



RF TEST REPORT

Report No.: SHATBL2601032W12

Applicant : Shanghai AllyNav Technology Co.,Ltd.

Product Name : GNSS RECEIVER

Brand Name : N/A

Model Name : R62GT

Series Model : N/A

FCC ID : 2AT4H-R62GT

Test Standard : 47 CFR Part 2, Part 90

Date of Sample Arrival : 2026.03.09

Date of Test : 2026.03.09~2026.06.04

Issue Date : 2026.06.24

Report Prepared by :

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(Guozheng Li)

Authorized Signatory :

Terry Yang

(Terry Yang)



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REVISION HISTORY

Rev.	Issue Date	Revisions	Revised by
00	2026.06.24	Initial Release	Guozheng Li

DECLARATION OF REPORT

1. The device has been tested by ATBL, and the test results show that the equipment under test (EUT) is in compliance with the requirements of 47 CFR Part 2, Part 90. And it is applicable only to the tested sample identified in the report.

2. This report shall not be reproduced except in full, without the written approval of ATBL, this document only be altered or revised by ATBL, personal only, and shall be noted in the revision of the document.

3. The general information of EUT in this report is provided by the customer or manufacture, ATBL is only responsible for the test data but not for the information provided by the customer or manufacture.

4. The results in this report is only apply to the sample as tested under conditions. The customer or manufacturer is responsible for ensuring that the additional production units of this model have the same electrical and mechanical components.

1. GENERAL DESCRIPTION

1.1. Applicant

Name : Shanghai AllyNav Technology Co.,Ltd.

Address : Room 201, Buliding 1, No 215, Gaoguang RD, Qingpu District, Shanghai, China

1.2. Manufacturer

Name : Shanghai AllyNav Technology Co.,Ltd.

Address : Room 201, Buliding 1, No 215, Gaoguang RD, Qingpu District, Shanghai, China

1.3. Factory

Name : Shanghai AllyNav Technology Co.,Ltd.

Address : Room 201, Buliding 1, No 215, Gaoguang RD, Qingpu District, Shanghai, China

1.4. General Information of EUT

Product Name:	GNSS RECEIVER
Model Name:	R62GT
Series Model:	N/A
Frequency Range:	410MHz~470MHz
Type of Modulation:	4FSK
Rated Output Power: (Conducted)	High Power Level: 1W Low Power Level: 0.5W
Channel Spacing:	12.5KHz
Antenna Type:	Rod Antenna
Antenna gain:	3.6dBi
Power Supply:	DC 9-36V
Adapter:	N/A
Battery parameter:	N/A
Hardware Version:	V2.330
Software Version:	Ubuntu 22.04.4 LTS

Remark:

1. The above information of EUT was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The modulation type of the product is 4FSK, so the data rate is greater than 4800 bits.

1.5. Environmental conditions

Temperature	Normal Temperature(NT):	20°C
Voltage	Normal Voltage(NV):	9-36V
	High Voltage(HV):	39.6V
	Low Voltage(LV):	8.1V
Other	Relative Humidity	55 %
	Air Pressure	101 kPa

1.6. Modification of EUT

No modifications are made to the EUT during all test items.

1.7. Laboratory Information

Company Name	:	Shanghai ATBL Technology Co., Ltd.
Address	:	Building 8,No.160 Basheng Road, Waigaoqiao Free Trade Zone, Pudong New Area, Shanghai
Telephone	:	+86(0)21-51298625
FCC Test Firm registration Number	:	485917
A2LA Number	:	6184.01
CNAS Number	:	CNAS L14531
CAB Identifier	:	CN0116

1.8. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

FCC Rules Part 90: PRIVATE LAND MOBILE RADIO SERVICES.

ANSI/TIA-603-E-2016: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

47 CFR FCC Part 15 Subpart B: Unintentional Radiators

FCC Part 2: FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS;
GENERAL RULES AND REGULATIONS

ANSI C63.26:2015: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services.

ANSI C63.4:2014: Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

2. TEST CONFIGURATION OF EQUIPMENT UNDER TEST

2.1. Test Mode

Per C63.26-2015, section 5.1, the lowest frequency, middle frequency, and highest frequency was performed the test as below:

Modulation/ Channel Bandwidth	Test Channel	TX Frequency (MHz)	RX Frequency (MHz)	Rule Part
4FSK/12.5KHz	Lowest	410.05	410.05	For Part90
	Middle	441.125	411.125	For Part90
	Highest	469.95	469.95	For Part90

Channel List

Modulation Type	Channel Separation	Channel	Frequency (MHz)	Channel	Frequency (MHz)
4FSK	12.5KHz	101	410.050	111	415.050
	12.5KHz	102	410.950	112	415.950
	12.5KHz	103	411.050	113	416.050
	12.5KHz	104	411.950	114	416.950
	12.5KHz	105	412.050	115	417.050
	12.5KHz	106	412.950	116	417.950
	12.5KHz	107	413.050	117	418.050
	12.5KHz	108	413.950	118	418.950
	12.5KHz	109	414.050	119	419.050
	12.5KHz	110	414.950	120	419.950

Modulation Type	Channel Separation	Channel	Frequency (MHz)	Channel	Frequency (MHz)
4FSK	12.5KHz	61	430.050	71	435.050
	12.5KHz	62	430.950	72	435.950
	12.5KHz	63	431.050	73	436.050
	12.5KHz	64	431.950	74	436.950
	12.5KHz	65	432.050	75	437.050
	12.5KHz	66	432.950	76	437.950
	12.5KHz	67	433.050	77	438.050
	12.5KHz	68	433.950	78	438.950
	12.5KHz	69	434.050	79	439.050
	12.5KHz	70	434.950	80	439.950

Modulation Type	Channel Separation	Channel	Frequency (MHz)	Channel	Frequency (MHz)
4FSK	12.5KHz	81	420.050	91	425.050
	12.5KHz	82	420.950	92	425.950
	12.5KHz	83	421.050	93	426.050
	12.5KHz	84	421.950	94	426.950
	12.5KHz	85	422.050	95	427.050
	12.5KHz	86	422.950	96	427.950
	12.5KHz	87	423.050	97	428.050
	12.5KHz	88	423.950	98	428.950
	12.5KHz	89	424.050	99	429.050
	12.5KHz	90	424.950	100	429.950

Modulation Type	Channel Separation	Channel	Frequency (MHz)	Channel	Frequency (MHz)
4FSK	12.5KHz	21	450.050	31	455.050
	12.5KHz	22	450.950	32	455.950
	12.5KHz	23	451.050	33	456.050
	12.5KHz	24	451.950	34	456.950
	12.5KHz	25	452.050	35	457.050
	12.5KHz	26	452.950	36	457.950
	12.5KHz	27	453.050	37	458.050
	12.5KHz	28	453.950	38	458.950
	12.5KHz	29	454.050	39	459.050
	12.5KHz	30	454.950	40	459.950

Modulation Type	Channel Separation	Channel	Frequency (MHz)	Channel	Frequency (MHz)
4FSK	12.5KHz	41	440.125	51	445.125
	12.5KHz	42	440.950	52	445.950
	12.5KHz	43	441.125	53	446.125
	12.5KHz	44	441.950	54	446.950
	12.5KHz	45	442.125	55	447.125
	12.5KHz	46	442.950	56	447.950
	12.5KHz	47	443.125	57	448.125
	12.5KHz	48	443.950	58	448.950
	12.5KHz	49	444.125	59	449.125
	12.5KHz	50	444.950	60	449.950

Modulation Type	Channel Separation	Channel	Frequency (MHz)	Channel	Frequency (MHz)
4FSK	12.5KHz	1	460.050	11	465.050
	12.5KHz	2	460.950	12	465.950
	12.5KHz	3	461.050	13	466.050
	12.5KHz	4	461.950	14	466.950
	12.5KHz	5	462.050	15	467.050
	12.5KHz	6	462.950	16	467.950
	12.5KHz	7	463.050	17	468.050
	12.5KHz	8	463.950	18	468.950
	12.5KHz	9	464.050	19	469.050
	12.5KHz	10	464.950	20	469.950

2.2. Summary of Test Results

Conducted Test:

Item	Test Description	FCC Rules	Result
1	Transmitter Frequency Stability	§2.1055;§90.213	Compliant
2	Transmitter Output Power	§2.1046;§90.205	Compliant
5	Occupied Bandwidth & Emission Mask	§2.1049;§90.209;§90.210;	Compliant
6	Transmitter Unwanted Emissions at Antenna Terminal	§2.1051;§90.210	Compliant
7	Transmitter Unwanted Emissions-Radiated	§2.1053;§90.210	Compliant
8	Transient Frequency Behavior	§90.214	Compliant
9	Modulation Characteristic	§2.1047; §90.207	not applicable

Remark:

All test items were verified and recorded according to the standards and without any deviation during the test.

2.3. Support Unit used in test configuration and system

NO.	Unit	Brand	Model	Description
1	PC	Dell	MCT557	Fixed frequency
2	Cable	LeLian	CR3796	1.5CM

2.4. Equipment List

2.4.1. For RF Conducted Test

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
1	Signal Generator	KEYSIGHT	N5173B	MY62220592	2025.08.27	2026.08.26
2	Vector Signal Generator	KEYSIGHT	N5182B	MY57301571	2025.08.27	2026.08.26
3	Spectrum Analyzer	Keysight	N9020A	MY53420874	2025.08.27	2026.08.26
4	Radio Communication Tester	HP	8921A	3725A09645	2025.08.27	2026.08.26
5	Attenuator	JK	SMA-JK6G-20dB	/	/	/
6	RF Cable	PE	RG393(1.5 CM)	1013809	2025.08.27	2026.08.26
7	Multimeter	FLUKE	15B+	44211266WS	2025.08.27	2026.08.26
8	DC regulated constant current switching power supply	DS1030	GTHLEY	EMC0068	2025.08.27	2026.08.26
9	Power meter	Rediteq	RPR6W	2201002	2025.08.27	2026.08.26

2.4.2. For Radiated Spurious Emission

Kind of Equipment	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Test Receiver	R&S	ESCI	100469	2025.08.27	2026.08.26
Spectrum Analyzer	Agilent	N9020A	MY50200856	2025.08.27	2026.08.26
Loop Antenna	Daze	ZN30900C	20077	2025.08.27	2026.08.26
Bilog Antenna	SCHWARZBECK	VLUB 9168	01174	2025.08.27	2026.08.26
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	2025.08.27	2026.08.26
Pre-Amplifier (0.1M-3GHz)	JPT	JPA-10M1G35	21010100035001	2025.08.27	2026.08.26
Pre-Amplifier (1G-18GHz)	JPT	JPA0118-55-303A	1910001800055000	2025.08.27	2026.08.26
Temperature & Humidity	DeLi	DeLi	N/A	2025.08.27	2026.08.26
RF Cable	Harbour	SHWCB-3000-N	N/A	2025.08.27	2026.08.26
Antenna/Turntable Controller	Brilliant	N/A	N/A	N/A	N/A
Filter Box	XingBo	EZSVFU1&EZSVFU2	N/A	N/A	N/A
Test SW	FALA	EMC-RI(Ver.4A2)		N/A	N/A

2.5. Measurement Uncertainty

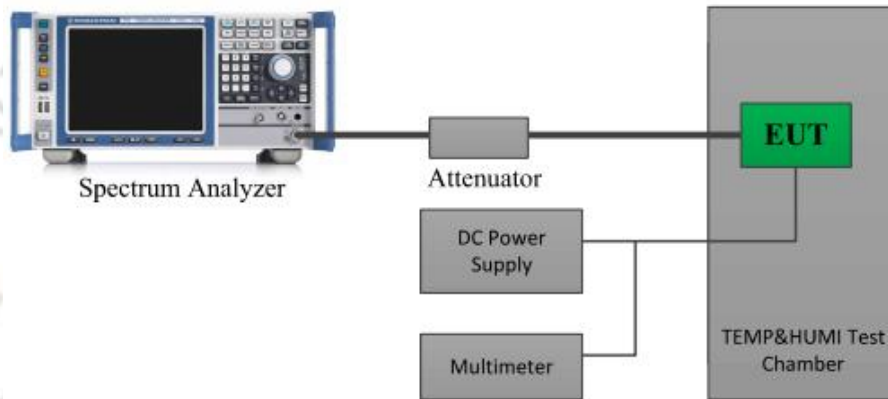
The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Conducted Emission	+3.2 dB
2	Radiated Emission below 1GHz	+3.9 dB
3	Radiated Emission above 1GHz	+4.8 dB
4	RF power, conducted	+0.8dB
5	spurious emissions, conducted	+2.7dB
6	Occupied Channel Bandwidth	± 2 %
7	Frequency Stability	± 2 %
8	Modulation Limiting	± 0.42 %
9	Transient Frequency Behavior	$\pm 6.8\%$
10	Low Pass Filter Response	± 0.76 dB

3. TEST RESULT

3.1. Transmitter Frequency Stability

3.1.1. Test Setup



3.1.2. Applicable Standard

FCC§ 90.213:

In the 150-174 MHz band, fixed and base stations with a 12.5 kHz channel bandwidth must have a frequency stability of 2.5 ppm. Fixed and base stations with a 6.25 kHz channel bandwidth must have a frequency stability of 1.0 ppm.

In the 150-174 MHz band, mobile stations designed to operate with a 12.5 kHz channel bandwidth or designed to operate on a frequency specifically designated for itinerant use or designed for low-power operation of two watts or less, must have a frequency stability of 5.0 ppm. Mobile stations designed to operate with a 6.25 kHz channel bandwidth must have a frequency stability of 2.0 ppm.

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.

3.1.3. Test Procedures

According to ANSI C63.26-2015 Section 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 $\pm 15\%$ 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 stability 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.

3.1.4. Test Result

All operating modes have been tested, only worst case(12V)mode was recorded in the test report.

Un-modulation, $f_c=410.05\text{MHz}$					
Temp (°C)	Voltage (V)	Measured (MHz)	Frequency error (ppm)	Limit (ppm)	Result
-30	DC 12V	410.0502	0.488	2.5	Pass
-20		410.0504	0.975		Pass
-10		410.0506	1.463		Pass
0		410.0502	0.488		Pass
10		410.0503	0.732		Pass
20		410.0509	2.195		Pass
30		410.0504	0.975		Pass
40		410.0507	1.707		Pass
50		410.0502	0.488		Pass
20	DC 8.1V	410.0504	0.975		Pass
20	DC 39.6V	410.0501	0.244		Pass

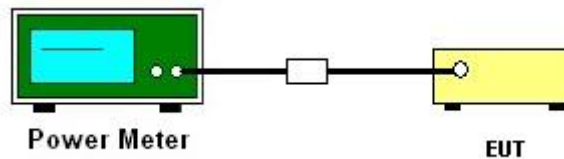
Un-modulation, $f_c=441.125\text{MHz}$					
Temp (°C)	Voltage (V)	Measured (MHz)	Frequency error (ppm)	Limit (ppm)	Result
-30	DC 12V	441.1241	-2.040	2.5	Pass
-20		441.1245	-1.133		Pass
-10		441.1246	-0.907		Pass
0		441.1245	-1.133		Pass
10		441.1243	-1.587		Pass
20		441.1246	-0.907		Pass
30		441.1244	-1.360		Pass
40		441.1247	-0.680		Pass
50		441.1245	-1.133		Pass
20	DC 8.1V	441.1243	-1.587		Pass
20	DC 39.6V	441.1248	-0.453		Pass

Un-modulation, fc=469.95MHz					
Temp (°C)	Voltage (V)	Measured (MHz)	Frequency error (ppm)	Limit (ppm)	Result
-30	DC 12V	469.9501	0.213	2.5	Pass
-20		469.9505	1.064		Pass
-10		469.9503	0.638		Pass
0		469.9506	1.277		Pass
10		469.9502	0.426		Pass
20		469.9505	1.064		Pass
30		469.9504	0.851		Pass
40		469.9501	0.213		Pass
50		469.9509	1.915		Pass
20	DC 8.1V	469.9502	0.426		Pass
20	DC 39.6V	469.9509	1.915		Pass

Note: the Operation Voltage range was provided by manufacturer.

3.2. Transmitter Output Power

3.2.1. Test Setup



3.2.2. Applicable Standard

FCC Part 90.205, FCC Part 2.1046:

(d) 150-174 MHz. (1) The maximum allowable station ERP is dependent upon the station's antenna HAAT and required service area and will be authorized in accordance with table 1. Applicants requesting an ERP in excess of that listed in table 1 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.

(h) 450-470 MHz.

(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.

3.2.3. Test Procedures

C63.26-2015, Clause 5.2.3.2:

measurements may be performed using a wide band gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.2.4. Test Result

Channel Separation	Test Modulation	Test Channel	Frequency (MHz)	Conducted Output Power (dBm)		ERP (dBm)		Rated power (dBm)	
				High Power Level	Low Power Level	High Power Level	Low Power Level	High Power Level	Low Power Level
12.5KHz	4FSK	Low	410.05	28.705	25.829	29.805	26.929	30	27
		Middle	441.125	28.449	25.158	29.549	26.258	30	27
		High	469.95	27.704	24.154	28.804	25.254	30	27

Note:

1.EIRP=Conducted Output Power+ Antenna gain; ERP=EIRP-2.15dB;

3.3. Occupied Bandwidth & Emission Mask

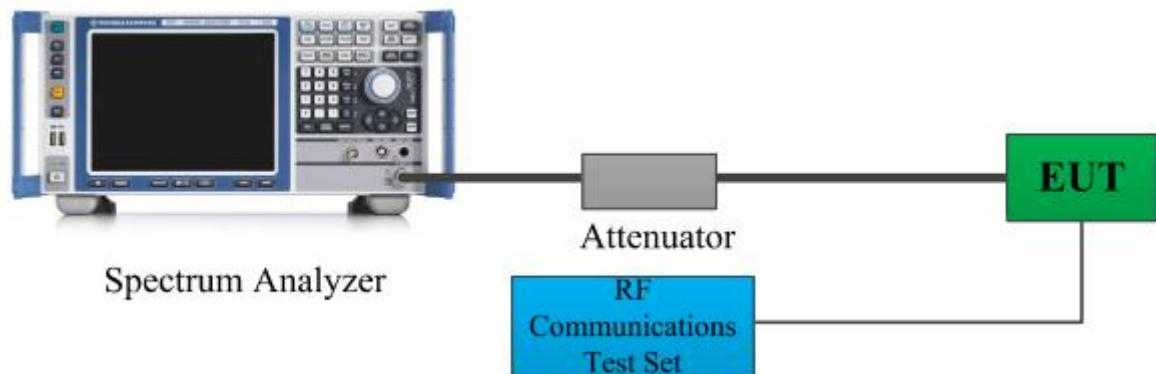
3.3.1. Applicable Standard

FCC§ 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) Unless specified elsewhere, channel spacing and bandwidths that will be authorized in the following frequency bands are given in the following table: STANDARD CHANNELSPACING/BANDWIDTH.

3.3.2. Test Setup



3.3.3. Test Procedures

According to ANSI C63.26-2015 Section 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 x 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 3 X RBW.

(c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the NOTE-Step a), step b), and step c) may require iteration to adjust within the specified tolerances. maximum spectrum analyzer input mixer level for linear operation. See

guidance provided in 4.2.3.

