	TEST REP	'OR	Г		
FCC ID	2BE6N-W150S				
Test Report No:	TCT241128E012				
Date of issue:	Dec. 09, 2024			C	
Testing laboratory: :	SHENZHEN TONGCE 1	ESTING	LAB	<i>—</i> ,	
Testing location/ address:	2101 & 2201, Zhenchan Fuhai Subdistrict, Bao'aı 518103, People's Reput	n District	Shenzhen, Gua		
Applicant's name: :	GIRAFIT INC				
Address:	21642 GOLDEN POPP	COUR	, WALNUT, Cal	ifornia 91749,	
Manufacturer's name :	GIRAFIT INC		(
Address:	21642 GOLDEN POPPY United States	21642 GOLDEN POPPY COURT, WALNUT, California 91749, United States			
Standard(s):	FCC CFR Title 47 Part 1 FCC KDB 558074 D01 1 ANSI C63.10:2020				
Product Name::	W150S Window Camera	a			
Trade Mark:	N/A		(
Model/Type reference :	GRF-W150SW, GRF-W W150S, W150SW, W15			RF-W150SG,	
Rating(s):	Adapter Information: MODEL: BS05A-050100 INPUT: AC 100-240V, 5 OUTPUT: DC 5V, 1000r	0/60Hz, (
Date of receipt of test item	Nov. 28, 2024		Q	(C)	
Date (s) of performance of test:	Nov. 28, 2024 ~ Dec. 09	, 2024			
Tested by (+signature) :	Yannie ZHONG		Yannie Zwarte	CE X	
Check by (+signature) :	Beryl ZHAO		Boy 2 T		
Approved by (+signature):	Tomsin	(\mathbf{C})	Tomsies	84	

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TCT通测检测 TESTING CENTRE TECHNOLOGY

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1. General Product Information

1.1. EUT description

Product Name:	W150S Window Camera		
Model/Type reference:	GRF-W150SW		
Sample Number	TCT241128E011-0101		
Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(HT20)/8 2422MHz~2452MHz (802.11n(HT40)/802.11ax(HE40))	802.11ax(HE20))	
Channel Separation:	5MHz	$\langle \mathcal{O} \rangle$	
Number of Channel:	11 for 802.11b/802.11g/802.11n(H 7 for 802.11n(HT40)/802.11ax(HE4	, , , ,	0)
Modulation Technology:	802.11b: Direct Sequence Spread 802.11g/802.11n: Orthogonal Frequency Division Mu		
Data speed:	802.11b: 1Mbps, 2Mbps, 5.5Mbps, 802.11g: 6Mbps, 9Mbps, 12Mbps, 48Mbps, 54Mbps 802.11n: Up to 150Mbps	11Mbps	6Mbps,
Antenna Type:	Metal Antenna		
Antenna Gain:	3.38dBi	KC)	
Rating(s):	Adapter Information: MODEL: BS05A-0501000US INPUT: AC 100-240V, 50/60Hz, 0. OUTPUT: DC 5V, 1000mA	25A Max.	

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

No.	Model No.	Tested with			
(G)1	GRF-W150SW	$\boxtimes \bigcirc \bigcirc$			
Other models	GRF-W150S, GRF-W150SB, GRF-W150SG, W150S, W150SW, W150SG, W150SB				
Note: GRF-W150SW is tested model, other models are derivative models. The models are identical in circuit and PCB layout, only different on the model names, image pixel and color. So the test data of GRF-W150SW can represent the remaining models.					



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1.3. Operation Frequency

For 802.11b/g/n(HT20)/ax(HE20)

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

For 802.11n(HT40)/ax(HE40)

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
		4	2427MHz	7	2442MHz		-
G`)	(5	2432MHz	8	2447MHz	G`)	- (0
3	2422MHz	6	2437MHz	9	2452MHz		<u> </u>

Note:

In section 15.31(*m*), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

802.11b/802.11g/802.11n(HT20)/802.11ax(HE20)

Frequency
2412MHz
2437MHz
2462MHz

802.11n(HT40)/802.11ax(HE40)

Channel	Frequency
The lowest channel	2422MHz
The middle channel	2437MHz
The Highest channel	2452MHz



2. Test Result Summary

Requirement	CFR 47 Section	Result
Antenna requirement	§15.203/§15.247 (c)	PASS
AC Power Line Conducted Emission	§15.207	PASS
Conducted Peak Output Power	§15.247 (b)(3)	PASS
6dB Emission Bandwidth	§15.247 (a)(2)	PASS
Power Spectral Density	§15.247 (e)	PASS
Band Edge	§15.247(d)	PASS
Spurious Emission	§15.205/§15.209	PASS

Note:

- 1. PASS: Test item meets the requirement.
- 2. Fail: Test item does not meet the requirement.
- 3. N/A: Test case does not apply to the test object.
- 4. The test result judgment is decided by the limit of test standard.

3. General Information

3.1. Test environment and mode

Operating Environment:		
Condition	Conducted Emission	Radiated Emission
Temperature:	22.1 °C	23.5 °C
Humidity:	50 % RH	51 % RH
Atmospheric Pressure:	1010 mbar	1010 mbar
Test Software:		
Software Information:	SSCOM V5.13.1	
Power Level:	3	
Test Mode:		
Engineer mode:	Keep the EUT in continuous channel and modulations wi	
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both horiz	During the test, each emission ing, investigated all operating isidered typical configuration g cables, rotating the turnta ontal and vertical polarization	y modes, rotated about all 3 n to obtain worst position, ble, varying antenna height
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both horiz	During the test, each emission ing, investigated all operating isidered typical configuration g cables, rotating the turnta	n was maximized by: having modes, rotated about all 3 n to obtain worst position ble, varying antenna height
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both horiz (Z axis) are shown in Test R We have verified the constru- were carried out with the EU report and defined as follow	During the test, each emission ing, investigated all operating isidered typical configuration g cables, rotating the turnta ontal and vertical polarization esults of the following pages.	n was maximized by: having modes, rotated about all 3 n to obtain worst position ble, varying antenna heigh s. The emissions worst-case operation. All the test modes hich was shown in this test
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both horiz (Z axis) are shown in Test R We have verified the constru- were carried out with the EU report and defined as follow Per-scan all kind of data ra was worst case.	During the test, each emission ing, investigated all operating isidered typical configuration g cables, rotating the turnta ontal and vertical polarization esults of the following pages. Unction and function in typical of JT in transmitting operation, w s:	n was maximized by: having modes, rotated about all 3 n to obtain worst position ble, varying antenna height s. The emissions worst-case operation. All the test modes hich was shown in this test
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polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both horiz (Z axis) are shown in Test R We have verified the constru- were carried out with the EU report and defined as follow Per-scan all kind of data ra was worst case. Mode 802.11b	During the test, each emission ing, investigated all operating isidered typical configuration g cables, rotating the turnta ontal and vertical polarization esults of the following pages. Unction and function in typical of JT in transmitting operation, w s:	n was maximized by: having modes, rotated about all 3 n to obtain worst position ble, varying antenna height s. The emissions worst-case operation. All the test modes hich was shown in this test bund the follow list which it Data rate 1Mbps
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both horiz (Z axis) are shown in Test R We have verified the constru- were carried out with the EU report and defined as follow Per-scan all kind of data ra was worst case. Mode 802.11b 802.11g	During the test, each emission ing, investigated all operating isidered typical configuration g cables, rotating the turnta ontal and vertical polarization esults of the following pages. Uction and function in typical of JT in transmitting operation, w s:	n was maximized by: having modes, rotated about all 3 n to obtain worst position ble, varying antenna height s. The emissions worst-case operation. All the test modes hich was shown in this test bund the follow list which it Data rate 1Mbps 6Mbps
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both horiz (Z axis) are shown in Test R We have verified the constru- were carried out with the EU report and defined as follow Per-scan all kind of data ra was worst case. Mode 802.11b 802.11g 802.11n(HT20)	During the test, each emission ing, investigated all operating isidered typical configuration g cables, rotating the turnta ontal and vertical polarization esults of the following pages. Unction and function in typical of JT in transmitting operation, w s: ate in lowest channel, and for	n was maximized by: having modes, rotated about all 3 n to obtain worst position ble, varying antenna height s. The emissions worst-case operation. All the test modes hich was shown in this test bund the follow list which it Data rate 1Mbps 6Mbps 6.5Mbps
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both horiz (Z axis) are shown in Test R We have verified the constru- were carried out with the EU report and defined as follow Per-scan all kind of data ra was worst case. Mode 802.11b 802.11g 802.11n(HT20) 802.11n(HT40)	During the test, each emission ing, investigated all operating isidered typical configuration g cables, rotating the turnta ontal and vertical polarization esults of the following pages. uction and function in typical of JT in transmitting operation, w s: ate in lowest channel, and for	n was maximized by: having modes, rotated about all 3 in to obtain worst position ble, varying antenna height s. The emissions worst-case operation. All the test modes hich was shown in this test bund the follow list which it Data rate 1Mbps 6Mbps 6.5Mbps 13.5Mbps
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor- manipulating interconnection from 1m to 4m in both horiz (Z axis) are shown in Test R We have verified the constru- were carried out with the EU report and defined as follow Per-scan all kind of data ra- was worst case. Mode 802.11b 802.11g 802.11n(HT20) 802.11ax(HE20)	During the test, each emission ing, investigated all operating isidered typical configuration g cables, rotating the turnta ontal and vertical polarization esults of the following pages. uction and function in typical of JT in transmitting operation, w s: ate in lowest channel, and for)	n was maximized by: having modes, rotated about all 3 n to obtain worst position ble, varying antenna height s. The emissions worst-case operation. All the test modes hich was shown in this test bund the follow list which it Data rate 1Mbps 6Mbps 6.5Mbps 13.5Mbps 6.5Mbps
polarities were performed. If the EUT continuously work axis (X, Y & Z) and cor- manipulating interconnection from 1m to 4m in both horiz (Z axis) are shown in Test R We have verified the constru- were carried out with the EU report and defined as follow Per-scan all kind of data ra <u>was worst case.</u> Mode 802.11b 802.11g 802.11n(HT20) 802.11n(HT40)	During the test, each emission ing, investigated all operating isidered typical configuration g cables, rotating the turnta ontal and vertical polarization esults of the following pages. uction and function in typical of JT in transmitting operation, w s: ate in lowest channel, and for)	n was maximized by: having modes, rotated about all 3 in to obtain worst position ble, varying antenna height s. The emissions worst-case operation. All the test modes hich was shown in this test bund the follow list which it Data rate 1Mbps 6Mbps 6.5Mbps 13.5Mbps



3.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
1	1	1	1	
(2°)	(¿G`) ((`)	$(\mathcal{L}G)$

Note:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
- 3. For conducted measurements (Output Power, 6dB Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.





4. Facilities and Accreditations

4.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

• FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

•IC - Registration No.: 10668A

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Innovation, Science and Economic Development Canada for radio equipment testing.

4.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China TEL: +86-755-27673339

4.3. Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	MU
1	Conducted Emission	± 3.10 dB
2	RF power, conducted	± 0.12 dB
3	Spurious emissions, conducted	± 0.11 dB
4	All emissions, radiated(<1 GHz)	± 4.56 dB
5	All emissions, radiated(1 GHz - 18 GHz)	± 4.22 dB
6	All emissions, radiated(18 GHz- 40 GHz)	± 4.36 dB



5. Test Results and Measurement Data

5.1. Antenna requirement

Standard requirement: FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

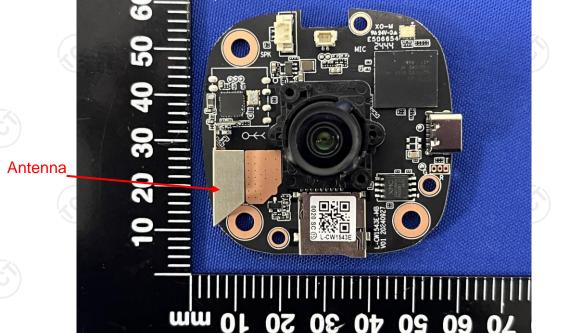
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit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

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.

E.U.T Antenna:

The WIFI antenna is metal antenna which permanently attached, and the best case gain of the antenna is 3.38dBi.





5.2. Conducted Emission

5.2.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.207				
Test Method:	ANSI C63.10:2020				
Frequency Range:	150 kHz to 30 MHz				
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto				
	Frequency range	Limit (dBuV)		
	(MHz)	Quasi-peak	Average		
Limits:	0.15-0.5	66 to 56*	56 to 46* 🔍		
	0.5-5	56	46		
	5-30	60	50		
	Referenc	e Plane			
Test Setup:	40cm E.U.T AC powe Test table/Insulation plane Remarkc E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Na Test table height=0.8m	EMI Receiver	AC power		
Test Mode:	Transmitting Mode				
Test Procedure:	 The E.U.T is connected to the main power through line impedance stabilization network (L.I.S.N.). Th provides a 50ohm/50uH coupling impedance for th measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50u coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all the interface cables must be changed according to ANSI C63.10:2020 on conducted measurement. 				

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5.2.2. Test Instruments

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Conducted Emission Shielding Room Test Site (843)						
Equipment	Manufacturer	Model	Serial Number	Calibration Due		
EMI Test Receiver	R&S	ESCI3	100898	Jun. 26, 2025		
LISN	Schwarzbeck	NSLK 8126	8126453	Jan. 31, 2025		
Attenuator	N/A	10dB	164080	Jun. 26, 2025		
Line-5	тст	CE-05	/	Jun. 26, 2025		
EMI Test Software	EZ_EMC	EMEC-3A1	1.1.4.2	1		
	EMI Test Receiver LISN Attenuator Line-5	EMI Test ReceiverR&SLISNSchwarzbeckAttenuatorN/ALine-5TCT	EMI Test ReceiverR&SESCI3LISNSchwarzbeckNSLK 8126AttenuatorN/A10dBLine-5TCTCE-05	EMI Test ReceiverR&SESCI3100898LISNSchwarzbeckNSLK 81268126453AttenuatorN/A10dB164080Line-5TCTCE-05/		

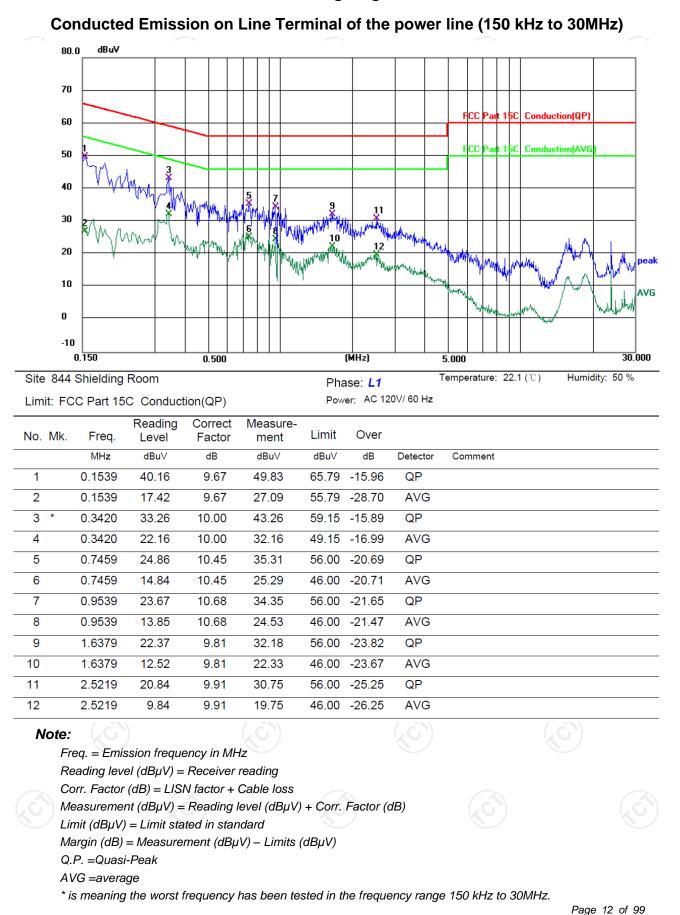


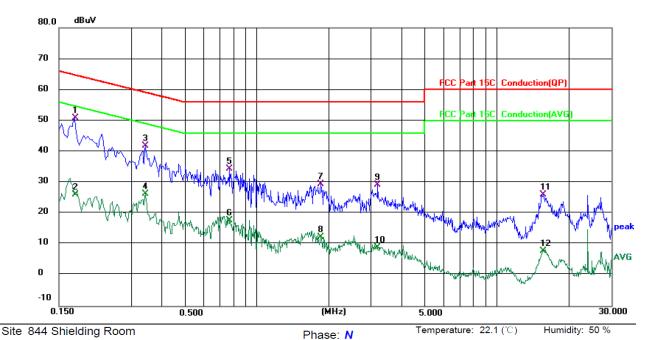
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5.2.3. Test data

TCT 通测检测 TESTING CENTRE TECHNOLOGY

Please refer to following diagram for individual





Power: AC 120V/ 60 Hz

Conducted Emission on Neutral Terminal of the power line (150 kHz to 30MHz)

Limit: FCC Part 15C Conduction(QP)

TCT 通测检测 TCT 通测检测

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBu∨	dB	Detector	Comment
1	*	0.1739	41.18	9.66	50.84	64.77	-13.93	QP	
2		0.1739	16.54	9.66	26.20	54.77	-28.57	AVG	
3		0.3420	31.88	10.00	41.88	59.15	-17.27	QP	
4		0.3420	16.28	10.00	26.28	49.15	-22.87	AVG	
5		0.7740	23.91	10.48	34.39	56.00	-21.61	QP	
6		0.7740	7.20	10.48	17.68	46.00	-28.32	AVG	
7		1.8500	19.77	9.83	29.60	56.00	-26.40	QP	
8		1.8500	2.58	9.83	12.41	46.00	-33.59	AVG	
9		3.1900	19.21	9.99	29.20	56.00	-26.80	QP	
10		3.1900	-0.94	9.99	9.05	46.00	-36.95	AVG	
11		15.5860	15.86	10.26	26.12	60.00	-33.88	QP	
12		15.5860	-2.27	10.26	7.99	50.00	-42.01	AVG	

Note1: Freq. = Emission frequency in MHz

Reading level ($dB\mu V$) = Receiver reading

Corr. Factor (dB) = LISN factor + Cable loss

Measurement ($dB\mu V$) = Reading level ($dB\mu V$) + Corr. Factor (dB)

 $Limit (dB\mu V) = Limit stated in standard$

Margin (dB) = Measurement (dB μ V) – Limits (dB μ V)

Q.P. =Quasi-Peak

AVG =average

* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.

