	<b>TEST REPC</b>	)RT					
FCC ID	2AUARTOOLMAX						
	TCT220413E037						
Date of issue:	May 20, 2022						
Testing laboratory:	SHENZHEN TONGCE TES						
Testing location/ address:	TCT Testing Industrial Park	TCT Testing Industrial Park Fuqiao 5th Industrial Zone, Fuhai Street, Bao'an District Shenzhen, Guangdong, 518103, People's					
Applicant's name::	THINKCAR TECH CO., LTD.						
Address:	2606, building 4, phase II, TiananYungu, Gangtou community, Bantian, Longgang District, Shenzhen, China						
Manufacturer's name:	THINKCAR TECH CO., LTD.						
Address:	2606, building 4, phase II, 7 Bantian, Longgang District,		tou community,				
Standard(s):	FCC CFR Title 47 Part 15 Subpart C Section 15.247 FCC KDB 558074 D01 15.247 Meas Guidance v05r02 ANSI C63.10:2013						
Product Name::	THINKTOOL Max, THINKT	OOL Platinum S20,	THINKTOOL Euro				
Trade Mark:	THINKCAR, XHINKCAR	<u>(</u> )					
Model/Type reference :	ТКТ06						
Rating(s):	Refer to EUT description of	page 3					
Date of receipt of test item	Apr. 13, 2022						
Date (s) of performance of test:	Apr. 13, 2022 ~ May 20, 20	22					
Tested by (+signature) :	Brews XU	Forens	ANG CE TR				
Check by (+signature) :	Beryl ZHAO	Barge 26					
Approved by (+signature):	Tomsin Tomsin 3						

TONGCE TESTING LAB. This document may be altered or revised by SHENZHEN TONGCE TESTING LAB personnel only, and shall be noted in the revision section of the document. The test results in the report only apply to the tested sample.

# **Table of Contents**

TCT 通测检测 TESTING CENTRE TECHNOLOGY

1. General Product Information
1.1. EUT description
1.2. Model(s) list
1.3. Operation Frequency
2. Test Result Summary
3. General Information5
3.1. Test environment and mode
3.2. Description of Support Units
4. Facilities and Accreditations6
4.1. Facilities
4.2. Location6
4.3. Measurement Uncertainty
5. Test Results and Measurement Data7
5.1. Antenna requirement7
5.2. Conducted Emission
5.3. Conducted Output Power12
5.4. 20dB Occupy Bandwidth13
5.5. Carrier Frequencies Separation14
5.6. Hopping Channel Number15
5.7. Dwell Time
5.8. Pseudorandom Frequency Hopping Sequence
5.9. Conducted Band Edge Measurement18
5.10.Conducted Spurious Emission Measurement19
5.11.Radiated Spurious Emission Measurement
Appendix A: Test Result of Conducted Test
Appendix B: Photographs of Test Setup
Appendix C: Photographs of EUT



# **1. General Product Information**

## 1.1. EUT description

Product Name:	THINKTOOL Max, THINKTOOL Platinum S20, THINKTOOL Euro Max				
Model/Type reference:	ТКТ06				
Sample Number:	TCT220413E037-0101				
Bluetooth Version:	V5.0 (This report is for BDR+EDR)				
Operation Frequency:	2402MHz~2480MHz				
Transfer Rate:	1/2/3 Mbits/s				
Number of Channel:	79				
Modulation Type:	GFSK, π/4-DQPSK, 8DPSK				
Modulation Technology:	FHSS				
Antenna Type:	Internal Antenna				
Antenna Gain:	1dBi				
Rating(s):	Adapter Information: MODEL: PSY1204000 INPUT: AC 100-240V, 50/60Hz, 1.3A OUTPUT: DC 12V, 4.0A, 48.0W Rechargeable Li-ion Battery DC 7.6V				

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

None.

# 1.3. Operation Frequency

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	20	2422MHz	40	2442MHz	60	2462MHz
1	1 2403MHz		2423MHz	41	2443MHz	61	2463MHz
10	2412MHz	30	2432MHz	50	2452MHz	70	2472MHz
11	2413MHz	31	2433MHz	51	2453MHz	71	2473MHz
18	2420MHz	- 38	2440MHz	58	2460MHz	78	2480MHz
<b>C</b> 19	2421MHz	39	2441MHz	59	2461MHz	C)	- (, G
Remark: modulatic	Channel 0, 3 on mode.	9 & 78 ha	ave been te	sted for C	6FSK, π/4-D	QPSK, 8I	DPSK

Report No.: TCT220413E037

Page 3 of 98



# 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)(1)	PASS
20dB Occupied Bandwidth	§15.247 (a)(1)	PASS
Carrier Frequencies Separation	015 777 (3)(1)	
Hopping Channel Number	§15.247 (a)(1)	PASS
Dwell Time	§15.247 (a)(1)	PASS
Radiated Emission	§15.205/§15.209	PASS
Band Edge	§15.247(d)	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:	23.8 °C	24.5 °C			
Humidity:	42 % RH	45 % RH			
Atmospheric Pressure:	1010 mbar	1010 mbar			
Test Software:					
Software Information:	SP_META_exe_V1.1824.00				
Power Level:	6				
Test Mode:					
Engineer mode: Keep the EUT in continuous transmitting by select channel and modulations with Fully-charged battery					
above the ground plane of 3 polarities were performed. I the EUT continuously work	8m & 1.5m for the measure 8m chamber. Measurements in During the test, each emissio ing, investigated all operating nsidered typical configuration	n both horizontal and vertica n was maximized by: having g modes, rotated about all 3			

manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case( Z axis) are shown in Test Results of the following pages. DH1 DH3 DH5 all have been tested, only worse case DH1 is reported.

## 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.

Equ	ipment	Model No.	Serial No.	FCC ID	Trade Name
	/	1	1	/	/

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, 20dB Occupied Bandwidth, Carrier Frequencies Separation, Hopping Channel Number, Dwell Time, 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-1
- SHENZHEN TONGCE TESTING LAB
- CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

## 4.2. Location

SHENZHEN TONGCE TESTING LAB

Address: TCT Testing Industrial Park Fuqiao 5th Industrial Zone, Fuhai Street, 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
7	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:

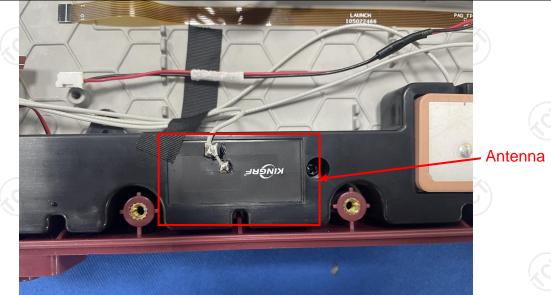
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit 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 Bluetooth antenna is internal antenna which permanently attached, and the best case gain of the antenna is 1dBi.



## 5.2. Conducted Emission

#### 5.2.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.207						
Test Method:	ANSI C63.10:2013						
Frequency Range:	150 kHz to 30 MHz	150 kHz to 30 MHz					
Receiver setup:	RBW=9 kHz, VBW=30	) kHz, Sweep time	e=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:	E.U.T       AC powe         Test table/Insulation plane         Remark:         E.U.T. Equipment Under Test         LISN: Line Impedence Stabilization NI         Test table height=0.8m	EMI Receiver	AC power				
Test Mode:	Charging + Transmitting Mode						
	<ol> <li>The E.U.T is connected to an adapter through a impedance stabilization network (L.I.S.N.). provides a 50ohm/50uH coupling impedance for measuring equipment.</li> <li>The peripheral devices are also connected to the r power through a LISN that provides a 50ohm/5 coupling impedance with 50ohm termination. (Ple refer to the block diagram of the test setup photographs).</li> <li>Both sides of A.C. line are checked for maxin emission, the relative positions of equipment and a the interface cables must be changed according to the stability.</li> </ol>						
Test Procedure:	<ol> <li>2. The peripheral device power through a Licoupling impedance refer to the block photographs).</li> <li>3. Both sides of A.C. conducted interference emission, the relative the interface cables</li> </ol>	ent. ces are also conne ISN that provides e with 50ohm terr diagram of the . line are checke nce. In order to fi re positions of equ must be changed	ected to the main a 50ohm/50uh nination. (Please test setup and ed for maximum nd the maximum ipment and all o l according to				
Test Procedure:	<ul> <li>2. The peripheral device power through a Licoupling impedance refer to the block photographs).</li> <li>3. Both sides of A.C. conducted interference emission, the relative</li> </ul>	ent. ces are also conne ISN that provides e with 50ohm terr diagram of the . line are checke nce. In order to fi re positions of equ must be changed	ected to the main a 50ohm/50uh nination. (Please test setup and ed for maximun nd the maximun lipment and all o l according to				



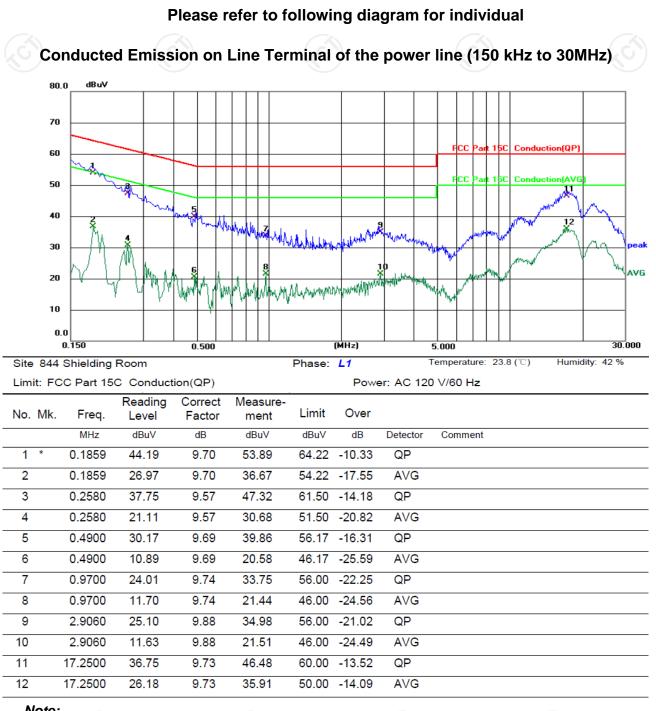
#### 5.2.2. Test Instruments

Conducted Emission Shielding Room Test Site (843)							
Equipment Manufacturer		Model Serial Number		Calibration Due			
EMI Test Receiver	R&S	ESCI3	100898	Jul. 07, 2022			
Line Impedance Stabilisation Newtork(LISN)		NSLK 8126	8126453	Feb. 24, 2023			
Line-5 TCT		CE-05	N/A	Jul. 07, 2022			
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A			



Page 9 of 98

#### 5.2.3. Test data

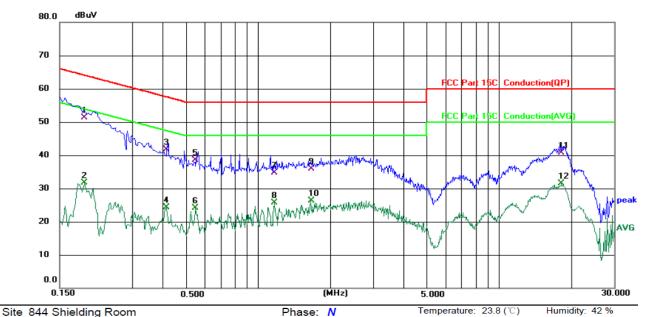


#### Note:

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  $(dB\mu V)$  – Limits  $(dB\mu V)$ Q.P. =Quasi-Peak AVG =average

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

Page 10 of 98



#### 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

Limit	Limit: FCC Part 15C Conduction(QP)						Powe	er: AC 120	0 V/60 Hz
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1900	41.65	9.73	51.38	64.04	-12.66	QP	
2		0.1900	21.99	9.73	31.72	54.04	-22.32	AVG	
3		0.4139	32.02	9.65	41.67	57.57	-15.90	QP	
4		0.4139	14.72	9.65	24.37	47.57	-23.20	AVG	
5		0.5500	28.73	9.72	38.45	56.00	-17.55	QP	
6		0.5500	14.40	9.72	24.12	46.00	-21.88	AVG	
7		1.1700	24.95	9.74	34.69	56.00	-21.31	QP	
8		1.1700	15.94	9.74	25.68	46.00	-20.32	AVG	
9		1.6539	26.16	9.76	35.92	56.00	-20.08	QP	
10		1.6539	16.56	9.76	26.32	46.00	-19.68	AVG	
11		18.1700	31.04	9.68	40.72	60.00	-19.28	QP	
12		18.1700	21.74	9.68	31.42	50.00	-18.58	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 $\mu$ V) – Limits (dB $\mu$ V) Q.P. =Quasi-Peak AVG =average

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

Note2:

Measurements were conducted in all three channels (high, middle, low) and three modulation (GFSK, Pi/4 DQPSK, 8DPSK), and the worst case Mode (Middle channel and GFSK) was submitted only.



## 5.3. Conducted Output Power

## 5.3.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (b)(1)
Test Method:	KDB 558074 D01 v05r02
Limit:	Section 15.247 (b) The maximum peak conducted output power of the intentional radiator shall not exceed the following: (1) For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band 0.125 watts.
Test Setup:	Spectrum Analyzer
Test Mode:	Transmitting mode with modulation
Test Procedure:	Use the following spectrum analyzer settings: Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel RBW > the 20 dB bandwidth of the emission being measured VBW ≥ RBW Sweep = auto Detector function = peak Trace = max hold Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission.
Test Result:	PASS

#### 5.3.2. Test Instruments

Name	Manufacturer	Model No.	Serial Number	<b>Calibration Due</b>
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Combiner Box	Ascentest	AT890-RFB	N/A	Jul. 07, 2022





## 5.4. 20dB Occupy Bandwidth

#### 5.4.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)
Test Method:	KDB 558074 D01 v05r02
Limit:	N/A
Test Setup:	Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	<ol> <li>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.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Use the following spectrum analyzer settings for 20dB Bandwidth measurement. Span = approximately 2 to 5 times the 20 dB bandwidth, centered on a hopping channel; 1%≤RBW≤5% of the 20 dB bandwidth; VBW≥3RBW; Sweep = auto; Detector function = peak; Trace = max hold.</li> <li>Measure and record the results in the test report.</li> </ol>
Test Result:	PASS

#### 5.4.2. Test Instruments

Name	Manufacturer	Model No.	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Combiner Box	Ascentest	AT890-RFB	N/A	Jul. 07, 2022





## 5.5. Carrier Frequencies Separation

#### 5.5.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)
Test Method:	KDB 558074 D01 v05r02
Limit:	Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.
Test Setup:	Spectrum Analyzer EUT
Test Mode:	Hopping mode
Test Procedure:	<ol> <li>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.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Enable the EUT hopping function.</li> <li>Use the following spectrum analyzer settings: Span = wide enough to capture the peaks of two adjacent channels; RBW is set to approximately 30% of the channel spacing, adjust as necessary to best identify the center of each individual channel; VBW≥RBW; Sweep = auto; Detector function = peak; Trace = max hold.</li> <li>Use the marker-delta function to determine the separation between the peaks of the adjacent channels. Record the value in report.</li> </ol>
Test Result:	PASS (C)

#### 5.5.2. Test Instruments

Name	Manufacturer	Model No.	Serial Number	<b>Calibration Due</b>
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Combiner Box	Ascentest	AT890-RFB	N/A	Jul. 07, 2022

Page 14 of 98

# 5.6. Hopping Channel Number

## 5.6.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)
Test Method:	KDB 558074 D01 v05r02
Limit:	Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.
Test Setup:	
	Spectrum Analyzer EUT
Test Mode:	Hopping mode
Test Procedure:	<ol> <li>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.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Enable the EUT hopping function.</li> <li>Use the following spectrum analyzer settings: Span = the frequency band of operation; set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller; VBW≥RBW; Sweep = auto; Detector function = peak; Trace = max hold.</li> <li>The number of hopping frequency used is defined as the number of total channel.</li> <li>Record the measurement data in report.</li> </ol>
Test Result:	PASS
5.6.2 Tost Instruments	