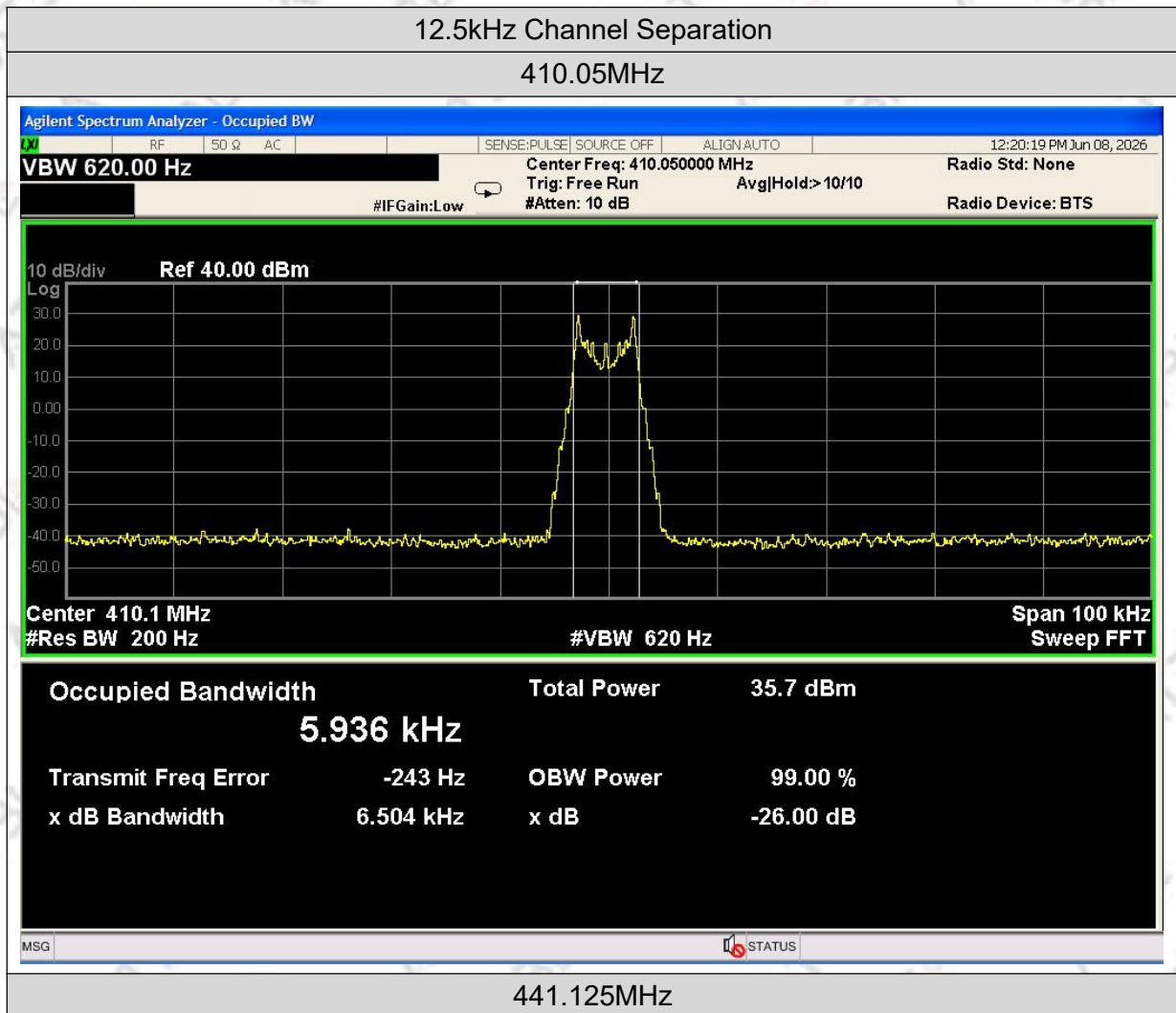
(d) Set the detection mode to peak, and the trace mode to max-hold.

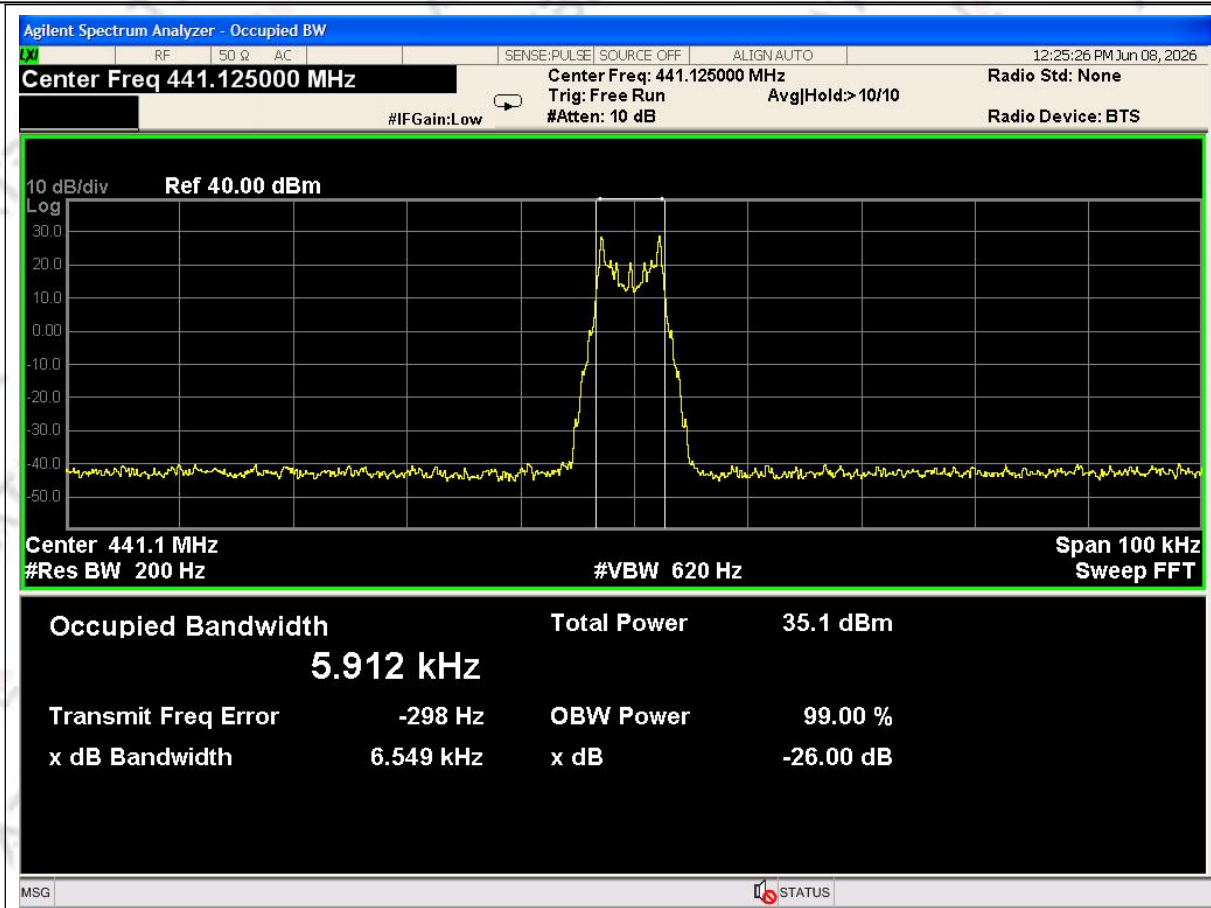
(e) If the instrument does not have a 99% OBW function, recover the trace data points and sum directly in linear power terms. Place the recovered amplitude data points, beginning at the lowest frequency, in a running sum until 0.5% of the total is reached. Record that frequency as the lower OBW frequency. 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.

3.3.4. Test Result

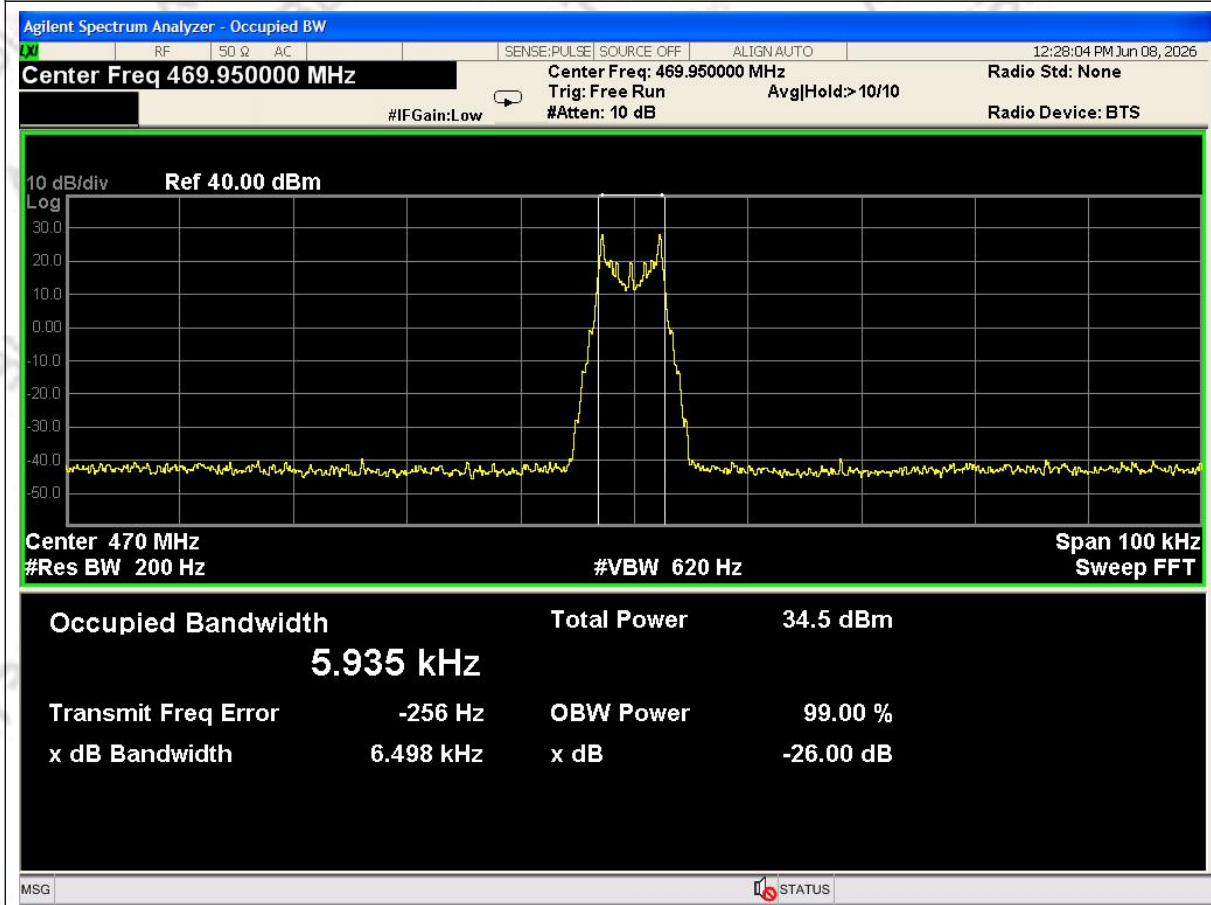
Emission Bandwidth Measurement Result _1W				
Operating Frequency	12.5kHz Channel Separation			
	99% Occupied Bandwidth (KHz)	26dB Emission Bandwidth (KHz)	Limits (KHz)	Result
410.05	5.936	6.504	12.5	Pass
441.125	5.912	6.549	12.5	Pass
469.95	5.935	6.498	12.5	Pass

The test plots as follows:



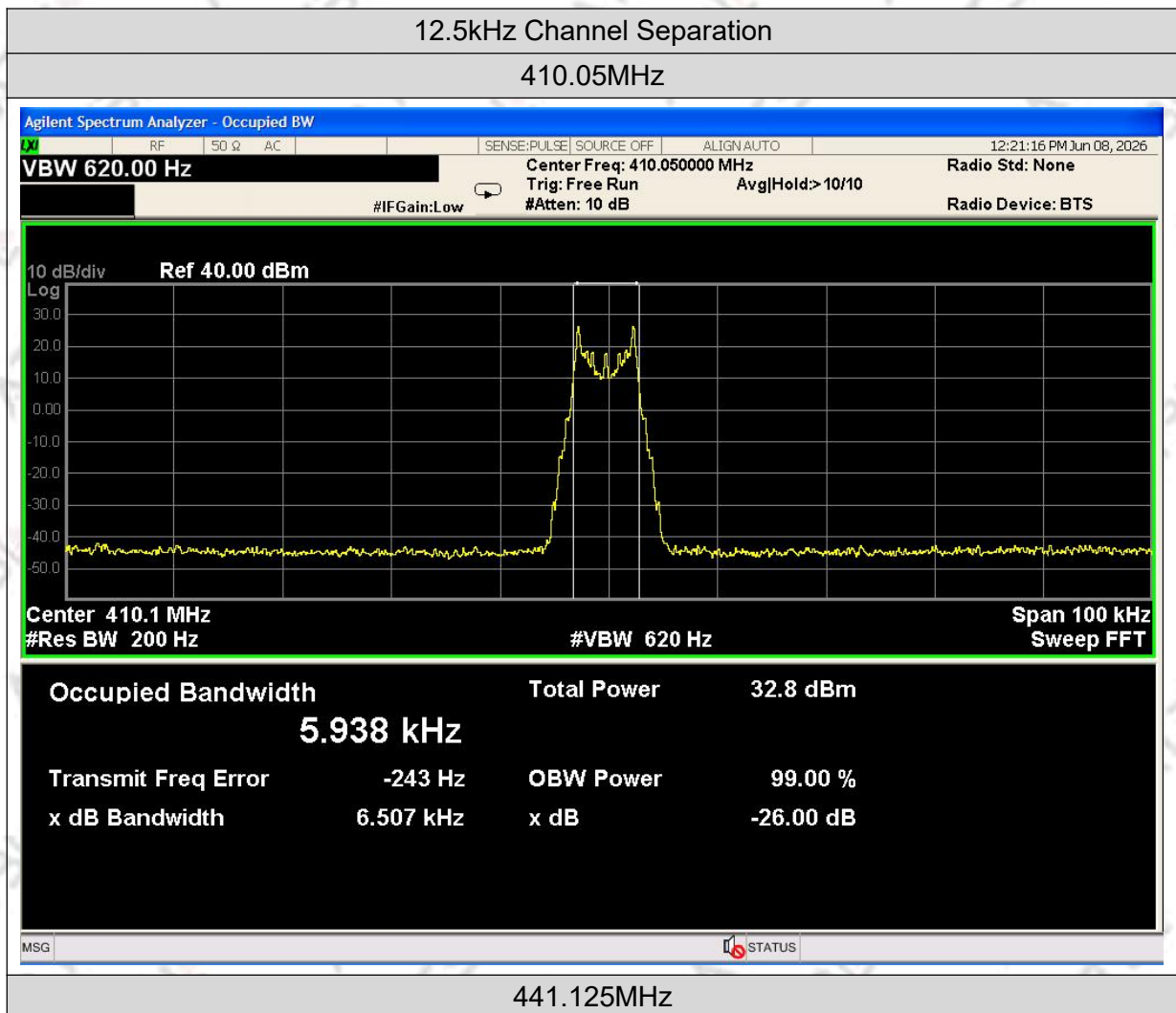


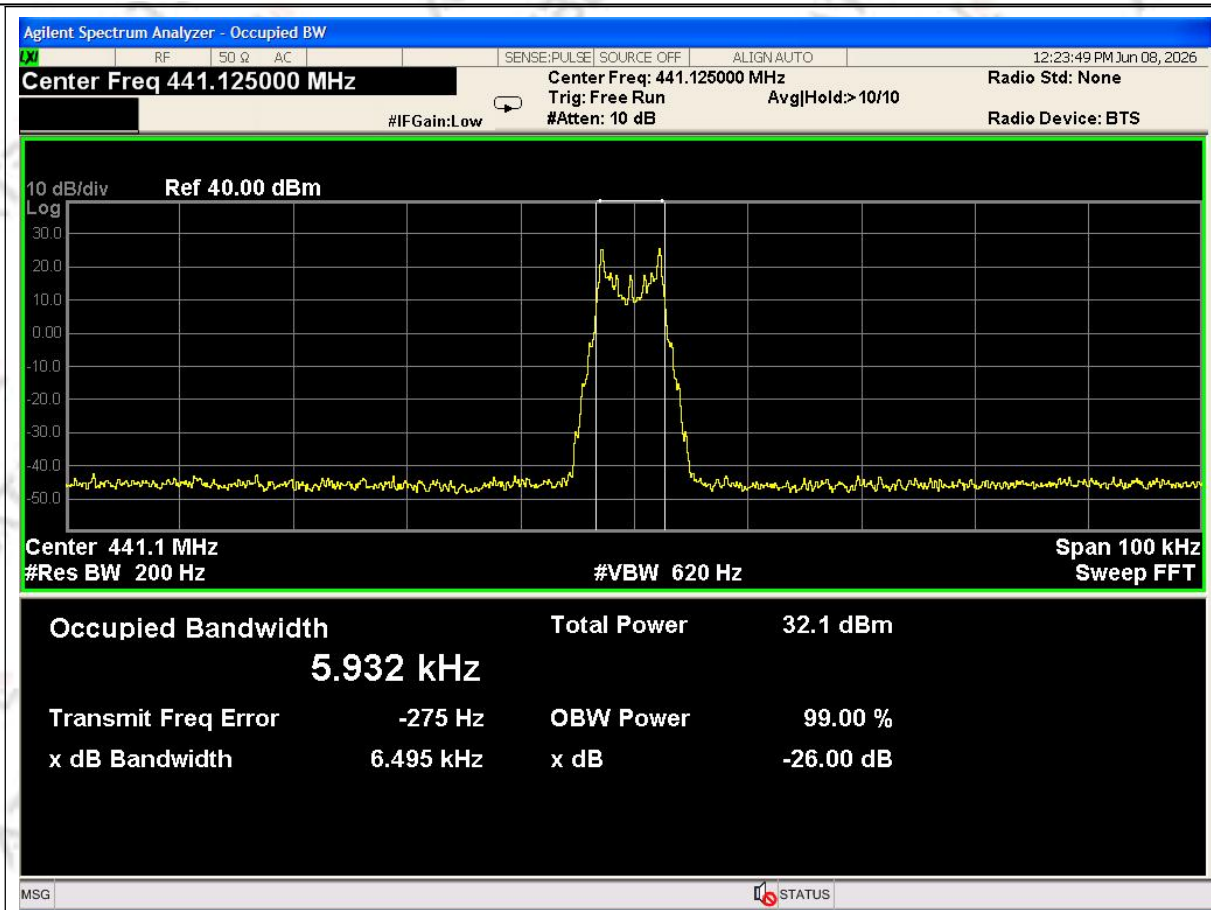
469.95MHz



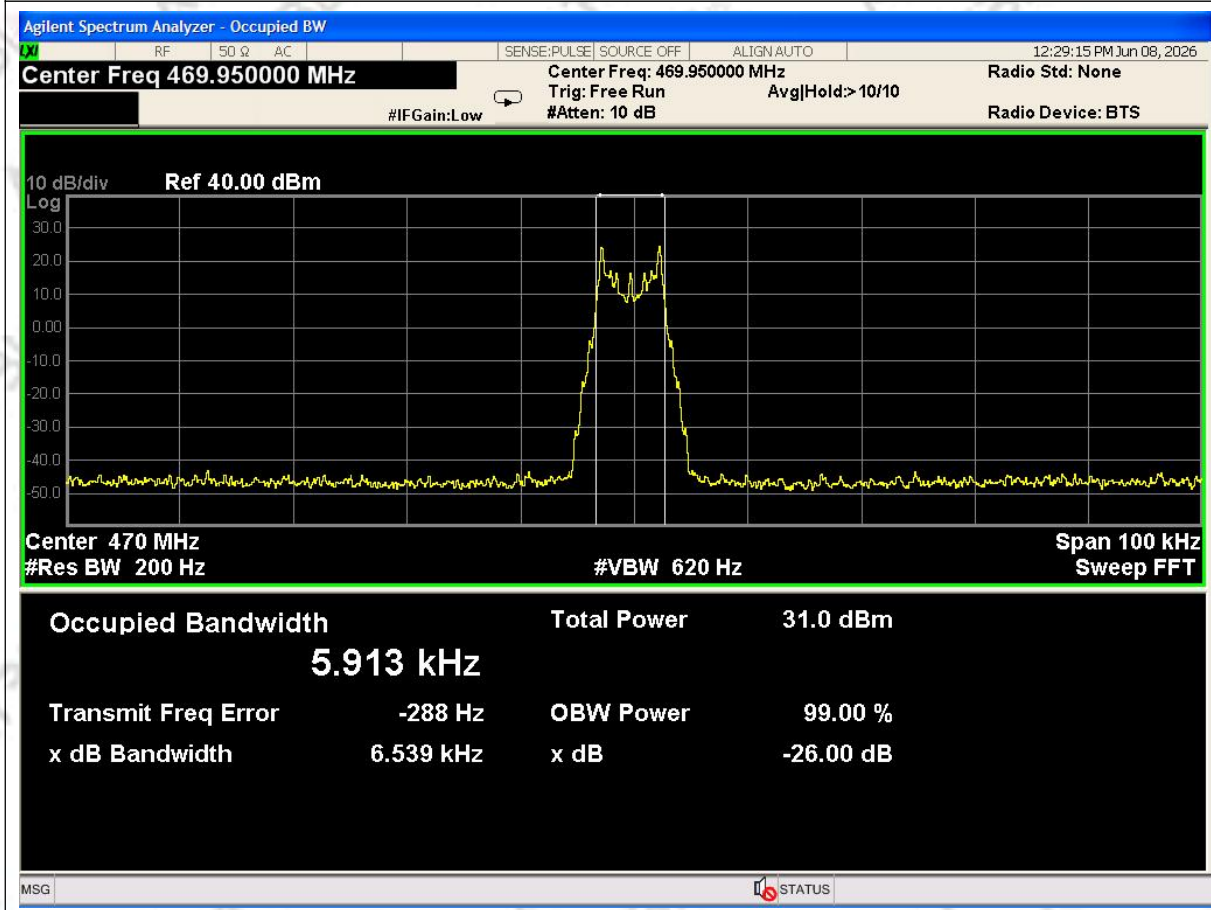
Emission Bandwidth Measurement Result _0.5W				
Operating Frequency	12.5kHz Channel Separation			
	99% Occupied Bandwidth (KHz)	26dB Emission Bandwidth (KHz)	Limits (KHz)	Result
410.05	5.938	6.507	12.5	Pass
441.125	5.932	6.495	12.5	Pass
469.95	5.913	6.539	12.5	Pass

The test plots as follows:





469.95MHz



Emission Mask please refer to the plots:

FCC§ 90.210:

Emission Mask C:25 kHz channel bandwidth equipment .

