

**Dynamic Frequency Selection (DFS) Test Report****C9130AXE-(X)****Cisco Catalyst C9130AX Series**  
(x=A, B)FCC ID: LDK948342197  
IC: 2461N-948342197**5250-5350, 5470-5725 MHz****Against the following Specifications:****CFR47 Part 15.407**  
**RSS247****Cisco Systems**  
170 West Tasman Drive  
San Jose, CA 95134

|                                                                                     |                                                                                                                      |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|  |                                  |
| <b>Author:</b> Johanna Knudsen<br><b>Tested By:</b> Johanna Knudsen                 | <b>Approved By:</b> Gerard Thorpe<br><b>Title:</b> Manager – Radio Compliance & Certifications<br><b>Revision:</b> 3 |

This report replaces any previously entered test report under EDCS – **18337252**. This test report has been electronically authorized and archived using the CISCO Engineering Document Control system.

|                                                                                                                      |            |
|----------------------------------------------------------------------------------------------------------------------|------------|
| <b>SECTION 1: OVERVIEW .....</b>                                                                                     | <b>3</b>   |
| <b>SECTION 2: ASSESSMENT INFORMATION .....</b>                                                                       | <b>4</b>   |
| 2.1 GENERAL .....                                                                                                    | 4          |
| 2.2 DATE OF TESTING .....                                                                                            | 6          |
| 2.3 REPORT ISSUE DATE .....                                                                                          | 6          |
| 2.4 TESTING FACILITIES .....                                                                                         | 6          |
| 2.5 EQUIPMENT ASSESSED (EUT) .....                                                                                   | 6          |
| <b>SECTION 3: RESULT SUMMARY .....</b>                                                                               | <b>7</b>   |
| 3.1 RESULTS SUMMARY TABLE .....                                                                                      | 7          |
| <b>SECTION 4: SAMPLE DETAILS .....</b>                                                                               | <b>8</b>   |
| 4.1 SAMPLE DETAILS .....                                                                                             | 8          |
| 4.2 SYSTEM DETAILS .....                                                                                             | 8          |
| 4.3 MODE OF OPERATION DETAILS .....                                                                                  | 8          |
| <b>APPENDIX A: DYNAMIC FREQUENCY SELECTION (DFS) .....</b>                                                           | <b>9</b>   |
| A.1 UNII DEVICE DESCRIPTION .....                                                                                    | 9          |
| A.2 DFS DETECTION THRESHOLDS .....                                                                                   | 11         |
| A.3 RADAR TEST WAVEFORMS .....                                                                                       | 12         |
| <b>APPENDIX B: DYNAMIC FREQUENCY SELECTION / TEST RESULTS .....</b>                                                  | <b>16</b>  |
| CALIBRATION PLOTS .....                                                                                              | 18         |
| B.1 TEST PROCEDURE/RESULTS .....                                                                                     | 35         |
| B.2 UNII DETECTION BANDWIDTH .....                                                                                   | 36         |
| B.3 INITIAL CHANNEL AVAILABILITY CHECK TIME .....                                                                    | 50         |
| B.4 RADAR BURST AT THE BEGINNING OF THE CHANNEL AVAILABILITY CHECK TIME .....                                        | 51         |
| B.5 RADAR BURST AT THE END OF THE CHANNEL AVAILABILITY CHECK TIME .....                                              | 52         |
| B.6 IN-SERVICE MONITORING FOR CHANNEL MOVE TIME, CHANNEL CLOSING TRANSMISSION TIME AND<br>NON-OCCUPANCY PERIOD ..... | 53         |
| B.7 STATISTICAL PERFORMANCE CHECK .....                                                                              | 56         |
| <b>APPENDIX C: LIST OF TEST EQUIPMENT USED TO PERFORM THE TEST .....</b>                                             | <b>242</b> |
| <b>APPENDIX D:   PHOTOGRAPHS OF TEST SETUPS .....</b>                                                                | <b>242</b> |
| <b>APPENDIX E:   SOFTWARE USED TO PERFORM TESTING .....</b>                                                          | <b>243</b> |
| <b>APPENDIX F: TEST PROCEDURES .....</b>                                                                             | <b>243</b> |
| <b>APPENDIX G: SCOPE OF ACCREDITATION (A2LA CERTIFICATE NUMBER 1178-01) .....</b>                                    | <b>243</b> |
| <b>APPENDIX H: TEST ASSESSMENT PLAN .....</b>                                                                        | <b>243</b> |
| <b>APPENDIX I: WORST CASE JUSTIFICATION .....</b>                                                                    | <b>243</b> |
| <b>APPENDIX J: UUT SOFTWARE INFO .....</b>                                                                           | <b>243</b> |

**Section 1: Overview**

The samples were assessed against the tests detailed in section 3 under the requirements of the following specifications:

|                              |
|------------------------------|
| <b>Specifications:</b>       |
| CFR47 Part 15.407<br>RSS-247 |

## Section 2: Assessment Information

### 2.1 General

This report contains an assessment of an apparatus against Electromagnetic Compatibility Standards based upon tests carried out on the samples submitted. The testing was performed by and for the use of Cisco systems Inc:

With regard to this assessment, the following points should be noted:

- a) The results contained in this report relate only to the items tested and were obtained in the period between the date of the initial assessment and the date of issue of the report. Manufactured products will not necessarily give identical results due to production and measurement tolerances.
- b) The apparatus was set up and exercised using the configuration and modes of operation defined in this report only.
- c) Where relevant, the apparatus was only assessed using the susceptibility criteria defined in this report and the Test Assessment Plan (TAP).
- d) All testing was performed under the following environmental conditions:

|                      |                                      |
|----------------------|--------------------------------------|
| Temperature          | 15°C to 35°C (54°F to 95°F)          |
| Atmospheric Pressure | 860mbar to 1060mbar (25.4" to 31.3") |
| Humidity             | 10% to 75*%                          |
- e) All AC testing was performed at one or more of the following supply voltages:

|                     |
|---------------------|
| 110V 60 Hz (+/-20%) |
|---------------------|

### Units of Measurement

The units of measurements defined in the appendices are reported in specific terms, which are test dependent. Where radiated measurements are concerned these are defined at a particular distance. Basic voltage measurements are defined in units of [dBuV]

As an example, the basic calculation for all measurements is as follows:

$$\text{Emission level [dBuV]} = \text{Indicated voltage level [dBuV]} + \text{Cable Loss [dB]} + \text{Other correction factors [dB]}$$

The combinations of correction factors are dependent upon the exact test configurations [see test equipment lists for further details] and may include:-

Antenna Factors, Pre Amplifier Gain, LISN Loss, Pulse Limiter Loss and Filter Insertion Loss..

Note: to convert the results from dBuV/m to uV/m use the following formula:-

$$\text{Level in uV/m} = \text{Common Antilogarithm} [(X \text{ dBuV/m})/20] = Y \text{ uV/m}$$

## Measurement Uncertainty Values

|                                   |                          |
|-----------------------------------|--------------------------|
| voltage and power measurements    | $\pm 2$ dB               |
| conducted EIRP measurements       | $\pm 1.4$ dB             |
| radiated measurements             | $\pm 3.2$ dB             |
| frequency measurements            | $\pm 2.4 \times 10^{-7}$ |
| temperature measurements          | $\pm 0.54^\circ$         |
| humidity measurements             | $\pm 2.3\%$              |
| DC and low frequency measurements | $\pm 2.5\%$              |

Where relevant measurement uncertainty levels have been estimated for tests performed on the apparatus. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

## Radiated emissions (expanded uncertainty, confidence interval 95%)

|                    |            |
|--------------------|------------|
| 30 MHz - 300 MHz   | +/- 3.8 dB |
| 300 MHz - 1000 MHz | +/- 4.3 dB |
| 1 GHz - 10 GHz     | +/- 4.0 dB |
| 10 GHz - 18GHz     | +/- 8.2 dB |
| 18GHz - 26.5GHz    | +/- 4.1 dB |
| 26.5GHz - 40GHz    | +/- 3.9 dB |

## Conducted emissions (expanded uncertainty, confidence interval 95%)

|                |             |
|----------------|-------------|
| 30 MHz – 40GHz | +/- 0.38 dB |
|----------------|-------------|

A product is considered to comply with a requirement if the nominal measured value is below the limit line. The product is considered to not be in compliance in case the nominal measured value is above the limit line.

This report must not be reproduced except in full, without written approval of Cisco Systems.

**2.2 Date of testing**

15-OCT-19 - 05-DEC-19

**2.3 Report Issue Date**

29-JAN-20

Cisco uses an electronic system to issue, store and control the revision of test reports. This system is called the Engineering Document Control System 13253354. The actual report issue date is embedded into the original file on EDCS. Any copies of this report, either electronic or paper, that are not on EDCS must be considered uncontrolled.

**2.4 Testing facilities**

This assessment was performed by:

**Testing Laboratory**

Cisco Systems, Inc.,  
125 West Tasman Drive  
San Jose, CA 95134, USA

**Registration Numbers for Industry Canada**

| <b>Cisco System Site</b> | <b>Address</b>                                    | <b>Site Identifier</b> |
|--------------------------|---------------------------------------------------|------------------------|
| Building P, 10m Chamber  | 125 West Tasman Dr<br>San Jose, CA 95134          | Company #: 2461N-2     |
| Building P, 5m Chamber   | 125 West Tasman Dr<br>San Jose, CA 95134          | Company #: 2461N-1     |
| Building I, 5m Chamber   | 285 W. Tasman Drive<br>San Jose, California 95134 | Company #: 2461M-1     |

**Test Engineers**

Johanna Knudsen

**2.5 Equipment Assessed (EUT)**

C9130AXE-B

## Section 3: Result Summary

### 3.1 Results Summary Table

| Basic Standard        | Technical Requirements / Details                         | Result |
|-----------------------|----------------------------------------------------------|--------|
| FCC 15.407<br>RSS-247 | Dynamic Frequency Selection (DFS)<br>Detection Threshold | Pass   |
| FCC 15.407<br>RSS-247 | Channel Availability Check Time                          | Pass   |
| FCC 15.407<br>RSS-247 | Channel Move Time                                        | Pass   |
| FCC 15.407<br>RSS-247 | Channel Closing Time                                     | Pass   |
| FCC 15.407<br>RSS-247 | Non-Occupancy Period                                     | Pass   |
| FCC 15.407<br>RSS-247 | U-NII Detection Bandwidth                                | Pass   |

## Section 4: Sample Details

Note: Each sample was evaluated to ensure that its condition was suitable to be used as a test sample prior to the commencement of testing.

### 4.1 Sample Details

| Sample No. | Equipment Details | Manufacturer       | Hardware Rev.        | Firmware Rev. | Software Rev. | Serial Number   |
|------------|-------------------|--------------------|----------------------|---------------|---------------|-----------------|
| S01        | C9130AXE-B        | Cisco Systems, Inc | 800-106171-01, P1A-2 | NA            | NA            | KWC233200WT     |
| S02        | Support Laptop    | Asus               | FX504G               | NA            | NA            | JANRCX002576412 |

### 4.2 System Details

| System Number | Description                                | Sample Description | Samples | System under test                   | Support equipment                   |
|---------------|--------------------------------------------|--------------------|---------|-------------------------------------|-------------------------------------|
| 1             | Used for 20, 40, 80MHz, and 160MHz testing | C9130AXE-B         | S01     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
|               |                                            | Support Laptop     | S02     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### 4.3 Mode of Operation Details

| Mode# | Description         | Comments                                                                                                                                                                                                                                                                                                                    |
|-------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | 20MHz BW DFS Tests  | DFS Tests with traffic: 24% Traffic Loading using IPERF<br><br>Image:<br>Cisco AP Software, (ap1g6a),<br>[sjc-ads-2610:/nobackup/rthangac/work/gh_c8_20sep/router]<br>Compiled Mon Sep 23 05:43:03 PDT 2019<br>ROM: Bootstrap program is U-Boot boot loader<br>BOOTLDR: U-Boot boot loader Version 115                      |
| 2     | 40MHz BW DFS Tests  | DFS Tests with traffic: 20% Traffic Loading using IPERF<br><br>Image:<br>Cisco AP Software, (ap1g6a),<br>[sjc-ads-2610:/nobackup/rthangac/work/gh_c8_20sep/router]<br>Compiled Mon Sep 23 05:43:03 PDT 2019<br>ROM: Bootstrap program is U-Boot boot loader<br>BOOTLDR: U-Boot boot loader Version 115                      |
| 3     | 80MHz BW DFS Tests  | DFS Tests with traffic: 18% Traffic Loading using IPERF<br><br>Image:<br>Cisco AP Software, (ap1g6a),<br>[sjc-ads-2610:/nobackup/rthangac/work/gh_c8_20sep/router]<br>Compiled Mon Sep 23 05:43:03 PDT 2019<br>ROM: Bootstrap program is U-Boot boot loader<br>BOOTLDR: U-Boot boot loader Version 115                      |
| 4     | 160MHz BW DFS Tests | DFS tests with traffic: 36% Traffic Loading using IPERF<br><br>Image:<br>Cisco AP Software, (ap1g6a),<br>[build-lnx-059:/san2/BUILD/workspace/Nightly-Cheetah-ap1g6a-mfg-c171_throttle]<br>Compiled Tue Oct 22 08:04:29 PDT 2019<br>ROM: Bootstrap program is U-Boot boot loader<br>BOOTLDR: U-Boot boot loader Version 118 |



## **Appendix A: Dynamic Frequency Selection (DFS)**

15.407: U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

U-NII devices operating in the 5.25-5.35 GHz and 5.47-5.725 GHz bands shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems.