#### 5.6.2. Test Instruments

Name	Manufacturer	Model No.	Serial Number	<b>Calibration Due</b>
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Combiner Box	Ascentest	AT890-RFB	N/A	Jul. 07, 2022
(.c)	66		(C)	$(\mathbf{G})$

#### 5.7. Dwell Time

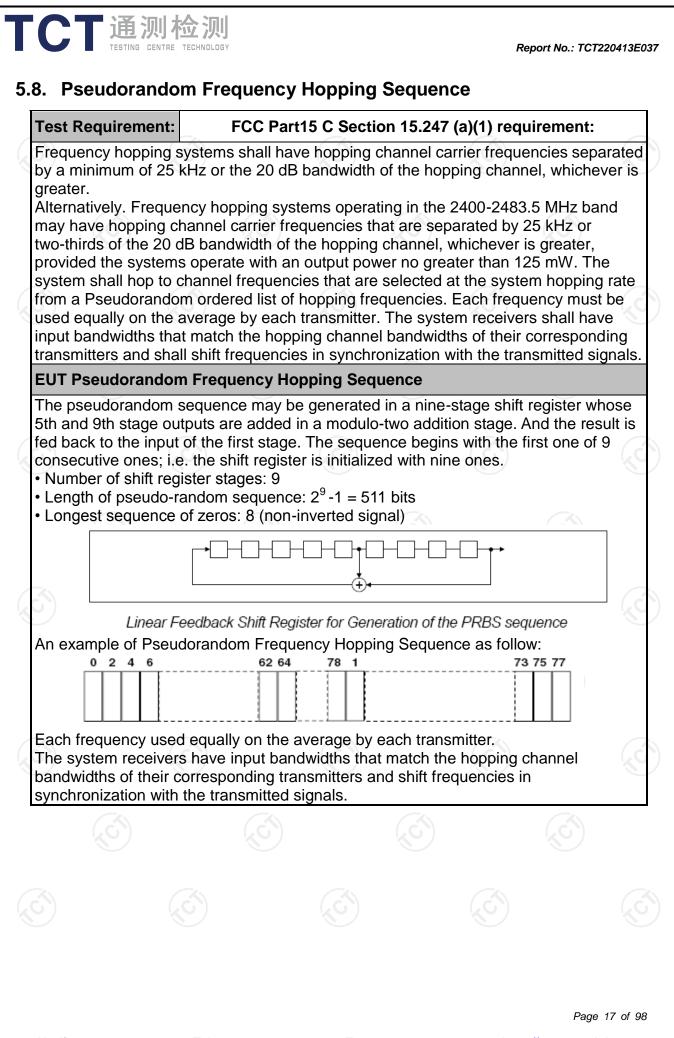
#### 5.7.1. Test Specification

TCT 通测检测 TESTING CENTRE TECHNOLOGY

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)
Test Method:	KDB 558074 D01 v05r02
Limit:	The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.
Test Setup:	Spectrum Analyzer EUT
Test Mode:	Hopping mode
Test Procedure:	<ol> <li>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.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Enable the EUT hopping function.</li> <li>Use the following spectrum analyzer settings: Span = zero span, centered on a hopping channel; RBW shall be ≤ channel spacing and where possible RBW should be set &gt;&gt; 1 / T, where T is the expected dwell time per channel; VBW≥RBW; Sweep = as necessary to capture the entire dwell time per hopping channel; Detector function = peak; Trace = max hold.</li> <li>Measure and record the results in the test report.</li> </ol>
Test Result:	PASS

#### 5.7.2. Test Instruments

Name	Manufacturer	Model No.	Serial Number	<b>Calibration Due</b>
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Combiner Box	Ascentest	AT890-RFB	N/A	Jul. 07, 2022





## 5.9. Conducted Band Edge Measurement

#### 5.9.1. Test Specification

FCC Part15 C Section 15.247 (d)
KDB 558074 D01 v05r02
In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.
Spectrum Analyzer EUT
Transmitting mode with modulation
<ol> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Set RBW = 100 kHz (≥1% span=10MHz), VBW = 300 kHz (≥RBW). Band edge emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100kHz RBW. The attenuation shall be 30 dB instead of 20 dB when RMS conducted output power procedure is used.</li> <li>Enable hopping function of the EUT and then repeat step 2 and 3.</li> <li>Measure and record the results in the test report.</li> </ol>

#### 5.9.2. Test Instruments

Name	Manufacturer	Model No.	Serial Number	<b>Calibration Due</b>
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Combiner Box	Ascentest	AT890-RFB	N/A	Jul. 07, 2022
$(\mathcal{S})$	(.G)		S )	$(\mathcal{G})$



## 5.10. Conducted Spurious Emission Measurement

## 5.10.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	KDB 558074 D01 v05r02
Limit:	In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.
Test Setup:	Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	<ol> <li>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.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Set RBW = 100 kHz, VBW = 300kHz, scan up through 10th harmonic. All harmonics / spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.</li> <li>Measure and record the results in the test report.</li> <li>The RF fundamental frequency should be excluded against the limit line in the operating frequency band.</li> </ol>
Test Result:	PASS

#### 5.10.2. Test Instruments

Name	Manufacturer	Model No.	Serial Number	<b>Calibration Due</b>
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Combiner Box	Ascentest	AT890-RFB	N/A	Jul. 07, 2022



#### 5.11.1. Test Specification

TCT通测检测 TESTING CENTRE TECHNOLOGY

Test Requirement:	FCC Part15	C Section	15.209			No.	
Test Method:	ANSI C63.10	):2013					
Frequency Range:	9 kHz to 25 (	GHz				<i>.</i>	
Measurement Distance:	3 m	X	9		R.		
Antenna Polarization:	Horizontal &	Vertical					
	Frequency	Detector	RBW	VBW	ŀ	Remark	
	9kHz- 150kHz	Quasi-peal		1kHz		i-peak Value	
Receiver Setup:	150kHz- 30MHz	Quasi-peal	k 9kHz	30kHz	Quas	i-peak Value	
·	30MHz-1GHz	Quasi-peal	120KHz	300KHz	Quas	i-peak Value	
	Above 1GHz	Peak	1MHz	3MHz		ak Value	
		Peak	1MHz	10Hz	Ave	rage Value	
	Frequen	су	Field Stre (microvolts	-		asurement nce (meters)	
	0.009-0.4	190	2400/F(I		Diotai	300	
	0.490-1.7		24000/F(			30	
	1.705-3		30			30	
	30-88	1	100		3		
	88-216	1	150		3		
Limit:	216-96		200			3	
	Above 9	60	500			3	
	Frequency		d Strength ovolts/meter)	Measuren Distano (meters	nce Detector		
	Above 1GH	2	500	3		Average	
	For radiated emis		5000 30MHz	3	(jú	Peak	
Test setup:	_ †	stance = 3m		Pre -A	Comput		
	C.Sm Turn table Im Receiver						
	30MHz to 1GHz						
		X					
۵) (۵)		5)	(				

CT 通测检测 TESTING CENTRE TECHNOLOGY	Report No.: TCT220413E0
	EUT Turn Table Ground Plane
	Above 1GHz
	AE EUT (Turntable) Ground Reference Plane Test Receiver
Test Mode:	Transmitting mode with modulation
Test Procedure:	<ol> <li>The testing follows the guidelines in Spurious Radiated Emissions of ANSI C63.10:2013 Measurement Guidelines.</li> <li>For the radiated emission test below 1GHz: The EUT was placed on a turntable with 0.8 meter above ground. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high PASS filter are used for the test in order to get better signal level.</li> <li>For the radiated emission test above 1GHz: Place the measurement antenna on a turntable with 1.5 meter above ground, which is away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission</li> </ol>

	receiving the ma measurement ar maximizes the e antenna elevatio restricted to a ra above the groun 3. Set to the maxi EUT transmit co 4. Use the followin (1) Span shall v emission be (2) Set RBW=1 for f>1GHz Sweep = a = max hold (3) For averag correction f	ed at the emission sour- ximum signal. The final itenna elevation shall b missions. The measure n for maximum emission nge of heights of from 1 d or reference ground p mum power setting an ontinuously. g spectrum analyzer se vide enough to fully cap sing measured; 20 kHz for f < 1 GHz, R ; VBW≥RBW; uto; Detector function =	l be that which ement ons shall be 1 m to 4 m olane. Id enable the ettings: oture the RBW=1MHz = peak; Trace uty cycle
	On time =N Where N1 length of ty Average E Level + 20 Corrected R	1*L1+N2*L2++Nn-1*L is number of type 1 pul pe 1 pulses, etc. mission Level = Peak E *log(Duty cycle) teading: Antenna Facto	ses, L1 is Emission r + Cable
Test results:	On time =N Where N1 length of ty Average E Level + 20 Corrected R	1*L1+N2*L2++Nn-1*L is number of type 1 pul pe 1 pulses, etc. mission Level = Peak E *log(Duty cycle)	lses, L1 is Emission r + Cable
Test results:	On time =N Where N1 length of ty Average E Level + 20 Corrected R Loss + Read	1*L1+N2*L2++Nn-1*L is number of type 1 pul pe 1 pulses, etc. mission Level = Peak E *log(Duty cycle) teading: Antenna Facto	ses, L1 is Emission r + Cable
Test results:	On time =N Where N1 length of ty Average E Level + 20 Corrected R Loss + Read	1*L1+N2*L2++Nn-1*L is number of type 1 pul pe 1 pulses, etc. mission Level = Peak E *log(Duty cycle) teading: Antenna Facto	ses, L1 is Emission r + Cable
Test results:	On time =N Where N1 length of ty Average E Level + 20 Corrected R Loss + Read	1*L1+N2*L2++Nn-1*L is number of type 1 pul pe 1 pulses, etc. mission Level = Peak E *log(Duty cycle) teading: Antenna Facto	ses, L1 is Emission r + Cable



#### 5.11.2. Test Instruments

TCT通测检测 TESTING CENTRE TECHNOLOGY

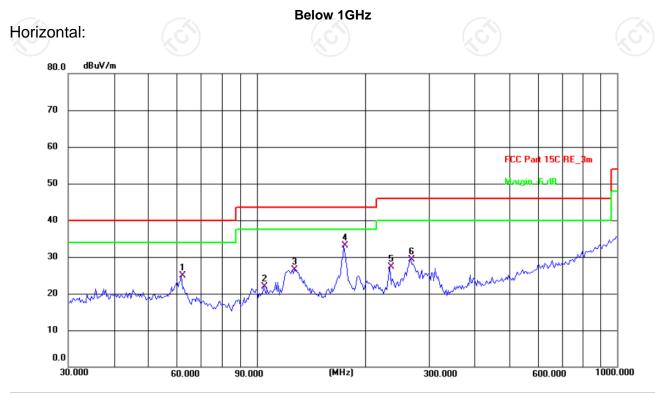
	Radiated En	nission Test Site	e (966)	
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESIB7	100197	Jul. 07, 2022
Spectrum Analyzer	R&S	FSQ40	200061	Jul. 07, 2022
Pre-amplifier	SKET	LNPA_0118G- 45	SK2021012 102	Feb. 24, 2023
Pre-amplifier	SKET	LNPA_1840G- 50	SK2021092 03500	Feb. 24, 2023
Pre-amplifier	HP	8447D	2727A05017	Jul. 07, 2022
Loop antenna	ZHINAN	ZN30900A	12024	Sep. 05, 2022
Broadband Antenna	Schwarzbeck	VULB9163	340	Sep. 04, 2022
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Sep. 04, 2022
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Apr. 10, 2023
Antenna Mast	Keleto	RE-AM	N/A	N/A
Coaxial cable	SKET	RC_DC18G-N	N/A	Feb. 24, 2023
Coaxial cable	SKET	RC-DC18G-N	N/A	Feb. 24, 2023
Coaxial cable	SKET	RC-DC40G-N	N/A	Jul. 07, 2022
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A

Page 23 of 98



#### 5.11.3. Test Data

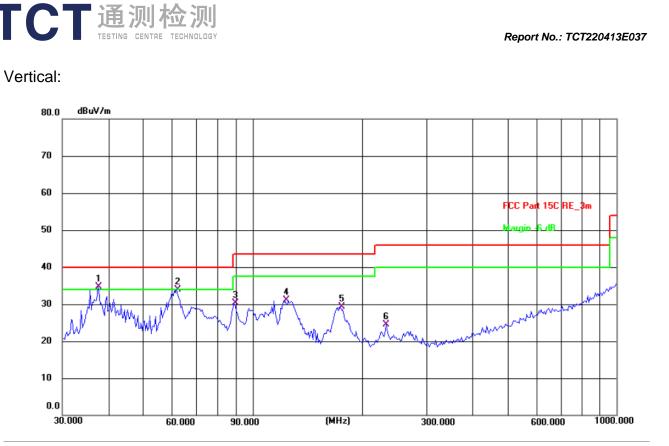
#### Please refer to following diagram for individual



Site #1 3m Anechoic Chamber Limit: FCC Part 15C RE 3m Polarization: *Horizontal* Power: DC 7.6 V Temperature: 24.5(C) Humidity: 45 %

<b>E</b>					100				
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	61.7781	12.85	11.96	24.81	40.00	-15.19	QP	Р	
2	104.5361	11.64	10.27	21.91	43.50	-21.59	QP	Р	
3	127.2176	14.49	11.98	26.47	43.50	-17.03	QP	Р	
4 *	174.4241	21.18	11.97	33.15	43.50	-10.35	QP	Р	
5	234.1684	15.44	11.83	27.27	46.00	-18.73	QP	Р	
6	267.5455	16.70	12.62	29.32	46.00	-16.68	QP	Р	
								· · · · · ·	

Page 24 of 98



#### Temperature: 24.5(C) Humidity: 45 % Site #1 3m Anechoic Chamber Polarization: Vertical Limit: FCC Part 15C RE\_3m Power: DC 7.6 V Reading Limit Frequency Factor Level Margin P/F No. Detector Remark (MHz) (dBuV) (dB/m) (dBuV/m) (dBuV/m) (dB) QP 1 \* 37.5479 34.65 40.00 -5.35 Ρ 21.18 13.47 2 21.99 33.95 40.00 -6.05 Ρ 61.7781 11.96 QP 30.36 Ρ 3 88.9639 21.78 8.58 43.50 -13.14 QP 19.29 31.04 43.50 Ρ 122.8340 11.75 -12.46 QP 4 QP Ρ 5 174.4241 17.32 29.29 43.50 -14.21 11.97 Ρ 6 232.5318 12.69 11.72 24.41 46.00 -21.59 QP

**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.

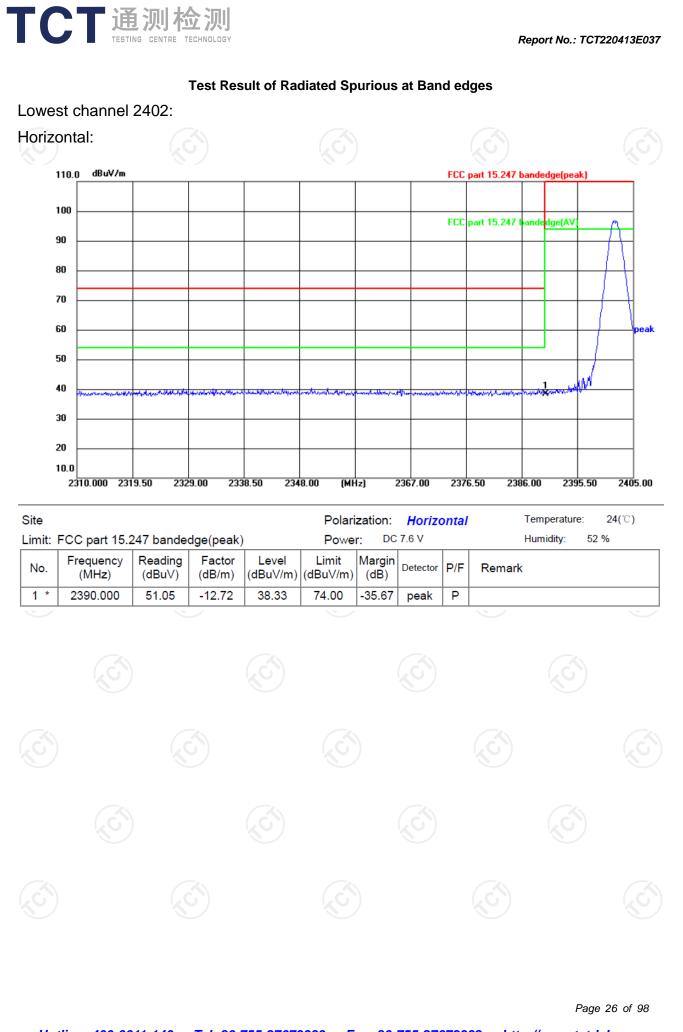
 Measurements were conducted in all three channels (high, middle, low) and three modulation (GFSK, Pi/4 DQPSK, 8DPSK) and the worst case Mode (Middle channel and GFSK) was submitted only.
 Freq. = Emission frequency in MHz

Measurement (dBμV/m) = Reading level (dBμV) + Corr. Factor (dB) Correction Factor= Antenna Factor + Cable loss – Pre-amplifier Limit (dBμV/m) = Limit stated in standard

 $Over (dB) = Measurement (dB\mu V/m) - Limits (dB\mu V/m)$ 

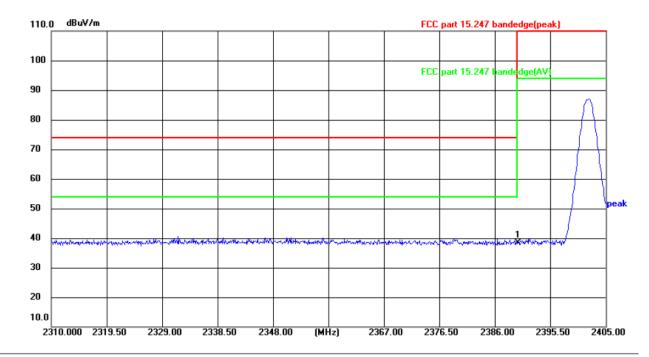
\* is meaning the worst frequency has been tested in the test frequency range.

