RF TEST REPORT

Report No.:	20230817G10068X-W4
Product Name:	GNSS RTK Receiver
Model No.:	V500
FCC ID:	O39V500
Applicant:	Hi-Target Surveying Instrument Co., Ltd.
Address:	202, BLDG 13, Tian'An HQ Center, No.555 North Panyu RD. Donghuan Block, Panyu District, 511400 Guangzhou, China.
Dates of Testing:	08/16/2023 - 10/19/2023
Issued by:	CCIC Southern Testing Co., Ltd.
Lab Location:	Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China. **Tel**：86 755 26627338 **Fax**：86 755 26627238

Test Report

Product ..... :	GNSS RTK Receiver
Brand Name ..... :	Hi-Target
Trade Name ..... :	Hi-Target
Applicant ..... :	Hi-Target Surveying Instrument Co., Ltd.
Applicant Address ..... :	202, BLDG 13, Tian'An HQ Center, No.555 North Panyu RD. Donghuan Block, Panyu District, 511400 Guangzhou, China.
Manufacturer ..... :	Hi-Target Surveying Instrument Co., Ltd.
Manufacturer Address ..... :	202, BLDG 13, Tian'An HQ Center, No.555 North Panyu RD. Donghuan Block, Panyu District, 511400 Guangzhou, China.
Test Standards ..... :	47 CFR Part 2/90
Test Result ..... :	Pass

Tested by ..... : 2023.11.20

Chuiwang Zhang, Test Engineer

Reviewed by ..... : 2023.11.20

Chris You, Senior Engineer

Approved by ..... : 2023.11.20

Yang Fan, Manager

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Change History		
Issue	Date	Reason for change
1.0	2023.11.20	First edition

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	GNSS RTK Receiver
Model No.	V500
Hardware Version	20220023C
Software Version	V2.7.4
Operation Frequency	410MHz ~ 470MHz
Channel Spacing	12.5kHz, 25kHz
Type of Modulation	GMSK, 4FSK
Rated Output Power	Low Power Level: 0.5W Middle Power Level: 1.0W High Power Level: 2.0W
Antenna Type	External Antenna
Antenna gain	2.0dBi
Power supply	Rechargeable Li-ion Polymer Battery DC 7.2V/6600mAh /6900mAh(Typical)

Note 1: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

Note 2: The information of antenna gain and cable loss is provided by the manufacturer and our lab is not responsible for the accuracy of the antenna gain and cable loss information.

1.2. Test Standards and Results

The purpose of the report is to conduct testing according to the following FCC certification standards:

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22	Public Mobile Services
3	ANSI/TIA-603-E-2016	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards
4	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

Test detailed items/section required by FCC rules and results are as below:

No.	FCC Rule	Description	Result
1	§2.1046, §90.205	Transmitter Output Power	PASS
2	§2.1049, §90.209	Occupied Bandwidth	PASS
3	§90.210(b)&(d)	Emission Mask	PASS
4	§2.1051, §90.210(b)&(d)	Transmitter Conducted Spurious Emission	PASS
5	§2.1053, §90.210(b)&(d)	Transmitter Radiated Spurious Emission	PASS
6	§2.1055, §90.213	Frequency Stability	PASS
7	§90.214	Transmitter Frequency Behavior	PASS

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15 Subpart B, recorded in a separate test report.

1.3. Table for Supporting Units

No.	Equipment	Brand Name	Model Name	Manufacturer	Serial No.	Note
1	Laptop	HP	TPN-Q221	HP	5CD14347QB	FCC DOC

1.4. Description Operation Frequency

Modulation Type	Channel Spacing	Test Channel	Test Frequency
GMSK, 4FSK	12.5kHz, 25kHz	Low	410.025 MHz
		Mid	440.000 MHz
		High	469.975 MHz

1.5. Laboratory Facilities

FCC-Registration No.: 406086

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until Oct. 30th, 2023.

ISED Registration: 11185A

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A on Aug. 04, 2016, valid time is until Oct. 30th, 2023.

CAB number: CN0064

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

1.6. Test Environment Conditions

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

Temperature (°C):	15℃- 35℃
Relative Humidity (%):	30% -60%
Atmospheric Pressure (kPa):	86kPa-106kPa

2. 47 CFR Part 90 Requirements

2.1. Transmitter Output Power

2.1.1. Requirement

For 47 CFR Part 90.205(h)_450~470MHz:

(1) The maximum allowable station effective radiated power (ERP) is dependent upon the station's antenna HAAT and required service area and will be authorized in accordance with table 2. Applicants requesting an ERP in excess of that listed in table 2 must submit an engineering analysis based upon generally accepted engineering practices and standards that includes coverage contours to demonstrate that the requested station parameters will not produce coverage in excess of that which the applicant requires

(2) Applications for stations where special circumstances exist that make it necessary to deviate from the ERP and antenna heights in Table 2 will be submitted to the frequency coordinator accompanied by a technical analysis, based upon generally accepted engineering practices and standards, that demonstrates that the requested station parameters will not produce a signal strength in excess of 39 dBu at any point along the edge of the requested service area. The coordinator may then recommend any ERP appropriate to meet this condition.

(3) An applicant for a station with a service area radius greater than 32 km (20 mi) must justify the requested service area radius, which may be authorized only in accordance with table 2, note 4. For base stations with service areas greater than 80 km, all operations 80 km or less from the base station will be on a primary basis and all operations outside of 80 km from the base station will be on a secondary basis and will be entitled to no protection from primary operations.

Table 2—450–470 MHz—Maximum ERP/Reference HAAT for a Specific Service Area Radius

	Service area radius (km)									
	3	8	13	16	24	32	40[4]	48[4]	64[4]	80[4]
Maximum ERP (W)[1]	2	100	[2]500	[2]500	[2]500	[2]500	[2]500	[2]500	[2]500	[2]500
Up to reference HAAT (m)[3]	15	15	15	27	63	125	250	410	950	2700

[1] Maximum ERP indicated provides for a 39 dBu signal strength at the edge of the service area per FCC Report R-6602, Fig. 29 (See §73.699, Fig. 10 b).

[2] Maximum ERP of 500 watts allowed. Signal strength at the service area contour may be less than 39 dBu.

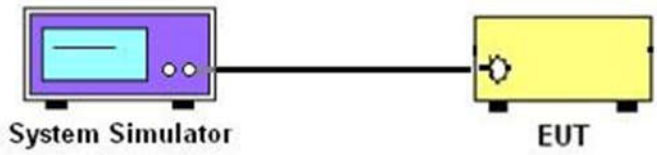
[3] When the actual antenna HAAT is greater than the reference HAAT, the allowable ERP will be reduced in accordance with the following equation: $ERP_{allow} = ERP_{max} \times (HAAT_{ref} / HAAT_{actual})^2$.

[4] Applications for this service area radius may be granted upon specific request with justification and must include a technical demonstration that the signal strength at the edge of the service area does not exceed 39 dBu.

2.1.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.1.3. Test Setup



2.1.4. Test Procedures

1. The testing follows the of ANSI C63.26-2015 Section 5.2.3.3.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set the RBW ≥ OBW.
4. Set VBW ≥ 3 × RBW.
5. Set span ≥ 2 × OBW.
6. Sweep time ≥ 10 × (number of points in sweep) × (transmission symbol period).
7. Detector = Peak.
8. Trace mode = Max hold.
9. Allow trace to fully stabilize.
10. Use the peak marker function to determine the peak amplitude level.
11. Repeat step 3~10 at other frequency and modulations.

2.1.5. Test Results of Transmitter Output Power

High Power Level: 2.0W							
Modulation Type	Channel Spacing	Test Frequency (MHz)	Conducted Output Power (dBm)	ERP (dBm)	ERP (W)	Max. Conducted Output Power Limit (dB)	Result
GMSK	12.5kHz	410.025	32.904	32.754	1.89	33.8	Pass
		440.000	32.983	32.833	1.92	33.8	Pass
		469.975	33.102	32.952	1.97	33.8	Pass
	25kHz	410.025	32.899	32.749	1.88	33.8	Pass
		440.000	32.909	32.759	1.89	33.8	Pass
		469.975	33.034	32.884	1.94	33.8	Pass
4FSK	12.5kHz	410.025	32.842	32.692	1.86	33.8	Pass
		440.000	32.897	32.747	1.88	33.8	Pass
		469.975	33.141	32.991	1.99	33.8	Pass
	25kHz	410.025	32.865	32.715	1.87	33.8	Pass
		440.000	32.939	32.789	1.90	33.8	Pass
		469.975	33.098	32.948	1.97	33.8	Pass

High Power Level: 1.0W							
Modulation Type	Channel Spacing	Test Frequency (MHz)	Conducted Output Power (dBm)	ERP (dBm)	ERP (W)	Max. Conducted Output Power Limit (dB)	Result
GMSK	12.5kHz	410.025	30.048	29.898	0.98	30.79	Pass
		440.000	29.900	29.750	0.94	30.79	Pass
		469.975	30.334	30.184	1.04	30.79	Pass
	25kHz	410.025	30.057	29.907	0.98	30.79	Pass
		440.000	30.915	30.765	1.19	30.79	Pass
		469.975	30.275	30.125	1.03	30.79	Pass
4FSK	12.5kHz	410.025	30.054	29.904	0.98	30.79	Pass
		440.000	29.918	29.768	0.95	30.79	Pass
		469.975	30.325	30.175	1.04	30.79	Pass
	25kHz	410.025	30.072	29.922	0.98	30.79	Pass
		440.000	29.902	29.752	0.94	30.79	Pass
		469.975	30.254	30.104	1.02	30.79	Pass

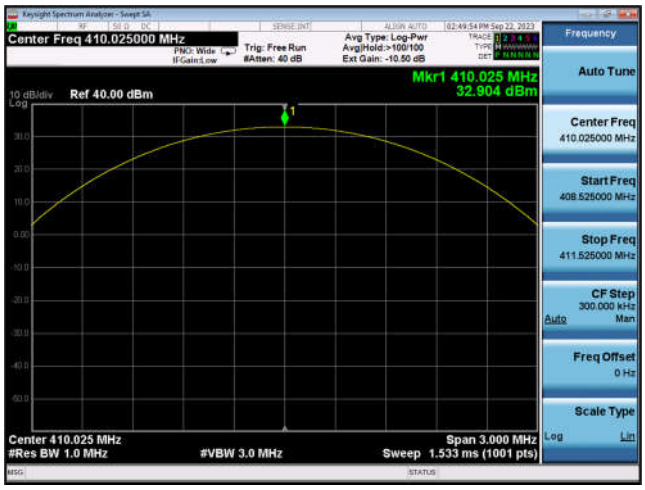
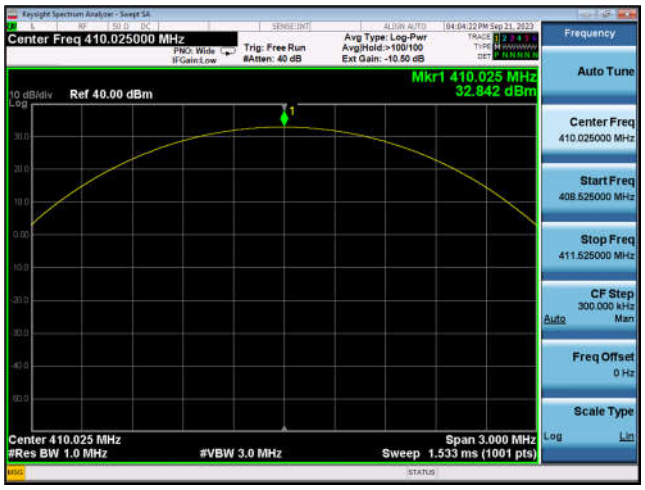
High Power Level: 0.5W							
Modulation Type	Channel Spacing	Test Frequency (MHz)	Conducted Output Power (dBm)	ERP (dBm)	ERP (W)	Max. Conducted Output Power Limit (dB)	Result
GMSK	12.5kHz	410.025	27.232	27.082	0.51	27.78	Pass
		440.000	27.204	27.054	0.51	27.78	Pass
		469.975	27.482	27.332	0.54	27.78	Pass
	25kHz	410.025	27.241	27.091	0.51	27.78	Pass
		440.000	27.195	27.045	0.51	27.78	Pass
		469.975	27.547	27.397	0.55	27.78	Pass
4FSK	12.5kHz	410.025	27.241	27.091	0.51	27.78	Pass
		440.000	27.204	27.054	0.51	27.78	Pass
		469.975	27.540	27.390	0.55	27.78	Pass
	25kHz	410.025	27.229	27.079	0.51	27.78	Pass
		440.000	27.209	27.059	0.51	27.78	Pass
		469.975	27.517	27.367	0.55	27.78	Pass

Note 1: ERP(dBm) = Conducted Output Power(dBm) + Ant Gian(dBi) - 2.15.

Note 2: Only High power level plot is reported to show setting parameter complies with testing method/procedure.

Note 3: the power tolerance should (1-/+20%) * Rated Power

High Power Level:

GMSK_12.5kHz: 410.025MHz	4FSK_12.5kHz: 410.025MHz
	
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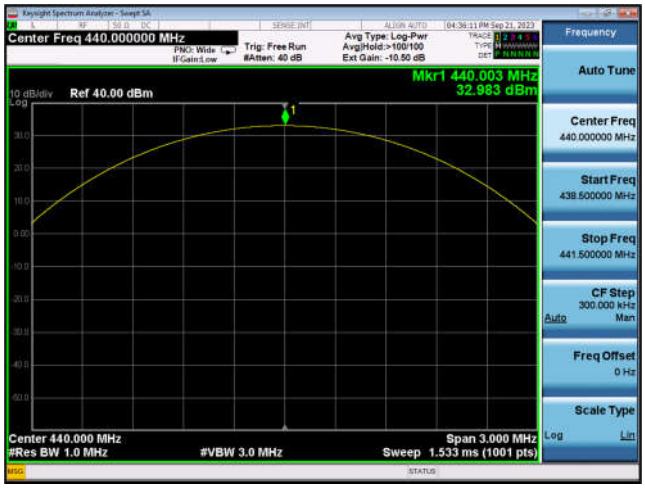	
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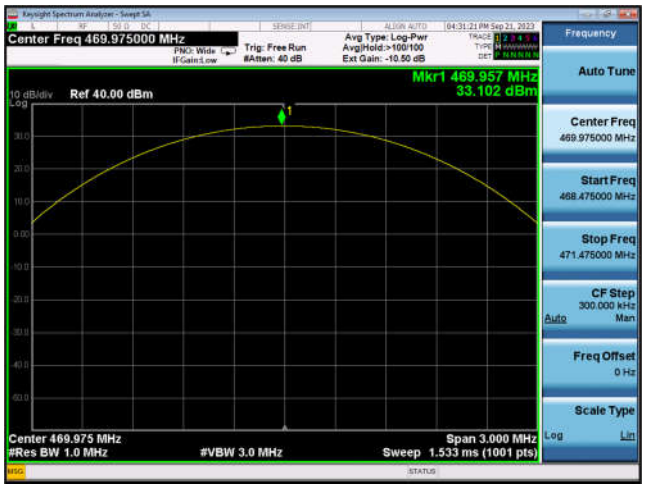
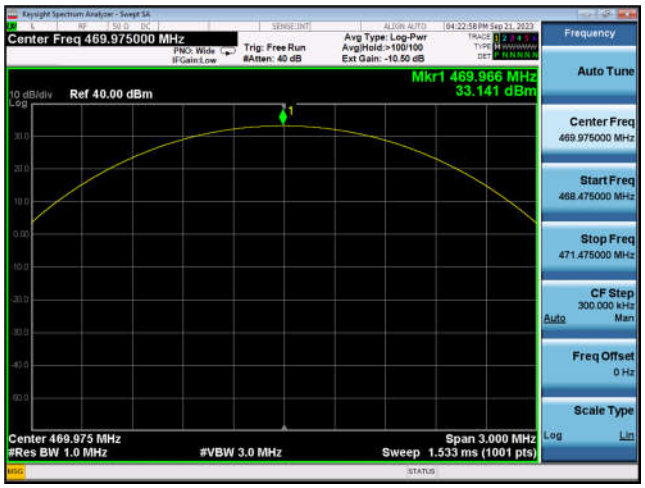
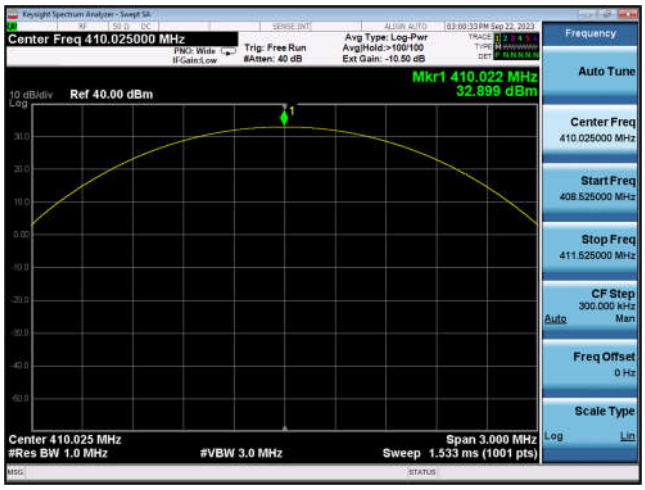
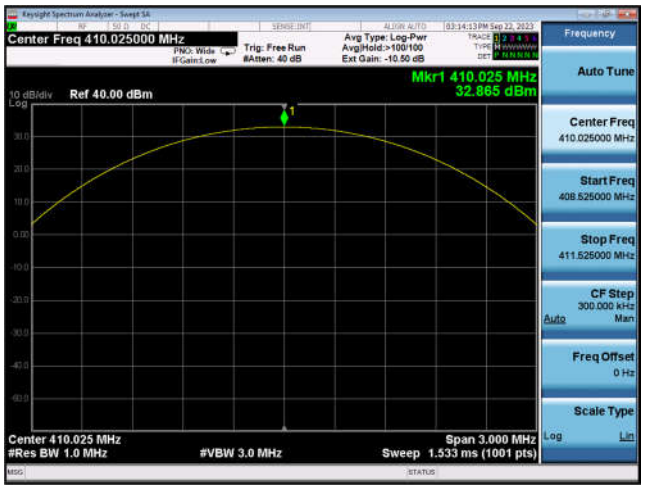
	

GMSK_25kHz: 410.025MHz	4FSK_25kHz: 410.025MHz
	
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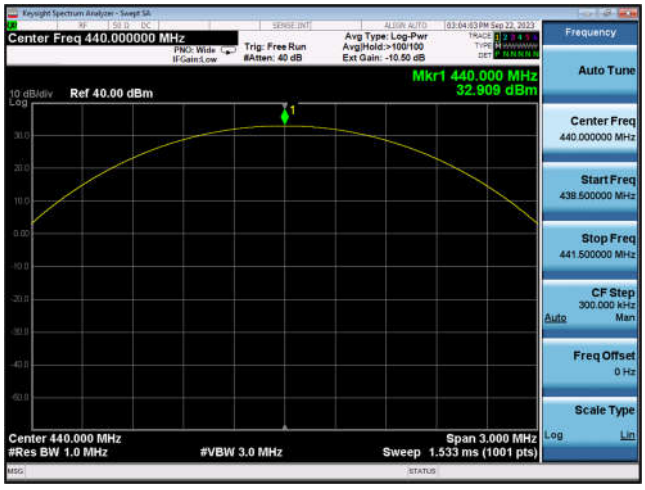	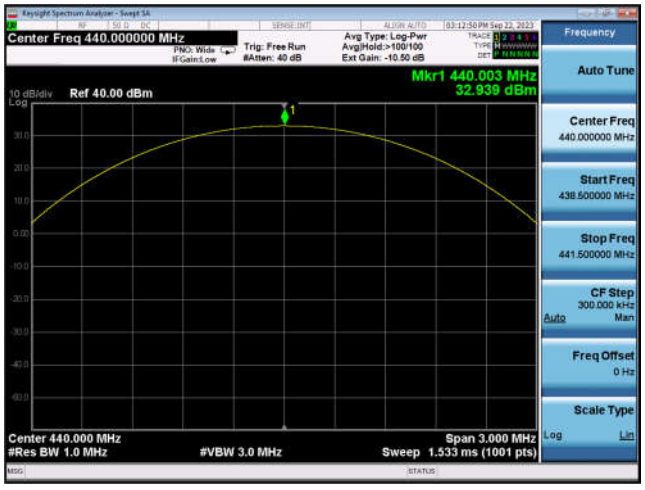
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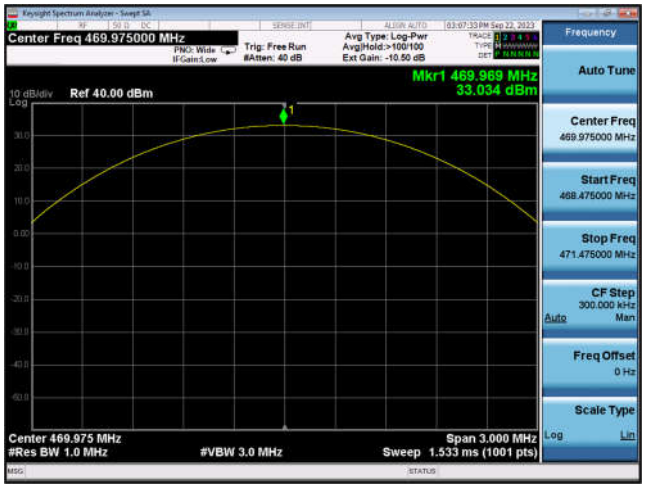
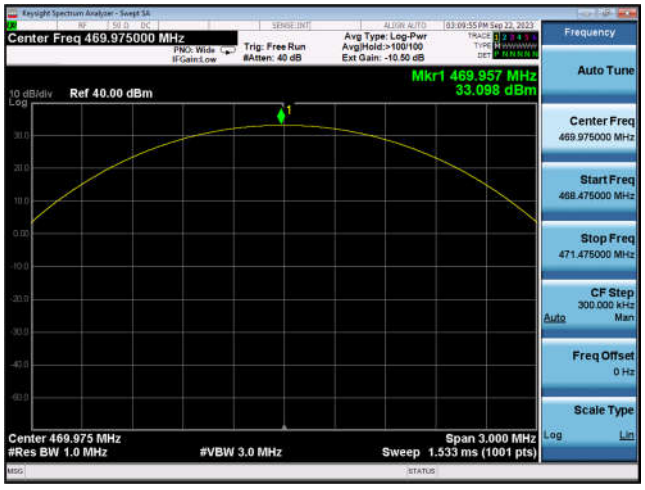
	

2.2. Occupied Bandwidth

2.2.1. Requirement

For 47 CFR Part 90.209:

(a) Each authorization issued to a station licensed under this part will show an emission designator representing the class of emission authorized. The designator will be prefixed by a specified necessary bandwidth. This number does not necessarily indicate the bandwidth occupied by the emission at any instant. In those cases where § 2.202 of this chapter does not provide a formula for the computation of necessary bandwidth, the occupied bandwidth, as defined in part 2 of this chapter, may be used in lieu of the necessary bandwidth.

(b) (5) Channel spacings and bandwidths that will be authorized in the following frequency bands are given in the following table.

Table 1 to § 90.209(b)(5)—Standard Channel Spacing/Bandwidth

Frequency band (MHz)	Channel spacing (kHz)	Authorized bandwidth (kHz)
Below 25		
25-50	20	20
72-76	20	20
150-174	7.5	20/11.25/6
216-220	6.25	20/11.25/6
220-222	5	4
406-512 [2]	[1] 6.25	[1 3 6] 20/11.25/6
806-809/851-854	12.5	20
809-817/854-862	12.5	20/11.25
817-824/862-869	25	20
869-901/935-940	12.5	13.6
902-928		
929-930	25	20
1427-1432	12.5	12.5
2450-2483.5		
Above 2500		

[1] For stations authorized on or after August 18, 1995.

[2] Bandwidths for radiolocation stations in the 420 – 450 MHz band and for stations operating in bands subject to this footnote will be reviewed and authorized on a case-by-case basis.

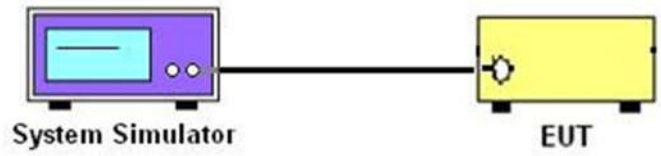
[3] Operations using equipment designed to operate with a 25kHz channel bandwidth will be authorized a 20kHz bandwidth. Operations using equipment designed to operate with a 12.5kHz channel bandwidth will be authorized a 11.25kHz bandwidth. Operations using equipment designed to operate with a 6.25kHz channel bandwidth will be authorized a 6kHz bandwidth. All stations must operate on channels with a bandwidth of 12.5kHz or less beginning January 1, 2013, unless the operations meet the efficiency standard of §90.203(j)(3).

[6] Operations using equipment designed to operate with a 25 kilohertz channel bandwidth may be authorized up to a 20kilohertz bandwidth unless the equipment meets the Adjacent Channel Power limits of §90.221 in which case operations may be authorized up to a 22 kilohertz bandwidth. Operations using equipment designed to operate with a 12.5kilohertz channel bandwidth may be authorized up to an 11.25 kilohertz bandwidth.

2.2.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.2.3. Test Setup



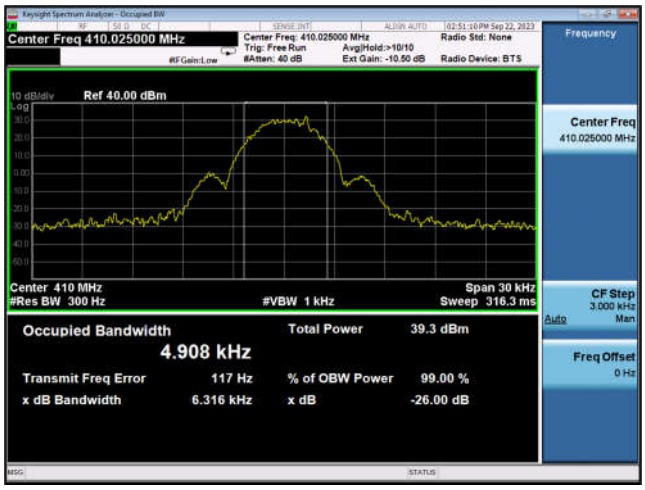
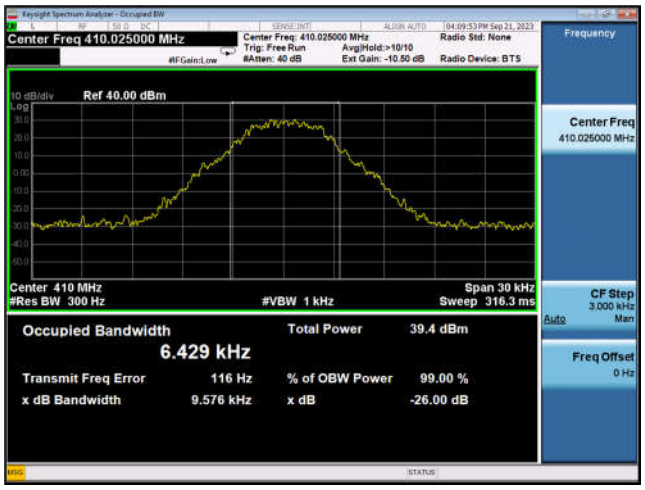
2.2.4. Test Procedures

1. The testing follows the of ANSI C63.26-2015 Section 5.4.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Use the spectrum analyzer “Channel Bandwidth” function to easurement the 26dB EBW and 99% OBW.
4. Set center frequency to the nominal EUT channel center frequency.
5. Set span to be approximately 1.5 to 5 times the OBW.
6. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW.
7. Set VBW ≥ 3 × RBW.
8. Set Detection mode = Peak.
9. Set Trace mode = Max hold.
10. Allow trace to stabilize.
11. Repeat step 3~10 at other frequency and modulations.

2.2.5. Test Results of Occupied Bandwidth

High Power Level: 2.0W						
Modulation Type	Channel Spacing	Test Frequency (MHz)	99% OBW (kHz)	26dB EBW (kHz)	Limit (kHz)	Result
GMSK	12.5kHz	410.025	4.908	6.316	≤ 11.25	PASS
		440.000	5.068	6.434		PASS
		469.975	4.976	6.389		PASS
	25kHz	410.025	9.966	12.71	≤ 20	PASS
		440.000	9.927	12.13		PASS
		469.975	9.829	12.07		PASS
4FSK	12.5kHz	410.025	6.429	9.576	≤ 11.25	PASS
		440.000	6.599	9.547		PASS
		469.975	6.647	9.656		PASS
	25kHz	410.025	13.046	18.48	≤ 20	PASS
		440.000	13.436	18.16		PASS
		469.975	12.807	18.08		PASS

High Power Level:

GMSK_12.5kHz: 410.025MHz	4FSK_12.5kHz: 410.025MHz
	
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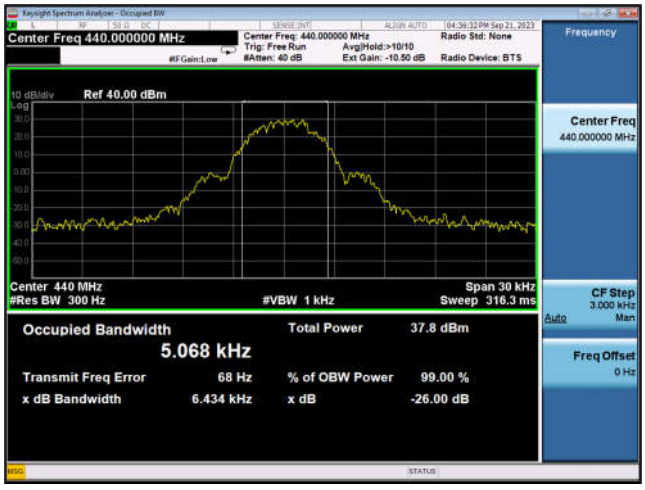	
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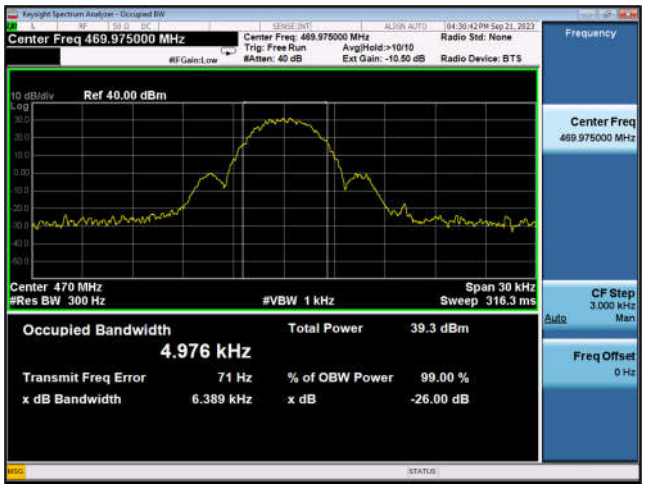	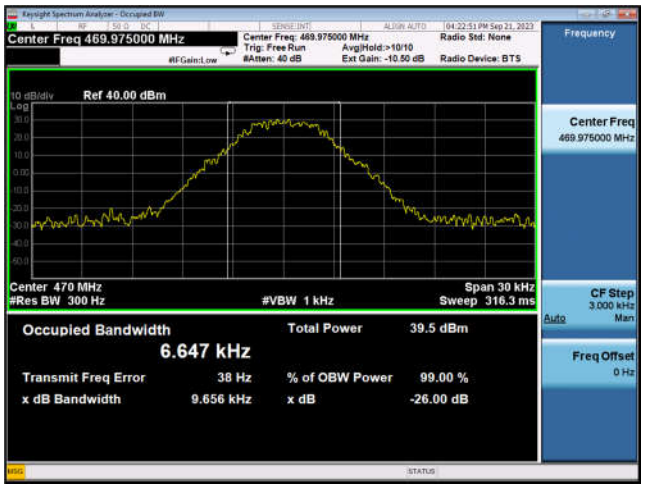