Note 2: Measurements were conducted in all three channels (high, middle, low) and all modulation(802.11b, 802.11g, 802.11n(HT20), 802.11ax(HE20), 802.11n(HT40), 802.11ax(HE40)), and the worst case Mode (Lowest channel and 802.11b) was submitted only.



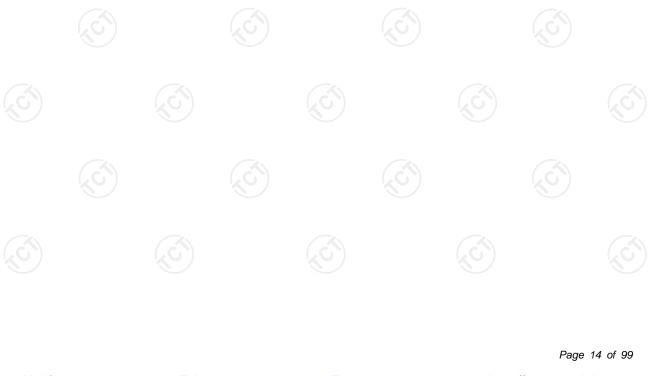
5.3. Maximum Conducted (Peak) Output Power

5.3.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (b)(3)
Test Method:	KDB 558074 D01 v05r02
Limit:	30dBm
Test Setup:	Power meter EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	 The RF output of EUT was connected to the power meter by RF cable. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. Measure the Peak output power and record the results in the test report.
Test Result:	PASS

5.3.2. Test Instruments

5.3	.2. Test Instrument		(\mathcal{C})	(\mathcal{C})	
	Equipment	Manufacturer	Model	Serial Number	Calibration Due
	Power Sensor	Agilent	8184A	MY41096530	Jun. 26, 2025
	Power Meter	Agilent	E4418B	MY45100357	Jun. 26, 2025



5.4. Emission Bandwidth

5.4.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)
Test Method:	KDB 558074 D01 v05r02
Limit:	>500kHz
Test Setup:	Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	 Set to the maximum power setting and enable the EUT transmit continuously. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz. Measure and record the results in the test report.
Test Result:	PASS

5.4.2. Test Instruments

(Equipment	Manufacturer	Model	Serial Number	Calibration Due
0	Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 26, 2025
	Combiner Box	Ascentest	AT890-RFB		
				(C)	

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5.5. Power Spectral Density

5.5.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	KDB 558074
Limit:	The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.
Test Setup:	
	Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	 The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW): 3 kHz ≤ RBW ≤ 100 kHz. Video bandwidth VBW ≥ 3 x RBW. Set the span to at least 1.5 times the OBW. Detector = Peak, Sweep time = auto couple. Trace mode =max hold. Use the peak marker function to determine the maximum power level. Measure and record the results in the test report.
Test Result:	PASS

5.5.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 26, 2025
Combiner Box	Ascentest	AT890-RFB	1	1



5.6. Conducted Band Edge and Spurious Emission Measurement

5.6.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	KDB558074
Limit:	In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement and radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).
Test Setup:	Spectrum Analyzer
Test Mode:	Transmitting mode with modulation
Test Procedure:	 The RF output of EUT was connected to the spectrum analyzer by RF cable. 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 = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d). Measure and record the results in the test report. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
Test Result:	PASS



5.6.2. Test Instruments

	Equipment	Manufacturer	Model	Serial Number	Calibration Due
(Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 26, 2025
N.	Combiner Box	Ascentest	AT890-RFB	7	/

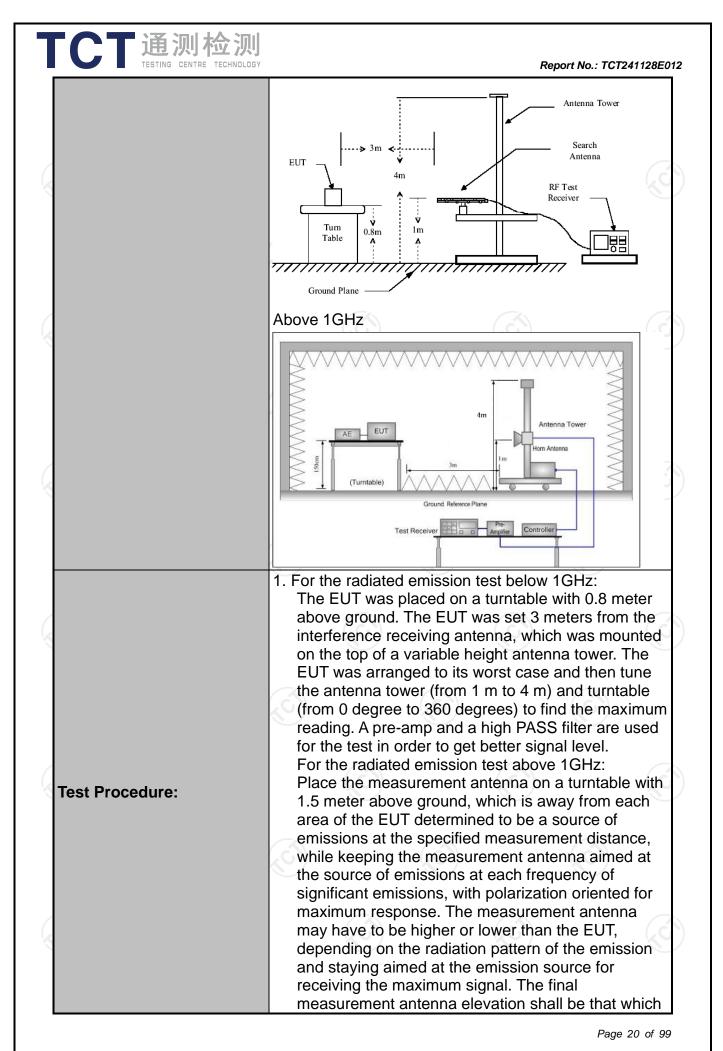




5.7. Radiated Spurious Emission Measurement

5.7.1. Test Specification

Test Requirement:	FCC Part15	C Section	15.209			
Test Method:	ANSI C63.10	ANSI C63.10:2020				
Frequency Range:	9 kHz to 25 (9 kHz to 25 GHz				
Measurement Distance:	3 m (C) (C)					
Antenna Polarization:	Horizontal &	Horizontal & Vertical				
Operation mode:	Transmitting mode with modulation					
	Frequency	Detector	RBW	VBW	Remark	
	9kHz- 150kHz	Quasi-peak		1kHz	Quasi-peak Value	
Receiver Setup:	150kHz- 30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value	
	30MHz-1GHz	Quasi-peak		300KHz	Quasi-peak Value	
	Above 1GHz	Peak	1MHz	3MHz	Peak Value	
		Peak	1MHz	10Hz	Average Value	
	Frequer	псу	Field Stre (microvolts)		Measurement Distance (meters)	
	0.009-0.490		2400/F(KHz)		300	
	0.490-1.705		24000/F(KHz)		30	
	1.705-30		30		30	
	30-88		100		3	
Limit:	88-216		150		3	
Limit:	216-960		<u>200</u> 500		3	
	Above 960		500		3	
	Frequency		Field Strength (microvolts/meter)		ment ce Detector rs)	
	Above 1GHz	2	500		Average	
			5000	3	Peak	
	For radiated					
	Di	stance = 3m			Computer	
	Pre -Amplifier					
Test setup:	EUT 0.8m Turn table					
	Ground Plane				Receiver	
	30MHz to 10	SH7	<u> </u>			



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	 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. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported. Use the following spectrum analyzer settings: Span shall wide enough to fully capture the emission being measured; Set RBW=120 kHz for f < 1 GHz; VBW ≥ RBW;
	 Sweep = auto; Detector function = peak; Trace = max hold; (3) Set RBW = 1 MHz, VBW= 3MHz for f >1 GHz for peak measurement. For average measurement: VBW = 10 Hz, when duty cycle is no less than 98 percent. VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Test results:	PASS



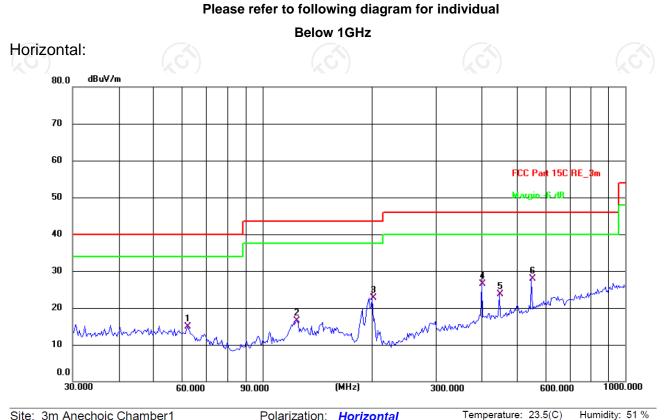
5.7.2. Test Instruments

	Radiated Em	nission Test Site	e (966)	
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESCI7	100529	Jan. 31, 2025
Spectrum Analyzer	R&S	FSQ40	200061	Jun. 26, 2025
Pre-amplifier	SKET	LNPA_0118G- 45	SK2021012 102	Jan. 31, 2025
Pre-amplifier	SKET	LNPA_1840G- 50	SK2021092 03500	Jan. 31, 2025
Pre-amplifier	HP	8447D	2727A05017	Jun. 26, 2025
Loop antenna	Schwarzbeck	FMZB1519B	00191	Jun. 26, 2025
Broadband Antenna	Schwarzbeck	VULB9163	340	Jun. 28, 2025
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Jun. 28, 2025
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Feb. 02, 2025
Coaxial cable	SKET	RE-03-D	/	Jun. 26, 2025
Coaxial cable	SKET	RE-03-M	1	Jun. 26, 2025
Coaxial cable	SKET	RE-03-L	1	Jun. 26, 2025
Coaxial cable	SKET	RE-04-D	1	Jun. 26, 2025
Coaxial cable	SKET	RE-04-M	KG)	Jun. 26, 2025
Coaxial cable	SKET	RE-04-L	/	Jun. 26, 2025
Antenna Mast	Keleto	RE-AM	1	
EMI Test Software	EZ_EMC	FA-03A2 RE+	1.1.4.2	





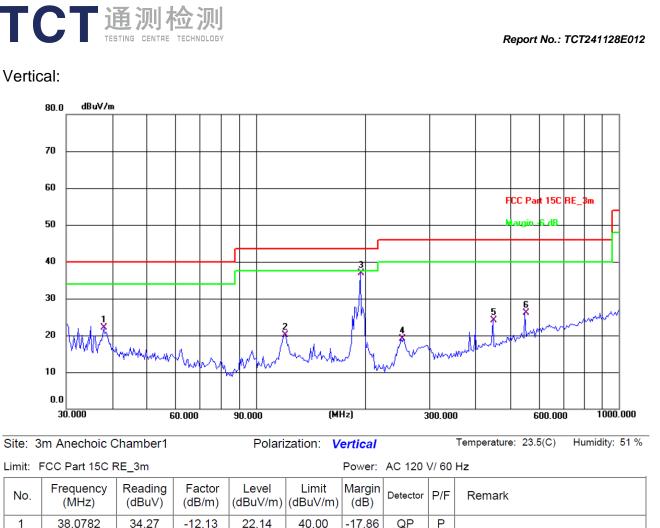
5.7.3. Test Data



Site: 3m Anechoic Chamber1

Polarization: Horizontal

Limit: F	CC Part 15C R	RE_3m				Power: AC 120 V/ 60 Hz				
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark	
1	62.2128	27.98	-13.00	14.98	40.00	-25.02	QP	Ρ		
2	124.5690	29.49	-13.07	16.42	43.50	-27.08	QP	Ρ		
3	200.6880	37.72	-14.97	22.75	43.50	-20.75	QP	Ρ		
4	401.8384	35.45	-8.96	26.49	46.00	-19.51	QP	Ρ		
5	449.5558	31.99	-8.20	23.79	46.00	-22.21	QP	Ρ		
6 *	550.9480	34.32	-6.43	27.89	46.00	-18.11	QP	Ρ		



1.0.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	20100101		Kernank
1	38.0782	34.27	-12.13	22.14	40.00	-17.86	QP	Ρ	
2	120.2766	33.53	-13.37	20.16	43.50	-23.34	QP	Ρ	
3 *	193.7727	51.30	-14.37	36.93	43.50	-6.57	QP	Р	
4	251.1804	32.23	-13.10	19.13	46.00	-26.87	QP	Р	
5	449.5558	32.36	-8.20	24.16	46.00	-21.84	QP	Ρ	
6	550.9480	32.59	-6.43	26.16	46.00	-19.84	QP	Ρ	

Note: 1. The low frequency, which started from 9KHz~30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported

 Measurements were conducted in all three channels (high, middle, low) and all modulation(802.11b, 802.11g, 802.11n(HT20), 802.11ax(HE20), 802.11n(HT40), 802.11ax(HE40)), and the worst case Mode (Lowest channel and 802.11b) was submitted only.

3. Freq. = Emission frequency in MHz

Measurement $(dB\mu V/m) = Reading \ level (dB\mu V) + Corr. Factor (dB)$

- Correction Factor= Antenna Factor + Cable loss Pre-amplifier
- $Limit (dB\mu V/m) = Limit stated in standard$
- $Margin (dB) = Measurement (dB\mu V/m) Limits (dB\mu V/m)$

 * is meaning the worst frequency has been tested in the test frequency range.