Page 25 of 98



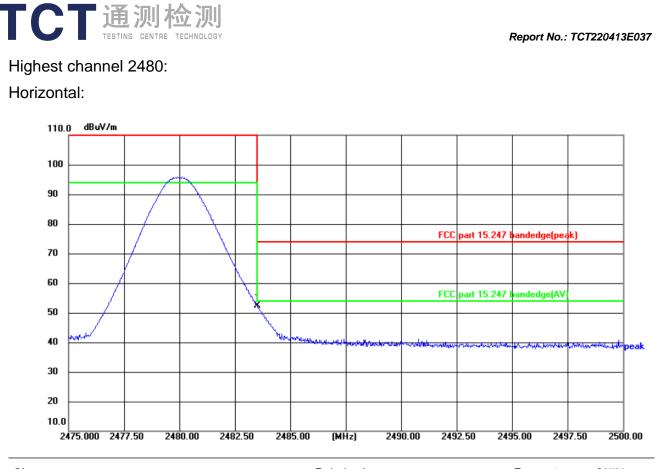
#### Vertical:

TCT通测检测 TESTING CENTRE TECHNOLOGY



Site					Polarization: Vertical			al	Temperature: 24(℃)		
Limit: FCC part 15.247 bandedge(peak) Power: DC 7.6 V Humidity: 52 %											
No.	Frequency (MHz)	Reading (dBuV)		Level (dBuV/m)		Margin (dB)	Detector	P/F	Remark		
1 *	2390.000	51.13	-12.72	38.41	74.00	-35.59	peak	Ρ			



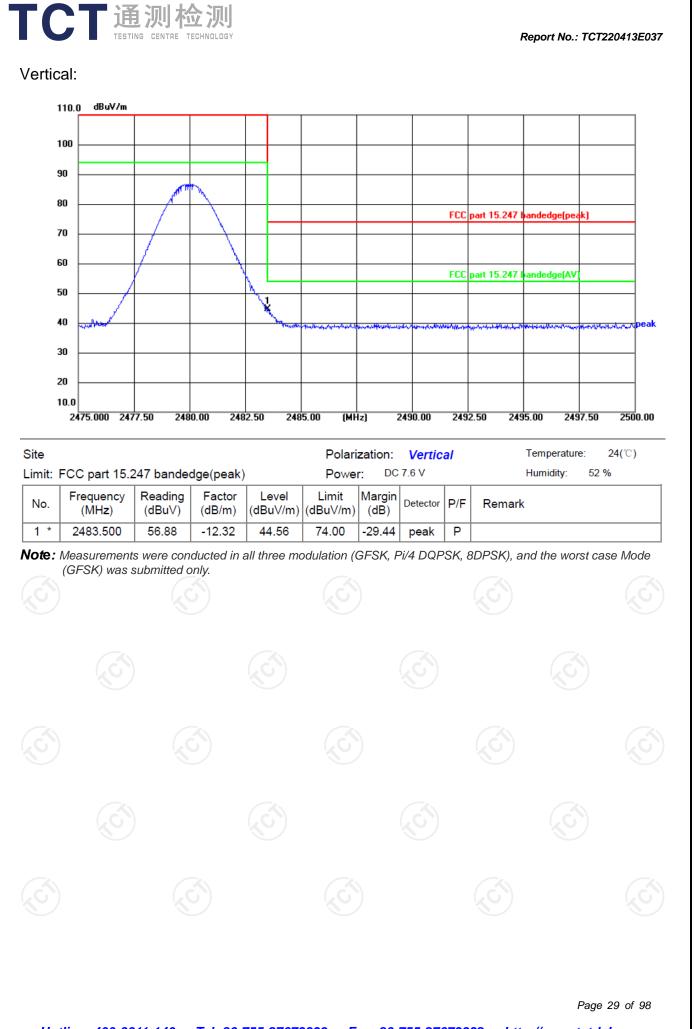


Site			Polarization: Horizontal			ntal	Temperature: 24(°ℂ)		
Limit:	FCC part 15.2	247 bande	dge(peak)	1	Power: DC 7.6 V				Humidity: 52 %
No.	Frequency (MHz)	Reading (dBuV)		Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	2483.500	64.61	-12.32	52.29	74.00	-21.71	peak	Ρ	



Page 28 of 98

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



#### Above 1GHz

Modulation	Type: GF	SK							
Low chann	el: 2402 N	1Hz							
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Peak	on Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4804	Н	47.38		0.66	48.04		74	54	-5.96
7206	Н	37.22		9.50	46.72		74	54	-7.28
	Н								
	$(\mathbf{G})$		J.J		(	.G`)		(.C)	
4804	V	46.78		0.66	47.44	<u> </u>	74	54	-6.56
7206	V	37.14		9.50	46.64		74	54	-7.36
	V								

Middle cha	nnel: 2441	MHz		X	)				X.
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	AV	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4882	Н	45.91		0.99	46.90		74	54	-7.10
7323	KOĤ)	35.75	-1,0	9.87	45.62	<u>0</u>	74	54	-8.38
	Ĥ								
4882	V	46.20		0.99	47.19		74	54	-6.81
7323	V	36.71		9.87	46.58		74	54	-7.42
<u> </u>	V			'	· /				

High chann	nel: 2480 N	ЛНz							
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Peak	on Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4960	Н	44.60		1.33	45.93		74	54	-8.07
7440	Н	35.37		10.22	45.59		74	54	-8.41
	Н	<u> </u>			2				
.c`)		(G)		(.0			$(\mathbf{G})$		(.c
4960	V	44.35		1.33 🔪	45.68		74	54	-8.32
7440	V	34.69		10.22	44.91		74	54	-9.09
	V								

#### Note:

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

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

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.

CT通测检测 TESTING CENTRE TECHNOLOGY

6. Measurements were conducted in all three modulation (GFSK, Pi/4 DQPSK, 8DPSK), and the worst case Mode (GFSK) was submitted only.

7. All the restriction bands are compliance with the limit of 15.209.

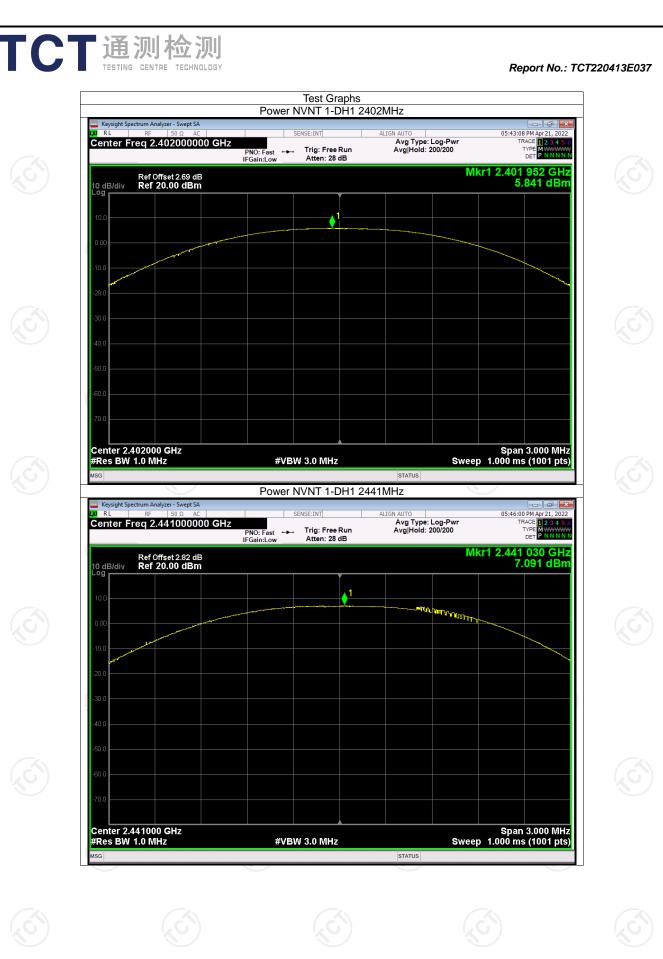


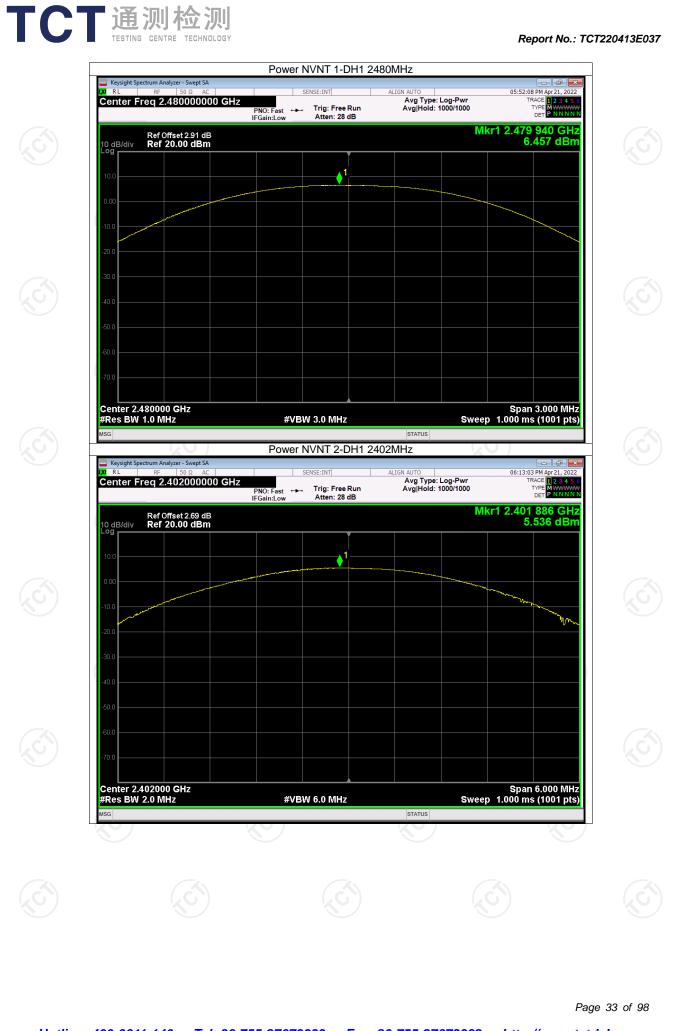
TCT通测检测 TESTING CENTRE TECHNOLOGY

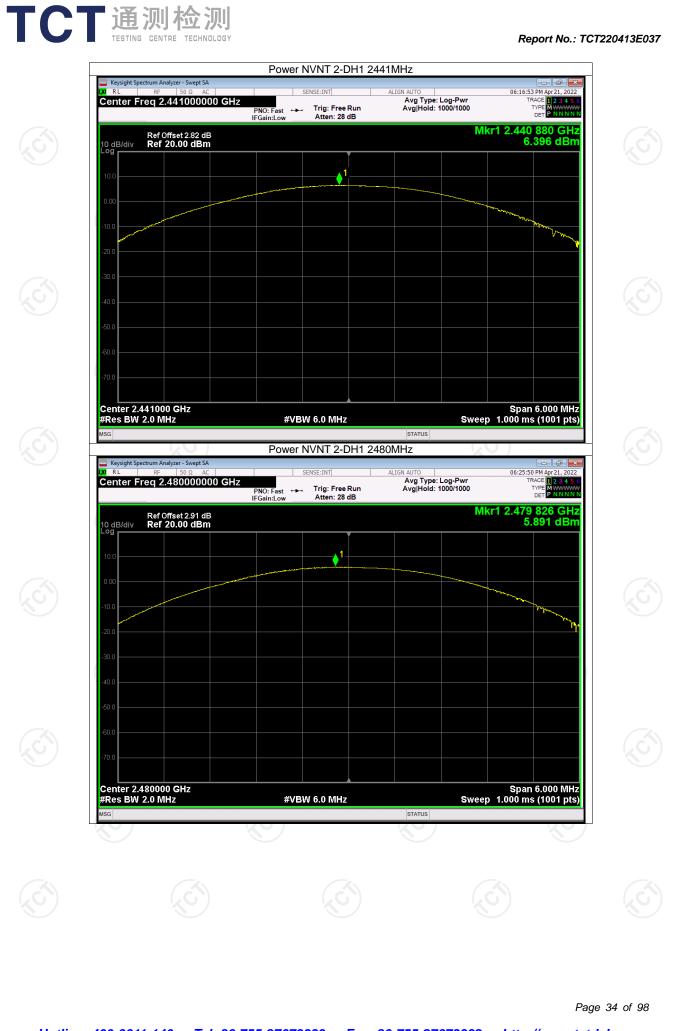
## Maximum Conducted Output Power

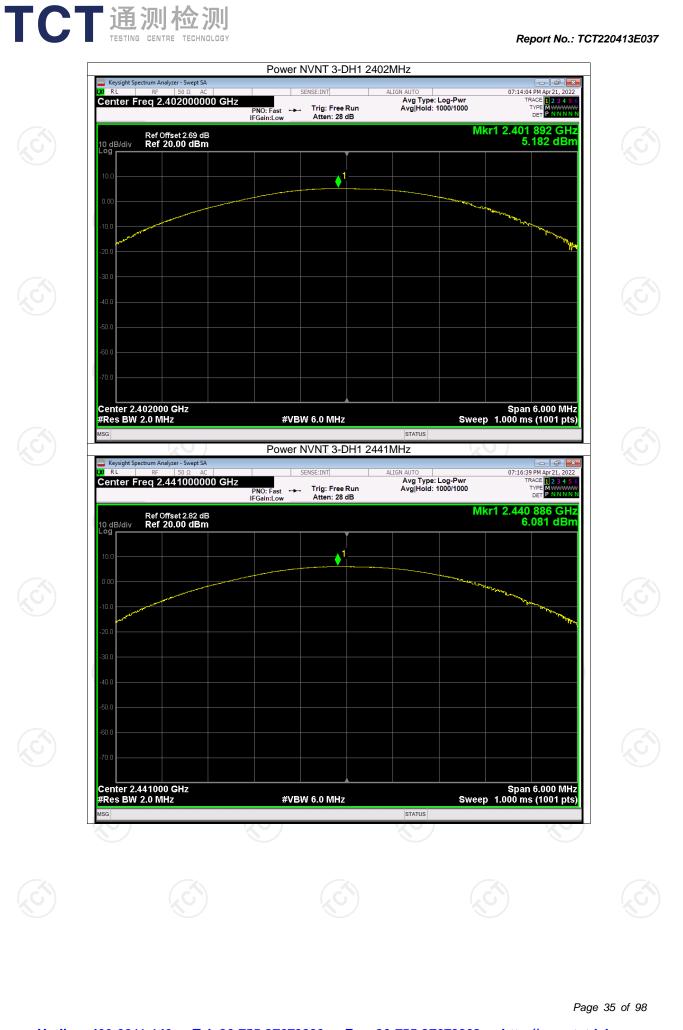
	Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
	NVNT	1-DH1	2402	5.84	30	Pass
(	NVNT	1-DH1	2441	7.09	30	Pass
X	NVNT	1-DH1	2480	6.46	30	Pass
	NVNT	2-DH1	2402	5.54	21	Pass
	NVNT	2-DH1	2441	6.4	21	Pass
	NVNT	2-DH1	2480	5.89	21	Pass
	NVNT	3-DH1	2402	5.18	21	Pass
	NVNT	3-DH1	2441	6.08	21	Pass
	NVNT	3-DH1	2480	5.51	21	Pass
		(				

