	TEST REPOR	Т					
FCC ID	2AX8U-D100	-					
Test Report No:	TCT220614E031						
Date of issue:	Aug. 16, 2022	S S					
Testing laboratory :	SHENZHEN TONGCE TESTING LAB						
Testing location/ address:		2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103,					
Applicant's name:	Shenzhen KaiDa technology dig	ital co, LTD					
Address:	4/F, building C, Yunli Zhigu, No. Bantian Street, Longgang Distric						
Manufacturer's name :	Shenzhen KaiDa technology dig	ital co, LTD					
Address:	4/F, building C, Yunli Zhigu, No. Bantian Street, Longgang Distric						
Standard(s):	FCC CFR Title 47 Part 15 Subpa FCC KDB 558074 D01 15.247 M ANSI C63.10:2013	art C Section 15.247					
Product Name:	Electronic photo frame						
Trade Mark:	FEONAL						
Model/Type reference:	D100, D101, D102, D103, D105	, D106, D108, D110, D111, D112					
Rating(s):	Adapter Information: MODEL: BCT050200-078ED INPUT: AC 100-240V, 50/60Hz, OUTPUT: DC 5.0V, 2000mA, 10						
Date of receipt of test item	Jun. 14, 2022	(C)					
Date (s) of performance of	Jun. 14, 2022 - Aug. 16, 2022						
test:	Brews XU						
	Brews XU	forent where a					
test: Tested by (+signature) : Check by (+signature) :	Brews XU Beryl ZHAO	Boyle PTCT					

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Table of Contents

TCT通测检测 TESTING CENTRE TECHNOLOGY

1.	General Pro	oduct Info	rmation					3
	1.1. EUT des	cription		<u>(c))</u>		<u>(6)</u>		3
	1.2. Model(s)							
	1.3. Operatio	n Frequenc	y					4
2.	Test Result	Summary	<u>, k</u>		<u>(6)</u>		<u>(6)</u>	5
3.	General Inf	ormation.						6
	3.1. Test env	ironment ar	nd mode					6
	3.2. Descript	ion of Supp	ort Units.					7
4.	Facilities a							
	4.1. Facilities	5						8
	4.2. Location							8
	4.3. Measure							
5.	Test Result	s and Mea	asureme	ent Data .		<u>(G)</u>		
	5.1. Antenna	requiremen	it					9
	5.2. Conduct	ed Emissio	1					10
	5.3. Maximun	n Conducte	d (Averag	je) Output	Power		<u>(6</u>)	14
	5.4. Emissior							
	5.5. Power S	pectral Den	sity					16
	5.6. Conduct	ed Band Ed	ge and Sp	ourious Er	nission M	easureme	nt	17
	5.7. Radiated	Spurious E	mission I	Measurem	ent			19
Ap	opendix A: T	est Resul	t of Con	ducted T	est			
A	opendix B: F	Photograp	hs of Te	st Setup				
A	opendix C: F	Photograp	hs of EL					



1. General Product Information

1.1. EUT description

Product Name:	Electronic photo frame
Model/Type reference:	D100
Sample Number	TCT220614E031-0101
Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(HT20))
Channel Separation:	5MHz
Number of Channel:	11 for 802.11b/802.11g/802.11n(HT20)
Modulation Technology:	802.11b: Direct Sequence Spread Spectrum (DSSS) 802.11g/802.11n: Orthogonal Frequency Division Multiplexing(OFDM)
Data speed:	802.11b: 1Mbps, 2Mbps, 5.5Mbps, 11Mbps 802.11g: 6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps 802.11n: Up to 150Mbps
Antenna Type:	Internal Antenna
Antenna Gain:	1.9dBi
Rating(s):	Adapter Information: MODEL: BCT050200-078ED INPUT: AC 100-240V, 50/60Hz, 0.3A OUTPUT: DC 5.0V, 2000mA, 10W

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			
1		D100					
Other models	D101, D102, D103,	D105, D106, D108,	D110, D111, D112				
	sted model, other mod ayout, only different on naining models.						



Page 3 of 82



1.3. Operation Frequency

For 802.11b/g/n(HT20)

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

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)

Channel	Frequency
The lowest channel	2412MHz
The middle channel	2437MHz
The Highest channel	2462MHz

Page 4 of 82



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 Average 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:	25.3 °C	25.5 °C
Humidity:	56 % RH	53 % RH
Atmospheric Pressure:	1010 mbar	1010 mbar
Test Software:		
Software Information:	ADB Command	
Power Level:	14	
Test Mode:		
Engineering mode:	Keep the EUT in continuous cycle by select channel and	
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both	During the test, each emission ing, investigated all operating isidered typical configuration ig cables, rotating the turnta horizontal and vertical po	y modes, rotated about all 3 n to obtain worst position, ble, varying antenna height larizations. The emissions
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both	During the test, each emission ing, investigated all operating insidered typical configuration ing cables, rotating the turnta	n was maximized by: having g modes, rotated about all 3 n to obtain worst position ble, varying antenna heigh larizations. The emissions
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both worst-case(Z axis) are show We have verified the constru- were carried out with the EU	During the test, each emission ing, investigated all operating isidered typical configuration og cables, rotating the turnta horizontal and vertical po wn in Test Results of the follow uction and function in typical of JT in transmitting operation, w	n was maximized by: having g modes, rotated about all 3 n to obtain worst position ble, varying antenna height larizations. The emissions ving pages.
polarities were performed. I the EUT continuously work axis (X, Y & Z) and cor manipulating interconnectin from 1m to 4m in both worst-case(Z axis) are show We have verified the constru- were carried out with the EU report and defined as follow Per-scan all kind of data r a	During the test, each emission ing, investigated all operating isidered typical configuration og cables, rotating the turnta horizontal and vertical po wn in Test Results of the follow uction and function in typical of JT in transmitting operation, w	n was maximized by: having modes, rotated about all 3 n to obtain worst position ble, varying antenna height larizations. The emissions ving pages. 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 worst-case(Z axis) are show 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 og cables, rotating the turnta horizontal and vertical po wn in Test Results of the follow 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 larizations. The emissions ving pages. 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 worst-case(Z axis) are show 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 og cables, rotating the turnta horizontal and vertical po wn in Test Results of the follow 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 larizations. The emissions ving pages. 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 worst-case(Z axis) are show 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 og cables, rotating the turnta horizontal and vertical po wn in Test Results of the follow 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 larizations. The emissions ving pages. operation. All the test modes hich was shown in this test bund the follow list which it Data rate 1Mbps 6Mbps



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	Equipment Model No.		FCC ID	Trade Name	
	1	1	/	6	

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-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: 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:

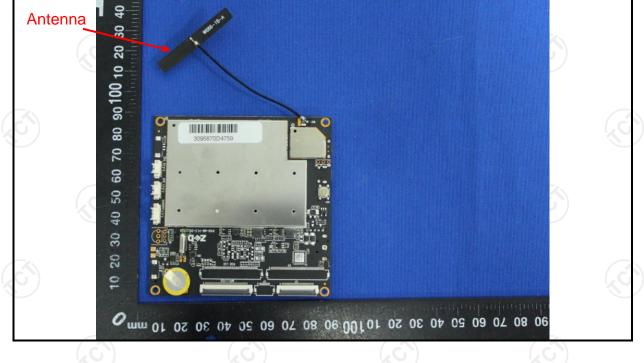
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit 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 internal antenna which permanently attached, and the best case gain of the antenna is 1.9dBi.





5.2. Conducted Emission

5.2.1. Test Specification

Test Requirement:	FCC Part15 C Section	15.207	KC		
Test Method:	ANSI C63.10:2013				
Frequency Range:	150 kHz to 30 MHz	3			
Receiver setup:	RBW=9 kHz, VBW=30	RBW=9 kHz, VBW=30 kHz, Sweep time			
	Frequency range	Limit (dBuV)		
	(MHz)	Quasi-peak	Áverage		
Limits:	0.15-0.5	66 to 56*	56 to 46*		
	0.5-5	56	46		
	5-30	60	50		
	Reference	e Plane			
Test Setup:	E.U.T AC powe Test table/Insulation plane Remark: E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Net Test table height=0.8m	EMI Receiver	— AC power		
Test Mode:	Transmitting Mode				
Test Procedure:	 The E.U.T is conneline impedance staprovides a 500hm/5 measuring equipme The peripheral device power through a Licoupling impedance refer to the block photographs). Both sides of A.C. conducted interferer emission, the relative 	bilization network 50uH coupling im nt. ces are also conne SN that provides with 50ohm tern diagram of the line are checkence. In order to fil e positions of equ	k (L.I.S.N.). This pedance for the ected to the mair s a 50ohm/50uH nination. (Please test setup and ed for maximum nd the maximum ipment and all o		
	the interface cables ANSI C63.10:2013 of				

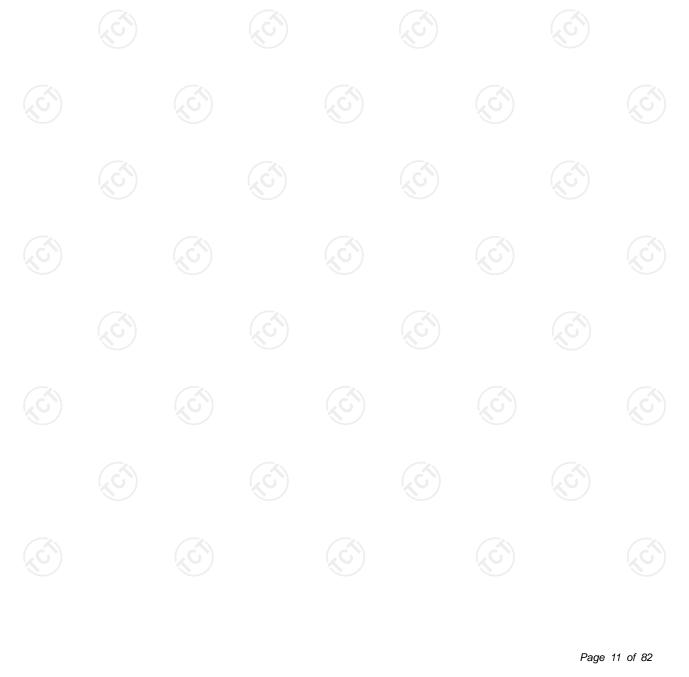
Page 10 of 82



5.2.2. Test Instruments

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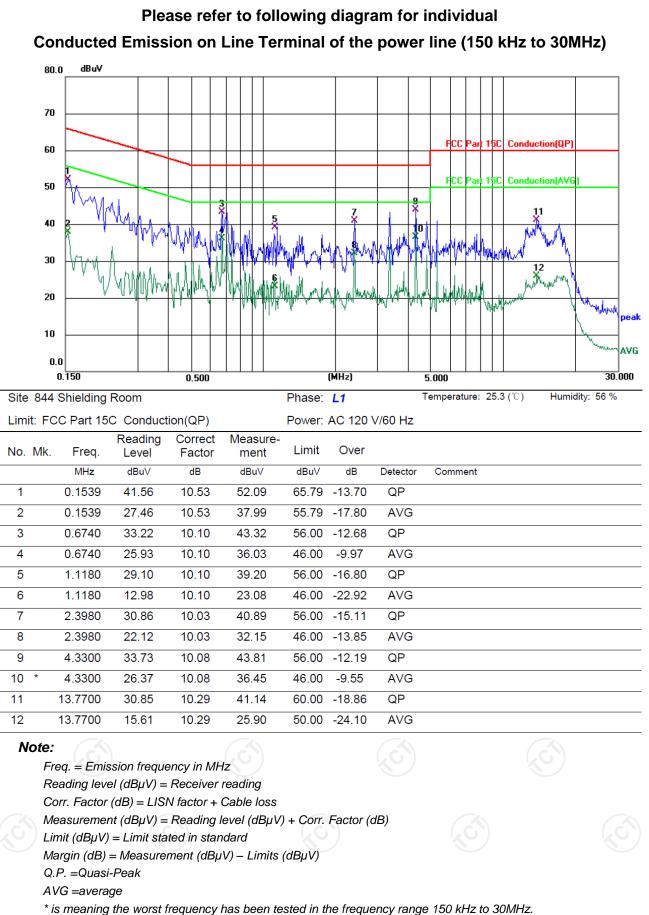
	Conducted Emission Shielding Room Test Site (843)						
X	Equipment	Manufacturer	Model	Serial Number	Calibration Due		
	EMI Test Receiver	R&S	ESCI3	100898	Jul. 03, 2023		
	Line Impedance Stabilisation Newtork(LISN)	Schwarzbeck	NSLK 8126	8126453	Feb. 24, 2023		
	Line-5	ТСТ	CE-05	/	Jul. 03, 2024		
	EMI Test Software	Shurple Technology	EZ-EMC	1	1 68		

