

# TEST REPORT

Applicant Name: Axiom Distribution Solutions  
Address: 1320 Arroyo Grande California United States 93420  
Report Number: SZ1240117-04046E-RF-00  
FCC ID: 2ATTQAXP5X5V

## Test Standard (s)

FCC PART 90

## Sample Description

Product Type: Digital Portable Radio  
Model No.: AXP595 VHF  
Multiple Model(s) No.: AXP565 VHF, AXP505 VHF  
Trade Mark: Axiom  
Date Received: 2024/01/18  
Issue Date: 2024/03/25

|              |                   |
|--------------|-------------------|
| Test Result: | Pass <sup>▲</sup> |
|--------------|-------------------|

▲ In the configuration tested, the EUT complied with the standards above.

## Prepared and Checked By:

*Mike Xiao*

Mike Xiao  
RF Engineer

## Approved By:

*Nancy Wang*

Nancy Wang  
RF Supervisor

Note: The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

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## Bay Area Compliance Laboratories Corp. (Shenzhen)

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DOCUMENT REVISION HISTORY

| Revision Number | Report Number          | Description of Revision | Date of Revision |
|-----------------|------------------------|-------------------------|------------------|
| 0               | SZ1240117-04046E-RF-00 | Original Report         | 2024/03/25       |

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

|                                                                                                                                                                                                                       |                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product                                                                                                                                                                                                               | Digital Portable Radio                                                                                                                                                                                                      |
| Tested Model                                                                                                                                                                                                          | AXP595 VHF                                                                                                                                                                                                                  |
| Multiple Model(s)                                                                                                                                                                                                     | AXP565 VHF, AXP505 VHF                                                                                                                                                                                                      |
| Frequency Range                                                                                                                                                                                                       | 136 -174MHz                                                                                                                                                                                                                 |
| Rated Transmit Power                                                                                                                                                                                                  | 5.0Watts(High), 1.0Watt(Low)                                                                                                                                                                                                |
| Channel separation                                                                                                                                                                                                    | 12.5kHz                                                                                                                                                                                                                     |
| Modulation Technique                                                                                                                                                                                                  | 4FSK/FM                                                                                                                                                                                                                     |
| Antenna Specification <sup>#</sup>                                                                                                                                                                                    | 0dBi (provided by the applicant)                                                                                                                                                                                            |
| Voltage Range                                                                                                                                                                                                         | DC 7.4V from battery or DC 12.0V from adapter                                                                                                                                                                               |
| Sample serial number                                                                                                                                                                                                  | AXP595 VHF:<br>2GRV-1 for Radiated Emissions Test<br>2GRV-2 for RF Conducted Test<br>AXP565 VHF:<br>2GRV-3 for Radiated Emissions Test<br>AXP505 VHF:<br>2GRV-4 for Radiated Emissions Test<br>(Assigned by BACL, Shenzhen) |
| Sample/EUT Status                                                                                                                                                                                                     | Good condition                                                                                                                                                                                                              |
| Adapter Information                                                                                                                                                                                                   | Model: ES085H-X120100XYF<br>Input: AC 100-240V~50/60Hz, 0.5A<br>Output: DC 12.0V, 1.0A                                                                                                                                      |
| Note: The Multiple models are electrically identical with the test model except for the screen and keyboard. Please refer to the declaration letter <sup>#</sup> for more detail, which was provided by manufacturer. |                                                                                                                                                                                                                             |

### Objective

This test report is in accordance with Part 2, and Part 90 of the Federal Communication Commissions rules.

### Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of federal Regulations Title 47 Part 2, Sub-part J as well as the following individual parts:

Part 90 – Private Land Mobile Radio Service

Applicable Standards: ANSI C63.26-2015.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

**Measurement Uncertainty**

| Parameter                    |                             | Uncertainty |
|------------------------------|-----------------------------|-------------|
| Occupied Channel Bandwidth   |                             | 5%          |
| Frequency Error              |                             | 213.55Hz    |
| RF output power, conducted   |                             | 0.72dB      |
| Unwanted Emission, conducted |                             | 1.75dB      |
| Audio Frequency Response     |                             | 0.1dB       |
| Low Pass Filter Response     |                             | 1.2dB       |
| Modulation Limiting          |                             | 1%          |
| Radiated Spurious Emission   | 30MHz~200MHz (Horizontal)   | 4.48dB      |
|                              | 30MHz~200MHz (Vertical)     | 4.55dB      |
|                              | 200MHz~1000MHz (Horizontal) | 4.85dB      |
|                              | 200MHz~1000MHz (Vertical)   | 5.05dB      |
|                              | 1GHz - 6GHz                 | 5.35dB      |
| Temperature                  |                             | 1°C         |
| Humidity                     |                             | 6%          |
| Supply voltages              |                             | 0.4%        |

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

**Test Facility**

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in a test mode which has been done in the factory.

#### Test channel information

| Test Mode     | Test Frequency (MHz) |
|---------------|----------------------|
| FM, 12.5kHz   | 136.0125             |
|               | 155.0125             |
|               | 173.9875             |
| 4FSK, 12.5kHz | 136.0125             |
|               | 155.0125             |
|               | 173.9875             |

### Equipment Modifications

No modification was made to the EUT.

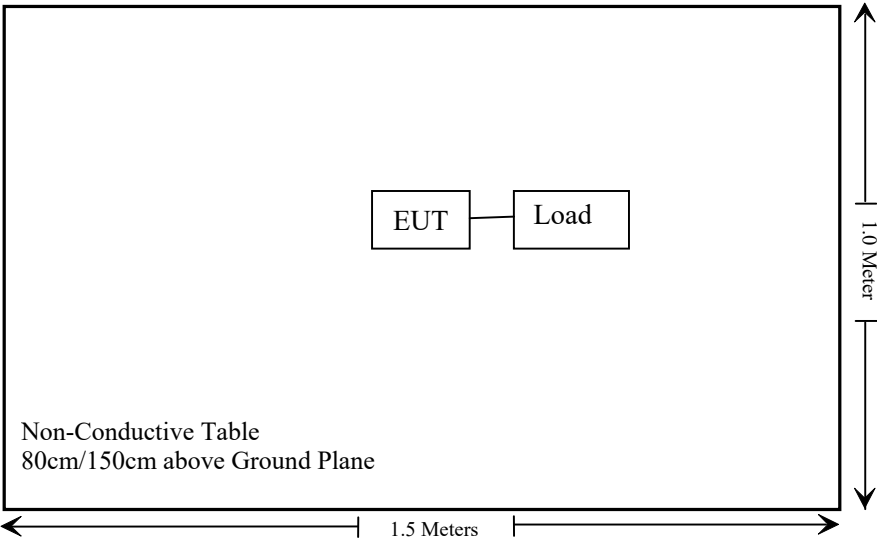
### Support Equipment List and Details

| Manufacturer | Description | Model   | Serial Number |
|--------------|-------------|---------|---------------|
| Unknown      | Load        | Unknown | Unknown       |

### External I/O Cable

| Cable Description | Length (m) | From Port | To   |
|-------------------|------------|-----------|------|
| RF Cable          | 0.5        | EUT       | Load |

Block Diagram of Test Setup





**SUMMARY OF TEST RESULTS**

| FCC Rules                 | Description of Test                   | Results   |
|---------------------------|---------------------------------------|-----------|
| FCC §1.1307 & §2.1093     | RF Exposure                           | Compliant |
| §2.1046; §90.205          | RF Output Power                       | Compliant |
| §2.1047; §90.207          | Modulation Characteristic             | Compliant |
| §2.1049; §90.209; §90.210 | Occupied Bandwidth & Emission Mask    | Compliant |
| §2.1051; §90.210          | Spurious Emission at Antenna Terminal | Compliant |
| §2.1053; §90.210          | Spurious Radiated Emissions           | Compliant |
| §2.1055; §90.213          | Frequency Stability                   | Compliant |
| §90.214                   | Transient Frequency Behavior          | Compliant |

**TEST EQUIPMENT LIST**

| Manufacturer                  | Description                    | Model           | Serial Number | Calibration Date | Calibration Due Date |
|-------------------------------|--------------------------------|-----------------|---------------|------------------|----------------------|
| <b>Radiated Emission Test</b> |                                |                 |               |                  |                      |
| R&S                           | EMI Test Receiver              | ESR3            | 102455        | 2024/01/16       | 2025/01/15           |
| Sonoma instrument             | Pre-amplifier                  | 310 N           | 186238        | 2023/06/08       | 2024/06/07           |
| Sunol Sciences                | Broadband Antenna              | JB1             | A040904-1     | 2023/07/20       | 2024/07/19           |
| Unknown                       | Cable                          | Chamber Cable 1 | F-03-EM236    | 2023/08/03       | 2024/08/02           |
| Unknown                       | V Band Pass Filter             | NHP-25+         | 15542         | 2023/07/04       | 2024/07/03           |
| COM-POWER                     | Dipole Antenna                 | AD-100          | 721027        | NCR              | NCR                  |
| Rohde & Schwarz               | Spectrum Analyzer              | FSV40           | 101605        | 2023/04/18       | 2024/04/17           |
| COM-POWER                     | Pre-amplifier                  | PA-122          | 181919        | 2023/06/29       | 2024/06/28           |
| Schwarzbeck                   | Horn Antenna                   | BBHA9120D(1201) | 1143          | 2023/07/26       | 2024/07/25           |
| A.H.System                    | Horn Antenna                   | SAS-200/571     | 135           | 2021/07/14       | 2024/07/13           |
| Unknown                       | RF Cable                       | KMSE            | 0735          | 2023/10/08       | 2024/10/07           |
| Unknown                       | RF Cable                       | UFA147          | 219661        | 2023/10/08       | 2024/10/07           |
| Agilent                       | Signal Generator               | N5183A          | MY50140588    | 2023/12/18       | 2024/12/17           |
| <b>RF Conducted Test</b>      |                                |                 |               |                  |                      |
| R&S                           | SPECTRUM ANALYZER              | FSU26           | 200120        | 2024/01/08       | 2025/01/07           |
| BACL                          | Temperature & Humidity Chamber | BTH-150-40      | 30145         | 2024/01/16       | 2025/01/15           |
| HP                            | RF Communication test set      | 8920B           | US36141849    | 2024/01/16       | 2025/01/15           |
| instek                        | DC Power Supply                | GPS-3030DD      | EM832096      | NCR              | NCR                  |
| Fluke                         | Digital Multimeter             | 287             | 19000011      | 2023/06/08       | 2024/06/07           |
| JFW                           | 30dB Attenuator                | 50FH-030-100 RF | F-03-EM032    | 2023/07/04       | 2024/07/03           |
| WEINSCHL                      | Power Splitter                 | 1515            | RH386         | 2023/07/04       | 2024/07/03           |
| Micro-Tronics                 | RF Cable                       | 8082135         | W1113         | 2023/07/04       | 2024/07/03           |
| Micro-Tronics                 | RF Cable                       | 8082176         | W6102         | 2023/07/04       | 2024/07/03           |
| R&S                           | Audio Analyzer                 | UPV             | 101782        | 2024/01/16       | 2025/01/15           |
| R&S                           | Signal Analyzer                | FSIQ26          | 837405/023    | 2024/01/08       | 2025/01/07           |

\* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## **FCC §1.1307&§2.1093 - RF EXPOSURE**

---

### **Applicable Standard**

FCC§1.1310 and §2.1093.

### **Test Result**

Compliance, please refer to the SAR report: SZ1240117-04046E-20.

## FCC §2.1046 & §90.205 - RF OUTPUT POWER

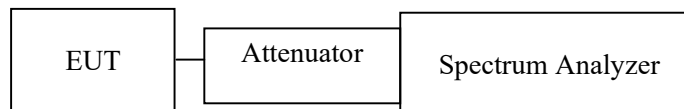
### Applicable Standard

FCC §2.1046 and §90.205

### Test Procedure

According to ANSI C63.26-2015 section 5.2.3.3

Conducted RF Output Power:



Note: The path loss from EUT to Spectrum Analyzer has included in the result.

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

Spectrum Analyzer Setting:

|         |           |
|---------|-----------|
| R B/W   | Video B/W |
| 100 kHz | 300 kHz   |

### Test Data

#### Environmental Conditions

|                    |         |
|--------------------|---------|
| Temperature:       | 26.3 °C |
| Relative Humidity: | 49 %    |
| ATM Pressure:      | 101 kPa |

*The testing was performed by Bruce Lin from 2024-03-21 to 2024-03-22.*

*Test Mode: Transmitting*

**Test Result: Pass.** Please refer to following table and plots.

The 30dB Attenuator and cable loss 0.5dB was added in the Spectrum Analyze as the offset.

| Modulation Mode | Channel Separation | $f_c$    | Reading (dBm)    |                 | Limit (dBm)      |                 |
|-----------------|--------------------|----------|------------------|-----------------|------------------|-----------------|
|                 |                    | MHz      | High Power Level | Low Power Level | High Power Level | Low Power Level |
| FM              | 12.5kHz            | 136.0125 | 37.13            | 30.52           | $\leq 37.78$     | $\leq 30.79$    |
|                 |                    | 155.0125 | 37.06            | 30.55           | $\leq 37.78$     | $\leq 30.79$    |
|                 |                    | 173.9875 | 36.89            | 30.04           | $\leq 37.78$     | $\leq 30.79$    |
| 4FSK            | 12.5kHz            | 136.0125 | 37.21            | 30.77           | $\leq 37.78$     | $\leq 30.79$    |
|                 |                    | 155.0125 | 37.03            | 30.61           | $\leq 37.78$     | $\leq 30.79$    |
|                 |                    | 173.9875 | 36.83            | 30.01           | $\leq 37.78$     | $\leq 30.79$    |

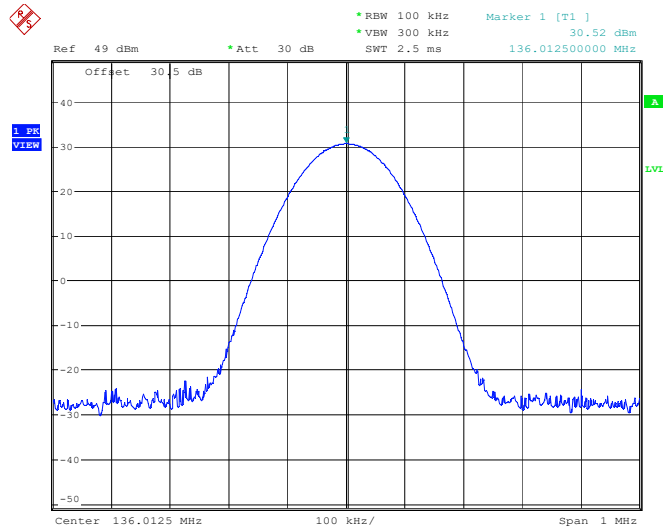
Note: The output power shall not exceed by more than 20 percent the manufacturer's rated output power.

