	TEST REPOR	Τ				
FCC ID :	2AQRM-S67L					
Test Report No:	TCT250305E029					
Date of issue:	Apr. 23, 2025					
Testing laboratory:	SHENZHEN TONGCE TESTING	G LAB				
Testing location/ address:	 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China 					
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) :	47 CFR FCC Part 15.407 KDB905462 D02 UNII DFS Corr New Rules v02 KDB 905462 D03 UNII Clients W New Rules v01r02					
Product Name::	Smart Phone					
Trade Mark:	MIRO, FOXX, FOXXD, AIRVOIC	CE, FOXXD HTH				
Model/Type reference :	S67L					
Rating(s):	Power supply: DC 5V from adap Adapter Information: Model: HJ-0502000W2-US Input: AC 100-240V, 50/60Hz, 0 Output: DC 5.0V, 2.0A, 10.0W					
Date of receipt of test item	Mar. 05, 2025					
Date (s) of performance of test:	Mar. 06, 2025 ~ Apr. 22, 2025					
Tested by (+signature) :	Brews XU	Forens Manacer				
Check by (+signature) :	Beryl ZHAO	Boy 200 TCT				
Approved by (+signature):	Tomsin	forms m 13 84				
TONGCE TESTING LAB. TH	nis document may be altered or r	e written approval of SHENZHEN evised by SHENZHEN TONGCE sion section of the document. The				

TESTING LAB personnel only, and shall be noted in the revision secti test results in the report only apply to the tested sample.

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TCT通测检测 1. General Product Information

1.1. EUT description

Product Name:	Smart Phone
Model/Type reference:	S67L
Sample Number:	TCT250305E025-0101
EUT type:	Client only device, no radar detection Capability
Operation Frequency:	Band 2A: 5260 MHz~5320 MHz Band 2C: 5500 MHz~5700 MHz
Channel Separation:	802.11a: 20MHz 802.11n: 20MHz, 40MHz 802.11ac: 20MHz, 40MHz, 80MHz
Modulation Technology:	Orthogonal Frequency Division Multiplexing (OFDM)
Antenna Type:	Internal Antenna
Antenna Gain:	1.80dBi
TPC Function:	Unsupported
Rating(s):	Power supply: DC 5V from adaptor or DC 3.87V from battery Adapter Information: Model: HJ-0502000W2-US Input: AC 100-240V, 50/60Hz, 0.3A Output: DC 5.0V, 2.0A, 10.0W
Remark:	This device selects the operating frequency with randomly in the DFS operation frequency.

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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2. Test Result Summary

		Conformance Test S	pecifications		
Report Clause	Ref. Std. Clause	Description	Measured	Limit	Result
UNII Detection Bandwidth	7.8.1	DFS: UNII Detection Bandwidth Measurement	N/A	100% of the 99% BW	N/A
Channel Availability Check	7.8.2.1	DFS: Initial Channel Availability Check Time	N/A	CAC ≥ 60 sec	N/A
Channel Availability Check	7.8.2.2	DFS: Radar Burst at the Beginning of the Channel Availability Check Time	N/A	Detection Threshold: -62dBm	N/A
Channel Availability Check	7.8.2.3	DFS: Radar Burst at the End of the Channel Availability Check Time	N/A	Detection Threshold: -62dBm	N/A
In-service Monitoring	7.8.3	DFS: In-Service Monitoring for Channel Move Time (CMT)	CMT ≤ 10sec	CMT ≤ 10sec	Complied
In-service Monitoring	7.8.3	DFS: In-Service Monitoring for Channel Closing Transmission Time (CCTT)	CCTT ≤ 60 ms starting at CMT 200ms	CCTT ≤ 60 ms starting at CMT 200ms	Complied
In-service Monitoring	7.8.3	DFS: In-Service Monitoring for Non-Occupancy Period (NOP)	NOP > 30 min	NOP ≥ 30 min	Complied
Statistical Performance Check	7.8.4	DFS: Statistical Performance Check	Complied	Table 5 - 7 (KDB 905462)	N/A

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3. General Information

3.1. RF General information

IEEE Std. 802.11	69	(Hz)		
a/n(HT20)/ ac(VHT20)	0	20		
n(HT40)/ac(VHT40)		40		
ac(VHT80)		80		

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	IC ID	Trade Name
Router	RT-AC88U	/	MSQ-RTGW00	1	/

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.