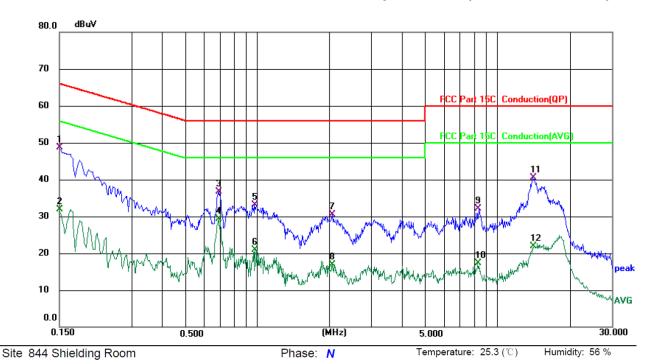


Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

5.2.3. Test data

TCT 通测检测 TCT 通测检测





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

Limit: FCC Part 15C Conduction(QP)

Power: AC 120 V/60 Hz

			Reading	Correct	Measure-				
No.	Mk.	Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBu∨	dB	Detector	Comment
1		0.1500	38.24	10.44	48.68	66.00	-17.32	QP	
2		0.1500	21.44	10.44	31.88	56.00	-24.12	AVG	
3		0.6900	26.65	10.10	36.75	56.00	-19.25	QP	
4	*	0.6900	19.14	10.10	29.24	46.00	-16.76	AVG	
5		0.9780	22.98	10.11	33.09	56.00	-22.91	QP	
6		0.9780	10.73	10.11	20.84	46.00	-25.16	AVG	
7		2.0579	20.40	10.12	30.52	56.00	-25.48	QP	
8		2.0579	6.86	10.12	16.98	46.00	-29.02	AVG	
9		8.3180	21.87	10.28	32.15	60.00	-27.85	QP	
10		8.3180	7.00	10.28	17.28	50.00	-32.72	AVG	
11		14.0940	30.02	10.40	40.42	60.00	-19.58	QP	
12		14.0940	11.51	10.40	21.91	50.00	-28.09	AVG	

Note:

Freq. = Emission frequency in MHz Reading level (dBµV) = Receiver reading Corr. Factor (dB) = LISN factor + Cable loss Measurement (dBµV) = Reading level (dBµV) + Corr. Factor (dB) Limit (dBµV) = Limit stated in standard Margin (dB) = Measurement (dBµV) – Limits (dBµV) Q.P. =Quasi-Peak AVG =average * is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz. Page 13 of 82



5.3. Maximum Conducted (Average) 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:						
	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 and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. Measure the conducted output power and record the results in the test report. 					
Test Result:	PASS					
(\mathcal{S})						

5.3.2. Test Instruments

Name	Manufacturer	Model No.	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 04, 2023
Combiner Box	Ascentest	AT890-RFB		

Page 14 of 82

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

Ģ	Name	Manufacturer	Model No.	Serial Number	Calibration Due
	Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 04, 2023
	Combiner Box	Ascentest	AT890-RFB	<u>େ</u> /	





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 and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. 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 = RMS, Sweep time = auto couple. Employ trace averaging (RMS) mode over a minimum of 100 traces. 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

Name	Manufacturer	Model No.	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 04, 2023
Combiner Box	Ascentest	AT890-RFB	/	/

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 EUT
Test Mode:	Transmitting mode with modulation
	 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.
Test Procedure:	 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 ove 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.

Page 17 of 82



5.6.2. Test Instruments

Manufacturer	Model No.	Serial Number	Calibration Due	
Agilent	N9020A	MY49100619	Jul. 04, 2023	
Ascentest	AT890-RFB	1	/	

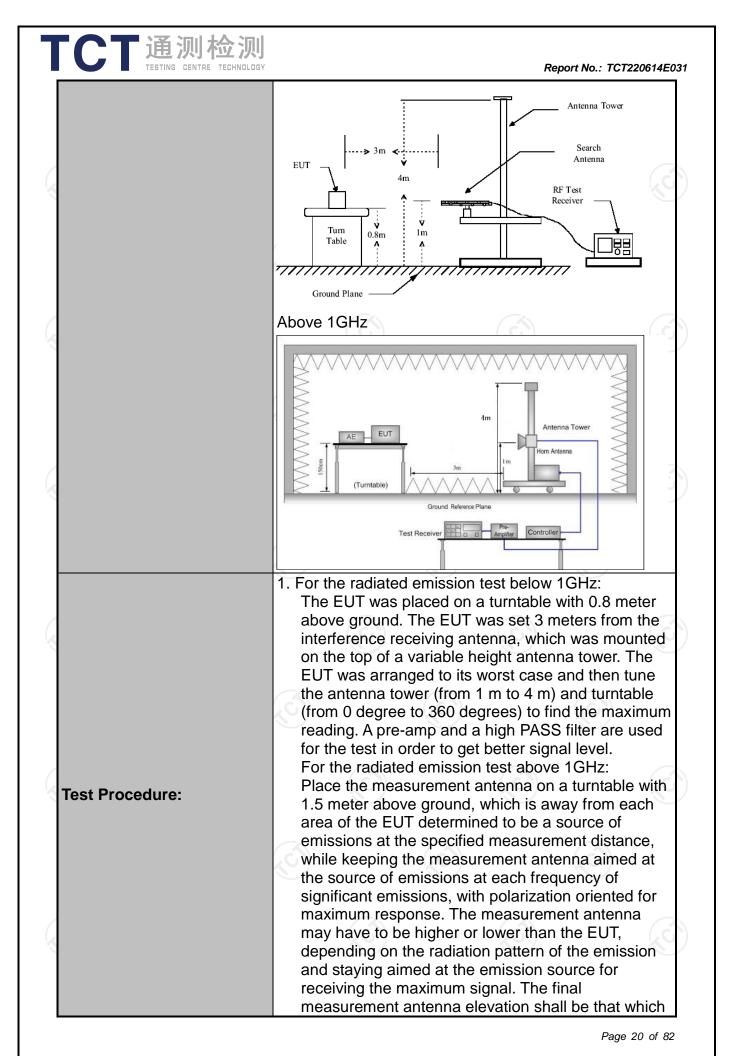


5.7.1. Test Specification

TCT通测检测 TESTING CENTRE TECHNOLOGY

Test Requirement:	FCC Part15 C Section 15.209							
Test Method:	ANSI C63.10	0:2013						
Frequency Range:	9 kHz to 25 (GHz						
Measurement Distance:	3 m (C)							
Antenna Polarization:	Horizontal &	Horizontal & Vertical						
Operation mode:	Transmitting mode with modulation							
	Frequency	Detector	RBW	VBW	Rema			
Receiver Setup:	9kHz- 150kHz 150kHz- 30MHz	Quasi-peal Quasi-peal			Quasi-peak Value Quasi-peak Value			
	30MHz-1GHz	Quasi-peal	120KHz	300KHz	Quasi-peal	< Value		
	Above 1GHz	Peak	1MHz	3MHz	Peak Va	alue		
		Peak	1MHz	10Hz	Average	Value		
	Frequen	ісу	Field Stro (microvolts		Measurer Distance (n			
	0.009-0.490		2400/F(KHz)		300			
	0.490-1.7		24000/F(KHz)		30			
	1.705-30		30		30			
	<u>30-88</u> 88-216		<u> </u>		3			
Limit:	216-960		200		3			
Emmt.	Above 960		500		3			
	Frequency		eld Strength rovolts/meter) Measure Distar (mete		ce Det	tector		
		_	500	3		erage		
	Above 1GHz	z	5000 3		Peak			
Test setup:	For radiated emissions below 30MHz Distance = 3m Comp Pre -Amplifie 0.8m Ground Plane							
	30MHz to 10	~						

Page 19 of 82



TESTING CENTRE TECHNOLOGY	Report No.: TCT220614E031
	 Report No.: TCT220614E031 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: (1) Span shall wide enough to fully capture the emission being measured; (2) 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 \geq 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



Page 21 of 82

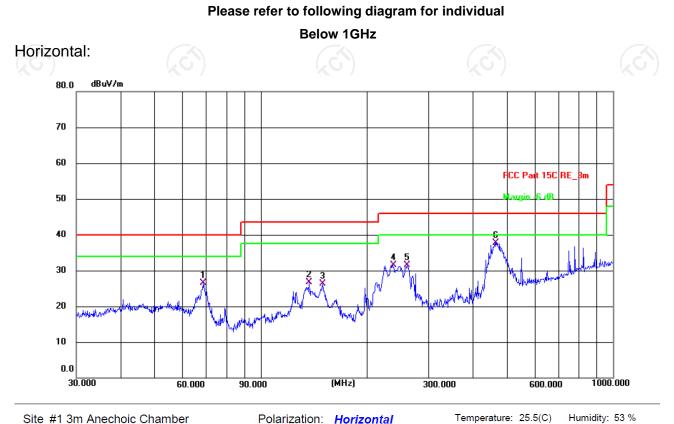
5.7.2. Test Instruments

	Radiated Emission Test Site (966)								
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due					
EMI Test Receiver	R&S	ESIB7	100197	Jul. 03, 2023					
Spectrum Analyzer	R&S	FSQ40	200061	Jul. 03, 2023					
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. 03, 2023					
Loop antenna	Schwarzbeck	FMZB1519B	00191	Jun. 11, 2024					
Broadband Antenna	Schwarzbeck	VULB9163	340	Jul. 05, 2024					
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Jul. 05, 2024					
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Apr. 10, 2023					
Antenna Mast	Keleto	RE-AM	1						
Coaxial cable	SKET	RC-18G-N-M	1	Feb. 24, 2024					
Coaxial cable	SKET	RC_40G-K-M	1	Feb. 24, 2024					
EMI Test Software	Shurple Technology	EZ-EMC	6	, «					





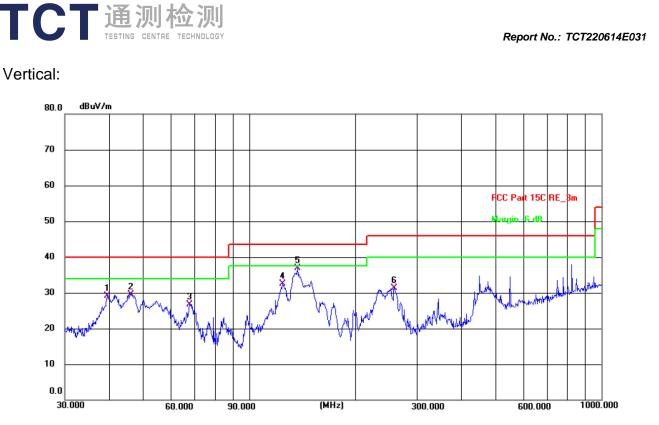
5.7.3. Test Data



Site #1 3m Anechoic Chamber Limit: FCC Part 15C RE_3m Polarization: *Horizontal* 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	68.6310	15.51	11.08	26.59	40.00	-13.41	QP	Ρ	
2	137.4202	14.17	12.51	26.68	43.50	-16.82	QP	Ρ	
3	150.0108	13.36	13.01	26.37	43.50	-17.13	QP	Ρ	
4	237.4760	19.43	12.05	31.48	46.00	-14.52	QP	Р	
5	260.1444	19.12	12.35	31.47	46.00	-14.53	QP	Ρ	
6 *	465.5994	20.03	17.66	37.69	46.00	-8.31	QP	Ρ	

