



# DFS TEST REPORT

**FCC ID** : 2AXJ4X50  
**Equipment** : AX3000 Whole Home Mesh Wi-Fi 6 System  
**Brand Name** : tp-link  
**Model Name** : Deco X50, Deco X55  
**Applicant** : TP-Link Corporation Limited  
Room 901, 9/F. , New East Ocean Centre, 9 Science  
Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong  
**Manufacturer** : TP-Link Corporation Limited  
Room 901, 9/F. , New East Ocean Centre, 9 Science  
Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong  
**Standard** : 47 CFR FCC Part 15.407

The product was received on Jul. 13, 2021, and testing was started from Aug. 13, 2021 and completed on Sep. 08, 2021. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

**Sporton International Inc. Hsinchu Laboratory**

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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### Appendix A. Test Photos

#### Photographs of EUT v01



TEL : 886-3-656-9065  
FAX : 886-3-656-9085  
Report Template No.: CB-A12\_3 Ver1.1

## Summary of Test Result

| Report Clause                                                                                                         | Ref Std. Clause        | Test Items                                                               | Result (PASS/FAIL) | Remark                                          |
|-----------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------|--------------------|-------------------------------------------------|
| 3.3                                                                                                                   | FCC KDB 905462 7.8.1   | DFS: UNII Detection Bandwidth Measurement                                | PASS               | -                                               |
| 3.4                                                                                                                   | FCC KDB 905462 7.8.2.1 | DFS: Initial Channel Availability Check Time                             | PASS               | -                                               |
| 3.4                                                                                                                   | FCC KDB 905462 7.8.2.2 | DFS: Radar Burst at the Beginning of the Channel Availability Check Time | PASS               | -                                               |
| 3.4                                                                                                                   | FCC KDB 905462 7.8.2.3 | DFS: Radar Burst at the End of the Channel Availability Check Time       | PASS               | -                                               |
| 3.5                                                                                                                   | FCC KDB 905462 7.8.3   | DFS: In-Service Monitoring for Channel Move Time (CMT)                   | PASS               | -                                               |
| 3.5                                                                                                                   | FCC KDB 905462 7.8.3   | DFS: In-Service Monitoring for Channel Closing Transmission Time (CCTT)  | PASS               | -                                               |
| 3.5                                                                                                                   | FCC KDB 905462 7.8.3   | DFS: In-Service Monitoring for Non-Occupancy Period (NOP)                | PASS               | -                                               |
| 3.6                                                                                                                   | FCC KDB 905462 7.8.4   | DFS: Statistical Performance Check                                       | PASS               | -                                               |
| 3.1.4                                                                                                                 | FCC KDB 905462 8.1     | User Access Restrictions                                                 | N/A                | Manufacturer attestation NOT accessible to user |
| Note: Mesh mode, only Statistical Performance Check (Section 7.8.4) on one of the radar types is required to perform. |                        |                                                                          |                    |                                                 |

### Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

### Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

**Reviewed by: Sam Chen**

**Report Producer: Vicky Huang**



# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

| Specification Items                                                                                                                                                                                                                                                                                                                                  | Description                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Frequency Range                                                                                                                                                                                                                                                                                                                                      | 5250 MHz – 5350 MHz                                                                            |
| Power Type                                                                                                                                                                                                                                                                                                                                           | From power adapter                                                                             |
| Channel Bandwidth                                                                                                                                                                                                                                                                                                                                    | 160 MHz operating channel bandwidth                                                            |
| Operating Mode                                                                                                                                                                                                                                                                                                                                       | <input checked="" type="checkbox"/> Master                                                     |
|                                                                                                                                                                                                                                                                                                                                                      | <input checked="" type="checkbox"/> Mesh                                                       |
|                                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/> Client with radar detection                                           |
|                                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/> Client without radar detection                                        |
| Communication Mode                                                                                                                                                                                                                                                                                                                                   | <input checked="" type="checkbox"/> IP Based (Load Based) <input type="checkbox"/> Frame Based |
| TPC Function                                                                                                                                                                                                                                                                                                                                         | <input checked="" type="checkbox"/> With TPC <input type="checkbox"/> Without TPC              |
| Power-on cycle                                                                                                                                                                                                                                                                                                                                       | 160MHz: Requires 66.522 seconds to complete its power-on cycle.                                |
| Firmware Number                                                                                                                                                                                                                                                                                                                                      | 1.0.1 Build 20210507 Rel. 56805                                                                |
| <ul style="list-style-type: none"><li>VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.</li><li>HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.</li><li>EUT employ a TPC mechanism and TPC have the capability to operate at least 6 dB below highest RF output power.</li></ul> |                                                                                                |

Note: The above information was declared by manufacturer.

#### TPC Power Result

| Mode                            | Min Power (dBm) | Max Power (dBm) | Min EIRP (dBm) | Max EIRP (dBm) |
|---------------------------------|-----------------|-----------------|----------------|----------------|
| 802.11ax HEW160_Nss1,(MCS0)_2TX | -               | -               | -              | -              |
| 5.25-5.35GHz                    | 14.95           | 20.95           | 15.92          | 21.92          |

### 1.1.2 Antenna Information

| Ant. | Port | Brand   | Model Name | Antenna Type   | Connector | Gain (dBi) |      |
|------|------|---------|------------|----------------|-----------|------------|------|
|      |      |         |            |                |           | 2.4GHz     | 5GHz |
| 1    | 2    | tp-link | 3101502756 | Dipole Antenna | I-PEX     | 1.93       | 0.9  |
| 2    | 1    | tp-link | 3101502757 | Dipole Antenna | I-PEX     | 1.94       | 0.97 |

Note: The above information was declared by manufacturer.

<For 2.4GHz Function>

For IEEE 802.11b/g/n/ax mode (2TX, 2RX):

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

<For 5GHz Function>

For IEEE 802.11a/n/ac/ax mode (2TX/2RX):

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

### 1.1.3 DFS Band Carrier Frequencies

There is one bandwidth systems.

For 160MHz bandwidth systems, use Channel 50

| Frequency Band          | Channel No. | Frequency |
|-------------------------|-------------|-----------|
| 5250~5350 MHz<br>Band 2 | 50          | 5250 MHz  |

### 1.1.4 Table for Multiple Listing

| EUT | Model Name | The color of the top cover on the EUT |
|-----|------------|---------------------------------------|
| 1   | Deco X50   | White                                 |
| 2   | Deco X55   | Black                                 |

Note 1: From the above models, model: Deco X50 was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.

### 1.1.5 Table for EUT Supports Functions

| Function  |
|-----------|
| AP Router |
| Mesh      |

## 1.2 Accessories

| Accessories    |            |             |                                                    |
|----------------|------------|-------------|----------------------------------------------------|
| Equipment Name | Brand Name | Model Name  | Rating                                             |
| Adapter        | tp-link    | T120150-2B4 | Input: 100-240V~50/60Hz, 0.6A<br>Output: 12V, 1.5A |

## 1.3 Support Equipment

### <AP Router Mode>

| Support Equipment |             |            |            |            |
|-------------------|-------------|------------|------------|------------|
| No.               | Equipment   | Brand Name | Model Name | FCC ID     |
| A                 | Notebook    | DELL       | E4300      | N/A        |
| B                 | Notebook    | DELL       | E4300      | N/A        |
| C                 | WLAN module | Intel      | AX200NGW   | PD9AX200NG |

### <Mesh Mode>

| Support Equipment |           |            |            |        |
|-------------------|-----------|------------|------------|--------|
| No.               | Equipment | Brand Name | Model Name | FCC ID |
| A                 | Notebook  | DELL       | E4300      | N/A    |
| B                 | Notebook  | DELL       | E4300      | N/A    |
| C                 | WLAN AP   | TP-Link    | Deco X50   | N/A    |

## 1.4 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15.407
- ♦ FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

## 1.5 Testing Location Information

| Testing Location Information                              |                                                                                                                                                                                                                                                |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Lab. : Sporton International Inc. Hsinchu Laboratory |                                                                                                                                                                                                                                                |
| Hsinchu<br>(TAF: 3787)                                    | ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)<br>TEL: 886-3-656-9065 FAX: 886-3-656-9085<br>Test site Designation No. TW3787 with FCC.<br>Conformity Assessment Body Identifier (CABID) TW3787 with ISED. |

### <AP Router Mode>

| Test Condition | Test Site No. | Test Engineer | Test Environment<br>(°C / %) | Test Date                       |
|----------------|---------------|---------------|------------------------------|---------------------------------|
| DFS            | DF01-CB       | Mason Chan    | 25.2-25.6 / 63-65            | Aug. 13, 2021~<br>Aug. 14, 2021 |

### <Mesh Mode>

| Test Condition | Test Site No. | Test Engineer | Test Environment<br>(°C / %) | Test Date                       |
|----------------|---------------|---------------|------------------------------|---------------------------------|
| DFS            | DF01-CB       | Mason Chan    | 24.9-25.3 / 65-66            | Aug. 13, 2021~<br>Sep. 08, 2021 |

## 2 Test Configuration of EUT

### 2.1 Test Channel Frequencies Configuration

| Test Channel Frequencies Configuration |                          |
|----------------------------------------|--------------------------|
| IEEE Std.                              | Test Channel Freq. (MHz) |
| 802.11ax (HEW160)                      | 5250 MHz                 |

### 2.2 The Worst Case Measurement Configuration

| The Worst Case Mode for Following Conformance Tests |                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tests Item                                          | Dynamic Frequency Selection (DFS)                                                                                                                                                                                                                                                                                                                                         |
| Test Condition                                      | Radiated measurement<br>The EUT shall be configured to operate at the highest transmitter output power setting. If more than one antenna assembly is intended for this power setting, the gain of the antenna assembly with the lowest gain shall be used. The DFS radar test signals have been aligned to the direction corresponding to the EUT's maximum antenna gain. |
| Modulation Mode                                     | 802.11ax (HEW160)                                                                                                                                                                                                                                                                                                                                                         |
| 1                                                   | AP Master Mode                                                                                                                                                                                                                                                                                                                                                            |
| 2                                                   | Mesh Mode<br>(Only Statistical Performance Check (Section 7.8.4) on one of the radar types)                                                                                                                                                                                                                                                                               |

### 3 Dynamic Frequency Selection (DFS) Test Result

#### 3.1 General DFS Information

##### 3.1.1 DFS Parameters

| Table D.1: DFS requirement values |                                                                                                       |
|-----------------------------------|-------------------------------------------------------------------------------------------------------|
| Parameter                         | Value                                                                                                 |
| Non-occupancy period              | Minimum 30 minutes                                                                                    |
| Channel Availability Check Time   | 60 seconds                                                                                            |
| Channel Move Time                 | 10 seconds (Note 1).                                                                                  |
| Channel Closing Transmission Time | 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second periods. (Notes 1 and 2). |
| U-NII Detection Bandwidth         | Minimum 100% of the 99% power bandwidth (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 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.

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

| Table D.2: Interference threshold values |                  |
|------------------------------------------|------------------|
| Maximum Transmit Power                   | Value (see note) |
| EIRP $\geq$ 200 mW                       | -64 dBm          |
| EIRP < 200 mW and PSD < 10dBm/MHz        | -62 dBm          |
| EIRP < 200 mW and PSD $\geq$ 10dBm/MHz   | -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 662911D01.

### 3.1.2 Applicability of DFS Requirements Prior to Use of a Channel

| Requirement                            | DFS Operational mode |                                |                             |
|----------------------------------------|----------------------|--------------------------------|-----------------------------|
|                                        | Master               | Client without radar detection | Client with radar detection |
| <i>Non-Occupancy Period</i>            | Yes                  | Not required                   | Yes                         |
| <i>DFS Detection Threshold</i>         | Yes                  | Not required                   | Yes                         |
| <i>Channel Availability Check Time</i> | Yes                  | Not required                   | Not required                |
| <i>U-NII Detection Bandwidth</i>       | Yes                  | Not required                   | Yes                         |

### 3.1.3 Applicability of DFS Requirements during Normal Operation

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

| 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.

**3.1.4 User Access Restrictions**

| User Access Restrictions            |                                                                                                                                                                                                                                              |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | DFS controls (hardware or software) related to radar detection are NOT accessible to the user. Manufacturer statement confirming that information regarding the parameters of the detected Radar Waveforms is not available to the end user. |

**3.1.5 Channel Loading/Data Streaming**

|                                     |                                                                                                |
|-------------------------------------|------------------------------------------------------------------------------------------------|
| <input type="checkbox"/>            | The data file (MPEG-4) has been transmitting in a streaming mode.                              |
| <input checked="" type="checkbox"/> | Software to ping the client is permitted to simulate data transfer with random ping intervals. |
| <input checked="" type="checkbox"/> | Minimum channel loading of approximately 17%.                                                  |
| <input type="checkbox"/>            | Unicast protocol has been used.                                                                |

## 3.2 Radar Test Waveform Calibration

### 3.2.1 Short Pulse Radar Test Waveforms

| Radar Type                                                                                                                                  | Pulse Width (μsec) | PRI (μsec)                                      | Number of Pulses                                                                                         | Minimum Percentage of Successful Detection | Minimum Trials |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------|
| 0                                                                                                                                           | 1                  | 1428                                            | 18                                                                                                       | See Note 1                                 | See Note 1     |
| 1A                                                                                                                                          | 1                  | 15 unique PRI in KDB 905462 D02 Table 5a        | $\text{Roundup}\left\{\left(\frac{1}{360}\right) \times \left(\frac{19 \times 10^6}{PRI}\right)\right\}$ | 60%                                        | 15             |
| 1B                                                                                                                                          | 1                  | 15 unique PRI within 518-3066, Excluding 1A PRI |                                                                                                          | 60%                                        | 15             |
| 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            |
| <b>Note 1:</b> 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 1 through 4. If more than 30 waveforms are used for short pulse radar types 1 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. The aggregate is the average of the percentage of successful detections of short pulse radar types 1-4.

### 3.2.2 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 Trials |
|------------|--------------------|-------------------|------------|----------------------------|------------------|--------------------------------------------|----------------|
| 5          | 50-100             | 5-20              | 1000-2000  | 1-3                        | 8-20             | 80%                                        | 30             |

Each waveform is defined as follows:

- The transmission period for the Long Pulse Radar test signal is 12 seconds.
- There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst Count.
- Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each Burst within the 12 second sequence may have a different number of pulses.
- The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a Burst will have the same pulse width. Pulses in different Bursts may have different pulse widths.
- Each pulse has a linear FM chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a transmission period will have the same chirp width. The chirp is centered on the pulse. For

example, with a radar frequency of 5300 MHz and a 20 MHz chirped signal, the chirp starts at 5290 MHz and ends at 5310 MHz.

- If more than one pulse is present in a Burst, the time between the pulses will be between 1000 and 2000 microseconds, with the time being randomly chosen. If three pulses are present in a Burst, the time between the first and second pulses is chosen independently of the time between the second and third pulses.
- The 12 second transmission period is divided into even intervals. The number of intervals is equal to Burst Count. Each interval is of length  $(12,000,000 / \text{Burst Count})$  microseconds. Each interval contains one Burst. The start time for the Burst, relative to the beginning of the interval, is between 1 and  $[(12,000,000 / \text{Burst Count}) - (\text{Total Burst Length}) + (\text{One Random PRI Interval})]$  microseconds, with the start time being randomly chosen. The step interval for the start time is 1 microsecond. The start time for each Burst is chosen independently.

### 3.2.3 Frequency Hopping Radar Test Waveform

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

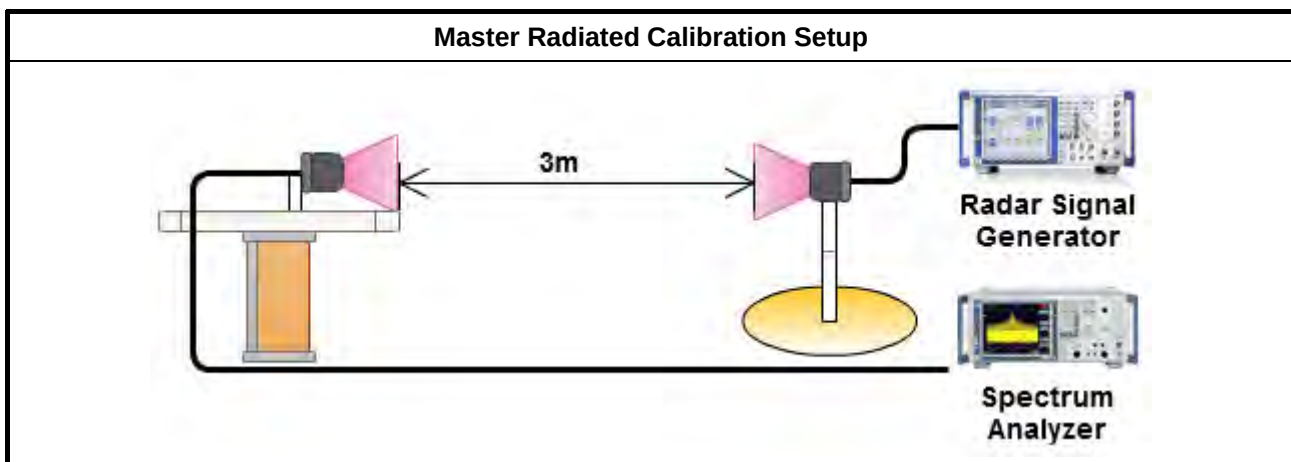
The FCC Type 6 waveform uses a static waveform with 100 bursts in the instruments ARB. In addition, the RF list mode is operated with a list containing 100 frequencies from a randomly generated list and it had be ensured that at least one of the random frequencies falls into the UNII Detection Bandwidth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

### 3.2.4 DFS Threshold Level

| DFS Threshold Level          |                                                             |
|------------------------------|-------------------------------------------------------------|
| DFS Threshold level: -63 dBm | <input type="checkbox"/> at the antenna connector           |
|                              | <input checked="" type="checkbox"/> in front of the antenna |

The Interference **Radar Detection Threshold Level** is  $-64 \text{ dBm} + 0 [\text{dBi}] + 1 \text{ dB} = -63 \text{ dBm}$ . That had been taken into account the output power range and antenna gain.

