

TEST REPORT

For

Handheld Wireless Terminal

Model Number: T8F1B

FCC ID: 2AH25T8F1BH

IC: 22621-T8F1BH

Report Number : WT268500579

Test Laboratory : Shenzhen Academy of Metrology and Quality
Inspection
Site Location : No.4, Tongfa Road, Xili Street, Nanshan District,
Shenzhen, Guangdong, China
Tel : 0086-755-86928965
Fax : 0086-755-86009898-31396
Web : www.smq.com.cn
E-mail : emcrf@smq.com.cn

The "Important statement" on the back of the report's first page is part of the document, and copies without it are incomplete.

Revision History

No	Date	Remark
V1.0	2026.03.16	Initial issue

TEST REPORT DECLARATION

Applicant : Shanghai Sunmi Technology Co.,Ltd.
Address : Room 505,No.388,Song Hu Road,Yang Pu
District,Shanghai,China
Manufacturer : Shanghai Sunmi Technology Co.,Ltd.
Address : Room 505,No.388,Song Hu Road,Yang Pu
District,Shanghai,China
EUT Description : Handheld Wireless Terminal
Model No. : T8F1B
Trade mark : SUNMI
HVIN : T8F1BH
FCC ID : 2AH25T8F1BH
IC : 22621-T8F1BH

Test Standards:

RSS-247 Issue 4 (2025-07) **FCC Part 15 Subpart E 15.407**

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory to determine the maximum emissions from the EUT. Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory is assumed full responsibility for the accuracy of the test results, unless they depend on the manufacturer information.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

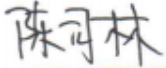
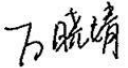
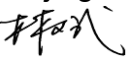
Project Engineer:	 (Chen Silin 陈司林)	Date:	<u>Mar. 16, 2026</u>
Checked by:	 (Wan Xiaojing 万晓婧)	Date:	<u>Mar. 16, 2026</u>
Approved by:	 (Lin Bin 林斌)	Date:	<u>Mar. 16, 2026</u>

TABLE OF CONTENTS

TEST REPORT DECLARATION	3
1. TEST RESULTS SUMMARY	5
2. GENERAL INFORMATION	6
2.1. Report information.....	6
2.2. Laboratory Accreditation and Relationship to Customer	6
3. PRODUCT DESCRIPTION.....	7
3.1. EUT Description.....	7
3.2. Related Submittal(s) / Grant (s)	7
3.3. Block Diagram of EUT Configuration	8
3.4. Operating Condition of EUT	9
3.5. Support Equipment List	9
3.6. Test Conditions.....	10
3.7. Special Accessories	10
3.8. Equipment Modifications	10
4. TEST EQUIPMENT USED	11
5. TRANSMIT POWER CONTROL	12
5.1. LIMITS OF TRANSMIT POWER CONTROL.....	12
5.2. TEST DATA.....	12
6. DYNAMIC FREQUENCY SELECTION	13
6.1. LIMITS OF DYNAMIC FREQUENCY SELECTION	13
6.2. TEST PROCEDURE.....	15
6.3. TEST DATA.....	16

1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	FCC Rules	IC Rules	Test Results
Transmit Power Control	FCC §15.407 (h)	RSS-247 Clause 6.2	N/A
Channel Closing Transmission Time	FCC §15.407 (h)	RSS-247 Clause 6.3	Pass
Channel Move Time	FCC §15.407 (h)	RSS-247 Clause 6.3	Pass
Non-Occupancy Period	FCC §15.407 (h)	RSS-247 Clause 6.3	Pass

Remark: "N/A" means "Not applicable."

Note: 5G WLAN not support wireless hotspot mode.

2. GENERAL INFORMATION

2.1. Report information

This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that SMQ approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that SMQ in any way guarantees the later performance of the product/equipment.

The sample/s mentioned in this report is/are supplied by Applicant, SMQ therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through SMQ, unless the applicant has authorized SMQ in writing to do so.

The lab will not be liable for any loss or damage resulting for false, inaccurate, inappropriate or incomplete product information provided by the applicant/manufacturer.

