



## FCC TEST REPORT

**FCC ID: 2AJUN-ES02PCIE**

On Behalf of

Silverstone Technology Co., Ltd.

2.4GHz wireless computer power and reset remote switch

Model No.: SST-ES02-PCle

Prepared for : Silverstone Technology Co., Ltd.  
Address : 12F., No. 168, Jiankang Rd., Zhonghe Dist., New Taipei City 235,  
Taiwan

Prepared By : Shenzhen Alpha Product Testing Co., Ltd.  
Address : Building i, No.2, Lixin Road, Fuyong Street, Bao'an District,  
518103, Shenzhen, Guangdong, China

Report Number : A2408008-C02-R04  
Date of Receipt : August 16, 2024  
Date of Test : August 16, 2024 - September 19, 2024  
Date of Report : September 19, 2024  
Version Number : V0  
**Test Result : Pass**

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## TABLE OF CONTENTS

<b>Description</b>	<b>Page</b>
<b>1. Summary of Standards and Results .....</b>	<b>6</b>
1.1. Description of Standards and Results .....	6
<b>2. General Information .....</b>	<b>7</b>
2.1. Description of Device (EUT) .....	7
2.2. Accessories of Device (EUT) .....	8
2.3. Tested Supporting System Details .....	8
2.4. Block Diagram of Connection Between EUT and Simulators .....	8
2.5. Test Mode Description .....	8
2.6. Test Conditions .....	9
2.7. Test Facility .....	9
2.8. Measurement Uncertainty .....	9
2.9. Test Equipment List .....	10
<b>3. Power Line Conducted Emission Test .....</b>	<b>13</b>
3.1. Block Diagram of Test Setup .....	13
3.2. Test Limits .....	13
3.3. Configuration of EUT on Test .....	14
3.4. Operating Condition of EUT .....	14
3.5. Test Procedure .....	14
3.6. Test Results .....	14
<b>4. Radiated Emission Test .....</b>	<b>15</b>
4.1. Block Diagram of Test Setup .....	15
4.2. Test Limit .....	16
4.3. Configuration of EUT on Test .....	17
4.4. Operating Condition of EUT .....	17
4.5. Test Procedure .....	17
4.6. Test Results .....	18
<b>5. Band Edge Test .....</b>	<b>23</b>
5.1. Block Diagram of Test Setup .....	23
5.2. Test Limit .....	23
5.3. Configuration of EUT on Test .....	24
5.4. Operating Condition of EUT .....	24
5.5. Test Procedure .....	24
5.6. Test Results .....	26
<b>6. Occupied Bandwidth Test .....</b>	<b>29</b>
6.1. Block Diagram of Test Setup .....	29
6.2. Test Limit .....	29
6.3. Test Procedure .....	29
6.4. Test Results .....	29
<b>7. Antenna Requirement .....</b>	<b>31</b>
7.1. Standard Requirement .....	31
7.2. Antenna Connected Construction .....	31

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7.3. Results.....	31
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## TEST REPORT DECLARATION

Applicant : Silverstone Technology Co., Ltd.  
Address : 12F., No. 168, Jiankang Rd., Zhonghe Dist., New Taipei City 235, Taiwan  
Manufacturer : Silverstone Technology Co., Ltd.  
Address : 12F., No. 168, Jiankang Rd., Zhonghe Dist., New Taipei City 235, Taiwan  
EUT Description : 2.4GHz wireless computer power and reset remote switch  
(A) Model No. : SST-ES02-PCle  
(B) Trademark :  **SILVERSTONE**

Measurement Standard Used:

**FCC Rules and Regulations Part 15 Subpart C Section 15.249**

**ANSI C63.10:2013**

The device described above is tested by Shenzhen Alpha Product Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen Alpha Product Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the FCC Part 15 requirements.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Alpha Product Testing Co., Ltd.

Tested by (name + signature).....: Yannis Wen  
Project Engineer

*Yannis Wen*

Approved by (name + signature).....: Jack Xu  
Project Manager

*Jack Xu*

Date of issue.....: September 9, 2024

## Revision History

Revision	Issue Date	Revisions	Revised By
V0	September 9, 2024	Initial released Issue	Yannis Wen

## 1. Summary of Standards and Results

### 1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

EMISSION			
Description of Test Item	Test Requirement	Standard Paragraph	Results
Power Line Conducted Emission Test	FCC Part 15	Section 15.207	N/A
Spurious Emission Test	FCC Part 15	Section 15.249&15.209	P
Occupied bandwidth	FCC Part 15	Section 15. 249	P
Band edge Requirement	FCC Part 15	Section 15.249	P
Antenna Requirement	FCC Part 15	Section 15.203	P
Field strength of Fundamental	FCC Part 15	Section 15.249(a)	P
Note: 1. P is an abbreviation for Pass. 2. F is an abbreviation for Fail. 3. N/A is an abbreviation for Not Applicable.			

## 2. General Information

### 2.1. Description of Device (EUT)

EUT Name : 2.4GHz wireless computer power and reset remote switch

Model No. : SST-ES02-PCle

DIFF. : N/A

Power supply : DC 3V from Button battery.

#### 2.4G Technology

Operation frequency : 2402MHz

Channel No. : 1 Channel

Modulation type : GFSK

Antenna Type : Internal IFA Antenna, max gain 0.45dBi  
(Antenna information is provided by applicant.)

Hardware version : V1.0

Software version : V1.0

Intend use : Residential, commercial and light industrial environment  
environment

## 2.2. Accessories of Device (EUT)

Accessories1 : /  
 Manufacturer : /  
 Model : /  
 Power supply : /

## 2.3. Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number	Certification or SDOC
1.	--	--	--	--	--

## 2.4. Block Diagram of Connection Between EUT and Simulators



## 2.5. Test Mode Description

Test mode:

Mode	Channel	Frequency (MHz)
GFSK	Low :CH1	2402
<b>Note:</b> <ol style="list-style-type: none"> <li>1. The test was used to control EUT work in Continuous TX mode, and select test channel, wireless mode</li> <li>2. The EUT has been tested as an independent unit. And Continual Transmitting in maximum power.</li> <li>3. New battery is used during all tests.</li> <li>4. For the relevant Conducted Measurement, the temporary antenna connector is used during the measurement. Antenna Connector Impedance: 50Ω, Cable Loss: 1.0 dB</li> </ol>		



## 2.6. Test Conditions

Temperature range	21-25°C
Humidity range	40-75%
Pressure range	86-106kPa

## 2.7. Test Facility

Shenzhen Alpha Product Testing Co., Ltd.