3.3. Test Instruments List

	DFS								
Name	Model No.	Manufacturer	Date of Cal.	Due Date					
vector Signal Generator	N5182A	Agilent	Jun. 27, 2024	Jun. 26, 2025					
Spectrum Analyzer	N9020A	Agilent	Jun. 27, 2024	Jun. 26, 2025					
Test Software	TST Pass	/	/						

<u>Hotlin</u>	e: 400-6611-	<u>140 Tel: 8</u>	86-755-27673	3339 Fax:	<u>86-755-2767</u>	3332 http	Page ://www.tct-la	e 6 of 27 1 b.com

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

.1.1. DFS I	Parameters			
(C)	(C))	KC KC
	Table D.1:	DFS requirement values		
	Parameter	Value		
	Ion-occupancy period	Minimum 30 minutes	(G)	
	nel Availability Check Time	60 seconds		
	Channel Move Time	10 seconds See Note 1.		
	I Closing Transmission Time	200 milliseconds + an aggreg over remaining 10 second pe	riods. See Note	s 1 and 2
U-N	NII Detection Bandwidth	Minimum 100% of the 99% po 3.	ower bandwidth	See Note
Note 2: The begin	nning of the Channel Move Time	<i>Time</i> is comprised of 200 millise plus any additional intermittent	control signals	required
Note 2: The begin to fa 10 s betv Note 3: Duri freq	Channel Closing Transmission nning of the Channel Move Time acilitate Channel changes (an ag second period. The aggregate d ween transmissions. ng the U-NII Detection Bandwid		conds starting a control signals ng the remaind count quiet per used and for ea	required er of the riods in ach
Note 2: The begin to fa 10 s betw Note 3: Duri frequ	Channel Closing Transmission nning of the Channel Move Time acilitate Channel changes (an ag second period. The aggregate d ween transmissions. ng the U-NII Detection Bandwid uency step the minimum percen	e plus any additional intermittent ggregate of 60 milliseconds) duri uration of control signals will not th detection test, radar type 1 is	conds starting a control signals ng the remaind count quiet per used and for ea	required er of the riods in ach
Note 2: The begin to fa 10 s betw Note 3: Duri frequ	Channel Closing Transmission nning of the Channel Move Time acilitate Channel changes (an ag second period. The aggregate d ween transmissions. ng the U-NII Detection Bandwid uency step the minimum percen- no data traffic.	e plus any additional intermittent ggregate of 60 milliseconds) duri uration of control signals will not th detection test, radar type 1 is	conds starting a control signals ng the remaind count quiet per used and for ea	required er of the riods in ach
Note 2: The begin to fa 10 s betw Note 3: Duri freq with	Channel Closing Transmission nning of the Channel Move Time acilitate Channel changes (an ag second period. The aggregate d ween transmissions. ng the U-NII Detection Bandwid uency step the minimum percen- no data traffic.	e plus any additional intermittent ggregate of 60 milliseconds) duri uration of control signals will not th detection test, radar type 1 is tage of detection is 90%. Measu	conds starting a control signals ng the remaind count quiet per used and for ea rements are pe	required er of the riods in ach
Note 2: The begin to fa 10 s betw Note 3: Duri freq with	Channel Closing Transmission nning of the Channel Move Time acilitate Channel changes (an ag second period. The aggregate d ween transmissions. ng the U-NII Detection Bandwid uency step the minimum percen no data traffic. Table D.2: Inte	e plus any additional intermittent ggregate of 60 milliseconds) duri uration of control signals will not th detection test, radar type 1 is tage of detection is 90%. Measu	conds starting a control signals ng the remaind count quiet per used and for ea rements are pe	required er of the riods in ach
Note 2: The begin to fa 10 s betw Note 3: Duri freq with	Channel Closing Transmission nning of the Channel Move Time acilitate Channel changes (an ag second period. The aggregate d ween transmissions. ng the U-NII Detection Bandwid uency step the minimum percen no data traffic. Table D.2: Inter kimum Transmit Power	e plus any additional intermittent ggregate of 60 milliseconds) duri uration of control signals will not th detection test, radar type 1 is tage of detection is 90%. Measu rference threshold values Value (see	conds starting a control signals ng the remaind count quiet per used and for ea rements are pe	required er of the riods in ach

FCT 通测检测 5.1.2. Applicability of DFS Requirements Prior to Use of a Channel

	DFS Operational mode					
Requirement	Master	Client without radar detection	Client with radar detection			
Non-Occupancy Period	Yes	Not required	Yes			
DFS Detection Threshold	Yes	Not required	Yes			
Channel Availability Check Time	Yes	Not required	Not required			
Uniform Spreading	Yes	Not required	Not required			
U-NII Detection Bandwidth	Yes	Not required	Yes			

5.1.3. Applicability of DFS Requirements during Normal Operation

	DFS Operational mode			
Requirement	Master	Client without radar detection	Client with radar detection	
DFS Detection Threshold	Yes	Not required	Yes	
Channel Closing Transmission Time	Yes	Yes	Yes	
Channel Move Time	Yes	Yes	Yes	
U-NII Detection Bandwidth	Yes	Not required	Yes	

5.1.4. Uniform Spreading

Manufacturer Declare the Uniform Spreading

☑For the 5250-5350 MHz and 5470-5725 MHz bands, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a Gaussian random algorithm.

5.1.5. User Access Restrictions

User Access Restrictions

DFS controls (hardware or software) related to radar detection are NOT accessible to the user. Manufacturer statement confirming that information regarding the parameters of the detected Radar Waveforms is not available to the end user.

