TCT通测检测 TESTING CENTRE TECHNOLOGY			
	TEST REPOR	Т	
FCC ID :	2AQRM-A65L		
Test Report No:	TCT241008E053		
Date of issue:	Nov. 20, 2024		
Testing laboratory:	SHENZHEN TONGCE TESTING	G LAB	
Testing location/ address:	2101 & 2201, Zhenchang Factor Subdistrict, Bao'an District, Sher People's Republic of China	ry Renshan Industrial Zone, Fuhai nzhen, Guangdong, 518103,	
Applicant's name: :	FOXX Development Inc.		
Address:	3480 Preston Ridge Road, Suite	500, Alpharetta, GA 30005, USA	
Manufacturer's name :	FOXX Development Inc.		
Address:	3480 Preston Ridge Road, Suite	500, Alpharetta, GA 30005, USA	
Standard(s):	FCC CFR Title 47 Part 15 Subpart C Section 15.247 FCC KDB 558074 D01 15.247 Meas Guidance v05r02 ANSI C63.10:2020		
Product Name::	Smart Phone		
Trade Mark :	FOXXD, FOXX, MIRO		
Model/Type reference :	A65L		
Rating(s):	Rechargeable Li-ion Battery DC 4.35V Power Adapter: Model: Foxx-11 Input: AC 100-240V, 50/60Hz, 0.3A Output: DC 5V, 1000mA		
Date of receipt of test item	Oct. 08, 2024		
Date (s) of performance of test:	Oct. 08, 2024 ~ Nov. 18, 2024		
Tested by (+signature) :	Rleo LIU	Pres Un TONGCE TE	
Check by (+signature) :	Beryl ZHAO	Boy 20 TCT	
Approved by (+signature):	Tomsin	Tomsm 45 34	
	• • • •	e written approval of SHENZHEN revised by SHENZHEN TONGCE	

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1. General Product Information

1.1. EUT description

Product Name:	Smart Phone	
Model/Type reference:	A65L	S
Sample Number	TCT241008E051-0101	
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)	$\langle \mathcal{O} \rangle$
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, 3 48Mbps, 54Mbps 802.11n: Up to 150Mbps	6Mbps,
Antenna Type:	PIFA Antenna	S
Antenna Gain:	-1.45dBi	
Rating(s):	Rechargeable Li-ion Battery DC 4.35V Power Adapter: Model: Foxx-11 Input: AC 100-240V, 50/60Hz, 0.3A Output: DC 5V, 1000mA	

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.

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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
N	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





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 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.

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3. General Information

3.1. Test environment and mode

Operating Environment:		
Condition	Conducted Emission	Radiated Emission
Temperature:	24.8 °C	25.1 °C
Humidity:	51 % RH	50 % RH
Atmospheric Pressure:	1010 mbar	1010 mbar
Test Software:		
Software Information:	Engineering mode	
Power Level:	Default	
Test Mode:		
	Keep the EUT in continuous	transmitting by select
above the ground plane of 3 polarities were performed. the EUT continuously work axis (X, Y & Z) and con manipulating interconnectir	channel and modulations wi .8m & 1.5m for the measure 3m chamber. Measurements in During the test, each emission king, investigated all operating nsidered typical configuration ng cables, rotating the turnta	th Fully-charged battery. ment below & above 1GHz h both horizontal and vertical h was maximized by: having modes, rotated about all 3 h to obtain worst position, ble, varying antenna height
The sample was placed 0 above the ground plane of 3 polarities were performed. the EUT continuously work axis (X, Y & Z) and con manipulating interconnectin from 1m to 4m in both horiz	channel and modulations wi .8m & 1.5m for the measure 3m chamber. Measurements in During the test, each emission king, investigated all operating nsidered typical configuration	th Fully-charged battery. ment below & above 1GHz h both horizontal and vertical h was maximized by: having modes, rotated about all 3 h to obtain worst position, ble, varying antenna height
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The sample was placed 0 above the ground plane of 3 polarities were performed. the EUT continuously work axis (X, Y & Z) and con manipulating interconnectin from 1m to 4m in both horiz (Z axis) are shown in Test F We have verified the constr were carried out with the EU report and defined as follow Per-scan all kind of data r was worst case. Mode 802.11b	channel and modulations wi .8m & 1.5m for the measure 3m chamber. Measurements in During the test, each emission king, investigated all operating insidered typical configuration and vertical configuration contal and vertical polarizations Results of the following pages.	th Fully-charged battery. ment below & above 1GHz h both horizontal and vertical n was maximized by: having modes, rotated about all 3 h to obtain worst position, ble, varying antenna height s. The emissions worst-case operation. All the test modes hich was shown in this test bund the follow list which it Data rate 1Mbps



3.2. Description of Support Units

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

Equipment	Model No.	Serial No.	FCC ID	Trade Name
1	1	1	1	1
$(\mathbf{z}\mathbf{O}^{*})$	201		(°)	$(\mathcal{A}\mathcal{O})$

Note:

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





4. Facilities and Accreditations

4.1. Facilities

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

• FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

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

- IC Registration No.: 10668A
 - SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

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

4.2. Location

SHENZHEN TONGCE TESTING LAB

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

4.3. Measurement Uncertainty

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

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



Test Results and Measurement Data 5.

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 antenna is PIFA antenna which permanently attached, and the best case gain of the antenna is -1.45dBi.



11 12 13 14 15 16 17 18 19 21 22 23 24 25 20

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5.2. Conducted Emission

5.2.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.207					
Test Method:	ANSI C63.10:2020	ANSI C63.10:2020				
Frequency Range:	150 kHz to 30 MHz	150 kHz to 30 MHz				
Receiver setup:	RBW=9 kHz, VBW=30	RBW=9 kHz, VBW=30 kHz, Sweep time=auto				
	Frequency range	Limit (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			
	Reference	ce Plane				
Test Setup:	40cm E.U.T AC power Test table/Insulation plane	Filter	r AC power			
Test Mode:	Test table height=0.8m	Remarkc E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m				
	 Charging + Transmitting Mode 1. The E.U.T is connected to the main power through line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50ut coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to the interface cables must be changed according to 					
Test Procedure:	 power through a L coupling impedance refer to the block photographs). 3. Both sides of A.C conducted interfere emission, the relative the interface cable 	ISN that provides with 50ohm tern diagram of the line are checked nce. In order to fin ve positions of equise must be chang	a 50ohm/50uH nination. (Please test setup and ed for maximum nd the maximum ipment and all o jed according to			
Test Procedure:	 power through a L coupling impedance refer to the block photographs). 3. Both sides of A.C conducted interfere emission, the relative conducted interfere emission. 	ISN that provides with 50ohm tern diagram of the line are checked nce. In order to fin ve positions of equise must be chang	a 50ohm/50uH nination. (Please test setup and ed for maximun nd the maximun ipment and all c jed according to			

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5.2.2. Test Instruments

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

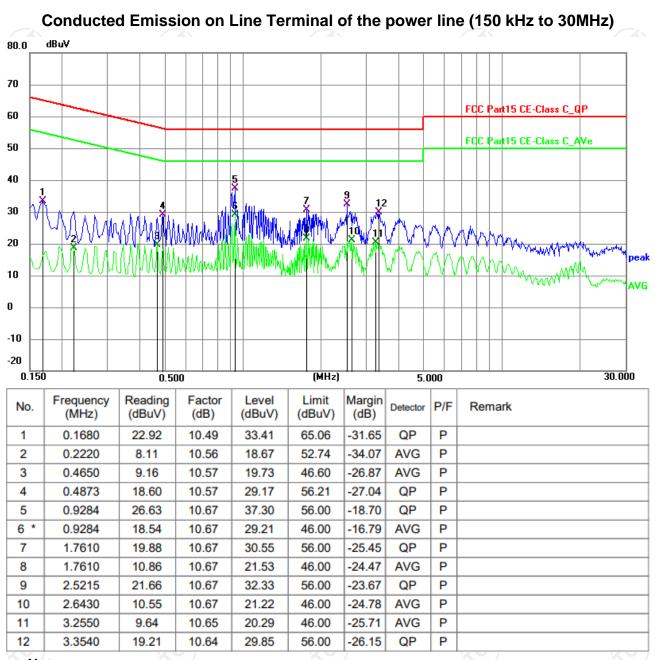


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5.2.3. Test data

Please refer to following diagram for individual

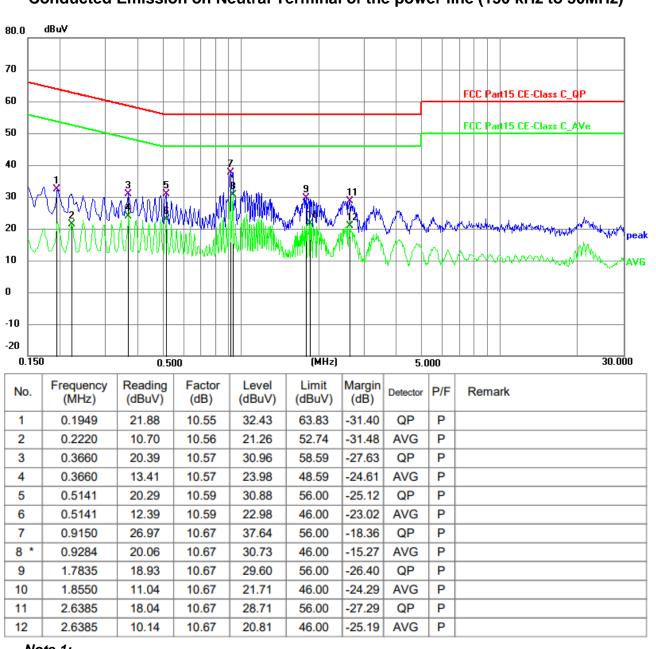


Note:

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.



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

Note 1:

Freq. = Emission frequency in MHz

TCT 通测检测 TESTING CENTRE TECHNOLOGY

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

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

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

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

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

Q.P. =Quasi-Peak

AVG =average

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

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

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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. 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

5.3.2. Test Instruments

Name	Name Manufacturer		Name Manufacturer Model No. Se		Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY50101018	Jun. 26, 2025		
Test Software	TST Pass	γ	/	/		



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:	
Test Mode:	Spectrum Analyzer EUT Transmitting mode with modulation Image: Comparison of the second sec
Test Procedure:	 Set to the maximum power setting and enable the EUT transmit continuously. Make the measurement with the spectrum analyzer' resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth mu be greater than 500 kHz. Measure and record the results in the test report.
Test Result:	PASS

5.4.2. Test Instruments

Name	Manufacturer	Manufacturer Model No. Serial Number		Calibration Due	
Spectrum Analyzer	Agilent	N9020A	MY50101018	Jun. 26, 2025	
Test Software	TST Pass	/			
			<u>{</u> G`}	(\mathcal{G})	



5.5. Power Spectral Density

5.5.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	KDB 558074
Limit:	The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.
Test Setup:	Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	 The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW): 3 kHz ≤ RBW ≤ 100 kHz. Video bandwidth VBW ≥ 3 x RBW. Set the span to at least 1.5 times the OBW. Detector = 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	MY50101018	Jun. 26, 2025		
Test Software	TST Pass			/		

5.6. Conducted Band Edge and Spurious Emission Measurement

5.6.1. Test Specification

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

5.6.2. Test Instruments

Name	Name Manufacturer		ame Manufacturer Model No. Serial Number		Calibration Due	
Spectrum Analyzer	Agilent	N9020A	MY50101018	Jun. 26, 2025		
Test Software	TST Pass	/	/	/		

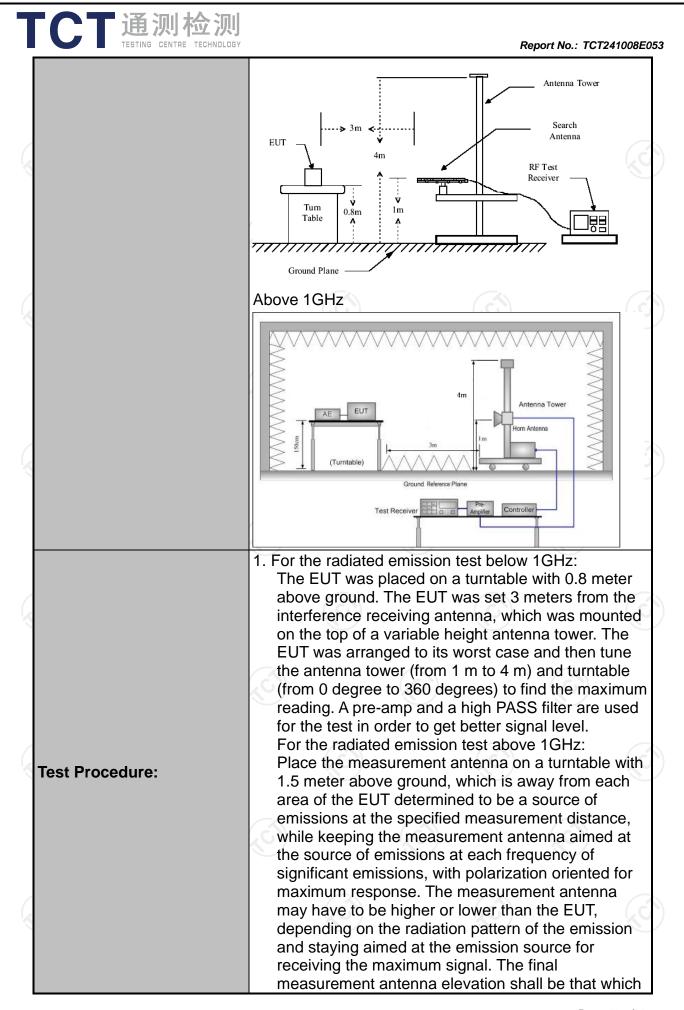
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5.7. Radiated Spurious Emission Measurement

