_

OBW NVNT n20 2437MHz Ant1

Spect	rum)						
Ref L	evel	20.00 dB	m Offset 7.77 dB	RBW 200 kHz				
👄 Att		30 d	IB SWT 19 μs	VBW 1 MHz	Mode Auto FF1	г		
		100/100						
⊖1Pk M	lax		1 1					
					M1[1]			48.17 dBm
10 dBm					Occ Bw			37562 MHz
0 dBm-								
U UBIII-			1 mmmmm	mannen	mmm	m m T2		
-10 dBn	n		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
				- V				
-20 dBn	n-+						\	
-30 dBn							$\left \right\rangle$	
-30 UBI								
-40 dBr	n-+							
~		. /					I m	mont
∿-sp~dBn	₽₩₩	Ju~						
-60 dBn	n							
-00 001	"							
-70 dBr	n-+							
CF 2.4	37 GI	Ηz		1001 pt	s	I	Span	30.0 MHz
Marker								
Туре	Ref		X-value	Y-value	Function	Fund	ction Result	
M1		1	2.452 GHz	-48.17 dBm	Occ. Duy		17 5404	07560 MUL
T1 T2		1	2.4281888 GHz 2.4457512 GHz	-7.54 dBm -7.33 dBm	Occ Bw		17.5624	37562 MHz
		7	211107012 012				4.141	12 01 2024
		Л			Ready		4/4	

Date: 3.JAN.2024 10:56:51

OBW NVNT n20 2462MHz Ant1

Spect			Ũ	211 11	/111/20	240210	11 12 7 010	. 1		E
Ref Lo Att	evel	20.00 c 30 .00/100	dB SWT	72 dB 👄 R 19 μs 👄 V	BW 200 kHz BW 1 MHz		Auto FFT			
⊖1Pk M	эх									
						M	1[1]			47.32 dBm
10 dBm-			_				_			70000 GH
						0	cc Bw	1	17.5924	07592 MH; I
0 dBm—			1.				0			
			annon	mon	www.w	mar	mohin	m h		
-10 dBm	ا – ۱					/				
-20 dBm										
-20 ubii	'		/							
-30 dBm			/							
-40 dBrr	∩— -									
		~ <i>s</i> -								
-20/48/r	10 V V	V .							-	on broad
-60 dBrr										
-00 080	'									
-70 dBm	∩									
CF 2.40	52 G⊦	łz			1001	pts			Span	30.0 MHz
Marker									· · ·	
Type	Ref	Trc	X-value	1	Y-value	Func	tion	Fund	tion Result	
M1		1	2.477		-47.32 dBi					
Τ1		1	2.4531888		-8.41 dBr		cc Bw		17.5924	07592 MHz
T2		1	2.4707812	2 GHz	-8.04 dBr	m				
						R	e a d y		1,20	03.01.2024

Date: 3.JAN.2024 11:03:38

_

OBW NVNT n40 2422MHz Ant1

Spect	rum									
Ref Lo	evel	20.00 d			RBW 500 kH					
	unt :	30 100/100	dB SWT	15.1 µs 🥃	VBW 2 MH	iz Mode	Auto FFT			
O 1Pk M		,								
						1	41[1]			49.34 dBm
10 dBm	+						Occ Bw			20000 GHz 16084 MHz
0 dBm-	_								0	
-10 dBm	n		for	~~~~~	my	m	m	m	2	
-20 dBm			1							
			/			ĺ			1	
-30 dBm		/								
-40 dBm	<u>۱</u>									D1
-sô dan	~~	w.J.					-		ww	WWW
-60 dBm	n									
-70 dBm	1									
CF 2.4	22 GI	Ηz			1001	I pts			Span	60.0 MHz
Marker										
Type	Ref		X-valu		Y-value		ction	Func	tion Result	:
M1 T1		1		452 GHz	-49.34 dE -7.57 dE		Dec Bw		36,0839	16084 MHz
T2		1		042 GHz	-7.37 dE		500 DW		55.6655	2000 - 10112
)[]					Ready		4/4	03.01.2024