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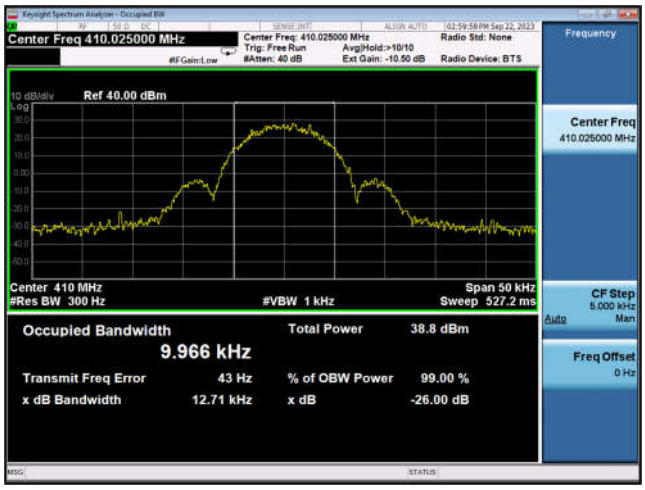	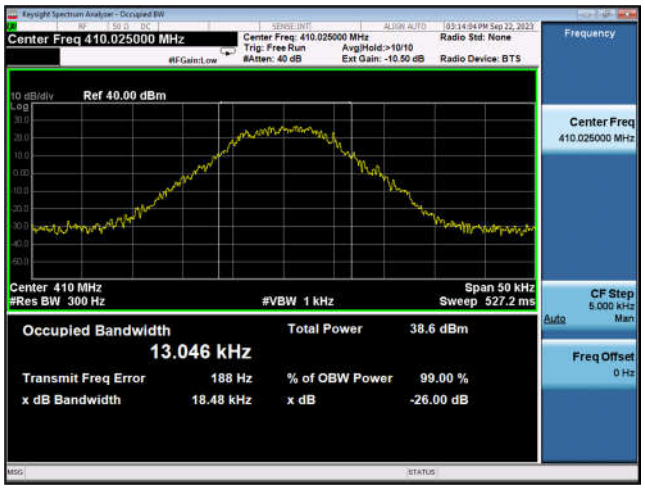
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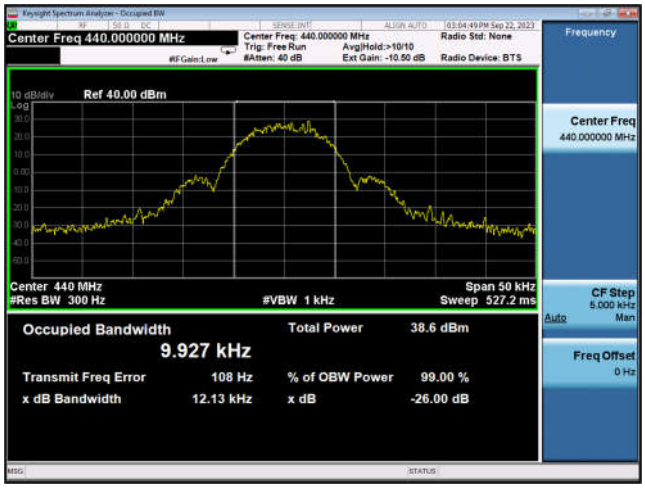	
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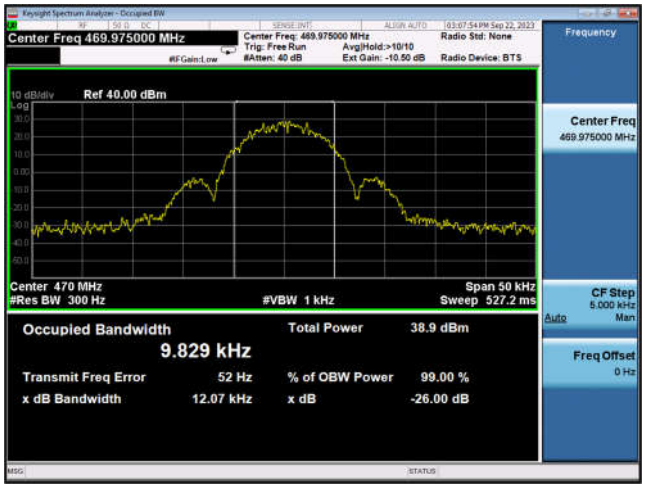
	

2.3. Emission Mask

2.3.1. Requirement

For 47 CFR Part 90.210:

(b) Emission Mask B. For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

(1) On any frequency removed from the assigned frequency by more than 50 percent, but not more than 100 percent of the authorized bandwidth: At least 25 dB.

(2) On any frequency removed from the assigned frequency by more than 100 percent, but not more than 250 percent of the authorized bandwidth: At least 35 dB.

(3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43 + 10 log (P) dB.

(d) 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) On any frequency from the center of the authorized bandwidth f_0 to 5.625 kHz removed from f_0: Zero dB.

(2) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5.625 kHz but no more than 12.5 kHz: At least 7.27(f_d–2.88 kHz) dB.

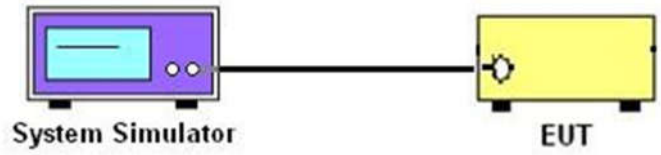
(3) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 12.5 kHz: At least 50 + 10 log(P) dB or 70 dB, whichever is the lesser attenuation.

(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.

2.3.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.3.3. Test Setup



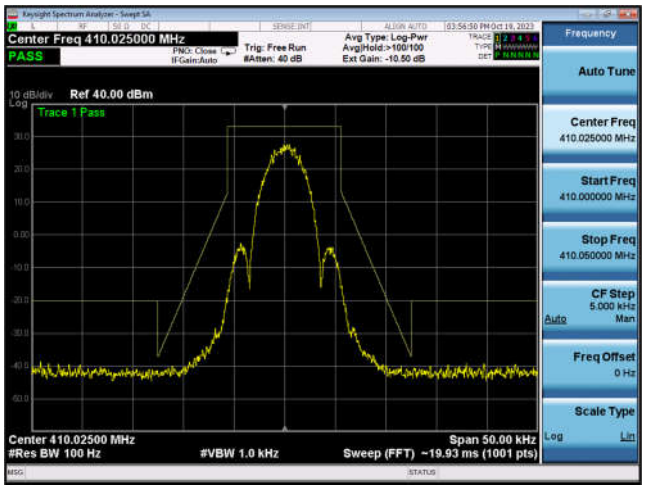
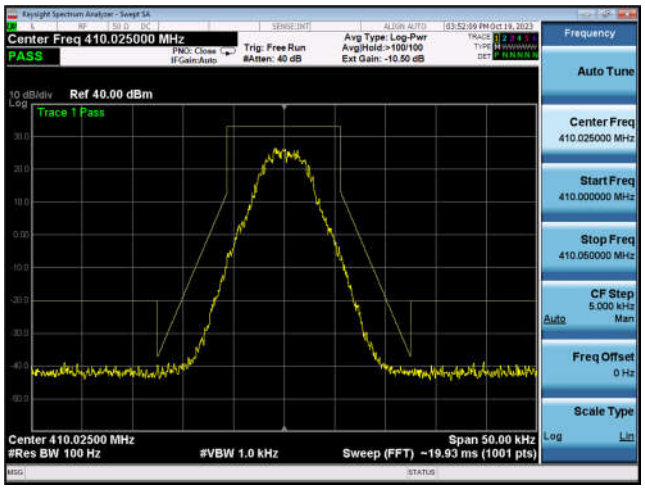
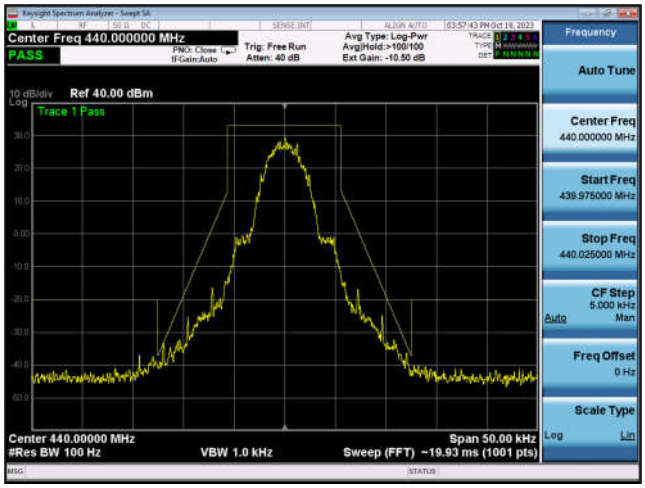
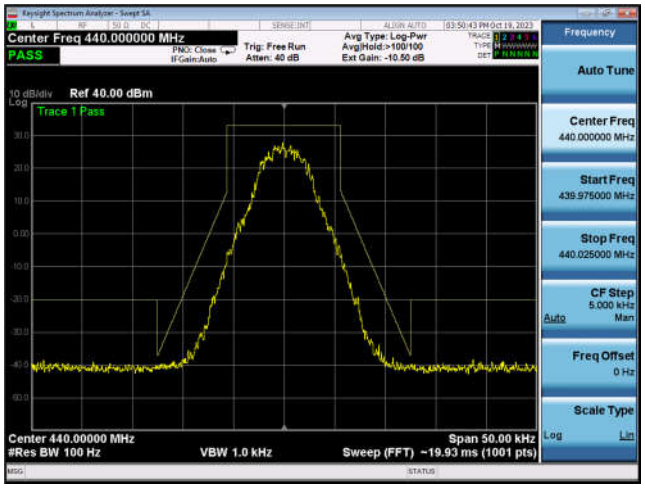
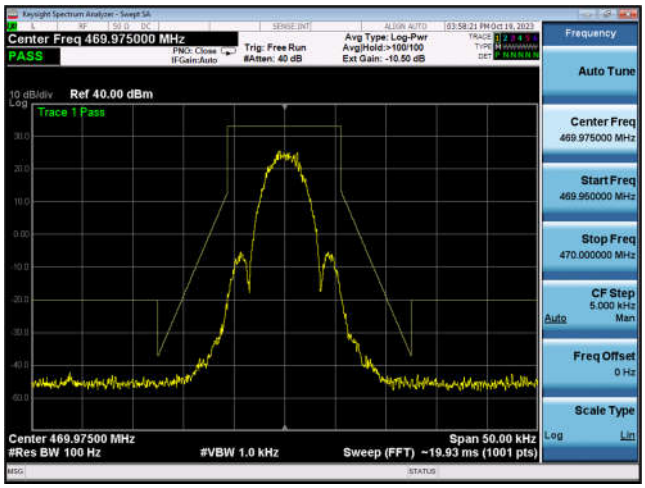
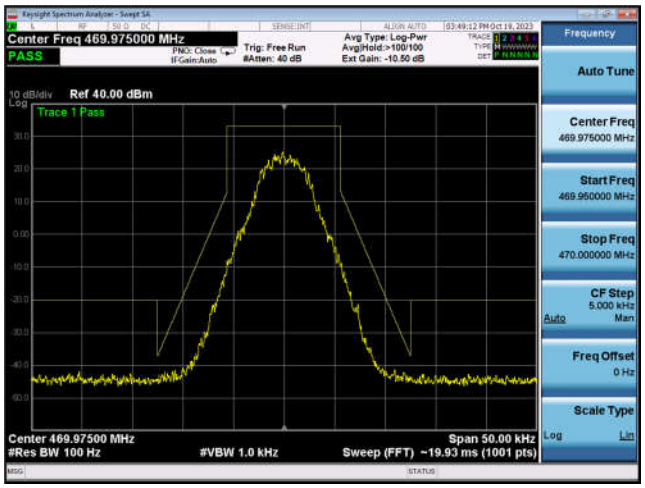
2.3.4. Test Procedures

