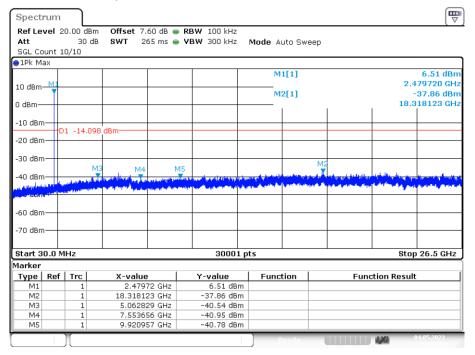


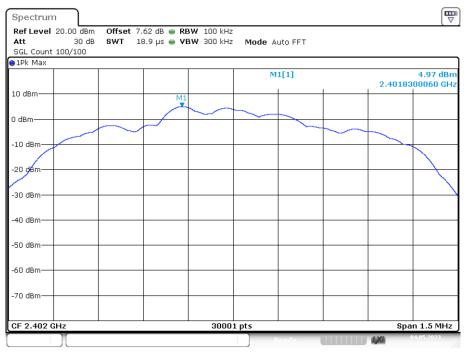
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref

Date: 4.MAY.2023 10:01:55



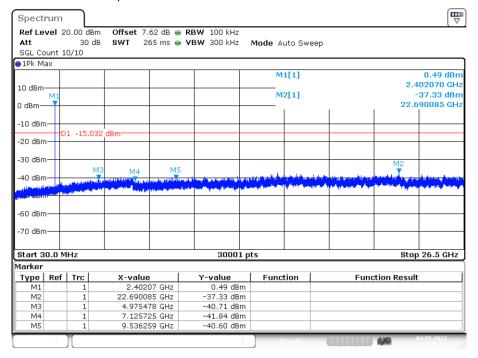
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission

Date: 4.MAY.2023 10:02:08



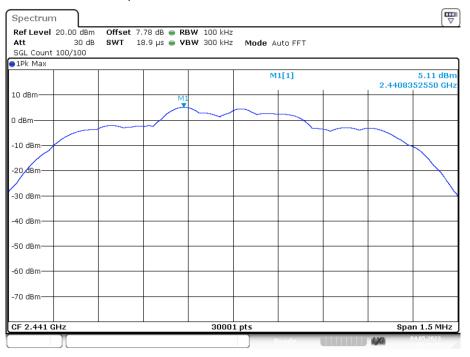
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref

Date: 4.MAY.2023 10:35:05



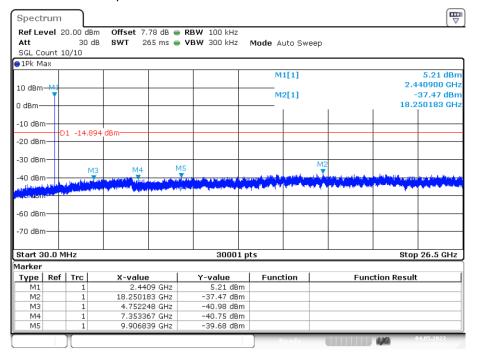
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission

Date: 4.MAY.2023 10:35:19



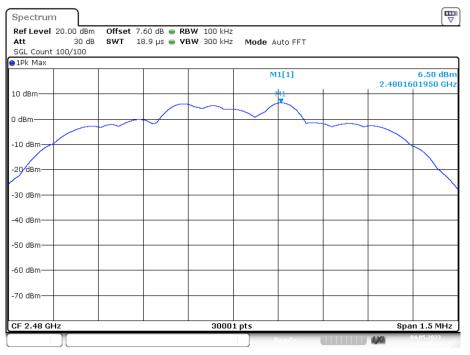
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref

Date: 4.MAY.2023 10:39:07



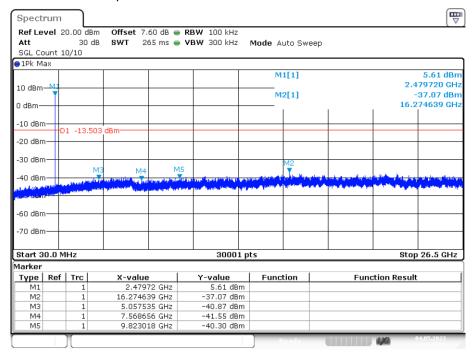
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission

Date: 4.MAY.2023 10:39:20



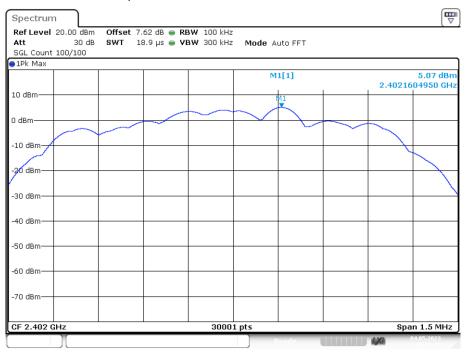
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref

Date: 4.MAY.2023 10:47:44



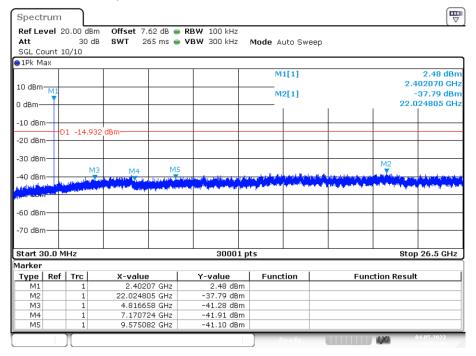
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission

Date: 4.MAY.2023 10:47:58



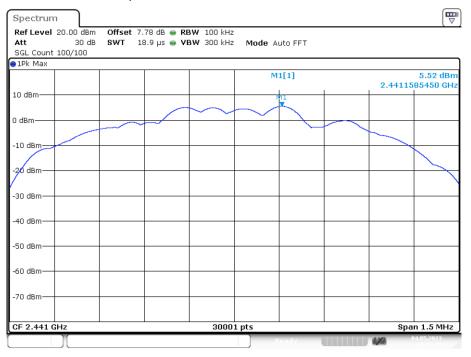
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref

Date: 4.MAY.2023 10:52:25



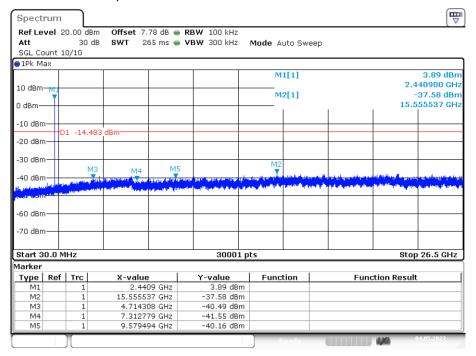
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission

Date: 4.MAY.2023 10:52:39



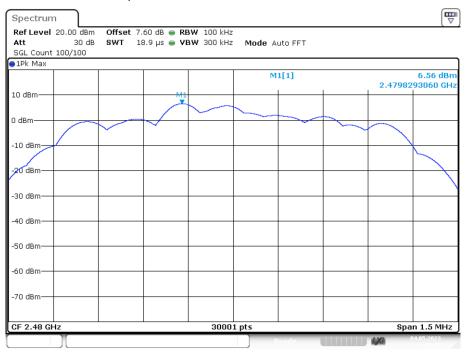
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref

Date: 4.MAY.2023 10:57:09



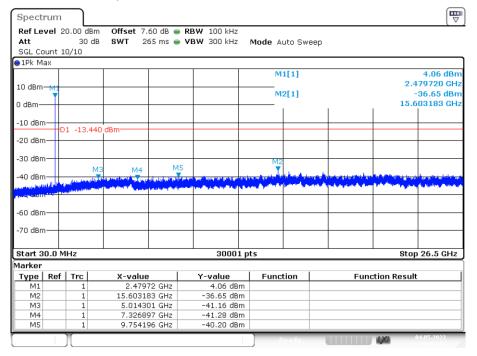
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission

Date: 4.MAY.2023 10:57:22



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref

Date: 4.MAY.2023 11:03:00

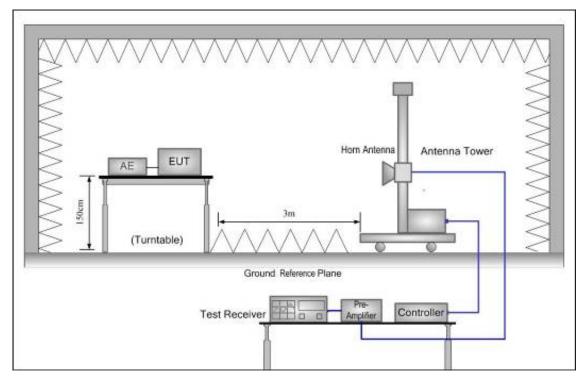


Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

Date: 4.MAY.2023 11:03:13

9. BAND EDGE COMPLIANCE

9.1. Block Diagram of Test Setup



9.2. Limit

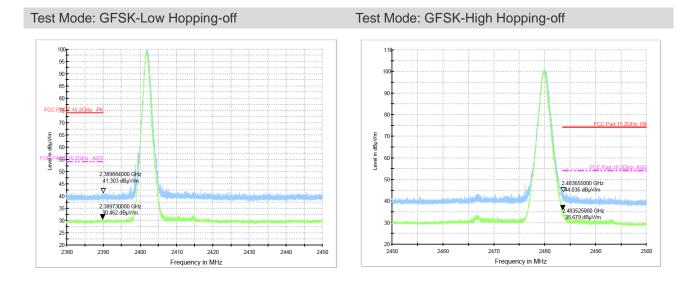
All the lower and upper band-edges emissions appearing within restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

9.3. Test Procedure

All restriction band and non- restriction band have been tested , only worse case is reported.