Page 31 of 98









TC	通测检测 TESTING CENTRE TECHNOLOG	Y		Report No.: TCT	220413E037
	Keysight Spectrum Analyzer - Swept SA     RL RF 50 Ω AC     Center Freq 2.480000000 G	Power NVNT 3-DH1 2	ALIGN AUTO	07:20:15 PM Apr 21, 2022	
	Ref Offset 2.91 dB	PNO: Fast Trig: Free Run IFGain:Low Atten: 28 dB	Avg Type: Log-Pwr Avg Hold: 1000/1000 MK	r1 2.479 922 GHz 5.514 dBm	
	10 dB/div Ref 20.00 dBm			5.514 dBm	
	0.00			When white and	
	-10.0			and the second se	
	-30.0				
	-50.0				
	-60.0				
	Center 2.480000 GHz #Res BW 2.0 MHz	#VBW 6.0 MHz		Span 6.000 MHz 1.000 ms (1001 pts)	
	MSG	<b>N</b>	STATUS	2	
				Page	36 of 98

Page 37 of 98

http://www.tct-lab.com



Hotline: 400-6611-140

Tel: 86-755-27673339

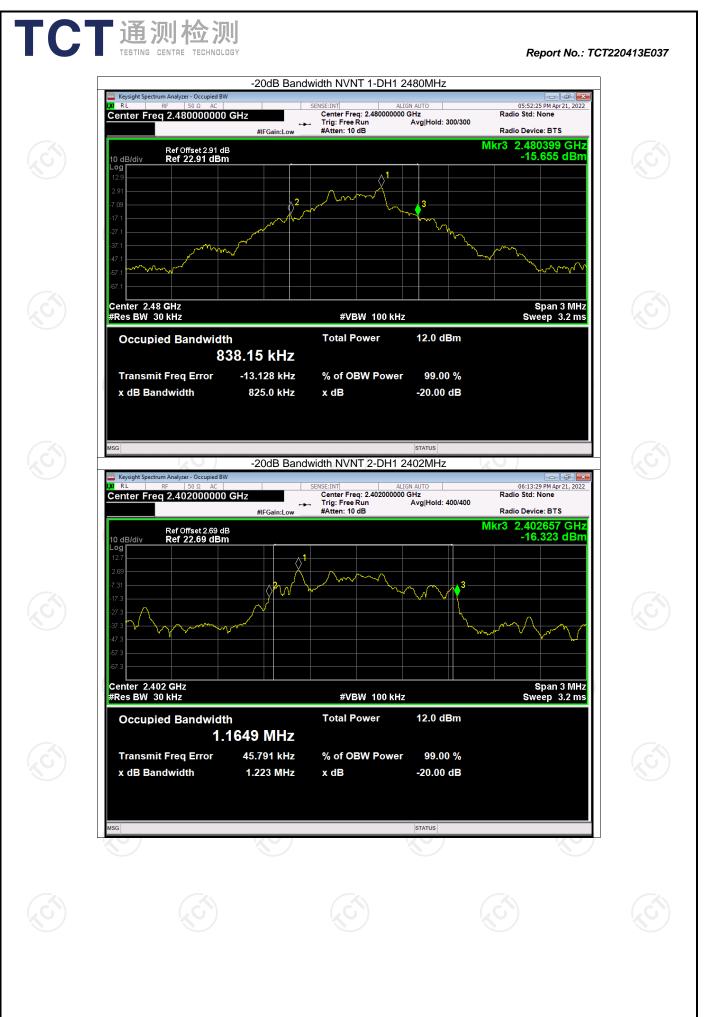
Fax: 86-755-27673332

=

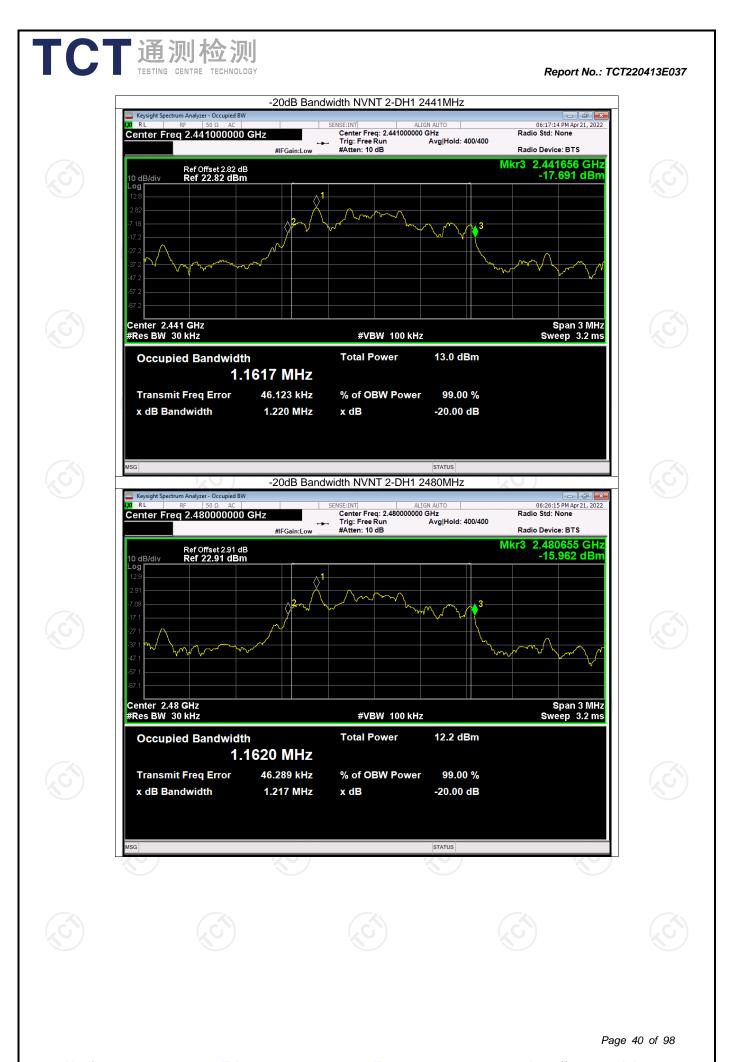
Condition	Mode	Frequency (MHz)	-20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	0.830	Pass
NVNT	1-DH1	2441	0.830	Pass
NVNT	1-DH1	2480	0.825	Pass
NVNT	2-DH1	2402	1.223	Pass
NVNT	2-DH1	2441	1.220	Pass
NVNT	2-DH1	2480	1.217	Pass
NVNT	3-DH1	2402	1.247	Pass
NVNT	3-DH1	2441	1.246	Pass
NVNT	3-DH1	2480	1.246	Pass







Page 39 of 98







Report No.: TCT220413E037

		••••••				
Condition	Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	2402.002	2402.998	0.996	0.830	Pass
NVNT	1-DH1	2441.003	2442.003	1	0.830	Pass
NVNT	1-DH1	2479.006	2479.998	0.992	0.830	Pass
NVNT	2-DH1	2401.836	2402.84	1.004	0.815	Pass
NVNT	2-DH1	2440.844	2441.842	0.998	0.815	Pass
NVNT	2-DH1	1239.703	2479.84	1240.137	0.815	Pass
NVNT	3-DH1	2401.84	2402.842	1.002	0.831	Pass
NVNT	3-DH1	2440.84	2441.84	1	0.831	Pass
NVNT	3-DH1	2478.844	2479.84	0.996	0.831	Pass

## **Carrier Frequencies Separation**

Page 43 of 98



		CFS NVNT 1-DH1 2	480MHz		
LXI RI	rsight Spectrum Analyzer - Swept SA RF 50 Ω AC ter Freq 2.479500000 G	GHz SENSE:INT	ALIGN AUTO Avg Type: Log-Pwr	06:09:22 PM Apr 21, 2022 TRACE 1 2 3 4 5 6 TYPE M AWAYAWAY DET PNNNNN	
		PNO: Wide C Trig: Free Run IFGain:Low #Atten: 30 dB	Avg Hold:>100/100	r1 2.479 006 GHz	
<b>10 dE</b> Log 10.0	Ref Offset 2.91 dB B/div Ref 20.00 dBm			6.198 dBm	
0.00	mar and a second	Mun Musumon			
-20.0					
-40.0					
-60.0 -70.0					
Cen	ter 2.479500 GHz			Span 2.000 MHz	
MKR 1	S BW 100 kHz MODE TRC SCL X N 1 f 2.479 0	#VBW 300 kHz Y FUNCTION 006 GHz 6.198 dBm		1.000 ms (1001 pts)	
2 3 4	N 1 f 2.479 9	998 GHz 5.389 dBm			
5 6 7 8				E	
9 10 11					
MSG		m	STATUS	4	
Key	rsight Spectrum Analyzer - Swept SA - RF 50 Ω AC	CFS NVNT 2-DH1 2	402MHz	07:01:29 PM Apr 21, 2022	
Cen	ter Freq 2.402500000 G	PNO: Wide Trig: Free Run IFGain:Low #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100		
10 dE	Ref Offset 2.69 dB B/div Ref 20.00 dBm		Mk	r1 2.401 836 GHz 4.809 dBm	
10 de Log 10.0	Ref Offset 2.69 dB Ref 20.00 dBm		Mk	r1 2.401 836 GHz 4.809 dBm	
Log 10.0	3/div Ref 20.00 dBm			r1 2.401 836 GHz	
Log 10.0 .00. -10.0	3/div Ref 20.00 dBm			r1 2.401 836 GHz 4.809 dBm	
Log 10.0 -10.0 -20.0 -30.0	3/div Ref 20.00 dBm			r1 2.401 836 GHz 4.809 dBm	
Log 10.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0	3/div Ref 20.00 dBm			r1 2.401 836 GHz 4.809 dBm	
Log 10.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0 <b>Cent</b> #Res	3/div Ref 20.00 dBm 1 1 1 1 1 1 1 1 1 1 1 1 1	#VBW 300 kHz	Sweep	r1 2.401 836 GHz 4.809 dBm	
Log 10.0 -10.0 -20.0 -30.0 -40.0 -50.0 -50.0 -70.0 Cent #Res MKR 1 -2 -3 3	3/div Ref 20.00 dBm 1 1 1 1 1 1 1 1 1 1 1 1 1	#VBW 300 kHz	Sweep	r1 2.401 836 GHz 4.809 dBm	
Log 10.0 -10.0 -20.0 -30.0 -40.0 -50.0 -50.0 -70.0 Cent #Re: 1 2	3/div Ref 20.00 dBm 1 1 1 1 1 1 1 1 1 1 1 1 1	#VBW 300 kHz	Sweep	r1 2.401 836 GHz 4.809 dBm	
Log 10.0 -0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -50.0 -50.0 -50.0 -70.0 <b>Cent</b> #Ret <b>X</b> <b>X</b> <b>X</b> <b>X</b> <b>X</b> <b>X</b> <b>X</b> <b>X</b> <b>X</b> <b>X</b>	3/div Ref 20.00 dBm 1 1 1 1 1 1 1 1 1 1 1 1 1	#VBW 300 kHz	Sweep	r1 2.401 836 GHz 4.809 dBm	
Log 10.0 -0.00 -20.0 -30.0 -40.0 -50.0 -70.0 <b>Cent</b> #Ret <b>1</b> 1 2 3 3 4 4 5 6 6 7 8 9 9	3/div Ref 20.00 dBm 1 1 1 1 1 1 1 1 1 1 1 1 1	#VBW 300 kHz	Sweep	r1 2.401 836 GHz 4.809 dBm	
Log 10.0 -0.00 -20.0 -30.0 -30.0 -40.0 -50.0 -50.0 -70.0 <b>Cen</b> #Re: 1 2 3 4 4 5 6 6 7 8 9 10 11 2	3/div Ref 20.00 dBm 1 1 1 1 1 1 1 1 1 1 1 1 1	#VBW 300 kHz #VBW 300 kHz FUNCTION 836 GHz 4.233 dBm 840 GHz 4.233 dBm		r1 2.401 836 GHz 4.809 dBm	
Log 100 000 -100 -200 -200 -200 -200 -200 -	3/div Ref 20.00 dBm 1 1 1 1 1 1 1 1 1 1 1 1 1	#VBW 300 kHz #VBW 300 kHz FUNCTION 836 GHz 4.233 dBm 840 GHz 4.233 dBm		r1 2.401 836 GHz 4.809 dBm	
Log 10.0 0.00 -20.0 -20.0 -30.0 -50.0 -50.0 -50.0 -70.0 <b>Cen</b> #Re: 1 1 2 3 4 4 5 6 6 7 8 9 10 11	3/div Ref 20.00 dBm 1 1 1 1 1 1 1 1 1 1 1 1 1	#VBW 300 kHz #VBW 300 kHz FUNCTION 836 GHz 4.233 dBm 840 GHz 4.233 dBm		r1 2.401 836 GHz 4.809 dBm	

Г	通测检测 TESTING CENTRE TECHNOLOGY	CFS NVNT 2-DH1 2441N	147	Report No.: TCT	220413E037
	Keysight Spectrum Analyzer - Swept SA K RL RF 50 Ω AC		ALIGN AUTO	07:04:12 PM Apr 21, 2022	
	Center Freq 2.441500000 GHz	PNO: Wide Trig: Free Run IFGain:Low #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 1 2 3 4 5 6 TYPE MWWWW DET P NNNNN	
<u>s</u>	Ref Offset 2.82 dB 10 dB/div Ref 20.00 dBm 10 0 10			2.440 844 GHz 5.840 dBm	
Ś	-40 0 -50 0 -60 0 -70 0 Center 2.441500 GHz #Res BW 100 kHz	#VBW 300 kHz	Sweep 1	Span 2.000 MHz 000 ms (1001 pts)	
(	MKR         MODE         TRC         SCL         X           1         N         1         f         2.440         844         GH           2         N         1         f         2.441         842         GH           3         - <td></td> <td>CTION WIDTH FUNCTI</td> <td>ON VALUE</td> <td></td>		CTION WIDTH FUNCTI	ON VALUE	
	MSG	CFS NVNT 2-DH1 2480N	STATUS		
	Keysight Spectrum Analyzer - Swept SA           XR         RF         50 Ω         AC           Center Freq 2.479500000 GHz           Ref Offset 2.91 dB           10 dB/div         Ref 20.00 dBm           000         1         4           10 0         5         10		ALIGN AUTO Avg Type: Log-Pwr Avg Hold:>100/100	07:12:23 PM Apr21, 2022 TRACE 1 23 4 5 6 TYPE WWWWW DET PNNNNN 1.239 703 GHz dBm	
3	-20 0 -30 0 -40 0 -50 0 -60 0				
	-70.0	#\/B\\\/ 300 kHz	Sween 1	Span 2.000 MHz	
	Center 2.479500 GHz #Res BW 100 kHz			Span 2.000 MHz 000 ms (1001 pts)	
J J	Center 2.479500 GHz #Res BW 100 kHz MKR MODE TRC SCL X 1 N 1 f 1239703 GH 2 N 1 f 2.479 840 GH 3 6 6 6 7 7 8 8 9 9 0 0 10 0 0 11 0 0 0 11 0 0 0 11 0 0 0 10 0 0 0 11 0 0 0 0	Y FUNCTION FUNC	CTION WIDTH FUNCTI	.000 ms (1001 pts)	
	KR         MODE         TRC         SCL         X           1         N         1         f         1.239         703         GH           2         N         1         f         2.339         703         GH           3         -	Y FUNCTION FUN z dBm z 5.281 dBm		.000 ms (1001 pts)	