Building i, No.2, Lixin Road, Fuyong Street, Bao'an District,  
518103, Shenzhen, Guangdong, China

June 21, 2018 File on Federal Communication Commission

Registration Number: 293961

## 2.8. Measurement Uncertainty

(95% confidence levels, k=2)

Item	MU	Remark
Uncertainty for Conducted Emission Test	1.63dB	
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.74 dB	Polarize: V
	3.76 dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	3.77 dB	Polarize: H
	3.80 dB	Polarize: V
Uncertainty for Radiation Emission test in 3m chamber (18GHz to 40GHz)	4.30 dB	Polarize: H
	4.31 dB	Polarize: V
Uncertainty for radio frequency	5.06×10 <sup>-8</sup> GHz	
Uncertainty for conducted RF Power	0.40dB	

## 2.9. Test Equipment List

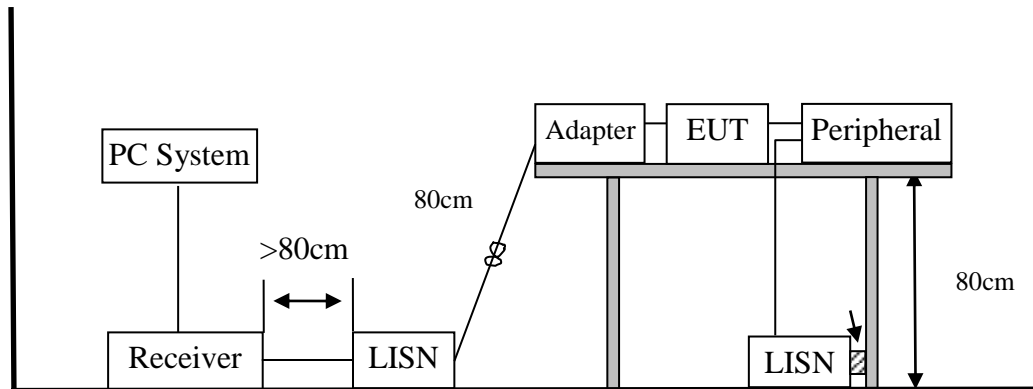
Equipment	Manufacturer	Model No.	Firmware version	Serial No.	Last Cal.	Cal. Due day
Test Receiver	ROHDE&SCHWARZ	ESCI	4.42 SP1	101165	2024.08.08	2025.08.07
Test Receiver	ROHDE&SCHWARZ	ESR	2.28 SP1	1316.3003K03-102082-Wa	2024.08.08	2025.08.07
Loop Antenna	SCHWARZBECK	FMZB 1519B	/	00128	2023.08.19	2025.08.18
Bilog Antenna	Schwarzbeck	VULB 9168	/	9168-627	2023.08.28	2025.08.27
Spectrum analyzer	SCHWARZBECK	FSV40-N	2.3	102137	2024.08.08	2025.08.07
Spectrum analyzer	SCHWARZBECK	FSU	4.71.SP5	200002	2024.08.08	2025.08.07
Amplifier	HP	HP8347A	/	2834A00455	2024.08.08	2025.08.07
Amplifier	Agilent	8449B	/	3008A02664	2024.08.08	2025.08.07
Horn Antenna	Schwarzbeck	BBHA 9120 D	/	2106	2023.08.19	2025.08.18
L.I.S.N.#1	Schwarzbeck	NSLK8126	/	8126-466	2024.08.08	2025.08.07
L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	/	101043	2024.08.08	2025.08.07
Pulse Limiter	Schwarzbeck	9516F	/	9618	2024.08.08	2025.08.07
Fixed Coaxial Attenuator(6dB Attenuation)	CD	ATT-0675	/	120540086	2024.08.08	2025.08.07
Coupling-Decoupling Network (CDN)	CD	CDN M2/M3	/	2302	2024.08.08	2025.08.07
Electromagnetic Injection Clamp (EMC-Clamp)	CD	EM-Clamp	/	0513A031201	2024.08.08	2025.08.07
Multifunctional Compact Immunity Test system	3ctest	CCS 600	CCS V4.0.9	ES0801655	2024.08.08	2025.08.07
Surge&EFT Coupling Decoupling Network	3ctest	SEPN 3832T	/	ES0951601	2024.08.08	2025.08.07
Voltage variation and PF magnetic field regulating device	3ctest	VMT2216S	/	ES0441601	2024.08.08	2025.08.07
Capacitive Coupling Clamp	3ctest	CCC 100	/	EC0441660	2024.08.08	2025.08.07
Combination Wave Surge Simulator	3ctest	CWS 600T	/	ES0311604	2024.08.08	2025.08.07
Unshielded symmetrical high - speed Interconnection Lines Coupling Decoupling Network	3ctest	CDN 405T8A1	/	ES2731602	2024.08.08	2025.08.07
Conducted Immunity test	SKET	CITS_150K2 30M	/	SK201910100 1_CITS	2024.08.08	2025.08.07

System						
Universal Radio Communication Tester	ROHDE&SCHWARZ	CMU200	V5.21	116785	2024.08.08	2025.08.07
Signal Generator	Agilent	N5182A	/	MY49060042	2024.08.08	2025.08.07
Vector Signal Generator	Agilent	E4438C	/	US44271917	2024.08.08	2025.08.07
Power meter	Agilent	E4419B	/	GB40202122	2024.08.08	2025.08.07
Power Sensor	Agilent	E9300A	/	MY41496628	2024.08.08	2025.08.07
Power Sensor	Agilent	E9304A	/	MY41496815	2024.08.08	2025.08.07
RF power Amplifier	OPHIR	5225R	/	1045	2024.08.08	2025.08.07
RF power Amplifier	OPHIR	5273R	/	1018	2024.08.08	2025.08.07
Antenna	SCHWARZBECK	STLP9128E-special	/	STLP9128Es#139	N/A	N/A
Antenna	SCHWARZBECK	STLP9128E-special	/	STLP 9149 #456	N/A	N/A
CMW500	ROHDE&SCHWARZ	CMW500	V 3.7.22	1201.0002K50-117239-sM	2024.08.08	2025.08.07
ISN	SCHWARZBECK	CAT3 8158	/	CAT3 8158 #167	2024.03.20	2025.03.19
ISN	SCHWARZBECK	CAT5 8158	/	S/N: 00316	2024.03.20	2025.03.19
ISN	SCHWARZBECK	NTFM 8158	/	S/N: 00273	2024.03.20	2025.03.19
HARMINICS&FLICKER MEASUREMENT SYSTEM	EVERFINE	HFM300_V200	/	200602005	2024.08.08	2025.08.07
BROADCAST TEST SYSTEM	R&S	SFU	/	100056	2024.03.20	2025.03.19
TV SIGNAL GENERATOR	FLUKE	54200M01	/	817010	2024.03.22	2025.03.21
AM/FM STEREO SIGNAL GENERATOR	MEGURO	MSG-2280	/	61080249	2024.03.20	2025.03.19
9*6*6 anechoic chamber	CHENYU	9*6*6	/	/	2022.05.18	2025.05.17
8*4*3 Shielded room	CHENYU	8*4*3	/	/	2022.05.18	2025.05.17
8*4*3 Shielded room	CHENYU	8*4*3	/	/	2022.05.18	2025.05.17