5.1.6. Channel Loading/Data Streaming

IP Based (Load Based) - stream the test file from the Master to the Client

The client device is link with the master device and plays the WAV audio file from master device to client device. Test file download in NTIA website (http://ntiacsd.ntia.doc.gov/dfs/)

The client device is link with the master device and plays the MPEG file (6 1/2 Magic Hours) from master device to client device. Test file download in NTIA website (http://ntiacsd.ntia.doc.gov/dfs/)

Alternative streaming e.g., FTP with about 17 to 20% loading and submit proposal to FCC.



「CT通测检测 TESTING CENTRE TECHNOLOGY 5.2. Radar Test Waveform Calibration

5.2.1. Short Pulse Radar Test Waveforms

Radar	Pulse Width	PRI	Number of Pulses	Minimum	Minimum
Туре	(µsec)	(µsec)		Percentage of	Number of
				Successful	Trials
				Detection	
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 µsec, with a minimum increment of 1 µsec, excluding PRI values selected	$\operatorname{Roundup} \left\{ \begin{pmatrix} \frac{1}{360} \end{pmatrix} \cdot \\ \begin{pmatrix} \frac{19 \cdot 10^{6}}{\operatorname{PRI}_{\mu \operatorname{sec}}} \end{pmatrix} \right\}$	60%	30
2	1-5	in Test A 150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
	(Radar Types 1-			80%	120

Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.

A minimum of 30 unique waveforms are required for each of the short pulse radar types 2 through 4. For short pulse radar type 1, the same waveform is used a minimum of 30 times. If more than 30 waveforms are used for short pulse radar types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. The aggregate is the average of the percentage of successful detections of short pulse radar types 1-4.

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「CT通测检测 TESTING CENTRE TECHNOLOGY 5.2.2. Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	ChirpWidth (MHz)	PRI (µsec)	Number of Pulses per <i>Burst</i>	Number of <i>Bursts</i>	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30
L				(

Each waveform is defined as follows:

- The transmission period for the Long Pulse Radar test signal is 12 seconds.
- There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst Count.
- Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each Burst within the 12 second sequence may have a different number of pulses.
- The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a Burst will have the same pulse width. Pulses in different Bursts may have different pulse widths.
- Each pulse has a linear FM chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a Burst will have the same chirp width. Pulses in different Bursts may have different chirp widths. The chirp is centered on the pulse. For example, with a radar frequency of 5300 MHz and a 20 MHz chirped signal, the chirp starts at 5290 MHz and ends at 5310 MHz.
- If more than one pulse is present in a Burst, the time between the pulses will be between 1000 and 2000 microseconds, with the time being randomly chosen. If three pulses are present in a Burst, the time between the first and second pulses is chosen independently of the time between the second and third pulses.
- The 12 second transmission period is divided into even intervals. The number of intervals is equal to Burst_Count. Each interval is of length (12,000,000 / Burst_Count) microseconds. Each interval contains one Burst. The start time for the Burst, relative to the beginning of the interval, is between 1 and [(12,000,000 / Burst_Count) (Total Burst Length) + (One Random PRI Interval)] microseconds, with the start time being randomly chosen. The step interval for the start time is 1 microsecond. The start time for each Burst is chosen independently.

Sizio. Trequency hopping Radar rest waveronn							
Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (ms)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	0.333	300	70%	30

5.2.3. Frequency Hopping Radar Test Waveform

The FCC Type 6 waveform uses a static waveform with 100 bursts in the instruments ARB. In addition, the RF list mode is operated with a list containing 100 frequencies from a randomly generated list and it had be ensured that at least one of the random frequencies falls into the UNII Detection Bandwidth of the DUT. Each burst from the waveform file initiates a trigger pulse at the beginning that switches the RF list from one item to the next one.

