# Radio Test Report

Report No.: STS2512229W06

Issued for

Shanghai Yaoyou Information Technology Co., Ltd.

Room 201,South Side,1B Floor,Lianzhi Valley,No.1366,Qixin Road,Minhang District, Shanghai,China.

| | |
|---|---|
| Product Name: | Android data collector |
| Brand Name: | YAOYOU |
| Model Name: | Y55 |
| Series Model(s): | Y55G, Y55pro, Y55E, Y55L, Y55S, Y55U, P8III, P8IIIH, P40, P40PRO, PCR100Y, PCR550, PDA006, RC320, RC325, A-Tab, HP-Tab, S60III, S60III Pro, MC200, MC200G, MC200pro, CS5i, CS5i Pro, HC12, T7, D5, SC280 |
| FCC ID: | 2BT3Z-Y55 |
| Test Standard: | FCC Part15.407 |

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

# TEST REPORT

| | |
|---|---|
| **Applicant's Name**..... : | Shanghai Yaoyou Information Technology Co., Ltd. |
| Address ..... : | Room 201,South Side,1B Floor,Lianzhi Valley,No.1366,Qixin Road,Minhang District, Shanghai,China. |
| **Manufacturer's Name**..... : | Shanghai Yaoyou Information Technology Co., Ltd. |
| Address ..... : | Room 201,South Side,1B Floor,Lianzhi Valley,No.1366,Qixin Road,Minhang District, Shanghai,China. |
| **Product Description** | |
| Product Name..... : | Android data collector |
| Brand Name ..... : | YAOYOU |
| Model Name ..... : | Y55 |
| Series Model(s) ..... : | Y55G, Y55pro, Y55E, Y55L, Y55S, Y55U, P8III, P8IIIH, P40, P40PRO, PCR100Y, PCR550, PDA006, RC320, RC325, A-Tab, HP-Tab, S60III, S60III Pro, MC200, MC200G, MC200pro, CS5i, CS5i Pro, HC12, T7, D5, SC280 |
| **Test Standards**..... : | FCC Part 15.407 |
| **Test Procedure** | 905462 D02 UNII DFS Compliance Procedures New Rules v02<br>905462 D03 UNII Clients Without Radar Detection New Rules v01r02 |

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

| | |
|---|---|
| **Date of Test** ..... : | |
| Date of receipt of test item..... : | 24 Dec. 2025 |
| Date (s) of performance of tests..... : | 24 Dec. 2025~04 Feb. 2026 |
| Date of Issue..... : | 04 Feb. 2026 |
| Test Result..... : | **Pass** |

Testing Engineer : Aaron Bu

(Aaron Bu)

Technical Manager : Skylar. Li

(Skylar Li)

Authorized Signatory : Bovey Yang

(Bovey Yang)

SHENZHEN STS TESTING APPROVAL

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## Revision History

| Rev. | Issue Date | Report No. | Effect Page | Contents |
|---|---|---|---|---|
| 00 | 04 Feb. 2026 | STS2512229W06 | ALL | Initial Issue |
| | | | | |

## 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards: KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 and 905462 D03 UNII Clients Without Radar Detection New Rules v01r02

| Part 15.407 | | | |
|---|---|---|---|
| Requirement | Operational Mode | | RESULTS |
| | Master | Client | |
| Non-Occupancy Period | Yes | Yes | Pass |
| DFS Detection Threshold | Yes | Not required | Not required |
| Channel Availability Check Time | Yes | Not required | Not required |
| Channel Closing Transmission Time | Yes | Yes | Pass |
| Channel Move Time | Yes | Yes | Pass |
| U-NII Detection Bandwidth | Yes | Not required | Not required |

## 1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD
Add. : 101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

## 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **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 | Uncertainty |
|---|---|---|
| 1 | DFS Threshold (conducted) | ±0.751dB |
| 2 | Temperature | ±1.054°C |
| 3 | Humidity | ±4.543% |

## 2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

<table>
<tr><td>Product Name</td><td>Android data collector</td></tr>
<tr><td>Brand Name</td><td>YAOYOU</td></tr>
<tr><td>Model Name</td><td>Y55</td></tr>
<tr><td>Series Model(s)</td><td>Y55G, Y55pro, Y55E, Y55L, Y55S, Y55U, P8III, P8IIIH, P40, P40PRO, PCR100Y, PCR550, PDA006, RC320, RC325, A-Tab, HP-Tab, S60III, S60III Pro, MC200, MC200G, MC200pro, CS5i, CS5i Pro, HC12, T7, D5, SC280</td></tr>
<tr><td>Model Difference</td><td>Only different in model name.</td></tr>
<tr><td>Product Description</td><td>The EUT is Android data collector
<table>
<tr><td>Operation Frequency:</td><td>802.11a/n/ac(20):5260 MHz -5320 MHz<br>802.11a/n/ac(40):5270 MHz -5310 MHz<br>802.11ac(80) 5290MHz<br>802.11a/n/ac(20):5500 MHz -5700 MHz<br>802.11a/n/ac(40):5510 MHz -5670 MHz<br>802.11ac(80) 5530-5610MHz</td></tr>
<tr><td>Modulation Type:</td><td>802.11a(OFDM):<br>BPSK,QPSK,16-QAM,64-QAM<br>802.11n(OFDM):<br>BPSK,QPSK,16-QAM,64-QAM<br>802.11ac(OFDM):<br>BPSK,QPSK,16-QAM,64-QAM,256-QAM</td></tr>
<tr><td>Number Of Channel</td><td>Please see Note 2.</td></tr>
<tr><td>Antenna Gain(Peak)</td><td>1.3dBi</td></tr>
</table>
Based on the application, features, or specification exhibited in User’s Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User’s Manual.</td></tr>
<tr><td>Channel List</td><td>Refer to below</td></tr>
<tr><td>Sub-class</td><td>H01</td></tr>
<tr><td>Power Rating</td><td>Input: DC 5V 3A</td></tr>
<tr><td>Adapter</td><td>N/A</td></tr>
<tr><td>Battery</td><td>Model: 5643116-2P<br>Brand:（Shenzhen Jiayuan Tongda Technology Co., Ltd.）<br>Rated Voltage:3.8V<br>Charge Limit Voltage:4.35V<br>Capacity: 9000mAh</td></tr>
<tr><td>Hardware version number</td><td>XT55_MB_V1.0</td></tr>
<tr><td>Software version number</td><td>Y55_V1.0</td></tr>
</table>

Note:

1. For a more detailed features description, please refer to the manufacturer’s specifications or the User Manual, the antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.

2

| For 802.11a/n(HT20)/ac(VHT20) | | | |
|---|---|---|---|
| Channel | Freq.(MHz) | Channel | Freq.(MHz) |
| 52 | 5260 | 100 | 5500 |
| 60 | 5300 | 116 | 5580 |
| 64 | 5320 | 140 | 5700 |

| Channel List for 802.11 n/ac | | | |
|---|---|---|---|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 54 | 5270 | 102 | 5510 |
| 62 | 5310 | 110 | 5550 |
| -- | -- | 134 | 5670 |

| Channel List for 802.11ac (VHT80) | | | |
|---|---|---|---|
| Channel | Freq.(MHz) | Channel | Freq.(MHz) |
| 58 | 5290 | 106 | 5530 |
| | | 122 | 5610 |

Remark: 1. The EUT not support TPC function, Radar detection and hotspot.

2.2.EQUIPMENT UNDER TEST (EUT) DETAILS

The manufacturer declared values for the EUT operational characteristics that affect DFS are as follows

**Operating Modes (5250 – 5350 MHz, 5470 – 5725 MHz)**

☐ Master Device
☒ Client Device (no In Service Monitoring, no Ad-Hoc mode)
☐ Client Device with In-Service Monitoring

**Antenna Gains / EIRP (5250 – 5350 MHz, 5470 – 5725 MHz)**

| | 5250 – 5350 MHz | | 5470 – 5725 MHz | |
|---|---|---|---|---|
| Antenna Gain (dBi) | 1.3 | | 1.3 | |
| Max/Min EIRP Power(dBm) | 13.65 | 12.01 | 12.37 | 8.38 |
| DFS Detection Threshold (dBm) | -62 | | | |

**Channel Protocol**

☒ IP Based
☐ Frame Based
☐ OTHER_____

Note 1: We test all channels that need to be tested for DFS, reporting only part of the test pattem and data, in this report, we have identified other parts that are compliant with RSS regulations.
Note 2: The method of establishing a connection between the master device and the slave device After inserting the EUT USB port into the Pc, the laptop opens the router control interface to connect to the EUT and control its corresponding signal transmission.