Software Information			
Test Item	Software Name	Manufacturer	Version
RE	EZ-EMC	farad	Alpha-3A1
RF-CE	MTS 8310	MWRFtest	2.0.0.0

### 3. Power Line Conducted Emission Test

#### 3.1. Block Diagram of Test Setup



#### 3.2. Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB( $\mu$ V)	Average Level dB( $\mu$ V)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

- Notes:
1. Emission level=Read level + LISN factor-Preamplifier factor + Cable loss
  2. \* Decreasing linearly with logarithm of frequency.
  3. The lower limit shall apply at the transition frequencies.

### 3.3. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

### 3.4. Operating Condition of EUT

- (1) Setup the EUT as shown as Section 3.1.
- (2) Turn on the power of all equipment.
- (3) Let the EUT work in test mode taking the test.

### 3.5. Test Procedure

- (1) The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10:2013 on conducted Emission test.
- (2) The frequency range from 150kHz to 30MHz is checked, the bandwidth of test receiver is set at 9kHz.
- (3) The frequency range from 30MHz to 1000MHz was pre-scanned with a Peak detector and all final readings of measurement from Test Receiver are Quasi-Peak and Average values.
- (4) The test results are reported on Section 3.6.

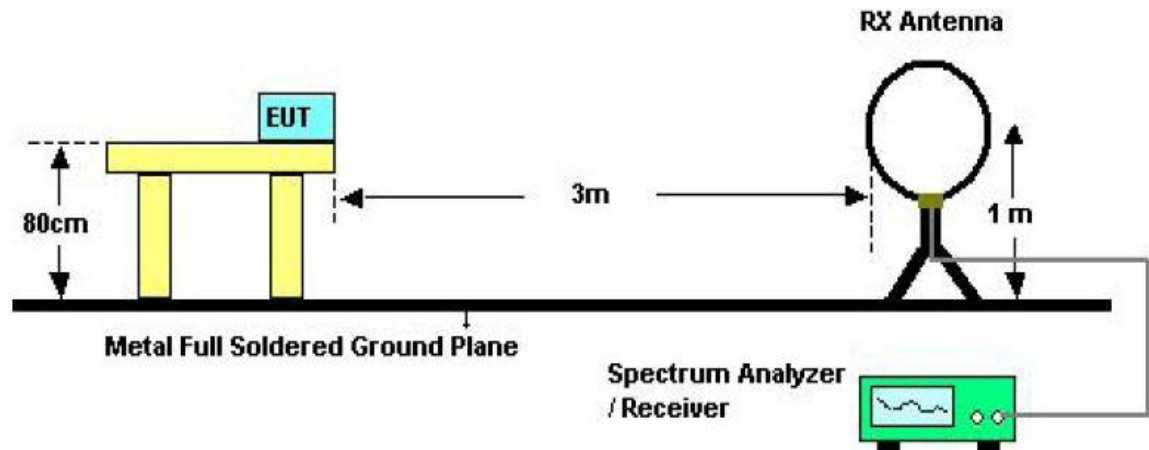
### 3.6. Test Results

Note: The EUT is supplied by battery, so this item does not applicable.

