RL RF		SENSE:P	ULSE	ALIGN OFF	11:12:28 AM May 08, 20
enter Freq '	13.265000000 GHz	PNO: East +++ T	rig: Free Run Atten: 30 dB	#Avg Type: RMS Avg Hold: 20/20	TRACE 1 2 3 4 TYPE MWMM DET P N N N
	Offset 2.45 dB f 20.00 dBm				Mkr1 2.435 2 GH -6.068 dB
0.0					
00	1				
1.0					6) (2)
.0	A3				-26.75
.0	Y				
.0		×45			- I de la constantino
.0			يس جول الاعدو ال		
					0
art 30 MHz					Stop 26.50 G
tes BW 100	kHz	#VBW 3	00 kHz		Sweep 2.530 s (30001 p
R MODE TRC SCL	×	Y Hz -6.068 dBm		FUNCTION WIDTH	FUNCTION VALUE
N 1 f	4.874 9 G	Hz -35.438 dBm	n l		
	4.874 9 G 7.311 9 G				
N 1 f		Hz -55.307 dBm	1		
N 1 f	9.576 8 G	12 00.001 uE1			
N 1 f N 1 f	9.576 8 G				
N 1 f N 1 f	9.576 8 G				
N 1 f N 1 f	9.576 8 G				





Tx. Spurious NVNT n20 2462MHz Ant1 Ref

RL	RF 50 Ω AC		SENSE:P	ULSE	ALIGN OFF		11:16:52 AM May 08, 2
enter Fre	q 13.265000	PNC		rig: Free Run Atten: 30 dB	#Avg Typ Avg Hold		TRACE 1 2 3 4 TYPE MWWW DET P N N N
	Ref Offset 2.44 di Ref 20.00 dBm						Mkr1 2.458 2 GI -6.072 dB
10							0 10
	1						
.0							
0		3					-26.08
	Y						
0		Y	5			10000000	
	and the second second second	a the second states and second	V.	A SALES PROVIDE AND INCOME.	and the second second		
0			and the official states of				
art 30 MH les BW 10			#VBW 3	00 kHz		Swee	Stop 26.50 G ep 2.530 s (30001 p
R MODE TRC		×	Y	FUNCTION	FUNCTION WIDTH		UNCTION VALUE
N 1	f	2.458 2 GHz 4.927 8 GHz	-6.072 dBn -34.887 dBn				
N 1 N 1	f	4.927 8 GHz 7.385 1 GHz	-34.887 dBn -44.322 dBn	1			
N 1	f	9.718 0 GHz	-55.460 dBn				

Tx. Spurious NVNT n20 2462MHz Ant1 Emission

BSL Testing Co.,LTD.

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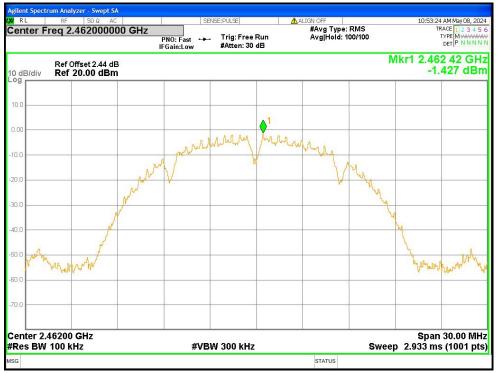
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-46.87	-20	Pass
b	2462	Ant1	-53.32	-20	Pass
g	2412	Ant1	-41.69	-20	Pass
g	2462	Ant1	-50.98	-20	Pass
n20	2412	Ant1	-38.98	-20	Pass
n20	2462	Ant1	-48.75	-20	Pass