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Whent

AVG

2450.00

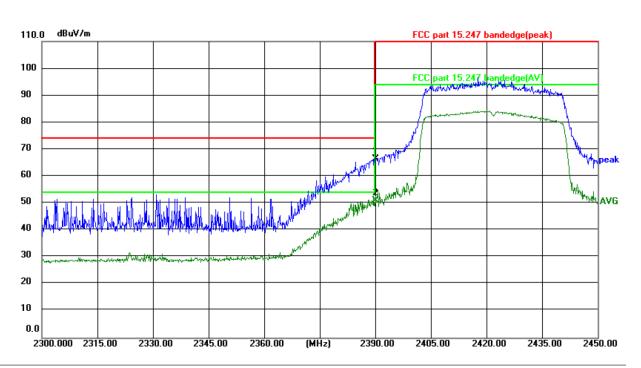
Test Result of Radiated Spurious at Band edges Lowest channel 2422: Horizontal: 110.0 dBu¥/m FCC part 15.247 bandedge(peak) 100 FCC part 15.247 bandedge(AV walk hard a hard the and here by here η. 90 80 In the second stand and the second se 70 60 50 M 40 30 20 10 0.0 2300.000 2315.00 2330.00 2345.00 2360.00 (MHz) 2390.00 2405.00 2420.00 2435.00 Temperature: 24.6(℃) Humidity: 57 % Site: 3m Anechoic Chamber Polarization: Horizontal Limit: FCC part 15.247 bandedge(peak) Power: AC 120 V/60 Hz Reading Margin Frequency Factor Level Limit P/F No. Detector Remark (MHz) (dBuV) (dB/m)(dBuV/m) (dBuV/m) (dB) 2390.000 80.71 -16.70 64.01 74.00 -9.99 Ρ 1 peak 2390.000 54.00 Ρ 2 * 67.87 -16.70 51.17 -2.83 AVG

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Vertical:

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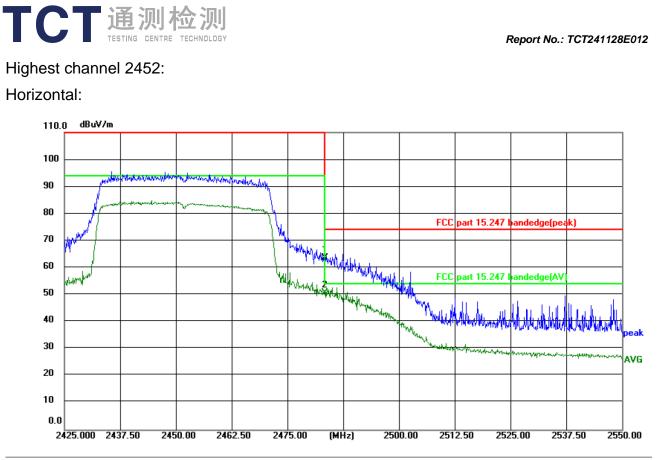


Site: 3m Anechoic Chamber Polarization: Vertical Temperature: 24.6(°C) Humidity: 57 %

Limit: FCC part 15.247 bandedge(peak) Power:AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F	Remark
1	2390.000	83.12	-16.70	66.42	74.00	-7.58	peak	Ρ	
2 *	2390.000	67.59	-16.70	50.89	54.00	-3.11	AVG	Ρ	

Report No.: TCT241128E012

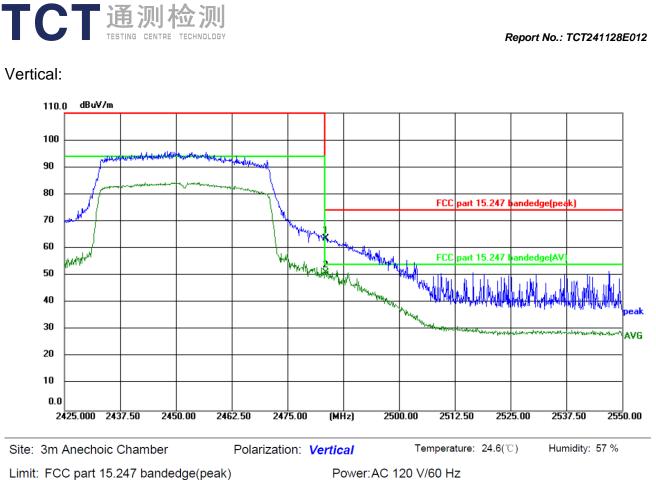


Site: 3m Anechoic Chamber Polarization: *Horizontal* Temperature: 24.6(°C) Humidity: 57 %

Limit:	FCC part 15.2	247 bandeo	dge(peak)	() Power:AC 120 V/60 Hz					2
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F	Remark
1	2483.500	80.31	-16.65	63.66	74.00	-10.34	peak	Ρ	
2 *	2483.500	67.30	-16.65	50.65	54.00	-3.35	AVG	Ρ	

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Limit: FCC part 15.247 bandedge(peak)

No.	Frequency (MHz)	Reading (dBuV)		Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	2483.500	80.27	-16.65	63.62	74.00	-10.38	peak	Ρ	
2 *	2483.500	67.78	-16.65	51.13	54.00	-2.87	AVG	Ρ	

Note:

- 1. Peak Final Emission Level=Peak Reading + Correction Factor;
- 2. Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
- 3. Measurements were conducted in all modulation(802.11b, 802.11g, 802.11n(HT20), 802.11ax(HE20), 802.11n(HT40), 802.11ax(HE40)), and the worst case Mode 802.11ax(HE40)) was submitted only.

Above 1GHz

Report No.: TCT241128E012

			M	odulation T	ype: 802.1 <i>′</i>	1b			
			L	ow channe	I: 2412 MH	z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4824	Н	56.31		-9.48	46.83		74	54	-7.17
7236	Н	46.25		-1.34	44.91		74	54	-9.09
	Н								
4824	V-	55.62		-9.48	46.14	~	74	54	-7.86
7236	V	46.18	(2G	-1.34	44.84	G`}	74	54	-9.16
	V				<	<u> </u>			

			Mi	iddle chann	el: 2437 MI	Hz			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4874	Н	54.56		-9.37	45.19		74	54	-8.81
7311	Н	46.05		-1.17	44.88		74	54	-9.12
	H				(
			KO.		X	0		KU)	
4874	V	55.89		-9.37	46.52	·	74	54	-7.48
7311	V	45.22		-1.17	44.05		74	54	-9.95
	V	(
				((

			Н	ligh channe	I: 2462 MH	Z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4924	Н	55.69		-9.26	46.43		74	54	-7.57
7386	Н	46.47		-1.01	45.46		74	54	-8.54
	H								
4924	V	55.04		-9.26	45.78		74	54	-8.22
7386	V	45.82		-1.01	44.81		74	54	-9.19
	V				J				

Note:

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1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dBµV/m)-Average limit (dBµV/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.

5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

	TESTI	NG CENTRE TEC	HNOLOGY				Repo	ort No.: TCT24	11128E012
			Μ	odulation T	ype: 802.11	lg			
			L	ow channe	I: 2412 MH	z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4824	Н	55.26		-9.48	45.78		74	54	-8.22
7236	Н	45.87		-1.34	44.53		74	54	-9.47
	Н			0	· · · ·		<u> </u>		
4824	V	56.44		-9.48	46.96		74	54	-7.04
7236	V	47.03	()	-1.34	45.69	×	74	54	-8.31
	V			•		G`}		(2G)	

	Middle channel: 2437 MHz											
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)			
4874	Н	56.25		-9.37	46.88		74	54	-7.12			
7311	Н	46.96		-1.17	45.79		74	54	-8.21			
	Н											
				6	(
4874	V	55.34		-9.37	45.97		74	54	-8.03			
7311	V	45.68		-1.17	44.51		74	54	-9.49			
	V											

			\ F	ligh channe	el: 2462 MH	z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)		Correction		n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4924	H.	55.38		-9.26	46.12		74	54	-7.88
7386	H	46.59		-1.01	45.58		74	54	-8.42
	H			/		<u> </u>			
						•			
4924	V	56.14		-9.26	46.88		74	54	-7.12
7386	V	46.02		-1.01	45.01		74	54	-8.99
(V	6. 67		(, (S)		\mathcal{S}^{2}		
Mada			7						

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1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.

5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

TC	T 通	シット Ng centre tec					Rep	ort No.: TCT24	41128E012
			Modu	lation Type	: 802.11n (l	HT20)			
			L	ow channe.	l: 2412 MH	z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4824	Н	55.91		-9.48	46.43		74	54	-7.57
7236	Н	45.52		-1.34	44.18		74	54	-9.82
	Н			(····				
4824	V	55.82		-9.48	46.34		74	54	-7.66
7236	V	46.63	6	-1.34	45.29	×	74	54	-8.71
	V					G`}		(2G)	

	Middle channel: 2437 MHz											
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)			
4874	Н	56.12		-9.37	46.75		74	54	-7.25			
7311	Н	45.75		-1.17	44.58		74	54	-9.42			
	Н											
				6	(
4874	V	56.26		-9.37	46.89		74	54	-7.11			
7311	V	46.49		-1.17	45.32		74	54	-8.68			
	V											

		(6)) F	ligh channe	el: 2462 MH	z	(a)		
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4924	H	55.97	(-9.26	46.71		74	54	-7.29
7386	Н	45.35		-1.01	44.34	<u> </u>	74	54	-9.66
	H			/	<	<u> </u>			
4924	V	55.72		-9.26	46.46		74	54	-7.54
7386	V	45.64		-1.01	44.63		74	54	-9.37
(\mathbf{e})	V	(2 6)		(, (5)		$\mathcal{G}^{\rightarrow}$		
Mada									

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.

5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

TC	T 通	刻检					Repo	ort No.: TCT24	41128E012
			Modul	ation Type:	802.11ax (HE20)			
			L	ow channe	I: 2412 MH	Z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4824	Н	55.47		-9.48	45.99		74	54	-8.01
7236	Н	46.19		-1.34	44.85		74	54	-9.15
	Н			V	· · · · ·				
4824	V	54.53		-9.48	45.05		74	54	-8.95
7236	N	45.48	()	-1.34	44.14		74	54	-9.86
	V)	(6)			

	Middle channel: 2437 MHz											
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)			
4874	Н	55.81		-9.37	46.44		74	54	-7.56			
7311	Н	46.93		-1.17	45.76		74	54	-8.24			
	Н											
				6	(
4874	V	55.72		-9.37	46.35		74	54	-7.65			
7311	V	45.54		-1.17	44.37		74	54	-9.63			
	V											

(\mathbf{c})) F	ligh channe	el: 2462 MH	Z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4924	H_	56.18		-9.26	46.92		74	54	-7.08
7386	H	45.34		-1.01	44.33	<u> </u>	74	54	-9.67
	H			/	(
100.1				0.00	40.74			5 4	
4924	V	55.97		-9.26	46.71		74	54	-7.29
7386	V	46.46		-1.01	45.45		74	54	-8.55
	V			(, (· · · ·				
Madai									

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.

5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

TC		的加枪					Repo	ort No.: TCT24	41128E012
			Modu	lation Type	: 802.11n (l	HT40)			
			L	ow channe.	I: 2422 MH	z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4844	Н	55.47		-9.43	46.04		74	54	-7.96
7266	Н	45.53		-1.28	44.25		74	54	-9.75
	Н			()				
4824	V	56.04		-9.43	46.61		74	54	-7.39
7236	N	45.39		-1.28	44.11		74	54	-9.89
	V)	(<u> </u>			

	Middle channel: 2437 MHz											
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)			
4874	Н	55.89		-9.37	46.52		74	54	-7.48			
7311	Н	46.42		-1.17	45.25		74	54	-8.75			
	Н											
				6	(
4874	V	55.35		-9.37	45.98	<u> </u>	74	54	-8.02			
7311	V	45.88		-1.17	44.71		74	54	-9.29			
	V											

(\mathbf{c})		(6)) F	ligh channe	el: 2452 MH	z	(\mathbf{c})		
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4904	H_	56.16	(-9.30	46.86		74	54	-7.14
7356	H	45.59		-1.08	44.51	<u> </u>	74	54	-9.49
	H			/	X	<u> </u>			
4904	V	56.02		-9.30	46.72		74	54	-7.28
7356	V	46.84		-1.08	45.76		74	54	-8.24
	V	- (2 6)		(, (5)				
Mada									

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.

5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

	TESTI	NG CENTRE TEC	HNOLOGY			Repo	ort No.: TCT24	1128E012	
			Modul	ation Type:	802.11ax (HE40)			
			Ĺ	ow channe	I: 2422 MH	z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4844	Н	55.97		-9.43	46.54		74	54	-7.46
7266	Н	46.06		-1.28	44.78		74	54	-9.22
	Н			0	· · · ·		<u> </u>		
4824	V	55.48		-9.43	46.05		74	54	-7.95
7236	V	45.59	()	-1.28	44.31		74	54	-9.69
	V			•)		G`)		(2G)	
							•		

Middle channel: 2437 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4874	Н	54.43		-9.37	45.06		74	54	-8.94
7311	Н	45.52		-1.17	44.35		74	54	-9.65
	Н								
4874	V	54.61		-9.37	45.24	<u> </u>	74	54	-8.76
7311	V	45.23		-1.17	44.06		74	54	-9.94
	V								

		High channel: 2452 MHz							
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4904	H	54.78		-9.30	45.48		74	54	-8.52
7356	Н	45.35		-1.08	44.27	<u> </u>	74	54	-9.73
	H			/	×	<u> </u>			
4904	V	56.68		-9.30	47.38		74	54	-6.62
7356	V	46.09		-1.08	45.01		74	54	-8.99
(\mathbf{e})	V	12 6		(, (· · · · ·		\mathcal{C}^{2}		(
Mater			/						

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1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.

5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

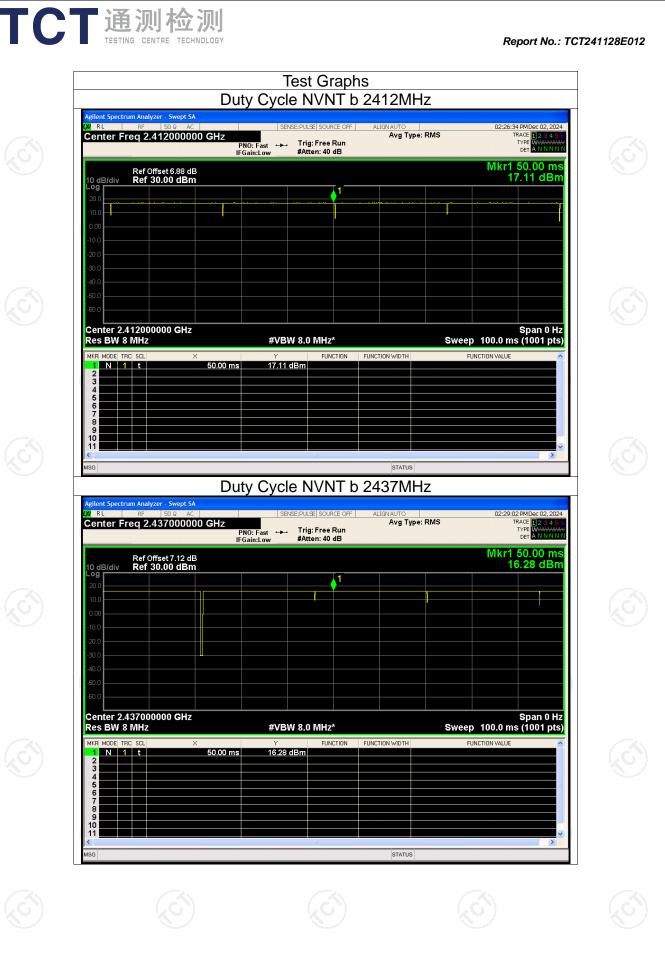


Appendix A: Test Result of Conducted Test

			Duty	y Cycle		
C	ondition Mode		Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)	
	NVNT	b	2412	100	0	
	NVNT	b	2437	99.5	0	
	NVNT	b	2462	99.4	0	
	NVNT	g	2412	99.2	0	
	NVNT	g	2437	99.4	0	
	NVNT	g	2462	99.2	0	
	NVNT	n20	2412	99.0	0	
	NVNT	n20	2437	98.4	(C) 0	
	NVNT	n20	2462	99.4	0	
	NVNT	n40	2422	99.4	0	
	NVNT	n40	2437	98.0	0	
	NVNT	n40	2452	99.3	0(, ())	
	NVNT	ax20	2412	98.0	0	
	NVNT	ax20	2437	98.1	0	
	NVNT	ax20	2462	97.7	0.10	
	NVNT	ax40	2422	98.9	(C) 0	
	NVNT	ax40	2437	98.1	0	
	NVNT	ax40	2452	99.1	0	



Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com Hotline: 400-6611-140



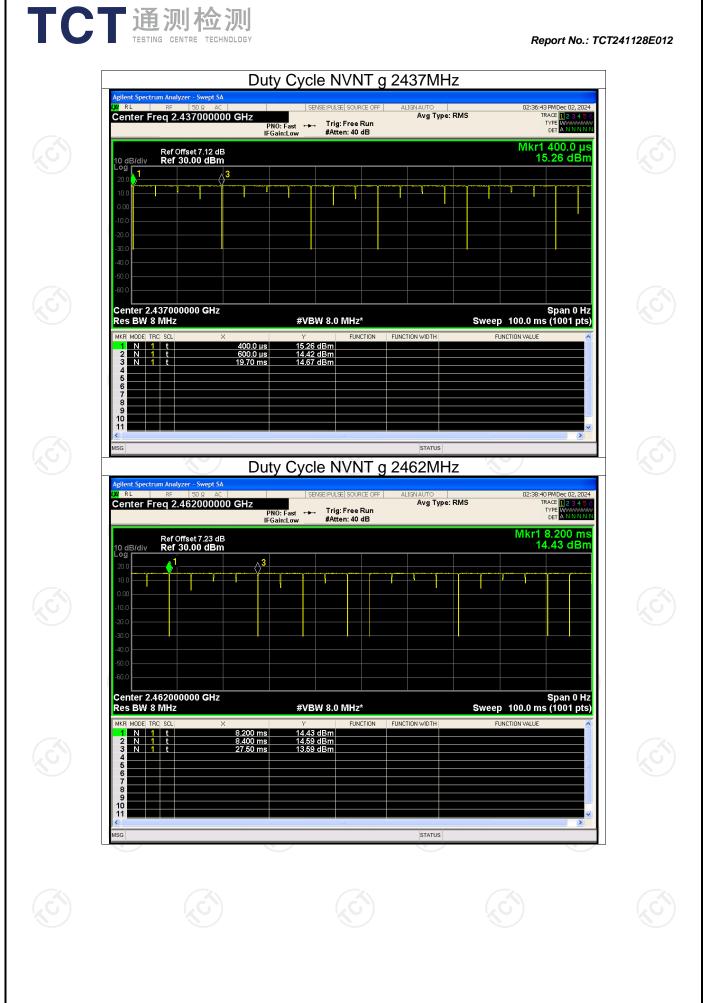
Report No.: TCT241128E012

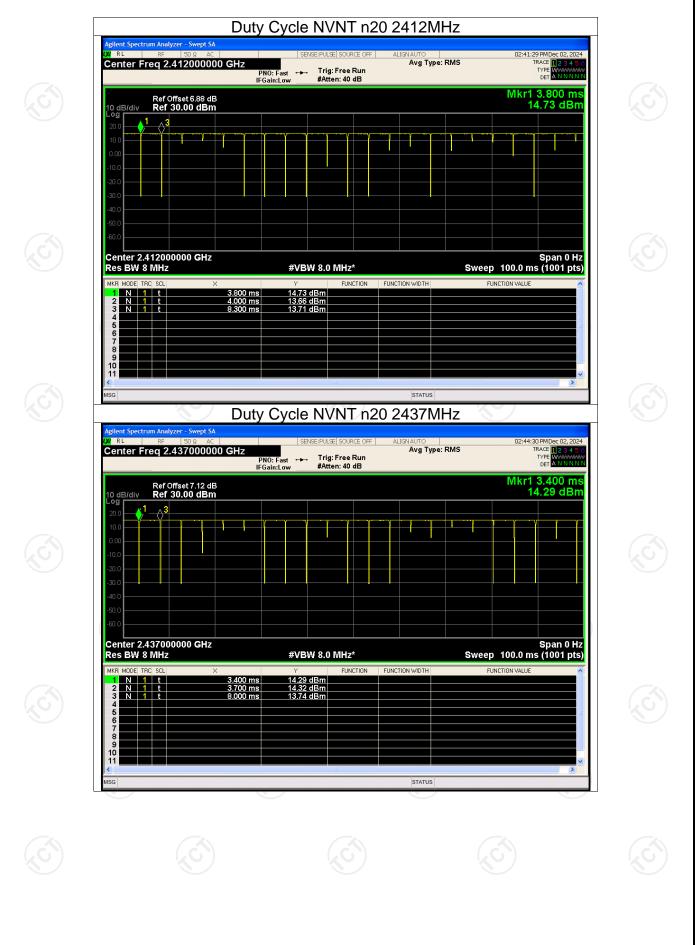
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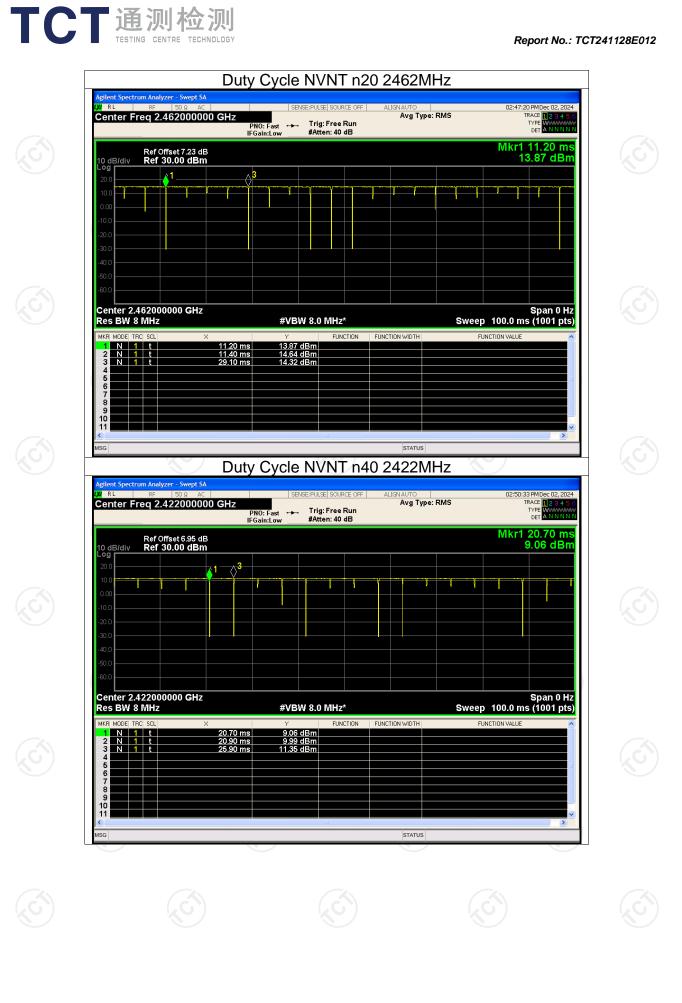
		Cycle NVNT b	2462MHz		
Agilent Spectrum Analyzer - 1 X RL RF 50 Center Freq 2.462	DQ AC		ALIGNAUTO Avg Type: RMS	02:3:	1:14 PMDec 02, 2024 TRACE 1 2 3 4 5 6 TYPE WWWWWW DET A N N N N N
Ref Offset 10 dB/div Ref 30.00	0 dBm			Mki	r1 400.0 µs 15.57 dBm
20.0	<mark>3</mark>				
-10.0					
-20.0					
-40.0					
-50.0					
Center 2.462000000 Res BW 8 MHz) GHz	#VBW 8.0 MHz*		Sweep 100.0 r	Span 0 Hz ns (1001 pts)
MKR MODE TRC SCL	× 400.0 μs 600.0 μs	Y FUNCTION 15.57 dBm 12.41 dBm	FUNCTION WIDTH	FUNCTION VALU	E
2 N 1 t 3 N 1 t 4 5	24.80 ms	12.41 dBm 15.03 dBm			
6 7 8					
9 10 11					~
K MSG	~ 1		STATUS		
Agilent Spectrum Analyzer - :		Cycle NVNT g	2412MHz		
Center Freq 2.412	ΩΩ AC 000000 GHz	SENSE:PULSE SOURCE OFF	ALIGNAUTO Avg Type: RMS	02:34	4:18 PMDec 02, 2024 TRACE 1 2 3 4 5 6 TYPE WWWWWWW
Center Freq 2.412	000000 GHz PNO: Fa IFGain:Li 6.88 dB	ast 🛶 Trig: Free Run		Mkr	TRACE 123456 TYPE WWWWWWW DET ANNNNN
Center Freq 2.412 Ref Offset 10 dB/div Ref 30.00	000000 GHz PNO: Fa IFGain:Li 6.88 dB	ast 🛶 Trig: Free Run		Mkr	TRACE 123456 TYPE WWWWWW DET ANNNNN
Center Freq 2.412	000000 GHz PNO: Fa IFGain:Li 6.88 dB	ast 🛶 Trig: Free Run		Mkr	TRACE 123456 TYPE WWWWWWW DET ANNNNN
Center Freq 2.412	000000 GHz PNO: Fa IFGain:Li 6.88 dB	ast 🛶 Trig: Free Run		Mkr	TRACE 123456 TYPE WWWWWWW DET ANNNNN
Center Freq 2.412	000000 GHz PNO: Fa IFGain:Li 6.88 dB	ast 🛶 Trig: Free Run		Mkr	TRACE 123456 TYPE WWWWWWW DET ANNNNN
Center Freq 2.412 Ref Offset 10 dB/div Ref 30.0 20.0 10.0 -20.0 -30.0 -40.0 -50.0 -50.0 -50.0 Ref 0ffset Ref 30.0 -2	000000 GHz PNO: Fa IFGain:Li 6.88 dB	ast 🛶 Trig: Free Run		Mkr	TRACE 123456 TYPE WWWWWWW DET ANNNNN
Center Freq 2.412	3.9 AC 000000 GHz PN0: Fa IFGain:L 6.88 dB 0 dBm	Ist I Trig: Free Run #Atten: 40 dB		Mkr 	TRACE D23456 TYPE WANNUM Der ANNINN 1 3.800 ms 13.48 dBm
Center Freq 2.412	3.9 AC 000000 GHz PN0: Fa IFGain:L 6.88 dB 0 dBm 0 d	Trig: Free Run #Atten: 40 dB		Mkr	TRACE D2 34 5 6 TYPE WANNING 1 3.800 ms 13.48 dBm 13.48 dBm 14.48
Center Freq 2.412	000000 GHz PNO: Fa IFGain:U	tist → Trig: Free Run #Atten: 40 dB	Avg Type: RMS	Mkr	TRACE D2 34 5 6 TYPE WANNING 1 3.800 ms 13.48 dBm 13.48 dBm 14.48
Center Freq 2.412	300 AC 00000 GHz PN0: Fa PN0: Fa FGain:1 6.88 dB 0 dBm 0 dBm	Ist Trig: Free Run #Atten: 40 dB #Atten: 40 dB #Atten: 40 dB #Atten: 40 dB #Atten: 40 dB	Avg Type: RMS	Mkr	TRACE D2 34 5 6 TYPE WANNING 1 3.800 ms 13.48 dBm 13.48 dBm 14.48
Center Freq 2.412 Ref Offset 10 dB/div Ref 30.0 20.0 20.0 10.0 10.0 20.0	300 AC 00000 GHz PN0: Fa PN0: Fa FGain:1 6.88 dB 0 dBm 0 dBm	Ist Trig: Free Run #Atten: 40 dB #Atten: 40 dB #Atten: 40 dB #Atten: 40 dB #Atten: 40 dB	Avg Type: RMS	Mkr	TRACE D2 34 5 6 TYPE WANNING 1 3.800 ms 13.48 dBm 13.48 dBm 14.48
Center Freq 2.412	300 AC 00000 GHz PN0: Fa PN0: Fa FGain:1 6.88 dB 0 dBm 0 dBm	Ist	Avg Type: RMS	Mkr	TRACE D2 34 5 6 TYPE WANNING 1 3.800 ms 13.48 dBm 13.48 dBm 14.48
Center Freq 2.412	300 AC 00000 GHz PN0: Fa PN0: Fa FGain:1 6.88 dB 0 dBm 0 dBm	Ist	Avg Type: RMS	Mkr	TRACE D23456 TYPE WANNING 13.800 ms 13.48 dBm 5pan 0 Hz ns (1001 pts)
Center Freq 2.412	300 AC 00000 GHz PN0: Fa PN0: Fa FGain:1 6.88 dB 0 dBm 0 dBm	Ist	Avg Type: RMS	Mkr	TRACE D23456 TYPE WANNING 13.800 ms 13.48 dBm 5pan 0 Hz ns (1001 pts)

TCT通测检测 TESTING CENTRE TECHNOLOGY

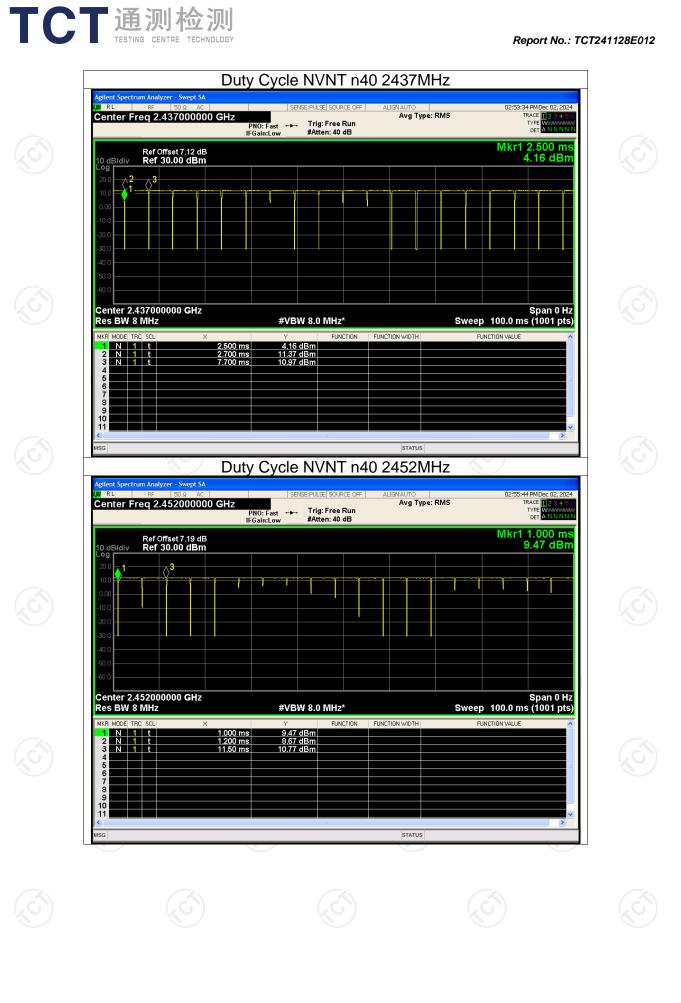
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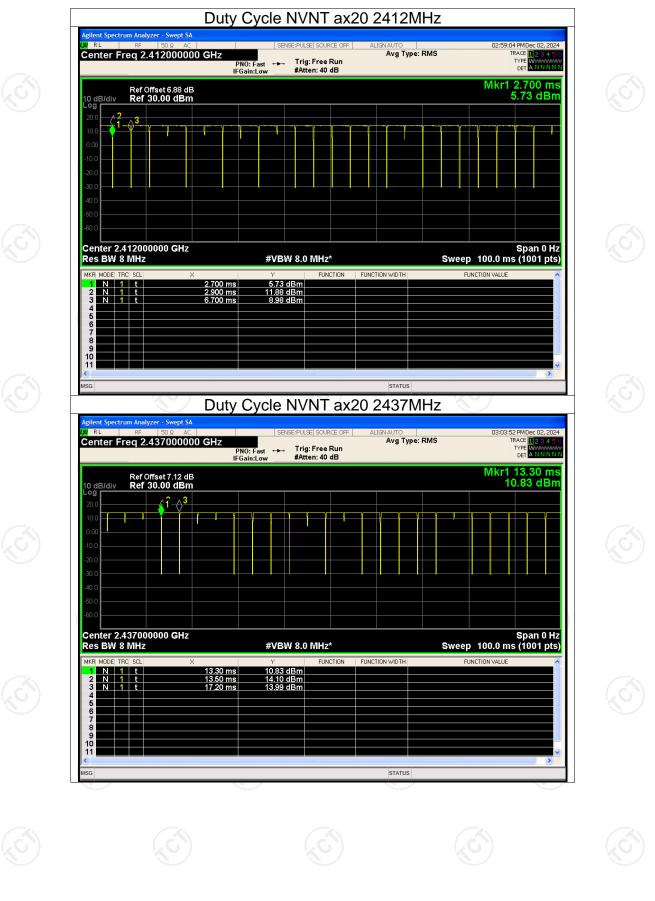




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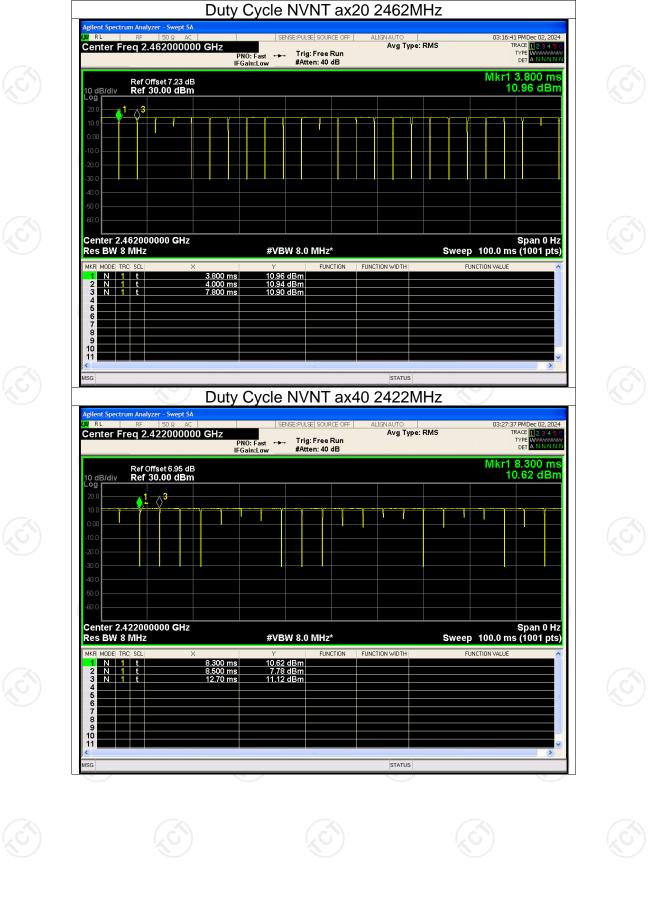


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Center Freq 2.437000000 GHz	PNO: Fast + Trig: Free Run IFGain:Low #Atten: 40 dB	ALIGNAUTO Avg Type: RMS	03:30:36 PMDec 02, 2024 TRACE 12 3 4 5 6 TYPE WWWWWW DET A N N N N N
Ref Offset 7.12 dB			/kr1 8.600 ms 11.90 dBm
-10.0			
-40.0			
Center 2.437000000 GHz Res BW 8 MHz	#VBW 8.0 MHz*	Sweep 10	Span 0 Hz 0.0 ms (1001 pts)
MKR MODE TRC SCL X 1 N 1 t 8.600 2 N 1 t 8.800 3 N 1 t 13.00 4	ms 11.90 dBm ms 9.12 dBm	FUNCTION WIDTH FUNCTIO	N VALUE
11 MSG		STATUS	×
Agilent Spectrum Analyzer - Swept SA	ty Cycle NVNT ax4	0 2452MHz	03:32:43 PMDec 02, 2024
Center Freq 2.452000000 GHz	PNO: Fast Trig: Free Run IFGain:Low #Atten: 40 dB	Avg Type: RMS	
Ref Offset 7.19 dB 10 dB/div Ref 30.00 dBm	3	·	11.56 dBm
-40.0 -50.0 -60.0			
Center 2.452000000 GHz Res BW 8 MHz MKR MODEL TRC SCL 1 N 1 t 3.700		Sweep 10	Span 0 Hz 0.0 ms (1001 pts) NVALUE
2 N 1 t 3.900 3 N 1 t 25.60 4 5	ms 10.29 dBm		
6 7 8 9 9			
MSG		STATUS	