5.7.1. Test Specification

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7.1. Test Specification	(((
Test Requirement:	FCC Part15 C Section 15.209					
Test Method:	ANSI C63.10	0:2020				
Frequency Range:	9 kHz to 25	GHz			Ĉ	6
Measurement Distance:	3 m		Û		C)
Antenna Polarization:	Horizontal &	Vertical				
	Transmitting mode with modulation					
Operation mode:					1	
	Frequency 9kHz- 150kHz	Detecto Quasi-pe		VBW 1kHz		Remark uasi-peak Value
Receiver Setup:	150kHz- 30MHz	Quasi-pe	ak 9kHz	30kHz	Q	uasi-peak Value
	30MHz-1GHz	Quasi-pe	ak 120KHz	300KHz	Q	uasi-peak Value
	Above 1GHz	Peak Peak	1MHz 1MHz	3MHz 10Hz		eak Value erage Value
	Frequer	псу	Field Stre (microvolts	•	Measurement Distance (meters)	
Limit:	0.009-0.490		2400/F(KHz)		300	
	0.490-1.705		24000/F(KHz)		30	
	1.705-30		30		30	
	<u>30-88</u> 88-216		100 150		3	
	216-960		200		3	
Linint.	Above 960		500			3
	Frequency	(mic	Field Strength (microvolts/meter) 500		ment ce rs)	Detector
	Above 1GHz		5000	3		Peak
	For radiated	emission	ns below 30)MHz	Compu	ter
Test setup:	EUT 0.8m Turn table Receiver					
	30MHz to 10		ind Plane	L		1
		21 IL				
						Page 18 of



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	 maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported. Use the following spectrum analyzer settings: Span shall wide enough to fully capture the emission being measured; Set RBW=120 kHz for f < 1 GHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace =
Test results:	 max hold; (3) Set RBW = 1 MHz, VBW= 3MHz for f >1 GHz for peak measurement. For average measurement: VBW = 10 Hz, when duty cycle is no less than 98 percent. VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

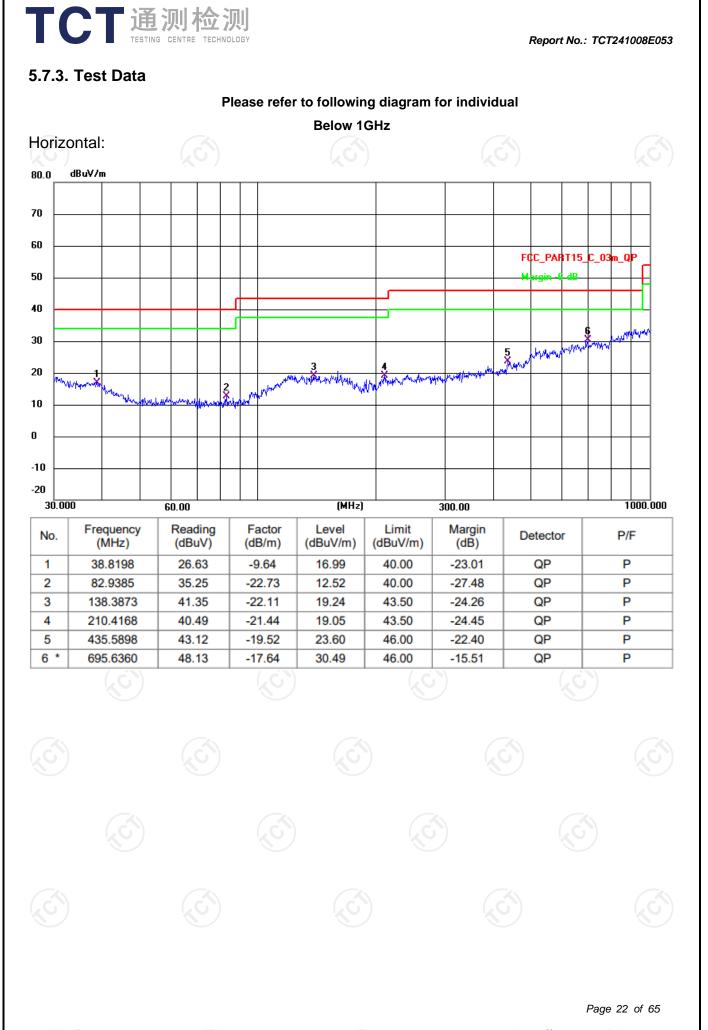


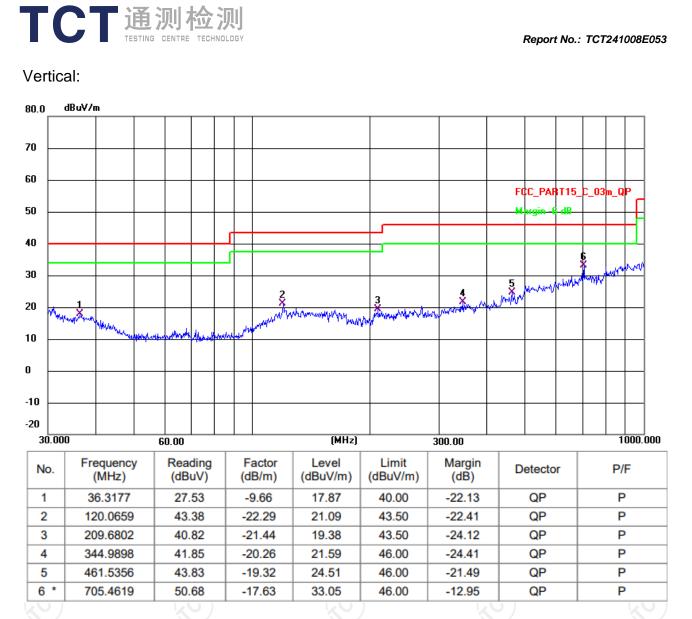
5.7.2. Test Instruments

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

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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 (Highest channel and 802.11b) was submitted only.

3. Freq. = Emission frequency in MHz

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

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.

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Test Result of Radiated Spurious at Band edges
Test Mode: 802 11n(HT20)

Test Mode: 802.11n(HT20)								
Test Channel: Lowest channel, Test Polarization: Vertical								
Frequency	Reading	Factor	Level	Limit	Marging	Detector	Result	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)			
2310	66.92	-16.45	50.47	74	-23.53	Peak	Pass	
2390	65.8	-15.86	49.94	74	-24.06	Peak	Pass	
2400	66.93	-15.82	51.11	74	-22.89	Peak	Pass	
	Test Chan	nel: Low	est channel,	Test Polariz	ation: Hori	izontal		
Frequency	Reading	Factor	Level	Limit	Marging Detector		Result	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)			
2310	67.24	-16.45	50.79	74	74 -23.21		Pass	
2390 🔇	0 66.12 -15.8		50.26	74	-23.74	Peak	Pass	
2400	67.25	-15.82	51.43	74	-22.57	Peak	Pass	
	Test Cha	nnel: Hig	hest channe	l, Test Polar	ization: Ve	ertical		
Frequency	Reading	Factor	Level	Limit	Marging	Detector	Result	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)			
2483.5	68.3	-16.6	51.7	74	-22.3	Peak	Pass	
2500	66.58	-16.45	50.13	74	-23.87	Peak	Pass	
	Test Chan	nel: High	est channel,	Test Polariz	zation: Hor	izontal		
Frequency	Reading	Factor	Level	Limit	Marging	Detector	Result	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)			
2483.5	68.12	-16.6	51.52	74	-22.48	Peak	Pass	
2500	66.19	-16.45	49.74	74	-24.26	Peak	Pass	
		0						

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 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.

Above 1GHz Modulation Type: 802.11b

			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	58.13		-9.48	48.65		74	54	-5.35
7236	Н	49.15		-1.34	47.81		74	54	-6.19
	Н								
4824	V	58.22	(-9.48	48.74	×	74	54	-5.26
7236	V	50.36		-1.34	49.02	(j`)	74	54	-4.98
	V				7				

			Μ	iddle chann	nel: 2437MH	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	59.21		-9.37	49.84		74	54	-4.16
7311	Н	49.59		-1.17	48.42		74	54	-5.58
	H				(
	N.		Ň		X				
4874	V	57.10		-9.37	47.73		74	54	-6.27
7311	V	49.11		-1.17	47.94		74	54	-6.06
	V			/	2				<u> </u>
				(.0					

			H	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	57.31		-9.26	48.05	G)	74	54	-5.95
7386	E	48.68		-1.01	47.67 🤇		74	54	-6.33
	Н								
4924	V	59.20		-9.26	49.94		74	54	-4.06
7386	V	48.53		-1.01	47.52		74	54	-6.48
	V						· · · ·		

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.

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TC		刻枪 NG CENTRE TEC					Repo	ort No.: TCT2	41008E053
			M	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	59.02		-9.48	49.54		74	54	-4.46
7236	Н	48.61		-1.34	47.27		74	54	-6.73
	Н			Ű	J				
4824	V	59.47		-9.48	49.99		74	54	-4.01
7236	V	49.71		-1.34	48.37		74	54	-5.63
	V)		5			

			M	iddle chanr	el: 2437MF	Ιz			
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	58.08		-9.37	48.71		74	54	-5.29
7311	Н	49.42		-1.17	48.25		74	54	-5.75
	H								
			(.6)		(
4874	V	56.18		-9.37	46.81	<u> </u>	74	54	-7.19
7311	V	47.80		-1.17	46.63		74	54	-7.37
	V								

	$(\mathcal{A}\mathcal{O})$	High channel: 2462 MHz				$\langle \mathcal{G} \rangle$	$(\mathbf{x}\mathbf{G}^{*})$	
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)
H	56.81	()	-9.26	47.55	·	74	54	-6.45
(H)	47.79	1 , C	-1.01	46.78	G`}	74	54	-7.22
F				~	<u> </u>			
V	58.61		-9.26	49.35		74	54	-4.65
V	48.84		-1.01	47.83		74	54	-6.17
V	× ×		🔨	· /		\sim \neq		
	H/V H H H V V	Ant. Pol. reading (dBµV) H 56.81 H 47.79 H V 58.61 V 48.84	Ant. Pol. H/V Peak reading (dBμV) AV reading (dBμV) H 56.81 H 47.79 H V 58.61 V 48.84	Ant. Pol. H/V Peak reading (dBµV) AV reading (dBµV) Correction Factor (dB/m) H 56.81 -9.26 H 47.79 -1.01 H V 58.61 -9.26 V 48.84 -9.26	Ant. Pol. H/V Peak reading (dBµV) AV reading (dBµV) Correction Factor (dB/m) Emission Peak (dBµV/m) H 56.81 -9.26 47.55 H 47.79 -1.01 46.78 H V 58.61 -9.26 49.35 V 48.84 -1.01 47.83	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

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.

TC		的加松					Repo	ort No.: TCT2	41008E053
			Modu	lation Type	: 802.11n(H	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	57.95		-9.48	48.47		74	54	-5.53
7236	Н	47.88		-1.34	46.54		74	54	-7.46
	Н			Ú)		<u> </u>		
4824	V	57.76		-9.48	48.28		74	54	-5.72
7236	V	47.73		-1.34	46.39		74	54	-7.61
	V)		0)			

			Μ	iddle chann	nel: 2437MF	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	57.67		-9.37	48.30		74	54	-5.70
7311	Н	48.11		-1.17	46.94		74	54	-7.06
	H								
			(.c.		(.				
4874	V	56.29		-9.37	43.38	<u> </u>	74	54	-10.62
7311	V	47.75		-1.17	43.04		74	54	-10.96
	V								

(\mathcal{G})		(G)	H	ligh channe	el: 2462 MH	(\mathbf{G})	(\mathcal{G})		
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)		Correction		n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4924	H	57.57		-9.26	48.31	×	74	54	-5.69
7386	H)	49.56	(_C	-1.01	48.55	G`}	74	54	-5.45
	Ŧ				~	<u> </u>			
4924	V	57.23		-9.26	47.97		74	54	-6.03
7386	V	48.61		-1.01	47.60		74	54	-6.40
	V			%	/		<u> </u>		

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.

Appendix A: Test Result of Conducted Test

1. Duty Cycle

TCT 通测检测 TESTING CENTRE TECHNOLOGY

1.1 Test Result

1.1.1 Ant1

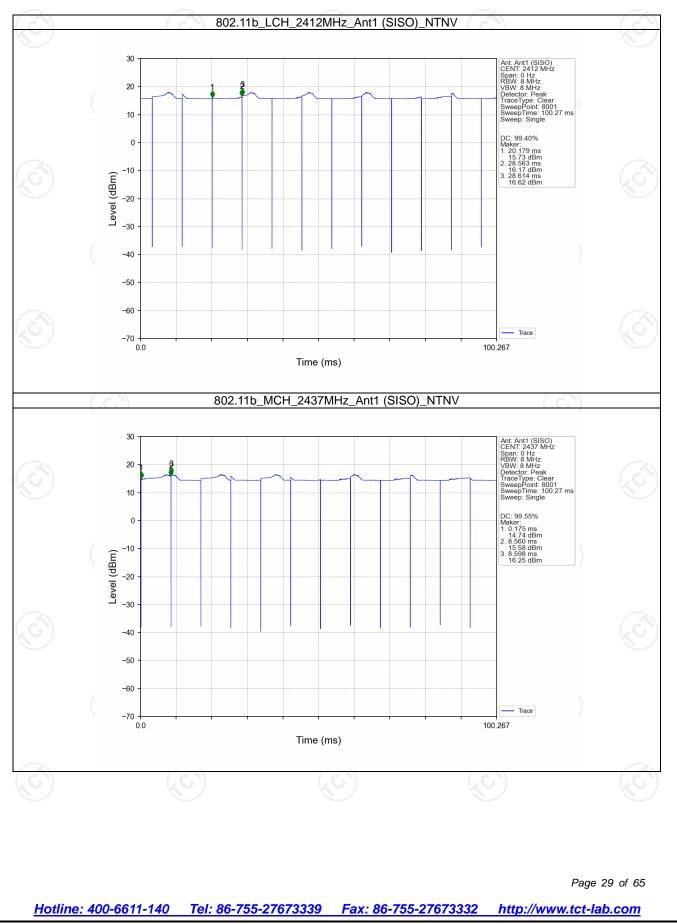
				A	nt1		
Mode	ТХ Туре	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
		2412	8.384	8.435	99.40	0.03	0.30
802.11b	SISO	2437	8.385	8.423	99.55	0.02	0.00
		2462	8.385	8.422	99.56	0.02	0.00
		2412	1.394	1.454	95.87	0.18	1.82
802.11g	SISO	2437	1.392	1.443	96.47	0.16	1.18
		2462	1.396	1.454	96.01	0.18	1.96
000 11 m		2412	1.301	1.352	96.23	0.17	1.30
802.11n	SISO	2437	1.301	1.353	96.16	0.17	1.43
(HT20)		2462	1.302	1.361	95.66	0.19	1.94
	(\mathcal{G})			•)	5		G)