1. The frequency range of equipment operation is: UNNI-1: 5150 MHz to 5250 MHz, U-Nll-2A:5250 MHz to 5350 MHz, UNNI-2C: 5470 MHz to 5725 MHz, UNNI-3: 5745 MHz to 5825 MHz.
2. The operating modes is Client, Equipped without radar detection capability, the main U-Nll device FCC used for DFS testing is TE7AX11000.
3. Please refer to section page 9 of this report for the maximum and minimum possible power levels(Equivalent lsotropic Radiated Power (EIRP)) of the equipment, The antenna gain is 3.3dBi
4. Test sequences or messages that should be used for communication between Master and Client Devices, which are used for Channel loading Stream the test file from the Master Device to the Client Device for IP based systems or frame based systems which dynamically allocate the talk/listen rato.
5. The time required for the master and slave devices to fully start is 120 seconds.
6. The product belongs to Slave without radar detection
7. Manufacturer statement confirming that information regarding the parameters of the detected Radar Waveforms is not available to the end user.
8. Manufacturers can manually select the frst channel 5300MHz.

## 2.3 TEST CONDITIONS AND CHANNEL

| | Normal Test Conditions |
|---|---|
| Temperature | 15°C – 35°C |
| Relative Humidity | 20% - 75% |
| Supply Voltage | DC 3.8V |

| Channel List | | |
|---|---|---|
| Band Frequency | EUT Channel | Test Frequency (MHz) |
| U-NII-2A | CH60 | 5300 |
| | CH58 | 5290 |

| Channel List | | |
|---|---|---|
| Band Frequency | EUT Channel | Test Frequency (MHz) |
| U-NII-2C | CH116 | 5580 |
| | CH106 | 5530 |

## 2.4 DFS MEASUREMENT INSTRUMENTATION

### a. RADAR GENERATION SYSTEM

An Agilent PSG is used as the radar-generating source. The integral arbitrary waveform generators are programmed using Agilent's "Pulse Building" software and Elliott custom software to produce the required waveforms, with the capability to produce both unmodulated and modulated (FM Chirp) pulses. Where there are multiple values for a specific radar parameter then the software selects a value at random and, for FCC tests, the software verifies that the resulting waveform is truly unique.

With the exception of the hopping waveforms required by the FCC's rules (see below), the radar generator is set to a single frequency within the radar detection bandwidth of the EUT.

Frequency hopping radar waveforms are simulated using a time domain model. A randomly hopping sequence algorithm (which uses each channel in the hopping radar's range once in a hopping sequence) generates a hop sequence. A segment of the first 100 elements of the hop sequence are then examined to determine if it contains one or more frequencies within the radar detection bandwidth of the EUT. If it does not then the first element of the segment is discarded and the next frequency in the sequence is added. The process repeats until a valid segment is produced. The radar system is then programmed to produce bursts at time slots coincident with the frequencies within the segment that fall in the detection bandwidth. The frequency of the generator is stepped in 1 MHz increments across the EUT's detection range.

The radar signal level is verified during testing using a CW signal with the AGC function switched on. Correction factors to account for the fact that pulses are generated with the AGC functions switched off

are measured annually and an offset is used to account for this in the software. The generator output is connected to the coupling port of the conducted set-up or to the radar-generating antenna.

b. CHANNEL MONITORING SYSTEM

Channel monitoring is achieved using a spectrum analyzer and digital storage oscilloscope. The analyzer is configured in a zero-span mode, center frequency set to the radar waveform's frequency or the center frequency of the EUT's operating channel.

The IF output of the analyzer is connected to one input of the oscilloscope and analyzer.
A signal generator output is set to send either the modulating signal directly or a pulse gate with an output pulse co-incident with each radar pulse. This output is connected to a second input on the oscilloscope and the oscilloscope displays both the channel traffic (via the if input) and the radar pulses on its display.

For in service monitoring tests the analyzer sweep time is set to > 20 seconds and the oscilloscope is configured with a data record length of 10 seconds for the short duration and frequency hopping waveforms, 20 seconds for the long duration waveforms. Both instruments are set for a single acquisition sequence. The analyzer is triggered 500ms before the start of the waveform and the oscilloscope is triggered directly by the modulating pulse train. Timing measurements for aggregate channel transmission time and channel move time are made from the oscilloscope data, with the end of the waveform clearly identified by the pulse train on one trace. The analyzer trace data is used to confirm that the last transmission occurred within the 10-second record of the oscilloscope. If necessary the record length of the oscilloscope is expanded to capture the last transmission on the channel prior to the channel move.

Channel availability check time timing plots are made using the analyzer. The analyzer is triggered at start of the EUT's channel availability check and used to verify that the EUT does not transmit when radar is applied during the check time.
The analyzer detector and oscilloscope sampling mode is set to peak detect for all plots.

## 2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

| RF Connected Test | | | | | |
|---|---|---|---|---|---|
| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last calibration | Calibrated until |
| Signal Analyzer | Agilent | N9020A | MY51510623 | 2025.02.22 | 2026.02.21 |
| Signal Generator | Keysight | N5182A | MY46240556 | 2025.09.26 | 2026.09.25 |
| Signal Generator | Keysight | N5182B | MY57301448 | 2025.09.26 | 2026.09.25 |
| Signal Analyzer | Agilent | N9020A | MY51510623 | 2025.02.22 | 2026.02.21 |
| Power Divider | eastsheep | PD-0.5/0.6-2S | B519 | 2025.02.25 | 2026.02.24 |
| Power Splitter | MINI-CIRCUITS | ZN2PD-9G | SF078500430 | 2025.02.25 | 2026.02.24 |
| Attenuator | Agilent | 8494B | DC-18G | 2025.02.25 | 2026.02.24 |
| Attenuator | Boyang | 99899 | DC-18G | 2025.02.25 | 2026.02.24 |
| Switch control box | MW | MW100-RFCB | N/A | N/A | N/A |
| Router | TP-Link | Archer AX11000 | 219B581000079 | N.C.R | N.C.R |
| Temperature & Humidity | SW-108 | SuWei | N/A | 2025.02.24 | 2026.02.23 |
| Test SW | MW | MTS 8310_2.0.0.0 | | | |

Note:

Router FCC ID：TE7AX11000

# 3. DFS PARAMETERS

## 3.1 DFS PARAMETERS

Table 1: 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 2: 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 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

| **Maximum Transmit Power** | **Value (See Notes 1, 2, and 3)** |
|---|---|
| EIRP ≥ 200 milliwatt | -64 dBm |
| EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz | -62 dBm |
| EIRP < 200 milliwatt that do not meet the power spectral density requirement | -64 dBm |

**Note 1:** This is the level at the input of the receiver assuming a 0 dBi receive antenna.
**Note 2:** Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.
**Note3:** EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

Table 4: DFS Response Requirement Values

| **Parameter** | **Value** |
|---|---|
| *Non-occupancy period* | Minimum 30 minutes |
| *Channel Availability Check Time* | 60 seconds |
| *Channel Move Time* | 10 seconds<br>See Note 1. |
| *Channel Closing Transmission Time* | 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.<br>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 5 – 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 | $\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{\text{PRI}_{\mu\text{sec}}}\right)\right\}$ | 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 5a - Pulse Repetition Intervals Values for Test A

| Pulse Repetition Frequency Number | Pulse Repetition Frequency (Pulses Per Second) | Pulse Repetition Interval (Microseconds) |
|---|---|---|
| 1 | 1930.5 | 518 |
| 2 | 1858.7 | 538 |
| 3 | 1792.1 | 558 |
| 4 | 1730.1 | 578 |
| 5 | 1672.2 | 598 |
| 6 | 1618.1 | 618 |
| 7 | 1567.4 | 638 |
| 8 | 1519.8 | 658 |
| 9 | 1474.9 | 678 |
| 10 | 1432.7 | 698 |
| 11 | 1392.8 | 718 |
| 12 | 1355 | 738 |
| 13 | 1319.3 | 758 |
| 14 | 1285.3 | 778 |
| 15 | 1253.1 | 798 |
| 16 | 1222.5 | 818 |
| 17 | 1193.3 | 838 |
| 18 | 1165.6 | 858 |
| 19 | 1139 | 878 |
| 20 | 1113.6 | 898 |
| 21 | 1089.3 | 918 |
| 22 | 1066.1 | 938 |
| 23 | 326.2 | 3066 |

The aggregate is the average of the percentage of successful detections of Short Pulse Radar Types 1-4. For example, the following table indicates how to compute the aggregate of percentage of successful detections.

| Radar Type | Number of Trials | Number of Successful Detections | Minimum Percentage of Successful Detection |
|---|---|---|---|
| 1 | 35 | 29 | 82.9% |
| 2 | 30 | 18 | 60% |
| 3 | 30 | 27 | 90% |
| 4 | 50 | 44 | 88% |
| Aggregate (82.9% + 60% + 90% + 88%)/4 = 80.2% | | | |

Long Pulse Radar Test Waveform

Table 6 – 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 |

Figure 1 provides a graphical representation of the Long Pulse Radar Test Waveform.