For transmitters that are not equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier output power (P) as follows:

- (1).On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5 kHz, but not more than 10 kHz: At least $83 \log(f_d/5)$ dB;
- (2).On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 10 kHz, but not more than 250 percent of the authorized bandwidth: At least $29 \log(f_d/11)$ dB or 50 dB, whichever is the lesser attenuation;
- (3).On any frequency removed from the center of the authorized bandwidth by more than 250 percent of the authorized bandwidth: At least $43 + 10 \log(P)$ dB.

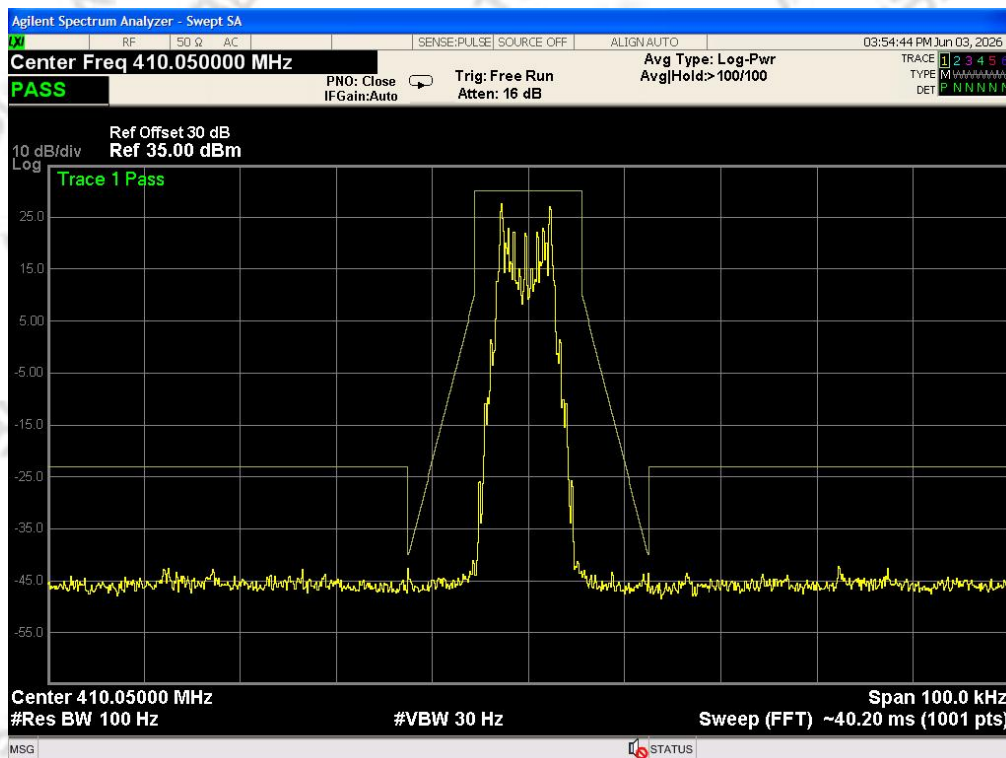
Emission Mask D: 12.5 kHz channel bandwidth equipment.

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:

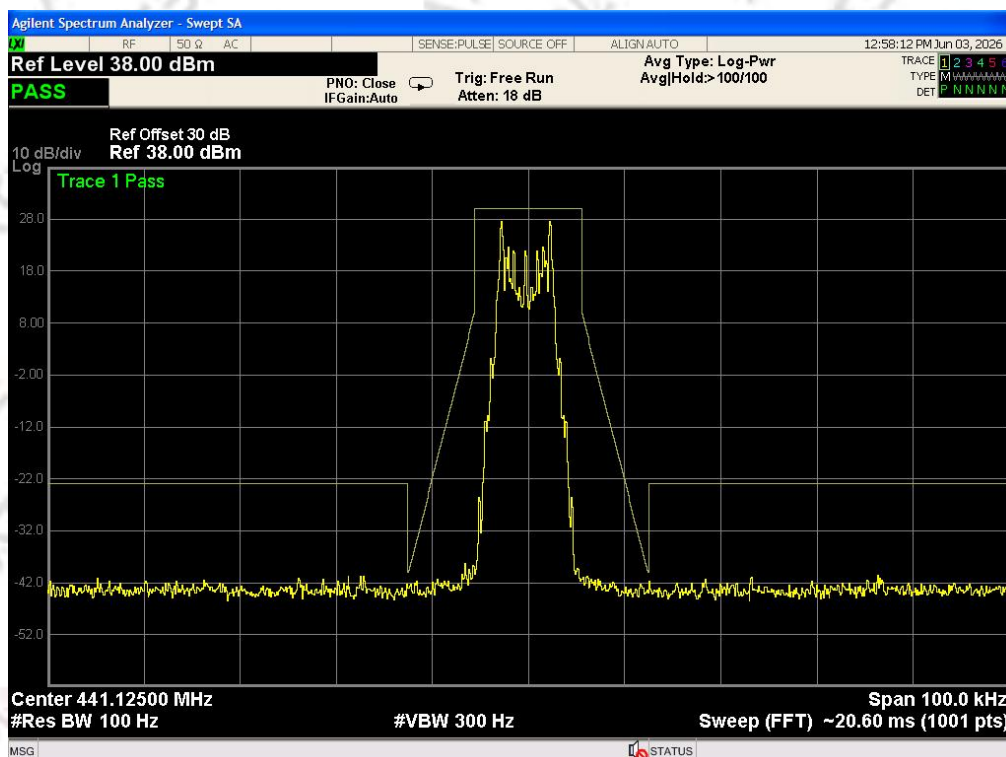
- (1) On any frequency from the center of the authorized bandwidth f_0 to 5.625 kHz removed from f_0 : Zero dB.
- (2) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5.625 kHz but no more than 12.5 kHz: At least $7.27(f_d - 2.88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

4FSK, 12.5kHz,:

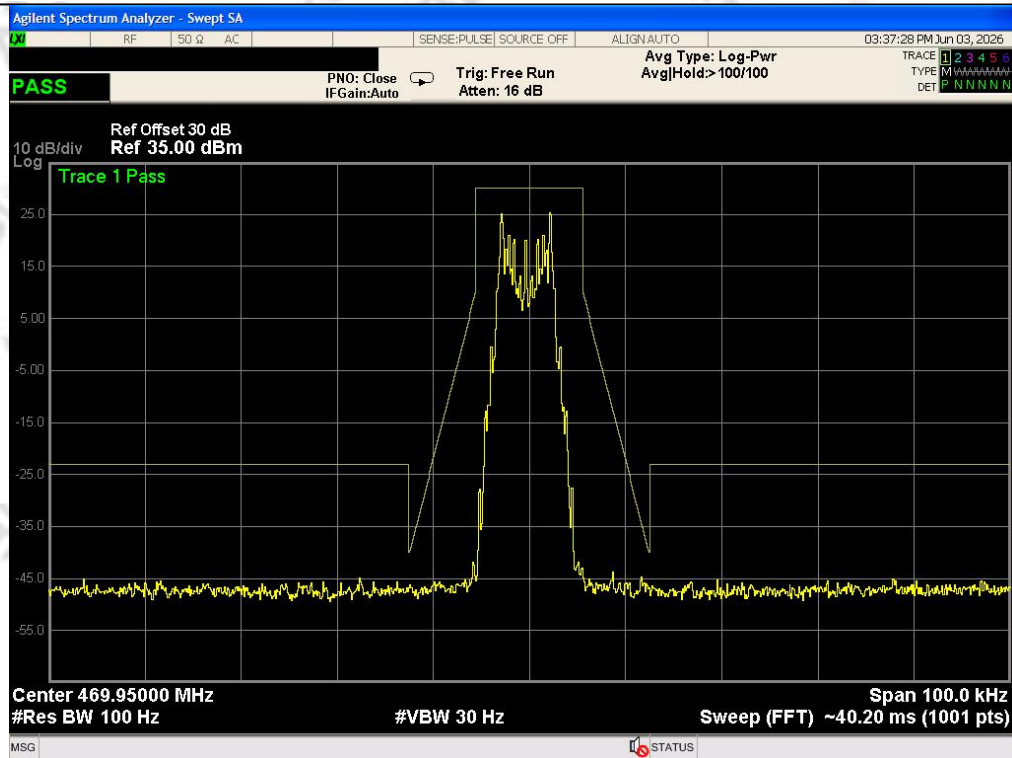
The Worst Emission Mask for (410.05MHz) of 12.5 KHz channel Separation (1W)



The Worst Emission Mask for (441.125MHz) of 12.5 KHz channel Separation (1W)

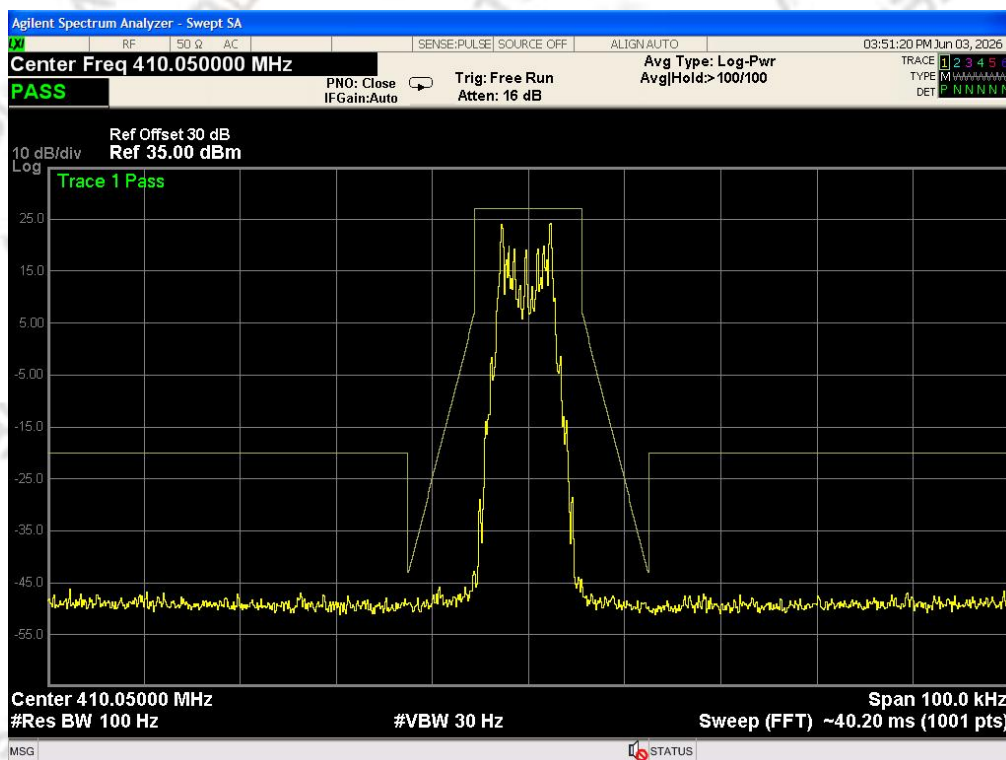


The Worst Emission Mask for (469.95MHz) of 12.5 KHz channel Separation (1W)

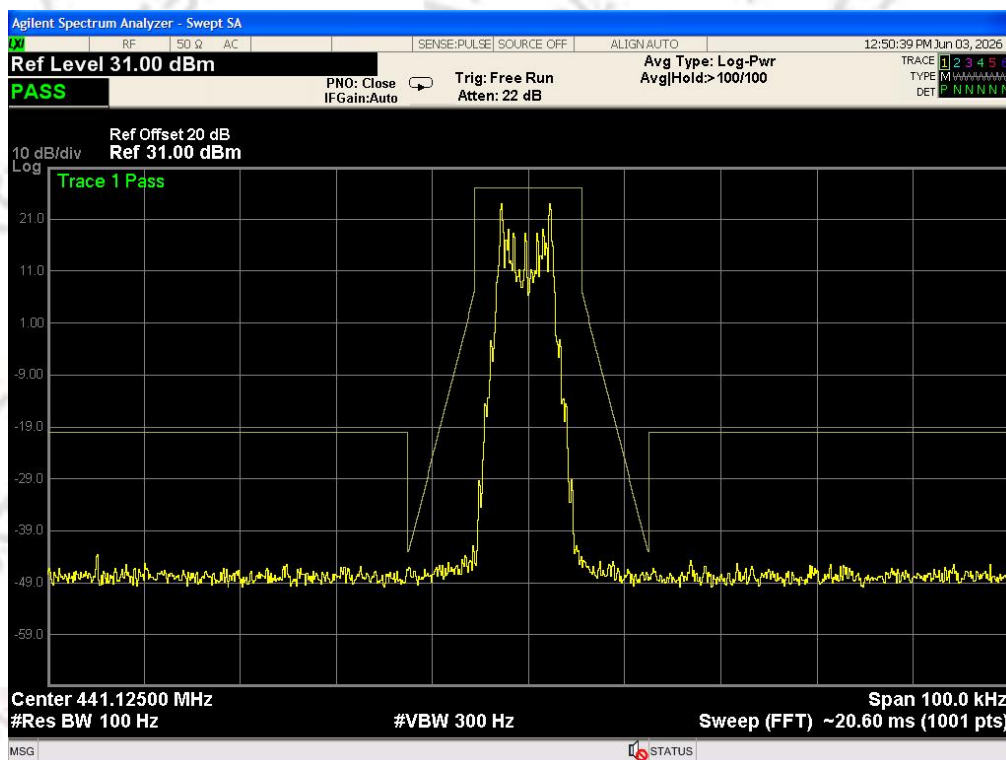


4FSK, 12.5kHz,:

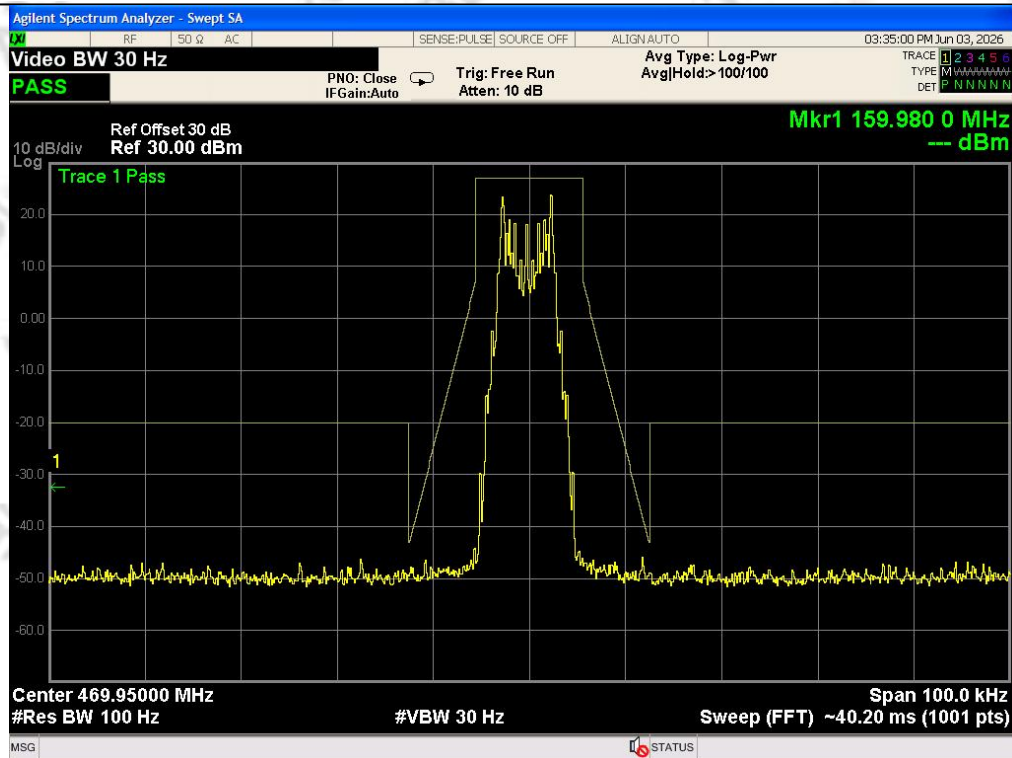
The Worst Emission Mask for (410.05MHz) of 12.5 KHz channel Separation (0.5W)



The Worst Emission Mask for (441.125MHz) of 12.5 KHz channel Separation (0.5W)



The Worst Emission Mask for (469.95MHz) of 12.5 KHz channel Separation (0.5W)



3.4. Transmitter Unwanted Emissions at Antenna Terminal

3.4.1. Applicable Standard

FCC§ 90.210:

Emission Mask C:25 kHz channel bandwidth equipment .

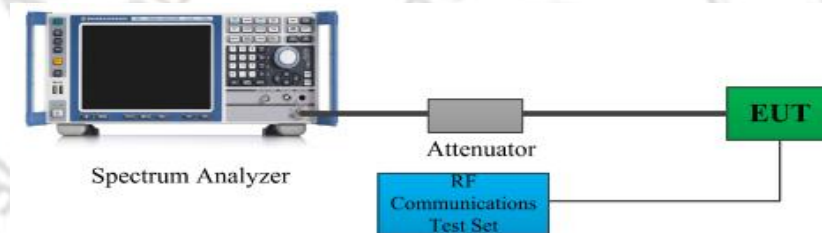
For transmitters that are not equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier output power (P) as follows:

- (1).On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5 kHz, but not more than 10 kHz: At least $83 \log (f_d/5)$ dB;
- (2).On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 10 kHz, but not more than 250 percent of the authorized bandwidth: At least $29 \log (f_d/11)$ dB or 50 dB, whichever is the lesser attenuation;
- (3).On any frequency removed from the center of the authorized bandwidth by more than 250 percent of the authorized bandwidth: At least $43 + 10 \log (P)$ dB.

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 $7.27(f_d - 2.88 \text{ kHz})$ dB.
- (3) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 12.5 kHz: At least $50 + 10 \log (P)$ dB or 70 dB, whichever is the lesser attenuation.
- (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.