### 3.2.5 Calibration Setup



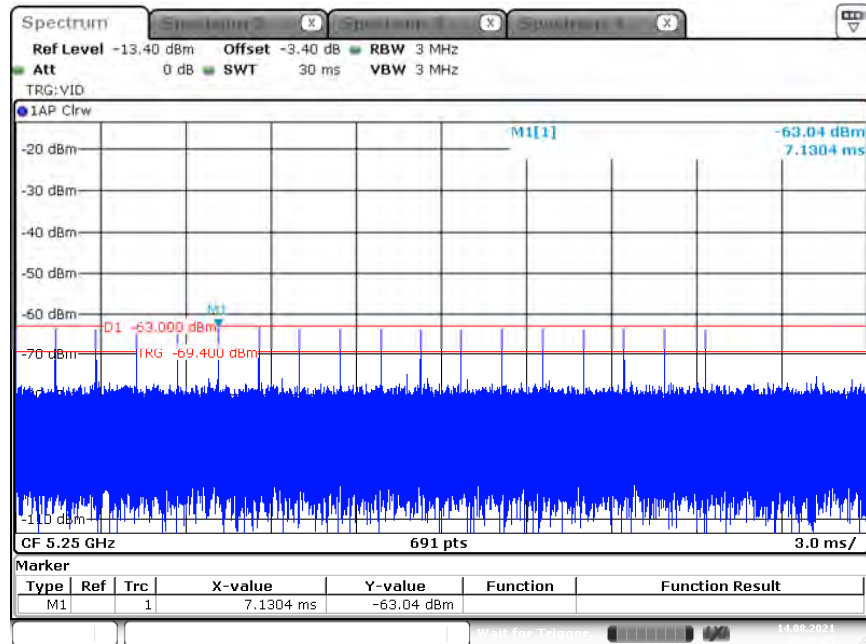


### 3.2.6 Radar Waveform calibration Plot

<AP Router Mode>

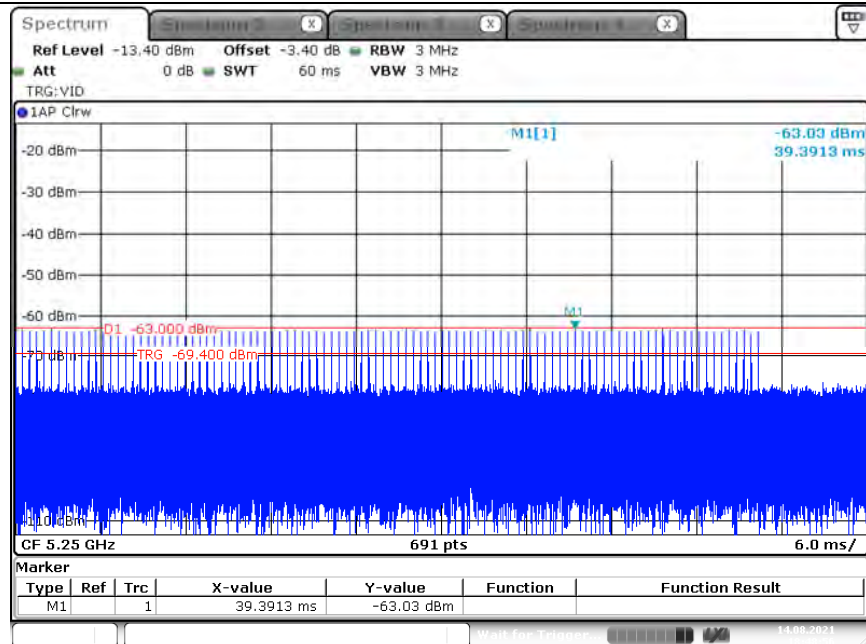
Test Frequency: 5250 MHz

Radar #0 DFS detection threshold level



Date: 14.AUG.2021 18:48:26

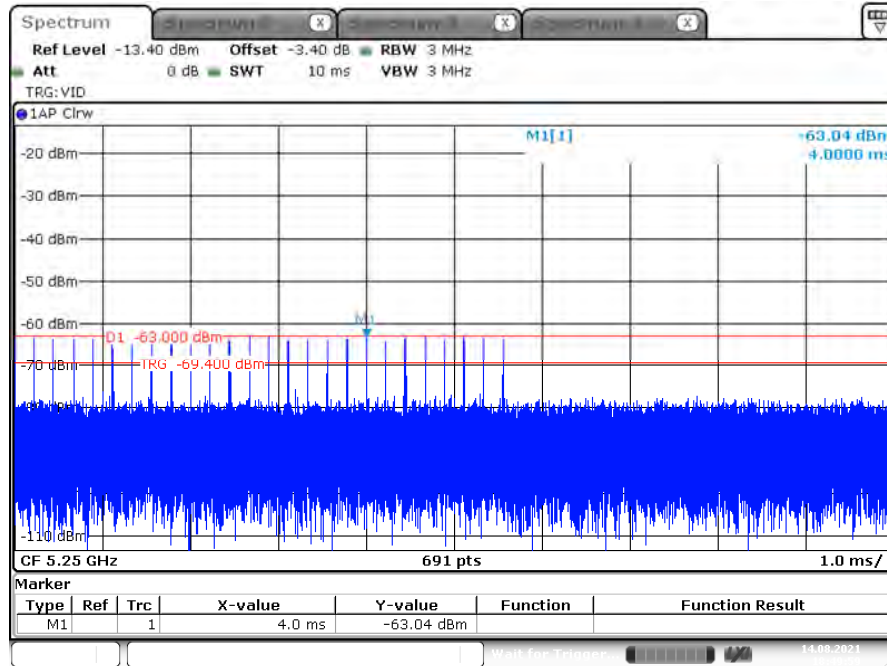
Radar #1 DFS detection threshold level



Date: 14.AUG.2021 18:48:57

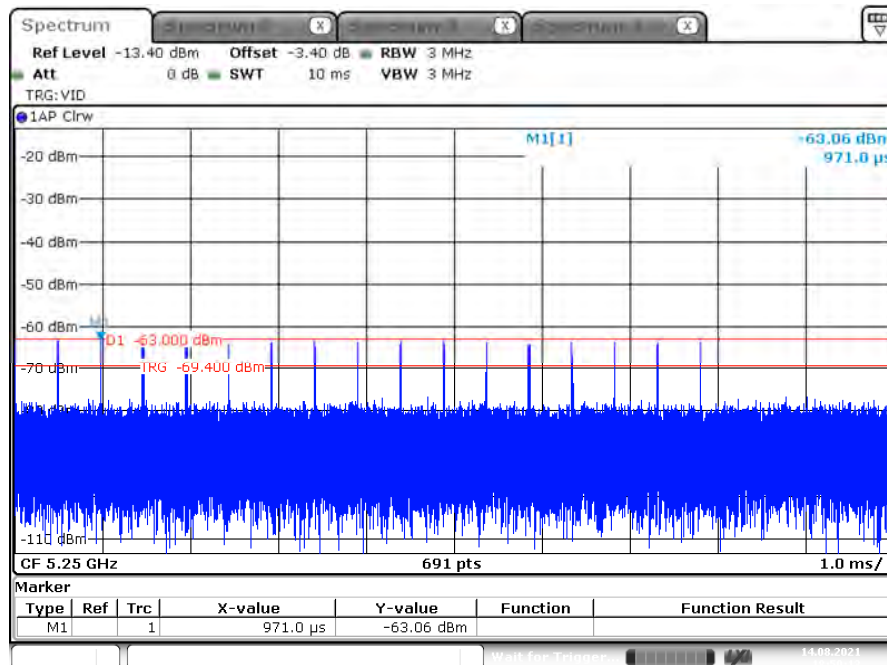


Radar #2 DFS detection threshold level

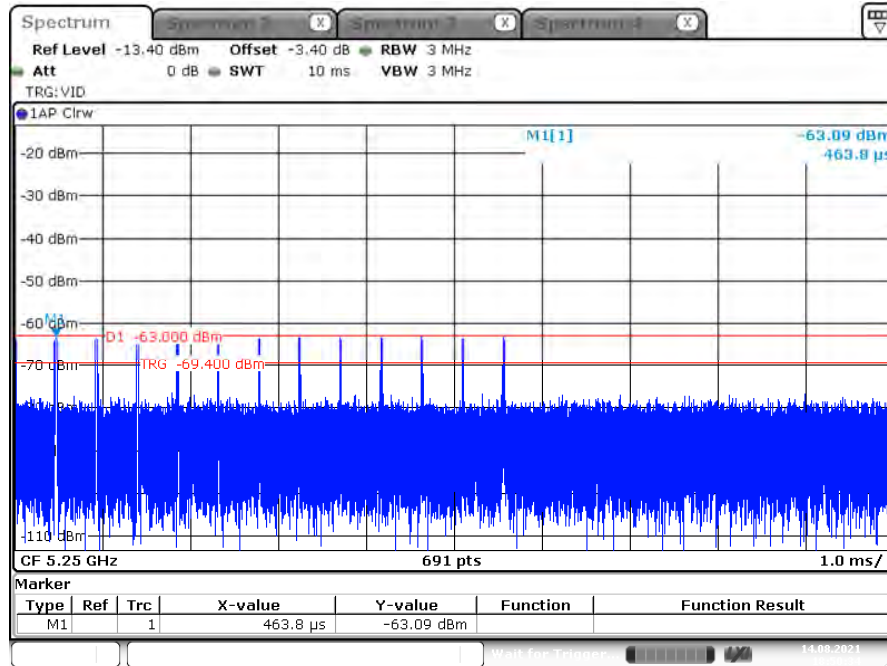
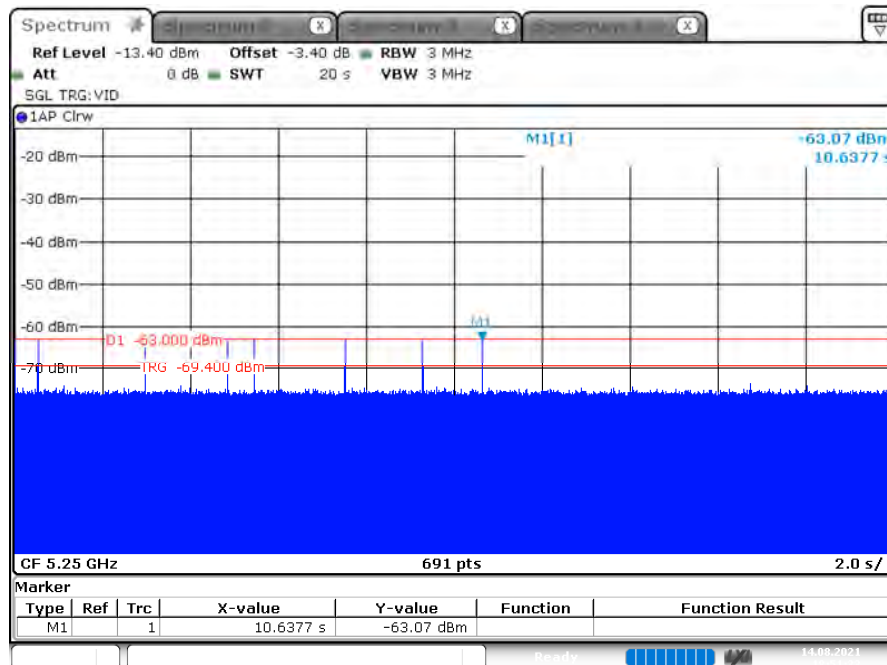