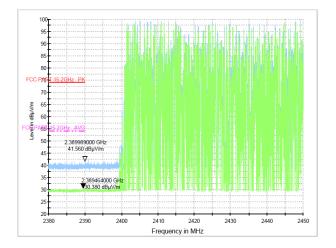
9.4. Test Result

PASS. (See below detailed test data)



Test Mode: GFSK-Low Hopping-on

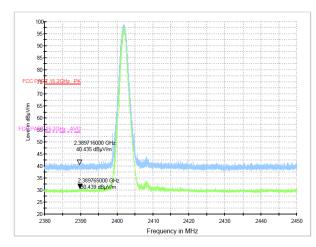
Test Mode: GFSK-High Hopping-on

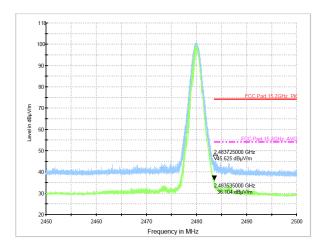


FCCPart IS 20142. ASS CCCPart IS 20142. ASS

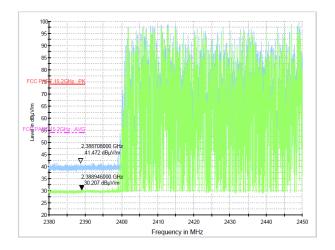


Test Mode: π/4 DQPSK-High Hopping-off

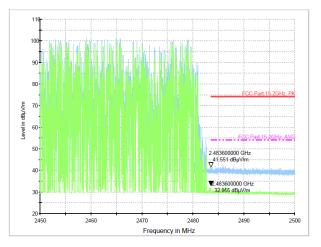




Test Mode: $\pi/4$ DQPSK-Low Hopping-on

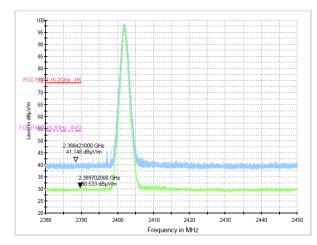


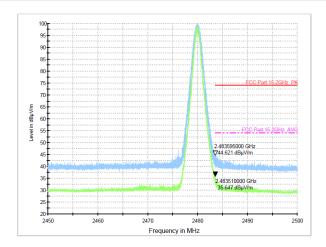
Test Mode: $\pi/4$ DQPSK-High Hopping-on



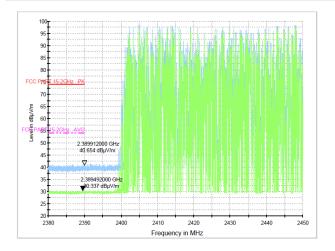
Test Mode: 8DPSK-Low Hopping-off

Test Mode: 8DPSK-High Hopping-off

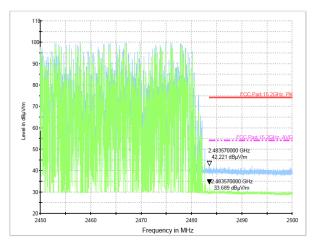




Test Mode: 8DPSK-Low Hopping-on

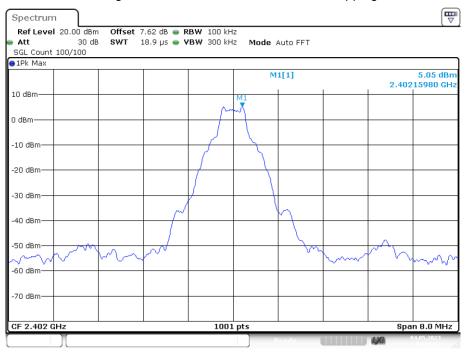


Test Mode: 8DPSK-High Hopping-on

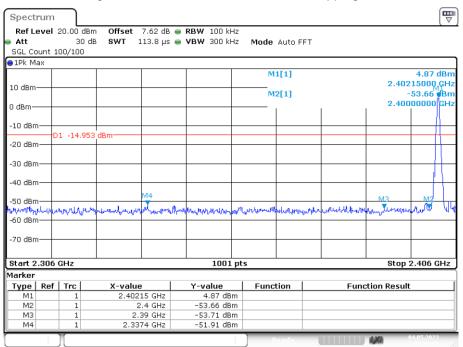


Conducted Method

Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref

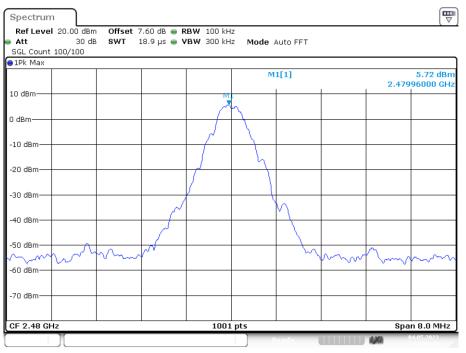


Date: 4.MAY.2023 09:58:52



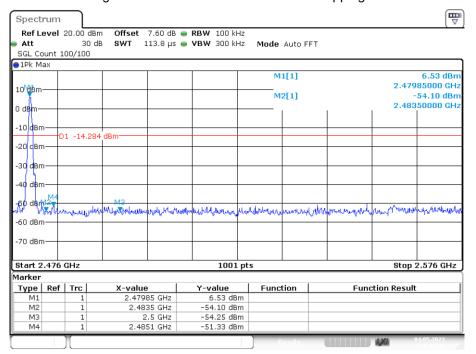
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