Duty Cycle NVNT ax40 2437MHz

SENSE:PULSE SOURCE OFF ALIGN AUTO

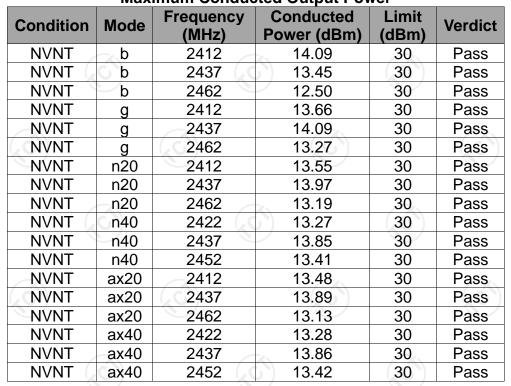
TCT 通测检测 TESTING CENTRE TECHNOLOGY

Agilent Spectrum Analyzer - Swept SA

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03:30:36 PMDec 02,

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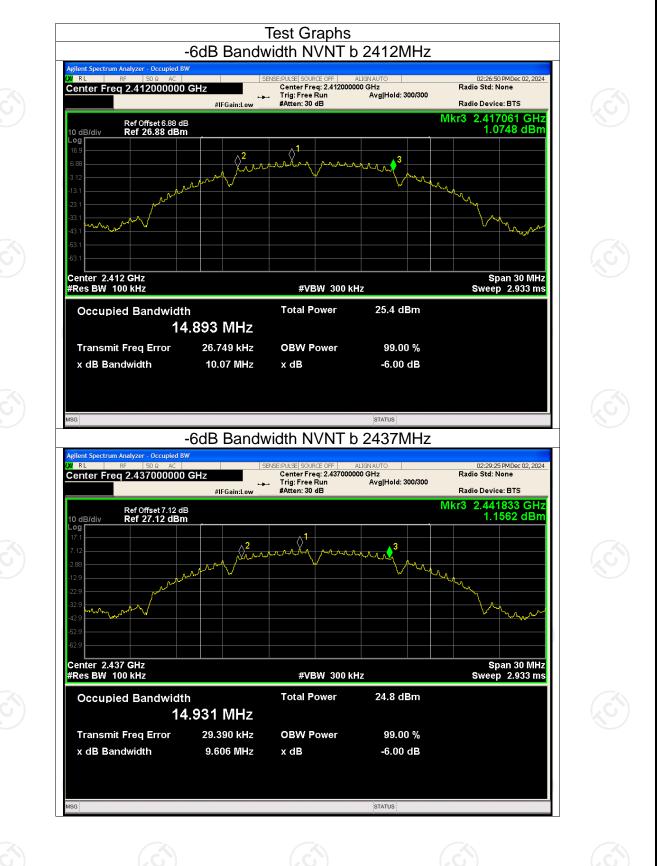
Maximum Conducted Output Power

TCT通测检测 TESTING CENTRE TECHNOLOGY

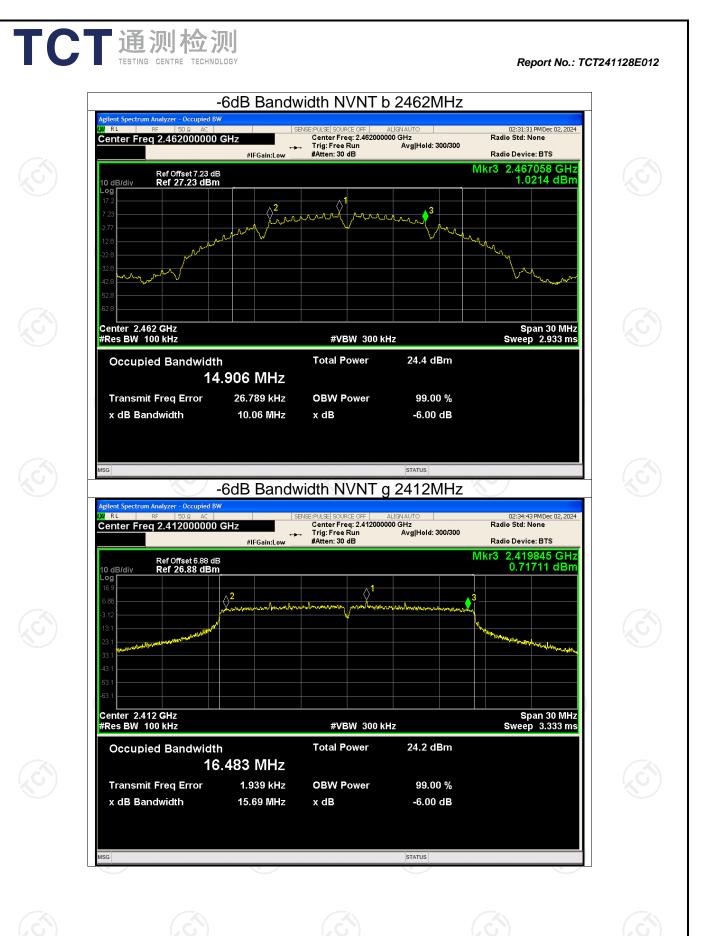
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Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	10.069	0.5	Pass
NVNT	b	2437	9.606	0.5	Pass
NVNT	b	2462	10.061	0.5	Pass
NVNT	g	2412	15.685	0.5	Pass
NVNT	g	2437	16.310	0.5	Pass
NVNT	g	2462	15.920	0.5	Pass
NVNT	n20	2412	16.021	0.5	Pass
NVNT	n20	2437	16.914	0.5	Pass
NVNT	n20	2462	16.923	0.5	Pass
NVNT	n40	2422	35.491	0.5	Pass
NVNT	n40	2437	35.168	0.5	Pass
NVNT	n40	2452	34.264	0.5	Pass
NVNT	ax20	2412	18.615	0.5	Pass
NVNT	ax20	2437	18.414	0.5	Pass
NVNT	ax20	2462	18.312	0.5	Pass
NVNT	ax40	2422	36.411	0.5	Pass
NVNT	ax40	2437	37.366	0.5	Pass
NVNT	ax40	2452	37.351	0.5	Pass

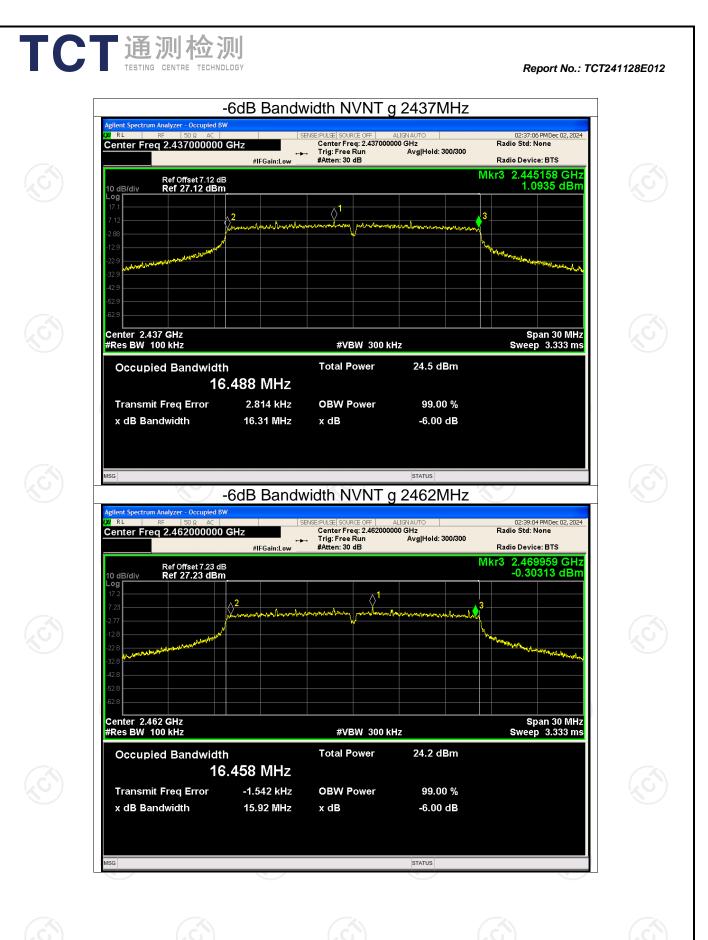
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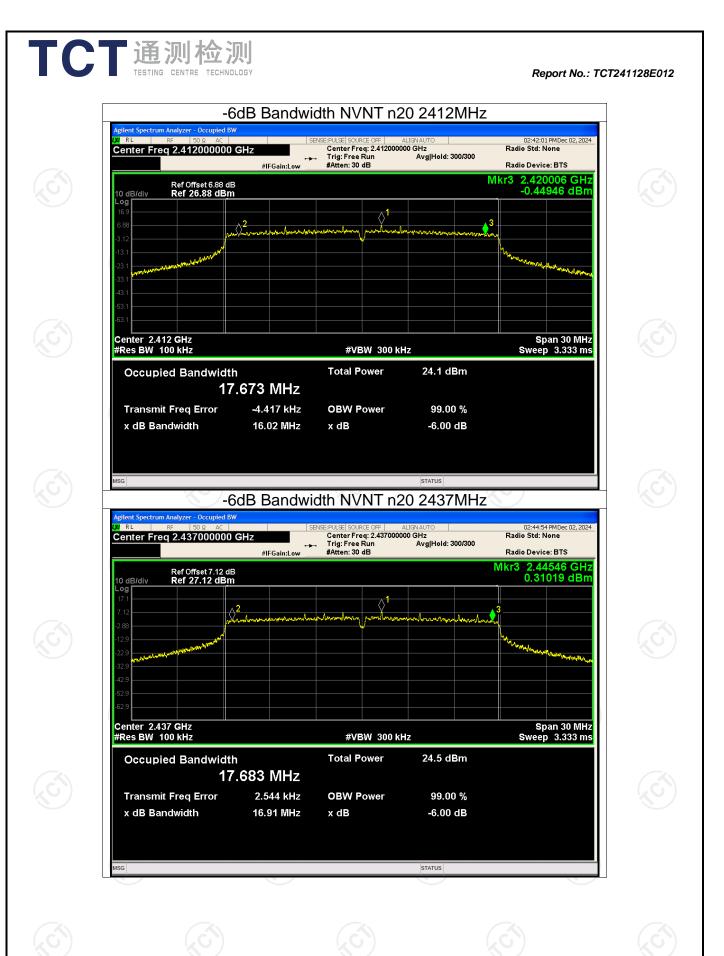


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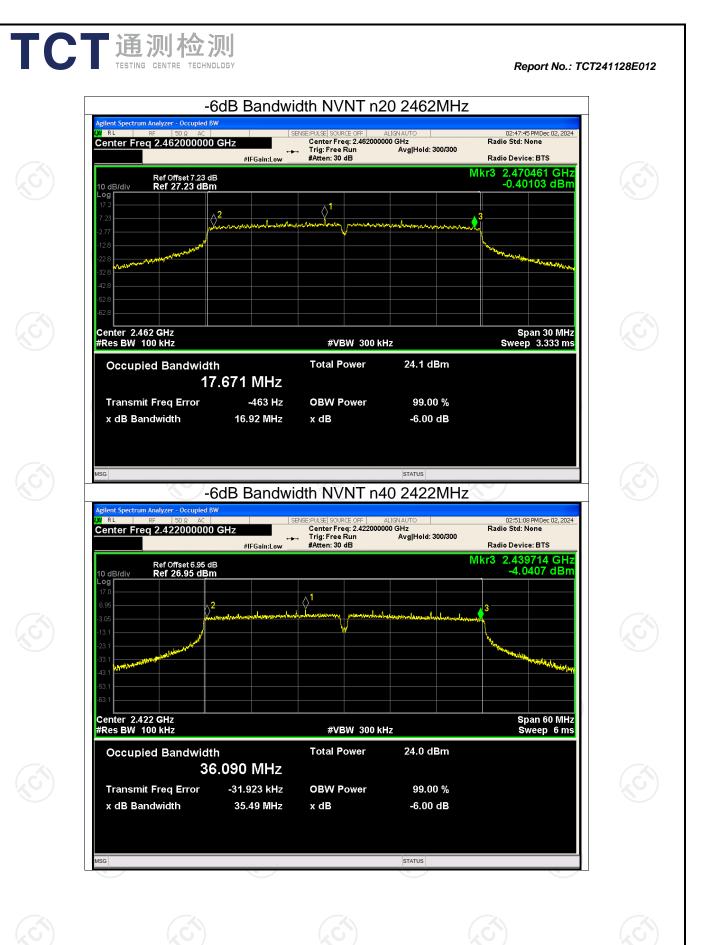


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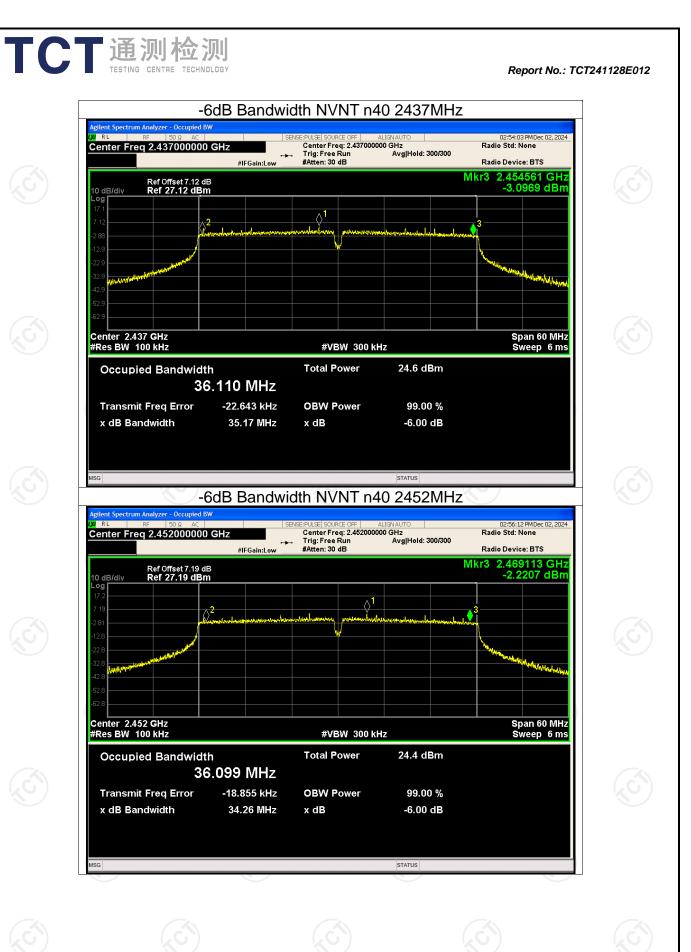




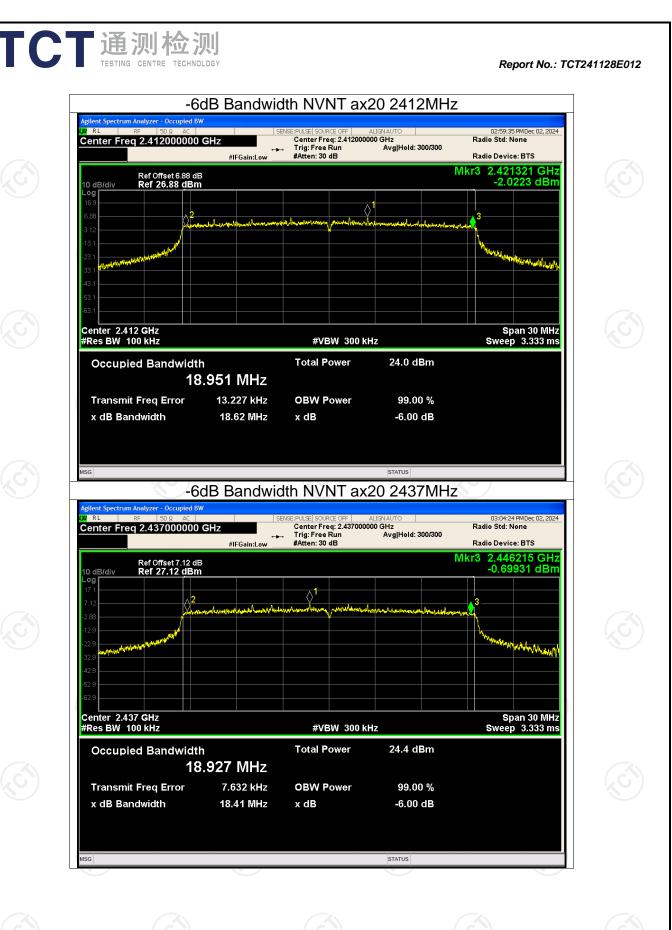
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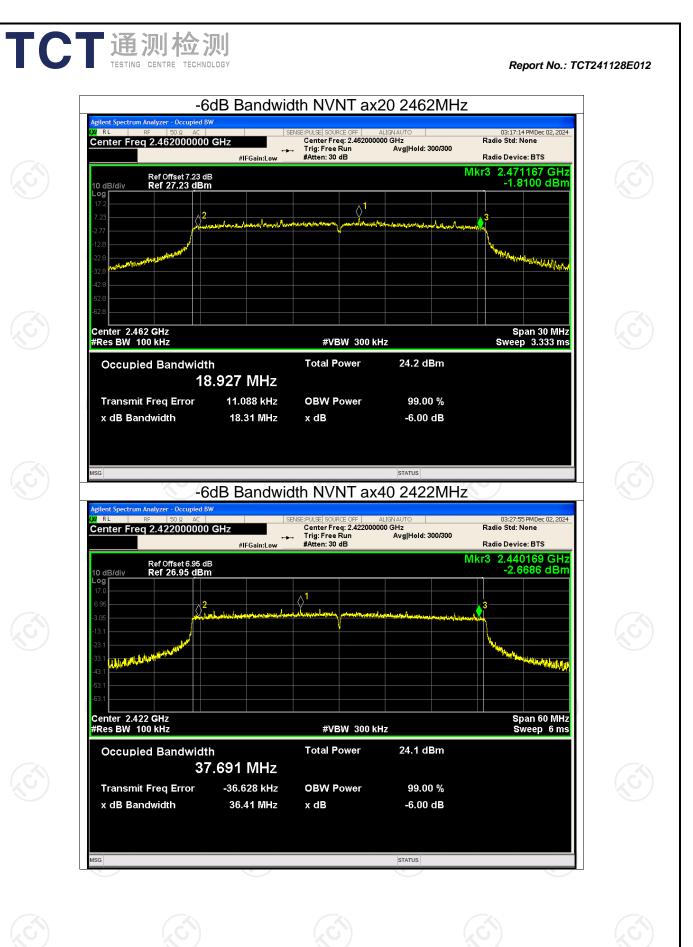