### **A.1 UNII Device Description**

Refer to the Radio Theory of Operation for supported modes. The modes included in this report represent the worst case data for all modes. The following antennas are supported by this product series. The data included in this report represent the worst case data for all antennas.

*List of External Antennas Supported on C9130AXE*

| Part Number        | Description                                                                                                                                                                                                                    | Gain                                            |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| C-ANT9101=         | Ceiling Mount Omni Self-Identifying Antenna with Bluetooth, 8-port, with DART connectors.                                                                                                                                      | 2 dBi (2.4 GHz)<br>6 dBi (5 GHz)<br>3 dBi (BLE) |
| C-ANT9102=         | Pole or Wall Mount Omni Self-Identifying Antenna with Bluetooth, 8-port, with DART connectors.                                                                                                                                 | 4 dBi (2.4 GHz)<br>4 dBi (5 GHz)<br>4 dBi (BLE) |
| C-ANT9103=         | Pole or Wall mount 75° Directional Self-Identifying Antenna with Bluetooth, 8-port, with DART connectors.                                                                                                                      | 6 dBi (2.4 GHz)<br>6 dBi (5 GHz)<br>6 dBi (BLE) |
| AIR-ANT2524V4C-R=  | Ceiling Mount Omni Antenna, 4-port, with RP-TNC connectors.<br><br> <b>Note</b> <u>Connect to AP using AIR-CAB002-D8-R=.</u>                  | 2 dBi (2.4 GHz)<br>4 dBi (5 GHz)                |
| AIR-ANT2524V4C-RS= | Ceiling Mount Omni Self-Identifying Antenna, 4-port, with RP-TNC connectors.<br><br> <b>Note</b> <u>Connect to AP using AIR-CAB002-D8-R=.</u> | 2 dBi (2.4 GHz)<br>4 dBi (5 GHz)                |
| AIR-ANT2544V4M-R=  | Wall Mount Omni Antenna, 4-port, with RP-TNC connectors.<br><br> <b>Note</b> <u>Connect to AP using AIR-CAB002-D8-R=.</u>                     | 4 dBi (2.4 GHz)<br>4 dBi (5 GHz)                |
| AIR-ANT2544V4M-RS= | Wall Mount Omni Self-Identifying Antenna, 4-port, with RP-TNC connectors.<br><br> <b>Note</b> <u>Connect to AP using AIR-CAB002-D8-R=.</u>    | 4 dBi (2.4 GHz)<br>4 dBi (5 GHz)                |
| AIR-ANT2566D4M-R=  | 60° Patch Antenna, 4-port, with RP-TNC connectors. <sup>1</sup><br><br> <b>Note</b> <u>Connect to AP using AIR-CAB002-D8-R=.</u>            | 6 dBi (2.4 GHz)<br>6 dBi (5 GHz)                |
| AIR-ANT2566D4M-RS= | 60° Patch Self-Identifying Antenna, 4-port, with RP-TNC connectors.<br><br> <b>Note</b> <u>Connect to AP using AIR-CAB002-D8-R=.</u>        | 6 dBi (2.4 GHz)<br>6 dBi (5 GHz)                |
| AIR-ANT2566P4W-R=  | Directional Antenna, 4-port, with RP-TNC connectors.<br><br> <b>Note</b> <u>Connect to AP using AIR-CAB002-D8-R=.</u>                       | 6 dBi (2.4 GHz)<br>6 dBi (5 GHz)                |
| AIR-ANT2566P4W-RS= | Directional Self-Identifying Antenna, 4-port, with RP-TNC connectors.<br><br> <b>Note</b> <u>Connect to AP using AIR-CAB002-D8-R=.</u>      | 6 dBi (2.4 GHz)<br>6 dBi (5 GHz)                |

The maximum EIRP of the 5GHz equipment is 29 dBm, and the minimum possible EIRP is 10 dBm. Above are the available 50 ohm antenna assemblies and their corresponding gains. 4dBi gain was used to set the -60 dBm threshold level during calibration of the test setup. There was also an additional cable loss of 2dB, so some test cases were performed at -58dBm.

System testing was performed with IPERF traffic that streams continuously from the Master to the Client IP based system. The Master requires 122.4s seconds to complete its power-on cycle.

Information regarding the parameters of the detected Radar Waveforms is not available to the end user.

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

## A.2 DFS Detection Thresholds

### 1. Interference Threshold values, Master or Client incorporating In-Service Monitoring

| Maximum Transmit Power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Value<br>(See Notes 1, 2, and 3) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| EIRP $\geq$ 200 milliwatt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | -64 dBm                          |
| EIRP < 200 milliwatt and<br>power spectral density < 10 dBm/MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | -62 dBm                          |
| EIRP < 200 milliwatt that do not meet the power spectral<br>density requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | -64 dBm                          |
| <p><b>Note 1:</b> This is the level at the input of the receiver assuming a 0 dBi receive antenna.</p> <p><b>Note 2:</b> 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.</p> <p><b>Note3:</b> EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01 v02r01.</p> |                                  |

### 2. DFS Response requirement values

| Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Value                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <i>Non-occupancy period</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Minimum 30 minutes                                                                                              |
| <i>Channel Availability Check Time</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 60 seconds                                                                                                      |
| <i>Channel Move Time</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 10 seconds<br>See Note 1.                                                                                       |
| <i>Channel Closing Transmission Time</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 200 milliseconds + an aggregate<br>of 60 milliseconds over<br>remaining 10 second period.<br>See Notes 1 and 2. |
| <i>U-NII Detection Bandwidth</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Minimum 100% of the U-NII 99%<br>transmission power bandwidth.<br>See Note 3.                                   |
| <p><b>Note 1:</b> <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.</p> <p><b>Note 2:</b> The <i>Channel Closing Transmission Time</i> is comprised of 200 milliseconds starting at the beginning of the <i>Channel Move Time</i> plus any additional intermittent control signals required to facilitate a <i>Channel</i> move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.</p> <p><b>Note 3:</b> During the <i>U-NII Detection Bandwidth</i> detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.</p> |                                                                                                                 |

### A.3 Radar Test Waveforms

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

#### 1. Short Pulse Radar Test Waveforms

| Radar Type                                                                                                                                                                                                                                                   | Pulse Width (μsec) | PRI (μsec)                                                                                                                                                    | Number of Pulses                                                                                                 | Minimum Percentage of Successful Detection | Minimum Numbers of Trials |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------|
| 0                                                                                                                                                                                                                                                            | 1                  | 1428                                                                                                                                                          | 18                                                                                                               | See Note 1                                 | See Note 1                |
| 1                                                                                                                                                                                                                                                            | 1                  | Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a                                                                     | Roundup $\left\{ \left( \frac{1}{360} \right) \cdot \left( \frac{19 \cdot 10^6}{PRI_{\mu sec}} \right) \right\}$ | 60%                                        | 30                        |
|                                                                                                                                                                                                                                                              |                    | Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A |                                                                                                                  |                                            |                           |
| 2                                                                                                                                                                                                                                                            | 1-5                | 150-230                                                                                                                                                       | 23-29                                                                                                            | 60%                                        | 30                        |
| 3                                                                                                                                                                                                                                                            | 6-10               | 200-500                                                                                                                                                       | 16-18                                                                                                            | 60%                                        | 30                        |
| 4                                                                                                                                                                                                                                                            | 11-20              | 200-500                                                                                                                                                       | 12-16                                                                                                            | 60%                                        | 30                        |
| Aggregate (Radar Types 1-4)                                                                                                                                                                                                                                  |                    |                                                                                                                                                               |                                                                                                                  | 80%                                        | 120                       |
| <b>Note 1:</b> Short Pulse Radar Type 0 shall only be used for the channel availability and detection bandwidth tests. It should be noted that any of the radar test waveforms 0 – 4 can be used for the channel availability and detection bandwidth tests. |                    |                                                                                                                                                               |                                                                                                                  |                                            |                           |

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

For example if in Short Pulse Radar Type 1 Test B a PRI of 3066  $\mu$ sec is selected, the number of pulses would be  $\text{Roundup}\left\{\left(\frac{1}{360}\right) \cdot \left(\frac{19 \cdot 10^6}{3066}\right)\right\} = \text{Roundup}\{17.2\} = 18$

**Table 5a – Pulse Repetition Intervals Values for Test A**

| <b>Pulse Repetition<br/>Frequency<br/>Number</b> | <b>Pulse Repetition Frequency<br/>(Pulses Per Second)</b> | <b>Pulse Repetition<br/>Interval (Microseconds)</b> |
|--------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------|
| 1                                                | 1930.5                                                    | 518                                                 |
| 2                                                | 1858.7                                                    | 538                                                 |
| 3                                                | 1792.1                                                    | 558                                                 |
| 4                                                | 1730.1                                                    | 578                                                 |
| 5                                                | 1672.2                                                    | 598                                                 |
| 6                                                | 1618.1                                                    | 618                                                 |
| 7                                                | 1567.4                                                    | 638                                                 |
| 8                                                | 1519.8                                                    | 658                                                 |
| 9                                                | 1474.9                                                    | 678                                                 |
| 10                                               | 1432.7                                                    | 698                                                 |
| 11                                               | 1392.8                                                    | 718                                                 |
| 12                                               | 1355.0                                                    | 738                                                 |
| 13                                               | 1319.3                                                    | 758                                                 |
| 14                                               | 1285.3                                                    | 778                                                 |
| 15                                               | 1253.1                                                    | 798                                                 |
| 16                                               | 1222.5                                                    | 818                                                 |
| 17                                               | 1193.3                                                    | 838                                                 |
| 18                                               | 1165.6                                                    | 858                                                 |
| 19                                               | 1139.0                                                    | 878                                                 |
| 20                                               | 1113.6                                                    | 898                                                 |
| 21                                               | 1089.3                                                    | 918                                                 |
| 22                                               | 1066.1                                                    | 938                                                 |
| 23                                               | 326.2                                                     | 3066                                                |

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

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

## 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             |

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

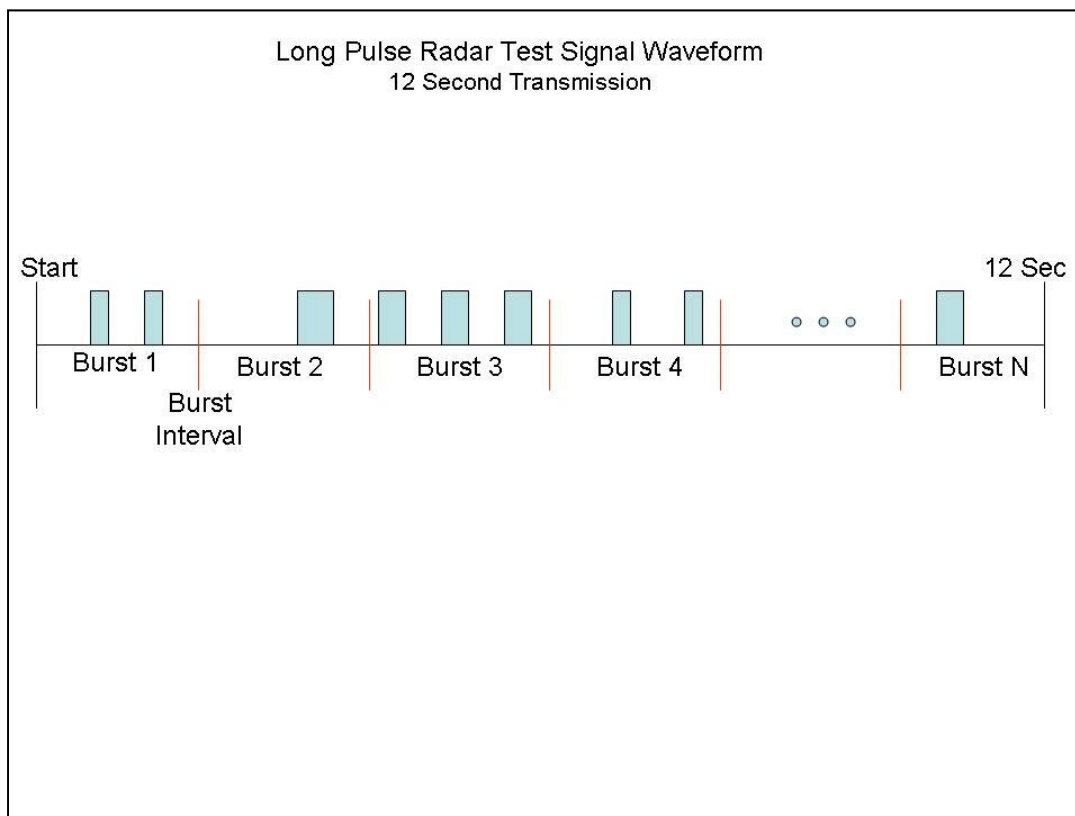
Each waveform is defined as follows:

- 1) The transmission period for the Long Pulse Radar test signal is 12 seconds.
- 2) 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.
- 3) 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.
- 4) 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.
- 5) Each pulse has a linear FM chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a Burst will have the same chirp width. 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.
- 6) 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.
- 7) 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 randomly.