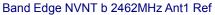


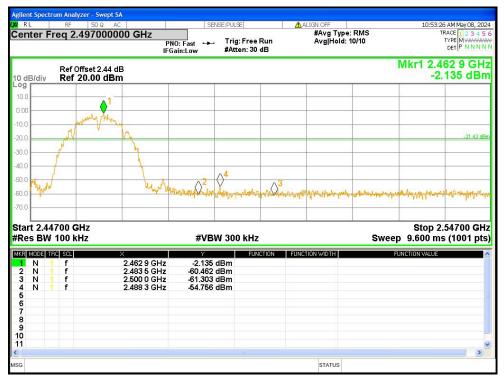
Band Edge NVNT b 2412MHz Ant1 Ref

RL	RF 50 Ω	AC	SENSE:PULS	E	ALIGN OFF		10:46:59 AM May 08, 2
enter Fi	req 2.37700	PNC		: Free Run en: 30 dB	#Avg Type Avg Hold:	:: RMS 100/100	TRACE 1 2 3 4 TYPE M WWW DET P N N N
dB/div	Ref Offset 2.4 Ref 20.00 (M	kr1 2.413 4 GH 1.419 dB
							A1
						N 10	
						June -	and hipericale
						1	-18.00
0						1	N.
.0							1
.0							\
o ——						A Stat	the
0 mm	when the later when	the home manufacture of the second second	and the second	mulappolizard	some and the second sec		- 1023
.0							
	700 GHz 100 kHz		#VBW 300) kHz		Sweep	Stop 2.42700 G 9.600 ms (1001 p
R MODE TF		×	Y I	FUNCTION	FUNCTION WIDTH	FUNC	TION VALUE
N 1	f	2.413 4 GHz 2.400 0 GHz	1.419 dBm -51.009 dBm				
N 1	f	2.400 0 GHz	-51.009 dBm				
N 1	f	2.398 0 GHz	-44.877 dBm				

Band Edge NVNT b 2412MHz Ant1 Emission



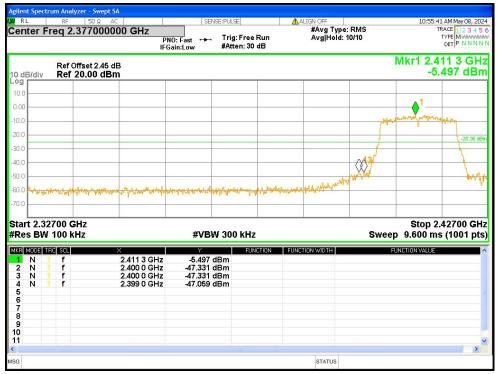




Band Edge NVNT b 2462MHz Ant1 Emission



Band Edge NVNT g 2412MHz Ant1 Ref



Band Edge NVNT g 2412MHz Ant1 Emission



Band Edge NVNT g 2462MHz Ant1 Ref

RL	RF	50 Ω AC		SENSE	:PULSE	ALIGN OFF		11:03:41	AM May 08, 2
nter Fr	eq 2	.4970000	Р		Trig: Free Run #Atten: 30 dB	#Avg Typ Avg Hold:		1	ACE 1 2 3 4 YPE M WAAAA DET P N N N
B/div		Offset 2.44 dl 20.00 dBn						Mkr1 2.46 -4.9	62 9 GI 948 dB
		<u>1</u>	0					0	-
	-	ownycon	-						-
	1								-25.00
	ſ		X						
H any			Andrea	Man 2		عملان معر مع مال مع	and the second second	- Malakaralle ala	Jun Jones
-						AA Garren and al Maren	and the second	and the second second	
rt 2.44 es BW				#VBW	300 kHz		Swe	Stop 2.5 ep 9.600 ms	
MODE TE	ic scl		× 2.462 9 GHz	-4.948 dE		FUNCTION WIDTH		FUNCTION VALUE	
N 1 N 1	f f		2.483 5 GHz 2.500 0 GHz 2.494 5 GHz	-56.843 dE -58.888 dE -55.981 dE	m				

Band Edge NVNT g 2462MHz Ant1 Emission



Band Edge NVNT n20 2412MHz Ant1 Ref

RL	RF 50 \$	2 AC	SENSE:PUL:	æ	ALIGN OFF		11:07:43	AM May 08, 20
enter F	req 2.3770	00000 GHz	0:East →→ Trig	: Free Run en: 30 dB	#Avg Type Avg Hold:		TR	ACE 1 2 3 4 5 YPE MWWWW DET P N N N N
) dB/div	Ref Offset 2 Ref 20.00						Mkr1 2.40 -5.0	9 1 GH 93 dBr
2.0						-		
00							● ¹	
.0						from	annound a mount	any
.0								-24.77 d
.0						0.8		-
.0								1
0			* motor particular		Restorderugen	MANY		W
.0	un Managenerita Mast	alement all and a second s	a welder an barry the	uparter a caracteria	All restant and			
.0							0	
	2700 GHz 100 kHz		#VBW 30) kHz		Swee	Stop 2.4 p 9.600 ms	
r Mode T	RC SCL	× 2.409 1 GHz	-5.093 dBm	FUNCTION	FUNCTION WIDTH	i	UNCTION VALUE	
N	1 f	2.400 0 GHz	-43.750 dBm					
N N	1 f 1 f	2.400 0 GHz 2.400 0 GHz	-43.750 dBm -43.750 dBm					
								>