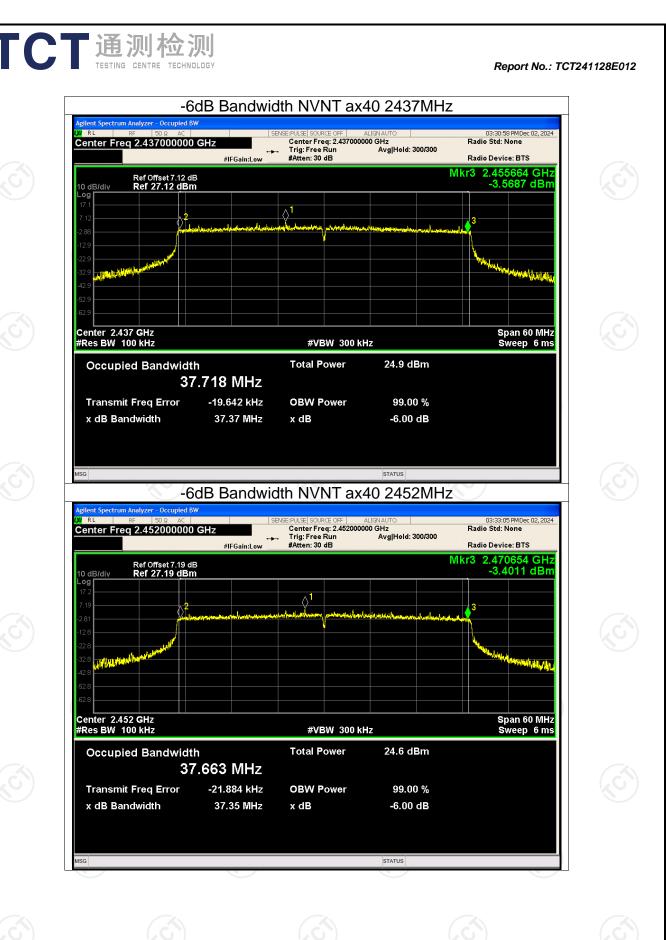
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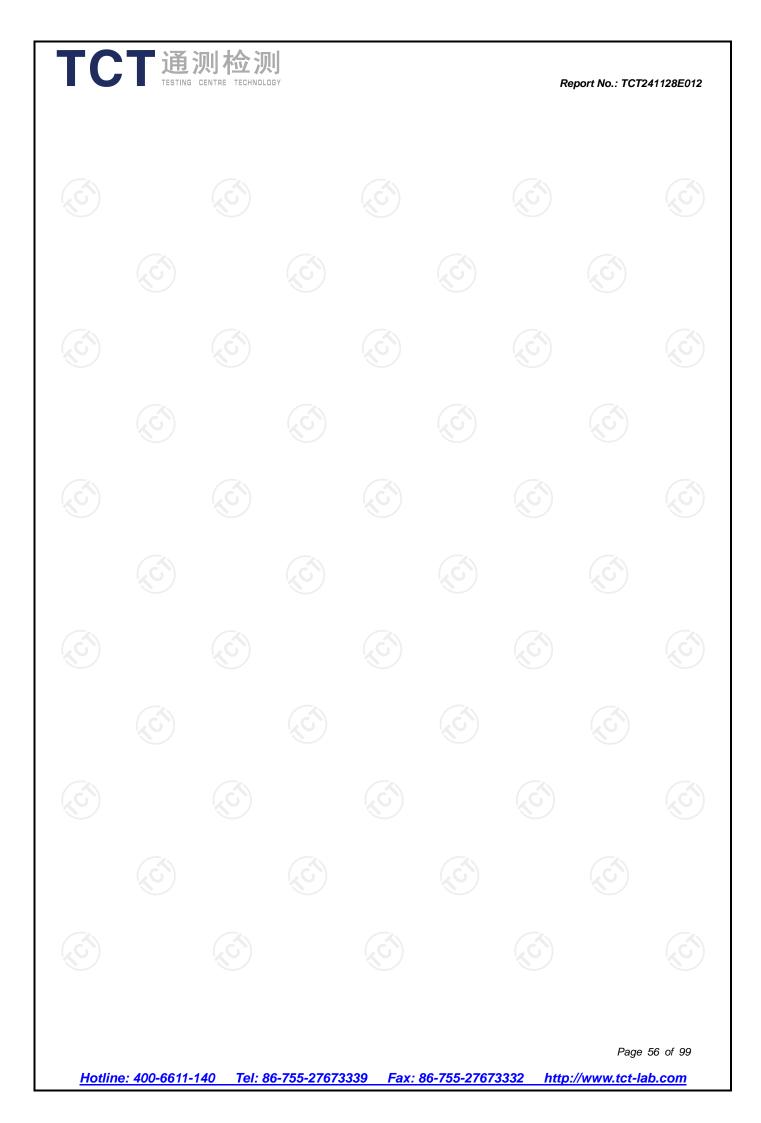
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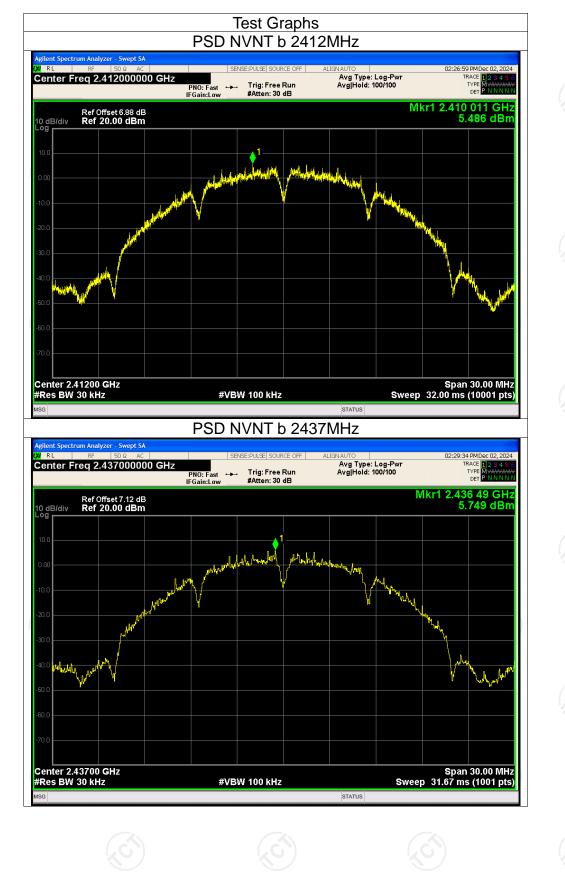
Condition Mode		Frequency (MHz)	Conducted PSD (dBm/30kHz)	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict			
NVNT	b	2412	5.49	-4.51	6 8	Pass			
NVNT	b	2437	5.75	-4.25	8	Pass			
NVNT	b	2462	5.12	-4.88	8	Pass			
NVNT	g	2412	2.78	-7.22	8	Pass			
NVNT	g	2437	2.67	-7.33	8 6	Pass			
NVNT	g	2462 🔪	2.26	-7.74	8	Pass			
NVNT	n20	2412	2.15	-7.85	8	Pass			
NVNT	n20	2437	2.63	-7.37	8	Pass			
NVNT	n20	2462	1.60	-8.40	6 8	Pass			
NVNT	n40	2422	-0.40	-10.40	8	Pass			
NVNT	n40	2437	-0.45	-10.45	8	Pass			
NVNT	n40	2452	-0.22	-10.22	8	Pass			
NVNT	ax20	2412	5.98	-4.02	8	Pass			
NVNT	ax20	2437	6.11	-3.89	8	Pass			
NVNT	ax20	2462	6.17	-3.83	8	Pass			
NVNT	ax40	2422	3.78	-6.22	8	Pass			
NVNT	ax40	2437	3.18	-6.82	6 8	Pass			
NVNT	ax40	2452	4.18	-5.82	8	Pass			

Maximum Power Spectral Density Level

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 NVN1
 ax40
 2452
 4.18
 -5.82
 8
 Pass

 Note: Conducted PSD (dBm/3kHz) = Conducted PSD (dBm/30kHz) +10log(3kHz/30kHz)



PSD NVNT b 2462MHz SENSE:PULSE SOURCE OFF ALIGNAUTO Avg Type: Log-Pwr Trig: Free Run Avg|Hold: 100/100 40 PM Dec 02, 20: TRACE 1 2 3 4 TYPE M DET P N N N PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.461 49 GHz 5.118 dBm

hul

'n.l

WWW Alex

Span 30.00 MHz Sweep 31.67 ms (1001 pts)

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STATUS PSD NVNT g 2412MHz

#VBW 100 kHz

Swept S/ RL SENSE:PULSE SOURCE OFF ec 02, 2024 Center Freq 2.412000000 GHz Avg Type: Log-Pwr Avg|Hold: 100/100 TRACE 1 TYPE M DET P PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.410 77 GHz 2.779 dBm Ref Offset 6.88 dB Ref 20.00 dBm 10 dB/div Log WWWWW www.www.www www.whentherwhen ħ ۲Ą Mun whith n Parwith Wardow mouthwal Center 2.41200 GHz #Res BW 30 kHz Span 30.00 MHz Sweep 31.67 ms (1001 pts) #VBW 100 kHz STATUS





RL

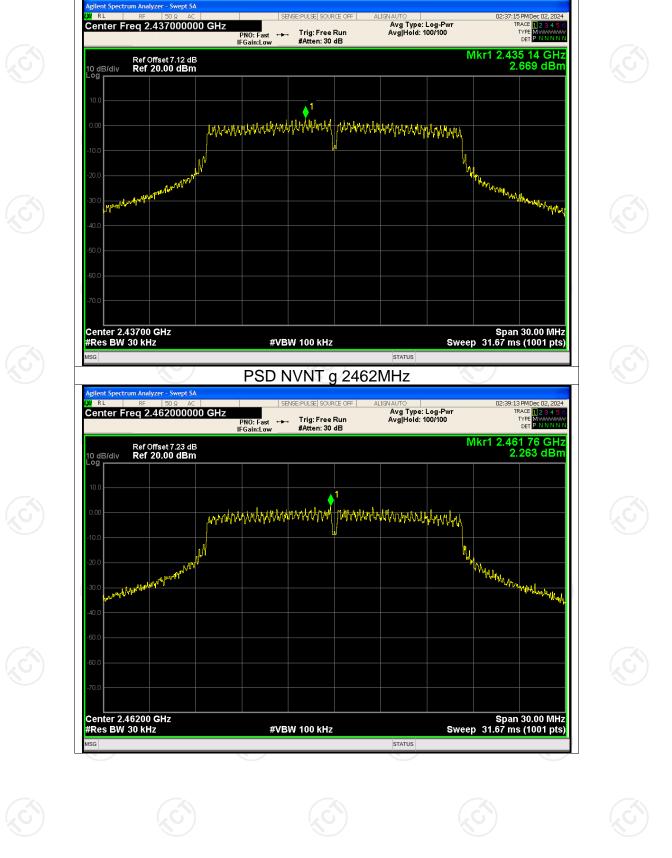
gilent Spectrum Analyzer - Swept SA

Center 2.46200 GHz #Res BW 30 kHz

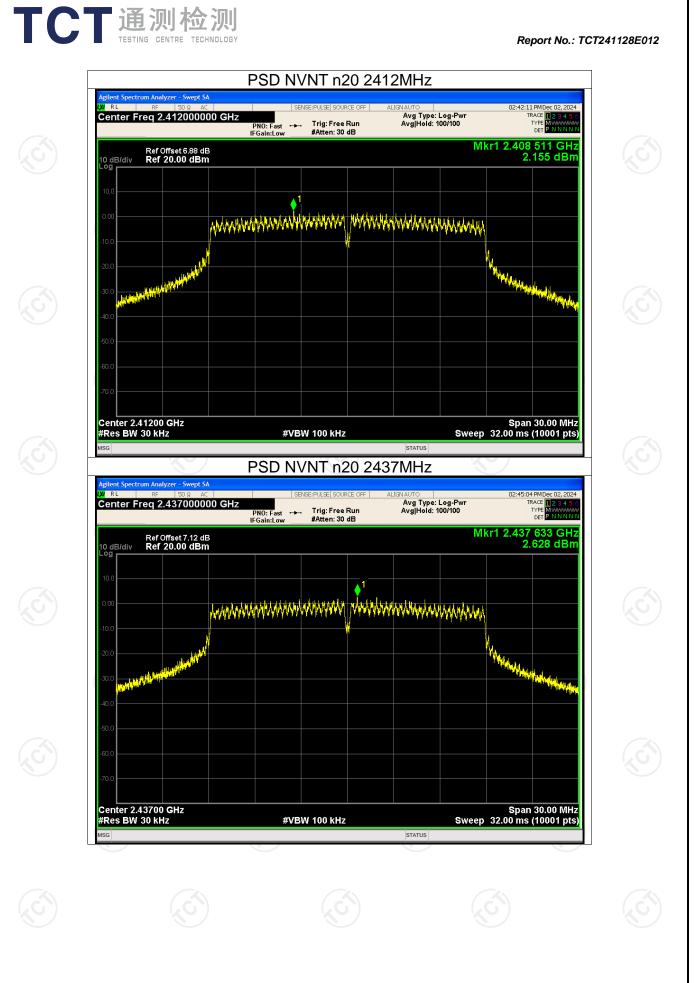
Center Freq 2.462000000 GHz

Ref Offset 7.23 dB Ref 20.00 dBm





PSD NVNT g 2437MHz



Ø phononintroduction and a second n Milling Wind Wind Mononal HI-Mayland and the sector Center 2.46200 GHz #Res BW 30 kHz Span 30.00 MHz Sweep 31.67 ms (1001 pts) #VBW 100 kHz STATUS PSD NVNT n40 2422MHz Swept S/ SENSE:PULSE SOURCE OFF RL ec 02, 2024 Center Freq 2.422000000 GHz Avg Type: Log-Pwr Avg|Hold: 100/100 TRACE 1 TYPE M DET P PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.418 28 GHz -0.397 dBm Ref Offset 6.95 dB Ref 20.00 dBm 10 dB/div Log า พุศาพยายสหรรมให้สองคุณให้สุดไหลายไปสาย unununununununununununun Murphilipping Mr. Walt 1. Junio "What we Center 2.42200 GHz #Res BW 30 kHz Span 60.00 MHz Sweep 63.27 ms (1001 pts) #VBW 100 kHz STATUS

PSD NVNT n20 2462MHz

PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 30 dB

SENSE:PULSE| SOURCE OFF ALIGNAUTO Avg Type: Log-Pwr Trig: Free Run Avg|Hold: 100/100

Report No.: TCT241128E012

55 PMDec 02, 20 TRACE 1 2 3 4 TYPE MWWW DET PNNN

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Mkr1 2.465 75 GHz 1.604 dBm



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Center Freq 2.462000000 GHz

Ref Offset 7.23 dB Ref 20.00 dBm

RL

10 dB/div

Mkr1 2.441 98 GHz -0.451 dBm Ref Offset 7.12 dB Ref 20.00 dBm puthurututublohadaountutudateunaaa an the second of the second www. Span 60.00 MHz Sweep 63.27 ms (1001 pts) #VBW 100 kHz STATUS PSD NVNT n40 2452MHz

SENSE:PULSE SOURCE OFF ALIGNAUTO Avg Type: Log-Pwr Trig: Free Run Avg|Hold: 100/100

PSD NVNT n40 2437MHz

PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB

Center Freq 2.452	PI	NO: Fast 🔸 Trig: Fre Gain:Low #Atten: 3		Avg Type: Log-Pwr Avg Hold: 100/100	TRACE 1 2 3 4 5 TYPE MWWW DET PNNN
Ref Offset 10 dB/div Ref 20.00	7.19 dB) dBm			Ν	/kr1 2.454 52 GH -0.223 dBr
10.0					
0.00		والمالية المتحديق والمتحد المحدد المحدد المحدد	1 M. Adalahan Angera	101- Mu	
-10.0	<u> -1 </u>	n for de hand an the formation of the fo	n yayusan wayanyin Ma	NNow WWW. How	u
-20.0	h h _M		γ 		
-30.0	pt/ ^{/r}				With the work of the state
-50.0					
-60.0					
-70.0					
Center 2.45200 GHz #Res BW 30 kHz		#VBW 100 kH	z	Swee	Span 60.00 MF p 63.27 ms (1001 pt