Page 23 of 82



Site #1 3m Anechoic Chamber Polarization: Vertical Temperature: 25.5(C) Humidity: 53 % Limit: FCC Part 15C RE 3m Power: AC 120 V/60 Hz Reading Limit Frequency Factor Level Margin Detector No. P/F Remark (MHz) (dBuV) (dB/m)(dBuV/m) (dBuV/m) (dB) 39.5757 15.42 13.69 40.00 -10.89 QP Ρ 29.11 1 Р 2 46.1779 16.04 13.56 29.60 40.00 -10.40 QP 15.59 26.79 Ρ 3 67.6751 11.20 40.00 -13.21 QP 4 124.5690 QP Ρ 20.60 11.85 32.45 43.50 -11.05 137.4202 Ρ 5 * 24.33 12.51 36.84 43.50 -6.66 QP 258.3264 -14.69 Ρ 18.97 12.34 31.31 46.00 QP 6

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

2. Measurements were conducted in all three channels (high, middle, low) and all modulation(802.11b, 802.11g, 802.11n(HT20), 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

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

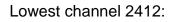
Margin (dB) = Measurement (dB μ V/m) – Limits (dB μ V/m)

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

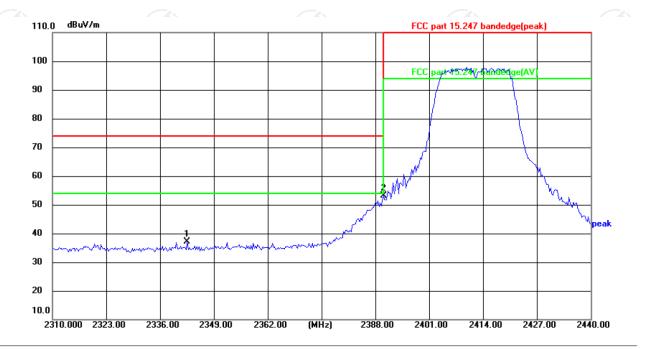
Page 24 of 82



Test Result of Radiated Spurious at Band edges



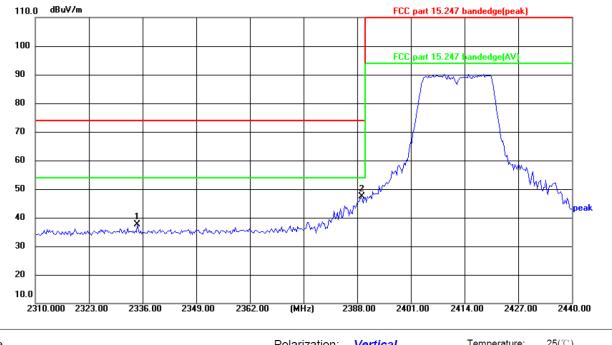
Horizontal:



Site Limit:	FCC part 15.	247 banded	dge(peak)		Polariza Power:		Horizon 20 V/60 Hz		Temperature: 25(°C) Humidity: 36 %
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	2342.565	52.31	-15.20	37.11	74.00	-36.89	peak	Ρ	
2 *	2389.980	68.14	-14.99	53.15	74.00	-20.85	peak	Ρ	
(\mathcal{G})	·	0 ر)			(JC))			(0)

Vertical:

TCT通测检测 TESTING CENTRE TECHNOLOGY



Site					Polarization: Vertical				Temperature: 25(°C)		
Limit:	FCC part 15.2		Power:	Power: AC 120 V/60 Hz			Humidity: 36 %				
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F	Remark		
1	2334.749	52.84	-15.23	37.61	74.00	-36.39	peak	Р			
2 *	2388.938	62.34	-14.99	47.35	74.00	-26.65	peak	Р			

Note: Measurements were conducted in all two channels (high, low) and all modulation (802.11b, 802.11g, 802.11n(HT20), and the worst case Mode 802.11n(HT20) was submitted only.

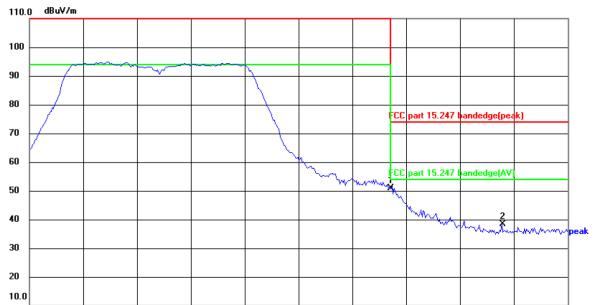
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

	50					W	many	4					
	40							\rightarrow	m	2		~~~~n	eak
	30												
	20											_	
		55.00 246	0.00 2465	5.00 2470	.00 (MHz) 24	80.00 2	2485.0	0 2490).00 24	95.00	2500.	.00
Site					Polariza	ation:	Horizon	tal		Temperatu	re:	25(° ℃)	
Limit:	FCC part 15.2	247 bandeo	dge(peak)		Power:	AC 1	20 V/60 Hz			Humidity:	36 %	6	
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Rema	rk			
1 *	2483.500	65.55	-14.58	50.97	74.00	-23.03	peak	Ρ					
2	2493.888	52.93	-14.54	38.39	74.00	-35.61	peak	Ρ					

Highest channel 2462:

TCT 通测检测 TESTING CENTRE TECHNOLOGY

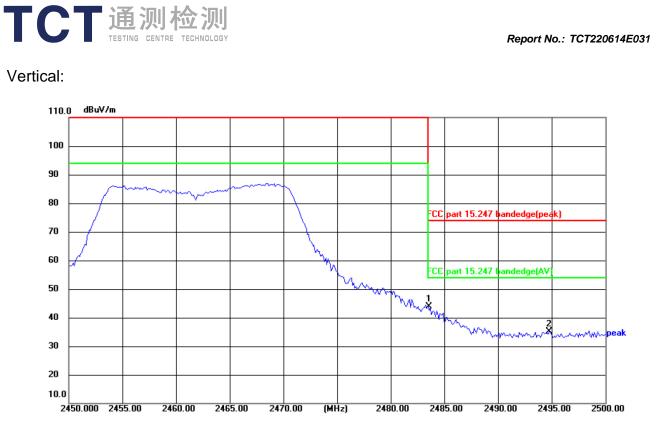
Horizontal:



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

Page 27 of 82

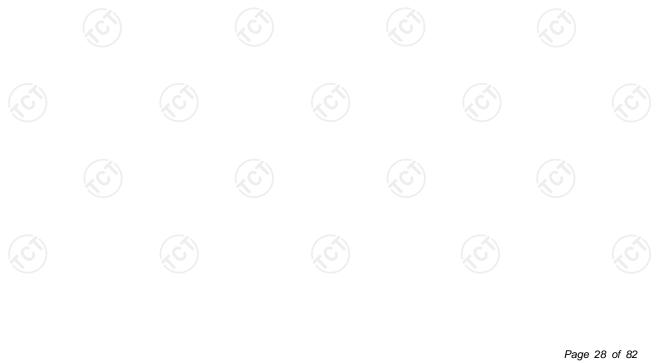
Report No.: TCT220614E031



Site	500				Polariza		Vertical		Temperature: 25(°C)
	FCC part 15.2		Power:		20 \//60 Hz		Humidity: 36 %		
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F	Remark
1 *	2483.500	58.53	-14.58	43.95	74.00	-30.05	peak	Ρ	
2	2494.789	49.56	-14.53	35.03	74.00	-38.97	peak	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)), and the worst case Mode 802.11n(HT20) was submitted only.



			M	odulation T	ype: 802.11	1b					
			L	ow channe	I: 2412 MH	Z					
Frequency (MHz)Ant. Pol. H/VPeak reading (dBμV)AV reading (dBuV)Correction Factor (dB/m)Emission Level Peak (dBμV/m)Peak limit (dBμV/m)AV limit (dBμV/m)Marg (dBμV/m)											
4824	Н	46.10		0.75	46.85		74	54	-7.15		
7236	Н	34.82		9.87	44.69		74	54	-9.31		
	Н										
4824	V	45.63		0.75	46.38	~~	74	54	-7.62		
7236	V	33.05	(_C	9.87	42.92	G`)	74	54	-11.08		
	V				2						

Above 1GHz

	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	45.37		0.97	46.34		74	54	-7.66					
7311	Н	35.94		9.83	45.77		74	54	-8.23					
	H				(
			KO.		X	0								
4874	V	45.71		0.97	46.68	·	74	54	-7.32					
7311	V	33.48		9.83	43.31		74	54	-10.69					
	V													
				((

					A 11				
			И Н	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	46.59		1.18	47.77		74	54	-6.23
7386	E.	34.26		10.07	44.33		74	54	-9.67
	Η								
4924	V	42.85		1.18	44.03		74	54	-9.97
7386	V	33.07		10.07	43.14		74	54	-10.86
	V			0	ノ				

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) ($dB\mu V/m$)-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. 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.

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

	TESTI	NG CENTRE TEC	HNOLOGY				Repo	ort No.: TCT2	20614E031
			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	46.91		0.75	47.66		74	54	-6.34
7236	Н	36.05		9.87	45.92		74	54	-8.08
<u> </u>	Н			0	J		<u></u>		
4824	V	45.36		0.75	46.11		74	54	-7.89
7236	V	36.82	()	9.87	46.69	~~	74	54	-7.31
	V		(2G	•)	(G`)		(, G)	
				/	2		•		

	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	45.60		0.97	46.57		74	54	-7.43					
7311	Н	37.19		9.83	47.02		74	54	-6.98					
	Н													
				2	(
4874	V	45.48		0.97	46.45	0)	74	54	-7.55					
7311	V	38.73	()	9.83	48.56		74	54	-5.44					
	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_	45.24		1.18	46.42		74	54	-7.58
7386	H	36.57		10.07	46.64	<u> </u>	74	54	-7.36
	H			/	X)			
4924	V	43.09		1.18	44.27		74	54	-9.73
7386	V	34.62		10.07	44.69		74	54	-9.31
(\mathbf{G})	V	θ ω ς`		(, (5)		JG -}		
Madai			7						

Note:

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.

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

○T 通测检测

TC		的 加枪					Repo	ort No.: TCT2	20614E031
			Modu	lation Type	: 802.11n (l	HT20)			
			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	47.32		0.75	48.07		74	54	-5.93
7236	Н	37.56		9.87	47.43		74	54	-6.57
	Н			V	· · · ·		<u> </u>		
4824	V	43.78		0.75	44.53		74	54	-9.47
7236	N	37.05	6	9.87	46.92		74	54	-7.08
	V)	(6)			

			Mi	ddle chann	el: 2437 MI	Ηz			
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	45.29		0.97	46.26		74	54	-7.74
7311	Н	37.81		9.83	47.64		74	54	-6.36
	Н								
4874	V	44.67		0.97	45.64	<u> </u>	74	54	-8.36
7311	V	32.14		9.83	41.97		74	54	-12.03
	V								

(\mathbf{c})		(6)	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_	46.43		1.18	47.61		74	54	-6.39
7386	Н	37.90		10.07	47.97		74	54	-6.03
	H			/	×	<u> </u>			
4924	V	45.76		1.18	46.94		74	54	-7.06
7386	V	39.25		10.07	49.32		74	54	-4.68
(V	(Jeff)		(, C			$\mathcal{S}^{\rightarrow}$		(
Mater									

Note:

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.

