| | |
|---|---|
| **Product Name: Desktop server** | **Report No: ITEZA2-202400184RF6** |
| **Product Model: UT2, UT2A, UT2 Pro, UT2C, UT2 Max** | **Security Classification: Open** |
| **Version: V1.0** | **Total Page: 134** |

# TIRT Testing Report

| Prepared By: | Checked By: | Approved By: | |
|---|---|---|---|
| Aaron Long | Stone Tang | Joky Wang | |
| Aaron Long | Stone Tang | Joky Wang | Beijing TIRT Technology Service Co., Ltd TIRT Shenzhen |

# RF TEST REPORT

## FCC ID: 2BGV2UT2

According to

## 47 CFR FCC Part 15, Subpart E(Section 15.407)

## ANSI C63.10:2013

| | |
|---|---|
| Applicant: | Unify Data Technology LLC |
| Address: | 1013 Centre Road, Suite 403S.2Wilmington, DE 19805, County of New Castle |
| Manufacturer: | Beijing Zentreadi Intelligence Information Technology Co.,Ltd |
| Address: | Room1109, 10th Floor, Building A, No.2 Zhongguancun South Street, Haidian District, Beijing |
| Sample No: | 1000035553 |
| Product Name: | Desktop server |
| Brand Name: | N/A |
| Model No.: | UT2, UT2A, UT2 Pro, UT2C, UT2 Max |
| Test No.: | UT2 |

| | |
|---|---|
| Date of Receipt: | 2024/06/06 |
| Date of Test: | 2024/06/06~2024/07/24 |
| Issued Date: | 2024/07/25 |
| Testing Lab: | TIRT |

# Table of Contents

# History of this test report

Original Report Issue Date: 2024.07.25

● No additional attachment

○ Additional attachments were issued following record

| Attachment No. | Issue Date | Description |
|---|---|---|
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# 1. General Information

## 1.1 Basic Description of Equipment Under Test

| | | |
|---|---|---|
| Equipment Name | Desktop server | |
| Test Model | UT2 | |
| Model Number | UT2, UT2A, UT2 Pro, UT2C, UT2 Max | |
| Trademark | N/A | |
| Power Supply | DC 3.85V from battery or DC 12V from adapter | |
| EUT Stage | ○ Product Unit | ●Final-Sample |
| Operating Band | 5260MHz~5320MHz<br>5500MHz~5700MHz | ●IEEE 802.11a/n/ac/ax(20MHz) |
| | | ●IEEE 802.11n/ac/ax(40MHz) |
| | | ●IEEE 802.11ac/ax(80MHz) |
| Modulation technology | OFDM, OFDMA | |
| Nominal Bandwidth | 20MHz / 40MHz / 80MHz | |
| Modulation Type | IEEE 802.11a: OFDM (BPSK / QPSK / 16QAM / 64QAM)<br>IEEE 802.11n: (BPSK / QPSK / 16QAM / 64QAM)<br>IEEE 802.11ac: (BPSK / QPSK / 16QAM / 64QAM / 256QAM)<br>IEEE 802.11ax: OFDMA<br>(64QAM,16QAM,QPSK,BPSK,256QAM,1024QAM) | |
| Function | ☐Outdoor AP ☒Indoor AP ☐Fixed P2P ☐Client | |
| Type of Device | Master, support the TPC function | |
| Antenna Type: | FPC Antenna | |
| Antenna Gain: | ANT1: 0.26dBi, ANT2: 2.68dBi, | |

Note:
#: The antenna gain provided by the applicant, and the laboratory will not be responsible for the accumulated calculation results which covers the information provided by the applicant.

According to section 15.31(m), regards to the operating frequency range over 10 MHz, must select three channels which were tested. The Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the below .

All mode had been tested, this only show the worst mode

| Band | Test Channel | 20MHz | | 40MHz | | 80MHz | |
|---|---|---|---|---|---|---|---|
| | | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| U-NII-2A | L | 52 | 5260 | 54 | 5270 | -- | -- |
| | M | 56 | 5280 | -- | -- | 58 | 5290 |
| | H | 64 | 5320 | 62 | 5310 | -- | -- |
| U-NII-2C | L | 100 | 5500 | 102 | 5510 | -- | -- |
| | M | 136 | 5680 | -- | -- | 106 | 5530 |
| | H | 140 | 5700 | 110 | 5550 | -- | -- |

## 1.2 Description Of Support Units

| Description | Manufacturer | Model No. | Serial Number | FCC ID |
|---|---|---|---|---|
| Wireless Router | N/A | N/A | N/A | KA2IRX5460A1 |
| Notebook | Lenovo | T430u | REF.No.SEA1800 | N/A |
| Network Cable | Supplied by lab | N/A | N/A | N/A |

# 2. Summary of Test Results

## 2.1 Summary of Test Items

| Item | Tested Bandwidth and Channel | | Limit | Result |
|---|---|---|---|---|
| | Bandwidth (MHz) / mode | Frequency (MHz) / Channel No. | | |
| Channel Availability Check Time | 20/ 802.11ax | 5320/ 64 | ≥ 60 sec | Pass |
| | 20/ 802.11ax | 5500/ 100 | | |
| U-NII Detection Bandwidth | 20/ 802.11ax | 5320/ 64 | > 100% of the U-NII 99% transmission power bandwidth | Pass |
| | 20/ 802.11ax | 5500/ 100 | | |
| Statistical Performance Check | 20/ 802.11ax | 5320/ 64 | Type 1~4≥60%<br>Type 1~4 and 5≥80%<br>Type 6 > 70% | Pass |
| | 20/ 802.11ax | 5500/ 100 | | |
| Channel Move Time | 20/ 802.11ax | 5320/ 64 | ≤ 10 sec | Pass |
| | 20/ 802.11ax | 5500/ 100 | | |
| Channel Closing Transmission Time | 20/ 802.11ax | 5320/ 64 | ≤ 200 ms + aggregate of 60 ms over remaining 10 sec period | Pass |
| | 20/ 802.11ax | 5500/ 100 | | |
| Non-Occupancy Period Test | 20/ 802.11ax | 5320/ 64 | ≥ 30 minutes | Pass |
| | 20/ 802.11ax | 5500/ 100 | | |

## 2.2 Application of Standard

47 CFR Part 15 Subpart E Section 15.407：Unlicensed National Information Infrastructure Devices

KDB905462 D02 V02：COMPLIANCE MEASUREMENT PROCEDURES FORUNLICENSED-NATIONAL INFORMATION INFRASTRUCTUREDEVICES OPERATING IN THE 5250-5350 MHZ AND 5470-5725MHz BANDS INCORPORATING DYNAMIC FREQUENCYSELECTION

KDB905462 D04 v01：OPERATIONAL MODES SUGGESTED FOR DFS TESTING

KDB905462 D03 v01r02：U-NIICLIENT DEVICES MTHOUT RADAR DETECTION CAPABILITY

ANSI C63.10:2013：American National Standard for Testing Unlicensed Wireless Devices

## 2.3 Test Instruments

| No. | Equipment | Manufacturer | Type No. | Serial No. | Cal. date (yyyy/mm/dd) | Cal. Due date (yyyy/mm/dd) |
|---|---|---|---|---|---|---|
| 1 | MXA Signal Analyzer | KEYSIGHT | N9020A | MY50410020 | 2023/11/10 | 2024/11/09 |
| 2 | WIDEBAND RADIO COMMNUNICATION TESTER | Rohde & Schwarz | CMW500 | 161997 | 2023/11/10 | 2024/11/09 |
| 3 | ESG VECTOR SIGNAL GENERATOR | Agilent | E4438C | MY45094854 | 2023/11/10 | 2024/11/09 |
| 4 | MXG Vector Signal Generator | Agilent | N5182A | MY46240163 | 2023/11/18 | 2024/11/17 |
| 5 | Adjustable Direct Current Regulated Power Supply | Dongguan Tongmen Electronic Technology Co., LTD | etm-6050c | 20211026123 | 2023/11/10 | 2024/11/09 |
| 6 | RF Control Unit | TST | TST-Full | S01 | 2023/11/10 | 2024/11/09 |
| 7 | RF Test software | TST | V2.0 | / | 2023/11/10 | 2024/11/09 |

## 2.4 Operation Mode

The EUT was supplied by and it was run in TX mode that was controlled by client provided RF testing program.

The EUT was transmitted continuously during the test. The worst case test result was showed in the report.

## 2.5 Test Condition

| Applicable to | Environmental conditions | Input Power | Tested by |
|---|---|---|---|
| Channel Availability Check Time | 20.0°C, 56 % RH | DC 3.85Vfrom battery | Stone Tang |
| Detection threshold | 24.3°C, 55 % RH | DC 3.85Vfrom battery | Stone Tang |
| Non-occupancy period | 20.0°C, 56 % RH | DC 3.85Vfrom battery | Stone Tang |
| Channel Move Time | 24.3°C, 55 % RH | DC 3.85Vfrom battery | Stone Tang |
| Detection bandwidth | 20.0°C, 56 % RH | DC 3.85Vfrom battery | Stone Tang |
| Channel Closing Transmission Time | 24.3°C, 55 % RH | DC 3.85Vfrom battery | Stone Tang |

The applicant declare the operating environment of EUT as below:

## 2.6 Measurement Uncertainty

| Test Item | Measurement Uncertainty |
|---|---|
| Channel Availability Check Time | ± 5.4 x 10-8 |
| Detection threshold | ± 5.4 x 10-8 |
| Non-occupancy period | ± 5.4 x 10-8 |
| Channel Move Time | ± 5.4 x 10-8 |
| Detection bandwidth | ± 5.4 x 10-8 |
| Channel Closing Transmission Time | ± 5.4 x 10-8 |

## 2.7 Test Location

| | |
|---|---|
| Company: | Beijing TIRT Technology Service Co.,Ltd Shenzhen |
| Address: | 104 Building C, Xinmingsheng Industrial Park No.132, Zhangge Old Village East Zone, Zhangge Community, Fucheng Street, Longhua District, Shenzhen, Guangdong, P. R. China |
| CNAS Registration Number: | CNAS L14158 |
| A2LA Registration Number: | 6049.01 |
| FCC Accredited Lab. Designation Number: | CN1366 |
| FCC Test Firm Registration Number: | 820690 |
| Telephone: | +86-0755-27087573 |

## 2.8 DFS test requirement

The following table from FCC KDB905462 D02 UNII DFS Compliance procedures new rules list the applicable requirements for the DFS testing.

**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. | | |

## Master Devices

a) The Master Device will use DFS in order to detect Radar Waveforms with received signal strength above the DFS Detection Threshold in the 5250~5350 MHz and 5470~5725 MHz bands. DFS is not required in the 5150~5250 MHz or 5725~5825 MHz bands.

b) Before initiating a network on a Channel, the Master Device will perform a Channel Availability Check for a specified time duration (Channel Availability Check Time) to ensure that there is no radar system operating on the Channel, using DFS described under subsection a) above.

c) The Master Device initiates a U-NII network by transmitting control signals that will enable other U-NII devices to Associate with the Master Device.

d) During normal operation, the Master Device will monitor the Channel (In-Service Monitoring) to ensure that there is no radar system operating on the Channel, using DFS described under a).

e) If the Master Device has detected a Radar Waveform during In-Service Monitoring as described under d), the Operating Channel of the U-NII network is no longer an Available Channel. The Master Device will instruct all associated Client Device(s) to stop transmitting on this Channel within the Channel Move Time. The transmissions during the Channel Move Time will be limited to the Channel Closing Transmission Time.

f) Once the Master Device has detected a Radar Waveform it will not utilize the Channel for the duration of the Non-Occupancy Period.

g) If the Master Device delegates the In-Service Monitoring to a Client Device, then the combination will be tested to the requirements described under d) through f) above.

**Table 4: DFS Response Requirement Values**

| Paramenter | 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.<br>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 facilitating 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.<br>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. | |

## 2.9 DFS Detection Thresholds

**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<br>power spectral density < 10 dBm/MHz | -62 dBm |
| EIRP < 200 milliwatt that do not meet the power<br>spectral density requirement | -64 dBm |
| Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.<br>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. | |

## 2.10 Radar Test Waveforms

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

**Table 5 Short Pulse Radar Test Waveforms**

| Radar Type | Pulse Width (µsec) | PRI (µsec) | Number of Pulses | Minimum Percentage of Successful | Minimum Number of |
|---|---|---|---|---|---|
| 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 | $\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot10^6}{\text{PRI}_{\mu\text{sec}}}\right)\right\}$ | 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 | | | |
| 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. | | | | | |

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. 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. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B.

For example if in Short Pulse Radar Type 1 Test B a PRI of 3066 µsec is selected, the number of pulses would be Round up $\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot10^6}{3066}\right)\right\}$ = Round up {17.2} = 18.

**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 |

**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 | Minimum Number of Trials |
|---|---|---|---|---|---|---|---|
| 5 | 50-100 | 5-20 | 1000-2000 | 1-3 | 8-20 | 80% | 30 |

The parameters for this waveforms are randomly chosen. Thirty unique waveforms are required for the Long Pulse Radar Type waveforms. If more than 30 waveforms are used for the Long Pulse Radar Type wave forms, then each additional waveform must also be unique and not repeated from the previous waveforms.

**Table 7 – Frequency Hopping Radar Test Waveform**

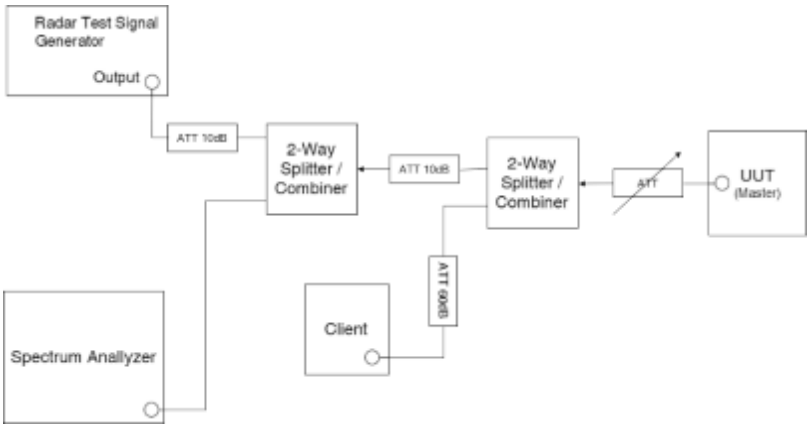
| Radar Type | Pulse Width (µsec) | PRI (µsec) | Pulses per Hop | Hopping Rate (kHz) | Hopping Sequence Length (msec) | Minimum Percentage of Successful | Minimum Number of Trials |
|---|---|---|---|---|---|---|---|
| 6 | 1 | 333 | 9 | 0.333 | 300 | 70% | 30 |

For the Frequency Hopping Radar Type, the same Burst parameters are used for each wave form. The hopping sequence is different for each wave form and a 100-length segment is selected from the hopping sequence defined by the following algorithm:

The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250–5724MHz.Next,the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues until all 475 frequencies are chosen for the set. For selection of a random frequency, the frequencies remaining within the group are always treated as equally likely.

# 3. Calibration of Radar Waveform

## 3.1 Test Configuration




## 3.2 Test Procedure

1) A 50 ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to place of the master

2) The interference Radar Detection Threshold Level is -64dBm + 6.25dBi +1dB = -56.75dBm that had been taken into account the output power range and antenna gain.