Page 46 of 98

		CFS	S NVNT 3-DH1 24	02MHz		
LXI RL	t Spectrum Analyzer - Swept SA RF 50 Ω AC Freq 2.402500000		SENSE:INT	ALIGN AUTO Avg Type: Log-Pwr Avg Hold:>100/100	07:25:40 PM Apr 21, 202 TRACE 2 3 4 5 TYPE MWWW DET P N N N 1	12
		PNO: Wide IFGain:Low	Trig: Free Run #Atten: 30 dB		Ukr1 2.401 840 GH	
dB/di	Ref Offset 2.69 dB Ref 20.00 dBm		Ť	<mark>2</mark>	4.830 dBr	
10.0			·····			-
-20.0						
-30.0						
-50.0 -60.0						
-70.0 Center	2.402500 GHz				Span 2.000 MH	
MKR MODI	E TRC SCL X	Y		FUNCTION WIDTH	ep 1.000 ms (1001 pt	
1 N 2 N 3 4	1 f 2.401 1 f 2.402	840 GHz 4.8 842 GHz 4.2	330 dBm 213 dBm			
5 6 7						E
8 9 10 11						
MSG			III	STATUS	Þ	
	t Spectrum Analyzer - Swept SA	CFS	SNVNT 3-DH1 24			
Center	RF 50 Ω AC Freg 2.441500000		SENSE:INT	ALIGN AUTO	07:27:43 PM Apr 21, 202	
		PNO: Wide (	Trig: Free Run	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 12345 TYPE MWWW DET PNNN	6 ~~
10 dB(di	Ref Offset 2.82 dB		Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 12345 TYPE MWWWW DET PNNN Wkr1 2.440 840 GH 5.825 dBr	
10 dB/di Log 10.0	Ref Offset 2.82 dB	PNO: Wide (	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100		
	Ref Offset 2.82 dB ∨ Ref 20.00 dBm	PNO: Wide (	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH	
10.0	Ref Offset 2.82 dB ∨ Ref 20.00 dBm	PNO: Wide (	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH	
Log	Ref Offset 2.82 dB ∨ Ref 20.00 dBm	PNO: Wide (	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH	
Log	Ref Offset 2.82 dB ∨ Ref 20.00 dBm	PNO: Wide (	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH	
Log 10.0 -10.0 -20.0 -30.0 -40.0 -60.0 -70.0 Center	Ref Offset 2.82 dB ∨ Ref 20.00 dBm	PNO: Wide ( IFGain:Low	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH	z
Log 10.0 -10.0 -20.0 -30.0 -30.0 -40.0 -60.0 -70.0 Center #Res B	Ref Offset 2.82 dB Ref 20.00 dBm	PNO: Wide ( IFGain:Low #X	#Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH 5.825 dBr	z
Log 10.0 .10.0 .20.0 .30.0 .40.0 .50.0 .60.0 .70.0 Center #Res B MKR MOD 1 N 2 N 3 4 5	Ref Offset 2.82 dB Ref 20.00 dBm	PNO: Wide ( IFGain:Low #X	#Atten: 30 dB	AvgType: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH 5.825 dBr	z
Log 100 -100 -200 -300 -400 -600 -600 -700 Center #Res B MKR MOD 2 N 3 4	Ref Offset 2.82 dB Ref 20.00 dBm	PNO: Wide ( IFGain:Low #X	#Atten: 30 dB	AvgType: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH 5.825 dBr	z
Log 100 000 -100 -200 -200 -300 -40	Ref Offset 2.82 dB Ref 20.00 dBm	PNO: Wide ( IFGain:Low #X	#Atten: 30 dB	AvgType: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH 5.825 dBr	
Log 100 000 -100 -200 -300 -300 -400 -500 -500 -500 -500 -500 -500 -5	Ref Offset 2.82 dB Ref 20.00 dBm	PNO: Wide ( IFGain:Low #X	#Atten: 30 dB	AvgType: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH 5.825 dBr	
Log 10.0 -10.0 -20.0 -30.0 -40.0 -50.0 -50.0 -60.0 -70.0 Center #Res B MKR MOD 1 N 2 N 3 4 5 6 7 8 9 10 11 - - - - - - - - - - - - -	Ref Offset 2.82 dB Ref 20.00 dBm	PNO: Wide ( IFGain:Low #X	#Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH 5.825 dBr	z
Log 100 -100 -200 -200 -300 -300 -400 -500 -400 -500 -700 -600 -700 -700 -700 -700 -700 -7	Ref Offset 2.82 dB Ref 20.00 dBm	PNO: Wide ( IFGain:Low #X	#Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH 5.825 dBr	z
Log 10.0 .000 .20.0	Ref Offset 2.82 dB Ref 20.00 dBm	PNO: Wide ( IFGain:Low #X	#Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	Mkr1 2.440 840 GH 5.825 dBr	z

TC	通测 TESTING CENTRE	<b>检测</b> TECHNOLOGY			Repo	rt No.: TCT220413E037	
	Keysight Spectrum Analyze		NVNT 3-DH1 248	OMHz Align auto	07:28:46 PM /	2	
	Center Freq 2.47	9500000 GHz PNO: Wide IFGain:Low		Avg Type: Log-Pw Avg Hold:>100/100	T TRACE TYPE DET Mkr1 2.478 84	1 2 3 4 5 6 MWWWWWW P N N N N N	
	10.0	et 2.91 dB 00 dBm			5.89	0 dBm	
	-10.0 -20.0						
	-30.0 -40.0 -50.0						
	-60.0 -70.0 Center 2.479500 G	iHz			Span 2.0	000 MHz	
	#Res         BW         100 kHz           MKR         MODE         TRC         SCL           1         N         1         f           2         N         1         f	X Y 2.478 844 GHz 5.89	SW 300 kHz FUNCTION F D dBm D dBm		FUNCTION VALUE	001 pts)	
	3 4 5 6 7						
	8 9 10 11 <		III			-	
(C)	MSG	9	R R	STATUS	Res and a second		
						Page 48 of 98	
Hotline	e: 400-6611-140	<u>Tel: 86-755-2767</u>	<u>3339 Fax: 8</u>	<u>36-755-276733</u>	<u>332 http://w</u>	www.tct-lab.com	

Report No.:	TCT220413E037
-------------	---------------

			Band Edge			
Condition	Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	No-Hopping	-62.14	-20	Pass
NVNT	1-DH1	2480	No-Hopping	-63.19	-20	Pass
NVNT	2-DH1	2402	No-Hopping	-62.66	-20	Pass
NVNT	2-DH1	2480	No-Hopping	-61.28	-20	Pass
NVNT	3-DH1	2402	No-Hopping	-61.47	-20	Pass
NVNT	3-DH1	2480	No-Hopping 🔇	-61.71	-20	Pass

TCT通测检测 TESTING CENTRE TECHNOLOGY

Page 49 of 98





right Spectrum Anlyzer-Swegt SA
Ref Offset 3 91 dB         Mkr1 2.480 024 GHz           Bidiv         A           Image: Constraint of the second secon
ter 2.480000 GHz Span 8.000 MHz
\$ BW 100 kHz
STATUS
Band Edge NVNT 1-DH1 2480MHz No-Hopping Emission           ysight Spectrum Analyzer - Swept SA           L         RF         50 Ω         AC         SENSE:INT         ALIGN AUTO         05:52:42 PM Apr21, 2022
ter Freq 2.526000000 GHz PNO: Fast IFGain:Low HAtten: 30 dB Avg Type: Log-Pwr Avg JPold: 200/200 TVPE VIEND TRACE TRACE TRACE TVPE VIEND TVPE VIEND TVPE VIEND TVPE VIEND TVPE VIEND TVPE VIEND TVPE VIEND TVPE VIEND TVPE VIEND TVPE VIEND VIEND TVPE VIEND VI
Ref Offset 3.91 dB         Mkr1 2.480 0 GHz           B/div         A1
2/4 3 w Way for some way and with a some way and way and the source of t
t 2.47600 GHz Stop 2.57600 GHz
s BW 100 kHz         #VBW 300 kHz         Sweep 9.600 ms (1001 pts)           MODE TRC SCL         X         Y         FUNCTION   FUNCTION WIDTH         FUNCTION VALUE
N         1         f         2.480 0 GHz         6.986 dBm           N         1         f         2.483 5 GHz         -57.747 dBm           N         1         f         2.500 0 GHz         -50.76 dBm           N         1         f         2.485 7 GHz         -56.333 dBm
STATUS

Land.	Band Keysight Spectrum Analyzer - Swept SA	d Edge NVNT 2-DH1 2402M	1Hz No-Hopping Ref		
LXI	RL RF 50Ω AC enter Freq 2.402000000 GHz	PNO: Wide +++ Trig: Free Run	ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 1000/1000	06:13:39 PM Apr 21, 2022 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	
19	Ref Offset 3.69 dB 0 dB/div Ref 20.00 dBm	IFGain:Low #Atten: 30 dB	Mk	r1 2.401 848 GHz 6.053 dBm	
	0.0	<b>1</b>			
c	.00		M		
	0.0				
3	0.0	- man -	M		
	0.0	s0(			
				A. Manahara	
-7	0.0				
	enter 2.402000 GHz Res BW 100 kHz	#VBW 300 kHz	Sweep	Span 8.000 MHz 1.000 ms (1001 pts)	
мз	G	dge NVNT 2-DH1 2402MHz	STATUS		
	Keysight Spectrum Analyzer - Swept SA           RL         RF         50 Ω         AC           enter Freq 2.356000000 GHz	SENSE:INT	ALIGN AUTO Avg Type: Log-Pwr	06:13:43 PM Apr 21, 2022 TRACE 1 2 3 4 5 6 TYPE M	
	Ref Offset 3.69 dB	PNO: Fast Trig: Free Run IFGain:Low #Atten: 30 dB	Avg Hold: 200/200	/kr1 2.401 9 GHz	
	Ref Offset 3.69 dB 0 dB/div Ref 20.00 dBm			6.154 dBm	
	0.0				
	0.0			-1 1 Seb attri	
3) 3	0.00			-// \$ 007	
			4		
3 S S	100 00 00 00 00 00 00 00 00 00			Stop 2.40600 GHz	
3 3 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	000 000 000 000 000 000 000 000	#VBW 300 kHz	Sweep		
3 3 4 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0.0	#VBW 300 kHz	Sweep	Stop 2.40600 GHz 9.600 ms (1001 pts)	
3 3 4 4 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	00	#VBW 300 kHz	Sweep	Stop 2.40600 GHz 9.600 ms (1001 pts)	
3 3 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	00	#VBW 300 kHz	Sweep	Stop 2.40600 GHz 9.600 ms (1001 pts)	
3 3 4 4 7 8 #	00	#VBW 300 kHz GHz 6.154 dBm GHz -50.696 dBm GHz -58.520 dBm GHz -56.612 dBm	Sweep	Stop 2.40600 GHz 9.600 ms (1001 pts)	
3 3 4 4 7 8 #	00	#VBW 300 kHz GHz 6.154 dBm GHz -50.696 dBm GHz -58.520 dBm GHz -56.612 dBm	Sweep	Stop 2.40600 GHz 9.600 ms (1001 pts)	

Page 52 of 98

TC'	通测检测 TESTING CENTRE TECHNOLOGY Report No.: T	CT220413E037
	Band Edge NVNT 2-DH1 2480MHz No-Hopping Ref	-
	XI         RL         RE         50 Ω         AC         SENSE:INT         ALIGN AUTO         06:26:36 PM Apr 21, 2022           Center Freq 2.480000000 GHz         Avg Type: Log-Pwr         TRACE         1 2 3 4 5 6           PN0: Wide IF Gain:Low         →         Trig: Free Run #Atten: 30 dB         Avg [Hold: 3000/3000         Tree	
	Ref Offset 3.91 dB 10 dB/div Ref 20.00 dBm 6.530 dBm Log	
	-10.0	
	-40.0	
	500 mmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmm	
	-70.0	
	Center 2.480000 GHz         Span 8.000 MHz           #Res BW 100 kHz         #VBW 300 kHz         Sweep 1.000 ms (1001 pts)	
	MSG STATUS Band Edge NVNT 2-DH1 2480MHz No-Hopping Emission	
	Image: Ward RL     RL     RL     RL     06:27:25 PM Apr 21, 2022       Center Freq 2.526000000 GHz     Avg Type: Log-Pwr     TRACE     2 34 5 6       PNO: Fast     →     Trig: Free Run     Avg[Hold: 3000/3000       IFGain:Low     #Atten: 30 dB     Det P NNNN	
	Ref Offset 3.91 dB 10 dB/div Ref 20.00 dBm 10 dB/div Ref 20.00 dBm 10 dB/div Ref 20.00 dBm 10 dB/div Ref 20.00 dBm	
	0.00	
	Start 2.47600 GHz         Stop 2.57600 GHz           #Res BW 100 kHz         #VBW 300 kHz         Sweep 9.600 ms (1001 pts)	
	MKR         MODE         TRC         ScL         X         Y         FUNCTION         FUNCTION WIDTH         FUNCTION VALUE         A           1         N         1         f         2.480.0 GHz         6.654.dBm         6.654.dBm	
	5	
	9 10 11 * *	
	MSG	

	Band	Edge NVNT 3-DH1 2402MH	z No-Hopping Ref		
LXI		SENSE:INT PNO: Wide ↔ Trig: Free Run	ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 1000/1000	07:14:41 PM Apr 21, 2022 TRACE 1 2 3 4 5 6 TYPE Mwwww DET P. N.N.N.N.N	
10 	o 	IFGain:Low #Atten: 30 dB	Mkr1	2.402 016 GHz 5.875 dBm	
-20 -30 -40 -50				Alm Marilland	
	nter 2.402000 GHz es BW 100 kHz Band Ec Reysight Spectrum Analyzer - Swept SA RL RF   50 Ω AC   nter Freq 2.3560000000 GHz	#VBW 300 kHz dge NVNT 3-DH1 2402MHz N SENSE:INT PNO: Fast IFGain:Low Trig: Free Run #Atten: 30 dB	STATUS No-Hopping Emission Align AUTO Avg Type: Log-Pwr Avg Hold: 200/200	Span 8.000 MHz 1.000 ms (1001 pts) 07:14:46 PM Apr 21, 2022 TRACE 12 3 4 5 6 TYPE 23 4 5 6 TYPE PNNNNN PET PNNNNN	
10 10 -10 -20 -30 -40 -60 -70		4		5.786 dBm	
#R	MODE         TRC         SCL         X           N         1         f         2.401 9 G           N         1         f         2.400 0 G           N         1         f         2.400 0 G           N         1         f         2.400 0 G           N         1         f         2.300 0 G           N         1         f         2.331 7 G	Y         FUNCTION           SHz         -57.86 dBm           Hz         -57.1716 dBm           SHz         -55.595 dBm		Stop 2.40600 GHz 0.600 ms (1001 pts) TON VALUE	

