



TEST REPORT

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Report Number: 2604P04335E-RF
FCC ID: 2A3OORA88

Test Standard (s)

FCC Part 95 Subpart E

Sample Description

Product Name: Two Way Radio
Model No.: EZTalk 2S, RA88
Trade Mark: RETEVIS
Received Date: 2026-01-14
Report Date: 2026-06-24

Test Result:	The EUT complied with the standards above.
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Prepared and Checked By:

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EMC Engineer

Approved By:

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EMC Engineer

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
Rev.00	2604P04335E-RF	Original Report	2026-06-24

GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

Product Name	Two Way Radio
Tested Model	EZTalk 2S
Multiple Model	RA88
Model Difference [#]	The differences between the two models above are: model name and sales channels. Please refer to DOS letter for details. The applicant provided model "EZTalk 2S" for testing.
Voltage Range [#]	DC 7.4V from battery
Manufacture	Shenzhen Retevis Technology Co., Ltd Address: 7/F,13-C, Zhonghaixin Science&Technology Park, No.12 Ganli 6th Road, Jihua Street, Longgang District, Shenzhen, China

Frequency Range	462MHz Main channels: 462.5500-462.7250MHz 462MHz Interstitial channels: 462.5625-462.7125MHz 467MHz Main channels: 467.5500-467.7250MHz 467MHz Interstitial channels: 467.5625-467.7125MHz
Maximum Conducted Output Power	462MHz Main channels: 32.72dBm 467MHz Main channels: 32.60dBm
Maximum ERP	462MHz Interstitial channels: 32.22dBm 467MHz Interstitial channels: 25.14dBm
Modulation Technique	FM
Channel Separation	12.5kHz/25kHz
Antenna Specification [#]	Integral Antenna, Gain: 1.76dBi (It is provided by the applicant.)
Sample Serial Number	For RF Radiated Test: 3G4E-1 For RF Conducted Test: 3G4E-2 (Assigned by ATC, Shenzhen)
Sample/EUT Status	Good condition

Objective

This report is in accordance with Part 2 and Part 95, Subpart A & Subpart E of the Federal Communication Commissions rules.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with Part 95 Subpart A, Subpart E of the Federal Communication Commissions rules with ANSI C63.26-2015: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services.

Unless otherwise stated there are no any additions to, deviations, or exclusions from the method.

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Accredited by American Association for Laboratory Accreditation (A2LA).The Certificate Number is 4297.01.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		5 %
RF Frequency		0.064×10^{-7}
RF output power, conducted		0.3 dB
Unwanted Emission, conducted		1.2 dB
Audio Frequency Response		0.1 dB
Modulation Limiting		1.5 %
Emissions, Radiated	30MHz - 1GHz	4.3 dB
	1GHz - 18GHz	4.9 dB
Temperature		1 °C
Humidity		2 %
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.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user).

Description of Channel List

462MHz main channels

Channel No.	Channel Frequency (MHz)	Channel No.	Channel Frequency (MHz)
1	462.5500	2	462.5750
3	462.6000	4	462.6250
5	462.6500	6	462.6750
7	462.7000	8	462.7250

462MHz interstitial channels

Channel No.	Channel Frequency (MHz)	Channel No.	Channel Frequency (MHz)
1	462.5625	2	462.5875
3	462.6125	4	462.6375
5	462.6625	6	462.6875
7	462.7125	/	/

467MHz main channels

Channel No.	Channel Frequency (MHz)	Channel No.	Channel Frequency (MHz)
1	467.5500	2	467.5750
3	467.6000	4	467.6250
5	467.6500	6	467.6750
7	467.7000	8	467.7250

Note: The EUT transmit on these 467MHz main channels only when communicating through a repeater station or making brief test transmissions in accordance with § 95.319(c), and which testing is compliant to this report and will do not cause interference to the communications of other stations.

467MHz interstitial channels

Channel No.	Channel Frequency (MHz)	Channel No.	Channel Frequency (MHz)
1	467.5625	2	467.5875
3	467.6125	4	467.6375
5	467.6625	6	467.6875
7	467.7125	/	/

Note 1: 462MHz main channels/ 462MHz interstitial channels/467MHz main channels: Channel Separation: 12.5kHz & 25 kHz

Note 2: 467MHz interstitial channels: Channel Separation: 12.5kHz

Note 3: The applicant claims to have two power ratings: 2W (high power) and 0.5W (low power). At the frequency 467.6375MHz(Channel Separation: 12.5kHz), only the low power is available.

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

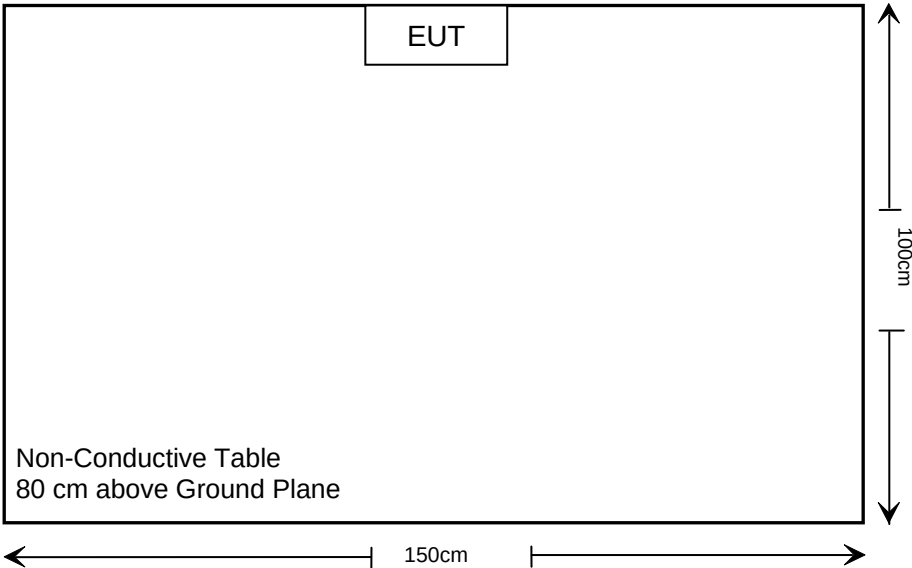
Manufacturer	Description	Model	Serial Number
/	/	/	/

External I/O Cable

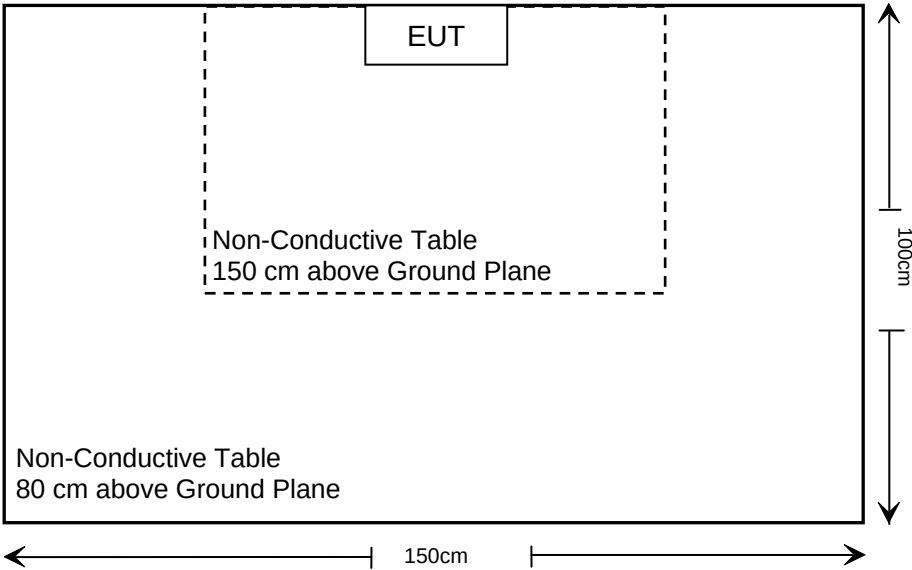
Cable Description	Length (m)	From Port	To
/	/	/	/

Block Diagram of Test Setup

Below 1GHz



Above 1GHz



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test		Results
§2.1093	RF Exposure(SAR)		Compliance
§2.1055(d), §95.1765	GMRS Frequency Accuracy		Compliance
§2.1046, §95.1767	GMRS RF Output Power		Compliance
§95.1771	GMRS Emission Types		Compliance
§2.1049, §95.1773, §95.1779	Authorized Bandwidth & Emission Mask		Compliance
§2.1047, §95.1775	Modulation Characteristic	Modulation limiting	Compliance
		Audio frequency response	Compliance
		Audio frequency filter	Compliance
§2.1051, §95.1779	Spurious Emission at Antenna Terminal		Compliance
§2.1053, §95.1779	Spurious Radiated Emissions		Compliance
§95.1787	GMRS additional requirements		Not Applicable

Not Applicable: The product has not digital data transmissions function.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Spurious Emission Test (Below 1GHz)					
Rohde & Schwarz	Test Receiver	ESR	102725	2026/05/07	2027/05/06
SONOMA INSTRUMENT	Amplifier	310N	186131	2026/01/20	2027/01/19
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2024/08/08	2027/08/07
Unknown	RF Coaxial Cable	No.12	N040	2026/05/07	2027/05/06
Unknown	RF Coaxial Cable	No.13	N300	2026/05/07	2027/05/06
Unknown	RF Coaxial Cable	No.14	N800	2026/05/07	2027/05/06
Schwarzbeck	Bilog Antenna	VULB9163	9163-194	2026/01/23	2029/01/22
Unknown	RF Coaxial Cable	No.40	/	2026/05/07	2027/05/06
Agilent	Signal Generator	N5183A	MY47420360	2026/05/07	2027/05/06
HEWLETT PACKARD	20dB Attenuator	8491A	53857	2025/09/18	2026/09/17
Test Software: Test Software:e3 191218 (V9)					
Radiated Spurious Emission Test (Above 1GHz)					
Rohde & Schwarz	Spectrum Analyzer	FSV40	101949	2026/05/07	2027/05/06
Decentest	Filter Switch Unit	DT7220FSU	DQ77927	2026/05/07	2027/05/06
Decentest	Multiplex Switch Test Control Set	DT7220CSU	DQ77924	2026/05/07	2027/05/06
A.H. Systems, inc.	Preamplifier	PAM-0118	226	2026/01/20	2027/01/19
Schwarzbeck	Horn Antenna	BBHA9120D	837	2026/01/29	2029/01/30
Unknown	RF Coaxial Cable	No.10	N050	2026/05/07	2027/05/06
Unknown	RF Coaxial Cable	No.11	N1000	2026/05/07	2027/05/06
Unknown	RF Coaxial Cable	No.19	N500	2026/05/07	2027/05/06
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-655	2023/11/27	2026/11/26
Agilent	Signal Generator	N5183A	MY47420360	2026/05/07	2027/05/06
Unknown	RF Coaxial Cable	No.40	/	2026/05/07	2027/05/06
Test Software: Test Software:e3 191218 (V9)					
RF Conducted Test					
Unknown	RF Coaxial Cable	No.31	RF-01	2026/05/07	2027/05/06
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101590	2026/05/07	2027/05/06
HP Agilent	RF Communication test set	8920A	3325U00859	2026/01/20	2027/01/19
Aeroflex/Weinschel	30dB Attenuator (Input 250W/ Output 50W)	58-30-33	PS467	2026/01/20	2027/01/19
BACL	Temp. & Humid. Chamber	BTH-150-40	30192	2026/05/07	2027/05/06
UNI-T	DC Power Supply	UTP8305M	/	2026/01/20	2027/01/19

*** Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

RF EXPOSURE

Applicable Standard

According to FCC §1.1307(b) and §2.1093, portable device operates Part 95 should be subjected to routine environmental evaluation for RF exposure prior or equipment authorization or use.

Result: Compliance.

Please refer to SAR Report Number: 2501S30338E-SA.

FREQUENCY ACCURACY

Applicable Standard

According to FCC §2.1055(a)(1),

The frequency stability shall be measured with variation of ambient temperature from -30 °C to +50 °C, and according to FCC 2.1055(d) (2), the frequency stability shall be measured with reducing primary supply voltage to the battery operating end point which is specified by the manufacturer.

According to FCC §95.1765,

Each GMRS transmitter type must be designed to comply with the frequency accuracy requirements in this section under normal operating conditions. Operators of GMRS stations must also ensure compliance with these requirements.

(a) The carrier frequency of each GMRS transmitter transmitting an emission with an occupied bandwidth greater than 12.5 kHz must remain within 5 parts-per-million (ppm) of the channel center frequencies listed in § 95.1763 under normal operating conditions.

(b) The carrier frequency of each GMRS transmitter transmitting an emission with an occupied bandwidth of 12.5 kHz or less must remain within 2.5 ppm of the channel center frequencies listed in § 95.1763 under normal operating conditions.

Test Procedure

According to C63.26-2015, Clause 5.6,

Frequency stability is a measure of the frequency drift due to temperature and supply voltage variations, with reference to the frequency measured at +20°C and rated supply voltage. The operating carrier frequency shall be set up in accordance with the manufacturer's published operation and instruction manual prior to the commencement of these tests. No adjustment of any frequency determining circuit element shall be made subsequent to this initial set-up. Frequency stability is tested:

- a) At 10°C intervals of temperatures between -30°C and +50°C at the manufacturer's rated supply voltage, and
- b) At +20°C temperature and ±15% supply voltage variations. If a product is specified to operate over a range of input voltage then the -15% variation is applied to the lowermost voltage and the +15% is applied to the uppermost voltage. During the test all necessary settings, adjustments and control of the EUT have to be performed without disturbing the test environment, i.e., without opening the environmental chamber. The frequency stabilities can be maintained to a lesser temperature range provided that the transmitter is automatically inhibited from operating outside the lesser temperature range. For handheld equipment that is only capable of operating from internal batteries and the supply voltage cannot be varied, the frequency stability tests shall be performed at the nominal battery voltage and the battery end point voltage specified by the manufacturer. An external supply voltage can be used and set at the internal battery nominal voltage, and again at the battery operating end point voltage which shall be specified by the equipment manufacturer.

If an unmodulated carrier is not available, the mean frequency of a modulated carrier can be obtained by using a frequency counter with gating time set to an appropriately large multiple of bit periods (gating time depending on the required accuracy). Full details on the choice of values shall be included in the test report.

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to a Frequency Counter via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads 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 Frequency Counter.

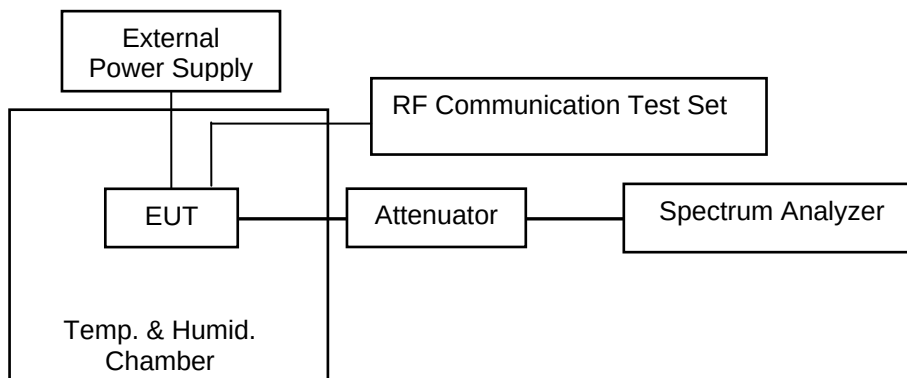
Frequency Stability vs. Voltage (item 1or item 2 will be chosen according to different condition):

☐1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

☒2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.

The output frequency was recorded for each voltage.

Setup Block Diagram



Test Data

Test Result: Please refer to the Appendix.

RF OUTPUT POWER

Applicable Standard

According to FCC §2.1046, and §95.1767,

This section contains transmitting power limits for GMRS stations. The maximum transmitting power depends on which channels are being used and the type of station.

(a) 462/467 MHz main channels. The limits in this paragraph apply to stations transmitting on any of the 462 MHz main channels or any of the 467 MHz main channels. Each GMRS transmitter type must be capable of operating within the allowable power range. GMRS licensees are responsible for ensuring that their GMRS stations operate in compliance with these limits.

(1) The transmitter output power of mobile, repeater and base stations must not exceed 50 Watts.

(2) The transmitter output power of fixed stations must not exceed 15 Watts.

(b) 462 MHz interstitial channels. The effective radiated power (ERP) of mobile, hand-held portable and base stations transmitting on the 462 MHz interstitial channels must not exceed 5 Watts.

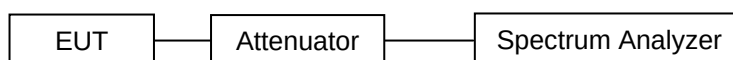
(c) 467 MHz interstitial channels. The effective radiated power (ERP) of hand-held portable units transmitting on the 467 MHz interstitial channels must not exceed 0.5 Watt. Each GMRS transmitter type capable of transmitting on these channels must be designed such that the ERP does not exceed 0.5 Watt.

Test Procedure

According to C63.26-2015, Clause 5.2.3.3,

This procedure can be used to measure the peak power in either a CW-like or noise-like narrowband RF signal. The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW $\geq 3 \times$ RBW.

- a) Set the RBW $\geq$ OBW.
- b) Set VBW $\geq 3 \times$ RBW.
- c) Set span $\geq 2 \times$ OBW.
- d) Sweep time $\geq 10 \times$ (number of points in sweep) $\times$ (transmission symbol period).
- e) Detector = peak.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the peak amplitude level



Test Data

Test Result: Please refer to the Appendix.

EMISSION TYPES

Applicable Standard

According to FCC §95.1771,

Each GMRS transmitter type must be designed to satisfy the emission capability rules in this section. Operation of GMRS stations must also be in compliance with these rules.

(a) Each GMRS transmitter type must have the capability to transmit F3E or G3E emissions.

(b) Only emission types A1D, F1D, G1D, H1D, J1D, R1D, A3E, F3E, G3E, H3E, J3E, R3E, F2D, and G2D are authorized for use in the GMRS. Equipment for which certification is sought under this subpart may have capabilities to transmit other emission types intended for use in other services, provided that these emission types can be deactivated when the equipment is used in the GMRS.

Judgment

Emission type is F3E.

AUTHOURIZED BANDWIDTH AND EMISSION MASK

Applicable Standard

According to FCC §95.1773,

Each GMRS transmitter type must be designed such that the occupied bandwidth does not exceed the authorized bandwidth for the channels used. Operation of GMRS stations must also be in compliance with these requirements.

(a) **Main channels.** The authorized bandwidth is 20 kHz for GMRS transmitters operating on any of the 462 MHz main channels (see § 95.1763(a)) or any of the 467 MHz main channels (see § 95.1763(c)).

(b) **Interstitial channels.** The authorized bandwidth is 20 kHz for GMRS transmitters operating on any of the 462 MHz interstitial channels (see § 95.1763(b)) and is 12.5 kHz for GMRS transmitters operating on any of the 467 MHz interstitial channels (see § 95.1763(d)).

(c) **Digital data transmissions.** Digital data transmissions are limited to the 462 MHz main channels and interstitial channels in the 462 MHz and 467 MHz bands.

According to FCC §95.1779,

Each GMRS transmitter type must be designed to comply with the applicable unwanted emissions limits in this section.

(a) **Emission masks.** Emission masks applicable to transmitting equipment in the GMRS are defined by the requirements in the following table. The numbers in the attenuation requirements column refer to rule paragraph numbers under paragraph (b) of this section.

Emission types filter	Attenuation requirements
A1D, A3E, F1D, G1D, F2D, F3E, G3E with audio filter	(1), (2), (7)
A1D, A3E, F1D, G1D, F3E, G3E without audio filter	(3), (4), (7)
H1D, J1D, R1D, H3E, J3E, R2E	(5), (6), (7)

(1) Filtering noted for GMRS transmitters refers to the requirement in § 95.1775(e).

(2) Unwanted emission power may be measured as either mean power or peak envelope power, provided that the transmitter output power is measured the same way.

(b) **Attenuation requirements.** The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) by at least:

(1) 25 dB (decibels) on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 100% of the authorized bandwidth.

(2) 35 dB on any frequency removed from the center of the authorized bandwidth by more than 100% up to and including 250% of the authorized bandwidth.

(3) $83 \log(f_d \div 5)$ dB on any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5 kHz up to and including 10 kHz.

(4) $116 \log(f_d \div 6.1)$ dB or $50 + 10 \log(P)$ dB, whichever is the lesser attenuation, on any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz), of more than 10 kHz up to and including 250% of the authorized bandwidth.

(5) 25 dB on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 150% of the authorized bandwidth.

(6) 35 dB on any frequency removed from the center of the authorized bandwidth by more than 150% up to and including 250% of the authorized bandwidth.

(7) $43 + 10 \log(P)$ dB on any frequency removed from the center of the authorized bandwidth by more than 250%.

(c) **Measurement bandwidths.** The power of unwanted emissions in the frequency bands specified in paragraphs (b)(1) through (4) of this section is measured with a reference bandwidth of 300 Hz. The power of unwanted emissions in the frequency range specified in paragraph (b)(5) of this section is measured with a reference bandwidth of at least 30 kHz.

(d) **Measurement conditions.** The requirements in this section apply to each GMRS transmitter type both with and without the connection of permitted attachments, such as an external speaker, microphone, power cord and/or antenna.

Test Procedure

According to C63.26-2015, Clause 5.4.4,

The OBW is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

The following procedure shall be used for measuring (99%) power bandwidth:

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.

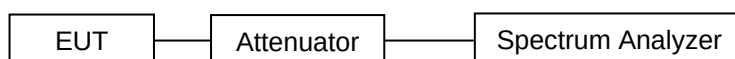
NOTE—Step a), step b), and step c) may require iteration to adjust within the specified tolerances.

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).

C63.26-2015, Clause 5.7.3 Out-of-band unwanted emissions measurements



Test Data

Test Result: Please refer to the Appendix.

MODULATION CHARACTERISTIC

Applicable Standard

According to FCC §2.1047 and §95.1775,

Each GMRS transmitter type must be designed to satisfy the modulation requirements in this section. Operation of GMRS stations must also be in compliance with these requirements.

- (a) **Main channels.** The peak frequency deviation for emissions to be transmitted on the main channels must not exceed ± 5 kHz.
- (b) **462 MHz interstitial channels.** The peak frequency deviation for emissions to be transmitted on the 462 MHz interstitial channels must not exceed ± 5 kHz.
- (c) **467 MHz interstitial channels.** The peak frequency deviation for emissions to be transmitted on the 467 MHz interstitial channels must not exceed ± 2.5 kHz, and the highest audio frequency contributing substantially to modulation must not exceed 3.125 kHz.
- (d) **Overmodulation.** Each GMRS transmitter type, except for a mobile station transmitter type with a transmitter power output of 2.5 W or less, must automatically prevent a higher than normal audio level from causing overmodulation.
- (e) **Audio filter.** Each GMRS transmitter type must include audio frequency low pass filtering, unless it complies with the applicable paragraphs of §95.1779 (without filtering).
 - (1) The filter must be between the modulation limiter and the modulated stage of the transmitter.
 - (2) At any frequency (f in kHz) between 3 and 20 kHz, the filter must have an attenuation of at least $60 \log(f/3)$ dB more than the attenuation at 1 kHz. Above 20 kHz, it must have an attenuation of at least 50 dB more than the attenuation at 1 kHz.

Test Procedure

According to C63.26-2015, Clause 5.3.2 Modulation limiting test methodology

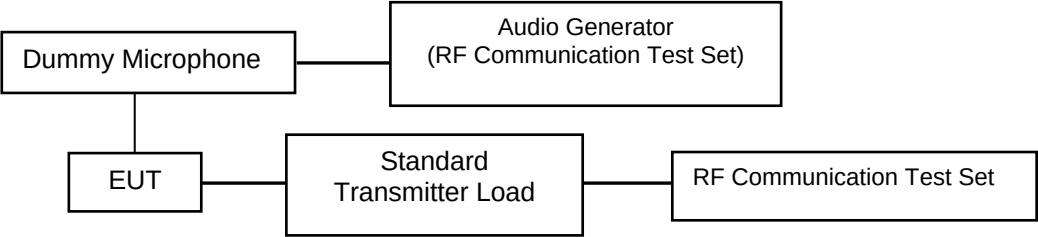
Modulation limiting is the ability of a transmitter circuit to limit the transmitter from producing deviations in excess of a rated system deviation.