2.2. Laboratory Accreditation and Relationship to Customer

The testing report were performed by the Shenzhen Academy of Metrology and quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at NETC Building, No.4 Tongfa Rd., Xili, Nanshan, Shenzhen, China. At the time of testing, Laboratory is accredited by the following organizations:

China National Accreditation Service for Conformity Assessment (CNAS) accredits the Laboratory for conformance to FCC standards, EMC international standards and EN standards. The Registration Number is CNAS L0579.

The Laboratory is Accredited Testing Laboratory of FCC with Designation number CN1165 and Site registration number 582918.

The Laboratory is registered to perform emission tests with Innovation, Science and Economic Development (ISED), and the registration number is 11177A.

The Laboratory is registered to perform emission tests with VCCI, and the registration number are C-20048, G20076, R-20077, R-20078 and T-20047.

The Laboratory is Accredited Testing Laboratory of American Association for Laboratory Accreditation (A2LA) and certificate number is 3292.01.

3. PRODUCT DESCRIPTION

NOTE: The extreme test conditions for temperature and antenna gain were declared by the manufacturer.

3.1.EUT Description

Description : Handheld Wireless Terminal
Manufacturer : Shanghai Sunmi Technology Co.,Ltd.
Model Number : T8F1B
Operate Frequency : U-NII 2A(5260~5320MHz)
U-NII 2C(5500~5700MHz)
Antenna Designation : IFA antenna:
5.25 GHz – 5.35 GHz -0.32 dBi
5.47 GHz – 5.725 GHz 1.81 dBi
Operating Voltage : DC 3.87 V
Software Version : 4.0.1
Hardware Version : V01

Remark: The product has the following configurations

Object	1st Source	2nd Source
Battery	Model name: GYPA Manufacturer: HUNAN GAOYUAN BATTERY CO.,LTD.	Model name: HPPC Manufacturer: Guangdong Highpower New Energy Technology Co., Ltd.
LCD	Model name: 98-03067 7201A Manufacturer: SHENZHEN DJN PHOTOELECTRIC TECHNOLOGY CO.,LTD	Model name: G674AAA085A2(GF3825B) Manufacturer: GUANGDONGSUPERVIEWOPTOELECTRONICSCO.,LTD.

Band 2A		Band 2C	
Ch.	Frequency (MHz)	Ch.	Frequency (MHz)
52	5260	100	5500
56	5280	104	5520
60	5300	108	5540

64	5320	112	5560
		116	5580
		132	5660
		136	5680
		140	5700

Table 2 802.11a/802.11n (20MHz) Frequency /Channel operations

Band 2A		Band 2C	
Ch.	Frequency (MHz)	Ch.	Frequency (MHz)
54	5270	102	5510
62	5310	110	5550
		118	5590
		126	5630
		134	5670

Table 3 802.11n/802.11ac/802.11ax (40MHz BW) Frequency /Channel operations

Band 2A		Band 2C	
Ch.	Frequency (MHz)	Ch.	Frequency (MHz)
58	5290	106	5530
		122	5610

Table 4 802.11ac/802.11ax (80MHz BW) Frequency /Channel operations

3.2.Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **2AH25T8F1BH** filing to comply with Section 15.247 of the FCC Part 15 Subpart E.

This submittal(s) (test report) is intended for IC: **22621-T8F1BH** filing to comply with IC RSS-247 Issue 3.

3.3.Block Diagram of EUT Configuration

Setup for Master with injection at the Master

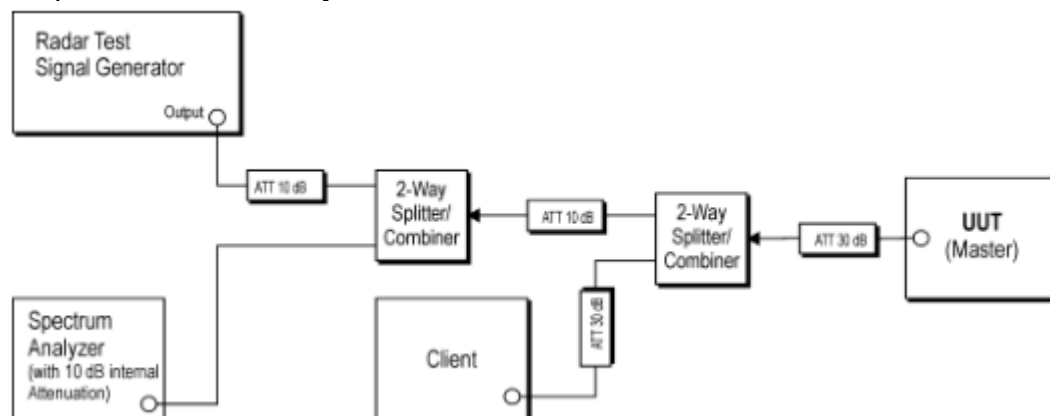


Figure 1 Example Conducted Setup where UUT is a Master and Radar Test Waveforms are injected into the Master