Report No.: TCT250305E029

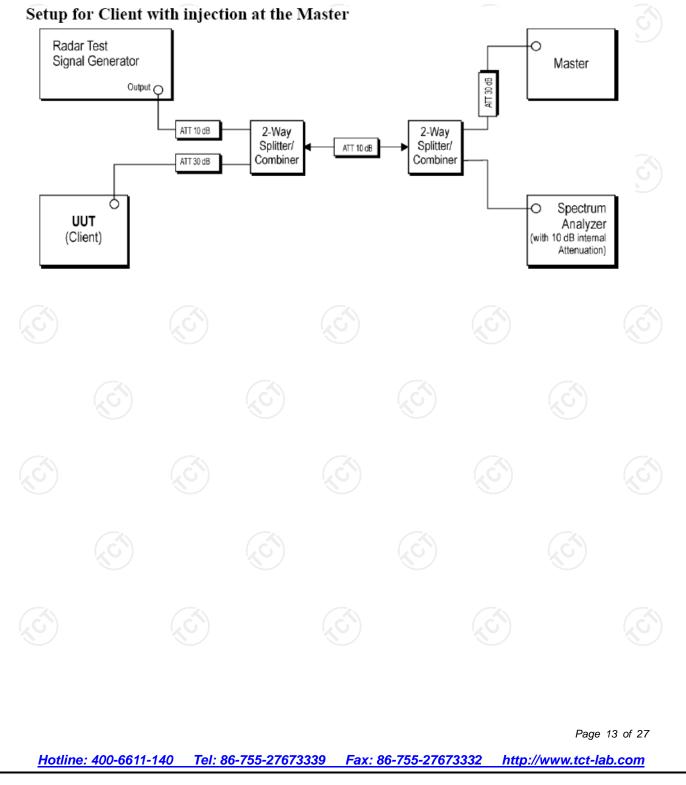


5.2.4. DFS Threshold Level

DFS Threshold Level						
DEC Threehold levels C2 dDm	⊠at the antenna connector					
DFS Threshold level: -62 dBm	\Box in front of the antenna					

The Interference **Radar Detection Threshold Level** is -62 dBm. That had been taken into account the output power range and antenna gain.