- a) Connect the equipment as illustrated in Figure 1.
- b) Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
- c) Set the test receiver to measure peak positive deviation. Set the audio bandwidth for ≤ 0.25 Hz to ≥ 15000 Hz. Turn the de-emphasis function off.
- d) Apply a 1000 Hz modulating signal to the transmitter from the audio frequency generator, and adjust the level to obtain 60% of full rated system deviation. This is the 0 dB reference level.
- e) Increase the level from the audio generator by 20 dB in 5 dB increments recording the deviation as measured from the test receiver in each step. Verify that the audio level used to make the OBW measurement is included in the sweep.
- f) Repeat for step e) at 300Hz, 2500Hz and 3000Hz at a minimum using the 0 dB reference level obtained in step d).
- g) Set the test receiver to measure peak negative deviation and repeat step d) through step f).
- h) The values recorded in step f) and step g) are the modulation limiting.
- i) Plot the data set as a percentage of deviation relative to the 0 dB reference point versus input voltage.

According to C63.26-2015, Clause 5.3.3.2 Audio frequency response test methodology—Constant Input

- a) Connect the equipment as illustrated in Figure 3.
- b) Set the test receiver to measure peak positive deviation. Set the audio bandwidth for ≤ 50 Hz to ≥ 15000 Hz. Turn the de-emphasis function off.
- c) Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
- d) Apply a 1000Hz tone and adjust the audio frequency generator to produce 20% of the rated system deviation.
- e) Set the test receiver to measure rms deviation and record the deviation reading as DEVREF.
- f) Set the audio frequency generator to the desired test frequency between 300Hz and 3000Hz.

Setup Block Diagram



Test Data

Test Result: Please refer to the Appendix.

SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Applicable Standard

According to FCC §95.1779,

Each GMRS transmitter type must be designed to comply with the applicable unwanted emissions limits in this section.

(a) **Emission masks.** Emission masks applicable to transmitting equipment in the GMRS are defined by the requirements in the following table. The numbers in the attenuation requirements column refer to rule paragraph numbers under paragraph (b) of this section.

Emission types filter	Attenuation requirements
A1D, A3E, F1D, G1D, F2D, F3E, G3E with audio filter	(1), (2), (7)
A1D, A3E, F1D, G1D, F3E, G3E without audio filter	(3), (4), (7)
H1D, J1D, R1D, H3E, J3E, R2E	(5), (6), (7)

(1) Filtering noted for GMRS transmitters refers to the requirement in § 95.1775(e).

(2) Unwanted emission power may be measured as either mean power or peak envelope power, provided that the transmitter output power is measured the same way.

(b) **Attenuation requirements.** The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) by at least:

(1) 25 dB (decibels) on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 100% of the authorized bandwidth.

(2) 35 dB on any frequency removed from the center of the authorized bandwidth by more than 100% up to and including 250% of the authorized bandwidth.

(3) $83 \log (f_d \div 5)$ dB on any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5 kHz up to and including 10 kHz.

(4) $116 \log (f_d \div 6.1)$ dB or $50 + 10 \log (P)$ dB, whichever is the lesser attenuation, on any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz), of more than 10 kHz up to and including 250% of the authorized bandwidth.

(5) 25 dB on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 150% of the authorized bandwidth.

(6) 35 dB on any frequency removed from the center of the authorized bandwidth by more than 150% up to and including 250% of the authorized bandwidth.

(7) $43 + 10 \log (P)$ dB on any frequency removed from the center of the authorized bandwidth by more than 250%.

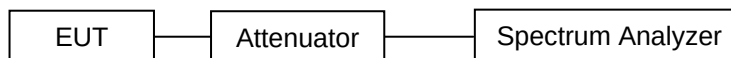
(c) **Measurement bandwidths.** The power of unwanted emissions in the frequency bands specified in paragraphs (b)(1) through (4) of this section is measured with a reference bandwidth of 300 Hz. The power of unwanted emissions in the frequency range specified in paragraph (b)(5) of this section is measured with a reference bandwidth of at least 30 kHz.

(d) **Measurement conditions.** The requirements in this section apply to each GMRS transmitter type both with and without the connection of permitted attachments, such as an external speaker, microphone, power cord and/or antenna.

Test Procedure

According to C63.26-2015, Clause 5.7.4 Spurious unwanted emission measurements

- a) Set the spectrum analyzer start frequency to the lowest frequency generated by the EUT, without going below 9 kHz, and the stop frequency to the lower frequency covered by the measurements previously performed in 5.7.3. As an alternative, the stop frequency can be set to the value specified in 5.1.1, depending on the EUT operating range, if the resulting plot can clearly demonstrate compliance for all frequencies not addressed by the out-of-band emissions measurements performed as per 5.7.3.
- b) When using an average power (rms) detector, ensure that the number of points in the sweep $\geq 2 \times (\text{span} / \text{RBW})$. This may require that the measurement range defined by the start and stop frequencies be subdivided, depending on the spectrum analyzer capabilities. This requirement does not apply to peak-detected power measurements. When average power is specified by the applicable regulation, a peak-detector can be utilized for preliminary measurements to accommodate wider frequency spans. Any emissions found in the preliminary measurement to exceed the applicable limit(s) shall be further examined using a power averaging (rms) detector with the minimum number of measurement points as defined above.
- c) The sweep time should be set to auto-couple for performing peak-detector measurements. For measurements that use a power averaging (rms) detector, the sweep time shall be set as described for out-of-band emissions measurements in item d) of 5.7.3.
- d) Identify and measure the highest spurious emission levels in each frequency range. It is not necessary to re-measure the out-of-band emissions as a part of this test. Record the frequencies and amplitudes corresponding to the measured emissions and capture the data plots.
- e) Repeat step b) through step d) for the upper spurious emission frequency range if not already captured by a wide span measurement performed as per the alternative provided in step a). The upper frequency for this measurement is defined in 5.1.1 as a function of the EUT operating range.
- f) Compare the results with the corresponding limit in the applicable regulation.
- g) The test report shall include the data plots of the measuring instrument display and the measured data.



Test Data

Test Result: Please refer to the Appendix.

RADIATED SPURIOUS EMISSIONS

Applicable Standard

According to FCC §2.1053 and §95.1779,

Each GMRS transmitter type must be designed to comply with the applicable unwanted emissions limits in this section.

(a) **Emission masks.** Emission masks applicable to transmitting equipment in the GMRS are defined by the requirements in the following table. The numbers in the attenuation requirements column refer to rule paragraph numbers under paragraph (b) of this section.

Emission types filter	Attenuation requirements
A1D, A3E, F1D, G1D, F2D, F3E, G3E with audio filter	(1), (2), (7)
A1D, A3E, F1D, G1D, F3E, G3E without audio filter	(3), (4), (7)
H1D, J1D, R1D, H3E, J3E, R2E	(5), (6), (7)

(1) Filtering noted for GMRS transmitters refers to the requirement in § 95.1775(e).

(2) Unwanted emission power may be measured as either mean power or peak envelope power, provided that the transmitter output power is measured the same way.

(b) **Attenuation requirements.** The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) by at least:

(1) 25 dB (decibels) on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 100% of the authorized bandwidth.

(2) 35 dB on any frequency removed from the center of the authorized bandwidth by more than 100% up to and including 250% of the authorized bandwidth.

(3) $83 \log(f_d \div 5)$ dB on any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5 kHz up to and including 10 kHz.

(4) $116 \log(f_d \div 6.1)$ dB or $50 + 10 \log(P)$ dB, whichever is the lesser attenuation, on any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz), of more than 10 kHz up to and including 250% of the authorized bandwidth.

(5) 25 dB on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 150% of the authorized bandwidth.

(6) 35 dB on any frequency removed from the center of the authorized bandwidth by more than 150% up to and including 250% of the authorized bandwidth.

(7) $43 + 10 \log(P)$ dB on any frequency removed from the center of the authorized bandwidth by more than 250%.

(c) **Measurement bandwidths.** The power of unwanted emissions in the frequency bands specified in paragraphs (b)(1) through (4) of this section is measured with a reference bandwidth of 300 Hz. The power of unwanted emissions in the frequency range specified in paragraph (b)(5) of this section is measured with a reference bandwidth of at least 30 kHz.

(d) **Measurement conditions.** The requirements in this section apply to each GMRS transmitter type both with and without the connection of permitted attachments, such as an external speaker, microphone, power cord and/or antenna.

Test Procedure

According to ANSI C63.26-2015 Section 5.5.3:

●Test setup:

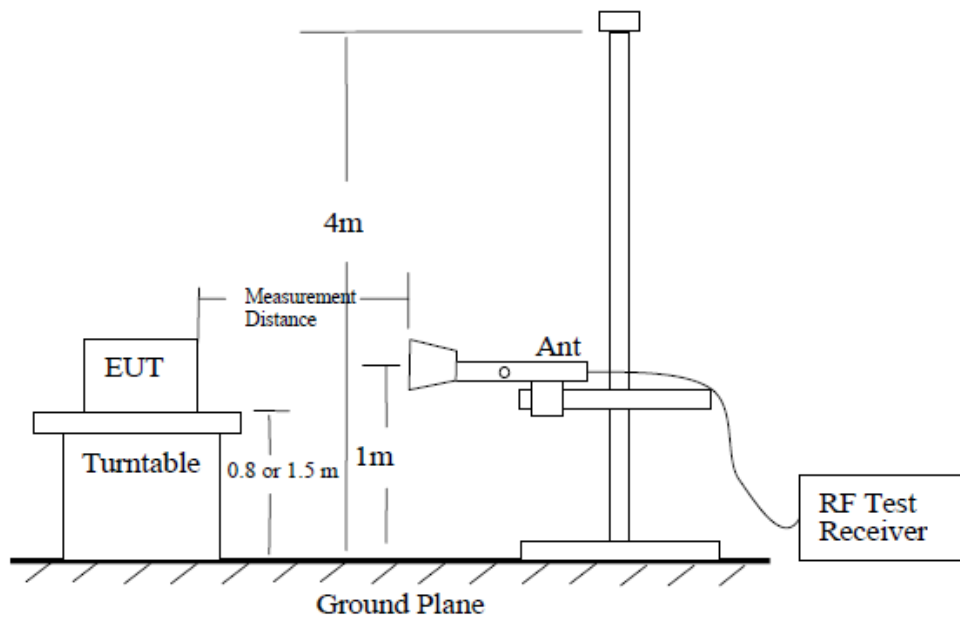


Figure 6 —Test site-up for radiated ERP and/or EIRP measurements

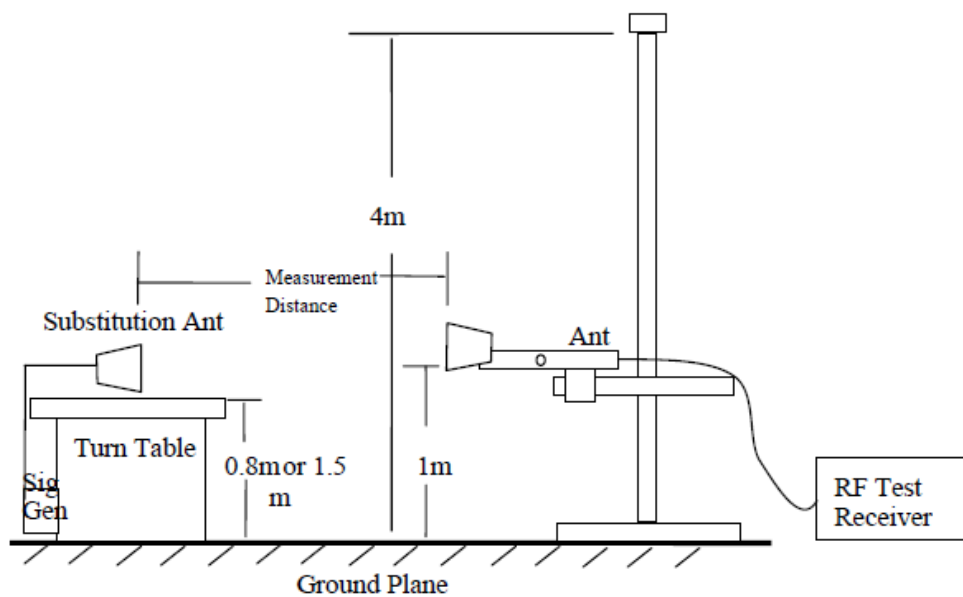


Figure 7 —Substitution method set-up for radiated emission

● Final radiated emissions testing

- a) Place the EUT in the center of the turntable. The EUT shall be configured to transmit into the standard non-radiating load (for measuring radiated spurious emissions), connected with cables of minimal length unless specified otherwise. If the EUT uses an adjustable antenna, the antenna shall be positioned to the length that produces the worst case emission at the fundamental operating frequency.
- b) Each emission under consideration shall be evaluated:
 - 1) Raise and lower the measurement antenna in accordance 5.5.2, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.
 - 2) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.
 - 3) Return the turntable to the azimuth where the highest emission amplitude level was observed.
 - 4) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.
 - 5) Record the measured emission amplitude level and frequency using the appropriate RBW.
- c) Repeat step b) for each emission frequency with the measurement antenna oriented in both the horizontal and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.
- d) Set-up the substitution measurement with the reference point of the substitution antenna located as near as possible to where the center of the EUT radiating element was located during the initial EUT measurement.
- e) Maintain the previous measurement instrument settings and test set-up, with the exception that the EUT is removed and replaced by the substitution antenna.
- f) Connect a signal generator to the substitution antenna; locate the signal generator so as to minimize any potential influences on the measurement results. Set the signal generator to the frequency where emissions are detected, and set an output power level such that the radiated signal can be detected by the measurement instrument, with sufficient dynamic range relative to the noise floor.
- g) For each emission that was detected and measured in the initial test [i.e., in step b) and step c)]:
 - 1) Vary the measurement antenna height between 1 m to 4 m to maximize the received (measured) signal amplitude.
 - 2) Adjust the signal generator output power level until the amplitude detected by the measurement instrument equals the amplitude level of the emission previously measured directly in step b) and step c).
 - 3) Record the output power level of the signal generator when equivalence is achieved in step 2).
- h) Repeat step e) through step g) with the measurement antenna oriented in the opposite polarization.
- i) Calculate the emission power in dBm referenced to a half-wave dipole using the following equation:

$$P_e = P_s(\text{dBm}) - \text{cable loss (dB)} + \text{antenna gain (dBd)}$$
 where
 P_e = equivalent emission power in dBm
 P_s = source (signal generator) power in dBm
 NOTE—dBd refers to the measured antenna gain in decibels relative to a half-wave dipole.
- j) Correct the antenna gain of the substitution antenna if necessary to reference the emission power to a half-wave dipole. When using measurement antennas with the gain specified in dBi, the equivalent dipole-referenced gain can be determined from: $\text{gain (dBd)} = \text{gain (dBi)} - 2.15 \text{ dB}$. If necessary, the antenna gain can be calculated from calibrated antenna factor information
- k) Provide the complete measurement results as a part of the test report.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the receiving 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 tenth harmonic of the fundamental frequency was investigated.

Test Data

Environmental Conditions

Test Item:	RSE Below 1GHz	RSE Above1GHz
Temperature:	24.7 °C	25.4 °C
Relative Humidity:	53 %	55 %
ATM Pressure:	100.3 kPa	100.6 kPa
Test Engineer:	Jayden Luo	Max.Tao & Angel Chen
Test Date:	2026-06-01	2026-05-09
EUT Operation Mode:	Transmitting	Transmitting

Test Result: Compliance, please refer to the below data.

Note: After pre-scan in the X, Y and Z axes of orientation, the worst case as setup photos was recorded.

Test Result: Compliance, please refer to the below data.

For Channel Spacing: 12.5kHz

Frequency (MHz)	Receiver Reading (dBm)	Rx Antenna Polar (H/V)	Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
462.625MHz						
925.25	-46.46	H	8.92	-37.54	-13	-24.54
925.25	-30.3	V	10.26	-20.04	-13	-7.04
1387.875	-42.36	H	-1.25	-43.61	-13	-30.61
1387.875	-41.06	V	-1.61	-42.67	-13	-29.67
1850.5	-22.39	H	-1.02	-23.41	-13	-10.41
1850.5	-20.26	V	-1.22	-21.48	-13	-8.48
2313.125	-41.8	H	1.66	-40.14	-13	-27.14
2313.125	-38.36	V	1.66	-36.7	-13	-23.7
2775.75	-33.56	H	1.51	-32.05	-13	-19.05
2775.75	-34.72	V	1.91	-32.81	-13	-19.81
3238.375	-26.09	H	2.3	-23.79	-13	-10.79
3238.375	-28.19	V	2.44	-25.75	-13	-12.75
3701	-50.46	H	2.85	-47.61	-13	-34.61
3701	-51.86	V	3.34	-48.52	-13	-35.52
4163.625	-46.56	H	3.92	-42.64	-13	-29.64
4163.625	-48.54	V	4.05	-44.49	-13	-31.49
4626.25	-49.18	H	4.75	-44.43	-13	-31.43
4626.25	-50.52	V	4.71	-45.81	-13	-32.81

Frequency (MHz)	Receiver Reading (dBm)	Rx Antenna Polar (H/V)	Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
462.6375MHz						
925.275	-42.07	H	8.92	-33.15	-13	-20.15
925.275	-30.59	V	10.26	-20.33	-13	-7.33
1387.912	-43.22	H	-1.25	-44.47	-13	-31.47
1387.912	-41.67	V	-1.61	-43.28	-13	-30.28
1850.55	-22.38	H	-1.02	-23.4	-13	-10.4
1850.55	-21.2	V	-1.22	-22.42	-13	-9.42
2313.188	-41.62	H	1.66	-39.96	-13	-26.96
2313.188	-38.19	V	1.66	-36.53	-13	-23.53
2775.825	-33.51	H	1.51	-32	-13	-19
2775.825	-35.1	V	1.91	-33.19	-13	-20.19
3238.462	-26.38	H	2.3	-24.08	-13	-11.08
3238.462	-28.81	V	2.44	-26.37	-13	-13.37
3701.1	-51.14	H	2.85	-48.29	-13	-35.29
3701.1	-52.31	V	3.34	-48.97	-13	-35.97
4163.737	-47.18	H	3.93	-43.25	-13	-30.25
4163.737	-49.03	V	4.06	-44.97	-13	-31.97
4626.375	-49.08	H	4.75	-44.33	-13	-31.33
4626.375	-51.34	V	4.71	-46.63	-13	-33.63
467.625MHz						
935.25	-43.04	H	9.31	-33.73	-13	-20.73
935.25	-41.79	V	9.95	-31.84	-13	-18.84
1402.875	-41.97	H	-1.33	-43.3	-13	-30.3
1402.875	-38.85	V	-1.53	-40.38	-13	-27.38
1870.5	-35.16	H	-0.81	-35.97	-13	-22.97
1870.5	-35.31	V	-1.02	-36.33	-13	-23.33
2338.125	-35.49	H	1.8	-33.69	-13	-20.69
2338.125	-33.64	V	1.59	-32.05	-13	-19.05
2805.75	-32.48	H	1.95	-30.53	-13	-17.53
2805.75	-37.87	V	1.89	-35.98	-13	-22.98
3273.375	-23.2	H	2.17	-21.03	-13	-8.03
3273.375	-25.38	V	2.27	-23.11	-13	-10.11
3741	-39.27	H	3.03	-36.24	-13	-23.24
3741	-39.6	V	3.11	-36.49	-13	-23.49
4208.625	-41.13	H	4.36	-36.77	-13	-23.77
4208.625	-44.47	V	4.42	-40.05	-13	-27.05
4676.25	-50.87	H	5.01	-45.86	-13	-32.86
4676.25	-50.94	V	4.91	-46.03	-13	-33.03

Frequency (MHz)	Receiver Reading (dBm)	Rx Antenna Polar (H/V)	Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
467.6375MHz						
935.275	-56.38	H	9.31	-47.07	-13	-34.07
935.275	-43.72	V	9.95	-33.77	-13	-20.77
1402.912	-43.71	H	-1.33	-45.04	-13	-32.04
1402.912	-40.64	V	-1.53	-42.17	-13	-29.17
1870.55	-24.8	H	-0.81	-25.61	-13	-12.61
1870.55	-24.51	V	-1.02	-25.53	-13	-12.53
2338.188	-41.24	H	1.8	-39.44	-13	-26.44
2338.188	-39.34	V	1.59	-37.75	-13	-24.75
2805.825	-35.97	H	1.95	-34.02	-13	-21.02
2805.825	-40.24	V	1.89	-38.35	-13	-25.35
3273.462	-25.19	H	2.17	-23.02	-13	-10.02
3273.462	-28.33	V	2.28	-26.05	-13	-13.05
3741.1	-51.55	H	3.03	-48.52	-13	-35.52
3741.1	-53.39	V	3.11	-50.28	-13	-37.28
4208.737	-45.73	H	4.36	-41.37	-13	-28.37
4208.737	-48.52	V	4.42	-44.1	-13	-31.1
4676.37	-50.07	H	5.02	-45.05	-13	-32.05
4676.37	-52.71	V	4.91	-47.8	-13	-34.8

For Channel Spacing: 25kHz

Frequency (MHz)	Receiver Reading (dBm)	Rx Antenna Polar (H/V)	Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
462.625MHz						
925.25	-38.63	H	8.92	-29.71	-13	-16.71
925.25	-30.27	V	10.26	-20.01	-13	-7.01
1387.875	-42.48	H	-1.25	-43.73	-13	-30.73
1387.875	-43.5	V	-1.61	-45.11	-13	-32.11
1850.5	-23.16	H	-1.02	-24.18	-13	-11.18
1850.5	-20.03	V	-1.22	-21.25	-13	-8.25
2313.125	-43.78	H	1.66	-42.12	-13	-29.12
2313.125	-39.07	V	1.66	-37.41	-13	-24.41
2775.75	-32.14	H	1.51	-30.63	-13	-17.63
2775.75	-34.12	V	1.91	-32.21	-13	-19.21
3238.375	-27.69	H	2.3	-25.39	-13	-12.39
3238.375	-29.34	V	2.44	-26.9	-13	-13.9
3701	-51.58	H	2.85	-48.73	-13	-35.73
3701	-52.49	V	3.34	-49.15	-13	-36.15
4163.625	-47.15	H	3.92	-43.23	-13	-30.23
4163.625	-48.63	V	4.05	-44.58	-13	-31.58
4626.25	-48.73	H	4.75	-43.98	-13	-30.98
4626.25	-50.54	V	4.71	-45.83	-13	-32.83
462.6375MHz						
925.275	-43.22	H	8.92	-34.3	-13	-21.3
925.275	-30.95	V	10.26	-20.69	-13	-7.69
1387.912	-42.84	H	-1.25	-44.09	-13	-31.09
1387.912	-43.73	V	-1.61	-45.34	-13	-32.34
1850.55	-23.28	H	-1.02	-24.3	-13	-11.3
1850.55	-20.04	V	-1.22	-21.26	-13	-8.26
2313.188	-43.53	H	1.66	-41.87	-13	-28.87
2313.188	-39.62	V	1.66	-37.96	-13	-24.96
2775.825	-32.2	H	1.51	-30.69	-13	-17.69
2775.825	-33.85	V	1.91	-31.94	-13	-18.94
3238.462	-27.59	H	2.3	-25.29	-13	-12.29
3238.462	-29.39	V	2.44	-26.95	-13	-13.95
3701.1	-51.71	H	2.85	-48.86	-13	-35.86
3701.1	-52.76	V	3.34	-49.42	-13	-36.42
4163.737	-47	H	3.93	-43.07	-13	-30.07
4163.737	-48.54	V	4.06	-44.48	-13	-31.48
4626.375	-49.03	H	4.75	-44.28	-13	-31.28
4626.375	-50.03	V	4.71	-45.32	-13	-32.32

Frequency (MHz)	Receiver Reading (dBm)	Rx Antenna Polar (H/V)	Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
467.625MHz						
935.25	-36.63	H	9.31	-27.32	-13	-14.32
935.25	-27.02	V	9.95	-17.07	-13	-4.07
1402.875	-41.78	H	-1.33	-43.11	-13	-30.11
1402.875	-41.44	V	-1.53	-42.97	-13	-29.97
1870.5	-24.8	H	-0.81	-25.61	-13	-12.61
1870.5	-23.79	V	-1.02	-24.81	-13	-11.81
2338.125	-43.48	H	1.8	-41.68	-13	-28.68
2338.125	-38.75	V	1.59	-37.16	-13	-24.16
2805.75	-35.11	H	1.95	-33.16	-13	-20.16
2805.75	-39.03	V	1.89	-37.14	-13	-24.14
3273.375	-25.82	H	2.17	-23.65	-13	-10.65
3273.375	-27.85	V	2.27	-25.58	-13	-12.58
3741	-50.79	H	3.03	-47.76	-13	-34.76
3741	-53.04	V	3.11	-49.93	-13	-36.93
4208.625	-45.93	H	4.36	-41.57	-13	-28.57
4208.625	-48.79	V	4.42	-44.37	-13	-31.37
4676.25	-49.2	H	5.01	-44.19	-13	-31.19
4676.25	-52.17	V	4.91	-47.26	-13	-34.26

Note 1: Absolute Level = Reading Level + Substituted Factor

Note 2: Substituted Factor contains: Substituted Level - Cable loss+ Antenna Gain

Note 3: Margin = Absolute Level - Limit

Note 4: The data which below the 20 dB limit was not recorded.