Rated high power: 5Watts

Rated low power: 1Watt

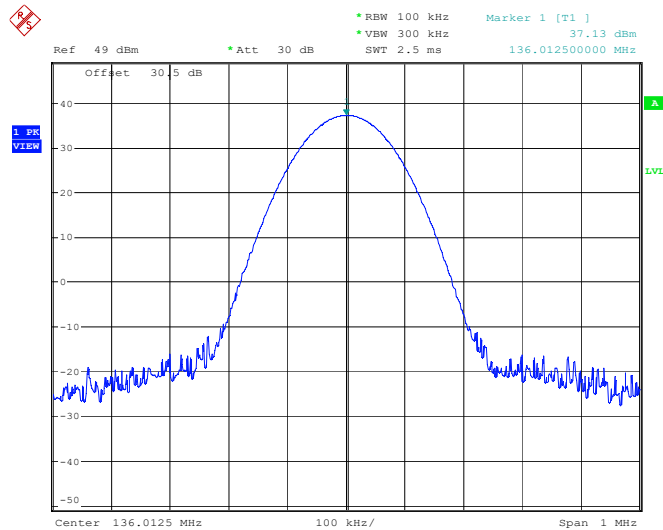
FM:

### Frequency 136.0125MHz, Low Power



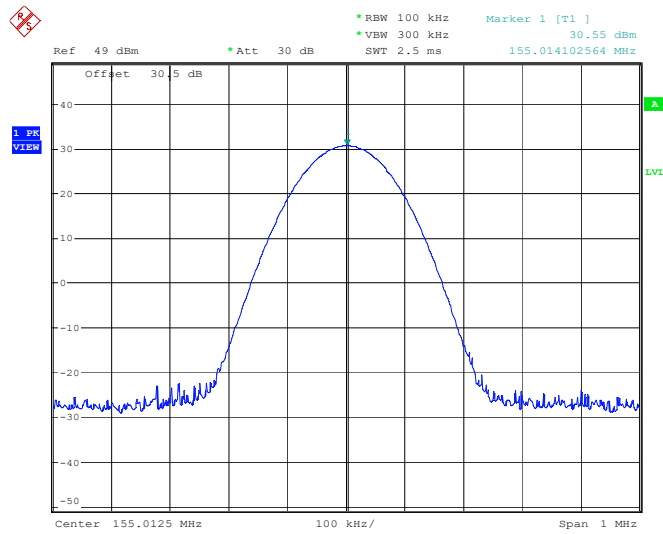
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.MAR.2024 18:50:59

### Frequency 136.0125 MHz, High Power



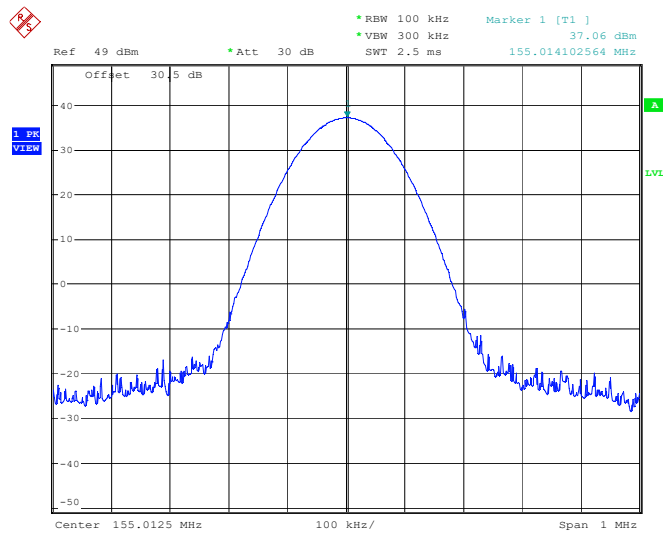
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.MAR.2024 18:50:33

### Frequency 155.0125MHz, Low Power



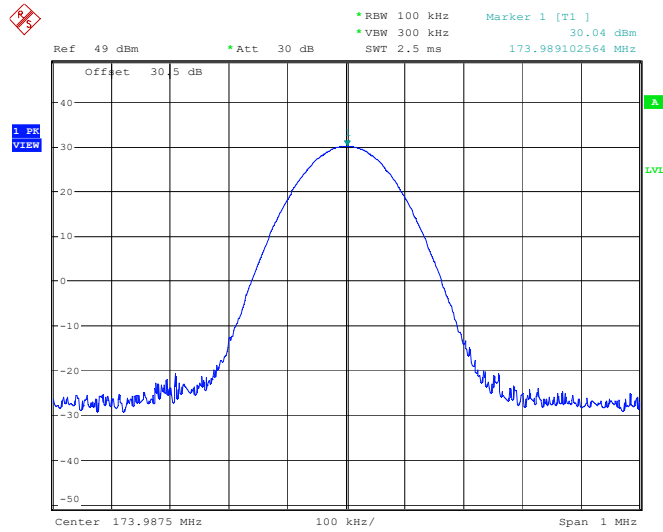
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.MAR.2024 18:51:32

### Frequency 155.0125MHz, High Power



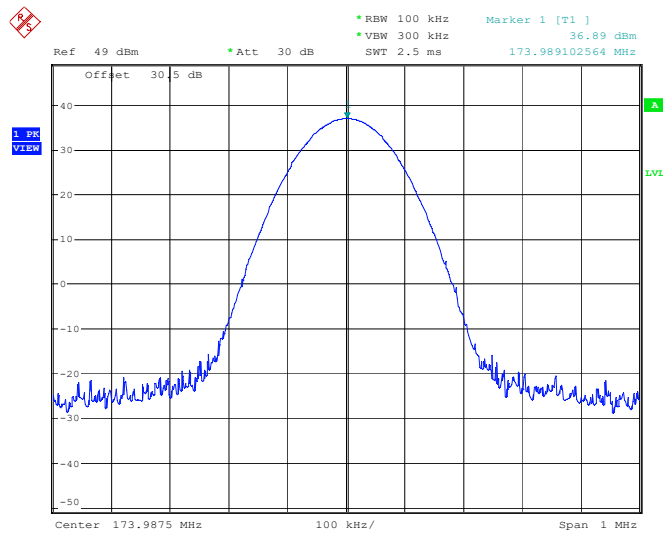
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.MAR.2024 18:51:50

### Frequency 173.9875 MHz, Low Power



ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.MAR.2024 18:52:51

### Frequency 173.9875 MHz, High Power

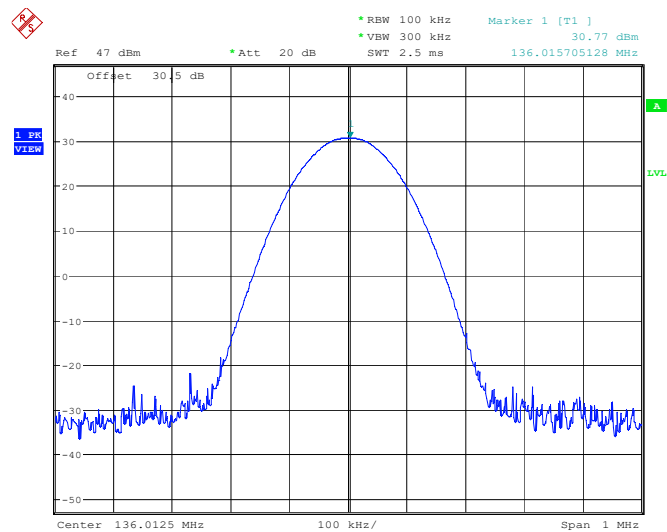


ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.MAR.2024 18:52:32



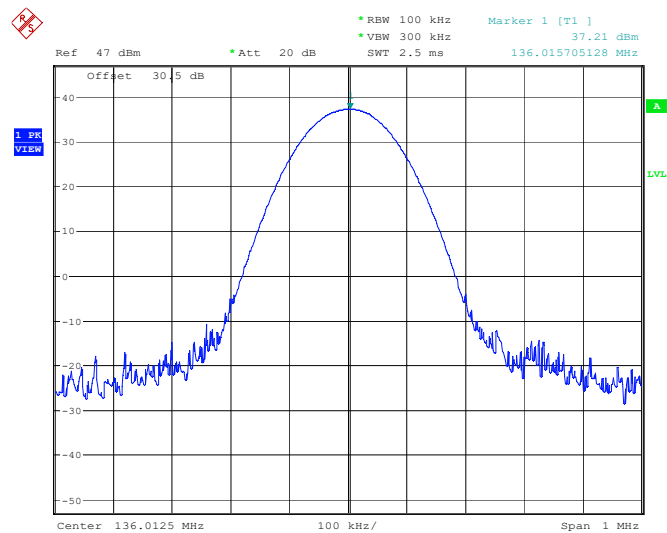
4FSK:

Frequency 136.0125MHz, Low Power



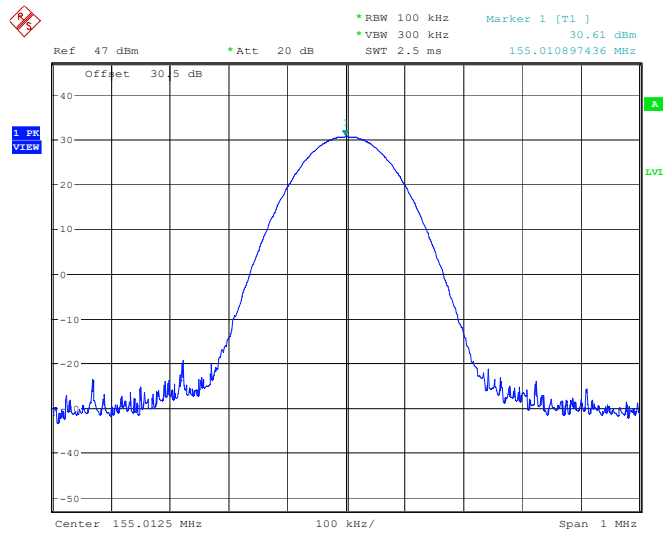
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.MAR.2024 17:18:19

Frequency 136.0125 MHz, High Power



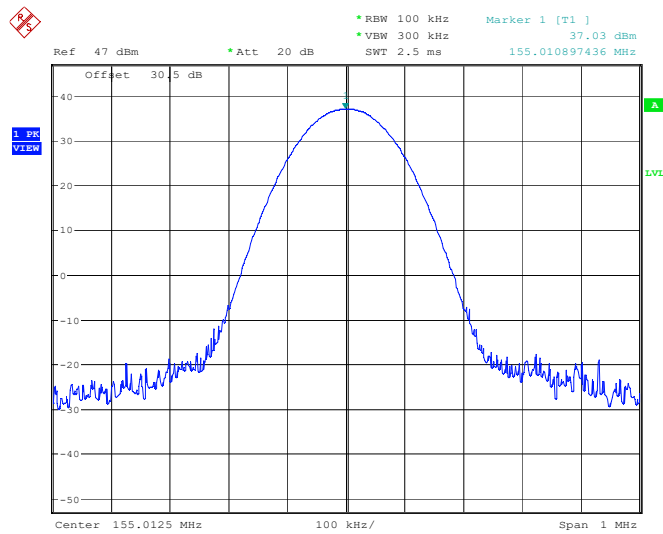
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.MAR.2024 17:15:55

### Frequency 155.0125MHz, Low Power



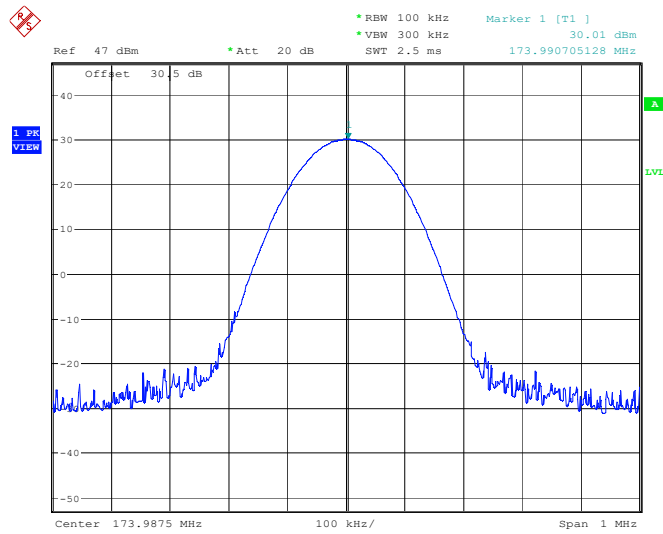
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.MAR.2024 17:19:06

### Frequency 155.0125MHz, High Power



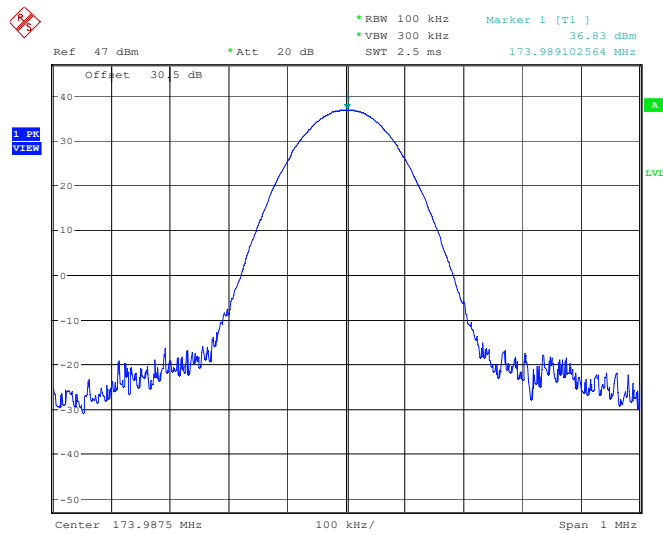
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.MAR.2024 17:19:26

### Frequency 173.9875 MHz, Low Power



ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.MAR.2024 17:20:13

### Frequency 173.9875 MHz, High Power



ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.MAR.2024 17:20:38

## FCC §2.1047 & §90.207 - MODULATION CHARACTERISTIC

### Applicable Standard

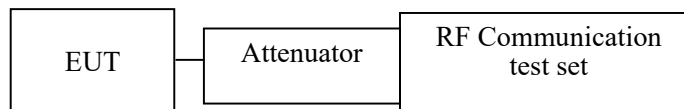
FCC§2.1047 and §90.207:

- (a) Equipment which utilizes voice modulated communication shall show the frequency response of the audio modulating circuit over a range of 100 to 5000 Hz. for equipment which is required to have a low pass filter, the frequency response of the filter, or all of the circuitry installed between the modulation limited and the modulated stage shall be supplied.
- (b) Equipment which employs modulation limiting, a curve showing the percentage of modulation versus the modulation input voltage shall be supplied.

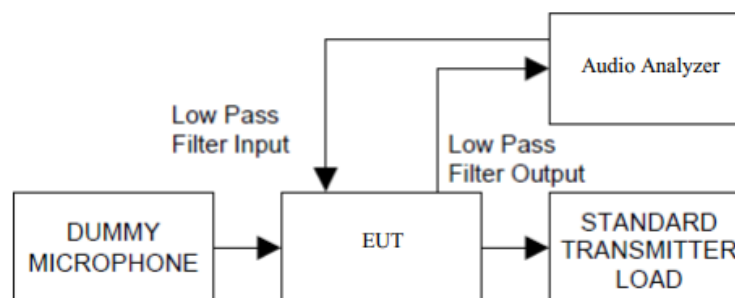
### Test Procedure

Test Method: ANSI C63.26-2015 section 5.3

For modulation limiting and audio frequency response:



For Audio Low Pass Filter Response:



### Test Data

#### Environmental Conditions

|                    |         |
|--------------------|---------|
| Temperature:       | 26.3 °C |
| Relative Humidity: | 49 %    |
| ATM Pressure:      | 101 kPa |