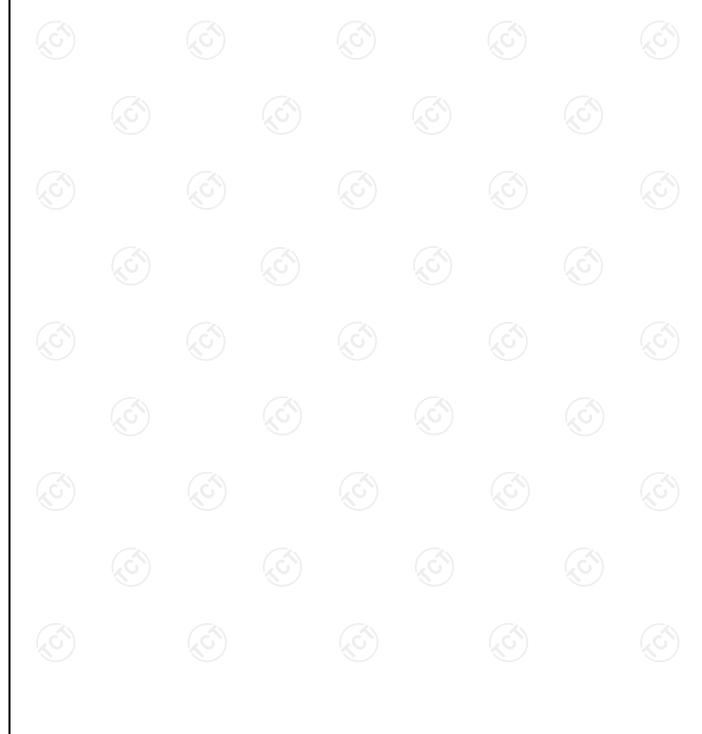
TC	通测检测 TESTING CENTRE TECHNOLOGY			Report No.: TCT2204	413E037
	Band Edge	NVNT 3-DH1 2480MHz		D7:20:57 PM Apr 21, 2022	
	Center Freq 2.480000000 GHz	Vide ↔ Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 1000/1000	TRACE 1 2 3 4 5 6 TYPE MWWWW DET P NNNN	
	Ref Offset 3.91 dB 10 dB/div Ref 20.00 dBm	Y	Mkr1 2	480 016 GHz 6.297 dBm	
	10.0	1			
	0.00				
	-20.0				
	-30.0	h			
	-40.0				
	-50.0 -60.0		- Marine Marine	numuna	
	-70.0				
	Center 2.480000 GHz #Res BW 100 kHz	#VBW 300 kHz	Sweep 1.0	Span 8.000 MHz 00 ms (1001 pts)	
	MSG Band Edge NV	/NT 3-DH1 2480MHz No	STATUS -Hopping Emission		
	Keysight Spectrum Analyzer - Swept SA           R         RF         50 Ω         AC           Center Freq 2.526000000 GHz         NO         NO         NO	Talas Face Dam	ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 1000/1000	D7:21:13 PM Apr 21, 2022 TRACE 12:34 5 6 TYPE M WWWWW DET P N N N N N	
	Ref Offset 3.91 dB 10 dB/div Ref 20.00 dBm			2.480 0 GHz 6.422 dBm	
	-10.0			-13.70 dBm	
	-40.0				
	.50 0 M A 2 4 3 .60 0 M 4 2 4 3	นอง มีวงกร้า <sub>ย</sub> ง	หูสารมาระบบเป็นสาราวได้สารแบบเราะเสียมแบบราวารการการการการ	estronover developen and a state	
	Start 2.47600 GHz #Res BW 100 kHz	#VBW 300 kHz	St Sweep 9.60	op 2.57600 GHz 10 ms (1001 pts)	
	MKR         MODE         TRC         SCL         X           1         N         1         f         2.480         0 GHz           2         N         1         f         2.483         5 GHz	Y FUNCTION FUN 6.422 dBm -57.407 dBm -56.165 dBm	ICTION WIDTH FUNCTION	/ALUE	
	3 N 1 f 2,500 0 GHz 4 N 1 f 2,488 3 GHz 5 6	-56.165 dBm -55.419 dBm		E	
	7 9 10				
	MSG		STATUS		

Page 55 of 98

Report No.: TCT220413E037
---------------------------

				J/		
Condition	Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Hopping	-62.01	-20	Pass
NVNT	1-DH1	2480	Hopping	-63.51	-20	Pass
NVNT	2-DH1	2402	Hopping	-60.37	-20	Pass
NVNT	2-DH1	2480	Hopping	-62.50	-20	Pass
NVNT	3-DH1	2402	Hopping	-58.90	-20	Pass
NVNT	3-DH1	2480	Hopping	-61.69	-20	Pass

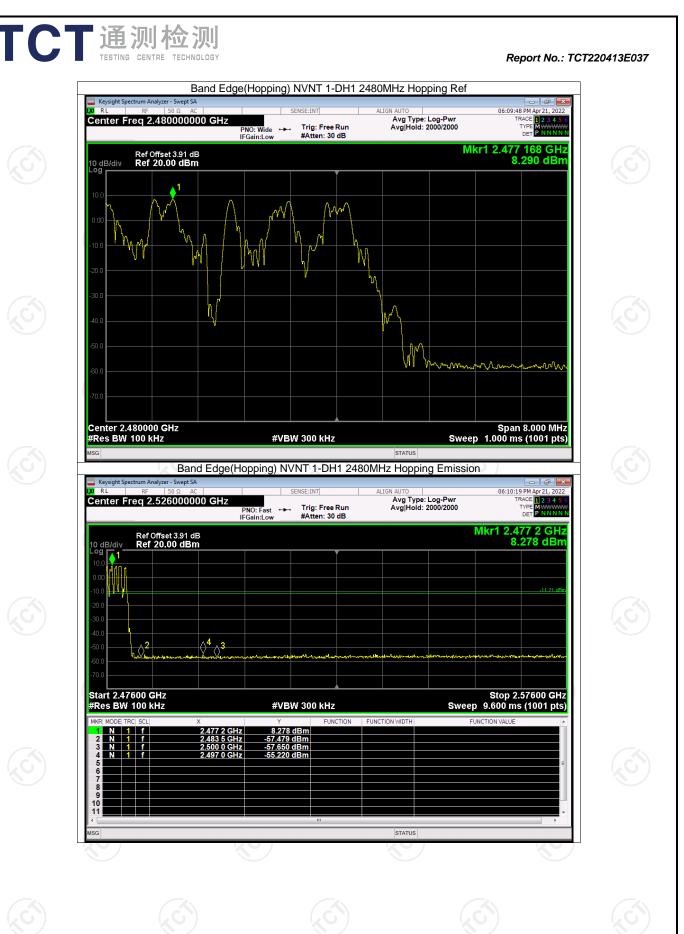
## **Band Edge(Hopping)**



Page 56 of 98



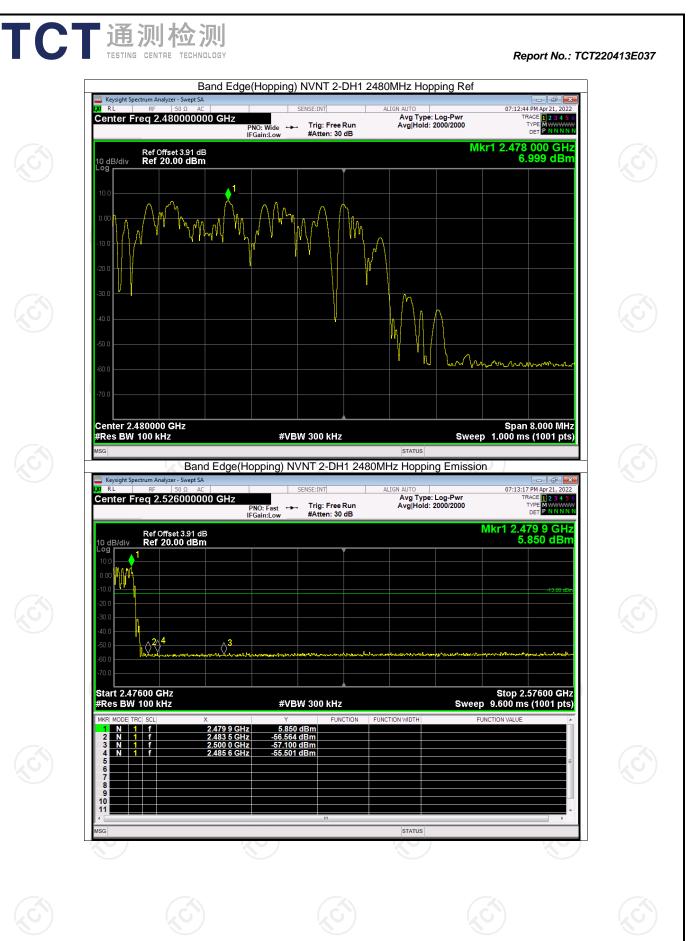
Page 57 of 98



Page 58 of 98

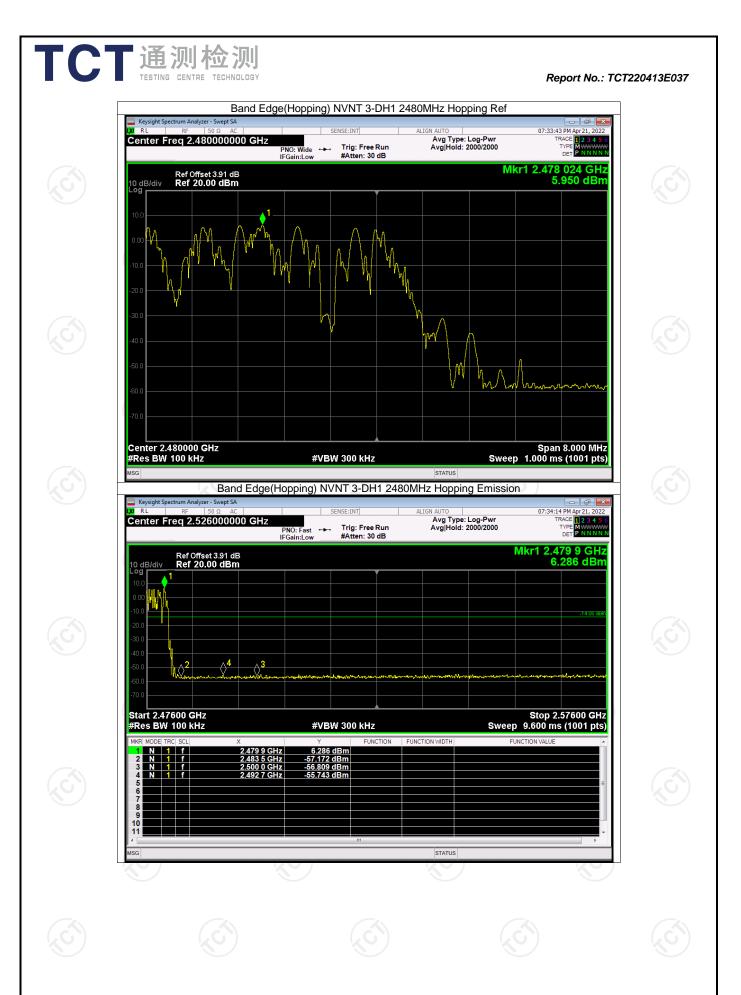
10.0 dB/div 10.0	Ref Offset 3.69 dB Ref 20.00 dBm	IFGain:Low #Atten: 30 dB	Mkr1	2.402 040 GHz 4.683 dBm	
0.00 -10.0 -20.0					
-10.0		$ \land \land \land$			
-20.0					
				M M	
-30.0					
-40.0					
-50.0	mmmmMW	My An			
-70.0					
	.402000 GHz			Span 8.000 MHz	
#Res BV	V 100 kHz	#VBW 300 kHz	STATUS	.000 ms (1001 pts)	
Keysight :	pectrum Analyzer - Swept SA RF 50 Ω AC	(Hopping) NVNT 2-DH1 240		07:05:06 PM Apr 21, 2022	
Center	Freq 2.356000000 GHz	PNO: Fast ↔ Trig: Free Run IFGain:Low #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000	TRACE 123456 TYPE MWWWW DET PNNNNN	
10 dB/div Log	Ref Offset 3.69 dB Ref 20.00 dBm		Mk	r1 2.401 6 GHz 4.420 dBm	
10.0					
-10.0				-1\$.3°, (B)	
-30.0 -40.0 -50.0		4		A3 A2	
-60.0	<del>น่งเกมสาวางค<sup>าม</sup>าไวรป</del> ังสารสุขา <mark>ปต่างว่างรูปคา</mark> าสุข	nie z na metri zastar za nie stranowie i na nie stranowie i na nie stranowie i na nie stranowie i na nie strano		32 	
	0600 GHz V 100 kHz	#VBW 300 kHz		Stop 2.40600 GHz .600 ms (1001 pts)	
	1 f 2.401 6 G	Y FUNCTION		ION VALUE	
3 N 4 N 5	1         f         2.400 0 G           1         f         2.390 0 G           1         f         2.340 4 G	Hz -57.597 dBm		=	
6 7 8 9					
MSG		×	STATUS	No.	

Page 59 of 98



Page 60 of 98

TC	通测检测 TESTING CENTRE TECHNOLOGY Report No.: TCT	220413E037
	Band Edge(Hopping) NVNT 3-DH1 2402MHz Hopping Ref Keysight Spectrum Analyzer - Swept SA RL RF S0.Q AC SENSE:INT ALIGN AUTO 07:29:14 PM Apr21, 2022 Center Freq 2.402000000 GHz FNO: Wide FNO:	
	IFGain:Low         #Atten: 30 dB         Det Privative           Ref Offset 3.69 dB         Mkr1 2.401 880 GHz 4.719 dBm           10 dB/div         Ref 20.00 dBm           10.0         10.0	
	Center 2.402000 GHz #Res BW 100 kHz         Span 8.000 MHz Sweep 1.000 ms (1001 pts)           Msg         status           Msg         status           Band Edge(Hopping) NVNT 3-DH1 2402MHz Hopping Emission         correction           Keysight Spectrum Analyzer - Swept SA         correction           Msg         status           PNO: Fast         trig: Free Run IFGain:Low         Avg Type: Log-Pwr #Atten: 30 dB           Mkr1 2.401 6 GHz         status         status           Msg         db         the status           I o dB/div         ga 3.69 dB         Mkr1 2.401 6 GHz           I o dB/div         ga 3.000 dBm         4.416 dBm	
	10 dB/div     Ref 20.00 dBm     4.410 dBm       10 dB/div     1     1       10 dB/div     1 <td< td=""><td></td></td<>	
	Start 2.30600 GHz         Stop 2.40600 GHz           #Res BW 100 kHz         #V/BW 300 kHz         Sweep 9.600 ms (1001 pts)           MRR MODE TRC Scl         ×         Y         Function Function width           1         1         f         2.4016 GHz         4.416 dBm           3         N         1         f         2.4010 GHz         -56.779 dBm           3         N         1         f         2.3861 GHz         -56.79 dBm         -           4         N         1         f         2.3861 GHz         -56.186 dBm         -         -           5         -         -         -         -         -         -         -           6         -	



Page 62 of 98

## Conducted RF Spurious Emission

		Conducted IVI O	punous Linissio		
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	-44.79	-20	Pass
NVNT	1-DH1	2441	-50.42	-20	Pass
NVNT	1-DH1	2480	-43.74	-20	Pass
NVNT	2-DH1	2402	-50.29	-20	Pass
NVNT	2-DH1	2441	-50.38	-20	Pass
NVNT	2-DH1	2480	-50.23	-20	Pass
NVNT 🚫	3-DH1	2402	-49.94	-20	Pass
NVNT	3-DH1	2441	-49.90	-20	Pass
NVNT	3-DH1	2480	-49.05	-20	Pass
	(				