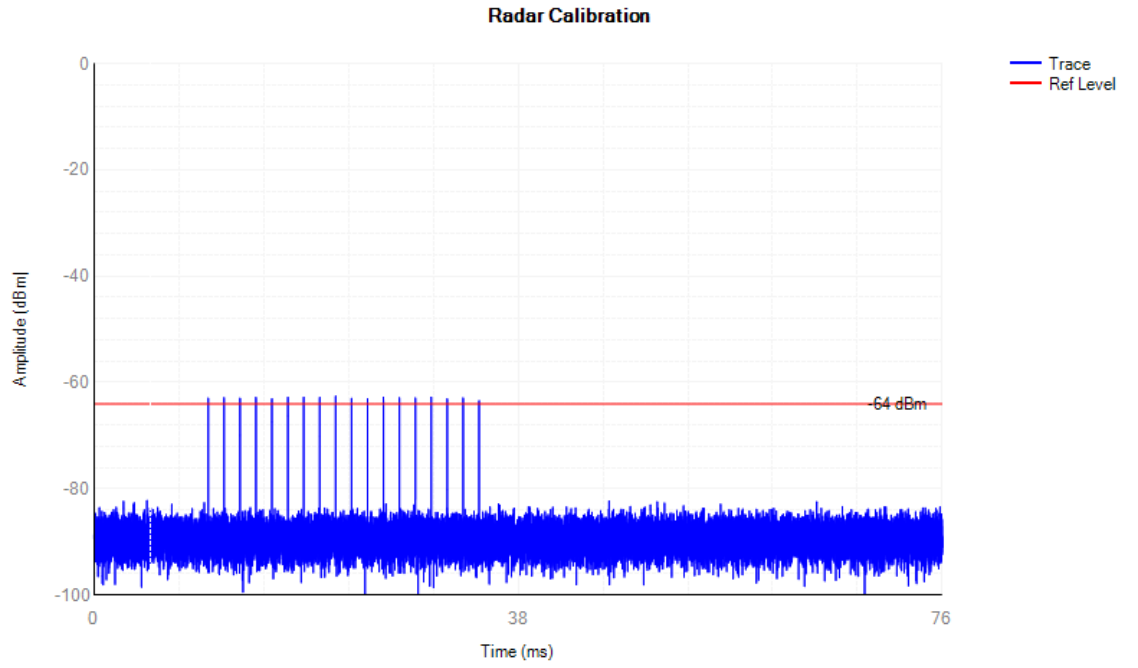
3) The following equipment setup was used to calibrate the conducted radar waveform. A vector signal generator was utilized to establish the test signal level for radar type 0. During this process, there were no transmissions by either the master or client device. The spectrum analyzer was switched to the zero spans (time domain) at the frequency of the radar waveform generator. Peak detection was used. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to 3 MHz. The spectrum analyzer had offset -1.0dB to compensate RF cable loss 1.0dB.

4) The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was -64dBm + 6.25dBi +1dB = -56.75dBm. Capture the spectrum analyzer plots on short pulse radar waveform.

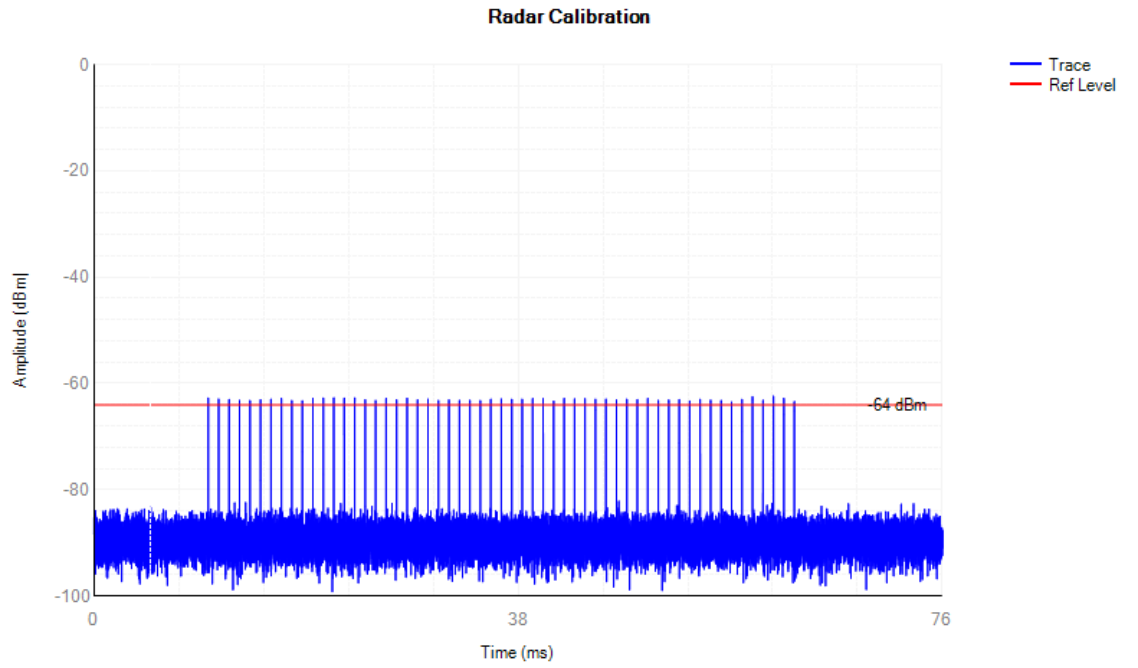
## 3.3 Test Result

| Test Mode | Frequency (MHz) | Radar Type | Result |
|---|---|---|---|
| 802.11ax(VHT20) | 5320 | Type0 | see test graph |
| | | Type1 | see test graph |
| | | Type2 | see test graph |
| | | Type3 | see test graph |
| | | Type4 | see test graph |
| | | Type5 | see test graph |
| | | Type6 | see test graph |
| | 5500 | Type0 | see test graph |
| | | Type1 | see test graph |
| | | Type2 | see test graph |
| | | Type3 | see test graph |
| | | Type4 | see test graph |
| | | Type5 | see test graph |
| | | Type6 | see test graph |