Date: 3.JAN.2024 11:26:08

OBW NVNT n40 2437MHz Ant1

	_	ODWI			_
Spectrum					
Ref Level	20.00 dB	m Offset 7.77 dB 👄	RBW 500 kHz		, , , , , , , , , , , , , , , , , , ,
Att	30 d	B SWT 15.1 μs 👄	VBW 2 MHz	Mode Auto FFT	
SGL Count	100/100				
∋1Pk Max					
				M1[1]	-49.36 dBn
10 dBm					2.4670000 GH
10 ubiii				Occ Bw	36.143856144 MH
0 dBm					
		In moun	man	man	mit
-10 dBm					
)		- I V		
-20 dBm	/		+ +		
	- 1				
-30 dBm					
-40 dBm					
-40 UBIII					
-50 aBm	nr_				man
oo abiii					
-60 dBm					
-70 dBm					
CF 2.437 G	Hz		1001 pts	5	Span 60.0 MHz
Marker			•		•
Type Ref	Trc	X-value	Y-value	Function	Function Result
M1	1	2.467 GHz	-49.36 dBm		
Τ1	1	2.4188382 GHz	-7.65 dBm	Occ Bw	36.143856144 MHz
T2	1	2.454982 GHz	-6.43 dBm		
	1			Ready	03.01.2024

Date: 3.JAN.2024 11:23:22

Spectrum Ref Level 20.00 dBm Offset 7.75 dB RBW 500 kHz	
	L V
Reflevel 20.00 aBm Offset 7.75 aB 🖷 RBW 500 KHZ	
■ Att 30 dB SWT 15.1 μs 👄 VBW 2 MHz Mode Auto FFT	
SGL Count 100/100	
• 1Pk Max	
M1[1] -	49.70 dBm
10 dBm 2.48	20000 GHz
Occ Bw 36.2037	96204 MHz
0 dBm	
I I made mente and a mater a materia	
-10 dBm	
-20 dBm / /	
-30 dBm / /	
-40 dBm	
has have been a second s	many
-StordBin-14-00-	
-60 dBm	
-70 dBm	
CF 2.452 GHz 1001 pts Span	60.0 MHz
· · · · ·	00.0 MHZ
Marker	1
Type Ref Trc X-value Y-value Function Function Result M1 1 2.482 GHz -49.70 dBm	
	96204 MHz
T2 1 2.470042 GHz -8.28 dBm	70204 MH2
	2 01 2024
Ready	

OBW NVNT n40 2452MHz Ant1

Date: 3.JAN.2024 11:19:55

8. BAND EDGE CHECK

8.1. Test limits

Please refer RSS-GEN & FCC PART 15: 15.247

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits and RSS-GEN limits.

8.2. Test Procedure

Details see the KDB558074 D01 Meas Guidance v05r02

- 8.2.1 Put the EUT on a 1.5m high table, power on the EUT. Emissions were scanned and measured rotating the EUT to 360 degrees, Find the maximum Emission
- 8.2.2 Check the spurious emissions out of band.
- 8.2.3 RBW 1MHz, VBW 3MHz, peak detector for peak value, RBW 1MHz, VBW 10Hz, RMS detector for AV value.

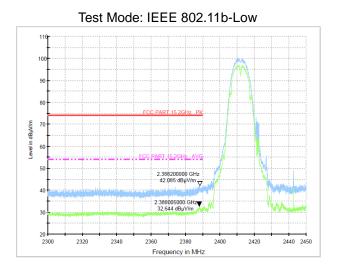
8.3. Test Setup

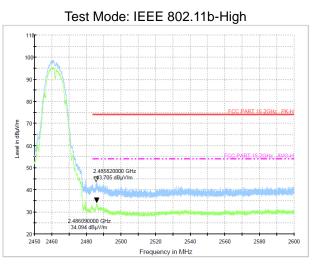
Same as 5.2.2.

8.4. Test Results PASS.

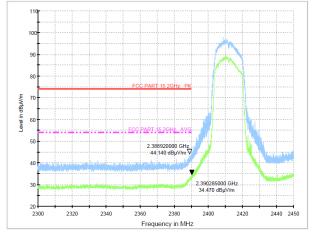
Detailed information please see the following page.