3.4.2. Test Setup



3.4.3. Test Procedures

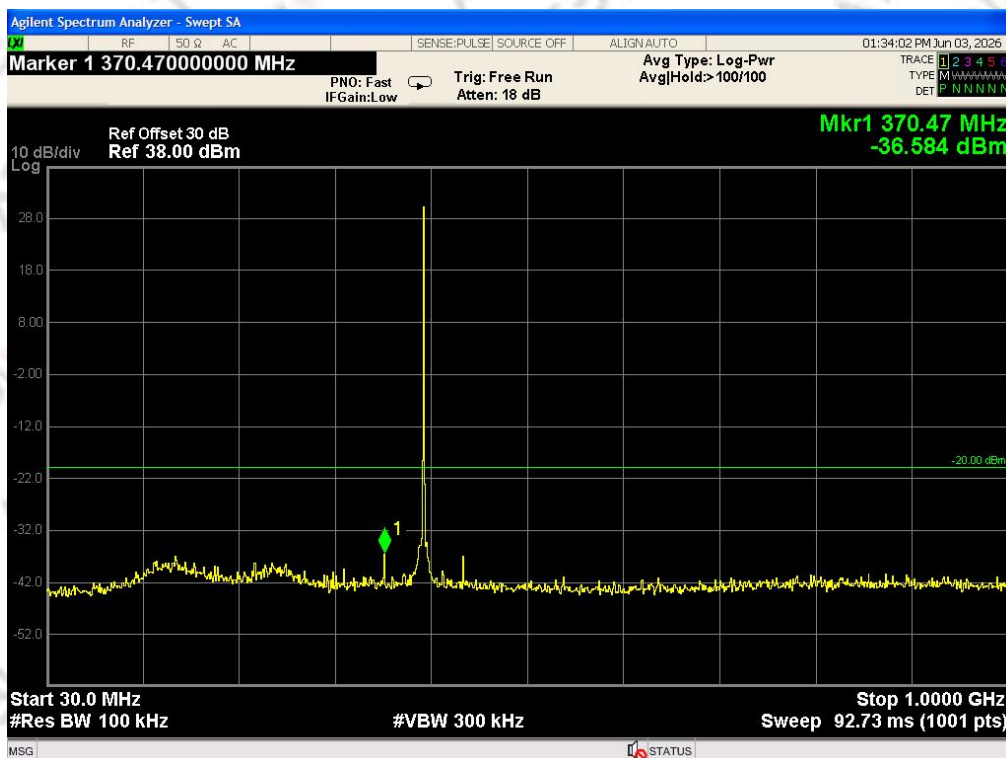
According to ANSI C63.26-2015 Section 5.7.4:

- (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-hand 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.

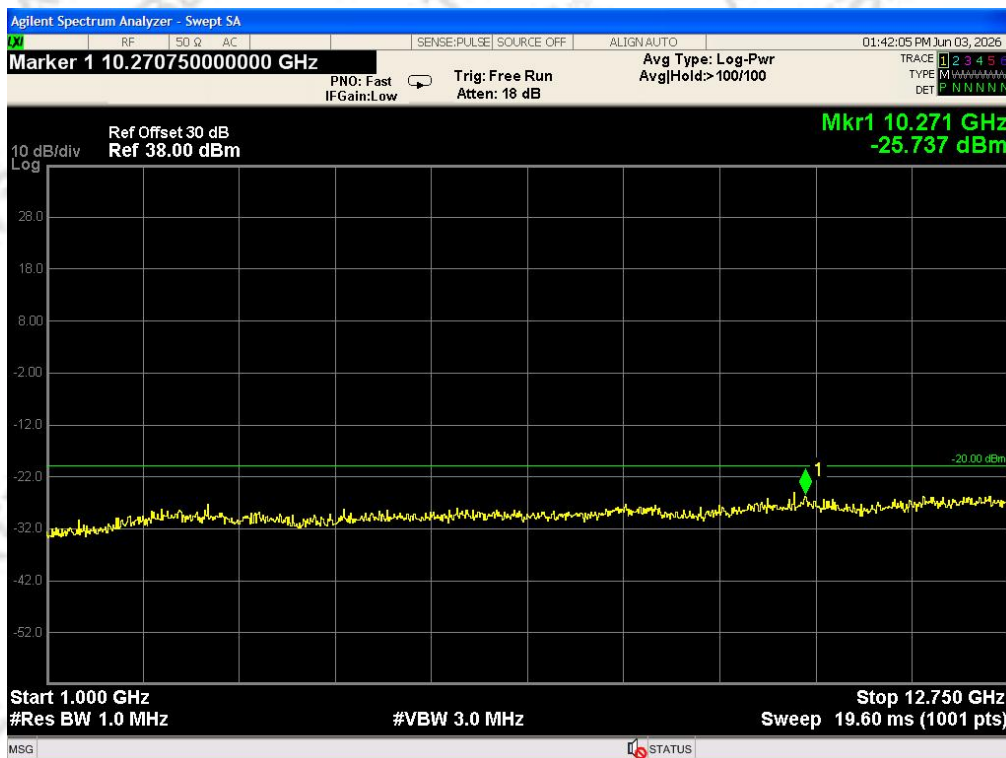
Limit for 12.5KHz: At least $50 + 10 \log (P) = 50 + 10 \log (1W) = 50(\text{dB}) = 50 - 30 = -20\text{dBm}$

3.4.4. Test Result

Conducted Spurious Emission (worst) @410.05MHz With 12.5 KHz Channel Separation -1W
30MHz~1000MHz

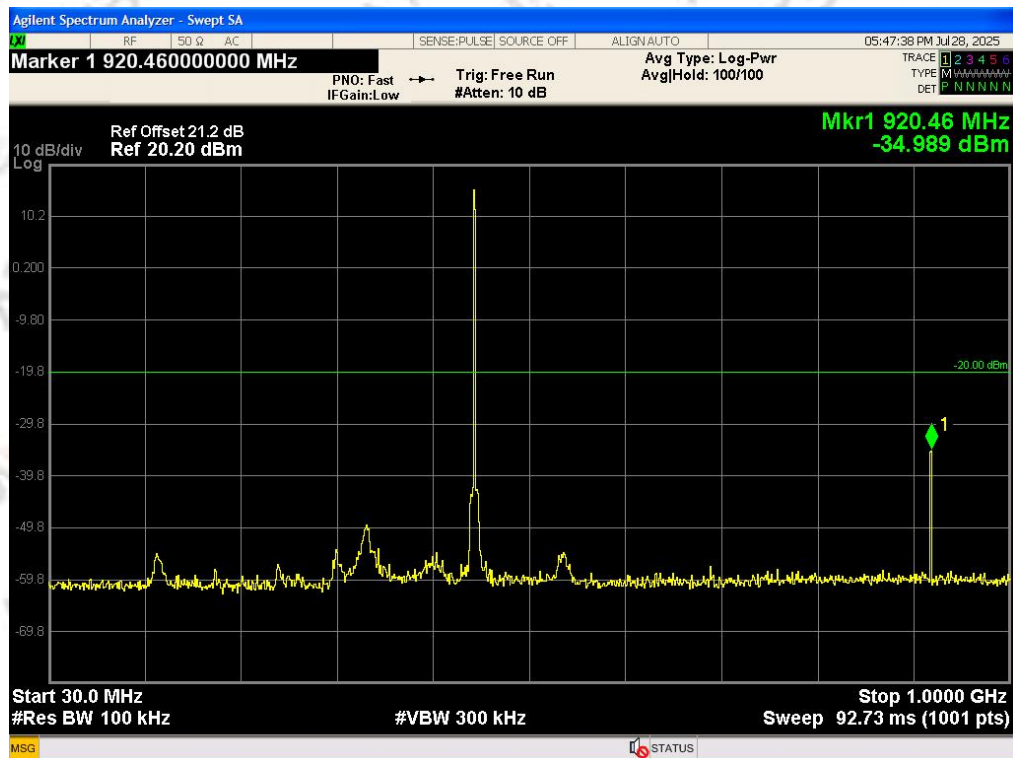


1000MHz-12750MHz

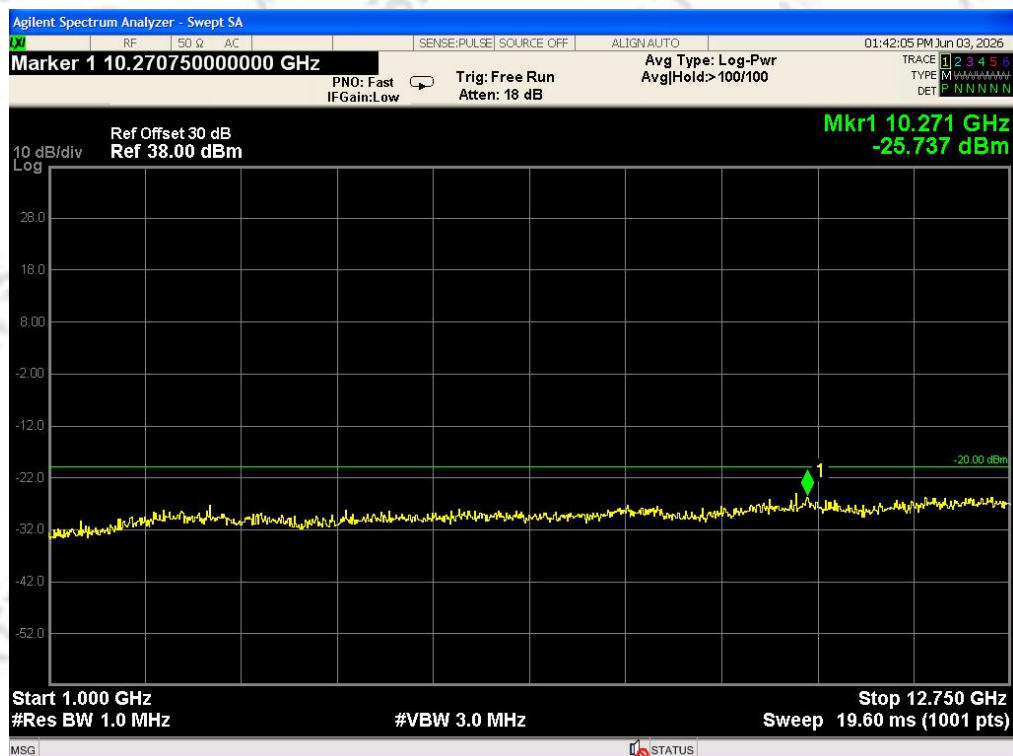


Conducted Spurious Emission (worst) @429.95MHz With 12.5 KHz Channel Separation -1W

30MHz~1000MHz

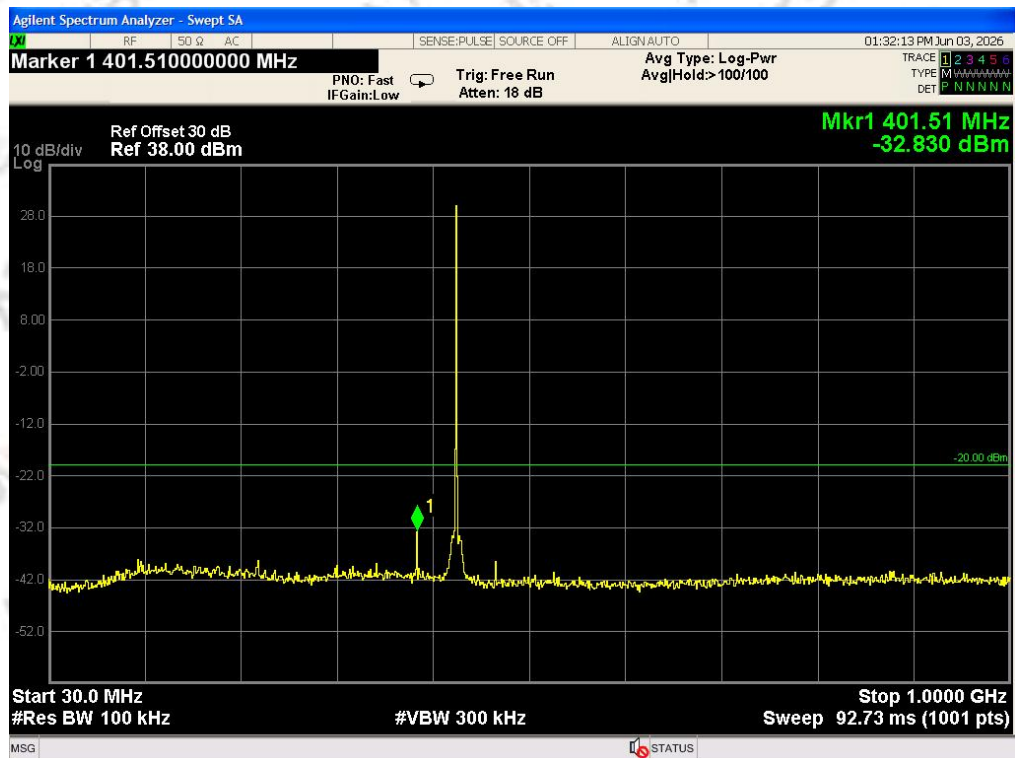


1000MHz-12750MHz

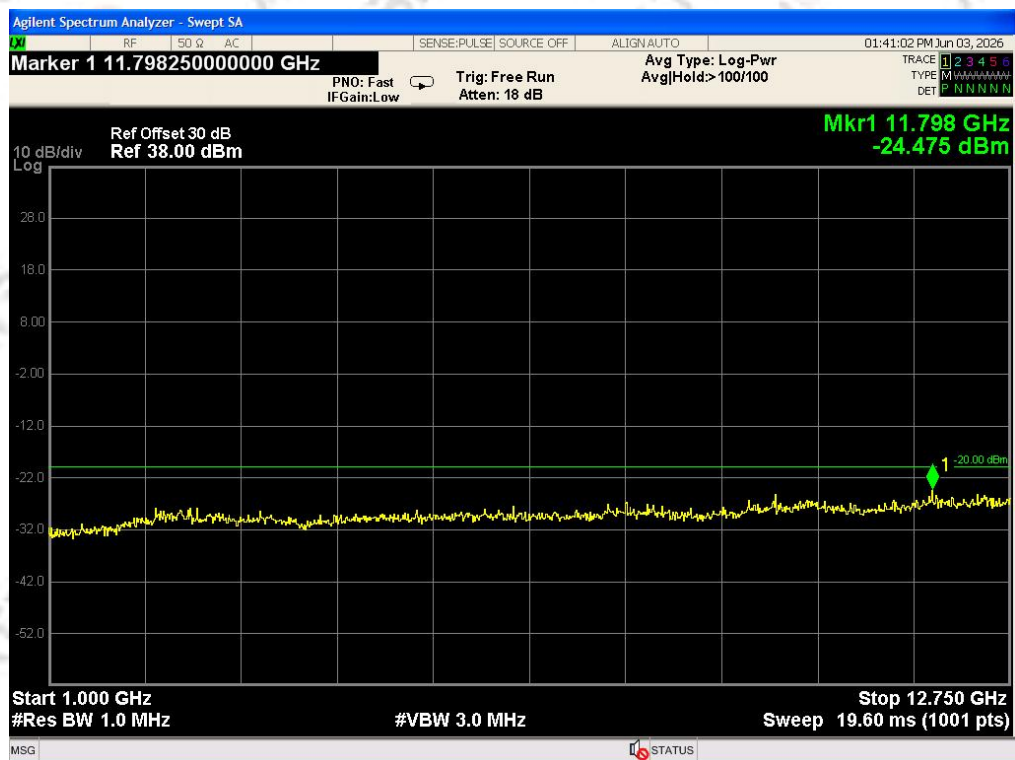


Conducted Spurious Emission (worst) @441.125MHz With 12.5 KHz Channel Separation -1W

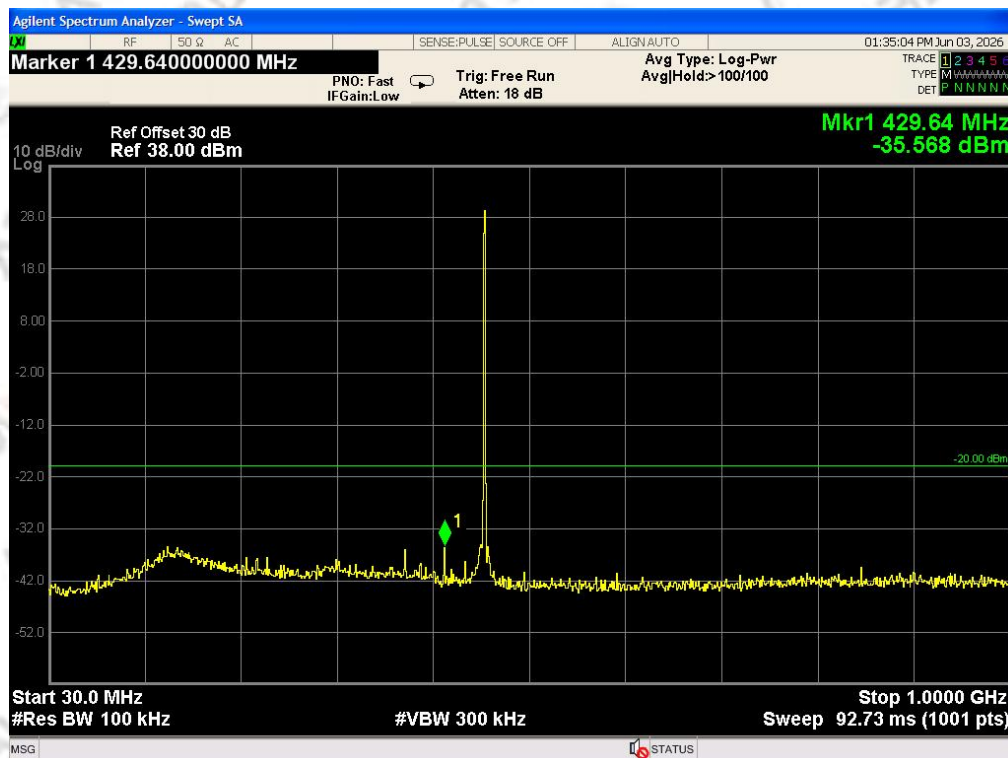
30MHz~1000MHz



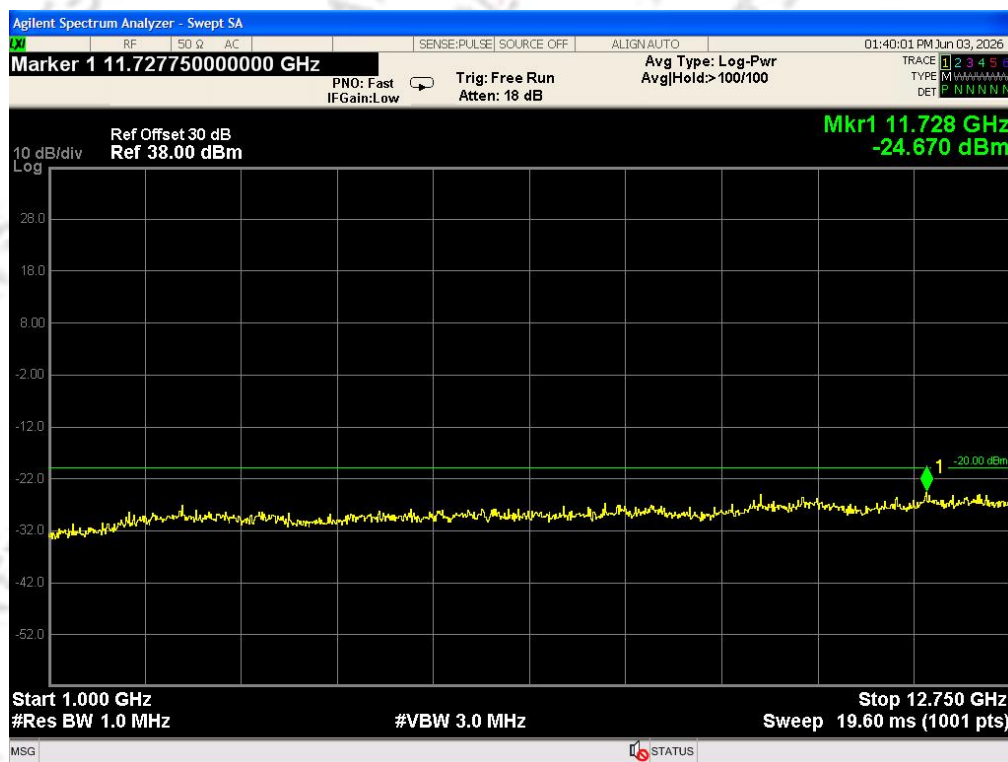
1000MHz-12750MHz



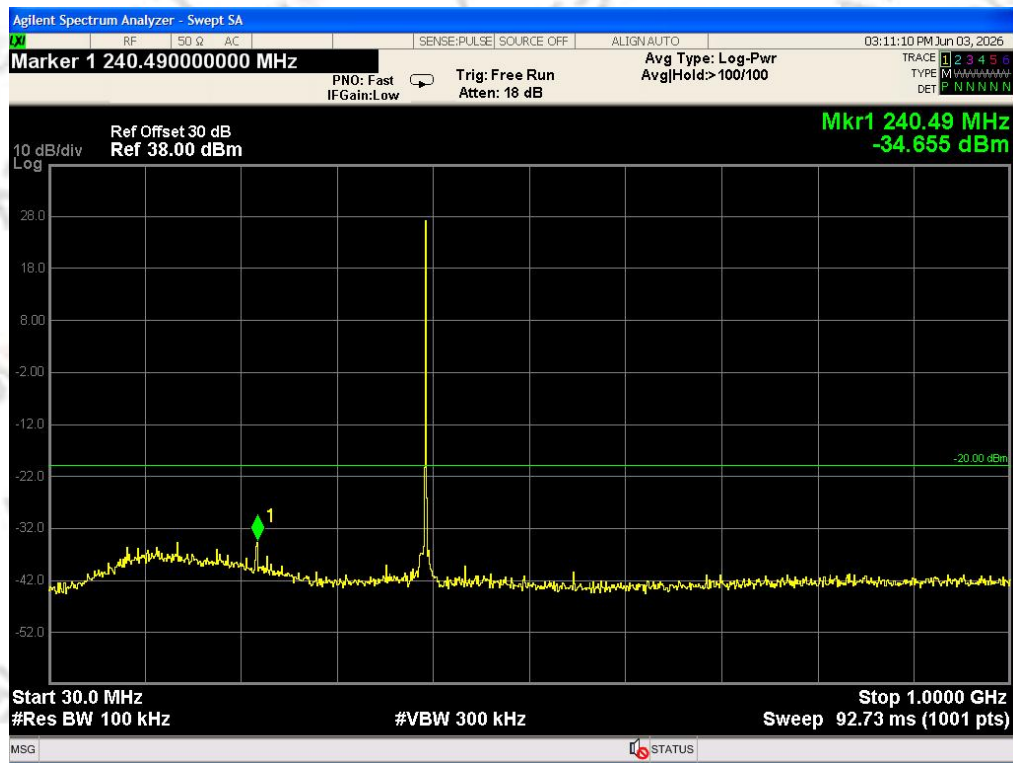
Conducted Spurious Emission (worst) @469.95MHz With 12.5 KHz Channel Separation -1W
30MHz~1000MHz