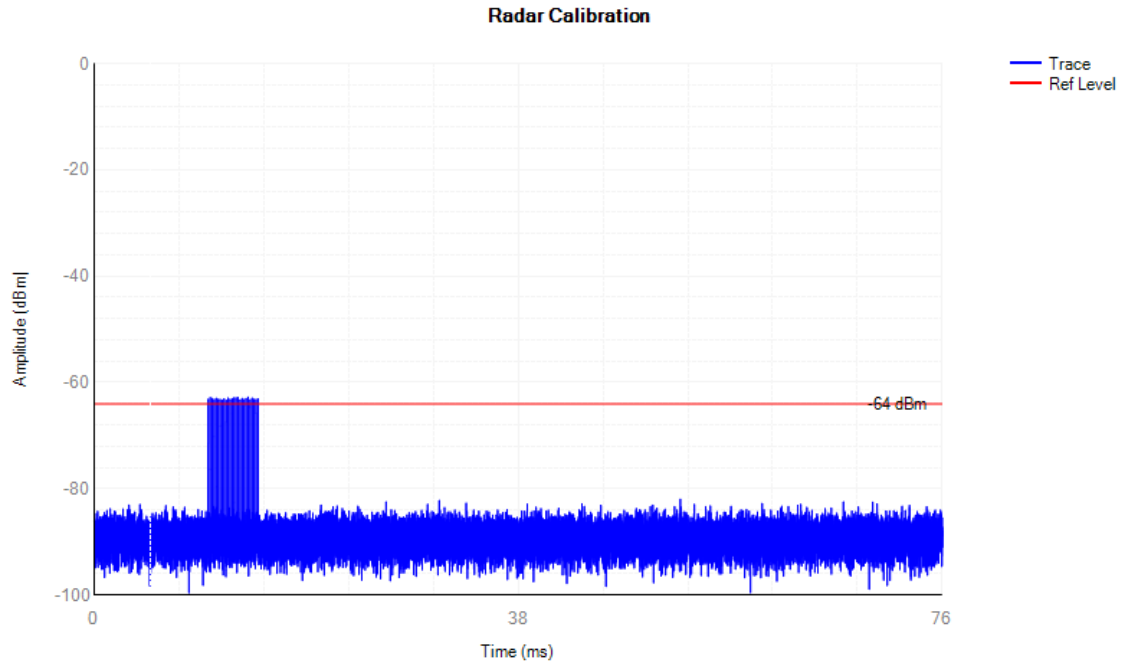
802.11ax(VHT20) 5320MHz_Type0



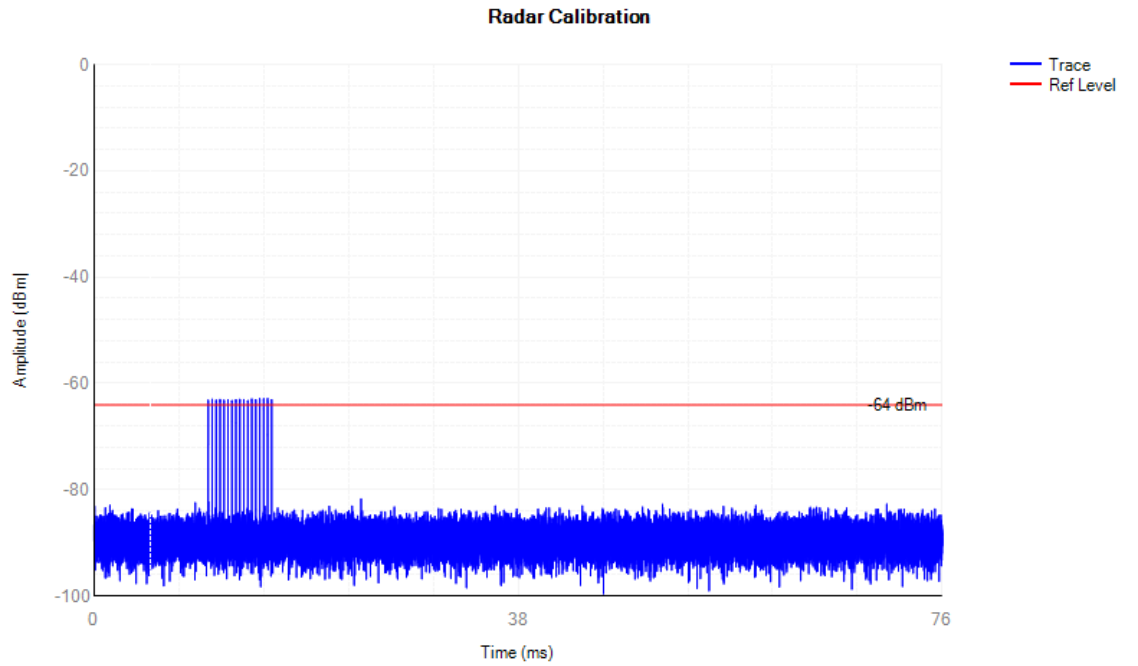

802.11ax(VHT20) 5320MHz_Type1



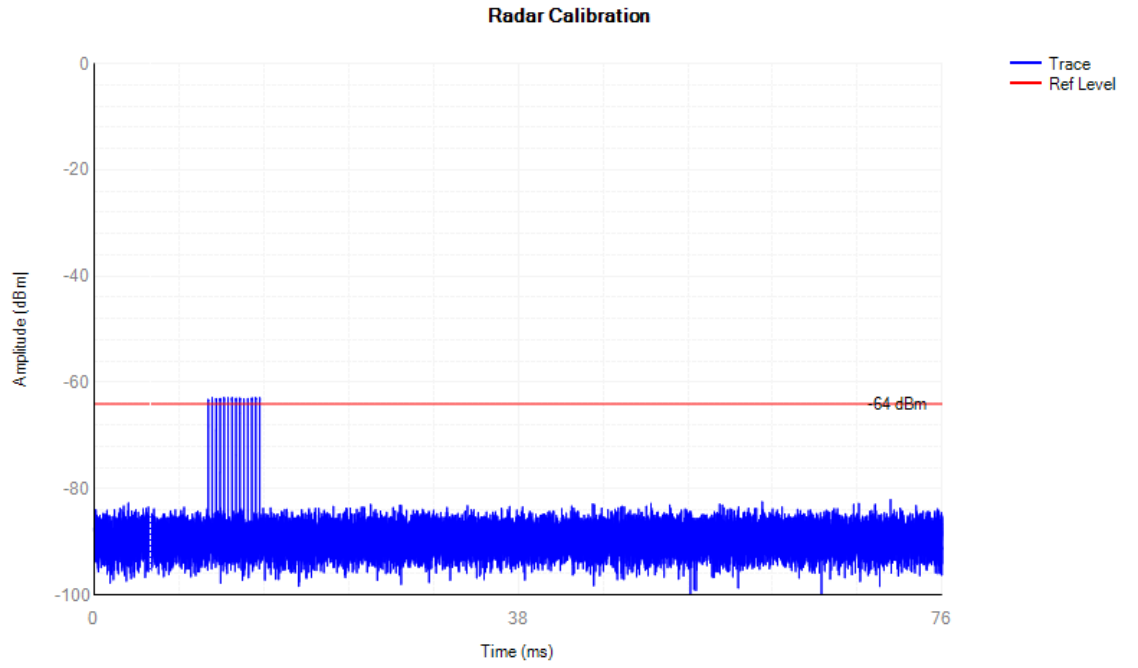
802.11ax(VHT20) 5320MHz_Type2



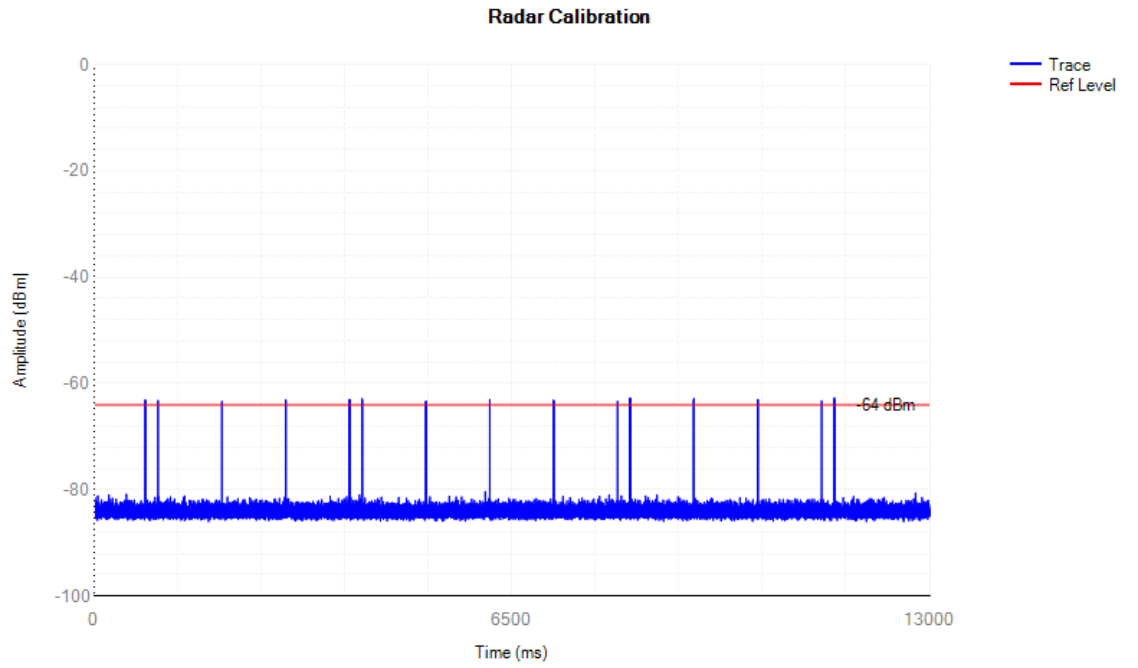

802.11ax(VHT20) 5320MHz_Type3



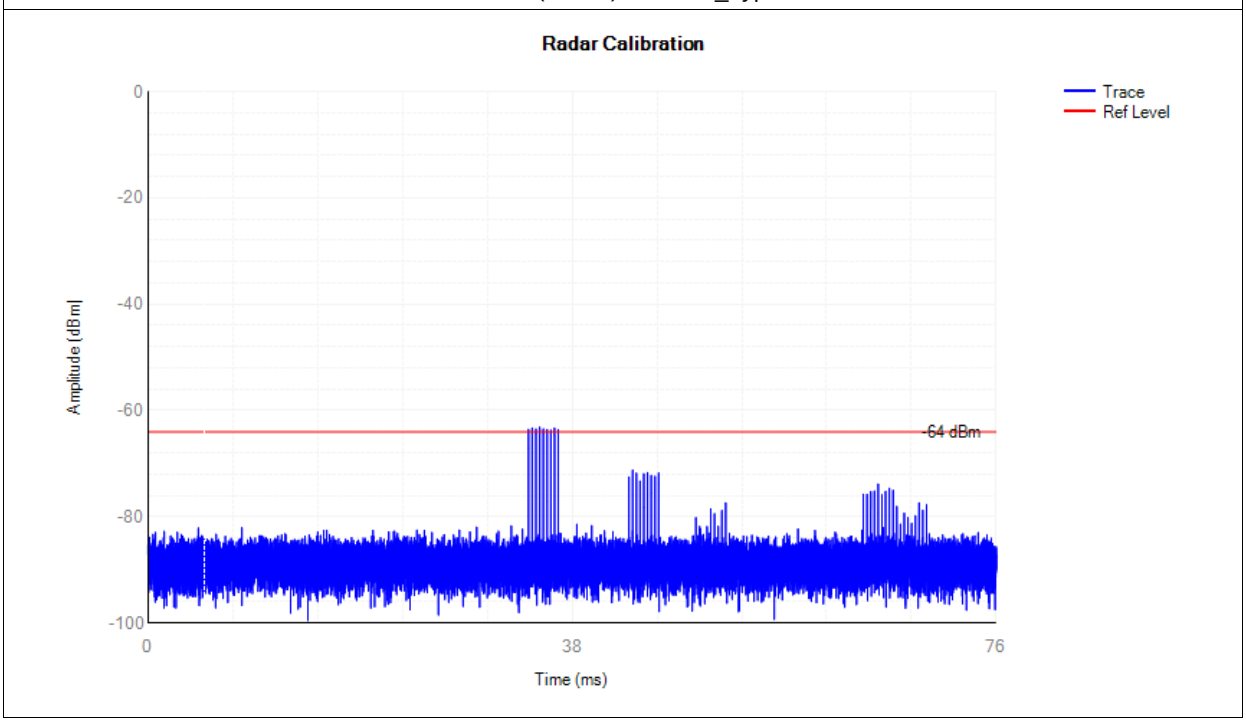
802.11ax(VHT20) 5320MHz_Type4



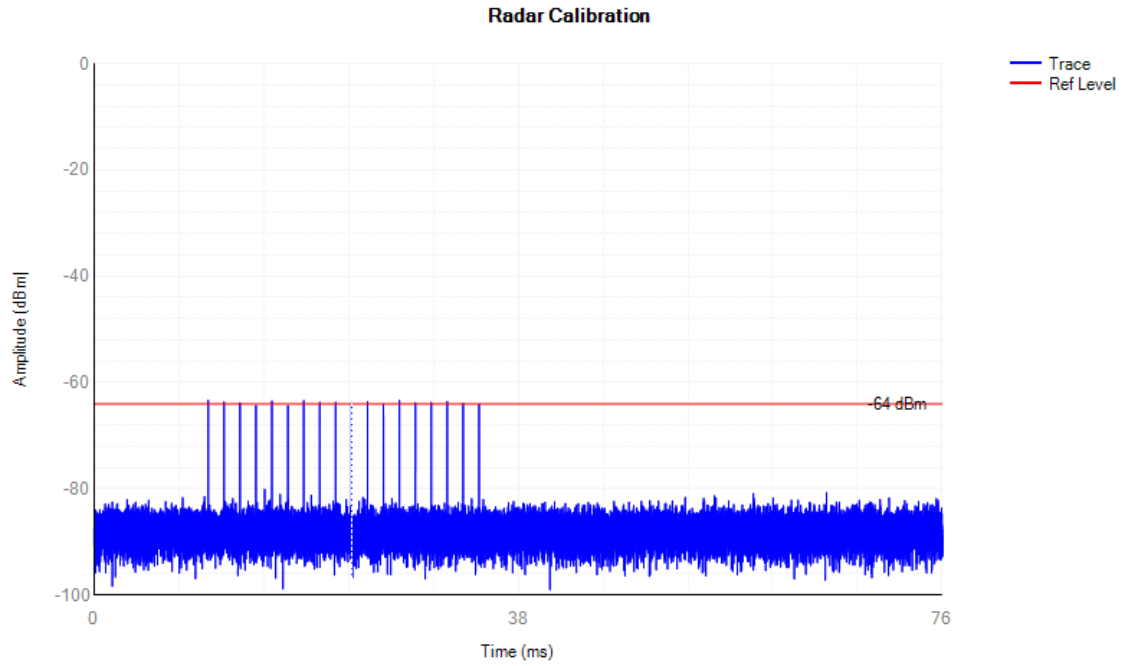

802.11ax(VHT20) 5320MHz_Type5



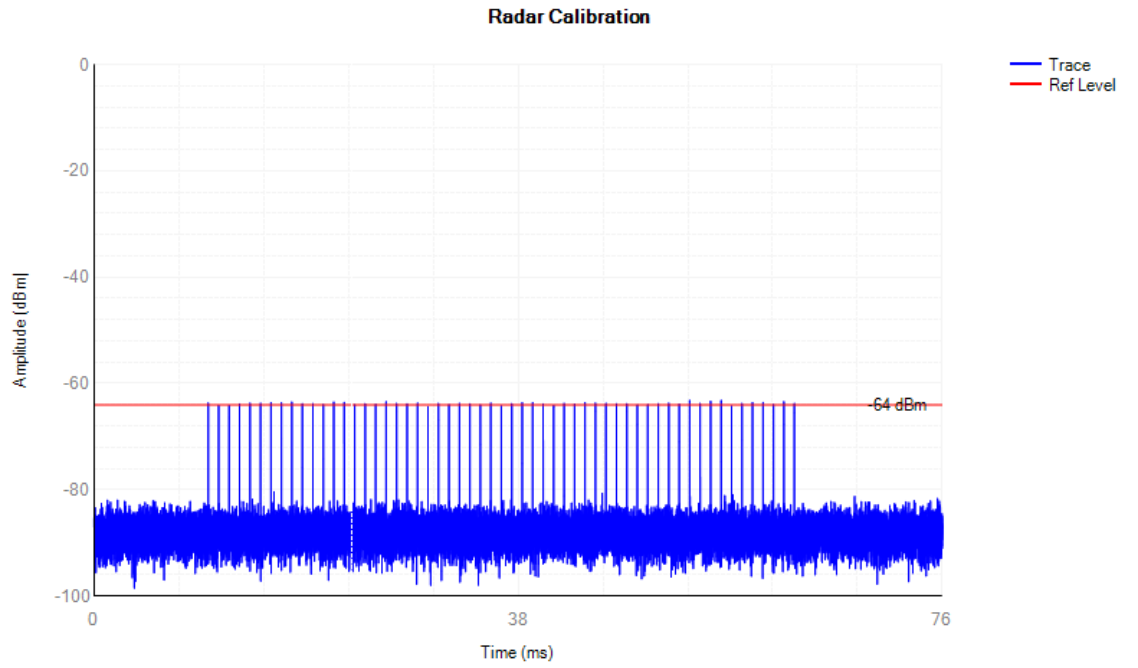
802.11ax(VHT20) 5320MHz_Type6



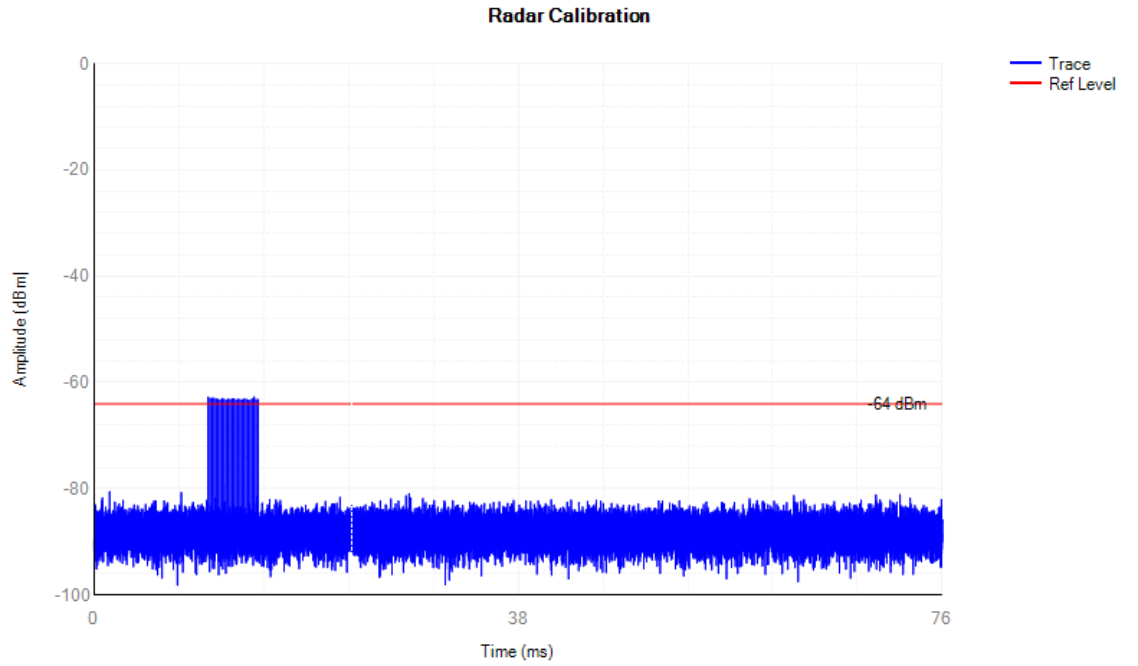
802.11ax(VHT20) 5500MHz_Type0



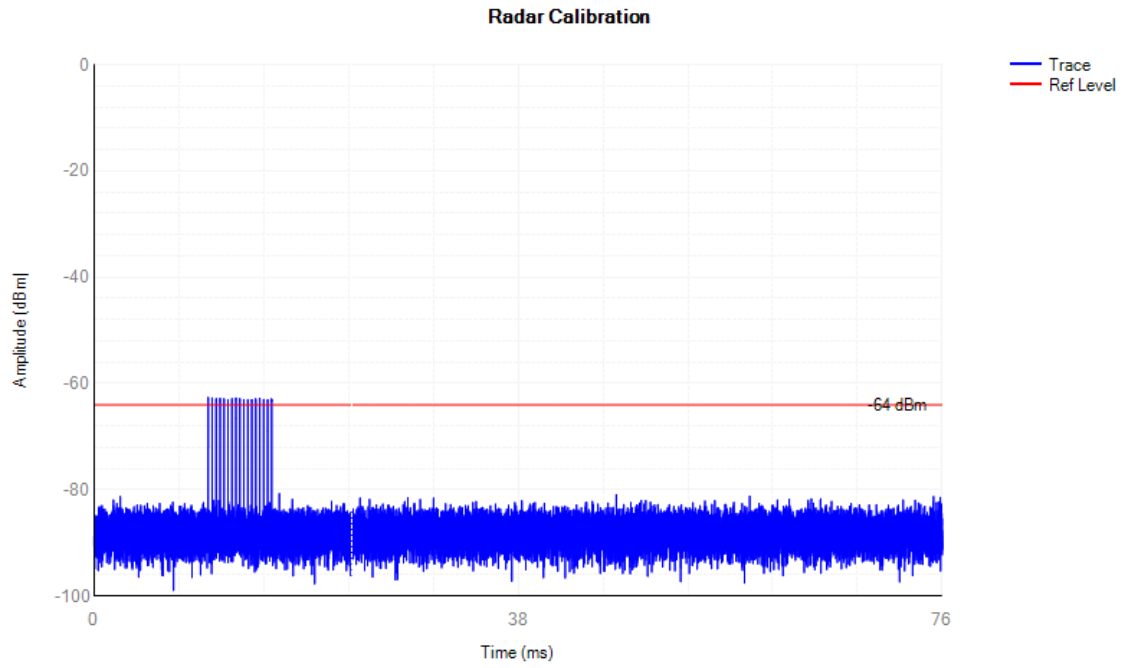

802.11ax(VHT20) 5500MHz_Type1



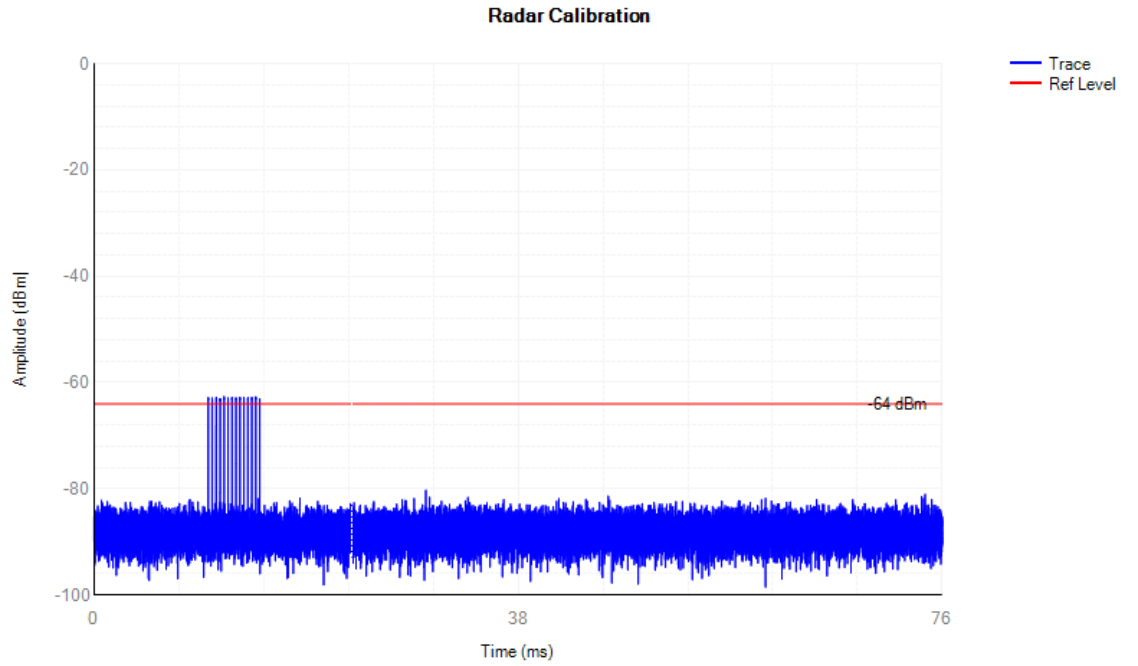
802.11ax(VHT20) 5500MHz_Type2



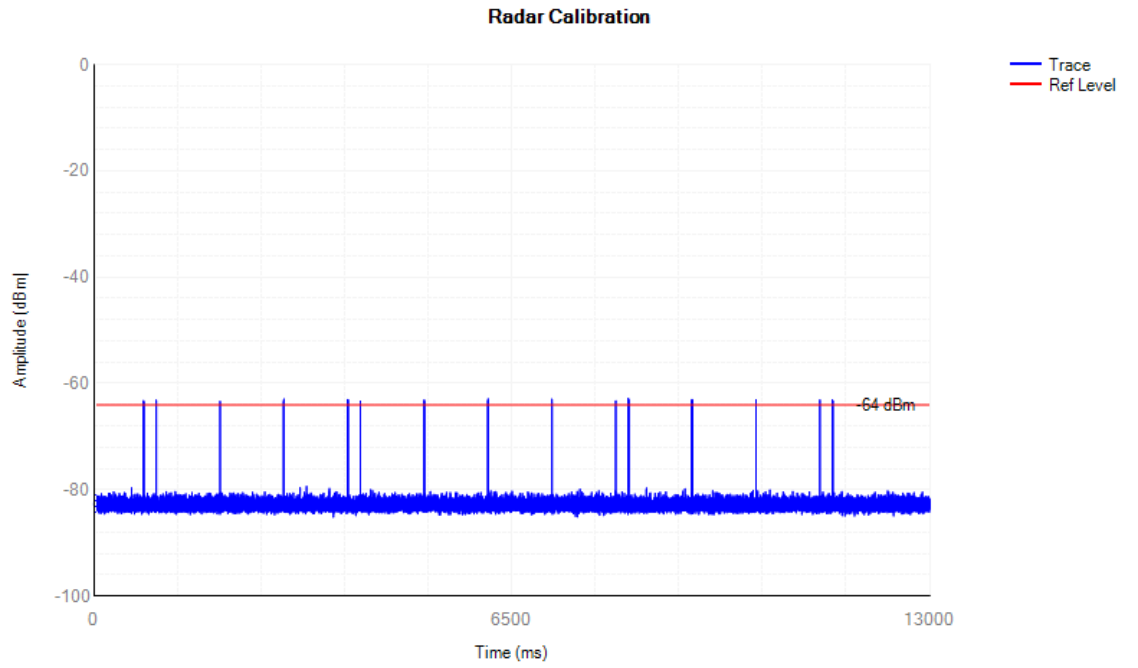

802.11ax(VHT20) 5500MHz_Type3



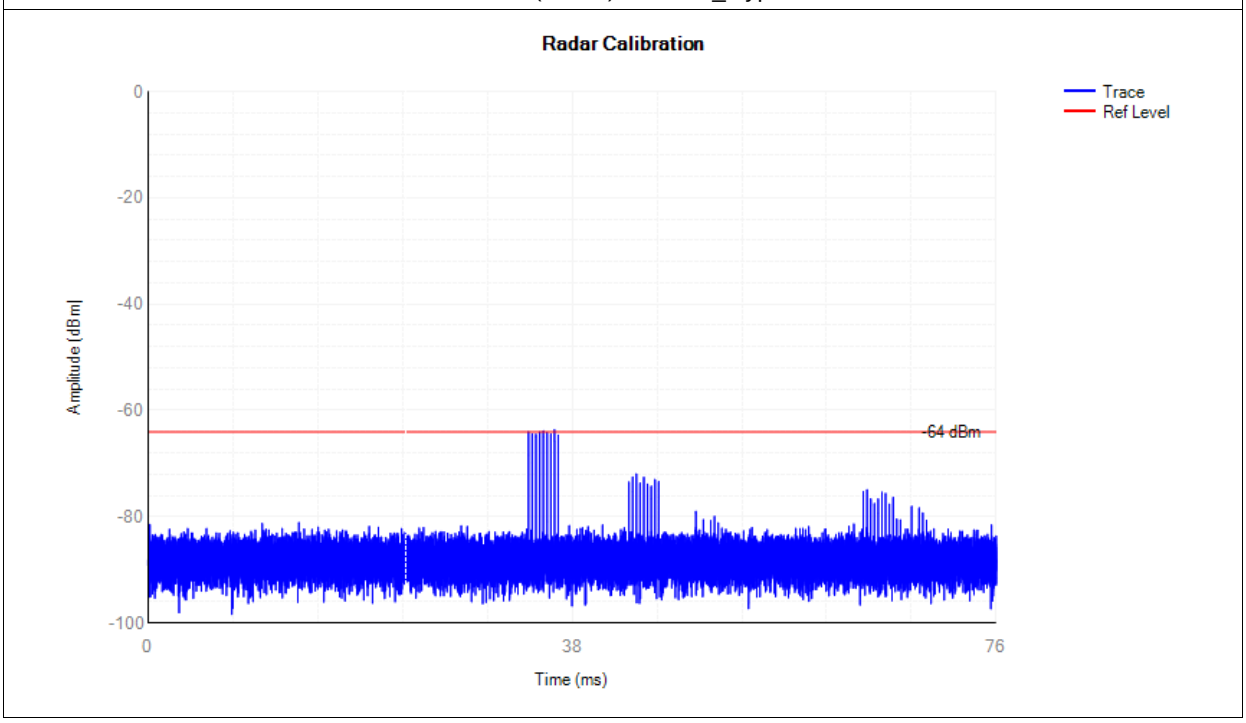
802.11ax(VHT20) 5500MHz_Type4




802.11ax(VHT20) 5500MHz_Type5



802.11ax(VHT20) 5500MHz_ Type6



# 4. Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period

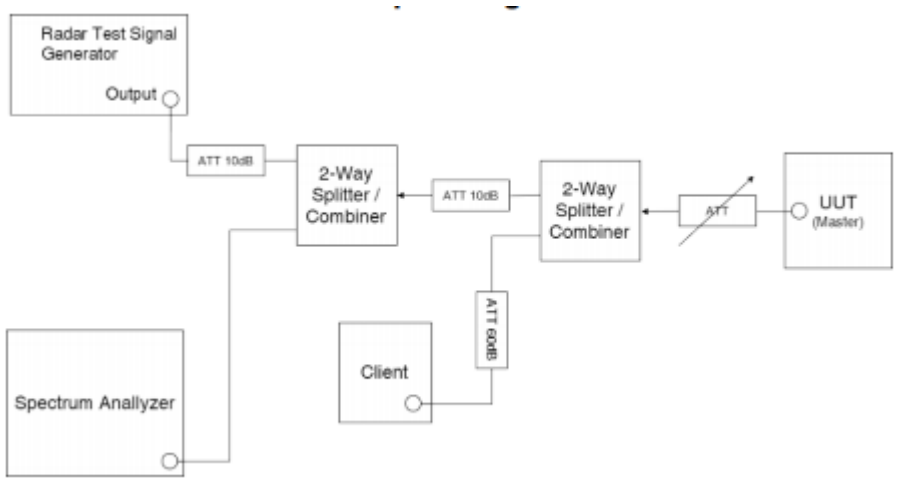
## 4.1 Limit of In-Service Monitoring

The EUT has In-Service Monitoring function to continuously monitor the radar signals. If radar is detected, it must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current Channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec.

The total duration of 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 facilitating Channel changes (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.

Non-Occupancy Period time is 30 minutes during which a Channel will not be utilized after a Radar Waveform is detected on that Channel.

## 4.2 Test Configuration




## 4.3 Test Procedure

The steps below define the procedure to determine the above-mentioned parameters when a radar Burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device (In- Service Monitoring).

1. One frequency will be chosen from the Operating Channels of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices, the test frequency must contain control signals.

This can be verified by disabling channel loading and monitoring the spectrum analyzer. If no control signals are detected, another frequency must be selected within the emission bandwidth where control signals are detected.

2. In case the UUT is a U-NII device operating as a Client Device (with or without DFS), a U-NII device operating as a Master Device will be used to allow the UUT (Client device) to Associate with the Master Device. In case the UUT is a Master Device, a U-NII device operating as a Client