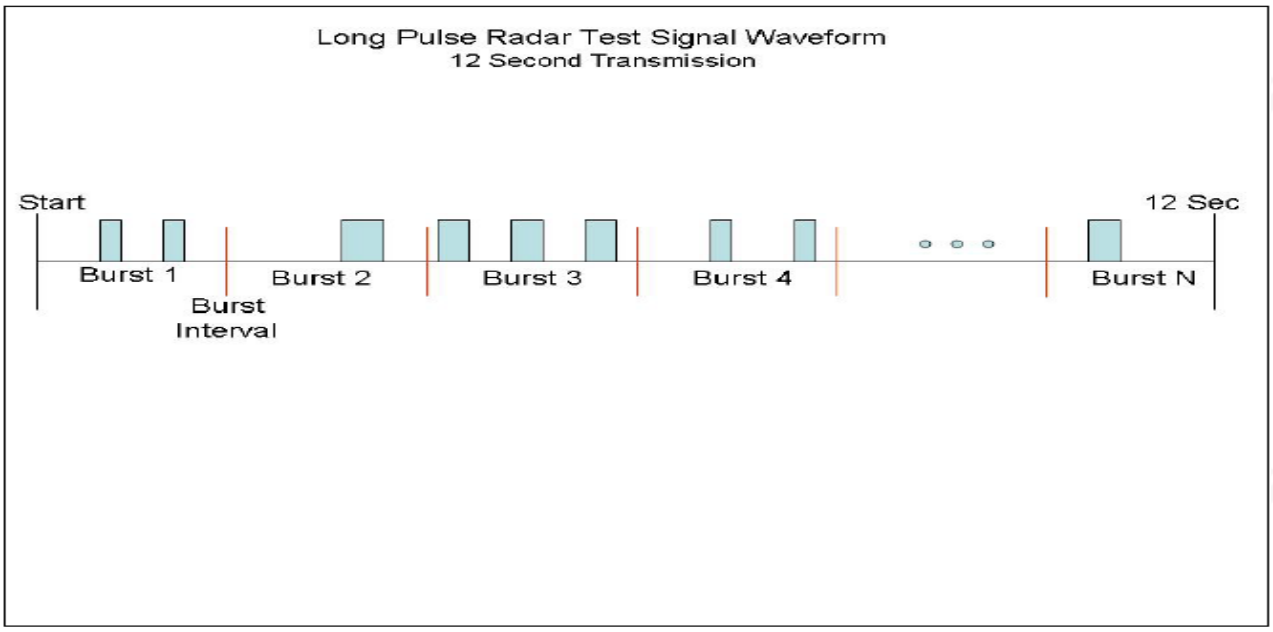



Table 7 – Frequency Hopping Radar Test Waveform

| 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 |

## 3.2 DFS –TEST RESULTS

3.2.1 TEST RESULTS– FCC Part 15.407 CLIENT DEVICE

Shutdown Time

| Mode | Frequency (MHz) | Channel Move Time (s) | Limit Channel Move Time (s) | Close Transmission Time (s) | Limit Close Transmission Time (s) | Verdict |
|---|---|---|---|---|---|---|
| ac80 | 5290 | 1.2929 | 10 | 0.0582 | 0.26 | Pass |
| ac80 | 5530 | 1.2668 | 10 | 0.0537 | 0.26 | Pass |
| a | 5300 | 1.3238 | 10 | 0.0414 | 0.26 | Pass |
| a | 5580 | 1.2983 | 10 | 0.0348 | 0.26 | Pass |

Notes:

1) Tests were performed using the conduction test method.
2) Channel availability check, detection threshold and non-occupancy period are not applicable to client devices.

3.2.2 DFS MEASUREMENT METHODS

a. DFS – CHANNEL CLOSING TRANSMISSION TIME AND CHANNEL MOVE TIME

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.
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.

b. DFS – CHANNEL NON-OCCUPANCY AND VERIFICATION OF PASSIVE SCANNING

Non-occupancy Period. A channel that has been flagged as containing a radar system, either by a channel availability check or in-service monitoring, is subject to a non-occupancy period of at least 30 minutes. The non-occupancy period starts at the time when the radar system is detected.

c. CHANNEL AVAILABILITY CHECK TIME

Channel Availability Check Time. A U-NII device shall check if there is a radar system already operating on the channel before it can initiate a transmission on a channel and when it has to move to a new channel. The U-NII device may start using the channel if no radar signal with a power level greater than the interference threshold values listed in paragraph (h)(2) of this section, is detected within 60 seconds.

d. CONTROL (TPC)

Compliance with the transmit power control requirements for devices is demonstrated through measurements showing multiple power levels and manufacturer statements explaining how the power control is implemented.

e. DETECTION PROBABILITY / SUCCESS RATE

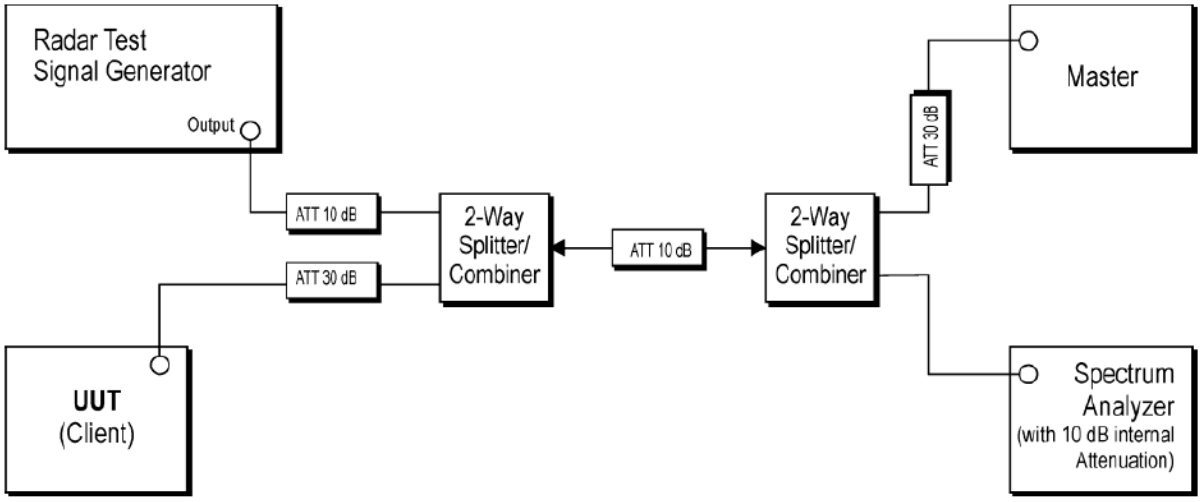
During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic. Minimum 100% of the U-NII 99% transmission power bandwidth.

f. NON- OCCUPANCY PERIOD

During the 30 minutes observation time, UUT did not make any transmissions on a channel after a radar signal was detected on that channel by either the Channel Availability Check or the In-Service Monitoring

3.2.3 DFS CONDUCTION TEST METHOD

a. The signal level of the simulated waveform is set to a reference level equal to the threshold level (plus 1dB if testing against FCC requirements). Lower levels may also be applied on request of the manufacturer.
The signal level is verified by measuring the CW signal level at the coupling point to the RDD antenna port. The radar signal level is calculated from the measured level, R (dBm) and the lowest gain antenna assembly intended for use with the RDD
If both master and client devices have radar detection capability then the radar level at the non RDD is verified to be at least 20dB below the threshold level to ensure that any responses are due to the RDD detecting radar.
The antenna connected to the channel monitoring subsystem is positioned to allow both master and client transmissions to be observed, with the level of the EUT's transmissions between 6 and 10dB higher than those from the other device.