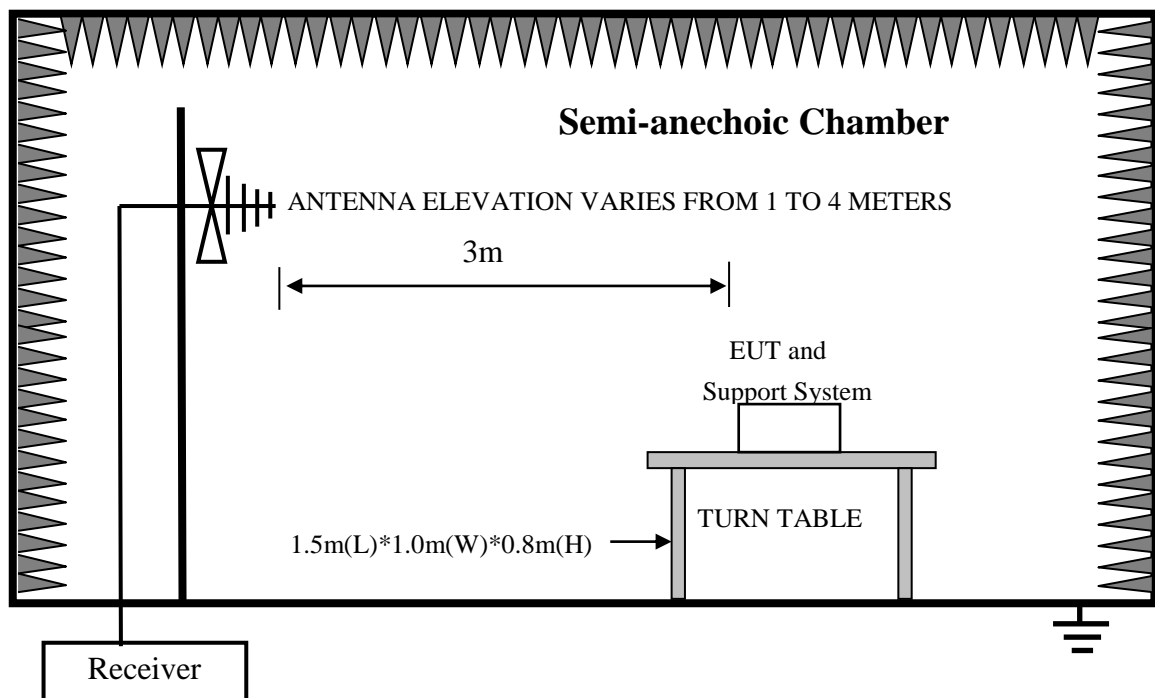
## 4. Radiated Emission Test

### 4.1. Block Diagram of Test Setup

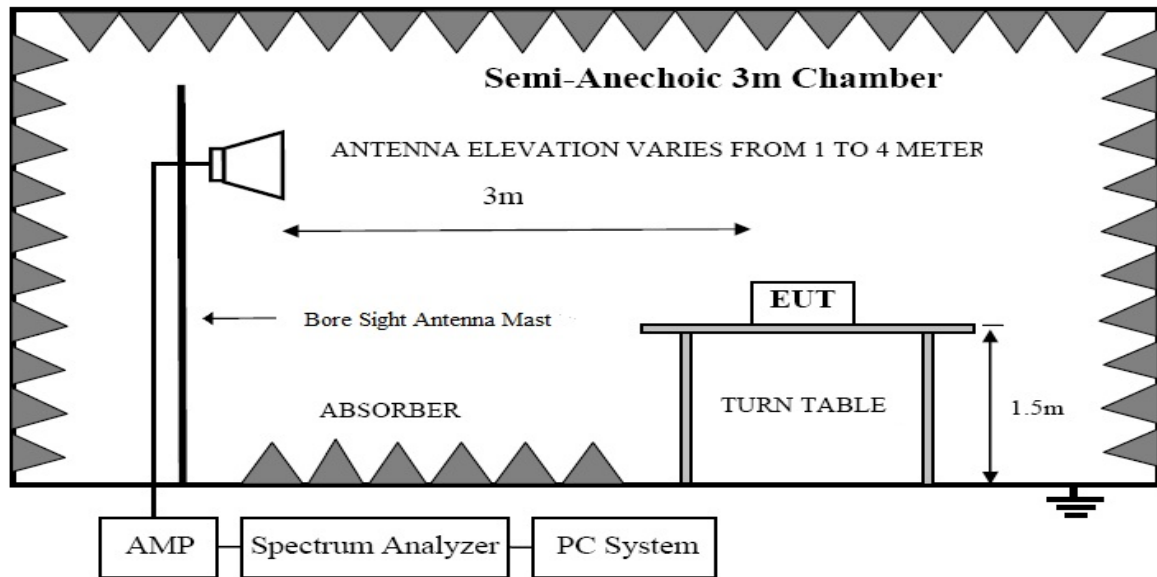
In Semi Anechoic Chamber (3m) Test Setup Diagram for 9KHz~30MHz



In Semi Anechoic Chamber (3m) Test Setup Diagram for 30MHz~1000MHz



In Semi Anechoic Chamber (3m) Test Setup Diagram for Above 1GHz



#### 4.2. Test Limit

Frequency MHz	Distance (Meters)	Field Strengths Limits	
		uV/m	dB uV/m
0.009 ~ 0.490	300	2400/F(kHz)	---
0.490 ~ 1.705	30	24000/F(kHz)	----
1.705 ~ 30	30	30	29.5
30 ~ 88	3	100(3nW)	40
88 ~ 216	3	150(6.8nW)	43.5
216 ~ 960	3	200(12nW)	46
Above 960	3	500(75nW)	54
Carrier frequency	3	50000(avg)	113.97(peak) 93.97(avg)

- Notes:
1. Emission level = Read level + Antenna Factor - Preamp Factor + Cable Loss
  2. The smaller limit shall apply at the cross point between two frequency bands.
  3. Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.
  4. For frequencies above 1000 MHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.



### 4.3. Configuration of EUT on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner that tends to maximize its emission characteristics in normal application.

### 4.4. Operating Condition of EUT

- (1) Setup the EUT as shown as Section 4.1.
- (2) Turn on the power of all equipment.
- (3) Let the EUT work in test mode taking the test.

### 4.5. Test Procedure

- (1) The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber for below 1GHz and 150 cm above the ground plane inside a semi-anechoic chamber for above 1GHz. An antenna was located 3m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10: 2013 on Radiated Emission test.
- (2) For the radiated emission test above 1GHz:  
Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- (3) Test antenna was located 4m from the EUT on an adjustable mast. Below pre-scan procedure was first performed in order to find prominent radiated emissions.
  - (a) Change work frequency or channel of device if practicable.
  - (b) Change modulation type of device if practicable.
  - (c) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions
- (4) For harmonic emissions test a appropriate high pass filter was inserted in the input port of AMP
- (5) The frequency range from 9KHz to 150KHz is checked, the bandwidth of test receiver is set at 200Hz.  
The frequency range from 150KHz to 30MHz is checked, the bandwidth of test receiver is set at 9KHz.

The frequency range from 30MHz to 1000MHz is checked, the bandwidth of test receiver is set at 120kHz.

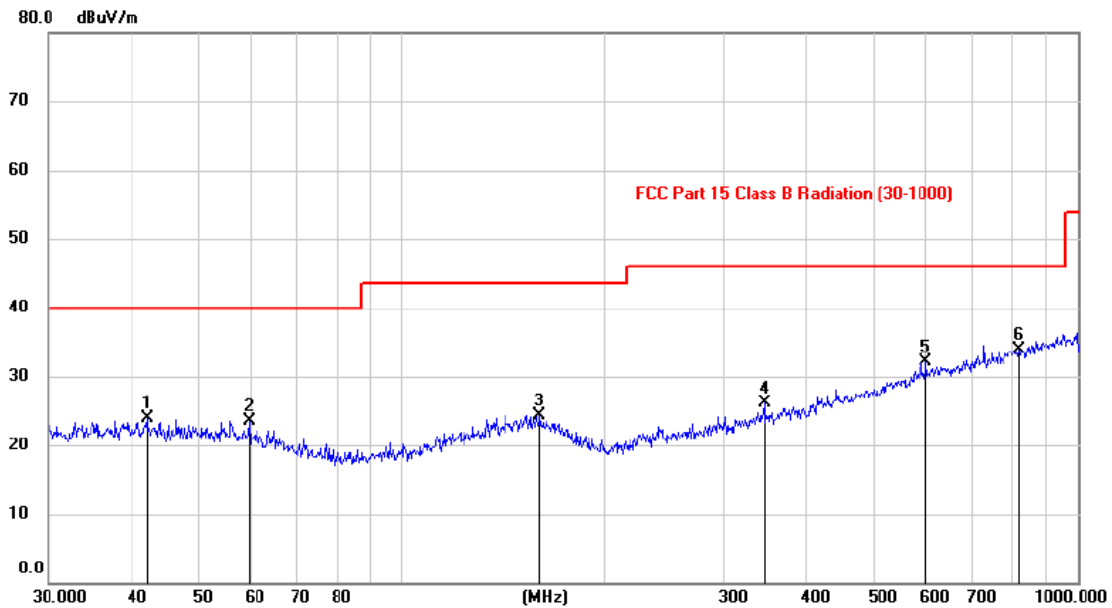
The frequency range from above 1GHz is checked, the bandwidth of Signal Analyzer is set at 1MHz.