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



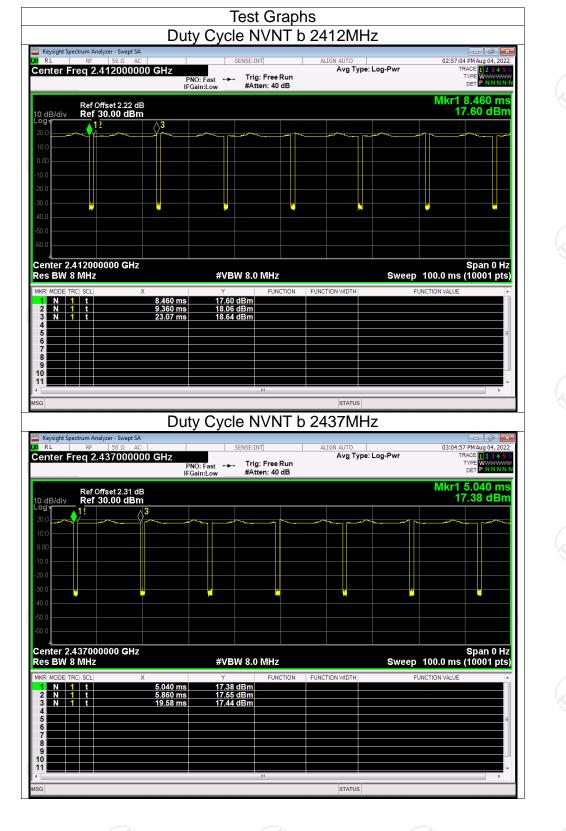
Appendix A: Test Result of Conducted Test

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C	Condition	Mode	Frequency (MHz)	Duty Cycle Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
•)	NVNT	b	2412	93.85	0.28	0.07
	NVNT	b	2437	93.87	0.27	0.07
	NVNT	b	2462	93.87	0.27	0.07
	NVNT	g	2412	72.30	1.41	0.44
	NVNT	g	2437	72.89	1.37	0.44
	NVNT	g	2462	73.33	1.35	0.44
	NVNT	n20	2412	74.53	1.28	0.44
	NVNT	n20	2437	73.62	1.33	0.44
٦)	NVNT	n20 🔇	2462	72.31	1.41	0.44

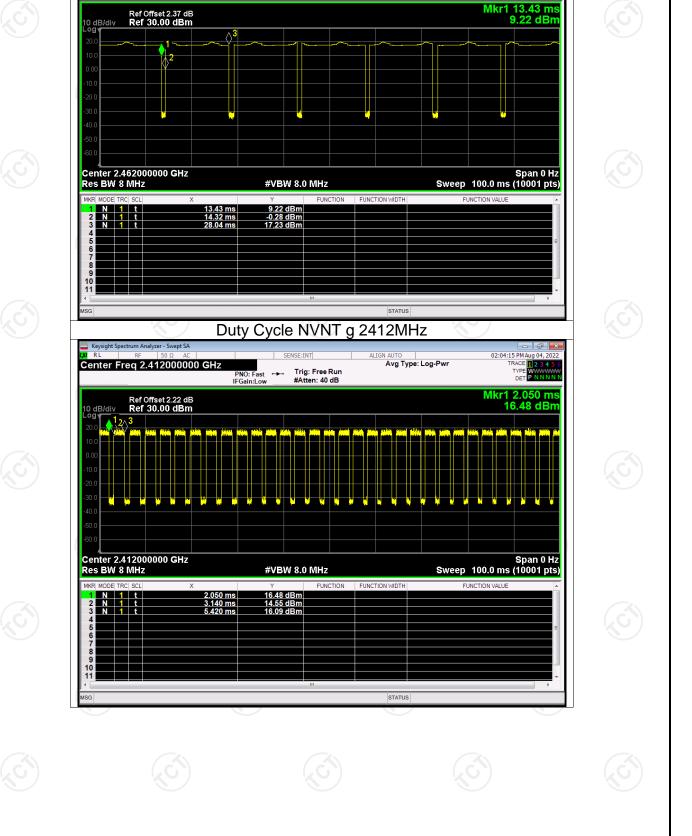
Page 32 of 82

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



Page 33 of 82

Report No.: TCT220614E031



Duty Cycle NVNT b 2462MHz

Trig: Free Run #Atten: 40 dB

PNO: Fast ↔→ IFGain:Low Avg Type: Log-Pwr

TCT通测检测 TESTING CENTRE TECHNOLOGY

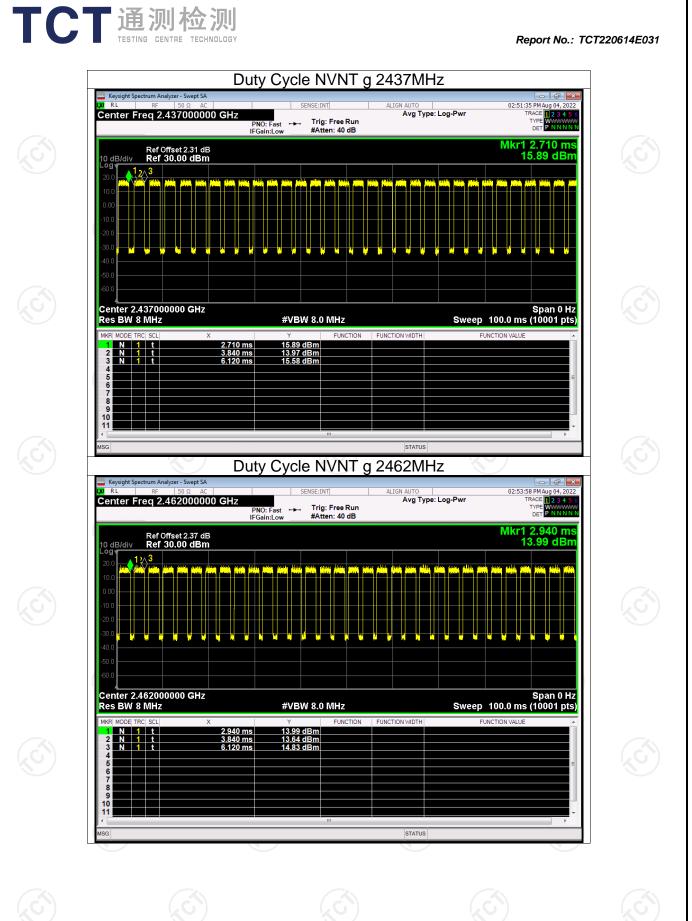
Keysight Sp

Center Freq 2.462000000 GHz

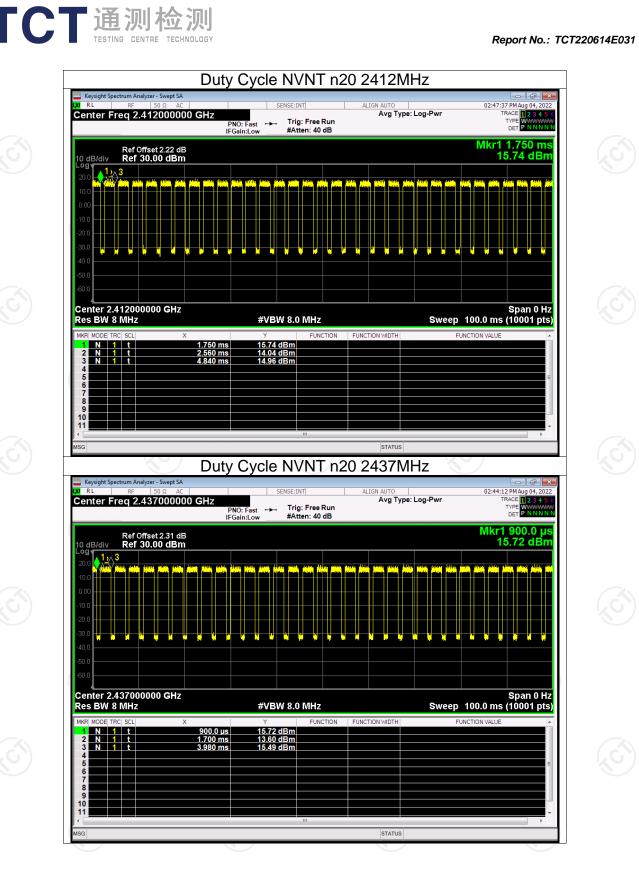
Report No.: TCT220614E031

03:17:35 PM Aug 04, 20 TRACE 1 2 3 4

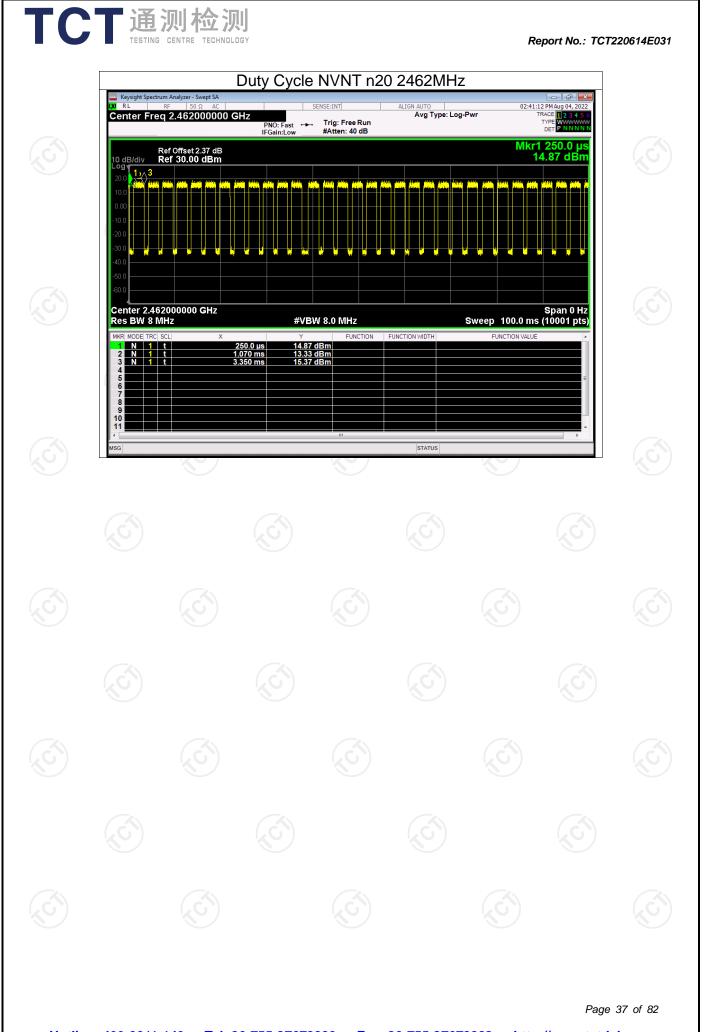
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Page 35 of 82