APPENDIX

Test Information:

Sample No.:	3G4E-2	Test Date:	2026/06/14-2026/06/15
Test Site:	RF	Test Mode:	Transmitting
Tester:	Steve Lu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-24.8	Relative Humidity: (%)	49-51	ATM Pressure: (kPa)	100.3
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Frequency Accuracy

Test Result

Test Frequency (MHz)	Temperature (℃)	Voltage (V _{DC})	Measured Frequency (MHz)	Frequency Error (ppm)	limit (ppm)
462.625	-30	7.4	462.625397	0.86	+/-2.5
	-20	7.4	462.625420	0.91	+/-2.5
	-10	7.4	462.625436	0.94	+/-2.5
	0	7.4	462.625412	0.89	+/-2.5
	10	7.4	462.625420	0.91	+/-2.5
	20	7.4	462.625400	0.86	+/-2.5
	30	7.4	462.625367	0.79	+/-2.5
	40	7.4	462.625399	0.86	+/-2.5
	50	7.4	462.625439	0.95	+/-2.5
	20	8.5	462.625430	0.93	+/-2.5
	20	6.3	462.625381	0.82	+/-2.5

Test Frequency (MHz)	Temperature (℃)	Voltage (V _{DC})	Measured Frequency (MHz)	Frequency Error (ppm)	limit (ppm)
462.6375	-30	7.4	462.637901	0.87	+/-2.5
	-20	7.4	462.637915	0.90	+/-2.5
	-10	7.4	462.637887	0.84	+/-2.5
	0	7.4	462.637941	0.95	+/-2.5
	10	7.4	462.637862	0.78	+/-2.5
	20	7.4	462.637900	0.86	+/-2.5
	30	7.4	462.637918	0.90	+/-2.5
	40	7.4	462.637912	0.89	+/-2.5
	50	7.4	462.637851	0.76	+/-2.5
	20	8.5	462.637913	0.89	+/-2.5
	20	6.3	462.637909	0.88	+/-2.5

Test Frequency (MHz)	Temperature (°C)	Voltage (V _{DC})	Measured Frequency (MHz)	Frequency Error (ppm)	limit (ppm)
467.625	-30	7.4	467.625397	0.85	+/-2.5
	-20	7.4	467.625369	0.79	+/-2.5
	-10	7.4	467.625360	0.77	+/-2.5
	0	7.4	467.625353	0.75	+/-2.5
	10	7.4	467.625360	0.77	+/-2.5
	20	7.4	467.625400	0.86	+/-2.5
	30	7.4	467.625439	0.94	+/-2.5
	40	7.4	467.625381	0.81	+/-2.5
	50	7.4	467.625356	0.76	+/-2.5
	20	8.5	467.625342	0.73	+/-2.5
	20	6.3	467.625411	0.88	+/-2.5

Test Frequency (MHz)	Temperature (°C)	Voltage (V _{DC})	Measured Frequency (MHz)	Frequency Error (ppm)	limit (ppm)
467.6375	-30	7.4	467.637857	0.76	+/-2.5
	-20	7.4	467.637875	0.80	+/-2.5
	-10	7.4	467.637940	0.94	+/-2.5
	0	7.4	467.637906	0.87	+/-2.5
	10	7.4	467.637891	0.84	+/-2.5
	20	7.4	467.637900	0.86	+/-2.5
	30	7.4	467.637901	0.86	+/-2.5
	40	7.4	467.637891	0.84	+/-2.5
	50	7.4	467.637905	0.87	+/-2.5
	20	8.5	467.637894	0.84	+/-2.5
	20	6.3	467.637926	0.91	+/-2.5

Note 1: Test was performed with unmodulation mode, the strict limit was used.

Note 2: The voltage range was declared by manufacturer.

RF Output Power**Test Result**

Test Bands	Channel Spacing	Power Level	Conducted Output power (dBm)	Conducted Output Power Limit (dBm)	ERP (dBm)	ERP Limit (dBm)
462 MHz Main (462.625MHz)	12.5kHz	High	32.58	≤47.00	32.19	/
		Low	25.88	≤47.00	25.49	/
	25kHz	High	32.72	≤47.00	32.33	/
		Low	25.82	≤47.00	25.43	/
462 MHz interstitial (462.6375MHz)	12.5kHz	High	32.52	/	32.13	≤37.00
		Low	25.72	/	25.33	≤37.00
	25kHz	High	32.61	/	32.22	≤37.00
		Low	25.93	/	25.54	≤37.00
467 MHz Main (467.625MHz)	12.5kHz	High	32.33	≤47.00	31.94	/
		Low	25.48	≤47.00	25.09	/
	25kHz	High	32.60	≤47.00	32.21	/
		Low	25.56	≤47.00	25.17	/
467 MHz interstitial (467.6375MHz)	12.5kHz	Low	25.53	/	25.14	≤27.00

Note 1: ERP=Conducted Output Power + Antenna Gain(dBd)

Note 2: Antenna Gain is 1.76dBi[#]

Note 3: 0dBi =2.15dBd

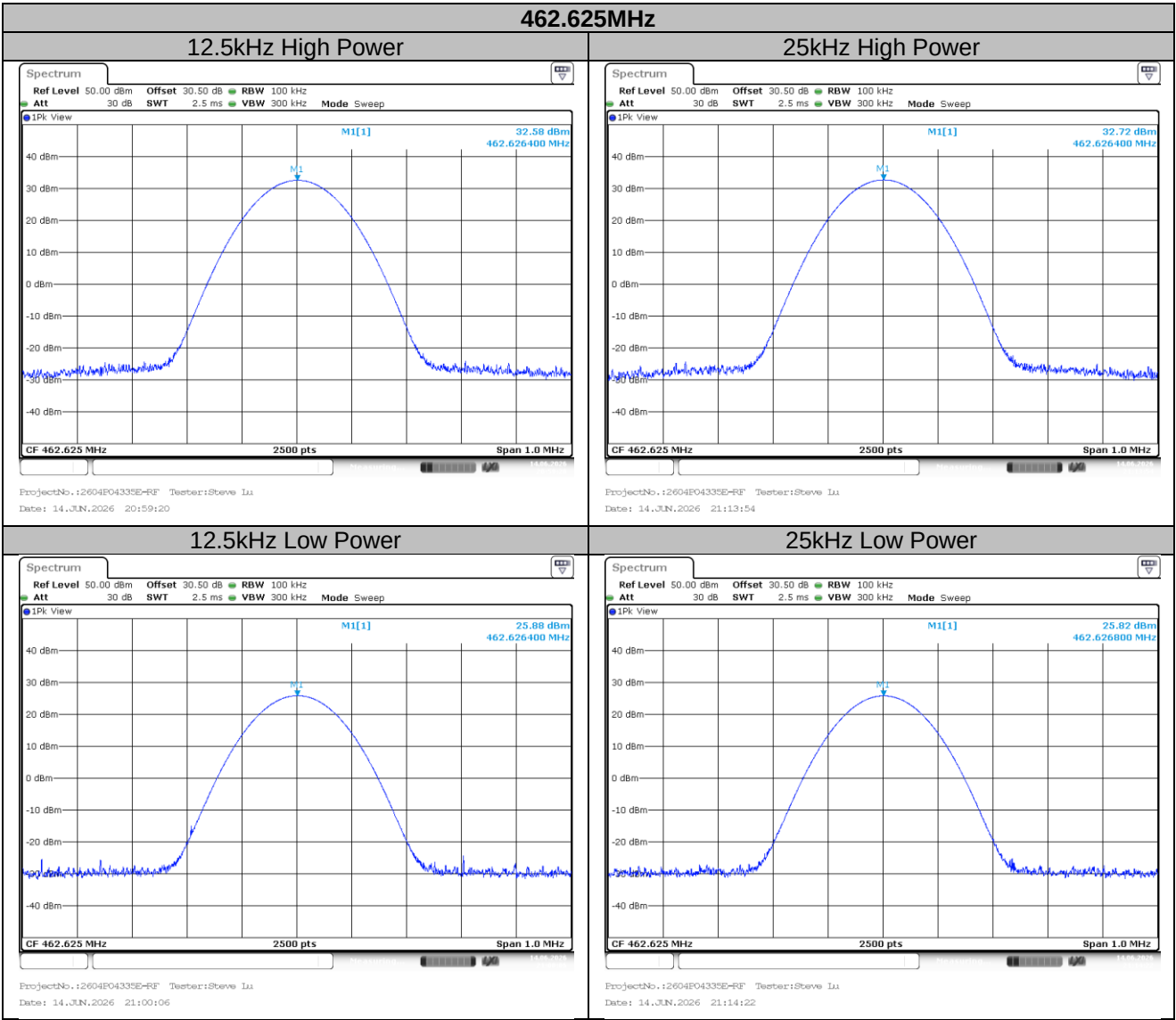
Note 4: For 462/467MHz main channels, Conducted Output Power must not exceed 50 Watts.
 $50W=10*\log(50*1000)=47dBm$

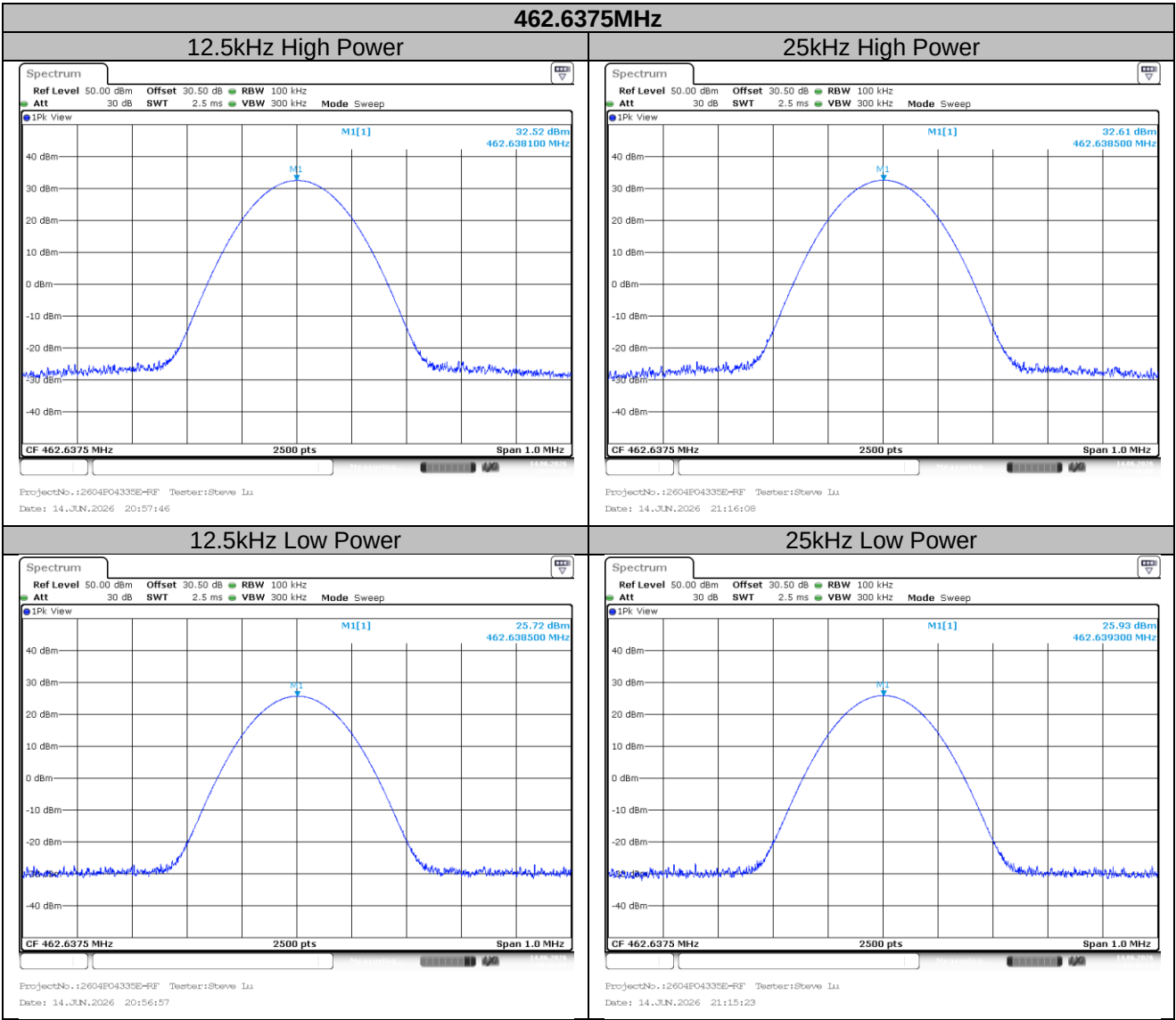
For 462 MHz interstitial channels, The ERP must not exceed 5 Watts.

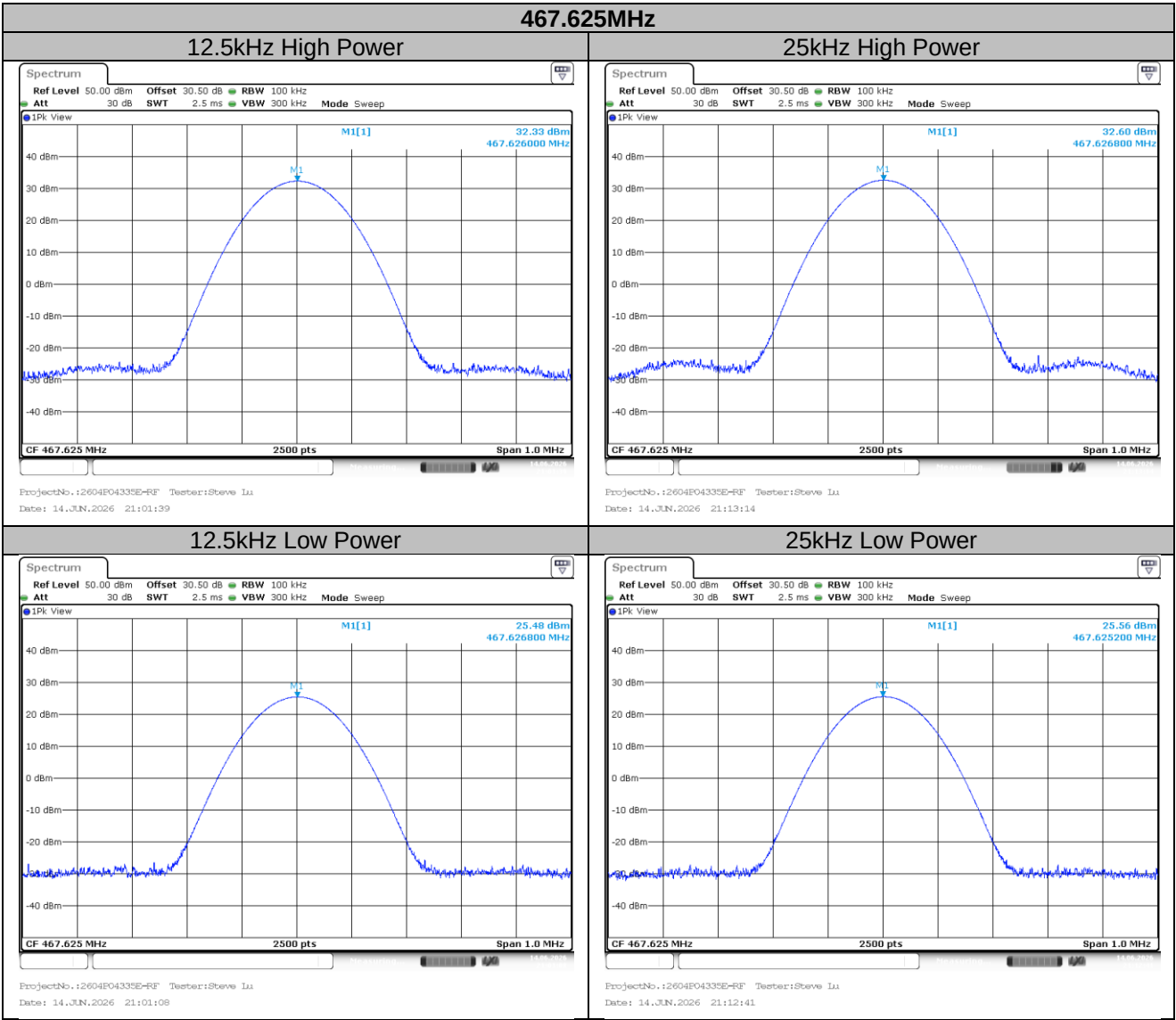
$5W=10*\log(5*1000)=37dBm$

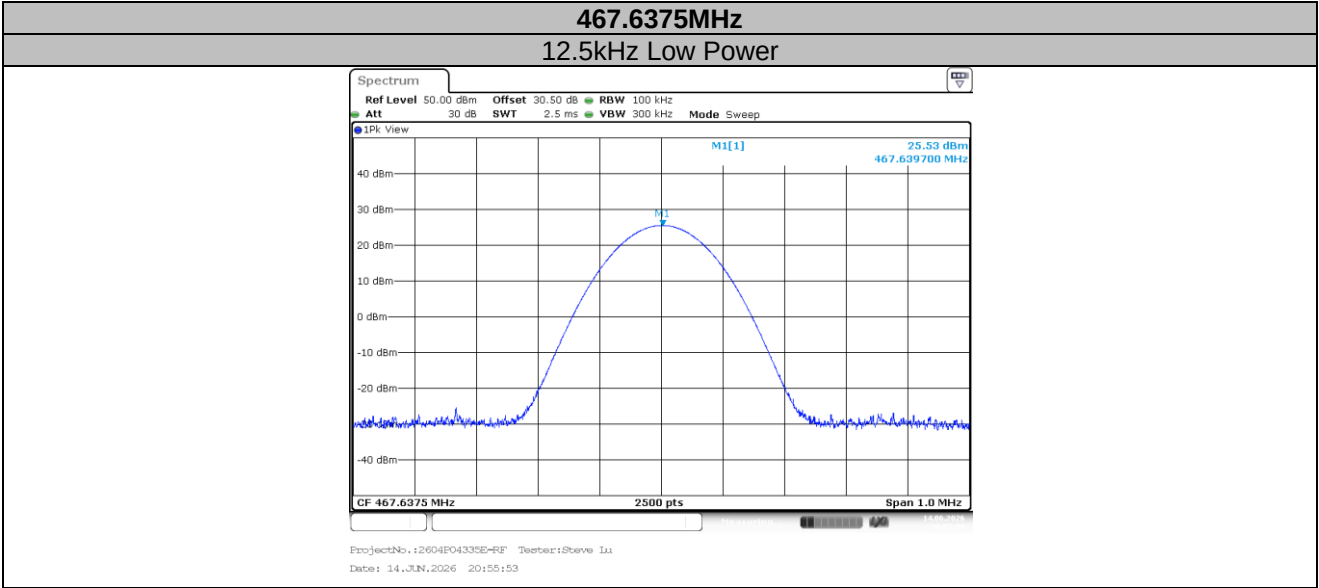
For 467 MHz interstitial channels, The ERP must not exceed 0.5 Watts

$0.5W=10*\log(0.5*1000)=27dBm$









Authorized Bandwidth and Emission Mask

Test Result

Test Bands	Channel Spacing	Power Level	99% Occupied Bandwidth (kHz)	Limit (kHz)
462 MHz Main (462.625MHz)	12.5kHz	High	9.59	≤20
		Low	9.58	≤20
	25kHz	High	14.85	≤20
		Low	14.84	≤20
462 MHz interstitial (462.6375MHz)	12.5kHz	High	9.56	≤20
		Low	9.58	≤20
	25kHz	High	14.85	≤20
		Low	14.86	≤20
467 MHz Main (467.625MHz)	12.5kHz	High	9.60	≤20
		Low	9.56	≤20
	25kHz	High	14.86	≤20
		Low	14.84	≤20
467 MHz interstitial (467.6375MHz)	12.5kHz	Low	9.58	≤12.5

Note: Emission bandwidth was based on calculation method instead of measurement.
Emission Designator Per CFR 47 §2.201& §2.202, BW = 2M + 2D

For FM Mode (Channel Spacing: 25 kHz)

Emission Designator: 16K0F3E

In this case, the maximum modulating frequency is 3.0 kHz with a 5.0 kHz deviation.

- $BW = 2(M+D) = 2*(3.0 \text{ kHz} + 5.0 \text{ kHz}) = 16 \text{ kHz} = 16K0$
- F3E portion of the designator represents an FM voice transmission

Therefore, the entire designator for 25 kHz channel spacing FM mode is 16K0F3E.

For FM Mode (Channel Spacing: 12.5 kHz)