*The testing was performed by Bruce Lin from 2024-02-22 to 2024-03-06.*

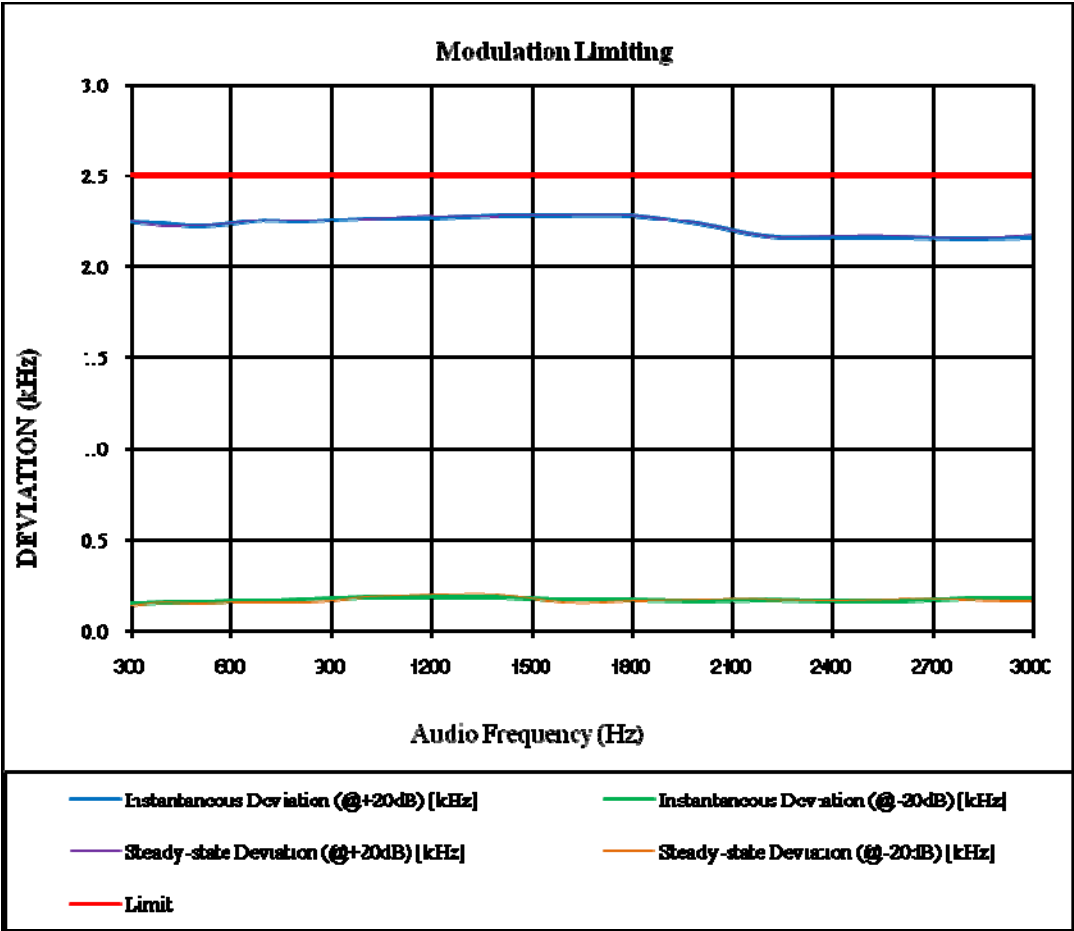
*Test Mode: Transmitting*

**Test Result: Pass.** Please refer to the following tables and plots.

**MODULATION LIMITING**

Carrier Frequency: 155.0125MHz, Separation: 12.5kHz

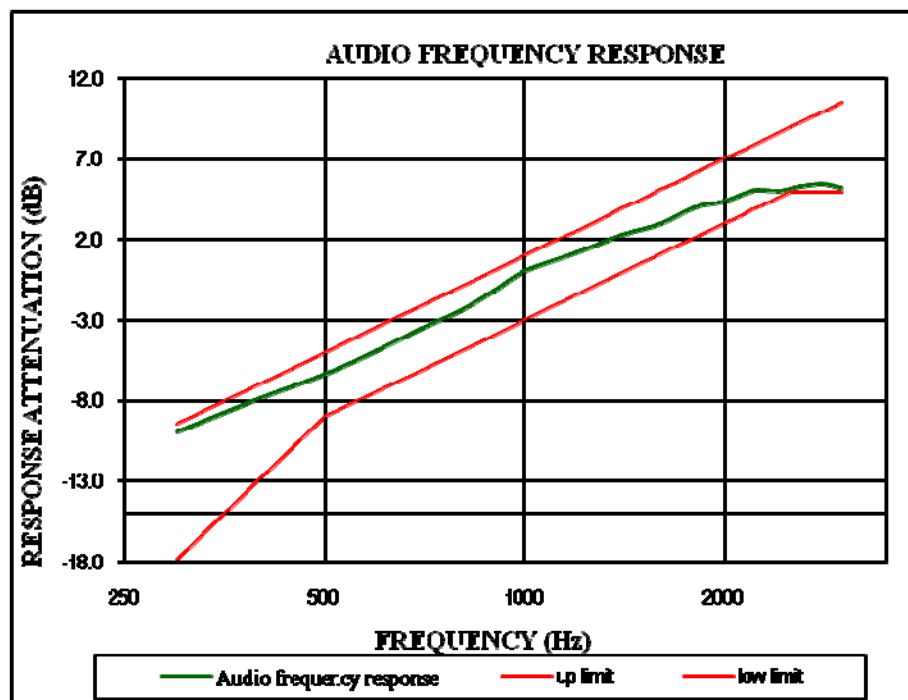
| Audio Frequency<br>(Hz) | Instantaneous                  |                                | Steady-state                   |                                | Limit<br>[kHz] |
|-------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----------------|
|                         | DEVIATION<br>(@+20dB)<br>[kHz] | DEVIATION<br>(@-20dB)<br>[kHz] | DEVIATION<br>(@+20dB)<br>[kHz] | DEVIATION<br>(@-20dB)<br>[kHz] |                |
| 300                     | 2.241                          | 0.152                          | 2.251                          | 0.142                          | 2.500          |
| 400                     | 2.236                          | 0.159                          | 2.226                          | 0.159                          | 2.500          |
| 500                     | 2.223                          | 0.161                          | 2.223                          | 0.151                          | 2.500          |
| 600                     | 2.239                          | 0.168                          | 2.239                          | 0.158                          | 2.500          |
| 700                     | 2.254                          | 0.169                          | 2.254                          | 0.159                          | 2.500          |
| 800                     | 2.251                          | 0.172                          | 2.251                          | 0.162                          | 2.500          |
| 900                     | 2.258                          | 0.178                          | 2.258                          | 0.168                          | 2.500          |
| 1000                    | 2.262                          | 0.185                          | 2.262                          | 0.185                          | 2.500          |
| 1200                    | 2.271                          | 0.188                          | 2.281                          | 0.198                          | 2.500          |
| 1400                    | 2.281                          | 0.190                          | 2.281                          | 0.200                          | 2.500          |
| 1600                    | 2.285                          | 0.171                          | 2.285                          | 0.161                          | 2.500          |
| 1800                    | 2.283                          | 0.177                          | 2.283                          | 0.167                          | 2.500          |
| 2000                    | 2.235                          | 0.165                          | 2.235                          | 0.175                          | 2.500          |
| 2200                    | 2.167                          | 0.176                          | 2.167                          | 0.176                          | 2.500          |
| 2400                    | 2.160                          | 0.168                          | 2.170                          | 0.168                          | 2.500          |
| 2600                    | 2.159                          | 0.167                          | 2.169                          | 0.177                          | 2.500          |
| 2800                    | 2.153                          | 0.181                          | 2.153                          | 0.171                          | 2.500          |
| 3000                    | 2.162                          | 0.180                          | 2.172                          | 0.170                          | 2.500          |



**Audio Frequency Response**

Carrier Frequency: 155.0125MHz, Separation: 12.5kHz

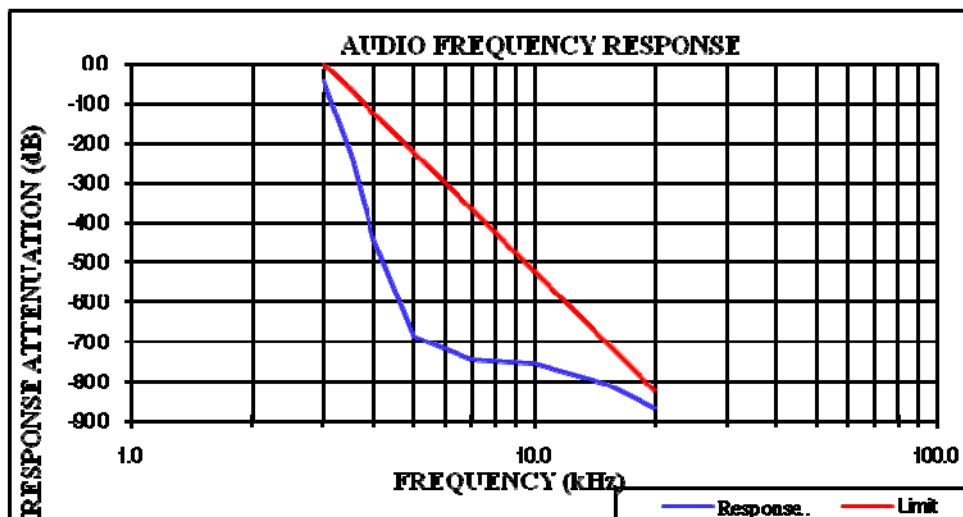
| Audio Frequency (Hz) | Response Attenuation (dB) |
|----------------------|---------------------------|
| 300                  | -9.90                     |
| 400                  | -7.83                     |
| 500                  | -6.38                     |
| 600                  | -4.94                     |
| 700                  | -3.53                     |
| 800                  | -2.43                     |
| 900                  | -1.19                     |
| 1000                 | 0.00                      |
| 1200                 | 1.17                      |
| 1400                 | 2.31                      |
| 1600                 | 3.01                      |
| 1800                 | 4.01                      |
| 2000                 | 4.35                      |
| 2200                 | 5.02                      |
| 2400                 | 5.01                      |
| 2600                 | 5.28                      |
| 2800                 | 5.42                      |
| 3000                 | 5.25                      |



**Audio frequency lows pass filter response**

Carrier Frequency: 155.0125MHz, Separation: 12.5kHz

| Audio Frequency (kHz) | Response Attenuation (dB) | Limit (dB) |
|-----------------------|---------------------------|------------|
| 3.0                   | -4.3                      | 0.0        |
| 3.5                   | -23.0                     | -6.7       |
| 4.0                   | -44.3                     | -12.5      |
| 5.0                   | -68.6                     | -22.2      |
| 7.0                   | -74.5                     | -36.8      |
| 10.0                  | -75.6                     | -52.3      |
| 15.0                  | -80.7                     | -69.9      |
| 20.0                  | -86.9                     | -82.5      |





## FCC §2.1049 & §90.209 & §90.210 - OCCUPIED BANDWIDTH & EMISSION MASK

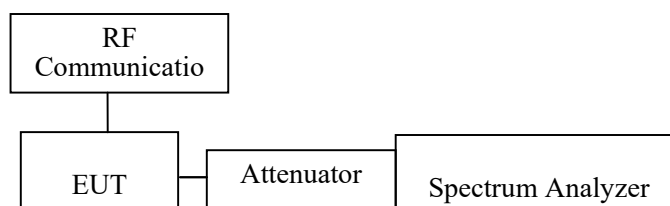
### Applicable Standard

FCC §2.1049 and §90.210

Emission Mask D - 12.5 kHz channel bandwidth equipment. For transmitters designed to operate with a 12.5 kHz channel bandwidth, any emission must be attenuated below the power (P) of the highest emission contained within the authorized bandwidth as follows:

- 1) For any frequency removed from the center of the authorized bandwidth  $f_0$  to 5.625 kHz removed from  $f_0$ , 0dB.
- 2) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 5.626 kHz but no more than 12.5 kHz, at least  $7.27 (f_d - 2.88 \text{ kHz})$  dB.
- 3) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 12.5 kHz at least: At least  $50 + 10 \log (P)$  dB or 70 dB, whichever is the lesser attenuation.
- 4) The reference level for showing compliance with the emission mask shall be established using a resolution bandwidth sufficiently wide (usually two or three times the channel bandwidth) to capture the true peak emission of the equipment under test. In order to show compliance with the emission mask up to and including 50 kHz removed from the edge of the authorized bandwidth, adjust the resolution bandwidth to 100 Hz with the measuring instrument in a peak hold mode. A sufficient number of sweeps must be measured to insure that the emission profile is developed. If video filtering is used, its bandwidth must not be less than the instrument resolution bandwidth. For emissions beyond 50 kHz from the edge of the authorized bandwidth, see paragraph (o) of this section. If it can be shown that use of the above instrumentation settings do not accurately represent the true interference potential of the equipment under test, an alternate procedure may be used provided prior Commission approval is obtained.

### Test Procedure



According to ANSI C63.26-2015 Section 5.4.4:

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (typically a span of  $1.5 \times \text{OBW}$  is sufficient).
  - b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set  $\geq 3 \times \text{RBW}$ .
  - c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
- NOTE—Step a), step b), and step c) may require iteration to adjust within the specified tolerances.

- d) Set the detection mode to peak, and the trace mode to max-hold.
- e) If the instrument does not have a 99% OBW function, recover the trace data points and sum directly in linear power terms. Place the recovered amplitude data points, beginning at the lowest frequency, in a running sum until 0.5% of the total is reached. Record that frequency as the lower OBW frequency. Repeat the process until 99.5% of the total is reached and record that frequency as the upper OBW frequency. The 99% power OBW can be determined by computing the difference these two frequencies.
- f) The OBW shall be reported and plot(s) of the measuring instrument display shall be provided with the test report. The frequency and amplitude axis and scale shall be clearly labeled. Tabular data can be reported in addition to the plot(s).

## Test Data

### Environmental Conditions

|                    |         |
|--------------------|---------|
| Temperature:       | 26.3 °C |
| Relative Humidity: | 49 %    |
| ATM Pressure:      | 101 kPa |

*The testing was performed by Bruce Lin from 2024-02-22 to 2024-03-21.*

*Test mode: Transmitting*

**Test Result: Pass.** Please refer to the following tables and plots.

| Modulation Mode | Channel Separation | f <sub>c</sub> | High Power Level       |                 | Low Power Level        |                 |
|-----------------|--------------------|----------------|------------------------|-----------------|------------------------|-----------------|
|                 |                    |                | 99% Occupied Bandwidth | 26 dB Bandwidth | 99% Occupied Bandwidth | 26 dB Bandwidth |
|                 |                    | MHz            | kHz                    | kHz             | kHz                    | kHz             |
| FM              | 12.5kHz            | 136.0125       | 9.936                  | 10.689          | 9.936                  | 10.657          |
|                 |                    | 155.0125       | 9.936                  | 10.577          | 9.936                  | 10.657          |
|                 |                    | 173.9875       | 9.936                  | 10.657          | 10.016                 | 10.657          |
| 4FSK            | 12.5kHz            | 136.0125       | 7.372                  | 9.856           | 7.612                  | 9.375           |
|                 |                    | 155.0125       | 7.452                  | 9.647           | 7.772                  | 9.968           |
|                 |                    | 173.9875       | 7.452                  | 9.487           | 7.933                  | 9.567           |

Emission Mask please refers to the plots.

Note:

Emission bandwidth was based on calculation method instead of measurement.

Emission Designator

$BW = 2M + 2D$

#### For FM Mode (Channel Spacing: 12.5 kHz)

Emission Designator: 11K0F3E

In this case, the maximum modulating frequency is 3.0 kHz with a 2.5 kHz deviation.

$BW = 2(M+D) = 2*(3.0 \text{ kHz} + 2.5 \text{ kHz}) = 11 \text{ kHz} = 11K0$

F3E portion of the designator represents an FM voice transmission

Therefore, the entire designator for 12.5 kHz channel spacing FM mode is 11K0F3E.

#### For Digital Mode (Channel Spacing: 12.5 kHz)

Emission Designator 7K60F1D and 7K60F1E

The 99% energy rule (title 47CFR 2.1049) was used for digital mode. It basically states that 99% of the modulation energy falls within X kHz, in this case, 7.60 kHz. The emission mask was obtained from 47CFR 90.210(d).

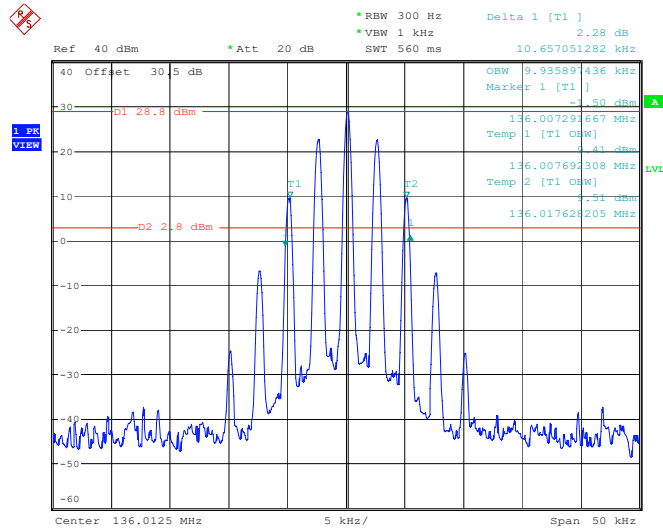
F1D and F1E portion of the designator indicates digital information.

Therefore, the entire designator for 12.5 kHz channel spacing digital mode is 7K60F1D and 7K60F1E.

The 30dB Attenuator and cable loss 0.5dB was added in the Spectrum Analyzer as the offset.

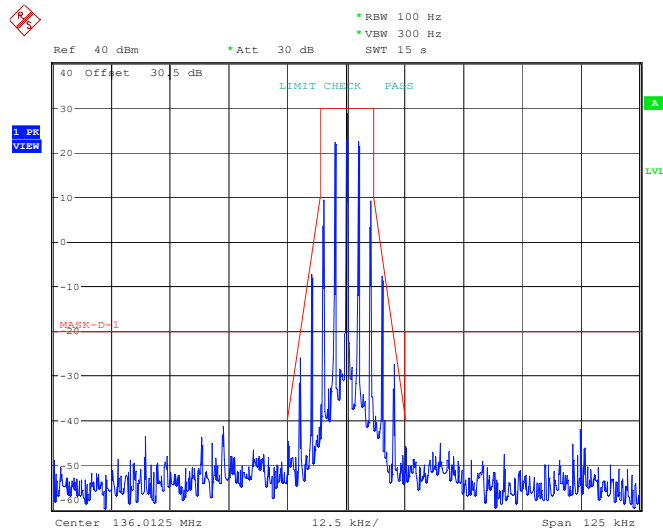
FM:

### Frequency 136.0125 MHz: 99% Occupied & 26 dB Bandwidth, Low Power



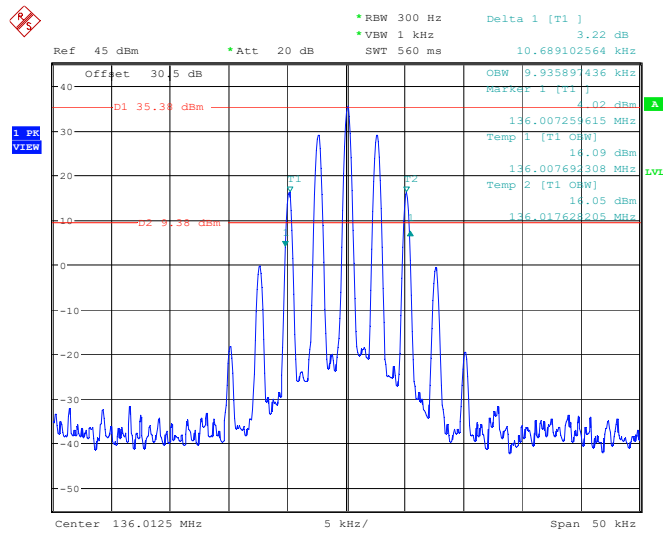
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
 Date: 6.MAR.2024 23:27:59

