

# FCC AND ISED CERTIFICATION TEST REPORT

Report No.: DDT-B23091115-2E01

Applicant	:	Ruijie Networks Co., Ltd.
Address	:	Building 19, Juyuanzhou Industrial Park, No. 618 Jinshan Road, Cangshan District, Fuzhou, Fujian, China
Equipment under Test	:	Wireless Bridge
Model No.	:	RG-EST100-E
Trade Mark	:	Reyee
FCC ID	:	2AX5J-EST100E
IC	:	27676-EST100E
Manufacturer	:	Ruijie Networks Co., Ltd.
Address	:	Building 19, Juyuanzhou Industrial Park, No. 618 Jinshan Road, Cangshan District, Fuzhou, Fujian, China

**Issued By:** Tianjin Dongdian Testing Service Co., Ltd.

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Development Area, Tianjin, China

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# REPORT

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## Test Report Declare

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**Test Standard Used:** FCC Rules and Regulations Part 15 Subpart C, RSS-247 Issue 3 August 2023.

**Test procedure used:** ANSI C63.10:2020, RSS-Gen Issue 5, Apr. 2018, KDB 558074 D01 15.247 Meas Guidance v05r02

**We Declare:**

The equipment described above is tested by Tianjin Dongdian Testing Service Co., Ltd and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Tianjin Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these tests.

**After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC&ISED standards.**



<b>Report No:</b>	DDT-B23091115-2E01		
<b>Date of Receipt:</b>	Oct. 18, 2023	<b>Date of Test:</b>	Oct. 18, 2023 ~ Oct. 27, 2023

**Prepared By:**

*Sunny Zhang*

**Sunny Zhang/Engineer**

**Approved By:**

*Aaron Zhang*

**Aaron Zhang/Manager**

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Tianjin Dongdian Testing Service Co., Ltd.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

### Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Oct. 27, 2023	

## 1. Summary of Test Results

The EUT have been tested according to the applicable standards as referenced below.		
Description of Test Item	Standard	Verdict
6dB Bandwidth and 99% Bandwidth	FCC 15.247 (a) (2) RSS-247 Clause 5.2 (a)	Pass
Maximum Conducted Output Power	FCC 15.247 (b) (3) RSS-247 Clause 5.4 (e)	Pass
Power Spectral Density	FCC 15.247 (e) RSS-247 Clause 5.2 (b)	Pass
Band-edge and Spurious Emissions (Conducted)	FCC 15.247 (d) RSS-247 Clause 5.5	Pass
Radiated Spurious Emissions	FCC 15.247 (d) FCC 15.209 FCC 15.205 RSS-247 Clause 5.5 RSS-GEN Clause 8.9	Pass
Radiated Band Edge Compliance	FCC 15.247 (d) FCC 15.209 FCC 15.205 RSS-247 Clause 5.5 RSS-GEN Clause 8.9	Pass
Power Line Conducted Emission	FCC 15.207 RSS-GEN Clause 8.8	Pass
Antenna Requirement	FCC 15.203 RSS-GEN Clause 6.8	Pass

## 2. General Test Information

### 2.1. Description of EUT

EUT* Name	: Wireless Bridge
Test Model Number	: RG-EST100-E
EUT Function Description	: Please reference user manual of this device
Power supply	: 12V DC power supply or 12V DC Passive PoE
Radio Technology	: IEEE 802.11b/g/n
Operation Frequency	: IEEE 802.11b: 2412MHz-2462MHz IEEE 802.11g: 2412MHz-2462MHz IEEE 802.11n HT20: 2412MHz-2462MHz IEEE 802.11n HT40: 2422MHz-2452MHz
Modulation	: IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Transmitter Rate	: IEEE 802.11b: 1, 2, 5.5, 11 Mbps IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps IEEE 802.11n: MCS0~MCS15
Antenna Type	: Directional antenna, maximum PK gain: Ant1 6.90dBi, Ant2 6.24dBi
SISO Mode	: <input checked="" type="checkbox"/> 11b <input checked="" type="checkbox"/> 11g <input checked="" type="checkbox"/> 11n <input type="checkbox"/> 11ax
MIMO Mode	: <input checked="" type="checkbox"/> 11b <input checked="" type="checkbox"/> 11g <input checked="" type="checkbox"/> 11n <input type="checkbox"/> 11ax

Note1: EUT is the ab. of equipment under test.

Note2: The 802.11b and 802.11g support CDD.

Note3: The EUT supports CDD and MIMO, antenna gains are not equal, Directional gain was calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain.

So Directional gain = GANT+ Array Gain, where Array Gain is as follows:

For power measurements, Array Gain = 0 dB (NANT ≤ 4), so the Directional gain=6.90.

Channel information					
CH	Frequency (MHz)	CH	Frequency (MHz)	CH	Frequency (MHz)
1	2412	5	2432	9	2452
2	2417	6	2437	10	2457
3	2422	7	2442	11	2462
4	2427	8	2447	/	/

### 2.2. Accessories of EUT

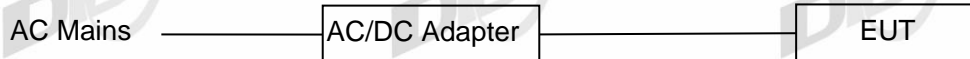
Description of Accessories	Manufacturer	Model number	Description
Switching Mode Power Adapter	CHENZHOU FRECOM ELECTRONICS CO., LTD.	F12L33-120100S PAU	INPUT:100-240V~50/60Hz 0.3A, OUTPUT:12V 1A 12W

### 2.3. Assistant equipment used for test

Assistant	Manufacturer	Model number	EMC Compliance	SN
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equipment				
Notebook	Lenovo Beijing Co. Ltd.	ThinkPad	FCC/CE	TP00067A

#### 2.4. Block diagram of EUT configuration for test



Run the special test software "PUTTY.exe" provided by manufacturer to control EUT work in Continuous Tx mode, and select test channel, wireless mode and data rate.

Tested mode, channel, setting Tx power and rand data rate information				
Mode	Setting Tx Power	Data rate (Mbps) (See Note)	Channel	Frequency (MHz)
IEEE 802.11b	0E	1	LCH: CH1	2412
	0E	1	MCH: CH6	2437
	0E	1	HCH: CH11	2462
IEEE 802.11g	10	6	LCH: CH1	2412
	10	6	MCH: CH6	2437
	10	6	HCH: CH11	2462
IEEE 802.11n HT20	10	MCS 0	LCH: CH1	2412
	10	MCS 0	MCH: CH6	2437
	10	MCS 0	HCH: CH11	2462
IEEE 802.11n HT40	0C	MCS 0	LCH: CH3	2422
	0C	MCS 0	MCH: CH6	2437
	0C	MCS 0	HCH: CH9	2452

Note1: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

#### 2.5. Deviations of test standard

No Deviation

#### 2.6. Test environment conditions

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

Temperature range:	21-28°C
Humidity range:	20-75%
Pressure range:	86-106kPa



## 2.7. Test laboratory

Tianjin Dongdian Testing Service Co., Ltd.

Address: Building D-1, No. 19, Weisi Road, Microelectronics Industrial Park Development Area, Tianjin, China.

Tel: +86-22-58038033, <http://www.ddttest.com>, Email: [ddt@dgddt.com](mailto:ddt@dgddt.com)

**NVLAP** (National Voluntary Laboratory Accreditation Program) CODE: 500036-0

**CNAS** (China National Accreditation Service for Conformity Assessment) CODE: L13402

**FCC** Designation Number: CN5004; FCC Test Firm Registration Number: 368676

**ISED** (Innovation, Science and Economic Development Canada) Company Number: 27768

Conformity Assessment Body Identifier: CN0125

**VCCI** Facility Registration Number: C-20089, T-20093, R-20125, G-20122

## 2.8. Measurement uncertainty

Test Item	Uncertainty
Bandwidth	0.14%
Peak Output Power (Conducted) (Spectrum Analyzer)	0.12 dB (10 MHz ≤ f < 3.6 GHz);
	0.32 dB (3.6 GHz ≤ f < 8 GHz)
Peak Output Power (Conducted) (Power Sensor)	0.51 dB
Power Spectral Density	0.12 dB (10 MHz ≤ f < 3.6 GHz);
	0.32 dB (3.6 GHz ≤ f < 8 GHz)
Frequencies Stability	6.7 x 10 <sup>-8</sup> (Antenna couple method)
	3.4 x 10 <sup>-8</sup> (Conducted method)
Conducted Spurious Emissions	0.12 dB (10 MHz ≤ f < 3.6 GHz);
	0.32 dB (3.6 GHz ≤ f < 8 GHz)
	0.52 dB (8 GHz ≤ f < 22 GHz)
Uncertainty for Radio Frequency (RBW < 20 kHz)	3x10 <sup>-7</sup>
Temperature	±2°C
Humidity	±1%
Uncertainty for Radiation Emission Test (30 MHz - 1 GHz)	2.72 dB (Antenna Polarize: V)
	2.72 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission Test (1 GHz - 40 GHz)	2.74 dB (1 - 6 GHz)
	2.72 dB (6 GHz - 18 GHz)
	3.54 dB (18 GHz - 26 GHz)
	4.30 dB (26 GHz - 40 GHz)
Uncertainty for Power Line Conduction Emission Test	3.40 dB (150 kHz - 30 MHz)

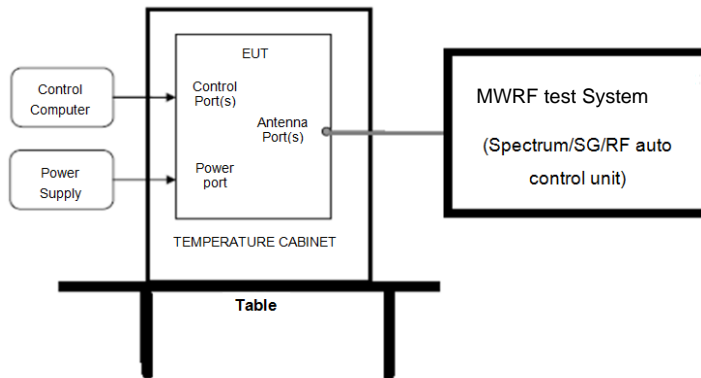
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

### 3. Equipment Used During Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
<b>RF Connected Test (MWRFtest system)</b>					
Microwave Signal Generator	R&S	SMF100A	101396	2023/05/29	1 Year
MXG Vector Signal Generator	Keysight	N5182A	MY50143288	2023/03/07	1 Year
EMI Test Receiver	R&S	ESU26	100243	2023/03/03	1 Year
Signal Analyzer	R&S	FSV	101730	2023/04/04	1 Year
Wideband Radio Communication Tester	R&S	CMW500	158800	2023/06/10	1 Year
Power Sensor	KEYSIGHT	U2021XA	MY59150007	2023/03/22	1 Year
DC Power Supply	inSTEK	PSP-2010	EN122317	2023/02/12	1 Year
Test Software	MWRFtest	MTS8310	V03	N/A	N/A
<b>Radiated Emission -10m EMI Chamber</b>					
Broadband Horn Antenna	TESEQ	BHA 9118	31754	2023/10/11	1 Year
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	790	2023/05/06	1 Year
Active Loop Antenna	R&S	HFH2-Z2	100269	2022/07/11	2 Year
Low noise amplifier	MITEQ	TPA0118-36	0914	2023/02/16	1 Year
EMI Test Receiver	R&S	ESCI	101024	2023/02/15	1 Year
EMI Test Receiver	R&S	ESCI	101030	2023/02/15	1 Year
EMI Test Receiver	R&S	ESU26	100244	2023/03/03	1 Year
Bilog Antenna	TESEQ	CBL6112D	29068	2022/10/10	2 Year
Bilog Antenna	TESEQ	CBL6112D	29069	2022/10/10	2 Year
Amplifier	Sonoma	310N	300913	2023/02/15	1 Year
Amplifier	Sonoma	310N	300914	2023/02/15	1 Year
Ant Mast	Innco	MA4000	N/A	N/A	N/A
Ant Mast	Innco	MA4000	N/A	N/A	N/A
Mast Controller	Innco	CO2000	N/A	N/A	N/A
Mast Controller	Innco	CO2000	N/A	N/A	N/A
RF Selector 4CH	TOYO	NS4904N	Selector1	N/A	N/A
RF Selector 4CH	TOYO	NS4904N	Selector2	N/A	N/A
Test software	TOYO	EP5/RSE	Ver 1.9.1	N/A	N/A
Test software	TOYO	EP5/RE	Ver 5.7.10	N/A	N/A
Test software	Audix	E3	V 6.11111b	N/A	N/A
<b>Power Line Conducted Emissions Test</b>					
Test Receiver	R&S	ESCI	101397	2023/02/15	1 Year
LISN	R&S	ENV216	101122	2023/02/15	1 Year
Test software	TOYO	EP5/CE	V 5.4.40	N/A	N/A

## 4. 6dB Bandwidth and 99% Bandwidth

### 4.1. Block diagram of test setup



### 4.2. Limits

For direct sequence systems, the minimum 6 dB bandwidth shall be at least 500 kHz

### 4.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

(2) 99% Bandwidth set the spectrum analyzer as follows:

RBW: 1% to 5% of the OBW

VBW: Three times the RBW

Detector Mode: Peak

Sweep time: auto

Trace mode Max hold

(3) 6dB Bandwidth set the spectrum analyzer as follows:

RBW: 100 kHz

VBW: 300 kHz

Detector Mode: Peak

Sweep time: auto

Trace mode Max hold

(4) Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

## 4.4. Test result

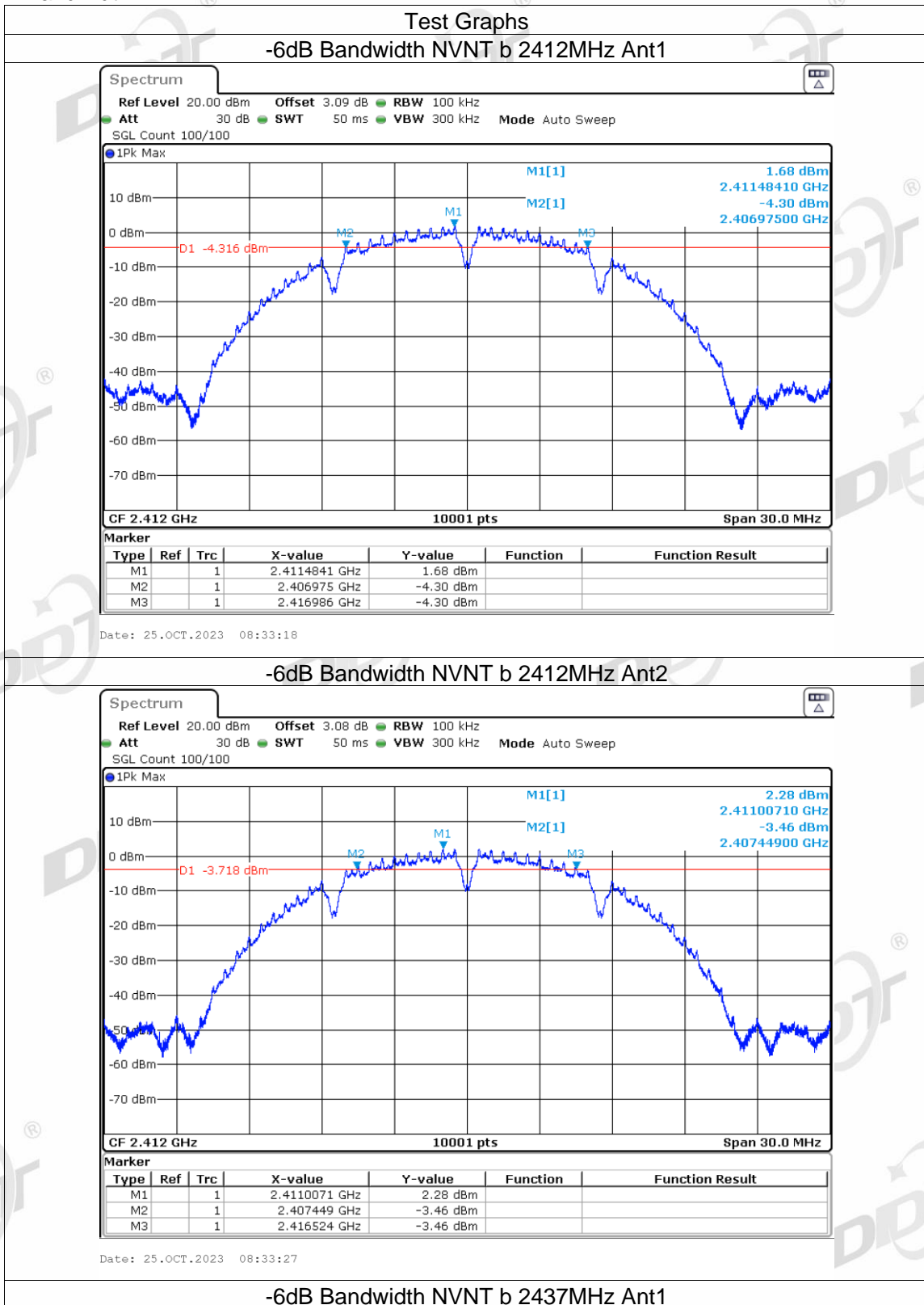
Test Mode	Test Channel	Antenna	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
b	2412	Ant1	10.011	$\cong 0.5$	Pass
b	2412	Ant2	9.075	$\cong 0.5$	Pass
b	2437	Ant1	9.552	$\cong 0.5$	Pass
b	2437	Ant2	9.090	$\cong 0.5$	Pass
b	2462	Ant1	10.014	$\cong 0.5$	Pass
b	2462	Ant2	9.555	$\cong 0.5$	Pass
g	2412	Ant1	15.087	$\cong 0.5$	Pass
g	2412	Ant2	15.099	$\cong 0.5$	Pass
g	2437	Ant1	15.105	$\cong 0.5$	Pass
g	2437	Ant2	15.108	$\cong 0.5$	Pass
g	2462	Ant1	15.087	$\cong 0.5$	Pass
g	2462	Ant2	15.108	$\cong 0.5$	Pass
n20	2412	Ant1	15.102	$\cong 0.5$	Pass
n20	2412	Ant2	15.096	$\cong 0.5$	Pass
n20	2437	Ant1	15.090	$\cong 0.5$	Pass
n20	2437	Ant2	15.114	$\cong 0.5$	Pass
n20	2462	Ant1	15.108	$\cong 0.5$	Pass
n20	2462	Ant2	15.114	$\cong 0.5$	Pass
n40	2422	Ant1	35.052	$\cong 0.5$	Pass
n40	2422	Ant2	35.058	$\cong 0.5$	Pass
n40	2437	Ant1	35.064	$\cong 0.5$	Pass
n40	2437	Ant2	35.052	$\cong 0.5$	Pass
n40	2452	Ant1	35.070	$\cong 0.5$	Pass
n40	2452	Ant2	35.346	$\cong 0.5$	Pass

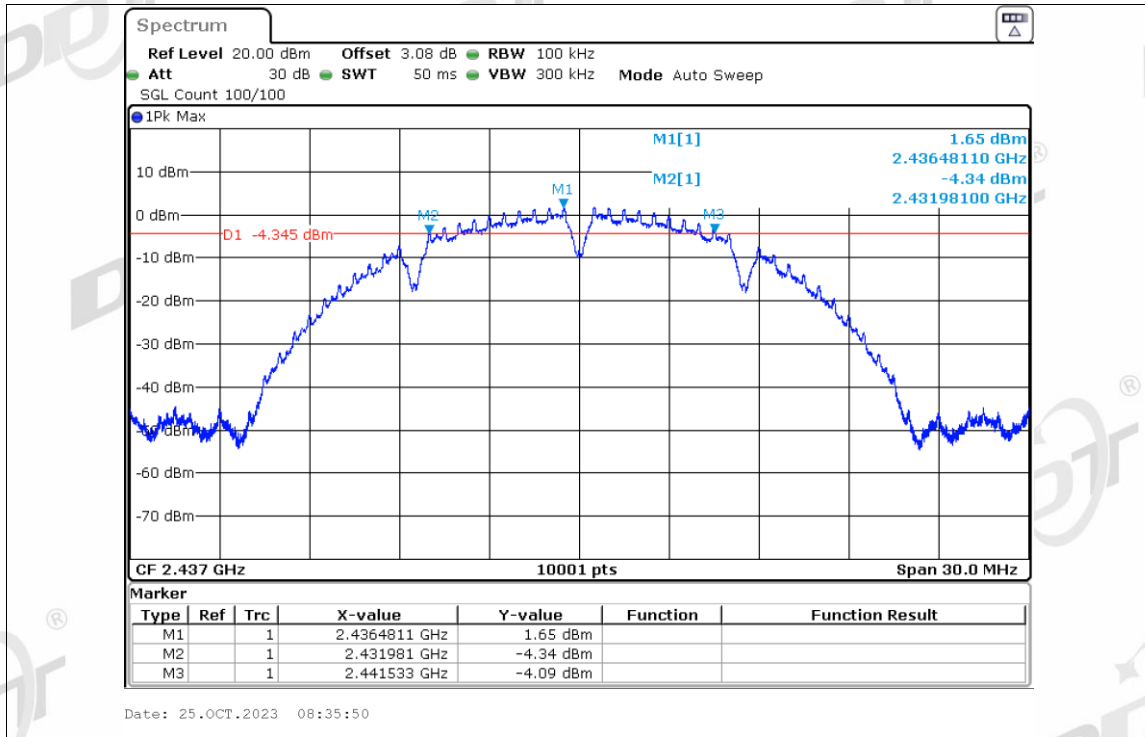
Test Mode	Test Channel	Antenna	99% OBW (MHz)	Limit (MHz)	Verdict
b	2412	Ant1	14.213	---	Pass
b	2412	Ant2	14.114	---	Pass
b	2437	Ant1	14.150	---	Pass
b	2437	Ant2	14.102	---	Pass
b	2462	Ant1	14.186	---	Pass
b	2462	Ant2	14.129	---	Pass
g	2412	Ant1	16.477	---	Pass
g	2412	Ant2	16.342	---	Pass
g	2437	Ant1	16.462	---	Pass

g	2437	Ant2	16.336	---	Pass
g	2462	Ant1	16.480	---	Pass
g	2462	Ant2	16.342	---	Pass
n20	2412	Ant1	17.482	---	Pass
n20	2412	Ant2	17.518	---	Pass
n20	2437	Ant1	17.485	---	Pass
n20	2437	Ant2	17.512	---	Pass
n20	2462	Ant1	17.491	---	Pass
n20	2462	Ant2	17.515	---	Pass
n40	2422	Ant1	35.954	---	Pass
n40	2422	Ant2	35.786	---	Pass
n40	2437	Ant1	35.936	---	Pass
n40	2437	Ant2	35.774	---	Pass
n40	2452	Ant1	35.960	---	Pass
n40	2452	Ant2	35.630	---	Pass

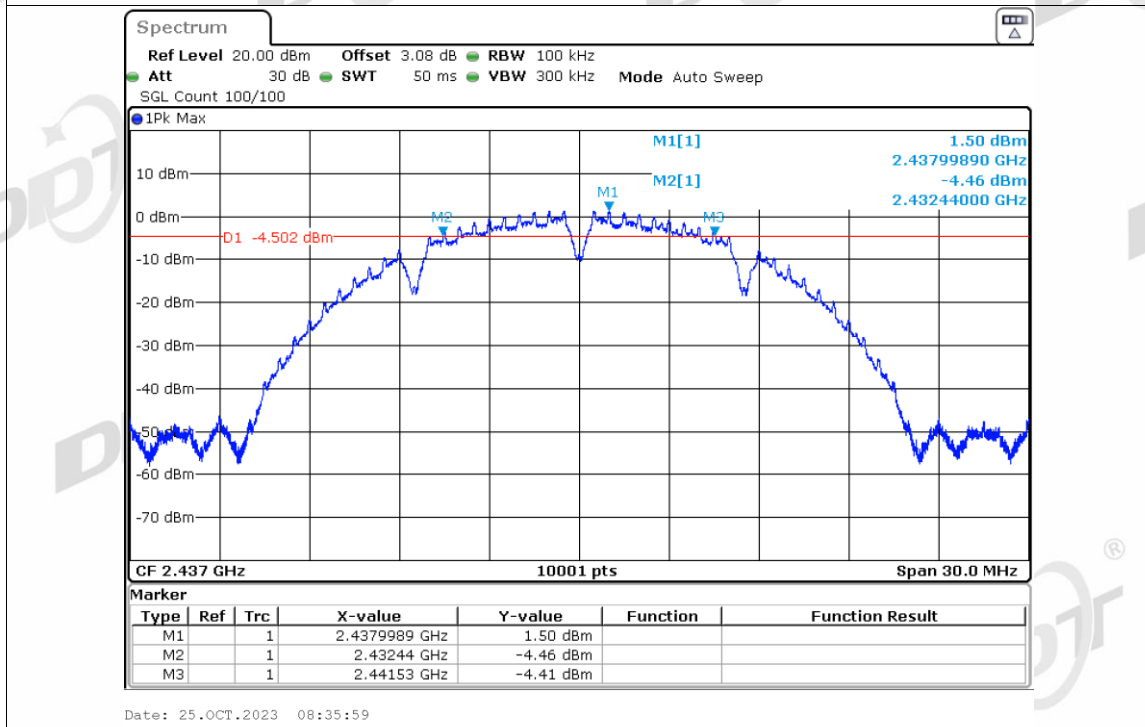
### 4.5. original test data

6dB Bandwidth:

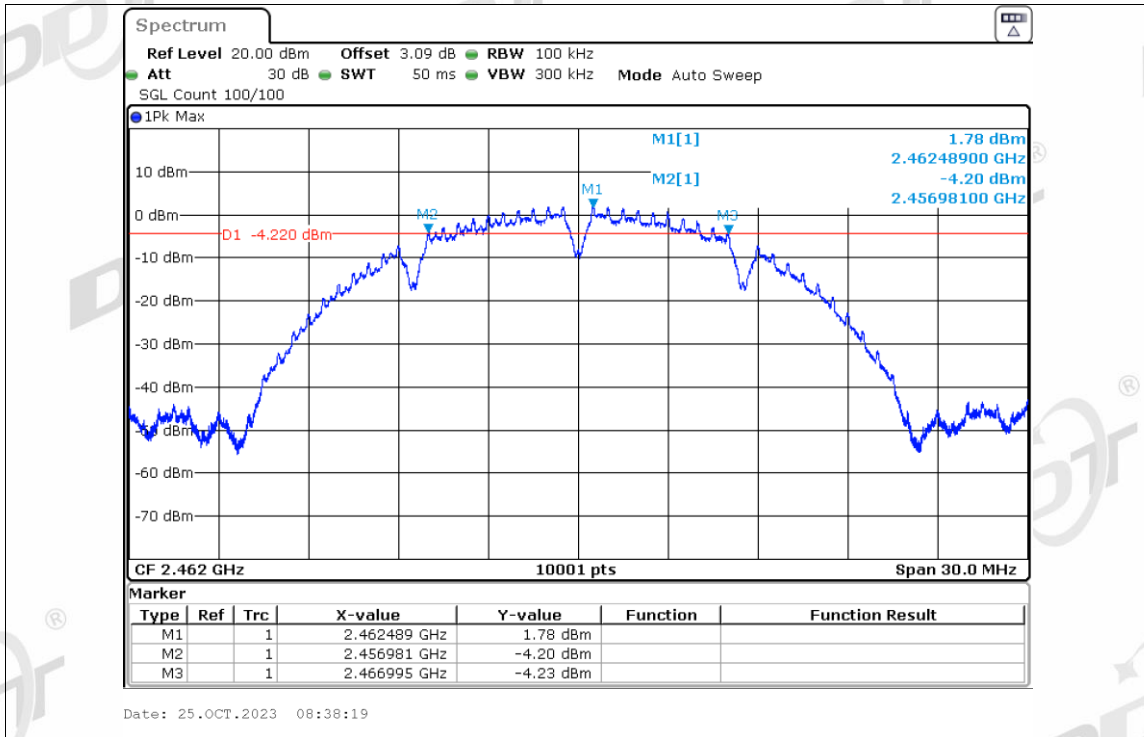




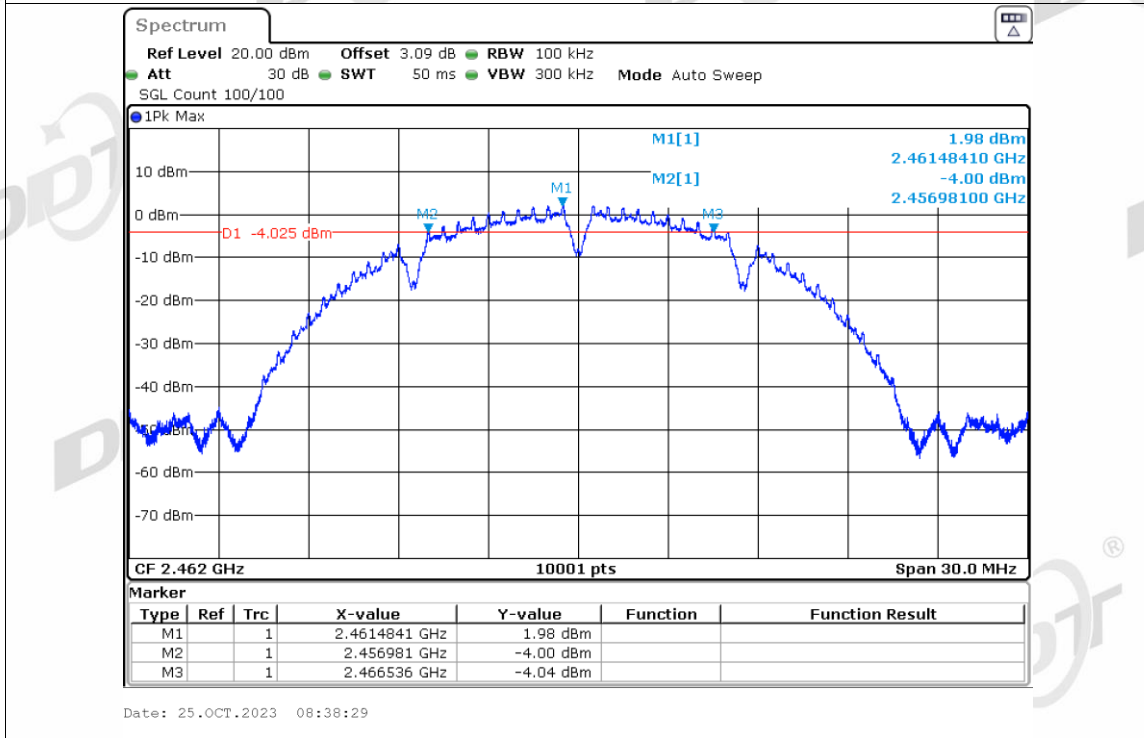
-6dB Bandwidth NVNT b 2437MHz Ant2



-6dB Bandwidth NVNT b 2462MHz Ant1

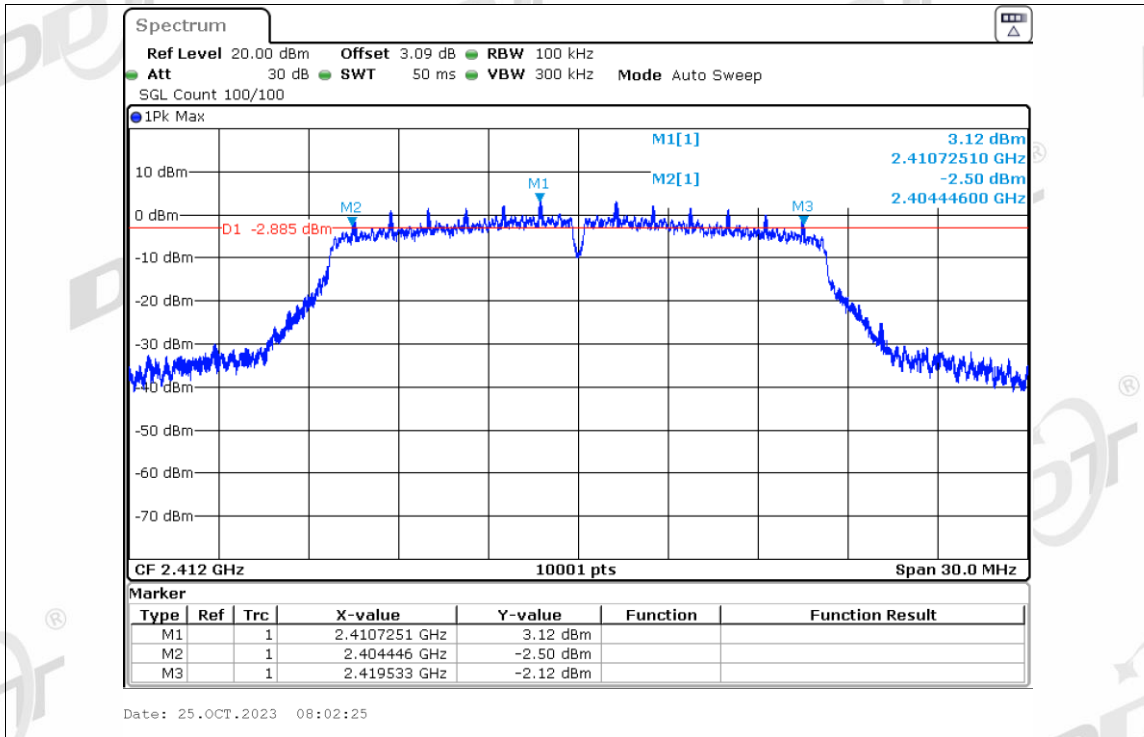


-6dB Bandwidth NVNT b 2462MHz Ant2

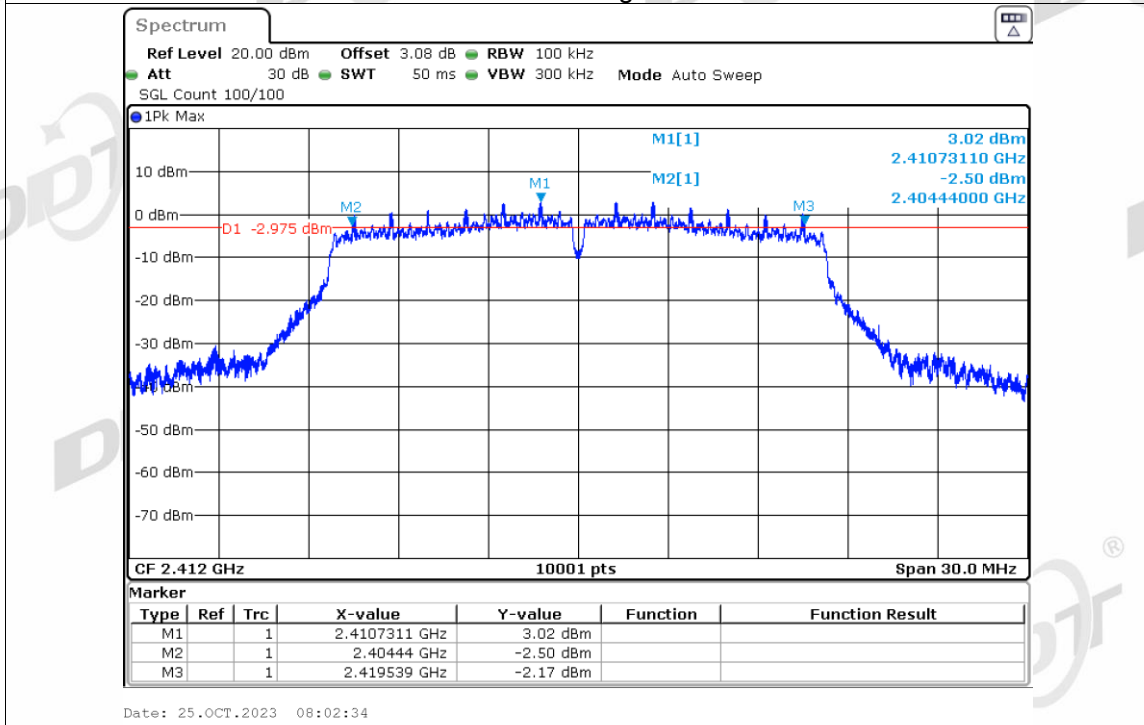


-6dB Bandwidth NVNT g 2412MHz Ant1

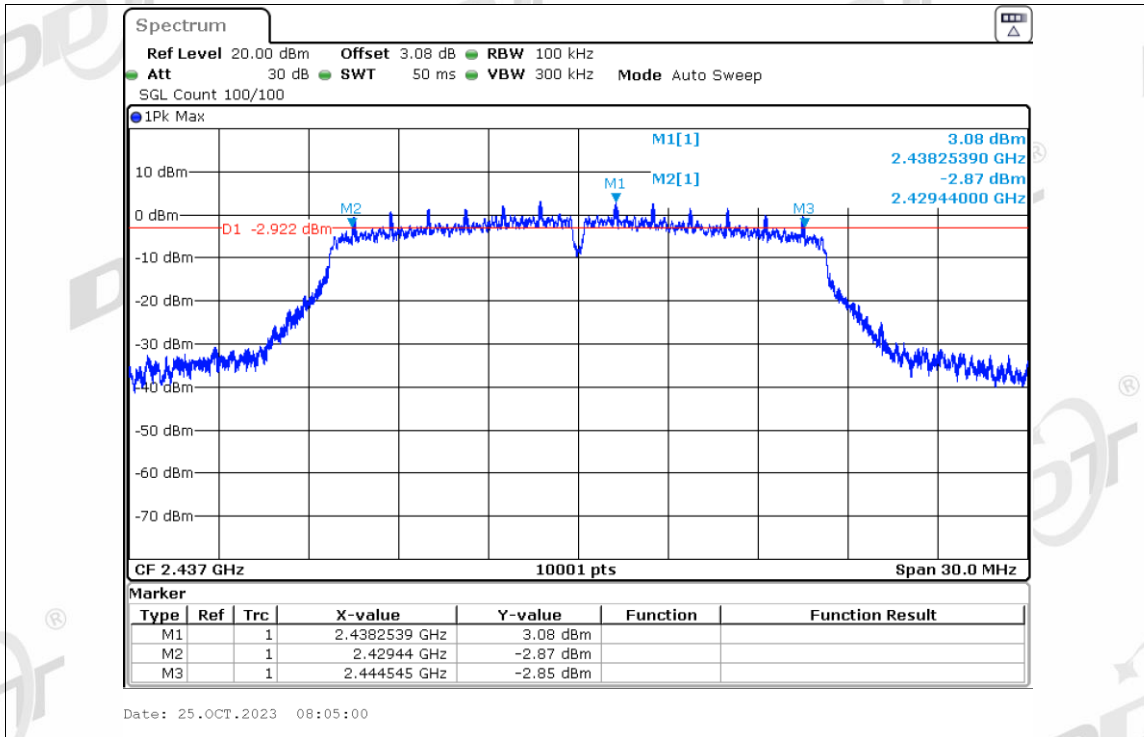




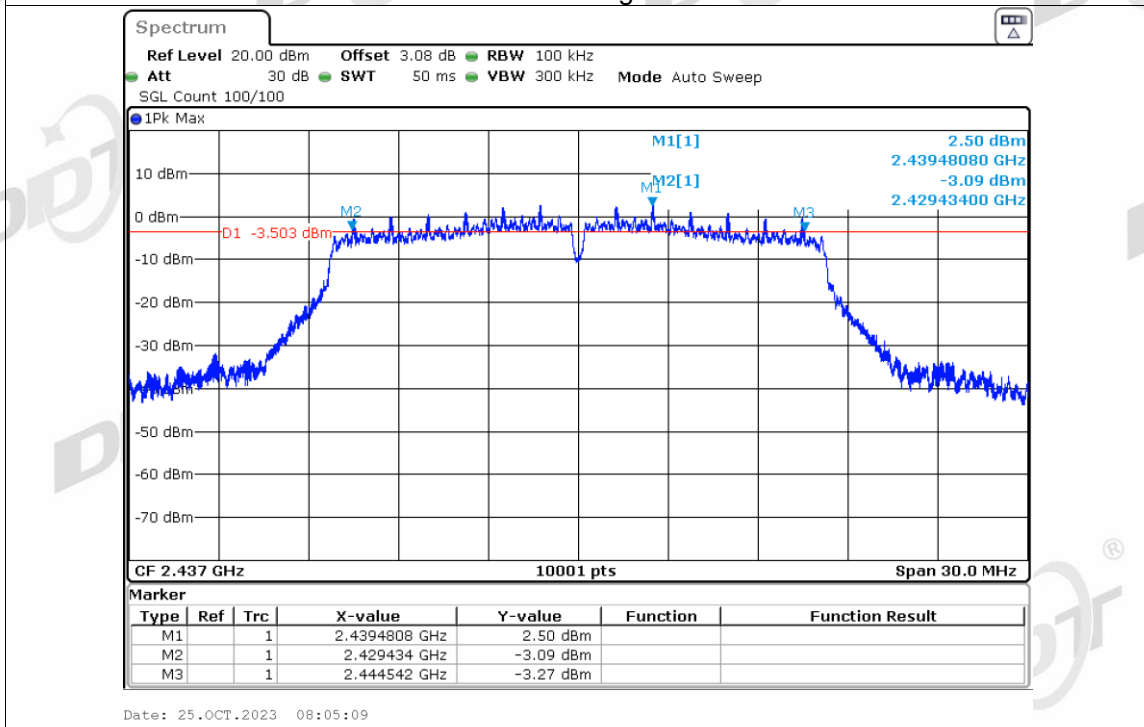
-6dB Bandwidth NVNT g 2412MHz Ant2



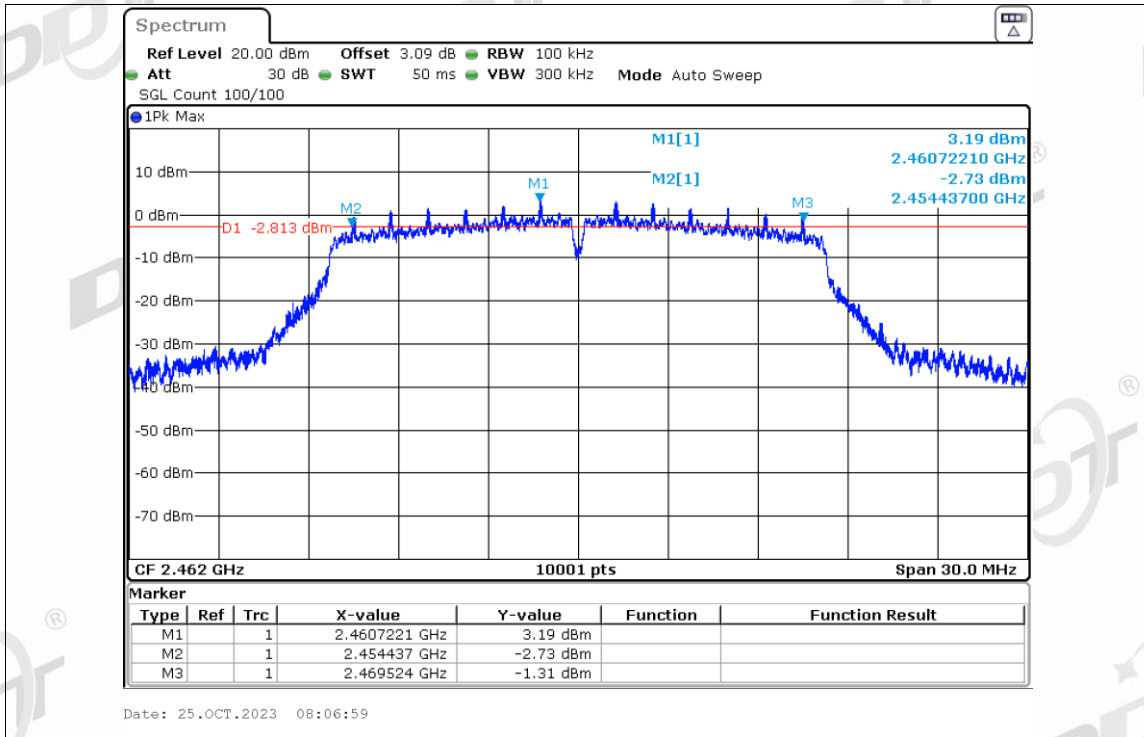
-6dB Bandwidth NVNT g 2437MHz Ant1



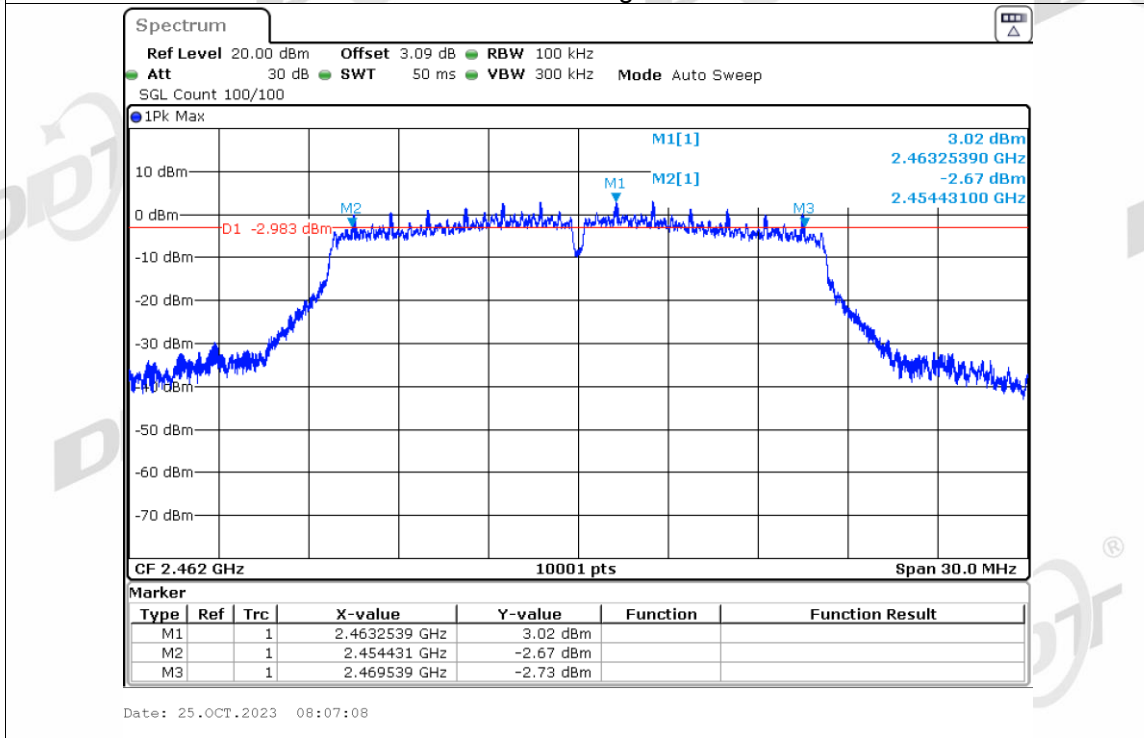
-6dB Bandwidth NVNT g 2437MHz Ant2



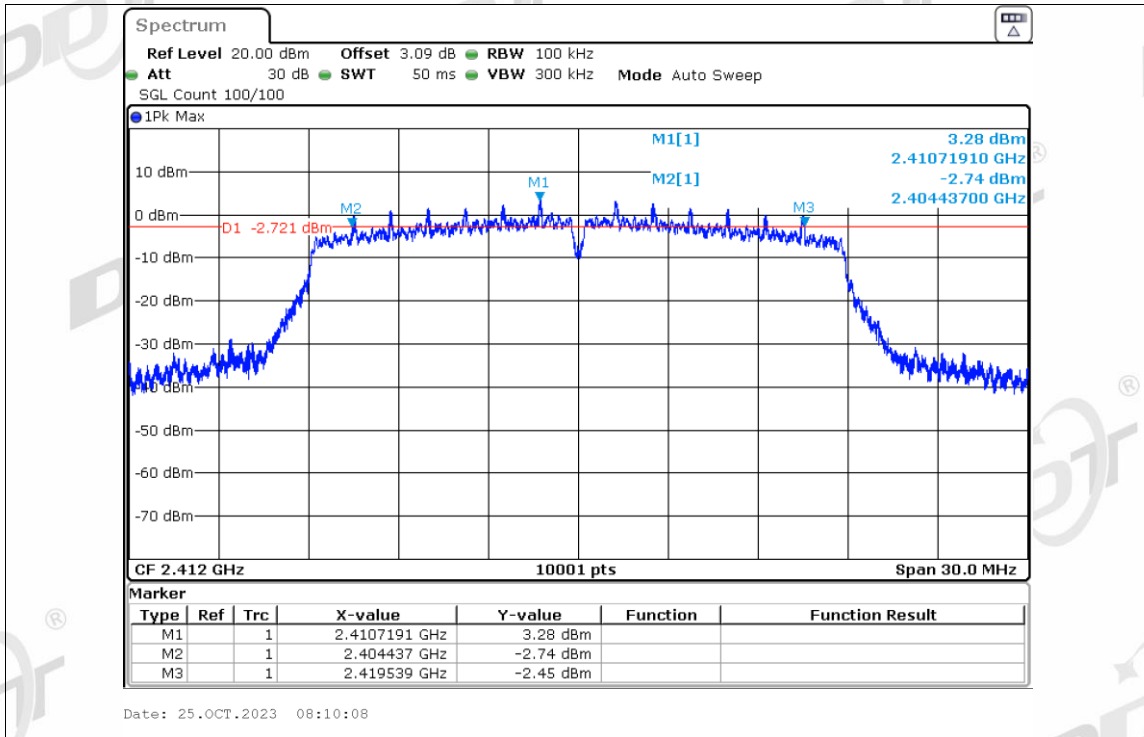
-6dB Bandwidth NVNT g 2462MHz Ant1



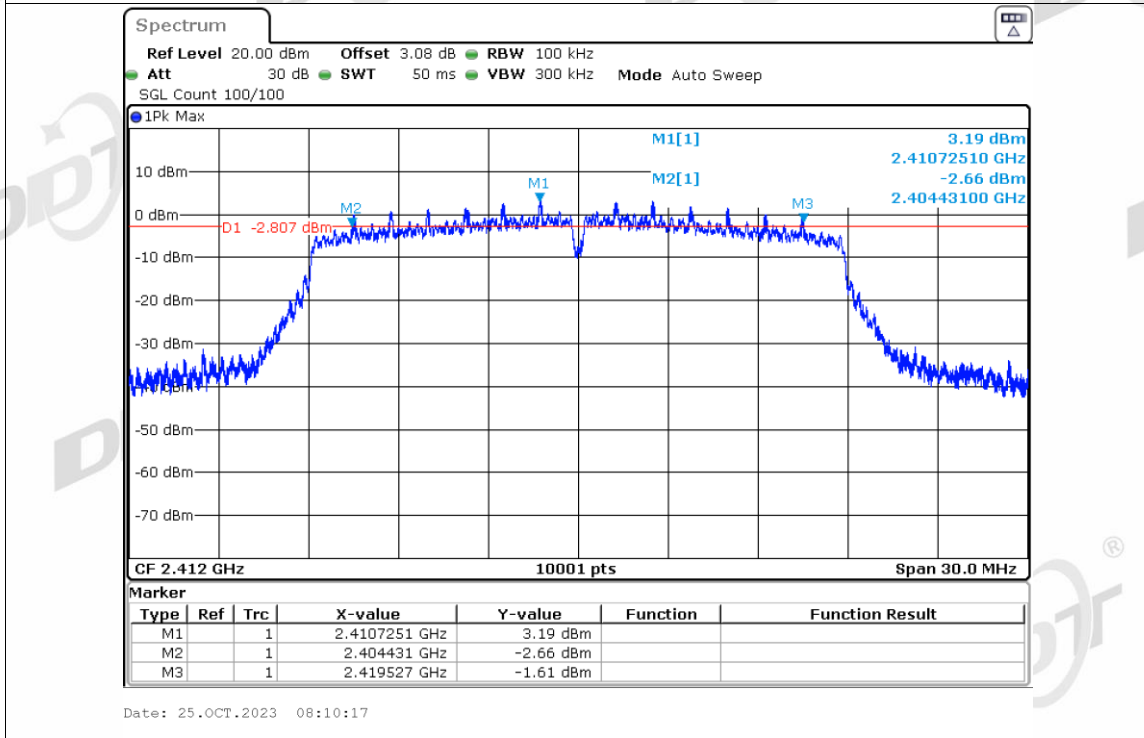
-6dB Bandwidth NVNT g 2462MHz Ant2



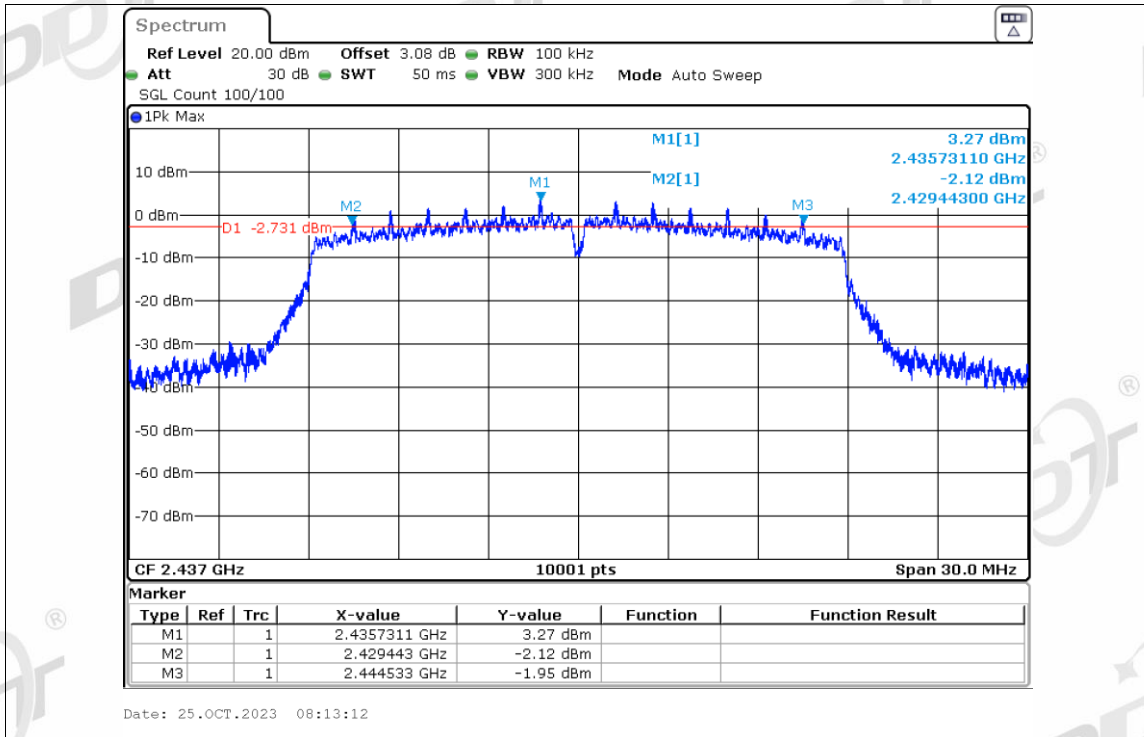
-6dB Bandwidth NVNT n20 2412MHz Ant1