Page 36 of 82

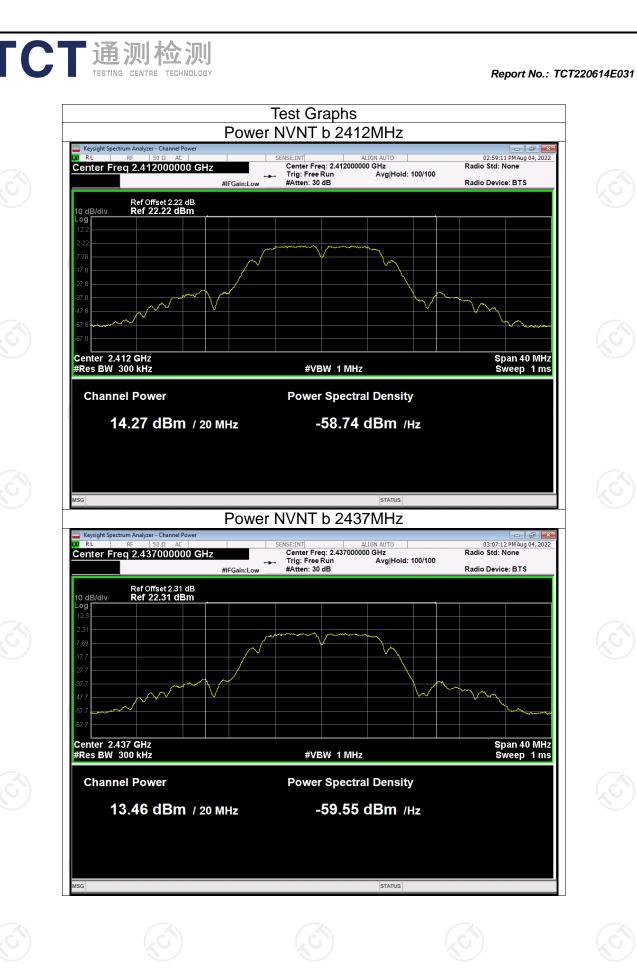


lode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
b	2412	14.27	0.28	14.55	30	Pass
b	2437	13.46	0.27	13.73	30	Pass
b	2462	13.80	0.27	14.07	30	Pass
g	2412	9.83	1.41	11.24	30	Pass
g	2437	11.67	1.37	13.04	30	Pass
g	2462	10.53	1.35	11.88	30	Pass
n20	2412	10.18	1.28	11.46	30	Pass
n20	2437	10.53	1.33	11.86	30	Pass
n20	2462	10.11	1.41	11.52	30	Pass
	b b g g g n20 n20	Iode (MHz) b 2412 b 2437 b 2462 g 2412 g 2442 g 2442 g 2442 g 2437 g 2462 n20 2412 n20 2437	Iode(MHz)Power (dBm)b241214.27b243713.46b246213.80g24129.83g243711.67g246210.53n20241210.18n20243710.53	IodeFrequency (MHz)Conducted Power (dBm)Factor (dB)b241214.270.28b243713.460.27b246213.800.27g24129.831.41g243711.671.37g246210.531.35n20241210.181.28n20243710.531.33	IodeFrequency (MHz)Conducted Power (dBm)Factor (dB)Power (dBm)b241214.270.2814.55b243713.460.2713.73b246213.800.2714.07g24129.831.4111.24g243711.671.3713.04g246210.531.3511.88n20241210.181.2811.46n20243710.531.3311.86	IodeFrequency (MHz)Conducted Power (dBm)Factor (dB)Power (dBm)Limit (dBm)b241214.270.2814.5530b243713.460.2713.7330b246213.800.2714.0730g24129.831.4111.2430g243711.671.3713.0430g246210.531.3511.8830n20241210.181.2811.4630n20243710.531.3311.8630

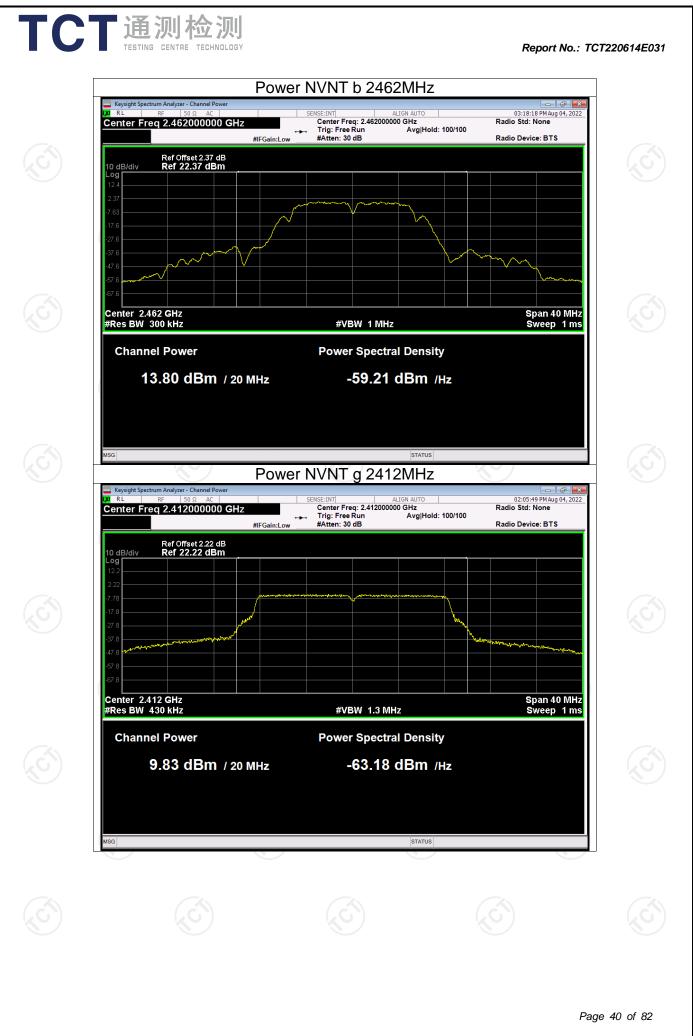
Maximum Conducted Output Power

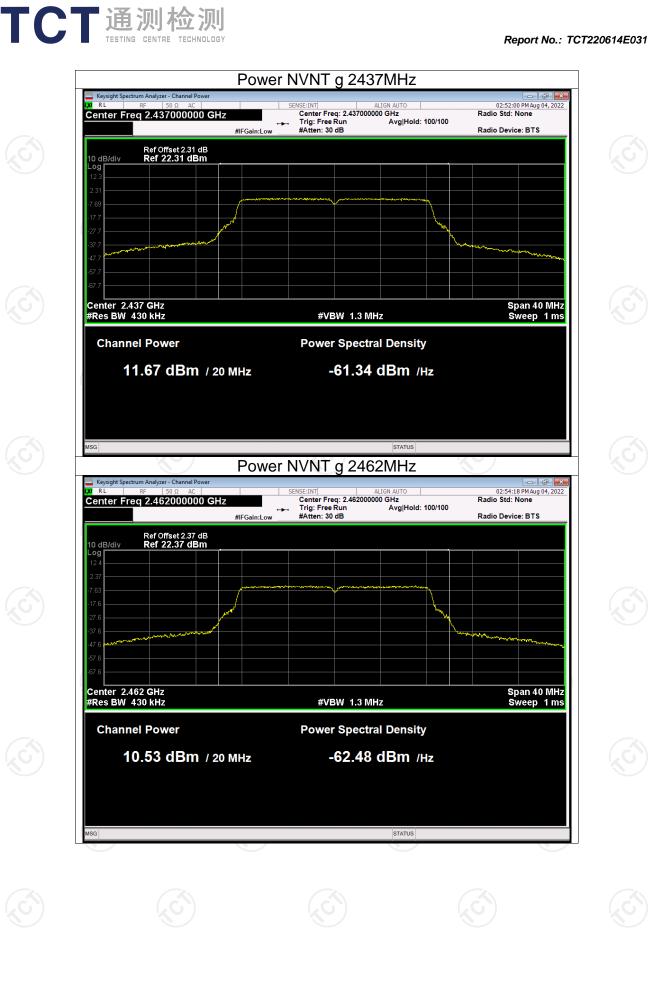
TCT通测检测 TESTING CENTRE TECHNOLOGY



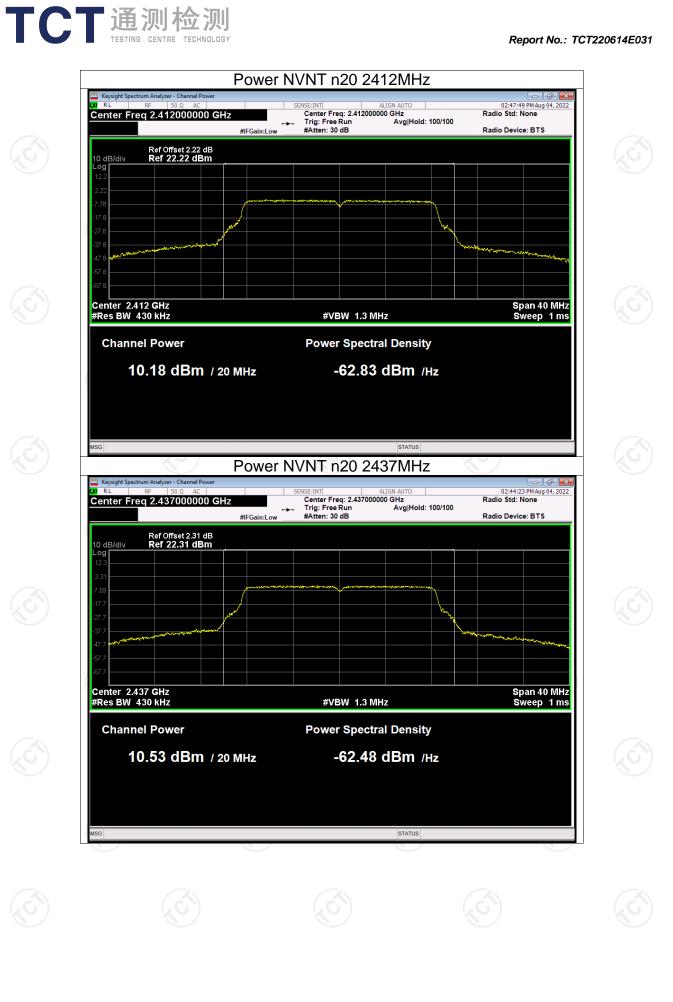


Page 39 of 82





Page 41 of 82



Page 42 of 82

TC		沪川 NOLOGY			Re	port No.: TCT	220614E031
	Keysight Spectrum Analyzer - Channel I K K K K K K K K K K K K K K K K K K K	ower	VNT n20 2	ALIGN AUTO		ت ق ک 1 PM Aug 04, 2022	
	Center Freq 2.46200000 Ref Offset 2.37 def 10 dB/div Ref 22.37 def 12.4 2.37 7.63 417.6 27.6	0 GHz #IFGain:Low	Center Freq: 2,4620 Trig: Free Run #Atten: 30 dB	00000 GHz Avg Hold: 100/10	Radio Std: I	None	
	-37 6 -47 6 -57 6 -67 6 -67 8 -78 -67 6 -78 -78 -79 -79 -79 -79 -79 -79 -79 -79 -79 -79		#vBW 1.3 Power Spec			Dan 40 MHz weep 1 ms	
	10.11 dBm	/ 20 MHz	-62.9	0 dBm /нz			
	MSG		NO	STATUS	×		
						Page	43 of 82
<u>Hotlin</u>	e: 400-6611-140 Te	<u>: 86-755-27673</u>	339 Fax:	<u>86-755-27673</u>	332 http:	//www.tct-la	ab.com

	-6dB Bandwidth								
Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict				
NVNT	b	2412	10.138	0.5	Pass				
NVNT	b	2437	10.124	0.5	Pass				
NVNT	b	2462	10.098	0.5	Pass				
NVNT	g	2412	16.314	0.5	Pass				
NVNT	g	2437	16.326	0.5	Pass				
NVNT	g	2462	16.333	0.5	Pass				
NVNT	n20	2412	16.351	0.5	Pass				
NVNT	n20	2437	16.329	0.5	Pass				
NVNT	n20	2462	16.339	0.5	Pass				