Date: 14.AUG.2021 18:50:00

Radar #3 DFS detection threshold level

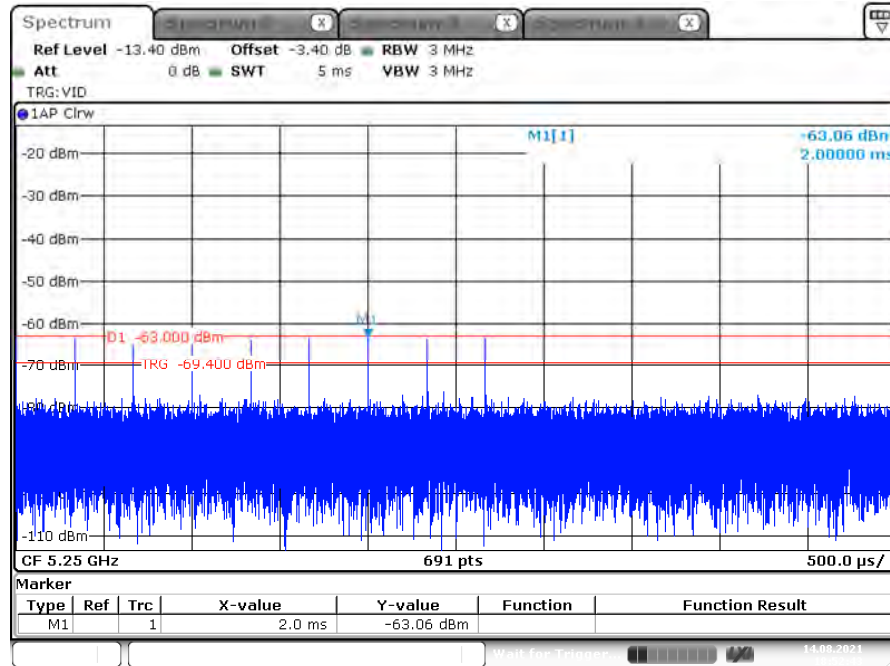


Date: 14.AUG.2021 18:50:14

**Radar #4 DFS detection threshold level**

**Radar #5 DFS detection threshold level**




Radar #6 DFS detection threshold level

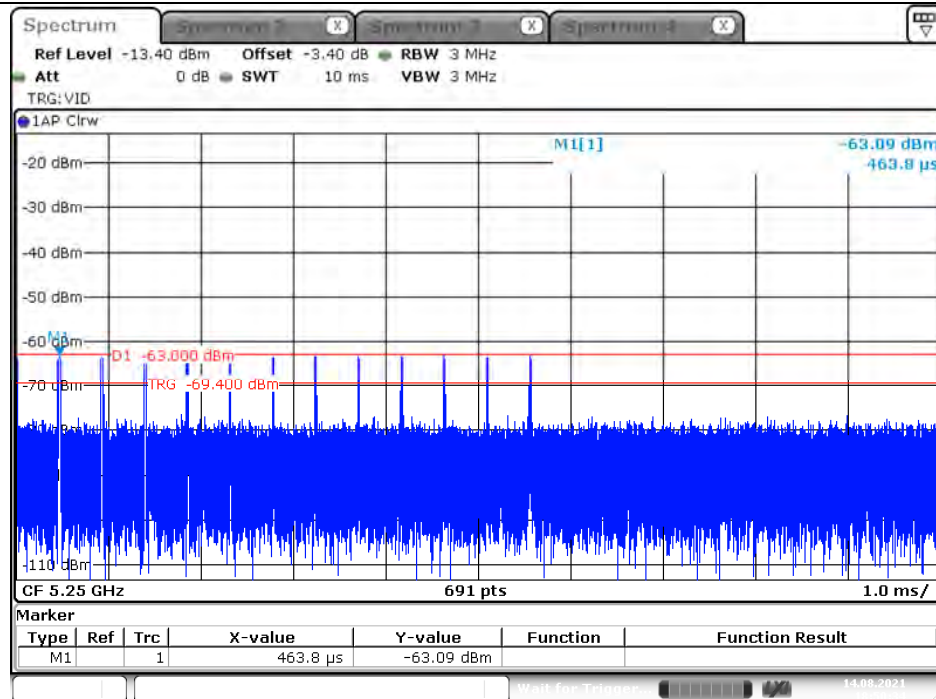


Date: 14.AUG.2021 16:52:43



<Mesh Mode>

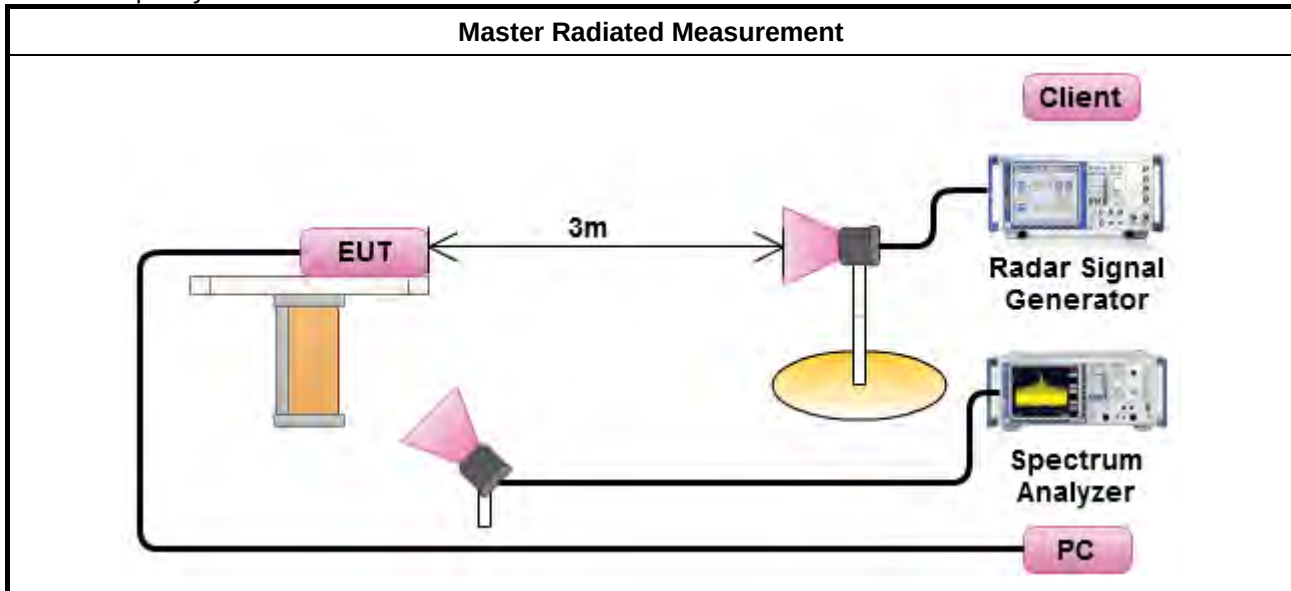
Radar #4 DFS detection threshold level



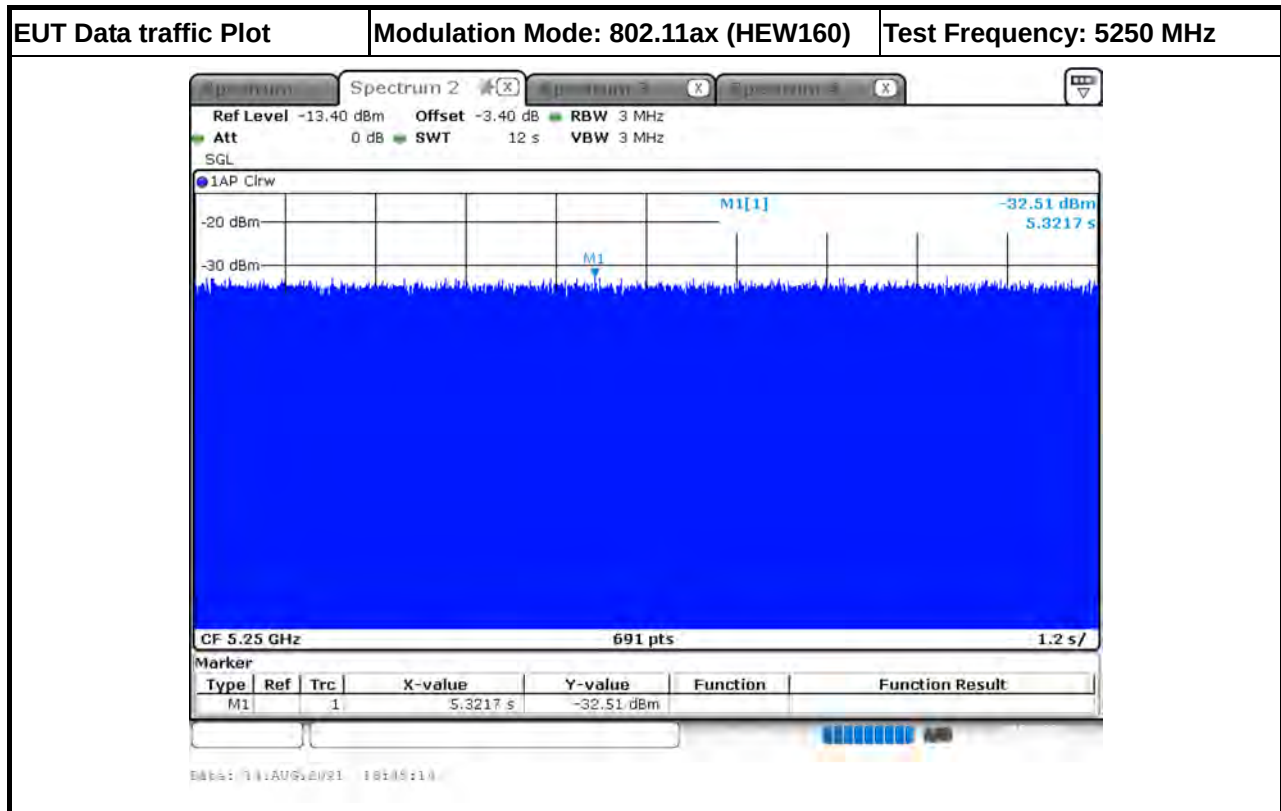
Date: 8.SEP.2021 14:00:13

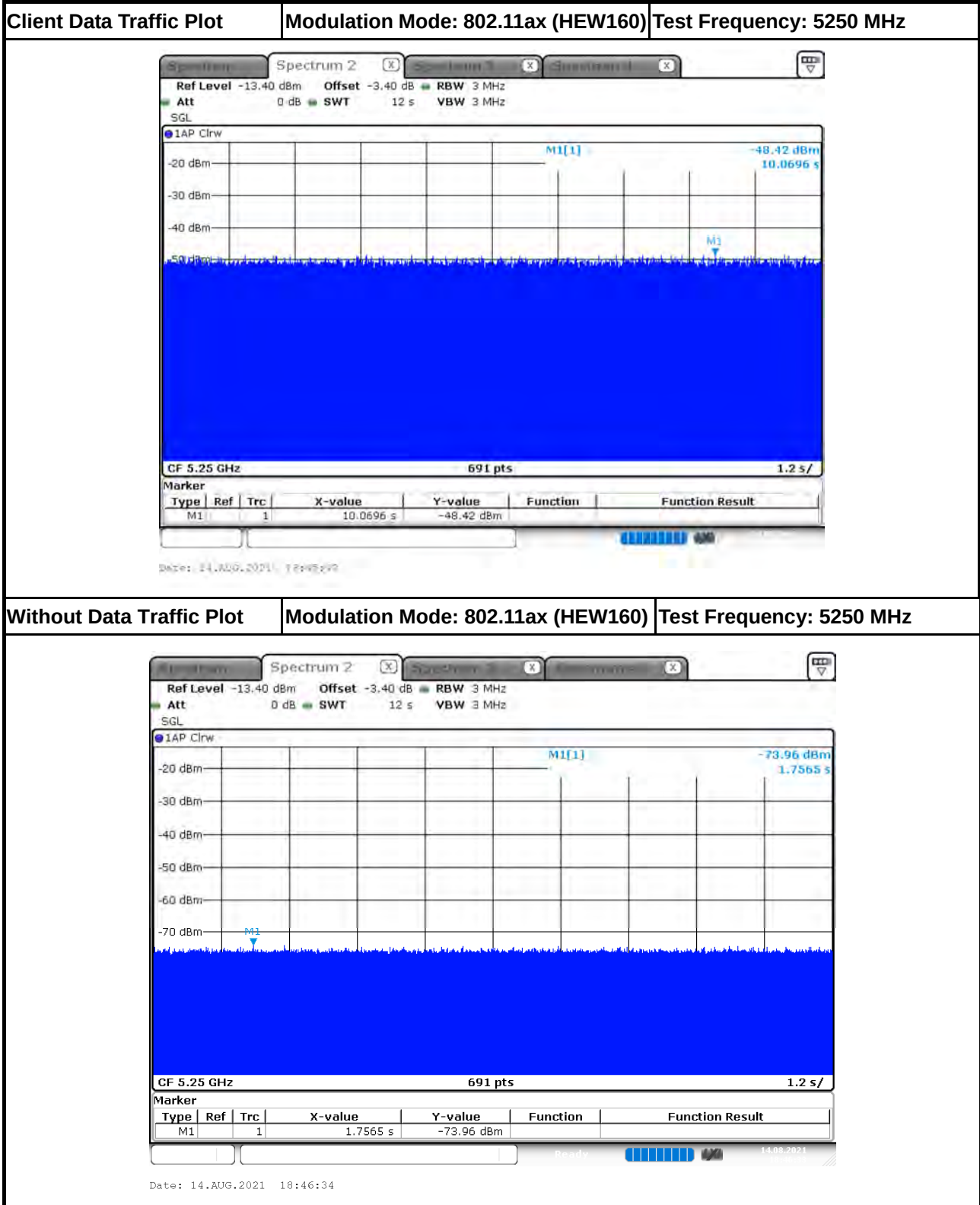
### 3.2.7 Test Setup

A spectrum analyzer is used as a monitor to verify that the EUT has vacated the Channel within the (Channel Closing Transmission Time and Channel Move Time, and does not transmit on a Channel during the Non-Occupancy Period after the detection and Channel move.



### 3.2.8 Data traffic Plot





### 3.3 UNII Detection Bandwidth

#### 3.3.1 UNII Detection Bandwidth Limit

| Channel Bandwidth (MHz) | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | UNII Detection Bandwidth Min. Limit (MHz) |
|-------------------------|-----------------|------------------------------|-------------------------------------------|
| 160                     | 5250 MHz        | 75.977                       | 76                                        |

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

#### 3.3.2 Measuring Instruments

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

#### 3.3.3 Test Procedures

| Test Method                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | During the U-NII Detection Bandwidth detection test, radar type 0 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic. The EUT is set up as a standalone device (no associated Client and no traffic). The radar frequency is increased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The highest frequency at which detection is greater than or equal to 90% is denoted as $F_H$ . The radar frequency is decreased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The lowest frequency at which detection is greater than or equal to 90% is denoted as $F_L$ .<br>UNII Detection Bandwidth = $F_H - F_L$ . |

### 3.3.4 Test Result of UNII Detection Bandwidth

| EUT Frequency=5250 MHz                                                |                                                     |   |   |   |   |   |   |   |   |    |                    |
|-----------------------------------------------------------------------|-----------------------------------------------------|---|---|---|---|---|---|---|---|----|--------------------|
| Channel Bandwidth (MHz)                                               | 160                                                 |   |   |   |   |   |   |   |   |    |                    |
| Radar Frequency (MHz)                                                 | DFS Detection Trials (1=Detection, 0= No Detection) |   |   |   |   |   |   |   |   |    | Detection Rate (%) |
|                                                                       | 1                                                   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                    |
| 5249                                                                  | 0                                                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0                  |
| 5250(FL)                                                              | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1  | 90                 |
| 5251                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5252                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5253                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5254                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5255                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5260                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5265                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5270                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5275                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5280                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5285                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5290                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5295                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5300                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5305                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5310                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5315                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5320                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5325                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5326                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5327                                                                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |
| 5328(FH)                                                              | 1                                                   | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1  | 90                 |
| 5329                                                                  | 0                                                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0                  |
| Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5328MHz-5250MHz)= |                                                     |   |   |   |   |   |   |   |   |    | 78                 |
| UNII Detection Bandwidth Min. Limit (MHz) =                           |                                                     |   |   |   |   |   |   |   |   |    | 76                 |
| <b>Test Result</b>                                                    |                                                     |   |   |   |   |   |   |   |   |    | <b>PASS</b>        |

### 3.4 Channel Availability Check (CAC)

#### 3.4.1 Channel Availability Check Limit

| Channel Availability Check Limit    |                                                                                                                                                                                                                |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute (60 sec) on the intended operating frequency. |

#### 3.4.2 Measuring Instruments

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

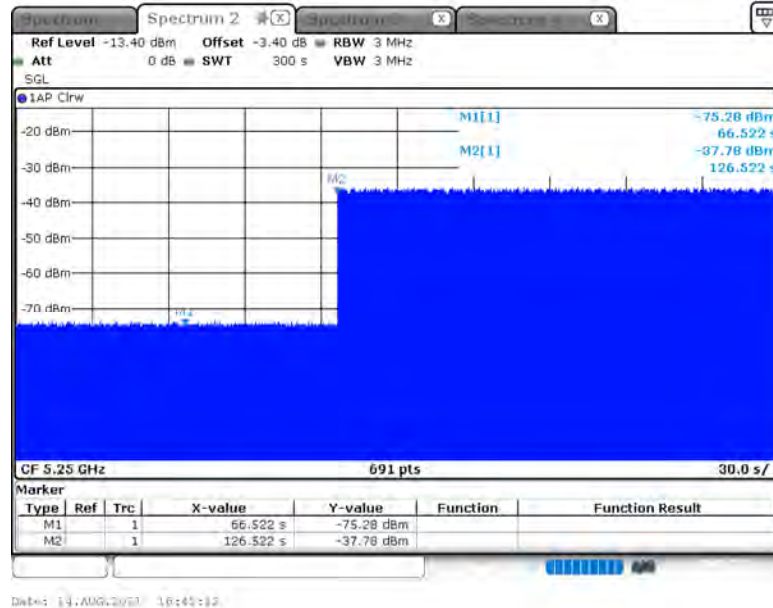
#### 3.4.3 Test Procedures

| Test Method                         |                                                                                                                                                                                                                                                                                                       |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | For Initial Channel Availability Check Time. The EUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the UNII device checks for Radar Waveforms for one minute on the test Channel. This test does not use any Radar Waveforms. |
| <input checked="" type="checkbox"/> | For Radar Burst at the Beginning of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the Beginning of the Channel Availability Check Time.                                                                                  |
| <input checked="" type="checkbox"/> | For Radar Burst at the End of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the End of the Channel Availability Check Time.                                                                                              |

### 3.4.4 Test Result of Initial Channel Availability Check Time

| Modulation Mode   | Freq.    | Radar Test Signal |
|-------------------|----------|-------------------|
| 802.11ax (HEW160) | 5250 MHz | N/A               |

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (66.522 sec). The initial CAC time of the EUT is indicated by marker 1 (66.522 sec). Initial beacons/data transmissions are indicated by marker 2 (126.522 sec).

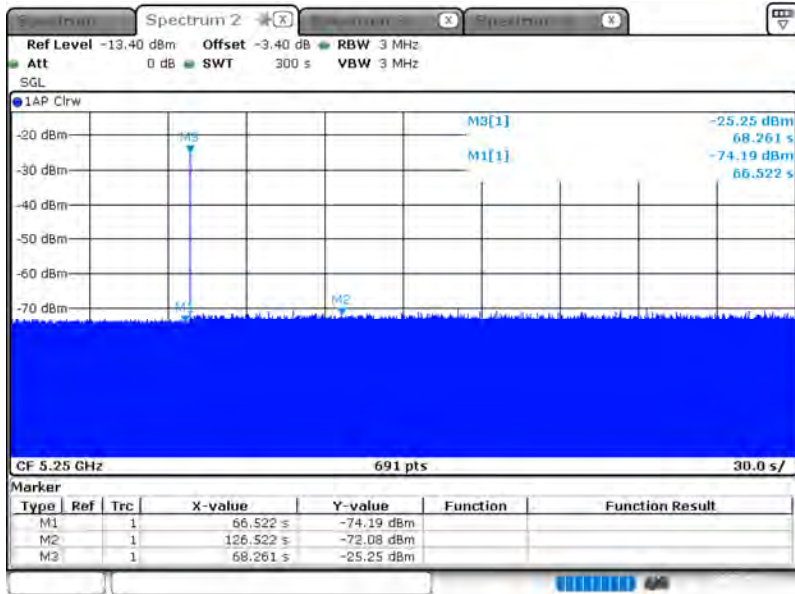


|                    |             |
|--------------------|-------------|
| <b>Test Result</b> | <b>PASS</b> |
|--------------------|-------------|

### 3.4.5 Test Result of Radar Burst at the Beginning of the Channel Availability Check Time

| Modulation Mode   | Freq.    | Radar Test Signal |
|-------------------|----------|-------------------|
| 802.11ax (HEW160) | 5250 MHz | N/A               |

Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 231.739 seconds after the radar Burst has been generated. Verify that during the 300 seconds measurement window no EUT transmissions occurred.



| Type | Ref | Trc | X-value   | Y-value    | Function | Function Result |
|------|-----|-----|-----------|------------|----------|-----------------|
| M1   | 1   |     | 66.522 s  | -74.19 dBm |          |                 |
| M2   | 1   |     | 126.522 s | -72.08 dBm |          |                 |
| M3   | 1   |     | 68.261 s  | -25.25 dBm |          |                 |

|             |      |
|-------------|------|
| Test Result | PASS |
|-------------|------|