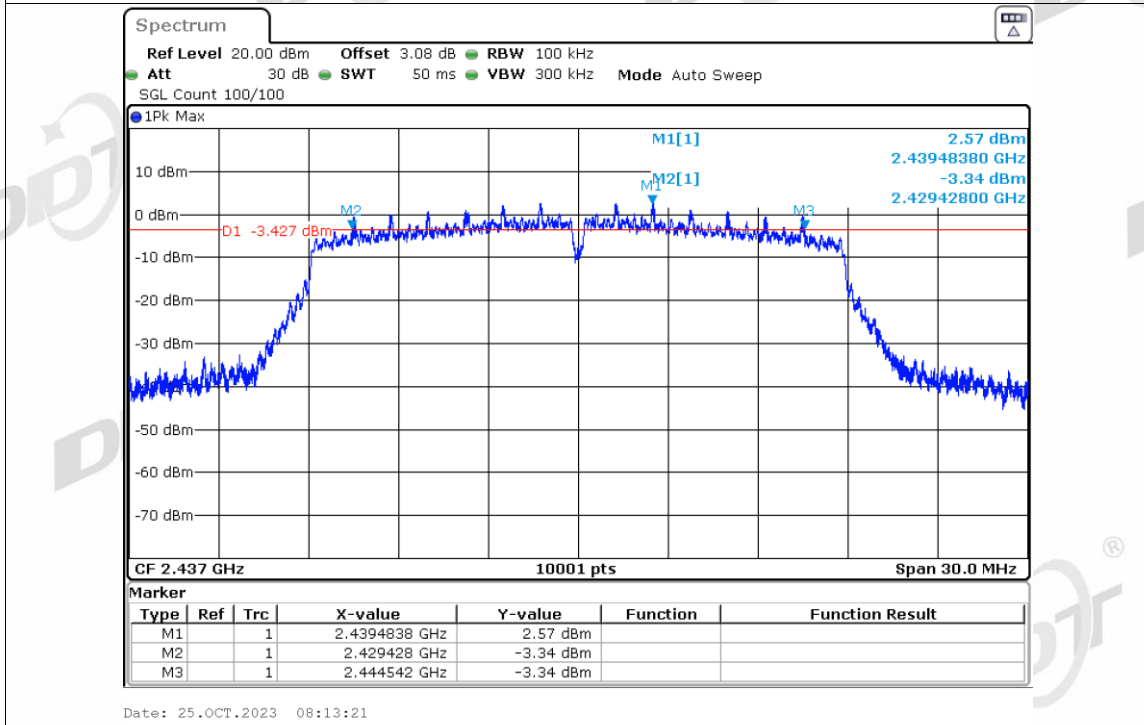
-6dB Bandwidth NVNT n20 2412MHz Ant2



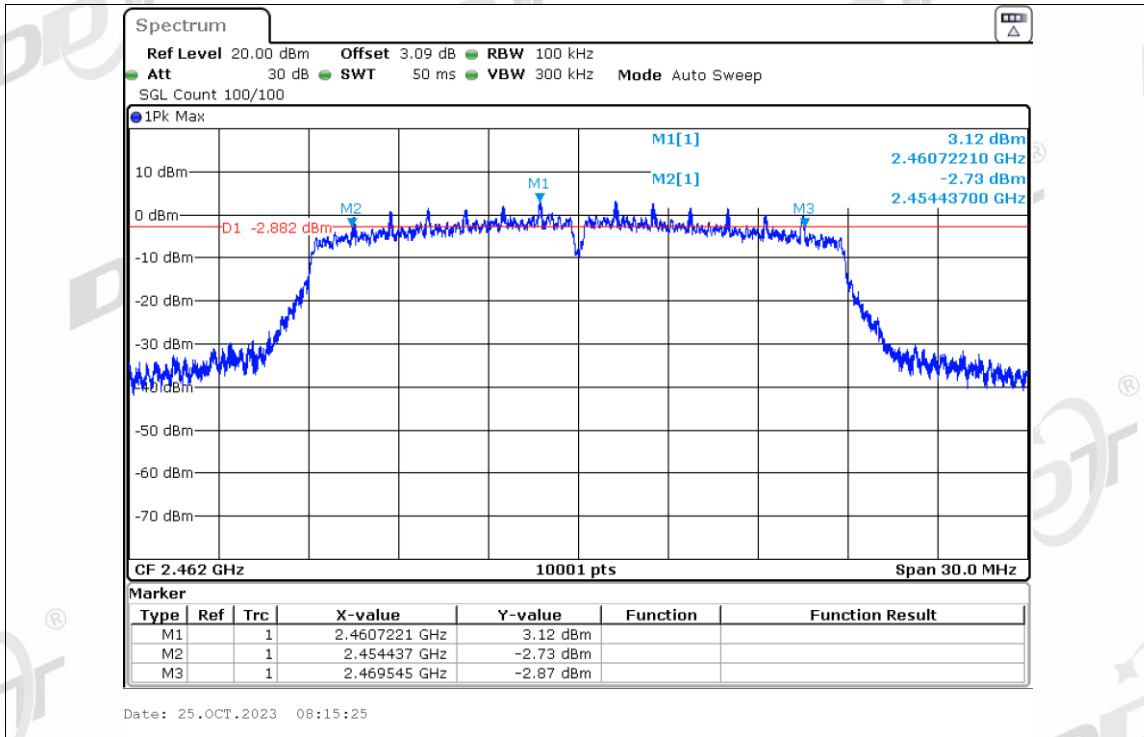
-6dB Bandwidth NVNT n20 2437MHz Ant1



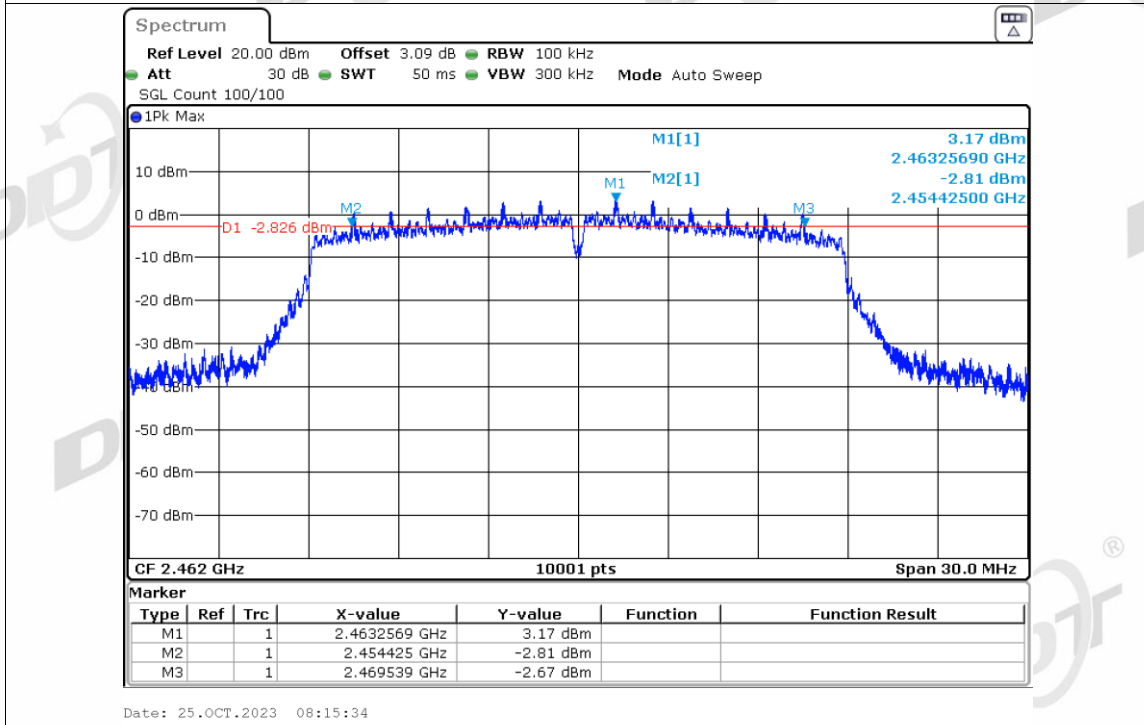
-6dB Bandwidth NVNT n20 2437MHz Ant2



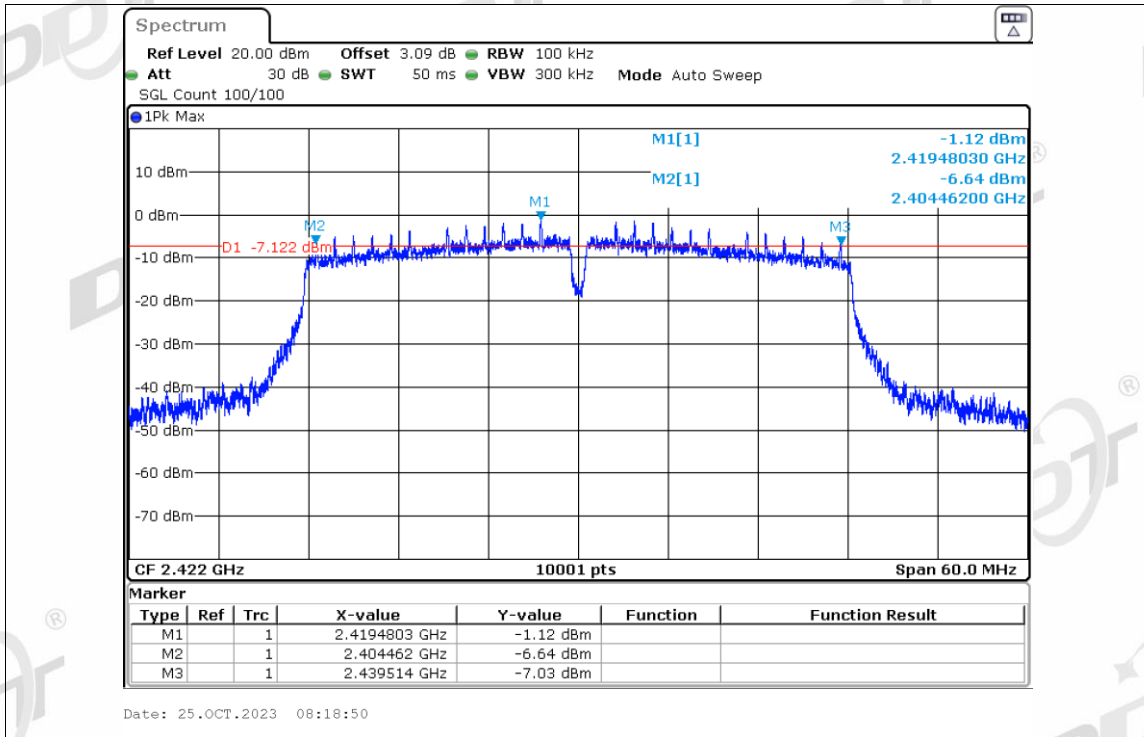
-6dB Bandwidth NVNT n20 2462MHz Ant1



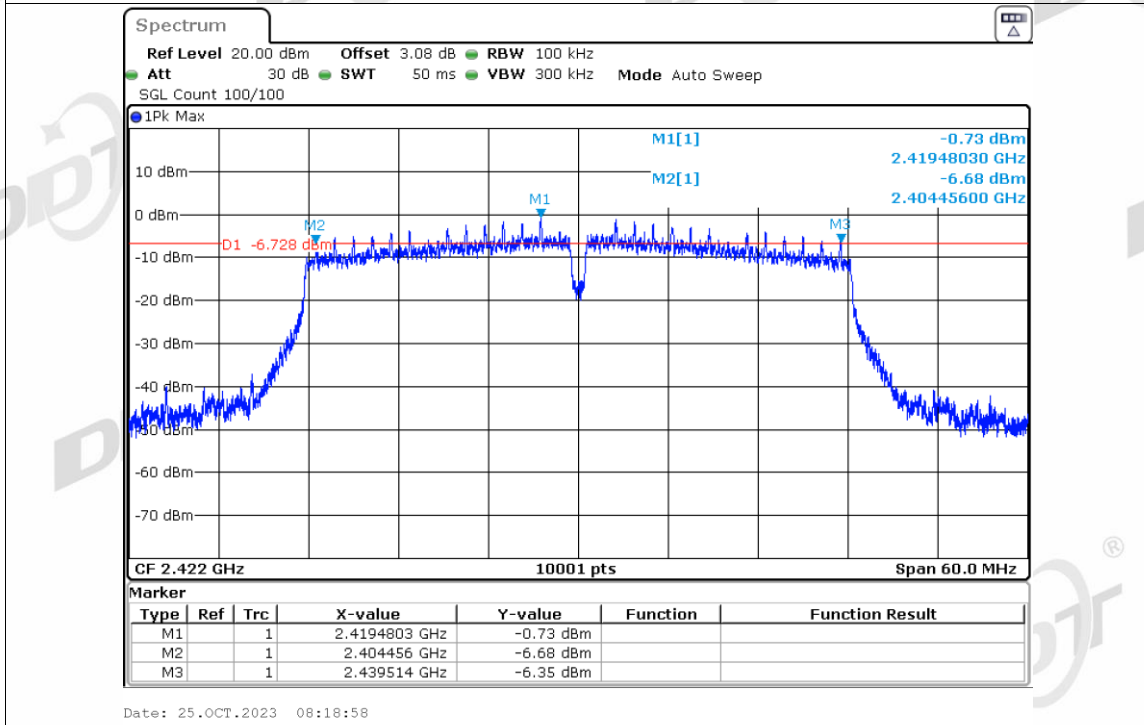
-6dB Bandwidth NVNT n20 2462MHz Ant2



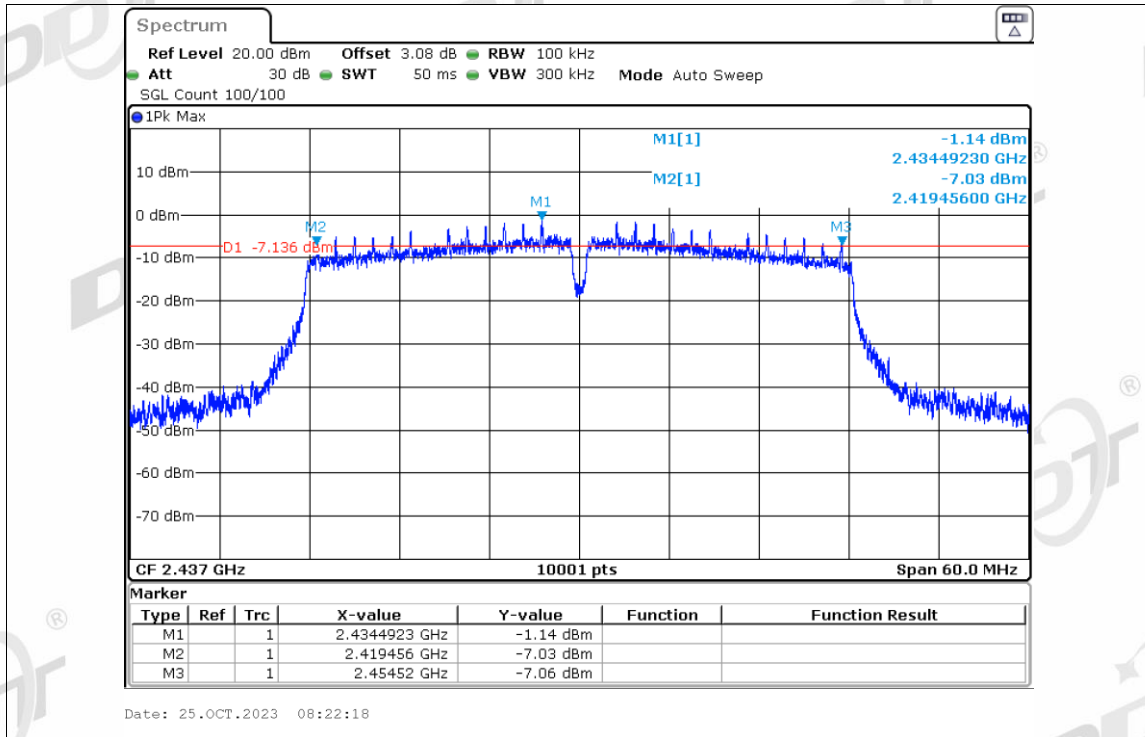
-6dB Bandwidth NVNT n40 2422MHz Ant1



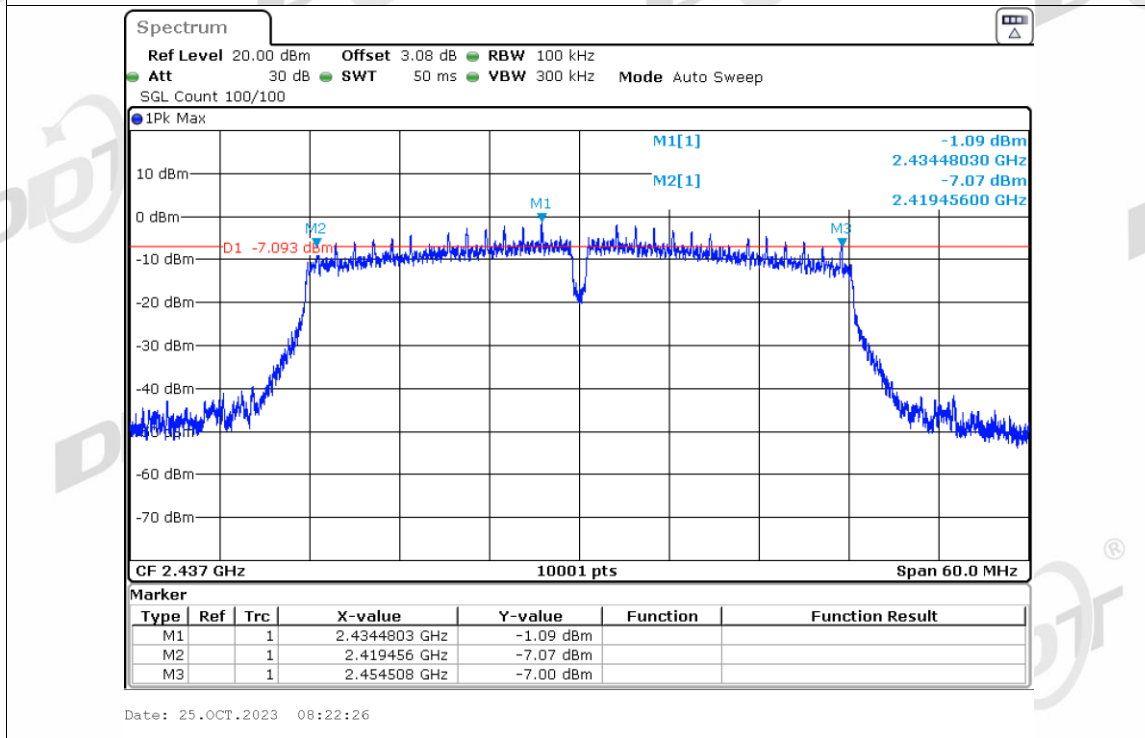
-6dB Bandwidth NVNT n40 2422MHz Ant2



-6dB Bandwidth NVNT n40 2437MHz Ant1

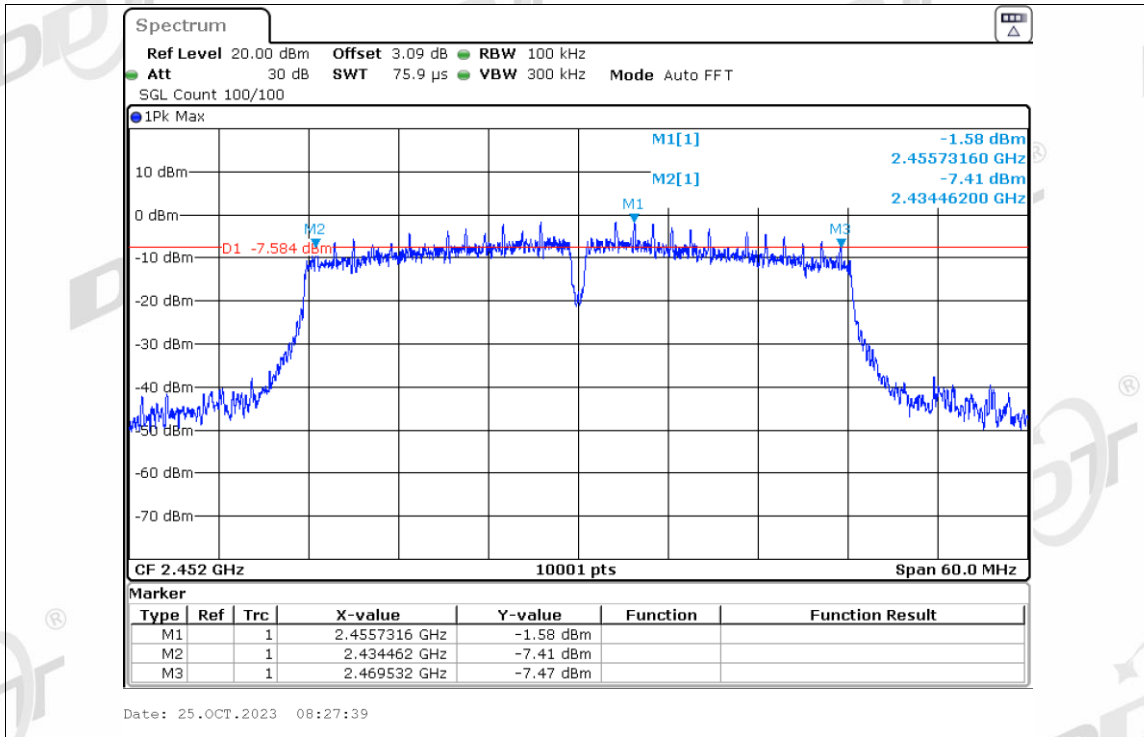


-6dB Bandwidth NVNT n40 2437MHz Ant2

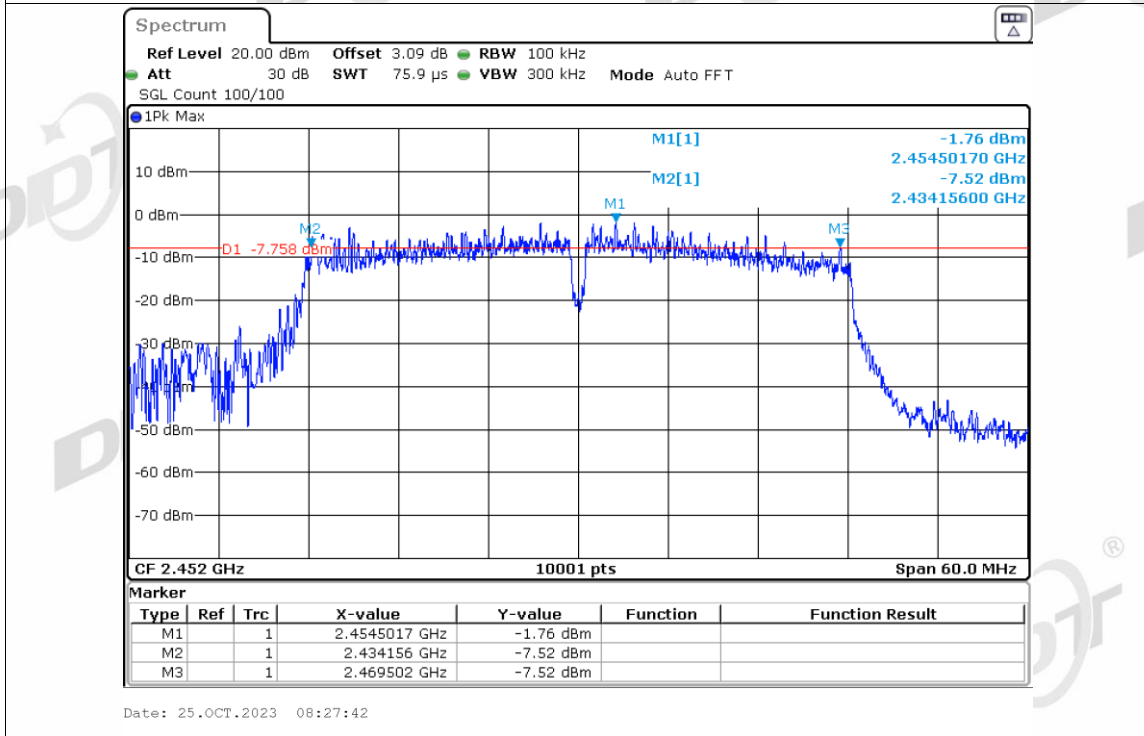


-6dB Bandwidth NVNT n40 2452MHz Ant1

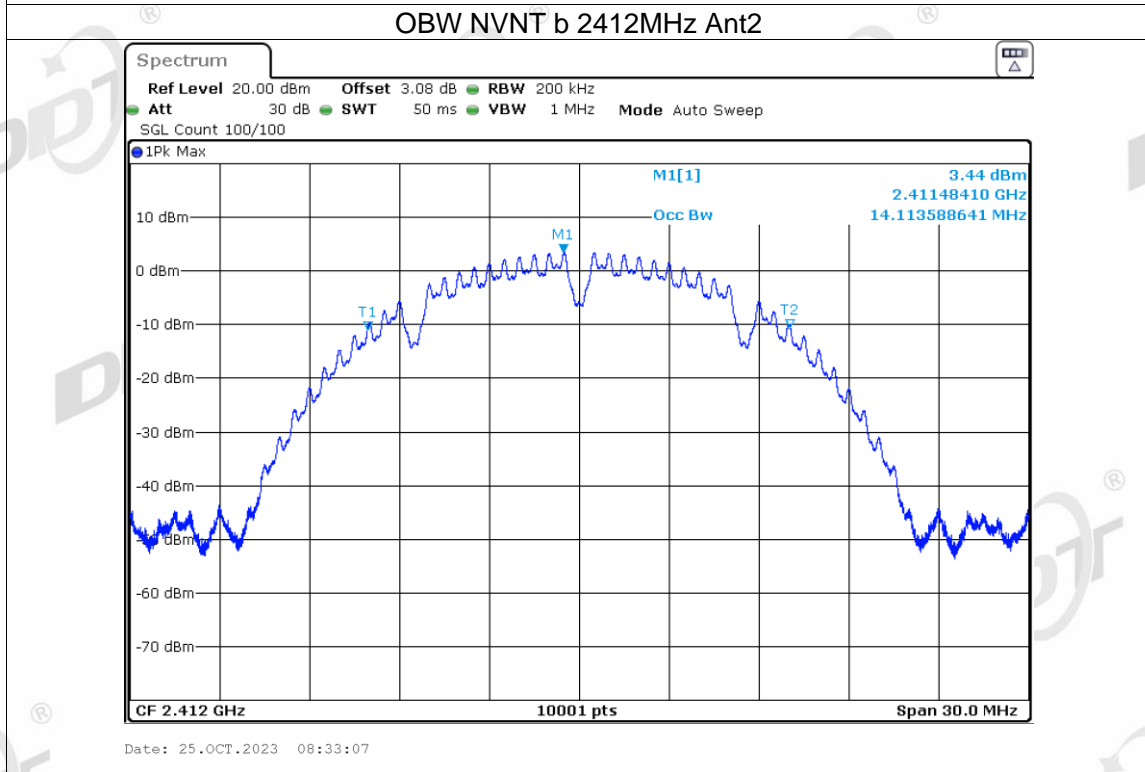
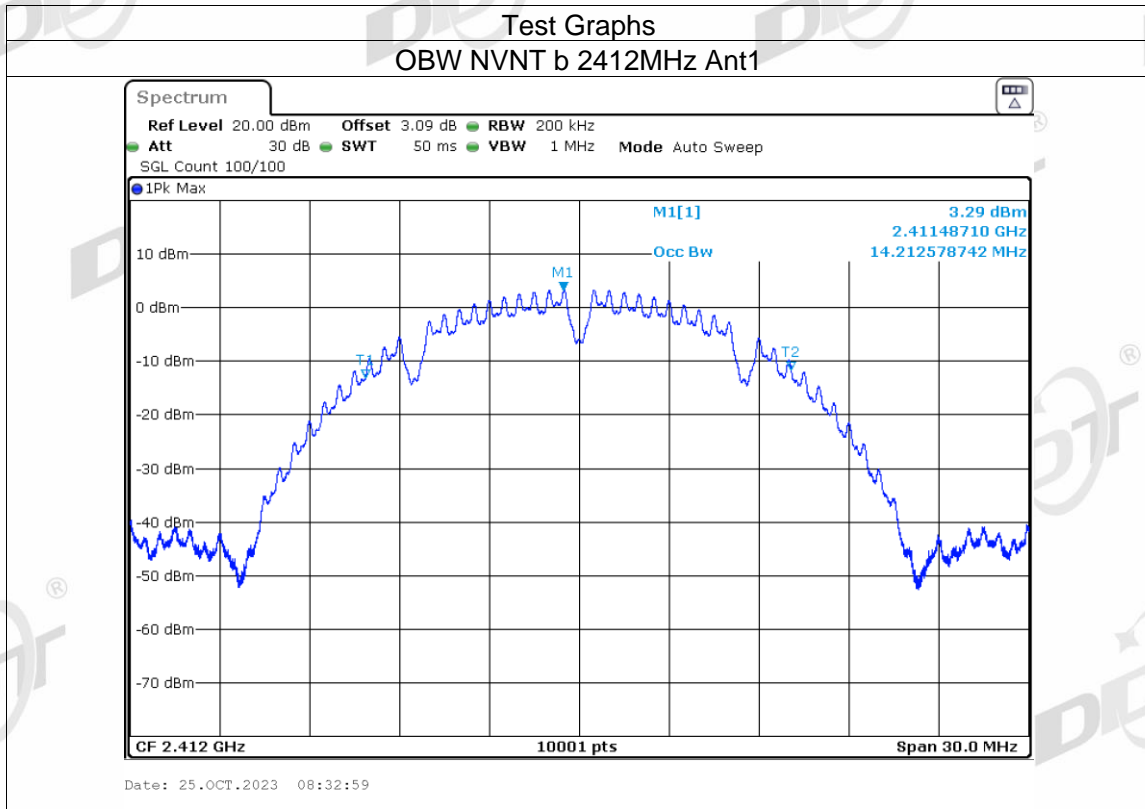