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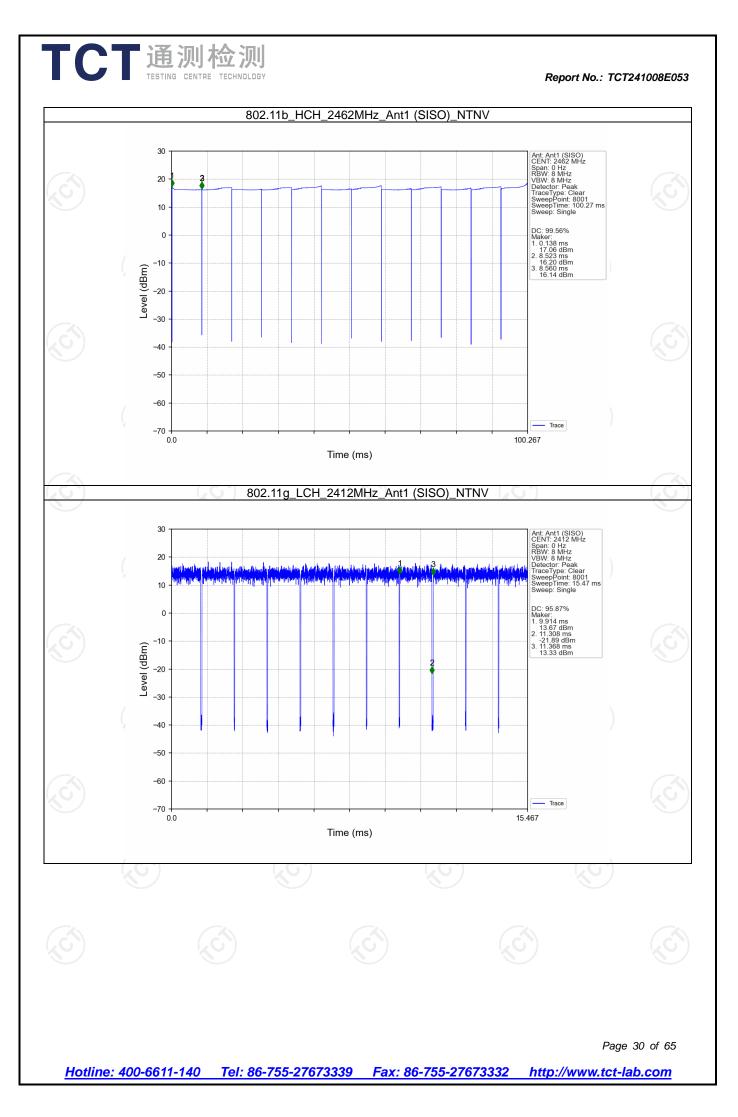


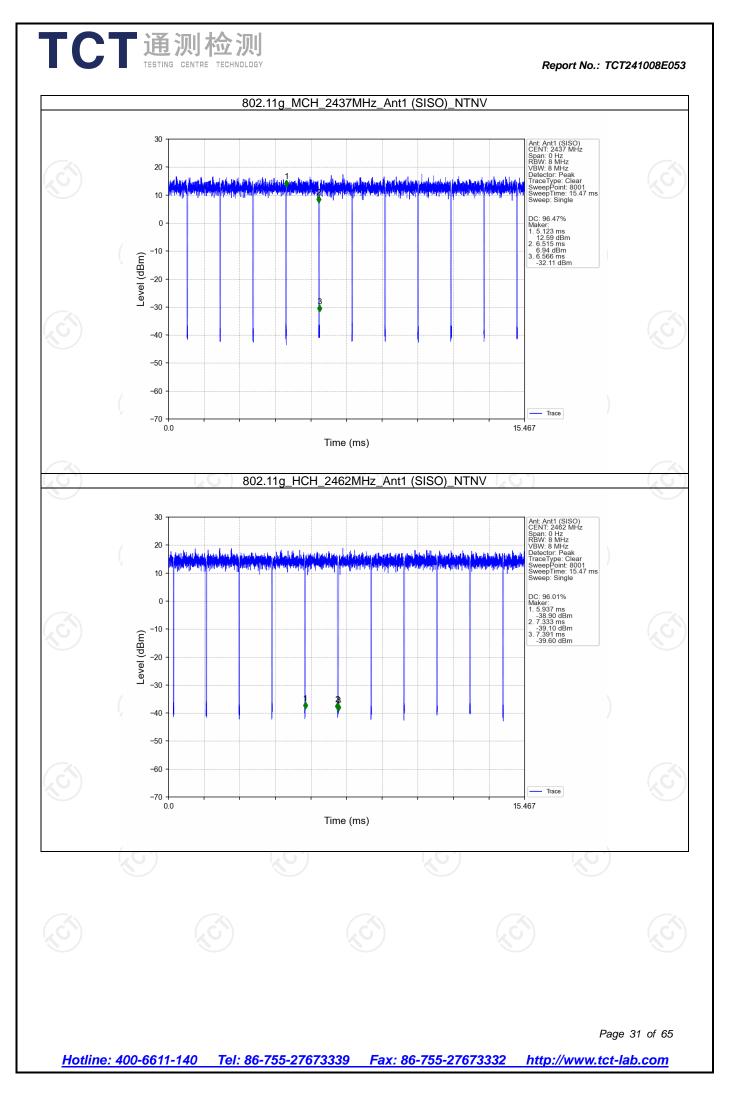
1.2 Test Graph

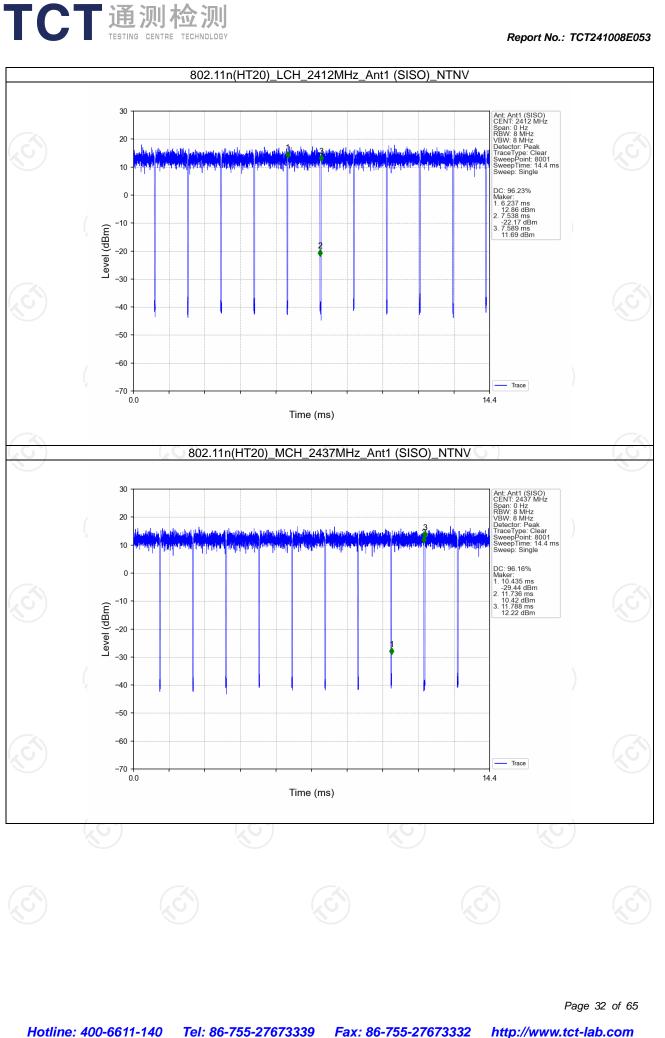
1.2.1 Ant1



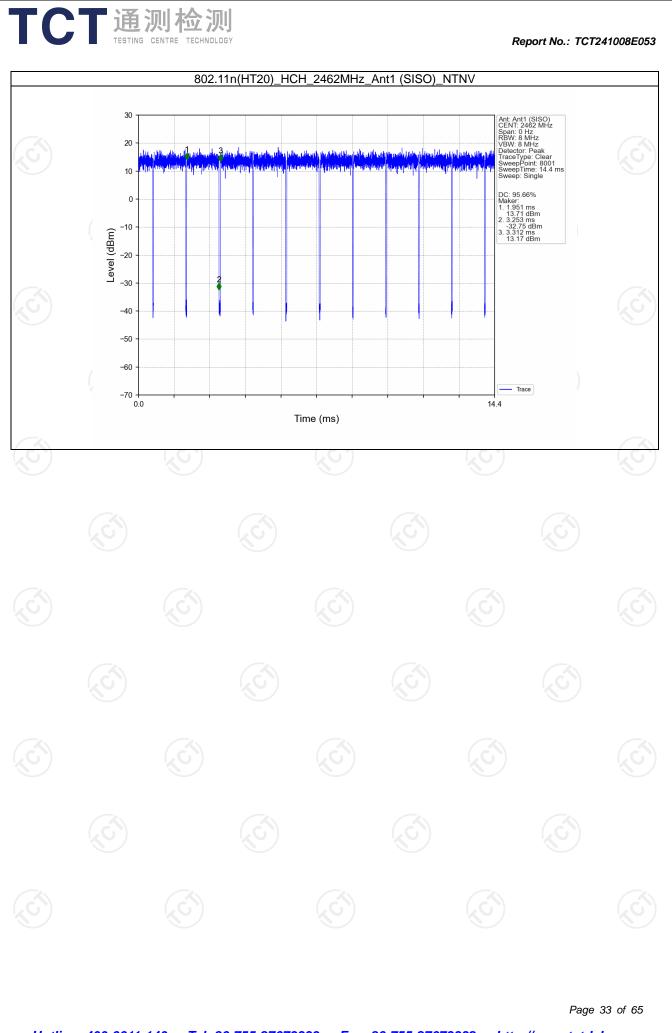
Report No.: TCT241008E053







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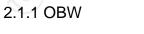


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2. Bandwidth

2.1 Test Result

TCT通测检测 TESTING CENTRE TECHNOLOGY



Mada	TX	Frequency		99% Occupie	d Bandwidth (MHz)	\ / a nali at
Mode	Туре	(MHz)	ANT	Result	Limit	Verdict
		2412	1	12.010	/ 20/	Pass
802.11b SISO	2437	1	12.019	/	Pass	
	2462	1	12.005	/	Pass	
		2412	1	17.904	/	Pass
802.11g	SISO	2437	1	18.136		Pass
G`)		2462	1	18.074		Pass
000.11.		2412	1	18.632	/	Pass
802.11n (HT20)	SISO	2437	1	18.866	/	Pass
		2462	1	18.770	/	Pass

2.1.2 6dB BW

Mode	TX	Frequency	ANT	6dB Band	lwidth (MHz)	Verdict
Mode	Туре	(MHz)	ANT	Result	Limit	verdict
		2412	1	9.280	>=0.5	Pass
802.11b	SISO	2437		9.323	>=0.5	Pass Pass
		2462	1	9.312	>=0.5	
		2412	1	16.675	>=0.5	Pass
802.11g	SISO	2437	1	16.927	>=0.5	Pass
		2462	1	16.944	>=0.5	Pass
000.44 m	$\langle O \rangle$	2412	1	17.764	>=0.5	Pass
802.11n (HT20)	SISO	2437	1	17.872	>=0.5	Pass
		2462	1	17.878	>=0.5	Pass

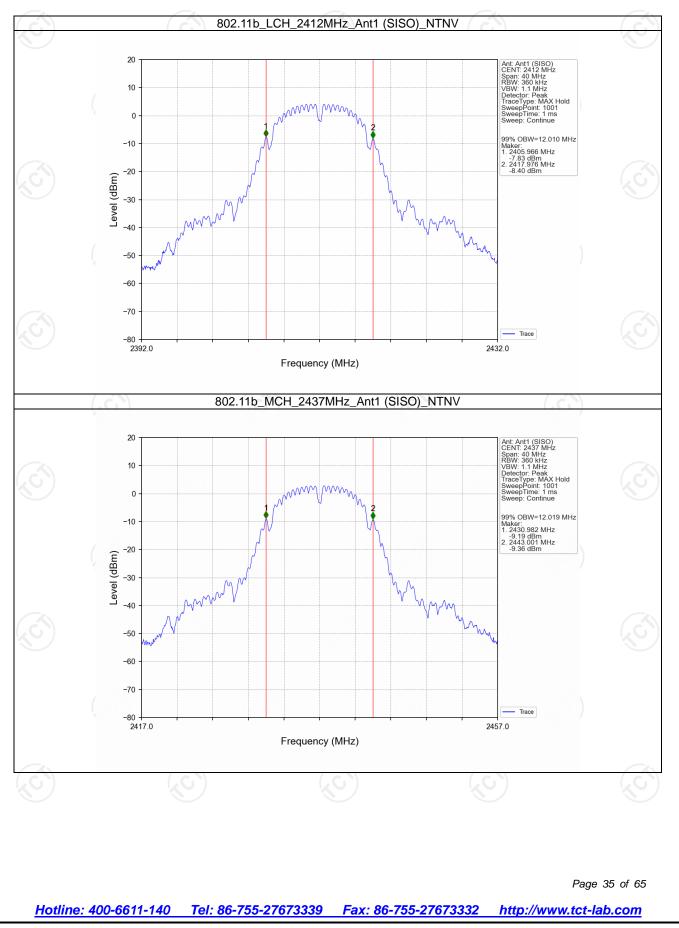
Report No.: TCT241008E053

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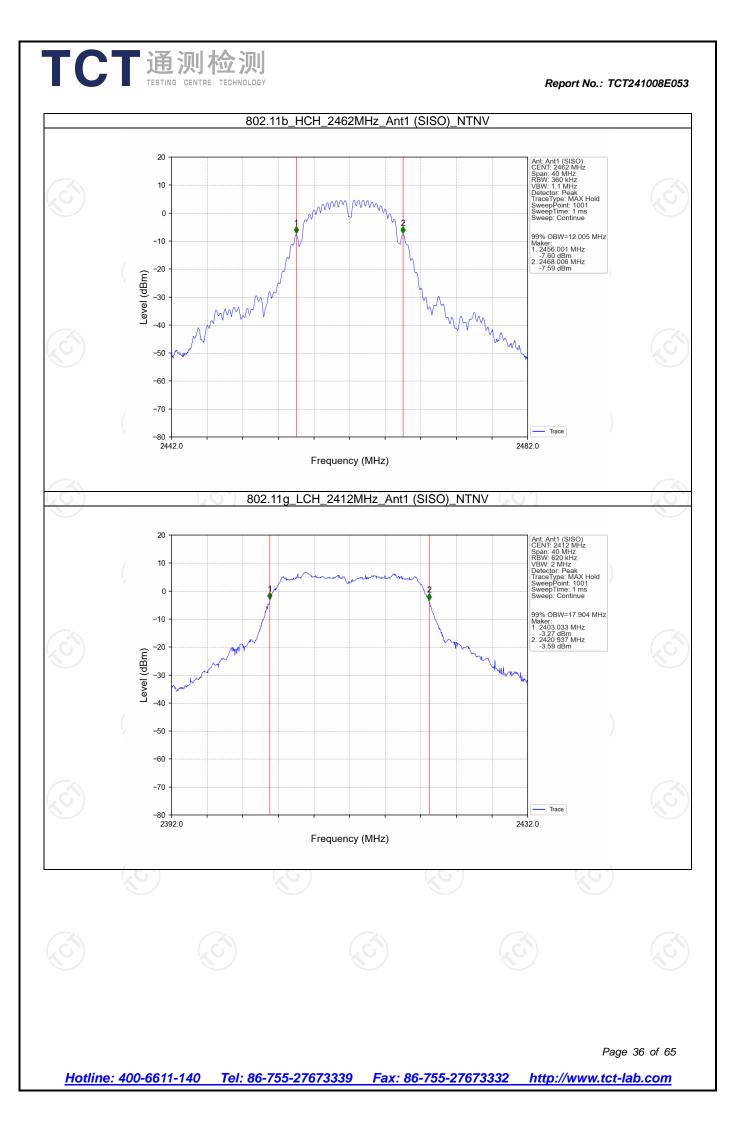