Device will be used and it is assumed that the Client will Associate with the UUT (Master). In both cases for conducted tests, the Radar Waveform generator will be connected to the Master Device. For radiated tests, the emissions of the Radar Waveform generator will be directed towards the
Master Device. If the Master Device has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
3. Stream the channel loading test file from the Master Device to the Client Device on the test Channel for the entire period of the test.
4. At time T0 the Radar Waveform generator sends a Burst of pulses for one of the Radar Type 0 in Table 5 at levels defined in Table 3, on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
5. Observe the transmissions of the UUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). Measure and record the Channel Move Time and Channel Closing Transmission Time if radar detection occurs. Figure 17 illustrates Channel Closing
Transmission Time.
6. When operating as a Master Device, monitor the UUT for more than 30 minutes following instant T2 to verify that the UUT does not resume any transmissions on this Channel. Perform this test once and record the measurement result.
7. In case the UUT is a U-NII device operating as a Client Device with In-Service Monitoring, perform steps 1 to 6.

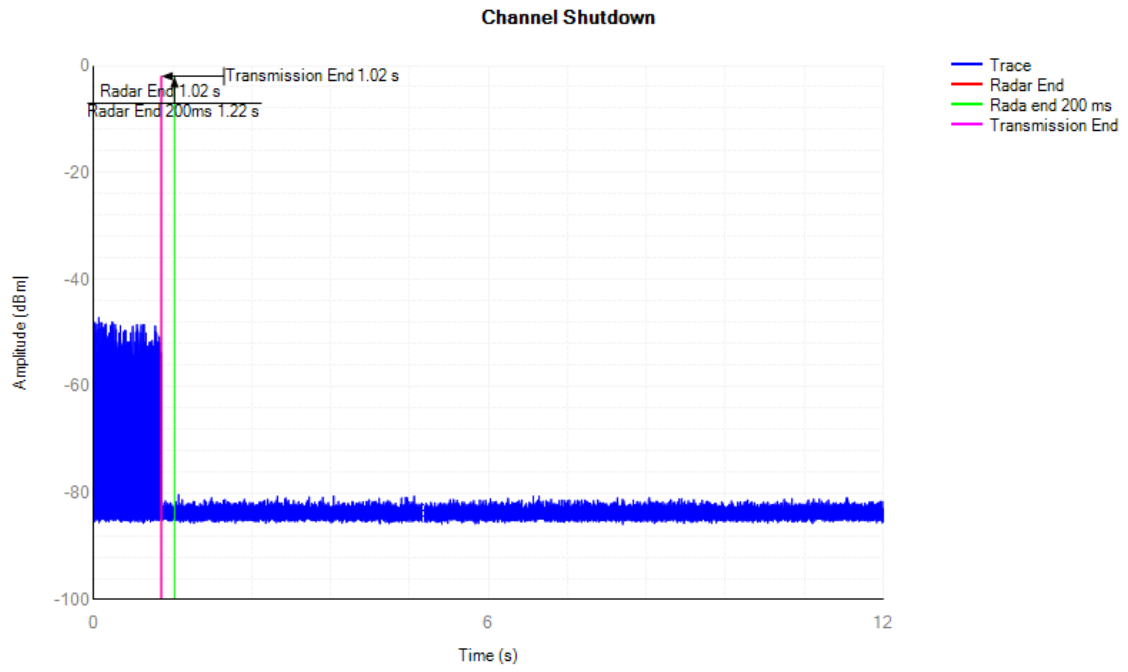
## 4.4 Test Result

| Test Mode | Frequency (MHz) | Radar Type | CCT (ms) | Limit (ms) | CMT (ms) | Limit (ms) | Verdict |
|---|---|---|---|---|---|---|---|
| 802.11ax(VHT20) | 5320 | Type0 | 0.5 | 260 | 23.5 | 10000 | PASS |
| | 5500 | Type0 | 79 | 260 | 523.8 | 10000 | PASS |

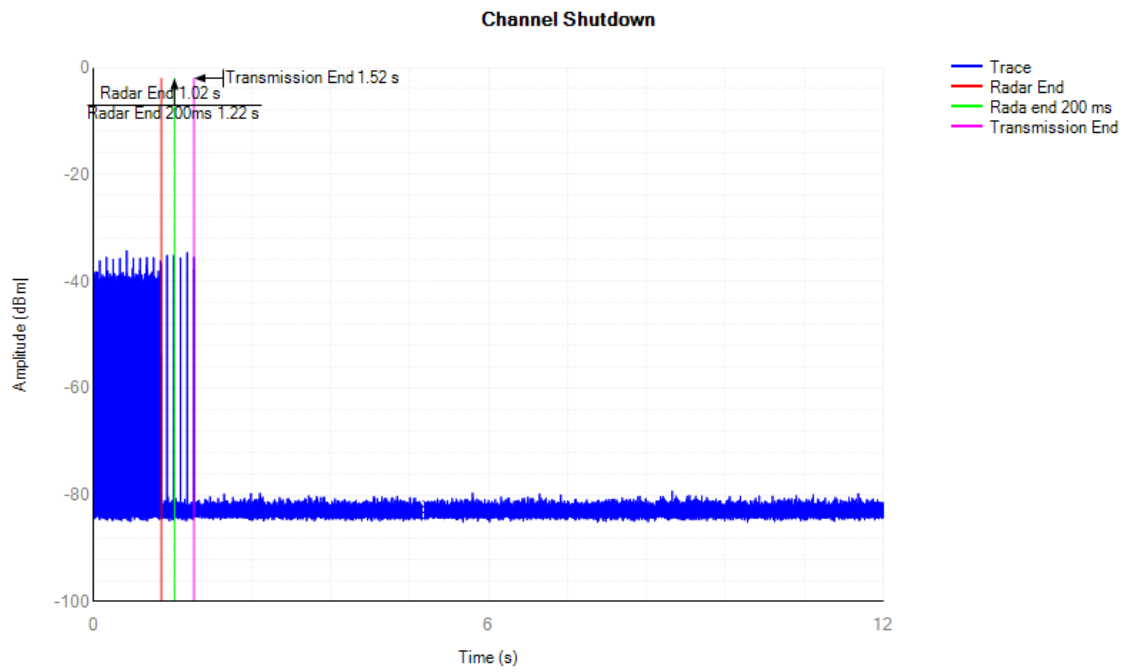
| Test Mode | Frequency (MHz) | Radar Type | CCT after 200ms (ms) | Limit (ms) | Verdict |
|---|---|---|---|---|---|
| 802.11ax(VHT20) | 5320 | Type0 | 0 | 60 | PASS |
| | 5500 | Type0 | 48 | 60 | PASS |

| Test Mode | Frequency (MHz) | Radar Type | Result | Limit (s) | Verdict |
|---|---|---|---|---|---|
| 802.11ax(VHT20) | 5320 | Type0 | see test graph | ≥1800 | PASS |
| | 5500 | Type0 | see test graph | ≥1800 | PASS |

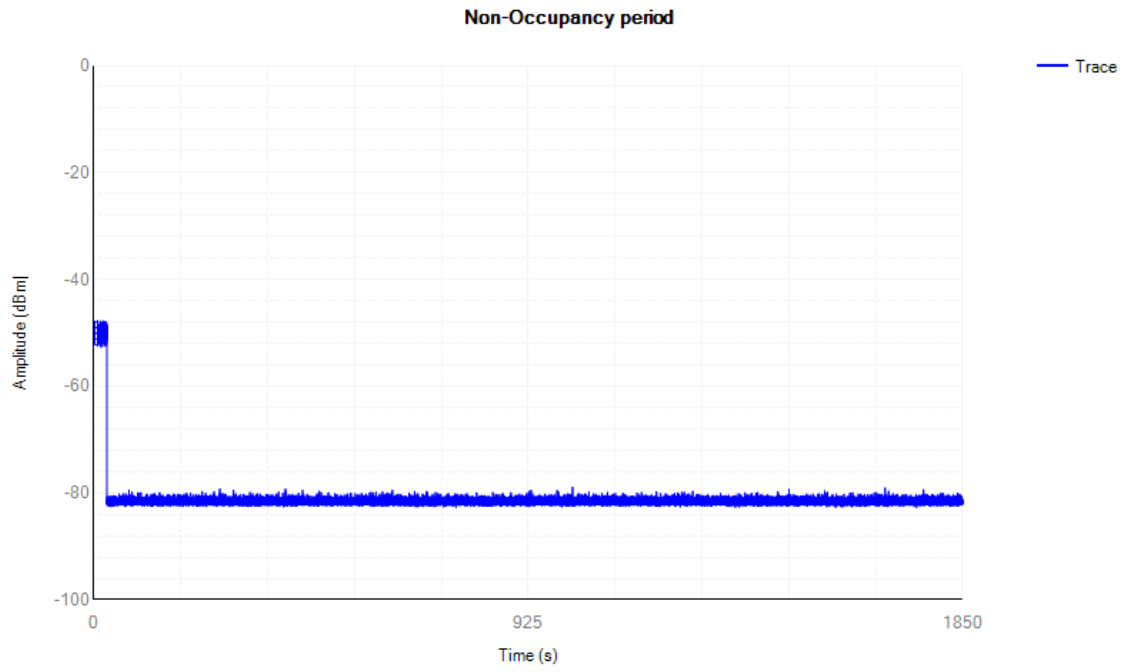
802.11ax(VHT20) 5320MHz



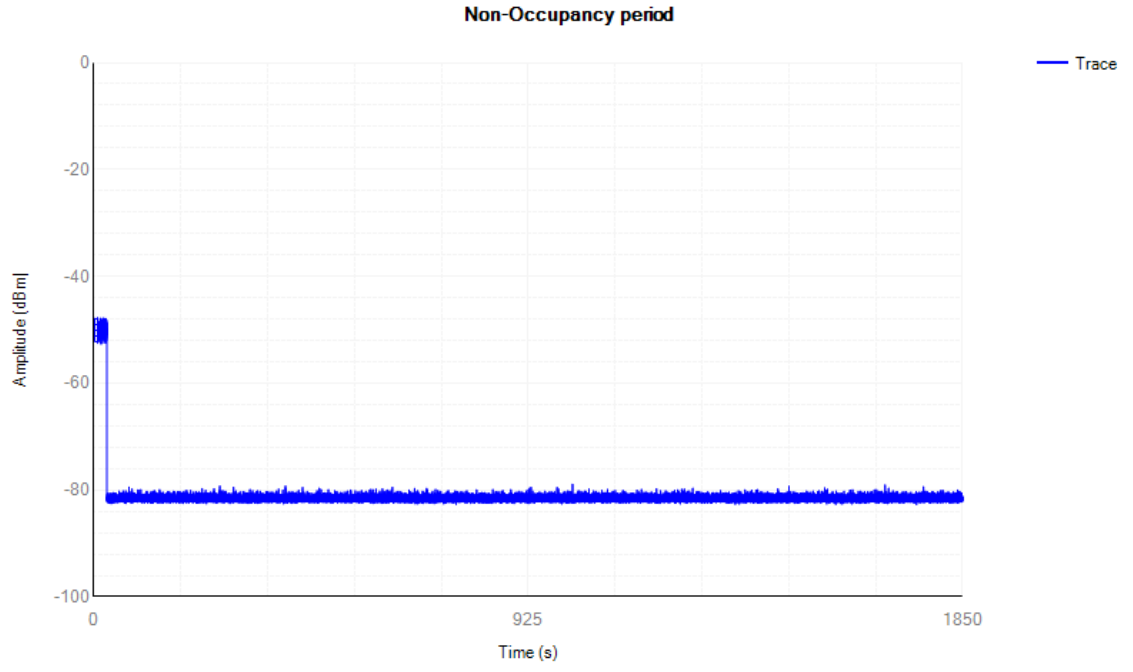

802.11ax(VHT20) 5500MHz



802.11ax(VHT20) 5320MHz




802.11ax(VHT20) 5500MHz

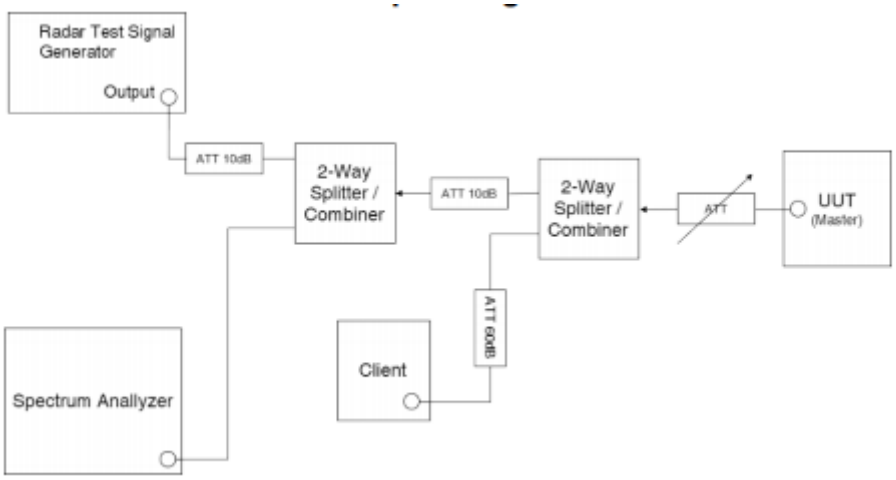


# 5. U-NII Detection Bandwidth

## 5.1 Limit of U-NII Detection Bandwidth

The U-NII Detection Bandwidth shall contain minimum 100% of the 99% power bandwidth.