### A representative example of a Long Pulse radar test waveform:

- 1) The total test signal length is 12 seconds.
- 2) 8 Bursts are randomly generated for the Burst Count.
- 3) Burst 1 has 2 randomly generated pulses.
- 4) The pulse width (for both pulses) is randomly selected to be 75 microseconds.
- 5) The PRI is randomly selected to be at 1213 microseconds.
- 6) Bursts 2 through 8 are generated using steps 3 – 5.
- 7) Each Burst is contained in even intervals of 1,500,000 microseconds. The starting location for Pulse 1, Burst 1 is randomly generated (1 to 1,500,000 minus the total Burst 1 length + 1 random PRI interval) at the 325,001 microsecond step. Bursts 2 through 8 randomly fall in successive 1,500,000 microsecond intervals (i.e. Burst 2 falls in the 1,500,001 – 3,000,000 microsecond range).

### Graphical Representation of a Long Pulse radar Test Waveform



### 3. Long Pulse Radar Test Waveform

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

For the Frequency Hopping Radar Type, the same *Burst* parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected<sup>1</sup> from the hopping sequence defined by the following algorithm:

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

**Appendix B: Dynamic Frequency Selection / Test Results****Standards Reference**

FCC 15.407 / RSS-247

**Test Procedure**

Ref. KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

|                                                                                                |
|------------------------------------------------------------------------------------------------|
| DFS Test parameters                                                                            |
| Span = 0 Hz<br>RBW $\geq$ 3 MHz<br>VBW $\geq$ 3 MHz<br>Detector = Peak<br>Trace = Single Sweep |

**Samples, Systems, and Modes**

| System Number | Description | Samples | System under test                   | Support equipment                   |
|---------------|-------------|---------|-------------------------------------|-------------------------------------|
| 1             | EUT         | S01     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
|               | Support     | S02     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

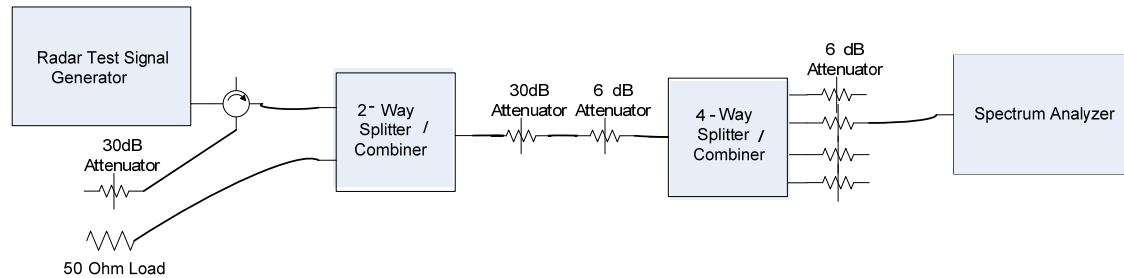
|                                       |                                                  |
|---------------------------------------|--------------------------------------------------|
| <b>Tested By :</b><br>Johanna Knudsen | <b>Date of testing:</b><br>15-OCT-19 - 05-DEC-19 |
| <b>Test Result : PASS</b>             |                                                  |

**Test Equipment**

See Appendix C for list of test equipment

The following equipment setup was used to calibrate the conducted Radar Waveform. A spectrum analyzer was used to establish the test signal level for each radar type. During this process there were no transmissions by either the Master or Client Device. The spectrum analyzer was switched to the zero span (Time Domain) mode at the frequency of the Radar Waveform generator. Peak detection was utilized. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to 3 MHz.

The signal generator amplitude was set so that the power level measured at the spectrum analyzer was -63dBm.

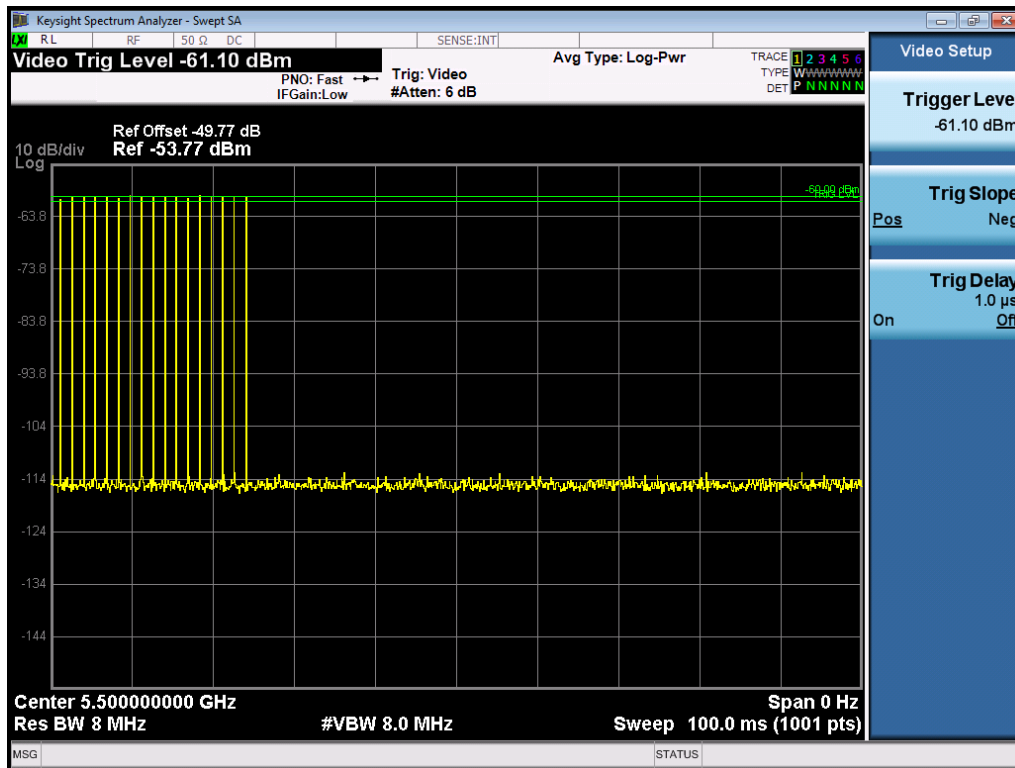


**Conducted Calibration Setup**

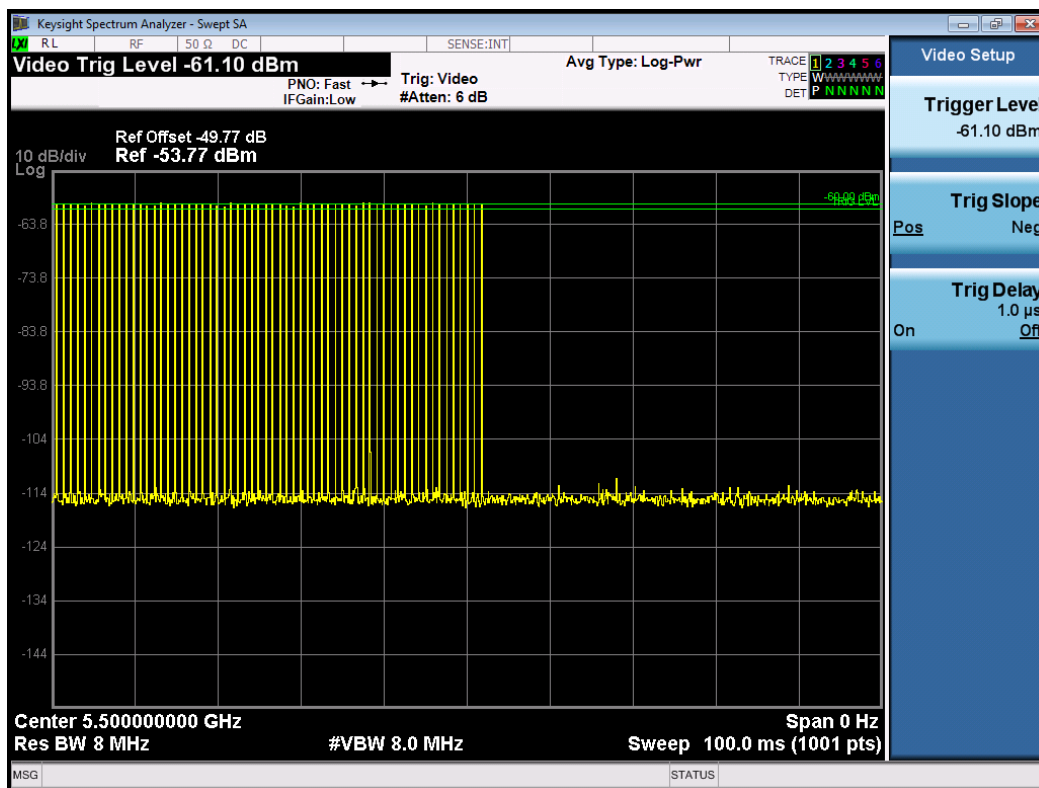
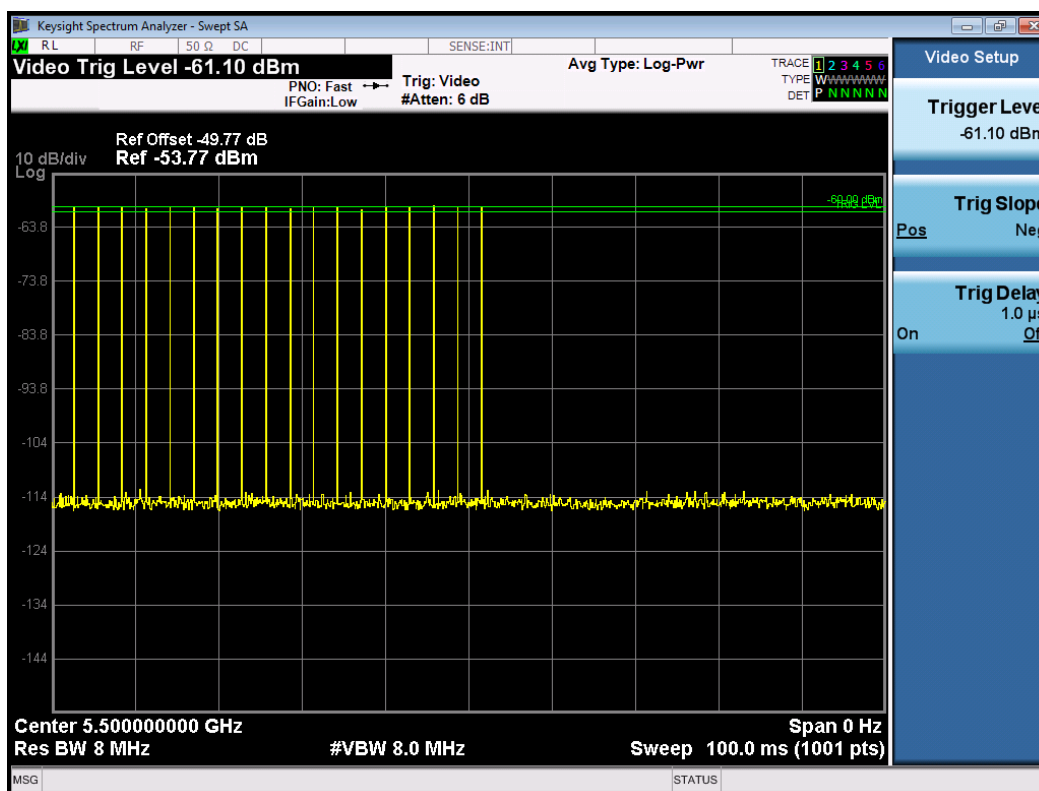
## Calibration Plots