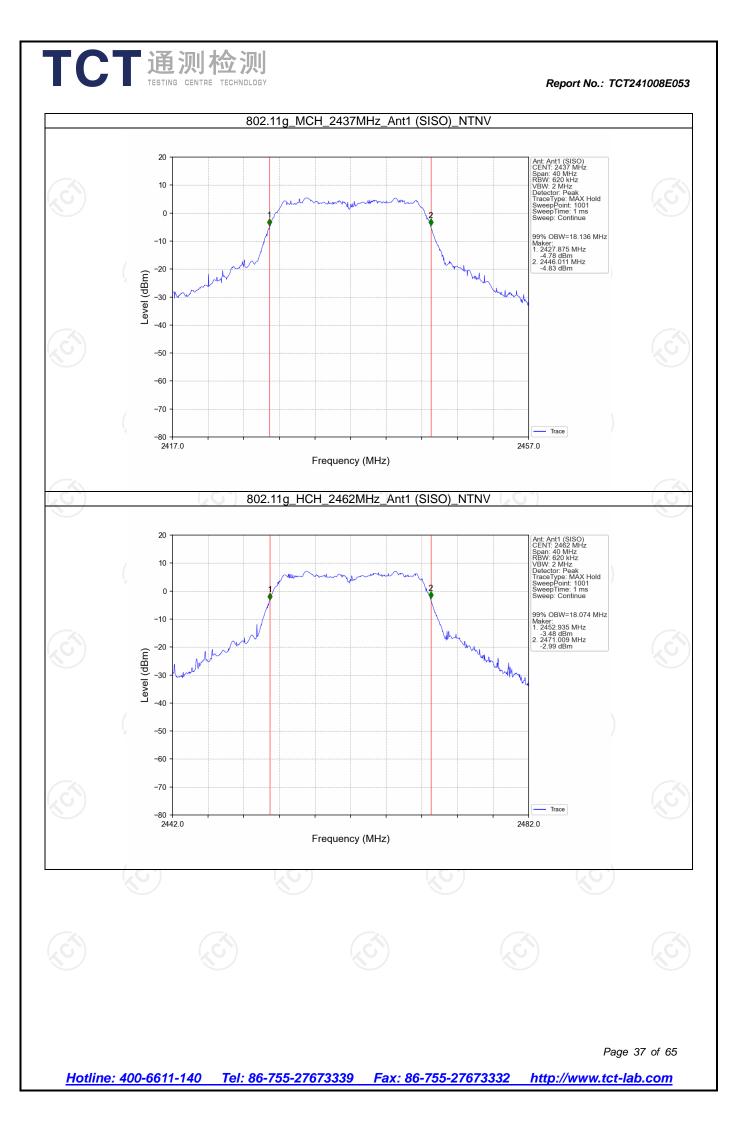
2.2 Test Graph

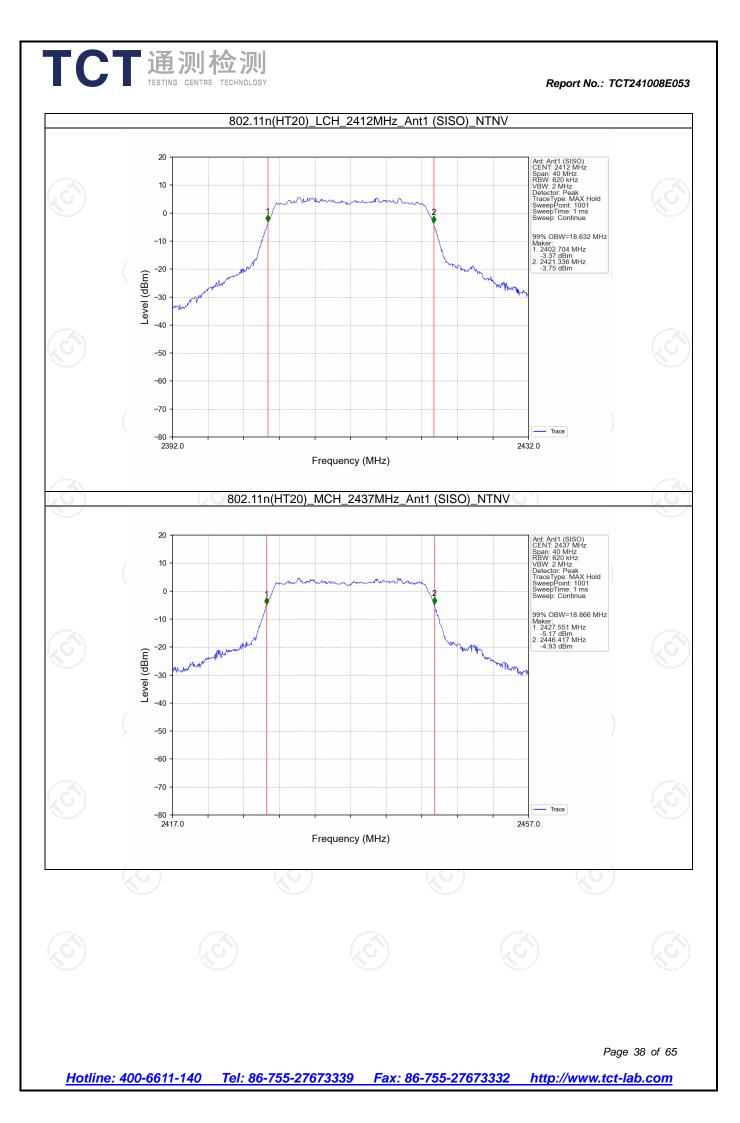
2.2.1 OBW

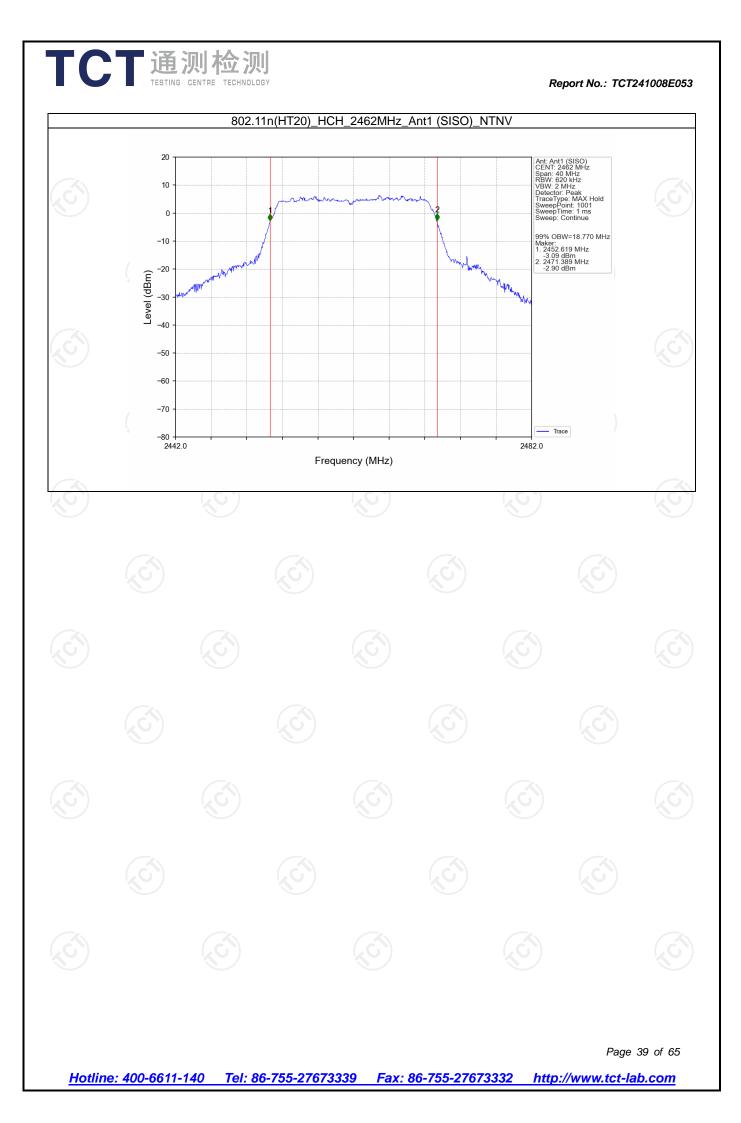


Report No.: TCT241008E053





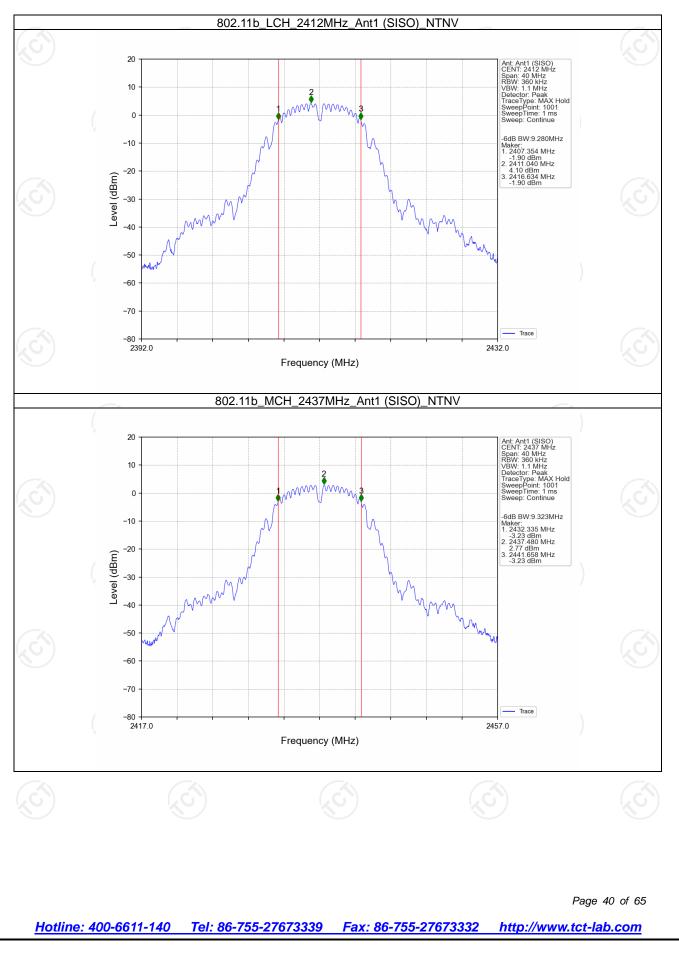


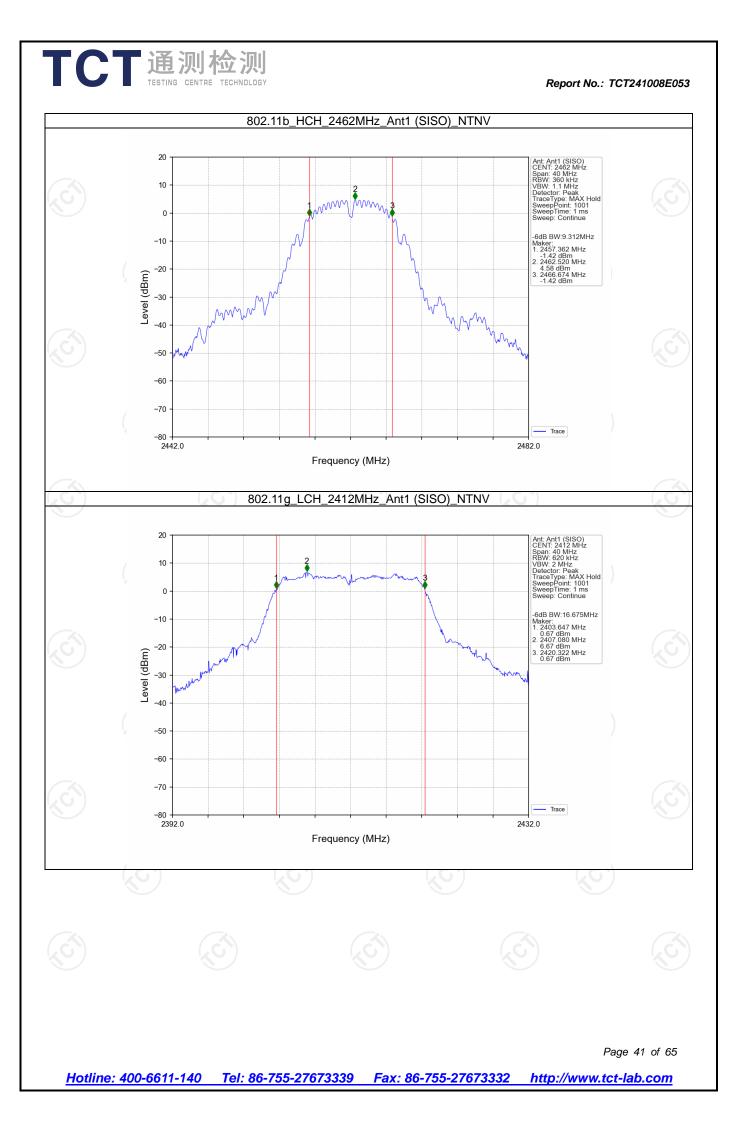


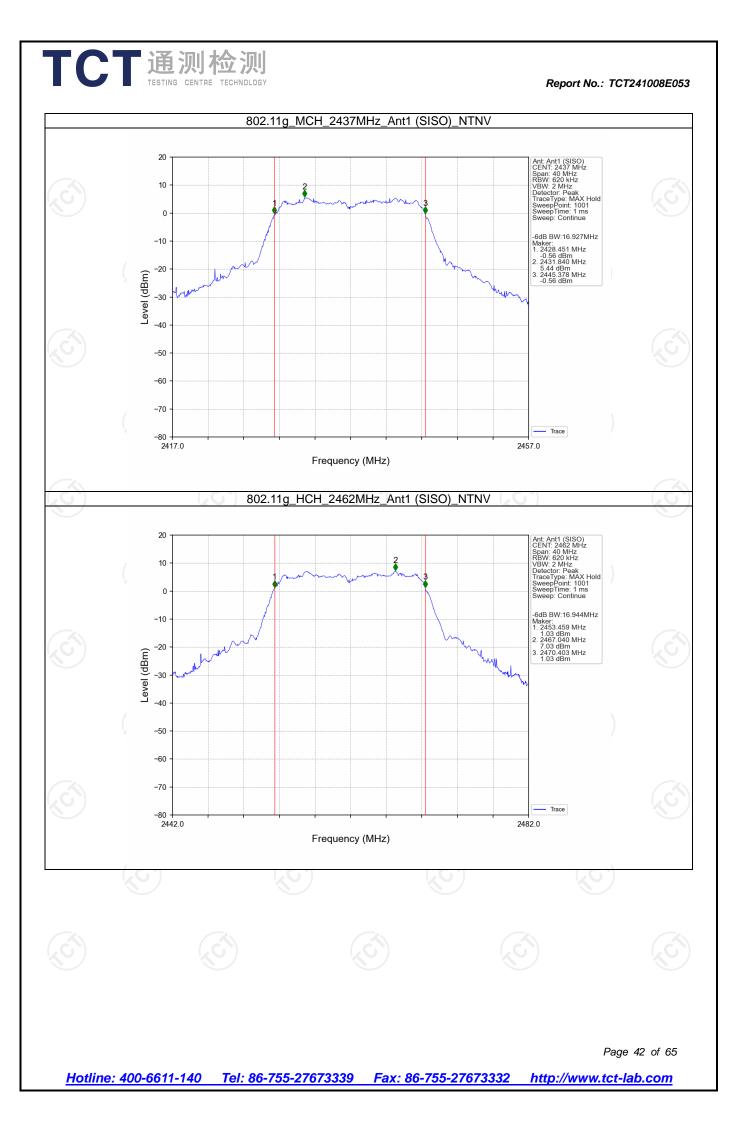


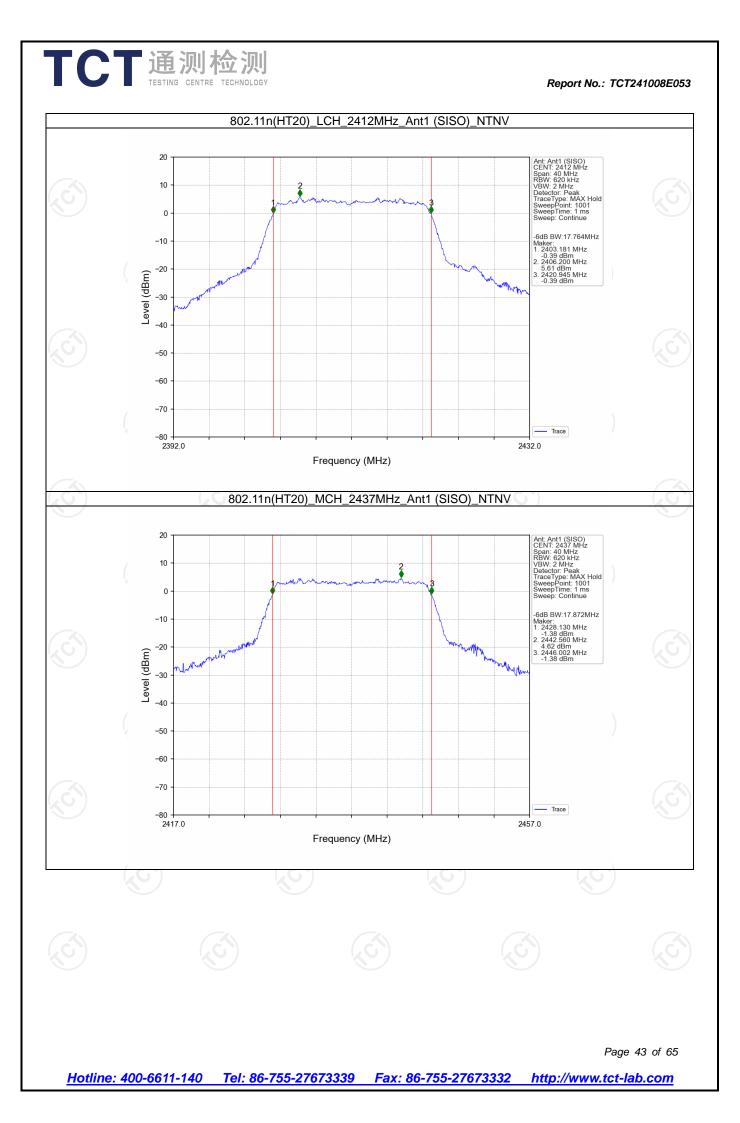
Report No.: TCT241008E053

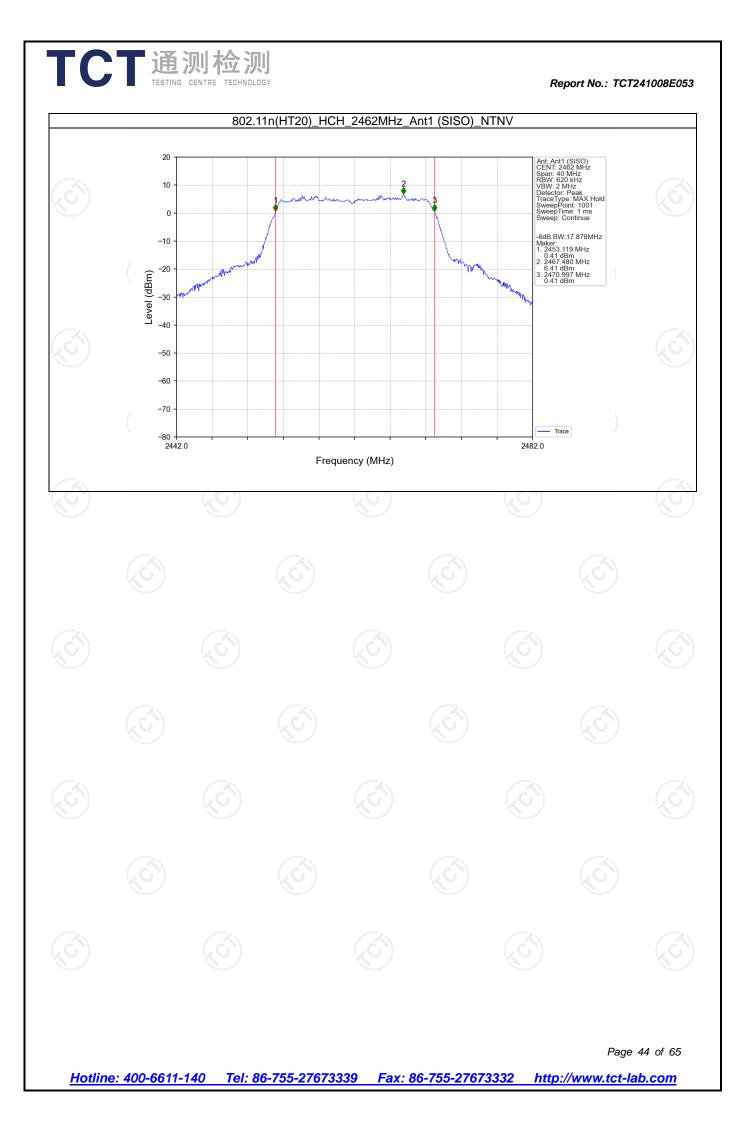
2.2.2 6dB BW













3. Maximum Conducted Output Power

TCT 通测检测 TESTING CENTRE TECHNOLOGY

3.1 Test Result

3.1.1 Power

Mode	TX	Frequency	Maximum Average Conducted Output Power (dBm)		Verdiet
	Туре		ANT1	Limit	Verdict
802.11b	SISO	2412	12.50	<=30	Pass
		2437	11.22	<=30	Pass
		2462	13.02	<=30	Pass