Page 63 of 98



Page 64 of 98

TC	通测检测 TESTING CENTRE TECHNOLOGY	Repor	t No.: TCT220413E037
	Tx. Spurious NVNT 1-E		
	Keysight Spectrum Analyzer - Swept SA     RL RF 50 Ω AC SENSE:INT     Center Freq 2.441000000 GHz	ALIGN AUTO 05:46:32 PM Au	r21,2022 2 3 4 5 6 N N N N N
	PNO: Wide $\longrightarrow$ Trig: Free R IFGain:Low #Atten: 30 d Ref Offset 3 82 dB	Mkr1 2.440 844 6	5 GHz
	Ref Offset 3.82 dB 10 dB/div Ref 20.00 dBm Log	7.413	dBm
	0.00	Maranny append	
	-10.0	a deal all all all and a second a second a second a second	
	-30.0		March Deserve
	-40.0		
	-50.0		
	-80.0		
	-70.0		
	Center 2.4410000 GHz #Res BW 100 kHz #VBW 300 kHz	Span 1.50 Sweep 2.000 ms (300	00 MHz
	Tx. Spurious NVNT 1-DH	STATUS	
	Keysight Spectrum Analyzer - Swept SA           XX         RL         RF         50 Ω         AC         SENSE:INT	ALIGN AUTO 05:47:02 PM Ar	r21, 2022
	Center Freq 13.265000000 GHz PNO: Fast IFGain:Low Trig: Free R #Atten: 30 d		2 3 4 5 6 WWWWW N N N N N
	Ref Offset 3.82 dB 10 dB/div Ref 20.00 dBm	Mkr1 2.441 4 7.285	dBm
	-10.0		-12:50 (Bm
	-30.0		2
	-50.0 -60.0		
	-70.0 Start 0.03 GHz	Stop 26.5	
	#Res BW 100 kHz         #VBW 300 kHz           MKR MODEL TRCI SCL         X         Y         FUNCT	Sweep 2.530 s (300	01 pts)
	1         N         1         f         2.4414         GHz         7.285         dBm           2         N         1         f         24.785         6         GHz         -43.017         dBm           3         N         1         f         5.020         5         GHz         -53.974         dBm		
	4         N         1         f         7.123 1 GHz         -54.722 dBm           5         N         1         f         9.605 1 GHz         -55.387 dBm           6         -         -         -         -         -           7         -         -         -         -         -		
	8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		
	11 m KSG	STATUS	• •
			Page 65 of 98

					Report No.: TO	CT220413E037
	Keysight Spectrum Analyzer - Swept SA RL RF 50 Ω AC	Tx. Spuriou	S NVNT 1-DH1 24	ALIGN AUTO	05:52:59 PM Apr 21, 2022	-
	enter Freq 2.480000000	PNO: Wide ↔		Avg Type: Log-Pwr Avg Hold: 1000/1000	TRACE 1 2 3 4 5 6 TYPE MWWWW DET PNNNNN	
	Ref Offset 3.91 dB 0 dB/div Ref 20.00 dBm			Mk	1 2.479 844 70 GHz 6.990 dBm	
	og		1			
	0.00		And the second second			
		Concert Management		all thank the second		
	20.0				and all and a second	
	30.0				میلار) استان از این از این این از این از	
Ġ)	10.0					
	50.0					
	50.0					
	70.0					
0	enter 2.4800000 GHz Res BW 100 kHz	#\/E	W 300 kHz	Swa	Span 1.500 MHz p 2.000 ms (30001 pts)	
	G			STATUS	p 2.000 ms (5000 prs)	
	Keysight Spectrum Analyzer - Swept SA R L RF 50 Ω AC	TX. Spurious N	SENSE:INT		05:53:28 PM Apr 21, 2022	
C	enter Freq 13.26500000	PNO: Fast IFGain:Low		Avg Type: Log-Pwr Avg Hold: 10/10	TRACE 123456 TYPE MWWWWW DET PNNNNN	
	Ref Offset 3.91 dB				Mkr1 2.480 2 GHz 6.774 dBm	
	10.0					
	0.00					
					-13.01 dBm	
3						G
3		5			A straight of the straight of	Ś
ं	10.0 20.0 30.0 40.0	5				Ś
<u>,</u>	10.0	<sup>5</sup>	awaran ang balang ang ang ang ang ang ang ang ang ang		Stop 26.50 GHz eep 2.530 s (30001 pts)	
	10.0 20.0 20.0 40.0 50.0 11.0 12.0	#VE #VE 480 2 GHz 6.77 440 7 GHz - 36.76	SW 300 kHz		Stop 26.50 GHz	
	10.0 20.0	#VE	BW 300 kHz FUNCTION F 4 dBm	Sw	Stop 26.50 GHz eep 2.530 s (30001 pts)	
	10.0 20.0 20.0 40.0 50.0 10.0	480 2 GHz 480 2 GHz 440 7 GHz 36.76 	BW 300 kHz FUNCTION F 4 dBm	Sw	Stop 26.50 GHz eep 2.530 s (30001 pts)	
	10.0 20.0	480 2 GHz 480 2 GHz 440 7 GHz 36.76 	BW 300 kHz FUNCTION F 4 dBm		Stop 26.50 GHz eep 2.530 s (30001 pts)	
	10.0 20.0 40.0 50.0 40.0 50.0	480 2 GHz 480 2 GHz 440 7 GHz 36.76 	BW 300 kHz FUNCTION F d dBm d dBm d dBm d dBm d dBm	Sw	Stop 26.50 GHz eep 2.530 s (30001 pts) FUNCTION VALUE	
	10.0 20.0	480 2 GHz 480 2 GHz 440 7 GHz 36.76 	BW 300 kHz FUNCTION F d dBm d dBm d dBm d dBm d dBm		Stop 26.50 GHz eep 2.530 s (30001 pts) FUNCTION VALUE	
	10.0 20.0	480 2 GHz 480 2 GHz 440 7 GHz 36.76 	BW 300 kHz FUNCTION F d dBm d dBm d dBm d dBm d dBm		Stop 26.50 GHz eep 2.530 s (30001 pts) FUNCTION VALUE	
	10.0 20.0	480 2 GHz 480 2 GHz 440 7 GHz 36.76 	BW 300 kHz FUNCTION F d dBm d dBm d dBm d dBm d dBm		Stop 26.50 GHz eep 2.530 s (30001 pts) FUNCTION VALUE	

Page 66 of 98

Reprint Spectrum Analyzer - Swept SA         SENSE.INT           Center Freq 2.402000000 GHz         Frig: Fregram           PNO: Wide         →         Trig: Fregram           Ref Offset 3.69 dB         10 dB/div         Ref 20.00 dBm           10 dB/div         Ref 20.00 dBm         1           0.00         -         1           -10.0         -         -           -20.0         -         -           -30.0         -         -           -60.0         -         -	ALIGN AUTO Avg Type: Log-Pwr Avg JHold: 1000/1000 0 dB 0	
IFGain:Low     #Atten: 3       10 dB/div     Ref Offset 3.69 dB       10 dB/div     Ref 20.00 dBm       0 00     1       0 00     1       -10 0     1       -20 0     -       -30 0     -       -40 0     -	Mkr1 2.401 841 05 GHz 6.114 dBm	
Log 10.0 0.00 -10.0 -20.0 -30.0 -30.0 -40.0 -50.0 -50.0		
0.00 -10.0 -20.0 -30.0 -40.0 -50		
-10.0 -20.0 -30.0 -40.0 -50.0		
-30.0		
-40.0		
-50.0		
-60.0		
-70.0		
Center 2.4020000 GHz #Res BW 100 kHz #VBW 300 kH	Span 1.500 MHz z Sweep 2.000 ms (30001 pts)	
MSG Tx. Spurious NVNT 2-D	status H1 2402MHz Emission	
Keysight Spectrum Analyzer - Swept SA           Ι/μ         RL         RF         50 Ω         AC         SENSE:INT	ALIGN AUTO 06:14:31 PM Apr 21, 2022	
Center Freq 13.265000000 GHz PNO: Fast IFGain:Low #Atten: 3	0 dB DET PNNNNN	
Ref Offset 3.69 dB 10 dB/div Ref 20.00 dBm Log	Mkr1 2.401 7 GHz 4.688 dBm	
-10.0		
-30.0		
-40.0 -50.0 -60.0		
Start 0.03 GHz #Res BW 100 kHz #VBW 300 kH		
MKR         MODE[TRC] SCL         X         Y         FL           1         N         1         f         2.4.01.7 GHz         4.688 dBm           2         N         1         f         24.852 7 GHz         -4.4.188 dBm           3         N         1         f         4.803 4 GHz         -51.371 dBm	NCTION FUNCTION WIDTH FUNCTION VALUE	
4         N         1         f         7.081 6 GHz         -53.692 dBm           5         N         1         f         9.445 4 GHz         -54.786 dBm           6         -         -         -         -         -		
7 8 9 10		
11 mm	STATUS	
Miss	STATUS	

	通测检测 ESTING CENTRE TECHNOLOGY	Tx. Spurious NVNT 2-DH	2441MHz Ref	Report No.: TCT	220413E037
LXI R	ysight Spectrum Analyzer - Swept SA L RF 50 Ω AC Iter Freq 2.441000000 GHz	Z SENSE:INT	ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 2000/2000	06:17:45 PM Apr 21, 2022 TRACE 1 2 3 4 5 6 TYPE MYNNW DET P NNNNN	
	Ref Offset 3.82 dB	PNO: Wide ↔ Trig: Free Run IFGain:Low #Atten: 30 dB		440 838 45 GHz 7.046 dBm	
10.0 d	B/div Ref 20.00 dBm	1		1.040 dBm	
0.00			Manula	- The second sec	
-10.0				March 1	
-20.0					
-40.0					
-50.0					
-60.0					
	ter 2.4410000 GHz			Span 1.500 MHz	
	s BW 100 kHz	#VBW 300 kHz	STATUS	2.000 ms (30001 pts)	
LXI R	ysight Spectrum Analyzer - Swept SA L RF 50 Ω AC	X. Spurious NVNT 2-DH1 2	ALIGN AUTO	06:18:14 PM Apr 21, 2022	
Cer	ter Freq 13.265000000 GH	PNO: Fast → Trig: Free Run IFGain:Low #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 10/10	TRACE 123456 TYPE NWWWW DET PNNNNN	
<b>10 d</b> Log	Ref Offset 3.82 dB B/div Ref 20.00 dBm		M	kr1 2.440 5 GHz 5.629 dBm	
0.00				-12.95 dDm	
-20.0					
-40.0 -50.0 -60.0					
-70.0	rt 0.03 GHz			Stop 26.50 GHz	
#Re	S BW 100 KHZ MODE  TRC  SCL  X	#VBW 300 kHz		2.530 s (30001 pts)	
2 3 4 5	N         1         f         2.440 5           N         1         f         24.822 7           N         1         f         4.881 1           N         1         f         7.162 8           N         1         f         9.956 3	GHz -43.335 dBm GHz -51.465 dBm			
6 7 8 9					
10 11 •				×.	
MSG	2	N.	STATUS	No.	

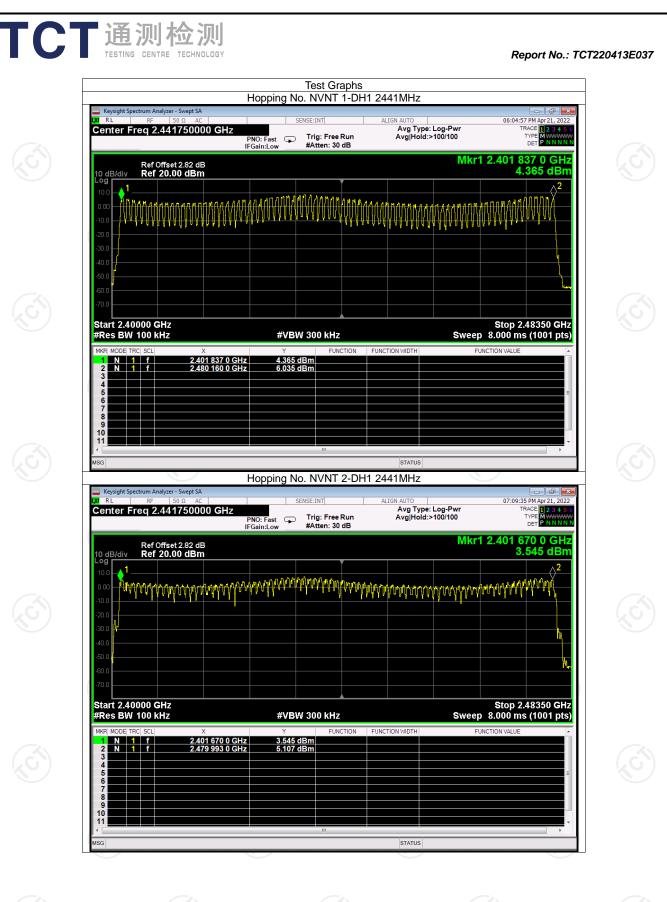
Keysight Spectrum Analyzer - Swept SA     RL RF 50 Ω AC	Tx. Spurious NVNT 2-DH1 248		50/10 DM Apr 21, 2022
Center Freq 2.480000000 GHz	SENSE:INT PNO: Wide -→- Trig: Free Run IFGain:Low #Atten: 30 dB	ALIGN AUTO 06 Avg Type: Log-Pwr Avg Hold: 1000/1000	:58:10 PM Apr 21, 2022 TRACE 1 2 3 4 5 6 TYPE M WWWWWW DET P NNNN
Ref Offset 3.91 dB 10 dB/div Ref 20.00 dBm Log		Mkr1 2.479	840 95 GHz 6.267 dBm
10.0	l Î Î		
0.00	Million	land land have have been a second and the second and the second and the second s	
-10.0			
-20.0 -30.0			
-40.0			
-50.0			
-60.0			
-70.0			
Center 2.4800000 GHz #Res BW 100 kHz <sup>MSG</sup>	#VBW 300 kHz	S Sweep 2.000	pan 1.500 MHz ms (30001 pts)
	Spurious NVNT 2-DH1 2480		
	SENSE:INT PNO: Fast →→→ Trig: Free Run	ALIGN AUTO 06 Avg Type: Log-Pwr Avg Hold: 20/20	:59:07 PM Apr 21, 2022 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P. N N N N N
Ref Offset 3.91 dB 10 dB/div Ref 20.00 dBm	IFGain:Low #Atten: 30 dB	Mkr1 :	2.480 2 GHz 6.273 dBm
-10.0			-13.73 dBm
-30.0			<sup>2</sup>
A 3	2 <sup>4</sup>		
-70.0		s	top 26.50 GHz
#Res BW 100 kHz MKR  MODE  TRC  SCL  X		Sweep 2.53	0 s (30001 pts)
1         N         1         f         2.480 2 G           2         N         1         f         25.105 9 G           3         N         1         f         4.960 5 G           4         N         1         f         7.510 4 G	Iz -43.965 dBm Iz -52.480 dBm Iz -53.936 dBm		
5 N 1 f 10.034 8 GH 6 7 8	lz -54.312 dBm		=
9 10 11			•
MSG		STATUS	

	eysight Spectrum Analyzer - Swept SA	Tx. Spurious NVNT 3-DH1 2		- 6 💌	
Ce	RL RF 50 Ω AC nter Freq 2.402000000 GH	Z PNO: Wide FGain:Low PNO: Wide PNO:	ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 2000/2000	07:15:16 PM Apr 21, 2022 TRACE 1 2 3 4 5 6 TYPE DET P N N N N	
10 0	Ref Offset 3.69 dB IB/div Ref 20.00 dBm		Mkr1	2.401 840 40 GHz 5.821 dBm	
Lõĝ 10.		1			
0.0			and the second		
-10.0					
-20.0	white a second se				
-40.0					
-50.0	) 				
-60.0					
-70.0					
	nter 2.4020000 GHz es BW 100 kHz	#VBW 300 kHz	Sweep	Span 1.500 MHz 2.000 ms (30001 pts)	
	eysight Spectrum Analyzer - Swept SA	Tx. Spurious NVNT 3-DH1 240			
LXI		PNO: Fast +++ Irig: Free Run	ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 10/10	07:15:47 PM Apr21, 2022 TRACE 1 2 3 4 5 6 TYPE M WWWW DET P N N N N N	
10	Ref Offset 3.69 dB dB/div Ref 20.00 dBm	IFGain:Low #Atten: 30 dB		Wkr1 2.401 7 GHz 4.673 dBm	
Lõg 10. 0.0	• • • • • • • • • • • • • • • • • • •				
-10. -20.	)			-14.18 dBm	
-30.		A4 .5		2	
-50. -60.					
	urt 0.03 GHz	#VBW 200 LUL		Stop 26.50 GHz	
мкя	BW 100 kHz           MODE TRC SCL         X           N         1         f         2.401	#VBW 300 kHz Y FUNCTION 7 GHz 4.673 dBm		0 2.530 s (30001 pts)	
2 3 4 5	N         1         f         2.401           N         1         f         24.785           N         1         f         4.803           N         1         f         7.060           N         1         f         9.565	5 GHz -44.126 dBm 4 GHz -52.485 dBm 4 GHz -54.203 dBm 4 GHz -54.873 dBm		E	
6 7 8 9					
10 11		III			
MSG	<u> </u>	NO TO	STATUS	N N	