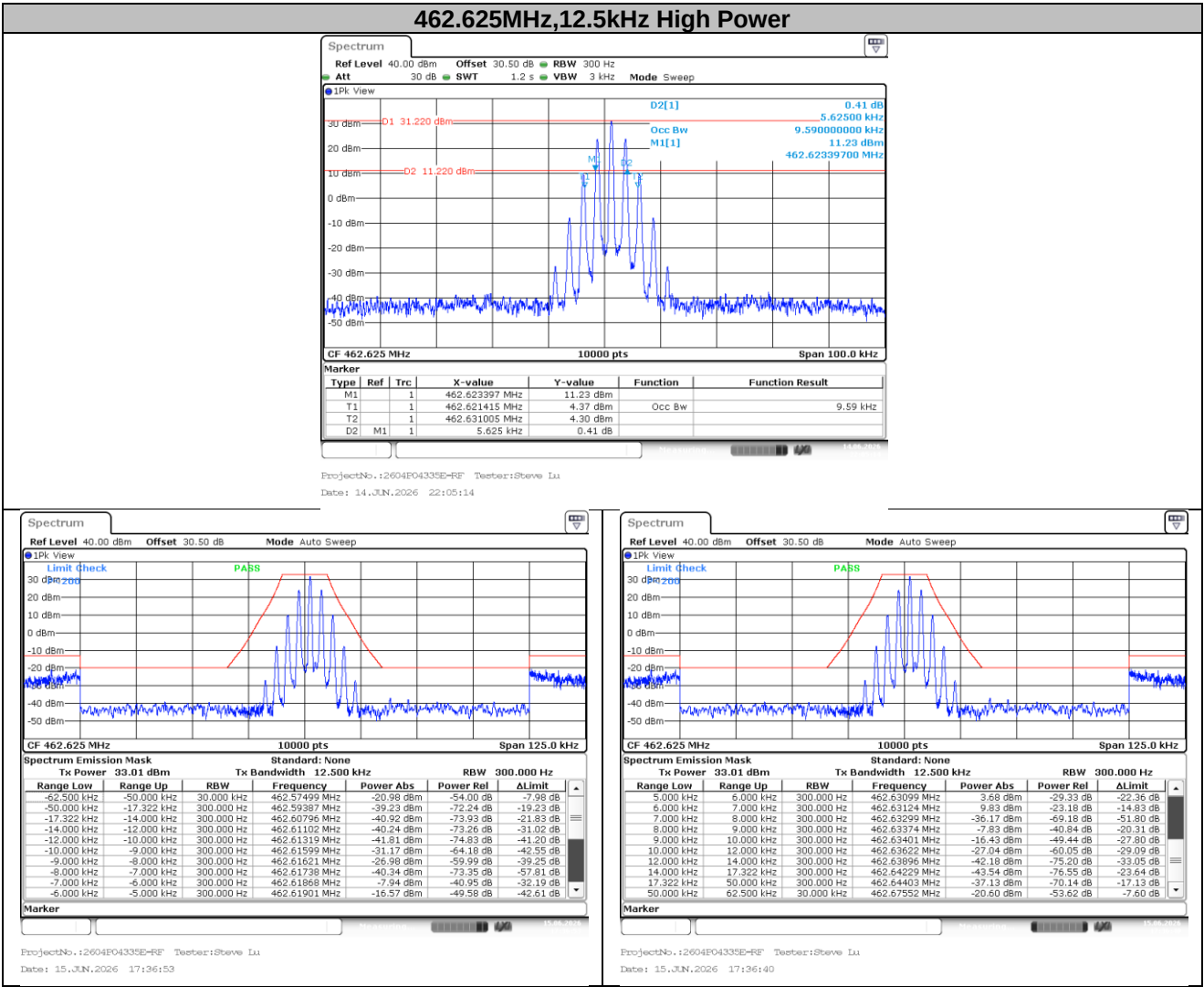
Emission Designator 11K0F3E

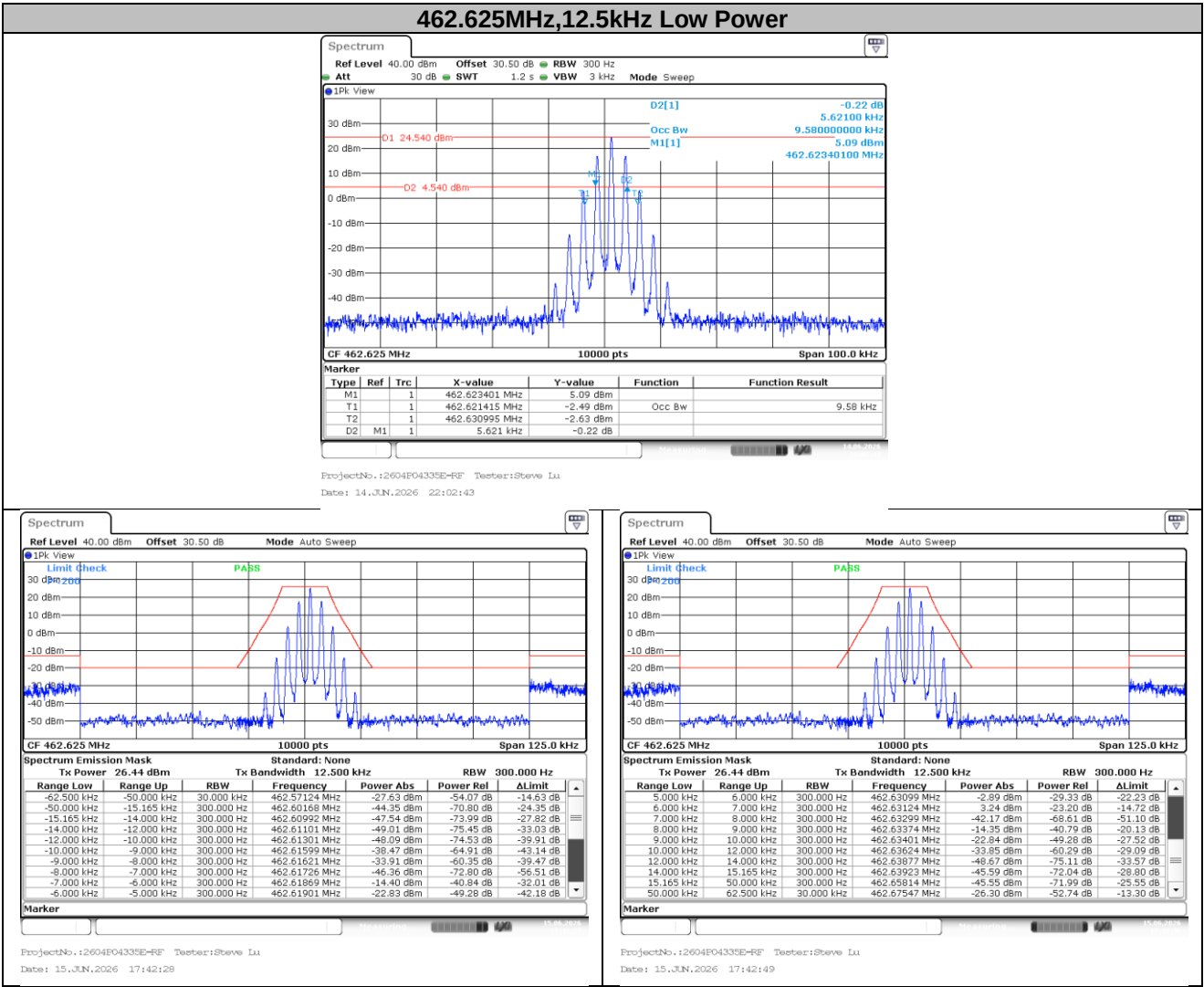
In this case, the maximum modulating frequency is 3.0 kHz with a 2.5 kHz deviation.

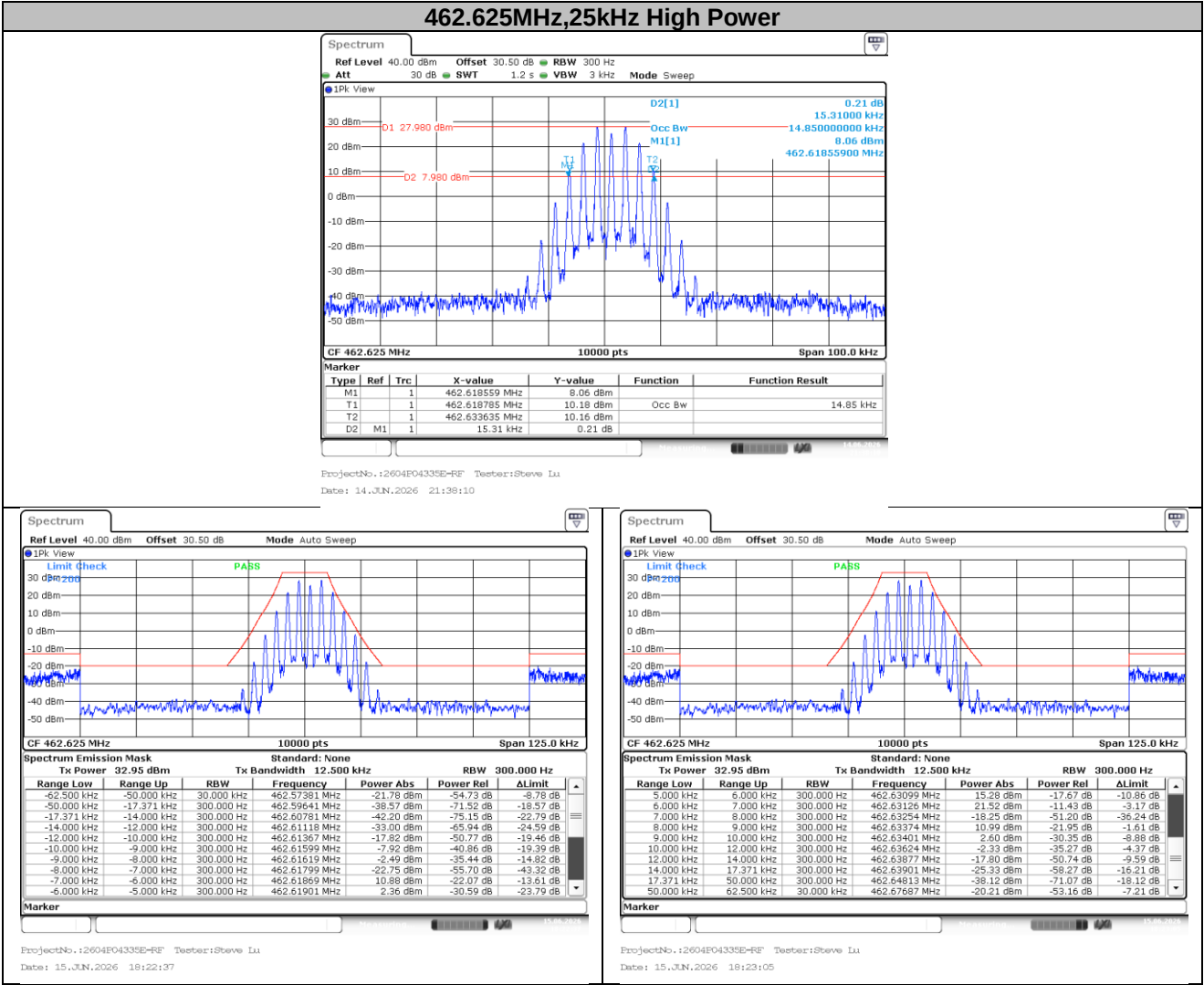
- $BW = 2(M+D) = 2*(3.0 \text{ kHz} + 2.5 \text{ kHz}) = 11 \text{ kHz} = 11K0$
- F3E portion of the designator represents an FM voice transmission

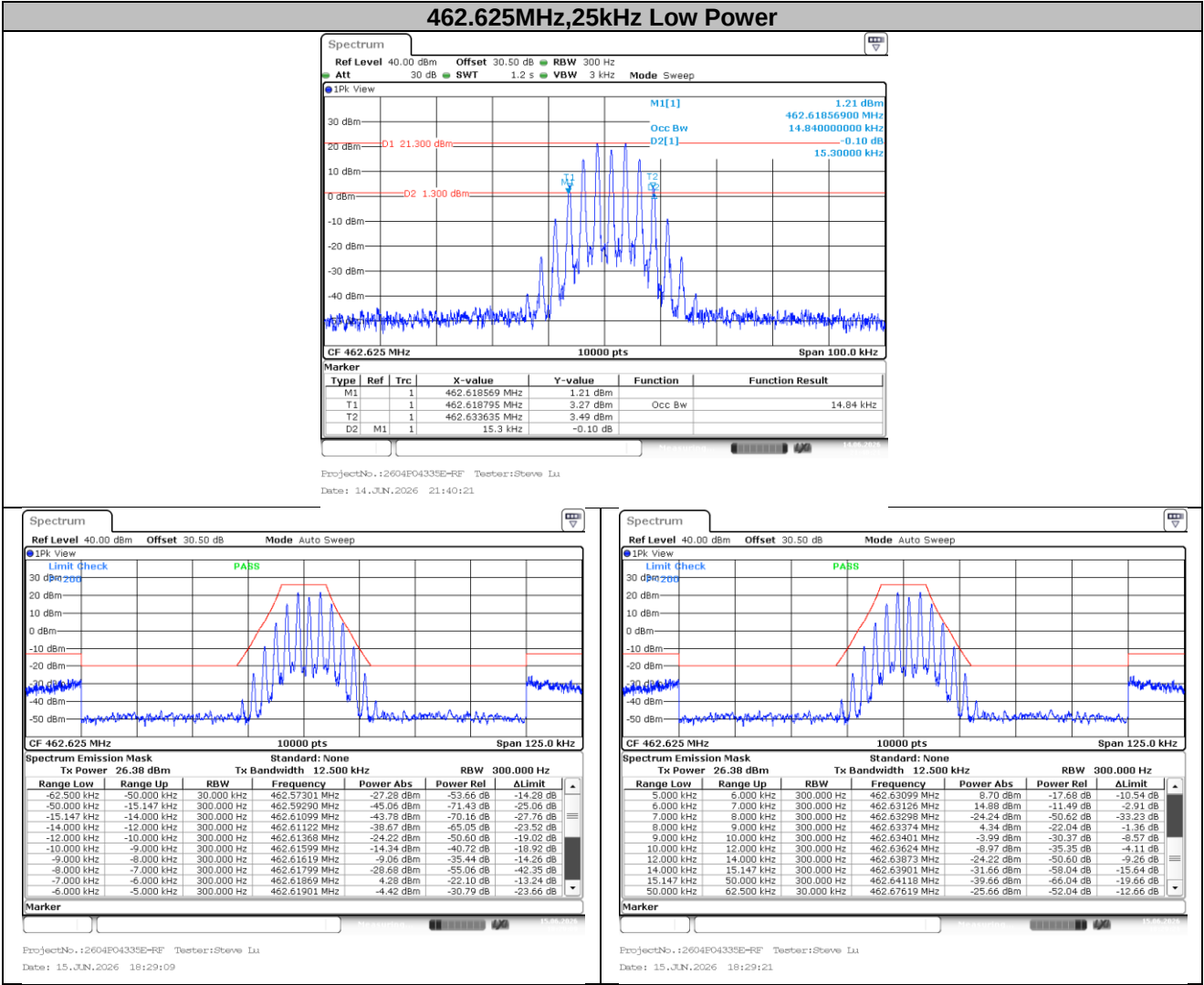
Therefore, the entire designator for 12.5 kHz channel spacing FM mode is 11K0F3E.

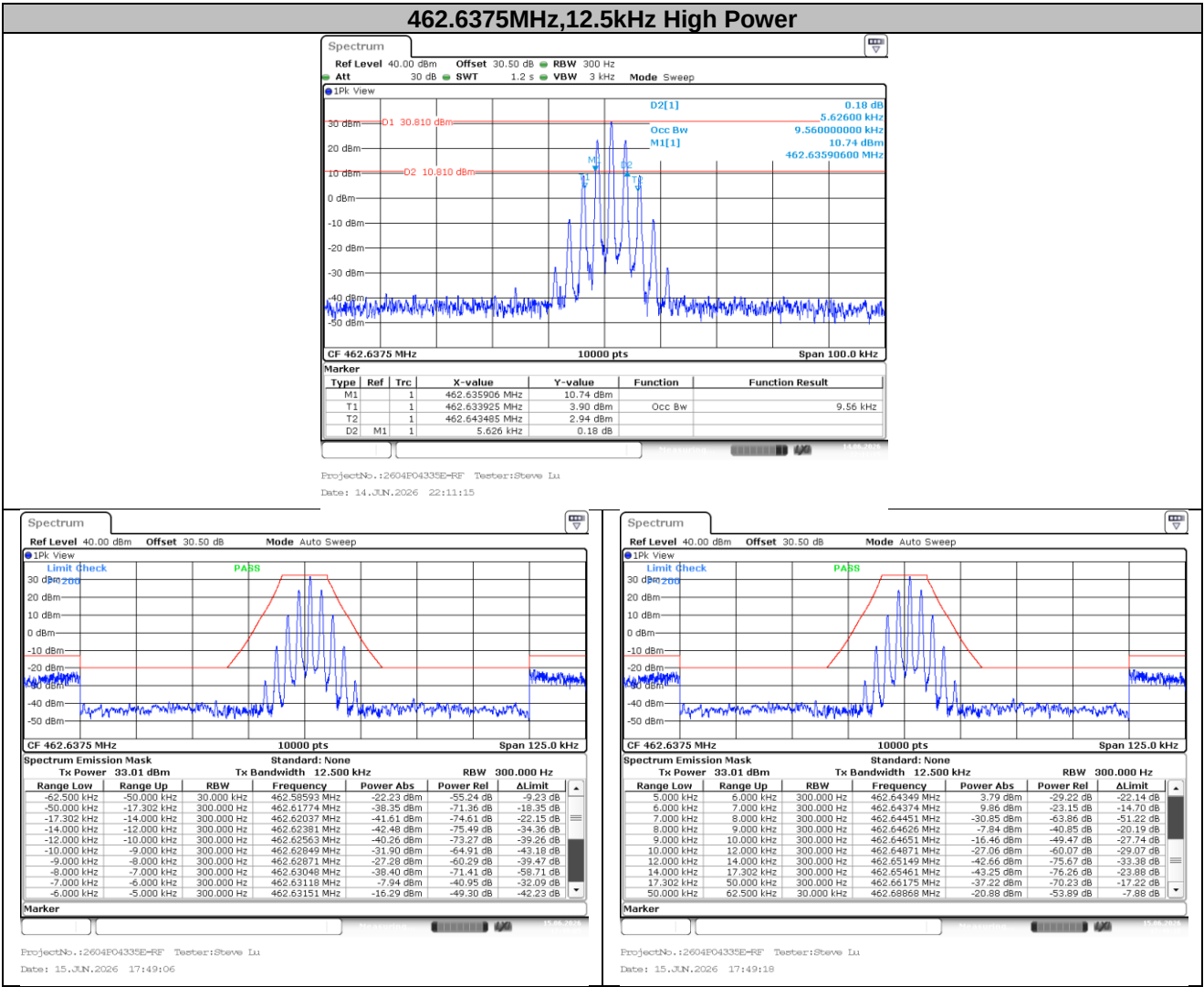
Emission Mask test was according to Attenuation requirements(3),(4),(7), low pass filter is not required.
Please refer to the below Plots.