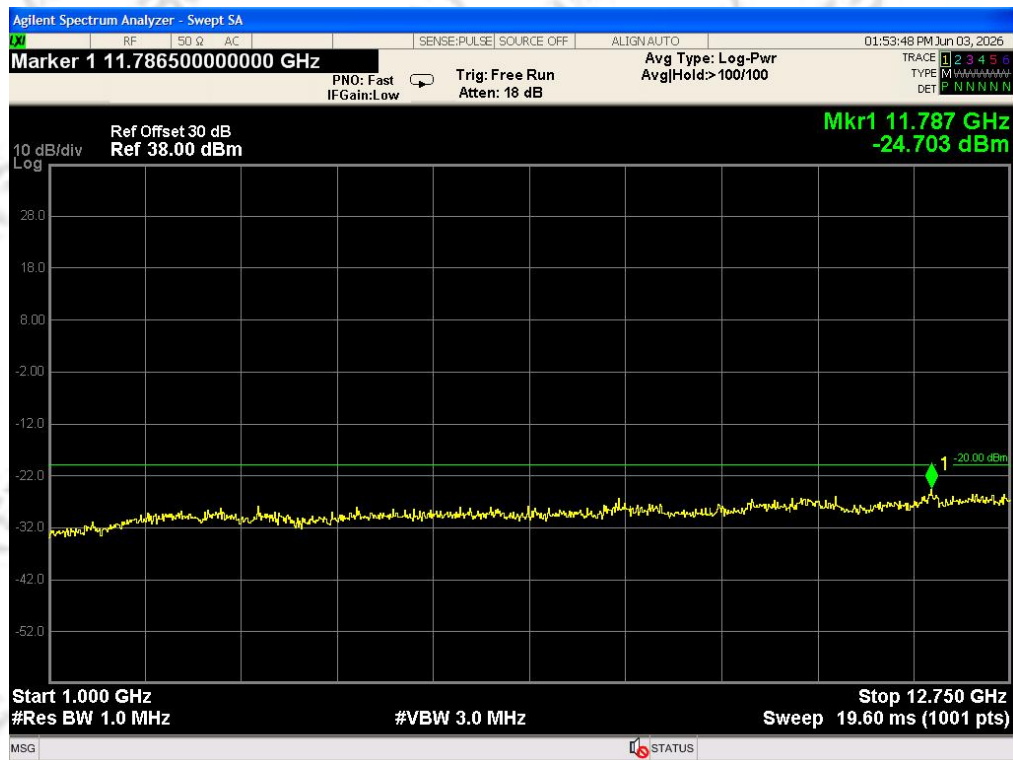
1000MHz-12750MHz



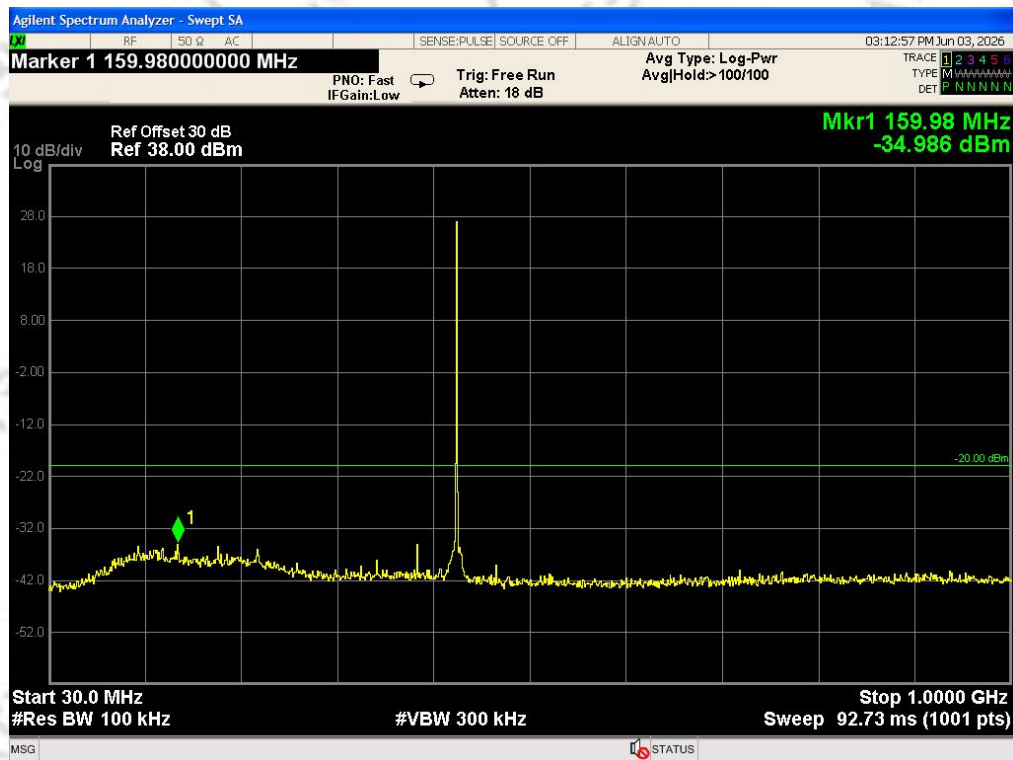
Conducted Spurious Emission (worst) @410.05MHz With 15 KHz Channel Separation -0.5W
30MHz~1000MHz



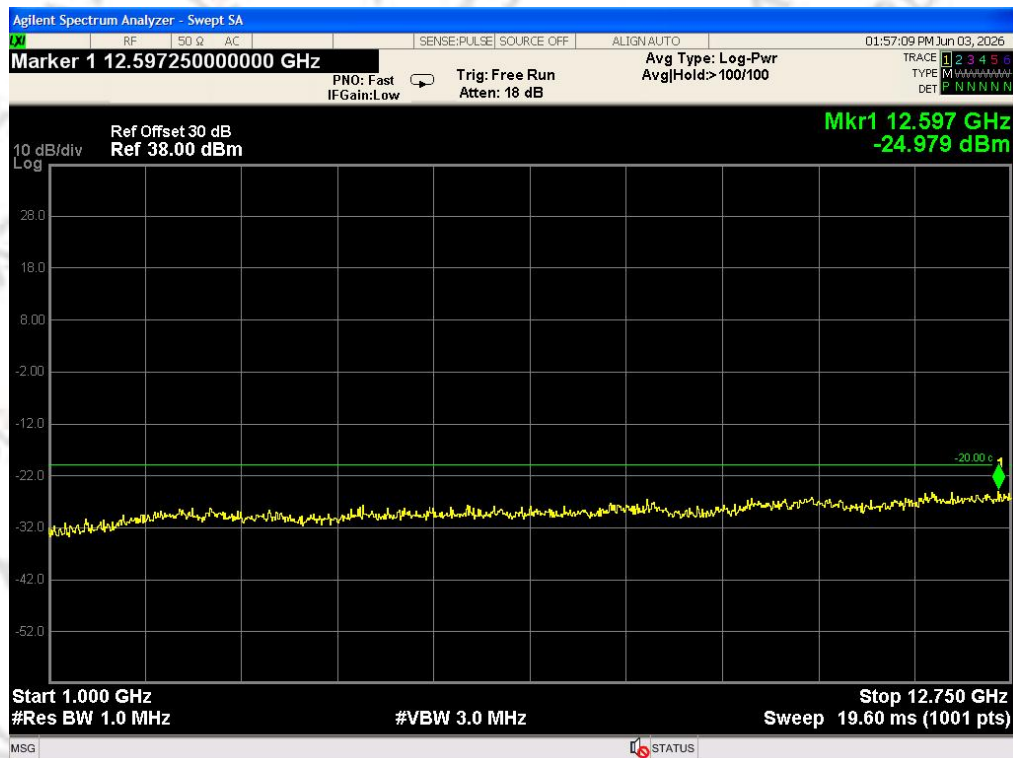
1000MHz-12750MHz



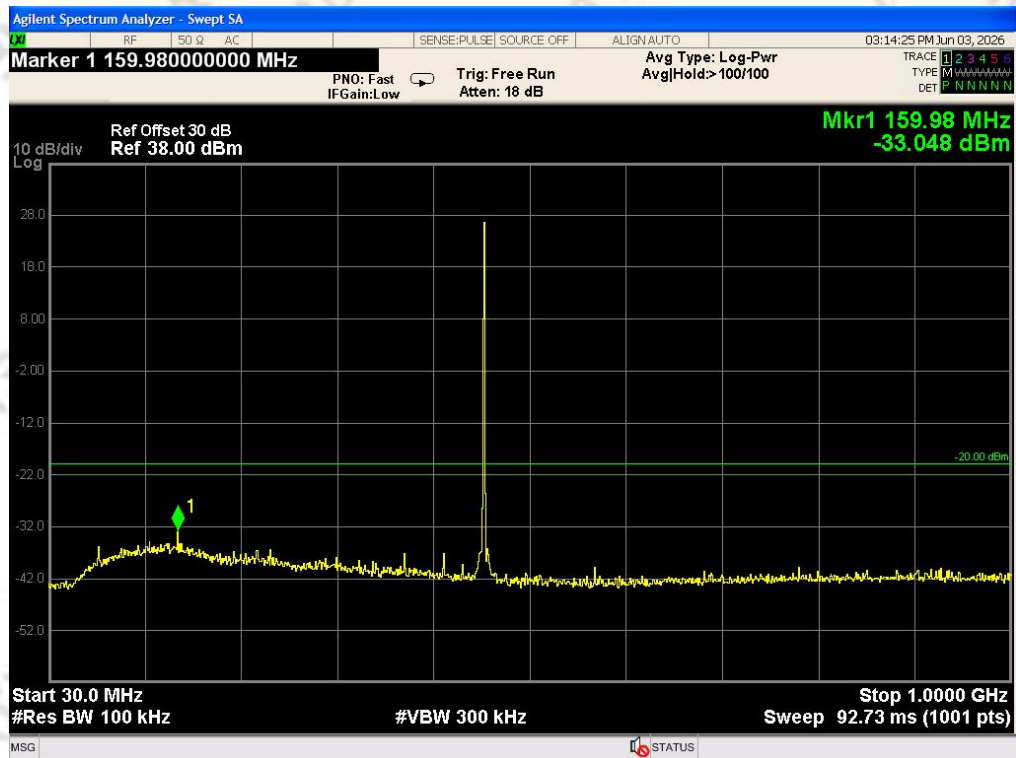
Conducted Spurious Emission (worst) @441.125MHz With 25 KHz Channel Separation -0.5W
30MHz~1000MHz



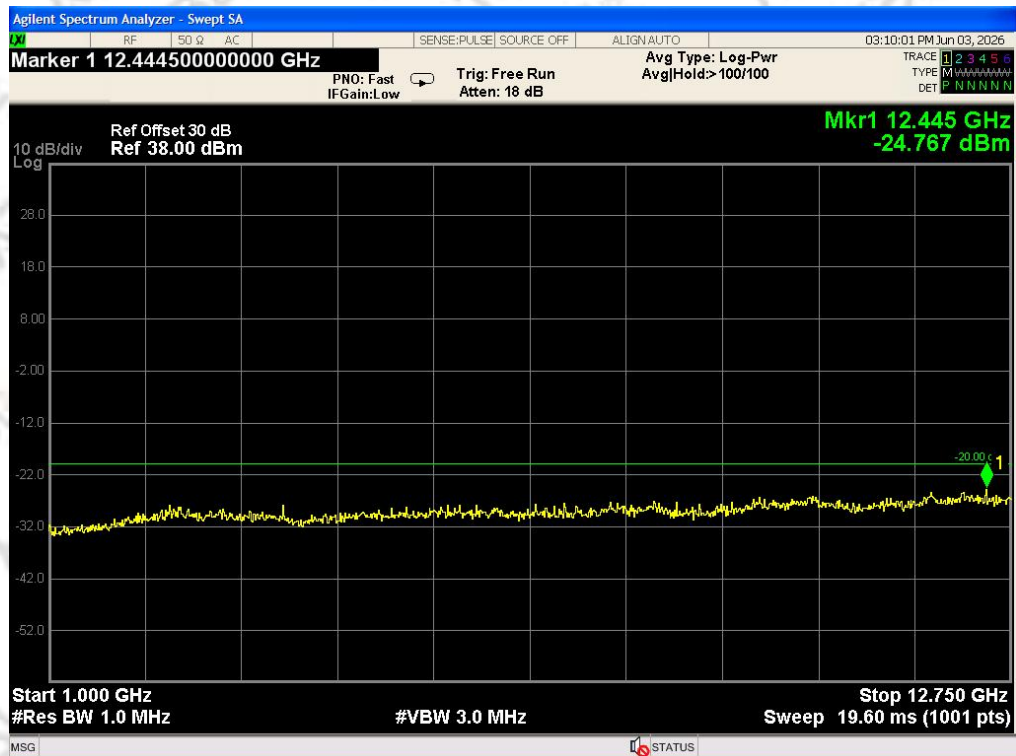
1000MHz-12750MHz



Conducted Spurious Emission (worst) @469.95MHz With 25 KHz Channel Separation -0.5W
30MHz~1000MHz



1000MHz-12750MHz



3.5. Transient Frequency Behavior

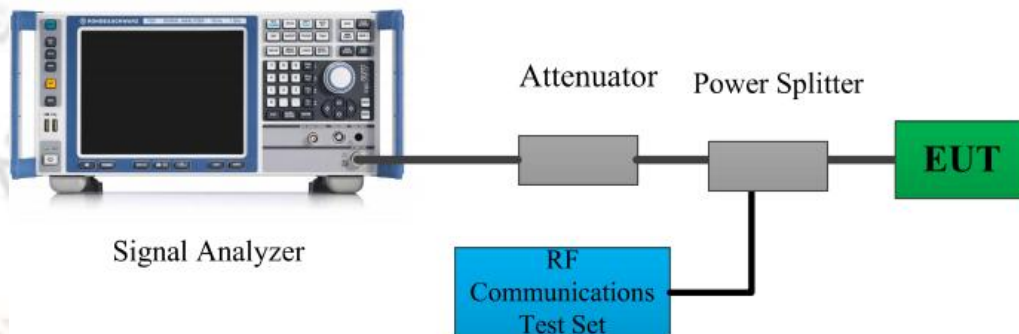
3.5.1. Applicable Standard

FCC§ 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

3.5.2. Test Setup



3.5.3. Test Procedures

According to ANSI C63.26-2015 Section 6.5.2.2:

- Connect the equipment as illustrated.
- Connect the output of the transmitter to the signal analyzer with modulation domain analyzer function.
- 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.
- Adjust the display of the modulation domain analyzer for proper viewing of the transmitter transient behavior. Set the timebase reference to the left for observing the transmitter turn-on

transient.

(e) Key the transmitter.

(f) Observe the stored display of the modulation domain analyzer. The signal trace shall be maintained within the allowable limits during the periods t_1 and t_2 , and shall also remain within limits following t_2 .

(g) 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.

(h) Adjust the display of the modulation domain analyzer for proper viewing of the transmitter transient behavior. Set the timebase reference to the right for observing the transmitter turn-off transient.

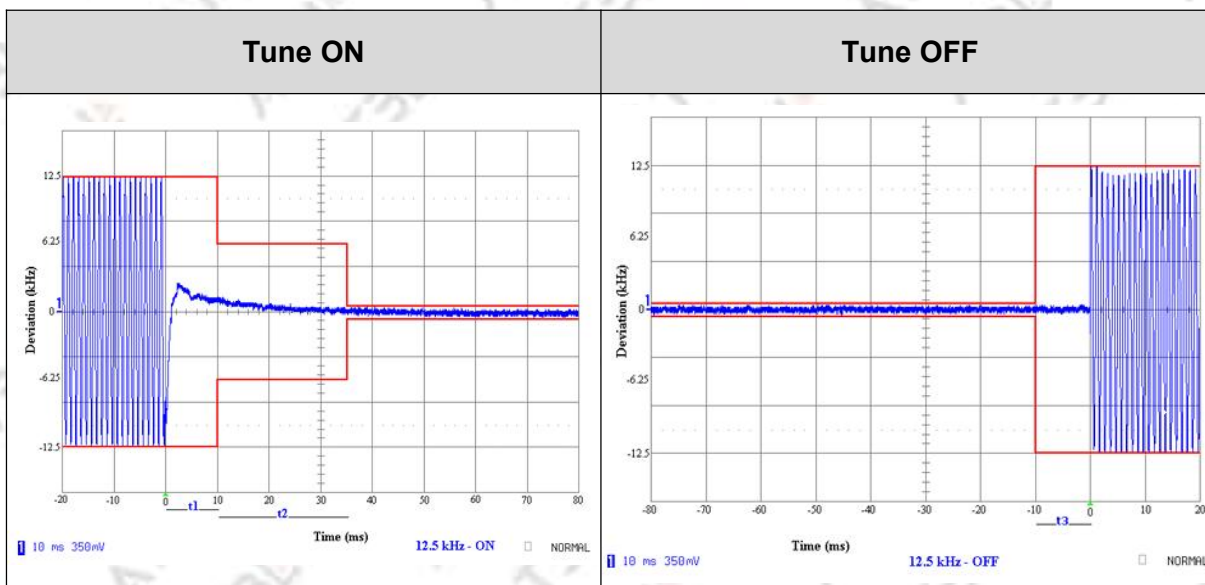
(i) Unkey the transmitter.