Radiation testing

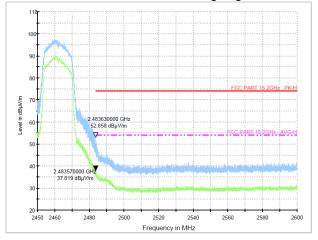


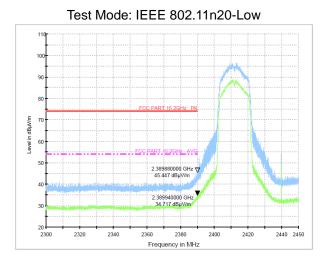


Test Mode: IEEE 802.11g-Low

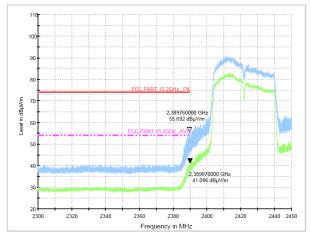


Test Mode: IEEE 802.11g-High

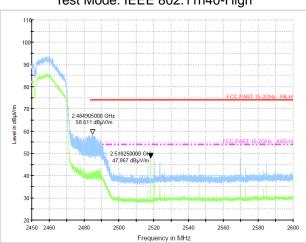




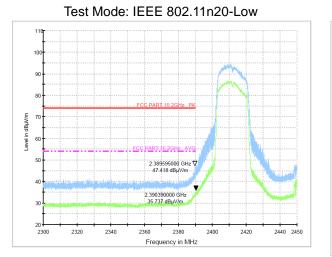
Test Mode: IEEE 802.11n40-Low

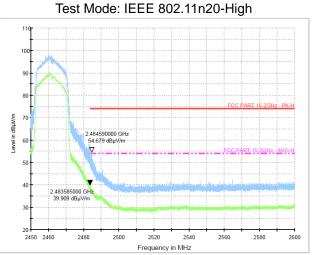


Test Mode: IEEE 802.11n20-High 100 90 80 Level in dBµV/m 70 2.484065000 GHz 55.372 dBµV/m 60 -∇.... 50 2.483720000 GHz 39.625 dBµV/m 40 3/ 20 -2480 2600 2450 2460 2500 2520 2540 2560 2580 Frequency in MHz

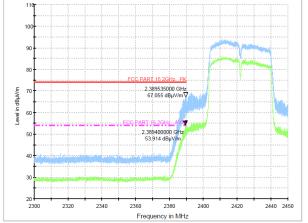


Test Mode: IEEE 802.11n40-High





Test Mode: IEEE 802.11n40-Low

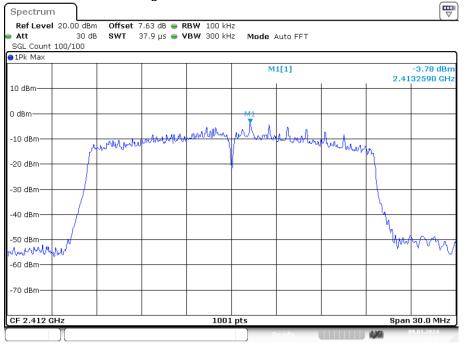


11 100 90 80 Level in dBµV/m 70 2.486120000 GHz 57.844 dBµV/m 60 V CC PART 15 2GHz AVG-I 50 40 · 2.488190000 GHz 42.135 dBµV/m 30 20 2450 2460 2480 2500 2520 2540 2560 2580 2600 Frequency in MHz