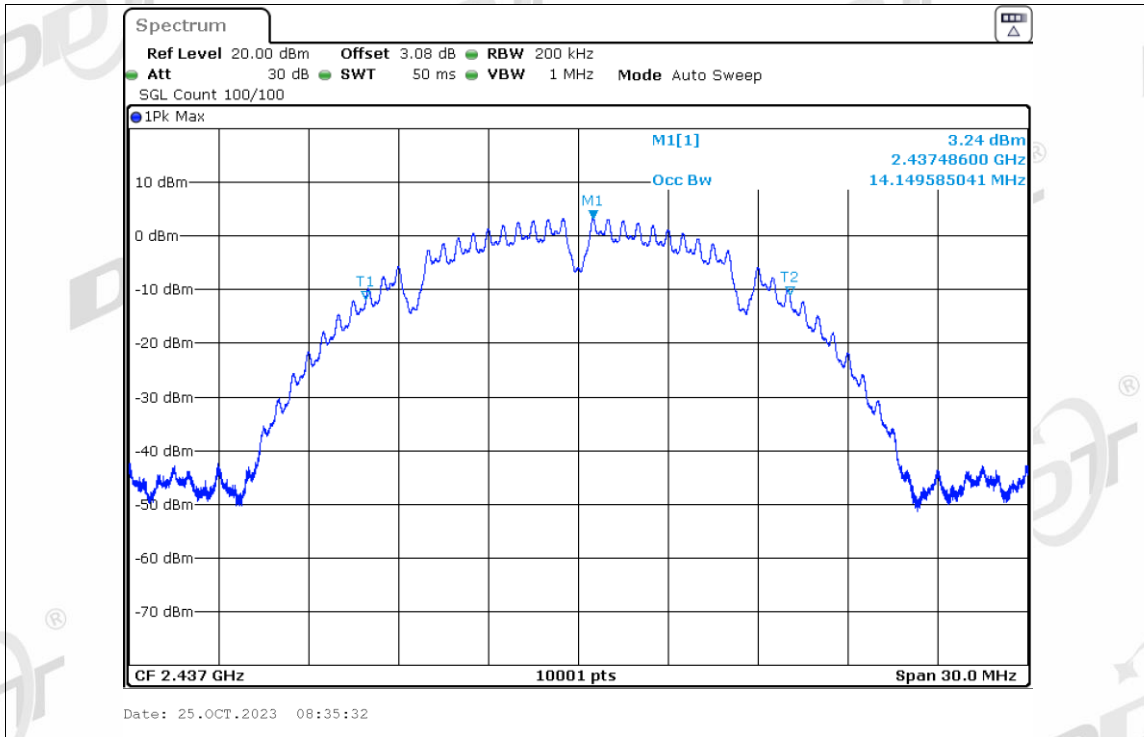
-6dB Bandwidth NVNT n40 2452MHz Ant2



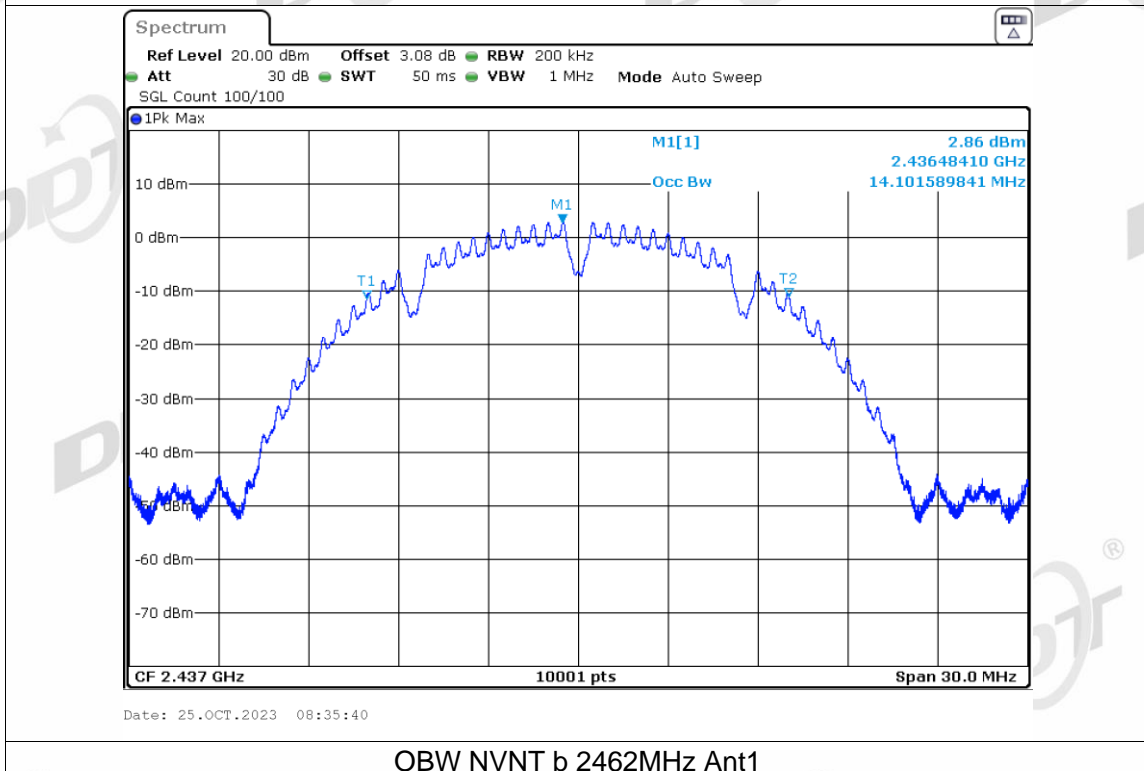
99% Bandwidth



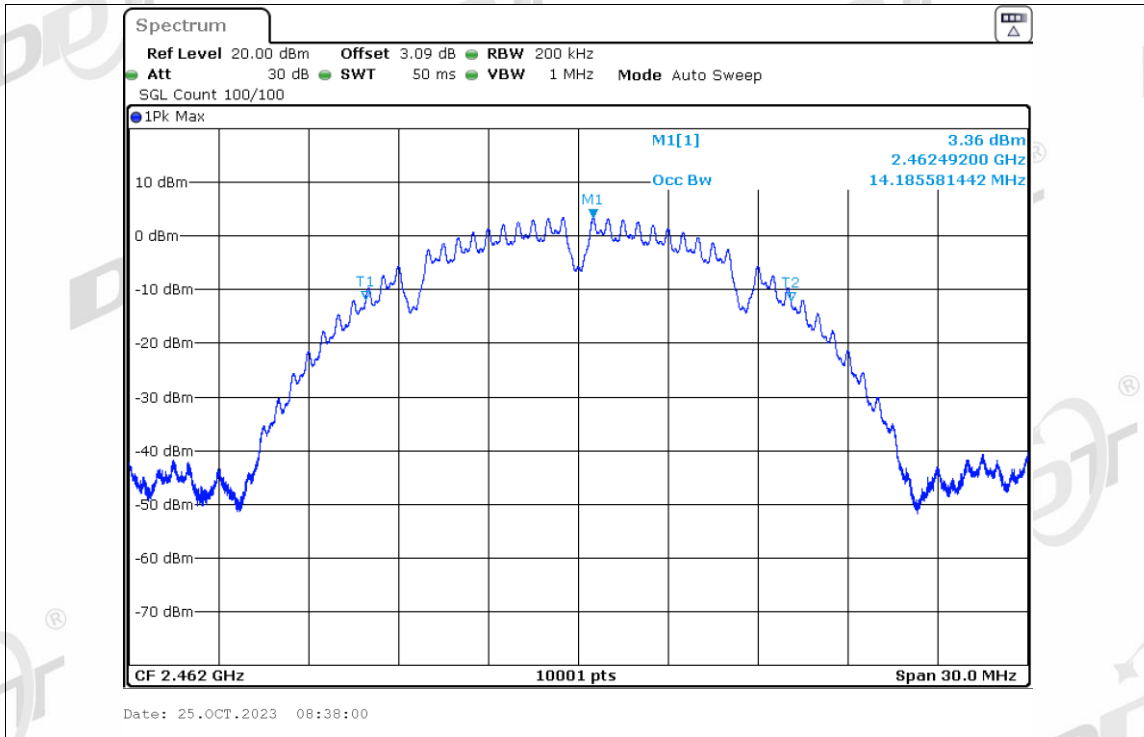
OBW NVNT b 2437MHz Ant1



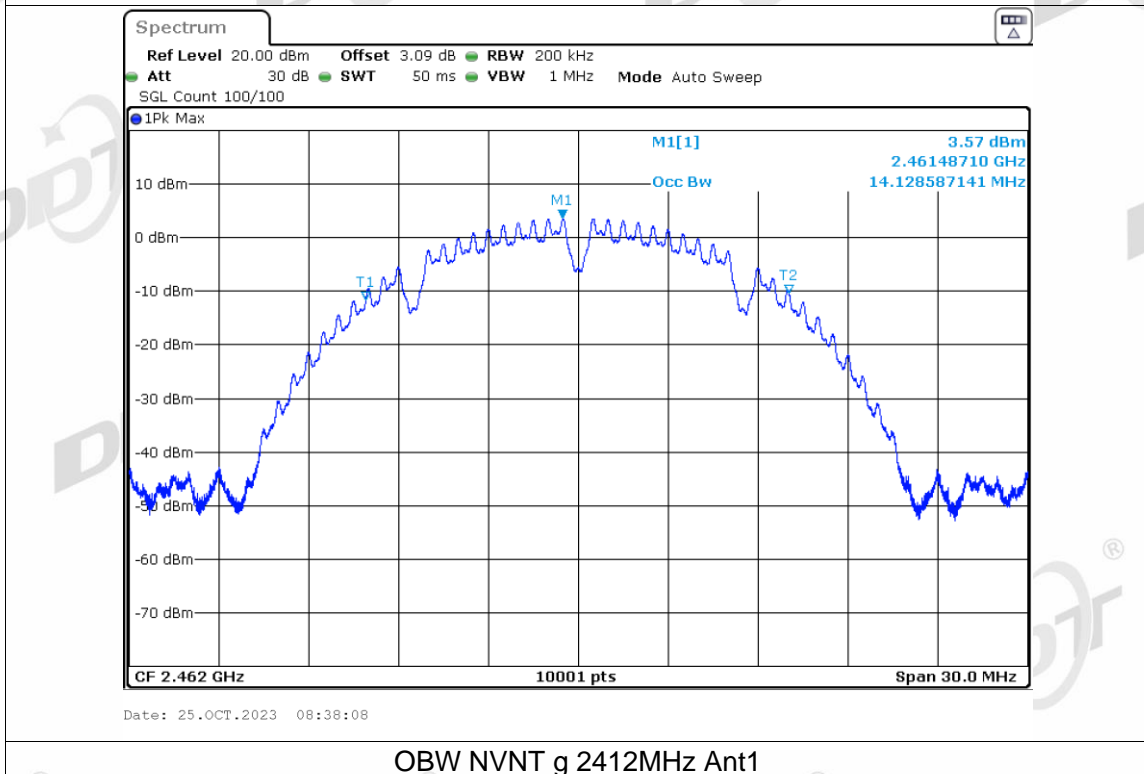
OBW NVNT b 2437MHz Ant2



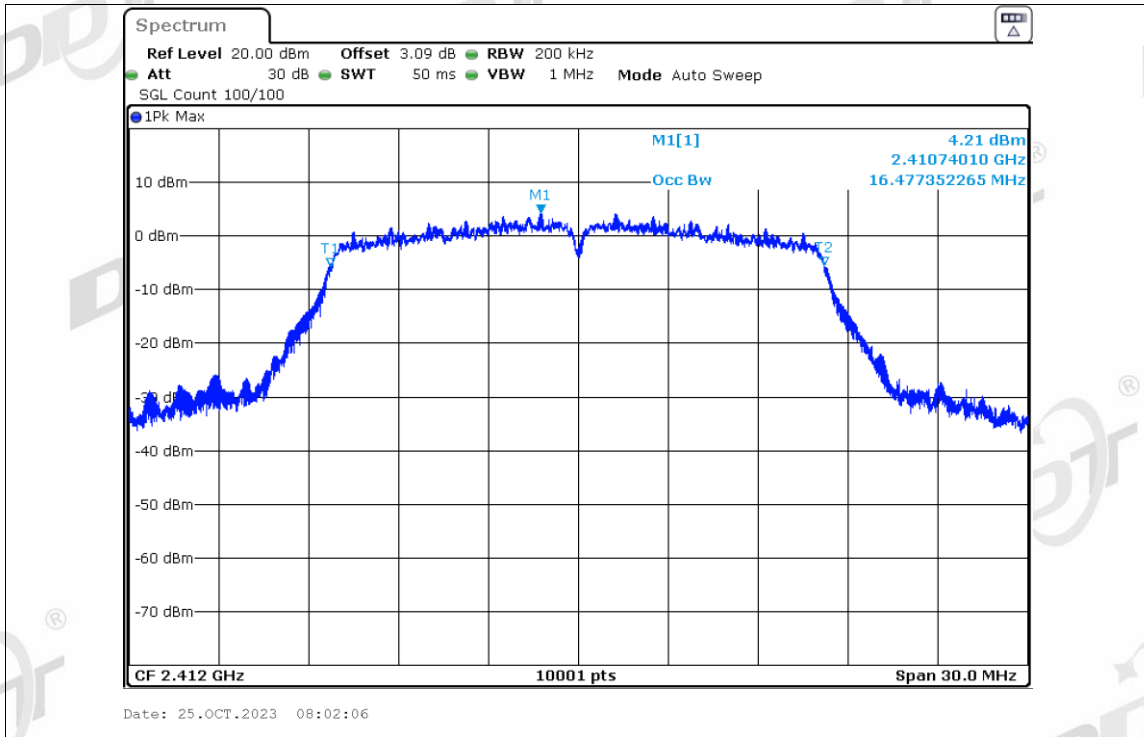
OBW NVNT b 2462MHz Ant1



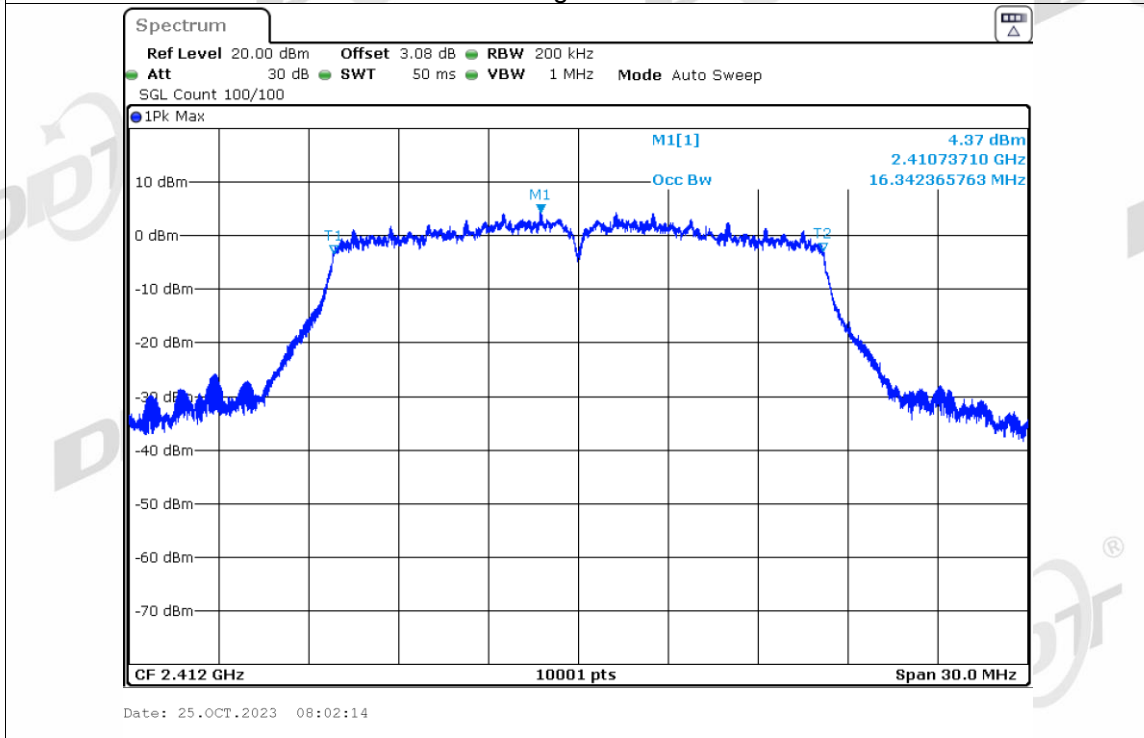
OBW NVNT b 2462MHz Ant2



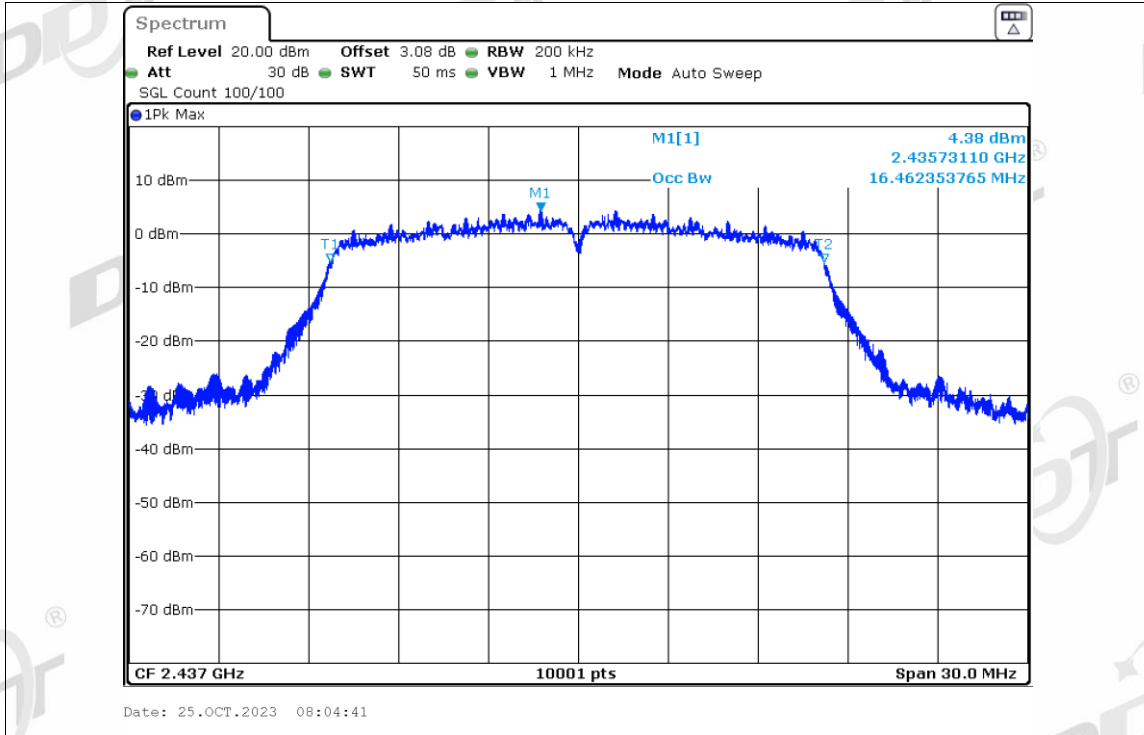
OBW NVNT g 2412MHz Ant1



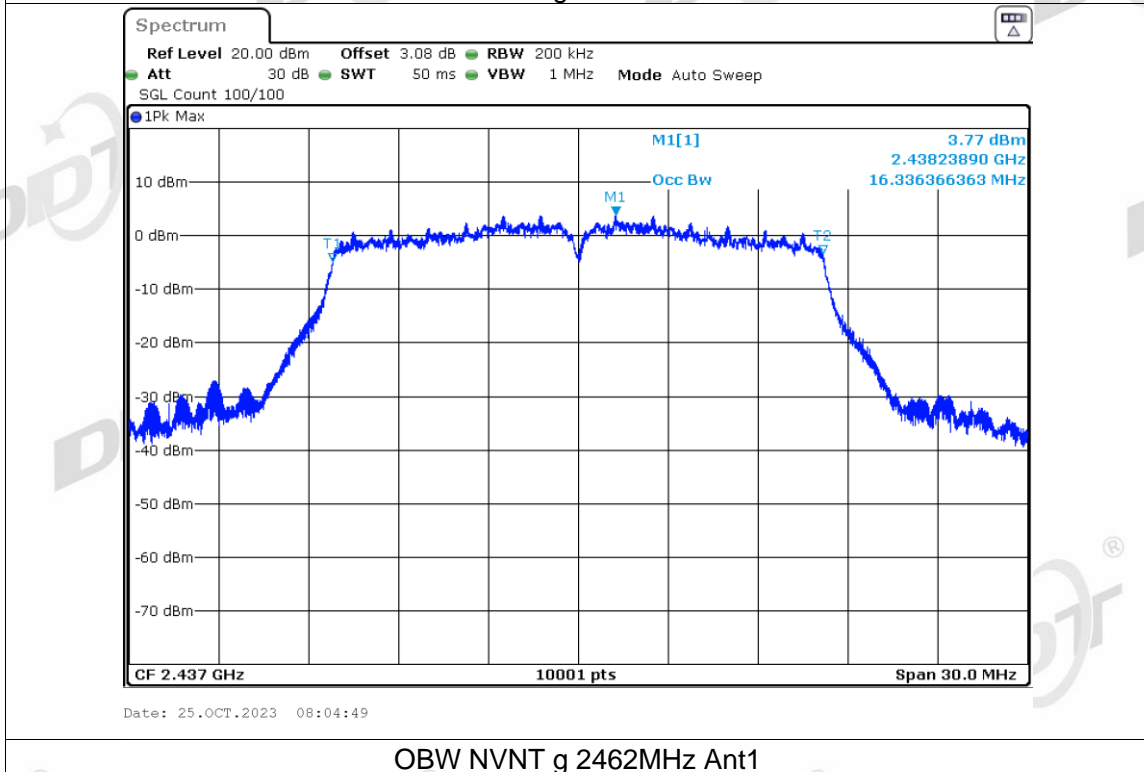
OBW NVNT g 2412MHz Ant2



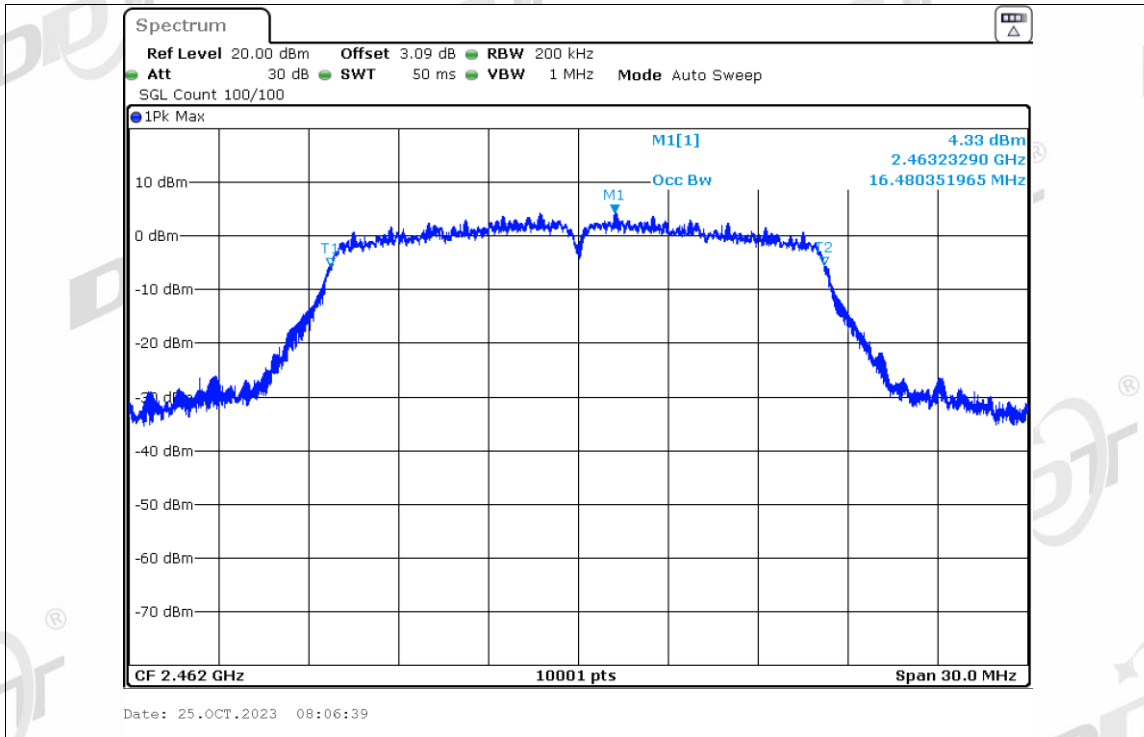
OBW NVNT g 2437MHz Ant1



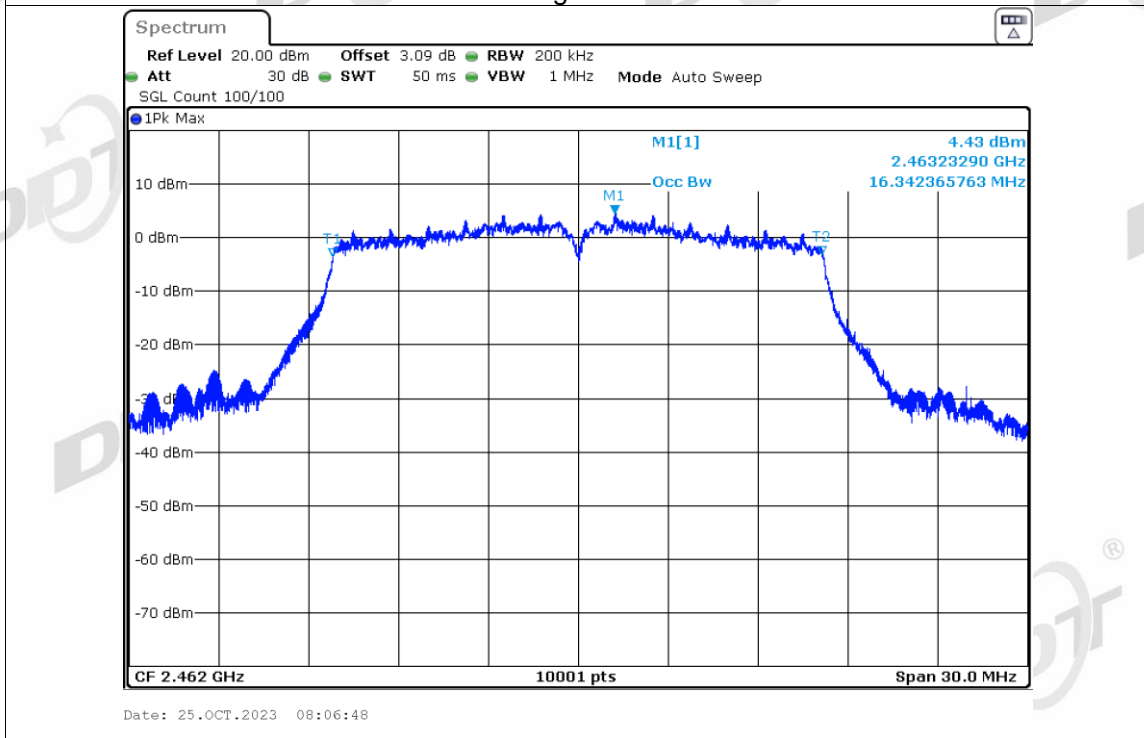
OBW NVNT g 2437MHz Ant2



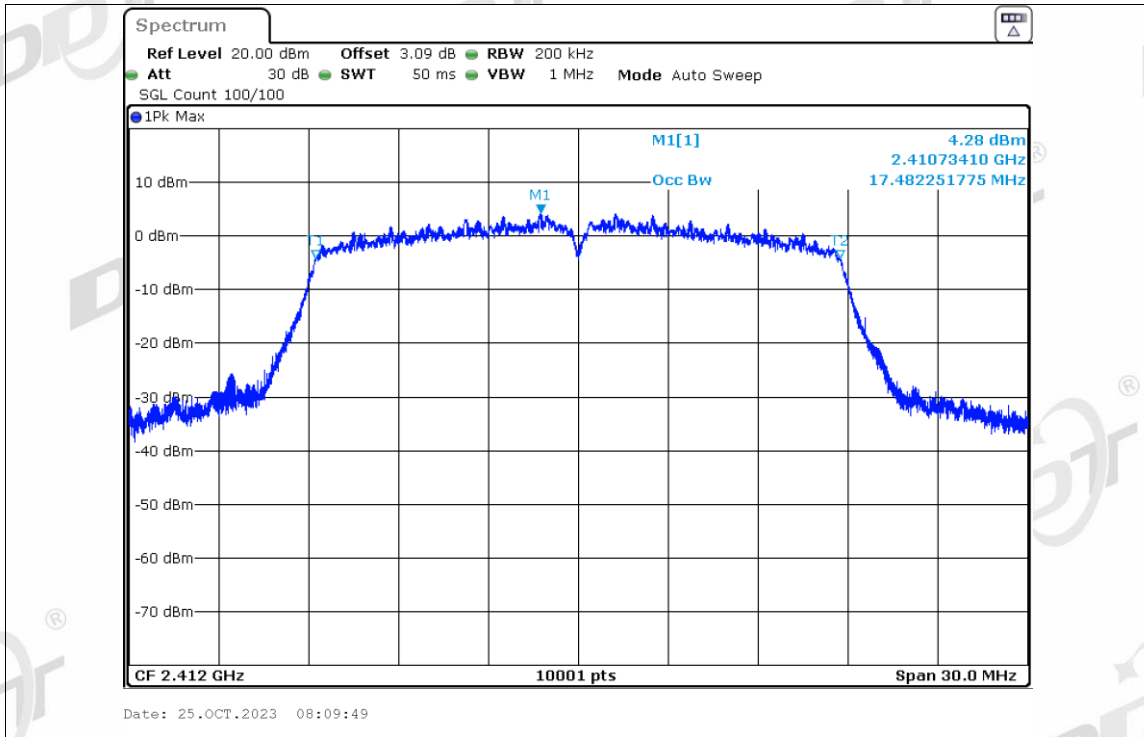
OBW NVNT g 2462MHz Ant1



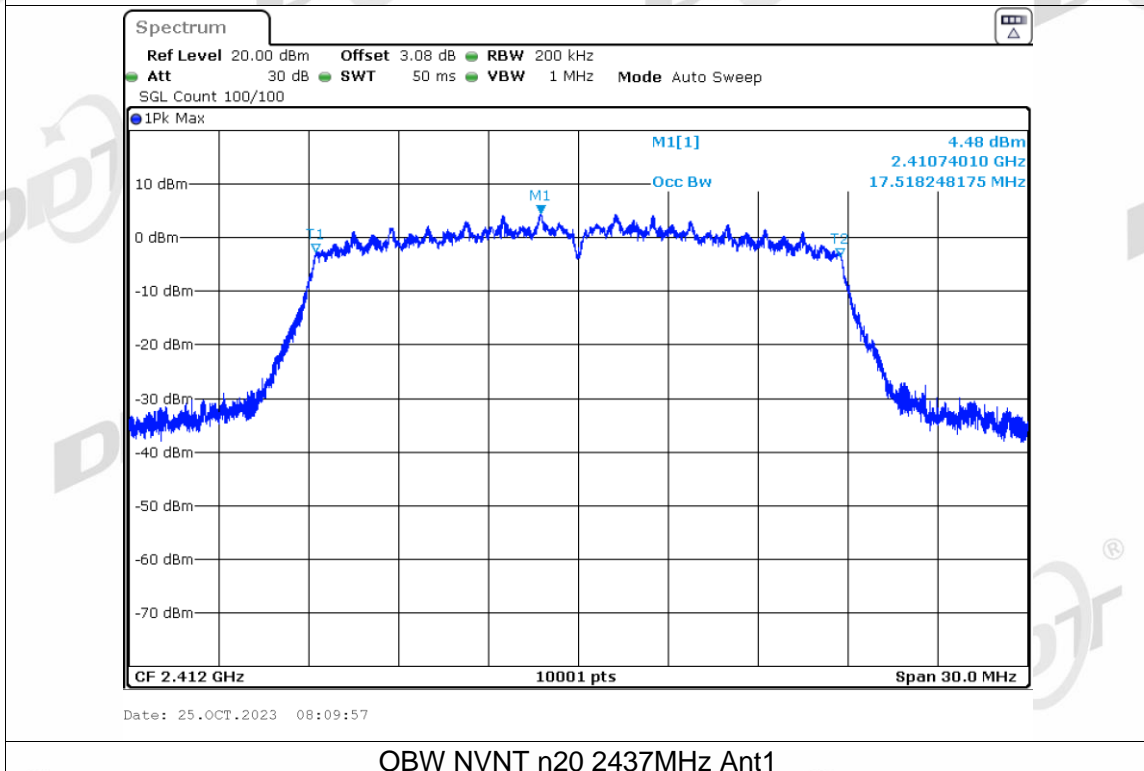
OBW NVNT g 2462MHz Ant2



OBW NVNT n20 2412MHz Ant1

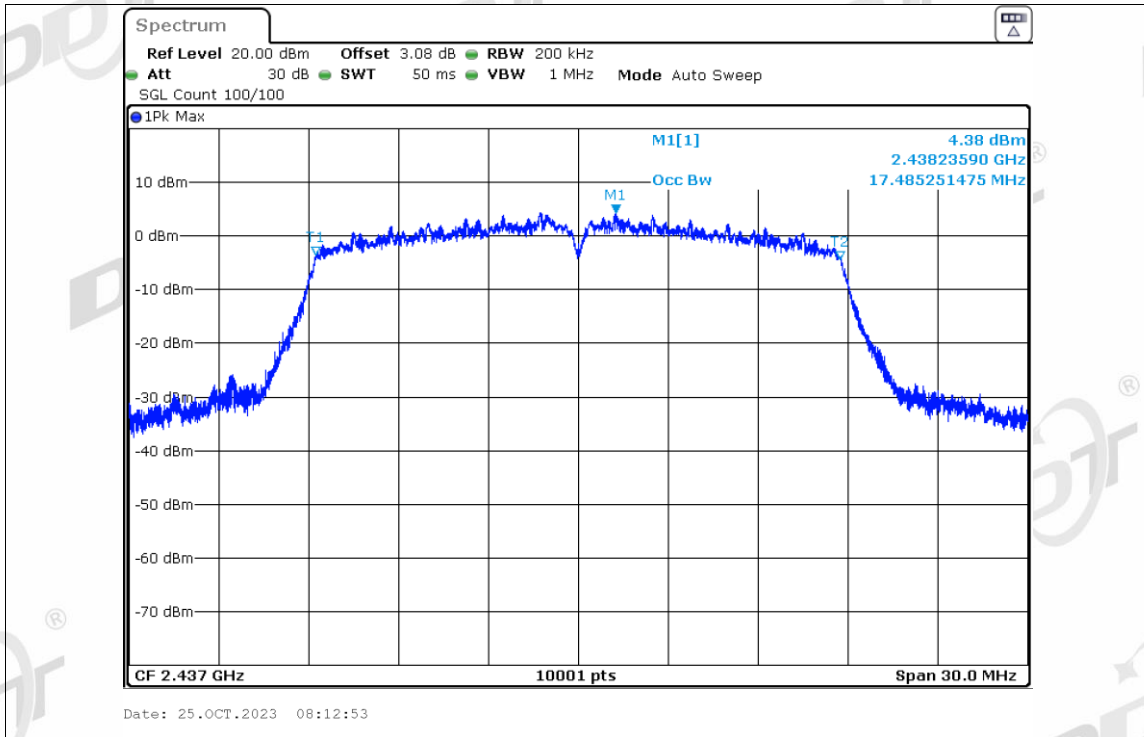


OBW NVNT n20 2412MHz Ant2

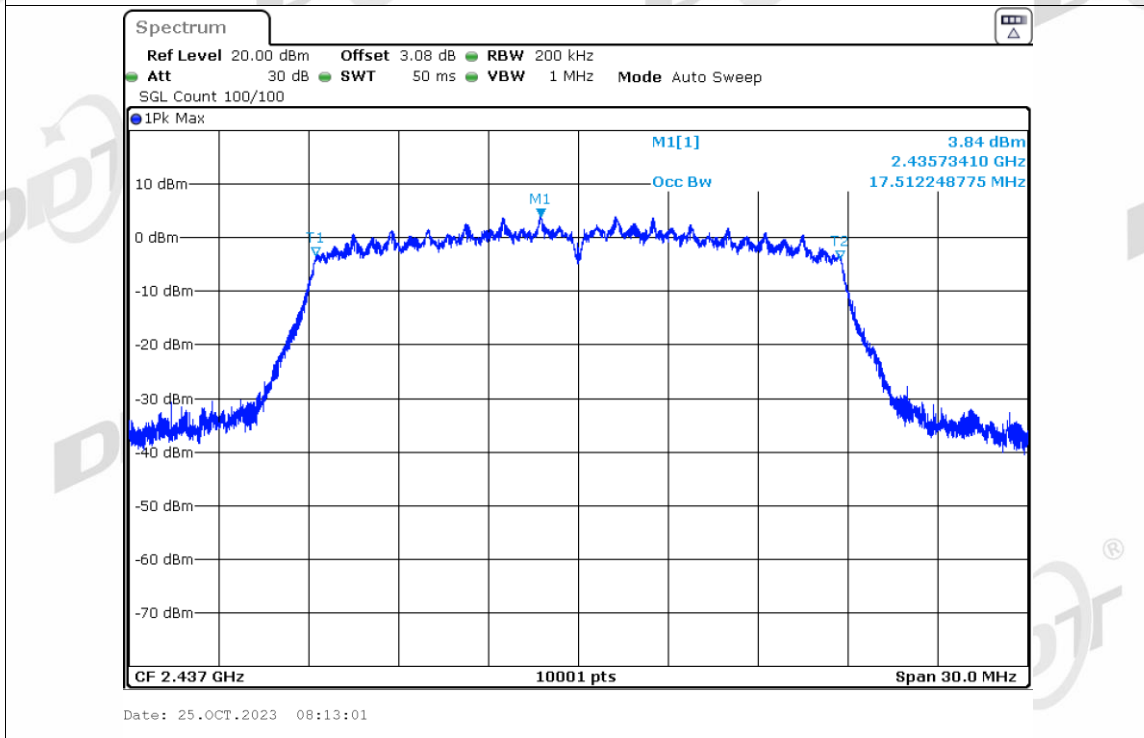


OBW NVNT n20 2437MHz Ant1

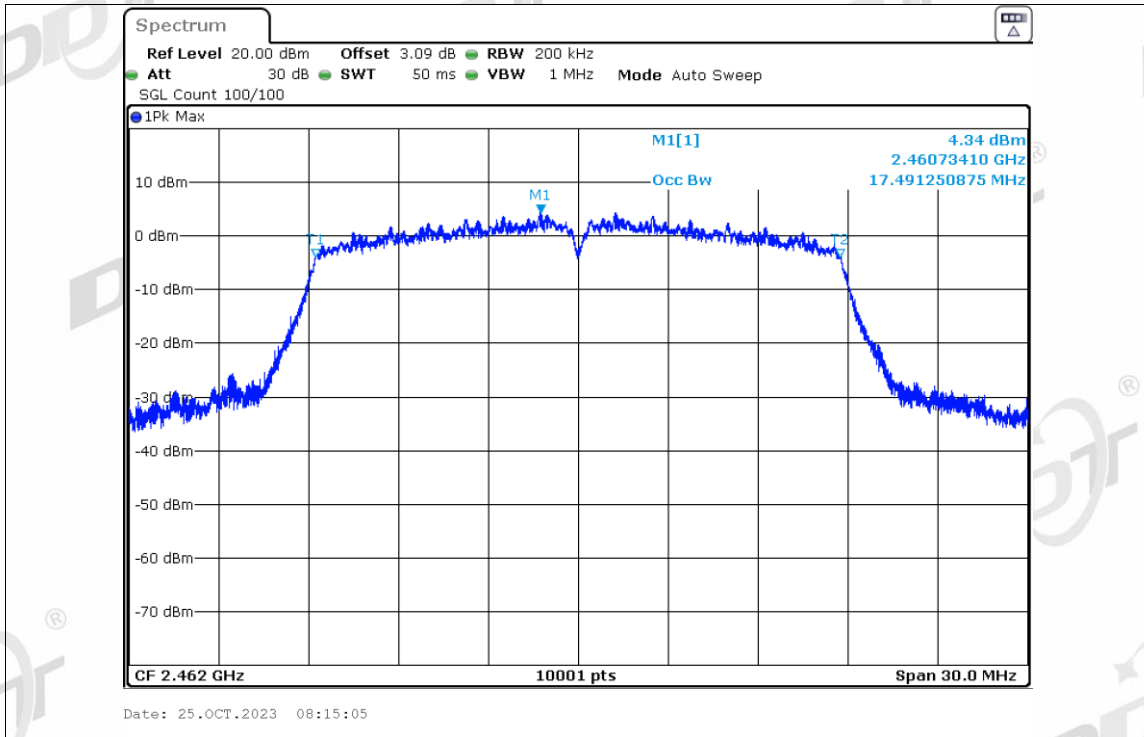




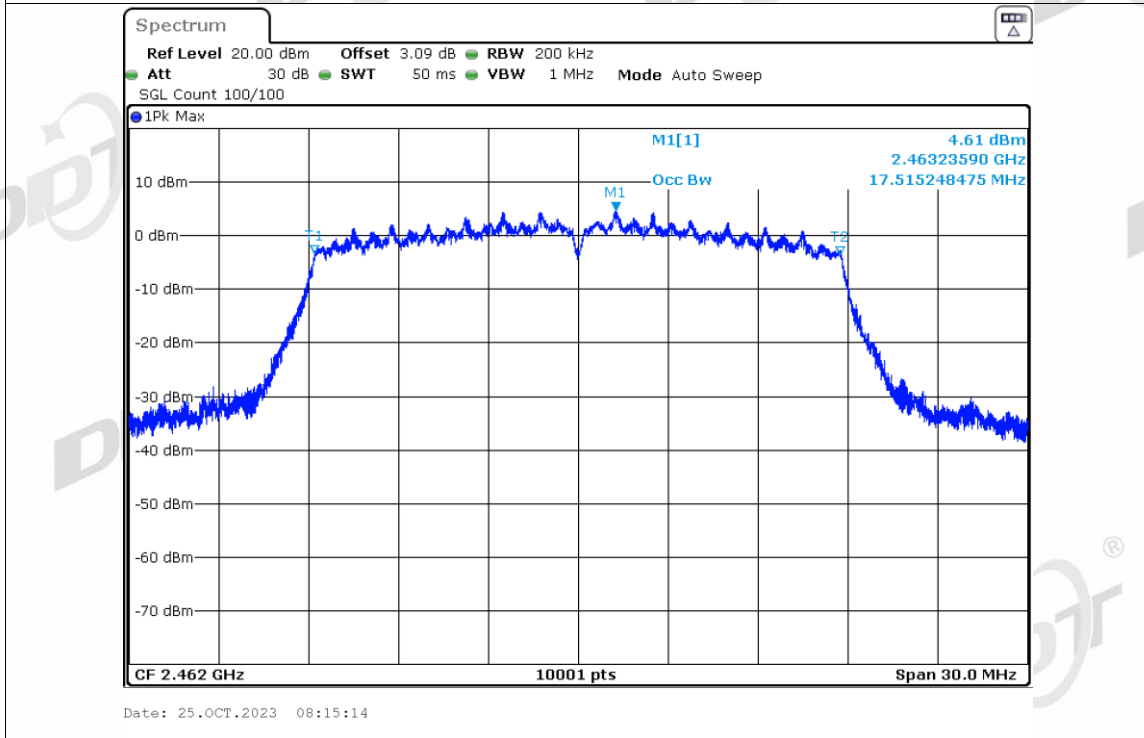
OBW NVNT n20 2437MHz Ant2



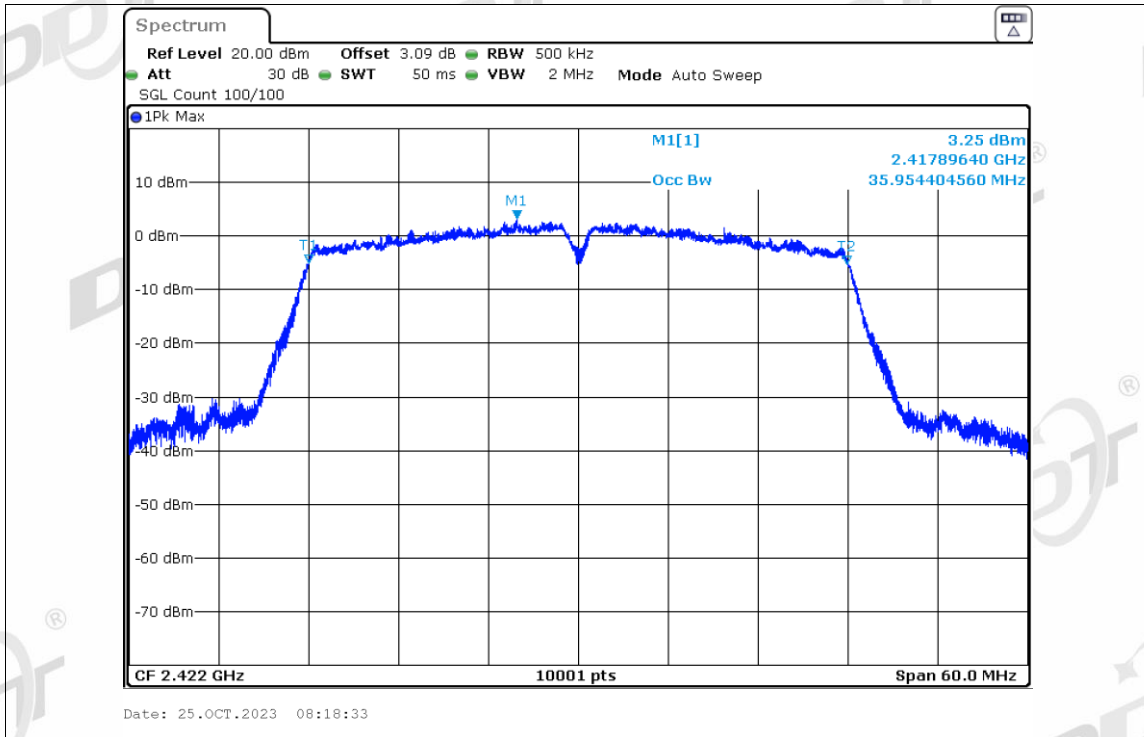
OBW NVNT n20 2462MHz Ant1



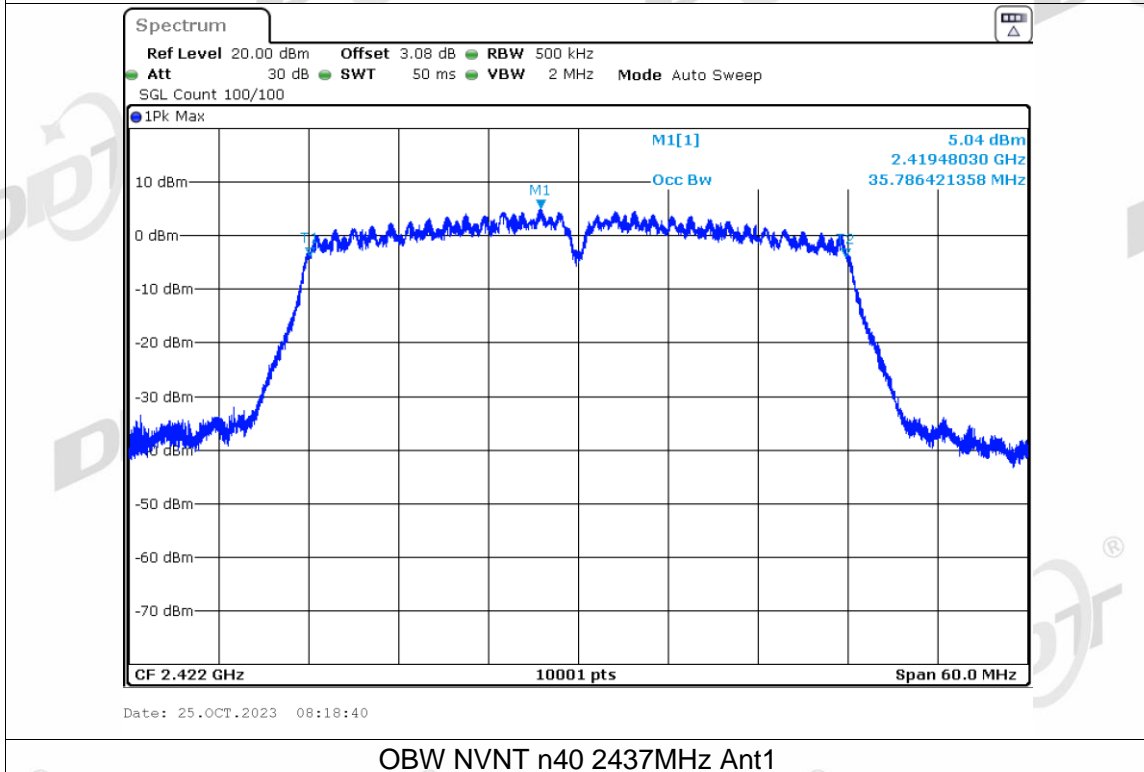
OBW NVNT n20 2462MHz Ant2



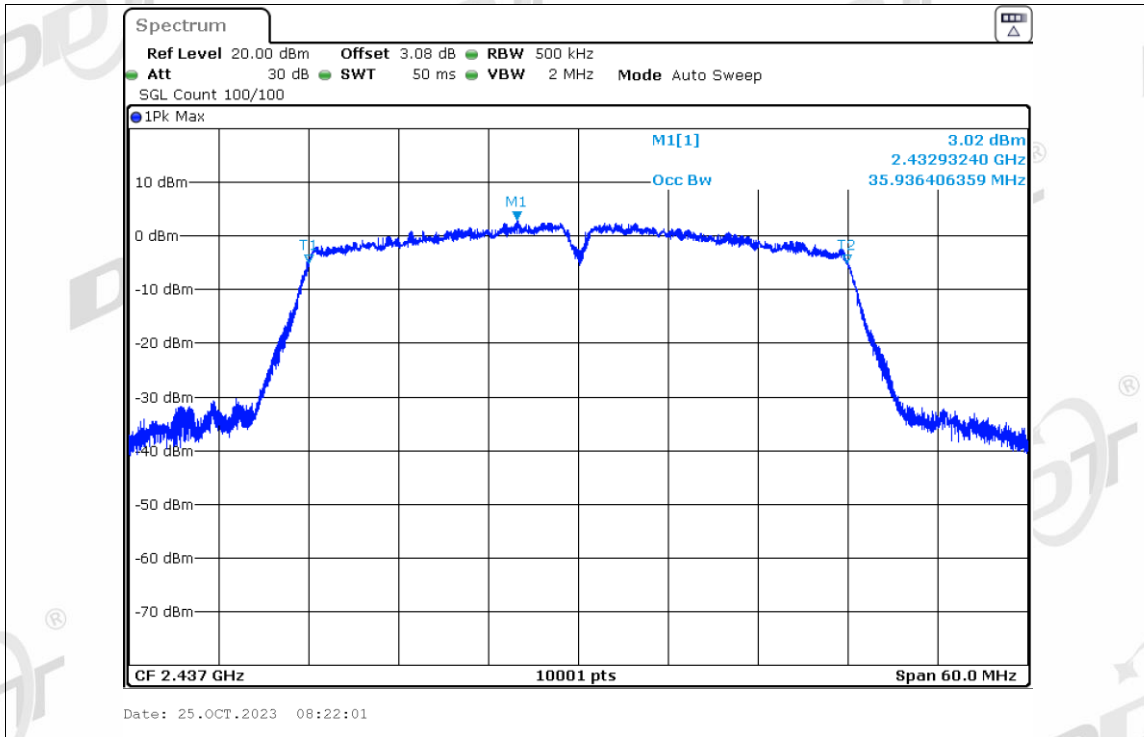
OBW NVNT n40 2422MHz Ant1



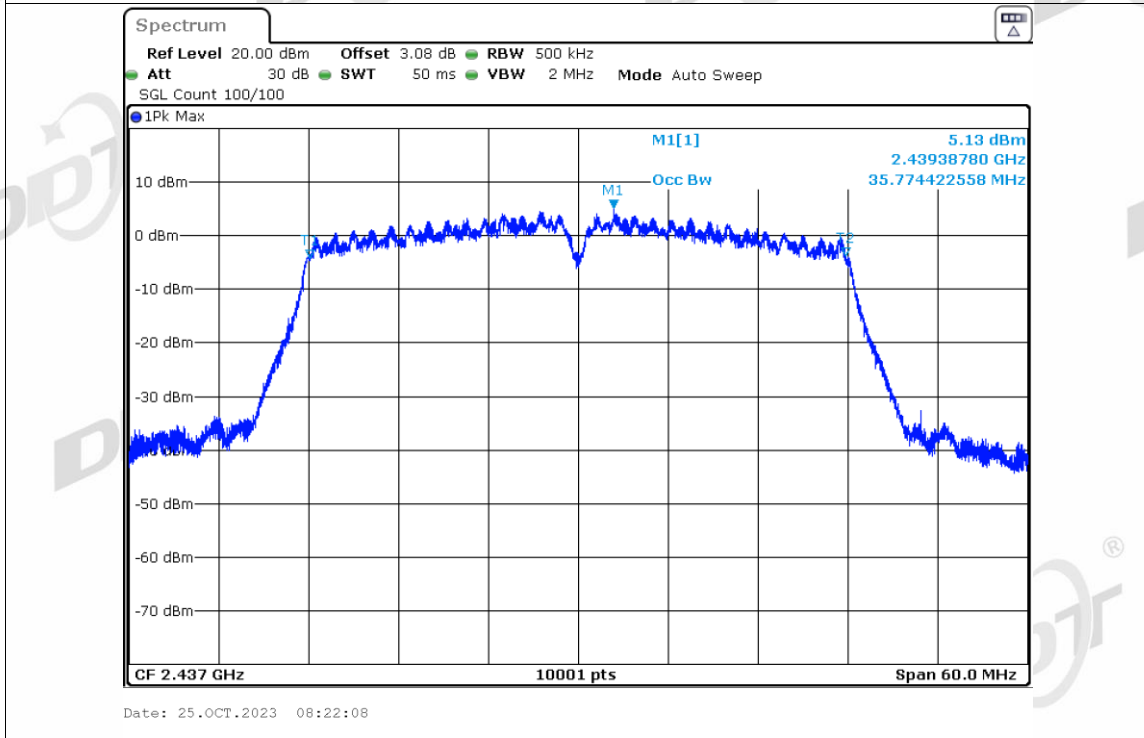
OBW NVNT n40 2422MHz Ant2



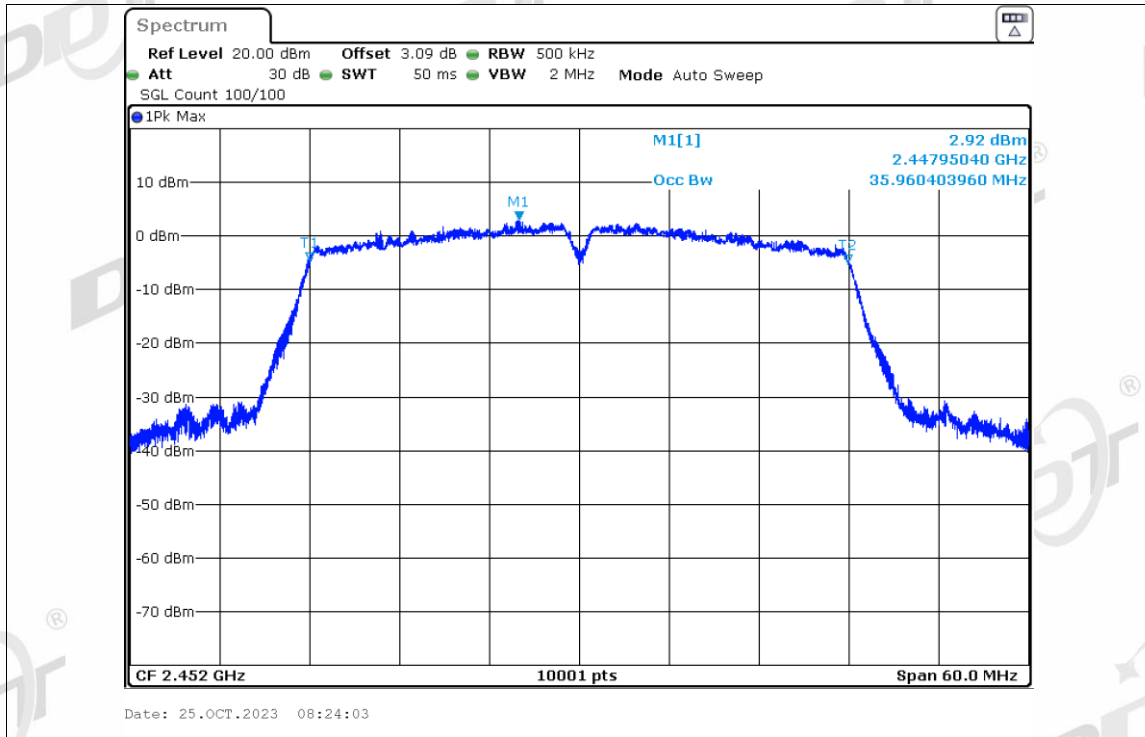
OBW NVNT n40 2437MHz Ant1



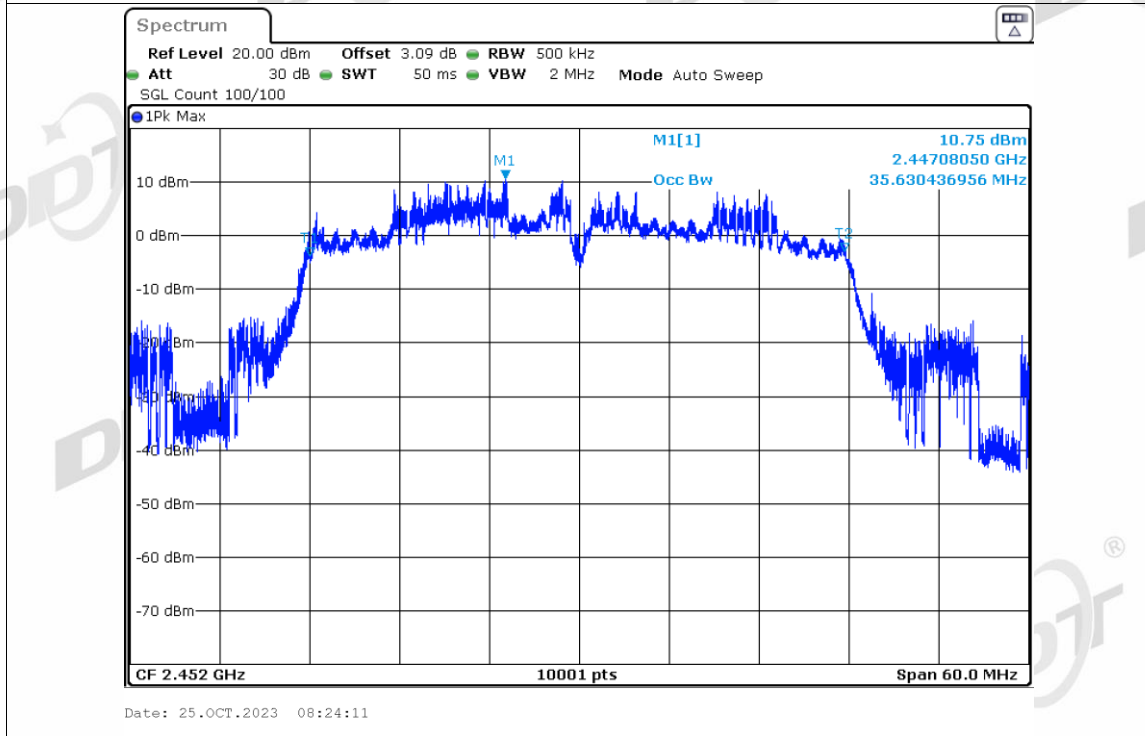
OBW NVNT n40 2437MHz Ant2



OBW NVNT n40 2452MHz Ant1



OBW NVNT n40 2452MHz Ant2



## 5. Maximum PK Conducted Output Power

### 5.1. Block diagram of test setup

Same as section 4.1

### 5.2. Limits

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. And according to FCC 47 CFR Section 15.247 (c), Systems operating in the 2400–2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