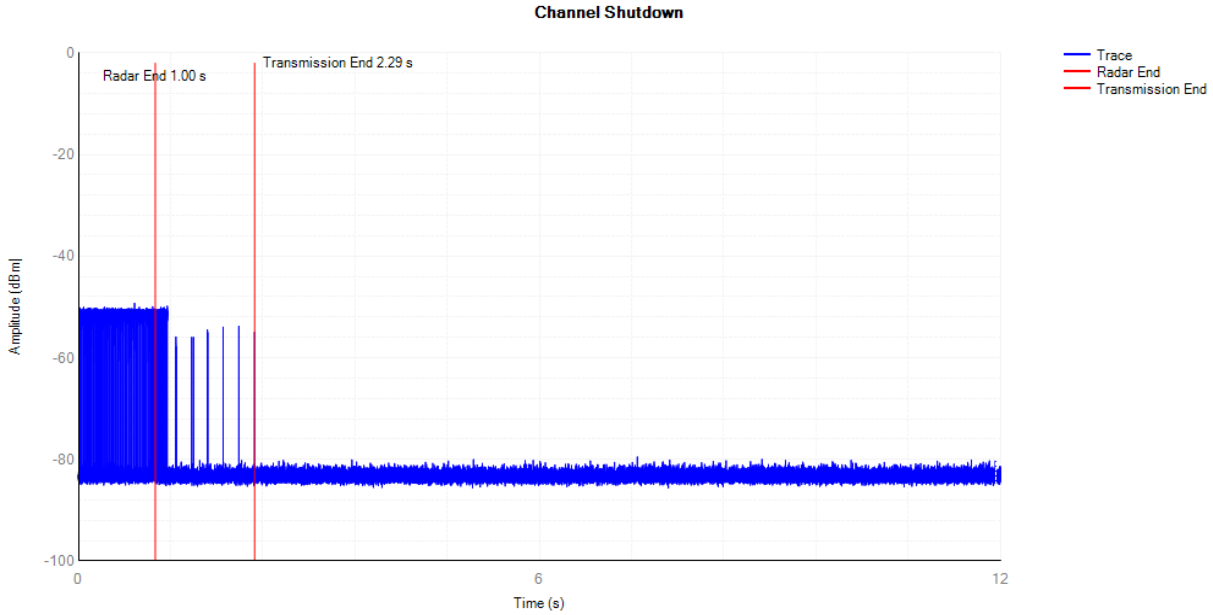



b. *Set-up B* is a set-up whereby the UUT is an RLAN device operating in slave mode, with or without Radar Interference Detection function. This set-up also contains an RLAN device operating in master mode. The radar test signals are injected into the master device. The UUT (slave device)is associated with the master device. Figure 5 shows an example for *Set-up B*. The set-up used shall be documented in the test report.
Channel loading mode:
EUT connects to the router through DFS setup, then controls and switches the EUT channel on the router background page.