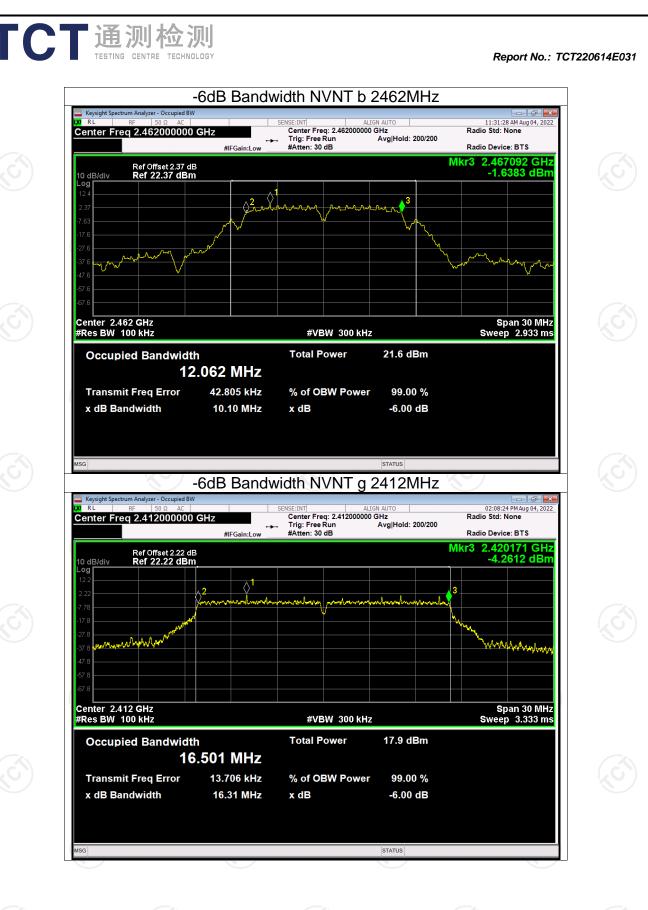
TCT 通测检测 TESTING CENTRE TECHNOLOGY



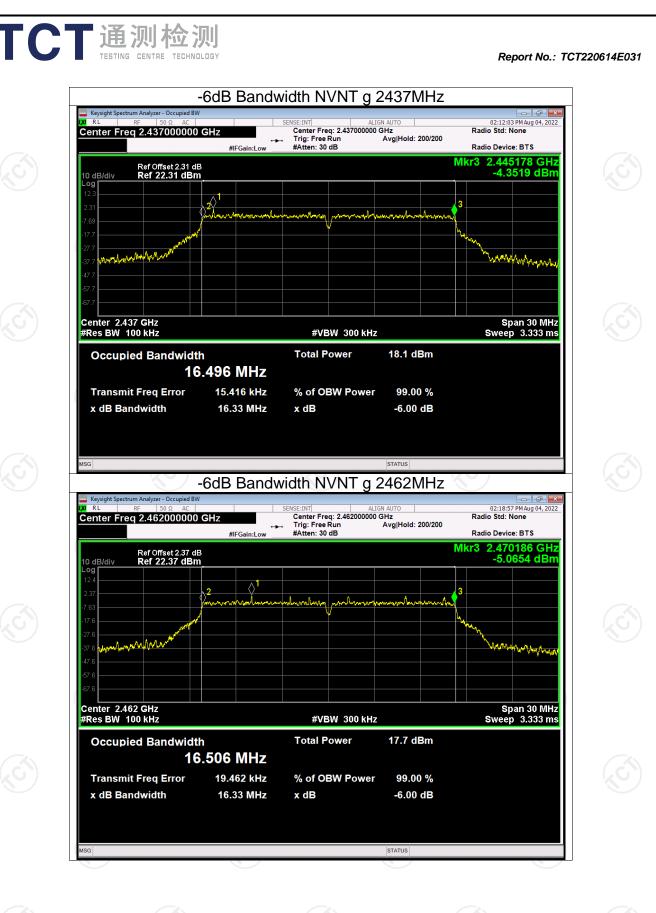
Page 44 of 82



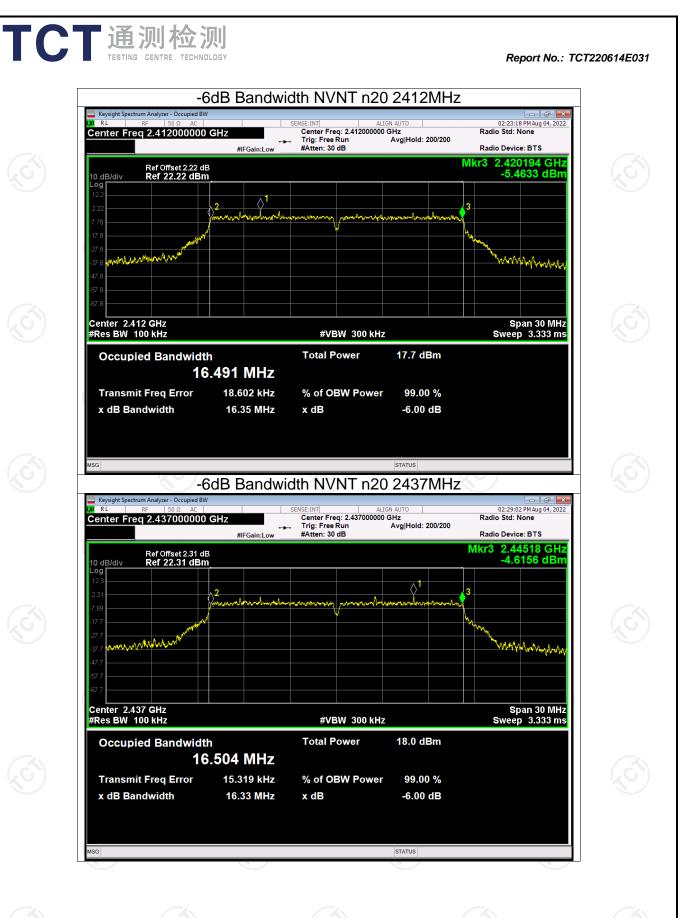
Page 45 of 82



Page 46 of 82



Page 47 of 82



Page 48 of 82

55 PM Aug 04, 2022 None			SENSE:INT AL Center Freq: 2.46200000		m Analyzer - Occupied BW RF 50 Ω AC q 2.462000000	LX/RL
	Radio Devi Mkr3 2.47	Avg Hold: 200/200	. Trig: Free Run #Atten: 30 dB	#IFGain:Low	Ref Offset 2.37 dB	
	3			1	Ref 22.37 dBm	10 dB/div Log 12.4
	may have been a second	amenderse terral	manandraan waadraamedo	Ymrinternlinedin 		-7.63 -17.6
and the free free	***//w/w				An Andrew Mar	-27.6 -37.6
						-67.6
pan 30 MHz p 3.333 ms	S Swee	z 17.6 dBm	#VBW 300 kH		00 kHz	Center 2.46 #Res BW 1
				.498 MHz		
		r 99.00 % -6.00 dB	% of OBW Power x dB	18.051 kHz 16.34 MHz	t Freq Error ndwidth	x dB Bar
	×	STATUS	N.S.		S	MSG

Report No.: TCT220614E031

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/30kHz)	Duty Factor (dB)	Total PSD (dBm/30kHz)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	d	2412	-8.94	0.28	-8.66	-18.66	8	Pass
NVNT	b	2437	-8.91	0.27	-8.64	-18.64	8	Pass
NVNT	b	2462	-9.28	0.27	-9.01	-19.01	8	Pass
NVNT	g	2412	-13.67	1.41	-12.26	-22.26	8	Pass
NVNT	g	2437	-13.32	1.37	-11.95	-21.95	8	Pass
NVNT	g	2462	-13.78	1.35	-12.43	-22.43	8	Pass
NVNT	n20	2412	-13.60	1.28	-12.32	-22.32	8	Pass
NVNT	n20	2437	-13.43	1.33	-12.10	-22.10	8	Pass
NVNT	n20	2462	-14.18	1.41	-12.77	-22.77	8	Pass

Maximum Power Spectral Density Level

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

TCT通测检测 TESTING CENTRE TECHNOLOGY



Center 2.41200 GHz #Res BW 30 kHz

PSD NVNT b 2437MHz

#VBW 100 kHz*

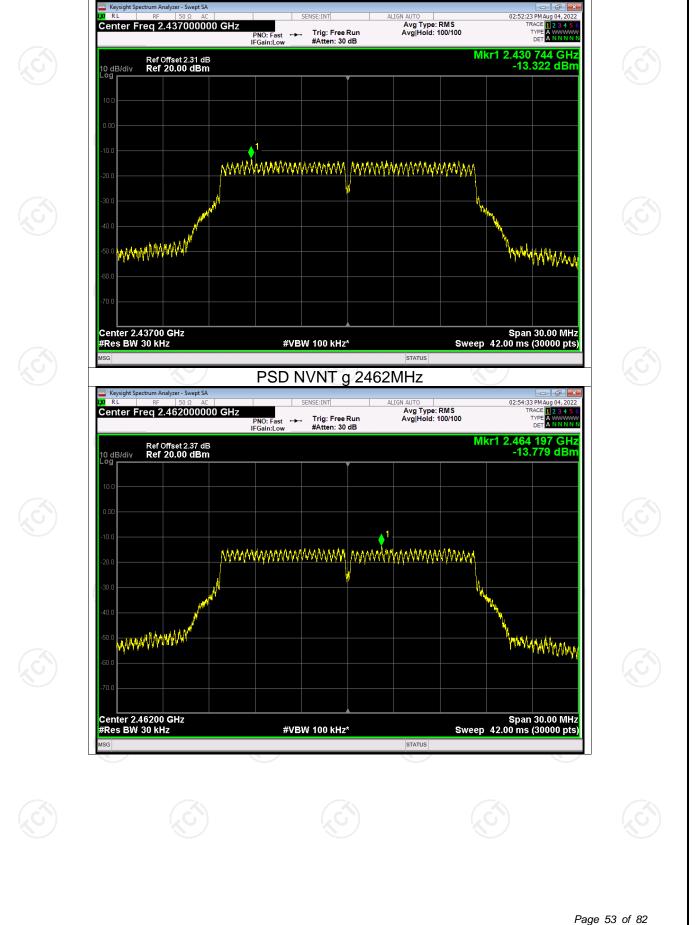


Span 30.00 MHz Sweep 42.00 ms (30000 pts)

STATUS

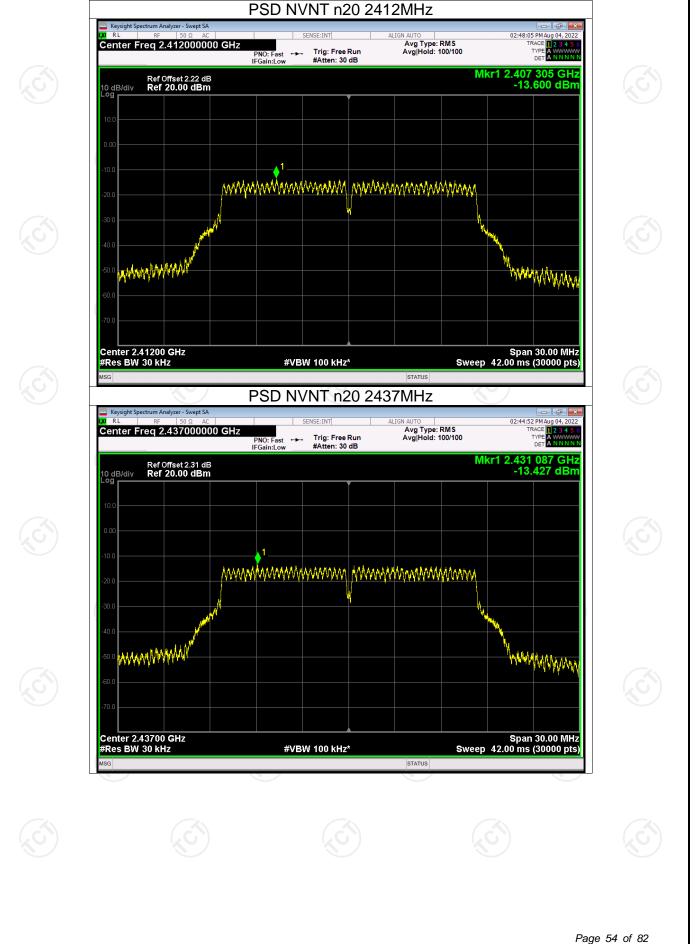
Page 51 of 82





PSD NVNT g 2437MHz

TCT通测检测 TESTING CENTRE TECHNOLOGY



TCT通测检测 TESTING CENTRE TECHNOLOGY

TC		金 			Report No.: TCT	220614E031
	Keysight Spectrum Analyzer - S	wept SA	NT n20 246			
	Center Freq 2.4620	PNO: Fast IFGain:Low	NSE:INT AL Trig: Free Run #Atten: 30 dB	IGN AUTO Avg Type: RMS Avg Hold: 100/100	02:42:16 PM Aug 04, 2022 TRACE 12 3 4 5 6 TYPE A WWWW DET A N N N N N	
	10 dB/div Ref Offset 2.	37 dB dBm	Ĭ		r1 2.458 885 GHz -14.175 dBm	
	0.00					
	-10.0	1 		<u> </u>		
	-20.0		AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	N		
	-40.0			 	(M. N. L.	
	-50.0 WYAMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA				MANA MANANA	
	-70.0					
	Center 2.46200 GHz #Res BW 30 kHz	#VBW	100 kHz*	Sweep	Span 30.00 MHz 42.00 ms (30000 pts)	
		2	NC N		2	
					Page	55 of 82