802.11g	SISO	2412	11.85	<=30	Pass
		2437	10.80	<=30	Pass
		2462	12.40	<=30	Pass 🔾
802.11n (HT20)	SISO	2412	11.13	<=30	Pass
		2437	10.36	<=30	Pass
		2462	12.04	<=30	Pass

4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

Mada	TX	Frequency	Maximum PSD (dBm/3kHz)) /a nali at
Mode	Туре	(MHz)	ANT1	Limit	Verdict
KU	SISO	2412	0.43	<=8	Pass
802.11b		2437	-1.14	<=8	Pass
		2462	-11.71	<=8	Pass
	SISO	2412	-15.11	<=8	Pass
802.11g		2437	-16.00	<=8	Pass
G`)		2462	-15.84	<=8	Pass
000.44.5	SISO	2412	-16.29	<=8	Pass
802.11n		2437	-16.03	<=8	Pass
(HT20)		2462	-15.49	<=8	Pass

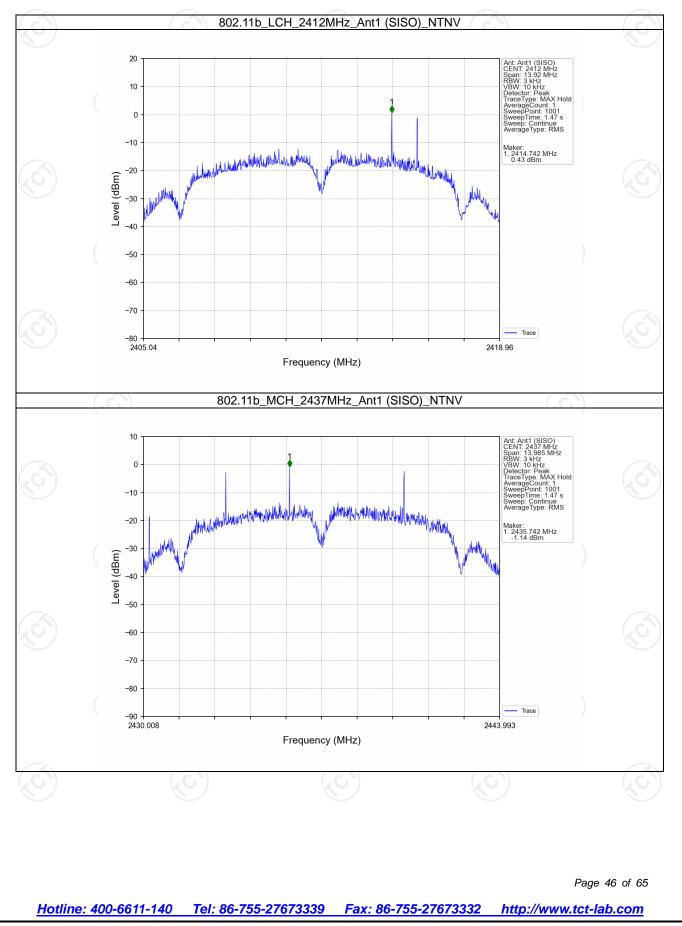
Note1: Antenna Gain: Ant1: -1.45dBi;

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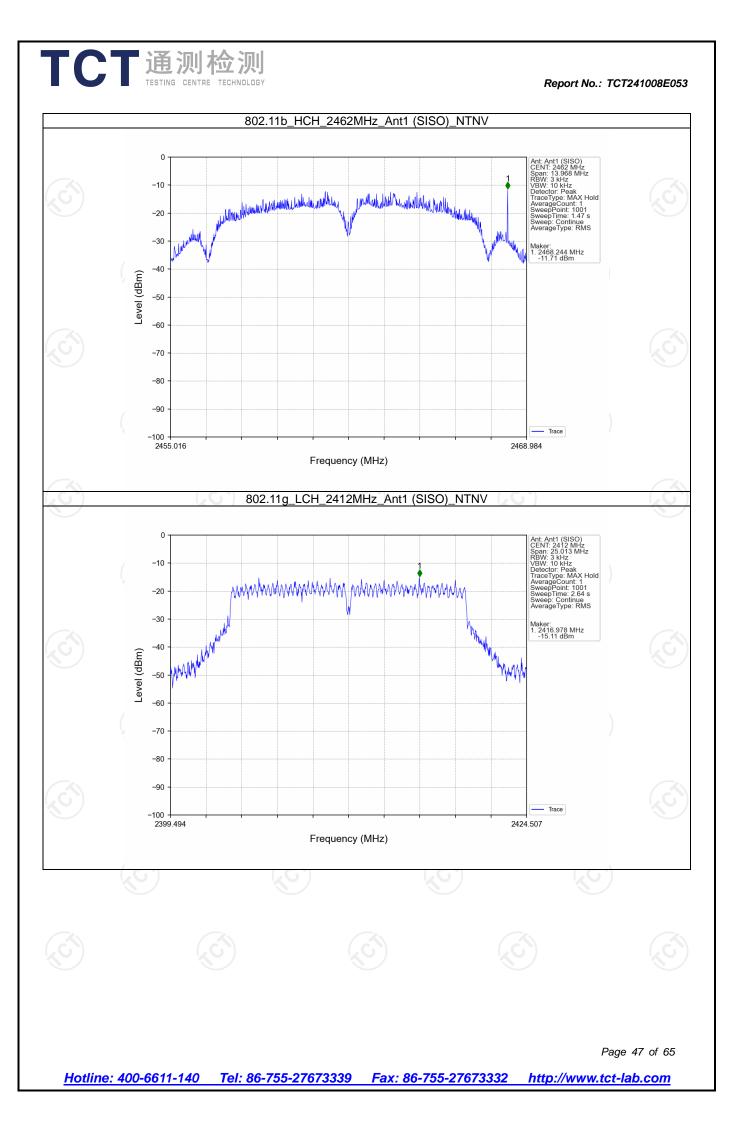