Report No.: TCT241128E012

02:54:17 PMDec 02, 20 TRACE 1 2 3 4 TYPE MWWW DET P N N N

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WAR WIN

Center 2.43700 GHz #Res BW 30 kHz

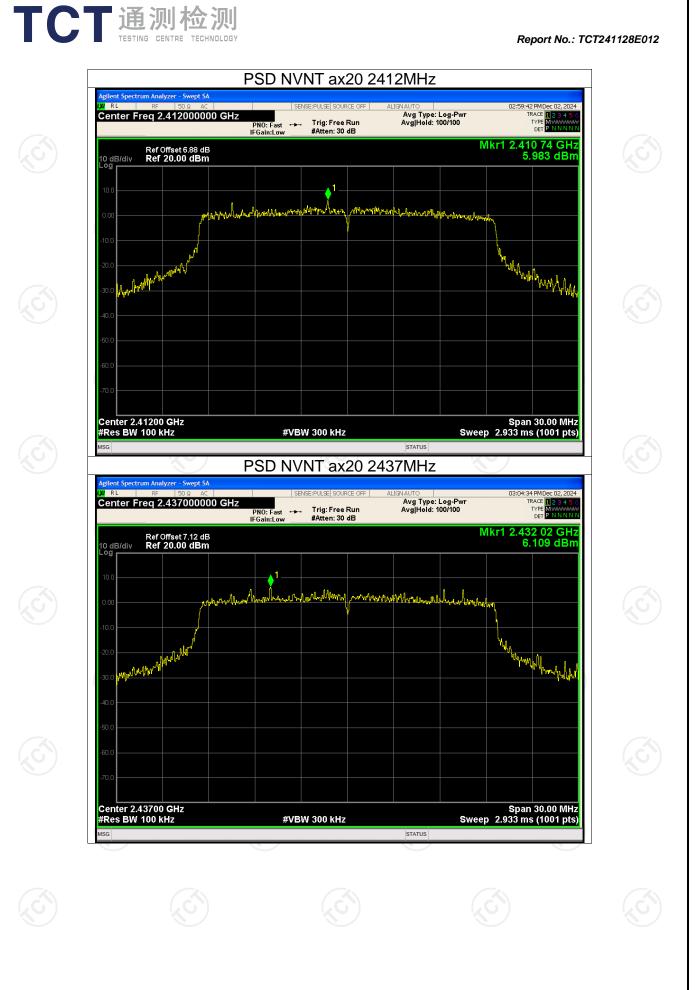
Center Freq 2.437000000 GHz

RL

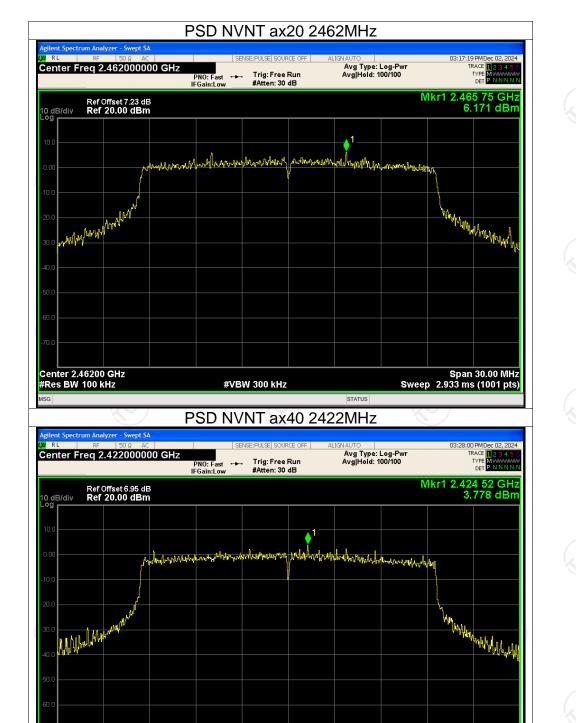
10 dB/div Log



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#VBW 300 kHz



TCT通测检测 TESTING CENTRE TECHNOLOGY

> Center 2.42200 GHz #Res BW 100 kHz

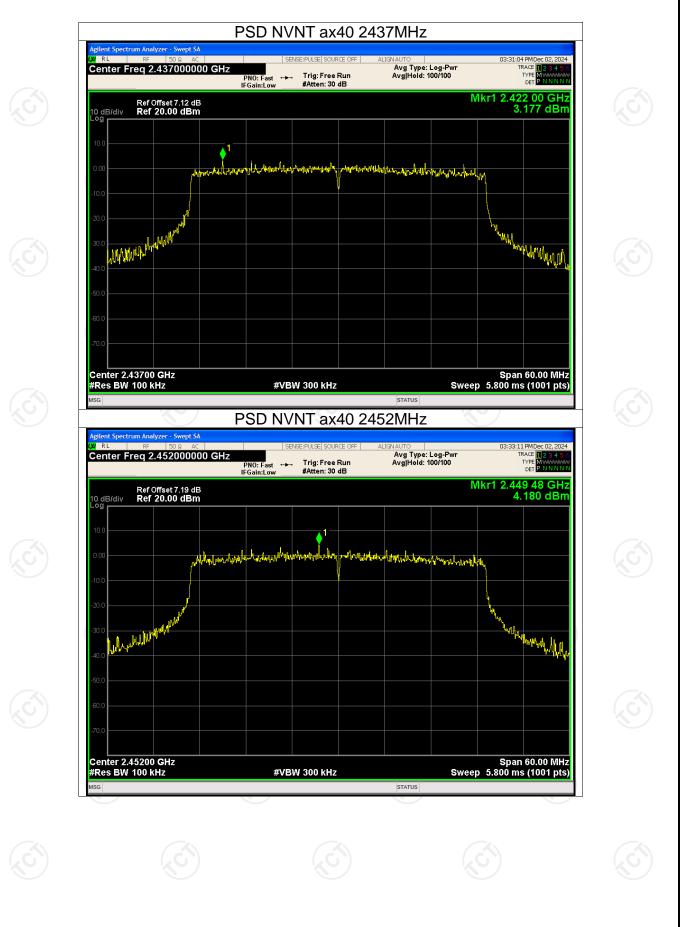
Report No.: TCT241128E012

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Span 60.00 MHz Sweep 5.800 ms (1001 pts)



STATUS



TCT通测检测 TESTING CENTRE TECHNOLOGY

TCT 通测检测 TESTING CENTRE TECHNOLOGY

Band Edge										
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict					
NVNT	b	2412	-54.14	-20	Pass					
NVNT	b	2462	-54.56	-20	Pass					
NVNT	g	2412	-49.60	-20	Pass					
NVNT	g	2462	-48.13	-20	Pass					
NVNT	n20	2412	-46.80	-20	Pass					
NVNT	n20	2462	-47.01	-20	Pass					
NVNT 🖉	n40	2422	-41.05	-20	Pass					
NVNT	n40	2452	-42.36	-20	Pass					
NVNT	ax20	2412	-42.44	-20	Pass					
NVNT	ax20	2462	-44.26	-20	Pass					
	ax40	2422	-36.23	-20	Pass					
NVNT	ax40	2452	-37.80	-20	Pass					

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Band Edge NVNT b 2462MHz Ref

ALIGN AUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000

SENSE:PULSE SOURCE OFF

PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB

TCT通测检测 TESTING CENTRE TECHNOLOGY

gilent Spectrum Analyze

Center Freq 2.462000000 GHz

RL

Report No.: TCT241128E012

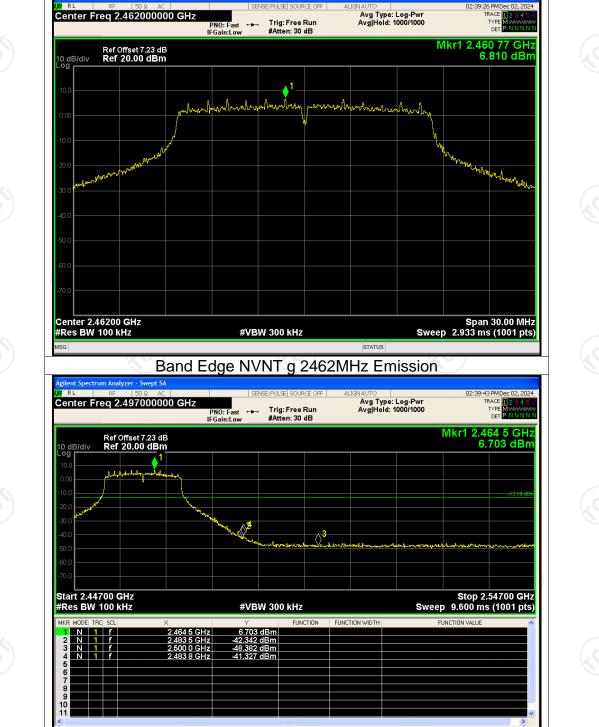
TYPE DET

Mkr1 2.413 29 GHz 7.384 dBm Ref Offset 6.88 dB Ref 20.00 dBm 10 dB/div <u> 1</u> Anothe Java Marshand mars maria mmunlowal mayn A. . Center 2.41200 GHz #Res BW 100 kHz Span 30.00 MHz Sweep 2.933 ms (1001 pts) #VBW 300 kHz STATUS Band Edge NVNT g 2412MHz Emission t SI SENSE:PULSE SOURCE OFF ALIGNAUTO Avg Type: Log-Pwr RL 02:35:21 PMDec 02, 2024 TRACE 1 2 3 4 5 6 Center Freq 2.377000000 GHz

Band Edge NVNT g 2412MHz Ref gilent Spectrum Analyz RL SENSE:PULSE SOURCE OFF ALIGN AUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000 Center Freq 2.412000000 GHz TRACE TYPE DET PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 30 dB

		_			PNO: Fast 🔸 Gain:Low	. Tri: #At	g:Freel ten:30	Run dB		Avg Ho	ld: 1000/1000		DET PNNN
10 dE	3/div		Offset 6.88 df f 20.00 dB m										413 3 GH: 7.369 dBn
Log												1	
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0.00												·	
-10.0											2,1		-12.62 dB
-20.0	\vdash										0,000		- John Market
-30.0	<u> </u>									لمستر	A.S.		
-40.0	<u> </u>									- And a			
-50.0	and and the second	where where	-	a south as a factor of the	alphanest and the state of the	ereland.	არიკიკიტი	ll man	- Mayon Mar				
-60.0													
-70.0													
	t 2.32										_		2.42700 GH
#Re	s BW	100	KHZ		#VB	W 30	0 kHz				Swe	ep 9.600 m	is (1001 pts
MKR I	MODE TR	C SCL	:	X	Y		FUN	CTION	FUNCT	FION WIDTH		FUNCTION VALUE	
2	N 1 N 1	f		2.413 3 GHz 2.400 0 GHz	-22.207	dBm dBm							
3	N 1	f		2.390 0 GHz 2.390 0 GHz		dBm							
4 5	<u>N 1</u>	<u> </u>		2.390 0 GHZ	-42.224	dBm							
6													
8													
9													
11													
<							Ш				,		>
MSG										STATUS			

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Band Edge NVNT g 2462MHz Ref

SENSE:PULSE SOURCE OFF

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gilent Spectrum Analyze

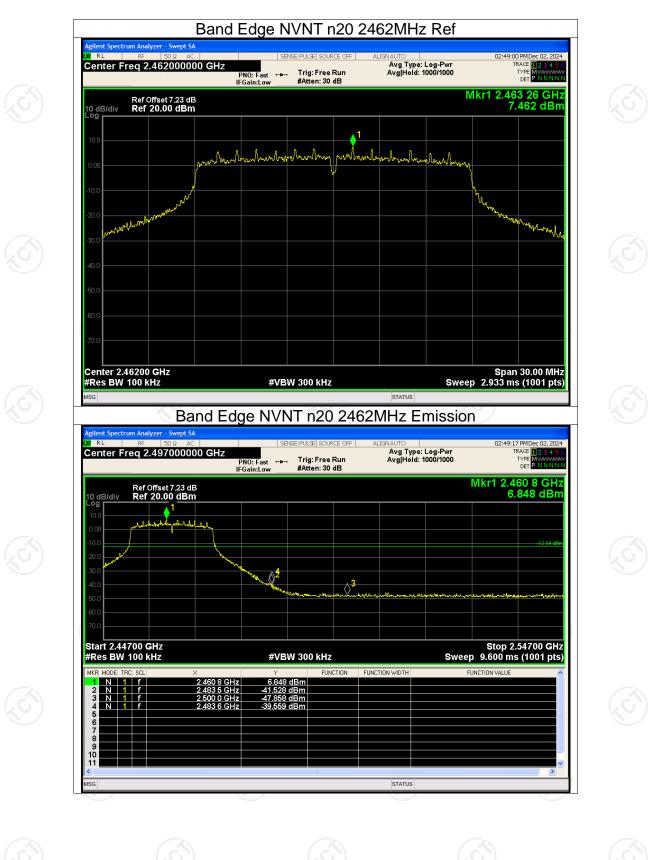
Center Freq 2.462000000 GHz

RL



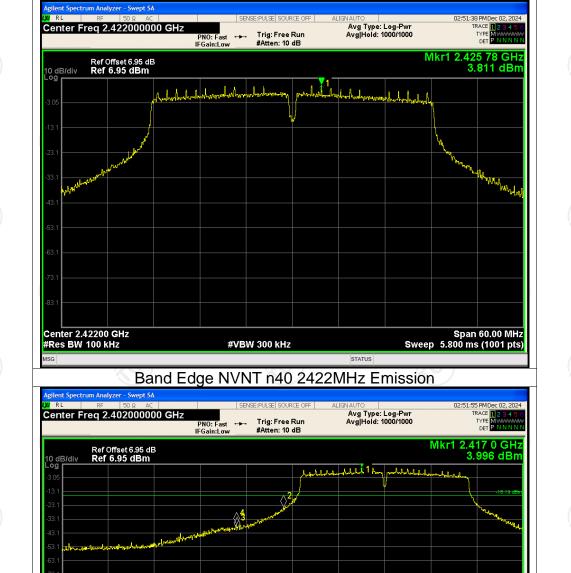
Band Edge NVNT n20 2412MHz Ref gilent Spectr RL ALIGNAUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000 SENSE:PULSE SOURCE OFF 02:43:18 PM De TRACE Center Freq 2.412000000 GHz PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 30 dB TYPE DET Mkr1 2.410 77 GHz 6.955 dBm Ref Offset 6.88 dB Ref 20.00 dBm 10 dB/div Inall mund Α. monthe Angente www. ٧hu MAN what have and and

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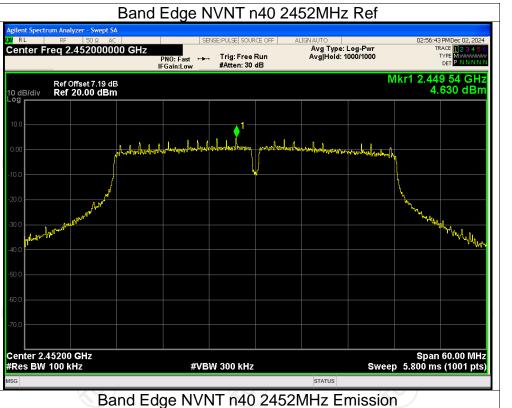


Band Edge NVNT n40 2422MHz Ref

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ISG

STATUS



FCT通测检测 TESTING CENTRE TECHNOLOGY

RL

10 dB/di Log

Center Freq 2.472000000 GHz

Ref Offset 7.19 dB Ref 20.00 dBm

Avg Type: Log-Pwr Avg|Hold: 1000/1000

TRACE

TYPE DET Mkr1 2.449 5 GHz 4.127 dBm

SENSE: PULSE SOURCE OFF

الم الم الما الما الما

PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 30 dB

....