5.2.5. Test Set up





Calibration Plots

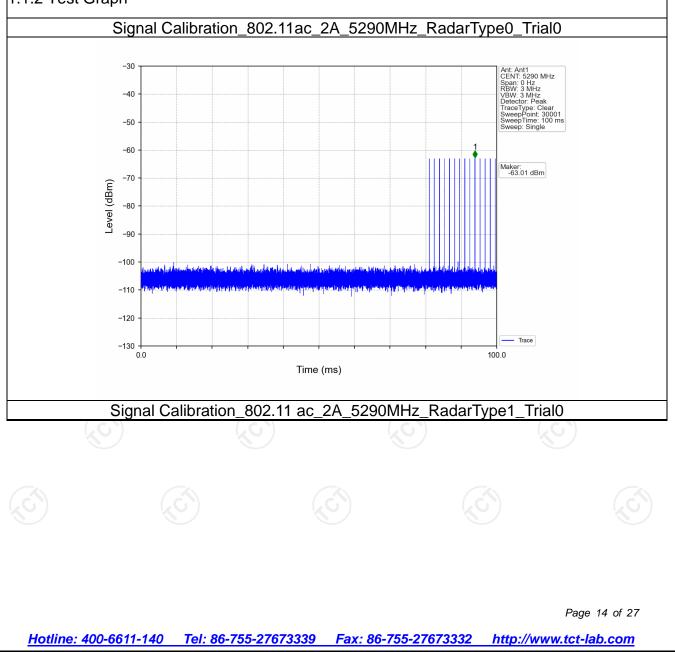
DFS signal: -62dBm

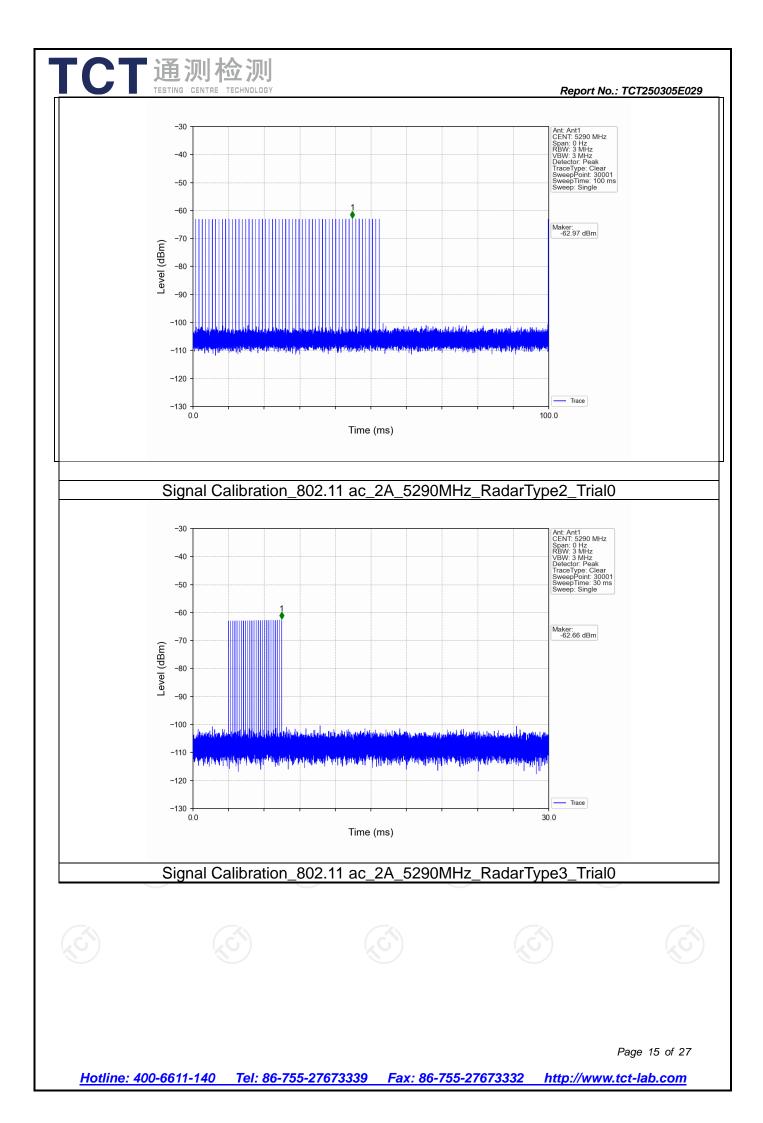
1.1 SC

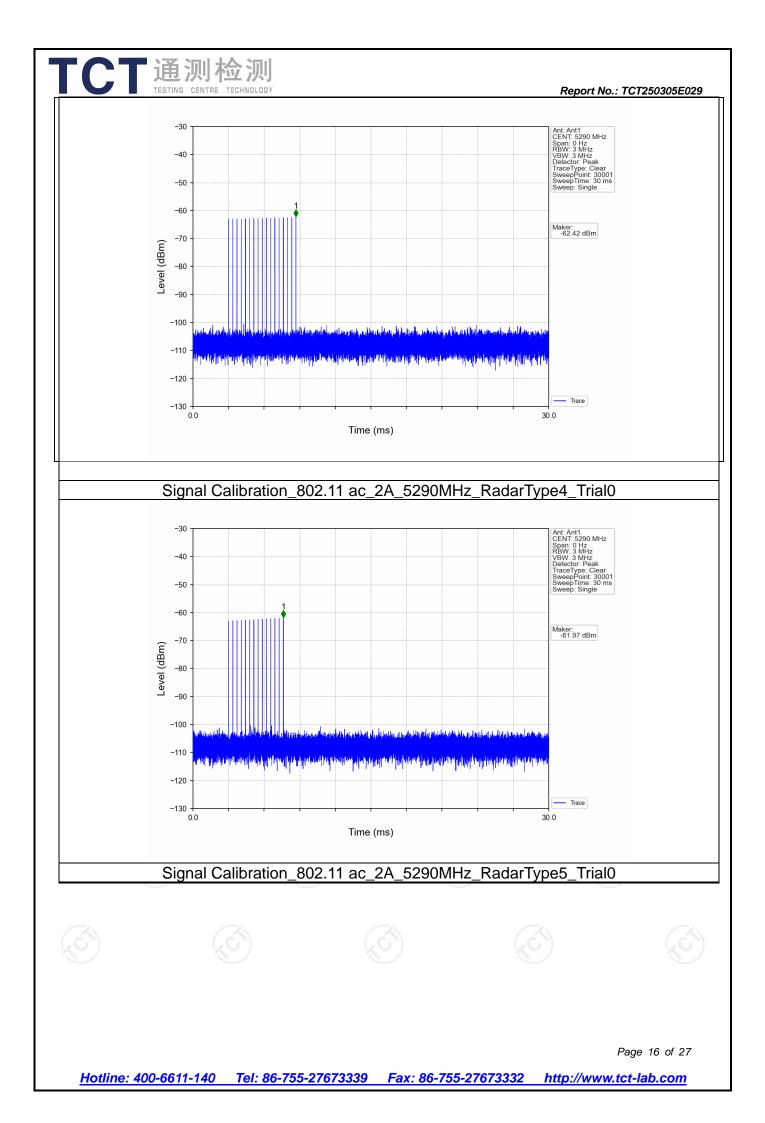
1.1.1 Test Result

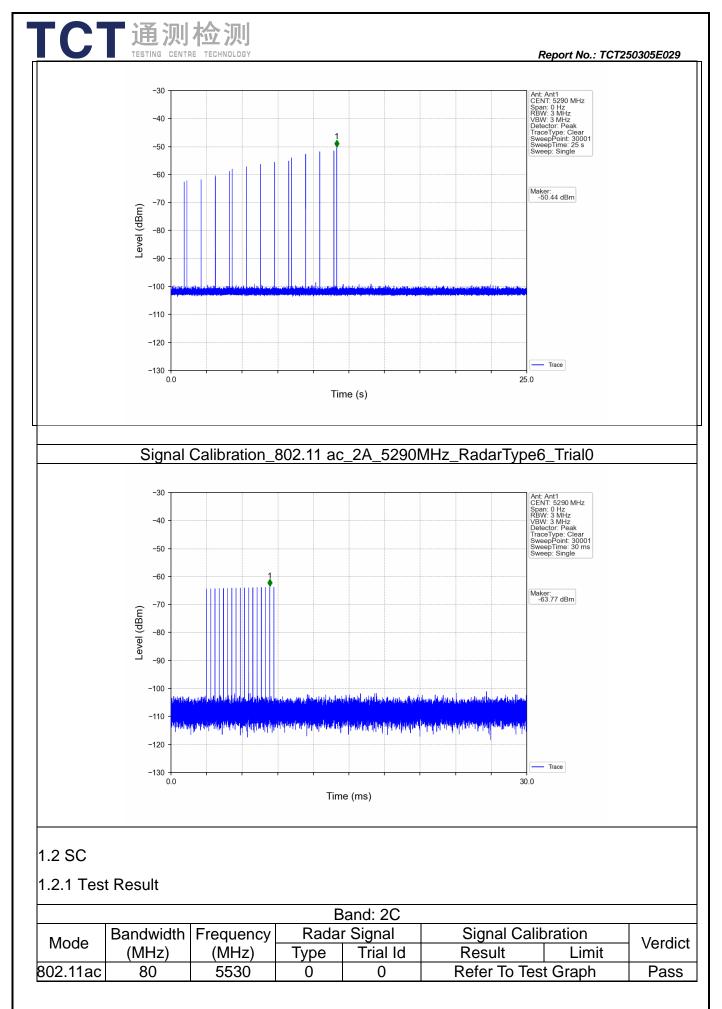
Band: 2A									
Mode	Bandwidth	andwidth Frequency		r Signal	Signal Calibration		Verdict		
wode	(MHz)	(MHz)	Туре	Trial Id	Result	Limit	veruici		
802.11ac	80	80 5290	0	0	Refer To Test Graph		Pass		
			1	0	Refer To Test Graph		Pass		
			2	0	Refer To Tes	t Graph	Pass		
			3	0	Refer To Tes	t Graph	Pass		
			4	0	Refer To Tes	t Graph	Pass		
			5	0	Refer To Tes	t Graph	Pass		
			6	0	Refer To Tes	t Graph	Pass		