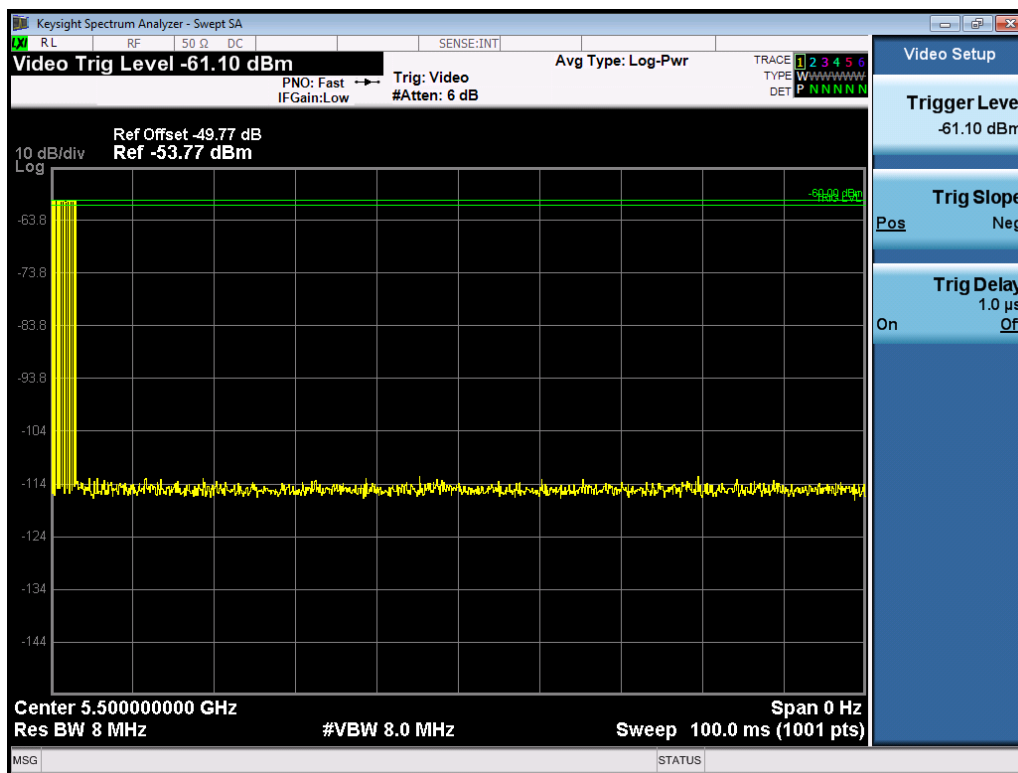
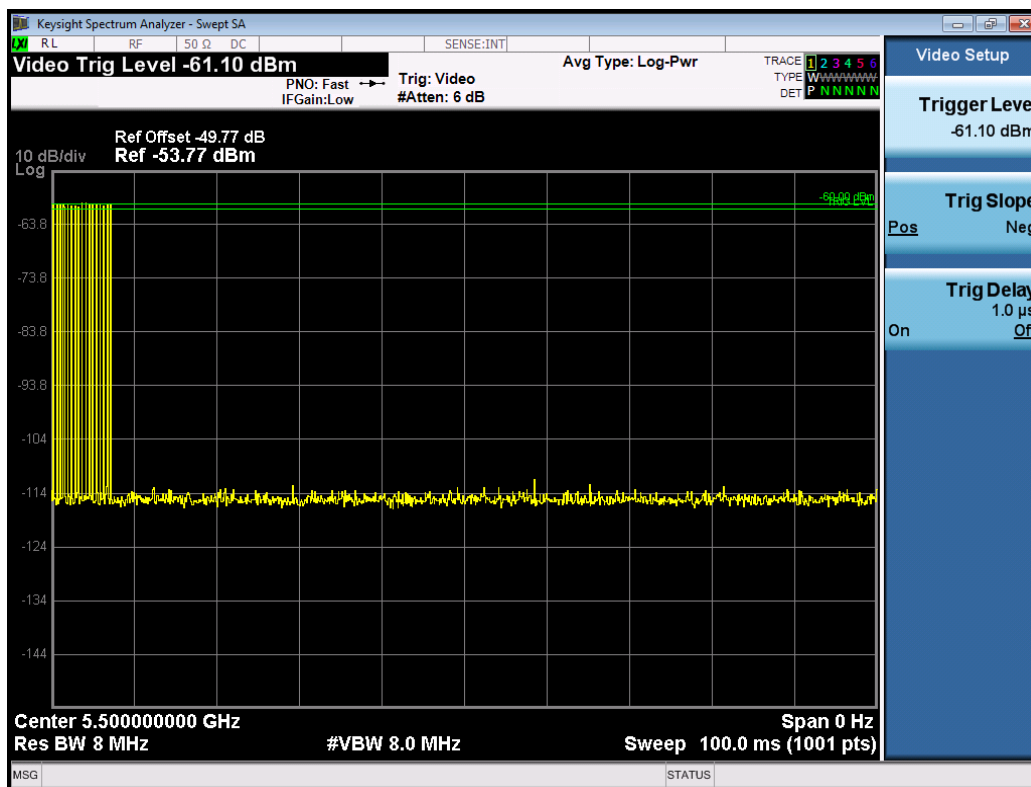
Following are the calibration plots for each of the required radar waveforms.

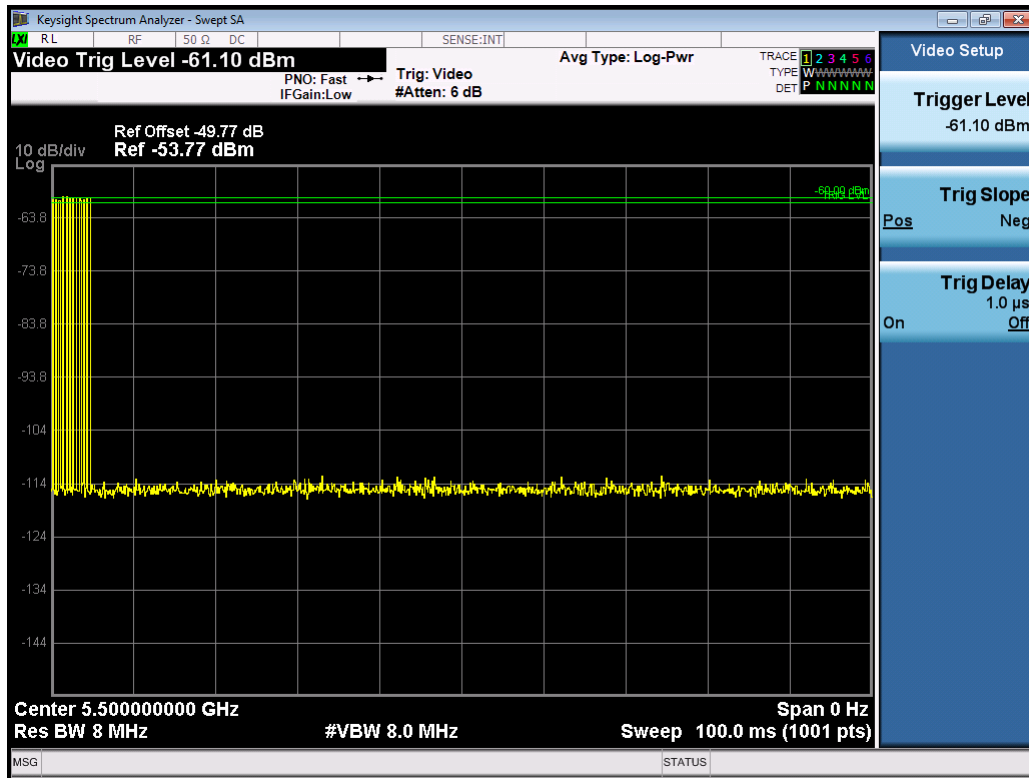
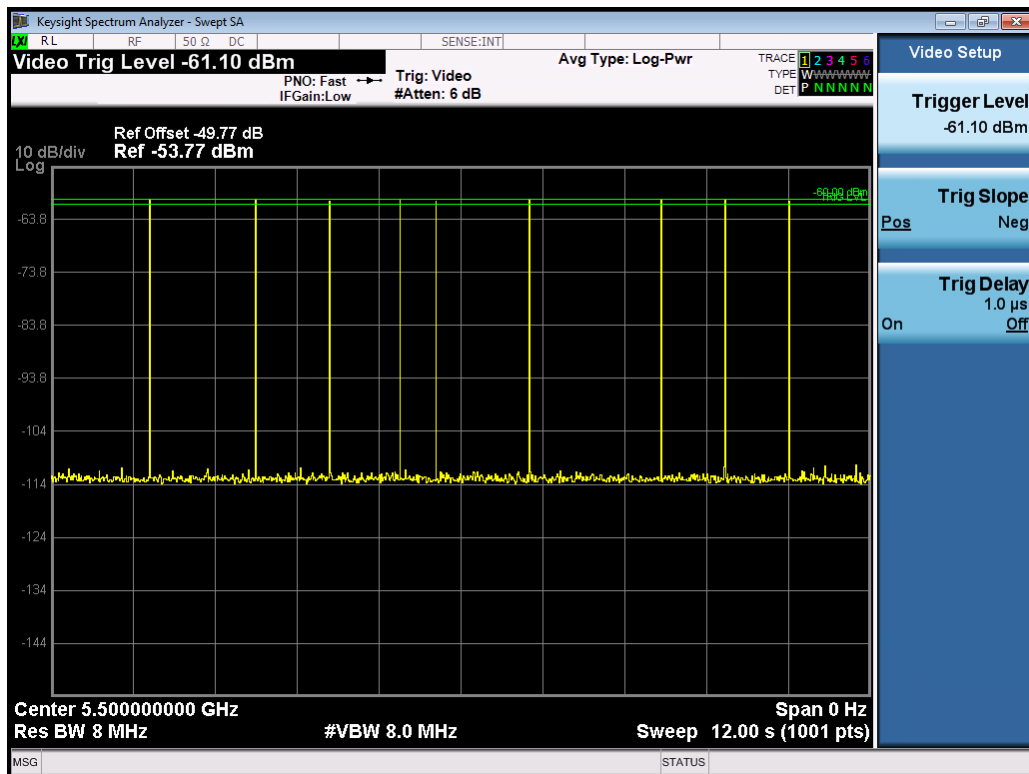
### Calibration Plots – Bandwidth 20