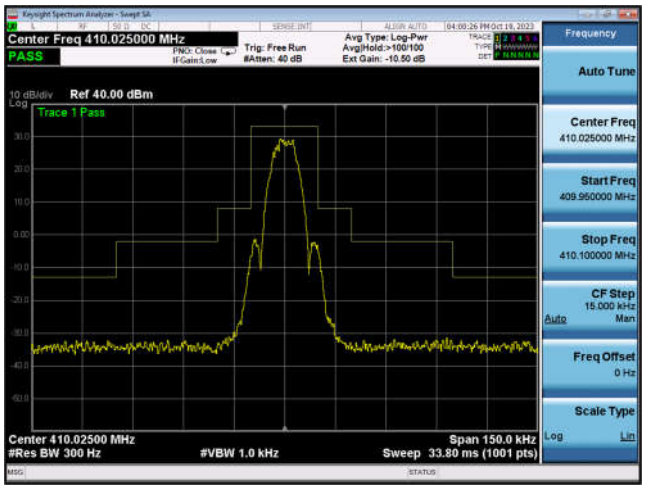
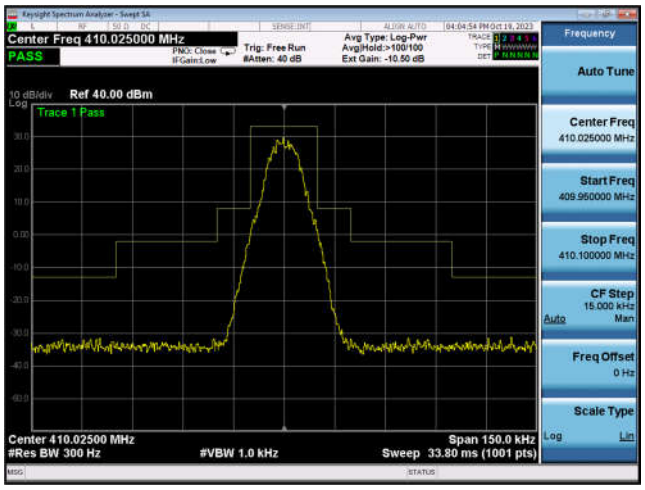
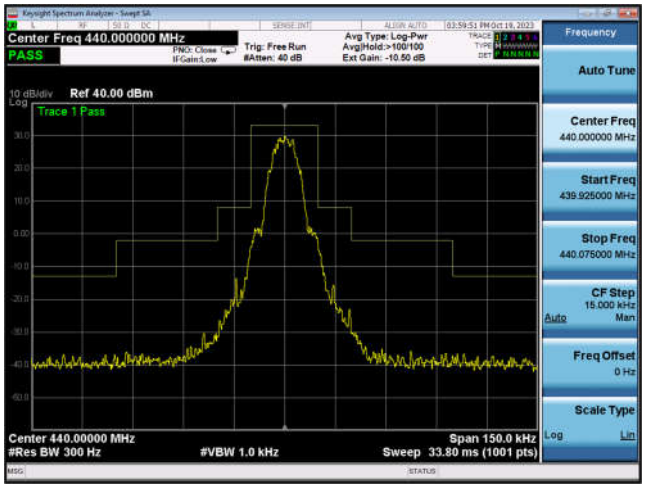
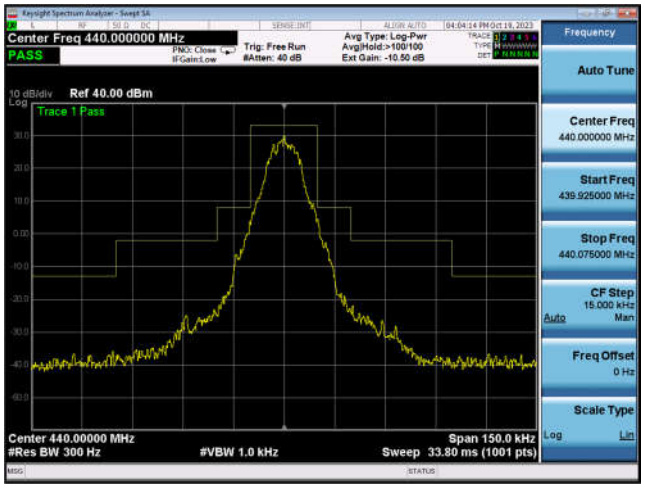
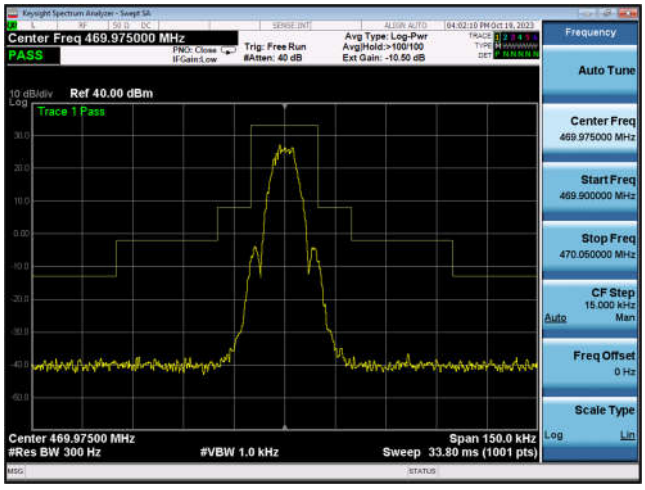
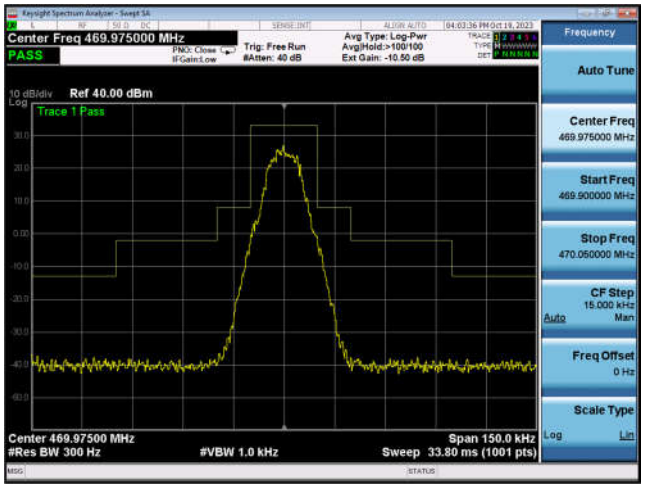
1. The testing follows the of ANSI C63.26-2015 Section 5.7.3.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set center frequency to the nominal EUT channel center frequency.
4. According §90.210(b)&(d) to set Emission mask limit.
5. Set RBW = 100Hz(Emission Mask D) or 300Hz(Emission Mask B).
6. Set VBW = 1kHz.
7. Set Detection mode = Peak.
8. Set Trace mode = Max hold.
9. Allow trace to stabilize.
10. Repeat step 3~9 at other frequency and modulations.

2.3.5. Test Result of Emission Mask

High Power Level: 2.0W					
Modulation Type	Channel Spacing	Test Frequency (MHz)	Applicable Mask	RBW(Hz)	Result
GMSK 4FSK	12.5kHz	410.025	D	100	PASS
		440.000	D	100	PASS
		469.975	D	100	PASS
GMSK 4FSK	25kHz	410.025	B	300	PASS
		440.000	B	300	PASS
		469.975	B	300	PASS

High Power Level:

GMSK_12.5kHz: 410.025MHz	4FSK_12.5kHz: 410.025MHz
	
GMSK_12.5kHz: 440.000MHz	**4FSK_12.5kHz: 440.000MHz**
	
GMSK_12.5kHz: 469.975MHz	**4FSK_12.5kHz: 469.975MHz**
	

GMSK_25kHz: 410.025MHz	4FSK_25kHz: 410.025MHz
	
GMSK_25kHz: 440.000MHz	4FSK_25kHz: 440.000MHz
	
GMSK_25kHz: 469.975MHz	4FSK_25kHz: 469.975MHz
	

2.4. Transmitter Conducted Spurious Emission

2.4.1. Requirement

For 47 CFR Part 90.210:

(b) Emission Mask B. For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

(3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43 + 10 log (P) dB.

(d) 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:

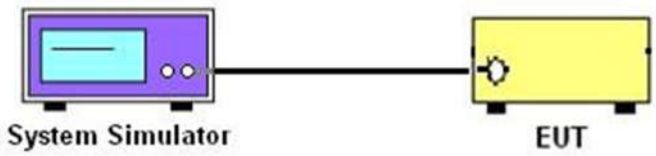
(3) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 12.5 kHz: At least 50 + 10 log(P) dB or 70 dB, whichever is the lesser attenuation.

(o) Instrumentation. The reference level for showing compliance with the emission mask shall be established, except as indicated in §§90.210 (d), (e), and (k), using standard engineering practices for the modulation characteristic used by the equipment under test. When measuring emissions in the 150 – 174 MHz and 421 – 512 MHz bands the following procedures will apply. 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 frequencies more than 50 kHz removed from the edge of the authorized bandwidth a resolution of at least 100 kHz must be used for frequencies below 1000 MHz. Above 1000 MHz the resolution bandwidth of the instrumentation must be at least 1 MHz. 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, then an alternate procedure may be used provided prior Commission approval is obtained.

2.4.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.4.3. Test Setup



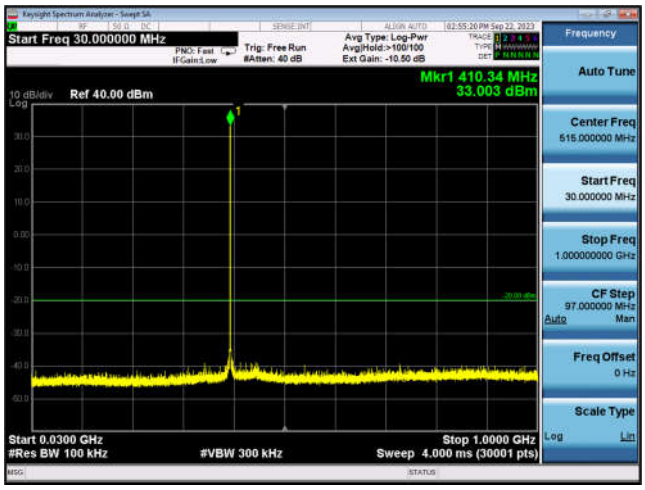
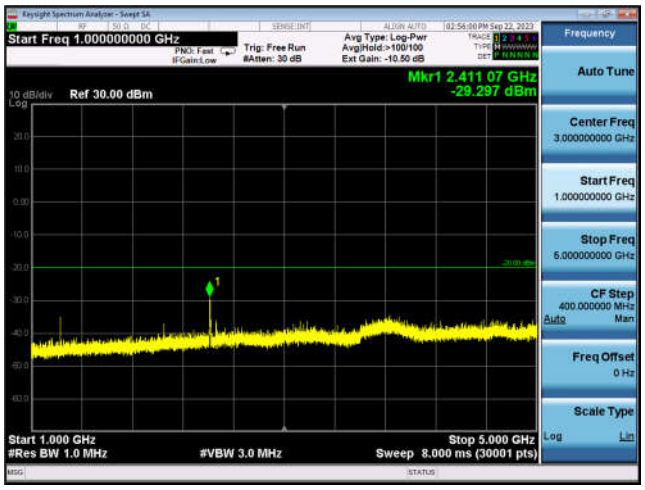
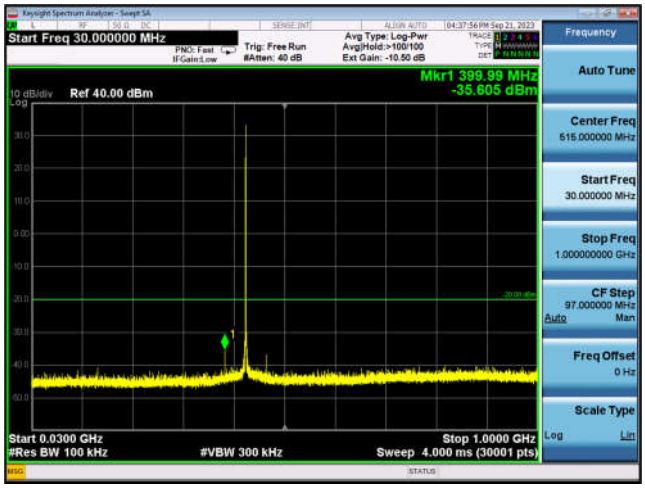
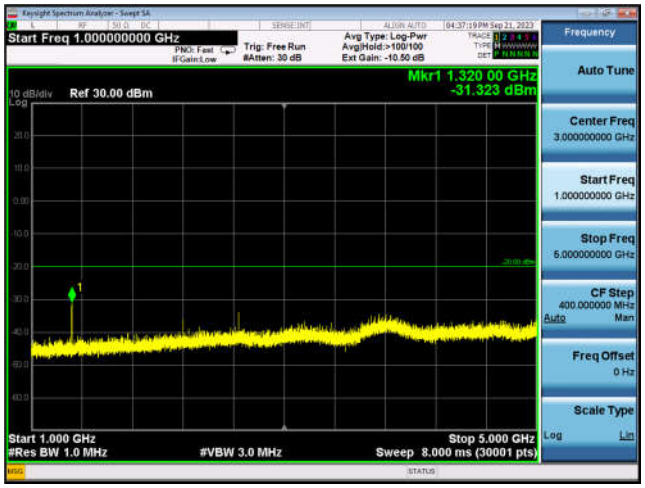
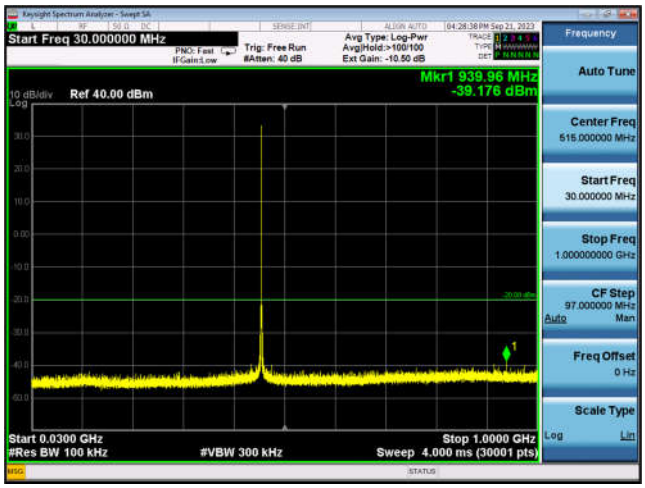
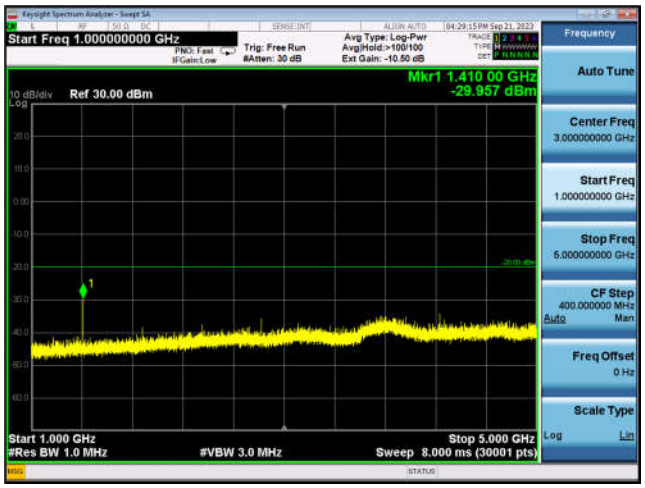
2.4.4. Test Procedures