### Frequency 136.0125 MHz: Emission Mask D, Low Power



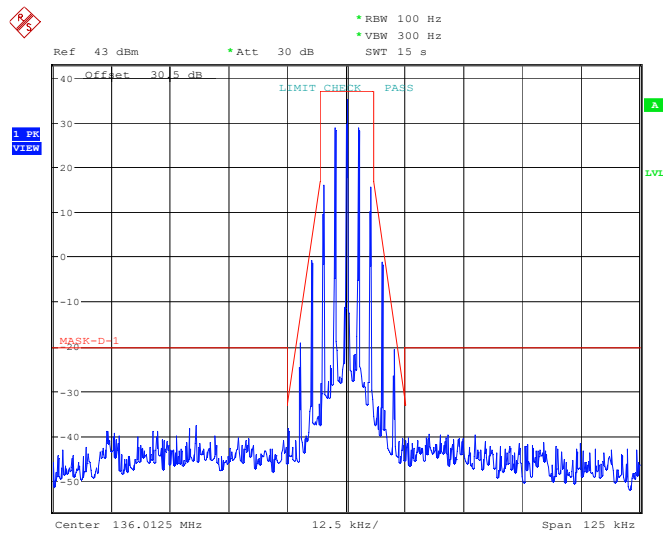
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
 Date: 21.MAR.2024 18:37:44

### Frequency 136.0125 MHz: 99% Occupied & 26 dB Bandwidth, High Power



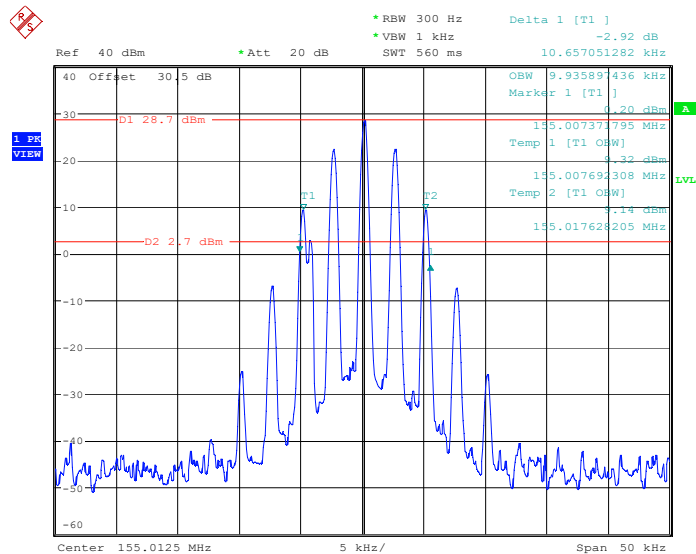
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 6.MAR.2024 23:21:34

### Frequency 136.0125 MHz: Emission Mask D, High Power



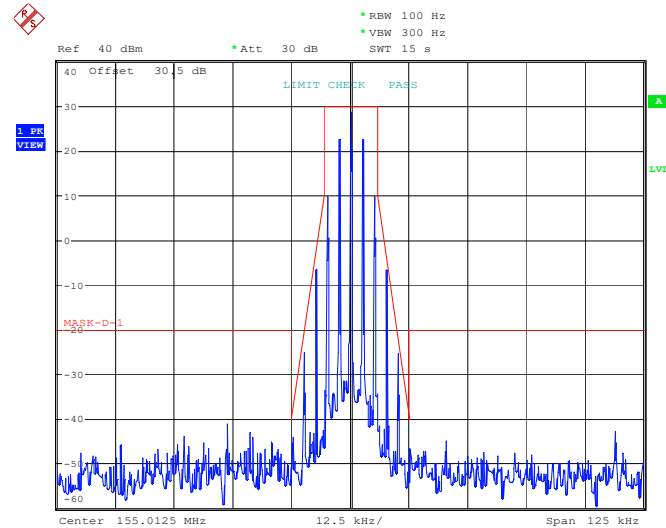
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.MAR.2024 18:45:06

Frequency 155.0125 MHz: 99% Occupied & 26 dB Bandwidth, Low Power



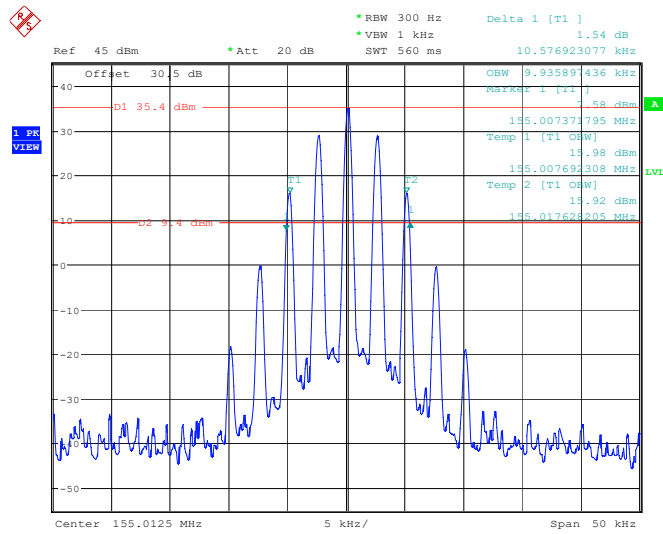
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 6.MAR.2024 23:26:32

Frequency 155.0125 MHz: Emission Mask D, Low Power



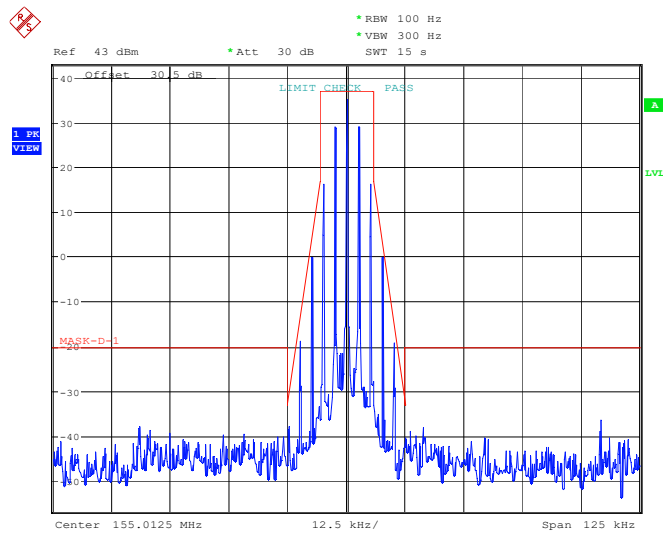
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.MAR.2024 18:38:56

### Frequency 155.0125MHz: 99% Occupied & 26 dB Bandwidth, High Power



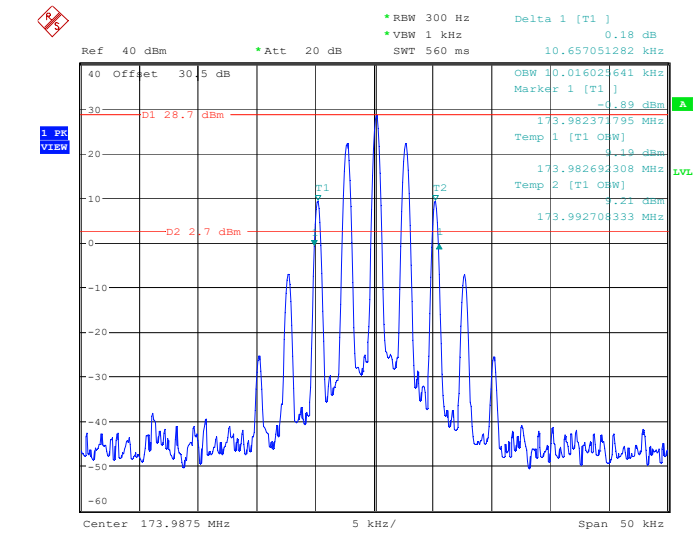
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 6.MAR.2024 23:23:13

### Frequency 155.0125 MHz: Emission Mask D, High Power



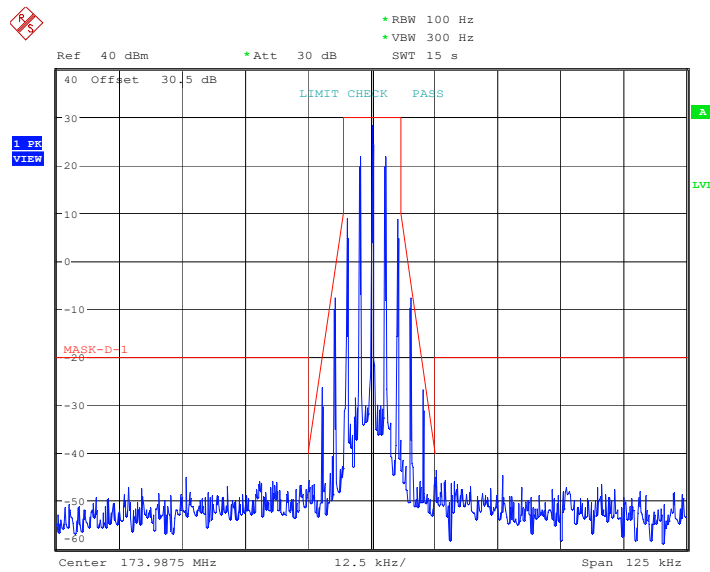
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.MAR.2024 18:42:57

### Frequency 173.9875 MHz: 99% Occupied & 26 dB Bandwidth, Low Power



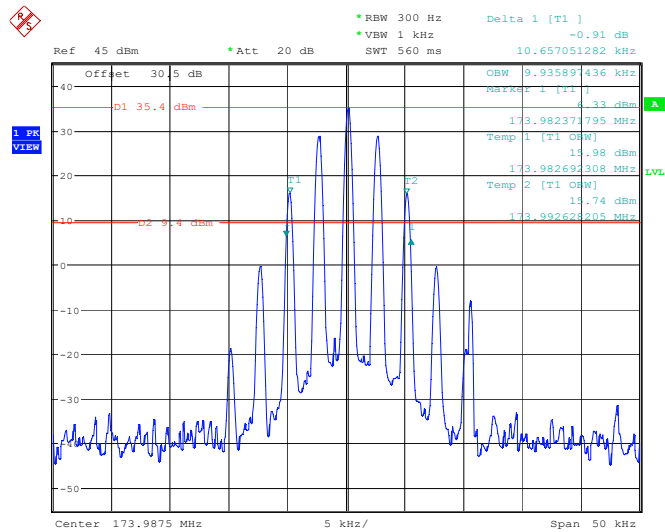
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 6.MAR.2024 23:25:12

### Frequency 173.9875 MHz: Emission Mask D, Low Power

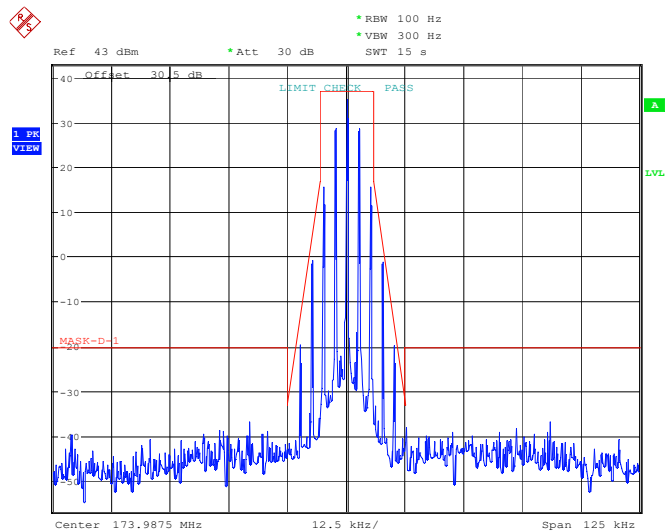


ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.MAR.2024 18:40:00



**Frequency 173.9875 MHz: 99% Occupied & 26 dB Bandwidth, High Power**

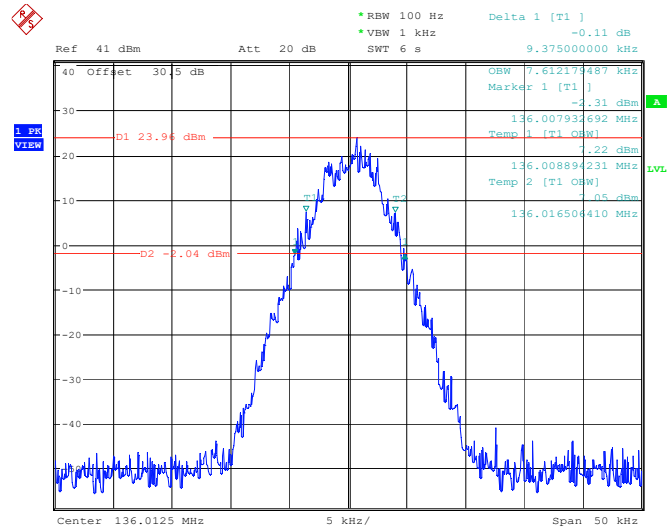
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 6.MAR.2024 23:24:06

**Frequency 173.9875 MHz: Emission Mask D, High Power**

ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.MAR.2024 18:41:47

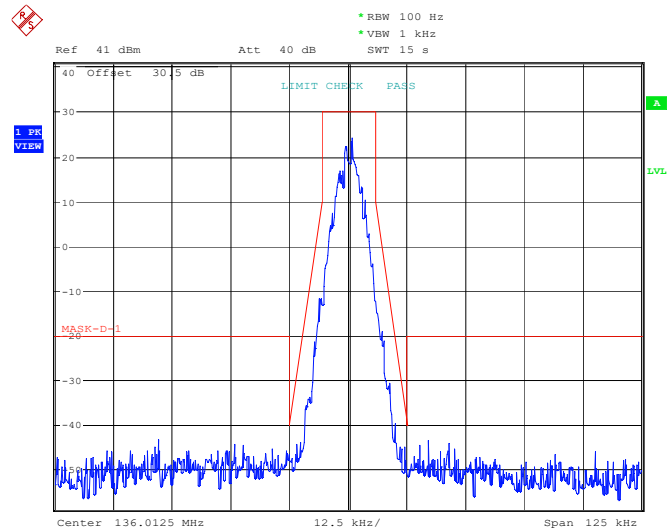
4FSK

Frequency 136.0125 MHz: 99% Occupied & 26 dB Bandwidth, Low Power



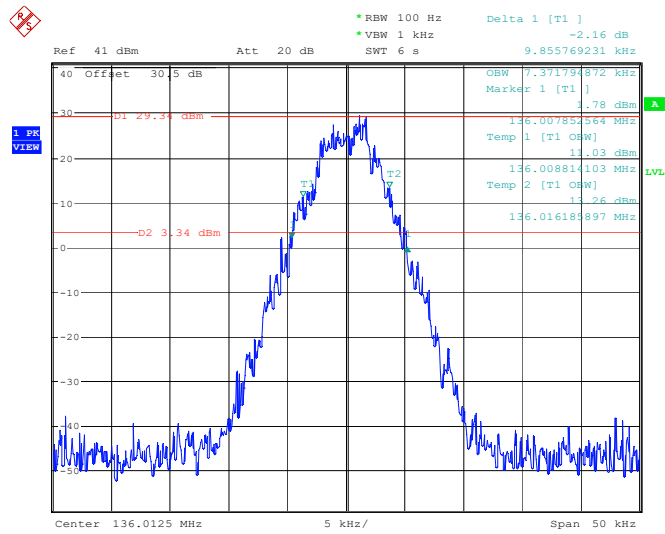
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.FEB.2024 19:38:27

Frequency 136.0125 MHz: Emission Mask D, Low Power



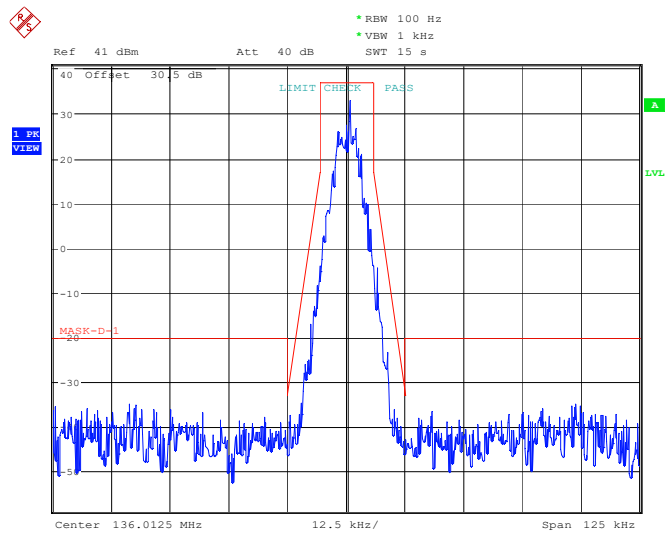
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.FEB.2024 19:03:16