Date: 4.MAY.2023 09:58:57



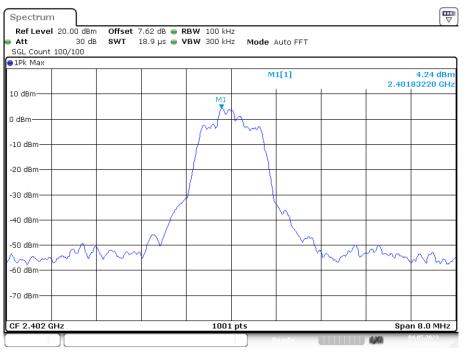
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref

Date: 4.MAY.2023 10:01:38



Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission

Date: 4.MAY.2023 10:01:44



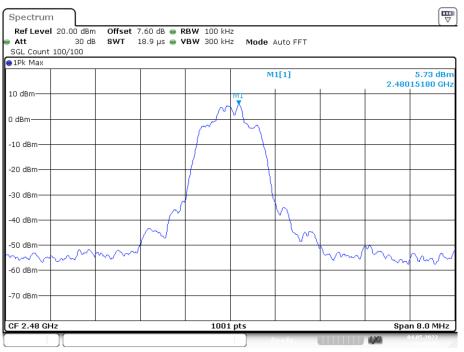
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref

Date: 4.MAY.2023 10:34:47

₩ Spectrum Ref Level 20.00 dBm Offset 7.62 dB 👄 RBW 100 kHz Att 30 dB SWT 113.8 µs 😑 VBW 300 kHz Mode Auto FFT SGL Count 100/100 ⊖1Pk Max M1[1] 5.08 dBn 2.40185000 GHz -51.57 dBm 2.40000000 GHz 10 dBm M2[1] 0 dBm--10 dBm D1 -15.760 dBm--20 dBm--30 dBm -40 dBm· N М4 -50 dBm Month in ton М manypharturalizeron mound with white he have IN May round allow warmer when the my Myth 440 -60 dBm -70 dBm· Start 2.306 GHz 1001 pts Stop 2.406 GHz Marker Type Ref Trc M1 1 **Y-value** 5.08 dBm -51.57 dBm X-value Function Function Result 2.40185 GHz M2 2.4 GHz 2.39 GHz 1 MЗ -54.71 dBm 1 M4 2.3701 GHz -52.26 dBm 1 4,40

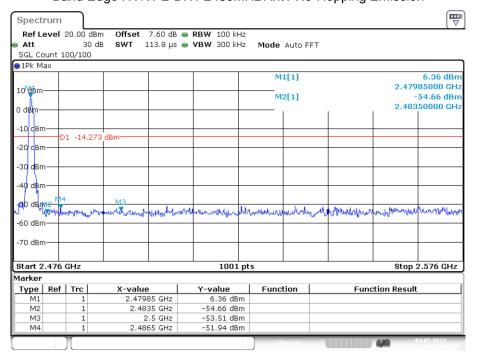
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission

Date: 4.MAY.2023 10:34:53



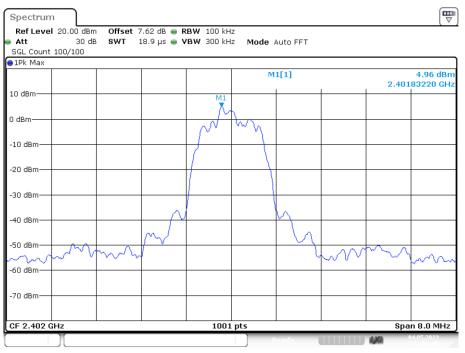
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref

Date: 4.MAY.2023 10:47:25



Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission

Date: 4.MAY.2023 10:47:31



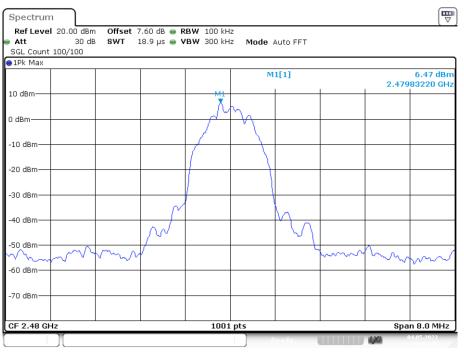
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref

Date: 4.MAY.2023 10:52:05

₩ Spectrum Ref Level 20.00 dBm Offset 7.62 dB 👄 RBW 100 kHz Att 30 dB SWT 113.8 µs 😑 VBW 300 kHz Mode Auto FFT SGL Count 100/100 ⊖1Pk Max M1[1] 5.10 dBn 2.40185000 GHz -53.31 JBm 2.40000000 GHz 10 dBm M2[1] 0 dBm--10 dBm D1 -15.039 dBm--20 dBm--30 dBm -40 dBm· M4 -50 dBm U. monteres where were worklower plan Manhan 44212422042042042042042042 whentheleneranderstate munth non Turkell Andered -60 dBm -70 dBm Start 2.306 GHz 1001 pts Stop 2.406 GHz Marker Type Ref Trc M1 1 X-value Y-value Function Function Result 2.40185 GHz 5.10 dBm -53.31 dBm M2 2.4 GHz 2.39 GHz 1 MЗ -53.99 dBm 1 M4 2.332 GHz -52.79 dBm 1 4,44

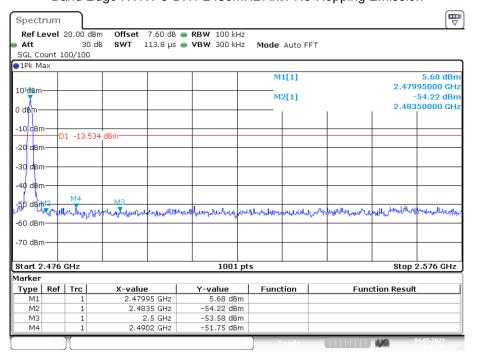
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission

Date: 4.MAY.2023 10:52:11



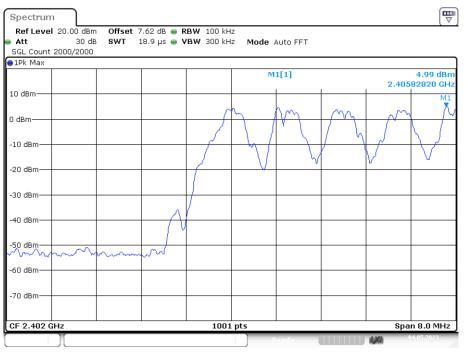
Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Ref

Date: 4.MAY.2023 11:02:38



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Emission

Date: 4.MAY.2023 11:02:44



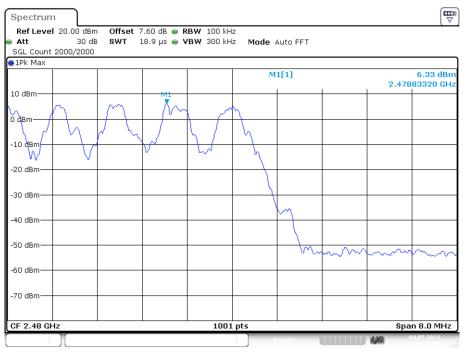
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref

Date: 4.MAY.2023 09:42:10

Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission

Spectru	m									
Ref Lev	el 20.00	dBm Offset	7.62 dB 🧉	• RBW 100 kHz						
Att	31	db SWT	113.8 µs 🧉	• VBW 300 kHz	Mode Aut	O FFT				
SGL Coun	t 1000/10	000								
∋1Pk Max										
					M1[1]]			5.07 dBr	
10 dBm—			_					2.40	385000 GH	
					M2[1]			-53.66 dBr		
0 dBm								2.40	000000101	
-10 dBm—										
00 JD	D1 -15.	013 dBm								
-20 dBm—										
-30 dBm—										
-50 abiii										
-40 dBm—										
		M4								
-50 dBm-	Aure	dealing draw bernet, by	Alla Amburt	mountertendente	distance in the local	Alm day	Marida Maridha camar	MB MB	Ma	
-60 dBm—				and the second sec		, N		ייי ייעייך		
-ou ubm—										
-70 dBm—										
/o abiii										
Start 2.3	06 GHz			1001 pt:	s			Stor	2.406 GHz	
Marker										
Type R	ef Trc	X-valı	ie	Y-value	Function		Fun	ction Resu	lt	
M1	1	2.40	385 GHz	5.07 dBm						
M2	1	2.4 GHz		-53.66 dBm						
M3	1		2.39 GHz	-53.60 dBm						
M4	1	2.3	252 GHz	-51.13 dBm						
					Read	7		440	04.05.2023	

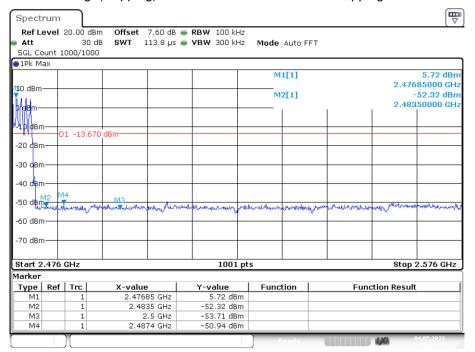
Date: 4.MAY.2023 09:42:39



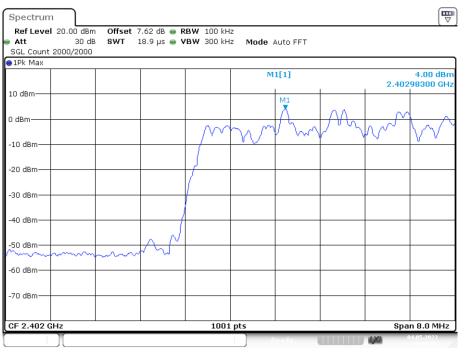
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref

Date: 4.MAY.2023 09:56:34

Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



Date: 4.MAY.2023 09:57:03



Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref

Date: 4.MAY.2023 10:09:57

Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission

Spectrum										
Ref Level Att SGL Count	30 d	B SWT		RBW 100 kH VBW 300 kH	-	Auto F	FT			
∋1Pk Max										
					М	1[1]				4.71 dBi
10 dBm		+		++	2.40 M2[1]			385000 GH -51.19 dB		
					IM	2[1]			2 40	-51.19 dB
0 dBm						1	1	1	2.40	I MA
-10 dBm										1 1 1 1
	D1 -16.001	d D en								
-20 dBm	DI -16.001									
-30 dBm		+		+		<u> </u>				+
-40 dBm										
-50 dBm			M4						МЗ	M2
comme that have	Marchellow John	. Harler Mondelinguas	logal or harro	maturaning	alan problem	whether	man	mour	with tomber	Mummed
-60 dBm							_			
-70 dBm				+ +						
Start 2.306	GHz			1001	pts				Stop	2.406 GHz
Marker										
Type Ref	Trc	X-value	e	Y-value	Func	tion		Func	tion Resu	lt
M1	1	2.403	85 GHz	4.71 dBr	n					
M2	1		2.4 GHz	-51.19 dBr						
MЗ	1		39 GHz	-52.94 dBr						
M4	1	2.34	16 GHz	-50.73 dBr	n					
						Ready			100	04.05.2023

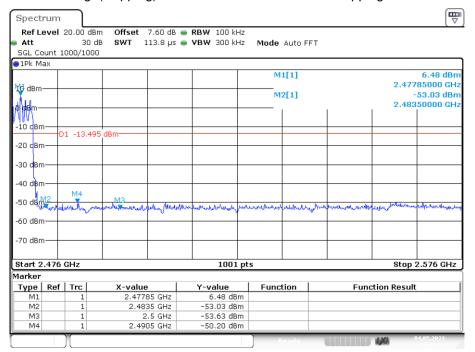
Date: 4.MAY.2023 10:10:26



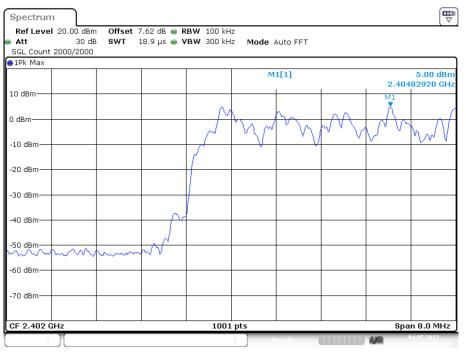
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref

Date: 4.MAY.2023 10:23:45

Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



Date: 4.MAY.2023 10:24:14



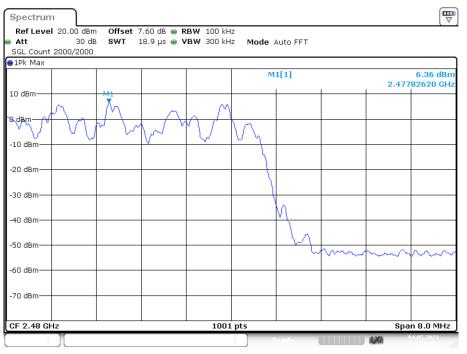
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref

Date: 4.MAY.2023 11:05:21

Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission

₩ Spectrum Ref Level 20.00 dBm Offset 7.62 dB 👄 RBW 100 kHz Att 30 dB SWT 113.8 µs 😑 VBW 300 kHz Mode Auto FFT SGL Count 1000/1000 ⊖1Pk Max 4.93 dBm 2.40185000 GHz -53.09 vBm 2.4000000 dW M1[1] 4.93 dBn 10 dBm M2[1] 0 dBm--10 dBm D1 -14.995 dBm--20 dBm--30 dBm -40 dBm· М4 -50 dBm----any party here mound new James and wround. and fight work while A Martin Martin march ver the -60 dBm--70 dBm· Start 2.306 GHz 1001 pts Stop 2.406 GHz Marker Type | Ref | Trc | X-value Y-value Function **Function Result** 2.40185 GHz 4.93 dBm Μ1 1 -53.09 dBm -54.27 dBm M2 2.4 GHz 2.39 GHz 1 MЗ 1 M4 2.3407 GHz -50.80 dBm 1 1/1