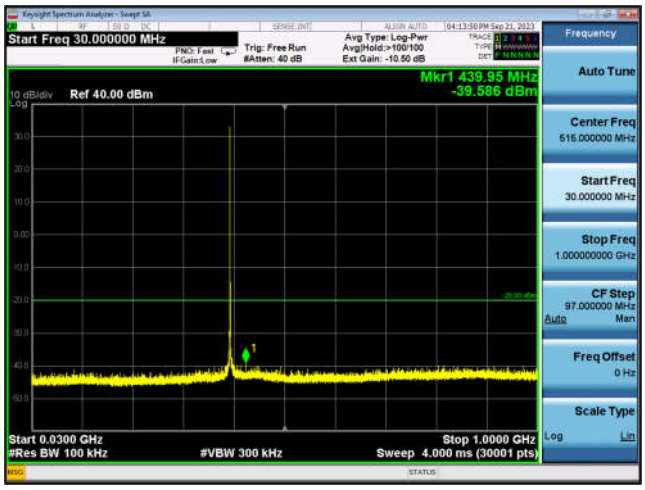
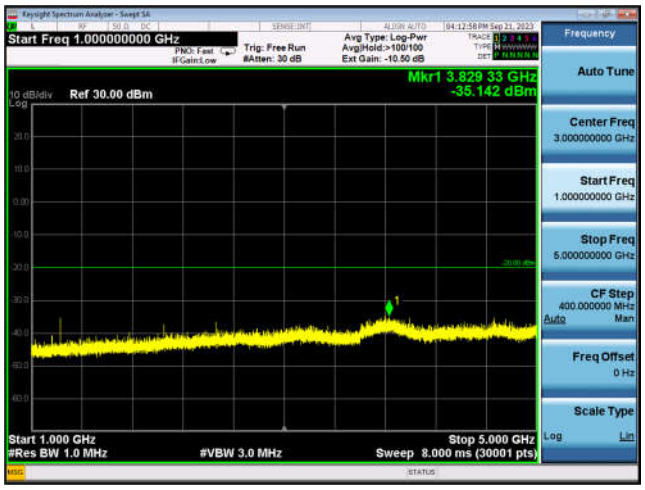
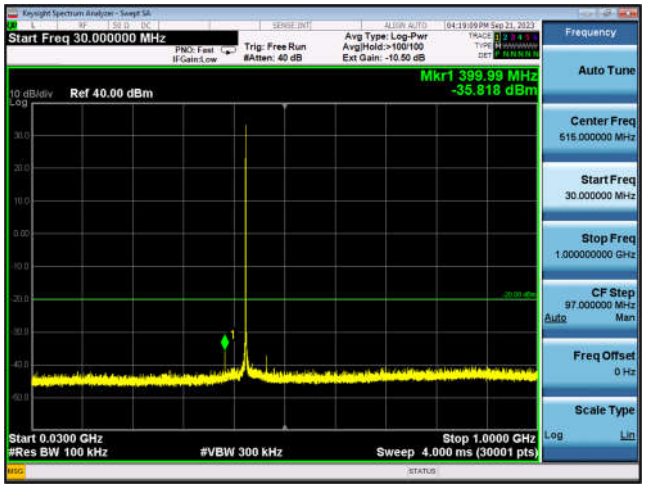
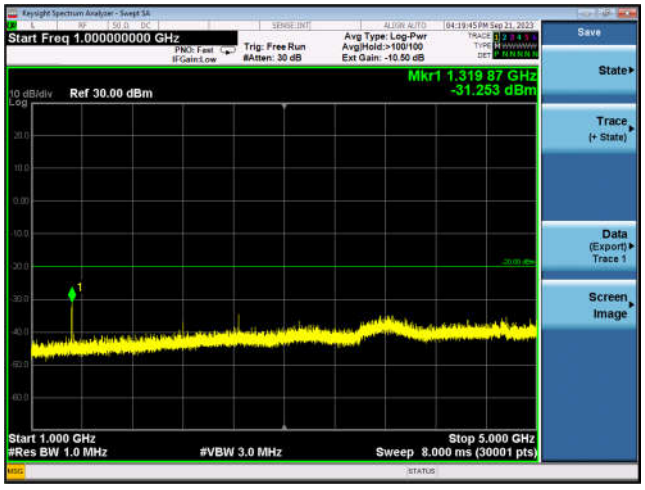
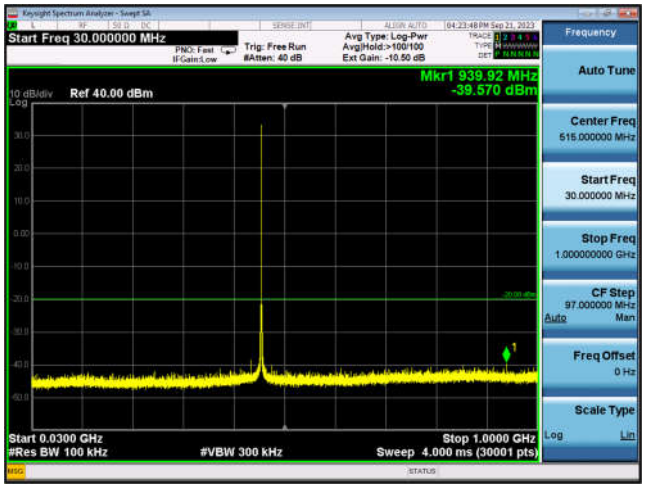
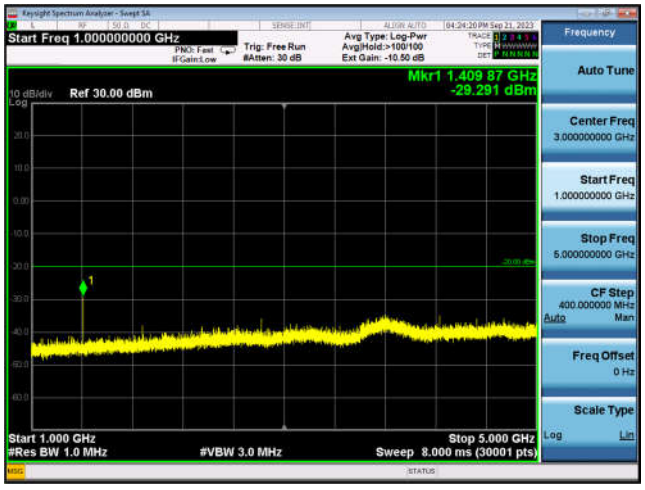
1. The testing follows the of ANSI C63.26-2015 Section 5.7.4.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set the spectrum analyzer start frequency to 9kHz and stop frequency to the tenth harmonic of the highest fundamental frequency.
4. Set RBW = 100kHz (Frequency below 1GHz) or 1MHz (Frequency above 1GHz).
5. Set VBW ≥ 3 × RBW.
6. Set Detector = Peak.
7. Set Trace mode = Max hold.
8. Set Sweep time = Auto-couple.
9. Identify and measure the highest spurious emission levels in each frequency range.
10. Compare the results with the corresponding limit in the applicable regulation.
11. Repeat step 3~10 at other frequency and modulations.

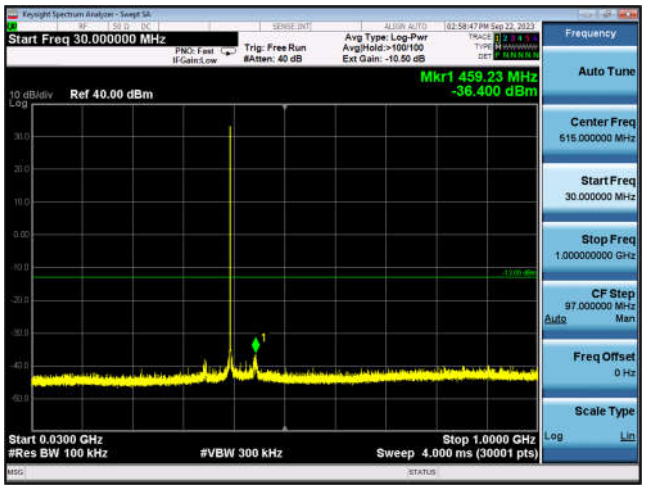
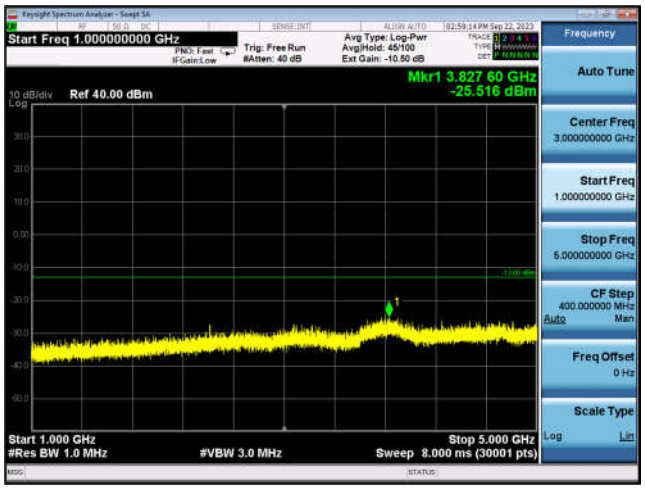
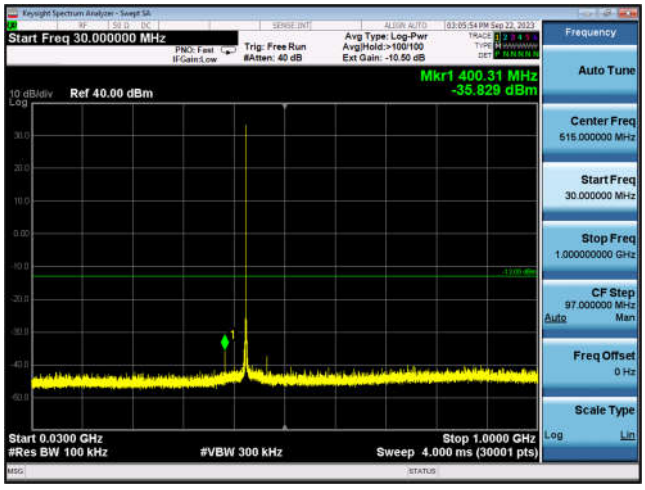
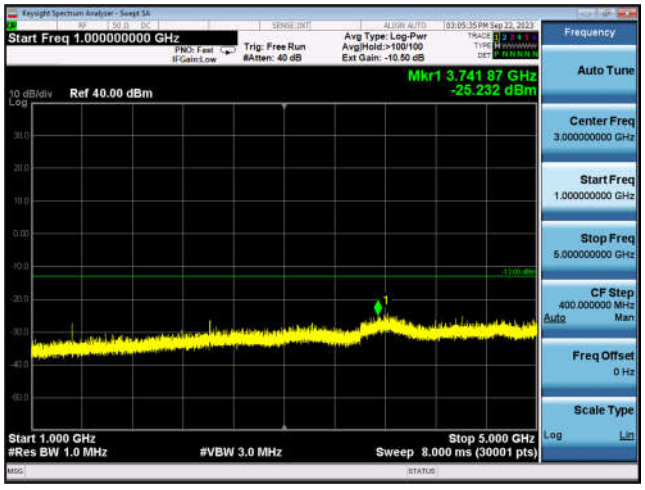
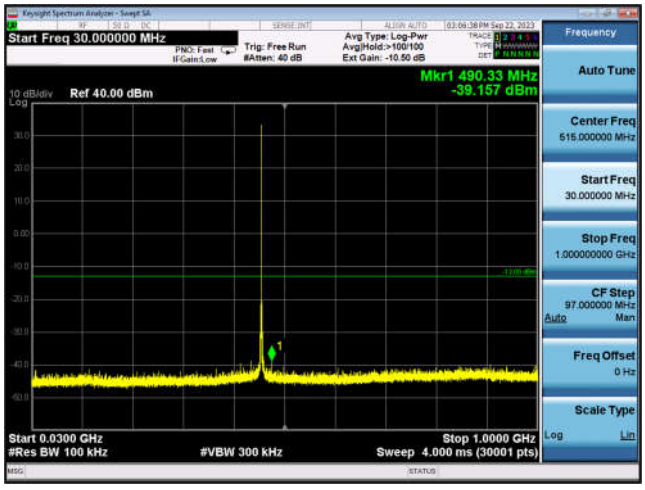
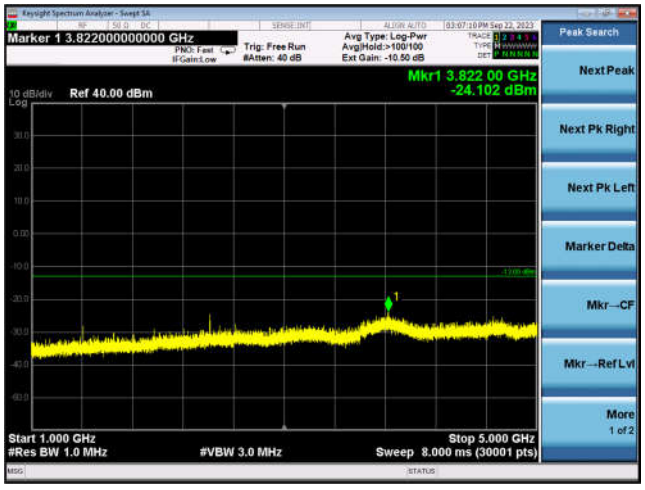
2.4.5. Test Result of Transmitter Conducted Spurious Emission

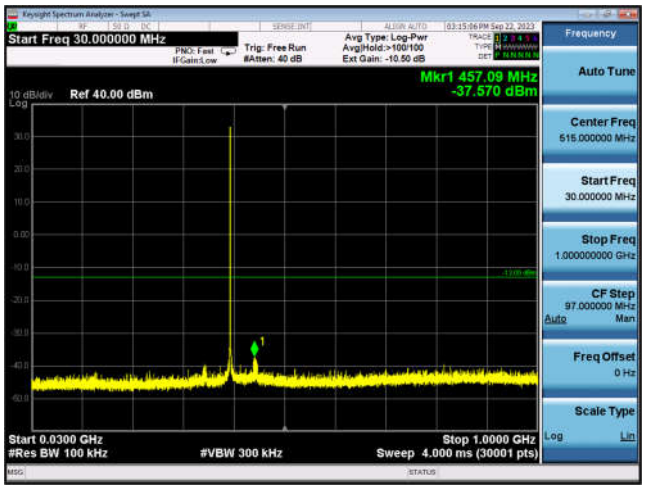
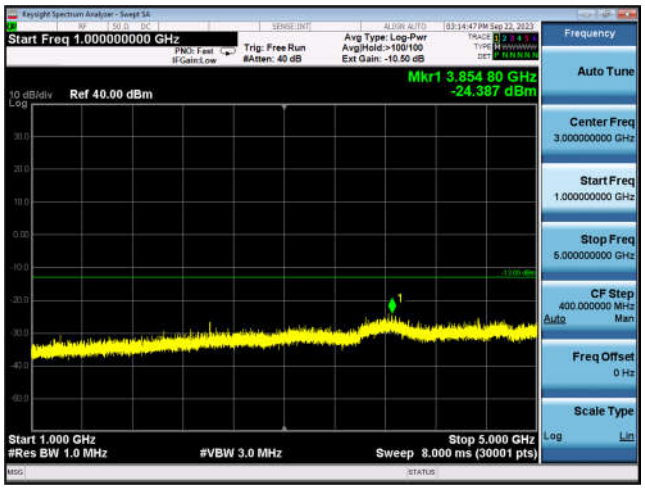
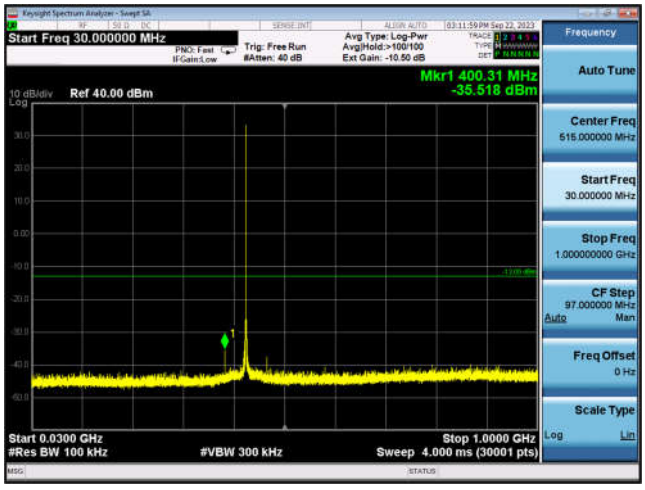
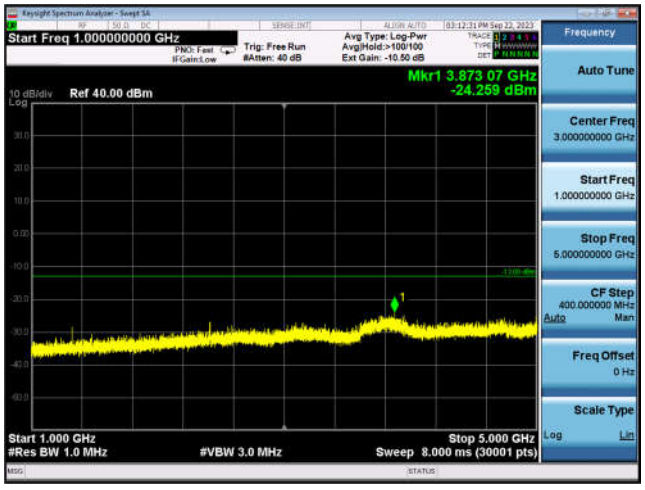
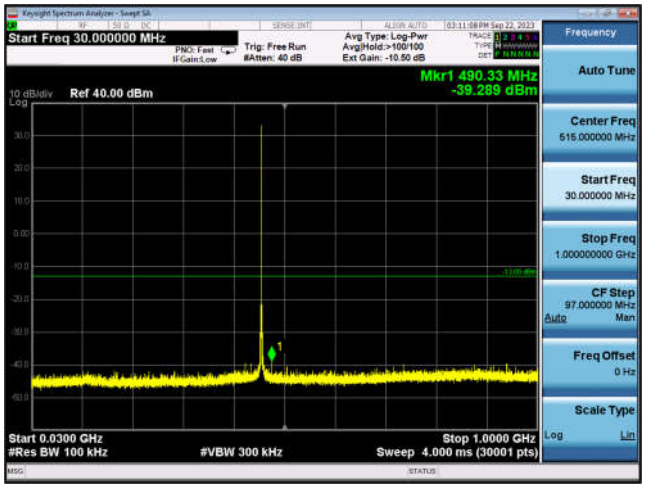
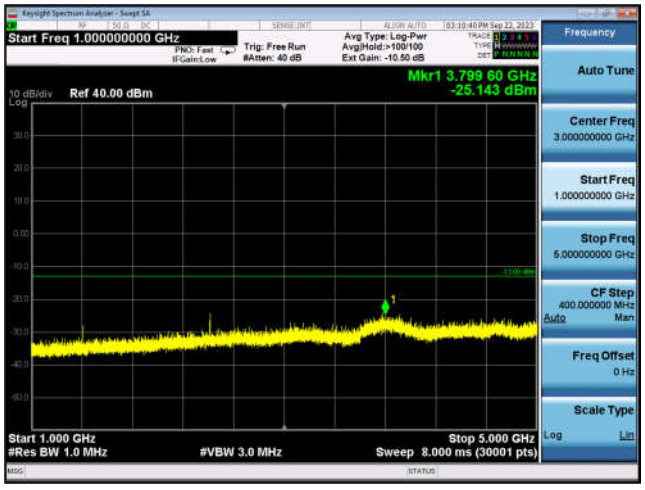
Note: For 9 kHz to 30MHz: the amplitude of spurious emissions is attenuated by more than 20dB below the permissible value, so we not provide the test result here.