Setup for Client with injection at the Master

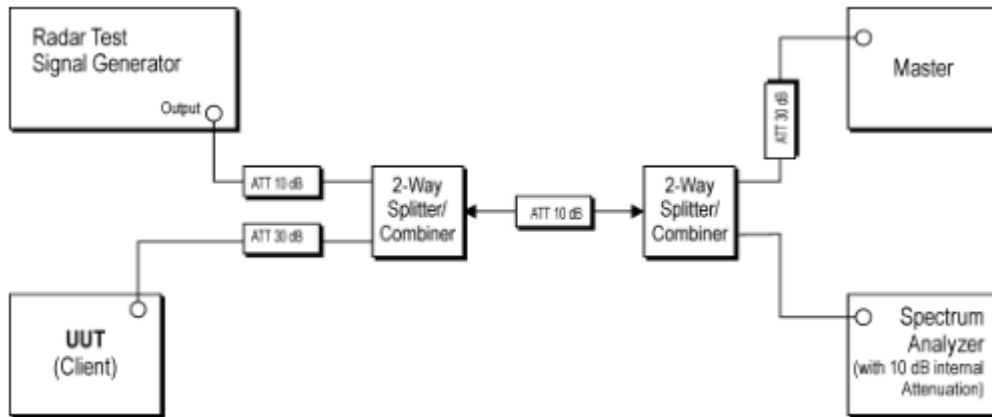


Figure 2 Example Conducted Setup where UUT is a Client and Radar Test Waveforms are injected into the Master

Setup for Client with injection at the Client

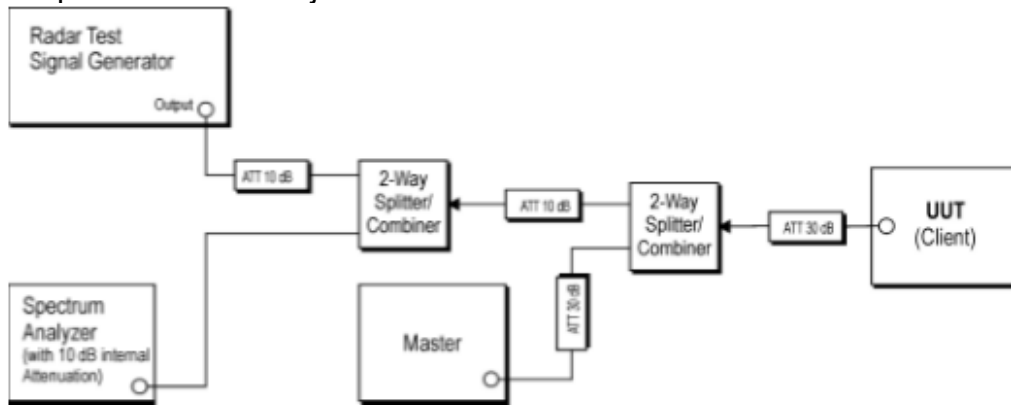


Figure 3 Example Conducted Setup where UUT is a Client and Radar Test Waveforms are injected into the Client

3.4. Operating Condition of EUT

The EUT utilizes the 802.11n architecture. Two nominal channel bandwidths are implemented: 20MHz, 40MHz, 80MHz. Only test the widest BW: 80MHz.

DFS Operational mode	Master	Client Without Radar Detection	Client With Radar Detection
	☐	☒	☐

3.5. Support Equipment List

Table 5 Support Equipment List

Name	Model No.	S/N	Manufacturer	FCC
Notebook	E460	---	Lenovo	DOC
Nighthawk X4S AC2600 Smart WiFi Router	R7800	---	NETGEAR	ID:PY315100319

3.6. Test Conditions

Date of test: Feb. 03, 2026

Date of EUT Receive: Jan. 19, 2026

Temperature: 23 °C

Relative Humidity: 34%

3.7. Special Accessories

Not available for this EUT intended for grant.