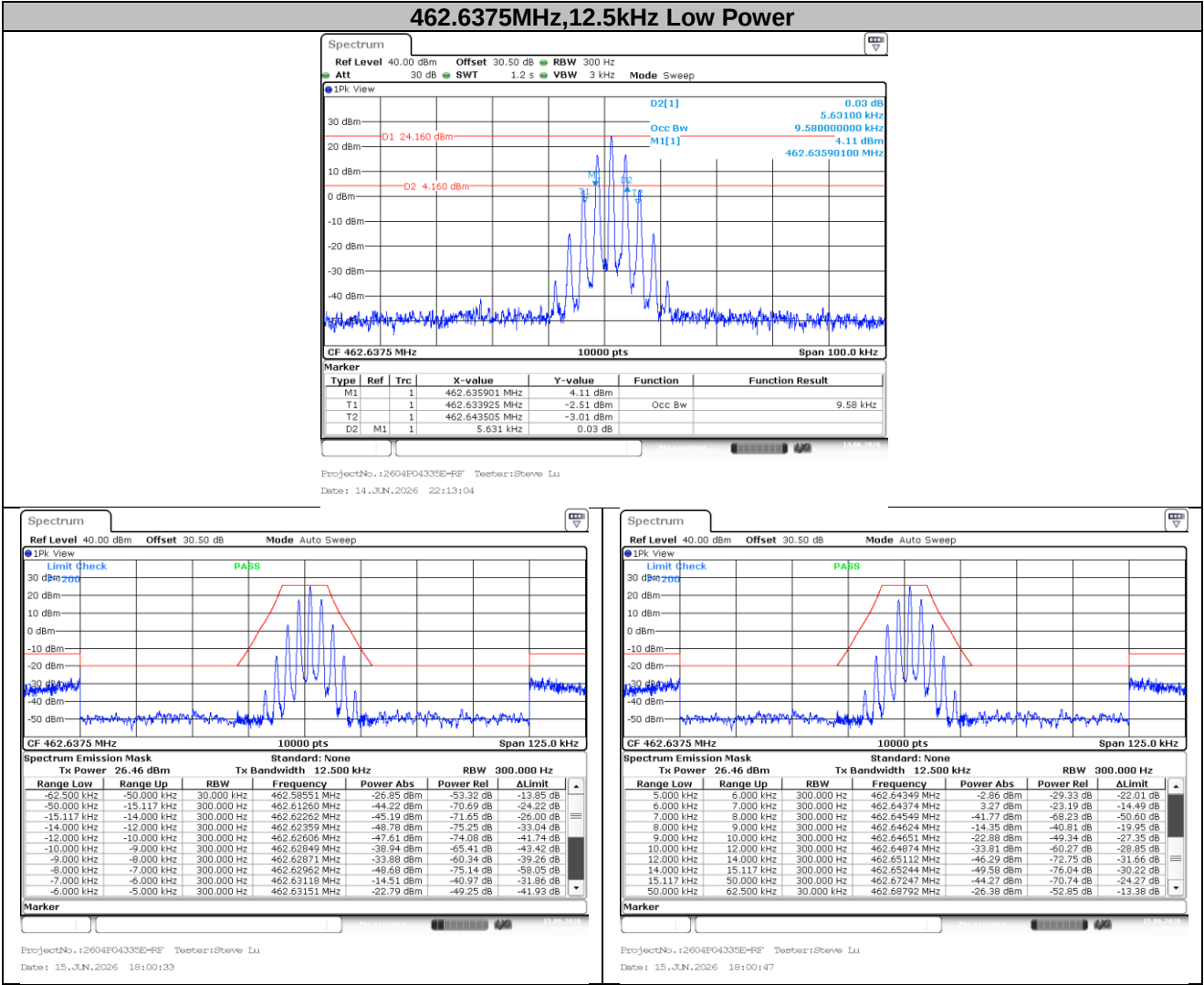


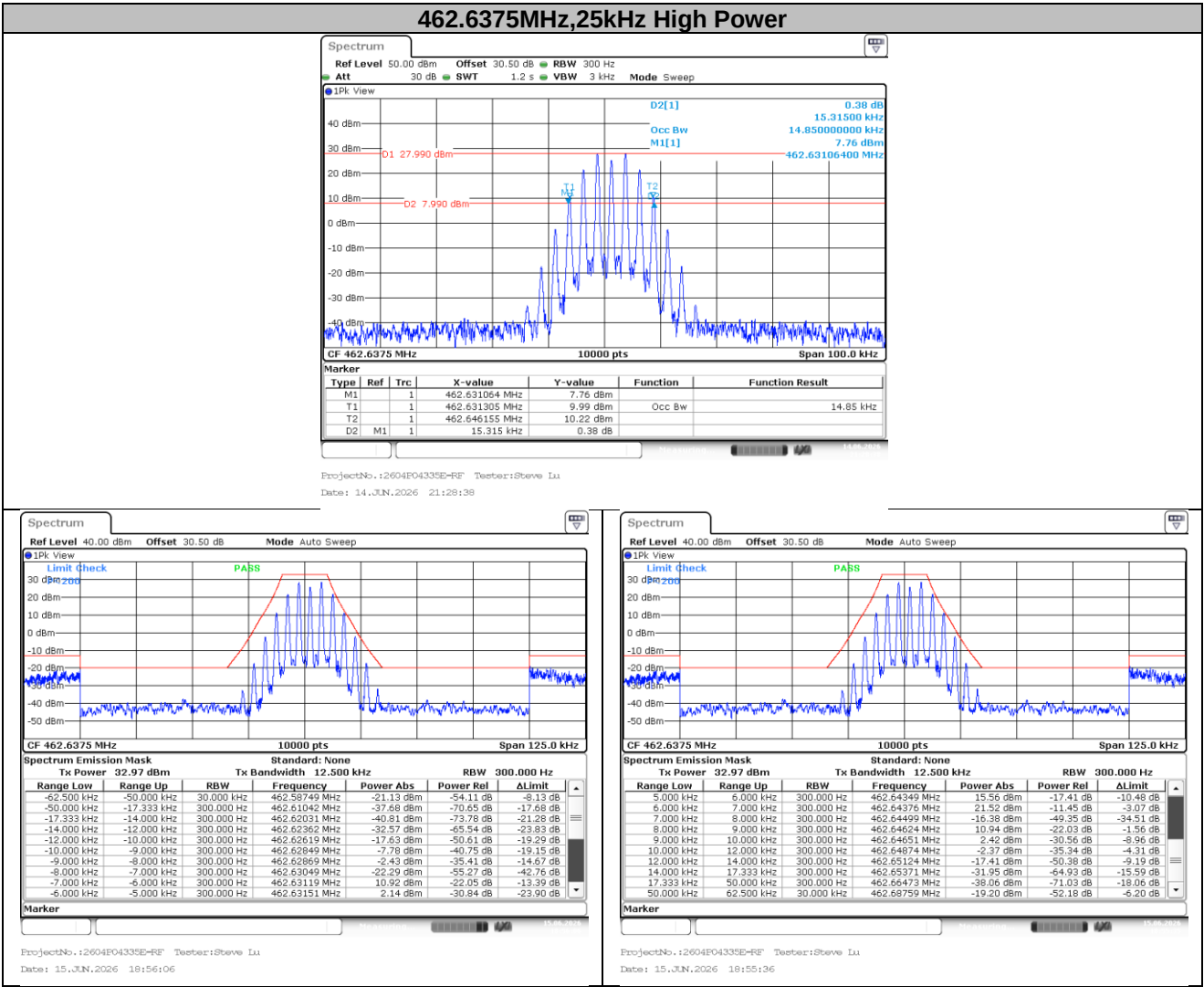


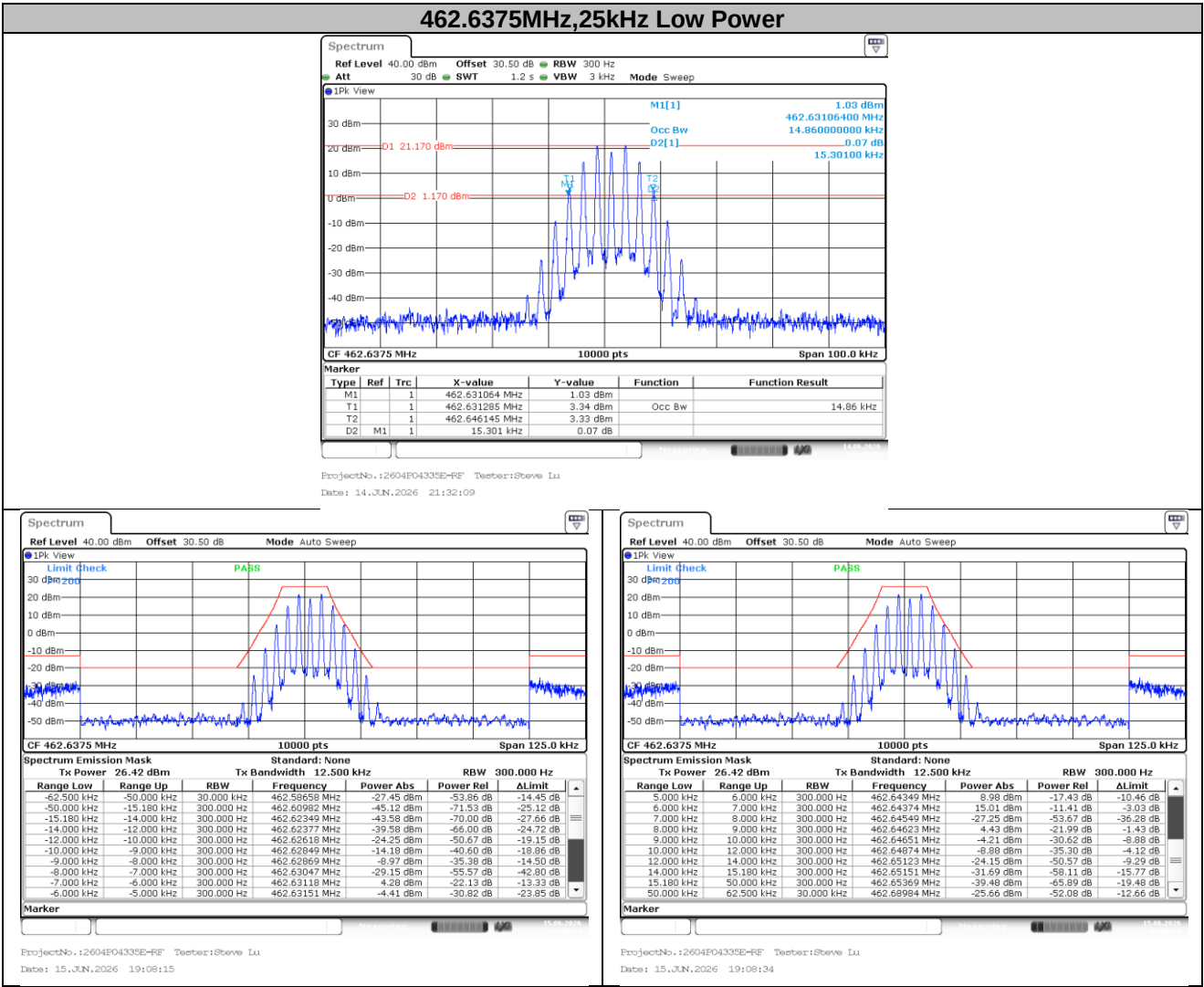


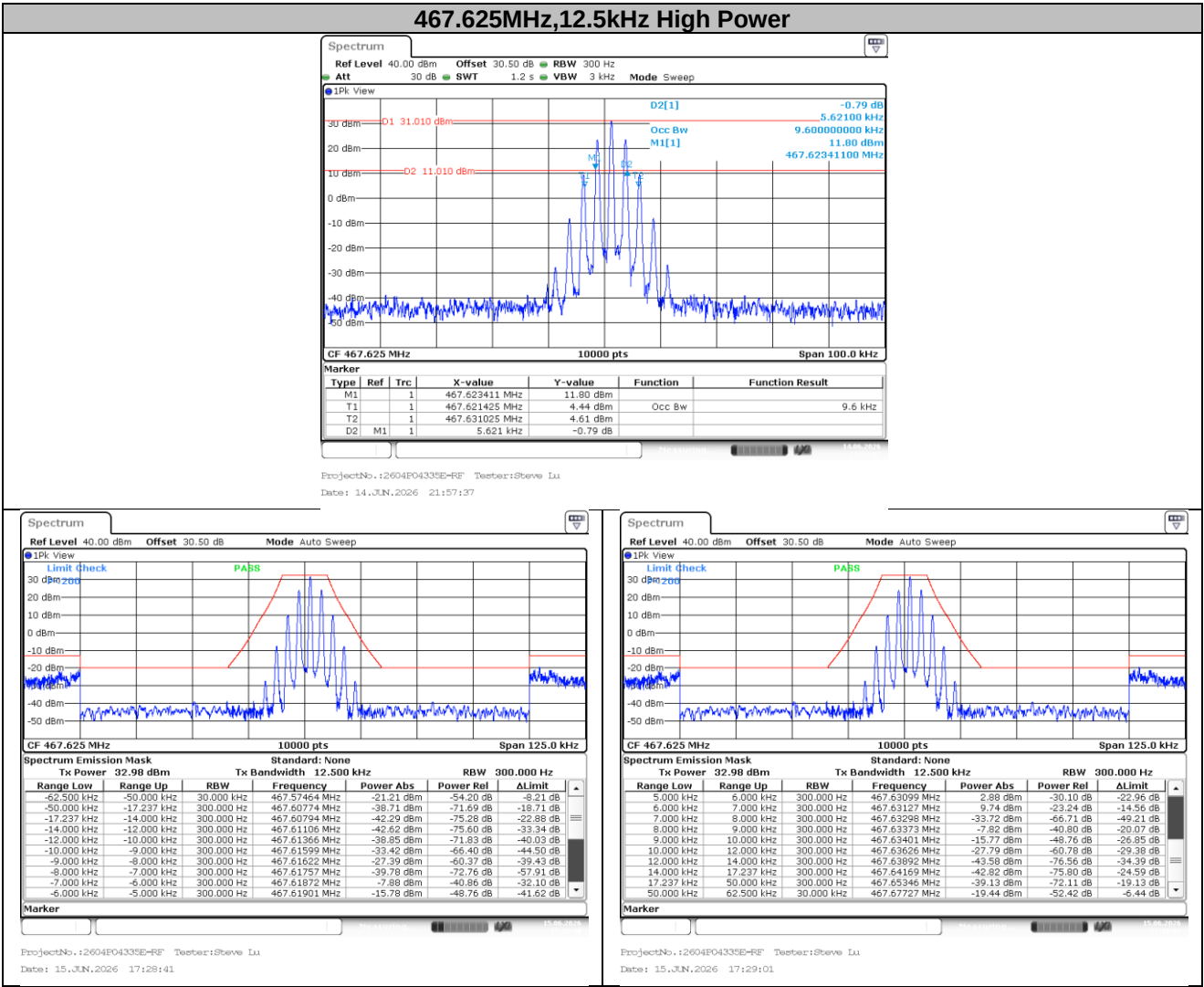


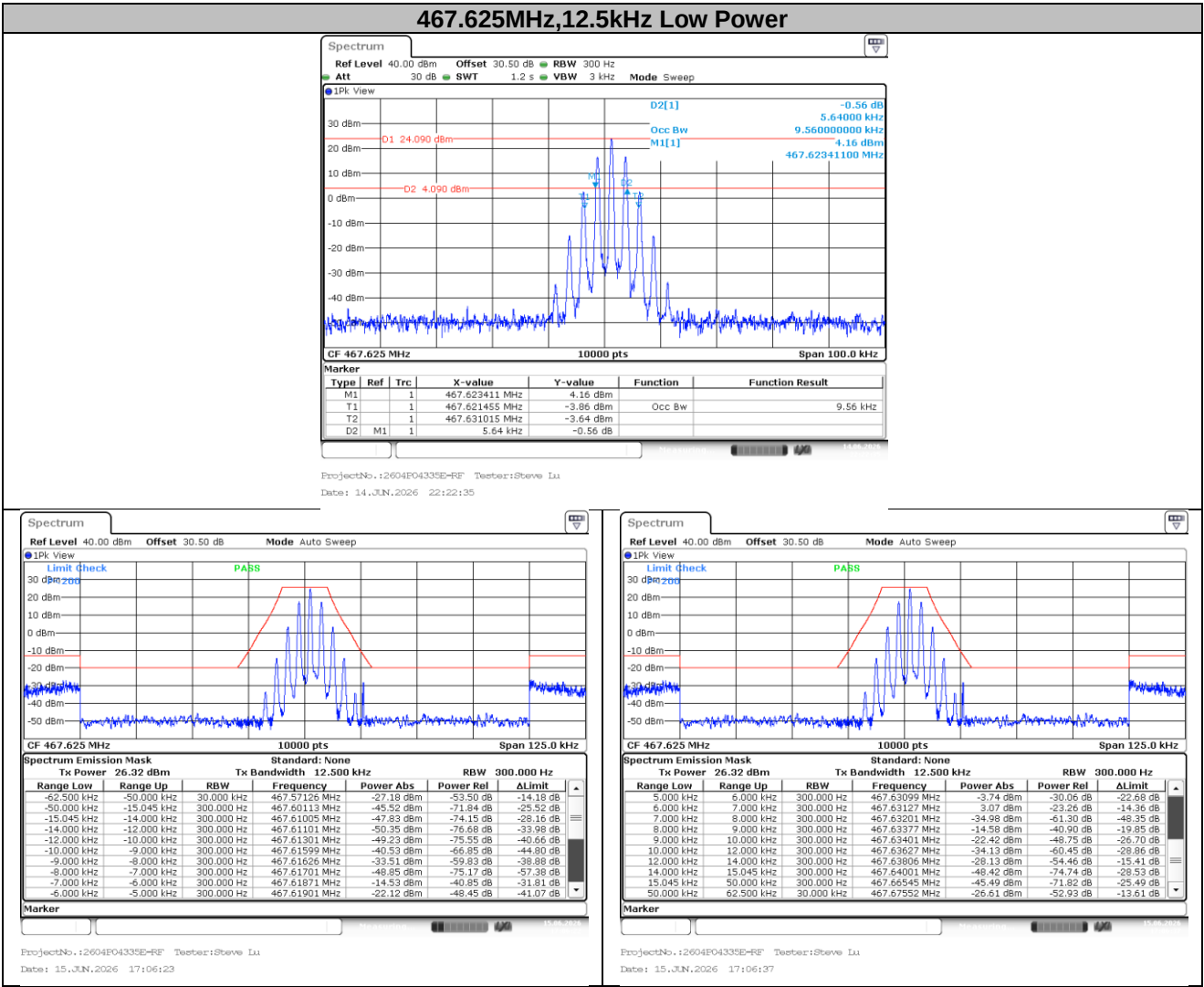


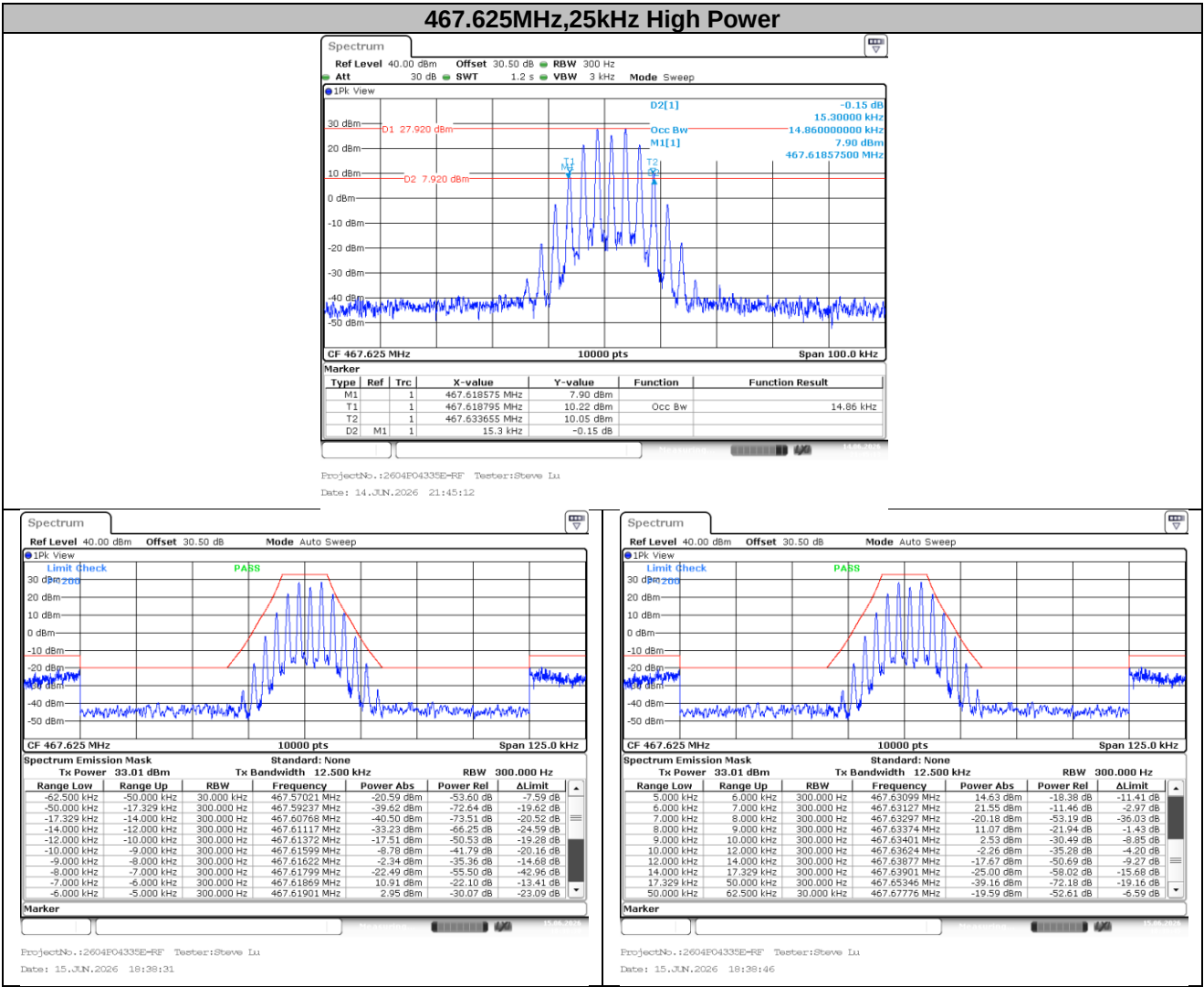


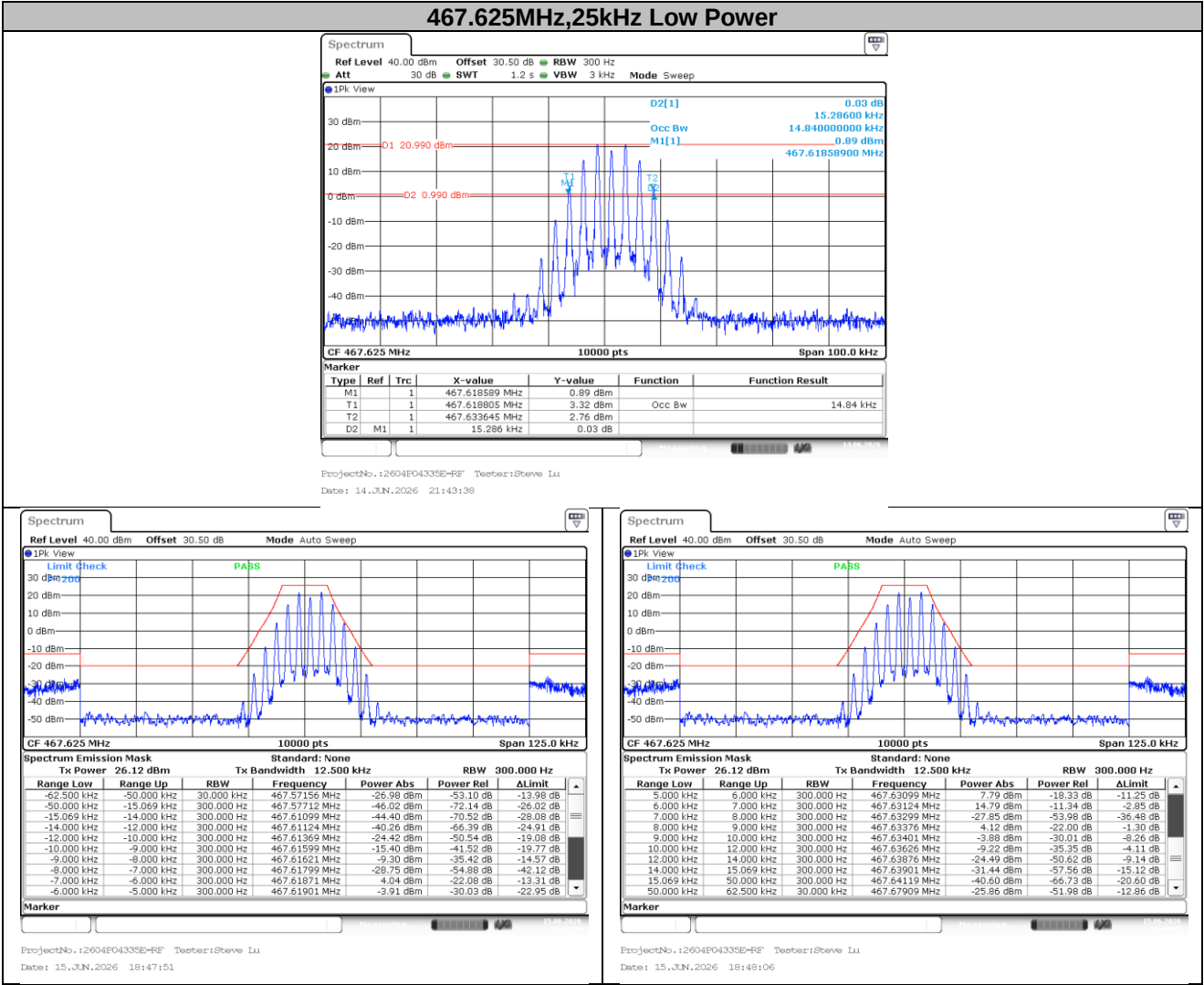


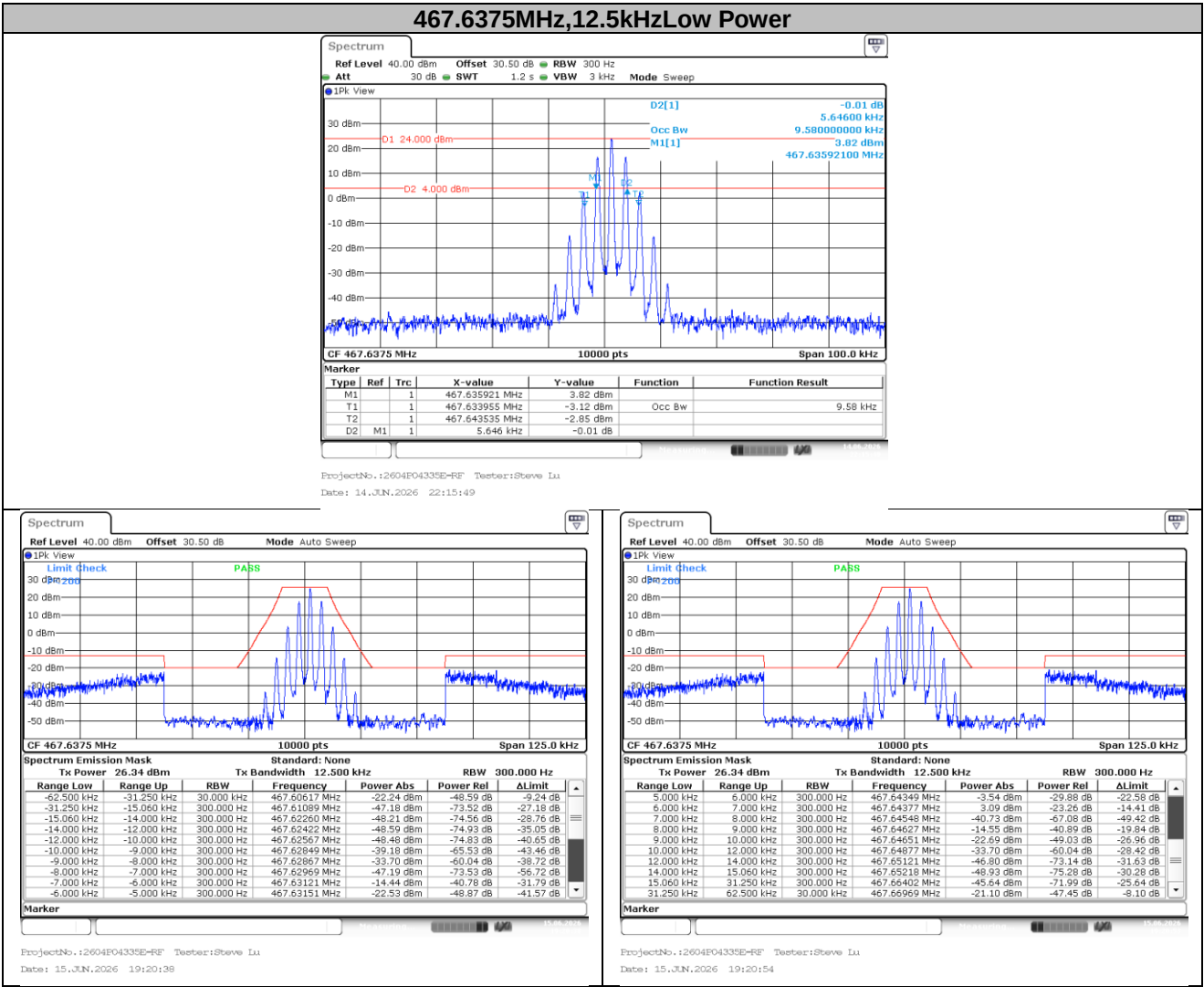












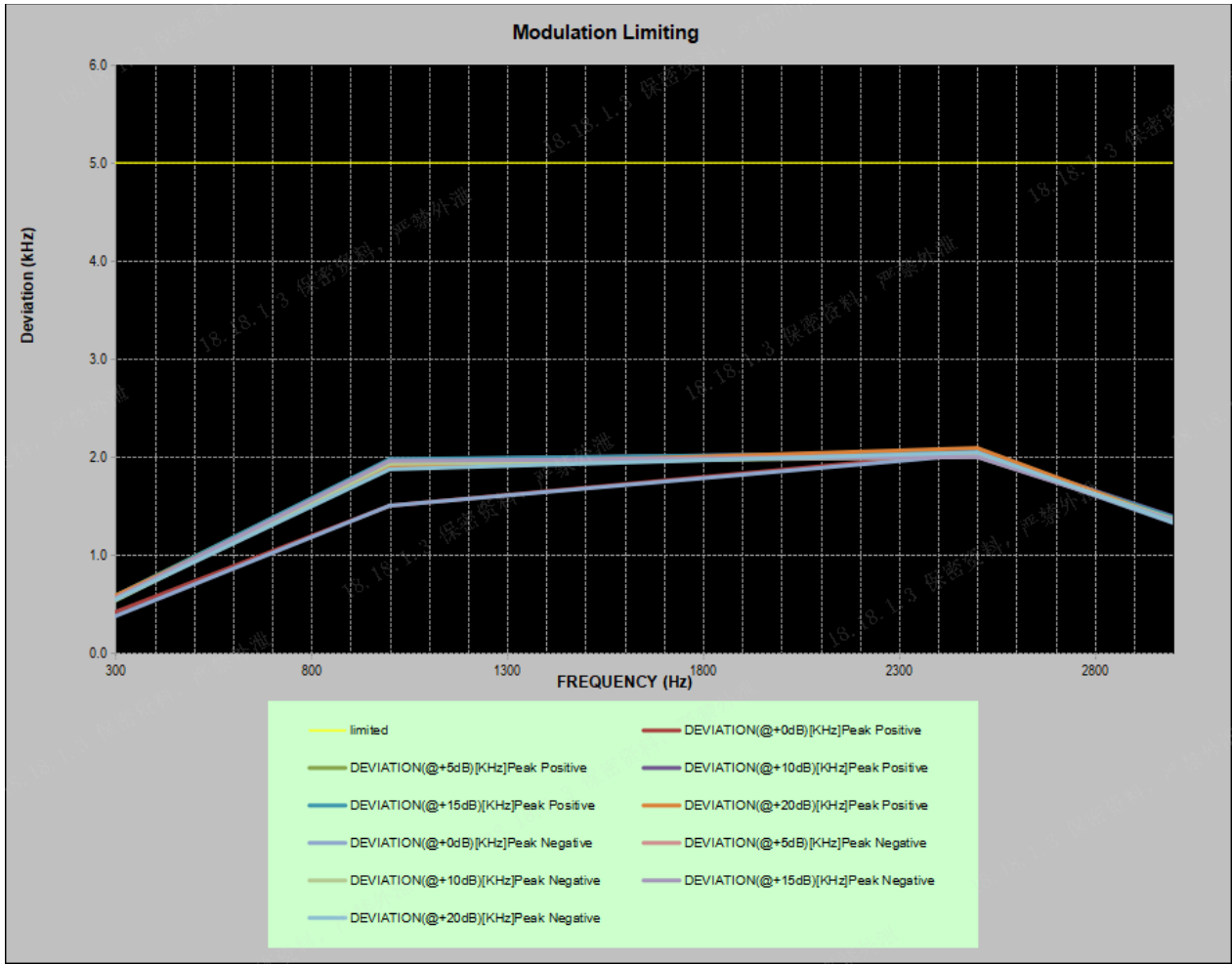
Modulation Requirements

Test Result

Channel Spacing: 12.5kHz

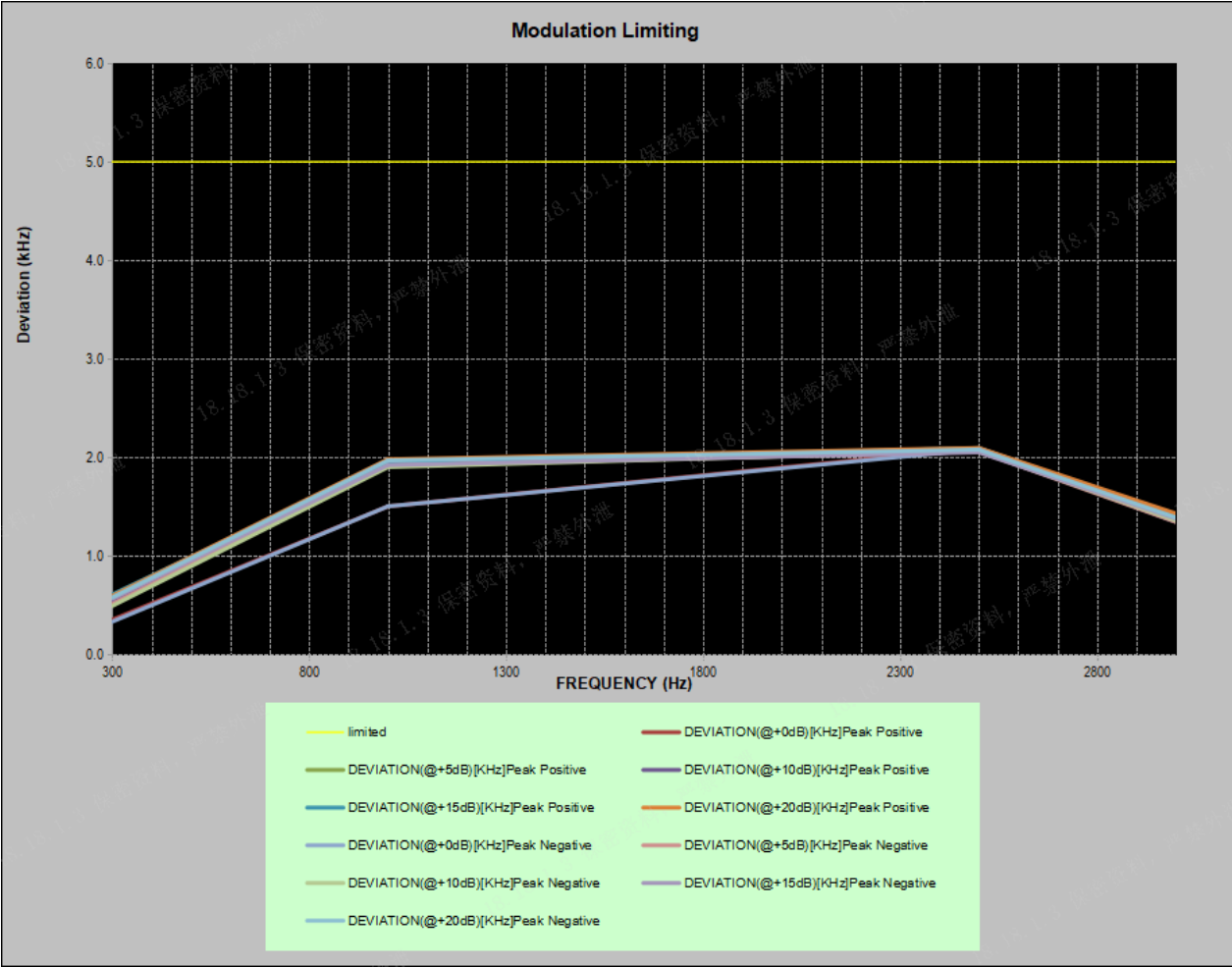
Modulation Limiting
Carrier Frequency: 462.625MHz

Audio Frequency (Hz)	DEVIATION (@+0dB) [kHz]		DEVIATION (@+5dB) [kHz]		DEVIATION (@+10dB) [kHz]		DEVIATION (@+15dB) [kHz]		DEVIATION (@+20dB) [kHz]		FCC Limit [kHz]
	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	
300	0.415	0.373	0.580	0.560	0.561	0.533	0.575	0.553	0.581	0.543	5.000
1000	1.500	1.500	1.964	1.943	1.969	1.928	1.975	1.958	1.900	1.872	5.000
2500	2.048	2.026	2.045	2.022	2.048	2.001	2.041	1.997	2.089	2.044	5.000
3000	1.345	1.324	1.380	1.348	1.391	1.365	1.382	1.353	1.349	1.334	5.000



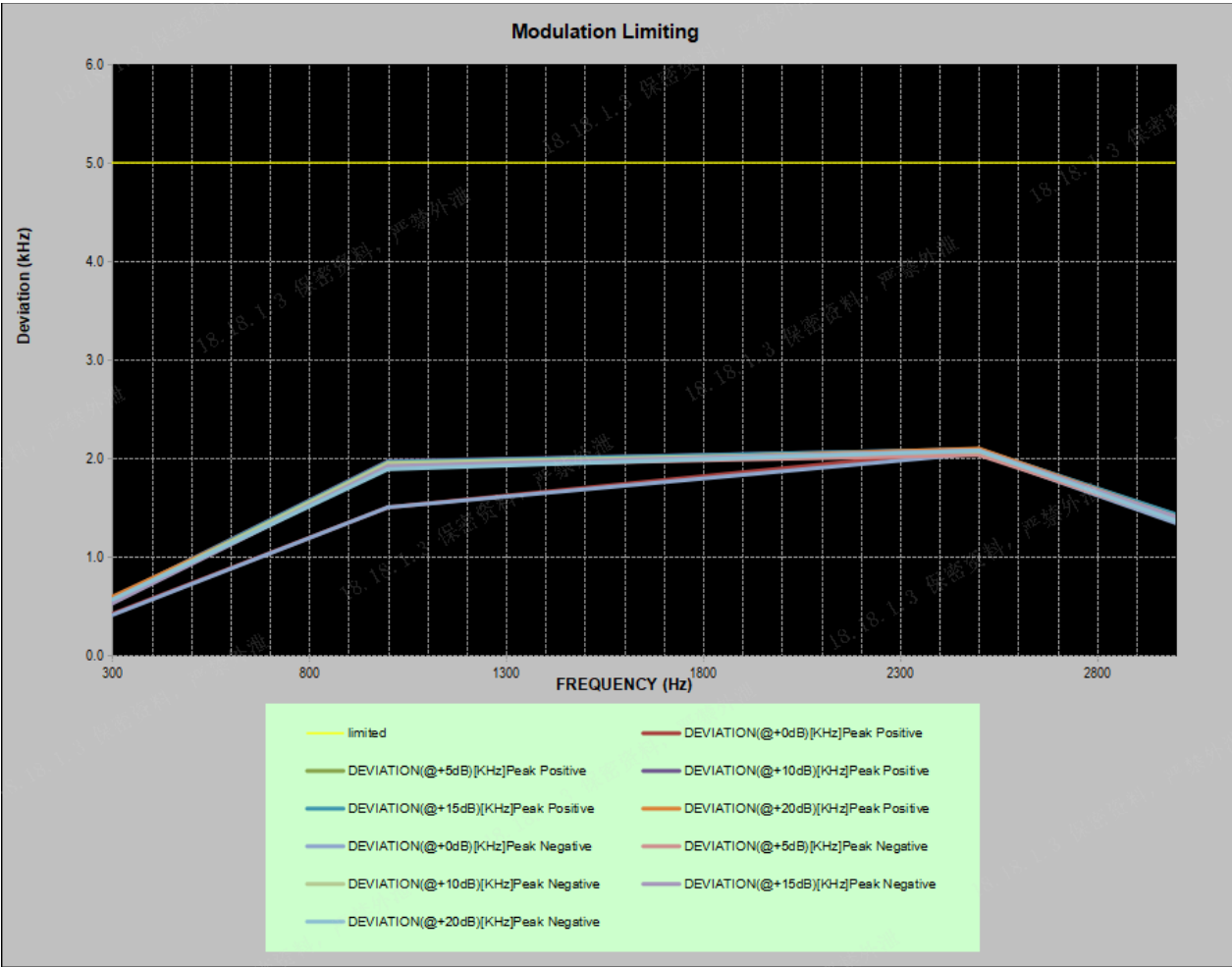
Carrier Frequency: 462.6375MHz

Audio Frequency (Hz)	DEVIATION (@+0dB) [kHz]		DEVIATION (@+5dB) [kHz]		DEVIATION (@+10dB) [kHz]		DEVIATION (@+15dB) [kHz]		DEVIATION (@+20dB) [kHz]		FCC Limit [kHz]
	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	
300	0.348	0.328	0.521	0.508	0.528	0.488	0.604	0.561	0.590	0.575	5.000
1000	1.500	1.500	1.924	1.912	1.910	1.898	1.937	1.919	1.978	1.966	5.000
2500	2.091	2.078	2.083	2.059	2.078	2.062	2.092	2.048	2.093	2.076	5.000
3000	1.394	1.345	1.391	1.342	1.397	1.357	1.401	1.376	1.428	1.387	5.000



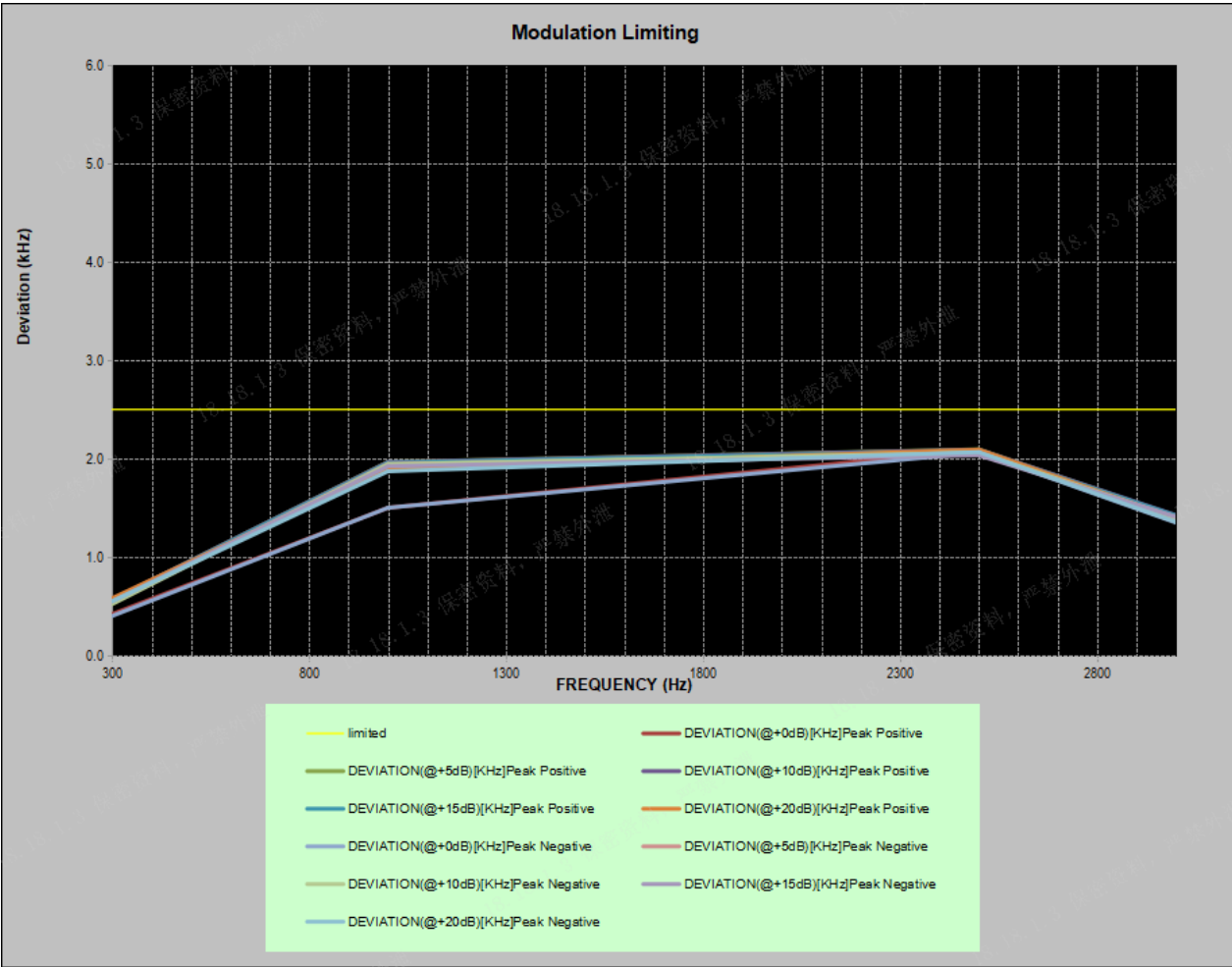
Carrier Frequency: 467.625MHz

Audio Frequency (Hz)	DEVIATION (@+0dB) [kHz]		DEVIATION (@+5dB) [kHz]		DEVIATION (@+10dB) [kHz]		DEVIATION (@+15dB) [kHz]		DEVIATION (@+20dB) [kHz]		FCC Limit [kHz]
	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	