- (6) The frequency range from 30MHz to 1000MHz was pre-scanned with a peak detector and all final readings of measurement from Test Receiver are Quasi-Peak values, the frequency range from 1GHz to 6GHz was pre-scanned with a peak detector and all final readings of measurement from Spectrum Analyzer are peak and average values checked, all measurement distance is 3m in 3m semi anechoic chamber.
- (7) Test for all x, y, z axes is performed and only the worst case of X xes was recorded in the test report.
- (8) The test results are reported on Section 4.6.

#### 4.6. Test Results

Frequency Range	: <b>9kHz~30MHz</b>
Test Mode	: TX 2402MHz
Test Results	: <b>PASS</b>
Note:	1. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported. 2. This mode is worst case mode, and this report only reflected the worst mode.

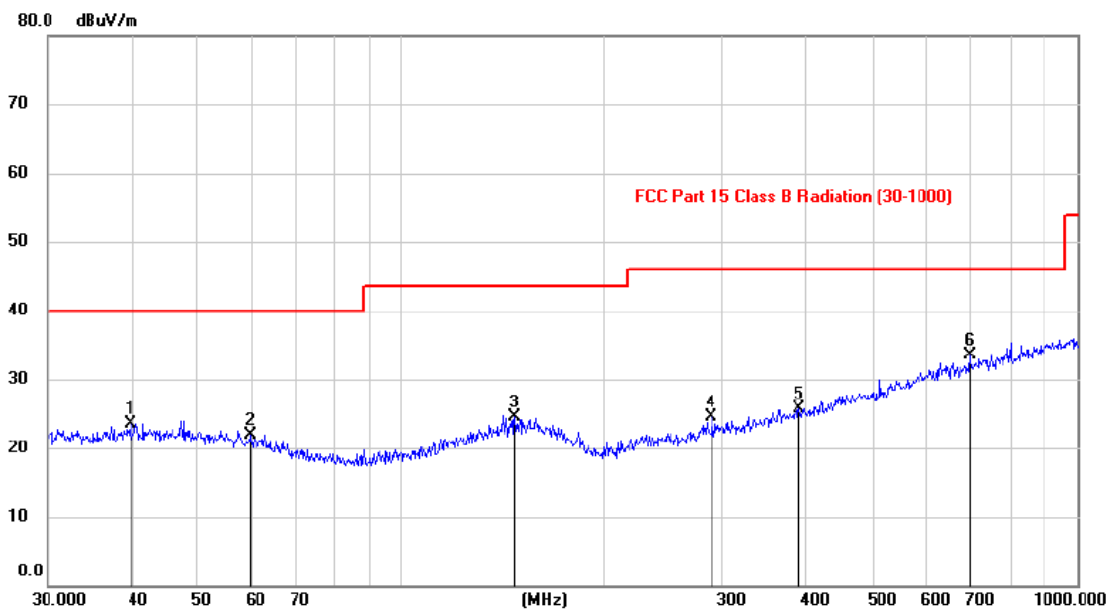
Frequency Range	: <b>30MHz~1000MHz</b>
Test Mode	: TX 2402MHz
Test Results	: <b>PASS</b>
Note: 1. The test results are listed in next pages. 2. This mode is worst case mode, and this report only reflected the worst mode. 3. If the limits for the measurement with the quasi-peak detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the quasi-peak detector need not be carried out.	

**Antenna polarity: Vertical**

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		42.0410	9.57	14.34	23.91	40.00	-16.09	peak		
2		59.5031	10.20	13.25	23.45	40.00	-16.55	peak		
3		160.1397	9.33	15.03	24.36	43.50	-19.14	peak		
4		344.7077	10.86	15.15	26.01	46.00	-19.99	peak		
5		597.6424	11.94	20.17	32.11	46.00	-13.89	peak		
6	*	819.5043	10.78	23.13	33.91	46.00	-12.09	peak		

Note:1. \*:Maximum data; x:Over limit; !:over margin.

2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

**Antenna polarity: Horizontal**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table
		MHz	Level	Factor	ment			Height	Degree
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree
1		39.7287	9.10	14.47	23.57	40.00	-16.43	peak	
2		59.7680	8.63	13.25	21.88	40.00	-18.12	peak	
3		147.8177	9.63	14.90	24.53	43.50	-18.97	peak	
4		288.6981	10.74	13.84	24.58	46.00	-21.42	peak	
5		388.2188	9.74	16.05	25.79	46.00	-20.21	peak	
6	*	696.3682	11.91	21.66	33.57	46.00	-12.43	peak	

Note: 1. \*:Maximum data; x:Over limit; !:over margin.