Band Edge NVNT ax20 2412MHz Ref SENSE: PULSE SOURCE OFF ALIGNAUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000 57 PMDec 02, 20 TRACE 1234 TYPE MWWW DET PNNN Center Freq 2.412000000 GHz PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.413 26 GHz 6.955 dBm Ref Offset 6.88 dB Ref 20.00 dBm 1 And Anche mentionen Why WILMANNA Span 30.00 MHz Sweep 2.933 ms (1001 pts)

STATUS

Band Edge NVNT ax20 2412MHz Emission

#VBW 300 kHz

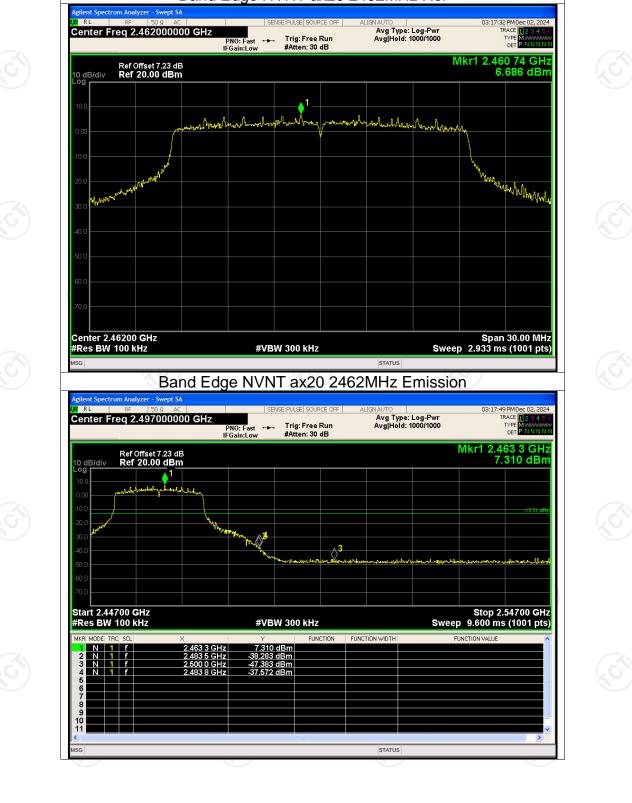
gilent Spectr RL

10 dB/div Log

What white

Center 2.41200 GHz #Res BW 100 kHz

enter F	req 2.3770	00000 GHz	NO: Fast T	ulse source off	Avg Typ	e: Log-Pwr I: 1000/1000	03:00:14 PMDec 02, 2 TRACE 1 2 3 4 TYPE MWWW DET P N N N
			Gain:Low #/	Atten: 30 dB			
) dB/div	Ref Offset 6 Ref 20.00						Mkr1 2.413 2 G 6.512 dE
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0.0					Y11		
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0.0							
0.0							
tart 2.32	2700 GHz						Stop 2.42700 G
tart 2.32 Res BW	100 kHz		#VBW 3			-	o 9.600 ms (1001 p
tart 2.32 Res BW	RC SCL	× 2.413 2 GHz	#VBW 3	FUNCTION	FUNCTION WIDTH	-	Stop 2.42700 G 9.600 ms (1001 p INCTION VALUE
tart 2.32 Res BW KR MODE TR 1 N 1 2 N 1	100 kHz RC SCL 1 f 1 f	2.413 2 GHz 2.400 0 GHz	۲ 6.512 dBn -21.605 dBn	FUNCTION	FUNCTION WIDTH	-	o 9.600 ms (1001 p
tart 2.32 Res BW KR MODE TF 1 N 1 2 N 1 3 N 1 4 N 1	100 kHz RC SCL 1 f 1 f	2.413 2 GHz	۲ 6.512 dBn	FUNCTION	FUNCTION WIDTH	-	Stop 2.42700 G 9.600 ms (1001 p INCTION VALUE
tart 2.32 Res BW KR MODE TH 2 N 1 3 N 1 4 N 1 5	100 kHz RC SCL 1 f 1 f	2.413 2 GHz 2.400 0 GHz 2.390 0 GHz	Y 6,512 dBn -21,605 dBn -39,683 dBn	FUNCTION	FUNCTION WIDTH	-	o 9.600 ms (1001 p
tart 2.32 Res BW KR MODE TF 1 N 1 2 N 1 3 N 1 4 N 1 5 6 6 7	100 kHz RC SCL 1 f 1 f	2.413 2 GHz 2.400 0 GHz 2.390 0 GHz	Y 6,512 dBn -21,605 dBn -39,683 dBn	FUNCTION	FUNCTION WIDTH	-	o 9.600 ms (1001 p
tart 2.32 Res BW	100 kHz RC SCL 1 f 1 f	2.413 2 GHz 2.400 0 GHz 2.390 0 GHz	Y 6,512 dBn -21,605 dBn -39,683 dBn	FUNCTION	FUNCTION WIDTH	-	o 9.600 ms (1001 p
tart 2.32 Res BW Res BW 1 N 1 2 N 1 3 N 1 4 N 1 5 5 6 6 7 8 8 9 9	100 kHz RC SCL 1 f 1 f	2.413 2 GHz 2.400 0 GHz 2.390 0 GHz	Y 6,512 dBn -21,605 dBn -39,683 dBn	FUNCTION	FUNCTION WIDTH	-	o 9.600 ms (1001 p
tart 2.32 Res BW KR MODE TR 1 N 2 N 3 N	100 kHz RC SCL 1 f 1 f	2.413 2 GHz 2.400 0 GHz 2.390 0 GHz	Y 6,512 dBn -21,605 dBn -39,683 dBn	FUNCTION	FUNCTION WIDTH	-	o 9.600 ms (1001 p



Band Edge NVNT ax20 2462MHz Ref

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gilent Spect





Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	-49.01	-20	Pass
NVNT	b	2437	-47.87	-20	Pass
NVNT	b	2462	-48.37	-20	Pass
NVNT	g	2412	-47.16	-20	Pass
NVNT	g	2437	-45.57	-20	Pass
NVNT	g	2462	-56.47	-20	Pass
	n20	2412	-46.34	-20	Pass
NVNT 🔍	n20	2437	-47.41	-20	Pass
NVNT	n20	2462	-56.54	-20	Pass
NVNT	n40	2422	-53.42	-20	Pass
ONVNT	n40	2437	-48.22	-20	Pass
NVNT	n40	2452	-46.74	-20	Pass
NVNT	ax20	2412	-46.10	-20	Pass
NVNT	ax20	2437	-46.75	-20	Pass
	ax20	2462	-46.48	-20	Pass
NVNT 🔍	ax40	2422	-42.38	-20	Pass
NVNT	ax40	2437	-44.26	-20	Pass
NVNT	ax40	2452	-43.58	-20	Pass

Conducted RF Spurious Emission









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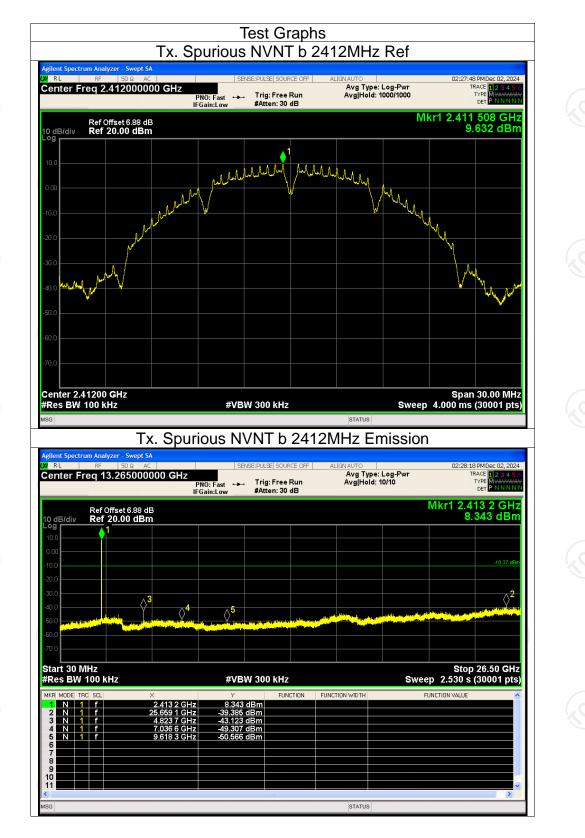






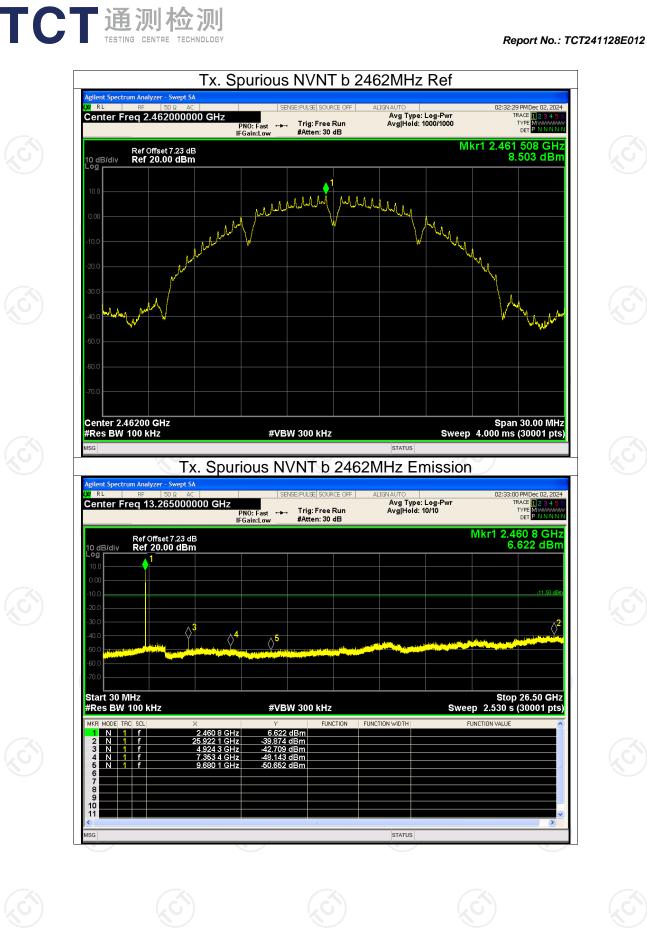


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Tx. Spurious NVNT g 2412MHz Ref gilent Spectr RL ALIGNAUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000 SENSE:PULSE SOURCE OFF Center Freq 2.412000000 GHz PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 30 dB TYPE DET Mkr1 2.413 274 GHz 7.359 dBm Ref Offset 6.88 dB Ref 20.00 dBm 10 dB/div 1 mlmmlmmlmmlmm undersed on allow on the market was ulm the loss المفالي والمعاد المعاد Well Mendall

TCT通测检测 TESTING CENTRE TECHNOLOGY

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gilent Spectr RL SENSE:PULSE SOURCE OFF ALIGN AUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000 Center Freq 2.437000000 GHz PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 30 dB TYPE DET Mkr1 2.438 289 GHz 7.524 dBm Ref Offset 7.12 dB Ref 20.00 dBm 10 dB/div 1 undread mand mand mand and and the water march and an and all inter the second Center 2.43700 GHz #Res BW 100 kHz Span 30.00 MHz Sweep 4.000 ms (30001 pts) #VBW 300 kHz STATUS

Tx. Spurious NVNT g 2437MHz Ref

Report No.: TCT241128E012

Mkr1 2.463 265 GHz 7.214 dBm Ref Offset 7.23 dB Ref 17.23 dBm 10 dB/div 1 Inner manumbrahan Mark. whend when Center 2.46200 GHz #Res BW 100 kHz Span 30.00 MHz Sweep 4.000 ms (30001 pts) #VBW 300 kHz STATUS

Tx. Spurious NVNT g 2462MHz Ref

SENSE:PULSE SOURCE OFF

PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 20 dB

ALIGNAUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000

TCT通测检测 TESTING CENTRE TECHNOLOGY

gilent Spectr RL

Center Freq 2.462000000 GHz

Tx. Spurious NVNT g 2462MHz Emission

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Report No.: TCT241128E012

TRACE TYPE DET

TYPE DET

02:42:34 PMDeL TRACE 1 TYPE M PET P gilent Spect RL SENSE:PULSE SOURCE OFF ALIGNAUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000 Center Freq 2.412000000 GHz PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.410 743 GHz 7.009 dBm Ref Offset 6.88 dB Ref 20.00 dBm 10 dB/div ø urnhurnhu waterstar on America Aus Marcala u.l. notranthroader Center 2.41200 GHz #Res BW 100 kHz Span 30.00 MHz Sweep 4.000 ms (30001 pts) #VBW 300 kHz STATUS

Tx. Spurious NVNT n20 2412MHz Ref

Tx. Spurious NVNT n20 2437MHz Ref gilent Spect RL ALIGN AUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000 SENSE:PULSE SOURCE OFF Center Freq 2.437000000 GHz PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 30 dB TYPE DET Mkr1 2.438 272 GHz 7.672 dBm Ref Offset 7.12 dB Ref 20.00 dBm 10 dB/div 1 months and and and Mundmedered mentered ANNA! Mark Phale WHITE WHITE Center 2.43700 GHz #Res BW 100 kHz Span 30.00 MHz Sweep 4.000 ms (30001 pts) #VBW 300 kHz STATUS

Tx. Spurious NVNT n20 2437MHz Emission

SENSE:PULSE | SOURCE OFF |

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Report No.: TCT241128E012

TRACE

RL

Center Freq 13.265000000 GHz

Tx. Spurious NVNT n20 2462MHz Emission

SENSE:PULSE | SOURCE OFF |

PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 20 dB

1 montenal and berry monteners nontrantmentmentmentaged Jus M MALANA Juna Marin Center 2.46200 GHz #Res BW 100 kHz Span 30.00 MHz Sweep 4.000 ms (30001 pts) #VBW 300 kHz STATUS

Tx. Spurious NVNT n20 2462MHz Ref

ALIGNAUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000

Avg Type: Log-Pwr Avg|Hold: 10/10

SENSE:PULSE SOURCE OFF

PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 20 dB

gilent Spect RL

10 dB/div

RL

Center Freq 13.265000000 GHz

Center Freq 2.462000000 GHz

Ref Offset 7.23 dB Ref 17.23 dBm

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Report No.: TCT241128E012

02:48:16 PMDL TRACE

Mkr1 2.463 275 GHz 7.258 dBm

TYPE DET

TYPE DET

Tx. Spurious NVNT n40 2422MHz Ref

SENSE:PULSE SOURCE OFF

PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 20 dB ALIGN AUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000

gilent Spect

Center Freq 2.422000000 GHz

Ref Offset 6.95 dB Ref 10.00 dBm

RL

10 dB/div

Report No.: TCT241128E012

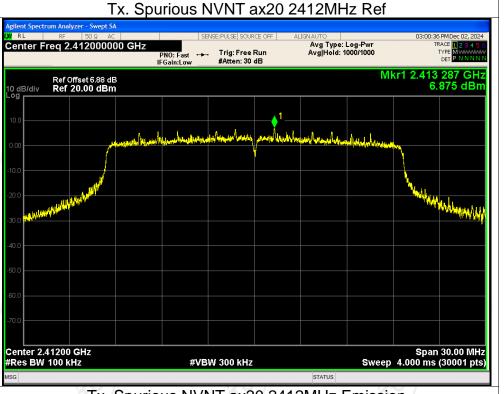
TRACE 1234 TYPE MWWW DET PNNN

Mkr1 2.418 264 GHz 3.792 dBm

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RL

Center Freq 13.265000000 GHz

Ref Offset 6.88 dB Ref 20.00 dBm

Tx. Spurious NVNT ax20 2412MHz Emission

Avg Type: Log-Pwr Avg|Hold: 10/10

TRACE TYPE

TYPE DET

 $\langle \rangle^2$

Mkr1 2.413 2 GHz 6.904 dBm

SENSE:PULSE SOURCE OFF

PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB

Tx. Spurious NVNT ax20 2437MHz Ref gilent Spect 156 PMDec UL, TRACE 1234 TYPE MWWW DET PNNN RL SENSE: PULSE SOURCE OFF ALIGNAUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000 Center Freq 2.437000000 GHz PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.438 264 GHz 7.016 dBm Ref Offset 7.12 dB Ref 20.00 dBm 10 dB/div alman American Marine And an individually i www. Center 2.43700 GHz #Res BW 100 kHz Span 30.00 MHz Sweep 4.000 ms (30001 pts) #VBW 300 kHz STATUS

Tx. Spurious NVNT ax20 2437MHz Emission

SENSE:PULSE SOURCE OFF

Report No.: TCT241128E012

RL

Center Freq 13.265000000 GHz

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Y-MINWWWW M.M.M Center 2.46200 GHz #Res BW 100 kHz Span 30.00 MHz Sweep 4.000 ms (30001 pts) #VBW 300 kHz STATUS Tx. Spurious NVNT ax20 2462MHz Emission 39 PML TRACE SENSE: PULSE SOURCE OFF RL Center Freq 13.265000000 GHz Avg Type: Log-Pwr Avg|Hold: 10/10 PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.461 7 GHz 3.219 dBm Ref Offset 7.23 dB Ref 20.00 dBm 10 dB/di Log \Diamond^2 ٥Î $\langle \rangle^4$ $\Diamond^{\mathbf{5}}$ Start 30 MHz #Res BW 100 kHz Stop 26.50 GHz Sweep 2.530 s (30001 pts)

#VBW 300 kHz

3.219 dBm -39.675 dBm -48.378 dBm -49.930 dBm -50.812 dBm

2.461 7 GHz 25.542 7 GHz 4.919 9 GHz 7.255 4 GHz 10.002 1 GHz

FUNCTION

FUNCTION WIDTH

FUNCTION VALUE

Tx. Spurious NVNT ax20 2462MHz Ref

1

ALIGNAUTO Avg Type: Log-Pwr Avg|Hold: 1000/1000

ada.

SENSE:PULSE SOURCE OFF

PNO: Fast ---- Trig: Free Run IFGain:Low #Atten: 30 dB

44

gilent Spect RL

10 dB/div

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Center Freq 2.462000000 GHz

Ref Offset 7.23 dB Ref 20.00 dBm

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03:18:09 PMDec 02, 20 TRACE 1 2 3 4 TYPE MWWW DET P N N N

Mkr1 2.463 301 GHz 6.807 dBm

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