### 5.3. Test procedure

Connect each EUT's antenna output to power sensor by RF cable and attenuator  
Measure the Maximum output power of antenna port by power sensor.

## 5.4. Test result

### PK Power

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Verdict
11B	2412	Ant1	20.51	30	27.41	36	Pass
11B	2412	Ant2	21.69	30	27.93	36	Pass
11B	2412	SUM	24.15	30	31.05	36	Pass
11B	2437	Ant1	20.70	30	27.60	36	Pass
11B	2437	Ant2	20.56	30	26.80	36	Pass
11B	2437	SUM	23.64	30	30.54	36	Pass
11B	2462	Ant1	20.88	30	27.78	36	Pass
11B	2462	Ant2	21.37	30	27.61	36	Pass
11B	2462	SUM	24.14	30	31.04	36	Pass
11G	2412	Ant1	21.52	30	28.42	36	Pass
11G	2412	Ant2	21.76	30	28.00	36	Pass
11G	2412	SUM	24.65	30	31.55	36	Pass
11G	2437	Ant1	21.65	30	28.55	36	Pass
11G	2437	Ant2	21.51	30	27.75	36	Pass
11G	2437	SUM	24.59	30	31.49	36	Pass
11G	2462	Ant1	21.74	30	28.64	36	Pass
11G	2462	Ant2	21.72	30	27.96	36	Pass
11G	2462	SUM	24.74	30	31.64	36	Pass
11N20	2412	Ant1	21.41	30	28.31	36	Pass
11N20	2412	Ant2	21.68	30	27.92	36	Pass
11N20	2412	SUM	24.56	30	31.46	36	Pass
11N20	2437	Ant1	21.50	30	28.40	36	Pass
11N20	2437	Ant2	21.45	30	27.69	36	Pass
11N20	2437	SUM	24.49	30	31.39	36	Pass
11N20	2462	Ant1	21.76	30	28.66	36	Pass
11N20	2462	Ant2	21.72	30	27.96	36	Pass
11N20	2462	SUM	24.75	30	31.65	36	Pass
11N40	2422	Ant1	19.95	30	26.85	36	Pass
11N40	2422	Ant2	20.38	30	26.62	36	Pass
11N40	2422	SUM	23.18	30	30.08	36	Pass
11N40	2437	Ant1	19.94	30	26.84	36	Pass
11N40	2437	Ant2	19.86	30	26.10	36	Pass
11N40	2437	SUM	22.91	30	29.81	36	Pass
11N40	2452	Ant1	20.03	30	26.93	36	Pass
11N40	2452	Ant2	20.00	30	26.24	36	Pass
11N40	2452	SUM	23.01	30	29.93	36	Pass

## 6. Power Spectral Density

### 6.1. Block diagram of test setup

Same as section 4.1