High Power Level:

GMSK_12.5kHz_410.025MHz: 30MHz~1GHz	GMSK_12.5kHz_410.025MHz: 1GHz~5GHz
	
GMSK_12.5kHz_440.000MHz: 30MHz~1GHz	GMSK_12.5kHz_440.000MHz: 1GHz~5GHz
	
GMSK_12.5kHz_469.975MHz: 30MHz~1GHz	GMSK_12.5kHz_469.975MHz: 1GHz~5GHz
	

4FSK_12.5kHz_410.025MHz: 30MHz~1GHz	4FSK_12.5kHz_410.025MHz: 1GHz~5GHz
	
4FSK_12.5kHz_440.000MHz: 30MHz~1GHz	4FSK_12.5kHz_440.000MHz: 1GHz~5GHz
	
4FSK_12.5kHz_469.975MHz: 30MHz~1GHz	4FSK_12.5kHz_469.975MHz: 1GHz~5GHz
	

GMSK_25kHz_410.025MHz: 30MHz~1GHz	GMSK_25kHz_410.025MHz: 1GHz~5GHz
	
GMSK_25kHz_440.000MHz: 30MHz~1GHz	GMSK_25kHz_440.000MHz: 1GHz~5GHz
	
GMSK_25kHz_469.975MHz: 30MHz~1GHz	GMSK_25kHz_469.975MHz: 1GHz~5GHz
	

4FSK_25kHz_410.025MHz: 30MHz~1GHz	4FSK_25kHz_410.025MHz: 1GHz~5GHz
	
4FSK_25kHz_440.000MHz: 30MHz~1GHz	4FSK_25kHz_440.000MHz: 1GHz~5GHz
	
4FSK_25kHz_469.975MHz: 30MHz~1GHz	4FSK_25kHz_469.975MHz: 1GHz~5GHz
	

2.5. Transmitter Radiated Spurious Emission

2.5.1. Requirement

For 47 CFR Part 90.210:

(b) Emission Mask B. For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

(3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43 + 10 log (P) dB.

(d) 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:

(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.

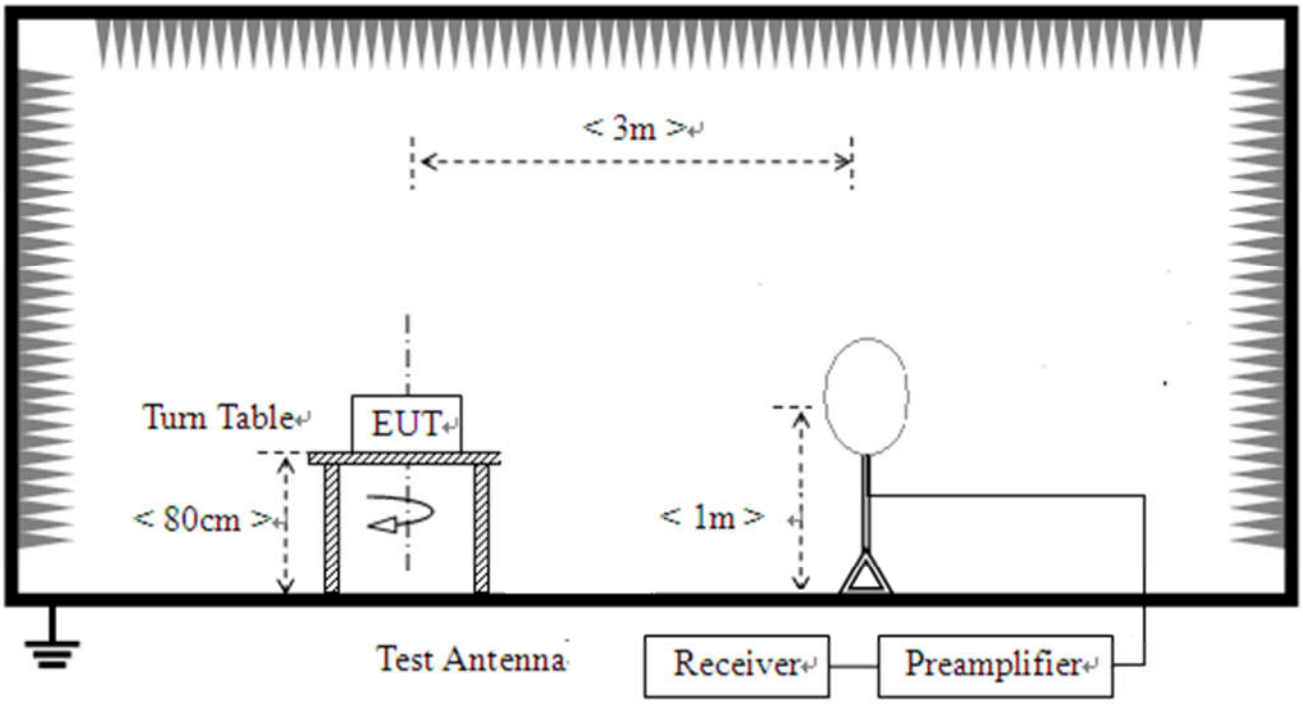
(o) Instrumentation. The reference level for showing compliance with the emission mask shall be established, except as indicated in §§90.210 (d), (e), and (k), using standard engineering practices for the modulation characteristic used by the equipment under test. When measuring emissions in the 150 – 174 MHz and 421 – 512 MHz bands the following procedures will apply. 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 frequencies more than 50 kHz removed from the edge of the authorized bandwidth a resolution of at least 100 kHz must be used for frequencies below 1000 MHz. Above 1000 MHz the resolution bandwidth of the instrumentation must be at least 1 MHz. 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, then an alternate procedure may be used provided prior Commission approval is obtained.

2.5.2. Measuring Instruments

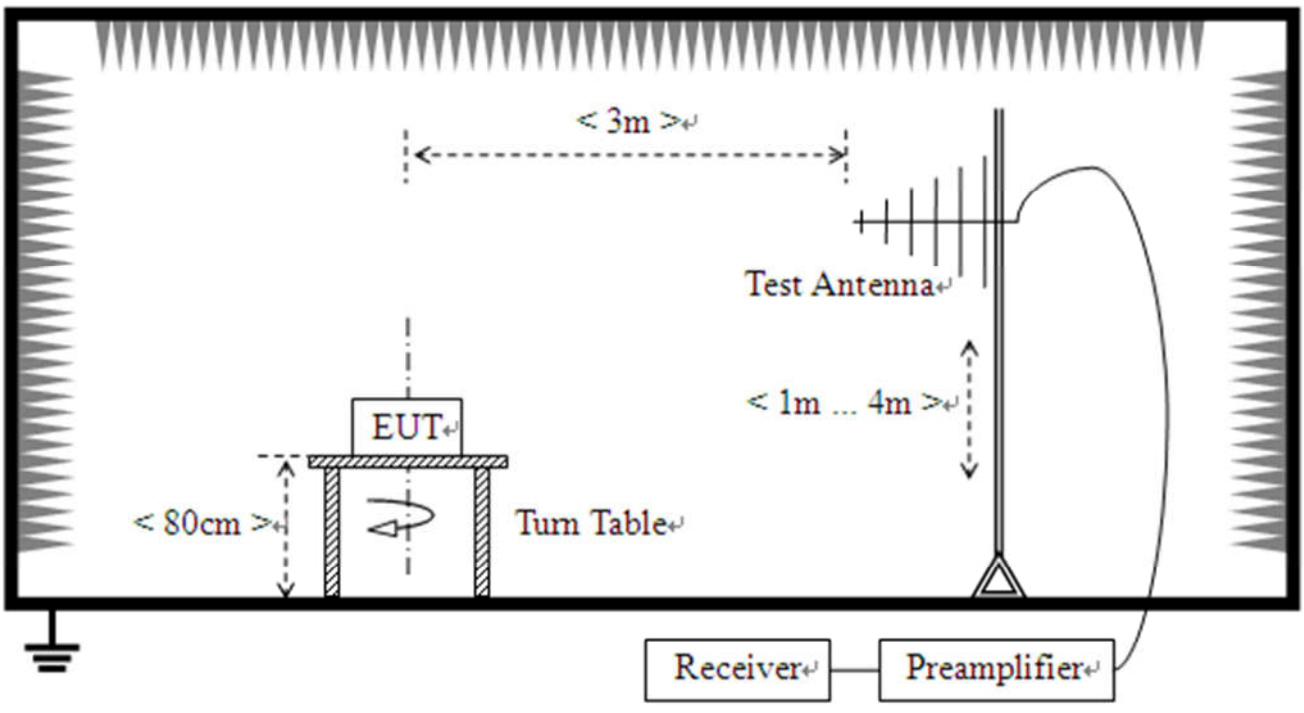
The measuring equipment is listed in the section 3 of this test report.

2.5.3. Test Setup

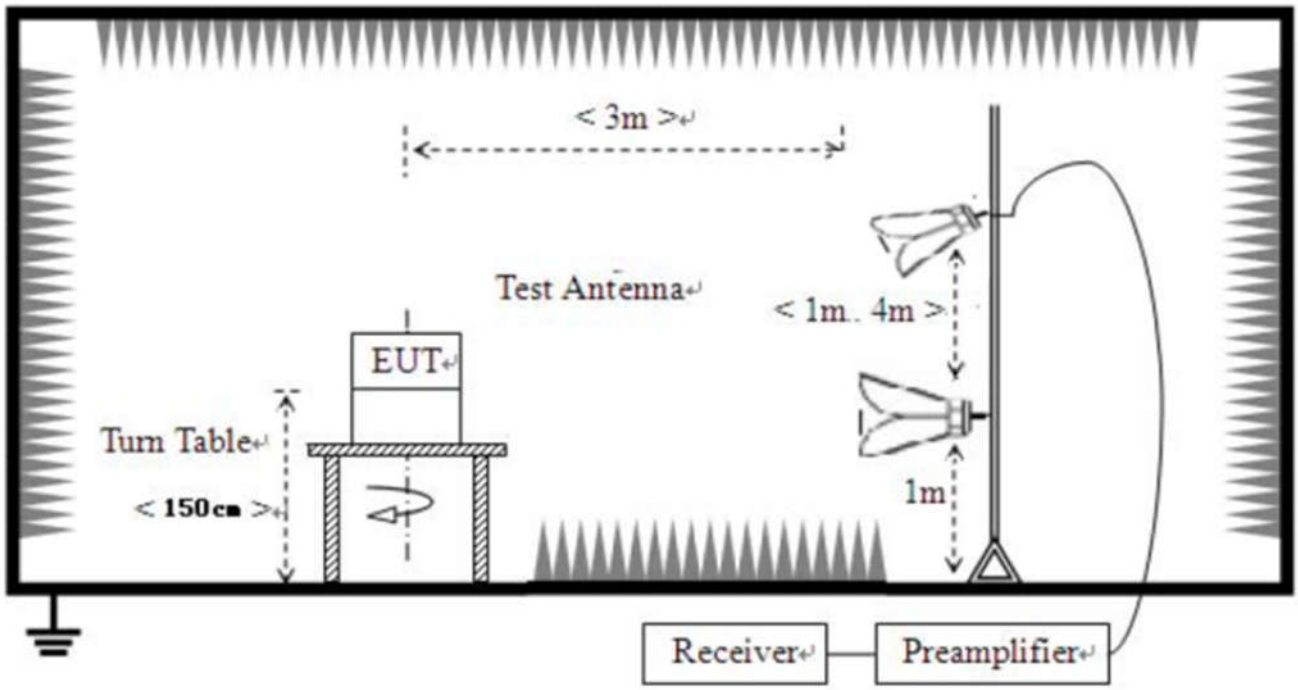
For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.5.4. Test Procedures

1. The EUT was placed on a rotatable wooden table with 0.8 meter (for below 1GHz) / 1.5 meters (for above 1GHz) above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating

frequency band.

11. All Spurious Emission tests were performed in X, Y, Z axis direction and low, middle, high channel. And only the worst axis test condition was recorded in this test report.
12. The spectrum is measured from 9 kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. The worst case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.

2.5.5. Test Result of Transmitter Radiated Spurious Emission

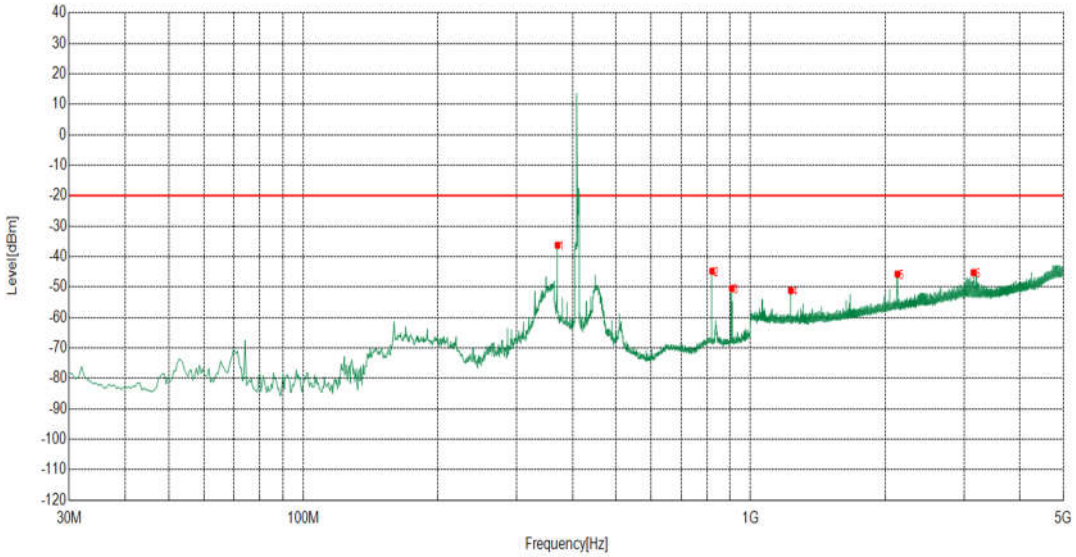
Note: 1. For 9 kHz to 30MHz: the amplitude of spurious emissions is attenuated by more than 20dB below the permissible value, so we not provide the test result here.

Note: 2. Absolute Level = Reading Level + Factor.