300	0.416	0.406	0.572	0.541	0.571	0.551	0.567	0.523	0.591	0.563	5.000
1000	1.500	1.500	1.961	1.914	1.969	1.950	1.960	1.918	1.901	1.887	5.000
2500	2.091	2.048	2.081	2.032	2.087	2.069	2.090	2.078	2.097	2.076	5.000
3000	1.372	1.340	1.421	1.373	1.425	1.401	1.429	1.402	1.401	1.365	5.000



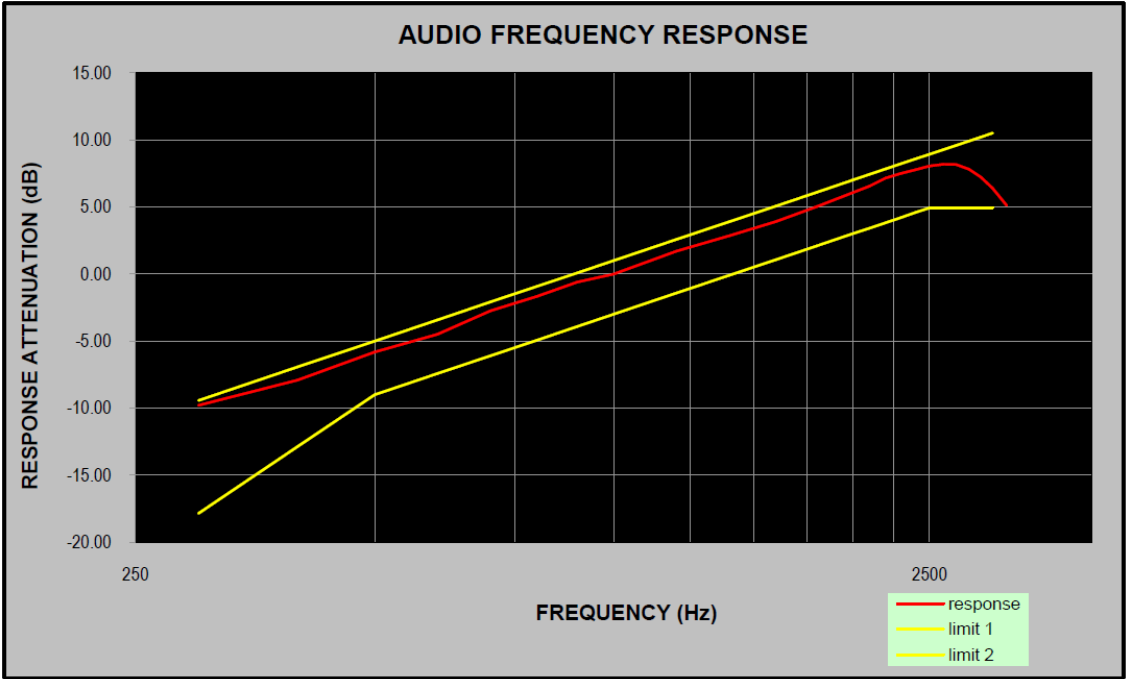
Carrier Frequency: 467.6375MHz

Audio Frequency (Hz)	DEVIATION (@+0dB) [kHz]		DEVIATION (@+5dB) [kHz]		DEVIATION (@+10dB) [kHz]		DEVIATION (@+15dB) [kHz]		DEVIATION (@+20dB) [kHz]		FCC Limit [kHz]
	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	
300	0.419	0.400	0.561	0.535	0.564	0.521	0.560	0.548	0.581	0.551	2.500
1000	1.500	1.500	1.966	1.945	1.964	1.942	1.957	1.923	1.897	1.871	2.500
2500	2.092	2.061	2.094	2.046	2.091	2.061	2.081	2.034	2.091	2.066	2.500
3000	1.370	1.350	1.416	1.404	1.426	1.397	1.422	1.408	1.395	1.357	2.500



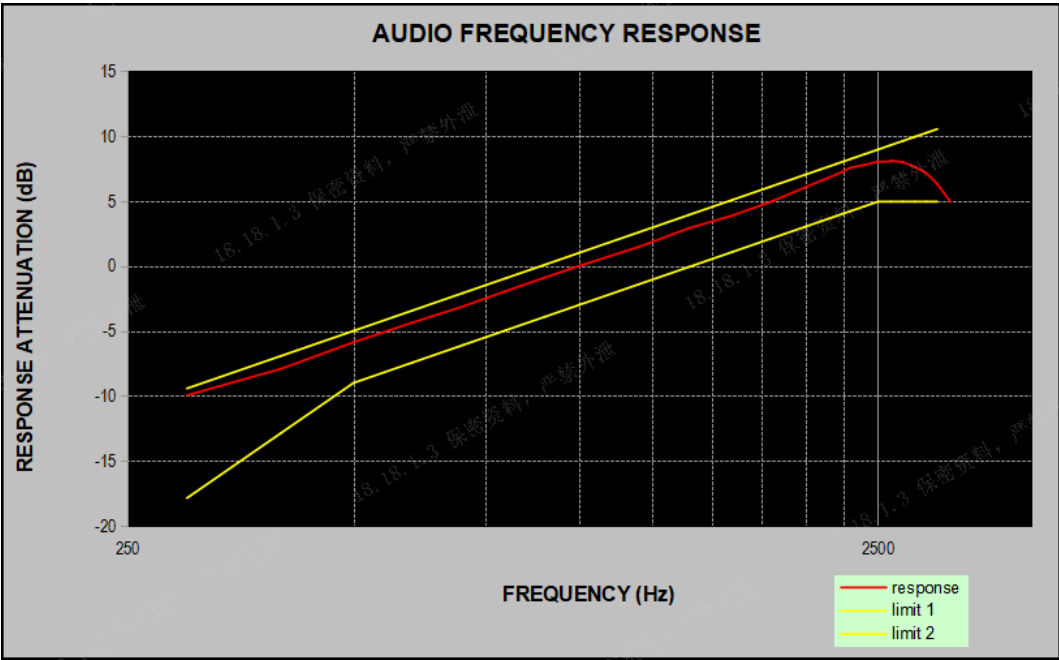
Audio Frequency Response
Carrier Frequency: 462.625MHz

Audio Frequency (Hz)	Response Attenuation (dB)
300	-9.79
400	-7.92
500	-5.81
600	-4.50
700	-2.73
800	-1.68
900	-0.61
1000	0.00
1200	1.70
1400	2.85
1600	3.90
1800	5.02
2000	6.07
2100	6.56
2200	7.15
2300	7.49
2400	7.78
2500	8.06
2600	8.17
2700	8.15
2800	7.80
2900	7.22
3000	6.38
3125	5.11



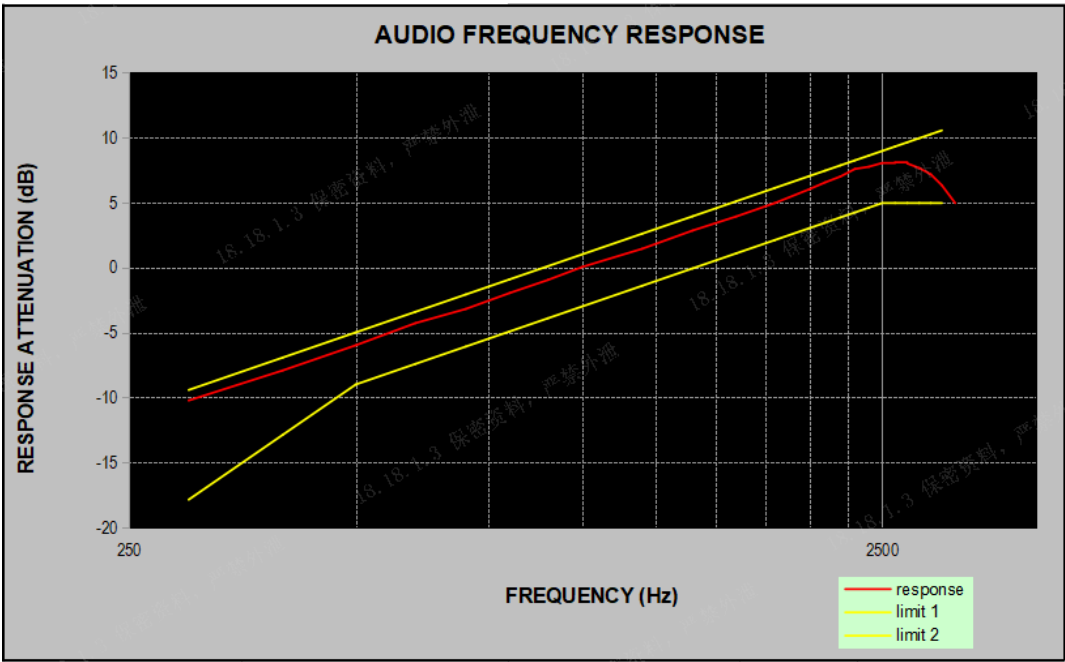
Carrier Frequency: 462.6375MHz

Audio Frequency (Hz)	Response Attenuation (dB)
300	-9.95
400	-7.92
500	-5.88
600	-4.35
700	-3.12
800	-1.92
900	-0.90
1000	0.00
1200	1.45
1400	2.89
1600	3.87
1800	4.92
2000	6.03
2100	6.54
2200	7.01
2300	7.54
2400	7.75
2500	8.01
2600	8.09
2700	7.97
2800	7.61
2900	7.13
3000	6.29
3125	4.91



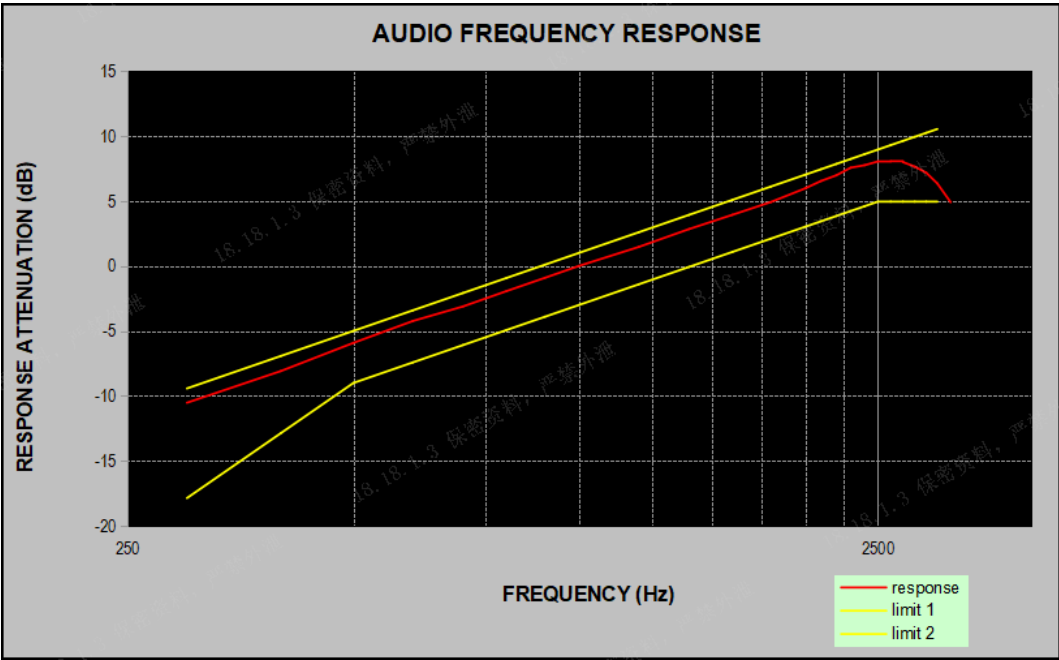
Carrier Frequency: 467.625MHz

Audio Frequency (Hz)	Response Attenuation (dB)
300	-10.23
400	-7.92
500	-5.99
600	-4.29
700	-3.20
800	-1.98
900	-0.97
1000	0.00
1200	1.42
1400	2.82
1600	3.90
1800	4.93
2000	5.99
2100	6.52
2200	6.97
2300	7.55
2400	7.72
2500	8.01
2600	8.06
2700	7.97
2800	7.62
2900	7.14
3000	6.30
3125	4.93