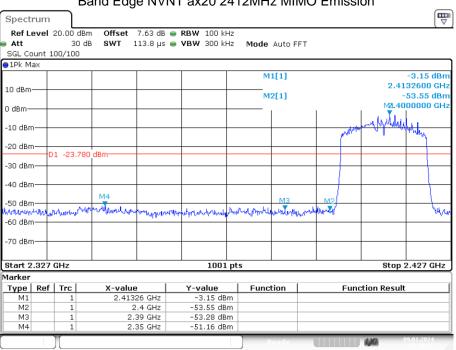
Test Mode: IEEE 802.11n40-High

Conduction method testing

Band Edge NVNT ax20 2412MHz MIMO Ref

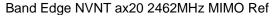


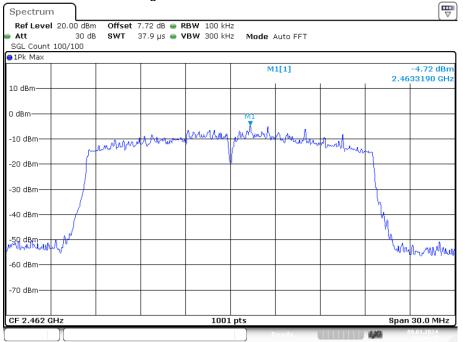
Date: 9.JAN.2024 19:38:41



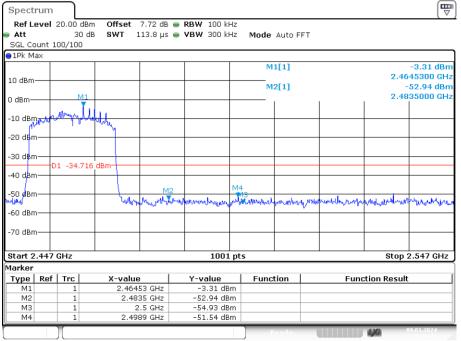
Band Edge NVNT ax20 2412MHz MIMO Emission

Date: 9.JAN.2024 19:38:47



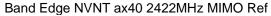


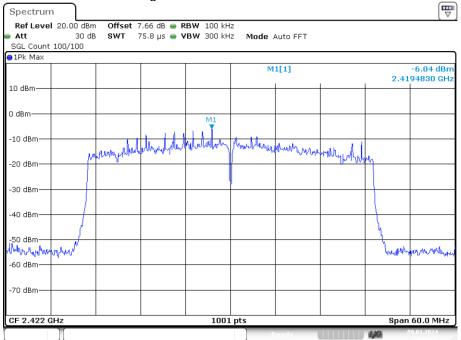
Date: 9.JAN.2024 20:26:34



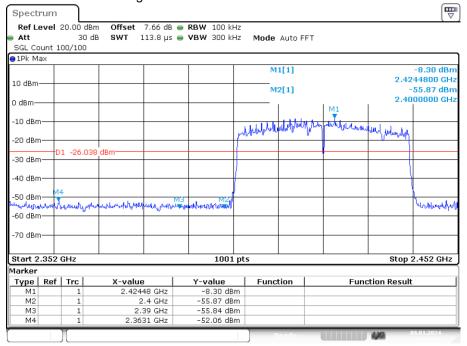
Band Edge NVNT ax20 2462MHz MIMO Emission

Date: 9.JAN.2024 20:26:40



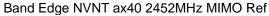


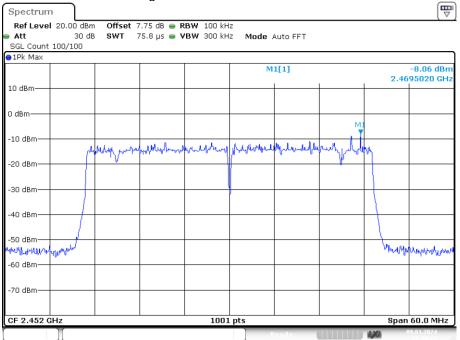
Date: 9.JAN.2024 20:01:52



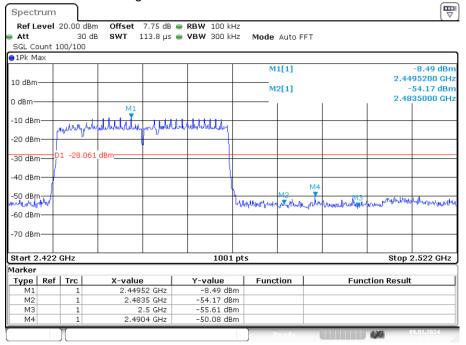
Band Edge NVNT ax40 2422MHz MIMO Emission