Band Edge NVNT n20 2462MHz Ant1 Ref

RL RF	50 Ω AC		SENSE:F	PULSE	ALIGN OFF			31 AM May 08, 2
nter Freq 2.4	97000000	PN		ʻrig: Free Run Atten: 30 dB	#Avg Typ Avg Hold:			TRACE 1 2 3 4 TYPE MWWW DET P N N 1
	fset 2.44 dB 0.00 dBm				1		Mkr1 2.4 -5	163 8 G .822 dE
)				2			0	
man	man parman							
	N. N.							-25.40
								-
and		handenaus	A2)4		61			
			montallyman	PAround a home	and and an formation	man and a way	-	apple with
	0		M. Mallyna	PArrow Astron	, _{magintar} and an	and an entry of a line	a ward and a stand of the stand	apather with
rt 2.44700 GH s BW 100 kH			#VBW 3	BOO KHZ	, where any from the second	swe	کر کر ک	
rt 2.44700 GH es BW 100 kH	z ×	163.8 GHz	Y	FUNCTION	FUNCTION WIDTH	Swe		
rt 2.44700 GH es BW 100 kH	Z X 2.4 2.4	163 8 GHz 183 5 GHz 180 0 GHz	#VBW 3	FUNCTION n n	estanting and a second part of the second se	Swe	ep 9.600 m	
rt 2.44700 GH es BW 100 kH MODE TRC SCL N 1 f	Z 2.4 2.4 2.5	183 5 GHz	-5.822 dBr -57.001 dBr	FUNCTION n n	FUNCTION WIDTH	Swe	ep 9.600 m	
MODE TRC SCL N 1 f N 1 f N 1 f	Z 2.4 2.4 2.5	183 5 GHz 500 0 GHz	-5.822 dBr -57.001 dBr -59.043 dBr	FUNCTION n n	FUNCTION WIDTH	Swe	ep 9.600 m	
TT 2.44700 GH S BW 100 KH MODE TFC SCL N 1 f N 1 f N 1 f	Z 2.4 2.4 2.5	183 5 GHz 500 0 GHz	-5.822 dBr -57.001 dBr -59.043 dBr	FUNCTION n n	FUNCTION WIDTH	Swe	ep 9.600 m	
MODE TRC SCL N 1 f N 1 f N 1 f	Z 2.4 2.4 2.5	183 5 GHz 500 0 GHz	-5.822 dBr -57.001 dBr -59.043 dBr	FUNCTION n n	FUNCTION WIDTH	Swe	ep 9.600 m	2.54700 G s (1001 p

Band Edge NVNT n20 2462MHz Ant1 Emission

10. CHANNEL BANDWIDTH

Test Requirement:	RSS-Gen 6.7
Test Method:	RSS-Gen

10.1 CONFORMANCE LIMIT

No limit requirement.

10.2 TEST PROCEDURE

The EUT was operating in Bluetooth transmitter mode and controlled its channel. Printed out the test result from the spectrum by hard copy function.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously

Set RBW = 1-5% of 99% occupied bandwidth.

Set the video bandwidth (VBW) \geq 3*RBW.

Set Span= approximately 2 to 3 times OBW

Set Detector = Peak.

Set Trace mode = max hold.

Set Sweep = auto couple.

If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies. Measure and record the results in the test report.

10.3 DEVIATION FROM STANDARD

No deviation.

10.4 TEST SETUP

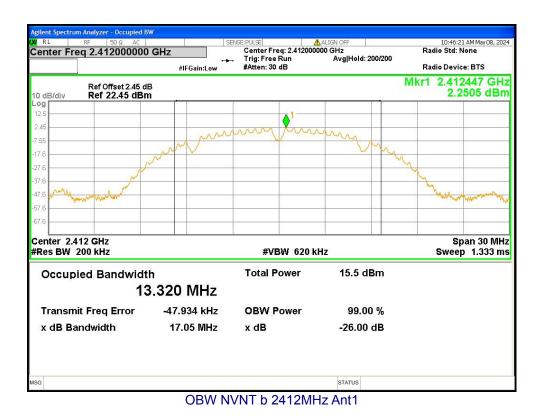
EUT	SPECTRUM
	ANALYZER

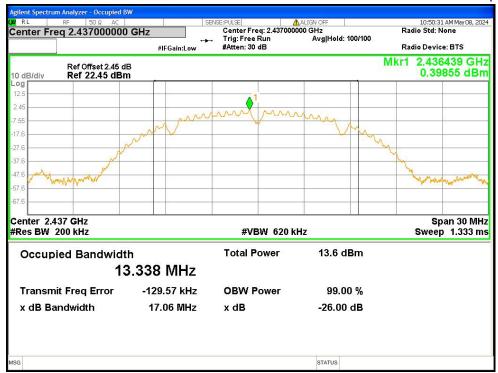
10.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