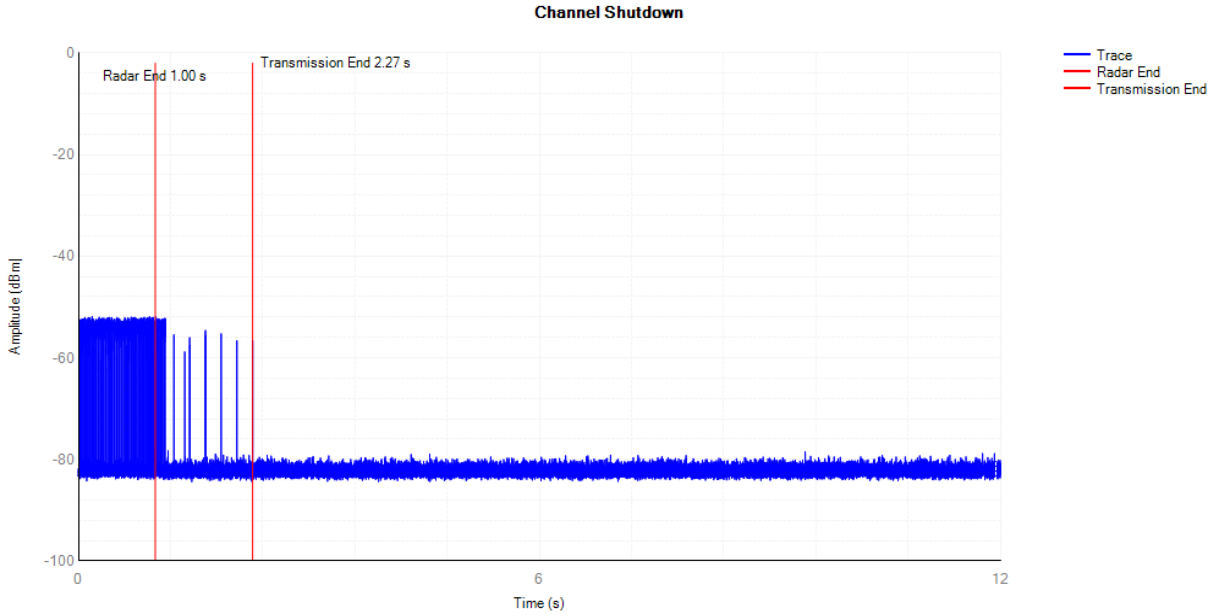
### 3.2.4 DFS Test Data

Shutdown Time

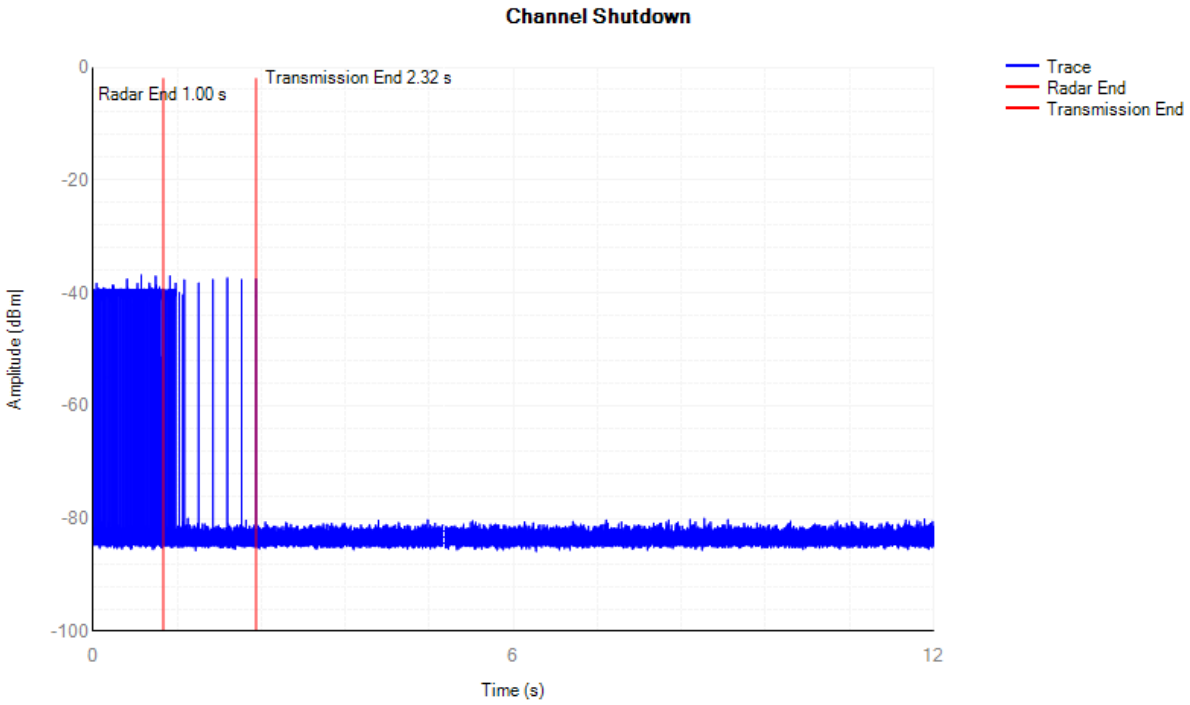
5290MHz ac80 Shutdown



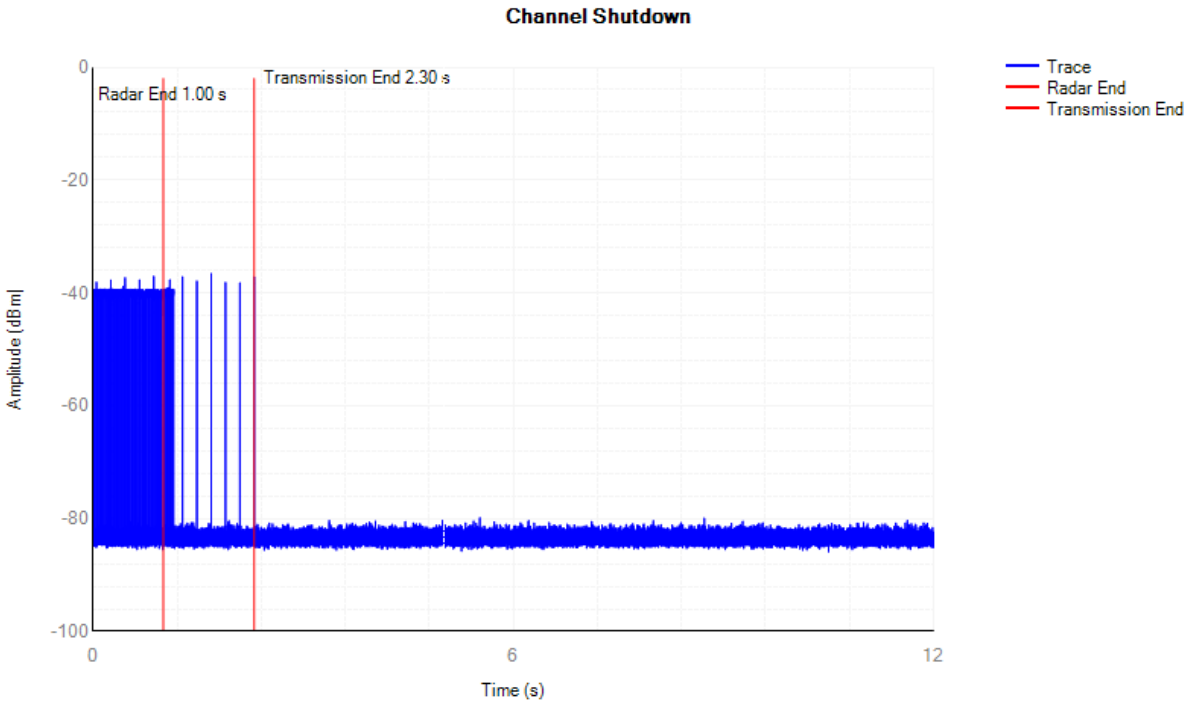

5530MHz ac80 Shutdown



5300MHz a Shutdown

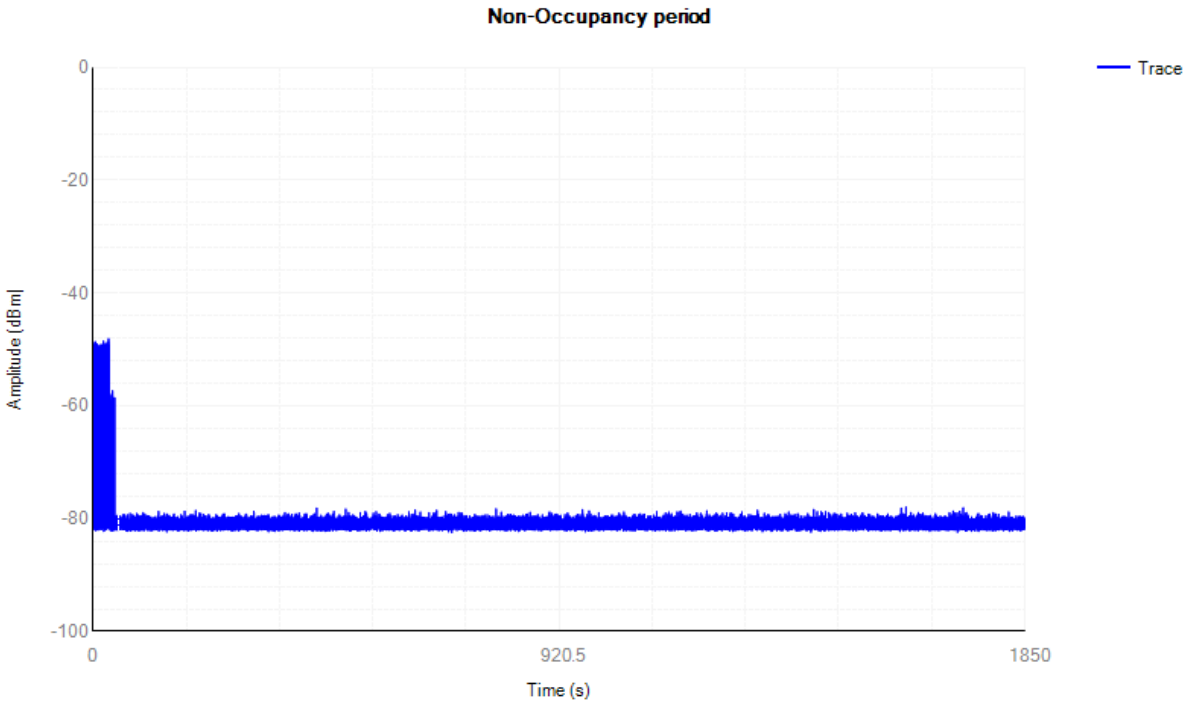



5580MHz a Shutdown

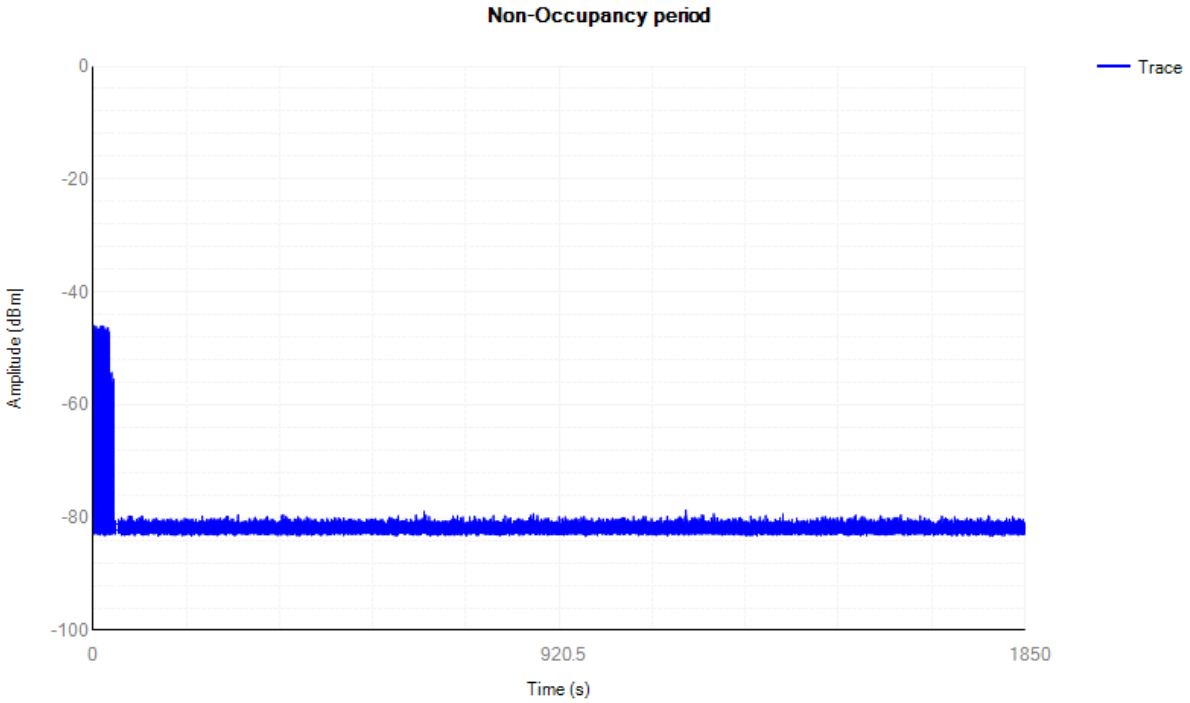


Non-Occupancy