3.8. Equipment Modifications

Not available for this EUT intended for grant.

4. TEST EQUIPMENT USED

Table 6 Test Equipment

No.	Equipment	Manufacturer	Model No.	Calibration Due Date	Calibration Interval
SB18161	Spectrum Analyzer	R&S	FSV3030	Apr.28, 2026	1 Year
SB17370	Power sensor, Power Meter	JS0806-2	Tonscend	Oct.14, 2026	1 Year
SB19868	Vector Signal Generator	R&S	SMW200A	Jul.27, 2026	1 Year

Table 7 Test software

Name	Manufacturer	Version
Bluetooth and WiFi Test System	Shenzhen JS tonskend co.,ltd	3.3.10

5. TRANSMIT POWER CONTROL

5.1.LIMITS OF TRANSMIT POWER CONTROL

CFR 47 (FCC) part 15.2407 (h)(1)

U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band

Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

5.2.TEST DATA

N/A

6. DYNAMIC FREQUENCY SELECTION

6.1. LIMITS OF DYNAMIC FREQUENCY SELECTION

CFR 47 (FCC) part 15.407 (h) (1)
 RSS-247 Issue 3 Clause 6.3
 kdb905462 D02

Table 8 Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	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
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 9 Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it		

is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

Table 10 Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (See Notes)
Devices with an e.i.r.p. < 200 mW AND a Power Spectral Density < 10 dBm/MHz	-62 dBm
Devices with $200 \text{ mW} \leq \text{e.i.r.p.} \leq 1 \text{ W}$	-64 dBm
Note: The detection threshold power is the received power, averaged over a 1-microsecond reference to a 0 dBi antenna.	

Table 11 DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

Table 12 Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
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	Roundup: $\{(1/360) \times (19 \times 10^6 \text{PRI}_{\text{usec}})\}$	60%	30
		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 in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				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.					

Table 13 Long Pulse Radar Test Waveform

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

Table 14 Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

6.2. TEST PROCEDURE

The EUT Operates over the 5250-5350MHz and 5470-5725 MHz range and it is a

Client Device without Radar Detection.

The radar detection threshold, lower antenna gain is the parameter of interference radar DFS detection threshold, the required conducted threshold at the antenna port is the $-62\text{dBm}+0\text{dBi}+1\text{dB}=-61\text{dBm}$.

The R&S SMBV100A vector signal generator with option K350 is used to generate the pulse during test.

The Client device is connected to the Master device on the Channel selected to test. The program iPerf is used to set up a connection between the Client and the Master Device with proper duty cycle.

The Spectrum analyzer is used to monitor the DFS radar pulse and the EUT transmission with zero span function at the selected Channel. The spectrum analyzer is set to peak detection, and max hold.

WLAN traffic load is verified before the pulse is injected.

Channel Move time

The test software controls the spectrum analyzer to start monitoring the EUT transmission, and at $T_0=2\text{sec}$, the pulse is injected. The time the pulse stop is marked as T_1 , The time when no transmission is detected is marked as T_3 . T_3-T_1 is calculated as Channel move time.

Non-Occupancy Period

The test software controls the spectrum analyzer to start monitoring the EUT transmission, and at $T_0=10\text{sec}$, the pulse is injected. T_2 is the channel move time stop moment; the software controls the spectrum to monitor for 1800 seconds. The plot is recorded in report.