Band Edge								
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict			
NVNT	b	2412	-51.18	-30	Pass			
NVNT	b	2462	-58.00	-30	Pass			
NVNT	g	2412	-44.68	-30	Pass			
NVNT	g	2462	-46.80	-30	Pass			
NVNT	n20	2412	-45.96	-30	Pass			
NVNT	n20	2462	-46.61	-30	Pass			

TCT 通测检测 TESTING CENTRE TECHNOLOGY

Page	56	of	82
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Test Graphs Band Edge NVNT b 2412MHz Ref

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

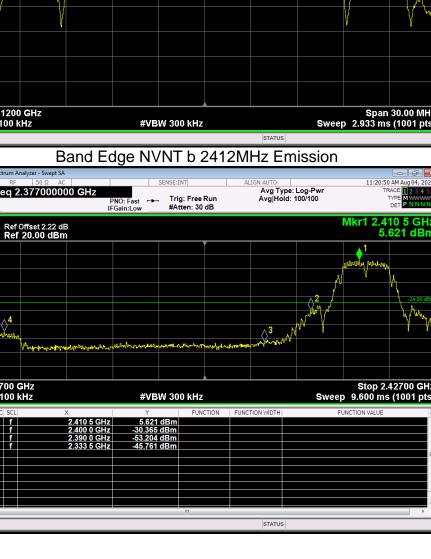
Avg Type: Log-Pwr Avg|Hold: 100/100

10 dB/div _og

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.412000000 GHz

Ref Offset 2.22 dB Ref 20.00 dBm



Page 57 of 82

Report No.: TCT220614E031

- 67 **-** X 11:20:47 AM Aug 04, 2022

TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N

Mkr1 2.413 53 GHz 5.424 dBm



Page 58 of 82



TCT通测检测 TESTING CENTRE TECHNOLOGY

02:19:15 PM Aug 04, 2022 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N KI RL Avg Type: Log-Pwr Avg|Hold: 100/100 Center Freg 2.462000000 GHz Trig: Free Run #Atten: 30 dB TYPE DET PNO: Fast ↔→ IFGain:Low Mkr1 2.454 56 GHz 0.628 dBm Ref Offset 2.37 dB Ref 20.00 dBm 10 dB/div Loa ø monthealthan and water many prover hypery pur wald Manna Mappa Center 2.46200 GHz #Res BW 100 kHz Span 30.00 MHz Sweep 2.933 ms (1001 pts) #VBW 300 kHz STATUS Band Edge NVNT g 2462MHz Emission er - Swept SA Keysight Sp U RL 02:19:18 PM AL Avg Type: Log-Pw Avg|Hold: 100/100 Center Freg 2.497000000 GHz 12345 MWWWW PNNNN Trig: Free Run #Atten: 30 dB TYPE PNO: Fast ↔→ IFGain:Low Mkr1 2.465 8 GHz 0.019 dBm Ref Offset 2.37 dB Ref 20.00 dBm 10 dB/div Log **r** 1.1 h Lh Start 2.44700 GHz #Res BW 100 kHz Stop 2.54700 GHz Sweep 9.600 ms (1001 pts) #VBW 300 kHz FUNCTION WIDTH **FION** 1 f 1 f 1 f 2.465 8 GHz 2.483 5 GHz 2.500 0 GHz 2.483 6 GHz -46.768 dBm -57.123 dBm -46.171 dBm N 10 11 STATUS

Band Edge NVNT g 2462MHz Ref

TCT通测检测 TESTING CENTRE TECHNOLOGY

🔤 Keysight Sp



02:23:36 PM Aug 04, 20 TRACE 1 2 3 4 TYPE MWWW DET P N N N Avg Type: Log-Pwr Avg|Hold: 100/100 Trig: Free Run #Atten: 30 dB TYPE DET PNO: Fast ↔→ IFGain:Low Mkr1 2.414 49 GHz 0.188 dBm Ref Offset 2.22 dB Ref 20.00 dBm 10 dB/div Loa mour mouring ᠂ᡁᡊ᠆ᡎᡌ᠆ᢧᢉ᠇ᡀᡀ ᡊᡙᢛᡊ᠊ᠴᠺ᠆᠋ᢣᢛᢦᠻᠮᡐᡁᡊ᠇ᡘ᠇ᢢ and marine m hall who gal and many 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 n20 2412MHz Emission er - Swept SA Keysight Sp U RL 02:23:39 PM AL Avg Type: Log-Pw Avg|Hold: 100/100 Center Freg 2.377000000 GHz 12345 MWWWW PNNNN Trig: Free Run #Atten: 30 dB TYPE PNO: Fast IFGain:Low Mkr1 2.404 6 GHz 0.792 dBm Ref Offset 2.22 dB Ref 20.00 dBm 10 dB/div Log **r** A3 "hunder a mouth have Start 2.32700 GHz #Res BW 100 kHz Stop 2.42700 GHz Sweep 9.600 ms (1001 pts) #VBW 300 kHz FUNCTION WIDTH 1 f 1 f 1 f 0.792 dBm -35.573 dBm -49.073 dBm -45.770 dBm N

Band Edge NVNT n20 2412MHz Ref

Center Freg 2.412000000 GHz

🔤 Keysight Sp

KI RL

Ref Offset 2.37 dB Ref 20.00 dBm

10 dB/div Log **r**



Report No.: TCT220614E031

Mkr1 2.457 0 GHz 0.930 dBm

Page 62 of 82

Page 63 of 82

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TCT通测检测 TESTING CENTRE TECHNOLOGY

Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	-35.61	-30	Pass
NVNT	b	2437	-36.30	-30	Pass
NVNT	b	2462	-34.47	-30	Pass
NVNT	g	2412	-37.04	-30	Pass
NVNT	g	2437	-37.86	-30	Pass
NVNT	g	2462	-37.68	-30	Pass
NVNT 🖉	n20	2412	-37.12	-30	Pass
NVNT	n20	2437	-35.28	-30	Pass
NVNT	n20	2462	-37.60	-30	Pass

Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332

Test Graphs Tx. Spurious NVNT b 2412MHz Ref

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

Avg Type: Log-Pwr Avg|Hold: 100/100

TCT通测检测 TESTING CENTRE TECHNOLOGY

> 10 dB/div _og

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.412000000 GHz

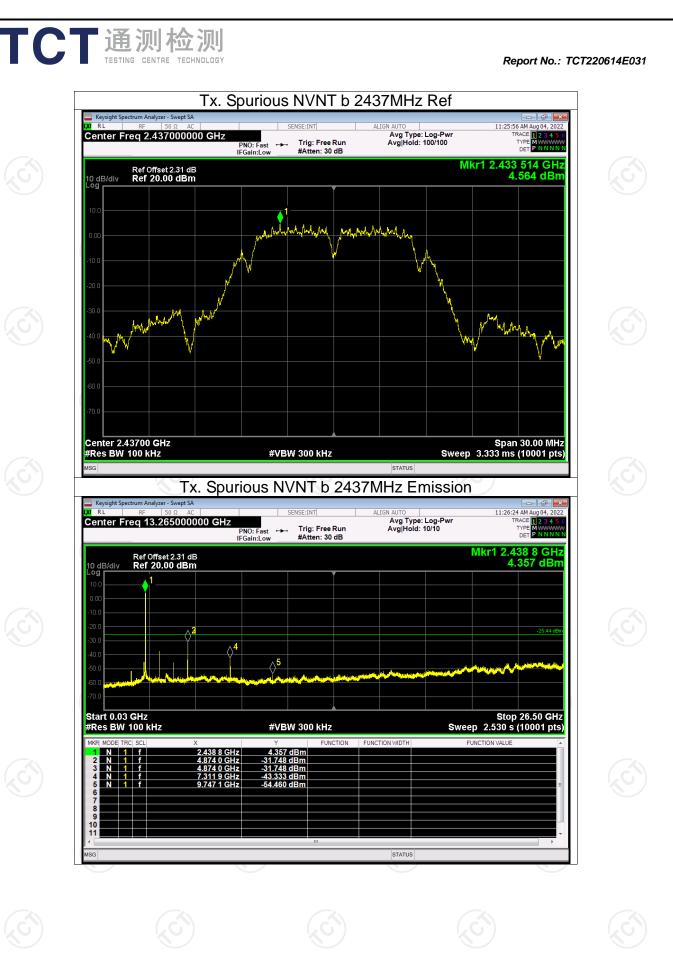
Ref Offset 2.22 dB Ref 20.00 dBm

Report No.: TCT220614E031

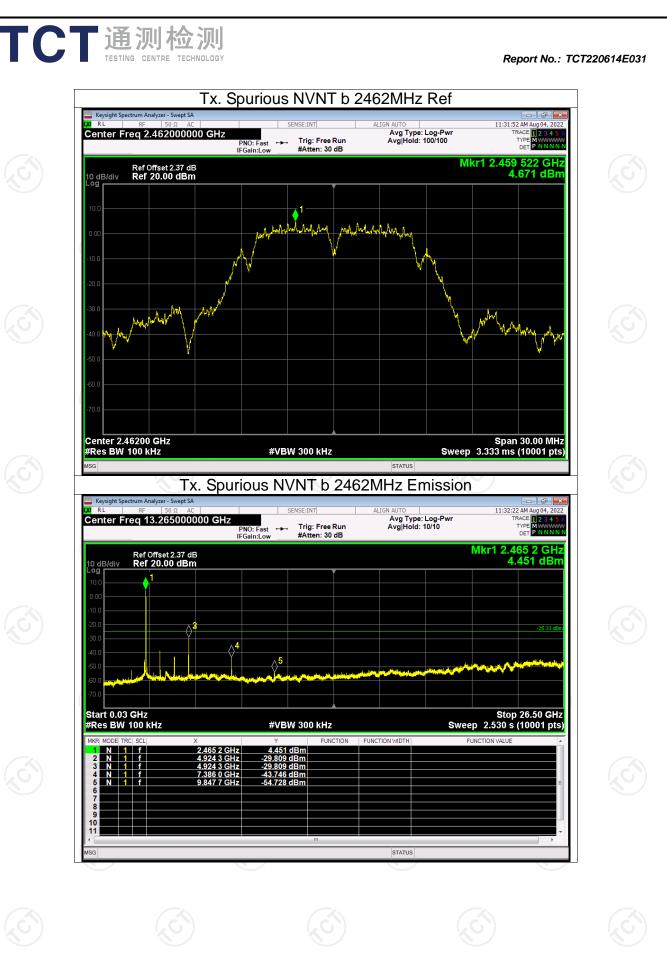
02:59:49 PM Aug 04, 2022 TRACE 1 2 3 4 5 6 TYPE MWWWW DET PNNNN