	eysight Spectrum Analyzer - Swept SA	Tx. Spurious NVNT 3-DH1			
	nter Freq 2.441000000 GHz	PNO: Wide ← → Trig: Free Run IFGain:Low #Atten: 30 dB	ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 1000/1000	07:17:25 PM Apr 21, 2022 TRACE 1 2 3 4 5 6 TYPE MWWWW DET P N N N N N	
	Ref Offset 3.82 dB B/div Ref 20.00 dBm		Mkr1 2	.440 840 00 GHz 6.812 dBm	
10.		1			
0.0	The second se		and the second and a second and a second as a second	Man Mon	
-10.0	A l				
-30.0	,				
-40.0					
-50.0					
-60.0					
	nter 2.4410000 GHz			Span 1.500 MHz	
#Re	es BW 100 kHz	#VBW 300 kHz	STATUS	2.000 ms (30001 pts)	
LXI	Keysight Spectrum Analyzer - Swept SA R L RF 50 Ω AC	Spurious NVNT 3-DH1 24	ALIGN AUTO	07:17:55 PM Apr 21, 2022	
Ce	nter Freq 13.265000000 GHz	PNO: Fast ←⊨→ Trig: Free Run IFGain:Low #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 10/10	TRACE 123456 TYPE MWWWWW DET PNNNNN	
10 d Log	Ref Offset 3.82 dB dB/div Ref 20.00 dBm			kr1 2.441 4 GHz 5.962 dBm	
10. 0.0 -10.	0			(24) (2-	
-20.	0				
-40.					
-60. -70.					
#R	art 0.03 GHz es BW 100 kHz	#VBW 300 kHz		Stop 26.50 GHz 2.530 s (30001 pts)	
1 2 3	MODE         TRC         SCL         X           N         1         f         2.4414 G           N         1         f         25.188 G           N         1         f         5.052 Z	Hz -43.097 dBm Hz -54.047 dBm	FUNCTION WIDTH FUNC	CTION VALUE	
G 4 5 6 7	N 1 f 7.460 1 G N 1 f 9.586 6 G			≡	
8 9 10 11				•	
MSG		III	STATUS	•	

E Kej	sight Spectrum Analyzer - Swept SA RF 50 Ω AC	1	SENSE:INT	OMHz Ref	07:21:47 PM Apr 21, 2022	
Cen	ter Freq 2.4800000	00 GHz PNO: Wide IFGain:Low	. Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000	TRACE 1 2 3 4 5 6 TYPE M WWWWW DET P N N N N	
10 de Log	Ref Offset 3.91 dE	3 1		Mkr1	2.479 841 80 GHz 6.268 dBm	(c
10.0			1			
0.00				- where a second		
-10.0	A					
-20.0						
-40.0						
-50.0						
-60.0						
-70.0						
	er 2.4800000 GHz BW 100 kHz	#VB	W 300 kHz	Sweep	Span 1.500 MHz 2.000 ms (30001 pts)	
MSG		Tx. Spurious N	VNT 3-DH1 2480M	status IHz Emission	0)	
LXI RI	sight Spectrum Analyzer - Swept SA RF 50 Ω AC Cer Freq 13.2650000		SENSE:INT	ALIGN AUTO	07:22:17 PM Apr 21, 2022 TRACE 12, 3, 4, 5, 6	
		PNO: Fast ↔ IFGain:Low	. Trig: Free Run #Atten: 30 dB	Avg Hold: 10/10	Mkr1 2.479 4 GHz	
10 di Log	Ref Offset 3.91 di 8/div Ref 20.00 dBn	B n	Ť		4.769 dBm	
10.0 0.00 -10.0						
-20.0					-1 3.73 dBm	6
-40.0 -50.0		3 3 4 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6				
-60.0 -70.0						
	t 0.03 GHz s BW 100 kHz	#VB	W 300 kHz	Swe	Stop 26.50 GHz ep 2.530 s (30001 pts)	
	N 1 f	24.837 7 GHz -42.781	dBm dBm	CTION WIDTH	FUNCTION VALUE	
1	N 1 f N 1 f	4.903 1 GHz -54.359 7.599 5 GHz -53.898 10.103 6 GHz -53.670	dBm dBm		=	66
1 2 3 4 5						
1 2 3 4 5 6 7 8 9					* •	
1 2 3 4 5 6 7 8 9 10 11			m	074745		
1 2 3 4 5 6 7 8 9 10 11	<b></b>		III III	STATUS	N N	
1 2 3 4 5 6 7 8 9 10 11				STATUS	×	
1 2 3 4 5 6 7 8 9 10 11				STATUS	C)	
1 2 3 4 5 6 7 8 9 10 11			m CC	STATUS	J J	

SS SS	Verd Pas Pas Pas	Limit 15 15 15	g Channo umber	Hopping N 79 79 79 79	e F 1 1	Mode           1-DH1           2-DH1           3-DH1	Condition NVNT NVNT NVNT	) )





8 PM Apr21, 2022 RACE 1 2 3 4 5 6 TYPE MWWWWWW DET P N N N N N	07:33:11 Pwr TF 00 Mkr1 2.401 6	ALIGN AUTO Avg Type: Log Avg Hold:>100/	SENSE:INT Trig: Free Run #Atten: 30 dB		m Analyzer - Swept SA RF 50 Ω AC 1 2.441750000 C	Center Fre
583 dBm	3.	MANAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA		vypayayaa	ef Offset 2.82 dB lef 20.00 dBm	
48350 GHz s (1001 pts)	Stop 2. Sweep 8.000 ms FUNCTION VALUE	FUNCTION WIDTH	W 300 kHz FUNCTION dBm dBm	Y 0 0 GHz 3.583	0 kHz CL X f 2.401 67	-60 0 -70 0 Start 2.4000 #Res BW 10 MKR MODE TRC 1 N 1 2 N 1 3 4 5
	2	STATUS	""			6 7 8 9 10 11 

Report No.: TCT220413E037

			Dwe	ell Time				
Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	0.38	59.66	157	31600	400	Pass
NVNT	1-DH3	2441	1.63	255.91	157	31600	400	Pass
NVNT	1-DH5	2441	2.88	236.16	82	31600	400	Pass
NVNT	2-DH1	2441	0.38	54.34	143	31600	400	Pass
NVNT	2-DH3	2441	1.63	252.65	155	31600	400	Pass
NVNT	2-DH5	2441	2.88	227.52	79	31600	400	Pass
NVNT	3-DH1	2441	0.38	60.8	160	31600	400	Pass
NVNT	3-DH3	2441	1.64	272.24	166	31600	400	Pass
NVNT	3-DH5	2441	2.89	222.53	77	31600	400	Pass

Page 76 of 98

	Test Graphs Dwell NVNT 1-DH1 2441MHz One Burst	
~	XY         RL         RF         50 Ω         AC         SENSE:INT         ALIGN AUTO         06:05:14 PM Apr21, 2022           Center Freq 2.441000000 GHz         Trig: Video         Trig: Video         Avg Type: Log-Pwr         TRACE II 2:34:56           PNO: Fast IFGain:Low         →         Trig: Video         DET PNNINN N	
<u>s</u>	Ref Offset 2.82 dB         ΔMkr1 380.0 μs           10 dB/div         Ref 20.00 dBm         -44.83 dB	
	-20.0 	
3)		
	Center 2.441000000 GHz         Span 0 Hz           Res BW 1.0 MHz         #VBW 3.0 MHz         Sweep 10.00 ms (10001 pts)	
	MKR         MODE         TRC         Scl         X         Y         FUNCTION         FUNCTION WIDTH         FUNCTION VALUE           1         Δ2         1         t         (Δ)         380.0 μs         (Δ)         -44.83 dB         -           2         F         1         t         -498.0 μs         -         -         -           3         -         -         -         -         -         -         -	
	11 * * * * * * * * * * * * * * * * * *	
	Dwell NVNT 1-DH1 2441MHz Accumulated	
	XI         RF         50 Ω         AC         SENSE:INT         ALIGN AUTO         06:05:48 PM Apr 21, 2022           Center Freq 2.441000000 GHz         Yes         Avg Type: Log-Pwr         Trace 12 2:4 5 6           PNO: Fast IFGain:Low         Trig: Free Run #Atten: 30 dB         Trig: Det Punn NN N	
	Ref Offset 2.82 dB 10 dB/div Ref 20.00 dBm	
	10.0	
3)		
	.100	
	-60.0	
	-70.0	
	Center 2.441000000 GHz Span 0 Hz	

	<b>通测检测</b> STING CENTRE TECHNOLOGY		Report No.: 1	CT220413E037
LXI RL	ght Spectrum Analyzer - Swept SA RF 50 Ω AC	ell NVNT 1-DH3 2441MHz One B	0 07:35:40 PM Apr 21, 2022	
Cent	IF0	Trig Delay-500.0 µs Avg NO: Fast →→ Trig: Video sain:Low #Atten: 30 dB	Туре: Log-Pwr TRACE 2 3 4 5 6 туре 0 5 7 0 1 2 3 4 5 6 0 5 7 0 1 2 3 5 7 0 1 2 3 5 7 0 1 2 3 5 7 0 1 2 3 5 7 0 1 2 3 5 7 0 1 2 3 5 7 0 1 2 3	
10 dB 10.0 0.00 -10.0 -20.0 -30.0	Ref Offset 2.82 dB Ref 20.00 dBm 1Δ2 2			
-40.0 -60.0 -60.0 -70.0		na para para pangana pangana pangana pana pana pana		
Res	er 2.441000000 GHz BW 1.0 MHz	#VBW 3.0 MHz	Span 0 Hz Sweep 10.00 ms (10001 pts)	
	DDE TRC   SCL X 2 1 t (Δ) 1.630 ms ( 1 t 498.0 μs	Υ FUNCTION FUNCTION WID 2.34 dB 3.75 dBm 	FUNCTION VALUE	
MSG	Dwe	STA II NVNT 1-DH3 2441MHz Accumu		
10 dB	Ref Offset 2.82 dB div Ref 20.00 dBm	NO: Fast ↔ Trig: Free Run Sain:Low #Atten: 30 dB	Type: Log-Pwr TYPE WWWWW DET P N N N N	
0.00 -10.0 -20.0 -30.0 -40.0 -50.0				
-60.0 - -70.0 - Cento Res E	er 2.441000000 GHz BW 1.0 MHz	#VBW 3.0 MHz	Span 0 Hz Sweep 31.60 s (10001 pts)	Ś
Č		y k	$\mathcal{O}$	

L <b>XI</b> F	eysight Spectrum Analyzer - Swept SA L RF 50 Q AC nter Freq 2.441000000 GHz PNO:	I NVNT 1-DH5 2441MHz One E SENSE:INT ALIGN AU Trig Delay-500.0 µs Avg Trig: Video m:Low ₩Atten: 30 dB	TO 07:37:04 PM Apr21, 20 g Type: Log-Pwr TRACE 23 4 TYPE WW DET PNNN	22 5 6 WW
Log 10.0 -10.0 -20.0 -30.0 -40.0 -50.0			ΔMkr1 2.880 m 2.73 d 1940 - 19400 - 1940 - 1940 - 1940 - 1940 - 1940 - 1940 -	
	a second s	#VBW 3.0 MHz	Span 0 H Sweep 10.00 ms (10001 pt	tz
1 2 3 4 5 6 6 7 8 9 9 0 11 11 4 SC	Dwell eysight Spectrum Analyzer - Swept SA	S22 dBm "" st. NVNT 1-DH5 2441MHz Accum sense:int Align Au	ATUS ulated 0 07:37:37 PM Apr21, 0	22
10.0 0.00 -10.0 -20.0 -30.0	PNO: IFGai B/div Ref 20.00 dBm	Fast Trig: Free Run #Atten: 30 dB		
-40 C -50 C -70 C Res Msg		#VBW 3.0 MHz	Span 0 H Sweep 31.60 s (10001 p	tz ts)
3) (5)				

ТСТ	通测检测 TESTING CENTRE TECHNOLOGY	Report No.: TCT220413E037
	Dwell NVNT 2-DH1 2441MHz One Bu Keysight Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN AUTO Center Freq 2.441000000 GHz PNO: Fast →→ Trig: Video FGain:Low #Atten: 30 dB	07:10:18 PM Apr 21, 2022 ype: Log-Pwr TRACE 10:24 5 6 TYPE WWWWWW DET P INNNN N
	Ref Offset 2.82 dB         Ref 20.00 dBm           10.0         B/dt/dt/dt/dt/dt/dt/dt/dt/dt/dt/dt/dt/dt/	ΔMkr1 380.0 μs -2.46 dB
	-50 0	Span 0 Hz Sweep 10.00 ms (10001 pts)
	4         6         6         6         6         6         6         6         6         7         8         6         7         8         6         7         8         7         8         7         8         7         8         7         8         10	
	Ref Offset 2.82 dB Ref 20.00 dBm 100 100 100 100 100 100 100 10	
Ś	4400         4400           500         600           600         600           700         600           700         600           Center 2.441000000 GHz           Res BW 1.0 MHz         #VBW 3.0 MHz           Ista         5100	Span 0 Hz Sweep 31.60 s (10001 pts)
		Page 80 of 98

	<u> 通测检测</u>		Report No.: TC	T220413E037
LXI R	/sight Spectrum Analyzer - Swept SA L RF 50 Ω AC	II NVNT 2-DH3 2441MHz One Burst SENSE:INT ALIGN AUTO Trig Delay-500.0 µs Avg Type: Log	07:38:41 PM Apr21, 2022	
Cen	IFGa	): Fast →→ Trig: Video in:Low #Atten: 30 dB	ΔMkr1 1.630 ms	
10 d Log	Ref Offset 2.82 dB Ref 20.00 dBm		3.44 dB	
0.00 -10.0 -20.0			TRIG LVL	
-30.0				
-50.0 -60.0 -70.0	n tender storen son kinder Nerder storen son kinder Nerder Storen son kinder so	ellen egelden beschendelingen etter er en egen blandelinge besen blyndeline på forset at forset. Prefer hellen blevet sig gjellen etter at sen etter blevet blevet sen etter blevet sen etter blevet blevet blev	and a state of the	
Cer	ter 2.441000000 GHz BW 1.0 MHz	#VBW 3.0 MHz	Span 0 Hz Sweep 10.00 ms (10001 pts)	
	MODE TRC SCL X A2 1 t (A) 1.630 ms (A F 1 t 357.0 µs	Y FUNCTION FUNCTION WIDTH 3.3.44 dB -7.90 dBm	FUNCTION VALUE	
3 4 5 6 7			E	
, 9 10 11				
MSG	Dwoll	III ISTATUS NVNT 2-DH3 2441MHz Accumulated		
LXI R	vsight Spectrum Analyzer - Swept SA	SENSE:INT ALIGN AUTO AVG Type: Log	07:39:14 PM Apr21, 2022 -Pwr TRACE 2 3 4 5 6	
	PNC	D:Fast →→ Trig:FreeRun in:Low #Atten:30 dB	TYPE WAAAAAAA DET PINNNN	
	3/div Ref 20.00 dBm			
0.00				
-10.0				
-20.0				
-40.0				
-50.0	<u>n ta na mana kata kata kata kata kata kata kata k</u>	N TEAL THE TRANSPORT	LINE CAN BE AN AN ALL AN ANALY AND AN AND AN AND AND AND AND AND AND A	
-60.0				
Cen	ter 2.441000000 GHz		Span 0 Hz	
Res MSG	BW 1.0 MHz	#VBW 3.0 MHz	Sweep 31.60 s (10001 pts)	