Note: 3. Worst-Case test data provide as below.

RSE Test Record

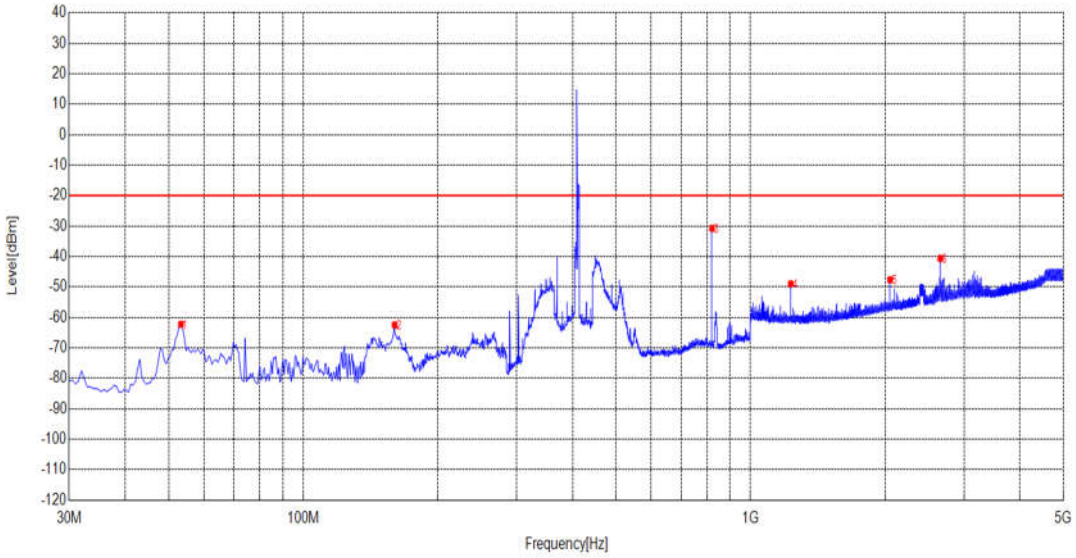
Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi:59%;101kPa
Operator:	Yang zhicheng	Test Date:	2023.09.13
Test Mode:	GMSK_12.5kHz_410.025MHz	Test Result:	Pass



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	370.1551	-64.51	-36.28	-20.00	16.28	28.23	Horizontal
2	819.975	-81.79	-44.76	-20.00	24.76	37.03	Horizontal
3	907.8039	-87.46	-50.46	-20.00	30.46	37.00	Horizontal
4	1230.0115	-48.88	-51.16	-20.00	31.16	-2.28	Horizontal
5	2128.4564	-47.87	-45.79	-20.00	25.79	2.08	Horizontal
6	3149.3075	-51.81	-45.26	-20.00	25.26	6.55	Horizontal

RSE Test Record

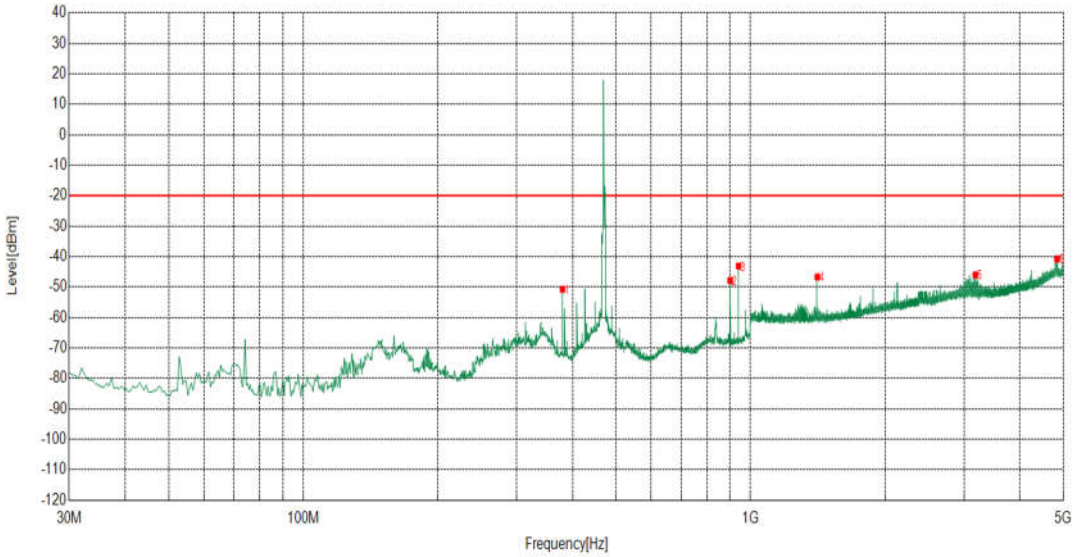
Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi:59%;101kPa
Operator:	Yang zhicheng	Test Date:	2023.09.13
Test Mode:	GMSK_12.5kHz_410.025MHz	Test Result:	Pass



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	53.2916	-81.50	-62.27	-20.00	42.27	19.23	Vertical
2	160.045	-82.35	-62.49	-20.00	42.49	19.86	Vertical
3	819.975	-66.52	-30.75	-20.00	10.75	35.77	Vertical
4	1229.8115	-46.71	-48.99	-20.00	28.99	-2.28	Vertical
5	2050.0525	-49.42	-47.66	-20.00	27.66	1.76	Vertical
6	2655.4828	-45.14	-40.62	-20.00	20.62	4.52	Vertical

RSE Test Record

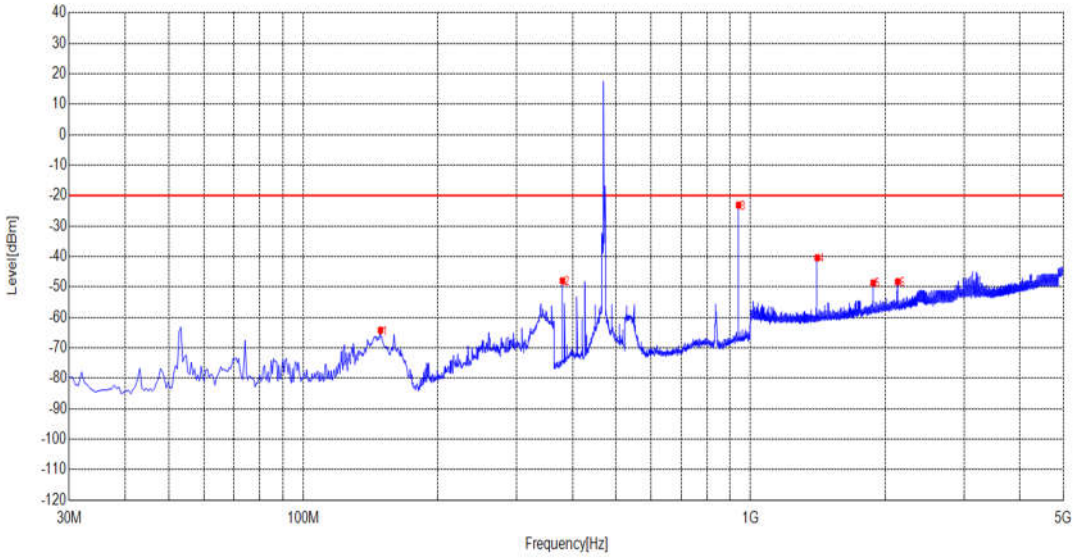
Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi:59%;101kPa
Operator:	Yang zhicheng	Test Date:	2023.09.13
Test Mode:	GMSK_12.5kHz_469.975MHz	Test Result:	Pass



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	379.8599	-78.61	-50.76	-20.00	30.76	27.85	Horizontal
2	900.04	-84.76	-47.87	-20.00	27.87	36.89	Horizontal
3	940.3152	-80.46	-43.14	-20.00	23.14	37.32	Horizontal
4	1409.8205	-44.45	-46.72	-20.00	26.72	-2.27	Horizontal
5	3180.509	-52.60	-46.05	-20.00	26.05	6.55	Horizontal
6	4841.7921	-55.11	-40.78	-20.00	20.78	14.33	Horizontal

RSE Test Record

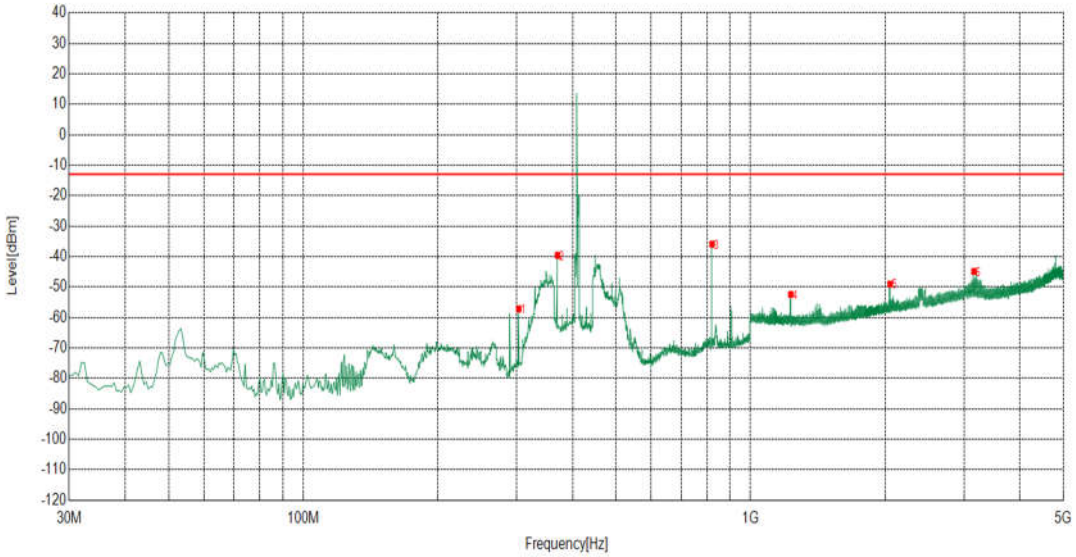
Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi:59%;101kPa
Operator:	Yang zhicheng	Test Date:	2023.09.13
Test Mode:	GMSK_12.5kHz_469.975MHz	Polarization:	Vertical



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	148.8844	-84.22	-64.23	-20.00	44.23	19.99	Vertical
2	379.8599	-75.59	-48.01	-20.00	28.01	27.58	Vertical
3	940.3152	-61.03	-23.13	-20.00	3.13	37.90	Vertical
4	1409.8205	-38.16	-40.43	-20.00	20.43	-2.27	Vertical
5	1880.044	-49.29	-48.70	-20.00	28.70	0.59	Vertical
6	2131.6566	-50.39	-48.30	-20.00	28.30	2.09	Vertical

RSE Test Record

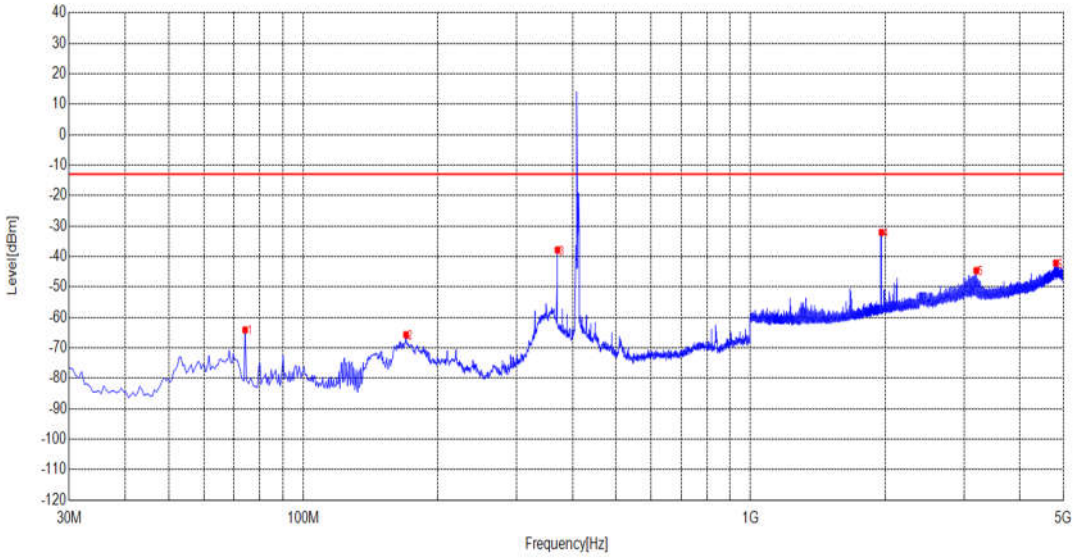
Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi:59%;101kPa
Operator:	Yang zhicheng	Test Date:	2023.09.13
Test Mode:	GMSK_25kHz_410.025MHz	Test Result:	Pass



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	303.1916	-83.28	-57.20	-13.00	44.20	26.08	Horizontal
2	370.1551	-67.81	-39.58	-13.00	26.58	28.23	Horizontal
3	819.975	-72.96	-35.93	-13.00	22.93	37.03	Horizontal
4	1229.9115	-50.18	-52.46	-13.00	39.46	-2.28	Horizontal
5	2050.0525	-50.79	-49.03	-13.00	36.03	1.76	Horizontal
6	3157.5079	-52.11	-44.89	-13.00	31.89	7.22	Horizontal

RSE Test Record

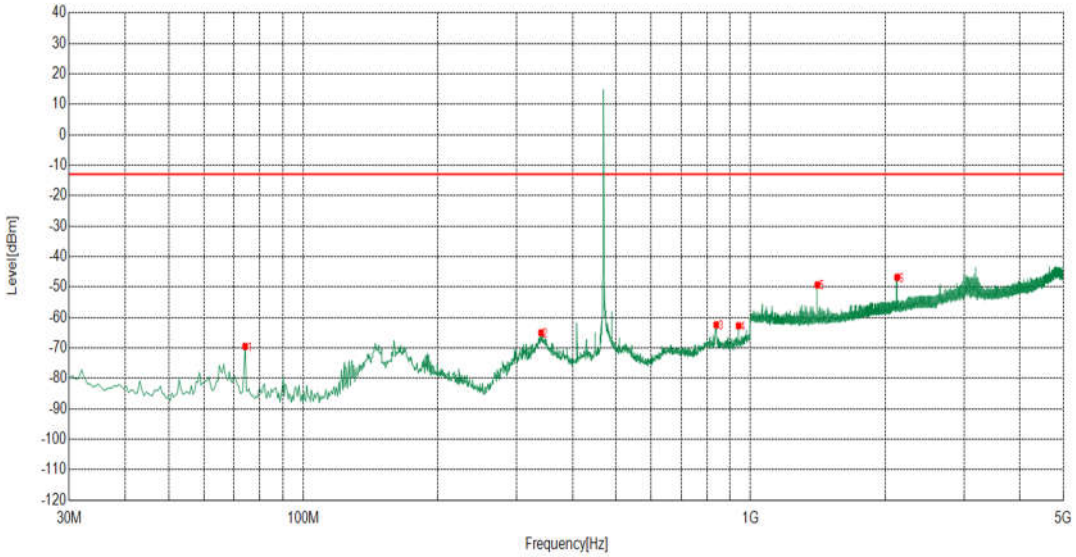
Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi:59%;101kPa
Operator:	Yang zhicheng	Test Date:	2023.09.13
Test Mode:	GMSK_25kHz_410.025MHz	Test Result:	Pass



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	74.1571	-85.69	-64.11	-13.00	51.11	21.58	Vertical
2	169.7499	-85.66	-65.70	-13.00	52.70	19.96	Vertical
3	370.1551	-64.98	-37.85	-13.00	24.85	27.13	Vertical
4	1961.5481	-33.29	-32.09	-13.00	19.09	1.20	Vertical
5	3193.1097	-51.89	-44.63	-13.00	31.63	7.26	Vertical
6	4811.3906	-56.89	-42.16	-13.00	29.16	14.73	Vertical