### 3.4.6 Test Result of Radar Burst at the End of the Channel Availability Check Time

| Modulation Mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Freq.    | Radar Test Signal |           |            |          |                 |         |          |                 |    |   |  |          |            |  |  |    |   |  |           |            |  |  |    |   |  |           |            |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|-----------|------------|----------|-----------------|---------|----------|-----------------|----|---|--|----------|------------|--|--|----|---|--|-----------|------------|--|--|----|---|--|-----------|------------|--|--|
| 802.11ax (HEW160)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 5250 MHz | N/A               |           |            |          |                 |         |          |                 |    |   |  |          |            |  |  |    |   |  |           |            |  |  |    |   |  |           |            |  |  |
| Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 174.348 seconds after the radar Burst has been generated. Verify that during the 300 seconds measurement window no EUT transmissions occurred.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |                   |           |            |          |                 |         |          |                 |    |   |  |          |            |  |  |    |   |  |           |            |  |  |    |   |  |           |            |  |  |
| <div><div><div><div><div>Spectrum 1</div><div>Spectrum 2</div><div>Spectrum 3</div><div>Spectrum 4</div></div><div><div>Ref Level -13.40 dBm</div><div>Offset -3.40 dB</div><div>RBW 3 MHz</div><div>Att 0 dB</div><div>SWT 300 s</div><div>VBW 3 MHz</div><div>SGL</div></div></div><div><div>1AP Clrw</div><div><div><div><div><div>-20 dBm</div><div>-30 dBm</div><div>-40 dBm</div><div>-50 dBm</div><div>-60 dBm</div><div>-70 dBm</div></div><div><div>M3</div><div>M2</div><div>M1</div></div><div><div>M3[1] -26.27 dBm<br/>125.652 s</div><div>M1[1] -74.23 dBm<br/>66.522 s</div></div></div></div><div><div>CF 5.25 GHz</div><div>691 pts</div><div>30.0 s/</div></div><div><div>Marker</div><table><thead><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr></thead><tbody><tr><td>M1</td><td>1</td><td></td><td>66.522 s</td><td>-74.23 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>126.522 s</td><td>-71.26 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>125.652 s</td><td>-26.27 dBm</td><td></td><td></td></tr></tbody></table></div></div></div></div><div>Date: 14.AUG.2021 17:28:23</div></div> |          |                   | Type      | Ref        | Trc      | X-value         | Y-value | Function | Function Result | M1 | 1 |  | 66.522 s | -74.23 dBm |  |  | M2 | 1 |  | 126.522 s | -71.26 dBm |  |  | M3 | 1 |  | 125.652 s | -26.27 dBm |  |  |
| Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Ref      | Trc               | X-value   | Y-value    | Function | Function Result |         |          |                 |    |   |  |          |            |  |  |    |   |  |           |            |  |  |    |   |  |           |            |  |  |
| M1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1        |                   | 66.522 s  | -74.23 dBm |          |                 |         |          |                 |    |   |  |          |            |  |  |    |   |  |           |            |  |  |    |   |  |           |            |  |  |
| M2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1        |                   | 126.522 s | -71.26 dBm |          |                 |         |          |                 |    |   |  |          |            |  |  |    |   |  |           |            |  |  |    |   |  |           |            |  |  |
| M3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1        |                   | 125.652 s | -26.27 dBm |          |                 |         |          |                 |    |   |  |          |            |  |  |    |   |  |           |            |  |  |    |   |  |           |            |  |  |
| Test Result                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PASS     |                   |           |            |          |                 |         |          |                 |    |   |  |          |            |  |  |    |   |  |           |            |  |  |    |   |  |           |            |  |  |

### 3.5 In-service Monitoring

#### 3.5.1 In-service Monitoring Limit

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

#### 3.5.2 Measuring Instruments

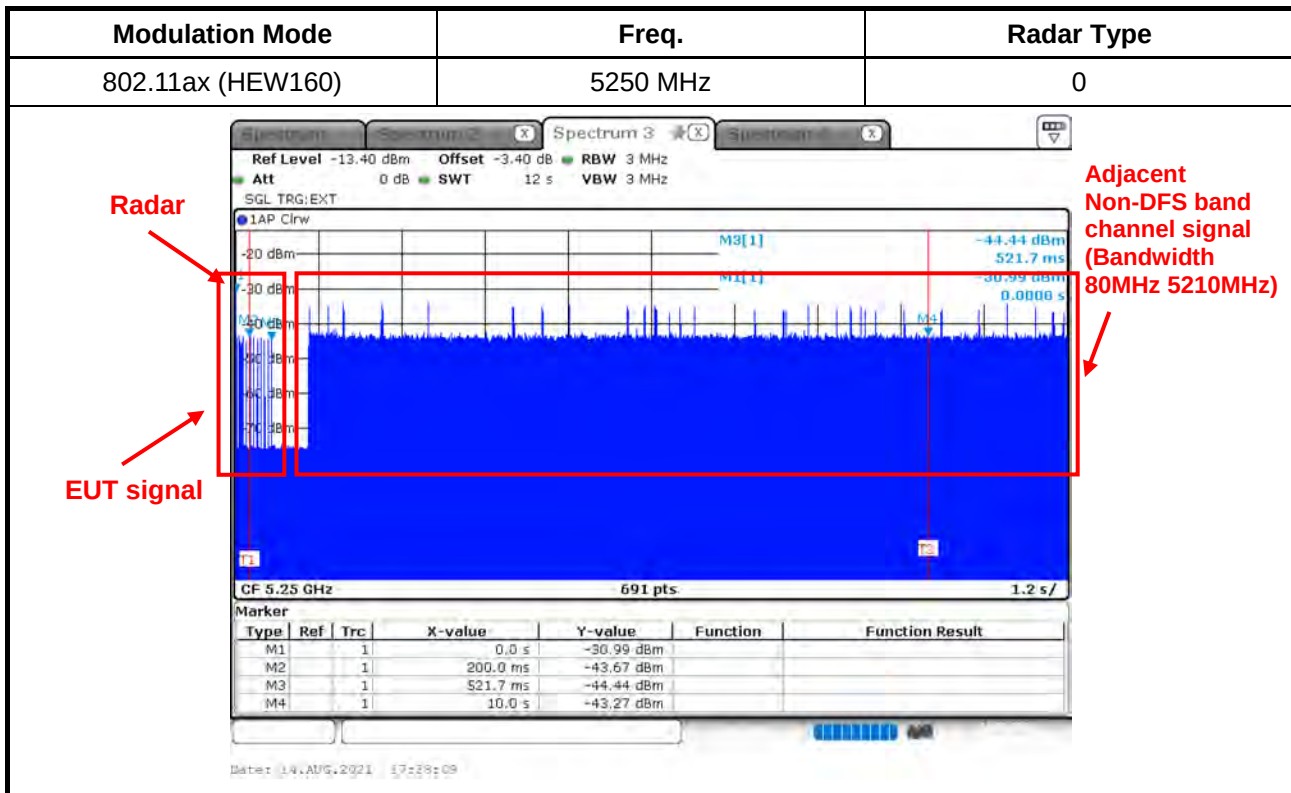
Refer a test equipment and calibration data table in this test report.

#### 3.5.3 Test Procedures

| Test Method                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time. Client Device will associate with the EUT. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Channel Move Time). Compare the Channel Move Time and Channel Closing Transmission Time limits. |
| <input checked="" type="checkbox"/> | Verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time. One 12 sec plot needs to be reported for the Short Pulse Radar Types 0. And zoom-in a 60 ms plot verified channel closing time for the aggregate transmission time starting from 200ms after the end of the radar signal to the completion of the channel move.                                                                                             |
| <input checked="" type="checkbox"/> | Verified during In-Service Monitoring; Non-Occupancy Period. Client Device will associate with the EUT. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Non-Occupancy Period). Compare the Non-Occupancy Period limits.                                                                 |

**3.5.4 Test Result of Channel Move Time****Modulation Mode: 802.11ax (HEW160)**

| Parameter                | Test Result | Limit |
|--------------------------|-------------|-------|
|                          | Type 0      |       |
| Test Channel (MHz)       | 5250 MHz    | -     |
| Channel Move Time (sec.) | 0.521       | < 10s |



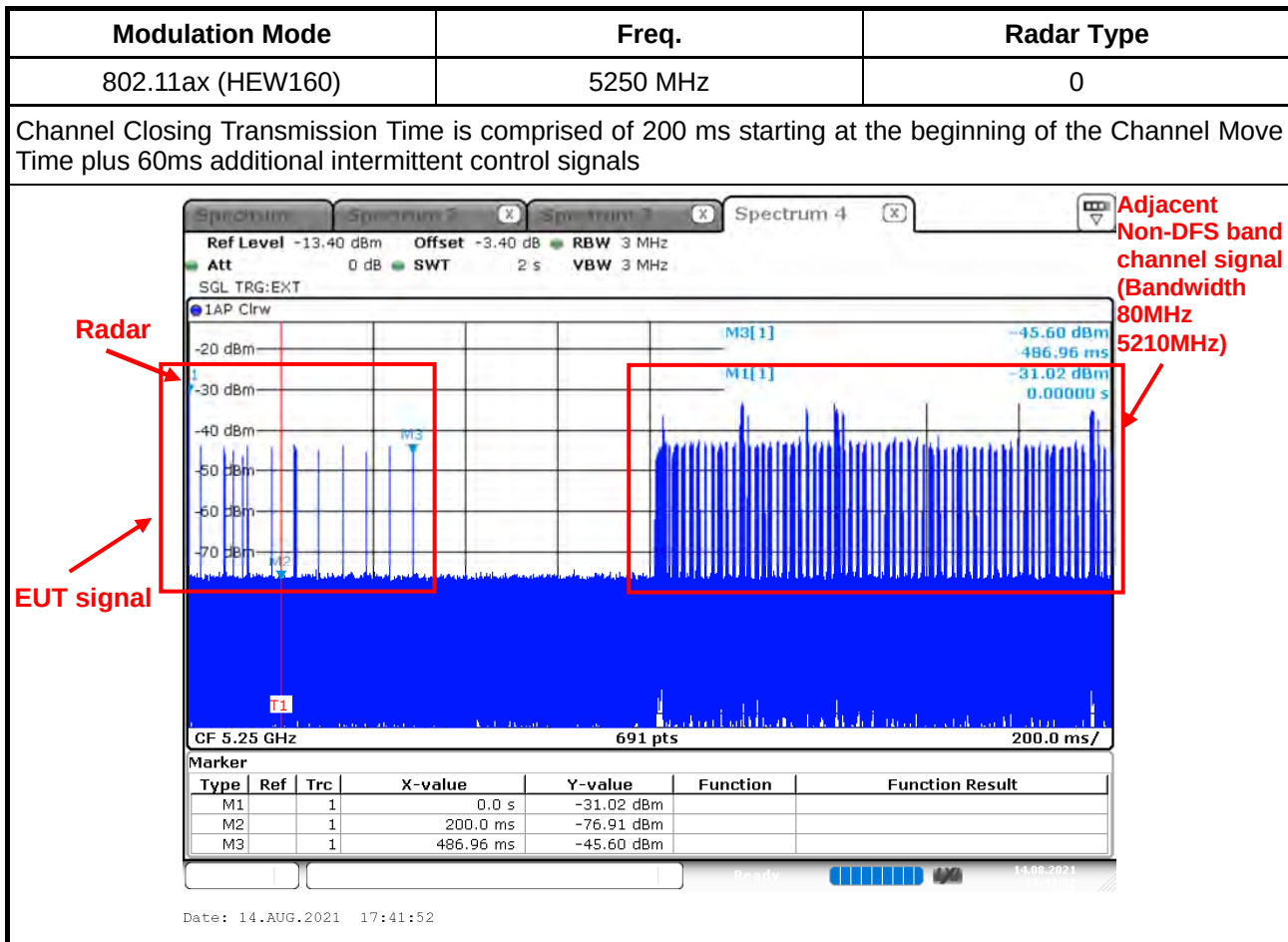


### 3.5.5 Test Result of Channel Closing Transmission Time

Modulation Mode: 802.11ax (HEW160)

| Parameter                                     | Test Result | Limit  |
|-----------------------------------------------|-------------|--------|
|                                               | Type 0      |        |
| Test Channel (MHz)                            | 5250 MHz    | -      |
| Channel Closing Transmission Time (ms) (Note) | 20.290      | < 60ms |

Note: 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 seconds period. The aggregate duration of control signals will not count quiet periods in between transmissions.



Dwell is the dwell time per spectrum analyzer sampling bin.

S is the sweep time

B is the number of spectrum analyzer sampling bins

C is the intermittent control signals of Channel Closing Transmission Time

N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission

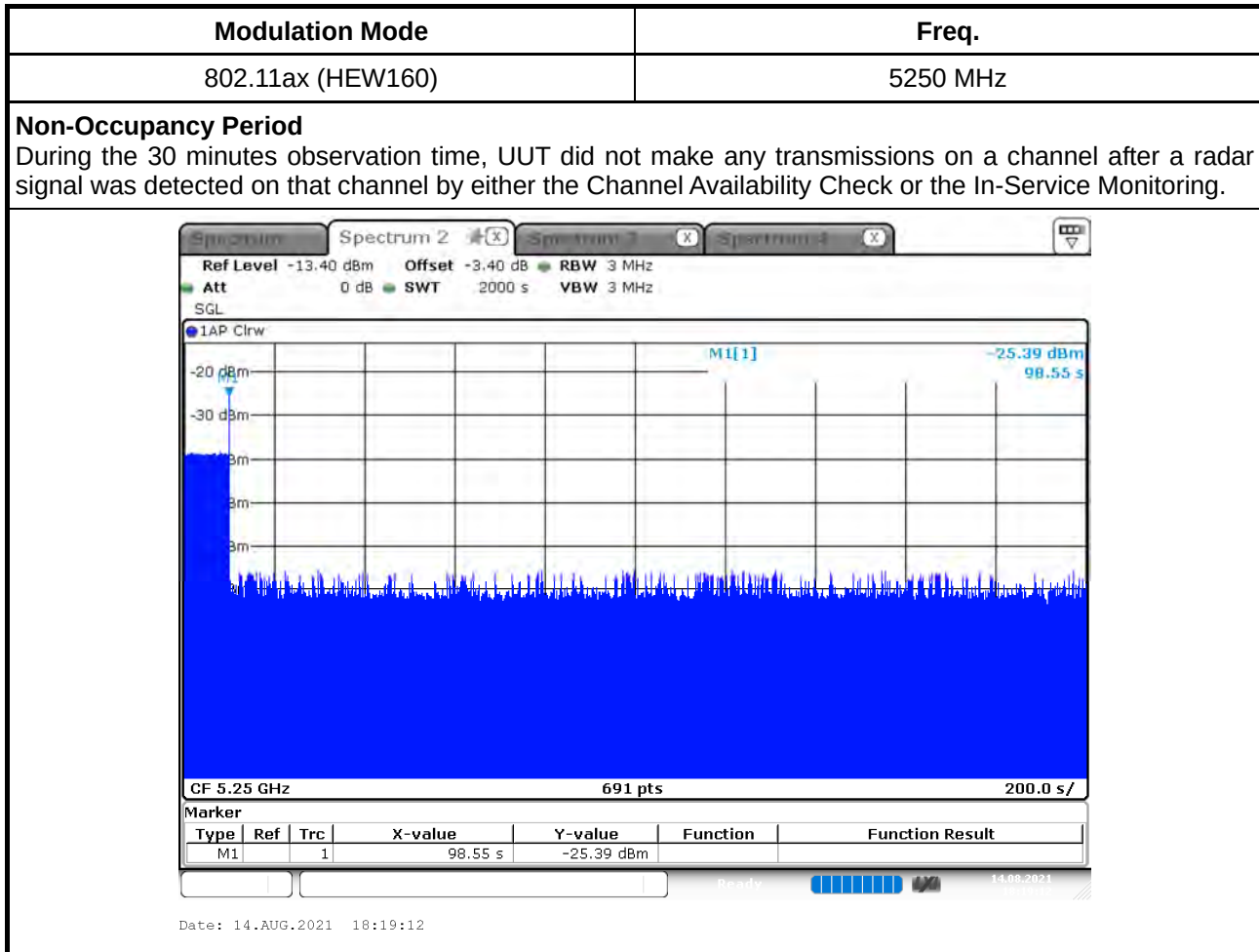
Dwell (6 ms)= S (2000 ms) / B (690)

C (20.290 ms) = N (7) X Dwell (2.899 ms)

### 3.5.6 Test Result of Non-Occupancy Period

Modulation Mode: 802.11ax (HEW160)

| Parameter                   | Test Result | Limit         |
|-----------------------------|-------------|---------------|
|                             | Type 0      |               |
| Test Channel (MHz)          | 5250 MHz    | -             |
| Non-Occupancy Period (min.) | $\geq 30$   | $\geq 30$ min |



### 3.6 Statistical Performance Check

#### 3.6.1 Statistical Performance Check Limit

| Radar Type                  | Minimum Percentage of Successful Detection (Pd) | Minimum Trials |
|-----------------------------|-------------------------------------------------|----------------|
| 1                           | 60%                                             | 30             |
| 2                           | 60%                                             | 30             |
| 3                           | 60%                                             | 30             |
| 4                           | 60%                                             | 30             |
| Aggregate (Radar Types 1-4) | 80%                                             | 120            |
| 5                           | 80%                                             | 30             |
| 6                           | 70%                                             | 30             |