1.1.2 Test Graph



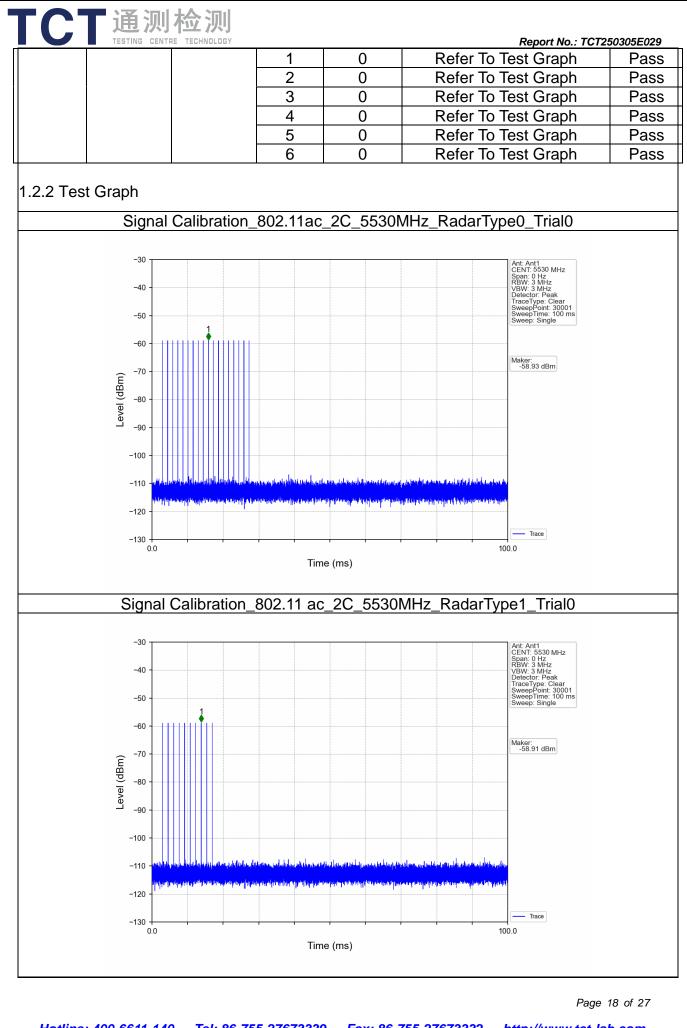




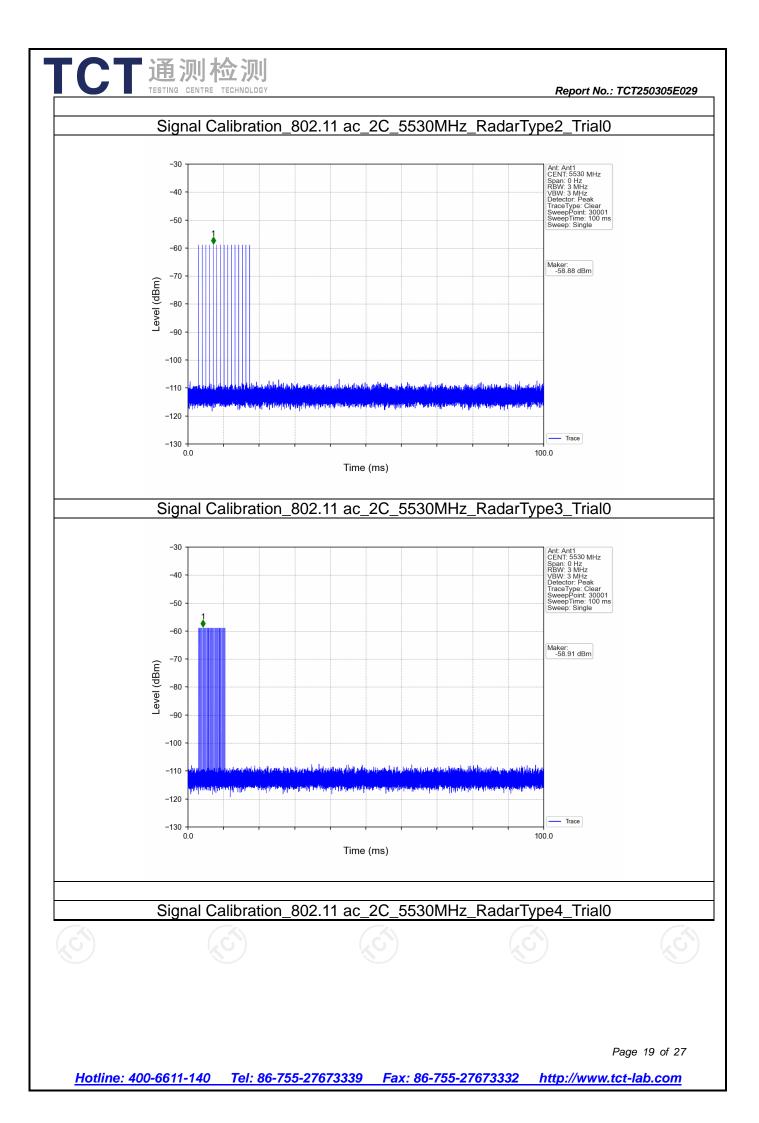


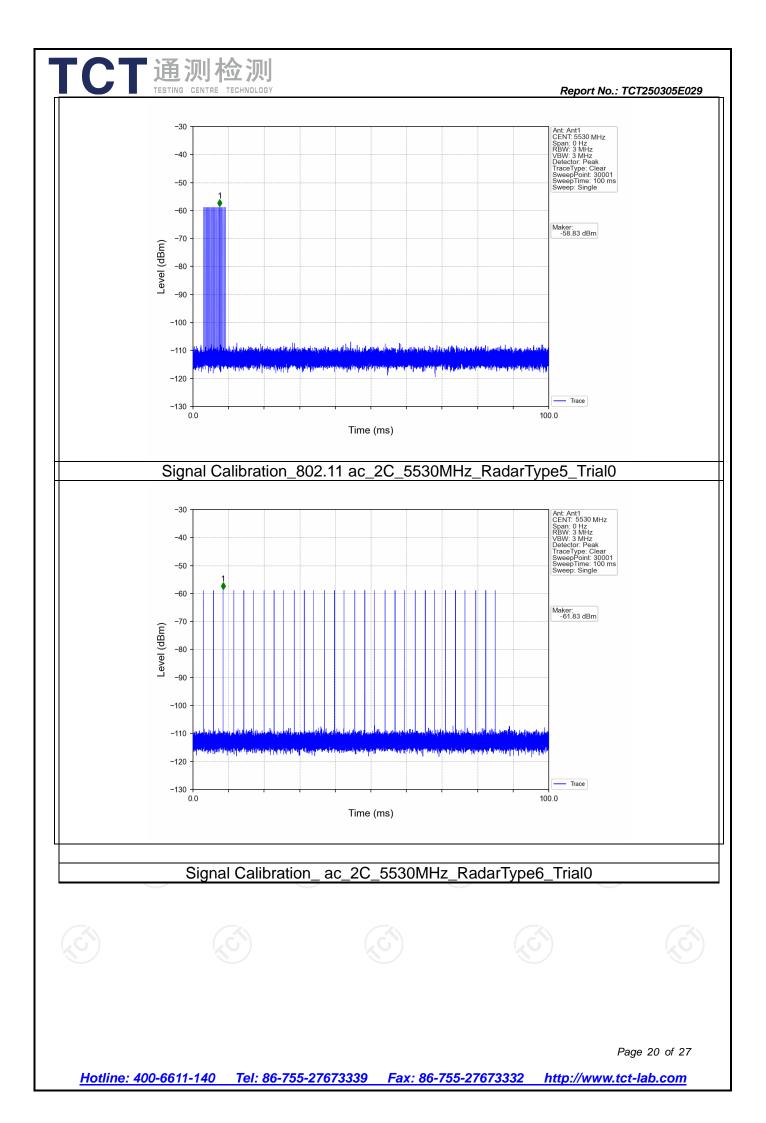