Date: 9.JAN.2024 20:01:58



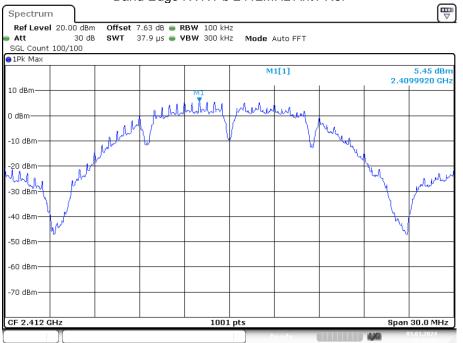


Date: 9.JAN.2024 20:20:27



Band Edge NVNT ax40 2452MHz MIMO Emission

Date: 9.JAN.2024 20:20:33



Band Edge NVNT b 2412MHz Ant1 Ref

Date: 3.JAN.2024 10:15:03



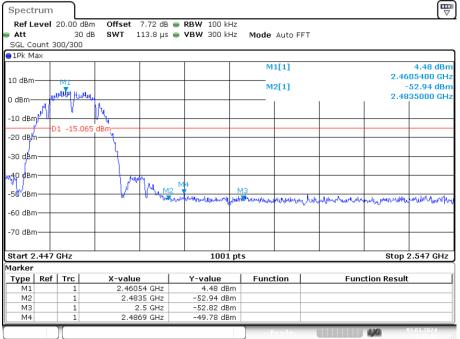
Band Edge NVNT b 2412MHz Ant1 Emission

Date: 3.JAN.2024 10:15:17



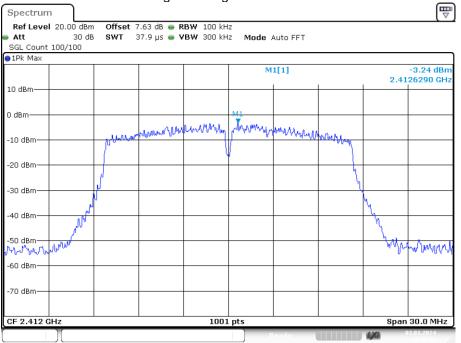
Band Edge NVNT b 2462MHz Ant1 Ref

Date: 3.JAN.2024 10:31:06



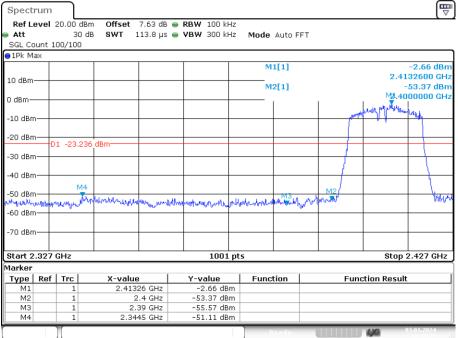
Band Edge NVNT b 2462MHz Ant1 Emission

Date: 3.JAN.2024 10:31:18



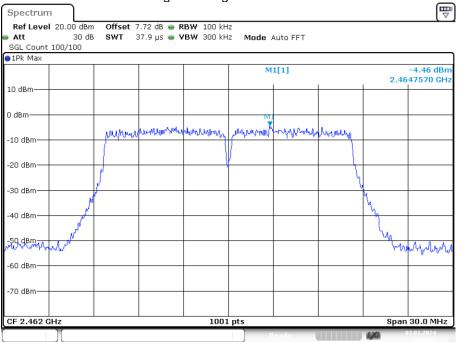
Band Edge NVNT g 2412MHz Ant1 Ref

Date: 3.JAN.2024 10:41:18



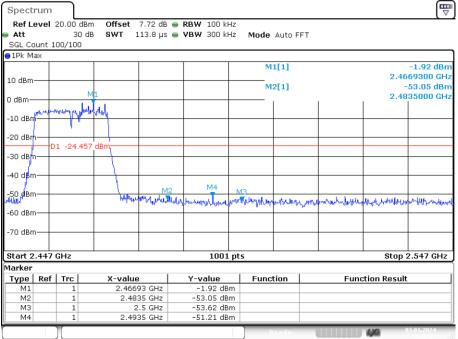
Band Edge NVNT g 2412MHz Ant1 Emission

Date: 3.JAN.2024 10:41:24



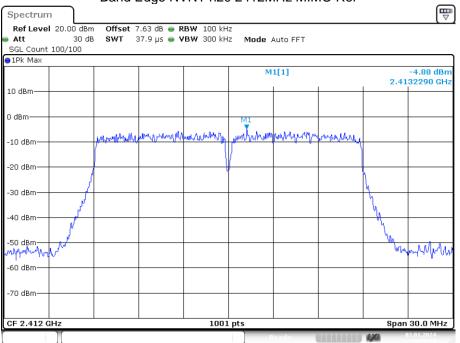
Band Edge NVNT g 2462MHz Ant1 Ref

Date: 3.JAN.2024 10:46:28



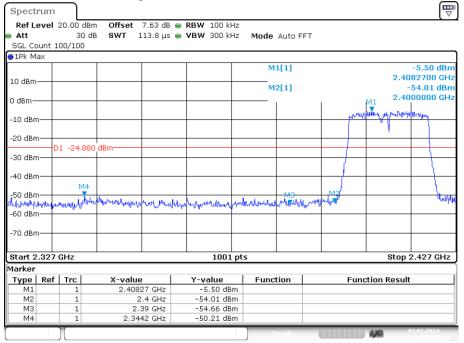
Band Edge NVNT g 2462MHz Ant1 Emission