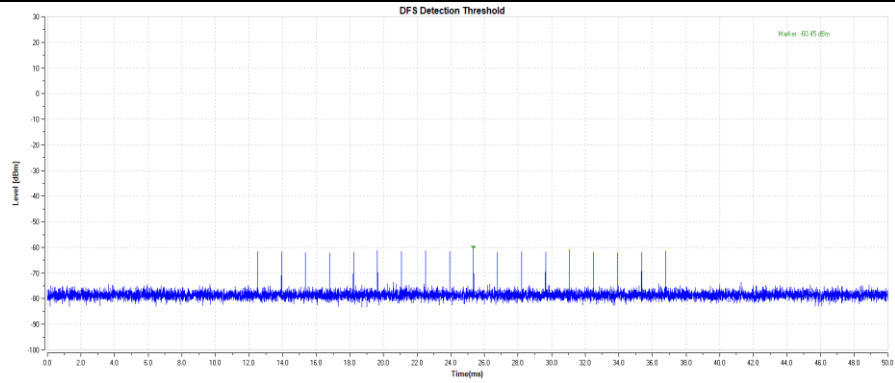
6.3.TEST DATA

DFS Detection Thresholds

TestMode	Frequency[dbm]	Radar Type	Result	Limit[dbm]	Verdict
11AC80SISO	5290	Type0	-60.45	-60.03	PASS
11AC80SISO	5530	Type0	-60.16	-60.04	PASS

Type 0

11AC80SISO-5290-Type0-PASS



11AC80SISO-5530-Type0-PASS

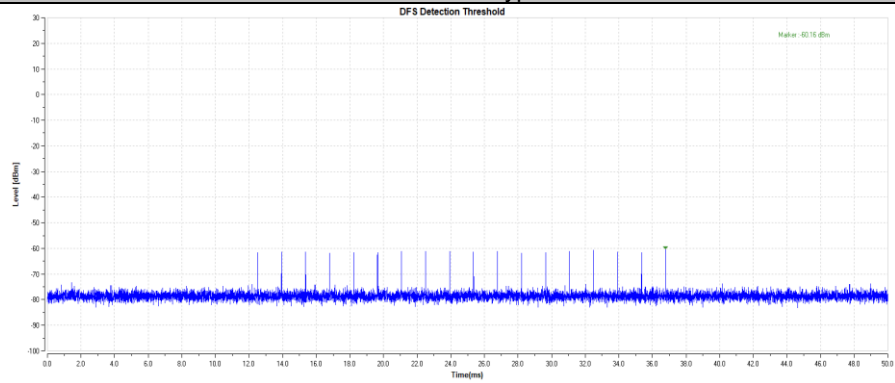
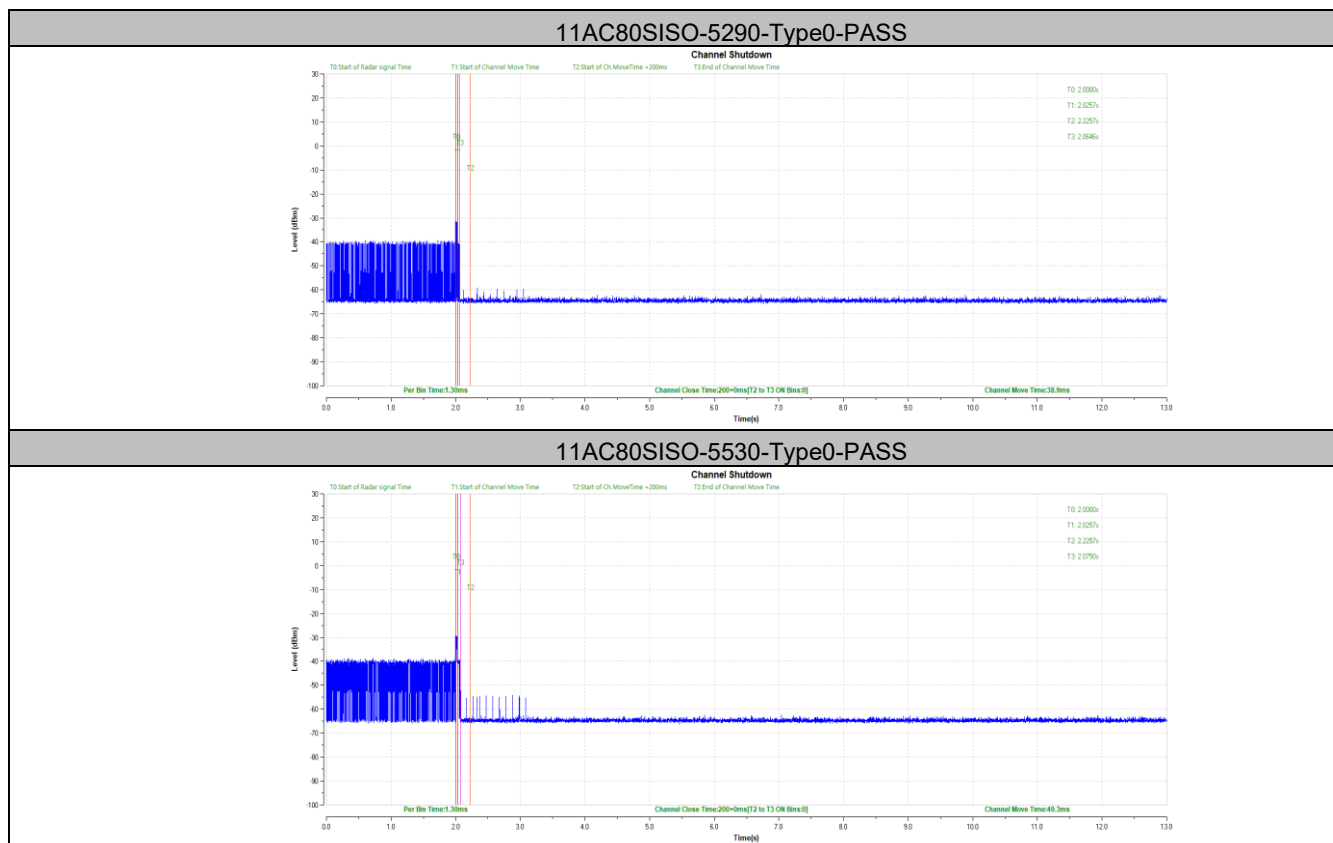