### Frequency 136.0125 MHz: 99% Occupied & 26 dB Bandwidth, High Power



ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.FEB.2024 19:35:31

### Frequency 136.0125 MHz: Emission Mask D, High Power



ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.FEB.2024 19:05:18

\* RBW 100 Hz  
 \* VBW 1 kHz  
 SWT 6 s

Delta 1 [T1]  
 -0.60 dB  
 9.967948718 kHz

Ref 41 dBm  
 Att 20 dB

40 Offset 30.5 dB  
 30  
 20  
 10  
 0  
 -10  
 -20  
 -30  
 -40

1 PR  
 VIEW

D1 22.16 dBm  
 D2 -3.84 dBm

OBW 7.77243897 kHz  
 Marker 1 [T1]  
 -4.72 dBm  
 155.007692308 MHz  
 Temp 1 [T1 OBW]  
 -3.49 dBm  
 155.008894231 MHz  
 Temp 2 [T1 OBW]  
 -2.70 dBm  
 155.016666667 MHz

Center 155.0125 MHz  
 5 kHz/  
 Span 50 kHz

ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.FEB.2024 19:40:43

Ref 45 dBm Att 40 dB

\* RBW 100 Hz  
\* VBW 1 kHz  
SWT 15 s

Offset 30.5 dB

LIMIT CHECK PASS

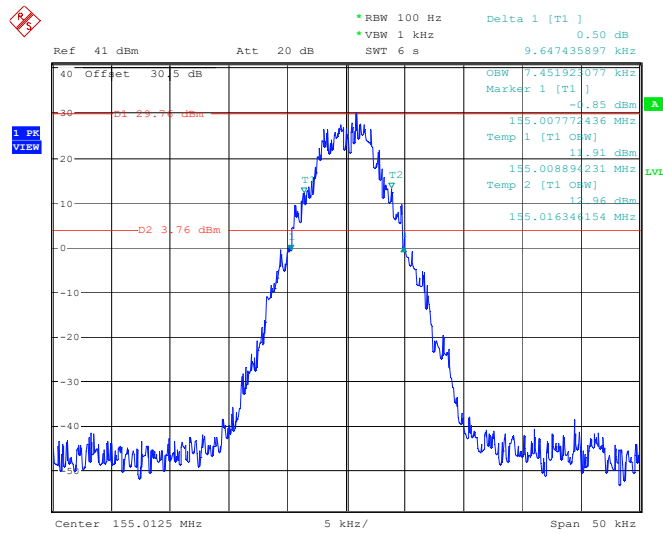
1. PR  
V1.15W

MASK-D-1

Center 155.0125 MHz 12.5 kHz/ Span 125 kHz

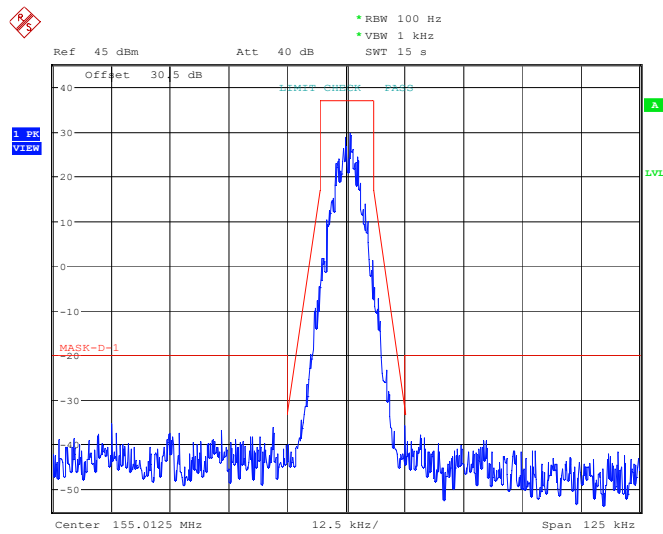
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.FEB.2024 18:55:46

### Frequency 155.0125MHz: 99% Occupied & 26 dB Bandwidth, High Power



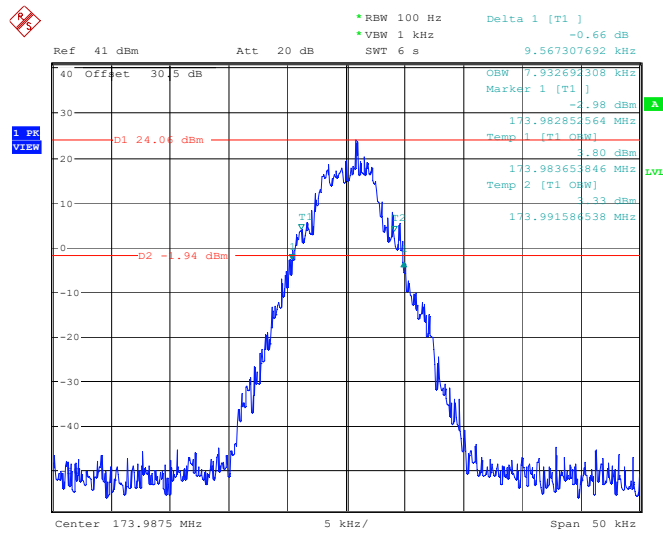
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
 Date: 22.FEB.2024 19:46:23

### Frequency 155.0125 MHz: Emission Mask D, High Power



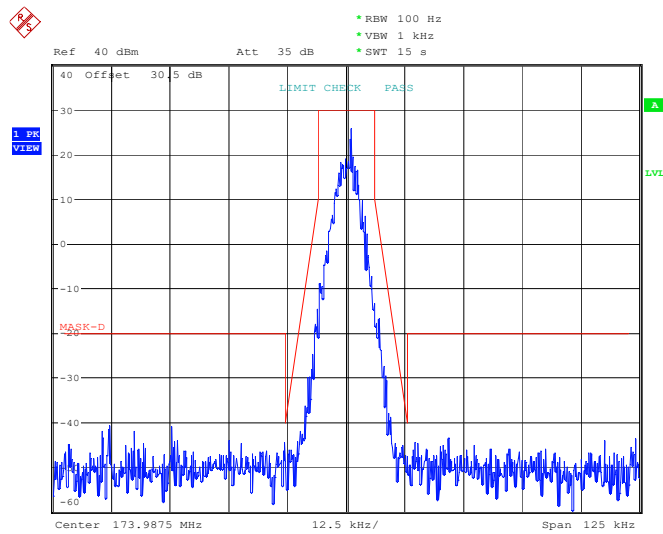
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
 Date: 22.FEB.2024 18:53:32

### Frequency 173.9875 MHz: 99% Occupied & 26 dB Bandwidth, Low Power



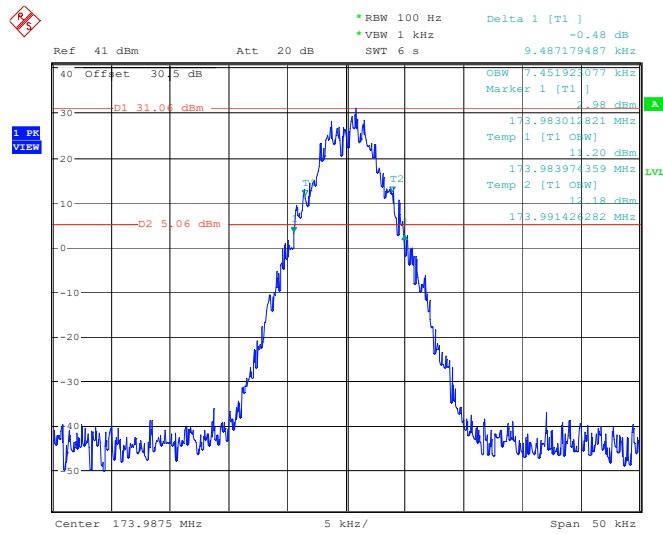
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.FEB.2024 19:51:22

### Frequency 173.9875 MHz: Emission Mask D, Low Power



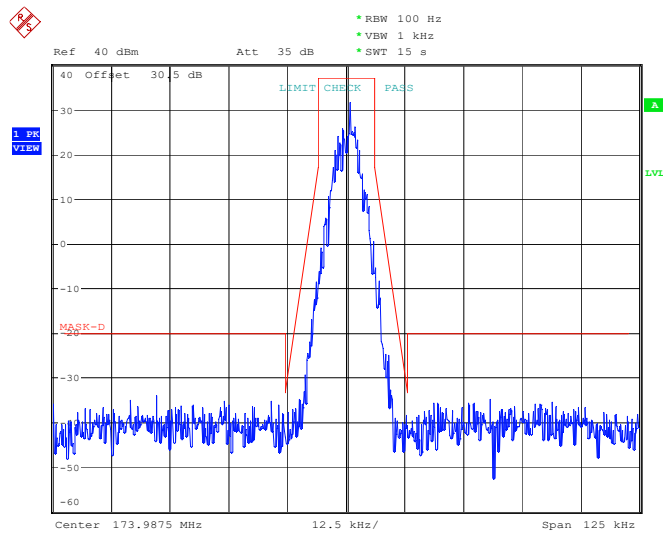
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.FEB.2024 18:19:44

### Frequency 173.9875 MHz: 99% Occupied & 26 dB Bandwidth, High Power



ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.FEB.2024 19:48:41

### Frequency 173.9875 MHz: Emission Mask D, High Power



ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 22.FEB.2024 18:27:19

## FCC §2.1051 & §90.210 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

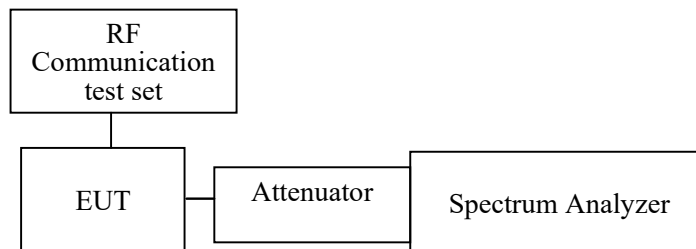
### Applicable Standard

Emission Mask D—12.5 kHz channel bandwidth equipment. For transmitters designed to operate with a 12.5 kHz channel bandwidth, any emission must be attenuated below the power (P) of the highest emission contained within the authorized bandwidth as follows:

- 1) For any frequency removed from the center of the authorized bandwidth  $f_0$  to 5.625 kHz removed from  $f_0$ , 0 dB.
- 2) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 5.626 kHz but no more than 12.5 kHz, at least  $7.27 (f_d - 2.88 \text{ kHz})$  dB.
- 3) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 12.5 kHz: At least  $50 + 10 \log (P)$  dB or 70 dB, whichever is the lesser attenuation.

### Test Procedure

According to ANSI C63.26-2015 section 5.7



Note: The path loss from EUT to Spectrum Analyzer has included in the result.

The RF output of the EUT was connected to a spectrum analyzer through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 100kHz for below 1GHz, and 1MHz for above 1GHz. Sufficient scans were taken to show any out of band emissions up to 10<sup>th</sup> harmonic.

### Test Data

#### Environmental Conditions

|                    |         |
|--------------------|---------|
| Temperature:       | 22.1 °C |
| Relative Humidity: | 49 %    |
| ATM Pressure:      | 101 kPa |

*The testing was performed by Bruce Lin on 2024-02-21.*

*Test Mode: Transmitting, worst case for high power level.*

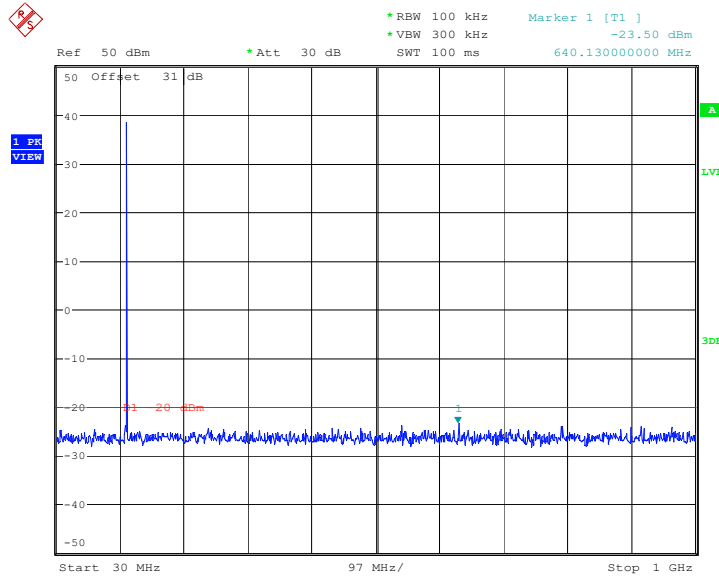
**Test Result: Pass.** Please refer to the following plots.



The 30dB Attenuator and cable loss 1.0dB was added in the Spectrum Analyzer as the offset.

## FM

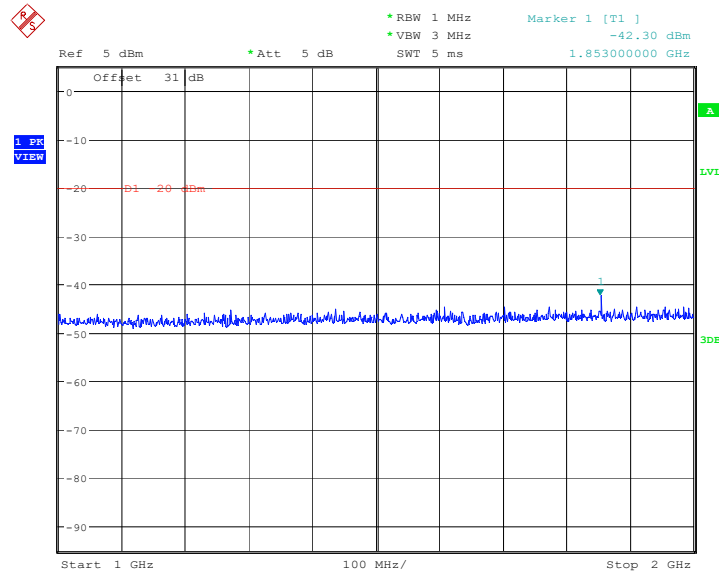
### 30MHz – 1 GHz, Low Channel



ProjectNo.:SZ1240117-04046E Tester:Bruce Lin

Date: 21.FEB.2024 21:38:28

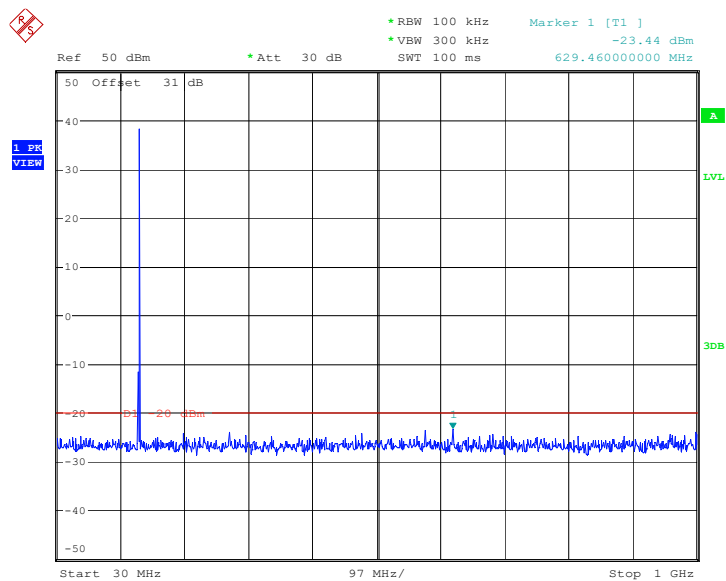
### 1 GHz – 2GHz, Low Channel



ProjectNo.:SZ1240117-04046E Tester:Bruce Lin

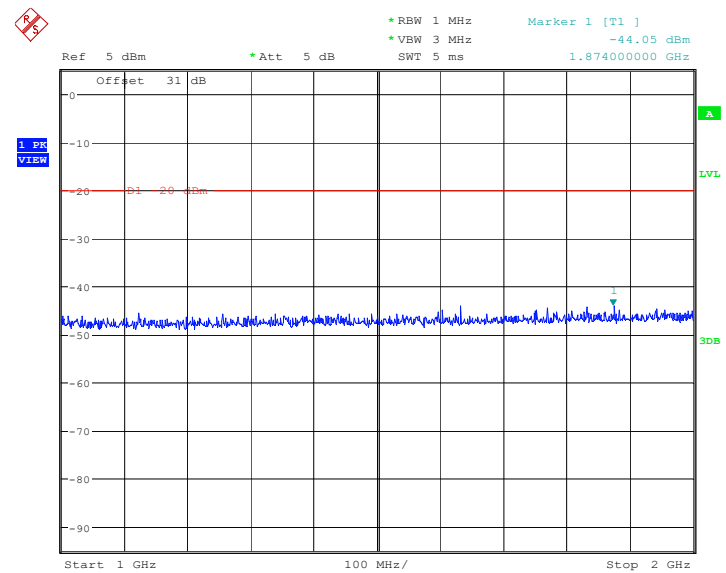
Date: 21.FEB.2024 21:25:40

30MHz – 1 GHz, Middle Channel



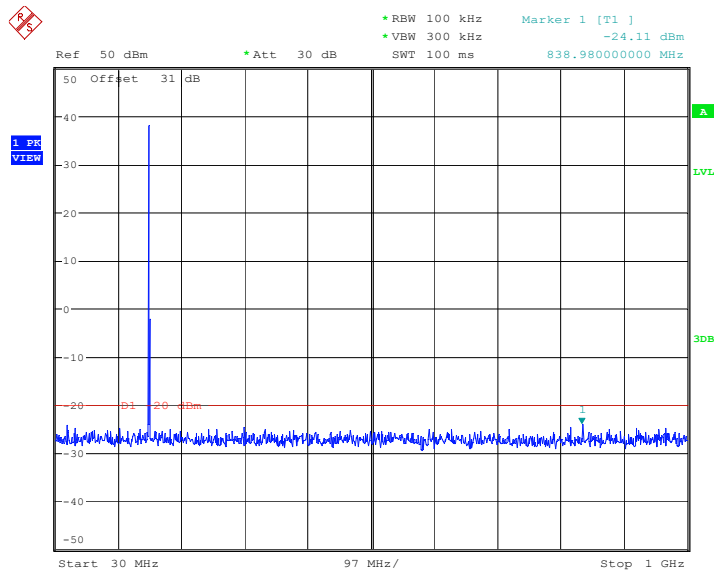
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.FEB.2024 21:38:39