Carrier Frequency: 467.6375MHz

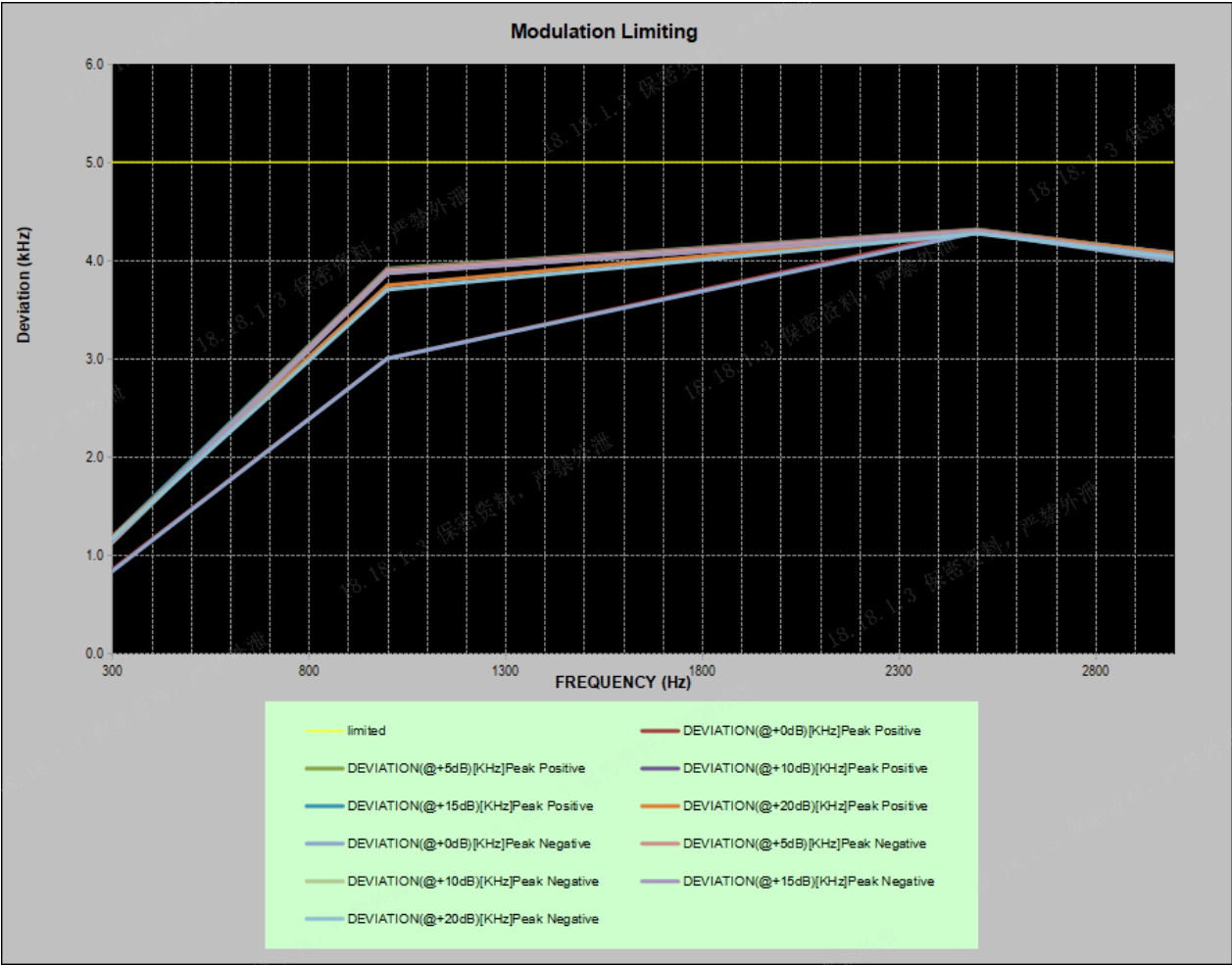
Audio Frequency (Hz)	Response Attenuation (dB)
300	-10.52
400	-8.09
500	-5.92
600	-4.24
700	-3.12
800	-1.94
900	-0.92
1000	0.00
1200	1.45
1400	2.82
1600	3.92
1800	4.90
2000	5.95
2100	6.52
2200	6.95
2300	7.54
2400	7.73
2500	8.02
2600	8.04
2700	7.97
2800	7.62
2900	7.15
3000	6.33
3125	4.89



Channel Spacing: 25kHz

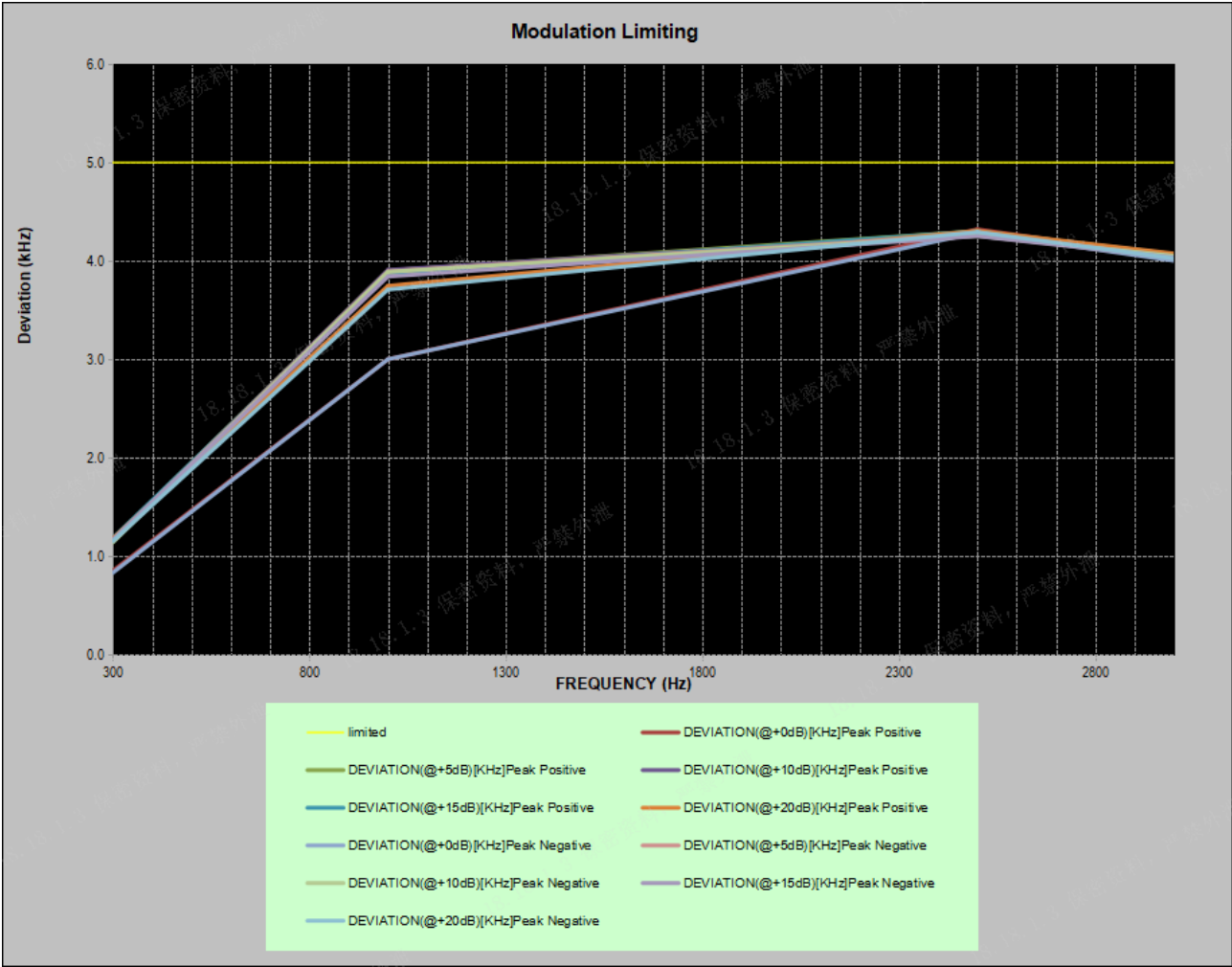
Modulation Limiting
Carrier Frequency: 462.625MHz

Audio Frequency (Hz)	DEVIATION (@+0dB) [kHz]		DEVIATION (@+5dB) [kHz]		DEVIATION (@+10dB) [kHz]		DEVIATION (@+15dB) [kHz]		DEVIATION (@+20dB) [kHz]		FCC Limit [kHz]
	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	
300	0.845	0.831	1.165	1.140	1.153	1.124	1.180	1.135	1.181	1.165	5.000
1000	3.000	3.000	3.916	3.896	3.904	3.871	3.891	3.869	3.745	3.702	5.000
2500	4.311	4.285	4.315	4.305	4.311	4.287	4.301	4.287	4.301	4.274	5.000
3000	4.035	3.997	4.068	4.027	4.072	4.040	4.075	4.043	4.071	4.032	5.000



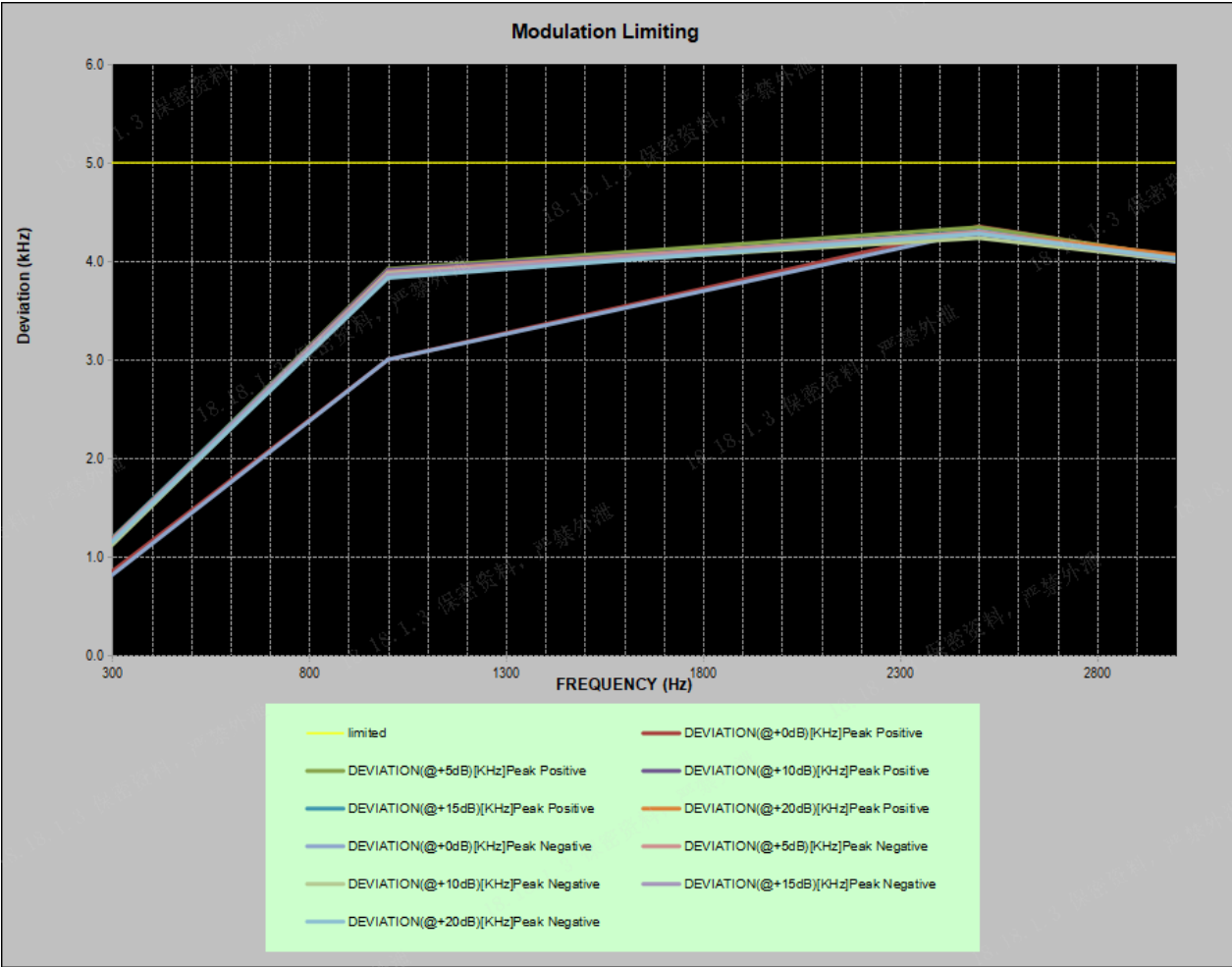
Carrier Frequency: 462.6375MHz

Audio Frequency (Hz)	DEVIATION (@+0dB) [kHz]		DEVIATION (@+5dB) [kHz]		DEVIATION (@+10dB) [kHz]		DEVIATION (@+15dB) [kHz]		DEVIATION (@+20dB) [kHz]		FCC Limit [kHz]
	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	
300	0.849	0.830	1.167	1.155	1.154	1.139	1.182	1.167	1.178	1.151	5.000
1000	3.000	3.000	3.902	3.891	3.908	3.889	3.871	3.841	3.746	3.709	5.000
2500	4.321	4.289	4.302	4.270	4.275	4.255	4.302	4.252	4.305	4.293	5.000
3000	4.039	4.002	4.067	4.045	4.062	4.051	4.063	4.034	4.075	4.026	5.000



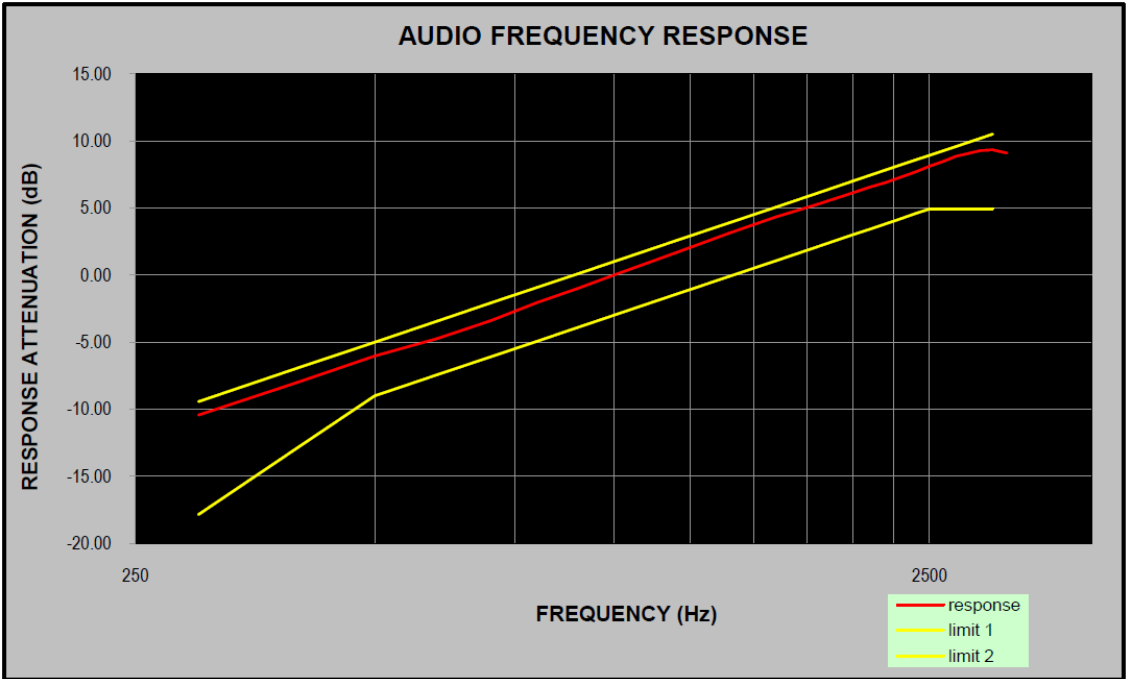
Carrier Frequency: 467.625MHz

Audio Frequency (Hz)	DEVIATION (@+0dB) [kHz]		DEVIATION (@+5dB) [kHz]		DEVIATION (@+10dB) [kHz]		DEVIATION (@+15dB) [kHz]		DEVIATION (@+20dB) [kHz]		FCC Limit [kHz]
	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	Peak Positive	Peak Negative	
300	0.849	0.814	1.168	1.157	1.154	1.119	1.187	1.169	1.179	1.148	5.000
1000	3.000	3.000	3.921	3.890	3.911	3.874	3.879	3.861	3.841	3.830	5.000
2500	4.352	4.307	4.345	4.297	4.278	4.236	4.304	4.282	4.295	4.279	5.000
3000	4.042	3.994	4.047	4.024	4.049	4.011	4.036	4.022	4.065	4.030	5.000



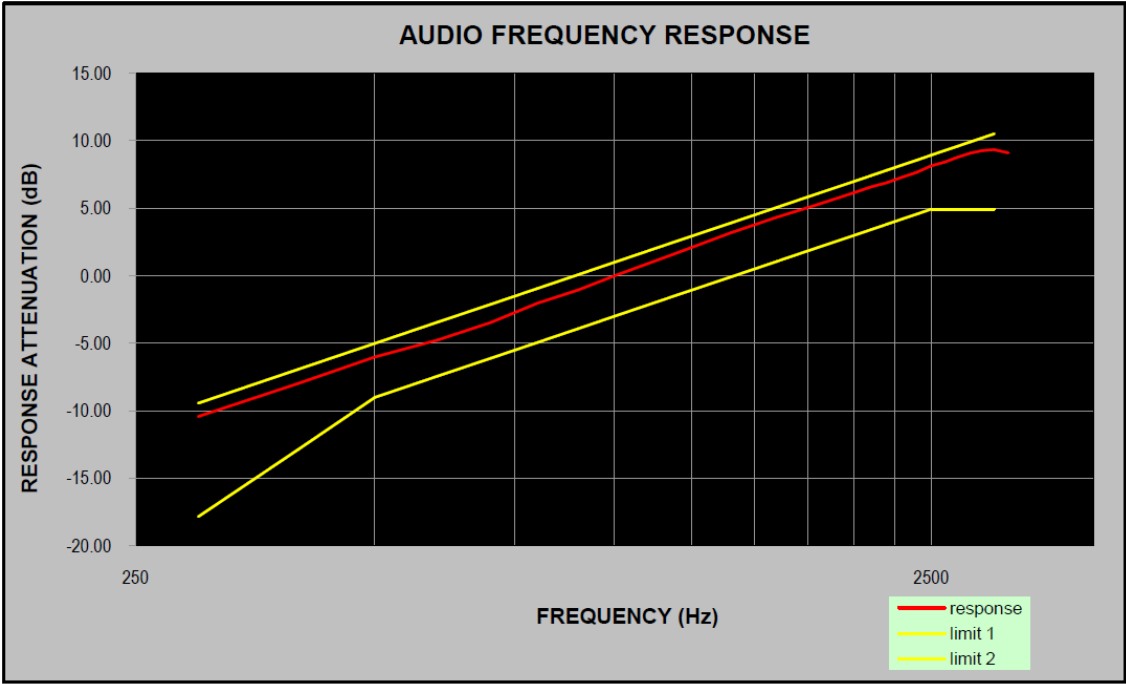
Audio Frequency Response
Carrier Frequency: 462.625MHz

Audio Frequency (Hz)	Response Attenuation (dB)
300	-10.43
400	-8.00
500	-6.04
600	-4.73
700	-3.41
800	-2.05
900	-1.01
1000	0.00
1200	1.69
1400	3.14
1600	4.34
1800	5.26
2000	6.12
2100	6.56
2200	6.90
2300	7.30
2400	7.69
2500	8.11
2600	8.47
2700	8.86
2800	9.07
2900	9.28
3000	9.34
3125	9.10



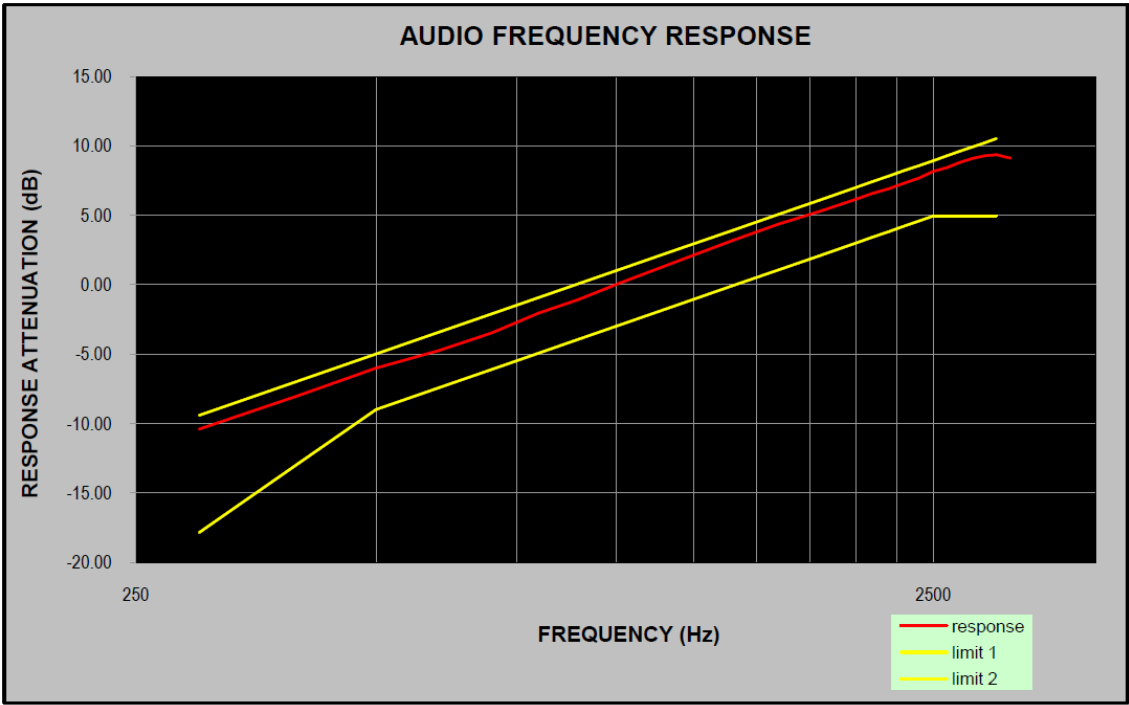
Carrier Frequency: 462.6375MHz

Audio Frequency (Hz)	Response Attenuation (dB)
300	-10.60
400	-7.94
500	-6.27
600	-4.87
700	-3.58
800	-2.34
900	-1.20
1000	0.00
1200	1.52
1400	2.85
1600	3.64
1800	4.87
2000	5.78
2100	6.28
2200	6.84
2300	7.05
2400	7.48
2500	7.98
2600	8.30
2700	8.58
2800	8.95
2900	9.13
3000	9.28
3125	9.11