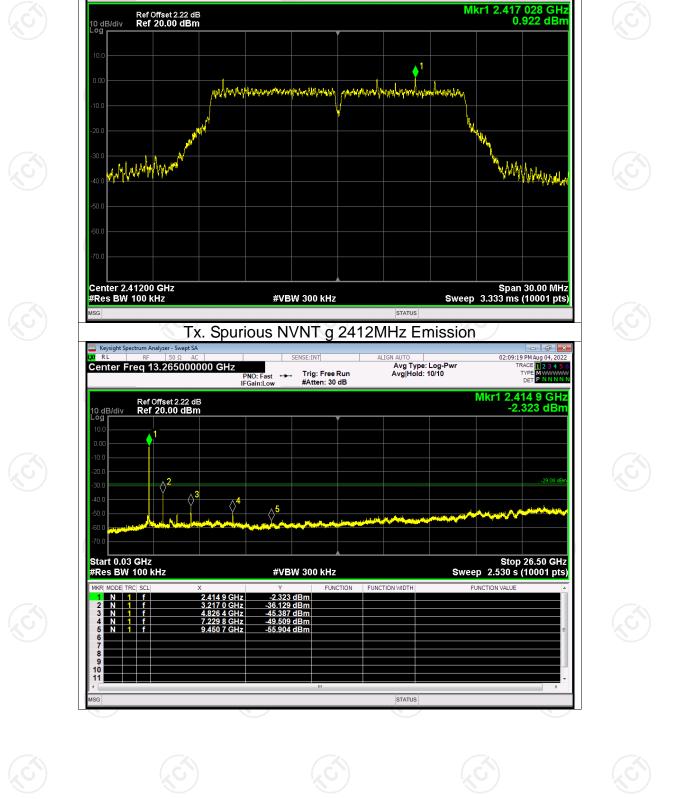
Mkr1 2.409 045 GHz 4.173 dBm

Page 64 of 82



Page 65 of 82





Tx. Spurious NVNT g 2412MHz Ref

Trig: Free Run #Atten: 30 dB

PNO: Fast ↔→ IFGain:Low

Avg Type: Log-Pwr Avg|Hold: 100/100

TCT通测检测 TESTING CENTRE TECHNOLOGY

🔤 Keysight Sp

Center Freg 2.412000000 GHz

KI RL

Report No.: TCT220614E031

02:08:51 PM Aug 04, 2022 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N

TYPE DET

Page 67 of 82

Center 2.43700 GHz #Res BW 100 kHz Span 30.00 MHz Sweep 3.333 ms (10001 pts) #VBW 300 kHz STATUS

Tx. Spurious NVNT g 2437MHz Emission m Analyzer - Swept SA

Fax: 86-755-27673332

Page 68 of 82

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PNO: Fast ↔→ IFGain:Low

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MUMAN

Tx. Spurious NVNT g 2437MHz Ref

Trig: Free Run #Atten: 30 dB

Avg Type: Log-Pwr Avg|Hold: 100/100

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Report No.: TCT220614E031

02:12:21 PM Aug 04, 2022 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N

Mkr1 2.432 017 GHz 1.443 dBm

WMMM MM

🔤 Keysight Sp

10 dB/div Loa

Keysight Spe U RL

Center Freg 2.437000000 GHz

with my physical and an

Ref Offset 2.31 dB Ref 20.00 dBm

KI RL

Hotline: 400-6611-140 Tel: 86-755-27673339

Tx. Spurious NVNT g 2462MHz Ref 🔤 Keysight Sp 19:25 PM Aug 04, 2022 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N KI RL Avg Type: Log-Pwr Avg|Hold: 100/100 Center Freg 2.462000000 GHz Trig: Free Run #Atten: 30 dB PNO: Fast ↔→ IFGain:Low Mkr1 2.455 781 GHz 0.461 dBm Ref Offset 2.37 dB Ref 20.00 dBm 10 dB/div Loa 1 mannon mountainternation ++++++ 1 MMM W MANNIN Center 2.46200 GHz #Res BW 100 kHz Span 30.00 MHz Sweep 3.333 ms (10001 pts) #VBW 300 kHz STATUS

TCT通测检测 TESTING CENTRE TECHNOLOGY

Tx. Spurious NVNT n20 2412MHz Ref

Trig: Free Run #Atten: 30 dB

PNO: Fast ↔→ IFGain:Low

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Avg Type: Log-Pwr Avg|Hold: 100/100

TCT通测检测 TESTING CENTRE TECHNOLOGY

🔤 Keysight Sp KI RL

10 dB/div Loa

Center Freg 2.412000000 GHz

Ref Offset 2.22 dB Ref 20.00 dBm

Report No.: TCT220614E031

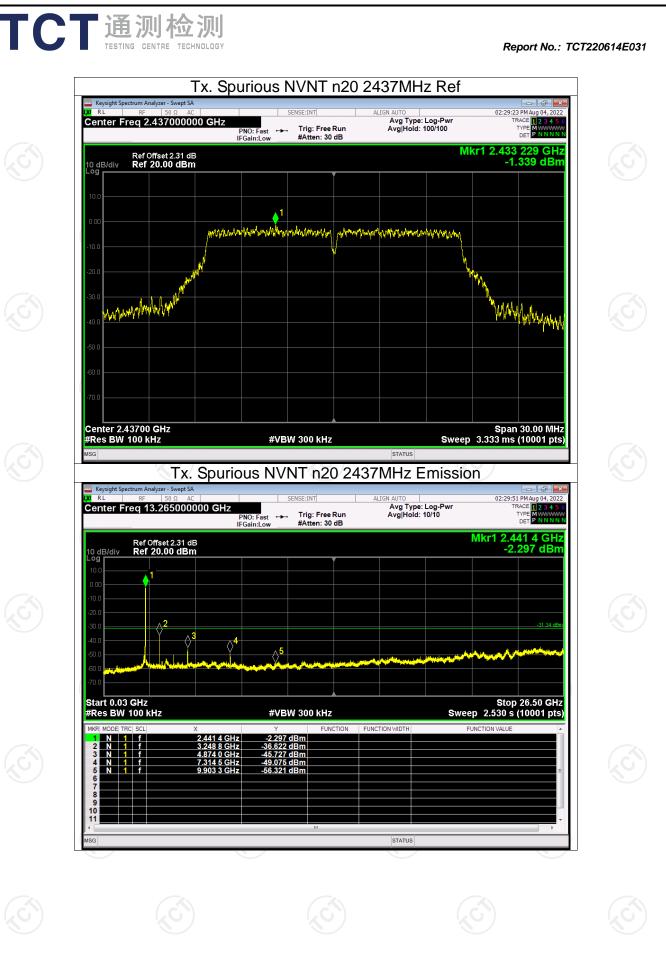
:23:47 PM Aug 04, 2022

TRACE 1 2 3 4 TYPE MWWW DET P NNN

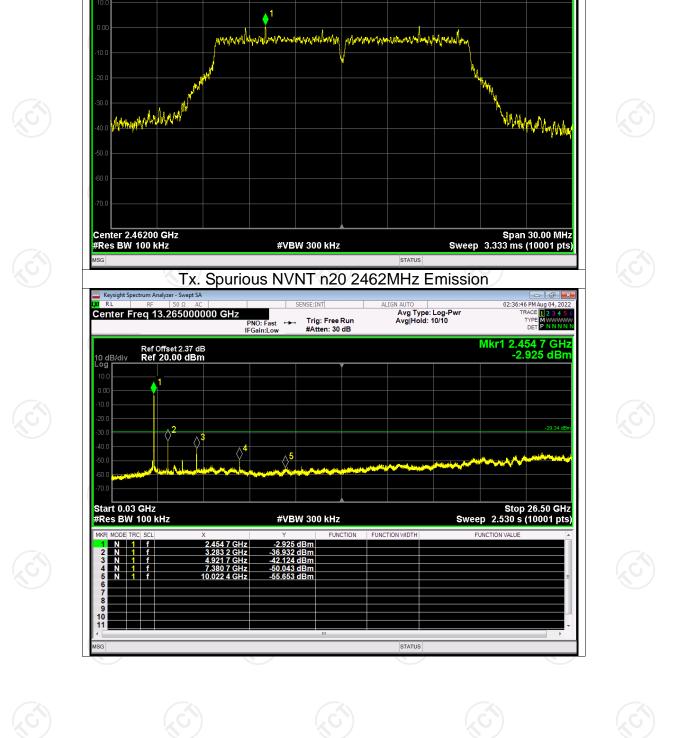
TYPE DET

Mkr1 2.404 545 GHz 0.922 dBm

Page 70 of 82



Page 71 of 82



Tx. Spurious NVNT n20 2462MHz Ref

Trig: Free Run #Atten: 30 dB

PNO: Fast ↔→ IFGain:Low Avg Type: Log-Pwr Avg|Hold: 100/100

TCT通测检测 TESTING CENTRE TECHNOLOGY

🔤 Keysight S

10 dB/div Loa

Center Freg 2.462000000 GHz

Ref Offset 2.37 dB Ref 20.00 dBm

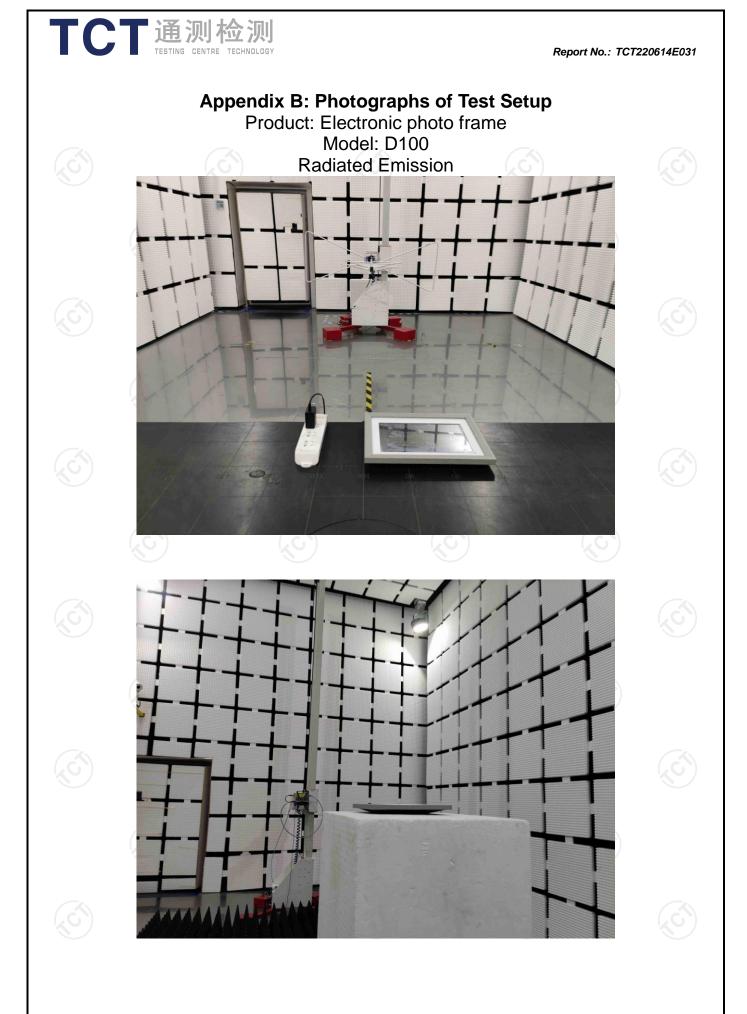
KI RL

Report No.: TCT220614E031

36:16 PM Aug 04, 2022 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N

Mkr1 2.457 050 GHz 0.665 dBm

Page 72 of 82



Page 73 of 82