1 GHz – 2 GHz, Middle Channel



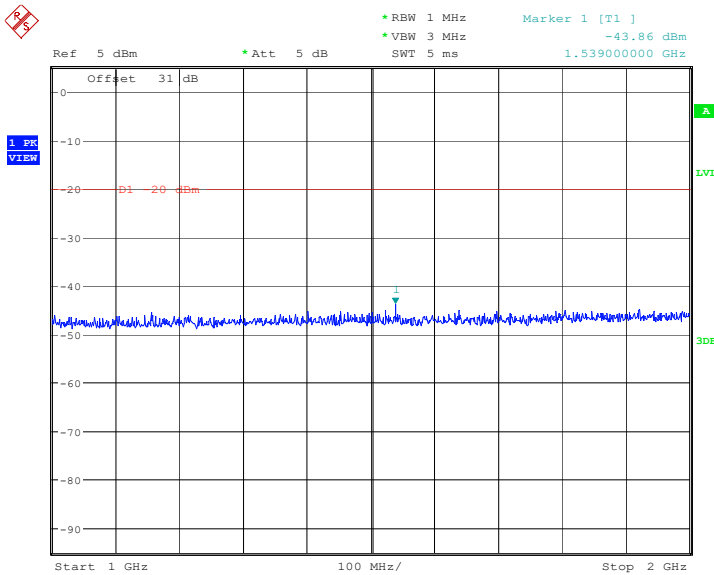
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.FEB.2024 21:25:59

### 30MHz – 1 GHz, High Channel



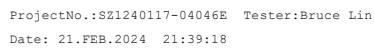
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.FEB.2024 21:38:47

### 1 GHz – 2 GHz, High Channel



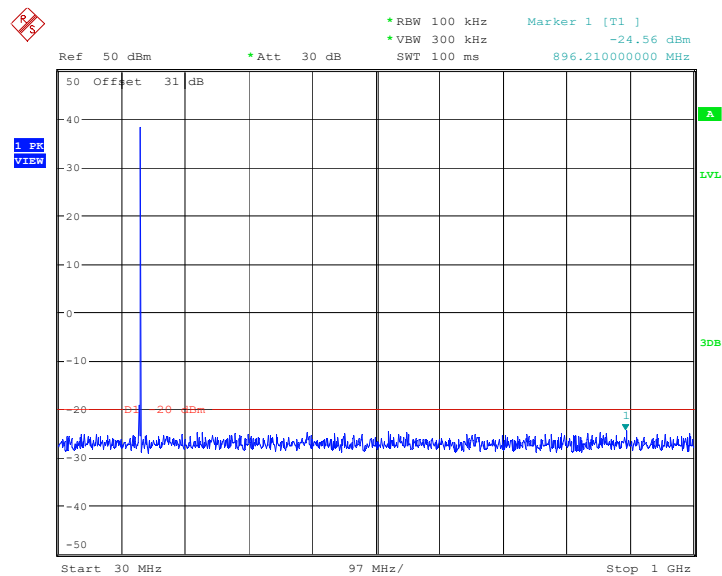
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.FEB.2024 21:26:18

### 30MHz – 1 GHz, Low Channel



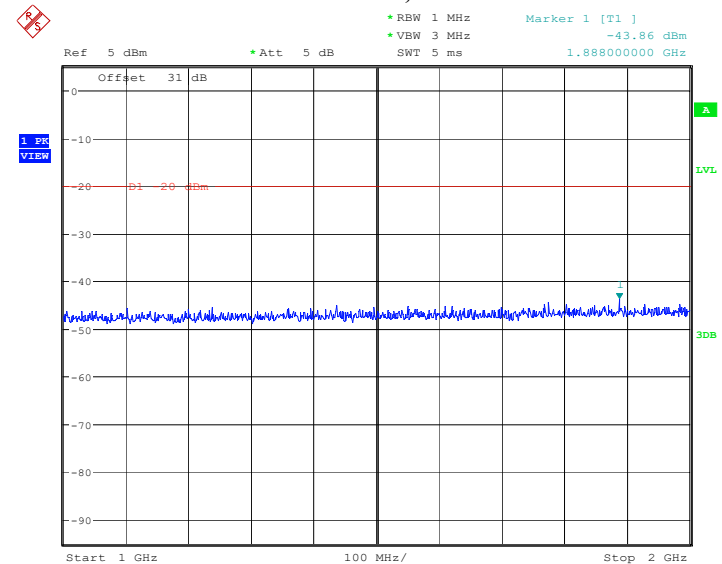
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.FEB.2024 21:29:20

30MHz – 1 GHz, Middle Channel



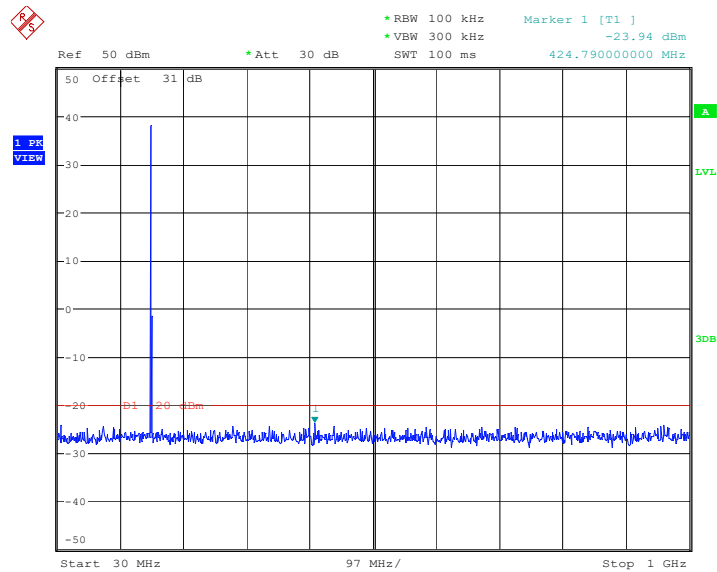
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.FEB.2024 21:39:27

1 GHz – 2 GHz, Middle Channel



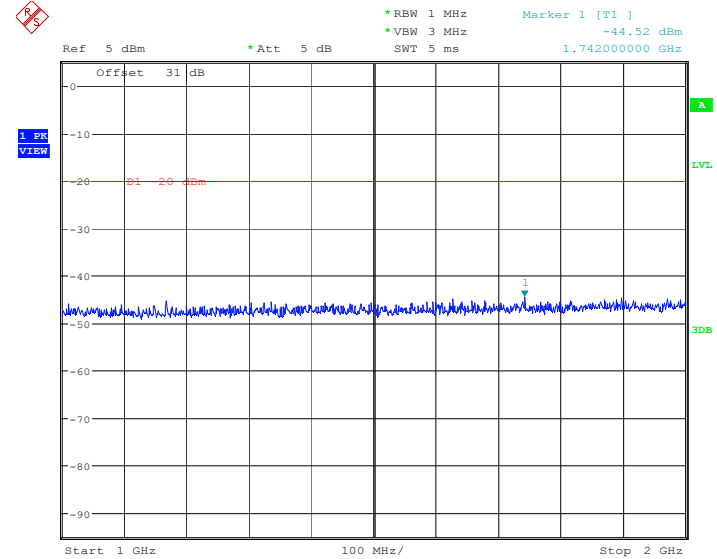
ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.FEB.2024 21:29:40

30MHz – 1 GHz, High Channel



ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.FEB.2024 21:39:38

1 GHz – 2 GHz, High Channel



ProjectNo.:SZ1240117-04046E Tester:Bruce Lin  
Date: 21.FEB.2024 21:29:59

## FCC §2.1053 & §90.210 - RADIATED SPURIOUS EMISSIONS

### Applicable Standard

FCC §2.1053 and §90.210

### Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load, which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to teeth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB = 10 lg (TXpwr in Watts/0.001)-the absolute level

Spurious attenuation limit in dB = 50 + 10 Log<sub>10</sub> (power out in Watts) for EUT with a 12.5 kHz channel bandwidth.

### Test Data

#### Environmental Conditions

|                    |            |
|--------------------|------------|
| Temperature:       | 22~25.4 °C |
| Relative Humidity: | 50~54 %    |
| ATM Pressure:      | 101 kPa    |

*The testing was performed by Anson Su on 2024-01-25 and 2024-03-11 for below 1GHz,  
Tyler Wu on 2024-02-05 and 2024-03-11 for above 1GHz.*

*Test Mode: Transmitting, worst case for high power level.*

*Note: Scan with X-axis, Y-axis, Z-axis, the worst case Y-axis was recorded*

*Test Result: Pass. Please refer to the following tables.*

**30MHz~2GHz:**

For Model AXP595 VHF

FM

| Frequency<br>(MHz)         | Receiver<br>Reading<br>(dBμV) | Polar<br>(H / V) | Substituted                   |                       |                              | Absolute<br>Level<br>(dBm) | FCC Part 90    |                |
|----------------------------|-------------------------------|------------------|-------------------------------|-----------------------|------------------------------|----------------------------|----------------|----------------|
|                            |                               |                  | Substituted<br>Level<br>(dBm) | Cable<br>Loss<br>(dB) | Antenna<br>Gain<br>(dBi/dBd) |                            | Limit<br>(dBm) | Margin<br>(dB) |
| Low Channel 136.0125MHz    |                               |                  |                               |                       |                              |                            |                |                |
| 272.025                    | 22.14                         | H                | -57.9                         | 0.90                  | 0.0                          | -58.80                     | -20            | 38.80          |
| 272.025                    | 31.98                         | V                | -44.8                         | 0.90                  | 0.0                          | -45.70                     | -20            | 25.70          |
| 1088.10                    | 29.82                         | H                | -43.1                         | 0.70                  | 6.50                         | -37.30                     | -20            | 17.30          |
| 1088.10                    | 30.32                         | V                | -43.9                         | 0.70                  | 6.50                         | -38.10                     | -20            | 18.10          |
| 1224.11                    | 29.24                         | H                | -43.7                         | 0.80                  | 6.90                         | -37.60                     | -20            | 17.60          |
| 1224.11                    | 29.37                         | V                | -44.3                         | 0.80                  | 6.90                         | -38.20                     | -20            | 18.20          |
| 1360.13                    | 29.21                         | H                | -43.9                         | 0.80                  | 7.90                         | -36.80                     | -20            | 16.80          |
| 1360.13                    | 29.38                         | V                | -44.4                         | 0.80                  | 7.90                         | -37.30                     | -20            | 17.30          |
| Middle Channel 155.0125MHz |                               |                  |                               |                       |                              |                            |                |                |
| 310.025                    | 22.67                         | H                | -54.3                         | 0.94                  | 0.0                          | -55.24                     | -20            | 35.24          |
| 310.025                    | 28.73                         | V                | -45.5                         | 0.94                  | 0.0                          | -46.44                     | -20            | 26.44          |
| 1085.09                    | 29.93                         | H                | -43.0                         | 0.70                  | 6.50                         | -37.20                     | -20            | 17.20          |
| 1085.09                    | 29.47                         | V                | -44.8                         | 0.70                  | 6.50                         | -39.00                     | -20            | 19.00          |
| 1240.10                    | 29.51                         | H                | -43.5                         | 0.80                  | 6.90                         | -37.40                     | -20            | 17.40          |
| 1240.10                    | 29.33                         | V                | -44.3                         | 0.80                  | 6.90                         | -38.20                     | -20            | 18.20          |
| 1395.11                    | 28.74                         | H                | -44.4                         | 0.80                  | 7.90                         | -37.30                     | -20            | 17.30          |
| 1395.11                    | 29.12                         | V                | -44.7                         | 0.80                  | 7.90                         | -37.60                     | -20            | 17.60          |
| 1550.13                    | 29.39                         | H                | -43.7                         | 0.90                  | 8.60                         | -36.00                     | -20            | 16.00          |
| 1550.13                    | 29.08                         | V                | -44.6                         | 0.90                  | 8.60                         | -36.90                     | -20            | 16.90          |
| High Channel 173.9875MHz   |                               |                  |                               |                       |                              |                            |                |                |
| 347.975                    | 23.14                         | H                | -52.8                         | 0.98                  | 0.0                          | -53.78                     | -20            | 33.78          |
| 347.975                    | 24.32                         | V                | -48.5                         | 0.98                  | 0.0                          | -49.48                     | -20            | 29.48          |
| 1043.93                    | 29.67                         | H                | -43.1                         | 0.70                  | 6.20                         | -37.60                     | -20            | 17.60          |
| 1043.93                    | 29.34                         | V                | -45.0                         | 0.70                  | 6.20                         | -39.50                     | -20            | 19.50          |
| 1217.91                    | 29.31                         | H                | -43.7                         | 0.80                  | 6.90                         | -37.60                     | -20            | 17.60          |
| 1217.91                    | 29.59                         | V                | -44.1                         | 0.80                  | 6.90                         | -38.00                     | -20            | 18.00          |
| 1391.90                    | 29.38                         | H                | -43.7                         | 0.80                  | 7.90                         | -36.60                     | -20            | 16.60          |
| 1391.90                    | 29.01                         | V                | -44.8                         | 0.80                  | 7.90                         | -37.70                     | -20            | 17.70          |
| 1565.89                    | 29.25                         | H                | -43.9                         | 0.90                  | 8.60                         | -36.20                     | -20            | 16.20          |
| 1565.89                    | 29.39                         | V                | -44.3                         | 0.90                  | 8.60                         | -36.60                     | -20            | 16.60          |
| 1739.88                    | 29.28                         | H                | -43.8                         | 0.90                  | 8.60                         | -36.10                     | -20            | 16.10          |
| 1739.88                    | 29.72                         | V                | -43.9                         | 0.90                  | 8.60                         | -36.20                     | -20            | 16.20          |