### 6.2. Limits

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

### 6.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

(2) Set the spectrum analyzer as follows:

Center frequency	DTS Channel center frequency
RBW:	$3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$
VBW:	$\geq 3\text{RBW}$
Span	1.5 times the DTS bandwidth
Detector Mode:	peak
Sweep time:	auto
Trace mode	Max hold

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude level within the RBW.

(4) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

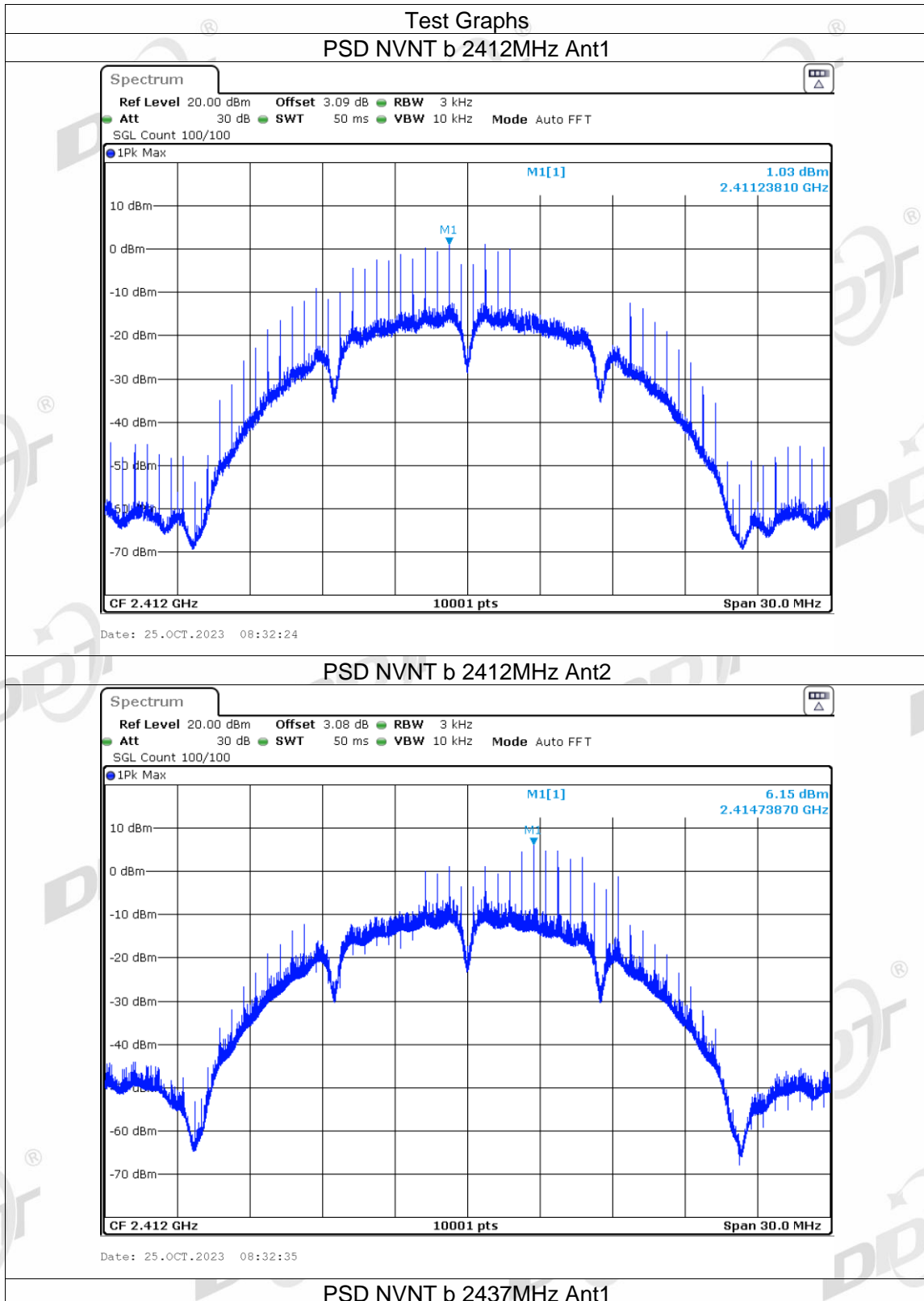


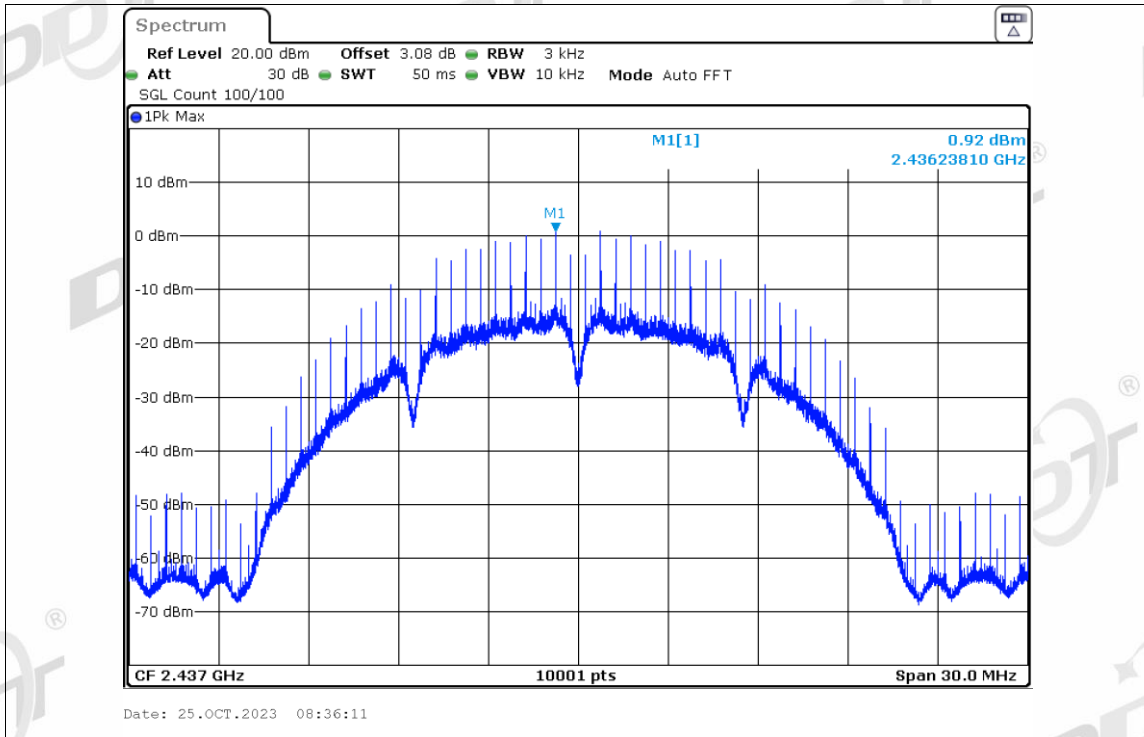
## 6.4. Test result

Test Mode	Test Channel	Ant	PSD (dBm/3kHz)	Limit(dBm/3kHz)	Verdict
b	2412	Ant1	1.03	8.00	Pass
b	2412	Ant2	6.15	8.00	Pass
b	2412	Sum	7.31	8.00	Pass
b	2437	Ant1	0.92	8.00	Pass
b	2437	Ant2	0.54	8.00	Pass
b	2437	Sum	3.74	8.00	Pass
b	2462	Ant1	-0.95	8.00	Pass
b	2462	Ant2	1.24	8.00	Pass
b	2462	Sum	3.29	8.00	Pass
g	2412	Ant1	-11.5	8.00	Pass
g	2412	Ant2	-11.46	8.00	Pass
g	2412	Sum	-8.47	8.00	Pass
g	2437	Ant1	-11.12	8.00	Pass
g	2437	Ant2	-12.39	8.00	Pass
g	2437	Sum	-8.7	8.00	Pass
g	2462	Ant1	-11.36	8.00	Pass
g	2462	Ant2	-11.33	8.00	Pass
g	2462	Sum	-8.33	8.00	Pass
n20	2412	Ant1	-10.41	8.00	Pass
n20	2412	Ant2	-11.52	8.00	Pass
n20	2412	Sum	-7.92	8.00	Pass
n20	2437	Ant1	-10.75	8.00	Pass
n20	2437	Ant2	-12.14	8.00	Pass
n20	2437	Sum	-8.38	8.00	Pass
n20	2462	Ant1	-10.76	8.00	Pass
n20	2462	Ant2	-11.35	8.00	Pass
n20	2462	Sum	-8.03	8.00	Pass
n40	2422	Ant1	-16.03	8.00	Pass
n40	2422	Ant2	-15.43	8.00	Pass
n40	2422	Sum	-12.71	8.00	Pass
n40	2437	Ant1	-16.82	8.00	Pass
n40	2437	Ant2	-15.28	8.00	Pass
n40	2437	Sum	-12.97	8.00	Pass

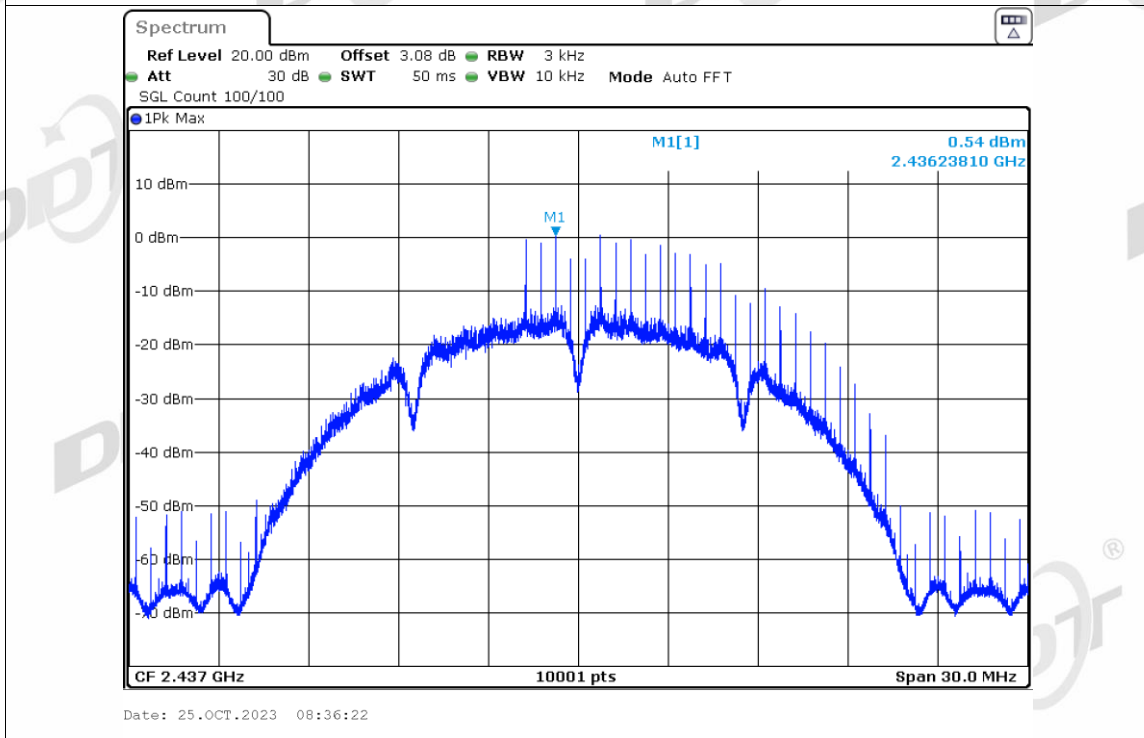
n40	2452	Ant1	-15.68	8.00	Pass
n40	2452	Ant2	-11.52	8.00	Pass
n40	2452	Sum	-10.11	8.00	Pass