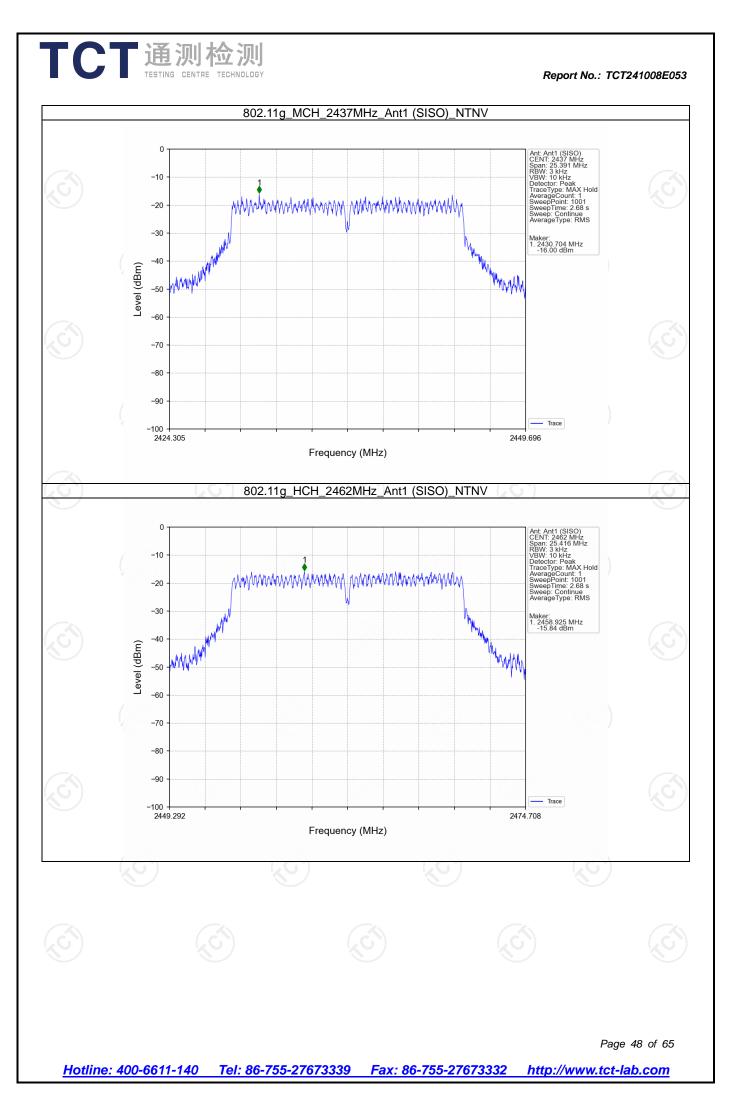
4.2 Test Graph

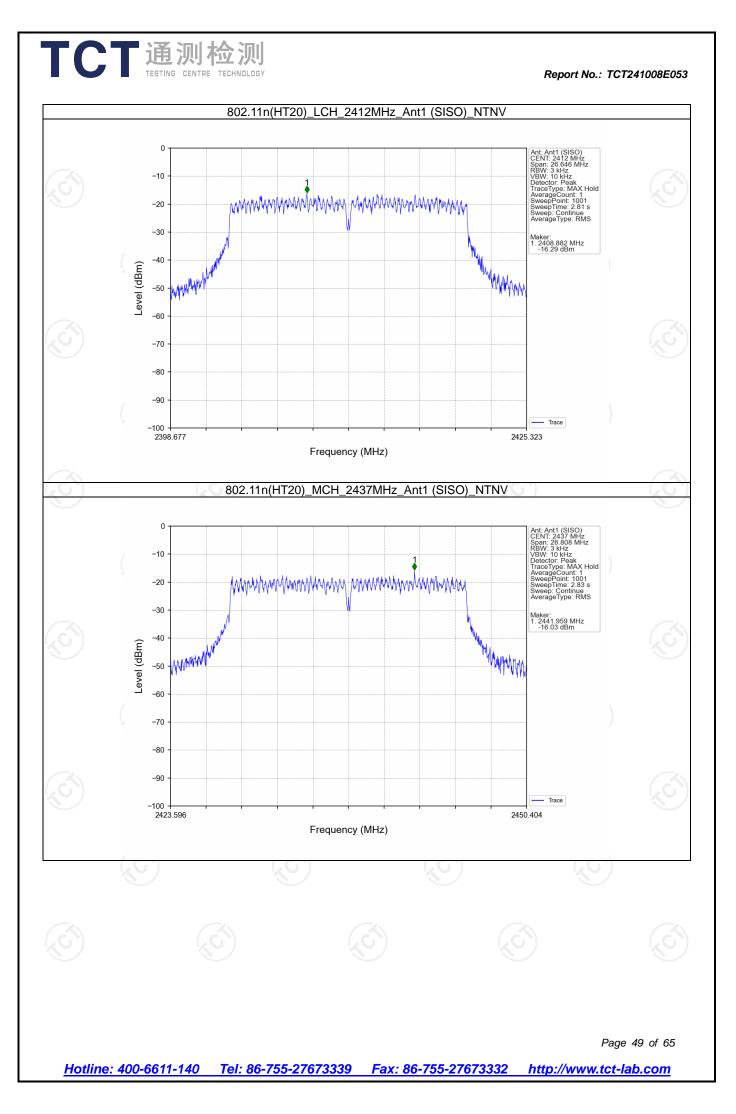
4.2.1 PSD

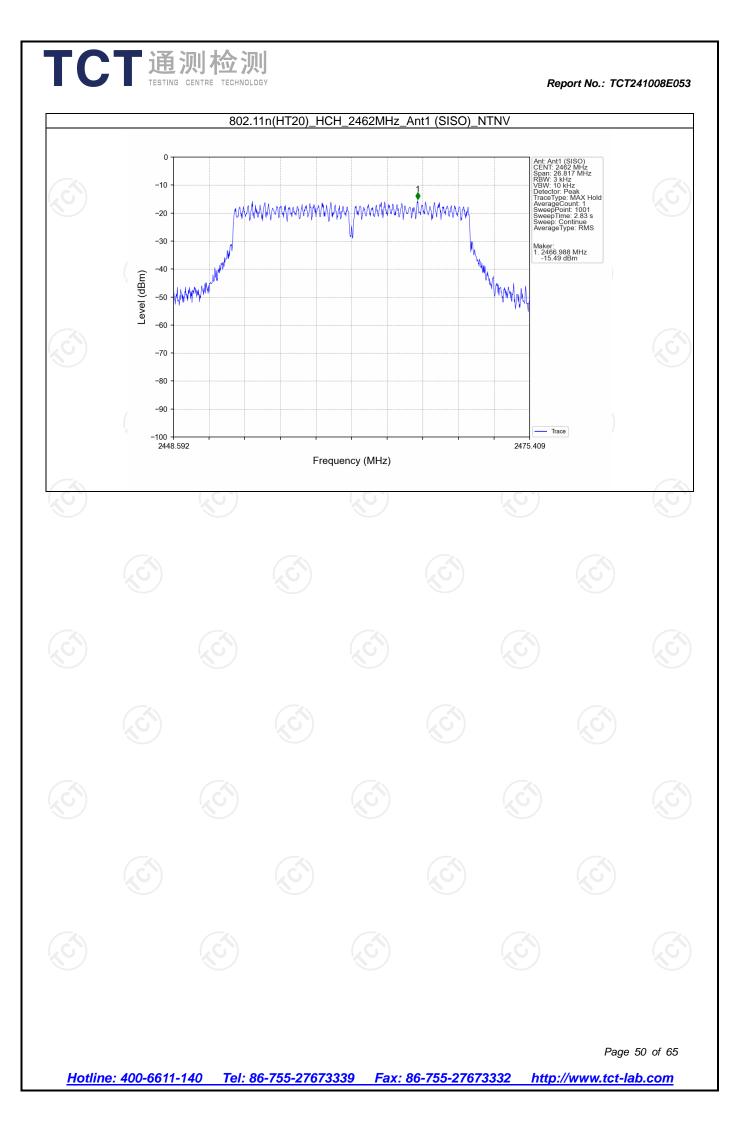


Report No.: TCT241008E053









5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

TCT通测检测 TESTING CENTRE TECHNOLOGY

5.1.1 Ref

Mode TX Type		Frequency (MHz)	ANT	Level of Reference (dBm)		
XU)		2412		3.07		
802.11b	SISO	2437	1	1.56		
		2462	1	3.70		
	SISO	2412	1	0.87		
802.11g		2437	1	-0.15		
.G`)		2462	1	(JG [*]) 1.41 (JG		
000.44		2412	1	0.29		
802.11n	SISO	2437	1	-0.82		
(HT20)		2462	1	0.71		

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	3.70	-26.30	Pass
		2437	1	3.70	-26.30	Pass
		2462	1	3.70	-26.30	Pass
802.11g	SISO	2412	1	1.41	-28.59	Pass
		2437	1	1.41	-28.59	Pass
		2462	1	1.41	-28.59	Pass
802.11n (HT20)	SISO	2412	1	0.71	-29.29	Pass
		2437	1	0.71	-29.29	Pass
		2462	1	0.71	-29.29	Pass

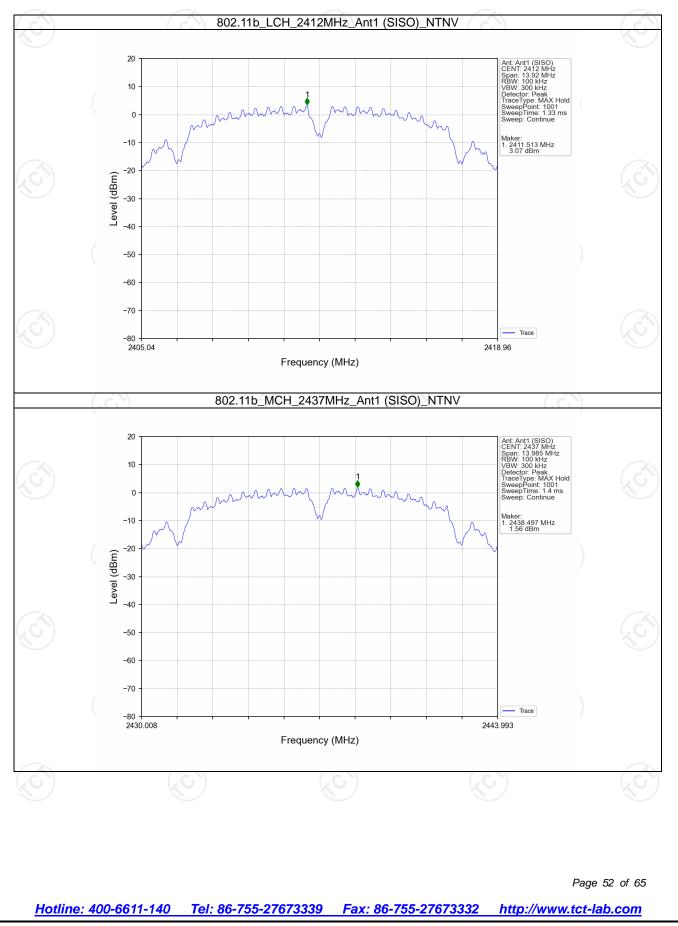
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

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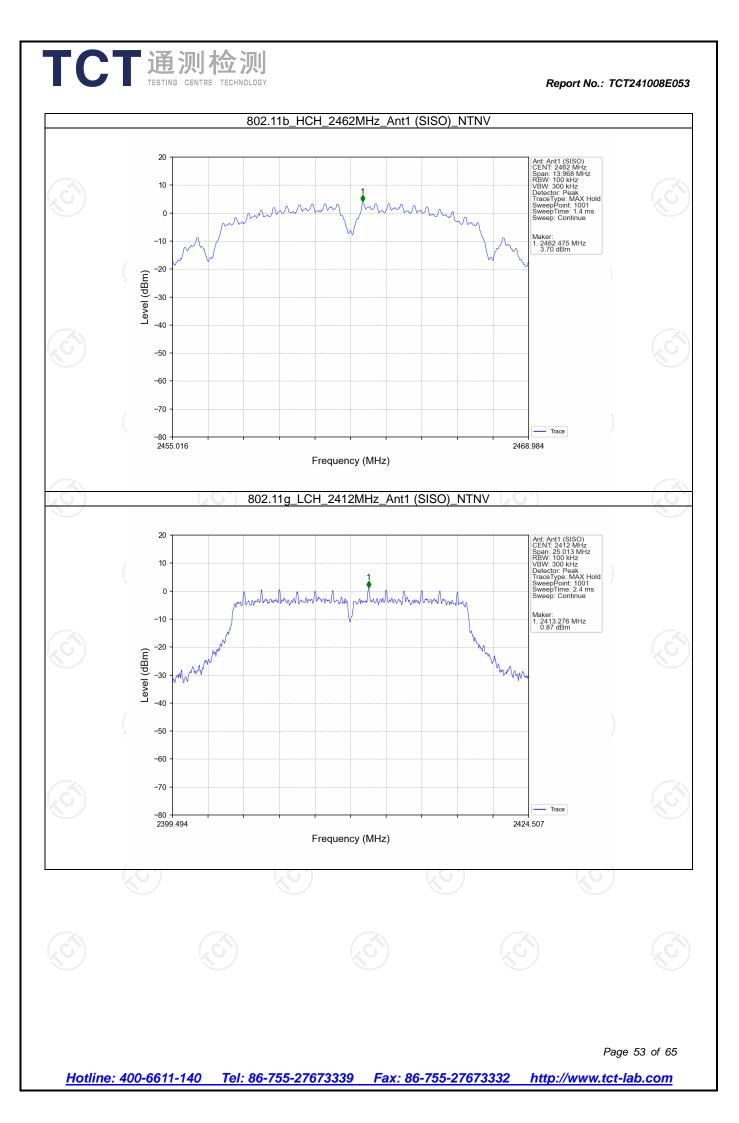