## 5.2 Test Configuration




## 5.3 Test Procedure

1. Adjust the equipment to produce a single *Burst* of any one of the Short Pulse Radar Types 0 – 4 in **Table 5** at the center frequency of the UUT *Operating Channel* at the specified *DFS Detection Threshold* level found in **Table 3**.
2. Set the UUT up as a standalone device (no associated Client or Master, as appropriate) and no traffic. Frame based systems will be set to a talk/listen ratio reflecting the worst case (maximum) that is user configurable during this test.
3. Generate a single radar *Burst*, and note the response of the UUT. Repeat for a minimum of 10 trials. The UUT must detect the *Radar Waveform* within the DFS band using the specified *U-NII Detection Bandwidth* criterion shown in **Table 4**. In cases where the channel bandwidth may exceed past the DFS band edge on specific channels (i.e., 802.11ac or wideband frame based systems) select a channel that has the entire emission bandwidth within the DFS band. If this is not possible, test the detection BW to the DFS band edge.
4. Starting at the center frequency of the UUT operating *Channel*, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the *U-NII Detection Bandwidth* criterion specified in **Table 4**. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as $F_H$) at which detection is greater than or equal to the *U-NII Detection Bandwidth* criterion. Recording the detection rate at frequencies above $F_H$ is not required to demonstrate compliance.

5. Starting at the center frequency of the UUT operating *Channel*, decrease the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the *U-NII Detection Bandwidth* criterion specified in **Table 4**. Repeat this measurement in 1MHz steps at frequencies 5 MHz above where the detection rate begins to fall. Record the lowest frequency (denote as $F_L$) at which detection is greater than or equal to the *U-NII Detection Bandwidth* criterion. Recording the detection rate at frequencies below $F_L$ is not required to demonstrate compliance. The U-NII Detection Bandwidth is calculated as follows:

   *U-NII Detection Bandwidth* = $F_H - F_L$

## 5.4 Test Result

802.11ax(VHT20)

| DUT Frequency (MHz) | Radar Type No. | Measured Detection Bandwidth (MHz) | 99% Transmission power Bandwidth (MHz) | Verdict | Comment |
|---|---|---|---|---|---|
| 5320 | 0 | 20 | 19.032 | PASS | |

| Check Frequency (MHz) | Detection count | Percentage of Detection | Minimum Limit | Verdict | Comment |
|---|---|---|---|---|---|
| 5285 | 9 of 10 | 90 % | 90% | PASS | |
| 5289 | 9 of 10 | 90 % | 90% | PASS | |
| 5290 | 10 of 10 | 100 % | 90% | PASS | Lower Limit |
| 5295 | 10 of 10 | 100 % | 90% | PASS | |
| 5320 | 10 of 10 | 100 % | 90% | PASS | |
| 5305 | 10 of 10 | 100 % | 90% | PASS | |
| 5310 | 10 of 10 | 100 % | 90% | PASS | Upper Limit |
| 5311 | 9 of 10 | 90 % | 90% | PASS | |
| 5315 | 9 of 10 | 90 % | 90% | PASS | |

802.11ax(VHT20)

| DUT Frequency (MHz) | Radar Type No. | Measured Detection Bandwidth | 99% Transmission power Bandwidth (MHz) | Verdict | Comment |
|---|---|---|---|---|---|
| 5500 | 0 | 20 | 19.113 | PASS | |

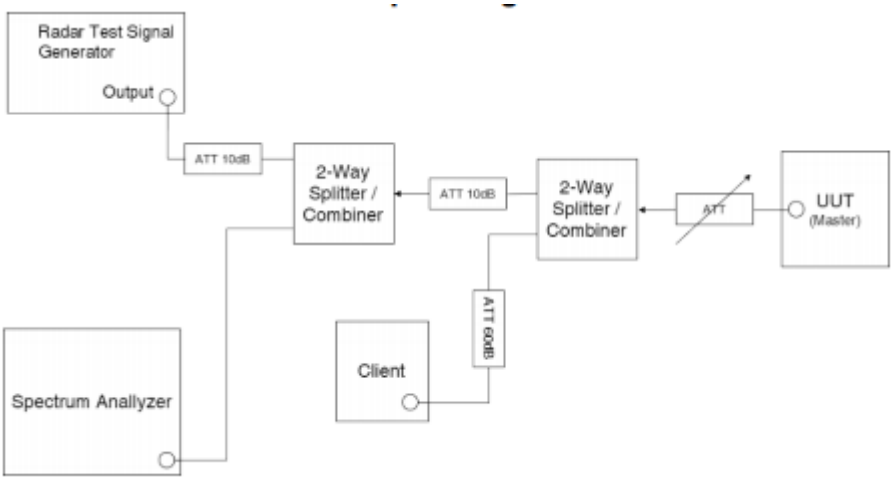
| Check Frequency (MHz) | Detection count | Percentage of Detection | Minimum Limit | Verdict | Comment |
|---|---|---|---|---|---|
| 5485 | 9 of 10 | 90 % | 90% | PASS | |
| 5489 | 9 of 10 | 90 % | 90% | PASS | |
| 5490 | 10 of 10 | 100 % | 90% | PASS | Lower Limit |
| 5495 | 10 of 10 | 100 % | 90% | PASS | |
| 5500 | 10 of 10 | 100 % | 90% | PASS | |
| 5505 | 10 of 10 | 100 % | 90% | PASS | |
| 5510 | 10 of 10 | 100 % | 90% | PASS | Upper Limit |
| 5511 | 9 of 10 | 90 % | 90% | PASS | |
| 5515 | 9 of 10 | 90 % | 90% | PASS | |

# 6. Channel Availability Check

## 6.1 Limit of Channel Availability Check

The Initial *Channel Availability Check Time* tests that the UUT does not emit beacon, control, or data signals on the test *Channel* until the power-up sequence has been completed and the U-NII device checks for *Radar Waveforms* for one minute on the test *Channel*.

## 6.2 Test Configuration




## 6.3 Test Procedure

This test does not use any *Radar Waveforms* and only needs to be performed one time.

1. The U-NII devices will be powered on and be instructed to operate on the appropriate U-NII *Channel* that must incorporate DFS functions. At the same time the UUT is powered on, the spectrum analyzer will be set to zero span mode with a 3 MHz RBW and 3 MHz VBW on the *Channel* occupied by the radar (Chr) with a 2.5 minute sweep time. The spectrum analyzer's sweep will be started at the same time power is applied to the U-NII device.
2. The UUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.
3. Confirm that the UUT initiates transmission on the channel

**A) Radar Burst at the Beginning of the Channel Availability Check Time**

The steps below define the procedure to verify successful radar detection on the test *Channel* during a period equal to the *Channel Availability Check Time* and avoidance of operation on that *Channel* when a radar *Burst* with a level equal to the *DFS Detection Threshold* + 1 dB occurs at the beginning of the *Channel Availability Check Time*. This is illustrated in **Figure 15**.

1. The *Radar Waveform* generator and UUT are connected using the applicable test setup described in the sections on Configuration for Conducted Tests (7.2) or Radiated Tests (7.3) and

the power of the UUT is switched off.

2. The UUT is powered on at T0. T1 denotes the instant when the UUT has completed its power-up sequence (Tpower_up). The *Channel Availability Check Time* commences on Chr at instant T1 and will end no sooner than T1 + Tch_avail_check.
3. A single *Burst* of one of the Short Pulse Radar Types 0-4 will commence within a 6 second window starting at T1. An additional 1 dB is added to the radar test signal to ensure it is at or above the *DFS Detection Threshold*, accounting for equipment variations/errors.
4. Visual indication or measured results on the UUT of successful detection of the radar *Burst* will be recorded and reported. Observation of Chr for UUT emissions will continue for 2.5 minutes after the radar *Burst* has been generated.
5. Verify that during the 2.5 minute measurement window no UUT transmissions occurred on Chr. The *Channel Availability Check* results will be recorded.

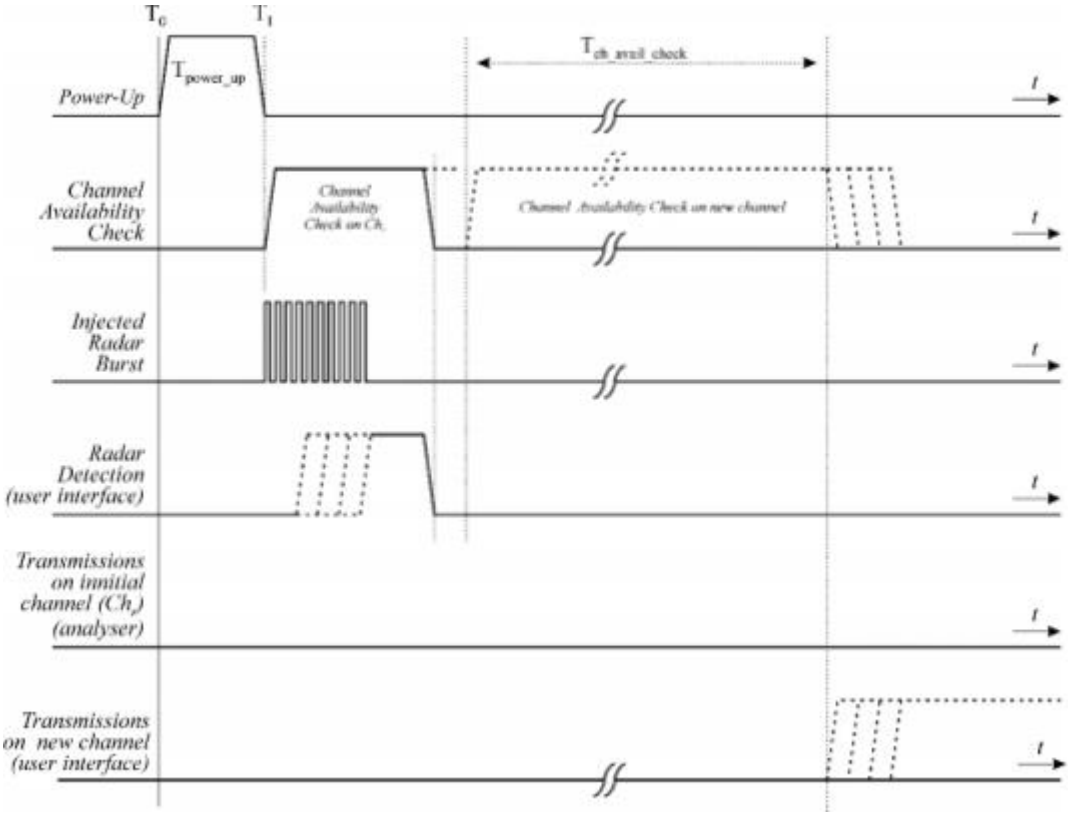



*Figure 15: Example of timing for radar testing at the beginning of the Channel Availability Check Time*

**B) Radar Burst at the End of the Channel Availability Check Time**

The steps below define the procedure to verify successful radar detection on the test Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar *Burst* with a level equal to the *DFS Detection Threshold* + 1dB occurs at the end of the *Channel Availability Check Time*. This is illustrated in **Figure 16**.

1. The *Radar Waveform* generator and UUT are connected using the applicable test setup described in the sections for Conducted Tests (7.2) or Radiated Tests (7.3) and the power of the UUT is switched off.
2. The UUT is powered on at T0. T1 denotes the instant when the UUT has completed its power-up sequence (Tpower_up). The *Channel Availability Check Time* commences on Chr at instant T1 and will end no sooner than T1 + Tch_avail_check.
3. A single *Burst* of one of the Short Pulse Radar Types 0-4 will commence within a 6 second window starting at T1 + 54 seconds. An additional 1 dB is added to the radar test signal to ensure it is at or above the *DFS Detection Threshold*, accounting for equipment variations/errors.
4. Visual indication or measured results on the UUT of successful detection of the radar *Burst* will be recorded and reported. Observation of Chr for UUT emissions will continue for 2.5 minutes after the radar *Burst* has been generated.
5. Verify that during the 2.5 minute measurement window no UUT transmissions occurred on Chr. The *Channel Availability Check* results will be recorded.

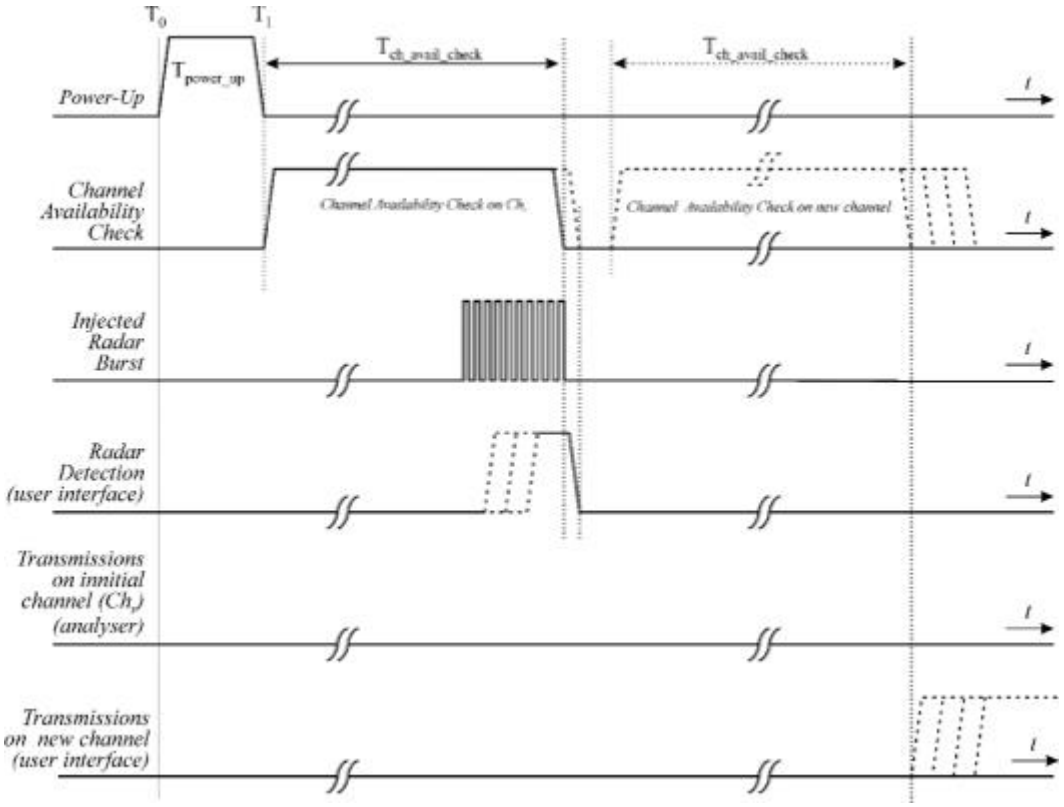



*Figure 16: Example of timing for radar testing towards the end of the Channel Availability Check Time*