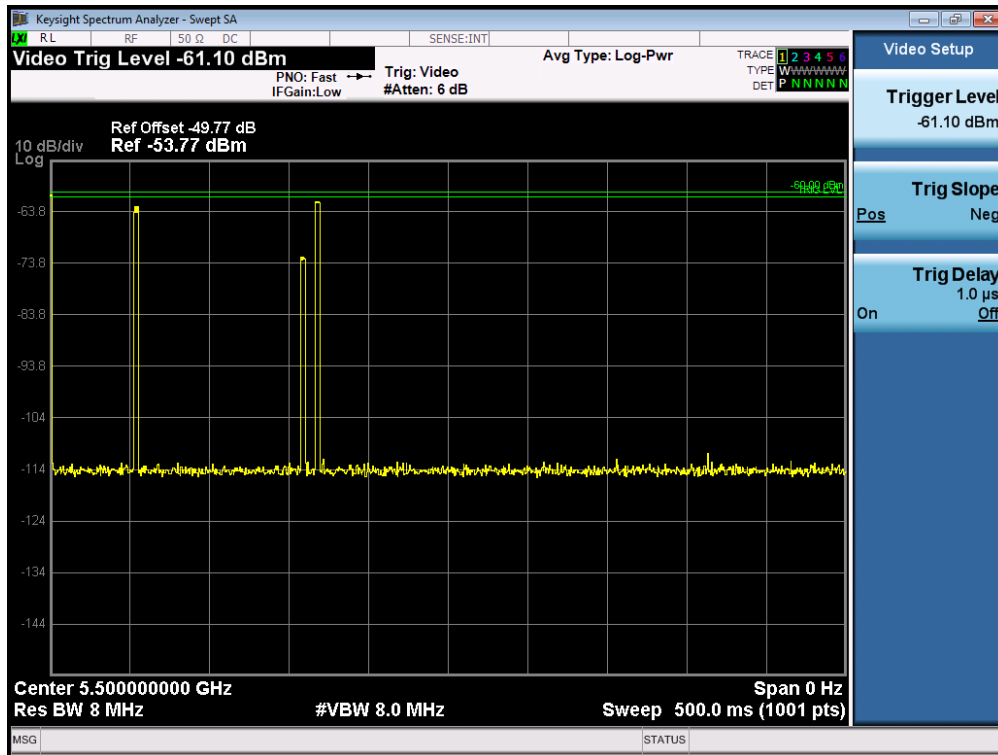


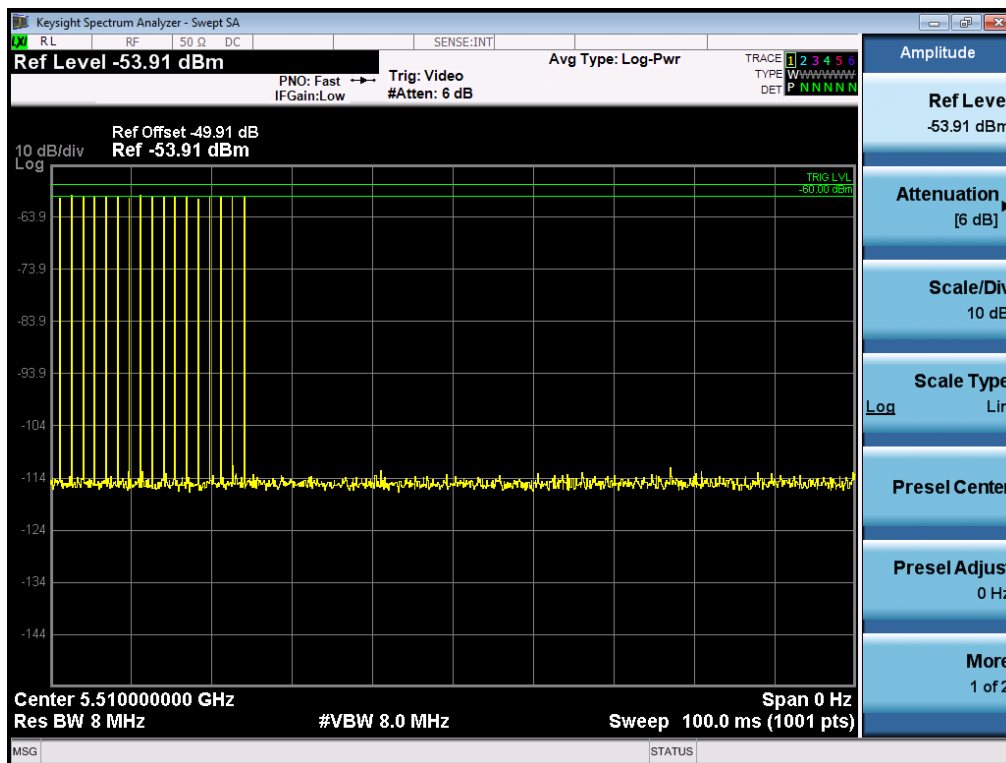
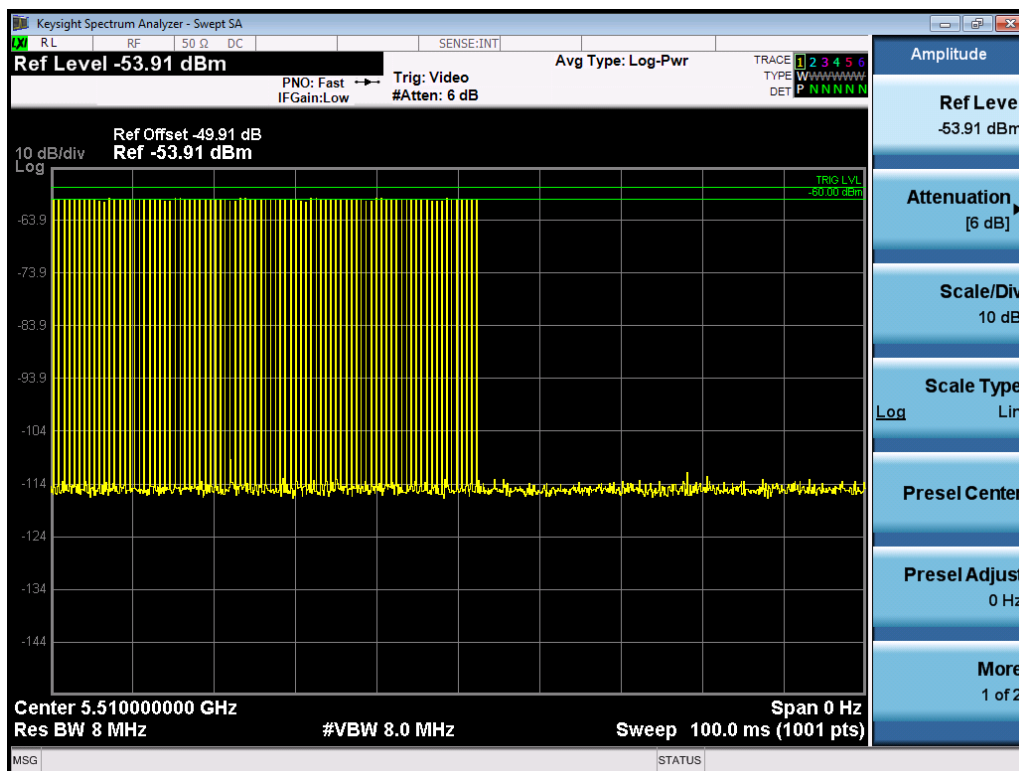
**USA Bin 0 Radar Calibration BW20**

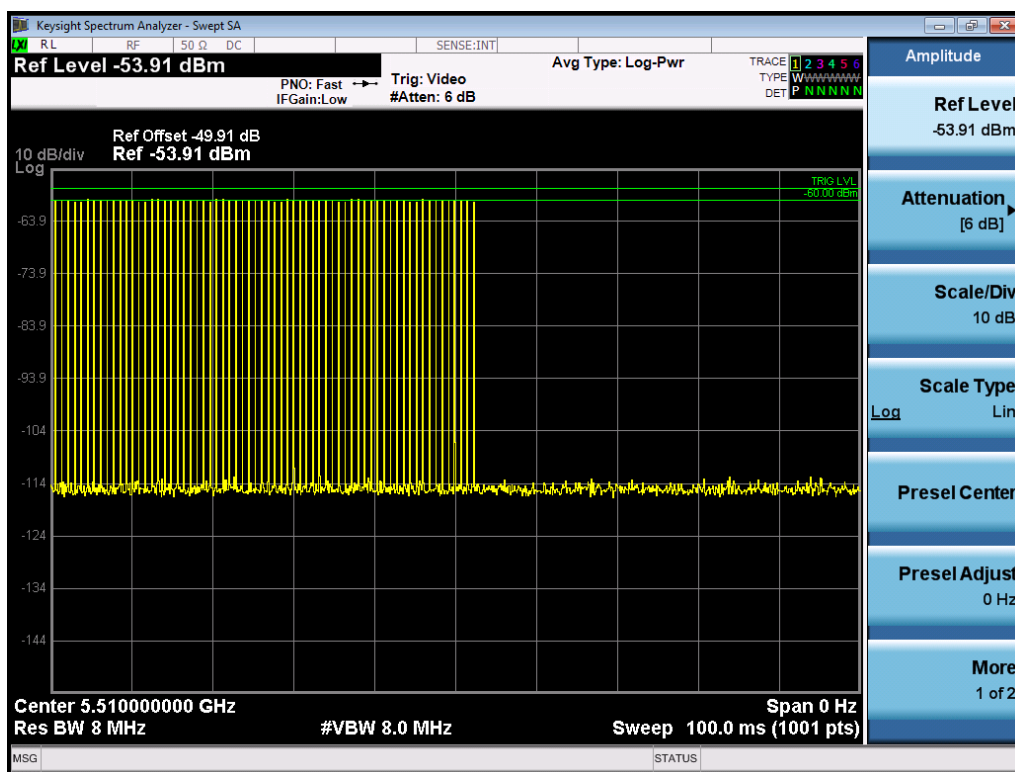
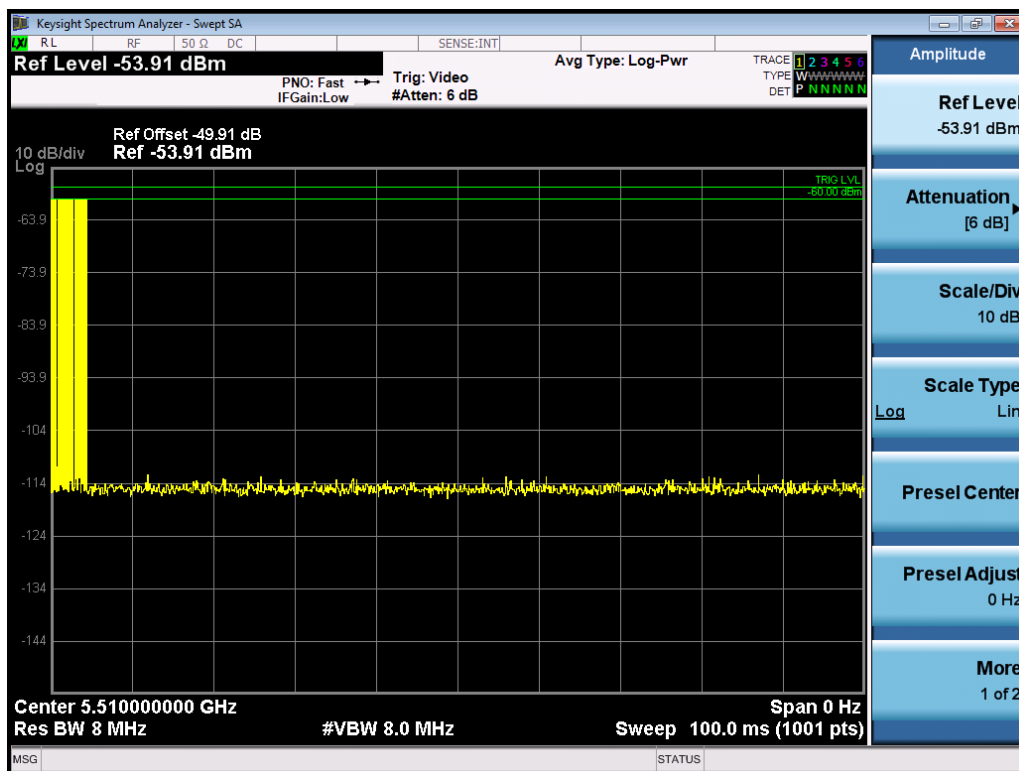
**USA Bin 1A Radar Calibration BW20****USA Bin 1B Radar Calibration BW20**

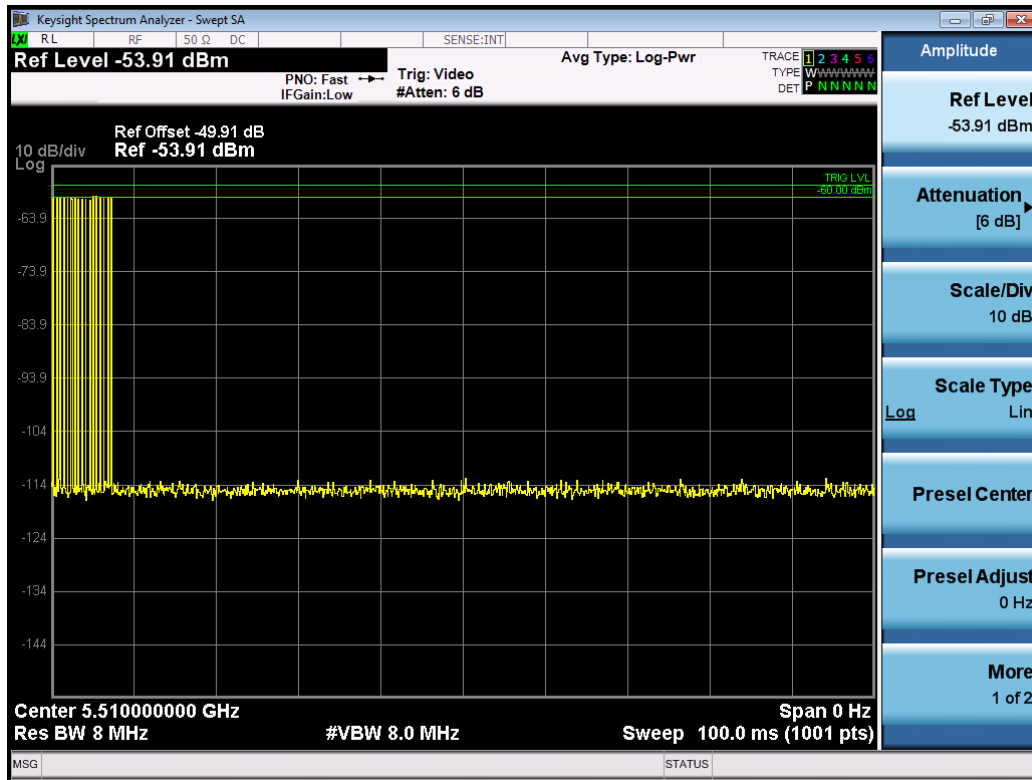
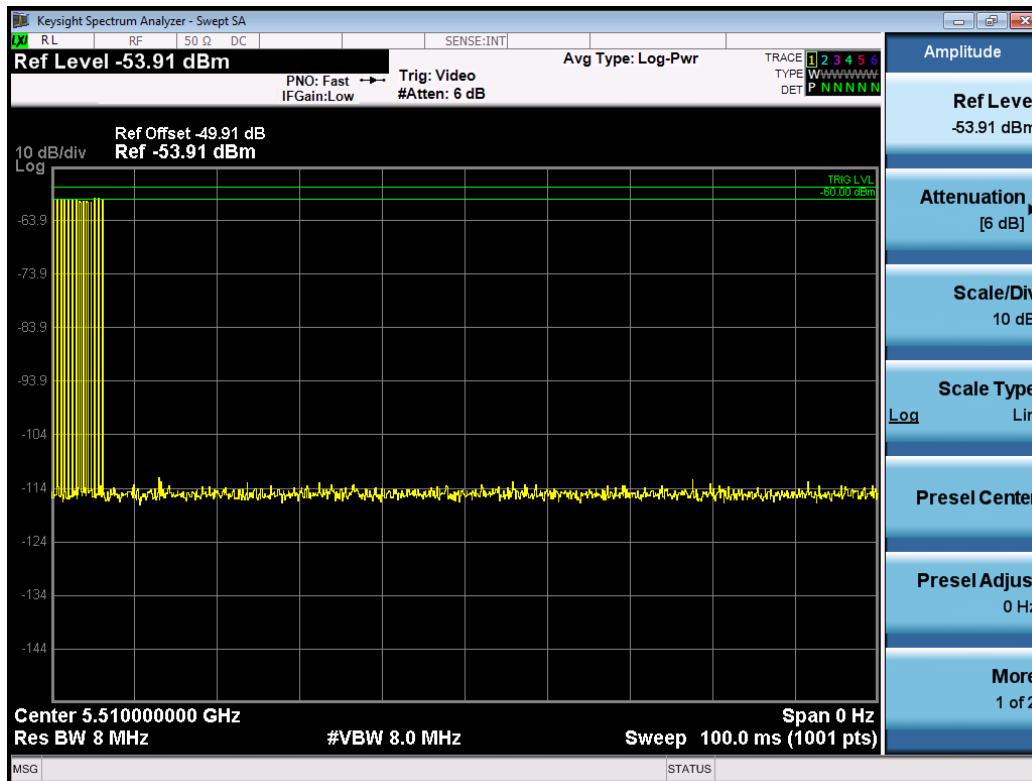
**USA Bin 2 Radar Calibration BW20****USA Bin 3 Radar Calibration BW20**