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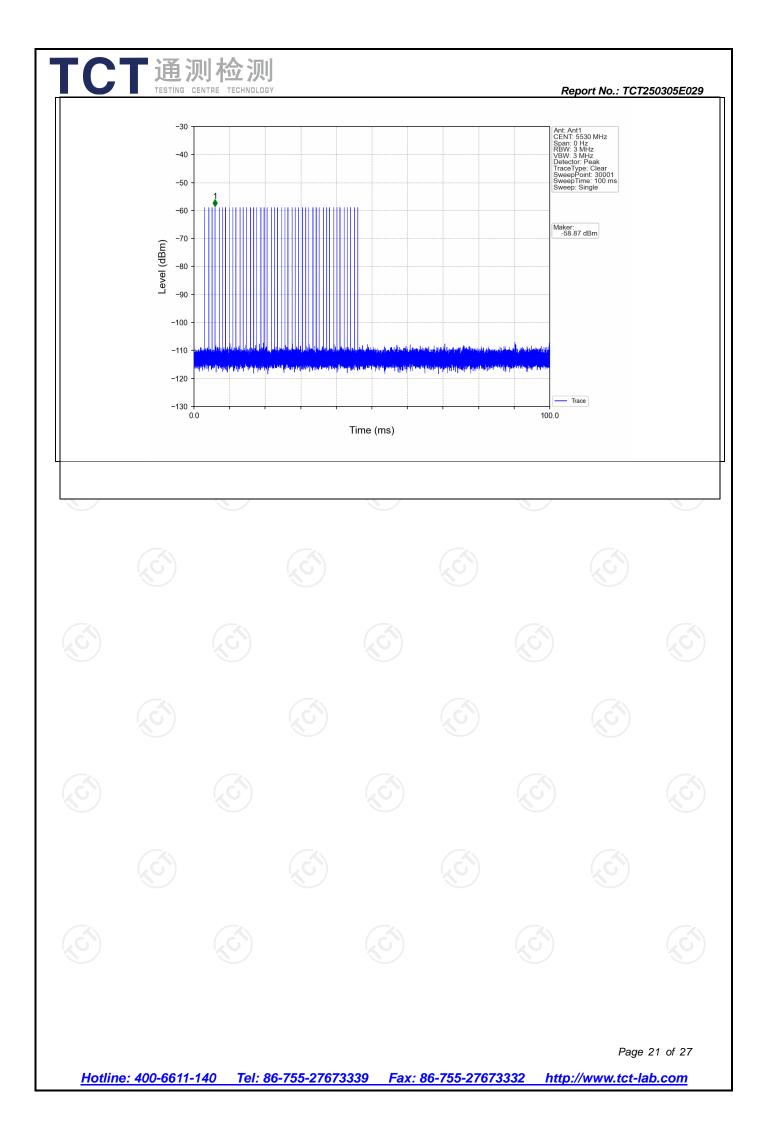
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com