## 6.4 Test Result

**DFS Beginning of CAC**

| Test Mode | Frequency (MHz) | Radar Type | Result | Verdict |
|---|---|---|---|---|
| 802.11ax(VHT20) | 5320 | Type0 | See test Graph | PASS |
| | 5500 | Type0 | See test Graph | PASS |

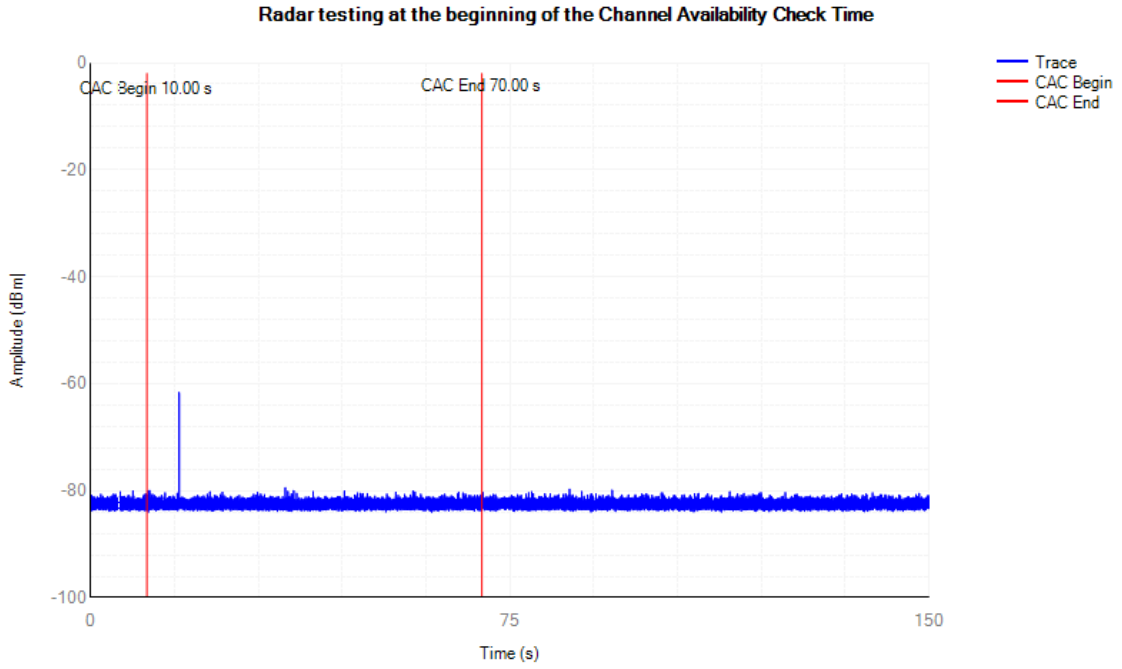
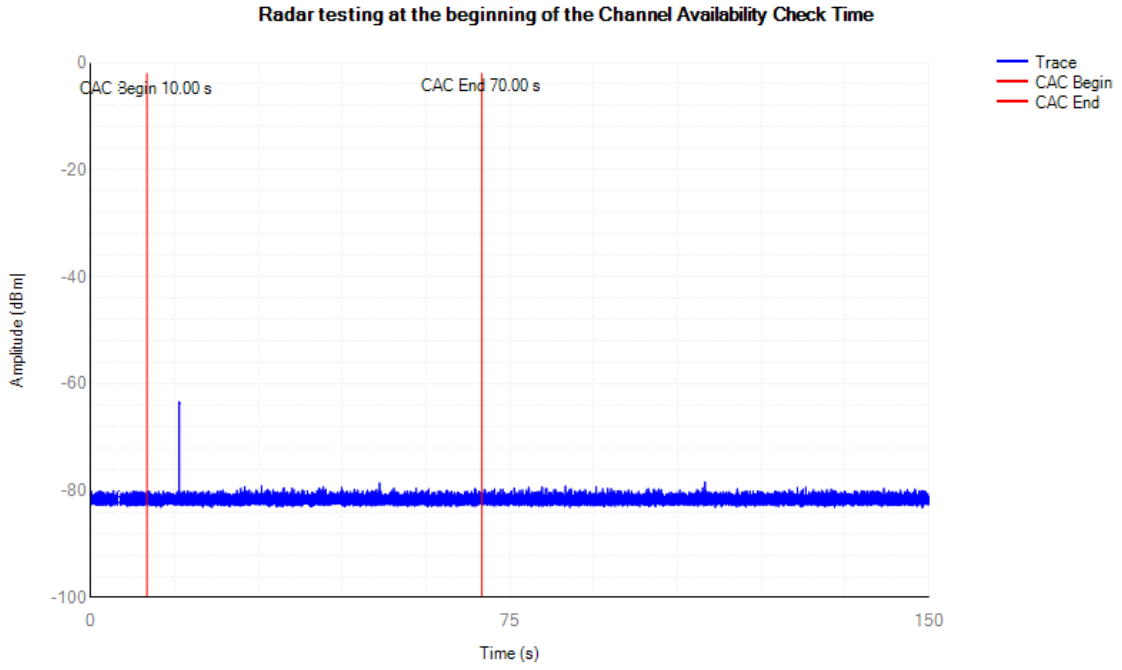
**DFS End of CAC**

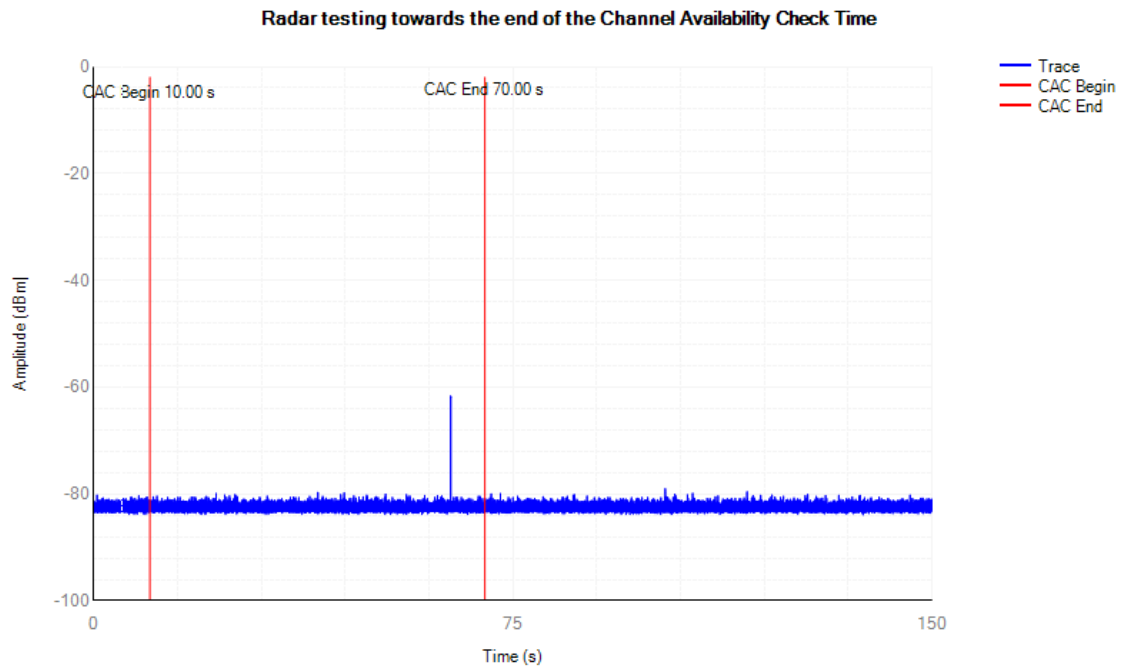
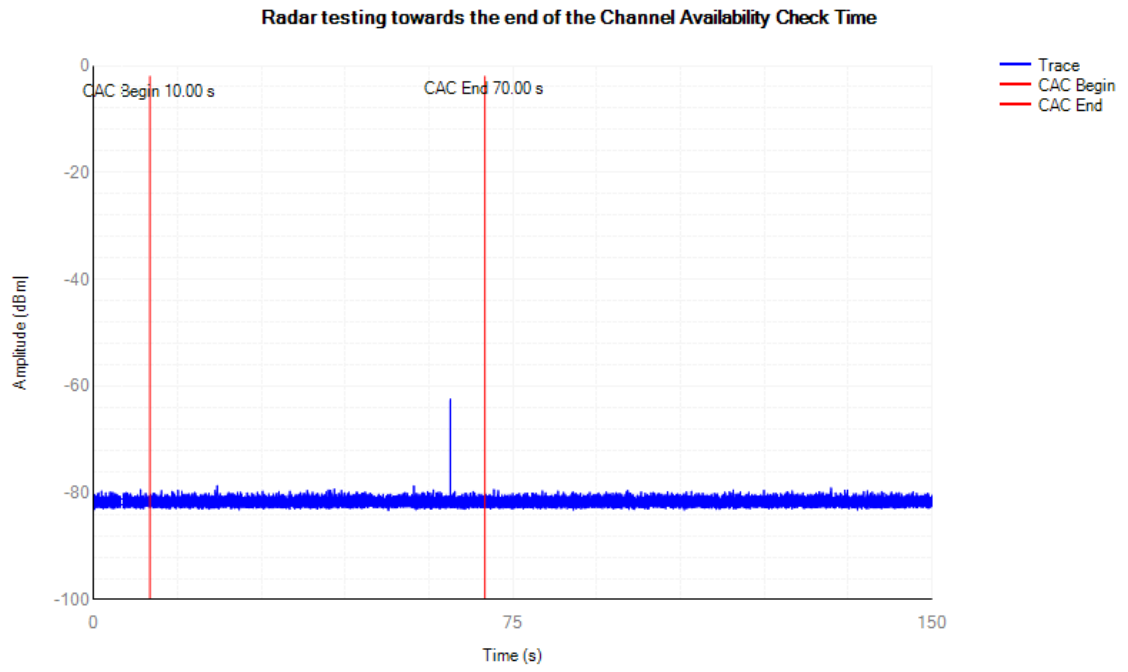
| Test Mode | Frequency (MHz) | Radar Type | Result | Verdict |
|---|---|---|---|---|
| 802.11ax(VHT20) | 5320 | Type0 | See test Graph | PASS |
| | 5500 | Type0 | See test Graph | PASS |

The time for master complete its power-on cycle:

The time for EUT to complete its power-on cycle is 70.5S.

The time for Auxiliary equipment to complete its power-on cycle is 10.6S

| DFS Beginning of CAC |
| --- |
| 802.11ax(VHT20) 5320MHz |
|  |
| 802.11ax(VHT20) 5500MHz |
|  |

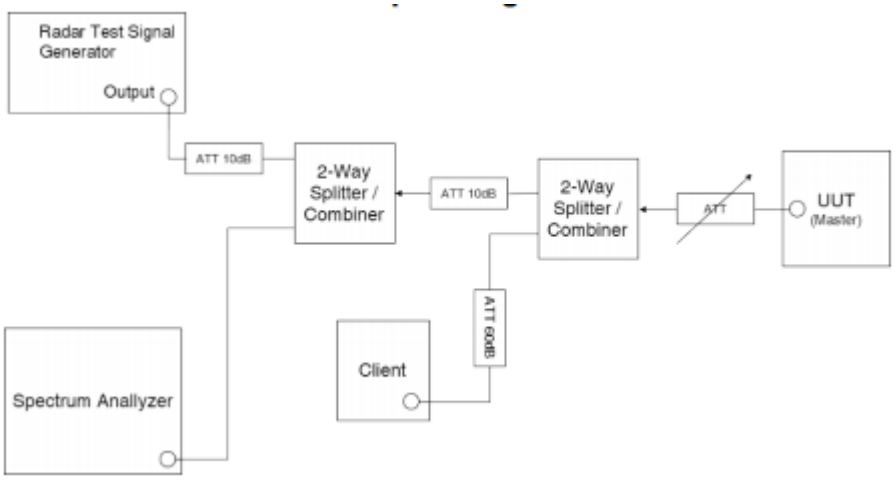
| DFS End of CAC |
| --- |
| 802.11ax(VHT20) 5320MHz |
|  |
| 802.11ax(VHT20) 5500MHz |
|  |

# 7. Statistical Performance Check

## 7.1 Limit of Statistical Performance Check

Refer to Table 5, 5a, 6, 7

## 7.2 Test Configuration




## 7.3 Test Procedure

The steps below define the procedure to determine the minimum percentage of successful detection requirements found in **Tables 5-7** when a radar burst with a level equal to the *DFS Detection Threshold* + 1dB is generated on the *Operating Channel* of the U-NII device *(In- Service Monitoring).*

1. One frequency will be chosen from the *Operating Channels* of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands.
2. In case the UUT is a U-NII device operating as a *Client Device* (with or without Radar Detection), a U-NII device operating as a *Master Device* will be used to allow the UUT (Client device) to *Associate* with the *Master Device*. In case the UUT is a *Master Device*, a U-NII device operating as a *Client Device* will be used and it is assumed that the Client will *Associate* with the UUT (Master). In both cases for conducted tests, the *Radar Waveform* generator will be connected to the *Master Device*. For radiated tests, the emissions of the *Radar Waveform* generator will be directed towards the *Master Device*. If the *Master Device* has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
3. Stream the channel loading test file from the *Master Device* to the Client Device on the test *Channel* for the entire period of the test.
4. At time T0 the *Radar Waveform* generator sends the individual waveform for each of the Radar Types 1- 6 in **Tables 5-7**, at levels defined in **Table 3**, on the *Operating Channel*. An

additional 1 dB is added to the radar test signal to ensure it is at or above the *DFS Detection Threshold*, accounting for equipment variations/errors.

5. Observe the transmissions of the UUT at the end of the Burst on the *Operating Channel* for duration greater than 10 seconds for Radar Type 0 to ensure detection occurs.
6. Observe the transmissions of the UUT at the end of the Burst on the *Operating Channel* for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs.
7. In case the UUT is a U-NII device operating as a *Client Device* with *In-Service Monitoring*, perform steps 1 to 6.