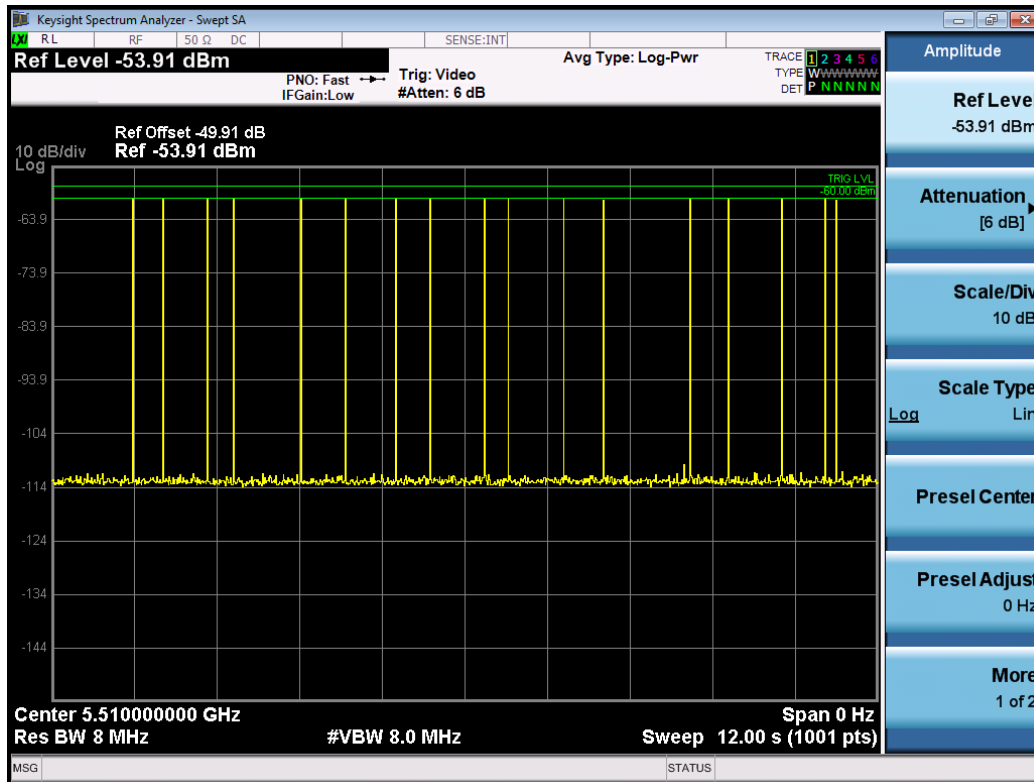
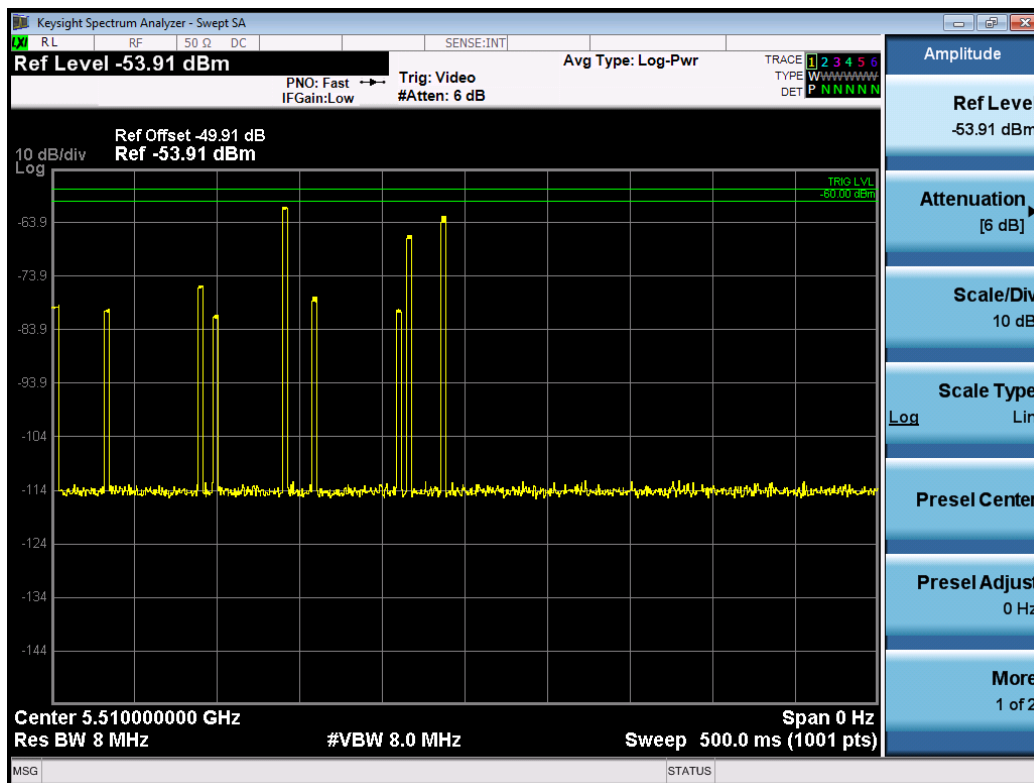
**USA Bin 4 Radar Calibration BW20****USA Bin 5 Radar Calibration BW20**

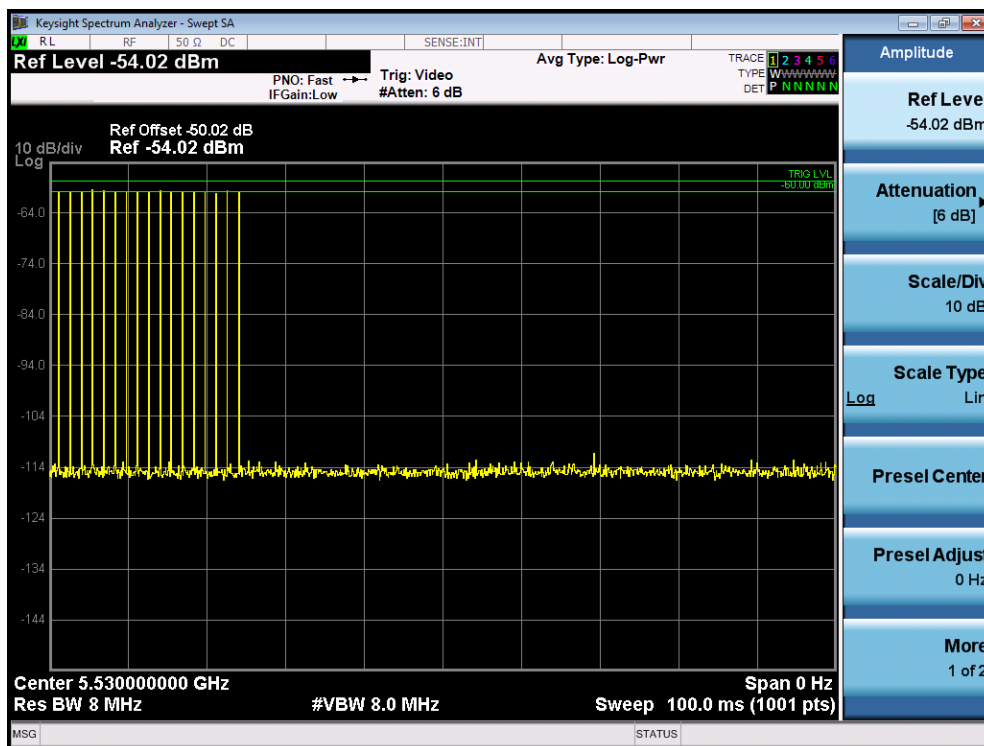
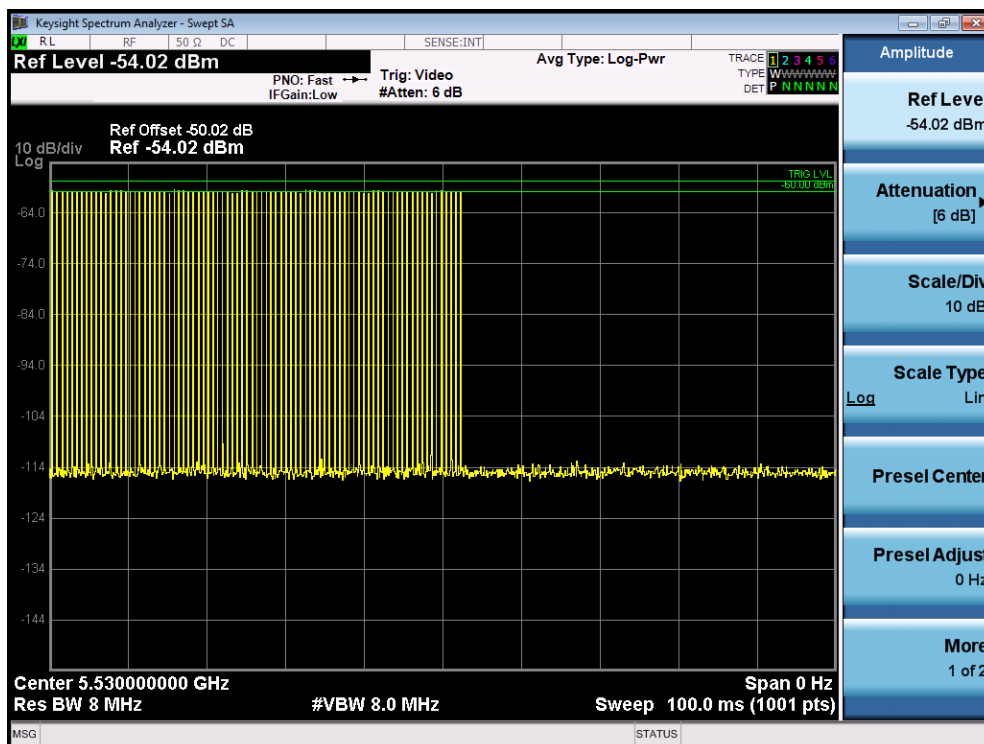
**USA Frequency Hopping Radar Calibration BW20**

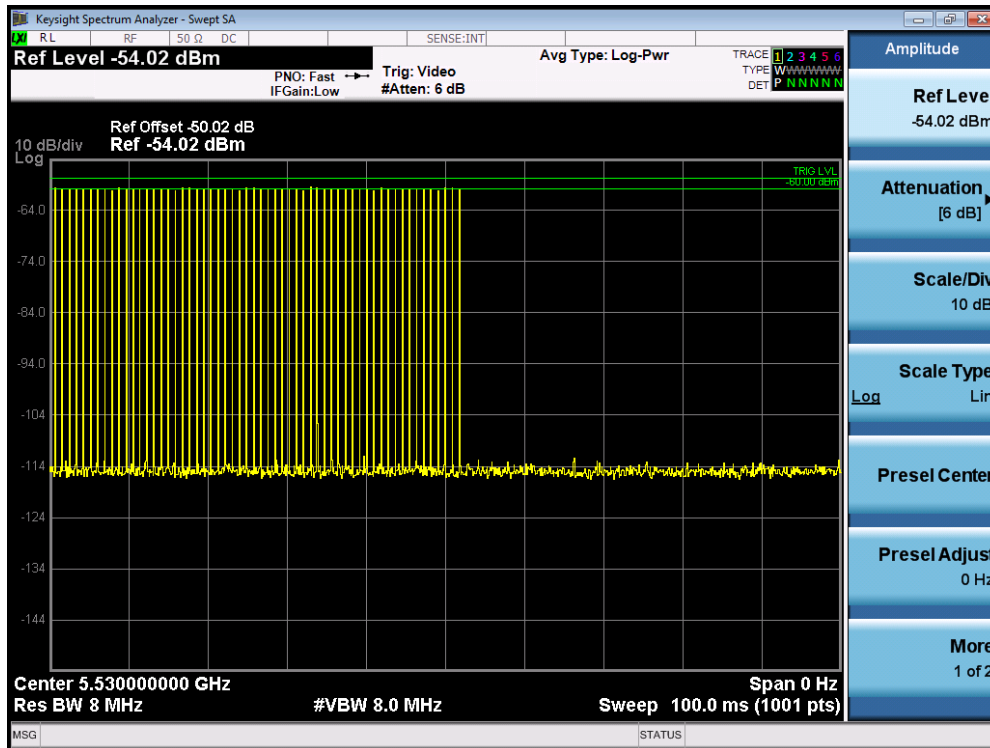
**Calibration Plots – Bandwidth 40****USA Bin 0 Radar Calibration BW40****USA Bin 1A Radar Calibration BW40**