Date: 3.JAN.2024 10:46:34



Band Edge NVNT n20 2412MHz MIMO Ref

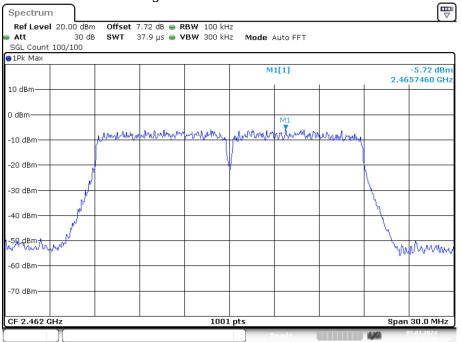
Date: 3.JAN.2024 10:50:39



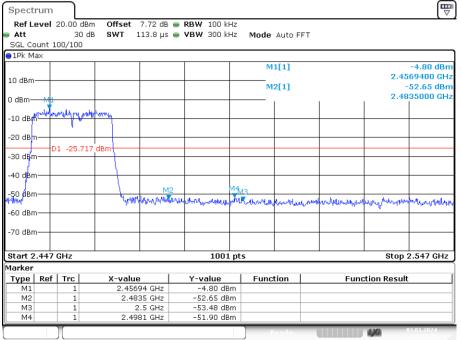
Band Edge NVNT n20 2412MHz MIMO Emission

Date: 3.JAN.2024 10:50:45



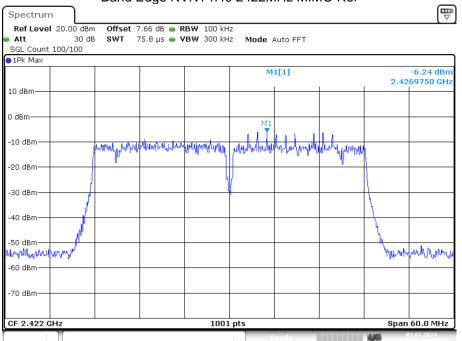


Date: 3.JAN.2024 11:04:29



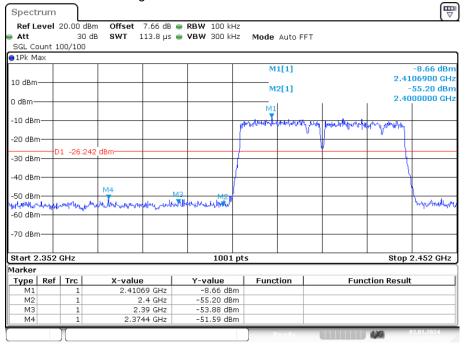
Band Edge NVNT n20 2462MHz MIMO Emission

Date: 3.JAN.2024 11:04:35



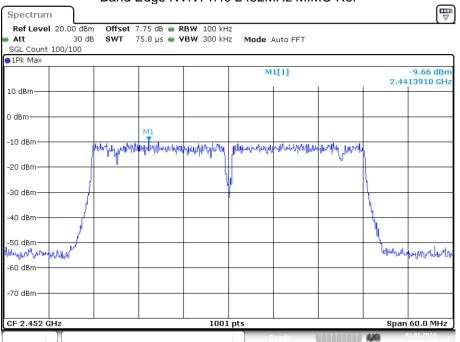
Band Edge NVNT n40 2422MHz MIMO Ref

Date: 3.JAN.2024 11:27:17



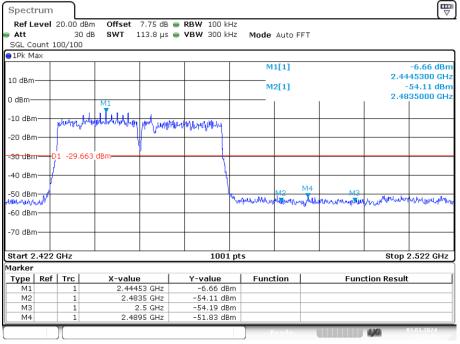
Band Edge NVNT n40 2422MHz MIMO Emission

Date: 3.JAN.2024 11:27:22



Band Edge NVNT n40 2452MHz MIMO Ref

Date: 3.JAN.2024 11:21:03



Band Edge NVNT n40 2452MHz MIMO Emission

Date: 3.JAN.2024 11:21:09

Note: 1. Except for mode b/g, other modes test the MIMO status. 2. All antennas have been tested, only the worst data of each pattern is reflected.