2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

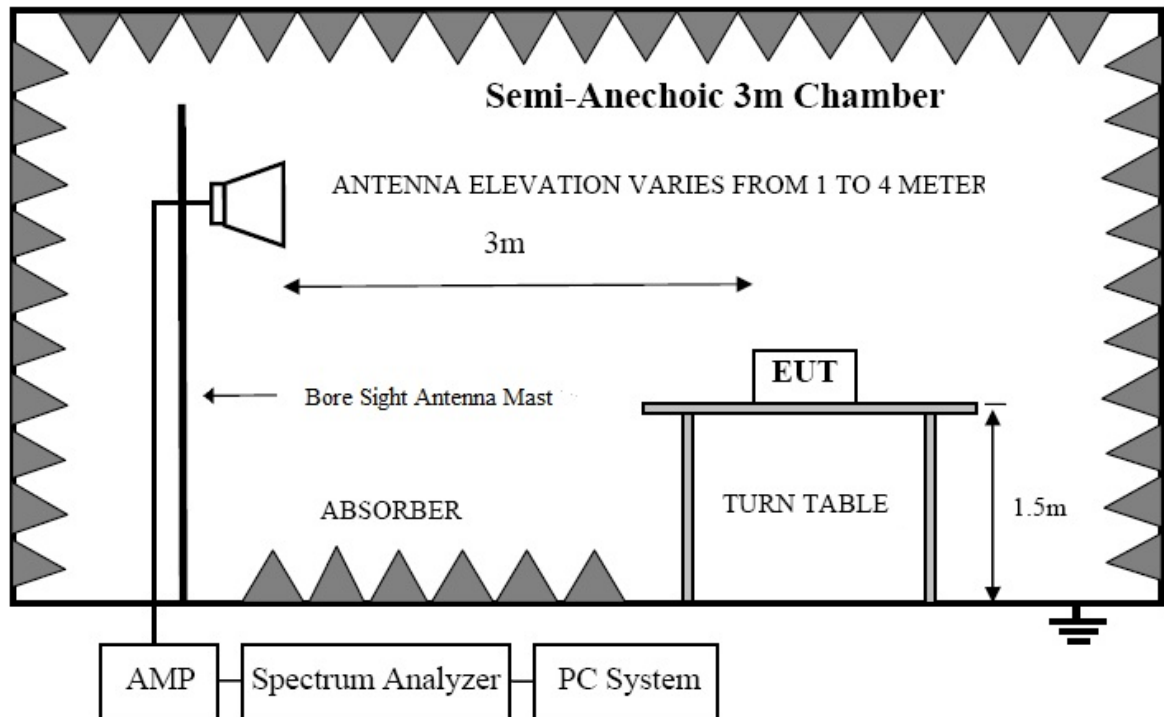
Note: 1.This report only shall the worst case mode.

2.The test data above 1GHz is too lower than the limit, so not show in this report.

Frequency Range : 1GHz~25GHz								
Test Mode : TX 2402MHz								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	2402	H	95.32	-3.41	91.71	113.97	-22.26	Peak
2	2402	H	--	-3.41	--	93.97	--	Avg
3	4804	H	38.45	3.23	41.68	74	-32.32	Peak
4	4804	H	--	3.23	--	54	--	Avg
1	2402	V	92.44	-3.41	89.03	113.97	-24.94	Peak
2	2402	V	--	-3.41	--	93.97	--	Avg
3	4804	V	35.84	3.23	39.07	74	-34.93	Peak
4	4804	V	--	3.23	--	54	--	Avg
Note:	1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit. 3. Spectrum Set for PK measure: RBW=1MHz, VBW=1MHz, Sweep time=Auto, Detector: PK. 4. Spectrum Set for AV measure: RBW=1MHz, VBW=3MHz, Sweep time=Auto, Detector: Avg. 5. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.							

## 5. Band Edge Test

### 5.1. Block Diagram of Test Setup



### 5.2. Test Limit

Please refer section 15.249 and section 15.205.

249(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in section 15.209, whichever is the lesser attenuation.

249(e) As shown in section 15.35(b), for frequencies above 1000MHz, the above field strength limits in paragraphs (a) and (b) of this section are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation under paragraph (b) of this section, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.

### 5.3. Configuration of EUT on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner that tends to maximize its emission characteristics in normal application.

### 5.4. Operating Condition of EUT

- (1) Setup the EUT as shown as Section 5.1.
- (2) Turn on the power of all equipment.
- (3) Let the EUT work in test mode taking the test.

### 5.5. Test Procedure

- (1) The EUT was placed on a non-metallic table, 150 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 3m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10: 2013 on Radiated Emission test.
- (2) For the radiated emission test above 1GHz:  
Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- (3) Test antenna was located 4m from the EUT on an adjustable mast. Below pre-scan procedure was first performed in order to find prominent radiated emissions.
  - (a) Change work frequency or channel of device if practicable.
  - (b) Change modulation type of device if practicable.
  - (c) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions

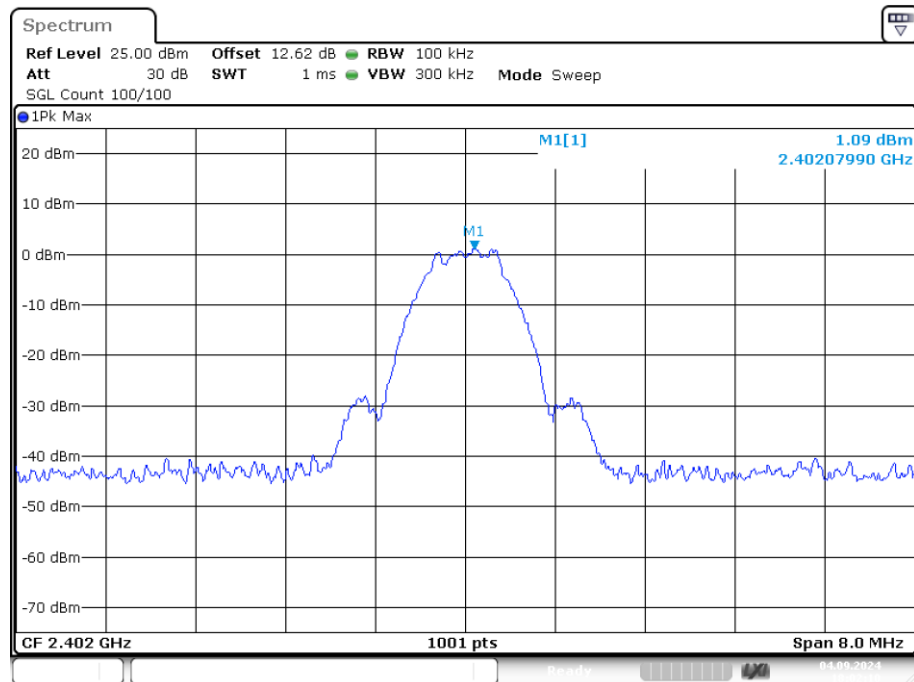


- (5) The frequency range from above 1GHz is checked, the bandwidth of Signal Analyzer is set at 1MHz.
- (6) The frequency range from 1GHz to 6GHz was pre-scanned with a peak detector and all final readings of measurement from Spectrum Analyzer are peak and average values checked, all measurement distance is 3m in 3m semi anechoic chamber.
- (7) Test for all x, y, z axes is performed and only the worst case of X xes was recorded in the test report.
- (8) The test results are reported on Section 5.6.