6.5. original test data

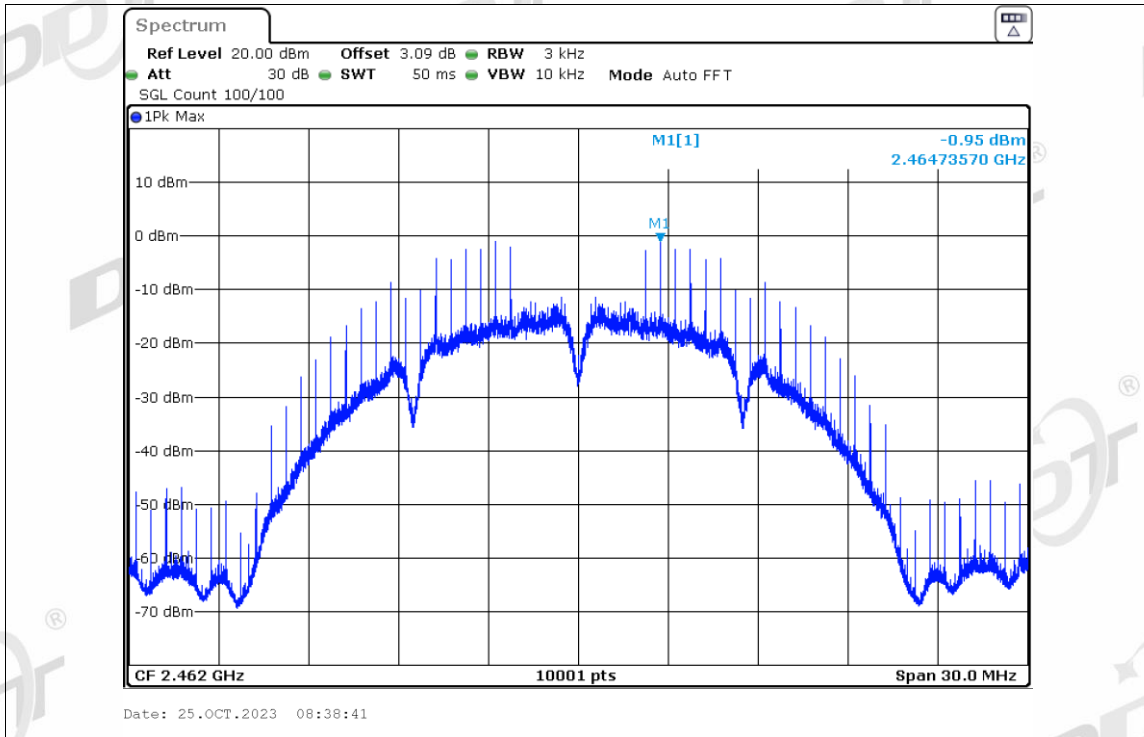




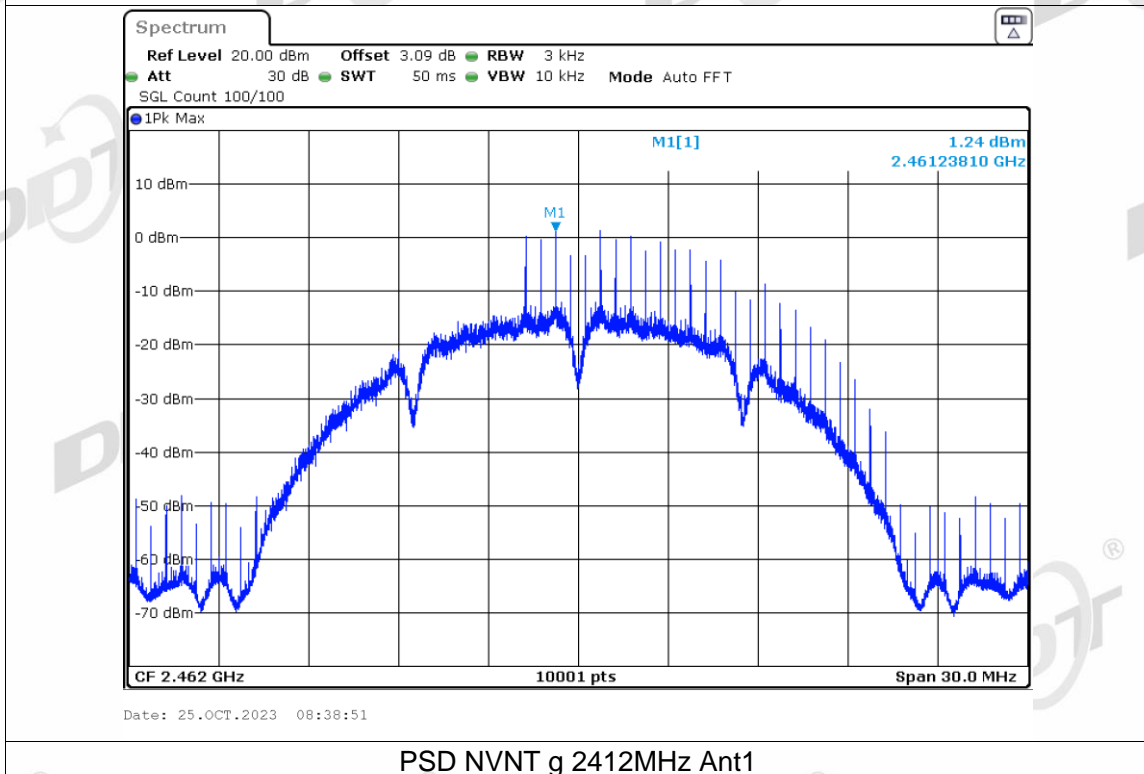
PSD NVNT b 2437MHz Ant2



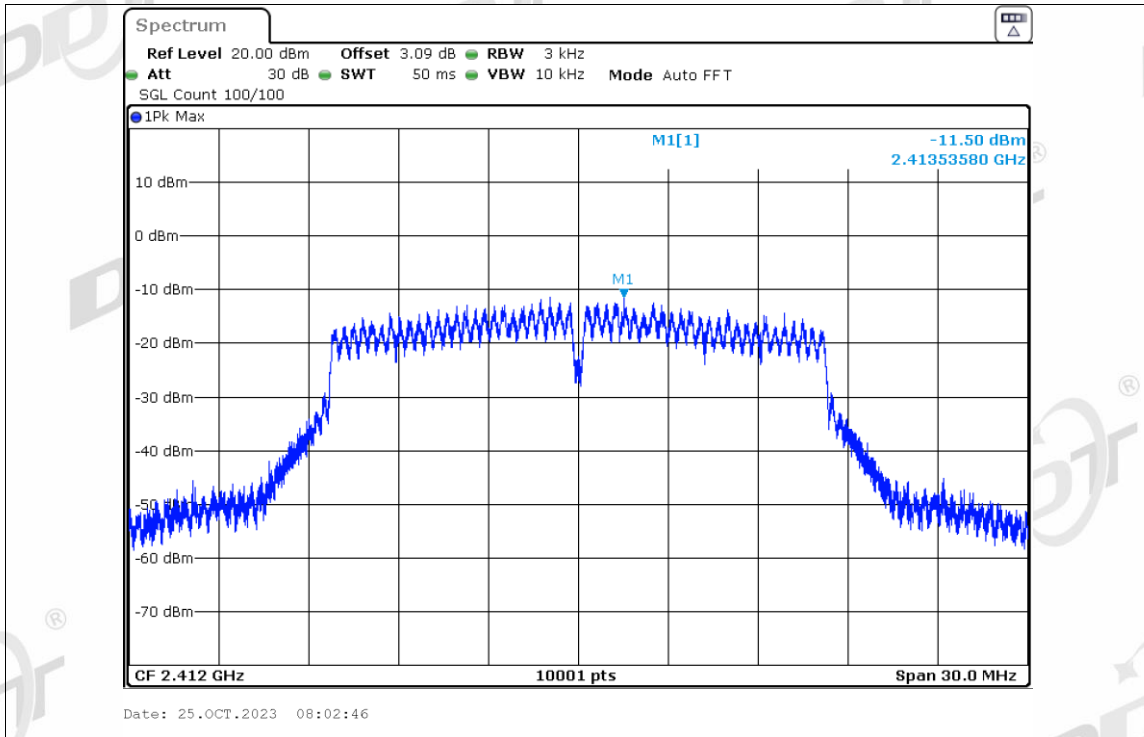
PSD NVNT b 2462MHz Ant1



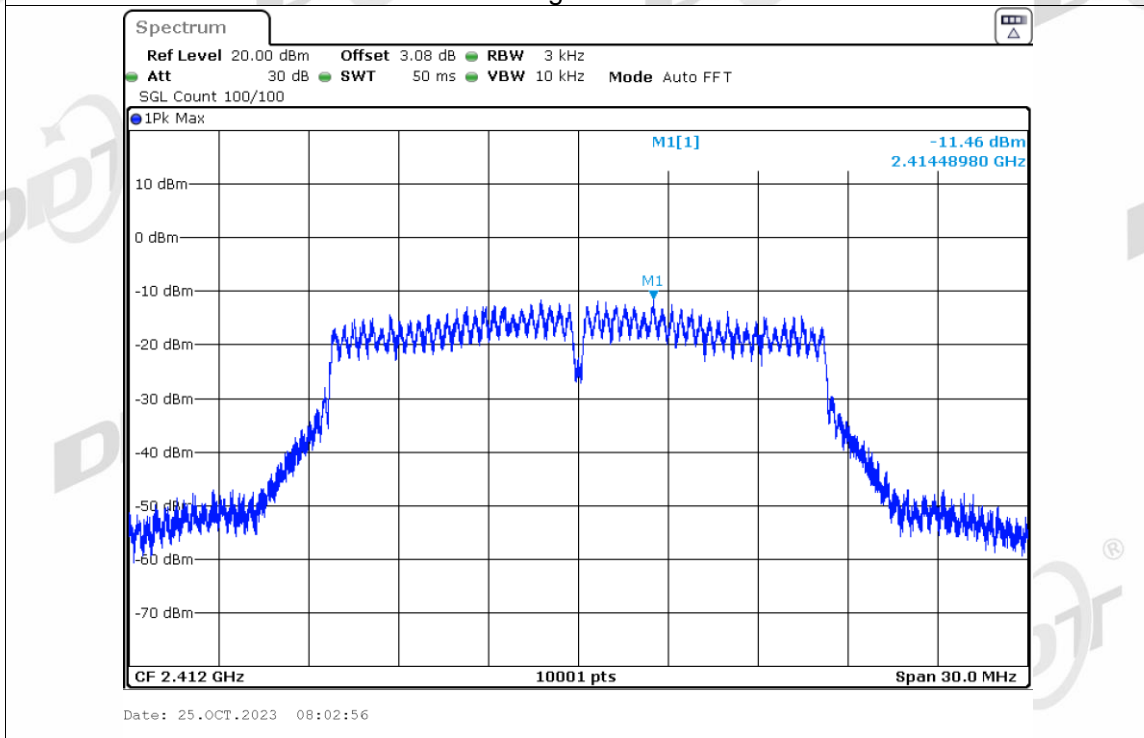
PSD NVNT b 2462MHz Ant2



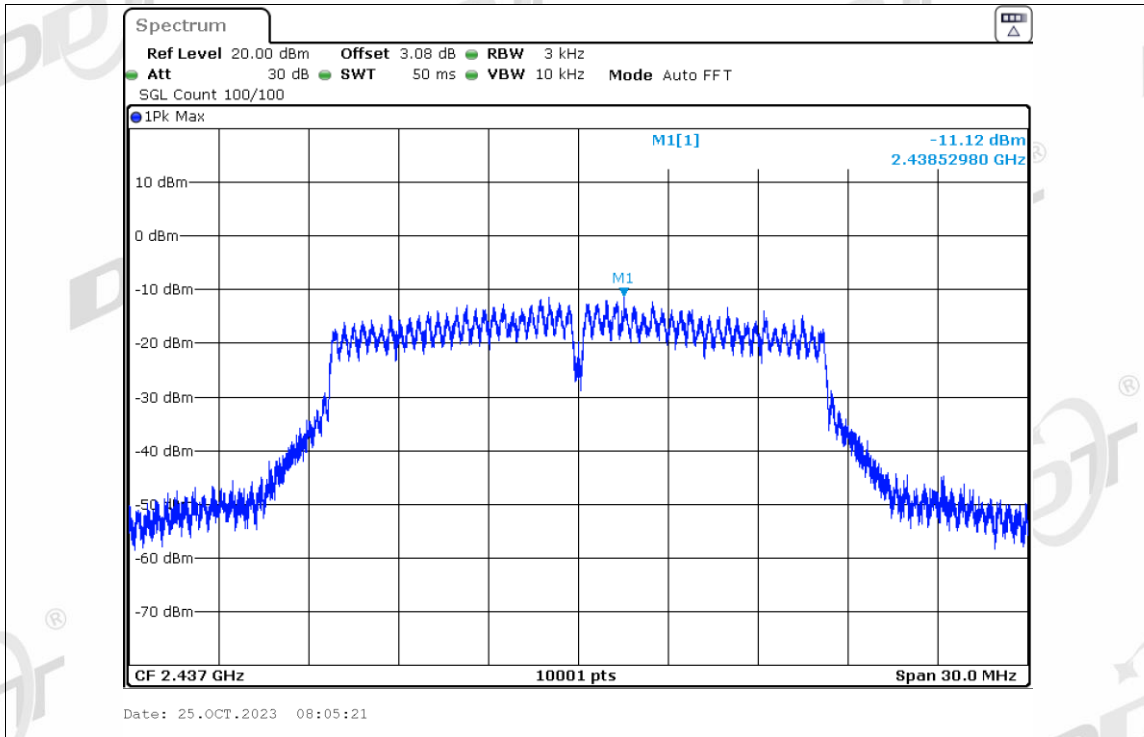
PSD NVNT g 2412MHz Ant1



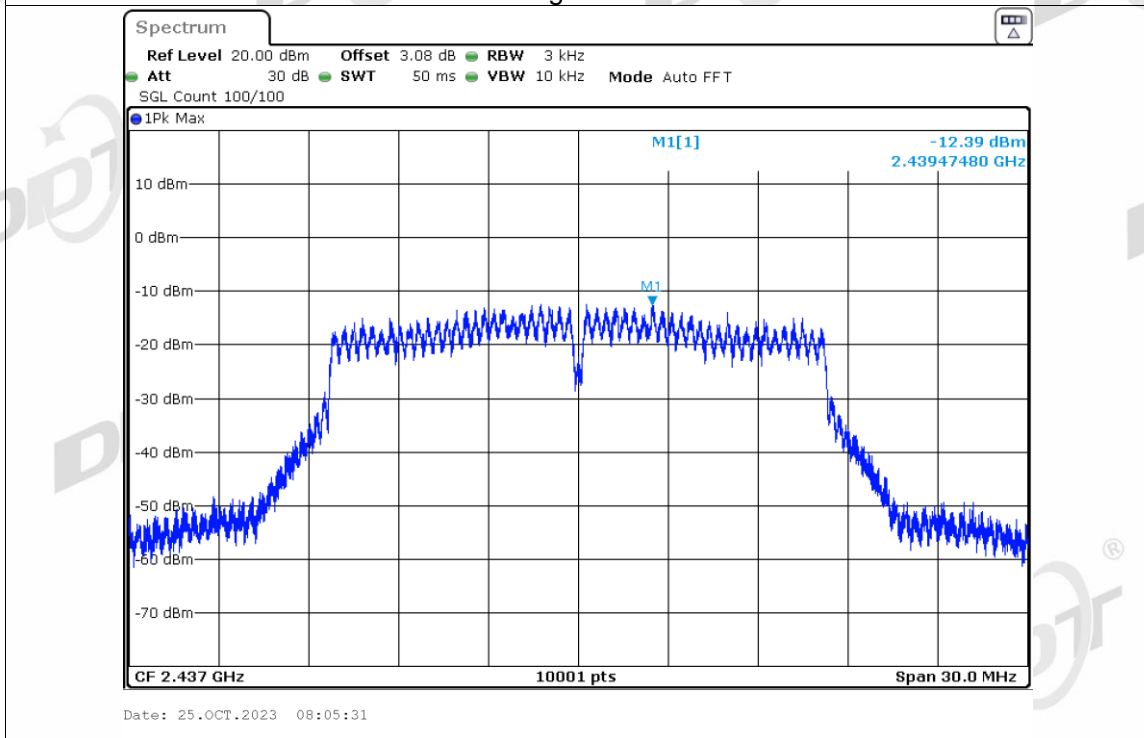
PSD NVNT g 2412MHz Ant2



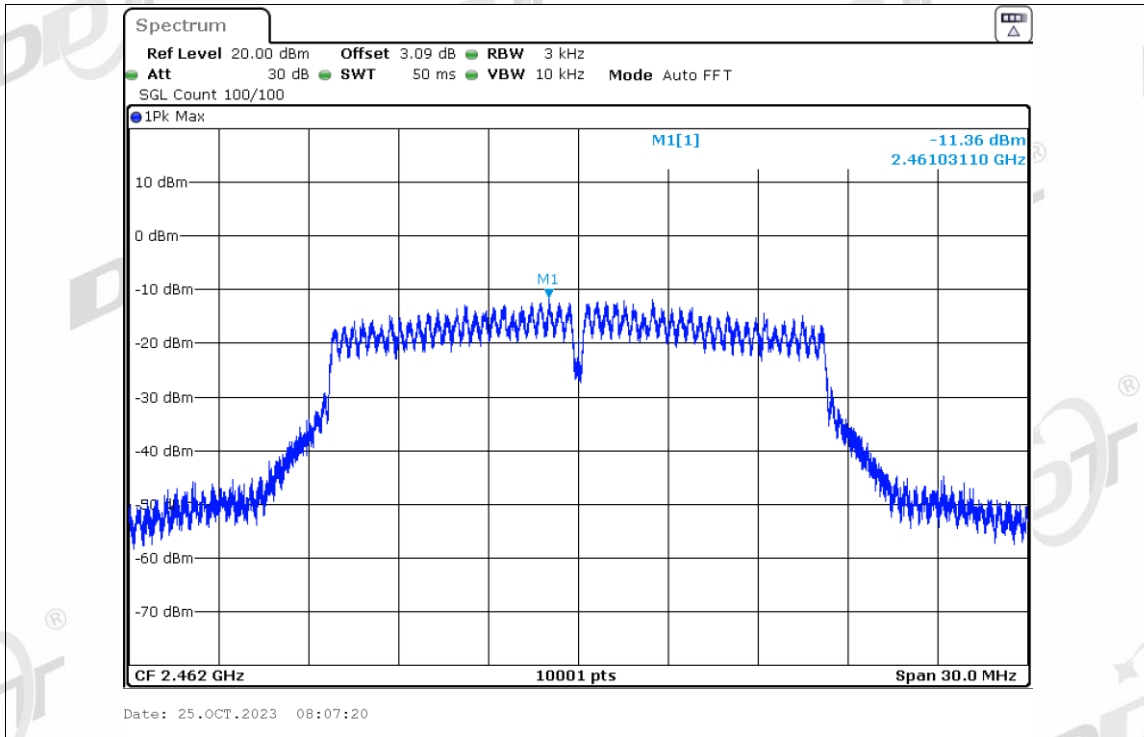
PSD NVNT g 2437MHz Ant1



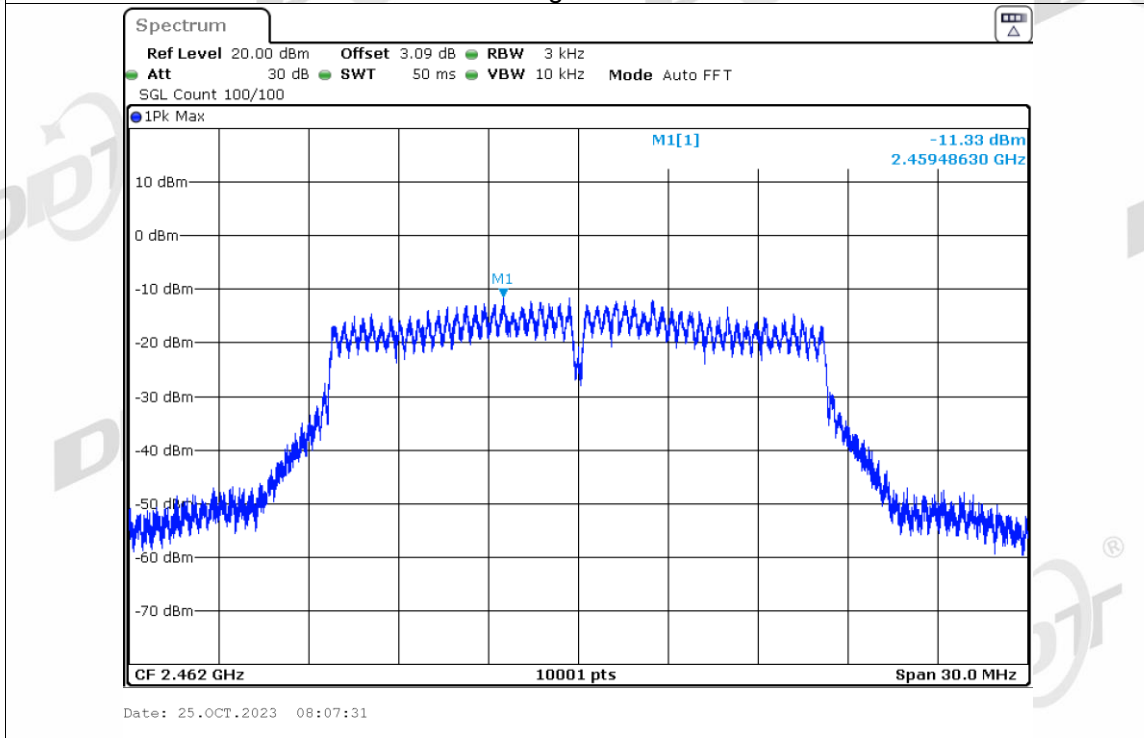
PSD NVNT g 2437MHz Ant2



PSD NVNT g 2462MHz Ant1

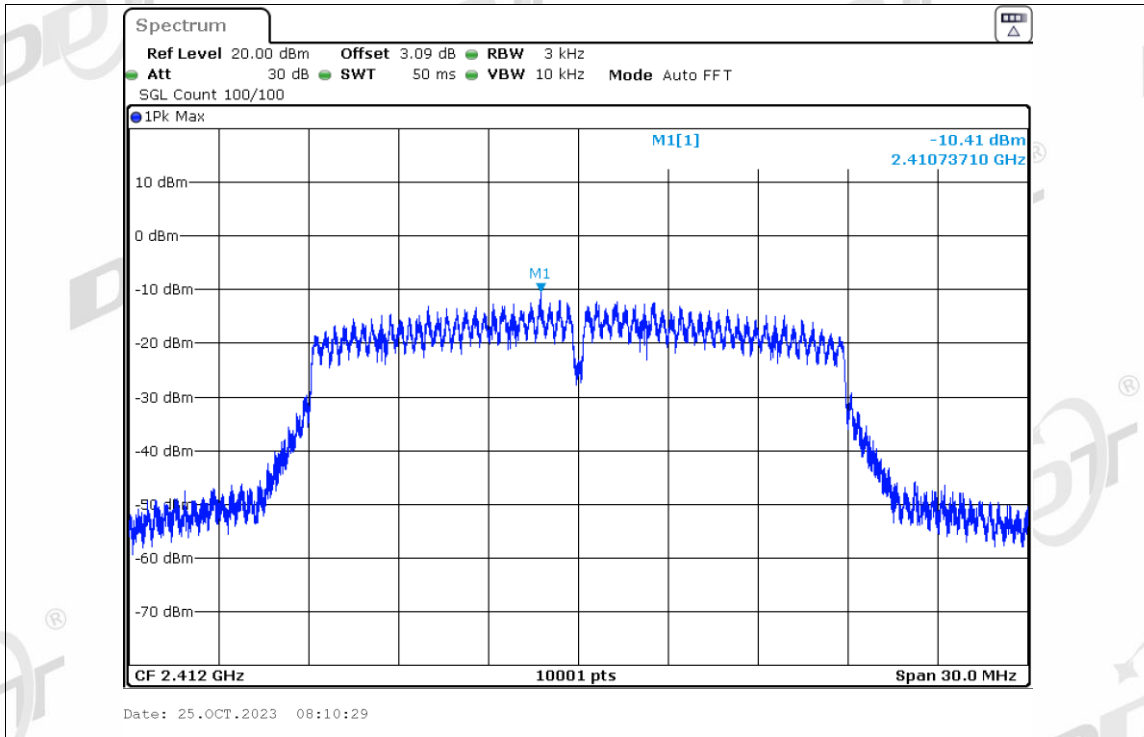


PSD NVNT g 2462MHz Ant2

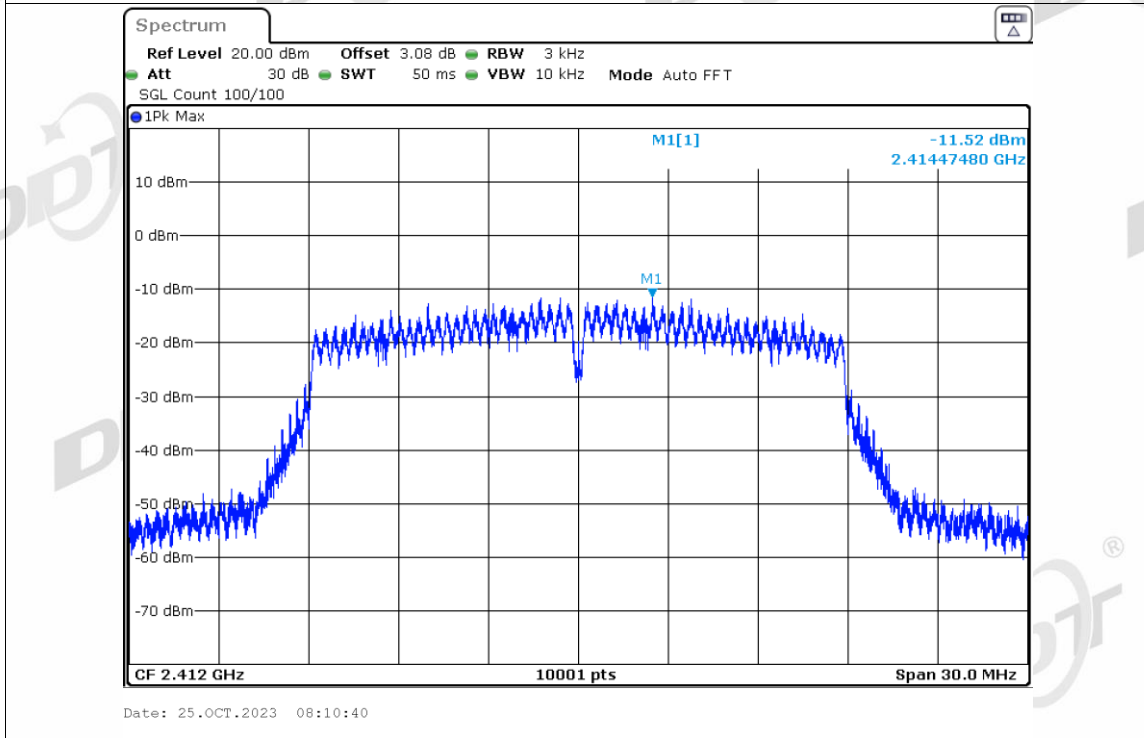


PSD NVNT n20 2412MHz Ant1