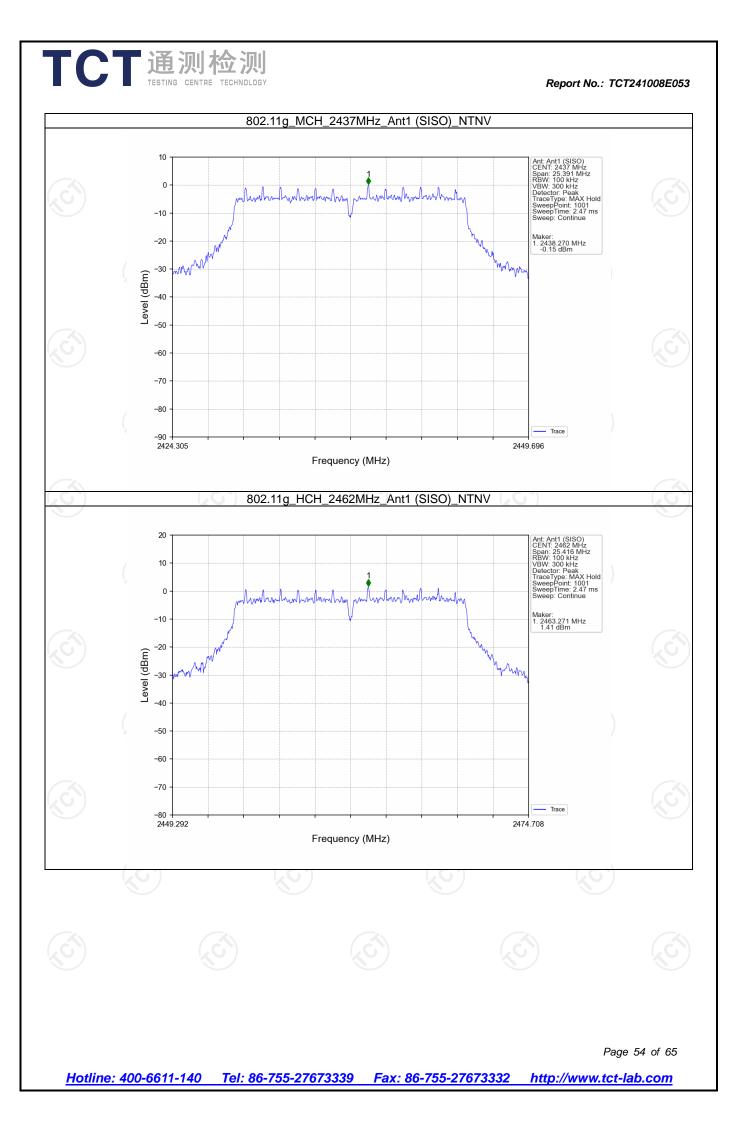
5.2 Test Graph

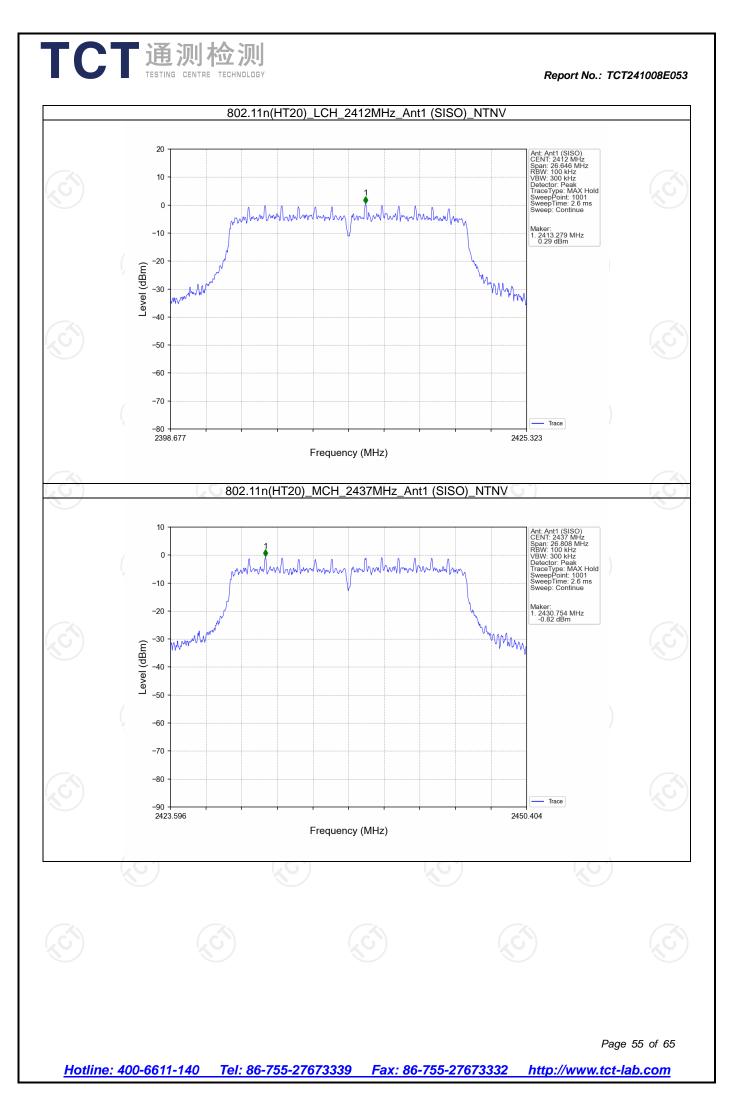
5.2.1 Ref

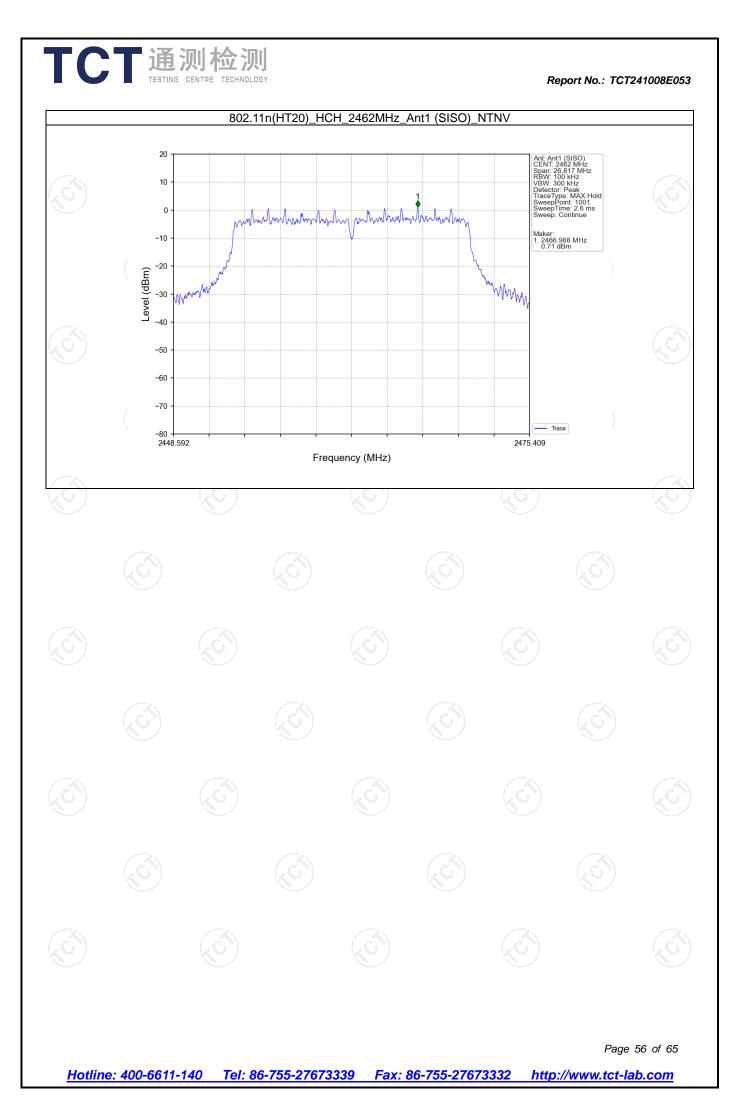


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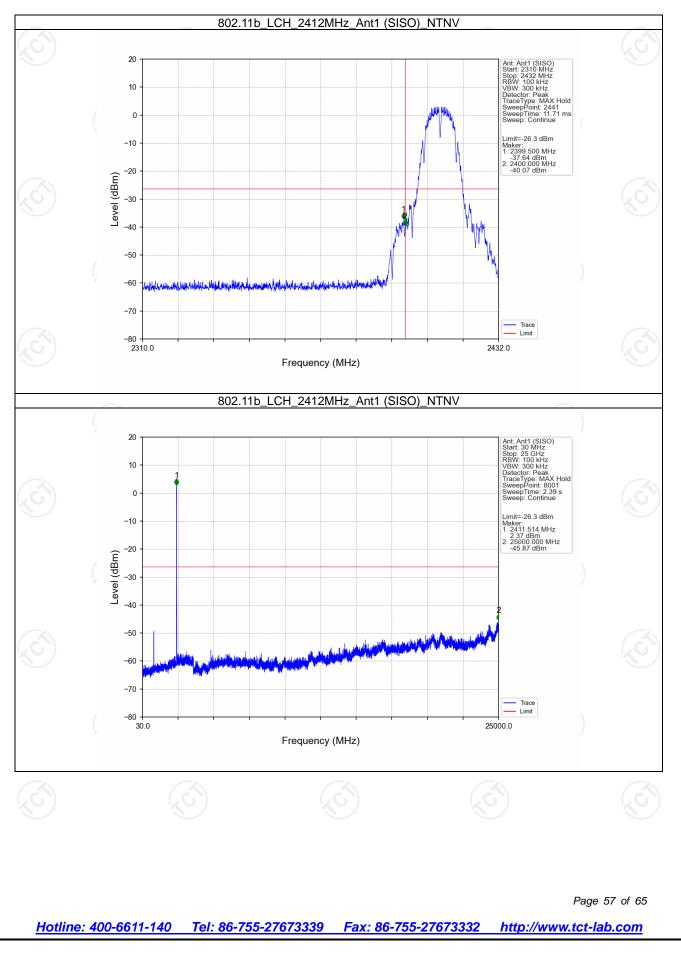