**USA Bin 1B Radar Calibration BW40****USA Bin 2 Radar Calibration BW40**

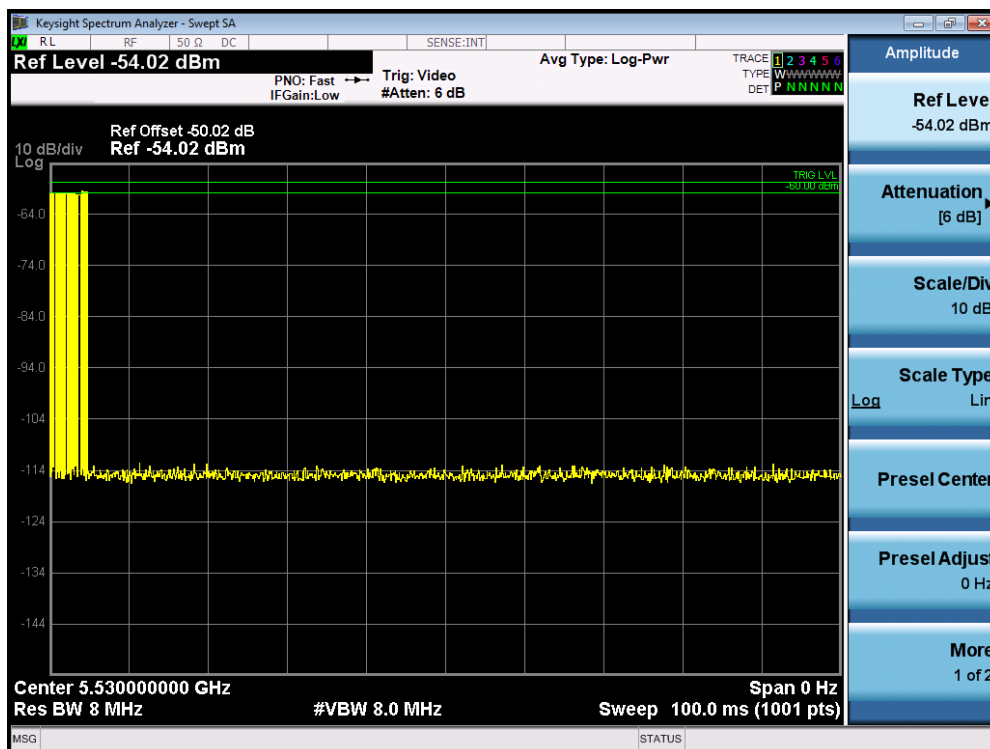
**USA Bin 3 Radar Calibration BW40****USA Bin 4 Radar Calibration BW40**

**USA Bin 5 Radar Calibration BW40****USA Frequency Hopping Radar Calibration BW40**

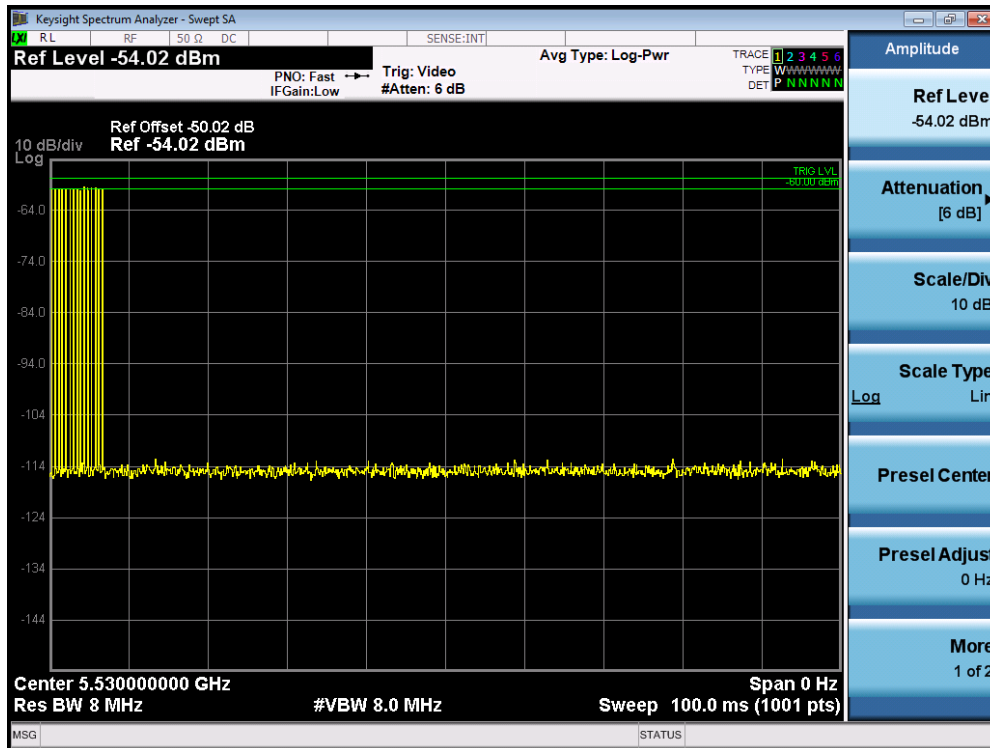
**Calibration Plots – Bandwidth 80****USA Bin 0 Radar Calibration BW80****USA Bin 1A Radar Calibration BW80**



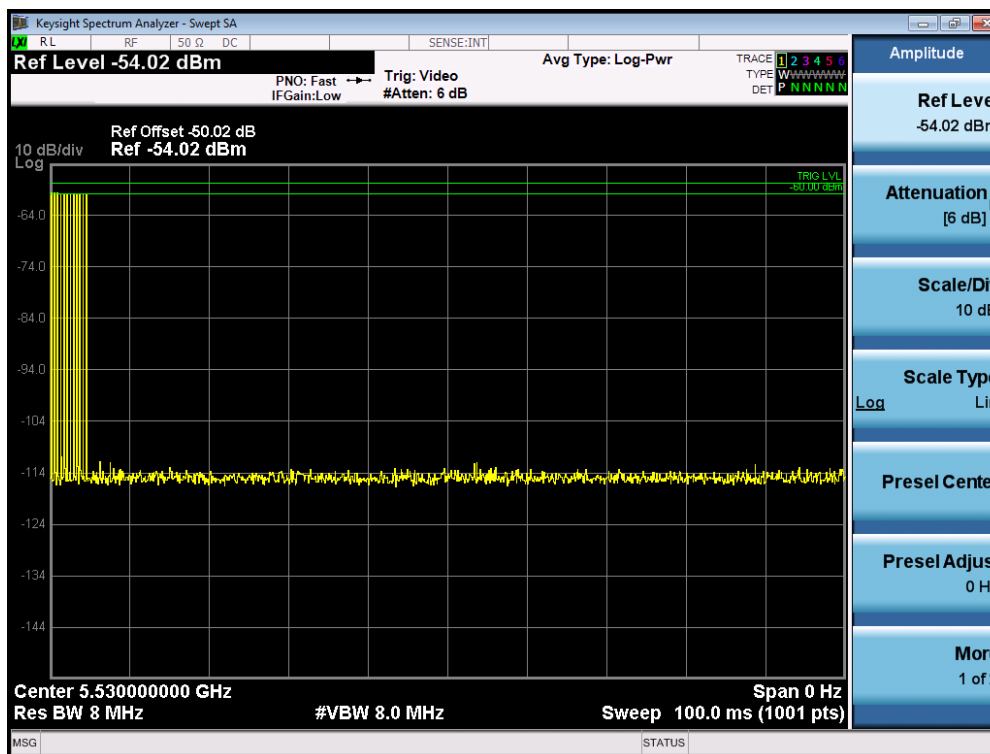
USA Bin 1B Radar Calibration BW80



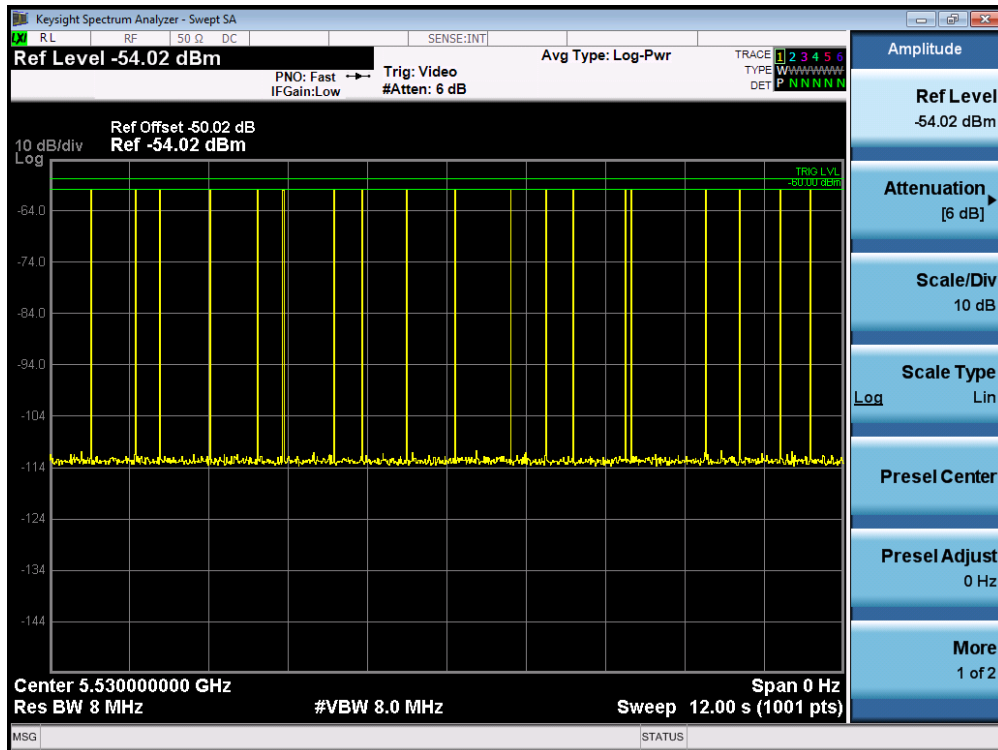
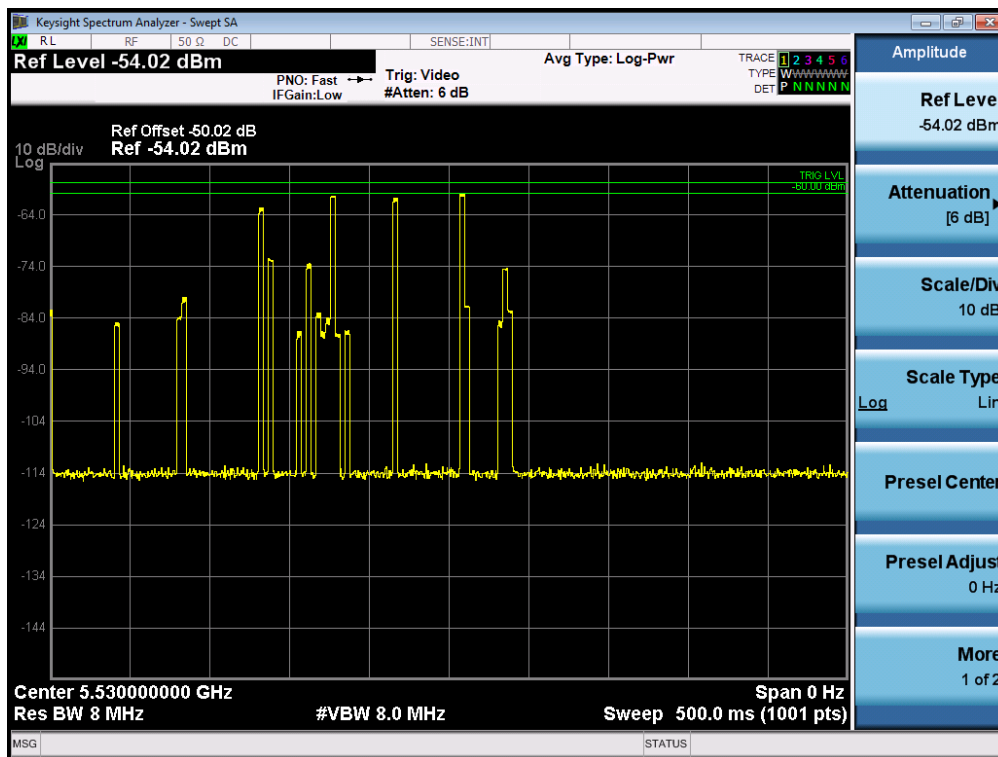
USA Bin 2 Radar Calibration BW80