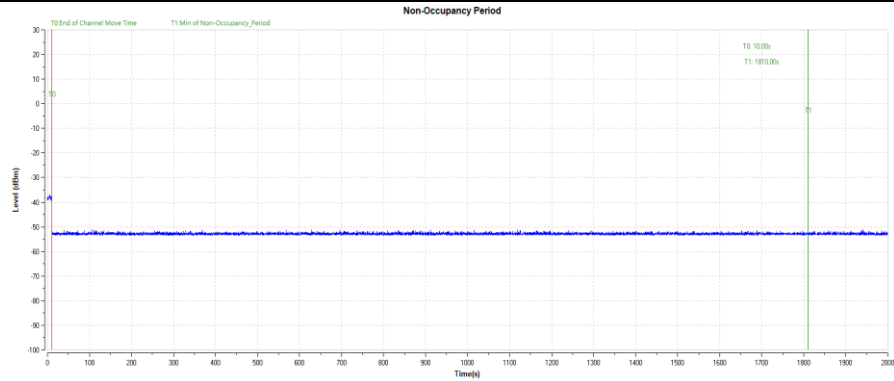
Table 15 Channel Move Time and Channel Closing Transmission Time Test Data

TestMode	Frequency[MHz]	CCTT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11AC80SISO	5290	200+0	200+60	38.9	10000	PASS
11AC80SISO	5530	200+0	200+60	49.3	10000	PASS

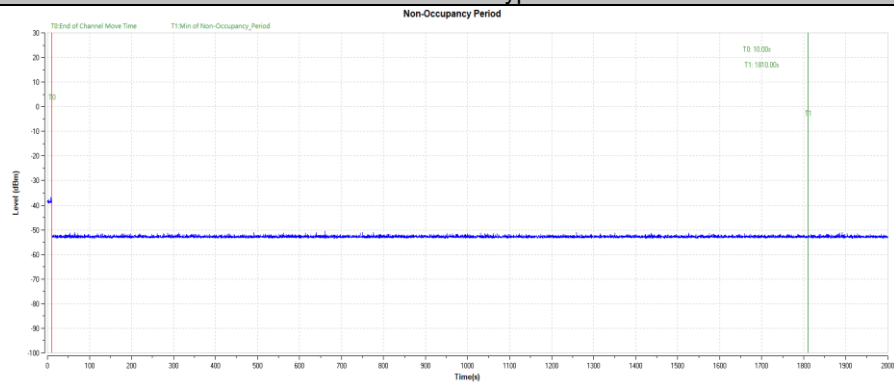


Non-Occupancy Period Test

11AC80SISO-5290-Type0-PASS



11AC80SISO-5530-Type0-PASS



1800s/60=30minute

Verdict: Pass

END OF REPORT