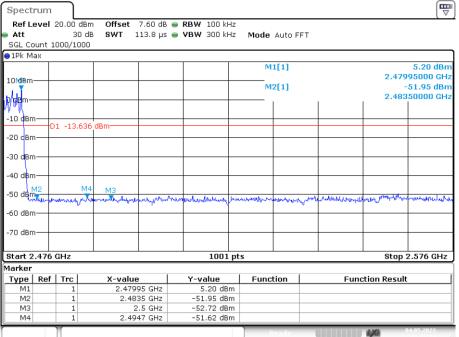
Date: 4.MAY.2023 11:05:51



Band Edge(Hopping) NVNT 3-DH1 2480MHz Ant1 Hopping Ref

Date: 4.MAY.2023 11:16:54

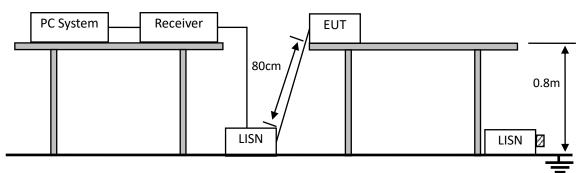
Band Edge(Hopping) NVNT 3-DH1 2480MHz Ant1 Hopping Emission



Date: 4.MAY.2023 11:17:23

10. POWER LINE CONDUCTED EMISSIONS

10.1.Block Diagram of Test Setup



 \blacksquare :50 Ω Terminator

10.2.Limit

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

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

10.3.Test Procedure

(1) The EUT was placed on a non-metallic table, 80cm above the ground plane.

(2) Setup the EUT and simulator as shown in 10.1

(3) The EUT Power connected to the power mains through a power adapter and a line impedance stabilization network (L.I.S.N1). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N2), this provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). 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 :2013on conducted Emission test.

(4) The bandwidth of test Receiver is set at 10KHz.

(5) The frequency range from 150 KHz to 30MHz is checked.

10.4.Test Result

Not applicable for equipment operated with battery.

11. ANTENNA REQUIREMENTS

11.1.Limit

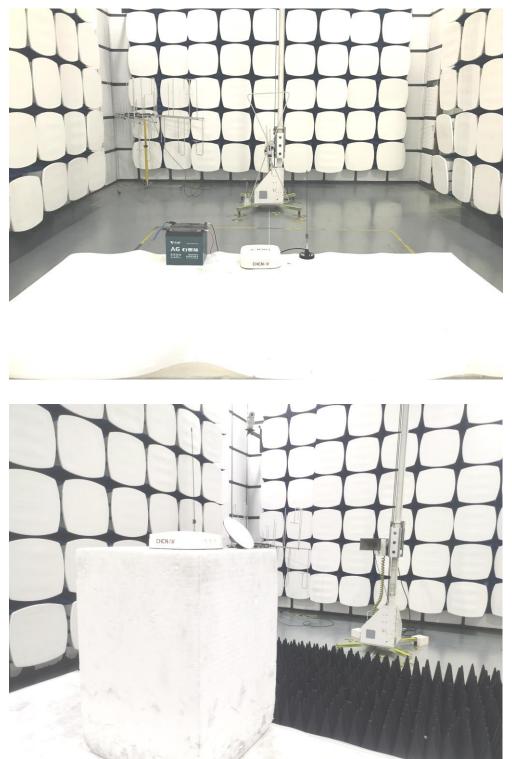
For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2.Result

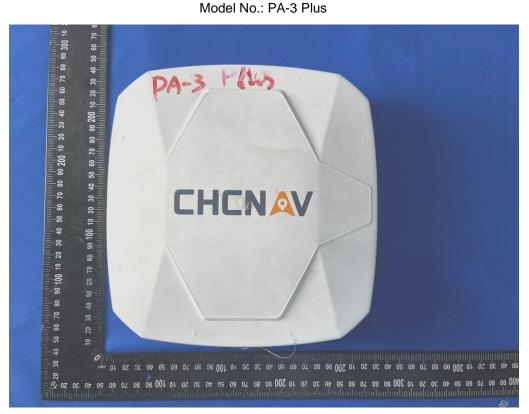
The EUT antenna is Internal Antenna. It complies with the standard requirement.