## 5.6. Test Results

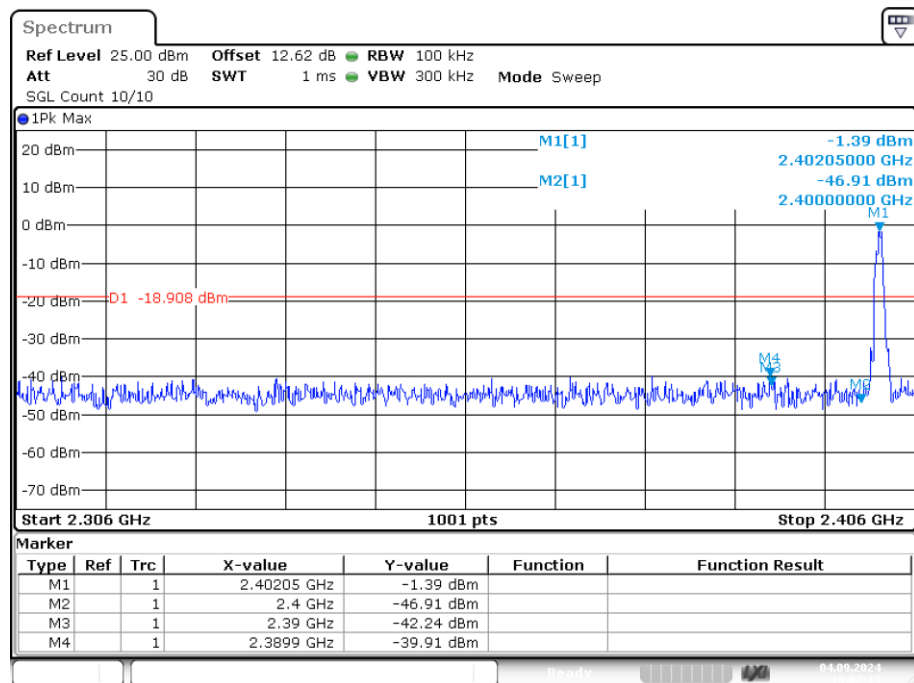
## GFSK

## Band Edge NVNT user 2402MHz Ant1 Ref



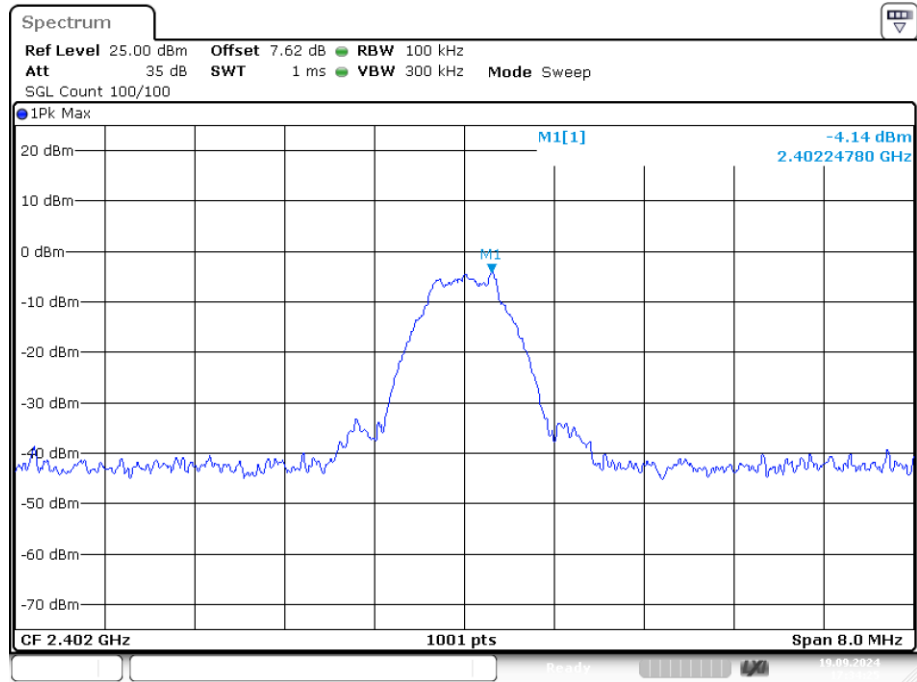
Date: 4.SEP.2024 18:02:10

## Band Edge NVNT user 2402MHz Ant1 Emission



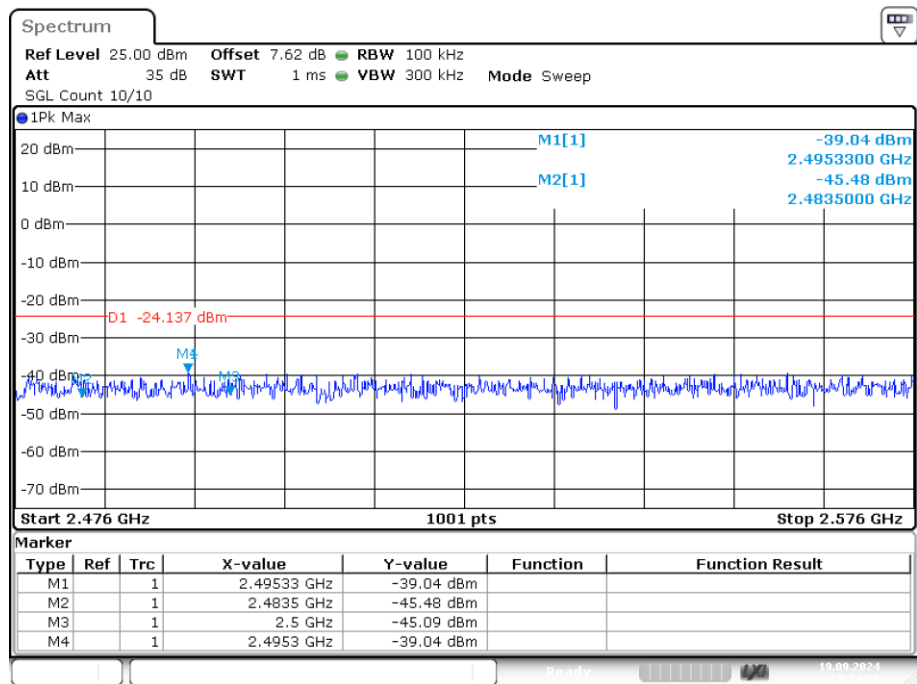
Date: 4.SEP.2024 18:02:13

## Band Edge NVNT user 2402MHz Ant1 Ref



Date: 19.SEP.2024 17:34:26

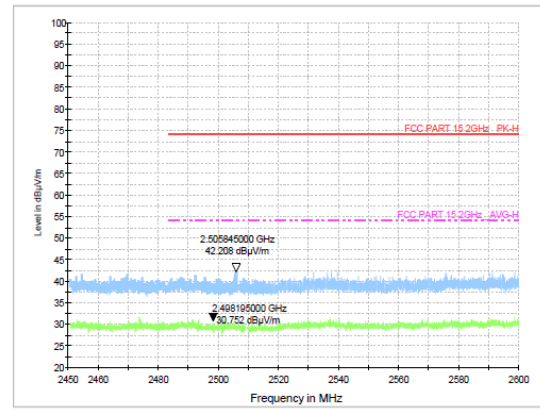
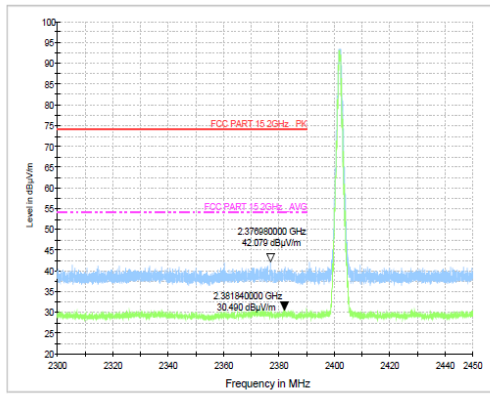
## Band Edge NVNT user 2402MHz Ant1 Emission



Date: 19.SEP.2024 17:34:29

Radiated Method: GFSK

Test Mode: CH-L



## 6. Occupied Bandwidth Test

### 6.1. Block Diagram of Test Setup



### 6.2. Test Limit

Please refer section 15.249 and section 15.205.

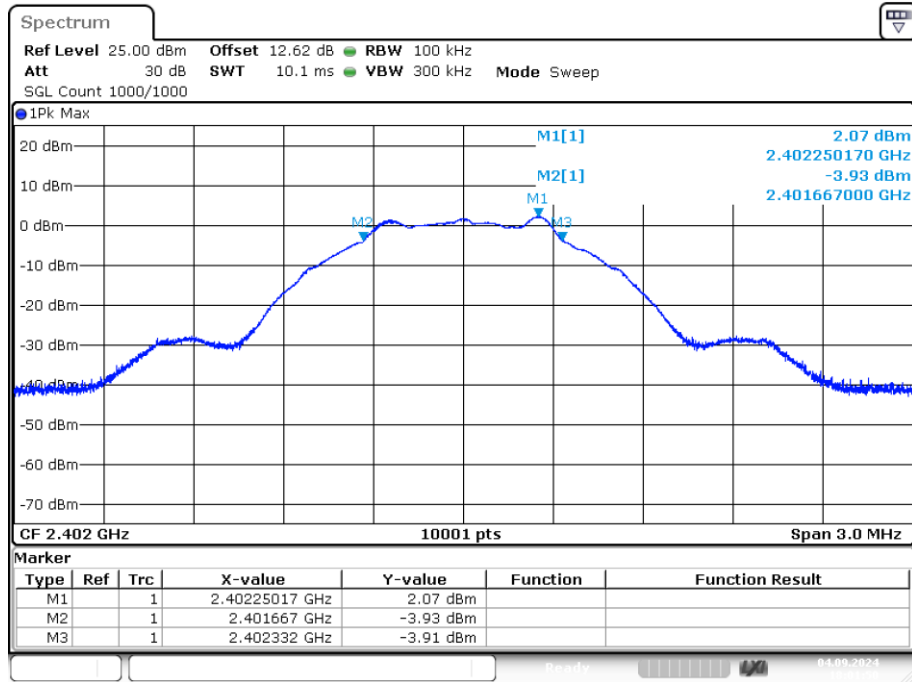
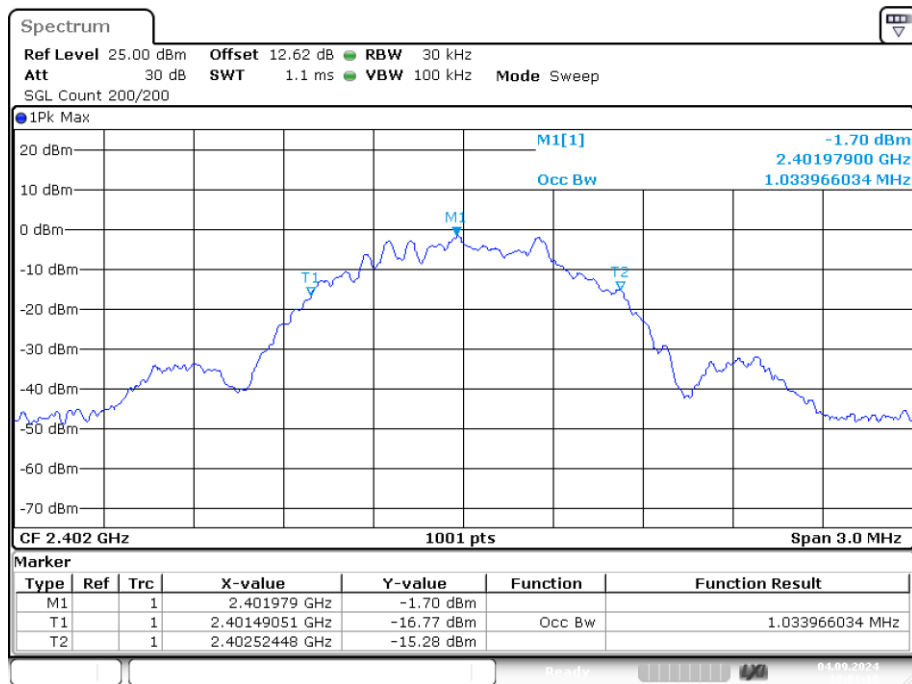
### 6.3. Test Procedure

- (1) The bandwidth is measured at an amplitude level reduced 20dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.
- (2) The test receiver RBW set 30KHz, VBW set 100KHz, Sweep time set auto.

### 6.4. Test Results

Mode		Frequency MHz	-6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (kHz)
GFSK	ANT1	2402	0.665	1.034	/

Note: 1. The test results are listed in next pages.

**-6dB Bandwidth NVNT user 2402MHz Ant1****OBW NVNT user 2402MHz Ant1**

## **7. Antenna Requirement**

### **7.1. Standard Requirement**

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### **7.2. Antenna Connected Construction**

The directional gains of antenna used for transmitting is 0.45dBi, and the antenna is fixed antenna no consideration of replacement. Please see EUT photo for details.

### **7.3. Results**

The EUT antenna is Internal Antenna. It complies with the standard requirement.

----- END OF REPORT-----