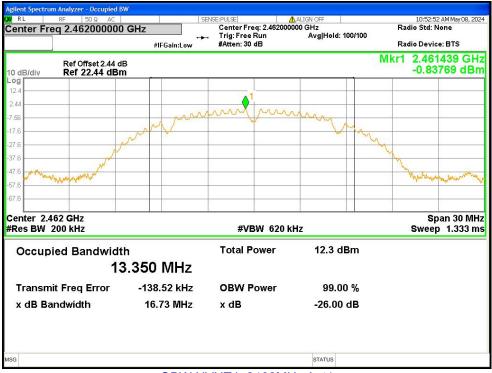
10.6 TEST RESULTS

Mode	Channel Frequency (MHz)	99% Occupied Bandwidth (MHz)	Verdict
b	2412	13.320	PASS
b	2437	13.338	PASS
b	2462	13.350	PASS
g	2412	16.312	PASS
g	2437	16.323	PASS
g	2462	16.334	PASS
n20	2412	17.310	PASS
n20	2437	17.320	PASS
n20	2462	17.314	PASS





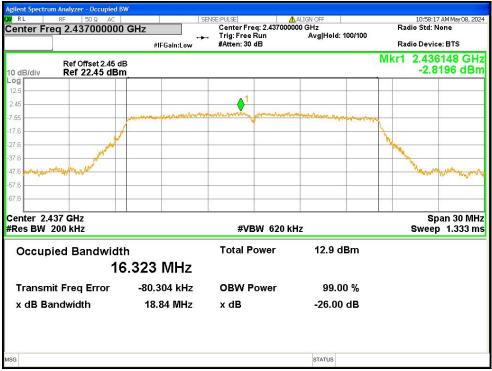
OBW NVNT b 2437MHz Ant1



OBW NVNT b 2462MHz Ant1

Agilent Spectrum Analyzer - Occupied					
RL RF 50 Ω AC Center Freq 2.41200000		Center Freq: 2.412000		Radi	10:55:08 AM May 08, 2024 o Std: None
	#IFGain:Low	Trig: Free Run #Atten: 30 dB	Avg Hold: 100/100	Radi	o Device: BTS
Ref Offset 2.45 of Ref 22.45 dB				Mkr1	2.410281 GHz -2.3918 dBm
Log 12.5					
2.45		<u>_1</u>			
-7.55	manamenton	anone and a second second second	unnan many lan		
-17.6	1			1	
-27.6	<u></u>			Man	
-37.6				M	0
-47.6 man Manuel What					Joseph March
-57.6					
-67.6			8		0
Center 2.412 GHz #Res BW 200 kHz		#VBW 6201	٢Hz		Span 30 MHz Sweep 1.333 ms
Occupied Bandwid	th	Total Power	13.6 dBm		
1	6.312 MHz				
Transmit Freq Error	-57.008 kHz	OBW Power	99.00 %		
x dB Bandwidth	19.03 MHz	x dB	-26.00 dB		
MSG			STATUS		