12. TEST SETUP PHOTO

12.1.Photo of Radiated Emission test



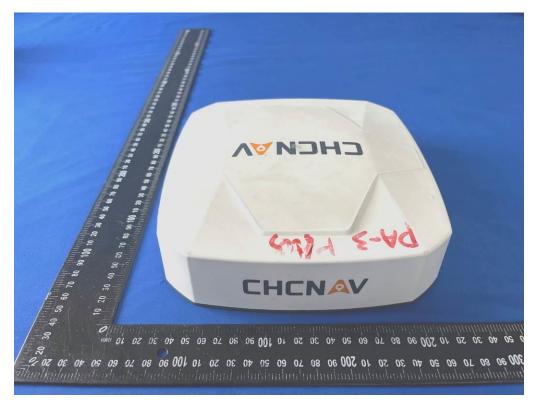
13. EUT Photo



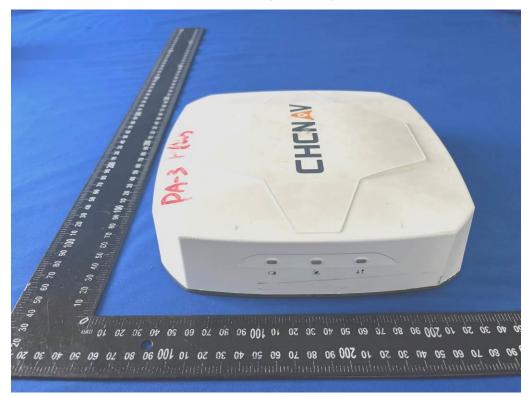
Overall view(PA-3 Plus)



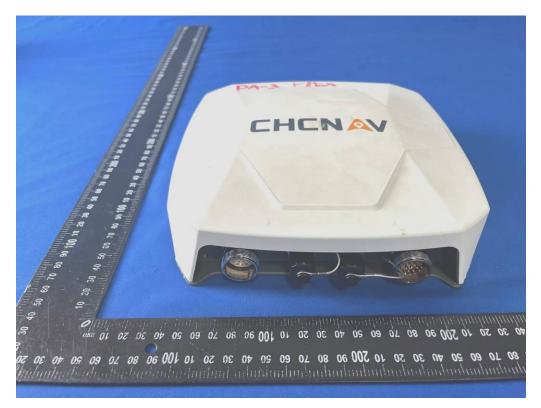
Overall view(PA-3 Plus)



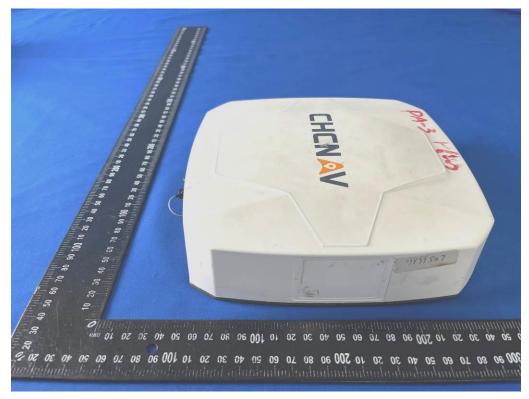
Overall view(PA-3 Plus)



Overall view(PA-3 Plus)



Overall view(PA-3 Plus)



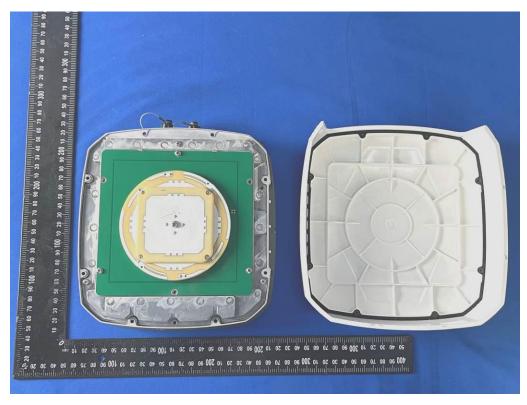
Overall view(PA-3 Plus)



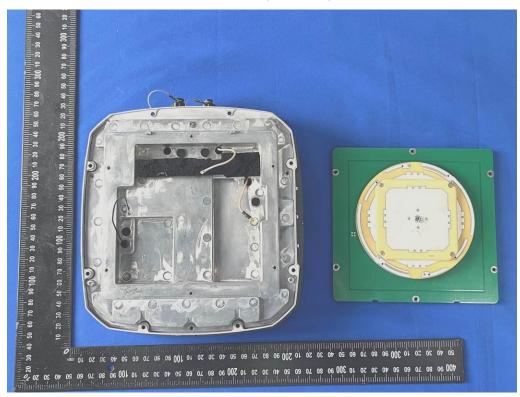
Port View(PA-3 Plus)



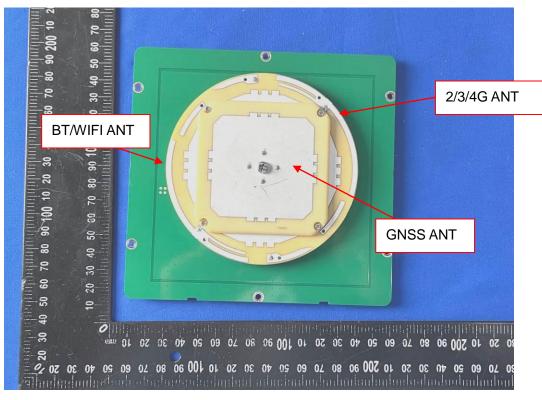
Port View (PA-3 Plus)



Internal view(PA-3 Plus)



Internal view(PA-3 Plus)



Internal view(PA-3 Plus)