(j) Observe the stored display of the modulation domain analyzer. The signal trace shall be maintained within the allowable limits during the period t_3 .

3.5.4. Test Result

Test Data:

Channel Separation	Test Modulation	Transient Period	Transient Frequency	Result
12.5KHz	4FSK	$T_1(10\text{ms})$	$\pm 12.5\text{ kHz}$	Pass
		$T_2(25\text{ms})$	$\pm 6.25\text{ kHz}$	Pass
		$T_3(10\text{ms})$	$\pm 12.5\text{ kHz}$	Pass



3.6. Modulation Characteristic

3.6.1. Applicable Standard

FCC§ 2.1047:

- (a) Voice modulated communication equipment. A curve or equivalent data showing the frequency response of the audio modulating circuit over a range of 100 to 5000 Hz shall be submitted. For equipment required to have an audio low-pass filter, a curve showing the frequency response of the filter, or of all circuitry installed between the modulation limiter and the modulated stage shall be submitted.
- (b) Equipment which employs modulation limiting. A curve or family of curves showing the percentage of modulation versus the modulation input voltage shall be supplied. The information submitted shall be sufficient to show modulation limiting capability throughout the range of modulating frequencies and input modulating signal levels employed.
- (c) Single sideband and independent sideband radiotelephone transmitters which employ a device or circuit to limit peak envelope power. A curve showing the peak envelope power output versus the modulation input voltage shall be supplied. The modulating signals shall be the same in frequency as specified in paragraph (c) of §2.1049 for the occupied bandwidth tests.
- (d) Other types of equipment. A curve or equivalent data which shows that the equipment will meet the modulation requirements of the rules under which the equipment is to be licensed.

3.6.2. Test Procedures

According to ANSI C63.26-2015 Section 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

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 ≥ 215000 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 300 Hz, 2500 Hz and 3000 Hz 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.

Audio Frequency Response

- (1). Configure the EUT as shown in figure 1.
- (2). Adjust the audio input for 20% of rated system deviation at 1 kHz using this level as a reference (0 dB).
- (3). Vary the Audio frequency from 100 Hz to 10 kHz and record the frequency deviation.
- (4). Audio Frequency Response = $20\log_{10}$ (Deviation of test frequency/Deviation of 1 kHz reference).

3.6.3. Test Result

Test Data:

The product does not support voice mode, so this test item is not applicable.

3.7. Transmitter Unwanted Emissions-Radiated

3.7.1. Applicable Standard

Emission Mask C:25 kHz channel bandwidth equipment .

For transmitters that are not equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier output power (P) as follows:

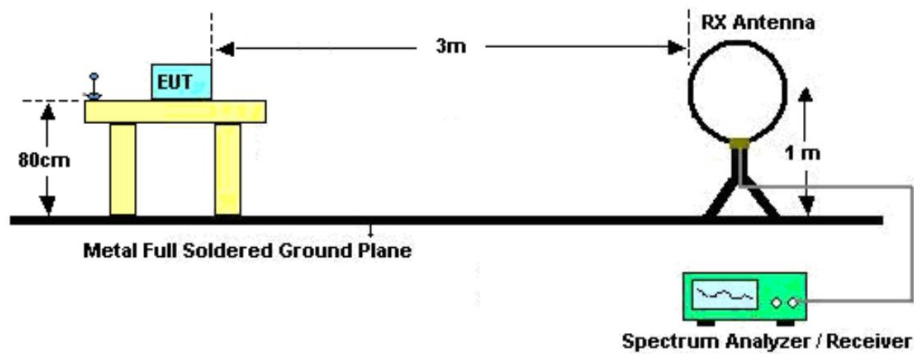
- (1).On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5 kHz, but not more than 10 kHz: At least $83 \log (f_d/5)$ dB;
- (2).On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 10 kHz, but not more than 250 percent of the authorized bandwidth: At least $29 \log (f_d/11)$ dB or 50 dB, whichever is the lesser attenuation;
- (3).On any frequency removed from the center of the authorized bandwidth by more than 250 percent of the authorized bandwidth: At least $43 + 10 \log (P)$ dB.

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:

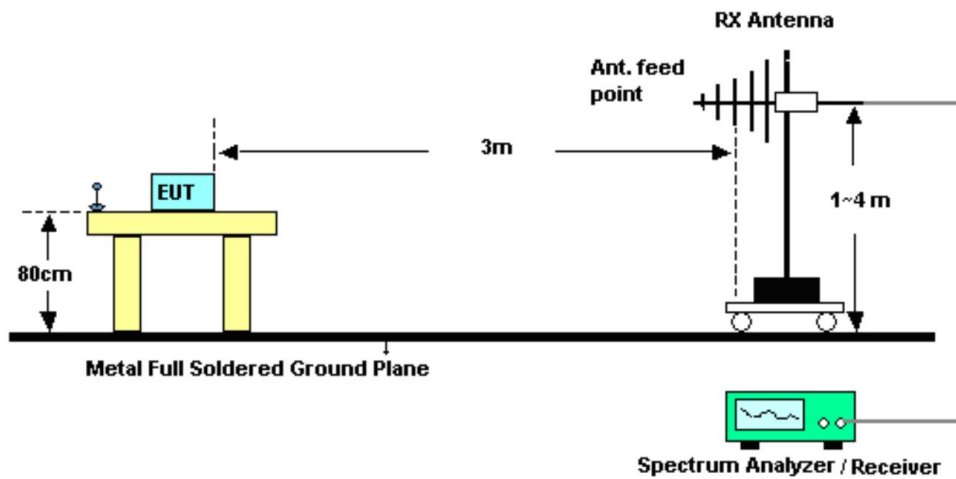
- (1) On any frequency from the center of the authorized bandwidth f_0 to 5.625 kHz removed from f_0 : Zero dB.
- (2) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5.625 kHz but no more than 12.5 kHz: At least $7.27(f_d - 2.88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

3.7.2. Test Setup

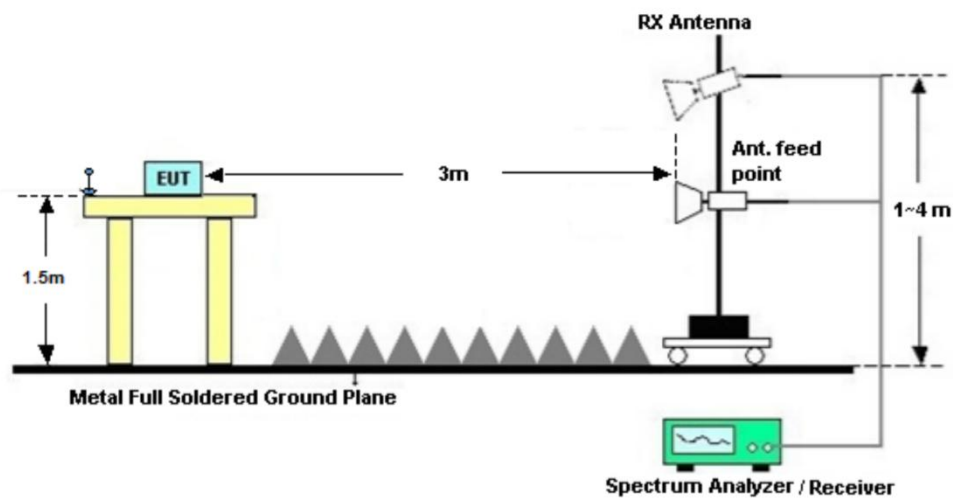
3.7.2.1. For radiated test below 30MHz



3.7.2.2. For radiated test from 30MHz to 1GHz



3.7.2.3. For radiated test above 1GHz



3.7.3. Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26.

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.7.4. Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. $\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$
11. $\text{ERP (dBm)} = \text{EIRP} - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

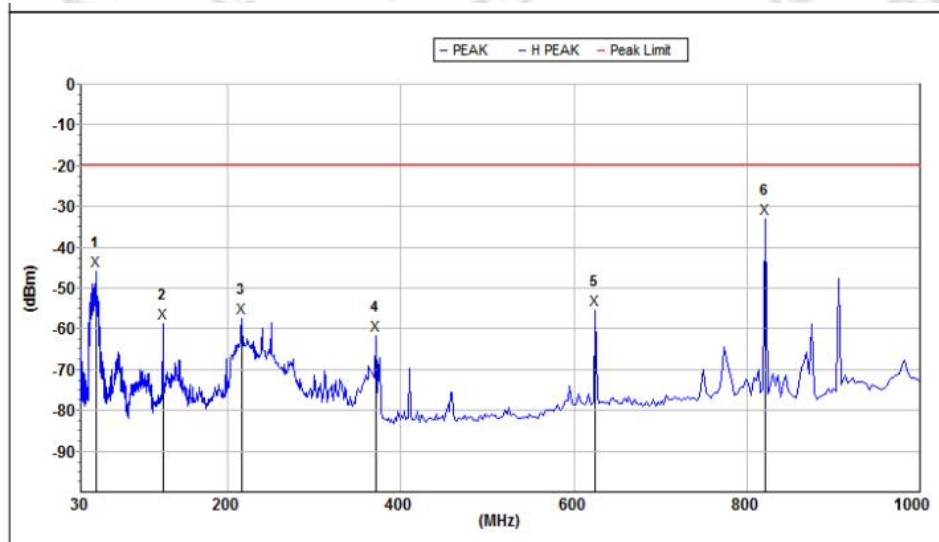
3.7.5. Test Result of Radiated Spurious Emission

Note:

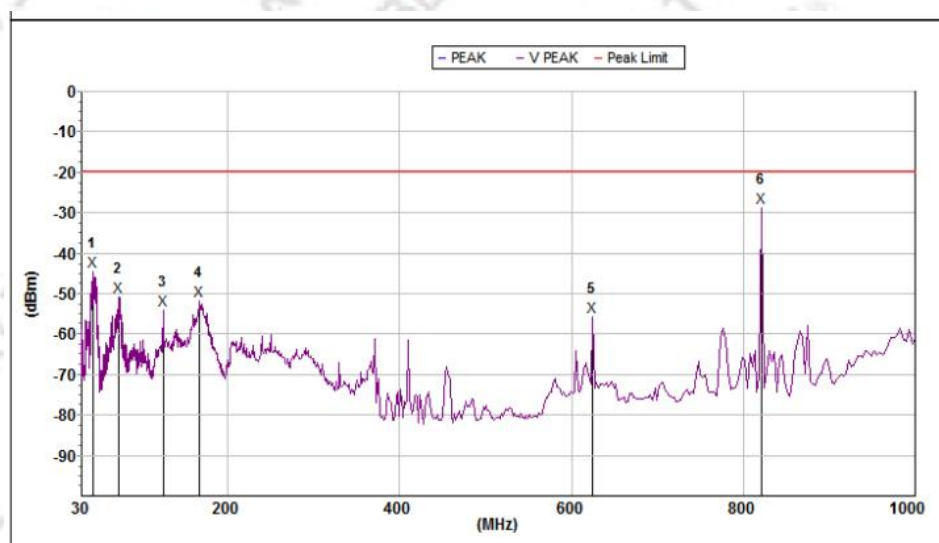
- 1.The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.
- 2.In order to prevent the amplifier from distorting, the test is conducted with a band-stop filter (300 MHz to 500 MHz) to remove the main frequency.

Measurement Result for 12.5KHz Channel Separation @ 410.05MHz-1W

1GHz Below:

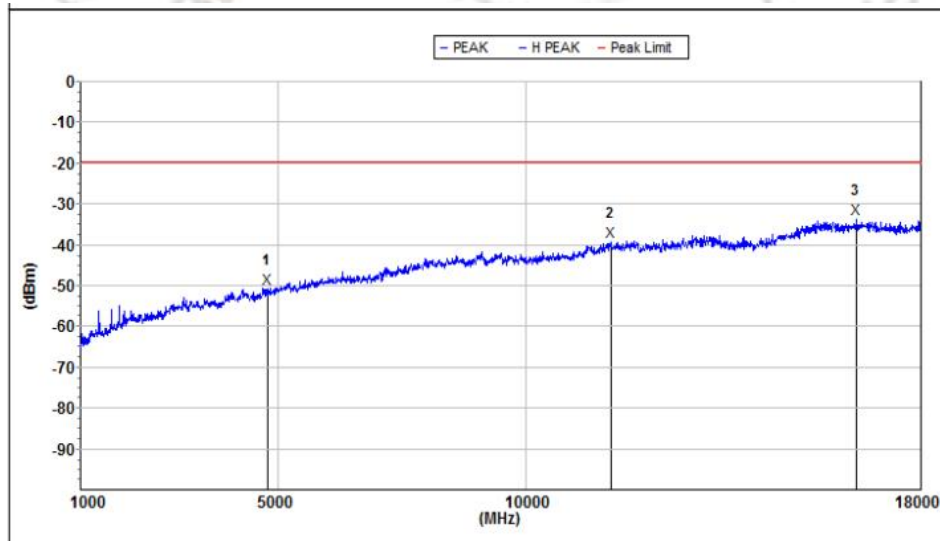


Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	47.826	-3.4	-42.3	-45.7	-20.0	25.7	H
2	125.007	-24.2	-34.4	-58.6	-20.0	38.6	H
3	216.024	-27.3	-29.8	-57.1	-20.0	37.1	H
4	370.702	-36.7	-24.9	-61.6	-20.0	41.6	H
5	625.078	-34.1	-21.0	-55.1	-20.0	35.1	H
6	821.710	-14.0	-19.0	-33.0	-20.0	13.0	H

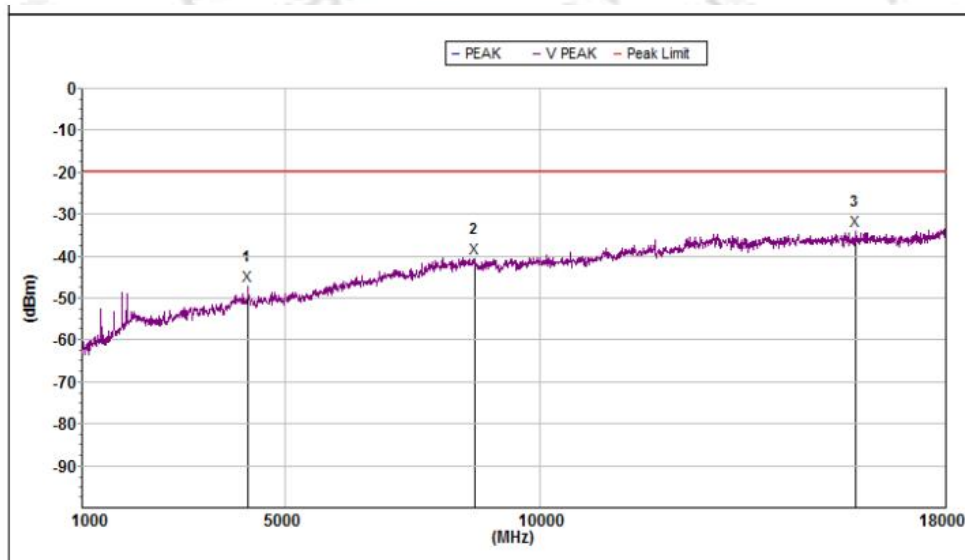


Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	43.812	-6.9	-37.4	-44.3	-20.0	24.3	V
2	73.103	-16.1	-34.6	-50.7	-20.0	30.7	V
3	125.007	-29.6	-24.4	-54.0	-20.0	34.0	V
4	167.237	-23.9	-27.9	-51.8	-20.0	31.8	V
5	625.078	-34.7	-21.0	-55.7	-20.0	35.7	V
6	821.710	-9.6	-19.0	-28.6	-20.0	8.6	V

1GHz Above:



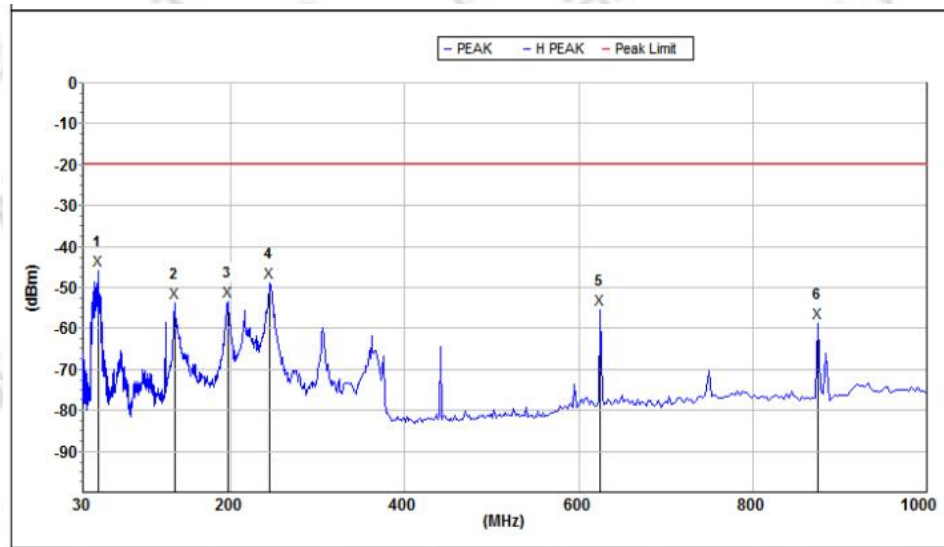
Mk	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	4782.500	-47.3	-3.2	-50.5	-20.0	30.5	H
2	11727.000	-47.2	7.9	-39.3	-20.0	19.3	H
3	16691.000	-48.2	14.7	-33.5	-20.0	13.5	H



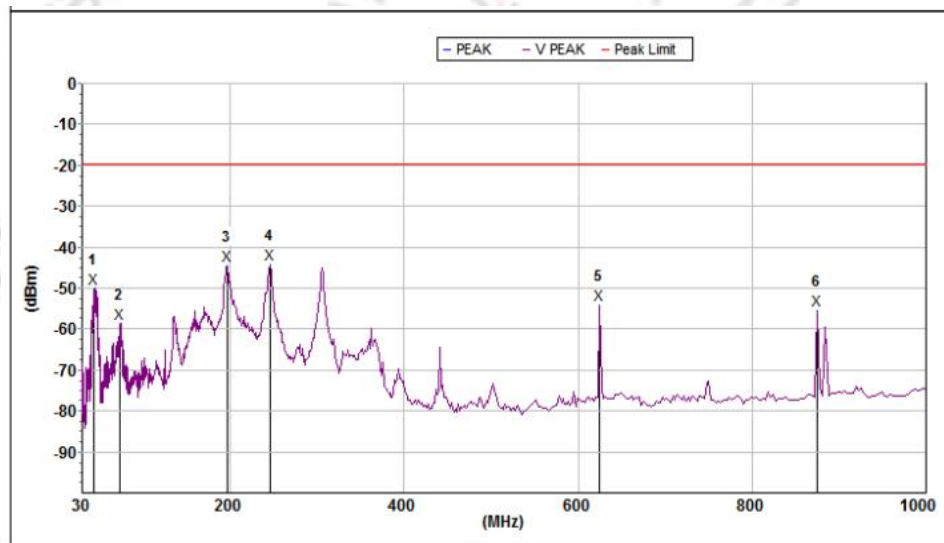
Mk	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	4264.000	-45.1	-2.1	-47.2	-20.0	27.2	V
2	8735.000	-47.1	6.7	-40.4	-20.0	20.4	V
3	16223.500	-48.5	14.7	-33.8	-20.0	13.8	V

Measurement Result for 12.5KHz Channel Separation @ 441.125MHz-1W

1GHz Below:

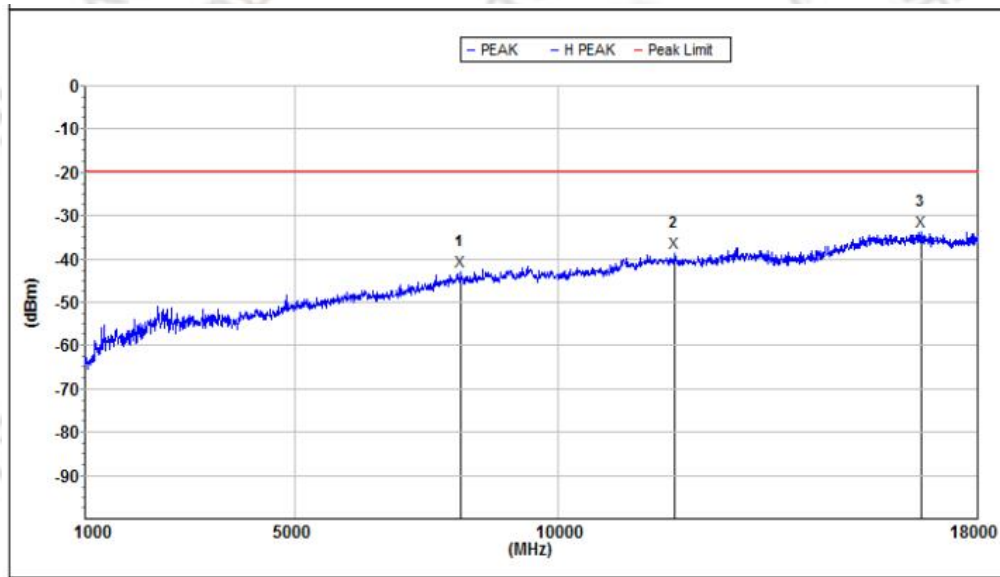


Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	47.826	-3.4	-42.3	-45.7	-20.0	25.7	H
2	135.982	-21.0	-32.6	-53.6	-20.0	33.6	H
3	196.510	-18.5	-34.9	-53.4	-20.0	33.4	H
4	245.090	-21.9	-26.8	-48.7	-20.0	28.7	H
5	625.078	-34.2	-21.0	-55.2	-20.0	35.2	H
6	875.247	-39.5	-19.1	-58.6	-20.0	38.6	H

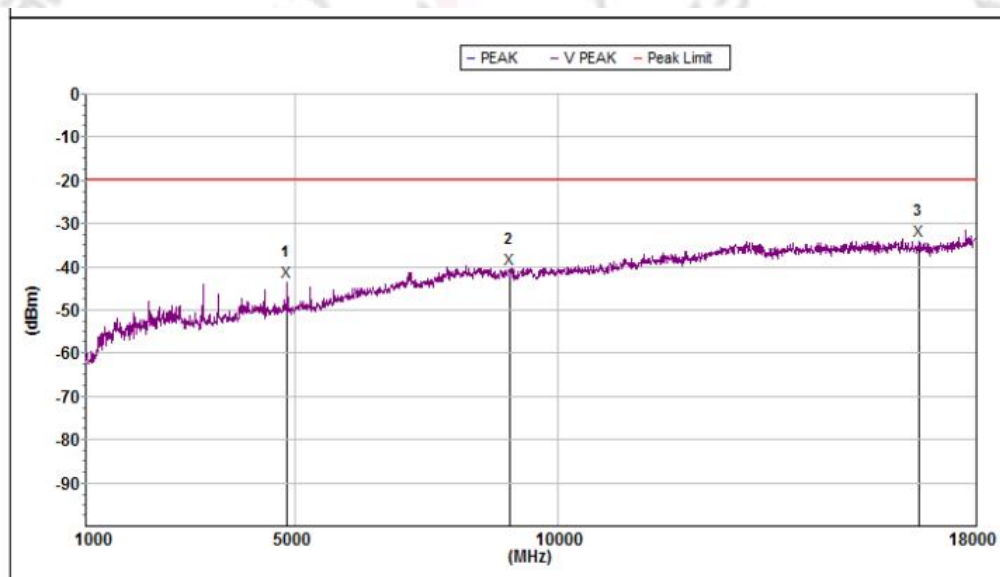


Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	43.812	-5.2	-44.8	-50.0	-20.0	30.0	V
2	73.876	-14.1	-44.3	-58.4	-20.0	38.4	V
3	196.510	-10.6	-33.7	-44.3	-20.0	24.3	V
4	245.951	-17.8	-26.4	-44.2	-20.0	24.2	V
5	625.078	-32.8	-21.0	-53.8	-20.0	33.8	V
6	875.247	-36.8	-18.4	-55.2	-20.0	35.2	V

1GHz Above:



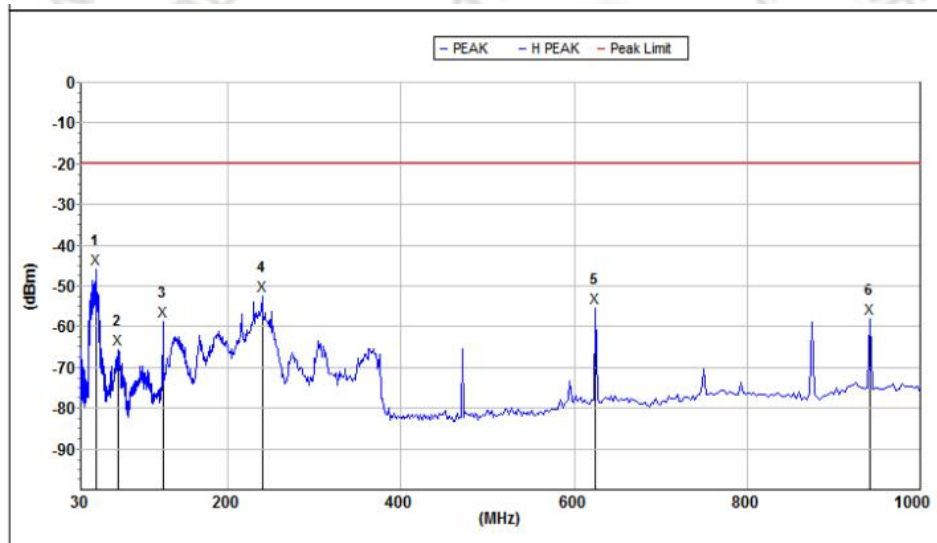
Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	8165.500	-47.0	4.1	-42.9	-20.0	22.9	H
2	12237.000	-46.8	8.4	-38.4	-20.0	18.4	H
3	16920.500	-48.3	14.7	-33.6	-20.0	13.6	H



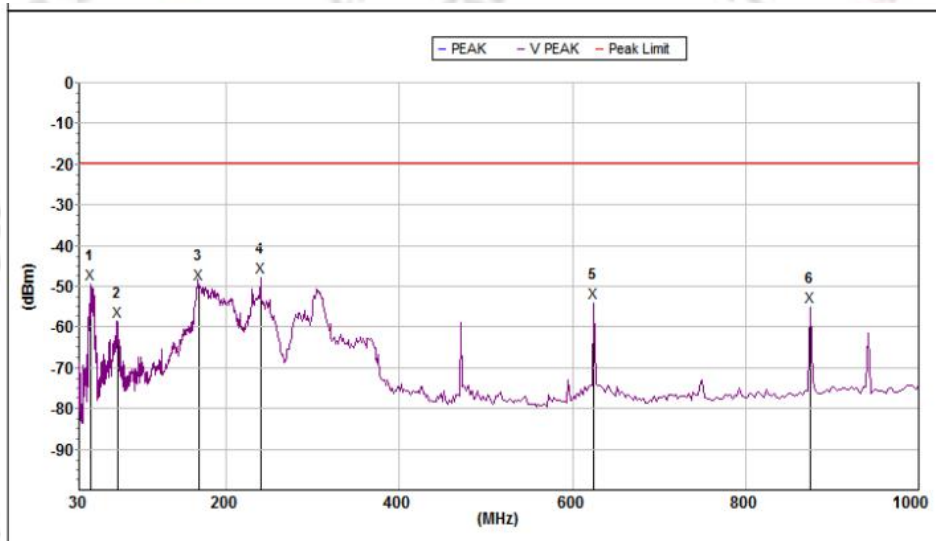
Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	4850.500	-42.1	-1.3	-43.4	-20.0	23.4	V
2	9092.000	-46.9	6.6	-40.3	-20.0	20.3	V
3	16912.000	-48.2	14.4	-33.8	-20.0	13.8	V

Measurement Result for 12.5KHz Channel Separation @ 469.95MHz-1W

1GHz Below:

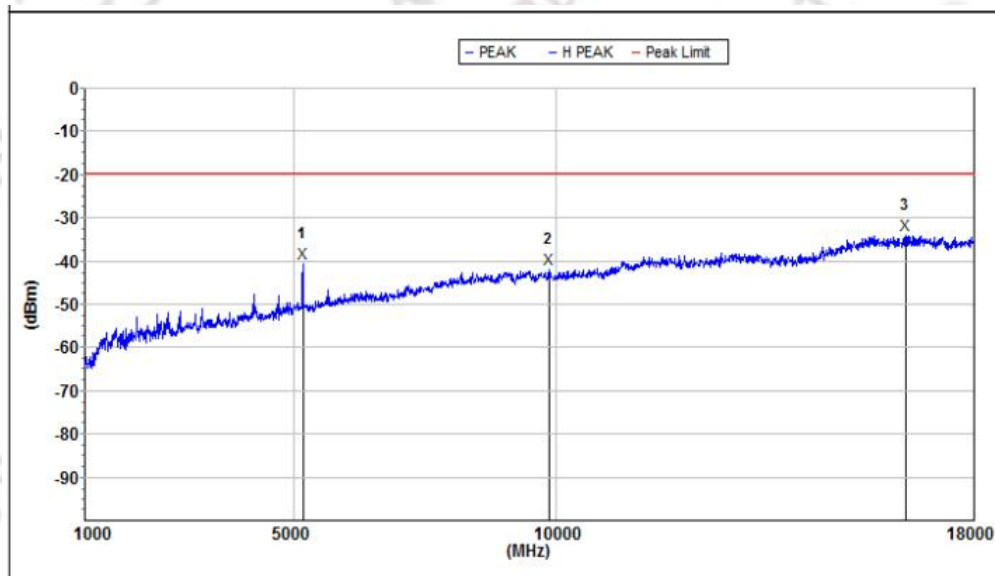


Mk.	Freq (MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	47.826	-3.4	-42.3	-45.7	-20.0	25.7	H
2	73.103	-21.0	-44.6	-65.6	-20.0	45.6	H
3	125.007	-24.3	-34.4	-58.7	-20.0	38.7	H
4	239.987	-25.1	-27.1	-52.2	-20.0	32.2	H
5	625.078	-34.3	-21.0	-55.3	-20.0	35.3	H
6	942.130	-40.5	-17.3	-57.8	-20.0	37.8	H

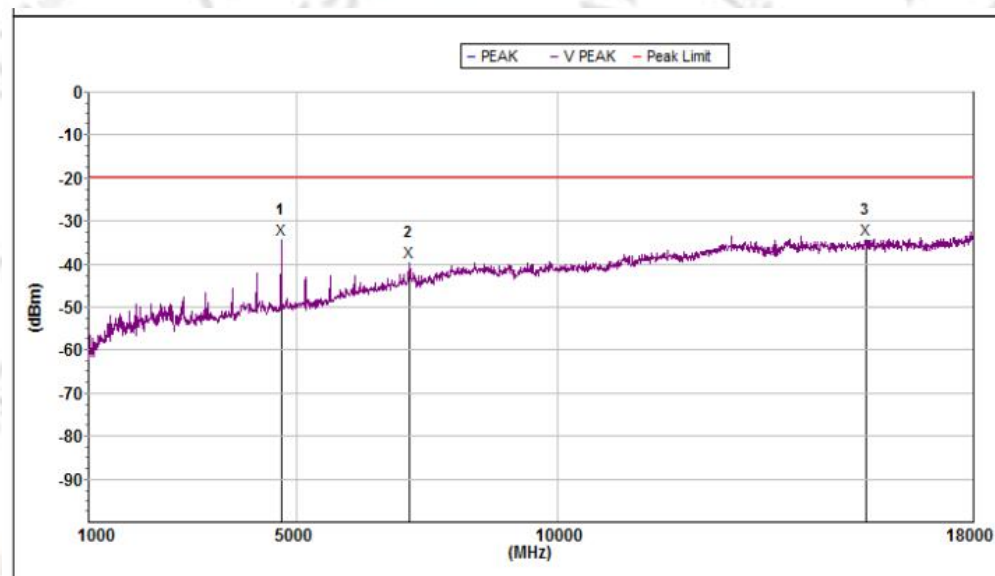


Mk.	Freq (MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	43.812	-4.4	-44.8	-49.2	-20.0	29.2	V
2	74.396	-14.2	-44.2	-58.4	-20.0	38.4	V
3	168.414	-11.8	-37.6	-49.4	-20.0	29.4	V
4	239.987	-21.6	-26.1	-47.7	-20.0	27.7	V
5	625.078	-32.9	-21.0	-53.9	-20.0	33.9	V
6	875.247	-36.6	-18.4	-55.0	-20.0	35.0	V

1GHz Above:



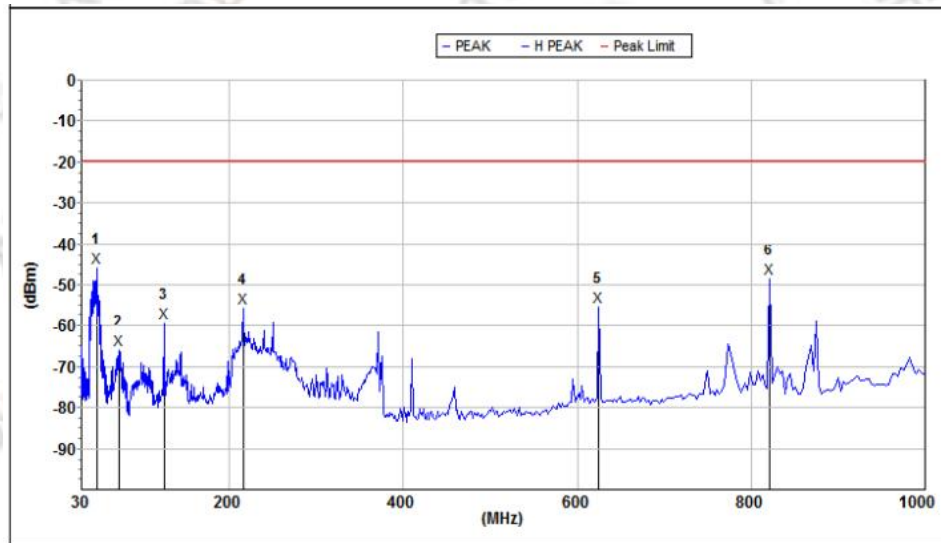
Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	5173.500	-38.4	-2.2	-40.6	-20.0	20.6	H
2	9891.000	-46.7	4.9	-41.8	-20.0	21.8	H
3	16682.500	-48.5	14.6	-33.9	-20.0	13.9	H



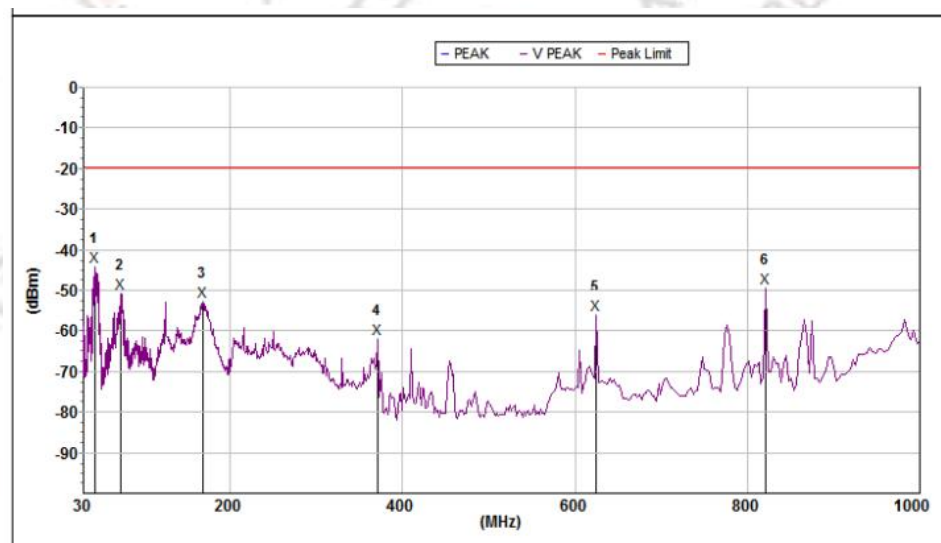
Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	4697.500	-32.7	-1.5	-34.2	-20.0	14.2	V
2	7171.000	-44.0	4.6	-39.4	-20.0	19.4	V
3	15934.500	-48.5	14.4	-34.1	-20.0	14.1	V

Measurement Result for 12.5KHz Channel Separation @ 410.05MHz-0.5W

1GHz Below:

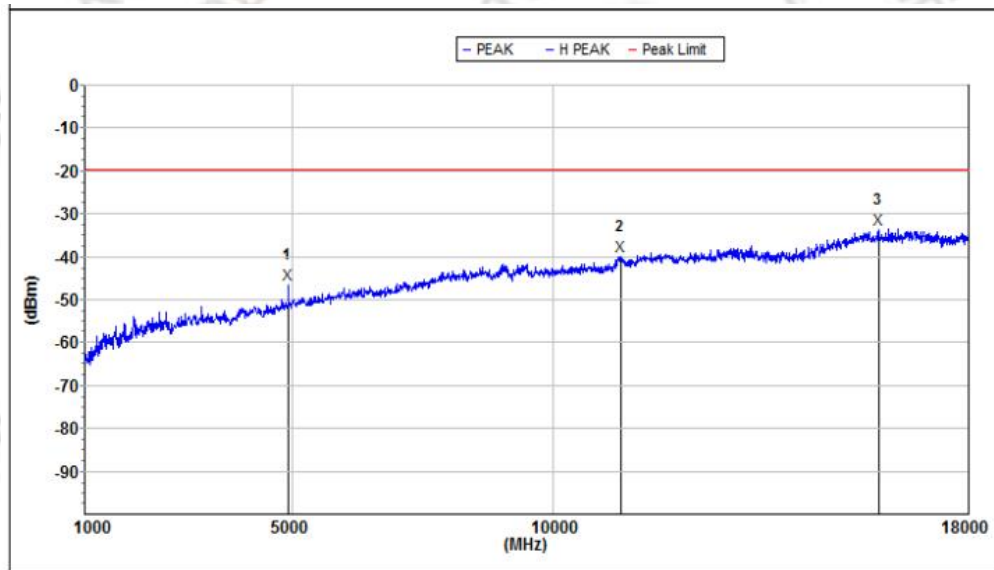


Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	47.826	-3.5	-42.3	-45.8	-20.0	25.8	H
2	73.103	-21.3	-44.6	-65.9	-20.0	45.9	H
3	125.007	-24.7	-34.4	-59.1	-20.0	39.1	H
4	216.024	-25.9	-29.8	-55.7	-20.0	35.7	H
5	625.078	-34.1	-21.0	-55.1	-20.0	35.1	H
6	821.710	-29.4	-19.0	-48.4	-20.0	28.4	H

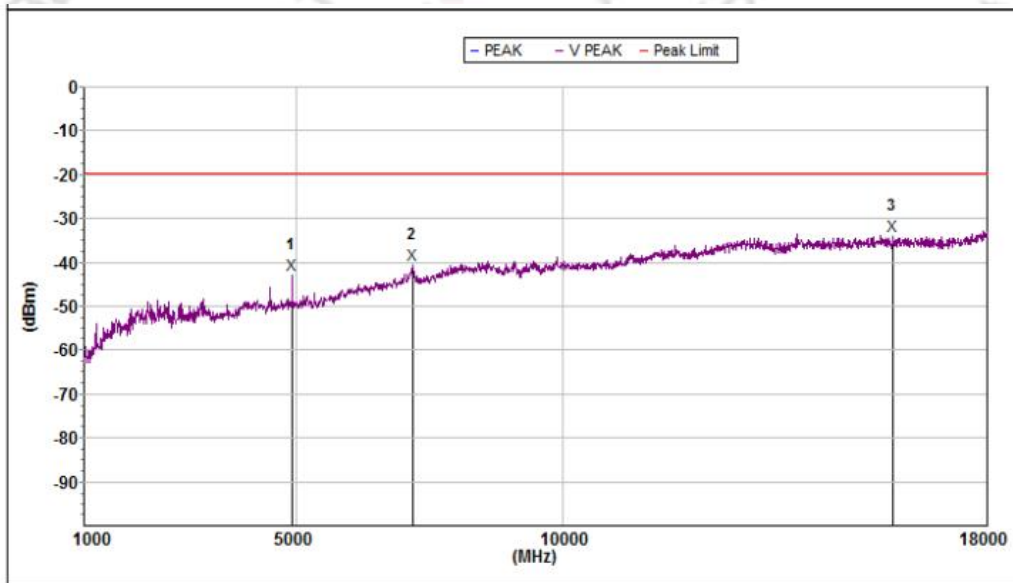


Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	43.659	-6.9	-37.3	-44.2	-20.0	24.2	V
2	73.876	-16.2	-34.5	-50.7	-20.0	30.7	V
3	168.414	-24.5	-28.1	-52.6	-20.0	32.6	V
4	370.702	-36.8	-24.9	-61.7	-20.0	41.7	V
5	625.078	-34.9	-21.0	-55.9	-20.0	35.9	V
6	821.710	-30.2	-19.0	-49.2	-20.0	29.2	V