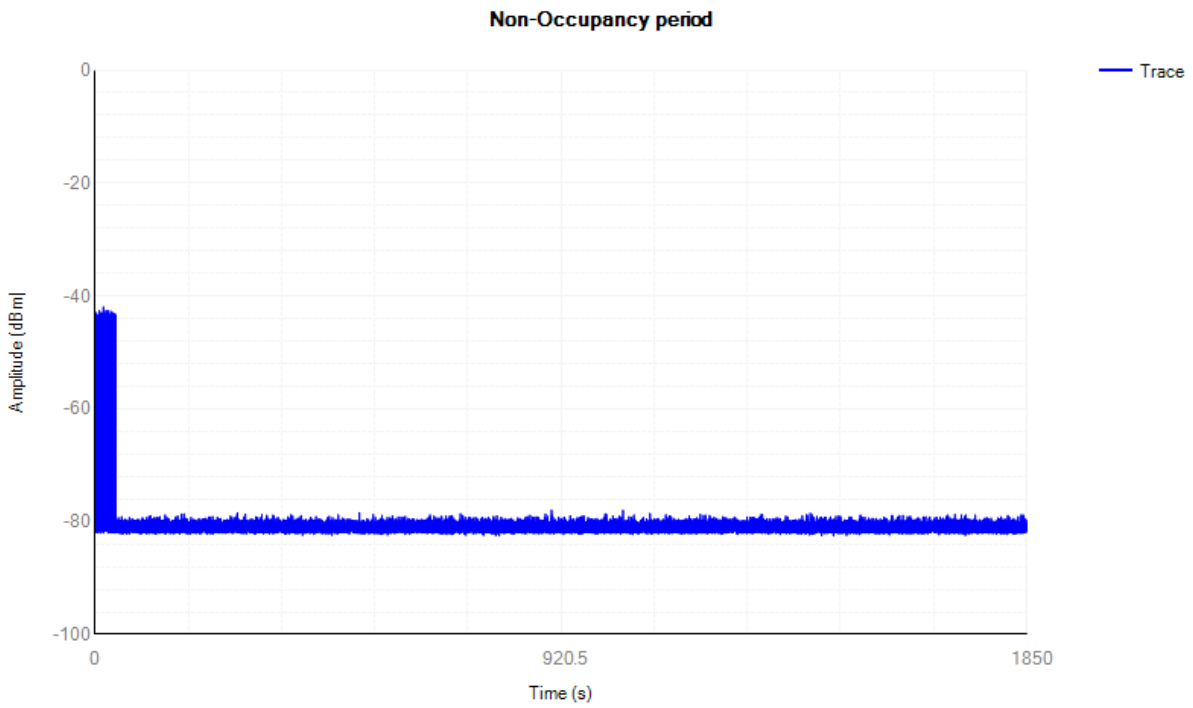
5290MHz ac80 Non-Occupancy



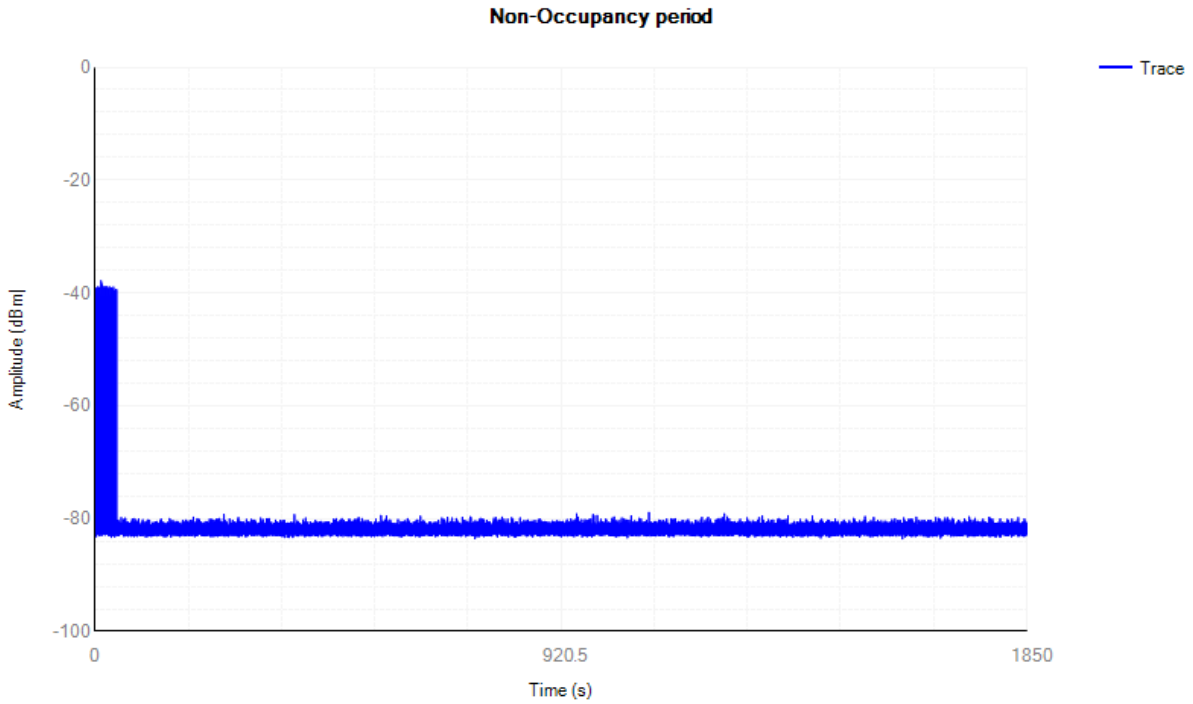

5530MHz ac80 Non-Occupancy



5300MHz a0 Non-Occupancy

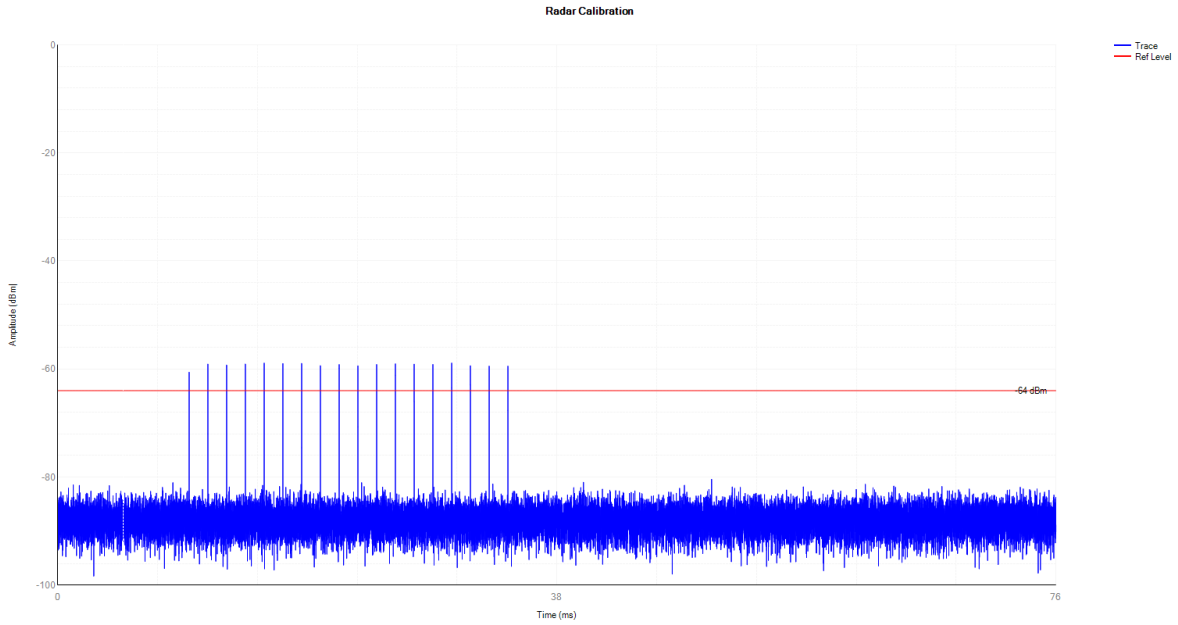



5580MHz a Non-Occupancy

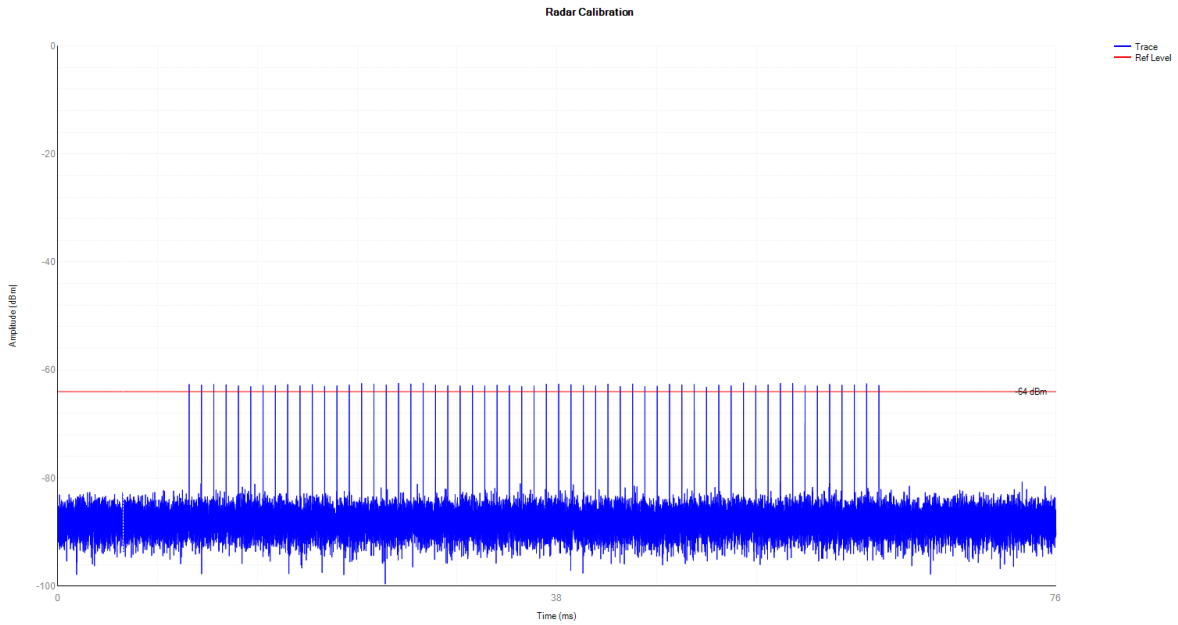


Radar Waveform Calibration

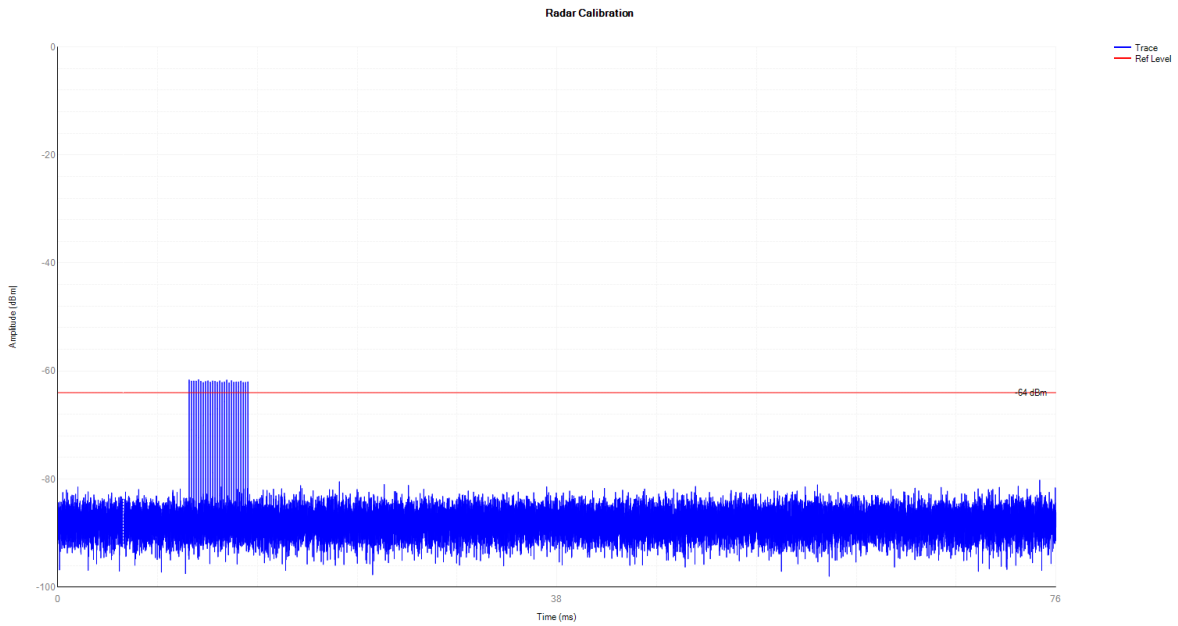
Type 0



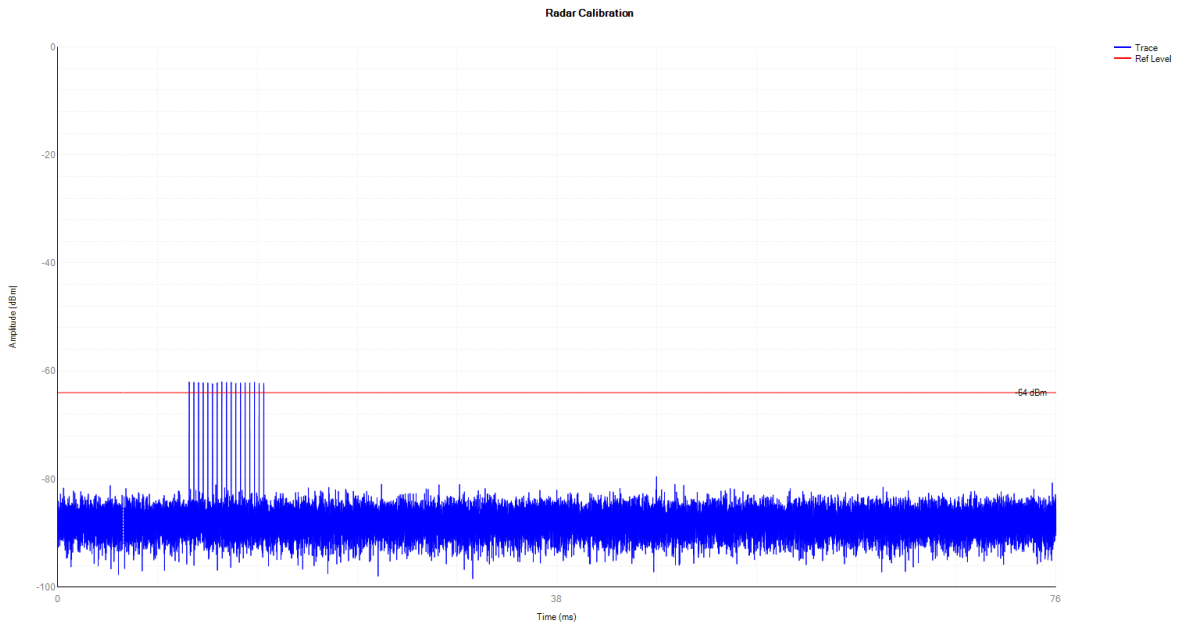