RSE Test Record

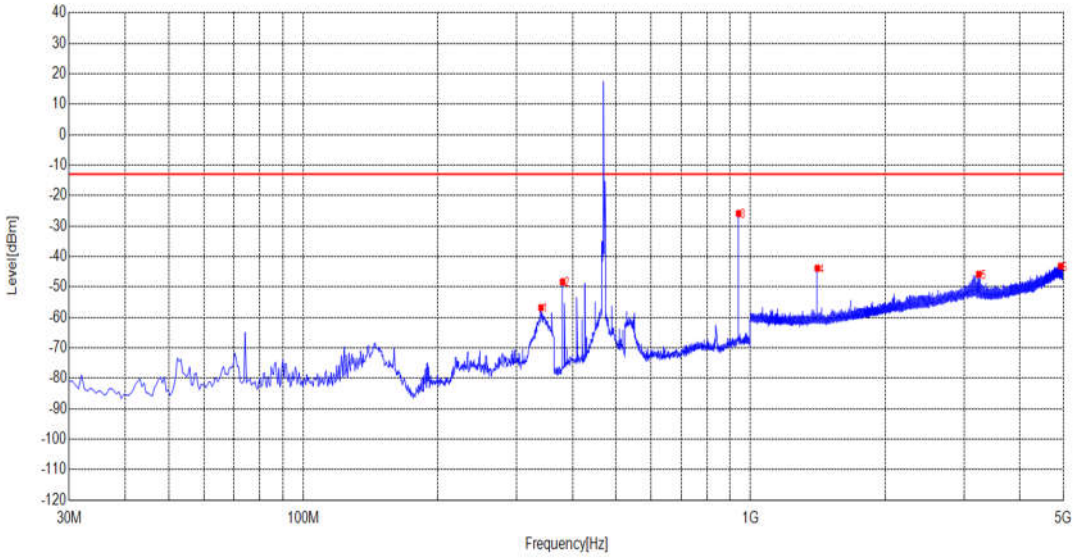
Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi:59%;101kPa
Operator:	Yang zhicheng	Test Date:	2023.09.13
Test Mode:	GMSK_25kHz_469.975MHz	Test Result:	Pass



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	74.1571	-88.77	-69.51	-13.00	56.51	19.26	Horizontal
2	340.07	-93.48	-65.03	-13.00	52.03	28.45	Horizontal
3	837.929	-99.53	-62.42	-13.00	49.42	37.11	Horizontal
4	940.3152	-100.06	-62.74	-13.00	49.74	37.32	Horizontal
5	1409.8205	-47.04	-49.31	-13.00	36.31	-2.27	Horizontal
6	2125.1563	-48.88	-46.81	-13.00	33.81	2.07	Horizontal

RSE Test Record

Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi:59%;101kPa
Operator:	Yang zhicheng	Test Date:	2023.09.13
Test Mode:	GMSK_25kHz_469.975MHz	Test Result:	Pass



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	340.07	-82.93	-56.83	-13.00	43.83	26.10	Vertical
2	379.8599	-75.90	-48.32	-13.00	35.32	27.58	Vertical
3	940.3152	-63.78	-25.88	-13.00	12.88	37.90	Vertical
4	1409.8205	-41.60	-43.87	-13.00	30.87	-2.27	Vertical
5	3237.0119	-53.04	-45.87	-13.00	32.87	7.17	Vertical
6	4933.6967	-57.74	-43.18	-13.00	30.18	14.56	Vertical

2.6. Frequency Stability

2.6.1. Requirement

For 47 CFR Part 90.213:

(a) Emission Mask B. For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

Table 1 to § 90.213(a)—Minimum Frequency Stability

Frequency band (MHz)	Fixed and base stations	Mobile stations	
		Over 2 watts output power	Over 2 watts output power
Below 25	100	100	200
25-50	20	20	50
72-76	5	/	50
150-174	5	5	50
216-220	1.0	/	1.0
220-222	0.1	1.5	1.5
421-512	[7 11 14] 2.5	[8] 5	5
806-809	1.0	1.5	1.5
809-824	1.5	2.5	2.5
851-854	1.0	1.5	1.5
854-869	1.5	2.5	2.5
869-901	0.1	1.5	1.5
902-928	2.5	2.5	2.5
902-928	2.5	2.5	2.5
929-930	1.5	/	/
935-940	0.1	1.5	1.5
1427-1435	300	300	300
Above 2450	/	/	/

[7] In the 421 – 512 MHz band, fixed and base stations with a 12.5 kHz channel bandwidth must have a frequency stability of 1.5 ppm. Fixed and base stations with a 6.25 kHz channel bandwidth must have a frequency stability of 0.5 ppm.

[8] In the 421 – 512 MHz band, mobile stations designed to operate with a 12.5 kHz channel bandwidth must have a frequency stability of 2.5 ppm. Mobile stations designed to operate with a 6.25 kHz channel bandwidth must have a frequency stability of 1.0 ppm.

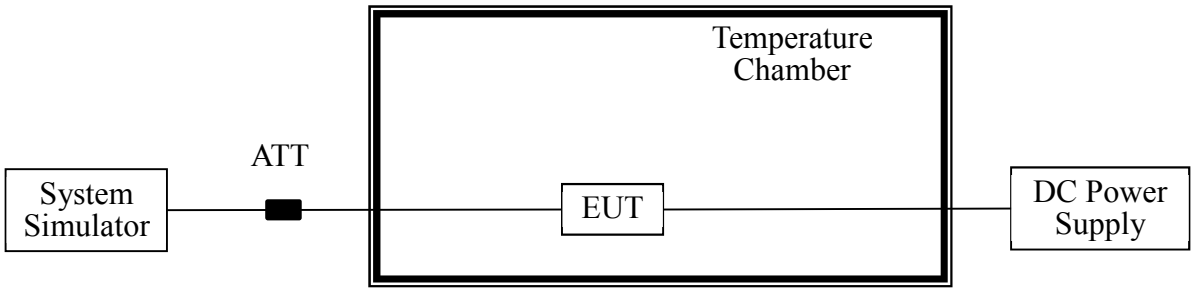
[11] Paging transmitters operating on paging-only frequencies must operate with frequency stability of 5 ppm in the 150 – 174 MHz band and 2.5 ppm in the 421 – 512 MHz band.

[14] Control stations may operate with the frequency tolerance specified for associated mobile frequencies.

2.6.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.6.3. Test Setup



2.6.4. Test Procedures

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.
4. The nominal, highest and lowest extreme voltages were tested, which are specified by the applicant; the normal temperature here used is 20°C.
5. The variation in frequency was measured for the worst case.

2.6.5. Test Result of Frequency Stability

GMSK_12.5kHz_440.000MHz					
DC Voltage (Vdc)	Temperature (℃)	Carrier Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Result
7.2	-30	440.000087	0.198	±2.5	PASS
	-20	440.000088	0.200		
	-10	440.000089	0.202		
	0	440.000089	0.202		
	+10	440.000090	0.205		
	+20	440.000088	0.200		
	+30	440.000089	0.202		
	+40	440.000089	0.202		
	+50	440.000088	0.200		
8.3	+20	440.000089	0.202		
6.1	+20	440.000090	0.205		

GMSK_25kHz_440.000MHz					
DC Voltage (Vdc)	Temperature (℃)	Carrier Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Result
7.2	-30	440.000088	0.200	±5	PASS
	-20	440.000086	0.195		
	-10	440.000085	0.193		
	0	440.000085	0.193		
	+10	440.000095	0.216		
	+20	440.000088	0.200		
	+30	440.000088	0.200		
	+40	440.000086	0.195		
	+50	440.000085	0.193		
8.3	+20	440.000086	0.195		
6.1	+20	440.000095	0.216		

4FSK_12.5kHz_440.000MHz					
DC Voltage (Vdc)	Temperature (℃)	Carrier Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Result
7.2	-30	440.000084	0.191	±2.5	PASS
	-20	440.000083	0.189		
	-10	440.000084	0.191		
	0	440.000085	0.193		
	+10	440.000086	0.195		
	+20	440.000084	0.191		
	+30	440.000084	0.191		
	+40	440.000083	0.189		
	+50	440.000086	0.195		
8.3	+20	440.000085	0.193		
6.1	+20	440.000086	0.195		

4FSK_25kHz_440.000MHz					
DC Voltage (Vdc)	Temperature (℃)	Carrier Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Result
7.2	-30	440.000083	0.189	±5	PASS
	-20	440.000085	0.193		
	-10	440.000085	0.193		
	0	440.000085	0.193		
	+10	440.000085	0.193		
	+20	440.000083	0.189		
	+30	440.000083	0.189		
	+40	440.000084	0.191		
	+50	440.000085	0.193		
8.3	+20	440.000085	0.193		
6.1	+20	440.000086	0.195		

2.7. Transmitter Frequency Behavior

2.7.1. Requirement

For 47 CFR Part 90.214:

Transmitters designed to operate in the 150 - 174 MHz and 421 - 512 MHz frequency bands must maintain transient frequencies within the maximum frequency difference limits during the time intervals indicated:

Time intervals[1] [2]	Maximum frequency difference [3]	All equipment	
		150 to 174 MHz	421 to 512 MHz
Transient Frequency Behavior for Equipment Designed to Operate on 25 kHz Channels			
t_1 [4]	±25.0 kHz	5.0 ms	10.0 ms
t_2	±12.5 kHz	20.0 ms	25.0 ms
t_3 [4]	±25.0 kHz	5.0 ms	10.0 ms
Transient Frequency Behavior for Equipment Designed to Operate on 12.5 kHz Channels			
t_1 [4]	±12.5 kHz	5.0 ms	10.0 ms
t_2	±6.25 kHz	20.0 ms	25.0 ms
t_3 [4]	±12.5 kHz	5.0 ms	10.0 ms
Transient Frequency Behavior for Equipment Designed to Operate on 6.25 kHz Channels			
t_1 [4]	±6.25 kHz	5.0 ms	10.0 ms
t_2	±3.125 kHz	20.0 ms	25.0 ms
t_3 [4]	±6.25 kHz	5.0 ms	10.0 ms

[1] $_{on}$ is the instant when a 1 kHz test signal is completely suppressed, including any capture time due to phasing.

t_1 is the time period immediately following t_{on}.

t_2 is the time period immediately following t_1.

t_3 is the time period from the instant when the transmitter is turned off until $t_{off.}$

t_{off} is the instant when the 1 kHz test signal starts to rise.

[2] During the time from the end of t_2 to the beginning of t_3, the frequency difference must not exceed the limits specified in §90.213.

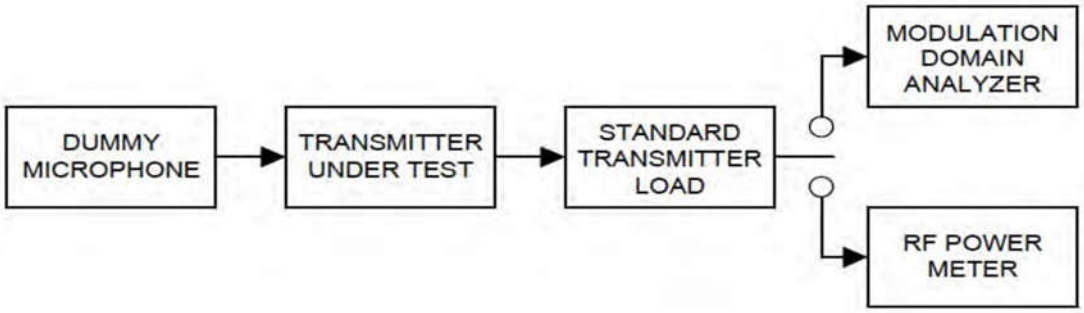
[3] Difference between the actual transmitter frequency and the assigned transmitter frequency.

[4] If the transmitter carrier output power rating is 6 watts or less, the frequency difference during this time period may exceed the maximum frequency difference for this time period.

2.7.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.7.3. Test Setup



2.7.4. Test Procedures

1. Connect the equipment as illustrated.
2. Connect the output of the standard transmitter load to the RF power meter. Supply sufficient attenuation via the RF attenuator to provide a level that is approximately 40 dB below the maximum allowable input to the modulation domain analyzer.
3. Unkey the transmitter.
5. Disconnect the RF power meter and connect the modulation domain analyzer in its place. Set the envelope trigger of the modulation domain analyzer to the minimum level that will trigger when the transmitter is keyed.
6. Reduce the attenuation of the RF attenuator so that the input to the to the modulation domain analyzer is increased by 30 dB when the transmitter is keyed.
7. Set the modulation domain analyzer to trigger on the rising edge of the waveform in order to capture a single-shot turn-on of the transmitter signal.
8. Adjust the display of the modulation domain analyzer for proper viewing of the transmitter transient behavior. Set the time base reference to the left for observing the transmitter turn-on transient.
9. Key the transmitter.
10. Observe the stored display of the modulation domain analyzer. The signal trace shall be maintained within the allowable limits during the periods t1 and t2, and shall also remain within limits following t2.
11. Adjust the modulation domain analyzer to trigger on the falling edge of the transmitter waveform in order to capture a single-shot turn-off transient of the transmitter signal.
12. Adjust the display of the modulation domain analyzer for proper viewing of the transmitter transient behavior. Set the time base reference to the right for observing the transmitter turn-off transient.
13. Unkey the transmitter.

14. Observe the stored display of the modulation domain analyzer. The signal trace shall be maintained within the allowable limits during the period t3.

2.7.5. Test Result of Transmitter Frequency Behavior

Modulation Type	Channel Spacing	Test Frequency	Transmitter status	Result
GMSK	12.5kHz	440.000 MHz	Off - On	PASS
			On - Off	PASS
GMSK	25kHz	440.000MHz	Off - On	PASS
			On - Off	PASS

Note: Provide worst-case of middle channel data here.

3. List of measuring equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI Test Receiver	ROHDE&SCHWARZ	ESW26	A180502935	2023.06.08	2024.06.07
2	5M Anechoic Chamber	Albatross	SAC-5MAC 12.8x6.8x6.4m	A0304210	2022.06.09	2026.06.08
3	Loop Antenna	Schwarz beck	HFH2-Z2	A0304220	2022.05.02	2025.05.01
4	Broadband antenna (30MHz~1GHz)	R&S	HL562	A0304224	2023.06.08	2024.06.07
5	EMI Horn Ant. (1-18G)	ETC	1209	A150402241	2021.01.02	2024.01.01
6	Horn antenna (18GHz~26.5GHz)	AR	AT4510	A0804450	2023.06.01	2024.05.31
7	Amplifier 30M~1GHz	MILMEGA	80RF1000-10004	A140101634	2022.12.13	2023.12.12
8	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/400	A160302517	2022.12.13	2023.12.12
9	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2023.02.20	2024.02.19
10	Constant Temperature Humidity Chamber	ESPEC	SU-642	A150802409	2023.03.18	2024.03.17
11	Oscilloscope	Tektronix	TBS1102	A180502998	2023.06.09	2024.06.08
12	Power Supply	R&S	WYJ-60100	A141102031	2023.07.12	2026.07.11

4. Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence . The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Emission Measurement (150kHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	2.8dB

Uncertainty of Radiated Emission Measurement (9kHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	3.5dB

Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	3.91dB

Uncertainty of Radiated Emission Measurement (1GHz~18GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	4.5dB

Uncertainty of Radiated Emission Measurement (18GHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	4.9dB

Uncertainty of RF Conducted Measurement (9kHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	1.2dB

** END OF REPORT **