1GHz Above:



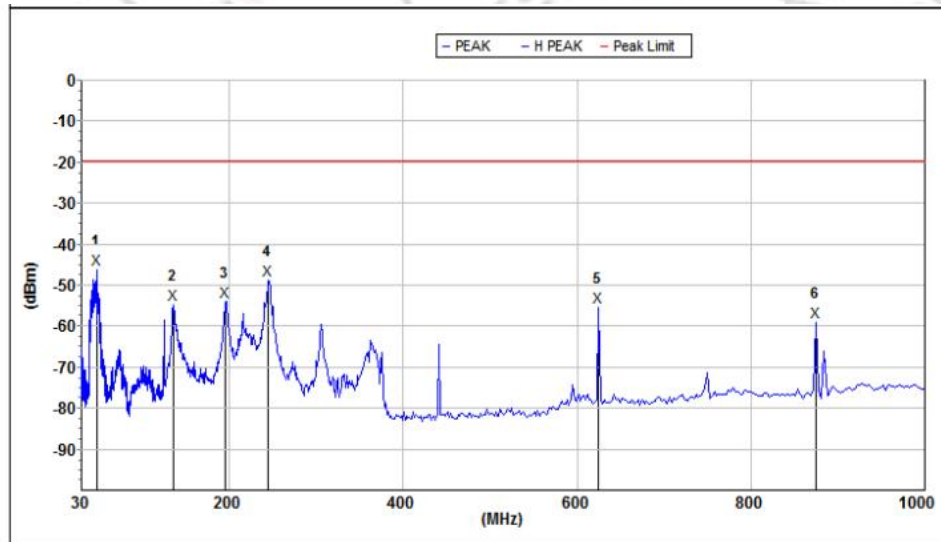
Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	4918.500	-43.7	-2.7	-46.4	-20.0	26.4	H
2	11319.000	-46.8	7.1	-39.7	-20.0	19.7	H
3	16266.000	-48.1	14.5	-33.6	-20.0	13.6	H



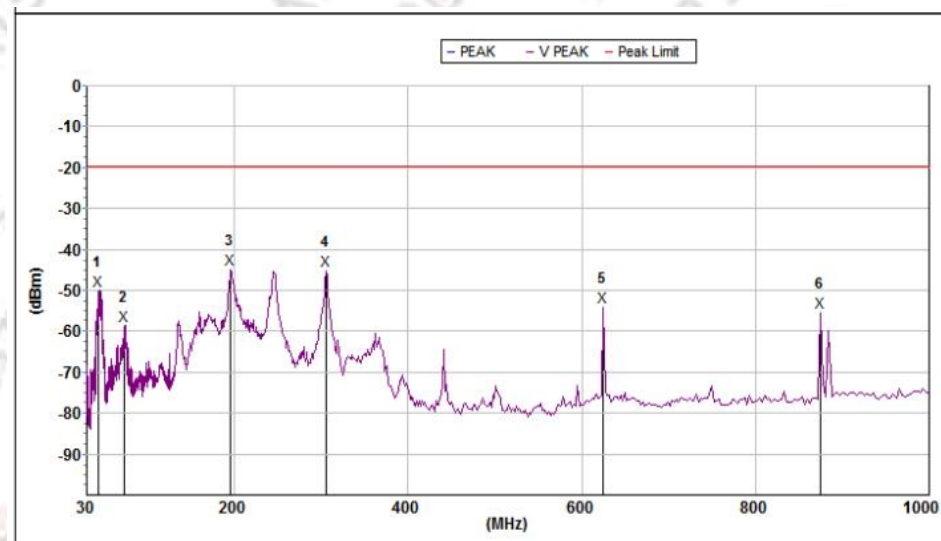
Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	4918.500	-41.6	-1.2	-42.8	-20.0	22.8	V
2	7196.500	-45.3	4.7	-40.6	-20.0	20.6	V
3	16223.500	-48.6	14.7	-33.9	-20.0	13.9	V

Measurement Result for 12.5KHz Channel Separation @ 441.125MHz-0.5W

1GHz Below:

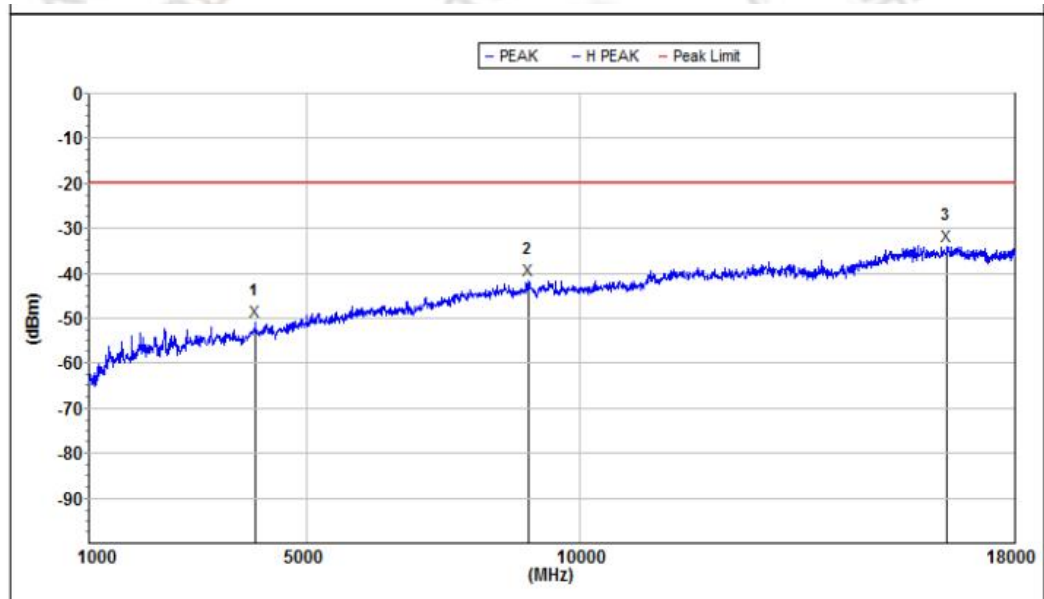


Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	Pol.
Peak:							
1	47.659	-3.6	-42.3	-45.9	-20.0	25.9	H
2	135.506	-21.9	-32.6	-54.5	-20.0	34.5	H
3	195.822	-19.3	-34.8	-54.1	-20.0	34.1	H
4	245.090	-21.9	-26.8	-48.7	-20.0	28.7	H
5	625.078	-34.2	-21.0	-55.2	-20.0	35.2	H
6	875.247	-39.7	-19.1	-58.8	-20.0	38.8	H

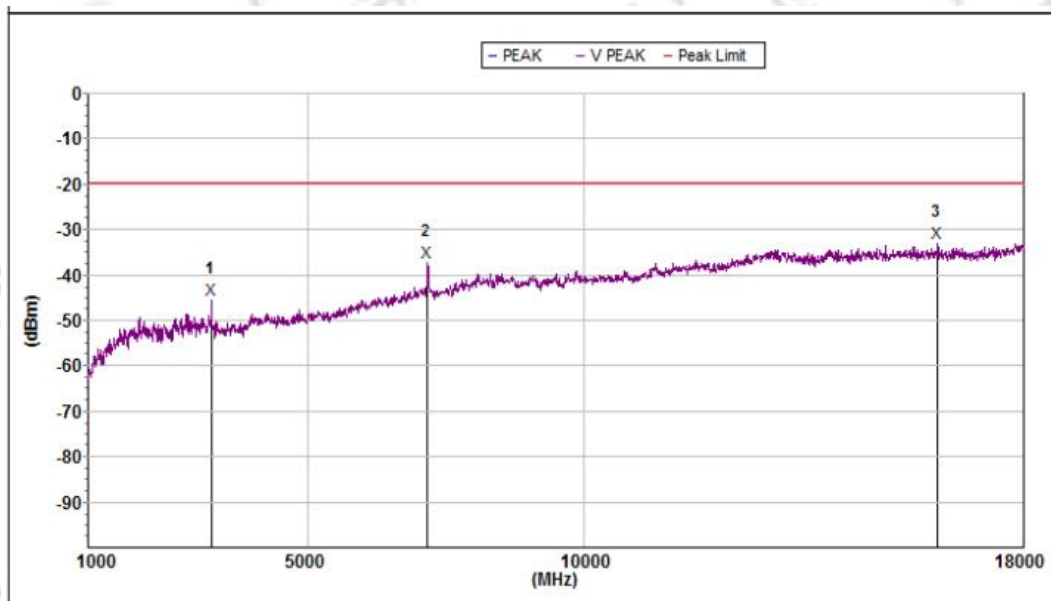


Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	43.812	-5.1	-44.8	-49.9	-20.0	29.9	V
2	73.876	-14.1	-44.3	-58.4	-20.0	38.4	V
3	195.822	-10.8	-34.0	-44.8	-20.0	24.8	V
4	305.680	-17.6	-27.4	-45.0	-20.0	25.0	V
5	625.078	-32.9	-21.0	-53.9	-20.0	33.9	V
6	875.247	-36.7	-18.4	-55.1	-20.0	35.1	V

1GHz Above:



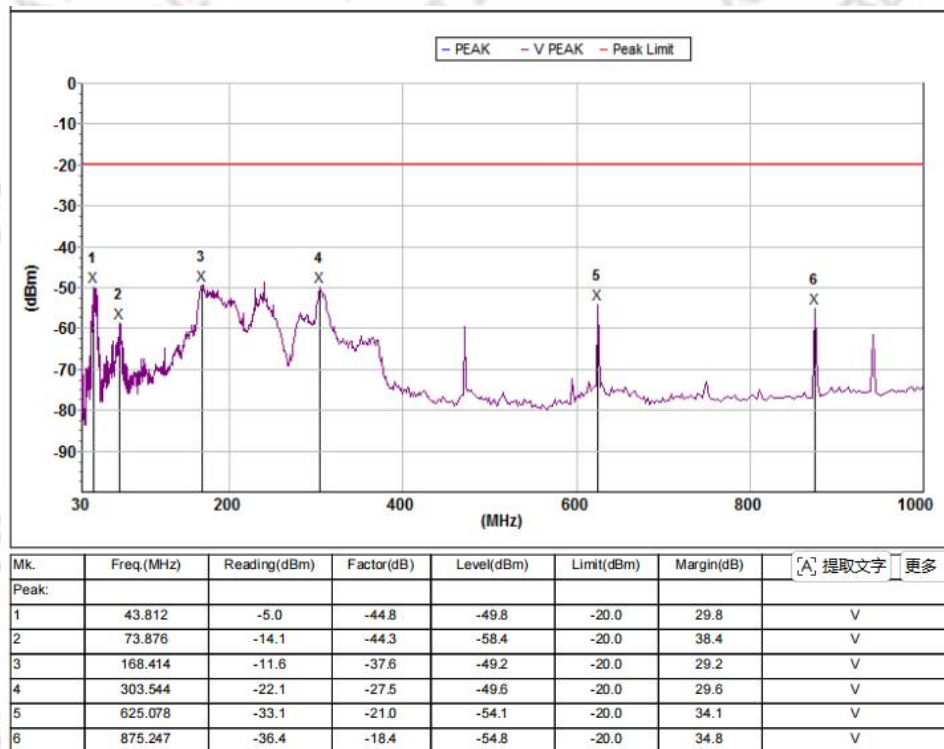
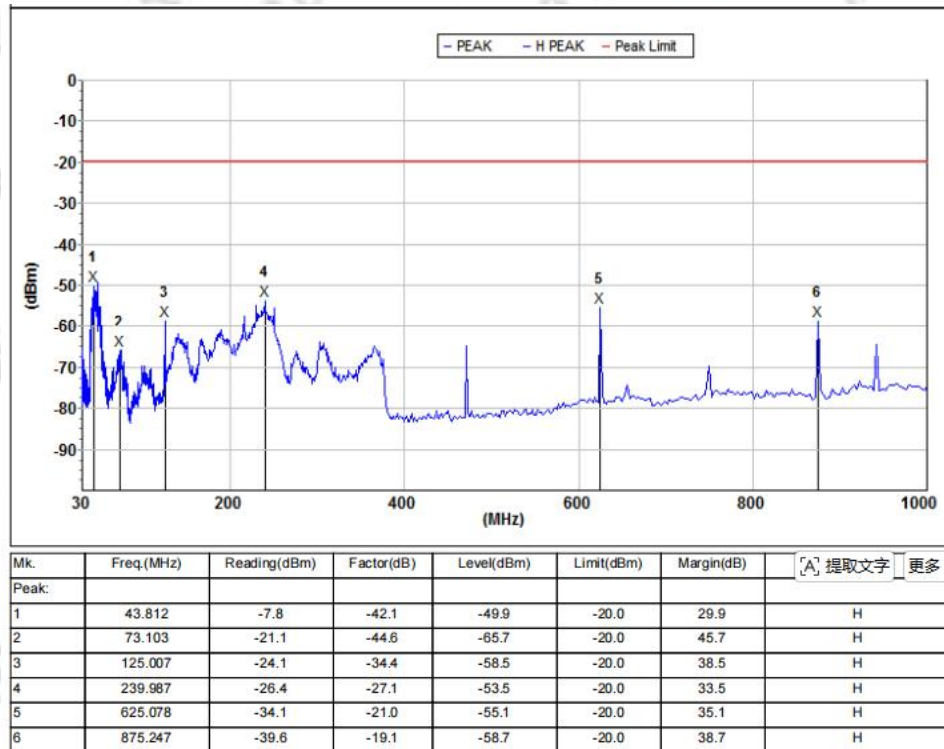
Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	4051.500	-45.7	-5.1	-50.8	-20.0	30.8	H
2	9058.000	-45.7	4.4	-41.3	-20.0	21.3	H
3	16742.000	-48.4	14.6	-33.8	-20.0	13.8	H



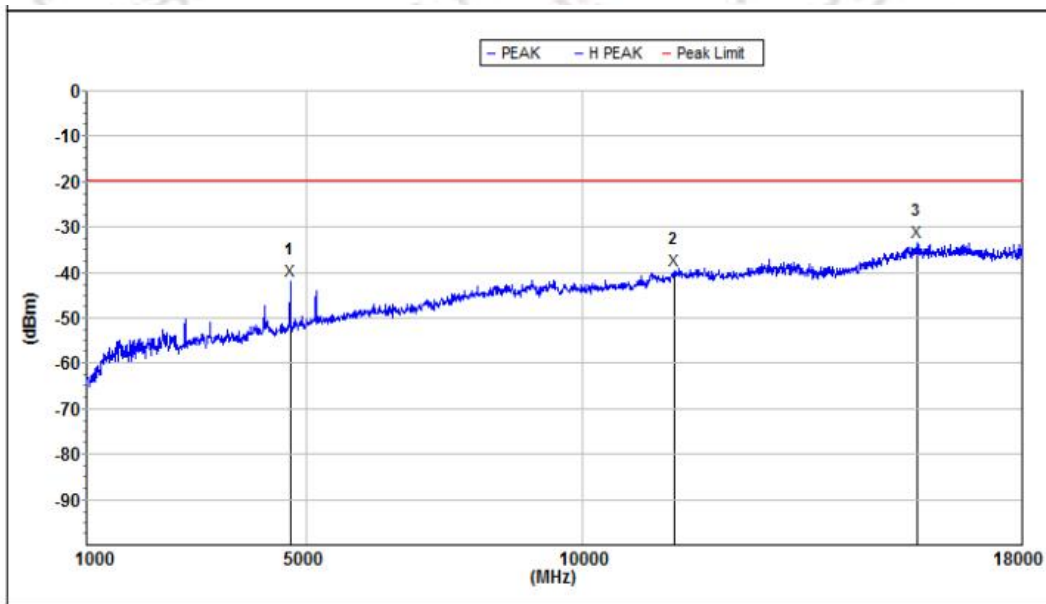
Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	3244.000	-39.1	-6.2	-45.3	-20.0	25.3	V
2	7171.000	-41.8	4.6	-37.2	-20.0	17.2	V
3	16444.500	-47.8	14.8	-33.0	-20.0	13.0	V

Measurement Result for 12.5KHz Channel Separation @ 469.95MHz-0.5W

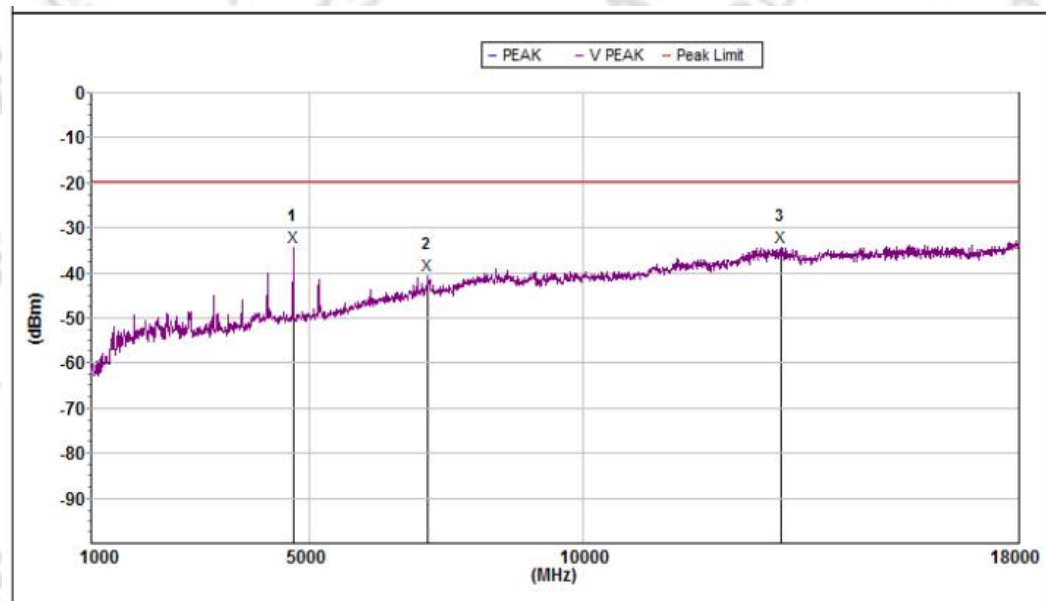
1GHz Below:



1GHz Above:



Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	4697.500	-38.4	-3.5	-41.9	-20.0	21.9	H
2	11667.500	-47.4	7.8	-39.6	-20.0	19.6	H
3	16096.000	-47.6	14.5	-33.1	-20.0	13.1	H



Mk.	Freq.(MHz)	Reading(dBm)	Factor(dB)	Level(dBm)	Limit(dBm)	Margin(dB)	[A] 提取文字 更多
Peak:							
1	4697.500	-32.6	-1.5	-34.1	-20.0	14.1	V
2	7171.000	-44.9	4.6	-40.3	-20.0	20.3	V
3	13631.000	-47.4	13.1	-34.3	-20.0	14.3	V

4. TEST SETUP PHOTOGRAPHS

Please refer to the Appendix B.

5. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

External Photos Please refer to the Appendix C1.

Internal Photos Please refer to the Appendix C2.

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