refer the document “BL-SZ25B1336-AI.PDF”.

## Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the "inspection and testing dedicated stamp" or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--