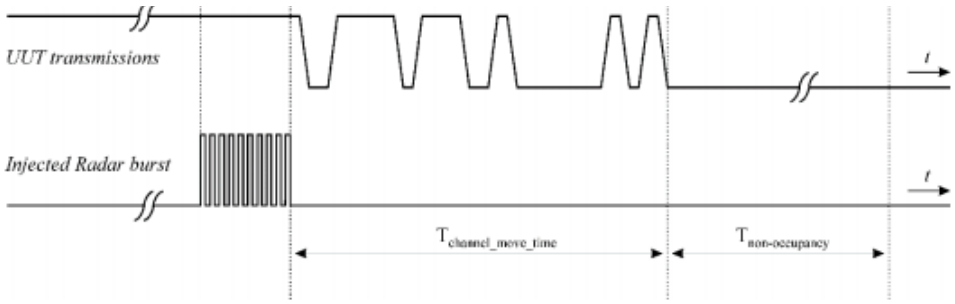



*Figure 17: Example of Channel Closing Transmission Time & Channel Closing Time*

## 7.4 TEST RESULTS

802.11ax(VHT20)

| DUT Frequency (MHz) | Radar Type No. | Detection count | Detection Limit | Verdict | Comment | |
|---|---|---|---|---|---|---|
| 5320 | 1 | 28 of 30 | 93.33% | 60.0 % | PASS | |
| 5320 | 2 | 29 of 30 | 96.67% | 60.0 % | PASS | |
| 5320 | 3 | 27 of 30 | 90% | 60.0 % | PASS | |
| 5320 | 4 | 28 of 30 | 93.33% | 60.0 % | PASS | |
| 5320 | 5 | 27 of 30 | 90% | 80.0 % | PASS | |
| 5320 | 6 | 28 of 30 | 93.33% | 70.0 % | PASS | |

## Aggregate Results for Short Pulse Radar Type 1-4

| Aggregate Calculation as follows | Aggregate Percentage | Aggregate Limit | Aggregate Result | Aggregate Comment |
|---|---|---|---|---|
| (P1 + P2 + P3 + P4) / 4 | 93.32% | 80.0 % | PASS | |

## Radar Type 1

| Trial Number | Random Trial used | Pulse Width (µs) | PRI (µs) | No. of Pulses | Pulses Detected | Comment |
|---|---|---|---|---|---|---|
| 1 | 3 | 1.000 | 557.000 | 95 | YES | |
| 2 | 37 | 1.000 | 1792.000 | 30 | YES | |
| 3 | 8 | 1.000 | 657.000 | 81 | YES | |
| 4 | 4 | 1.000 | 579.000 | 92 | YES | |
| 5 | 34 | 1.000 | 1499.000 | 36 | YES | |
| 6 | 27 | 1.000 | 816.000 | 65 | YES | |
| 7 | 21 | 1.000 | 919.000 | 58 | YES | |
| 8 | 50 | 1.000 | 3061.000 | 18 | YES | |
| 9 | 48 | 1.000 | 2865.000 | 19 | YES | |
| 10 | 47 | 1.000 | 2768.000 | 20 | YES | |
| 11 | 40 | 1.000 | 2083.000 | 26 | YES | |
| 12 | 20 | 1.000 | 897.000 | 59 | YES | |
| 13 | 42 | 1.000 | 2278.000 | 24 | YES | |
| 14 | 10 | 1.000 | 699.000 | 76 | YES | |
| 15 | 6 | 1.000 | 619.000 | 86 | YES | |
| 16 | 39 | 1.000 | 1987.000 | 27 | YES | |
| 17 | 15 | 1.000 | 799.000 | 67 | YES | |
| 18 | 41 | 1.000 | 2182.000 | 25 | YES | |
| 19 | 32 | 1.000 | 1304.000 | 41 | YES | |
| 20 | 25 | 1.000 | 621.000 | 86 | NO | |
| 21 | 7 | 1.000 | 637.000 | 83 | YES | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 22 | 19 | 1.000 | 876.000 | 61 | YES | |
| 23 | 45 | 1.000 | 2571.000 | 21 | YES | |
| 24 | 18 | 1.000 | 859.000 | 62 | YES | |
| 25 | 36 | 1.000 | 1692.000 | 32 | YES | |
| 26 | 1 | 1.000 | 517.000 | 102 | NO | |
| 27 | 12 | 1.000 | 737.000 | 72 | YES | |
| 28 | 9 | 1.000 | 676.000 | 78 | YES | |
| 29 | 44 | 1.000 | 2473.000 | 22 | YES | |
| 30 | 14 | 1.000 | 779.000 | 68 | YES | |

## Radar Type 2

| Trial Number | Random Trial used | Pulse Width (µs) | PRI (µs) | No. of Pulses | Pulses Detected | Comment |
|---|---|---|---|---|---|---|
| 1 | 47 | 3.400 | 212.000 | 27 | YES | |
| 2 | 46 | 3.000 | 191.000 | 28 | YES | |
| 3 | 38 | 2.000 | 181.000 | 25 | YES | |
| 4 | 16 | 3.600 | 193.000 | 26 | YES | |
| 5 | 19 | 2.000 | 201.000 | 25 | YES | |
| 6 | 48 | 4.200 | 226.000 | 24 | YES | |
| 7 | 36 | 3.200 | 201.000 | 28 | YES | |
| 8 | 14 | 4.800 | 176.000 | 24 | YES | |
| 9 | 50 | 4.100 | 159.000 | 25 | YES | |
| 10 | 28 | 1.700 | 215.000 | 27 | YES | |
| 11 | 33 | 2.100 | 227.000 | 28 | YES | |
| 12 | 29 | 4.100 | 188.000 | 26 | YES | |
| 13 | 44 | 3.500 | 168.000 | 29 | YES | |
| 14 | 37 | 3.400 | 192.000 | 24 | YES | |
| 15 | 43 | 4.100 | 154.000 | 24 | YES | |
| 16 | 42 | 2.500 | 216.000 | 28 | YES | |
| 17 | 35 | 1.200 | 207.000 | 24 | YES | |
| 18 | 26 | 3.700 | 218.000 | 28 | YES | |
| 19 | 49 | 1.800 | 158.000 | 25 | YES | |
| 20 | 27 | 2.700 | 198.000 | 29 | YES | |
| 21 | 23 | 3.800 | 188.000 | 28 | YES | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 22 | 8 | 2.600 | 173.000 | 26 | NO | |
| 23 | 41 | 1.300 | 217.000 | 25 | YES | |
| 24 | 18 | 2.000 | 152.000 | 24 | YES | |
| 25 | 4 | 4.700 | 201.000 | 23 | YES | |
| 26 | 34 | 2.200 | 198.000 | 28 | YES | |
| 27 | 45 | 3.200 | 223.000 | 29 | YES | |
| 28 | 30 | 4.200 | 172.000 | 25 | YES | |
| 29 | 12 | 3.100 | 181.000 | 28 | YES | |
| 30 | 15 | 2.200 | 181.000 | 29 | YES | |

## Radar Type 3

| Trial Number | Random Trial used | Pulse Width (µs) | PRI (µs) | No. of Pulses | Pulses Detected | Comment |
|---|---|---|---|---|---|---|
| 1 | 17 | 8.700 | 412 | 17 | YES | |
| 2 | 23 | 9.700 | 255 | 16 | YES | |
| 3 | 18 | 6.200 | 262 | 18 | YES | |
| 4 | 47 | 9.800 | 249 | 17 | NO | |
| 5 | 34 | 6.400 | 476 | 17 | YES | |
| 6 | 29 | 9.900 | 445 | 17 | YES | |
| 7 | 21 | 8.100 | 203 | 17 | YES | |
| 8 | 36 | 9.800 | 493 | 17 | YES | |
| 9 | 25 | 9.600 | 457 | 17 | YES | |
| 10 | 6 | 7.500 | 428 | 17 | YES | |
| 11 | 32 | 8.700 | 355 | 18 | YES | |
| 12 | 46 | 8.500 | 348 | 17 | YES | |
| 13 | 5 | 8.200 | 463 | 18 | YES | |
| 14 | 10 | 9.800 | 205 | 17 | YES | |
| 15 | 50 | 7.700 | 205 | 17 | YES | |
| 16 | 11 | 9.000 | 499 | 16 | YES | |
| 17 | 44 | 7.100 | 456 | 16 | NO | |
| 18 | 27 | 6.600 | 300 | 17 | YES | |
| 19 | 12 | 8.000 | 462 | 17 | YES | |
| 20 | 35 | 7.300 | 199 | 18 | YES | |
| 21 | 19 | 9.600 | 335 | 18 | YES | |
| 22 | 7 | 6.500 | 465 | 17 | YES | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 23 | 40 | 7.400 | 270 | 17 | YES | |
| 24 | 39 | 7.200 | 357 | 18 | YES | |
| 25 | 37 | 7.500 | 216 | 17 | YES | |
| 26 | 3 | 9.500 | 296 | 16 | YES | |
| 27 | 26 | 9.200 | 496 | 17 | NO | |
| 28 | 30 | 8.400 | 308 | 17 | YES | |
| 29 | 43 | 6.700 | 397 | 17 | YES | |
| 30 | 13 | 8.400 | 342 | 17 | YES | |

## Radar Type 4

| Trial Number | Random Trial used | Pulse Width (µs) | PRI (µs) | No. of Pulses | Pulses Detected | Comment |
|---|---|---|---|---|---|---|
| 1 | 48 | 14.500 | 432 | 12 | YES | |
| 2 | 27 | 15.600 | 302 | 13 | YES | |
| 3 | 14 | 16.600 | 211 | 16 | YES | |
| 4 | 16 | 19.900 | 365 | 14 | YES | |
| 5 | 2 | 19.900 | 427 | 12 | YES | |
| 6 | 1 | 15.900 | 409 | 13 | YES | |
| 7 | 29 | 17.300 | 286 | 16 | YES | |
| 8 | 41 | 13.300 | 438 | 14 | YES | |
| 9 | 46 | 15.300 | 487 | 14 | YES | |
| 10 | 42 | 18.500 | 207 | 14 | YES | |
| 11 | 33 | 19.500 | 383 | 13 | YES | |
| 12 | 12 | 16.000 | 460 | 13 | YES | |
| 13 | 6 | 18.500 | 498 | 13 | YES | |
| 14 | 32 | 12.600 | 292 | 15 | YES | |
| 15 | 39 | 12.400 | 216 | 14 | YES | |
| 16 | 35 | 12.600 | 267 | 13 | YES | |
| 17 | 18 | 15.600 | 419 | 15 | NO | |
| 18 | 4 | 12.600 | 359 | 14 | YES | |
| 19 | 40 | 13.600 | 236 | 15 | YES | |
| 20 | 7 | 18.600 | 235 | 12 | YES | |
| 21 | 24 | 18.100 | 396 | 14 | YES | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 22 | 20 | 12.300 | 437 | 13 | YES | |
| 23 | 13 | 16.000 | 484 | 14 | YES | |
| 24 | 30 | 11.800 | 383 | 14 | YES | |
| 25 | 8 | 14.100 | 282 | 15 | YES | |
| 26 | 22 | 17.800 | 419 | 13 | YES | |
| 27 | 45 | 16.700 | 418 | 16 | NO | |
| 28 | 9 | 13.300 | 253 | 14 | YES | |
| 29 | 50 | 14.400 | 285 | 12 | YES | |
| 30 | 3 | 13.600 | 397 | 15 | YES | |

## Radar Type 5

| Trial Number | Random Trial used | Pulses Detected | Comment |
|---|---|---|---|
| 1 | 48 | YES | For detailed burst data see separate table Type5_Trial1 |
| 2 | 25 | YES | For detailed burst data see separate table Type5_Trial2 |
| 3 | 3 | YES | For detailed burst data see separate table Type5_Trial3 |
| 4 | 4 | YES | For detailed burst data see separate table Type5_Trial4 |
| 5 | 11 | YES | For detailed burst data see separate table Type5_Trial5 |
| 6 | 46 | YES | For detailed burst data see separate table Type5_Trial6 |
| 7 | 31 | YES | For detailed burst data see separate table Type5_Trial7 |
| 8 | 40 | NO | For detailed burst data see separate table Type5_Trial8 |
| 9 | 37 | NO | For detailed burst data see separate table Type5_Trial9 |
| 10 | 15 | YES | For detailed burst data see separate table Type5_Trial10 |
| 11 | 41 | YES | For detailed burst data see separate table Type5_Trial11 |
| 12 | 24 | YES | For detailed burst data see separate table Type5_Trial12 |
| 13 | 28 | YES | For detailed burst data see separate table Type5_Trial13 |
| 14 | 50 | YES | For detailed burst data see separate table Type5_Trial14 |
| 15 | 32 | YES | For detailed burst data see separate table Type5_Trial15 |
| 16 | 29 | YES | For detailed burst data see separate table Type5_Trial16 |
| 17 | 23 | YES | For detailed burst data see separate table Type5_Trial17 |
| 18 | 35 | YES | For detailed burst data see separate table Type5_Trial18 |
| 19 | 18 | YES | For detailed burst data see separate table Type5_Trial19 |
| 20 | 5 | YES | For detailed burst data see separate table Type5_Trial20 |
| 21 | 10 | YES | For detailed burst data see separate table Type5_Trial21 |
| 22 | 12 | NO | For detailed burst data see separate table Type5_Trial22 |
| 23 | 22 | YES | For detailed burst data see separate table Type5_Trial23 |
| 24 | 36 | YES | For detailed burst data see separate table Type5_Trial24 |
| 25 | 6 | YES | For detailed burst data see separate table Type5_Trial25 |
| 26 | 9 | YES | For detailed burst data see separate table Type5_Trial26 |
| 27 | 34 | YES | For detailed burst data see separate table Type5_Trial27 |
| 28 | 30 | YES | For detailed burst data see separate table Type5_Trial28 |

| | | | |
|---|---|---|---|
| 29 | 7 | YES | For detailed burst data see separate table Type5_Trial29 |
| 30 | 16 | YES | For detailed burst data see separate table Type5_Trial30 |

## Radar Type 5_Trial 1

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 2 | 97.900 | 7.000000 | 1123 | --- | 368.000 |
| 2 | 2 | 94.200 | 7.000000 | 1096 | --- | 363.000 |
| 3 | 2 | 95.600 | 7.000000 | 1705 | --- | 338.000 |
| 4 | 3 | 60.700 | 7.000000 | 1725 | 1788.000 | 628.000 |
| 5 | 2 | 79.600 | 7.000000 | 920 | --- | 352.000 |
| 6 | 2 | 55.700 | 7.000000 | 1462 | --- | 71.000 |
| 7 | 2 | 92.300 | 7.000000 | 1485 | --- | 208.000 |
| 8 | 3 | 59.600 | 7.000000 | 1549 | 1830.000 | 605.000 |
| 9 | 2 | 95.900 | 7.000000 | 1528 | --- | 727.000 |
| 10 | 2 | 87.500 | 7.000000 | 1520 | --- | 637.000 |
| 11 | 3 | 81.100 | 7.000000 | 960 | 1815.000 | 593.000 |
| 12 | 3 | 93.000 | 7.000000 | 1245 | 1717.000 | 400.000 |
| 13 | 3 | 62.500 | 7.000000 | 1218 | 1563.000 | 742.000 |
| 14 | 1 | 70.400 | 7.000000 | --- | --- | 627.000 |
| 15 | 2 | 63.400 | 7.000000 | 1345.000 | --- | 439.000 |
| 16 | 1 | 78.000 | 7.000000 | --- | --- | 663.000 |

## Radar Type 5_Trial 2

| Burst | No. of Pulse | Pulse Width (μs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 2 | 97.000 | 19.000000 | 1539.000 | --- | 378.000 |
| 2 | 2 | 62.300 | 19.000000 | 1931.000 | --- | 586.000 |
| 3 | 3 | 85.300 | 19.000000 | 1860.000 | 942.000 | 473.000 |
| 4 | 2 | 57.900 | 19.000000 | 1401.000 | --- | 394.000 |
| 5 | 1 | 72.200 | 19.000000 | --- | --- | 254.000 |
| 6 | 1 | 92.800 | 19.000000 | --- | --- | 242.000 |
| 7 | 2 | 56.300 | 19.000000 | 1405.000 | --- | 411.000 |
| 8 | 3 | 54.200 | 19.000000 | 1382.000 | 1712.000 | 591.000 |
| 9 | 3 | 88.100 | 19.000000 | 1026.000 | 1680.000 | 17.000 |
| 10 | 3 | 68.200 | 19.000000 | 1051.000 | 1804.000 | 269.000 |
| 11 | 2 | 91.600 | 19.000000 | 1080.000 | --- | 315.000 |
| 12 | 2 | 94.700 | 19.000000 | 1056.000 | --- | 501.000 |
| 13 | 2 | 60.900 | 19.000000 | 1566.000 | --- | 227.000 |
| 14 | 2 | 57.700 | 19.000000 | 1345.000 | --- | 332.000 |
| 15 | 2 | 80.500 | 19.000000 | 1002.000 | --- | 131.000 |
| 16 | 1 | 78.700 | 19.000000 | --- | --- | 51.000 |
| 17 | 2 | 95.800 | 19.000000 | 1851.000 | --- | 346.000 |
| 18 | 3 | 74.500 | 19.000000 | 1430.000 | 1097.000 | 108.000 |
| 19 | 3 | 65.700 | 19.000000 | 1155.000 | 1430.000 | 508.000 |

## Radar Type 5_Trial 3

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 2 | 54.600 | 13.000000 | 1482.000 | --- | 997.000 |
| 2 | 3 | 58.000 | 13.000000 | 1111.000 | 999.000 | 712.000 |
| 3 | 3 | 63.400 | 13.000000 | 1268.000 | 1709.000 | 269.000 |
| 4 | 3 | 67.400 | 13.000000 | 1035.000 | 1498.000 | 377.000 |
| 5 | 3 | 70.200 | 13.000000 | 1122.000 | 999.000 | 381.000 |
| 6 | 1 | 92.500 | 13.000000 | --- | --- | 942.000 |
| 7 | 3 | 63.900 | 13.000000 | 1233.000 | 1239.000 | 49.000 |
| 8 | 1 | 67.700 | 13.000000 | --- | --- | 121.000 |
| 9 | 2 | 74.700 | 13.000000 | 1791.000 | --- | 596.000 |
| 10 | 2 | 98.000 | 13.000000 | 1740.000 | --- | 602.000 |