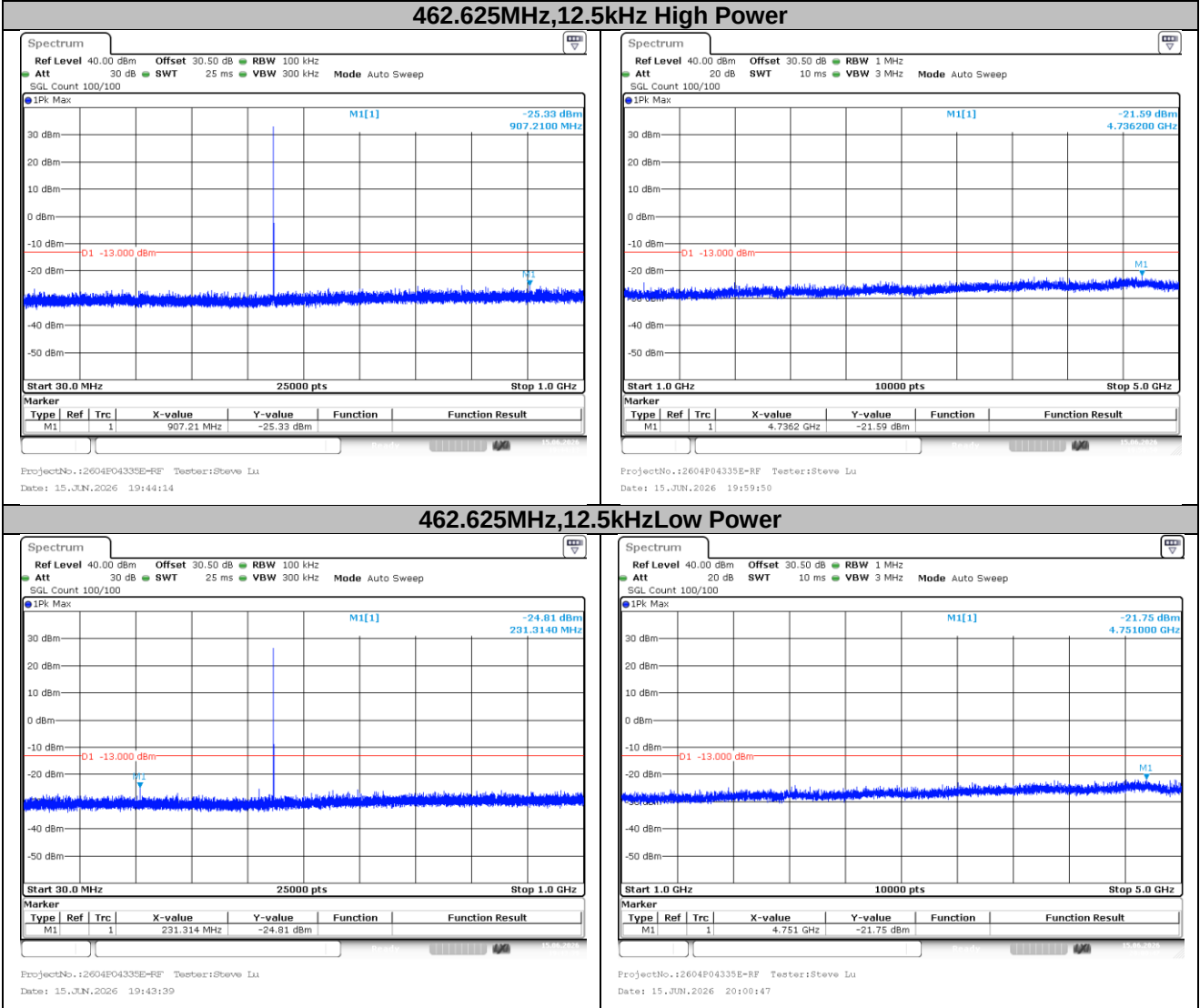
Carrier Frequency: 467.625MHz

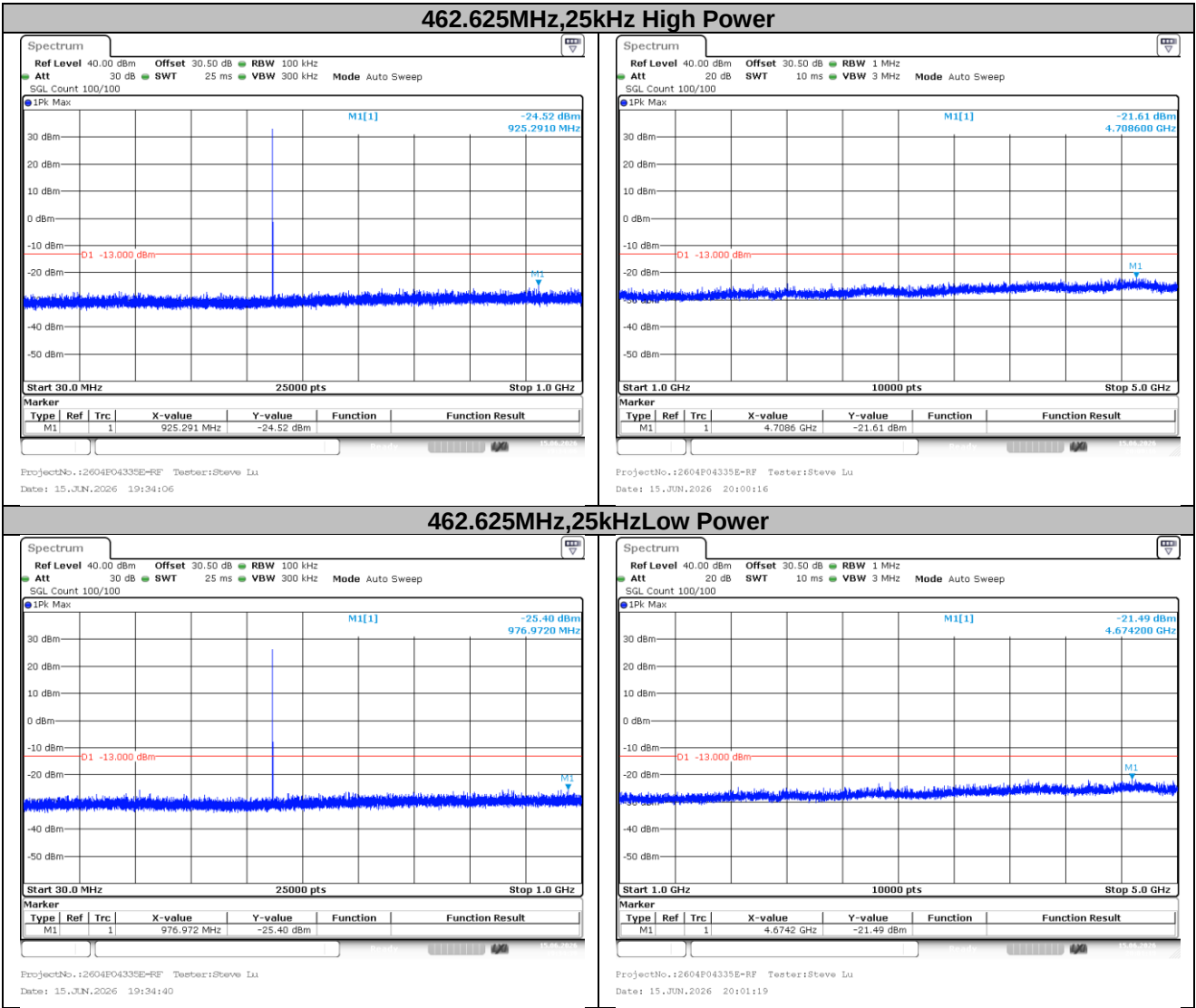
Audio Frequency (Hz)	Response Attenuation (dB)
300	-10.41
400	-7.98
500	-6.01
600	-4.75
700	-3.45
800	-2.04
900	-1.05
1000	0.00
1200	1.72
1400	3.18
1600	4.35
1800	5.28
2000	6.15
2100	6.58
2200	6.91
2300	7.31
2400	7.68
2500	8.15
2600	8.42
2700	8.79
2800	9.09
2900	9.27
3000	9.35
3125	9.11

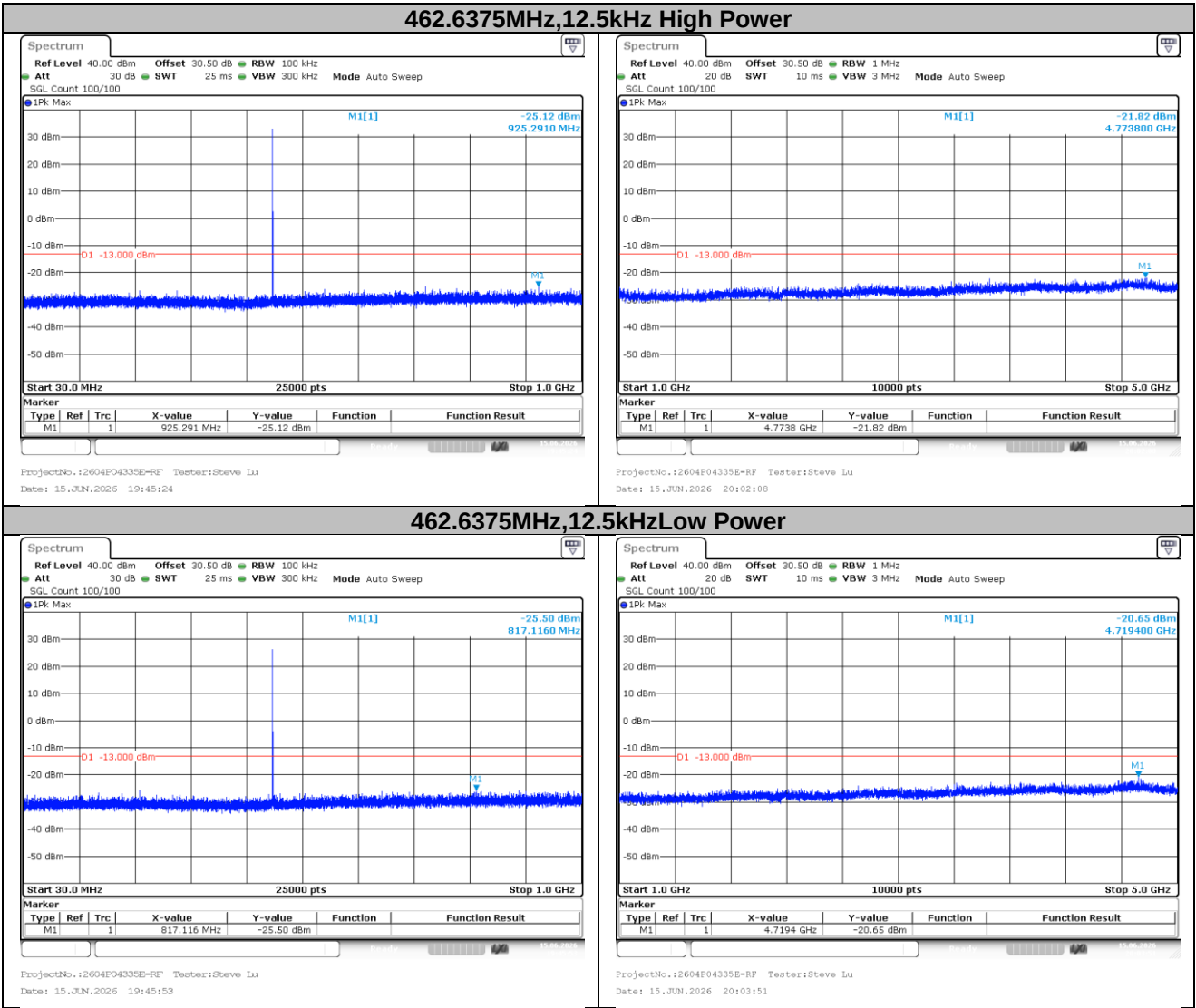


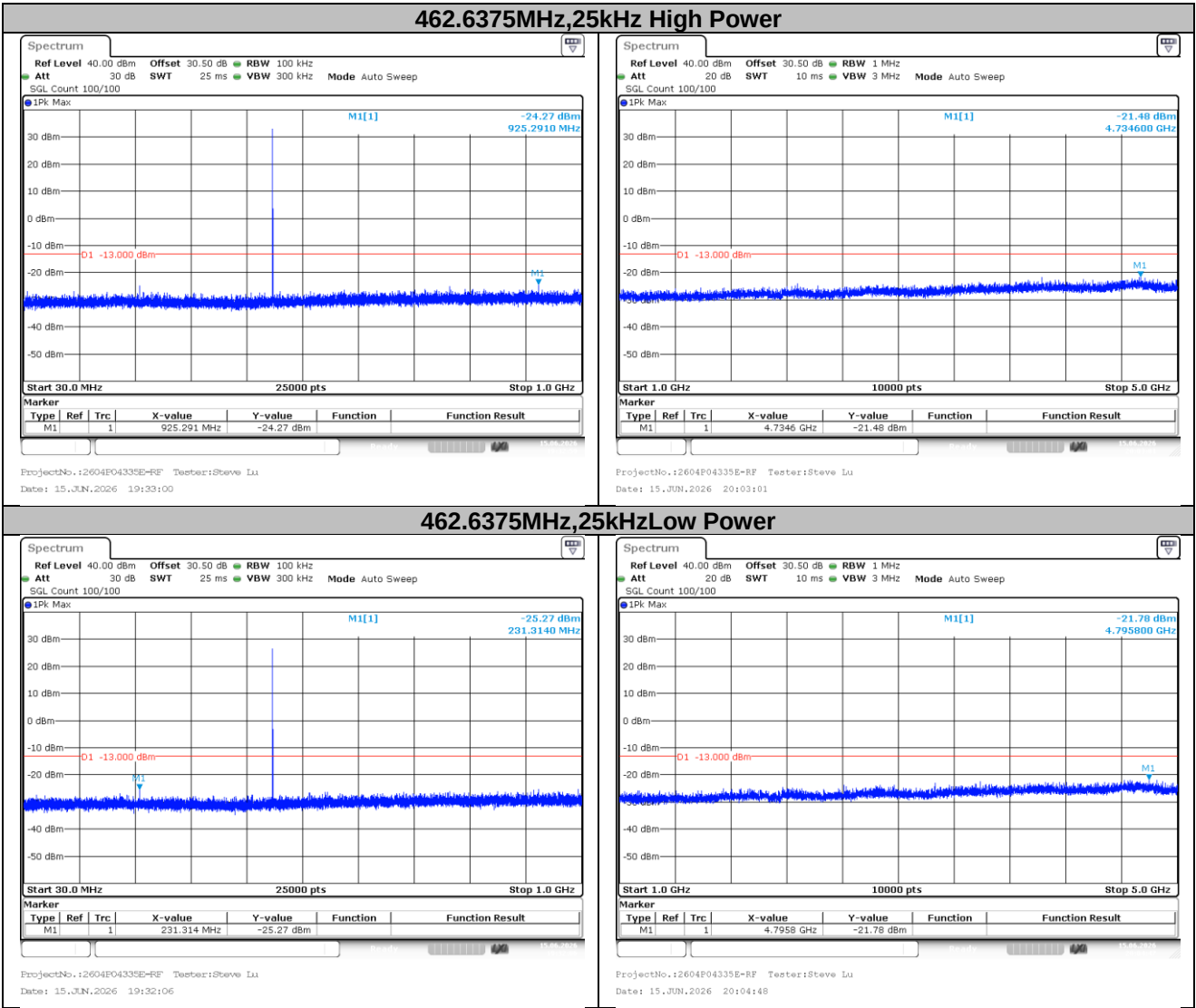
Antenna Port Unwanted Emissions

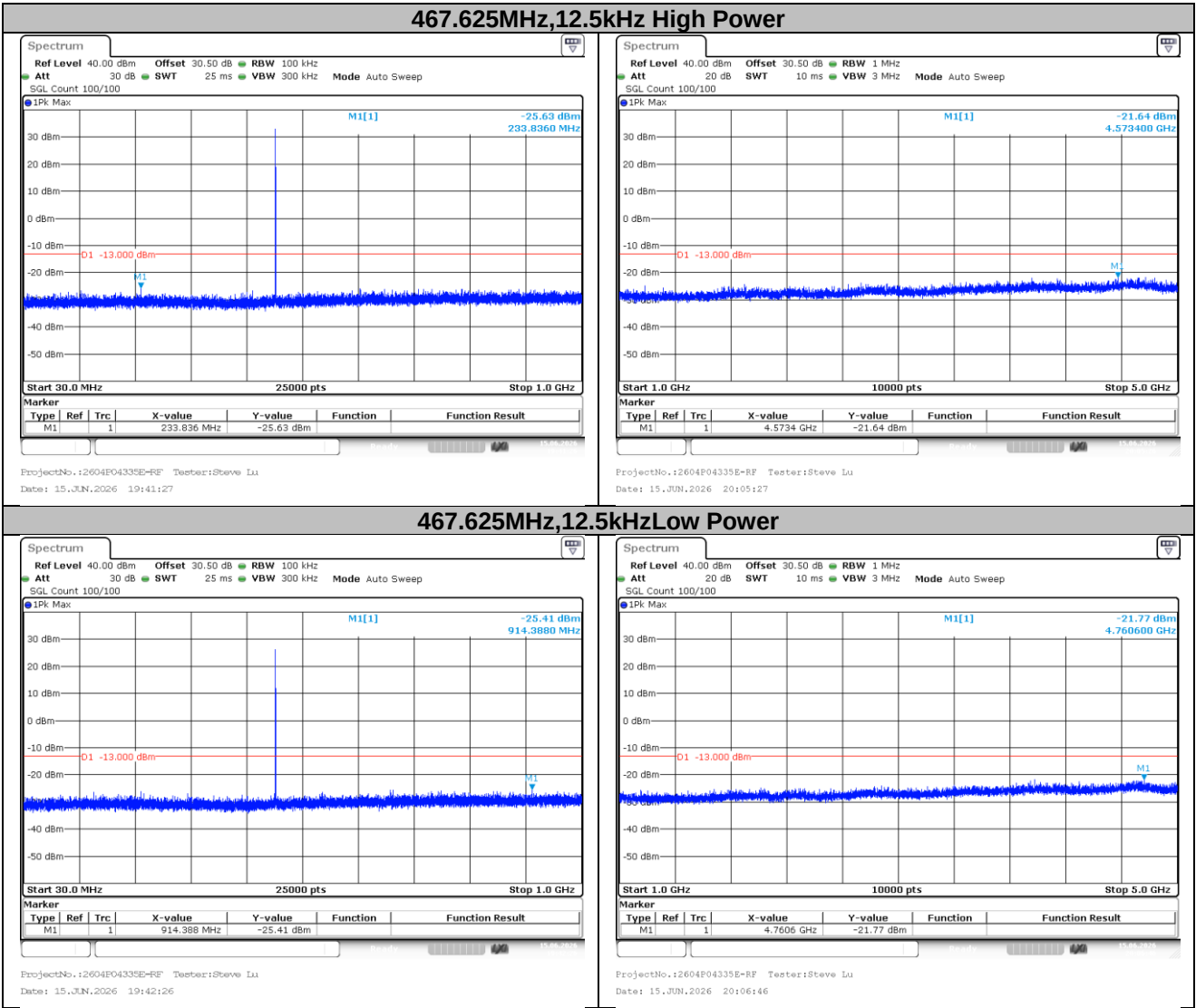
Test Result

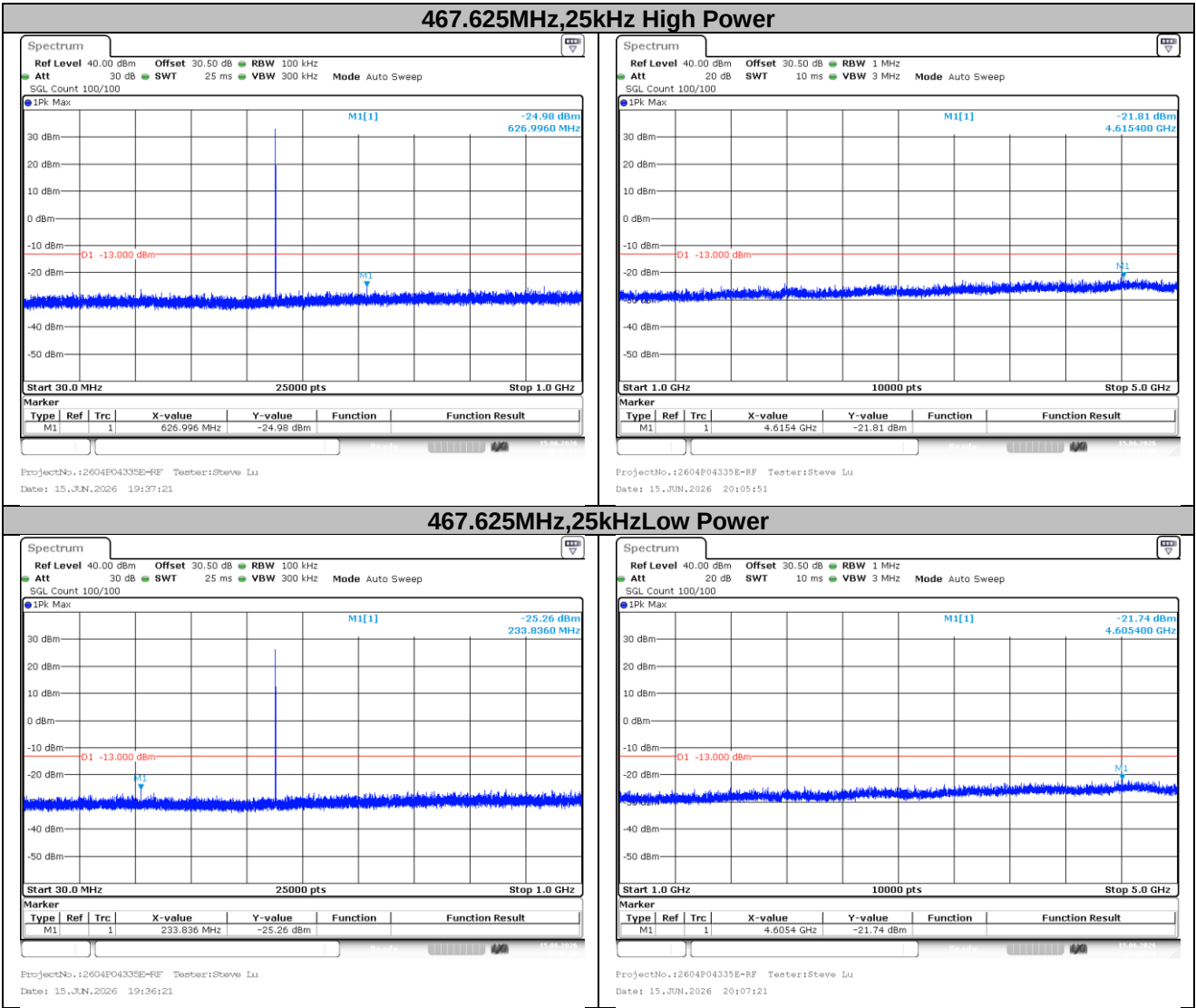












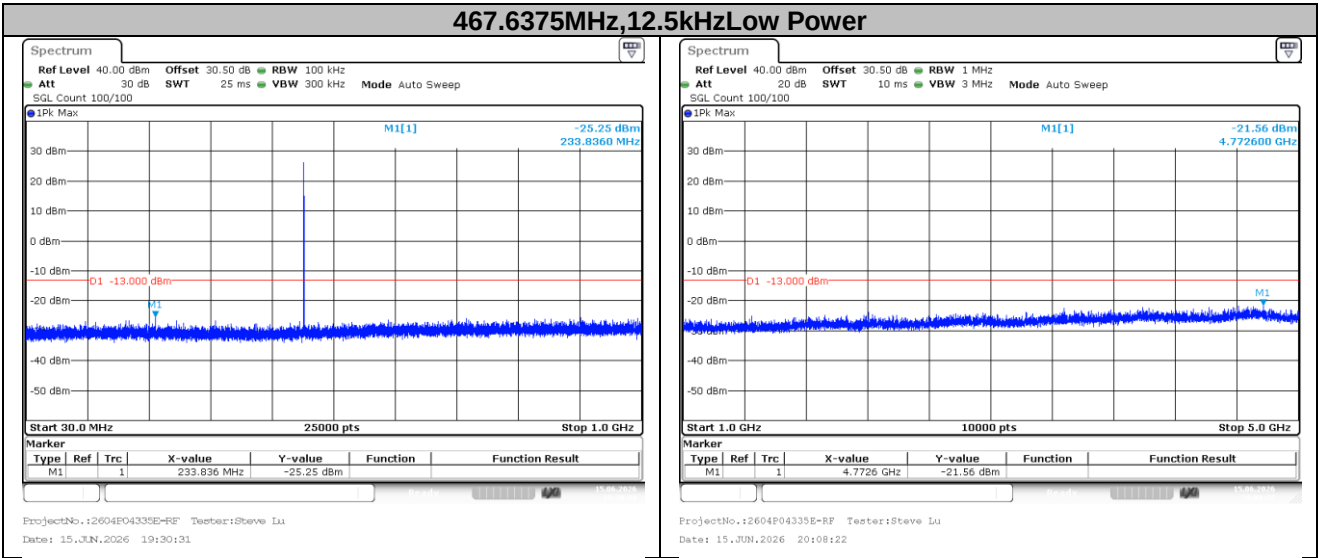


EXHIBIT A-EUT PHOTOGRAPHS

Please refer to the Attachment No.1 2604P04335E-RF EUT External Photos and Attachment No.2 2604P04335E-RF EUT Internal Photos.

EXHIBIT B-TEST SETUP PHOTOGRAPHS

Please refer to the Attachment No.3 2604P04335E-RF Test Photos.

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