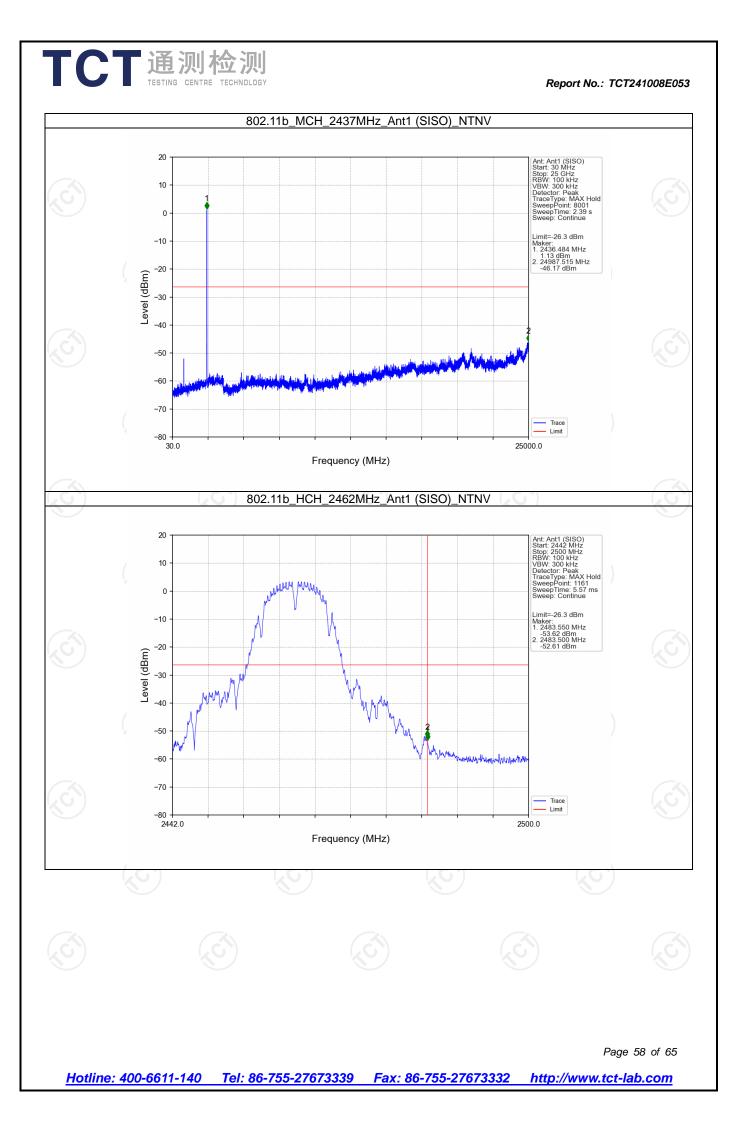


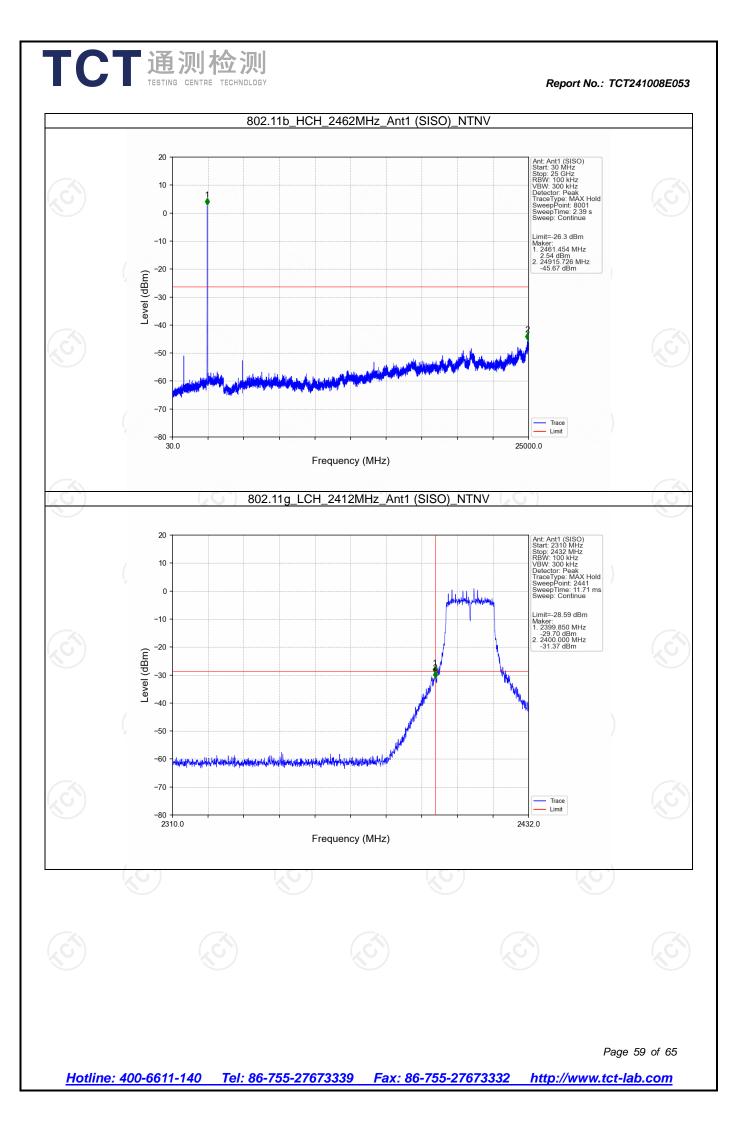


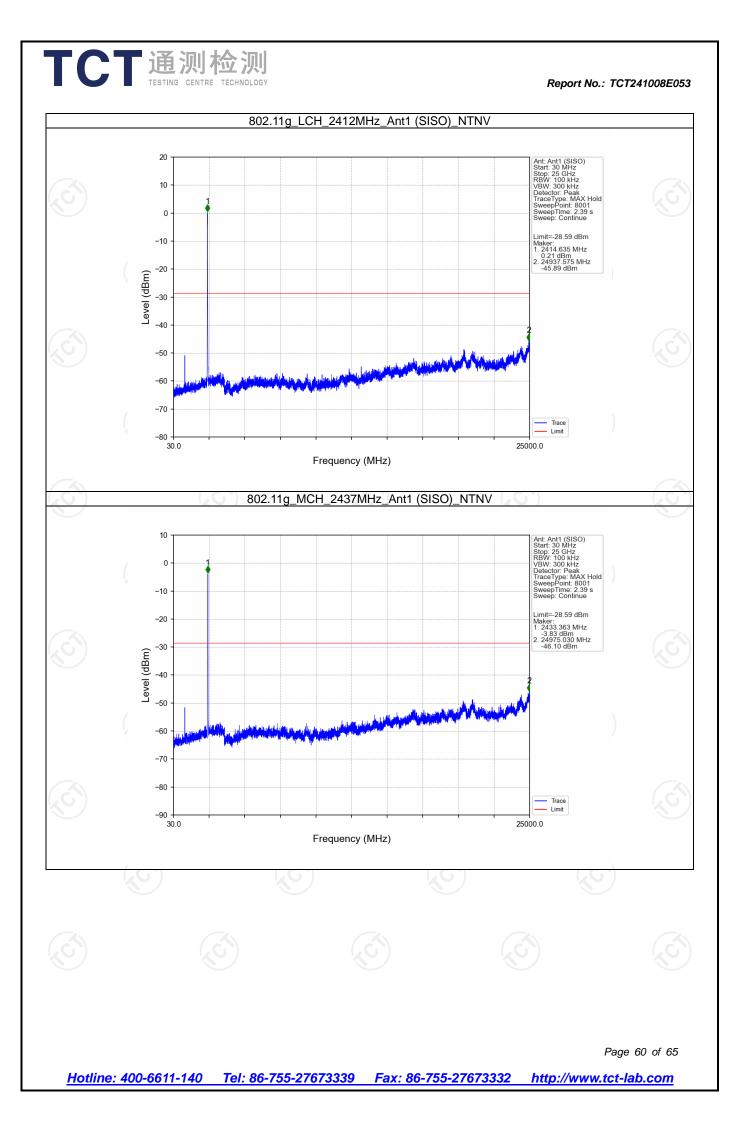
Report No.: TCT241008E053

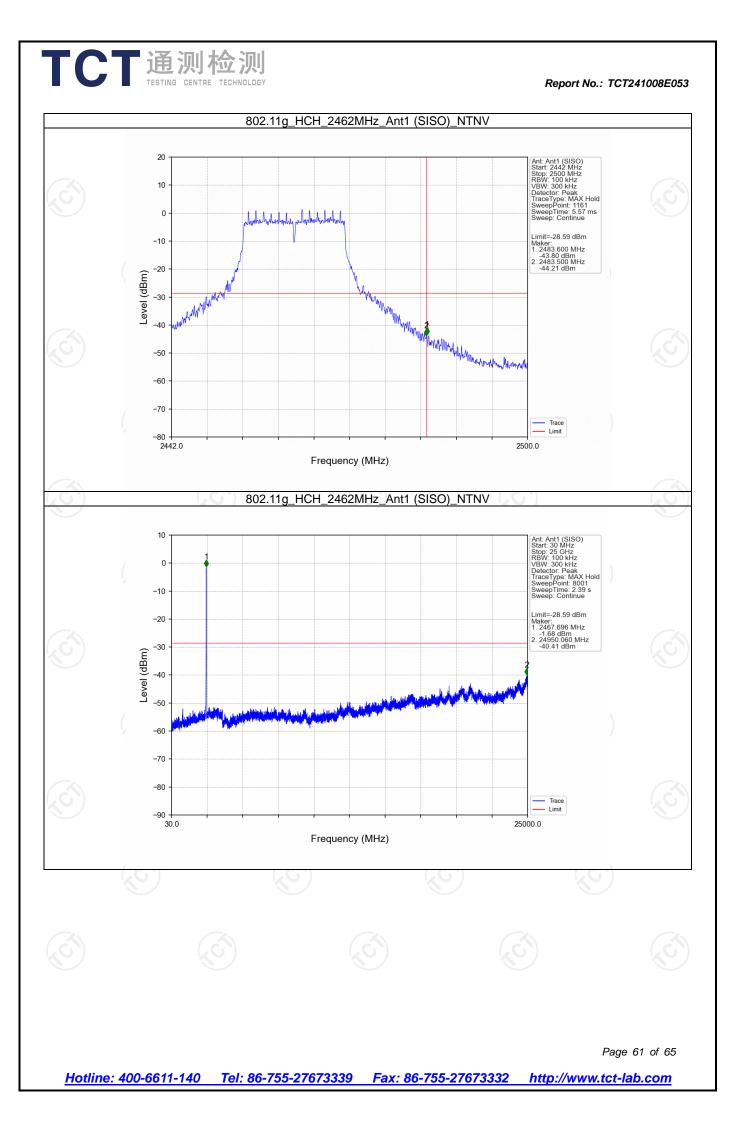
5.2.2 CSE

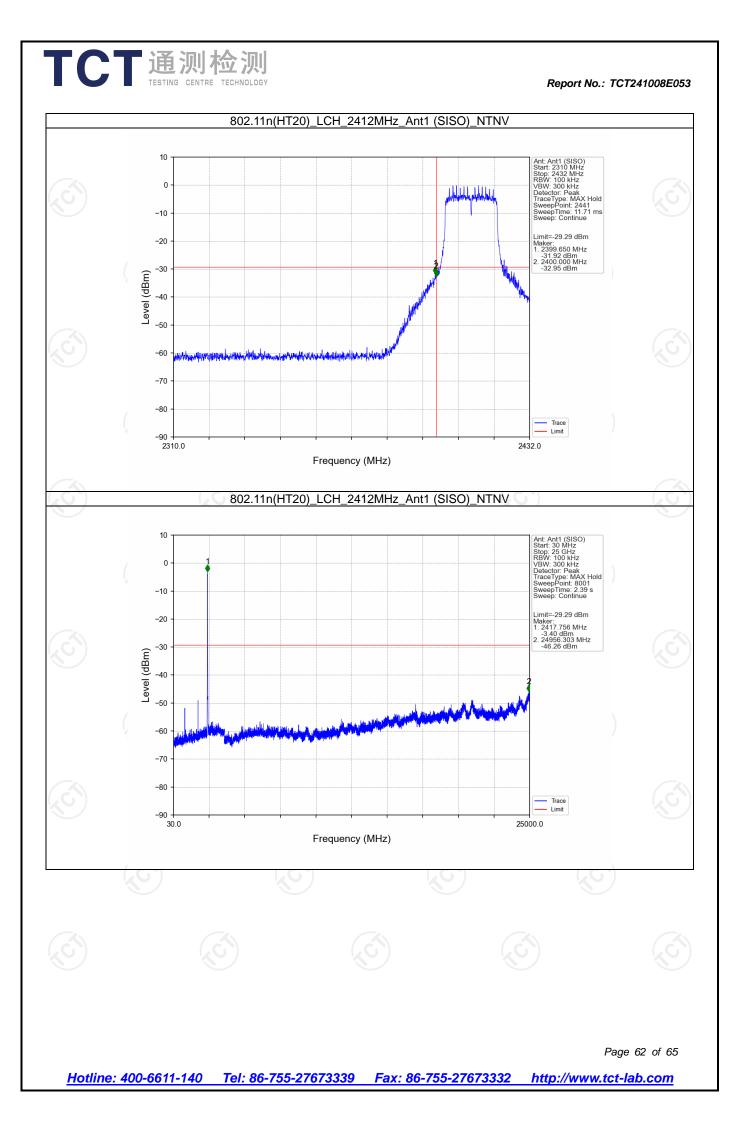


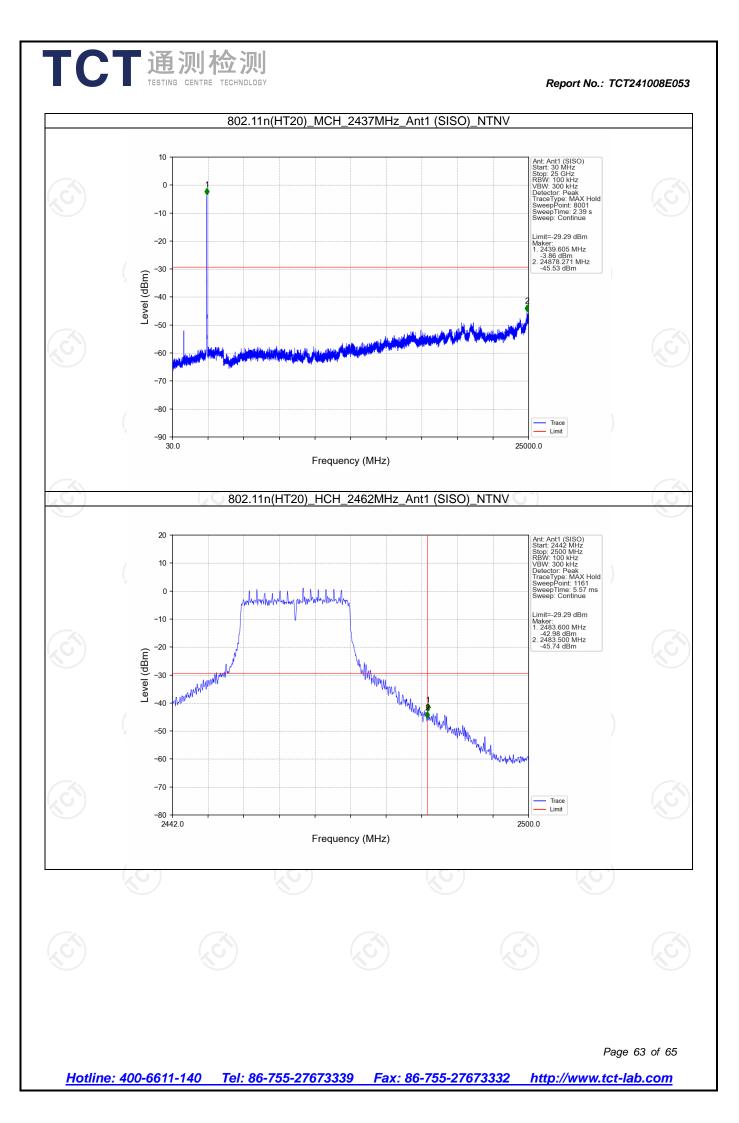


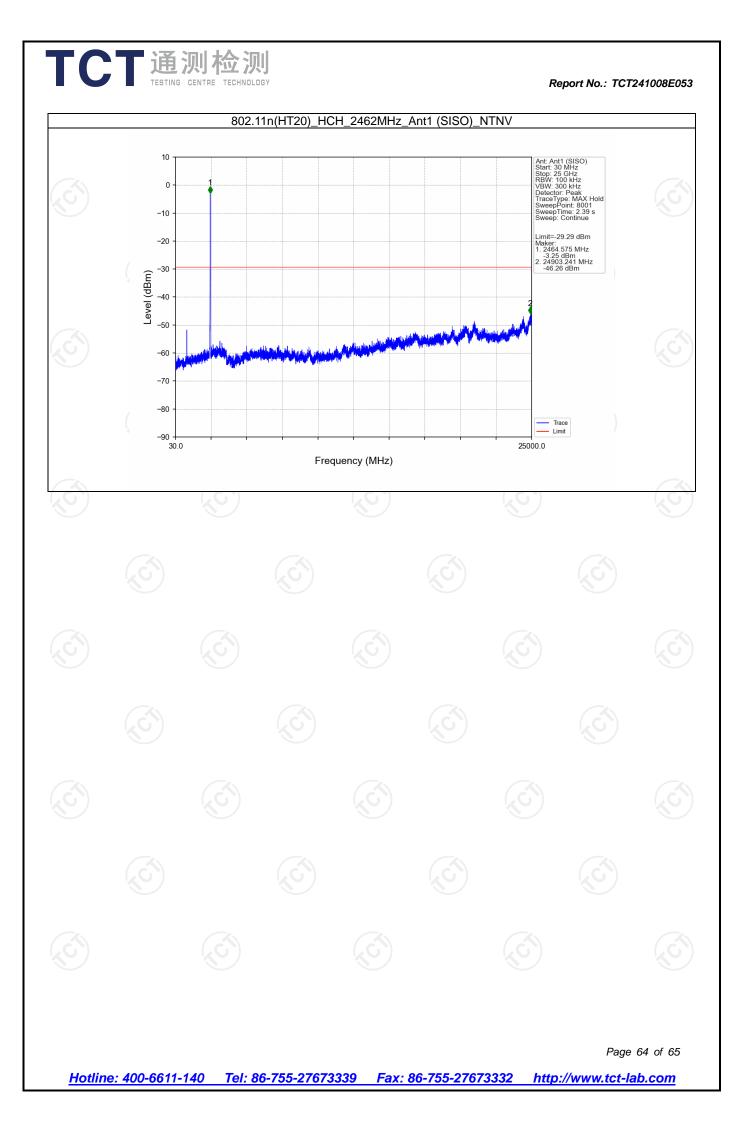












Appendix B: Photographs of Test Setup

Please refer to document Appendix No.: TCT241008E051-A

Appendix C: Photographs of EUT

Please refer to document Appendix No.: TCT241008E051-B & TCT241008E051-C

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