## Radar Type 5_Trial 4

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 1 | 64.600 | 15.000000 | --- | --- | 373.000 |
| 2 | 2 | 95.900 | 15.000000 | 1430.000 | --- | 66.000 |
| 3 | 2 | 54.800 | 15.000000 | 1287.000 | --- | 696.000 |
| 4 | 2 | 63.800 | 15.000000 | 1654.000 | --- | 597.000 |
| 5 | 2 | 55.100 | 15.000000 | 1400.000 | --- | 517.000 |
| 6 | 2 | 92.900 | 15.000000 | 1849.000 | --- | 259.000 |
| 7 | 3 | 56.500 | 15.000000 | 1000.000 | 1682.000 | 660.000 |
| 8 | 1 | 61.700 | 15.000000 | --- | --- | 591.000 |
| 9 | 1 | 58.100 | 15.000000 | --- | --- | 474.000 |
| 10 | 2 | 95.400 | 15.000000 | 1214.000 | --- | 1077.000 |
| 11 | 2 | 96.700 | 15.000000 | 1667.000 | --- | 917.000 |

## Radar Type 5_Trial 5

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 3 | 60.700 | 11.000000 | 1264.000 | 1572.000 | 640.000 |
| 2 | 3 | 81.600 | 11.000000 | 923.000 | 1387.000 | 439.000 |
| 3 | 2 | 73.800 | 11.000000 | 1230.000 | --- | 16.000 |
| 4 | 2 | 76.700 | 11.000000 | 1544.000 | --- | 613.000 |
| 5 | 1 | 79.400 | 11.000000 | --- | --- | 213.000 |
| 6 | 3 | 87.700 | 11.000000 | 1316.000 | 1461.000 | 568.000 |
| 7 | 3 | 77.100 | 11.000000 | 1065.000 | 1167.000 | 387.000 |
| 8 | 2 | 55.600 | 11.000000 | 1454.000 | --- | 647.000 |
| 9 | 1 | 62.600 | 11.000000 | --- | --- | 285.000 |
| 10 | 2 | 72.100 | 11.000000 | 1369.000 | --- | 189.000 |
| 11 | 2 | 66.900 | 11.000000 | 994.000 | --- | 165.000 |
| 12 | 2 | 75.500 | 11.000000 | 1164.000 | --- | 480.000 |
| 13 | 1 | 62.700 | 11.000000 | --- | --- | 28.000 |
| 14 | 2 | 69.100 | 11.000000 | 1823.000 | --- | 516.000 |
| 15 | 2 | 89.400 | 11.000000 | 1694.000 | --- | 561.000 |
| 16 | 2 | 86.700 | 11.000000 | 1528.000 | --- | 420.000 |
| 17 | 3 | 76.700 | 11.000000 | 1339.000 | 1407.000 | 61.000 |
| 18 | 1 | 80.300 | 11.000000 | --- | --- | 67.000 |

## Radar Type 5_Trial 6

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 3 | 51.300 | 11.000000 | 1799.000 | 1297.000 | 737.000 |
| 2 | 3 | 52.600 | 11.000000 | 1397.000 | 1860.000 | 189.000 |
| 3 | 1 | 58.200 | 11.000000 | --- | --- | 495.000 |
| 4 | 3 | 53.300 | 11.000000 | 1885.000 | 1319.000 | 152.000 |
| 5 | 1 | 74.600 | 11.000000 | --- | --- | 76.000 |
| 6 | 1 | 51.900 | 11.000000 | --- | --- | 190.000 |
| 7 | 1 | 96.700 | 11.000000 | --- | --- | 195.000 |
| 8 | 2 | 49.200 | 11.000000 | 1276.000 | --- | 604.000 |
| 9 | 3 | 94.000 | 11.000000 | 1526.000 | 1582.000 | 267.000 |
| 10 | 3 | 76.500 | 11.000000 | 1494.000 | 1729.000 | 842.000 |
| 11 | 1 | 65.900 | 11.000000 | --- | --- | 144.000 |
| 12 | 2 | 95.100 | 11.000000 | 1441.000 | --- | 435.000 |
| 13 | 3 | 61.500 | 11.000000 | 1037.000 | 1474.000 | 262.000 |
| 14 | 2 | 52.100 | 11.000000 | 1278.000 | --- | 525.000 |

## Radar Type 5_Trial 7

| Burst | No. of Pulses | Pulse Width (μs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 2 | 77.100 | 10.000000 | 1102.000 | --- | 160.000 |
| 2 | 2 | 50.400 | 10.000000 | 957.000 | --- | 633.000 |
| 3 | 3 | 84.200 | 10.000000 | 1076.000 | 1386.000 | 363.000 |
| 4 | 1 | 95.300 | 10.000000 | --- | --- | 992.000 |
| 5 | 1 | 66.200 | 10.000000 | --- | --- | 751.000 |
| 6 | 3 | 67.900 | 10.000000 | 1284.000 | 1725.000 | 149.000 |
| 7 | 2 | 74.900 | 10.000000 | 958.000 | --- | 690.000 |
| 8 | 2 | 86.000 | 10.000000 | 1715.000 | --- | 512.000 |
| 9 | 1 | 87.500 | 10.000000 | --- | --- | 611.000 |
| 10 | 3 | 60.000 | 10.000000 | 1333.000 | 1179.000 | 361.000 |
| 11 | 1 | 56.000 | 10.000000 | --- | --- | 214.000 |
| 12 | 2 | 54.900 | 10.000000 | 1656.000 | --- | 643.000 |

## Radar Type 5_Trial 8

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 2 | 56.400 | 6.000000 | 963.000 | --- | 180.000 |
| 2 | 2 | 92.600 | 6.000000 | 1584.000 | --- | 459.000 |
| 3 | 2 | 79.100 | 6.000000 | 1493.000 | --- | 435.000 |
| 4 | 1 | 63.100 | 6.000000 | --- | --- | 1256.000 |
| 5 | 2 | 66.700 | 6.000000 | 1215.000 | --- | 734.000 |
| 6 | 1 | 95.500 | 6.000000 | --- | --- | 1281.000 |
| 7 | 2 | 80.500 | 6.000000 | 974.000 | --- | 1432.000 |
| 8 | 2 | 65.800 | 6.000000 | 1558.000 | --- | 92.000 |

## Radar Type 5_Trial 9

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing (µs) | Pulse 2-to-3 Spacing (µs) | Starting Location Within Interval (µs) |
|---|---|---|---|---|---|---|
| 1 | 1 | 83.500 | 5.000000 | --- | --- | 77.000 |
| 2 | 2 | 84.100 | 5.000000 | 1049.000 | --- | 561.000 |
| 3 | 2 | 76.500 | 5.000000 | 1012.000 | --- | 322.000 |
| 4 | 2 | 94.300 | 5.000000 | 1524.000 | --- | 591.000 |
| 5 | 2 | 68.000 | 5.000000 | 1447.000 | --- | 479.000 |
| 6 | 2 | 64.200 | 5.000000 | 1574.000 | --- | 177.000 |
| 7 | 3 | 76.400 | 5.000000 | 1446.000 | 1628.000 | 4.000 |
| 8 | 2 | 57.000 | 5.000000 | 1737.000 | --- | 631.000 |
| 9 | 3 | 57.500 | 5.000000 | 1714.000 | 1626.000 | 330.000 |
| 10 | 1 | 97.600 | 5.000000 | --- | --- | 508.000 |
| 11 | 1 | 72.900 | 5.000000 | --- | --- | 27.000 |
| 12 | 1 | 66.700 | 5.000000 | --- | --- | 157.000 |
| 13 | 1 | 98.000 | 5.000000 | --- | --- | 313.000 |
| 14 | 2 | 75.800 | 5.000000 | 1232.000 | --- | 429.000 |
| 15 | 2 | 88.900 | 5.000000 | 1618.000 | --- | 574.000 |
| 16 | 3 | 87.000 | 5.000000 | 1587.000 | 1221.000 | 326.000 |
| 17 | 1 | 54.100 | 5.000000 | --- | --- | 550.000 |
| 18 | 3 | 92.900 | 5.000000 | 930.000 | 1084.000 | 275.000 |

## Radar Type 5_Trial 10

| Burst | No. of Pulses | Pulse Width (μs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 2 | 49.800 | 18.000000 | 1595.000 | --- | 21.000 |
| 2 | 2 | 51.000 | 18.000000 | 1563.000 | --- | 729.000 |
| 3 | 2 | 57.800 | 18.000000 | 1384.000 | --- | 15.000 |
| 4 | 2 | 78.700 | 18.000000 | 979.000 | --- | 261.000 |
| 5 | 1 | 68.500 | 18.000000 | --- | --- | 533.000 |
| 6 | 2 | 97.900 | 18.000000 | 1015.000 | --- | 493.000 |
| 7 | 2 | 81.800 | 18.000000 | 1634.000 | --- | 218.000 |
| 8 | 1 | 69.100 | 18.000000 | --- | --- | 1102.000 |
| 9 | 2 | 88.200 | 18.000000 | 1357.000 | --- | 524.000 |

## Radar Type 5_Trial 11

| Burst | No. of Pulses | Pulse Width (μs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 2 | 68.200 | 20.000000 | 1589.000 | --- | 608.000 |
| 2 | 2 | 95.300 | 20.000000 | 1096.000 | --- | 1107.000 |
| 3 | 2 | 64.100 | 20.000000 | 973.000 | --- | 1251.000 |
| 4 | 3 | 81.700 | 20.000000 | 1229.000 | 1116.000 | 442.000 |
| 5 | 1 | 85.700 | 20.000000 | --- | --- | 528.000 |
| 6 | 1 | 49.500 | 20.000000 | --- | --- | 261.000 |
| 7 | 2 | 73.700 | 20.000000 | 1296.000 | --- | 317.000 |
| 8 | 1 | 57.000 | 20.000000 | --- | --- | 131.000 |
| 9 | 3 | 81.600 | 20.000000 | 1463.000 | 985.000 | 1132.000 |

## Radar Type 5_Trial 12

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing (µs) | Pulse 2-to-3 Spacing (µs) | Starting Location Within Interval (µs) |
|---|---|---|---|---|---|---|
| 1 | 2 | 77.300 | 8.000000 | 1113.000 | --- | 442.000 |
| 2 | 3 | 72.800 | 8.000000 | 1354.000 | 1837.000 | 373.000 |
| 3 | 3 | 75.100 | 8.000000 | 1355.000 | 1639.000 | 48.000 |
| 4 | 3 | 86.300 | 8.000000 | 1498.000 | 1822.000 | 357.000 |
| 5 | 1 | 49.900 | 8.000000 | --- | --- | 161.000 |
| 6 | 2 | 68.700 | 8.000000 | 1619.000 | --- | 132.000 |
| 7 | 3 | 75.000 | 8.000000 | 1288.000 | 1532.000 | 644.000 |
| 8 | 2 | 59.600 | 8.000000 | 1300.000 | --- | 48.000 |
| 9 | 1 | 97.100 | 8.000000 | --- | --- | 403.000 |
| 10 | 2 | 51.200 | 8.000000 | 1422.000 | --- | 506.000 |
| 11 | 2 | 97.400 | 8.000000 | 1351.000 | --- | 22.000 |
| 12 | 2 | 86.700 | 8.000000 | 1180.000 | --- | 634.000 |
| 13 | 3 | 81.400 | 8.000000 | 1704.000 | 1848.000 | 28.000 |
| 14 | 3 | 67.900 | 8.000000 | 1080.000 | 1341.000 | 12.000 |
| 15 | 2 | 70.600 | 8.000000 | 1681.000 | --- | 577.000 |
| 16 | 3 | 92.100 | 8.000000 | 1758.000 | 1536.000 | 609.000 |
| 17 | 2 | 51.100 | 8.000000 | 1941.000 | --- | 612.000 |
| 18 | 2 | 88.200 | 8.000000 | 966.000 | --- | 60.000 |

## Radar Type 5_Trial 13

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 2 | 96.500 | 12.000000 | 1544.000 | --- | 99.000 |
| 2 | 2 | 64.600 | 12.000000 | 1375.000 | --- | 550.000 |
| 3 | 1 | 67.300 | 12.000000 | --- | --- | 550.000 |
| 4 | 3 | 49.300 | 12.000000 | 1878.000 | 1651.000 | 1131.000 |
| 5 | 3 | 50.700 | 12.000000 | 975.000 | 1518.000 | 102.000 |
| 6 | 3 | 56.200 | 12.000000 | 1700.000 | 1447.000 | 1041.000 |
| 7 | 2 | 97.400 | 12.000000 | 1637.000 | --- | 130.000 |
| 8 | 3 | 57.900 | 12.000000 | 1602.000 | 1161.000 | 38.000 |
| 9 | 2 | 59.100 | 12.000000 | 984.000 | --- | 333.000 |

## Radar Type 5_Trial 14

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 2 | 62.100 | 5.000000 | 1767.000 | --- | 49.000 |
| 2 | 2 | 53.000 | 5.000000 | 1907.000 | --- | 76.000 |
| 3 | 1 | 73.000 | 5.000000 | --- | --- | 573.000 |
| 4 | 3 | 68.500 | 5.000000 | 1490.000 | 1185.000 | 440.000 |
| 5 | 2 | 61.300 | 5.000000 | 1013.000 | --- | 645.000 |
| 6 | 2 | 51.800 | 5.000000 | 1682.000 | --- | 178.000 |
| 7 | 2 | 89.100 | 5.000000 | 1367.000 | --- | 171.000 |
| 8 | 1 | 85.200 | 5.000000 | --- | --- | 251.000 |
| 9 | 2 | 93.800 | 5.000000 | 908.000 | --- | 307.000 |
| 10 | 2 | 65.500 | 5.000000 | 972.000 | --- | 415.000 |
| 11 | 3 | 59.800 | 5.000000 | 1555.000 | 1769.000 | 440.000 |
| 12 | 2 | 68.200 | 5.000000 | 1364.000 | --- | 408.000 |
| 13 | 2 | 81.600 | 5.000000 | 1077.000 | --- | 86.000 |
| 14 | 3 | 88.600 | 5.000000 | 934.000 | 1096.000 | 215.000 |
| 15 | 2 | 86.700 | 5.000000 | 958.000 | --- | 272.000 |
| 16 | 2 | 73.300 | 5.000000 | 1246.000 | --- | 576.000 |
| 17 | 1 | 97.600 | 5.000000 | --- | --- | 262.000 |
| 18 | 3 | 81.600 | 5.000000 | 1172.000 | 1322.000 | 628.000 |

## Radar Type 5_Trial 15

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 1 | 79.900 | 6.000000 | --- | --- | 565.000 |
| 2 | 3 | 54.800 | 6.000000 | 1708.000 | 1448.000 | 439.000 |
| 3 | 2 | 92.400 | 6.000000 | 985.000 | --- | 706.000 |
| 4 | 2 | 82.200 | 6.000000 | 1912.000 | --- | 758.000 |
| 5 | 3 | 58.100 | 6.000000 | 1594.000 | 1591.000 | 79.000 |
| 6 | 2 | 73.400 | 6.000000 | 939.000 | --- | 107.000 |
| 7 | 3 | 84.400 | 6.000000 | 1733.000 | 1253.000 | 238.000 |
| 8 | 3 | 97.000 | 6.000000 | 1896.000 | 1606.000 | 373.000 |
| 9 | 1 | 91.100 | 6.000000 | --- | --- | 363.000 |
| 10 | 1 | 83.400 | 6.000000 | --- | --- | 227.000 |
| 11 | 2 | 66.400 | 6.000000 | 1272.000 | --- | 646.000 |
| 12 | 3 | 91.000 | 6.000000 | 1831.000 | 1066.000 | 457.000 |
| 13 | 3 | 86.500 | 6.000000 | 1763.000 | 1055.000 | 22.000 |

## Radar Type 5_Trial 16

| Burst | No. of Pulses | Pulse Width (µs) | Chirp Width (MHz) | Pulse 1-to-2 Spacing | Pulse 2-to-3 Spacing | Starting Location |
|---|---|---|---|---|---|---|
| 1 | 2 | 76.400 | 20.000000 | 1666.000 | --- | 613.000 |
| 2 | 3 | 98.600 | 20.000000 | 1128.000 | 1195.000 | 1083.000 |
| 3 | 3 | 94.100 | 20.000000 | 1506.000 | 1563.000 | 362.000 |
| 4 | 1 | 83.300 | 20.000000 | --- | --- | 319.000 |
| 5 | 3 | 87.900 | 20.000000 | 1568.000 | 1152.000 | 604.000 |
| 6 | 2 | 68.200 | 20.000000 | 995.000 | --- | 451.000 |
| 7 | 2 | 80.400 | 20.000000 | 1689.000 | --- | 791.000 |
| 8 | 2 | 87.500 | 20.000000 | 1286.000 | --- | 359.000 |
| 9 | 3 | 69.600 | 20.000000 | 1189.000 | 1825.000 | 241.000 |
| 10 | 3 | 55.000 | 20.000000 | 1217.000 | 1783.000 | 317.000 |