9. FREQUENCY STABILITY

9.1. Test limit

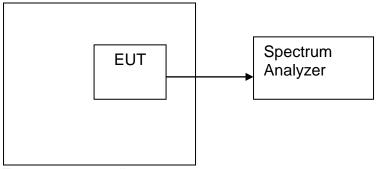
Please refer section RSS-Gen.

Regulation RSS-Gen If the frequency stability of the licence-exempt radio apparatus is not specified in the applicable RSS, the fundamental emissions of the radio apparatus should be kept within at least the central 80% of its permitted operating frequency band in order to minimize the possibility of out-of-band operation. In addition, its occupied bandwidth shall be entirely outside the restricted bands and the prohibited TV bands of 54-72 MHz, 76-88 MHz, 174-216 MHz, and 470-602 MHz, unless otherwise indicated.

9.2. Test Procedure

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

9.3. Test Setup



Temperature controller

9.4. Test Results

PASS.

Detailed information please see the following page.

Assigned Frequency(MHz): 2412MHz								
Voltage	Temperature	Measured Frequency (MHz)	Frequency stability (MHz)	Limit (MHz)				
Low DC 3.0V	+20℃	2412.002	0.002	±0.020				
	-10℃	2412.001	0.001	±0.020				
	-5℃	2412.002	0.002	±0.020				
	0°C	2412.005	0.005	±0.020				
	+10°C	2412.002	0.002	±0.020				
Normal DC 3.3V	+20°C	2412.006	0.006	±0.020				
	+30°C	2412.002	0.002	±0.020				
	+40°C	2412.004	0.004	±0.020				
	+50°C	2412.002	0.002	±0.020				
	+60°C	2412.003	0.003	±0.020				
High DC 3.6V	+20°C	2412.002	0.002	±0.020				

Note: Record data for worst case mode

10. ANTENNA REQUIREMENT

10.1.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.

10.2. Antenna Connected Construction

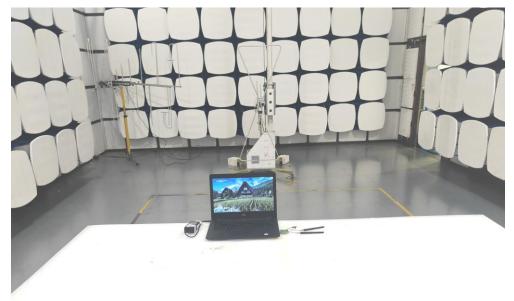
The antenna connector is unique antenna and no consideration of replacement. Please see EUT photo for details.

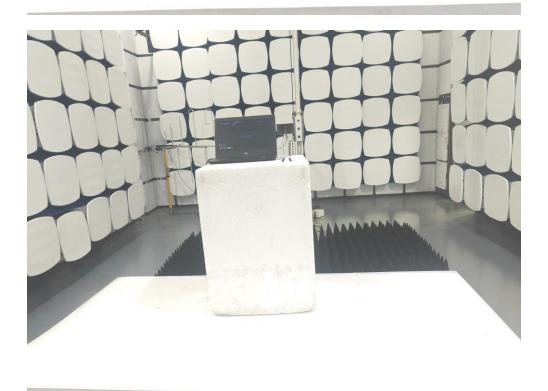
10.3.Results

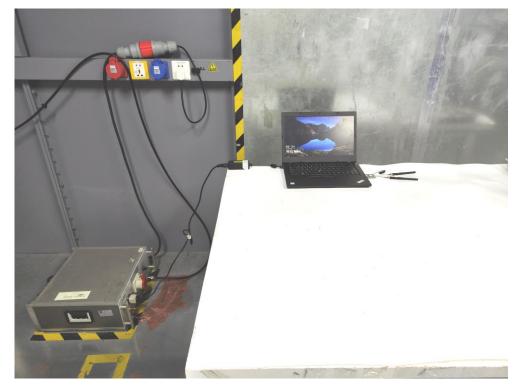
The EUT antenna is internal Antenna. It complies with the standard requirement.

11.TEST SETUP PHOTO

11.1.Photo of Radiated Emission test







11.2.Photo of Conducted Emission test

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