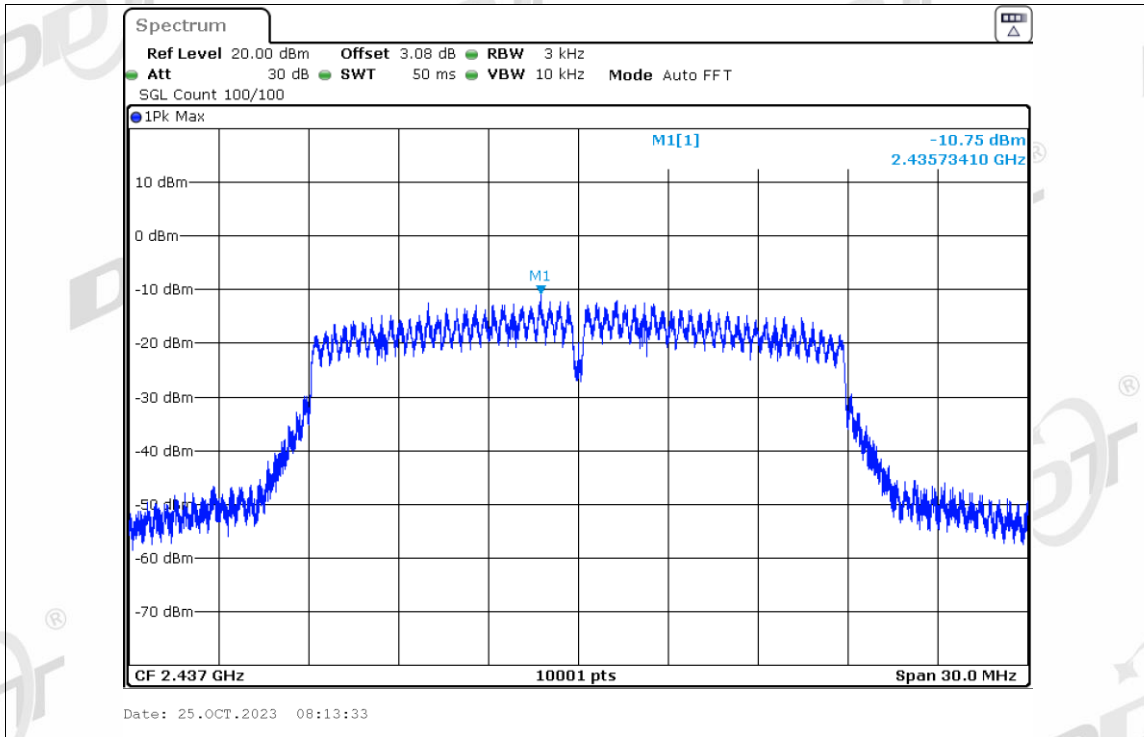




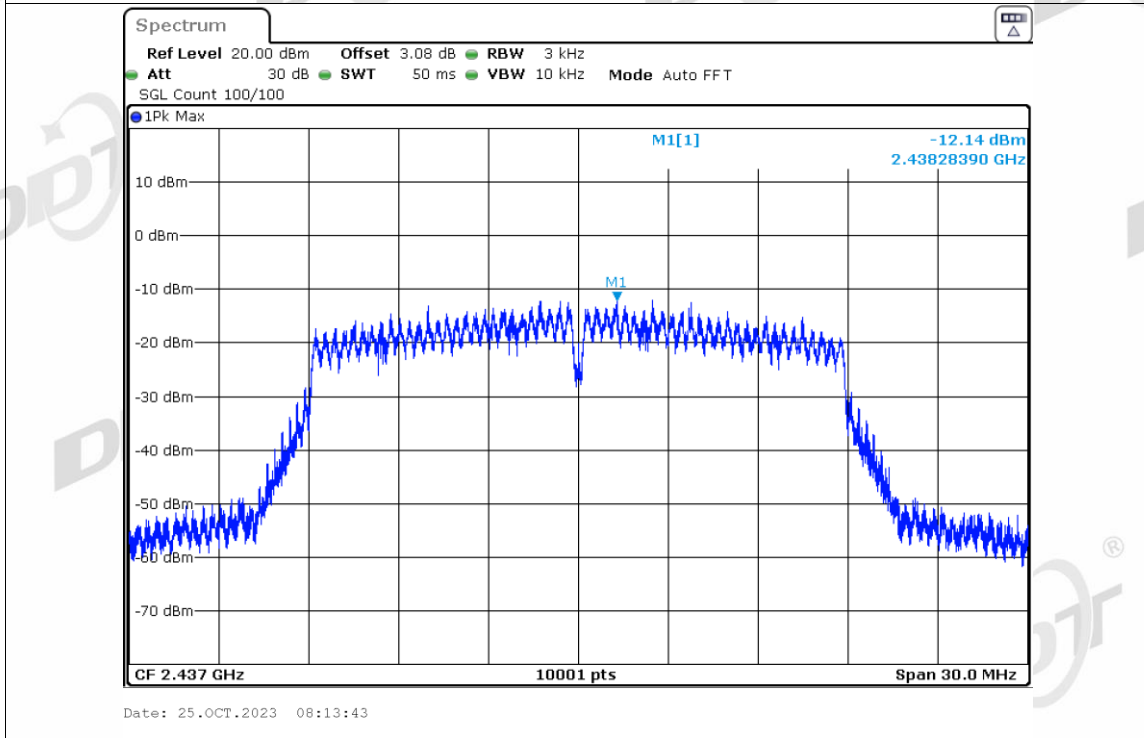
PSD NVNT n20 2412MHz Ant2



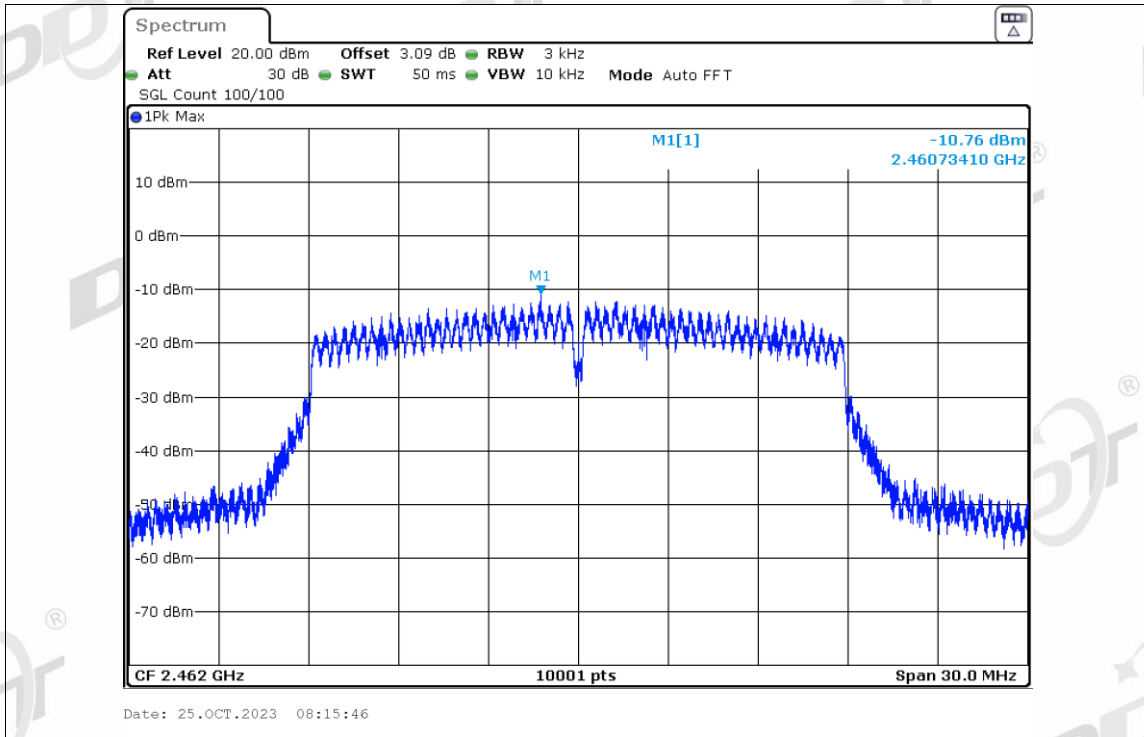
PSD NVNT n20 2437MHz Ant1



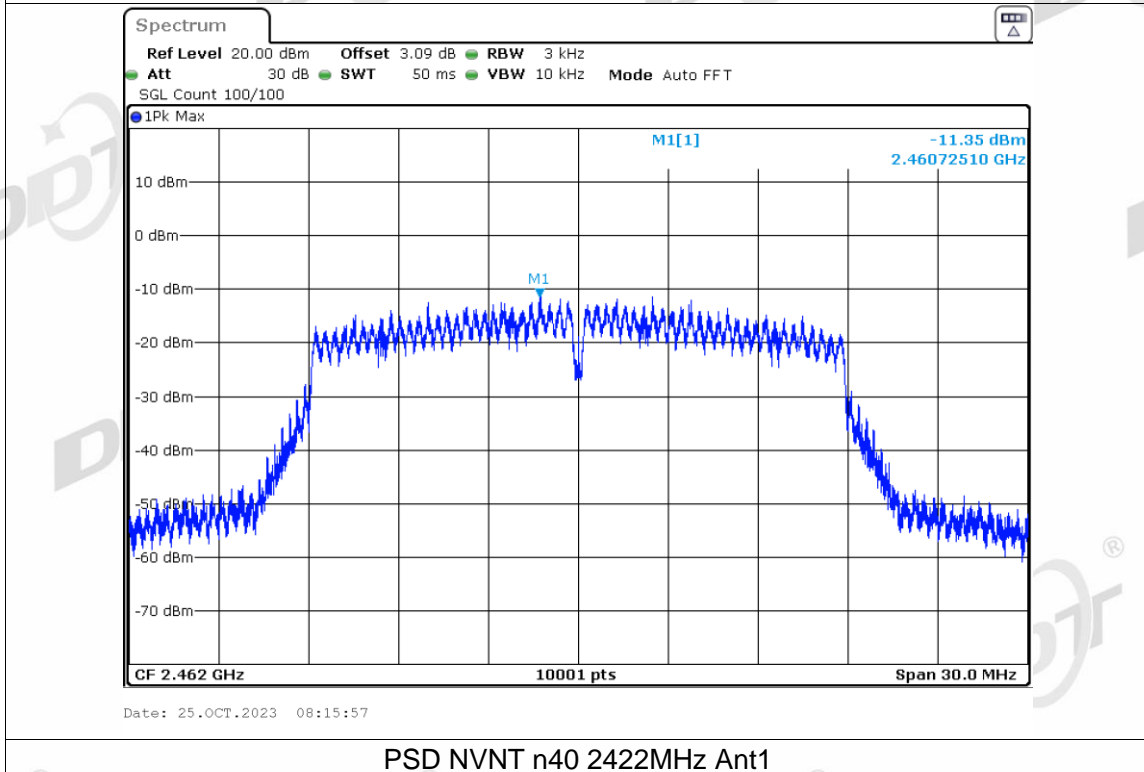
PSD NVNT n20 2437MHz Ant2



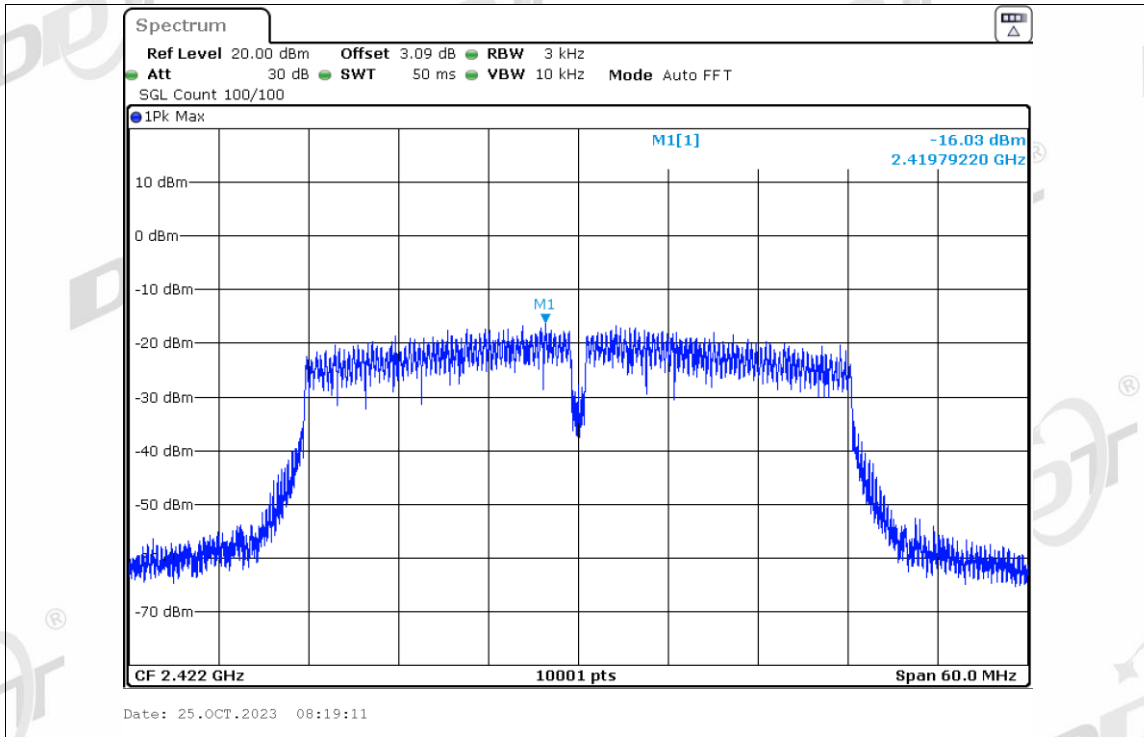
PSD NVNT n20 2462MHz Ant1



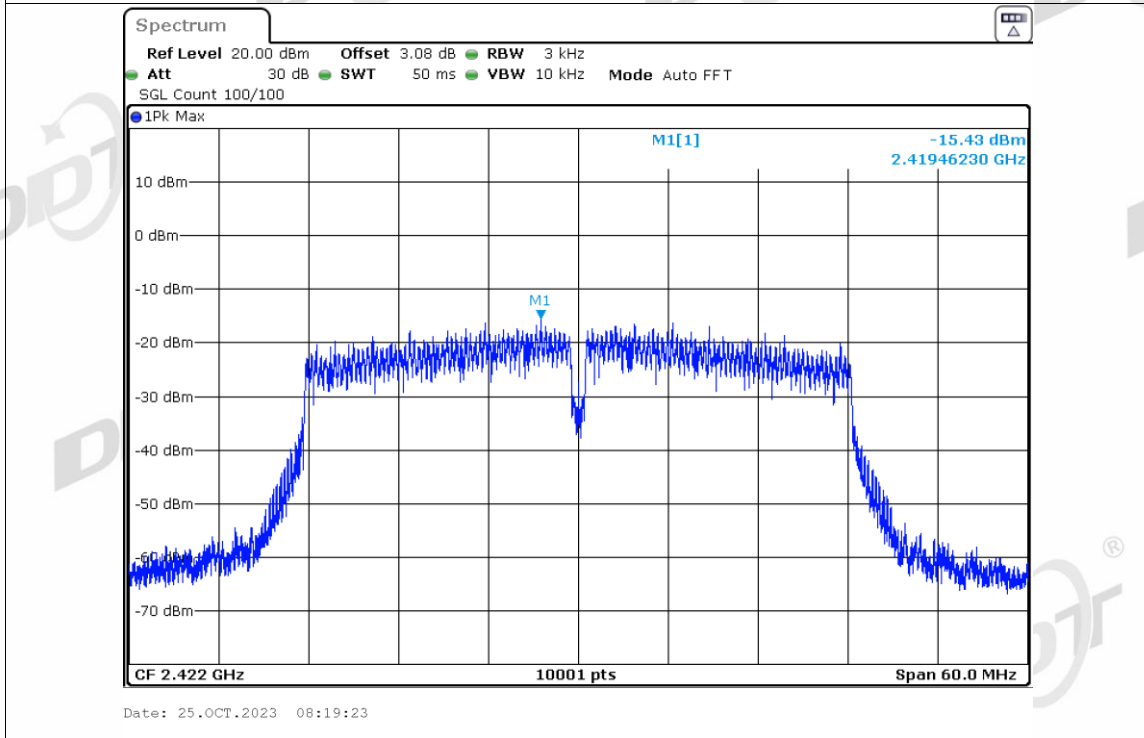
PSD NVNT n20 2462MHz Ant2



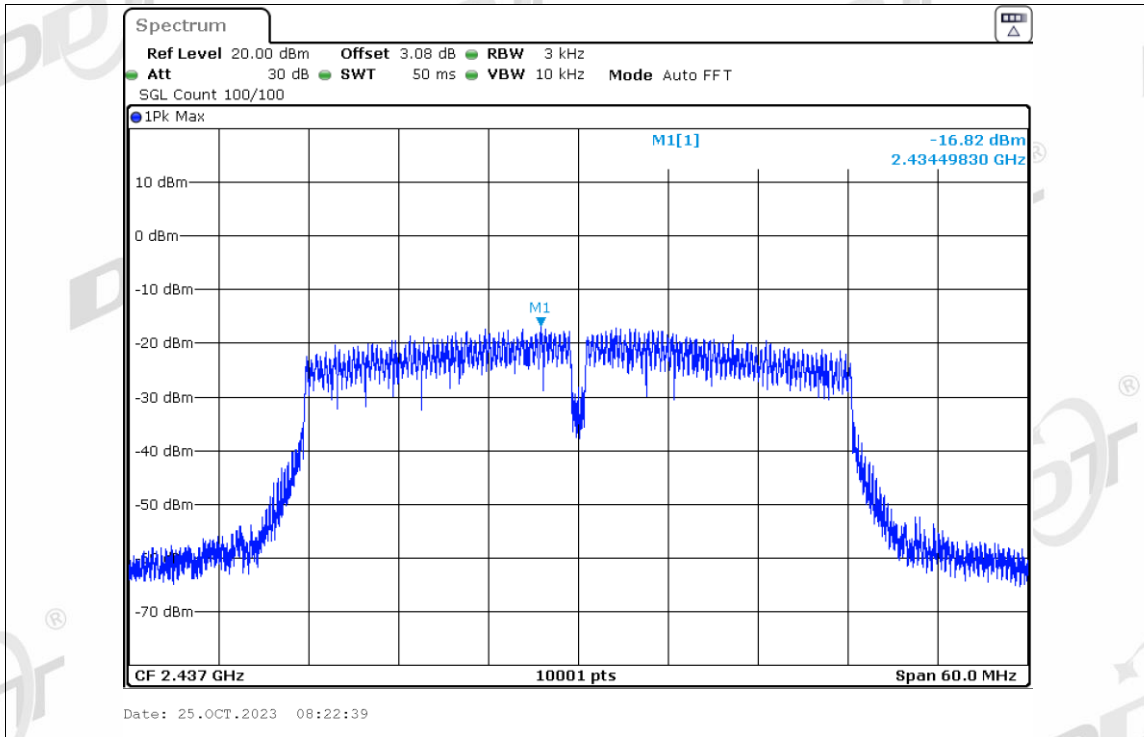
PSD NVNT n40 2422MHz Ant1



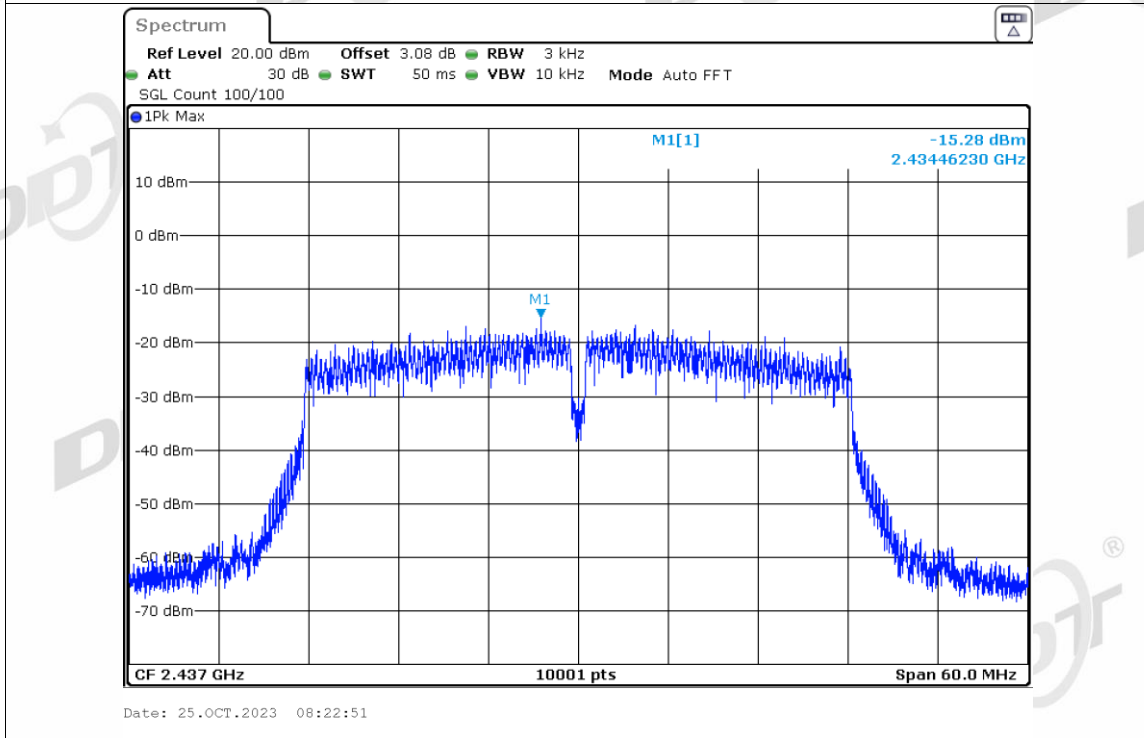
PSD NVNT n40 2422MHz Ant2



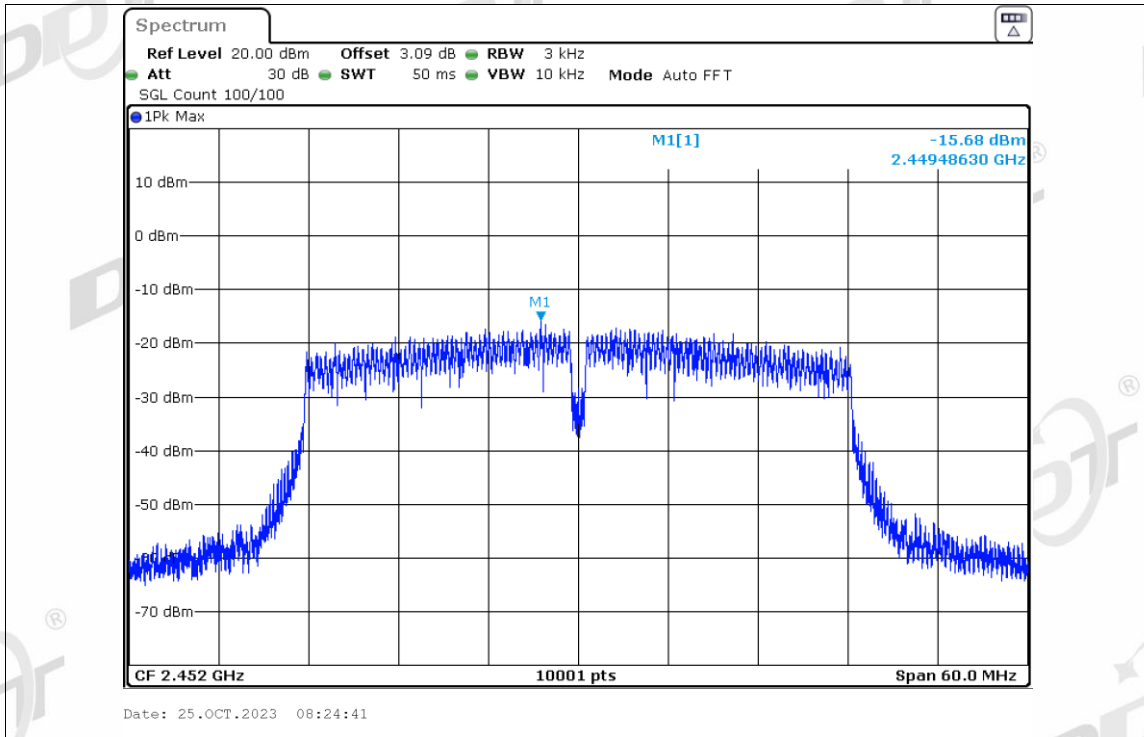
PSD NVNT n40 2437MHz Ant1



PSD NVNT n40 2437MHz Ant2



PSD NVNT n40 2452MHz Ant1



PSD NVNT n40 2452MHz Ant2