Type 1



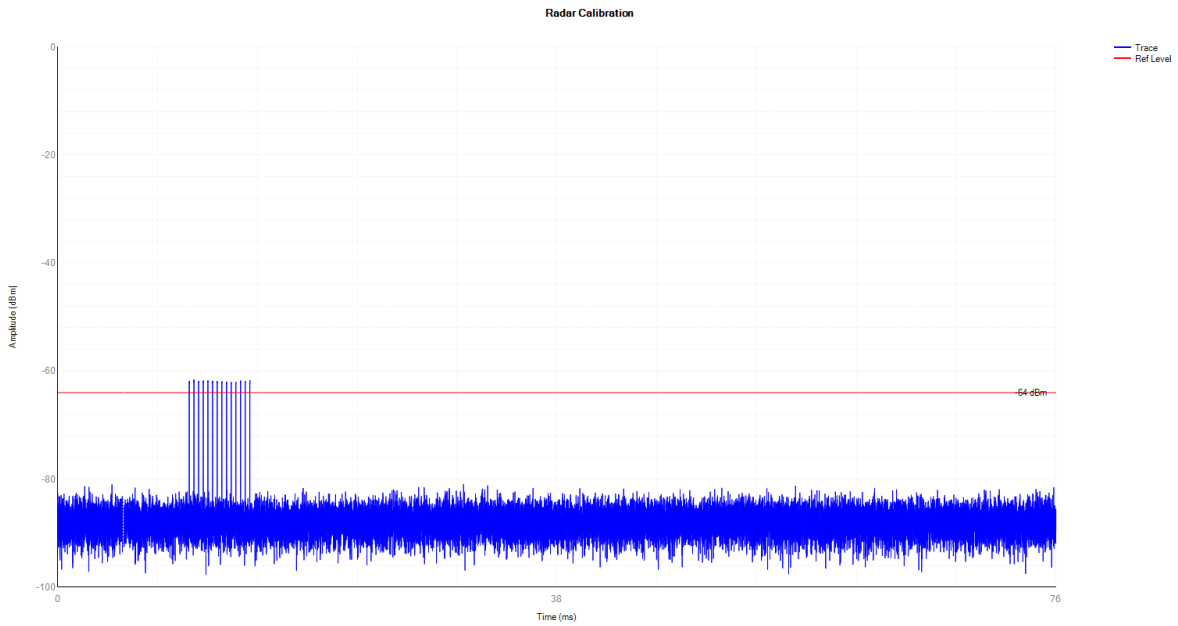
Type 2


Radar Calibration
Trace
Ref Level
0
-20
-40
-60
-80
-100
Amplitude (dBm)
-64 dBm
0
38
76
Time (ms)

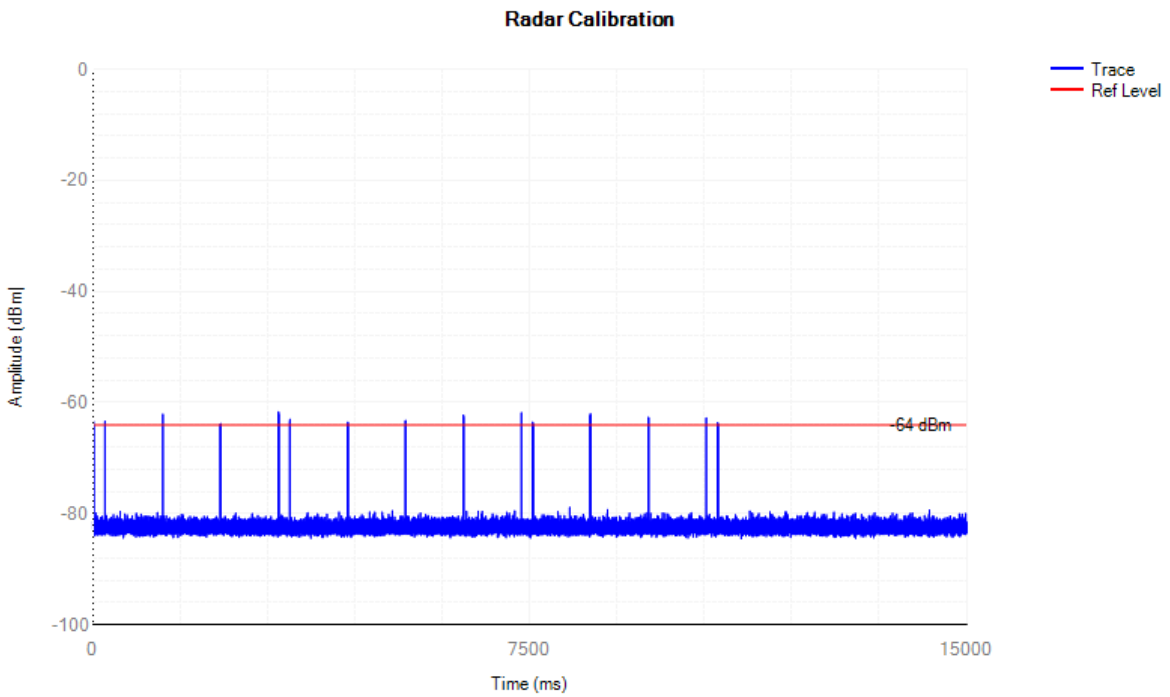
Type 3


Radar Calibration
Trace
Ref Level
0
-20
-40
-60
-80
-100
Amplitude (dBm)
-64 dBm
0
38
76
Time (ms)

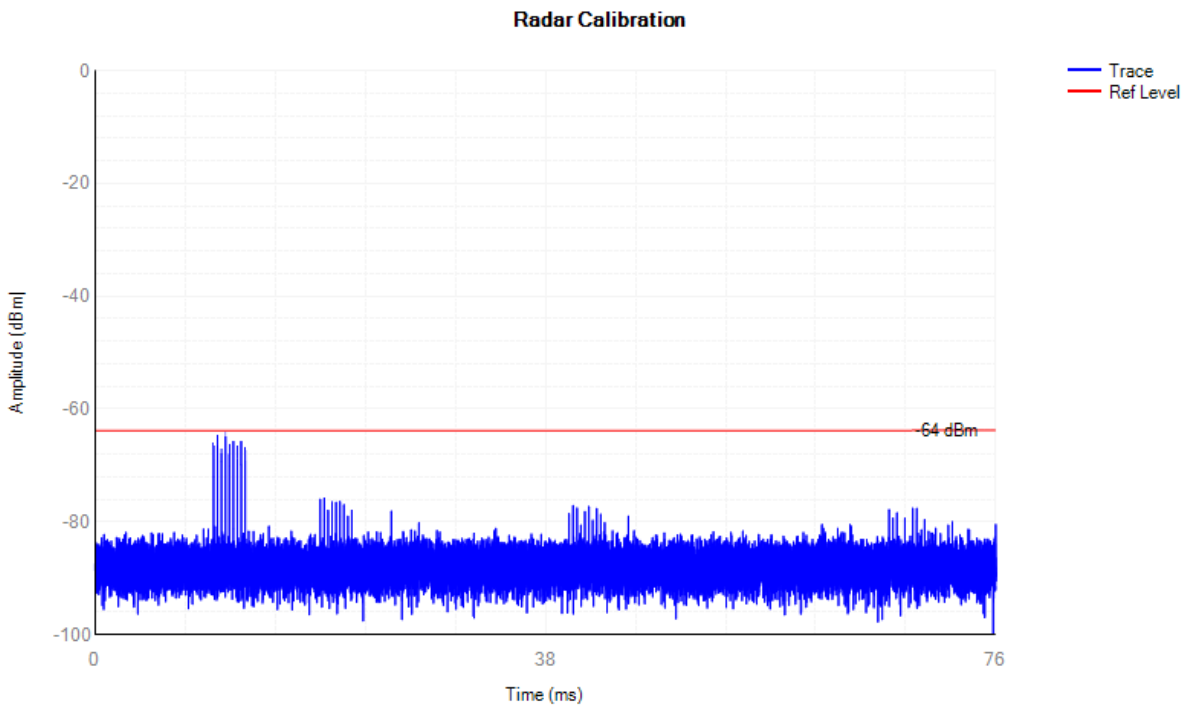
Type 4


Radar Calibration
Trace
Ref Level
0
-20
-40
-60
-80
-100
Amplitude (dBm)
-64 dBm
0
38
76
Time (ms)

Type 5


Radar Calibration
Trace
Ref Level
0
-20
-40
-60
-80
-100
Amplitude (dBm)
-64 dBm
0
7500
15000
Time (ms)

Type 6


Radar Calibration
Trace
Ref Level
0
-20
-40
-60
-80
-100
Amplitude [dBm]
-64 dBm
0
38
76
Time (ms)

3.2.5 DFS Test photo

※※※※※END OF THE REPORT※※※※※