The percentage of successful detection is calculated by:

$$\frac{\text{TotalWaveformDetections}}{\text{TotalWaveformTrails}} \times 100 = \text{Probability of Detection Radar Waveform}$$

In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows:

$$\frac{Pd1 + Pd2 + Pd3 + Pd4}{4}$$

#### 3.6.2 Measuring Instruments

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

#### 3.6.3 Test Procedures

| Test Method                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> For Statistical Performance Check test. Demonstrating a minimum channel loading of approximately 17% or greater of the test. Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 1-4 and 6 to ensure detection occurs. Then 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. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs. |



## 3.6.4 Test Result of Statistical Performance Check

&lt;AP Router Mode&gt;

Modulation Mode: 802.11ax (HEW160)

## Type 1 Radar Statistical Performance

| Trial #                  | Test Freq. (MHz) | Pulse Repetition<br>Frequency Number | Pulse Repetition<br>Frequency<br>(Pulse Per Second) | PRI (us) | 1=Detection<br>0=No Detection |
|--------------------------|------------------|--------------------------------------|-----------------------------------------------------|----------|-------------------------------|
| 1                        | 5320             | 1                                    | 1930.5                                              | 518      | 1                             |
| 2                        | 5323             | 23                                   | 326.2                                               | 3066     | 1                             |
| 3                        | 5321             | 19                                   | 1139.0                                              | 878      | 1                             |
| 4                        | 5260             | 12                                   | 1355.0                                              | 738      | 1                             |
| 5                        | 5301             | 4                                    | 1730.1                                              | 578      | 1                             |
| 6                        | 5266             | 8                                    | 1519.8                                              | 658      | 1                             |
| 7                        | 5293             | 15                                   | 1253.1                                              | 798      | 1                             |
| 8                        | 5284             | 6                                    | 1618.1                                              | 618      | 1                             |
| 9                        | 5297             | 14                                   | 1285.3                                              | 778      | 1                             |
| 10                       | 5300             | 3                                    | 1792.1                                              | 558      | 0                             |
| 11                       | 5305             | 13                                   | 1319.3                                              | 758      | 1                             |
| 12                       | 5284             | 9                                    | 1474.9                                              | 678      | 1                             |
| 13                       | 5275             | 7                                    | 1567.4                                              | 638      | 1                             |
| 14                       | 5257             | 17                                   | 1193.3                                              | 838      | 1                             |
| 15                       | 5321             | 10                                   | 1432.7                                              | 698      | 1                             |
| 16                       | 5327             | -                                    | 1692.0                                              | 591      | 1                             |
| 17                       | 5300             | -                                    | 328.1                                               | 3048     | 1                             |
| 18                       | 5298             | -                                    | 373.4                                               | 2678     | 1                             |
| 19                       | 5289             | -                                    | 574.4                                               | 1741     | 1                             |
| 20                       | 5271             | -                                    | 1216.5                                              | 822      | 1                             |
| 21                       | 5305             | -                                    | 801.3                                               | 1248     | 1                             |
| 22                       | 5262             | -                                    | 488.5                                               | 2047     | 1                             |
| 23                       | 5282             | -                                    | 956.0                                               | 1046     | 1                             |
| 24                       | 5291             | -                                    | 517.6                                               | 1932     | 0                             |
| 25                       | 5312             | -                                    | 1422.5                                              | 703      | 1                             |
| 26                       | 5255             | -                                    | 542.0                                               | 1845     | 1                             |
| 27                       | 5281             | -                                    | 741.3                                               | 1349     | 1                             |
| 28                       | 5320             | -                                    | 881.8                                               | 1134     | 1                             |
| 29                       | 5305             | -                                    | 427.4                                               | 2340     | 1                             |
| 30                       | 5276             | -                                    | 628.9                                               | 1590     | 1                             |
| Detection Percentage (%) |                  |                                      |                                                     |          | 93.333                        |
| Limit                    |                  |                                      |                                                     |          | 60%                           |
| Test Result              |                  |                                      |                                                     |          | PASS                          |

**Type 2 Radar Statistical Performance**

| Trial #                  | Test Freq. (MHz) | Pulse Width (us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|------------------|------------------|----------|----------------|-------------------------------|
| 1                        | 5250             | 2.6              | 221      | 23             | 1                             |
| 2                        | 5262             | 4.6              | 198      | 27             | 1                             |
| 3                        | 5269             | 1.1              | 184      | 29             | 1                             |
| 4                        | 5309             | 4.8              | 203      | 24             | 1                             |
| 5                        | 5270             | 2.4              | 162      | 25             | 1                             |
| 6                        | 5282             | 3.4              | 204      | 28             | 1                             |
| 7                        | 5263             | 2.3              | 170      | 27             | 0                             |
| 8                        | 5276             | 3.5              | 184      | 23             | 1                             |
| 9                        | 5323             | 4.9              | 150      | 27             | 1                             |
| 10                       | 5315             | 4.6              | 211      | 29             | 1                             |
| 11                       | 5263             | 2.9              | 158      | 23             | 1                             |
| 12                       | 5291             | 2.6              | 226      | 27             | 1                             |
| 13                       | 5303             | 1.6              | 204      | 26             | 1                             |
| 14                       | 5306             | 3.9              | 181      | 25             | 1                             |
| 15                       | 5273             | 4.6              | 202      | 24             | 0                             |
| 16                       | 5297             | 4.1              | 194      | 27             | 1                             |
| 17                       | 5295             | 2.3              | 193      | 28             | 1                             |
| 18                       | 5296             | 3.9              | 173      | 29             | 1                             |
| 19                       | 5267             | 4.3              | 188      | 23             | 1                             |
| 20                       | 5302             | 1.5              | 215      | 26             | 1                             |
| 21                       | 5318             | 4.9              | 227      | 27             | 1                             |
| 22                       | 5325             | 1.1              | 199      | 23             | 1                             |
| 23                       | 5283             | 4.5              | 155      | 29             | 1                             |
| 24                       | 5311             | 4.0              | 190      | 27             | 1                             |
| 25                       | 5311             | 2.4              | 151      | 23             | 0                             |
| 26                       | 5280             | 2.5              | 180      | 28             | 1                             |
| 27                       | 5305             | 2.5              | 228      | 23             | 1                             |
| 28                       | 5254             | 2.5              | 203      | 25             | 1                             |
| 29                       | 5313             | 1.5              | 188      | 25             | 1                             |
| 30                       | 5281             | 1.9              | 217      | 24             | 1                             |
| Detection Percentage (%) |                  |                  |          |                | 90.000                        |
| Limit                    |                  |                  |          |                | 60%                           |
| <b>Test Result</b>       |                  |                  |          |                | <b>PASS</b>                   |

**Type 3 Radar Statistical Performance**

| Trial #                  | Test Freq. (MHz) | Pulse Width (us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|------------------|------------------|----------|----------------|-------------------------------|
| 1                        | 5287             | 8.0              | 205      | 16             | 1                             |
| 2                        | 5301             | 6.7              | 382      | 18             | 1                             |
| 3                        | 5265             | 8.6              | 418      | 16             | 0                             |
| 4                        | 5306             | 9.4              | 351      | 17             | 1                             |
| 5                        | 5284             | 7.4              | 383      | 18             | 1                             |
| 6                        | 5267             | 9.8              | 232      | 16             | 0                             |
| 7                        | 5323             | 9.1              | 377      | 17             | 1                             |
| 8                        | 5318             | 9.6              | 457      | 16             | 1                             |
| 9                        | 5257             | 8.0              | 471      | 18             | 1                             |
| 10                       | 5256             | 9.0              | 304      | 18             | 1                             |
| 11                       | 5319             | 8.0              | 316      | 17             | 1                             |
| 12                       | 5260             | 9.8              | 325      | 16             | 1                             |
| 13                       | 5320             | 8.0              | 409      | 17             | 0                             |
| 14                       | 5300             | 9.9              | 200      | 17             | 1                             |
| 15                       | 5311             | 8.8              | 458      | 16             | 1                             |
| 16                       | 5293             | 8.0              | 232      | 18             | 0                             |
| 17                       | 5322             | 8.3              | 250      | 16             | 1                             |
| 18                       | 5266             | 8.7              | 270      | 16             | 1                             |
| 19                       | 5274             | 7.7              | 350      | 17             | 1                             |
| 20                       | 5318             | 7.1              | 230      | 16             | 1                             |
| 21                       | 5274             | 7.3              | 416      | 18             | 0                             |
| 22                       | 5276             | 7.6              | 498      | 18             | 1                             |
| 23                       | 5262             | 7.3              | 286      | 17             | 1                             |
| 24                       | 5295             | 7.3              | 287      | 16             | 1                             |
| 25                       | 5312             | 7.5              | 462      | 17             | 1                             |
| 26                       | 5297             | 6.2              | 300      | 17             | 0                             |
| 27                       | 5304             | 6.4              | 323      | 18             | 1                             |
| 28                       | 5265             | 7.1              | 420      | 16             | 1                             |
| 29                       | 5281             | 7.2              | 395      | 18             | 1                             |
| 30                       | 5313             | 8.4              | 377      | 16             | 1                             |
| Detection Percentage (%) |                  |                  |          |                | 80.000                        |
| Limit                    |                  |                  |          |                | 60%                           |
| <b>Test Result</b>       |                  |                  |          |                | <b>PASS</b>                   |


**Type 4 Radar Statistical Performance**

| <i>Trial #</i>           | <i>Test Freq. (MHz)</i> | <i>Pulse Width (us)</i> | <i>PRI (us)</i> | <i>Pulses / Burst</i> | <i>1=Detection<br/>0=No Detection</i> |
|--------------------------|-------------------------|-------------------------|-----------------|-----------------------|---------------------------------------|
| 1                        | 5315                    | 18.0                    | 242             | 15                    | 1                                     |
| 2                        | 5314                    | 19.9                    | 279             | 12                    | 1                                     |
| 3                        | 5303                    | 12.9                    | 487             | 14                    | 0                                     |
| 4                        | 5273                    | 15.0                    | 452             | 13                    | 1                                     |
| 5                        | 5300                    | 16.3                    | 230             | 12                    | 1                                     |
| 6                        | 5303                    | 19.8                    | 238             | 13                    | 1                                     |
| 7                        | 5274                    | 18.2                    | 420             | 16                    | 0                                     |
| 8                        | 5281                    | 16.3                    | 452             | 15                    | 1                                     |
| 9                        | 5297                    | 14.2                    | 495             | 12                    | 0                                     |
| 10                       | 5319                    | 17.8                    | 228             | 16                    | 1                                     |
| 11                       | 5255                    | 19.1                    | 211             | 16                    | 0                                     |
| 12                       | 5319                    | 18.4                    | 283             | 15                    | 1                                     |
| 13                       | 5286                    | 11.8                    | 411             | 12                    | 1                                     |
| 14                       | 5309                    | 14.2                    | 284             | 13                    | 0                                     |
| 15                       | 5260                    | 13.9                    | 202             | 12                    | 1                                     |
| 16                       | 5283                    | 17.8                    | 340             | 14                    | 1                                     |
| 17                       | 5289                    | 15.6                    | 290             | 16                    | 0                                     |
| 18                       | 5267                    | 14.6                    | 250             | 16                    | 1                                     |
| 19                       | 5254                    | 14.4                    | 484             | 15                    | 1                                     |
| 20                       | 5274                    | 18.9                    | 387             | 13                    | 1                                     |
| 21                       | 5282                    | 11.1                    | 348             | 15                    | 0                                     |
| 22                       | 5269                    | 13.8                    | 291             | 16                    | 1                                     |
| 23                       | 5267                    | 14.3                    | 295             | 12                    | 1                                     |
| 24                       | 5305                    | 12.5                    | 300             | 12                    | 0                                     |
| 25                       | 5282                    | 12.5                    | 322             | 14                    | 1                                     |
| 26                       | 5258                    | 12.5                    | 383             | 13                    | 0                                     |
| 27                       | 5325                    | 15.7                    | 322             | 16                    | 1                                     |
| 28                       | 5263                    | 19.8                    | 469             | 13                    | 0                                     |
| 29                       | 5265                    | 18.6                    | 406             | 15                    | 1                                     |
| 30                       | 5304                    | 15.9                    | 238             | 14                    | 1                                     |
| Detection Percentage (%) |                         |                         |                 |                       | 66.667                                |
| Limit                    |                         |                         |                 |                       | 60%                                   |
| <b>Test Result</b>       |                         |                         |                 |                       | <b>PASS</b>                           |

**Total Type 1~4 Radar Statistical Performance**

| <b>Radar Type #</b>         | <b>Detection Percentage (%)</b> |
|-----------------------------|---------------------------------|
| 1                           | 93.333                          |
| 2                           | 90.000                          |
| 3                           | 80.000                          |
| 4                           | 66.667                          |
| Aggregate (Radar Types 1-4) | 82.500                          |
| Limit                       | 80%                             |
| <b>Test Result</b>          | <b>PASS</b>                     |



**Type 5 Radar Statistical Performance**

| Center Freq. (MHz)       | Low Edge (MHz) | High Edge (MHz) | VSG Freq. (MHz) | Detection   |
|--------------------------|----------------|-----------------|-----------------|-------------|
| Trial                    | Chirp          | Offset          |                 |             |
| 1                        | 5              | 2               | 5250.0          | 1           |
| 2                        | 20             | 8               | 5250.0          | 1           |
| 3                        | 7              | 2.8             | 5250.0          | 1           |
| 4                        | 8              | 3.2             | 5250.0          | 0           |
| 5                        | 9              | 3.6             | 5250.0          | 1           |
| 6                        | 10             | 4               | 5250.0          | 1           |
| 7                        | 11             | 4.4             | 5250.0          | 1           |
| 8                        | 12             | 4.8             | 5250.0          | 1           |
| 9                        | 13             | 5.2             | 5250.0          | 1           |
| 10                       | 14             | 5.6             | 5250.0          | 1           |
| 11                       | 15             | 6               | 5250.0          | 1           |
| 12                       | 16             | 6.4             | 5250.0          | 1           |
| 13                       | 17             | 6.8             | 5250.0          | 0           |
| 14                       | 20             | 8               | 5250.0          | 1           |
| 15                       | 19             | 7.6             | 5250.0          | 1           |
| 16                       | 18             | 7.2             | 5250.0          | 1           |
| 17                       | 17             | 6.8             | 5250.0          | 1           |
| 18                       | 16             | 6.4             | 5250.0          | 1           |
| 19                       | 15             | 6               | 5250.0          | 1           |
| 20                       | 14             | 5.6             | 5250.0          | 1           |
| 21                       | 13             | 5.2             | 5250.0          | 1           |
| 22                       | 12             | 4.8             | 5250.0          | 1           |
| 23                       | 11             | 4.4             | 5250.0          | 1           |
| 24                       | 10             | 4               | 5250.0          | 1           |
| 25                       | 9              | 3.6             | 5250.0          | 1           |
| 26                       | 8              | 3.2             | 5250.0          | 0           |
| 27                       | 18             | 7.2             | 5250.0          | 1           |
| 28                       | 19             | 7.6             | 5250.0          | 1           |
| 29                       | 20             | 8               | 5250.0          | 1           |
| 30                       | 5              | 2               | 5250.0          | 1           |
| Total                    |                |                 |                 | 27          |
| Detection Percentage (%) |                |                 |                 | 90%         |
| Limit                    |                |                 |                 | 80%         |
| Test Result              |                |                 |                 | <b>PASS</b> |



| <b>Trial Number</b>                           |                      |                         | 1                        |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 8                        |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 1                    | 62.1                    | 5                        | -                                | -                                | 1091                                          |
| 2                                             | 2                    | 56                      | 5                        | 1729                             | -                                | 133                                           |
| 3                                             | 2                    | 91.3                    | 5                        | 1230                             | -                                | 1057                                          |
| 4                                             | 3                    | 50.7                    | 5                        | 1762                             | 1616                             | 1442                                          |
| 5                                             | 2                    | 92.6                    | 5                        | 1723                             | -                                | 544                                           |
| 6                                             | 2                    | 87.3                    | 5                        | 1302                             | -                                | 1089                                          |
| 7                                             | 2                    | 59.5                    | 5                        | 1291                             | -                                | 1374                                          |
| 8                                             | 2                    | 52.2                    | 5                        | 1653                             | -                                | 1237                                          |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |

| <b>Trial Number</b>                           |                      |                         | 2                        |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 9                        |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 3                    | 90                      | 20                       | 1007                             | 1326                             | 30                                            |
| 2                                             | 2                    | 73.7                    | 20                       | 1785                             | -                                | 979                                           |
| 3                                             | 1                    | 78.1                    | 20                       | -                                | -                                | 683                                           |
| 4                                             | 2                    | 92.4                    | 20                       | 1281                             | -                                | 950                                           |
| 5                                             | 1                    | 61.2                    | 20                       | -                                | -                                | 612                                           |
| 6                                             | 3                    | 67.2                    | 20                       | 1525                             | 1870                             | 17                                            |
| 7                                             | 1                    | 78.5                    | 20                       | -                                | -                                | 429                                           |
| 8                                             | 2                    | 60.3                    | 20                       | 1931                             | -                                | 936                                           |
| 9                                             | 3                    | 92.9                    | 20                       | 1403                             | 1476                             | 548                                           |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |



| Trial Number                                  |               |                  | 3                 |                           |                           |                                        |
|-----------------------------------------------|---------------|------------------|-------------------|---------------------------|---------------------------|----------------------------------------|
| Number of Bursts in Trial                     |               |                  | 10                |                           |                           |                                        |
| Chirp Center Frequency                        |               |                  | 5250              |                           |                           |                                        |
| Burst                                         | No. of Pulses | Pulse Width (us) | Chirp Width (MHz) | Pulse 1-to-2 Spacing (us) | Pulse 2-to-3 Spacing (us) | Starting Location Within Interval (ms) |
| 1                                             | 3             | 63.4             | 7                 | 1574                      | 1607                      | 801                                    |
| 2                                             | 1             | 98               | 7                 | -                         | -                         | 966                                    |
| 3                                             | 1             | 58.7             | 7                 | -                         | -                         | 185                                    |
| 4                                             | 1             | 88               | 7                 | -                         | -                         | 1012                                   |
| 5                                             | 3             | 79.5             | 7                 | 1562                      | 1370                      | 943                                    |
| 6                                             | 3             | 57.1             | 7                 | 1900                      | 1188                      | 686                                    |
| 7                                             | 2             | 64.4             | 7                 | 1090                      | -                         | 599                                    |
| 8                                             | 1             | 78.7             | 7                 | -                         | -                         | 1089                                   |
| 9                                             | 1             | 69.3             | 7                 | -                         | -                         | 188                                    |
| 10                                            | 3             | 55.3             | 7                 | 1375                      | 1691                      | 933                                    |
| Detection Check (1=Detection; 0=No Detection) |               |                  |                   |                           |                           | 1                                      |

| Trial Number                                  |               |                  | 4                 |                           |                           |                                        |
|-----------------------------------------------|---------------|------------------|-------------------|---------------------------|---------------------------|----------------------------------------|
| Number of Bursts in Trial                     |               |                  | 11                |                           |                           |                                        |
| Chirp Center Frequency                        |               |                  | 5250              |                           |                           |                                        |
| Burst                                         | No. of Pulses | Pulse Width (us) | Chirp Width (MHz) | Pulse 1-to-2 Spacing (us) | Pulse 2-to-3 Spacing (us) | Starting Location Within Interval (ms) |
| 1                                             | 2             | 74.3             | 8                 | 1642                      | -                         | 24                                     |
| 2                                             | 1             | 83.1             | 8                 | -                         | -                         | 985                                    |
| 3                                             | 2             | 59.5             | 8                 | 1680                      | -                         | 988                                    |
| 4                                             | 2             | 59.8             | 8                 | 1786                      | -                         | 800                                    |
| 5                                             | 2             | 77.6             | 8                 | 1617                      | -                         | 339                                    |
| 6                                             | 2             | 79.9             | 8                 | 1553                      | -                         | 1040                                   |
| 7                                             | 1             | 56               | 8                 | -                         | -                         | 544                                    |
| 8                                             | 3             | 71.4             | 8                 | 1406                      | 1927                      | 452                                    |
| 9                                             | 1             | 97.4             | 8                 | -                         | -                         | 204                                    |
| 10                                            | 2             | 98.3             | 8                 | 1037                      | -                         | 926                                    |
| 11                                            | 1             | 63.6             | 8                 | -                         | -                         | 1052                                   |
| Detection Check (1=Detection; 0=No Detection) |               |                  |                   |                           |                           | 0                                      |



| <b>Trial Number</b>                           |                      |                         | 5                        |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 12                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 1                    | 50                      | 9                        | -                                | -                                | 557                                           |
| 2                                             | 2                    | 62.5                    | 9                        | 1731                             | -                                | 567                                           |
| 3                                             | 2                    | 55.4                    | 9                        | 1070                             | -                                | 460                                           |
| 4                                             | 1                    | 65.7                    | 9                        | -                                | -                                | 4                                             |
| 5                                             | 2                    | 58                      | 9                        | 1512                             | -                                | 64                                            |
| 6                                             | 2                    | 60.9                    | 9                        | 1230                             | -                                | 650                                           |
| 7                                             | 3                    | 89.6                    | 9                        | 1598                             | 1738                             | 235                                           |
| 8                                             | 3                    | 84.4                    | 9                        | 1271                             | 1617                             | 873                                           |
| 9                                             | 3                    | 72.3                    | 9                        | 1498                             | 1321                             | 901                                           |
| 10                                            | 1                    | 58.9                    | 9                        | -                                | -                                | 663                                           |
| 11                                            | 2                    | 74.8                    | 9                        | 1584                             | -                                | 919                                           |
| 12                                            | 1                    | 71.8                    | 9                        | -                                | -                                | 375                                           |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |

| <b>Trial Number</b>                           |                      |                         | 6                        |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 13                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 2                    | 88.1                    | 10                       | 1257                             | -                                | 846                                           |
| 2                                             | 1                    | 58.7                    | 10                       | -                                | -                                | 725                                           |
| 3                                             | 2                    | 97.1                    | 10                       | 1037                             | -                                | 30                                            |
| 4                                             | 3                    | 83.1                    | 10                       | 1029                             | 1106                             | 490                                           |
| 5                                             | 1                    | 62.1                    | 10                       | -                                | -                                | 262                                           |
| 6                                             | 2                    | 71.4                    | 10                       | 1058                             | -                                | 283                                           |
| 7                                             | 2                    | 86.3                    | 10                       | 1867                             | -                                | 49                                            |
| 8                                             | 3                    | 77.3                    | 10                       | 1418                             | 1876                             | 634                                           |
| 9                                             | 1                    | 78.9                    | 10                       | -                                | -                                | 304                                           |
| 10                                            | 3                    | 79.2                    | 10                       | 1055                             | 1572                             | 564                                           |
| 11                                            | 3                    | 52                      | 10                       | 1582                             | 1836                             | 852                                           |
| 12                                            | 3                    | 56.5                    | 10                       | 1195                             | 1542                             | 525                                           |
| 13                                            | 3                    | 100                     | 10                       | 1638                             | 1729                             | 750                                           |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                                  |                      |                         | 7                        |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 14                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 2                    | 92.7                    | 11                       | 1208                             | -                                | 231                                           |
| 2                                                    | 2                    | 81.3                    | 11                       | 1144                             | -                                | 804                                           |
| 3                                                    | 2                    | 60.4                    | 11                       | 1555                             | -                                | 34                                            |
| 4                                                    | 2                    | 62.1                    | 11                       | 1320                             | -                                | 427                                           |
| 5                                                    | 1                    | 50                      | 11                       | -                                | -                                | 577                                           |
| 6                                                    | 3                    | 65.9                    | 11                       | 1020                             | 1365                             | 3                                             |
| 7                                                    | 2                    | 73.8                    | 11                       | 1308                             | -                                | 51                                            |
| 8                                                    | 2                    | 74.3                    | 11                       | 1143                             | -                                | 360                                           |
| 9                                                    | 1                    | 62.9                    | 11                       | -                                | -                                | 394                                           |
| 10                                                   | 2                    | 74.8                    | 11                       | 1404                             | -                                | 317                                           |
| 11                                                   | 2                    | 69.7                    | 11                       | 1309                             | -                                | 532                                           |
| 12                                                   | 2                    | 69.8                    | 11                       | 1688                             | -                                | 339                                           |
| 13                                                   | 2                    | 77.4                    | 11                       | 1857                             | -                                | 381                                           |
| 14                                                   | 1                    | 55.1                    | 11                       | -                                | -                                | 426                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |

| <b>Trial Number</b>                                  |                      |                         | 8                        |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 15                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 1                    | 91.7                    | 12                       | -                                | -                                | 776                                           |
| 2                                                    | 2                    | 90                      | 12                       | 1196                             | -                                | 187                                           |
| 3                                                    | 3                    | 92.3                    | 12                       | 1486                             | 1853                             | 448                                           |
| 4                                                    | 2                    | 66.8                    | 12                       | 1545                             | -                                | 702                                           |
| 5                                                    | 1                    | 64                      | 12                       | -                                | -                                | 403                                           |
| 6                                                    | 3                    | 95.4                    | 12                       | 1123                             | 1473                             | 230                                           |
| 7                                                    | 3                    | 66.8                    | 12                       | 1867                             | 1401                             | 604                                           |
| 8                                                    | 3                    | 67.7                    | 12                       | 1472                             | 1397                             | 38                                            |
| 9                                                    | 1                    | 68.2                    | 12                       | -                                | -                                | 735                                           |
| 10                                                   | 2                    | 82.2                    | 12                       | 1297                             | -                                | 610                                           |
| 11                                                   | 1                    | 92.1                    | 12                       | -                                | -                                | 618                                           |
| 12                                                   | 2                    | 57                      | 12                       | 1764                             | -                                | 705                                           |
| 13                                                   | 2                    | 58.5                    | 12                       | 1310                             | -                                | 22                                            |
| 14                                                   | 3                    | 85.5                    | 12                       | 1630                             | 1447                             | 641                                           |
| 15                                                   | 2                    | 82.2                    | 12                       | 1371                             | -                                | 109                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                                  |                      |                         | 9                        |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 16                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 2                    | 74.4                    | 13                       | 1707                             | -                                | 442                                           |
| 2                                                    | 2                    | 63.6                    | 13                       | 1725                             | -                                | 280                                           |
| 3                                                    | 2                    | 71.3                    | 13                       | 1704                             | -                                | 459                                           |
| 4                                                    | 3                    | 77.6                    | 13                       | 1063                             | 1405                             | 197                                           |
| 5                                                    | 3                    | 65.2                    | 13                       | 1731                             | 1294                             | 101                                           |
| 6                                                    | 3                    | 55.1                    | 13                       | 1109                             | 1549                             | 17                                            |
| 7                                                    | 2                    | 96.8                    | 13                       | 1034                             | -                                | 131                                           |
| 8                                                    | 3                    | 80.8                    | 13                       | 1533                             | 1051                             | 365                                           |
| 9                                                    | 1                    | 60.4                    | 13                       | -                                | -                                | 222                                           |
| 10                                                   | 2                    | 61.8                    | 13                       | 1312                             | -                                | 371                                           |
| 11                                                   | 2                    | 71.3                    | 13                       | 1657                             | -                                | 33                                            |
| 12                                                   | 2                    | 98.1                    | 13                       | 1024                             | -                                | 291                                           |
| 13                                                   | 1                    | 57.9                    | 13                       | -                                | -                                | 188                                           |
| 14                                                   | 1                    | 91.8                    | 13                       | -                                | -                                | 163                                           |
| 15                                                   | 2                    | 56.7                    | 13                       | 1259                             | -                                | 426                                           |
| 16                                                   | 2                    | 89.7                    | 13                       | 1690                             | -                                | 606                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                                  |                      |                         | 10                       |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 17                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 2                    | 74.4                    | 14                       | 1107                             | -                                | 462                                           |
| 2                                                    | 1                    | 87.6                    | 14                       | -                                | -                                | 653                                           |
| 3                                                    | 2                    | 61.7                    | 14                       | 1741                             | -                                | 457                                           |
| 4                                                    | 2                    | 57.5                    | 14                       | 1566                             | -                                | 388                                           |
| 5                                                    | 2                    | 66.1                    | 14                       | 1855                             | -                                | 63                                            |
| 6                                                    | 3                    | 70.1                    | 14                       | 1044                             | 1012                             | 136                                           |
| 7                                                    | 1                    | 66.4                    | 14                       | -                                | -                                | 343                                           |
| 8                                                    | 1                    | 59.2                    | 14                       | -                                | -                                | 349                                           |
| 9                                                    | 2                    | 88.3                    | 14                       | 1240                             | -                                | 362                                           |
| 10                                                   | 1                    | 64.7                    | 14                       | -                                | -                                | 221                                           |
| 11                                                   | 2                    | 73                      | 14                       | 1703                             | -                                | 144                                           |
| 12                                                   | 2                    | 81.7                    | 14                       | 1450                             | -                                | 671                                           |
| 13                                                   | 3                    | 70.1                    | 14                       | 1741                             | 1278                             | 320                                           |
| 14                                                   | 1                    | 63.6                    | 14                       | -                                | -                                | 196                                           |
| 15                                                   | 1                    | 58.7                    | 14                       | -                                | -                                | 413                                           |
| 16                                                   | 2                    | 65.9                    | 14                       | 1478                             | -                                | 170                                           |
| 17                                                   | 1                    | 72.7                    | 14                       | -                                | -                                | 564                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                                  |                      |                         | 11                       |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 18                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 2                    | 72.1                    | 15                       | 1193                             | -                                | 130                                           |
| 2                                                    | 3                    | 76.3                    | 15                       | 1484                             | 1390                             | 114                                           |
| 3                                                    | 1                    | 86.1                    | 15                       | -                                | -                                | 14                                            |
| 4                                                    | 1                    | 73.2                    | 15                       | -                                | -                                | 604                                           |
| 5                                                    | 1                    | 81.2                    | 15                       | -                                | -                                | 548                                           |
| 6                                                    | 2                    | 99.5                    | 15                       | 1398                             | -                                | 173                                           |
| 7                                                    | 1                    | 93.9                    | 15                       | -                                | -                                | 262                                           |
| 8                                                    | 2                    | 75.9                    | 15                       | 1921                             | -                                | 38                                            |
| 9                                                    | 3                    | 79.2                    | 15                       | 1100                             | 1429                             | 84                                            |
| 10                                                   | 3                    | 77                      | 15                       | 1166                             | 1799                             | 610                                           |
| 11                                                   | 1                    | 91.8                    | 15                       | -                                | -                                | 339                                           |
| 12                                                   | 3                    | 56.8                    | 15                       | 1330                             | 1556                             | 580                                           |
| 13                                                   | 2                    | 83.1                    | 15                       | 1556                             | -                                | 295                                           |
| 14                                                   | 2                    | 63                      | 15                       | 1552                             | -                                | 156                                           |
| 15                                                   | 1                    | 65.7                    | 15                       | -                                | -                                | 439                                           |
| 16                                                   | 1                    | 64.5                    | 15                       | -                                | -                                | 188                                           |
| 17                                                   | 1                    | 88.5                    | 15                       | -                                | -                                | 419                                           |
| 18                                                   | 1                    | 60.6                    | 15                       | -                                | -                                | 205                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                                  |                      |                         | 12                       |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 19                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 2                    | 90.5                    | 16                       | 1299                             | -                                | 381                                           |
| 2                                                    | 2                    | 88.4                    | 16                       | 1418                             | -                                | 327                                           |
| 3                                                    | 2                    | 53.7                    | 16                       | 1055                             | -                                | 536                                           |
| 4                                                    | 1                    | 80.5                    | 16                       | -                                | -                                | 285                                           |
| 5                                                    | 1                    | 50.4                    | 16                       | -                                | -                                | 398                                           |
| 6                                                    | 2                    | 61.2                    | 16                       | 1749                             | -                                | 439                                           |
| 7                                                    | 2                    | 78.8                    | 16                       | 1065                             | -                                | 129                                           |
| 8                                                    | 3                    | 75                      | 16                       | 1748                             | 1820                             | 325                                           |
| 9                                                    | 2                    | 96.7                    | 16                       | 1254                             | -                                | 440                                           |
| 10                                                   | 3                    | 76.3                    | 16                       | 1848                             | 1106                             | 397                                           |
| 11                                                   | 1                    | 73.3                    | 16                       | -                                | -                                | 232                                           |
| 12                                                   | 2                    | 92.4                    | 16                       | 1317                             | -                                | 91                                            |
| 13                                                   | 2                    | 92.4                    | 16                       | 1854                             | -                                | 256                                           |
| 14                                                   | 3                    | 64.4                    | 16                       | 1240                             | 1634                             | 582                                           |
| 15                                                   | 2                    | 67.3                    | 16                       | 1473                             | -                                | 117                                           |
| 16                                                   | 2                    | 84.1                    | 16                       | 1795                             | -                                | 202                                           |
| 17                                                   | 1                    | 80.9                    | 16                       | -                                | -                                | 135                                           |
| 18                                                   | 1                    | 74.6                    | 16                       | -                                | -                                | 396                                           |
| 19                                                   | 2                    | 97.6                    | 16                       | 1805                             | -                                | 615                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                                  |                      |                         | 13                       |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 20                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 2                    | 66.1                    | 17                       | 1417                             | -                                | 388                                           |
| 2                                                    | 2                    | 86.7                    | 17                       | 1693                             | -                                | 348                                           |
| 3                                                    | 2                    | 70.5                    | 17                       | 1263                             | -                                | 215                                           |
| 4                                                    | 2                    | 78                      | 17                       | 1446                             | -                                | 28                                            |
| 5                                                    | 2                    | 66                      | 17                       | 1185                             | -                                | 585                                           |
| 6                                                    | 2                    | 80.6                    | 17                       | 1855                             | -                                | 65                                            |
| 7                                                    | 1                    | 95.5                    | 17                       | -                                | -                                | 92                                            |
| 8                                                    | 1                    | 98.8                    | 17                       | -                                | -                                | 68                                            |
| 9                                                    | 3                    | 64.3                    | 17                       | 1641                             | 1108                             | 517                                           |
| 10                                                   | 1                    | 75.1                    | 17                       | -                                | -                                | 121                                           |
| 11                                                   | 2                    | 72.6                    | 17                       | 1499                             | -                                | 448                                           |
| 12                                                   | 1                    | 60.3                    | 17                       | -                                | -                                | 567                                           |
| 13                                                   | 2                    | 54.9                    | 17                       | 1056                             | -                                | 245                                           |
| 14                                                   | 2                    | 98.8                    | 17                       | 1023                             | -                                | 584                                           |
| 15                                                   | 2                    | 60.9                    | 17                       | 1243                             | -                                | 579                                           |
| 16                                                   | 2                    | 62.7                    | 17                       | 1226                             | -                                | 464                                           |
| 17                                                   | 1                    | 80.1                    | 17                       | -                                | -                                | 89                                            |
| 18                                                   | 2                    | 70.9                    | 17                       | 1711                             | -                                | 153                                           |
| 19                                                   | 1                    | 90.7                    | 17                       | -                                | -                                | 282                                           |
| 20                                                   | 1                    | 98.9                    | 17                       | -                                | -                                | 71                                            |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 0                                             |