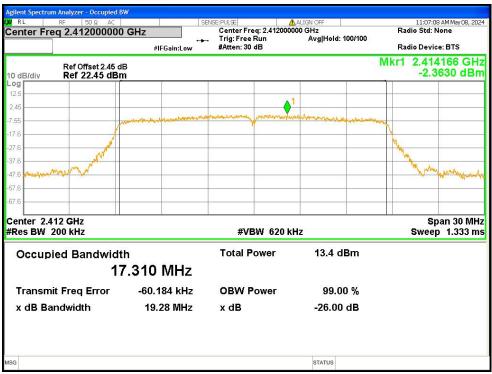
OBW NVNT g 2412MHz Ant1



OBW NVNT g 2437MHz Ant1

Agnenit Spectru LXI R L	rum Analyzer - Occupied B\ RF 50 Ω AC	<i>•</i>	SENSE:PULSE	ALIGN OFF		11:03:15 AM May 08, 2024
	req 2.462000000	GHz	Center Freq: 2.462000	0000 GHz	Ra	dio Std: None
	7	#IFGain:Low		Avg Hold: 100/100	Ra	dio Device: BTS
-		#II Gam.cow			Mkr1	
10 dB/div	Ref Offset 2.44 dE Ref 22.44 dBm				IVINI	-2.7234 dBm
Log 12.4						
2.44			A1			
-7.56		want of more many and	south and a second and the second	and management managements		
-17.6				a second second second second second		
-17.6	NIM M				N.	
-27.6	abres				N.H.	n.
-37.6	work all some la bet					When any when the man when the start
and a second						
-57.6						
-67.6						
Center 2.		i			_	Span 30 MHz
#Res BW	200 KMZ		#VBW 620 k	(HZ		Sweep 1.333 ms
Occup	pied Bandwidt	h	Total Power	13.7 dBm		
	16	6.334 MHz				
Transn	nit Freq Error	-75.999 kHz	OBW Power	99.00 %		
x dB B	andwidth	19.30 MHz	x dB	-26.00 dB		
MSG				STATUS		

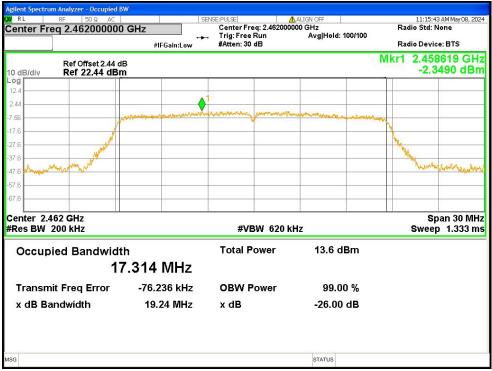
OBW NVNT g 2462MHz Ant1



OBW NVNT n20 2412MHz Ant1

Agilent Spectrum Analyzer - Occupied B			<i></i>					
RL RF 50 Ω AC Center Freq 2.437000000		SENSE:PULSE Center Freq Trig: Free Ri	: 2.43700000	LIGN OFF 0 GHz Avg Hold: '	100/100	Rad	11:10:59 AM M lio Std: None	
#IFGain:Low #Atten: 30 dB						Radio Device: BTS		
Ref Offset 2.45 d 10 dB/div Ref 22.45 dBn						Mkr1	2.43423 -2.314	
12.5								
2.45		● ¹						
-7.55	and the second states and a second states and the	wednesdamment of	hundralinimister	and the literation	fertherenge who	and the second second	0	
-17.6	<u> </u>				-			
-27.6	<u></u>					1		
-37.6						7	Mr. Nu	
-47.6							and a draw	Manager .
-57.6								
Center 2.437 GHz #Res BW 200 kHz	#VBW 620 kHz				Span 30 MHz Sweep 1.333 ms			
Occupied Bandwidth		Total Power		12.7 d	12.7 dBm			
17	7.320 MHz							
Transmit Freq Error	-85.182 kHz	OBW Power 9		99.0	99.00 %			
x dB Bandwidth	19.21 MHz	x dB		-26.00 dB				
MSG				STATUS				

OBW NVNT n20 2437MHz Ant1



OBW NVNT n20 2462MHz Ant1

11. ANTENNA REQUIREMENT

F					
Standard requirement:	FCC Part15 C Section 15.203 /247(c)				
	RSS-Gen Section 6.8, RSS-247 Section 5.4				
15.203 requirement:					
be used with the device. The use of a intentional radiator, the manufacturer muse of a standard antenna jack or elect	It to ensure that no antenna other than that furnished by the responsible party shall a permanently attached antenna or of an antenna that uses a unique coupling to the hay design the unit so that a broken antenna can be replaced by the user, but the prical connector is prohibited.				
15.247(c) (1)(i) requirement:					
(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi 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 6dBi.					
For intentional device, according to RSS-Gen Issue 5 Section 6.8:					
The applicant for equipment certification, as per RSP-100, must provide a list of all antenna types that may be used with the licence-exempt transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna.					
Licence-exempt transmitters that have received equipment certification may operate with different types of antennas. However, it is not permissible to exceed the maximum equivalent isotropically radiated power (e.i.r.p.) limits specified in the applicable standard (RSS) for licence-exempt apparatus.					
RSS-247 Section 5.4					
employ transmitting antennas with direct	5 MHz band that is used exclusively for fixed. Point-to-point operations may ctional gain greater than 6dBi provided the maximum conducted output power of dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.				
EUT Antenna:					
The WIFI 2.4G antenna is PCB Antenna, the best case gain for the antenna is -0.51dBi, reference to the appendix II for details					

12. TEST SETUP PHOTO

Reference to the appendix I for details.

13. EUT CONSTRUCTIONAL DETAILS

Reference to the appendix II for details.

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