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5.3. UNII Detection Bandwidth

5.3.1. UNII Detection Bandwidth Limit

Channel Bandwidth (MHz)	99% Power Bandwidth (MHz)	UNII Detection Bandwidth (MHz)		
20	N/A	N/A		
40	N/A	N/A		
80	N/A	N/A		

UNII Detection Bandwidth is minimum 100% of the 99% power bandwidth. A single radar Burst is generated for a minimum of 10 trials, and the response of the UUT is noted. The UUT must detect the Radar Waveform 90% or more of the time.

5.3.2. Measuring Instruments

Refer a test equipment and calibration data table in this test report.

5.3.3. Test Procedures

Test Method

☑Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.1 for UNII Detection Bandwidth test. During the U-NII Detection Bandwidth detection test, radar type 1 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic. The EUT is set up as a standalone device (no associated Client and no traffic). The radar frequency is increased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The highest frequency at which detection is greater than or equal to 90% is denoted as FH. The radar frequency is decreased in 1 MHz steps, repeating the above test sequence, until the detection and to 90%. The lowest frequency at which detection is greater than or equal to 90%. The lowest frequency at which detection is greater than or equal to 90%. The lowest frequency at which detection is greater than or equal to 90% is denoted as FL. UNII Detection Bandwidth = FH -FL

Test result: Not required



5.4. Channel Availability Check (CAC)

5.4.1. Channel Availability Check Limit

Channel Availability Check Limit

The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute (60 sec) on the intended operating frequency.

5.4.2. Measuring Instruments

Refer a test equipment and calibration data table in this test report

5.4.3. Test Procedures

Test Method

Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.2.1 for Initial Channel Availability Check Time. The EUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the UNII device checks for Radar Waveforms for one minute on the test Channel. This test does not use any Radar Waveforms.

⊠Refer as FCC 06-96 Appendix, clause 7.8.2.2 for Radar Burst at the Beginning of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the Beginning of the Channel Availability Check Time.

⊠Refer as FCC 06-96 Appendix, clause 7.8.2.3 for Radar Burst at the End of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the End of the Channel Availability Check Time.

Test result: Not required

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5.5. In-service Monitoring

5.5.1. In-service Monitoring Limit

In-service Monitoring Limit						
Channel Move Time	10 sec	C				
Channel Closing Transmission Time	200 ms + an aggregate of 60 ms over reperiods.	emaining 10 sec				
Non-occupancy period	Minimum 30 minutes					

5.5.2. Measuring Instruments

Refer a test equipment and calibration data table in this test report

5.5.3. Test Procedures