| <b>Trial Number</b>                                  |                      |                         | 14                       |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 8                        |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 2                    | 67.5                    | 20                       | 1542                             | -                                | 947                                           |
| 2                                                    | 3                    | 83.6                    | 20                       | 1272                             | 1696                             | 124                                           |
| 3                                                    | 2                    | 93.2                    | 20                       | 1877                             | -                                | 701                                           |
| 4                                                    | 1                    | 55.6                    | 20                       | -                                | -                                | 1123                                          |
| 5                                                    | 3                    | 84.2                    | 20                       | 1733                             | 1619                             | 756                                           |
| 6                                                    | 3                    | 69.1                    | 20                       | 1612                             | 1071                             | 1                                             |
| 7                                                    | 2                    | 66.9                    | 20                       | 1905                             | -                                | 7                                             |
| 8                                                    | 3                    | 86.8                    | 20                       | 1697                             | 1621                             | 1082                                          |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                           |                      |                         | 15                       |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 9                        |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 2                    | 62.2                    | 19                       | 1571                             | -                                | 949                                           |
| 2                                             | 2                    | 85                      | 19                       | 1669                             | -                                | 189                                           |
| 3                                             | 2                    | 64.5                    | 19                       | 1505                             | -                                | 176                                           |
| 4                                             | 2                    | 50.4                    | 19                       | 1325                             | -                                | 538                                           |
| 5                                             | 2                    | 66.1                    | 19                       | 1483                             | -                                | 908                                           |
| 6                                             | 2                    | 71.2                    | 19                       | 1110                             | -                                | 1017                                          |
| 7                                             | 3                    | 53.7                    | 19                       | 1445                             | 1677                             | 492                                           |
| 8                                             | 3                    | 62.5                    | 19                       | 1596                             | 1341                             | 349                                           |
| 9                                             | 3                    | 62                      | 19                       | 1929                             | 1221                             | 1105                                          |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |

| <b>Trial Number</b>                           |                      |                         | 16                       |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 10                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 2                    | 80.5                    | 18                       | 1910                             | -                                | 284                                           |
| 2                                             | 2                    | 64.2                    | 18                       | 1661                             | -                                | 751                                           |
| 3                                             | 2                    | 90.1                    | 18                       | 1041                             | -                                | 491                                           |
| 4                                             | 2                    | 69.8                    | 18                       | 1495                             | -                                | 107                                           |
| 5                                             | 1                    | 73.1                    | 18                       | -                                | -                                | 490                                           |
| 6                                             | 3                    | 77.2                    | 18                       | 1418                             | 1145                             | 1155                                          |
| 7                                             | 3                    | 52.6                    | 18                       | 1732                             | 1787                             | 772                                           |
| 8                                             | 2                    | 71.4                    | 18                       | 1562                             | -                                | 121                                           |
| 9                                             | 2                    | 89.8                    | 18                       | 1491                             | -                                | 89                                            |
| 10                                            | 2                    | 76.4                    | 18                       | 1355                             | -                                | 615                                           |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                           |                      |                         | 17                       |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 11                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 2                    | 51.2                    | 17                       | 1236                             | -                                | 740                                           |
| 2                                             | 1                    | 71.7                    | 17                       | -                                | -                                | 941                                           |
| 3                                             | 2                    | 74.7                    | 17                       | 1164                             | -                                | 370                                           |
| 4                                             | 2                    | 50.9                    | 17                       | 1919                             | -                                | 371                                           |
| 5                                             | 2                    | 65.2                    | 17                       | 1206                             | -                                | 1033                                          |
| 6                                             | 2                    | 98                      | 17                       | 1182                             | -                                | 346                                           |
| 7                                             | 2                    | 58.7                    | 17                       | 1612                             | -                                | 639                                           |
| 8                                             | 1                    | 63.8                    | 17                       | -                                | -                                | 1056                                          |
| 9                                             | 3                    | 86.3                    | 17                       | 1545                             | 1065                             | 205                                           |
| 10                                            | 1                    | 94.4                    | 17                       | -                                | -                                | 753                                           |
| 11                                            | 3                    | 88.5                    | 17                       | 1699                             | 1319                             | 58                                            |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |

| <b>Trial Number</b>                           |                      |                         | 18                       |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 12                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 2                    | 88.7                    | 16                       | 1405                             | -                                | 448                                           |
| 2                                             | 3                    | 90.2                    | 16                       | 1544                             | 1235                             | 621                                           |
| 3                                             | 1                    | 96.5                    | 16                       | -                                | -                                | 512                                           |
| 4                                             | 2                    | 80.5                    | 16                       | 1090                             | -                                | 321                                           |
| 5                                             | 2                    | 63.7                    | 16                       | 1268                             | -                                | 798                                           |
| 6                                             | 1                    | 53.4                    | 16                       | -                                | -                                | 809                                           |
| 7                                             | 2                    | 52.3                    | 16                       | 1043                             | -                                | 301                                           |
| 8                                             | 3                    | 54.7                    | 16                       | 1701                             | 1104                             | 796                                           |
| 9                                             | 3                    | 75.6                    | 16                       | 1923                             | 1729                             | 669                                           |
| 10                                            | 2                    | 59.2                    | 16                       | 1244                             | -                                | 369                                           |
| 11                                            | 1                    | 56.3                    | 16                       | -                                | -                                | 51                                            |
| 12                                            | 2                    | 87.8                    | 16                       | 1608                             | -                                | 733                                           |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                           |                      |                         | 19                       |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 13                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 2                    | 68.2                    | 15                       | 1104                             | -                                | 229                                           |
| 2                                             | 2                    | 58.4                    | 15                       | 1627                             | -                                | 488                                           |
| 3                                             | 3                    | 74.7                    | 15                       | 1861                             | 1015                             | 137                                           |
| 4                                             | 2                    | 58.2                    | 15                       | 1593                             | -                                | 520                                           |
| 5                                             | 1                    | 51.6                    | 15                       | -                                | -                                | 799                                           |
| 6                                             | 2                    | 94.7                    | 15                       | 1469                             | -                                | 43                                            |
| 7                                             | 2                    | 70.7                    | 15                       | 1091                             | -                                | 126                                           |
| 8                                             | 2                    | 82.9                    | 15                       | 1472                             | -                                | 607                                           |
| 9                                             | 3                    | 62.7                    | 15                       | 1168                             | 1453                             | 527                                           |
| 10                                            | 2                    | 63.1                    | 15                       | 1529                             | -                                | 143                                           |
| 11                                            | 1                    | 96.1                    | 15                       | -                                | -                                | 176                                           |
| 12                                            | 2                    | 57                      | 15                       | 1457                             | -                                | 882                                           |
| 13                                            | 3                    | 95.6                    | 15                       | 1707                             | 1501                             | 214                                           |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |

| <b>Trial Number</b>                           |                      |                         | 20                       |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 14                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 1                    | 95.7                    | 14                       | -                                | -                                | 117                                           |
| 2                                             | 1                    | 93.1                    | 14                       | -                                | -                                | 720                                           |
| 3                                             | 1                    | 55.8                    | 14                       | -                                | -                                | 297                                           |
| 4                                             | 1                    | 76.7                    | 14                       | -                                | -                                | 284                                           |
| 5                                             | 2                    | 68                      | 14                       | 1686                             | -                                | 472                                           |
| 6                                             | 3                    | 94.1                    | 14                       | 1796                             | 1393                             | 264                                           |
| 7                                             | 2                    | 53.9                    | 14                       | 1293                             | -                                | 525                                           |
| 8                                             | 1                    | 99.3                    | 14                       | -                                | -                                | 155                                           |
| 9                                             | 2                    | 73.3                    | 14                       | 1458                             | -                                | 65                                            |
| 10                                            | 2                    | 93.3                    | 14                       | 1196                             | -                                | 451                                           |
| 11                                            | 3                    | 55.8                    | 14                       | 1895                             | 1034                             | 243                                           |
| 12                                            | 1                    | 66.4                    | 14                       | -                                | -                                | 228                                           |
| 13                                            | 2                    | 65.6                    | 14                       | 1732                             | -                                | 746                                           |
| 14                                            | 2                    | 76.5                    | 14                       | 1187                             | -                                | 522                                           |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                           |               |                  | 21                |                           |                           |                                        |
|-----------------------------------------------|---------------|------------------|-------------------|---------------------------|---------------------------|----------------------------------------|
| <b>Number of Bursts in Trial</b>              |               |                  | 15                |                           |                           |                                        |
| <b>Chirp Center Frequency</b>                 |               |                  | 5250              |                           |                           |                                        |
| Burst                                         | No. of Pulses | Pulse Width (us) | Chirp Width (MHz) | Pulse 1-to-2 Spacing (us) | Pulse 2-to-3 Spacing (us) | Starting Location Within Interval (ms) |
| 1                                             | 1             | 85.1             | 13                | -                         | -                         | 565                                    |
| 2                                             | 2             | 72.5             | 13                | 1648                      | -                         | 211                                    |
| 3                                             | 1             | 67.5             | 13                | -                         | -                         | 348                                    |
| 4                                             | 2             | 56.1             | 13                | 1360                      | -                         | 156                                    |
| 5                                             | 1             | 71.1             | 13                | -                         | -                         | 718                                    |
| 6                                             | 2             | 93.1             | 13                | 1391                      | -                         | 400                                    |
| 7                                             | 1             | 56.5             | 13                | -                         | -                         | 482                                    |
| 8                                             | 1             | 63.8             | 13                | -                         | -                         | 703                                    |
| 9                                             | 2             | 67.4             | 13                | 1727                      | -                         | 780                                    |
| 10                                            | 1             | 52.3             | 13                | -                         | -                         | 102                                    |
| 11                                            | 3             | 62.4             | 13                | 1228                      | 1715                      | 304                                    |
| 12                                            | 2             | 53.3             | 13                | 1630                      | -                         | 57                                     |
| 13                                            | 2             | 83.1             | 13                | 1205                      | -                         | 768                                    |
| 14                                            | 2             | 93.7             | 13                | 1085                      | -                         | 461                                    |
| 15                                            | 2             | 90.7             | 13                | 1297                      | -                         | 746                                    |
| Detection Check (1=Detection; 0=No Detection) |               |                  |                   |                           |                           | 1                                      |

| <b>Trial Number</b>                           |               |                  | 22                |                           |                           |                                        |
|-----------------------------------------------|---------------|------------------|-------------------|---------------------------|---------------------------|----------------------------------------|
| <b>Number of Bursts in Trial</b>              |               |                  | 16                |                           |                           |                                        |
| <b>Chirp Center Frequency</b>                 |               |                  | 5250              |                           |                           |                                        |
| Burst                                         | No. of Pulses | Pulse Width (us) | Chirp Width (MHz) | Pulse 1-to-2 Spacing (us) | Pulse 2-to-3 Spacing (us) | Starting Location Within Interval (ms) |
| 1                                             | 2             | 98.8             | 12                | 1439                      | -                         | 95                                     |
| 2                                             | 1             | 54.5             | 12                | -                         | -                         | 676                                    |
| 3                                             | 2             | 80.5             | 12                | 1360                      | -                         | 8                                      |
| 4                                             | 2             | 55.9             | 12                | 1906                      | -                         | 373                                    |
| 5                                             | 2             | 72.1             | 12                | 1623                      | -                         | 254                                    |
| 6                                             | 2             | 84.4             | 12                | 1604                      | -                         | 480                                    |
| 7                                             | 1             | 78.5             | 12                | -                         | -                         | 663                                    |
| 8                                             | 1             | 88               | 12                | -                         | -                         | 314                                    |
| 9                                             | 2             | 74.7             | 12                | 1157                      | -                         | 596                                    |
| 10                                            | 2             | 97.1             | 12                | 1673                      | -                         | 264                                    |
| 11                                            | 1             | 81.6             | 12                | -                         | -                         | 740                                    |
| 12                                            | 1             | 83.6             | 12                | -                         | -                         | 163                                    |
| 13                                            | 3             | 87.6             | 12                | 1757                      | 1322                      | 628                                    |
| 14                                            | 2             | 58.5             | 12                | 1372                      | -                         | 132                                    |
| 15                                            | 3             | 91.8             | 12                | 1767                      | 1183                      | 106                                    |
| 16                                            | 2             | 58.8             | 12                | 1432                      | -                         | 659                                    |
| Detection Check (1=Detection; 0=No Detection) |               |                  |                   |                           |                           | 1                                      |