## 4FSK

| Frequency<br>(MHz)         | Receiver<br>Reading<br>(dBμV) | Polar<br>(H / V) | Substituted                   |                       |                              | Absolute<br>Level<br>(dBm) | FCC Part 90    |                |
|----------------------------|-------------------------------|------------------|-------------------------------|-----------------------|------------------------------|----------------------------|----------------|----------------|
|                            |                               |                  | Substituted<br>Level<br>(dBm) | Cable<br>Loss<br>(dB) | Antenna<br>Gain<br>(dBi/dBd) |                            | Limit<br>(dBm) | Margin<br>(dB) |
| Low Channel 136.0125MHz    |                               |                  |                               |                       |                              |                            |                |                |
| 272.025                    | 22.54                         | H                | -57.5                         | 0.90                  | 0.0                          | -58.40                     | -20            | 38.40          |
| 272.025                    | 32.03                         | V                | -44.8                         | 0.90                  | 0.0                          | -45.70                     | -20            | 25.70          |
| 1088.10                    | 29.55                         | H                | -43.3                         | 0.70                  | 6.50                         | -37.50                     | -20            | 17.50          |
| 1088.10                    | 29.91                         | V                | -44.3                         | 0.70                  | 6.50                         | -38.50                     | -20            | 18.50          |
| 1224.11                    | 29.05                         | H                | -43.9                         | 0.80                  | 6.90                         | -37.80                     | -20            | 17.80          |
| 1224.11                    | 29.42                         | V                | -44.2                         | 0.80                  | 6.90                         | -38.10                     | -20            | 18.10          |
| 1360.13                    | 29.22                         | H                | -43.9                         | 0.80                  | 7.90                         | -36.80                     | -20            | 16.80          |
| 1360.13                    | 29.17                         | V                | -44.7                         | 0.80                  | 7.90                         | -37.60                     | -20            | 17.60          |
| Middle Channel 155.0125MHz |                               |                  |                               |                       |                              |                            |                |                |
| 310.025                    | 22.84                         | H                | -54.2                         | 0.94                  | 0.0                          | -55.14                     | -20            | 35.14          |
| 310.025                    | 28.81                         | V                | -45.4                         | 0.94                  | 0.0                          | -46.34                     | -20            | 26.34          |
| 1085.09                    | 29.49                         | H                | -43.4                         | 0.70                  | 6.50                         | -37.60                     | -20            | 17.60          |
| 1085.09                    | 29.68                         | V                | -44.6                         | 0.70                  | 6.50                         | -38.80                     | -20            | 18.80          |
| 1240.10                    | 29.29                         | H                | -43.7                         | 0.80                  | 6.90                         | -37.60                     | -20            | 17.60          |
| 1240.10                    | 29.33                         | V                | -44.3                         | 0.80                  | 6.90                         | -38.20                     | -20            | 18.20          |
| 1395.11                    | 29.41                         | H                | -43.7                         | 0.80                  | 7.90                         | -36.60                     | -20            | 16.60          |
| 1395.11                    | 29.16                         | V                | -44.7                         | 0.80                  | 7.90                         | -37.60                     | -20            | 17.60          |
| 1550.13                    | 29.09                         | H                | -44.0                         | 0.90                  | 8.60                         | -36.30                     | -20            | 16.30          |
| 1550.13                    | 30.35                         | V                | -43.3                         | 0.90                  | 8.60                         | -35.60                     | -20            | 15.60          |
| High Channel 173.9875MHz   |                               |                  |                               |                       |                              |                            |                |                |
| 347.975                    | 23.34                         | H                | -52.6                         | 0.98                  | 0.0                          | -53.58                     | -20            | 33.58          |
| 347.975                    | 24.38                         | V                | -48.4                         | 0.98                  | 0.0                          | -49.38                     | -20            | 29.38          |
| 1043.93                    | 29.51                         | H                | -43.3                         | 0.70                  | 6.20                         | -37.80                     | -20            | 17.80          |
| 1043.93                    | 29.54                         | V                | -44.8                         | 0.70                  | 6.20                         | -39.30                     | -20            | 19.30          |
| 1217.91                    | 29.55                         | H                | -43.4                         | 0.80                  | 6.90                         | -37.30                     | -20            | 17.30          |
| 1217.91                    | 29.49                         | V                | -44.2                         | 0.80                  | 6.90                         | -38.10                     | -20            | 18.10          |
| 1391.90                    | 29.53                         | H                | -43.6                         | 0.80                  | 7.90                         | -36.50                     | -20            | 16.50          |
| 1391.90                    | 29.27                         | V                | -44.6                         | 0.80                  | 7.90                         | -37.50                     | -20            | 17.50          |
| 1565.89                    | 28.98                         | H                | -44.2                         | 0.90                  | 8.60                         | -36.50                     | -20            | 16.50          |
| 1565.89                    | 29.21                         | V                | -44.5                         | 0.90                  | 8.60                         | -36.80                     | -20            | 16.80          |
| 1739.88                    | 29.86                         | H                | -43.2                         | 0.90                  | 8.60                         | -35.50                     | -20            | 15.50          |
| 1739.88                    | 29.52                         | V                | -44.1                         | 0.90                  | 8.60                         | -36.40                     | -20            | 16.40          |

For Model AXP565 VHF

FM

| Frequency<br>(MHz)         | Receiver<br>Reading<br>(dBμV) | Polar<br>(H / V) | Substituted                   |                       |                              | Absolute<br>Level<br>(dBm) | FCC Part 90    |                |
|----------------------------|-------------------------------|------------------|-------------------------------|-----------------------|------------------------------|----------------------------|----------------|----------------|
|                            |                               |                  | Substituted<br>Level<br>(dBm) | Cable<br>Loss<br>(dB) | Antenna<br>Gain<br>(dBi/dBd) |                            | Limit<br>(dBm) | Margin<br>(dB) |
| Low Channel 136.0125MHz    |                               |                  |                               |                       |                              |                            |                |                |
| 272.025                    | 24.89                         | H                | -55.1                         | 0.90                  | 0.0                          | -56.00                     | -20            | 36.00          |
| 272.025                    | 28.27                         | V                | -48.5                         | 0.90                  | 0.0                          | -49.40                     | -20            | 29.40          |
| 1008.10                    | 29.85                         | H                | -43.0                         | 0.70                  | 6.20                         | -37.50                     | -20            | 17.50          |
| 1008.10                    | 29.31                         | V                | -45.1                         | 0.70                  | 6.20                         | -39.60                     | -20            | 19.60          |
| 1134.11                    | 29.45                         | H                | -43.4                         | 0.70                  | 6.50                         | -37.60                     | -20            | 17.60          |
| 1134.11                    | 29.06                         | V                | -45.2                         | 0.70                  | 6.50                         | -39.40                     | -20            | 19.40          |
| 1260.13                    | 29.52                         | H                | -43.5                         | 0.80                  | 7.30                         | -37.00                     | -20            | 17.00          |
| 1260.13                    | 29.17                         | V                | -44.8                         | 0.80                  | 7.30                         | -38.30                     | -20            | 18.30          |
| Middle Channel 155.0125MHz |                               |                  |                               |                       |                              |                            |                |                |
| 310.025                    | 24.92                         | H                | -52.1                         | 0.94                  | 0.0                          | -53.04                     | -20            | 33.04          |
| 310.025                    | 28.15                         | V                | -46.1                         | 0.94                  | 0.0                          | -47.04                     | -20            | 27.04          |
| 1085.09                    | 29.35                         | H                | -43.5                         | 0.70                  | 6.50                         | -37.70                     | -20            | 17.70          |
| 1085.09                    | 29.61                         | V                | -44.6                         | 0.70                  | 6.50                         | -38.80                     | -20            | 18.80          |
| 1240.10                    | 29.46                         | H                | -43.5                         | 0.80                  | 6.90                         | -37.40                     | -20            | 17.40          |
| 1240.10                    | 29.15                         | V                | -39.9                         | 0.80                  | 6.90                         | -33.80                     | -20            | 13.80          |
| 1395.11                    | 29.43                         | H                | -43.7                         | 0.80                  | 7.90                         | -36.60                     | -20            | 16.60          |
| 1395.11                    | 29.09                         | V                | -44.7                         | 0.80                  | 7.90                         | -37.60                     | -20            | 17.60          |
| 1550.13                    | 29.37                         | H                | -43.8                         | 0.90                  | 8.60                         | -36.10                     | -20            | 16.10          |
| 1550.13                    | 28.94                         | V                | -44.7                         | 0.90                  | 8.60                         | -37.00                     | -20            | 17.00          |
| High Channel 173.9875MHz   |                               |                  |                               |                       |                              |                            |                |                |
| 347.975                    | 24.28                         | H                | -51.6                         | 0.98                  | 0.0                          | -52.58                     | -20            | 32.58          |
| 347.975                    | 27.75                         | V                | -45.0                         | 0.98                  | 0.0                          | -45.98                     | -20            | 25.98          |
| 1043.93                    | 29.54                         | H                | -43.3                         | 0.70                  | 6.20                         | -37.80                     | -20            | 17.80          |
| 1043.93                    | 29.86                         | V                | -44.5                         | 0.70                  | 6.20                         | -39.00                     | -20            | 19.00          |
| 1217.91                    | 29.01                         | H                | -44.0                         | 0.80                  | 6.90                         | -37.90                     | -20            | 17.90          |
| 1217.91                    | 29.45                         | V                | -39.6                         | 0.80                  | 6.90                         | -33.50                     | -20            | 13.50          |
| 1391.90                    | 29.21                         | H                | -43.9                         | 0.80                  | 7.90                         | -36.80                     | -20            | 16.80          |
| 1391.90                    | 29.13                         | V                | -44.7                         | 0.80                  | 7.90                         | -37.60                     | -20            | 17.60          |
| 1565.89                    | 29.57                         | H                | -43.6                         | 0.90                  | 8.60                         | -35.90                     | -20            | 15.90          |
| 1565.89                    | 29.42                         | V                | -44.3                         | 0.90                  | 8.60                         | -36.60                     | -20            | 16.60          |
| 1739.88                    | 29.03                         | H                | -44.0                         | 0.90                  | 8.60                         | -36.30                     | -20            | 16.30          |
| 1739.88                    | 29.74                         | V                | -43.9                         | 0.90                  | 8.60                         | -36.20                     | -20            | 16.20          |

## 4FSK

| Frequency<br>(MHz)         | Receiver<br>Reading<br>(dBμV) | Polar<br>(H / V) | Substituted                   |                       |                              | Absolute<br>Level<br>(dBm) | FCC Part 90    |                |
|----------------------------|-------------------------------|------------------|-------------------------------|-----------------------|------------------------------|----------------------------|----------------|----------------|
|                            |                               |                  | Substituted<br>Level<br>(dBm) | Cable<br>Loss<br>(dB) | Antenna<br>Gain<br>(dBi/dBd) |                            | Limit<br>(dBm) | Margin<br>(dB) |
| Low Channel 136.0125MHz    |                               |                  |                               |                       |                              |                            |                |                |
| 272.025                    | 25.18                         | H                | -54.8                         | 0.90                  | 0.0                          | -55.70                     | -20            | 35.70          |
| 272.025                    | 28.59                         | V                | -48.2                         | 0.90                  | 0.0                          | -49.10                     | -20            | 29.10          |
| 1008.10                    | 29.75                         | H                | -43.1                         | 0.70                  | 6.20                         | -37.60                     | -20            | 17.60          |
| 1008.10                    | 29.31                         | V                | -45.1                         | 0.70                  | 6.20                         | -39.60                     | -20            | 19.60          |
| 1134.11                    | 30.12                         | H                | -42.8                         | 0.70                  | 6.50                         | -37.00                     | -20            | 17.00          |
| 1134.11                    | 29.46                         | V                | -44.8                         | 0.70                  | 6.50                         | -39.00                     | -20            | 19.00          |
| 1260.13                    | 29.85                         | H                | -43.2                         | 0.80                  | 7.30                         | -36.70                     | -20            | 16.70          |
| 1260.13                    | 29.43                         | V                | -44.5                         | 0.80                  | 7.30                         | -38.00                     | -20            | 18.00          |
| Middle Channel 155.0125MHz |                               |                  |                               |                       |                              |                            |                |                |
| 310.025                    | 25.02                         | H                | -52.0                         | 0.94                  | 0.0                          | -52.94                     | -20            | 32.94          |
| 310.025                    | 28.26                         | V                | -45.9                         | 0.94                  | 0.0                          | -46.84                     | -20            | 26.84          |
| 1085.09                    | 29.85                         | H                | -43.0                         | 0.70                  | 6.50                         | -37.20                     | -20            | 17.20          |
| 1085.09                    | 29.31                         | V                | -44.9                         | 0.70                  | 6.50                         | -39.10                     | -20            | 19.10          |
| 1240.10                    | 30.13                         | H                | -42.8                         | 0.80                  | 6.90                         | -36.70                     | -20            | 16.70          |
| 1240.10                    | 29.32                         | V                | -39.8                         | 0.80                  | 6.90                         | -33.70                     | -20            | 13.70          |
| 1395.11                    | 29.05                         | H                | -44.1                         | 0.80                  | 7.90                         | -37.00                     | -20            | 17.00          |
| 1395.11                    | 29.46                         | V                | -44.4                         | 0.80                  | 7.90                         | -37.30                     | -20            | 17.30          |
| 1550.13                    | 29.82                         | H                | -43.3                         | 0.90                  | 8.60                         | -35.60                     | -20            | 15.60          |
| 1550.13                    | 29.37                         | V                | -44.3                         | 0.90                  | 8.60                         | -36.60                     | -20            | 16.60          |
| High Channel 173.9875MHz   |                               |                  |                               |                       |                              |                            |                |                |
| 347.975                    | 24.66                         | H                | -51.2                         | 0.98                  | 0.0                          | -52.18                     | -20            | 32.18          |
| 347.975                    | 27.94                         | V                | -44.9                         | 0.98                  | 0.0                          | -45.88                     | -20            | 25.88          |
| 1043.93                    | 29.37                         | H                | -43.4                         | 0.70                  | 6.20                         | -37.90                     | -20            | 17.90          |
| 1043.93                    | 29.83                         | V                | -44.5                         | 0.70                  | 6.20                         | -39.00                     | -20            | 19.00          |
| 1217.91                    | 30.24                         | H                | -42.7                         | 0.80                  | 6.90                         | -36.60                     | -20            | 16.60          |
| 1217.91                    | 29.12                         | V                | -40.0                         | 0.80                  | 6.90                         | -33.90                     | -20            | 13.90          |
| 1391.90                    | 29.67                         | H                | -43.5                         | 0.80                  | 7.90                         | -36.40                     | -20            | 16.40          |
| 1391.90                    | 29.41                         | V                | -44.4                         | 0.80                  | 7.90                         | -37.30                     | -20            | 17.30          |
| 1565.89                    | 29.58                         | H                | -43.6                         | 0.90                  | 8.60                         | -35.90                     | -20            | 15.90          |
| 1565.89                    | 29.83                         | V                | -43.8                         | 0.90                  | 8.60                         | -36.10                     | -20            | 16.10          |
| 1739.88                    | 29.34                         | H                | -43.7                         | 0.90                  | 8.60                         | -36.00                     | -20            | 16.00          |
| 1739.88                    | 29.15                         | V                | -44.5                         | 0.90                  | 8.60                         | -36.80                     | -20            | 16.80          |

For Model AXP505 VHF

FM

| Frequency<br>(MHz)         | Receiver<br>Reading<br>(dBμV) | Polar<br>(H / V) | Substituted                   |                       |                              | Absolute<br>Level<br>(dBm) | FCC Part 90    |                |
|----------------------------|-------------------------------|------------------|-------------------------------|-----------------------|------------------------------|----------------------------|----------------|----------------|
|                            |                               |                  | Substituted<br>Level<br>(dBm) | Cable<br>Loss<br>(dB) | Antenna<br>Gain<br>(dBi/dBd) |                            | Limit<br>(dBm) | Margin<br>(dB) |
| Low Channel 136.0125MHz    |                               |                  |                               |                       |                              |                            |                |                |
| 272.025                    | 24.11                         | H                | -55.9                         | 0.90                  | 0.0                          | -56.80                     | -20            | 36.80          |
| 272.025                    | 28.06                         | V                | -48.8                         | 0.90                  | 0.0                          | -49.70                     | -20            | 29.70          |
| 1088.10                    | 30.13                         | H                | -42.7                         | 0.70                  | 6.50                         | -36.90                     | -20            | 16.90          |
| 1088.10                    | 29.48                         | V                | -44.8                         | 0.70                  | 6.50                         | -39.00                     | -20            | 19.00          |
| 1224.11                    | 29.13                         | H                | -43.8                         | 0.80                  | 6.90                         | -37.70                     | -20            | 17.70          |
| 1224.11                    | 29.34                         | V                | -39.8                         | 0.80                  | 6.90                         | -33.70                     | -20            | 13.70          |
| 1360.13                    | 29.86                         | H                | -43.3                         | 0.80                  | 7.90                         | -36.20                     | -20            | 16.20          |
| 1360.13                    | 29.80                         | V                | -44.0                         | 0.80                  | 7.90                         | -36.90                     | -20            | 16.90          |
| Middle Channel 155.0125MHz |                               |                  |                               |                       |                              |                            |                |                |
| 310.025                    | 23.99                         | H                | -53.0                         | 0.94                  | 0.0                          | -53.94                     | -20            | 33.94          |
| 310.025                    | 27.86                         | V                | -46.3                         | 0.94                  | 0.0                          | -47.24                     | -20            | 27.24          |
| 1085.09                    | 29.73                         | H                | -43.2                         | 0.70                  | 6.50                         | -37.40                     | -20            | 17.40          |
| 1085.09                    | 29.06                         | V                | -45.2                         | 0.70                  | 6.50                         | -39.40                     | -20            | 19.40          |
| 1240.10                    | 29.38                         | H                | -43.6                         | 0.80                  | 6.90                         | -37.50                     | -20            | 17.50          |
| 1240.10                    | 29.15                         | V                | -39.9                         | 0.80                  | 6.90                         | -33.80                     | -20            | 13.80          |
| 1395.11                    | 29.54                         | H                | -43.6                         | 0.80                  | 7.90                         | -36.50                     | -20            | 16.50          |
| 1395.11                    | 29.31                         | V                | -44.5                         | 0.80                  | 7.90                         | -37.40                     | -20            | 17.40          |
| 1550.13                    | 29.07                         | H                | -44.1                         | 0.90                  | 8.60                         | -36.40                     | -20            | 16.40          |
| 1550.13                    | 28.89                         | V                | -44.8                         | 0.90                  | 8.60                         | -37.10                     | -20            | 17.10          |
| High Channel 173.9875MHz   |                               |                  |                               |                       |                              |                            |                |                |
| 347.975                    | 23.36                         | H                | -52.5                         | 0.98                  | 0.0                          | -53.48                     | -20            | 33.48          |
| 347.975                    | 27.17                         | V                | -45.6                         | 0.98                  | 0.0                          | -46.58                     | -20            | 26.58          |
| 1043.93                    | 29.47                         | H                | -43.3                         | 0.70                  | 6.20                         | -37.80                     | -20            | 17.80          |
| 1043.93                    | 29.72                         | V                | -44.7                         | 0.70                  | 6.20                         | -39.20                     | -20            | 19.20          |
| 1217.91                    | 29.15                         | H                | -43.8                         | 0.80                  | 6.90                         | -37.70                     | -20            | 17.70          |
| 1217.91                    | 29.34                         | V                | -39.8                         | 0.80                  | 6.90                         | -33.70                     | -20            | 13.70          |
| 1391.90                    | 29.46                         | H                | -43.7                         | 0.80                  | 7.90                         | -36.60                     | -20            | 16.60          |
| 1391.90                    | 29.61                         | V                | -44.2                         | 0.80                  | 7.90                         | -37.10                     | -20            | 17.10          |
| 1565.89                    | 29.72                         | H                | -43.4                         | 0.90                  | 8.60                         | -35.70                     | -20            | 15.70          |
| 1565.89                    | 29.12                         | V                | -44.6                         | 0.90                  | 8.60                         | -36.90                     | -20            | 16.90          |
| 1739.88                    | 29.34                         | H                | -43.7                         | 0.90                  | 8.60                         | -36.00                     | -20            | 16.00          |
| 1739.88                    | 29.76                         | V                | -43.9                         | 0.90                  | 8.60                         | -36.20                     | -20            | 16.20          |