| <b>Trial Number</b>                                  |                      |                         | 23                       |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 17                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 1                    | 96                      | 11                       | -                                | -                                | 284                                           |
| 2                                                    | 2                    | 92.5                    | 11                       | 1241                             | -                                | 488                                           |
| 3                                                    | 2                    | 89.5                    | 11                       | 1347                             | -                                | 76                                            |
| 4                                                    | 2                    | 74.8                    | 11                       | 1607                             | -                                | 688                                           |
| 5                                                    | 2                    | 60.6                    | 11                       | 1523                             | -                                | 28                                            |
| 6                                                    | 2                    | 71.5                    | 11                       | 1659                             | -                                | 383                                           |
| 7                                                    | 2                    | 71.1                    | 11                       | 1454                             | -                                | 182                                           |
| 8                                                    | 1                    | 98.7                    | 11                       | -                                | -                                | 20                                            |
| 9                                                    | 2                    | 85.1                    | 11                       | 1770                             | -                                | 576                                           |
| 10                                                   | 2                    | 89.2                    | 11                       | 1086                             | -                                | 410                                           |
| 11                                                   | 2                    | 60.7                    | 11                       | 1101                             | -                                | 458                                           |
| 12                                                   | 2                    | 75.2                    | 11                       | 1719                             | -                                | 348                                           |
| 13                                                   | 2                    | 75.7                    | 11                       | 1799                             | -                                | 481                                           |
| 14                                                   | 3                    | 56.7                    | 11                       | 1132                             | 1884                             | 587                                           |
| 15                                                   | 2                    | 65                      | 11                       | 1885                             | -                                | 480                                           |
| 16                                                   | 2                    | 64.6                    | 11                       | 1910                             | -                                | 195                                           |
| 17                                                   | 3                    | 69.9                    | 11                       | 1410                             | 1190                             | 396                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                                  |                      |                         | 24                       |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 18                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 3                    | 83.8                    | 10                       | 1290                             | 1021                             | 536                                           |
| 2                                                    | 2                    | 66.9                    | 10                       | 1112                             | -                                | 44                                            |
| 3                                                    | 3                    | 91                      | 10                       | 1220                             | 1504                             | 611                                           |
| 4                                                    | 2                    | 86.1                    | 10                       | 1678                             | -                                | 456                                           |
| 5                                                    | 3                    | 65.5                    | 10                       | 1928                             | 1222                             | 330                                           |
| 6                                                    | 1                    | 62.6                    | 10                       | -                                | -                                | 297                                           |
| 7                                                    | 3                    | 68.7                    | 10                       | 1505                             | 1200                             | 351                                           |
| 8                                                    | 3                    | 59.2                    | 10                       | 1452                             | 1114                             | 230                                           |
| 9                                                    | 1                    | 73.9                    | 10                       | -                                | -                                | 222                                           |
| 10                                                   | 1                    | 77.2                    | 10                       | -                                | -                                | 57                                            |
| 11                                                   | 2                    | 96.4                    | 10                       | 1357                             | -                                | 399                                           |
| 12                                                   | 2                    | 99.9                    | 10                       | 1173                             | -                                | 299                                           |
| 13                                                   | 2                    | 99.9                    | 10                       | 1520                             | -                                | 464                                           |
| 14                                                   | 1                    | 86.7                    | 10                       | -                                | -                                | 294                                           |
| 15                                                   | 1                    | 92.6                    | 10                       | -                                | -                                | 653                                           |
| 16                                                   | 1                    | 77.1                    | 10                       | -                                | -                                | 550                                           |
| 17                                                   | 2                    | 81.1                    | 10                       | 1664                             | -                                | 566                                           |
| 18                                                   | 3                    | 68.4                    | 10                       | 1536                             | 1309                             | 580                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                                  |                      |                         | 25                       |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 19                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 3                    | 68.2                    | 9                        | 1723                             | 1868                             | 471                                           |
| 2                                                    | 3                    | 83.7                    | 9                        | 1711                             | 1405                             | 368                                           |
| 3                                                    | 2                    | 69.7                    | 9                        | 1781                             | -                                | 425                                           |
| 4                                                    | 1                    | 59.7                    | 9                        | -                                | -                                | 440                                           |
| 5                                                    | 2                    | 96.7                    | 9                        | 1484                             | -                                | 123                                           |
| 6                                                    | 2                    | 95.8                    | 9                        | 1319                             | -                                | 261                                           |
| 7                                                    | 3                    | 71.3                    | 9                        | 1095                             | 1354                             | 332                                           |
| 8                                                    | 3                    | 53.2                    | 9                        | 1527                             | 1427                             | 427                                           |
| 9                                                    | 2                    | 69.5                    | 9                        | 1771                             | -                                | 397                                           |
| 10                                                   | 3                    | 63.9                    | 9                        | 1075                             | 1447                             | 67                                            |
| 11                                                   | 2                    | 93.4                    | 9                        | 1783                             | -                                | 174                                           |
| 12                                                   | 2                    | 77.3                    | 9                        | 1564                             | -                                | 17                                            |
| 13                                                   | 2                    | 73.1                    | 9                        | 1294                             | -                                | 216                                           |
| 14                                                   | 1                    | 77.4                    | 9                        | -                                | -                                | 292                                           |
| 15                                                   | 3                    | 57.2                    | 9                        | 1722                             | 1886                             | 619                                           |
| 16                                                   | 2                    | 68.7                    | 9                        | 1629                             | -                                | 233                                           |
| 17                                                   | 1                    | 60.8                    | 9                        | -                                | -                                | 226                                           |
| 18                                                   | 3                    | 69.7                    | 9                        | 1128                             | 1224                             | 599                                           |
| 19                                                   | 1                    | 62.2                    | 9                        | -                                | -                                | 433                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                                  |                      |                         | 26                       |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 20                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 1                    | 80.5                    | 8                        | -                                | -                                | 90                                            |
| 2                                                    | 3                    | 62.6                    | 8                        | 1406                             | 1343                             | 319                                           |
| 3                                                    | 3                    | 85.6                    | 8                        | 1190                             | 1529                             | 384                                           |
| 4                                                    | 2                    | 83.9                    | 8                        | 1208                             | -                                | 567                                           |
| 5                                                    | 2                    | 92.4                    | 8                        | 1488                             | -                                | 234                                           |
| 6                                                    | 2                    | 54                      | 8                        | 1529                             | -                                | 535                                           |
| 7                                                    | 3                    | 81.3                    | 8                        | 1501                             | 1812                             | 325                                           |
| 8                                                    | 1                    | 98.5                    | 8                        | -                                | -                                | 532                                           |
| 9                                                    | 1                    | 85.8                    | 8                        | -                                | -                                | 272                                           |
| 10                                                   | 2                    | 84.7                    | 8                        | 1593                             | -                                | 182                                           |
| 11                                                   | 2                    | 83.3                    | 8                        | 1705                             | -                                | 134                                           |
| 12                                                   | 2                    | 79.8                    | 8                        | 1567                             | -                                | 286                                           |
| 13                                                   | 1                    | 77.9                    | 8                        | -                                | -                                | 368                                           |
| 14                                                   | 3                    | 98.4                    | 8                        | 1510                             | 1569                             | 290                                           |
| 15                                                   | 2                    | 79.9                    | 8                        | 1588                             | -                                | 231                                           |
| 16                                                   | 3                    | 78                      | 8                        | 1140                             | 1353                             | 353                                           |
| 17                                                   | 3                    | 55.2                    | 8                        | 1700                             | 1327                             | 53                                            |
| 18                                                   | 3                    | 71.9                    | 8                        | 1081                             | 1224                             | 44                                            |
| 19                                                   | 1                    | 62                      | 8                        | -                                | -                                | 298                                           |
| 20                                                   | 3                    | 70.5                    | 8                        | 1888                             | 1442                             | 529                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 0                                             |

| <b>Trial Number</b>                                  |                      |                         | 27                       |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 8                        |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 2                    | 69.1                    | 18                       | 1076                             | -                                | 1436                                          |
| 2                                                    | 2                    | 62.1                    | 18                       | 1688                             | -                                | 22                                            |
| 3                                                    | 2                    | 94.8                    | 18                       | 1891                             | -                                | 897                                           |
| 4                                                    | 1                    | 75.8                    | 18                       | -                                | -                                | 1186                                          |
| 5                                                    | 2                    | 65.4                    | 18                       | 1713                             | -                                | 589                                           |
| 6                                                    | 2                    | 97.7                    | 18                       | 1292                             | -                                | 614                                           |
| 7                                                    | 3                    | 98.1                    | 18                       | 1670                             | 1711                             | 506                                           |
| 8                                                    | 2                    | 85.4                    | 18                       | 1672                             | -                                | 776                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                           |                      |                         | 28                       |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 9                        |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 3                    | 82                      | 19                       | 1233                             | 1713                             | 679                                           |
| 2                                             | 3                    | 87.7                    | 19                       | 1554                             | 1123                             | 473                                           |
| 3                                             | 2                    | 98.9                    | 19                       | 1518                             | -                                | 869                                           |
| 4                                             | 1                    | 55                      | 19                       | -                                | -                                | 719                                           |
| 5                                             | 1                    | 93.6                    | 19                       | -                                | -                                | 902                                           |
| 6                                             | 2                    | 58.7                    | 19                       | 1641                             | -                                | 1243                                          |
| 7                                             | 2                    | 88.7                    | 19                       | 1387                             | -                                | 410                                           |
| 8                                             | 1                    | 60.3                    | 19                       | -                                | -                                | 1154                                          |
| 9                                             | 1                    | 97.7                    | 19                       | -                                | -                                | 512                                           |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |

| <b>Trial Number</b>                           |                      |                         | 29                       |                                  |                                  |                                               |
|-----------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>              |                      |                         | 10                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                 |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                  | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                             | 1                    | 69.6                    | 20                       | -                                | -                                | 1131                                          |
| 2                                             | 1                    | 74.5                    | 20                       | -                                | -                                | 290                                           |
| 3                                             | 1                    | 60.9                    | 20                       | -                                | -                                | 895                                           |
| 4                                             | 1                    | 74.6                    | 20                       | -                                | -                                | 202                                           |
| 5                                             | 2                    | 99.3                    | 20                       | 1501                             | -                                | 139                                           |
| 6                                             | 2                    | 95.3                    | 20                       | 1065                             | -                                | 854                                           |
| 7                                             | 2                    | 91.9                    | 20                       | 1722                             | -                                | 219                                           |
| 8                                             | 2                    | 51                      | 20                       | 1285                             | -                                | 57                                            |
| 9                                             | 2                    | 87.7                    | 20                       | 1747                             | -                                | 141                                           |
| 10                                            | 1                    | 87.2                    | 20                       | -                                | -                                | 596                                           |
| Detection Check (1=Detection; 0=No Detection) |                      |                         |                          |                                  |                                  | 1                                             |



| <b>Trial Number</b>                                  |                      |                         | 30                       |                                  |                                  |                                               |
|------------------------------------------------------|----------------------|-------------------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| <b>Number of Bursts in Trial</b>                     |                      |                         | 11                       |                                  |                                  |                                               |
| <b>Chirp Center Frequency</b>                        |                      |                         | 5250                     |                                  |                                  |                                               |
| <b>Burst</b>                                         | <b>No. of Pulses</b> | <b>Pulse Width (us)</b> | <b>Chirp Width (MHz)</b> | <b>Pulse 1-to-2 Spacing (us)</b> | <b>Pulse 2-to-3 Spacing (us)</b> | <b>Starting Location Within Interval (ms)</b> |
| 1                                                    | 3                    | 59.9                    | 5                        | 1901                             | 1196                             | 935                                           |
| 2                                                    | 2                    | 77.1                    | 5                        | 1590                             | -                                | 1038                                          |
| 3                                                    | 2                    | 62.7                    | 5                        | 1227                             | -                                | 690                                           |
| 4                                                    | 1                    | 77.1                    | 5                        | -                                | -                                | 547                                           |
| 5                                                    | 3                    | 99.8                    | 5                        | 1798                             | 1790                             | 551                                           |
| 6                                                    | 2                    | 61.5                    | 5                        | 1135                             | -                                | 876                                           |
| 7                                                    | 2                    | 77.5                    | 5                        | 1583                             | -                                | 448                                           |
| 8                                                    | 2                    | 57.3                    | 5                        | 1890                             | -                                | 736                                           |
| 9                                                    | 2                    | 53.5                    | 5                        | 1757                             | -                                | 362                                           |
| 10                                                   | 1                    | 66.6                    | 5                        | -                                | -                                | 836                                           |
| 11                                                   | 3                    | 80.7                    | 5                        | 1811                             | 1289                             | 410                                           |
| <b>Detection Check (1=Detection; 0=No Detection)</b> |                      |                         |                          |                                  |                                  | 1                                             |

**Type 6 Radar Statistical Performance**

| Trial #                  | Test Freq. (MHz) | Pulses / Hop | Pulse Width (us) | PRI (us) | 1=Detection<br>0=No Detection |
|--------------------------|------------------|--------------|------------------|----------|-------------------------------|
| 1                        | 5250             | 9            | 1                | 333      | 1                             |
| 2                        | 5250             | 9            | 1                | 333      | 1                             |
| 3                        | 5250             | 9            | 1                | 333      | 1                             |
| 4                        | 5250             | 9            | 1                | 333      | 1                             |
| 5                        | 5250             | 9            | 1                | 333      | 1                             |
| 6                        | 5250             | 9            | 1                | 333      | 1                             |
| 7                        | 5250             | 9            | 1                | 333      | 1                             |
| 8                        | 5250             | 9            | 1                | 333      | 1                             |
| 9                        | 5250             | 9            | 1                | 333      | 1                             |
| 10                       | 5250             | 9            | 1                | 333      | 1                             |
| 11                       | 5250             | 9            | 1                | 333      | 1                             |
| 12                       | 5250             | 9            | 1                | 333      | 1                             |
| 13                       | 5250             | 9            | 1                | 333      | 1                             |
| 14                       | 5250             | 9            | 1                | 333      | 1                             |
| 15                       | 5250             | 9            | 1                | 333      | 1                             |
| 16                       | 5250             | 9            | 1                | 333      | 1                             |
| 17                       | 5250             | 9            | 1                | 333      | 1                             |
| 18                       | 5250             | 9            | 1                | 333      | 1                             |
| 19                       | 5250             | 9            | 1                | 333      | 1                             |
| 20                       | 5250             | 9            | 1                | 333      | 1                             |
| 21                       | 5250             | 9            | 1                | 333      | 1                             |
| 22                       | 5250             | 9            | 1                | 333      | 1                             |
| 23                       | 5250             | 9            | 1                | 333      | 1                             |
| 24                       | 5250             | 9            | 1                | 333      | 1                             |
| 25                       | 5250             | 9            | 1                | 333      | 1                             |
| 26                       | 5250             | 9            | 1                | 333      | 1                             |
| 27                       | 5250             | 9            | 1                | 333      | 1                             |
| 28                       | 5250             | 9            | 1                | 333      | 1                             |
| 29                       | 5250             | 9            | 1                | 333      | 1                             |
| 30                       | 5250             | 9            | 1                | 333      | 1                             |
| Detection Percentage (%) |                  |              |                  |          | 100.000                       |
| Limit                    |                  |              |                  |          | 70%                           |
| <b>Test Result</b>       |                  |              |                  |          | <b>PASS</b>                   |



&lt;Mesh Mode&gt;

**Type 4 Radar Statistical Performance**

| Trial #                  | Test Freq. (MHz) | Pulses / Hop | Pulse Width (us) | PRI (us) | 1=Detection<br>0=No Detection |
|--------------------------|------------------|--------------|------------------|----------|-------------------------------|
| 1                        | 5276             | 18.0         | 242              | 15       | 1                             |
| 2                        | 5256             | 19.9         | 279              | 12       | 1                             |
| 3                        | 5266             | 12.9         | 487              | 14       | 0                             |
| 4                        | 5298             | 15.0         | 452              | 13       | 1                             |
| 5                        | 5316             | 16.3         | 230              | 12       | 0                             |
| 6                        | 5325             | 19.8         | 238              | 13       | 1                             |
| 7                        | 5308             | 18.2         | 420              | 16       | 0                             |
| 8                        | 5262             | 16.3         | 452              | 15       | 1                             |
| 9                        | 5289             | 14.2         | 495              | 12       | 1                             |
| 10                       | 5279             | 17.8         | 228              | 16       | 0                             |
| 11                       | 5328             | 19.1         | 211              | 16       | 1                             |
| 12                       | 5298             | 18.4         | 283              | 15       | 0                             |
| 13                       | 5297             | 11.8         | 411              | 12       | 1                             |
| 14                       | 5283             | 14.2         | 284              | 13       | 0                             |
| 15                       | 5312             | 13.9         | 202              | 12       | 1                             |
| 16                       | 5318             | 17.8         | 340              | 14       | 0                             |
| 17                       | 5309             | 15.6         | 290              | 16       | 1                             |
| 18                       | 5260             | 14.6         | 250              | 16       | 1                             |
| 19                       | 5276             | 14.4         | 484              | 15       | 1                             |
| 20                       | 5271             | 18.9         | 387              | 13       | 0                             |
| 21                       | 5303             | 11.1         | 348              | 15       | 1                             |
| 22                       | 5273             | 13.8         | 291              | 16       | 1                             |
| 23                       | 5272             | 14.3         | 295              | 12       | 0                             |
| 24                       | 5281             | 12.5         | 300              | 12       | 1                             |
| 25                       | 5313             | 12.5         | 322              | 14       | 1                             |
| 26                       | 5301             | 12.5         | 383              | 13       | 1                             |
| 27                       | 5321             | 15.7         | 322              | 16       | 0                             |
| 28                       | 5321             | 19.8         | 469              | 13       | 1                             |
| 29                       | 5303             | 18.6         | 406              | 15       | 1                             |
| 30                       | 5252             | 15.9         | 238              | 14       | 0                             |
| Detection Percentage (%) |                  |              |                  |          | 63.333                        |
| Limit                    |                  |              |                  |          | 70%                           |
| <b>Test Result</b>       |                  |              |                  |          | <b>Complied</b>               |

## 4 Test Equipment and Calibration Data

| Instrument              | Brand     | Model No. | Serial No.    | Characteristics | Calibration Date | Calibration Due Date | Remark             |
|-------------------------|-----------|-----------|---------------|-----------------|------------------|----------------------|--------------------|
| Spectrum Analyzer       | R&S       | FSV40     | 101026        | 9kHz~40GHz      | Dec. 01, 2020    | Nov. 30, 2021        | Radiated (DF01-CB) |
| Vector Signal generator | R&S       | SMU200A   | 102782        | 100kHz-6GHz     | Jun. 24, 2021    | Jun. 23, 2022        | Radiated (DF01-CB) |
| Horn Antenna            | COM-POWER | AH-118    | 071187        | 1GHz ~ 18GHz    | Jul. 29, 2021    | Jul. 28, 2022        | Radiated (DF01-CB) |
| Horn Antenna            | COM-POWER | AH-118    | 071042        | 1GHz ~ 18GHz    | Dec. 22, 2020    | Dec. 21, 2021        | Radiated (DF01-CB) |
| VEKTOR SIGNAL GENERATOR | R&S       | SMW200A   | 109426        | 100KHz- 7.5GHz  | Dec. 23, 2020    | Dec. 22, 2021        | Radiated (DF01-CB) |
| RF Power Divider        | STI       | 2 Way     | DV-2way -05   | 1GHz ~ 8GHz     | Mar. 01, 2021    | Feb. 28, 2022        | Radiated (DF01-CB) |
| RF Power Divider        | STI       | 2 Way     | DV-2way -06   | 1GHz ~ 8GHz     | Mar. 01, 2021    | Feb. 28, 2022        | Radiated (DF01-CB) |
| RF Power Divider        | MTJ       | 4 Way     | DFS-01-DV-01  | 1GHz ~ 6GHz     | Oct. 05, 2020    | Oct. 04, 2021        | Radiated (DF01-CB) |
| RF Cable-high           | Woken     | RG402     | High Cable-57 | 1 GHz ~18 GHz   | Oct. 05, 2020    | Oct. 04, 2021        | Radiated (DF01-CB) |
| RF Cable-high           | Woken     | RG402     | High Cable-58 | 1 GHz ~18 GHz   | Oct. 05, 2020    | Oct. 04, 2021        | Radiated (DF01-CB) |
| RF Cable-high           | Woken     | RG402     | High Cable-59 | 1 GHz ~18 GHz   | Oct. 05, 2020    | Oct. 04, 2021        | Radiated (DF01-CB) |

Note: Calibration Interval of instruments listed above is one year.



## 5 Measurement Uncertainty

| Test Items        | Uncertainty | Remark                   |
|-------------------|-------------|--------------------------|
| Radiated Emission | 3.4 dB      | Confidence levels of 95% |