## 4FSK

| Frequency<br>(MHz)         | Receiver<br>Reading<br>(dBμV) | Polar<br>(H / V) | Substituted                   |                       |                              | Absolute<br>Level<br>(dBm) | FCC Part 90    |                |
|----------------------------|-------------------------------|------------------|-------------------------------|-----------------------|------------------------------|----------------------------|----------------|----------------|
|                            |                               |                  | Substituted<br>Level<br>(dBm) | Cable<br>Loss<br>(dB) | Antenna<br>Gain<br>(dBi/dBd) |                            | Limit<br>(dBm) | Margin<br>(dB) |
| Low Channel 136.0125MHz    |                               |                  |                               |                       |                              |                            |                |                |
| 272.025                    | 24.21                         | H                | -55.8                         | 0.90                  | 0.0                          | -56.70                     | -20            | 36.70          |
| 272.025                    | 27.94                         | V                | -48.9                         | 0.90                  | 0.0                          | -49.80                     | -20            | 29.80          |
| 1088.10                    | 29.95                         | H                | -42.9                         | 0.70                  | 6.50                         | -37.10                     | -20            | 17.10          |
| 1088.10                    | 29.89                         | V                | -44.3                         | 0.70                  | 6.50                         | -38.50                     | -20            | 18.50          |
| 1224.11                    | 30.42                         | H                | -42.5                         | 0.80                  | 6.90                         | -36.40                     | -20            | 16.40          |
| 1224.11                    | 29.17                         | V                | -39.9                         | 0.80                  | 6.90                         | -33.80                     | -20            | 13.80          |
| 1360.13                    | 29.74                         | H                | -43.4                         | 0.80                  | 7.90                         | -36.30                     | -20            | 16.30          |
| 1360.13                    | 29.53                         | V                | -44.3                         | 0.80                  | 7.90                         | -37.20                     | -20            | 17.20          |
| Middle Channel 155.0125MHz |                               |                  |                               |                       |                              |                            |                |                |
| 310.025                    | 23.73                         | H                | -53.3                         | 0.94                  | 0.0                          | -54.24                     | -20            | 34.24          |
| 310.025                    | 27.54                         | V                | -46.7                         | 0.94                  | 0.0                          | -47.64                     | -20            | 27.64          |
| 1085.09                    | 30.01                         | H                | -42.9                         | 0.70                  | 6.50                         | -37.10                     | -20            | 17.10          |
| 1085.09                    | 29.87                         | V                | -44.4                         | 0.70                  | 6.50                         | -38.60                     | -20            | 18.60          |
| 1240.10                    | 30.34                         | H                | -42.6                         | 0.80                  | 6.90                         | -36.50                     | -20            | 16.50          |
| 1240.10                    | 29.09                         | V                | -40.0                         | 0.80                  | 6.90                         | -33.90                     | -20            | 13.90          |
| 1395.11                    | 29.62                         | H                | -43.5                         | 0.80                  | 7.90                         | -36.40                     | -20            | 16.40          |
| 1395.11                    | 29.73                         | V                | -44.1                         | 0.80                  | 7.90                         | -37.00                     | -20            | 17.00          |
| 1550.13                    | 29.42                         | H                | -43.7                         | 0.90                  | 8.60                         | -36.00                     | -20            | 16.00          |
| 1550.13                    | 29.08                         | V                | -44.6                         | 0.90                  | 8.60                         | -36.90                     | -20            | 16.90          |
| High Channel 173.9875MHz   |                               |                  |                               |                       |                              |                            |                |                |
| 347.975                    | 23.52                         | H                | -52.4                         | 0.98                  | 0.0                          | -53.38                     | -20            | 33.38          |
| 347.975                    | 27.33                         | V                | -45.5                         | 0.98                  | 0.0                          | -46.48                     | -20            | 26.48          |
| 1043.93                    | 29.87                         | H                | -42.9                         | 0.70                  | 6.20                         | -37.40                     | -20            | 17.40          |
| 1043.93                    | 29.91                         | V                | -44.5                         | 0.70                  | 6.20                         | -39.00                     | -20            | 19.00          |
| 1217.91                    | 30.53                         | H                | -42.4                         | 0.80                  | 6.90                         | -36.30                     | -20            | 16.30          |
| 1217.91                    | 29.35                         | V                | -39.7                         | 0.80                  | 6.90                         | -33.60                     | -20            | 13.60          |
| 1391.90                    | 29.85                         | H                | -43.3                         | 0.80                  | 7.90                         | -36.20                     | -20            | 16.20          |
| 1391.90                    | 29.34                         | V                | -44.5                         | 0.80                  | 7.90                         | -37.40                     | -20            | 17.40          |
| 1565.89                    | 29.37                         | H                | -43.8                         | 0.90                  | 8.60                         | -36.10                     | -20            | 16.10          |
| 1565.89                    | 29.06                         | V                | -44.6                         | 0.90                  | 8.60                         | -36.90                     | -20            | 16.90          |
| 1739.88                    | 29.37                         | H                | -43.7                         | 0.90                  | 8.60                         | -36.00                     | -20            | 16.00          |
| 1739.88                    | 29.64                         | V                | -44.0                         | 0.90                  | 8.60                         | -36.30                     | -20            | 16.30          |

**Note:**

Absolute Level = Reading Level + Substituted Factor

Substituted Factor contains: SG Level - Cable loss+ Antenna Gain

Margin = Limit - Absolute Level

## FCC §2.1055 & §90.213 - FREQUENCY STABILITY

### Applicable Standard

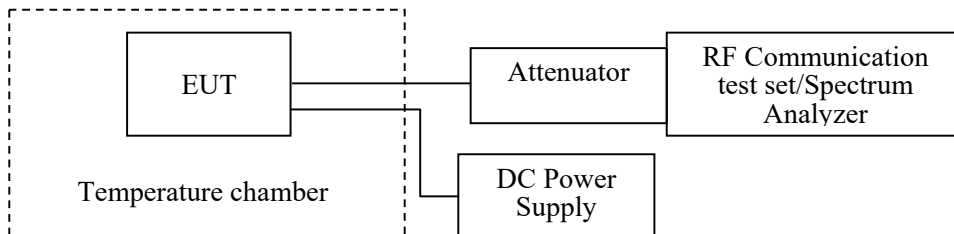
FCC §2.1055 and §90.213

### Test Procedure

According to ANSI C63.26-2015 section 5.6

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The power cable and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the counter.



### Test Data

#### Environmental Conditions

|                    |         |
|--------------------|---------|
| Temperature:       | 26.3 °C |
| Relative Humidity: | 49 %    |
| ATM Pressure:      | 101 kPa |

*The testing was performed by Bruce Lin from 2024-02-22 to 2024-03-06.*

*Test Mode: Transmitting, worst case for high power level.*

**Test Result:** *Pass. Please refer to the following tables.*

Test without modulation:

| Test Frequency<br>(MHz) | Temperature<br>(°C) | Voltage<br>(V <sub>DC</sub> ) | Measured<br>Frequency<br>(MHz) | Frequency<br>Error<br>(ppm) | Limit<br>(ppm) |
|-------------------------|---------------------|-------------------------------|--------------------------------|-----------------------------|----------------|
| 155.0125                | -30                 | 7.4                           | 155.0125041                    | 0.03                        | ≤5             |
|                         | -20                 |                               | 155.0125834                    | 0.54                        | ≤5             |
|                         | -10                 |                               | 155.0125066                    | 0.04                        | ≤5             |
|                         | 0                   |                               | 155.0125861                    | 0.56                        | ≤5             |
|                         | 10                  |                               | 155.0125256                    | 0.17                        | ≤5             |
|                         | 20                  |                               | 155.0125387                    | 0.25                        | ≤5             |
|                         | 30                  |                               | 155.0125625                    | 0.40                        | ≤5             |
|                         | 40                  |                               | 155.0125673                    | 0.43                        | ≤5             |
|                         | 50                  |                               | 155.0125245                    | 0.16                        | ≤5             |
|                         | 20                  | 6.5                           | 155.0125619                    | 0.40                        | ≤5             |
|                         | 20                  | 8.4                           | 155.0125469                    | 0.30                        | ≤5             |

## FCC §90.214 - TRANSIENT FREQUENCY BEHAVIOR

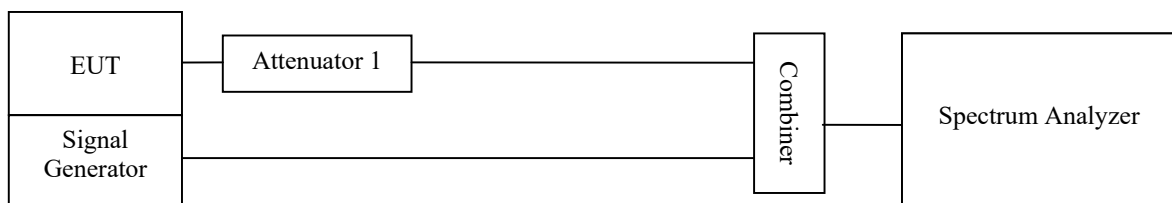
### Applicable Standard

Regulations: FCC §90.214

Test method: ANSI C63.26-2015 clause 6.5.2.2

### Test Procedure

- Connect the EUT and test equipment as shown on the following block diagram.
- Verify RF attenuator power rating for EUT providing adequate protection to the combining network and measurement equipment. Instrumentation linearity shall be confirmed per item j) of 4.2.3..
- Tune spectrum analyzer center frequency to EUT frequency and span to at least 100 kHz. Set amplitude according to EUT RF power
- Switch transmitter on and adjust settings in accordance with step c); switch transmitter to the off position.
- Set analyzer to FM mode; re-tune analyzer to EUT frequency and span according to step c), while in FM demodulation mode.
- An RF test signal of the same frequency as the EUT from the signal generator shall be modulated by a frequency of 1 kHz with a deviation equal to plus or minus the value of the channel spacing (separation). The RF signal strength shall be adjusted allowing the analyzer to demodulate the signal in FM mode.
- Adjust analyzer x axis to capture at least 100 ms of demodulated signal.
- Adjust analyzer y axis for the correct deviation amplitude.
- The analyzer display should show a continuous 1 kHz signal and the channel spacing deviation amplitude.
- Change analyzer settings to single sweep and external trigger. For newer analyzers, the channel bandwidth might have to be adjusted for the correct sample rate and sweep speed.
- Turn on EUT and adjust analyzer to display desired signal by adjusting trigger settings and considerations in step j). Turn off EUT.
- Repeat step k) until optimum set-up is achieved.





Test Data

Environmental Conditions

|                    |         |
|--------------------|---------|
| Temperature:       | 22.1 °C |
| Relative Humidity: | 49 %    |
| ATM Pressure:      | 101 kPa |

The testing was performed by Bruce Lin on 2024-03-21.

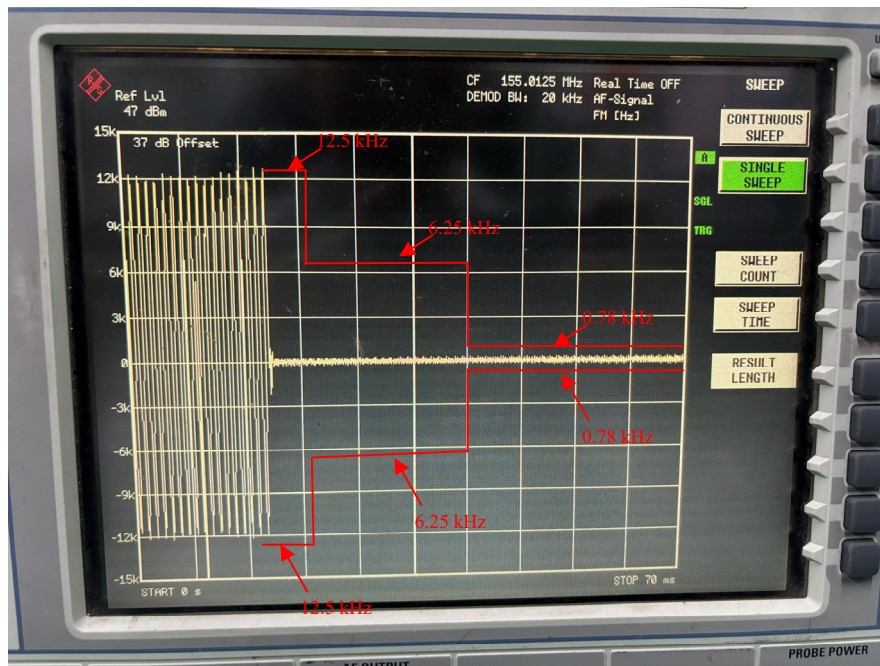
Test Result: Pass. Please refer to the following tables and plots.

| Test Frequency<br>(MHz) | Channel Separation<br>(kHz) | Transient Period<br>(ms) | Transient Frequency | Result |
|-------------------------|-----------------------------|--------------------------|---------------------|--------|
| 155.0125                | 12.5                        | 5 (t1)                   | <+/-12.5 kHz        | Pass   |
|                         |                             | 20(t2)                   | <+/-6.25 kHz        |        |
|                         |                             | 5 (t3)                   | <+/-12.5 kHz        |        |

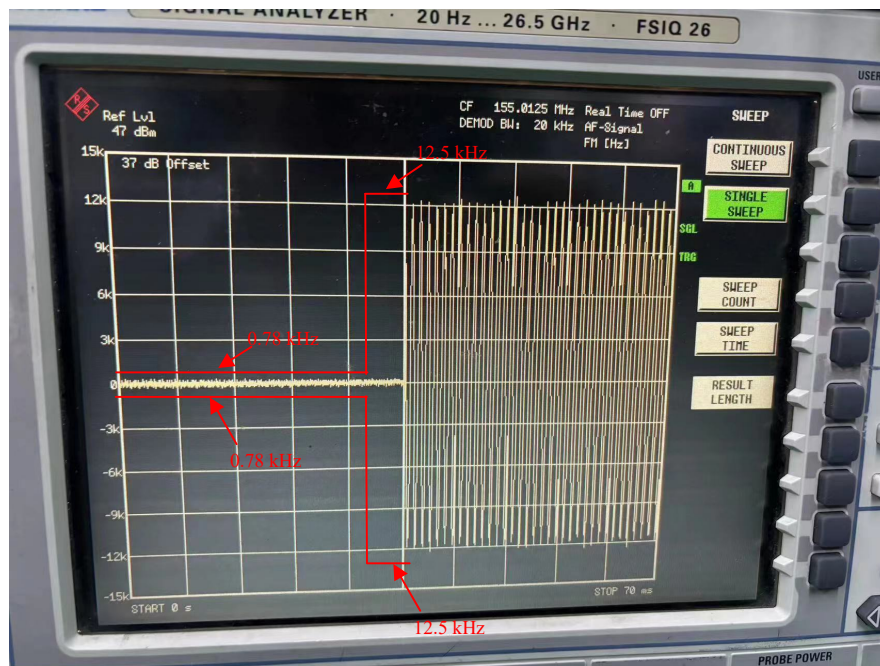
Note: During the time from the end of t<sub>2</sub> to the beginning of t<sub>3</sub>, the frequency difference not exceed the limits specified in §90.213

For 155.0125MHz 12.5kHz mode, the limit is 155.0125MHz\*+/-5ppm=+/-0.78kHz

### Turn on



### Turn off



## **EUT PHOTOGRAPHS**

Please refer to the attachment SZ1240117-04046E-RF External photo and SZ1240117-04046E-RF Internal photo.

## **TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment SZ1240117-04046E-RF Test Setup photo.

**\*\*\*\*\* END OF REPORT \*\*\*\*\***