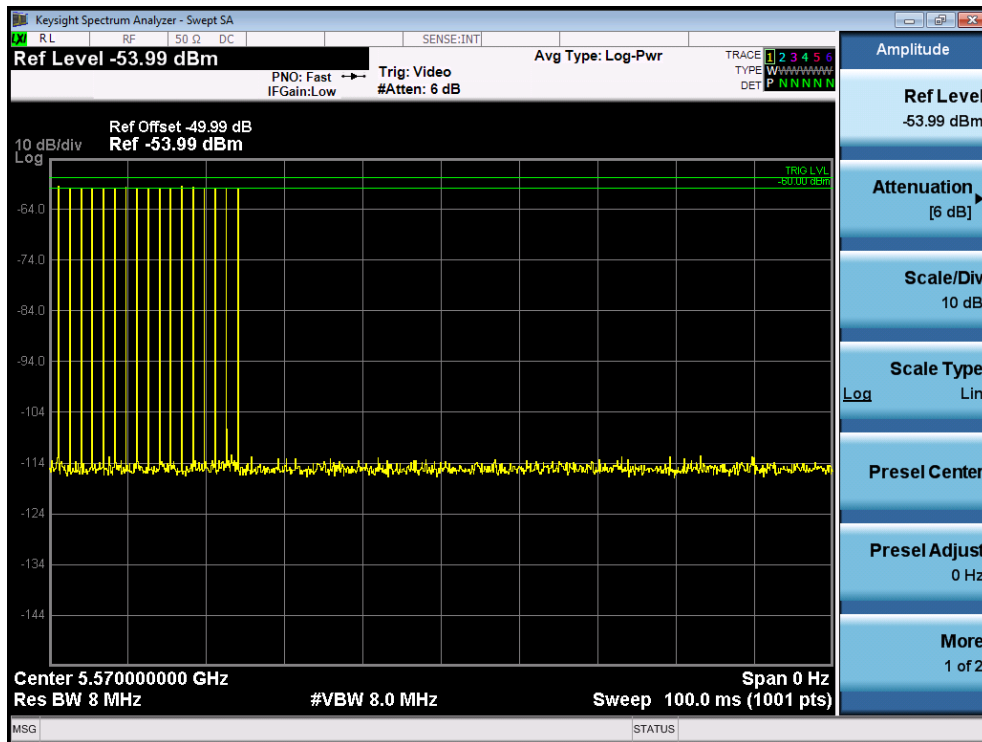
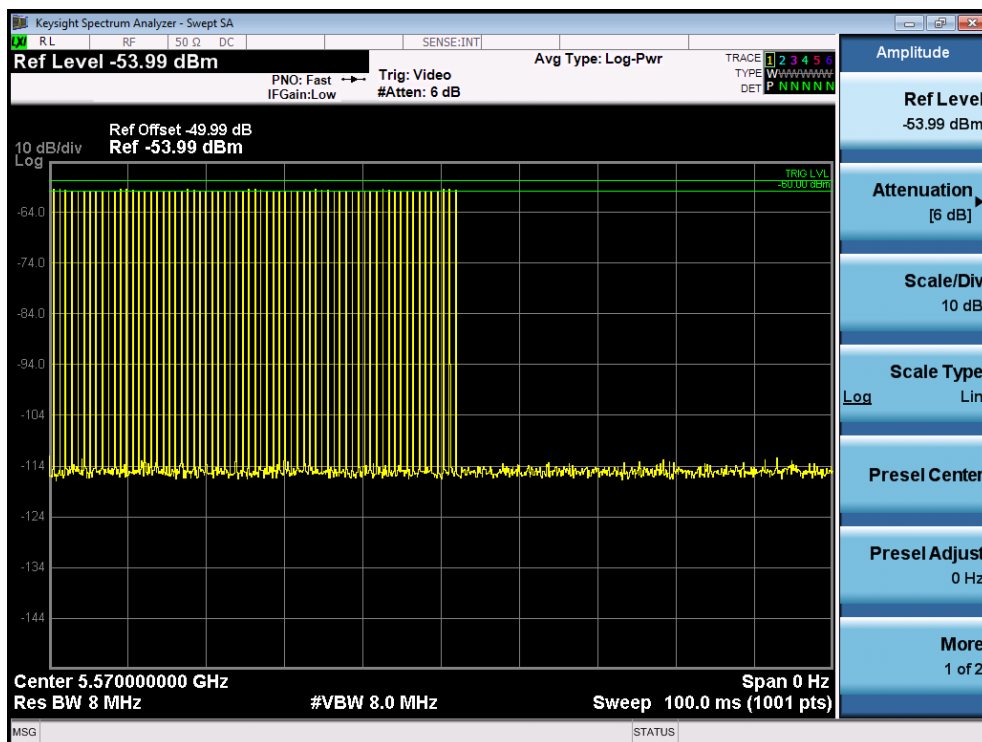
USA Bin 3 Radar Calibration BW80

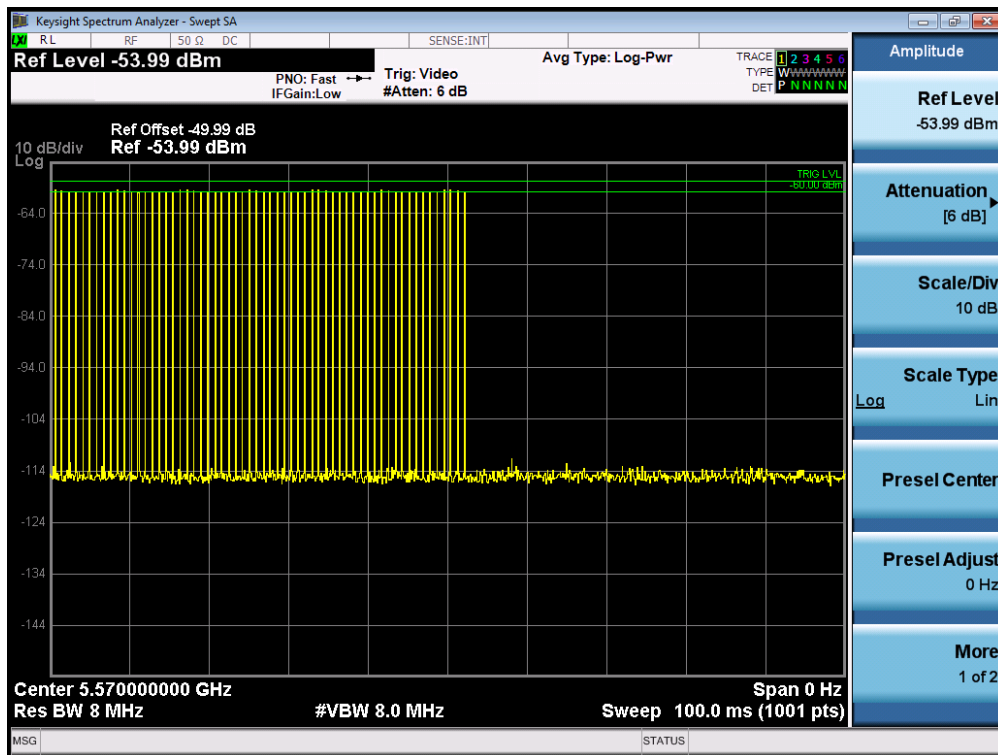
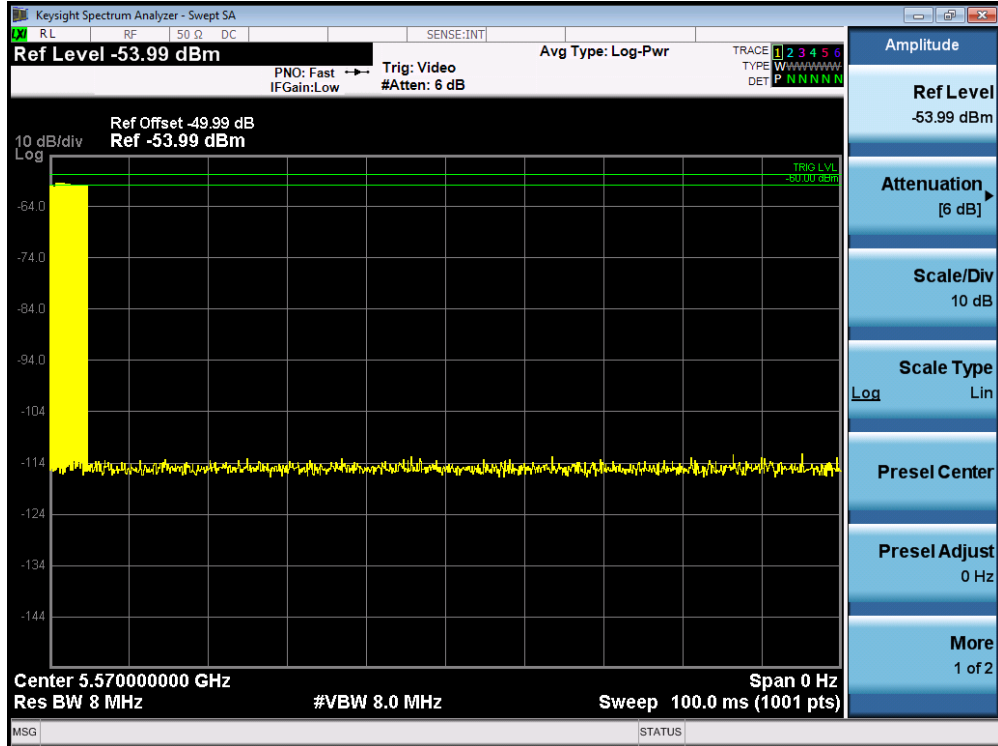


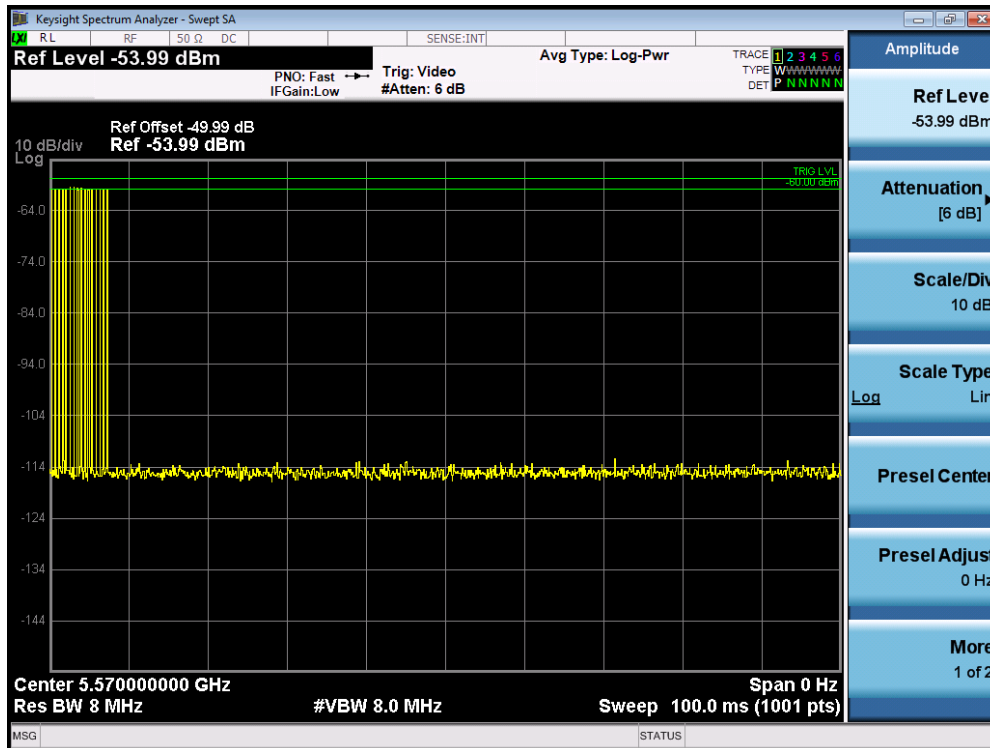
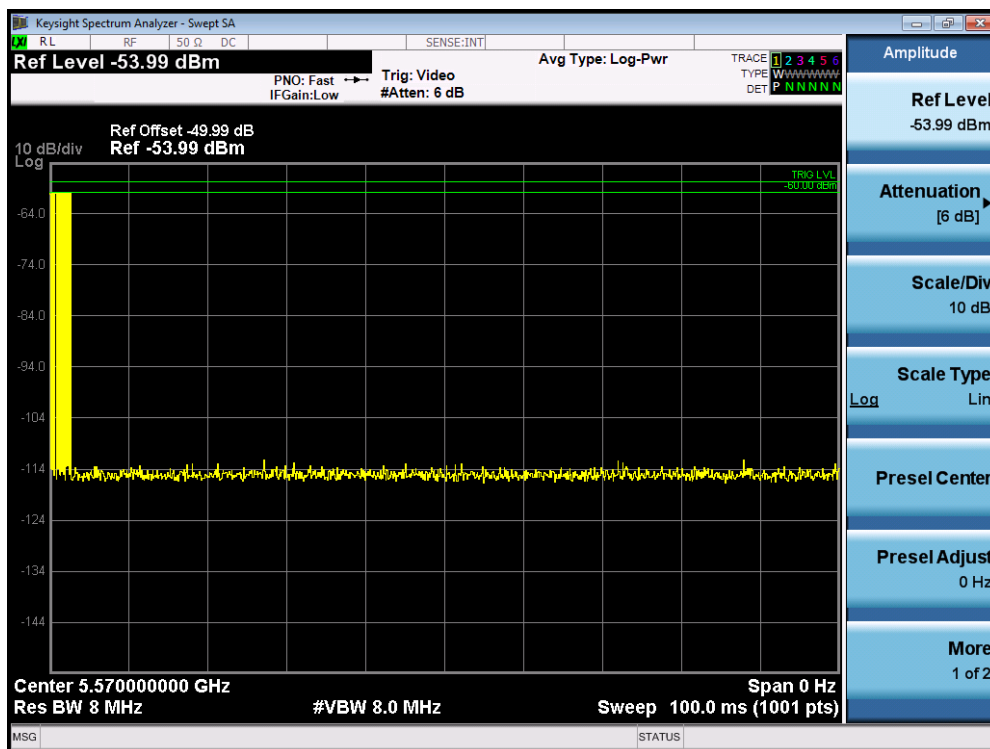
USA Bin 4 Radar Calibration BW80

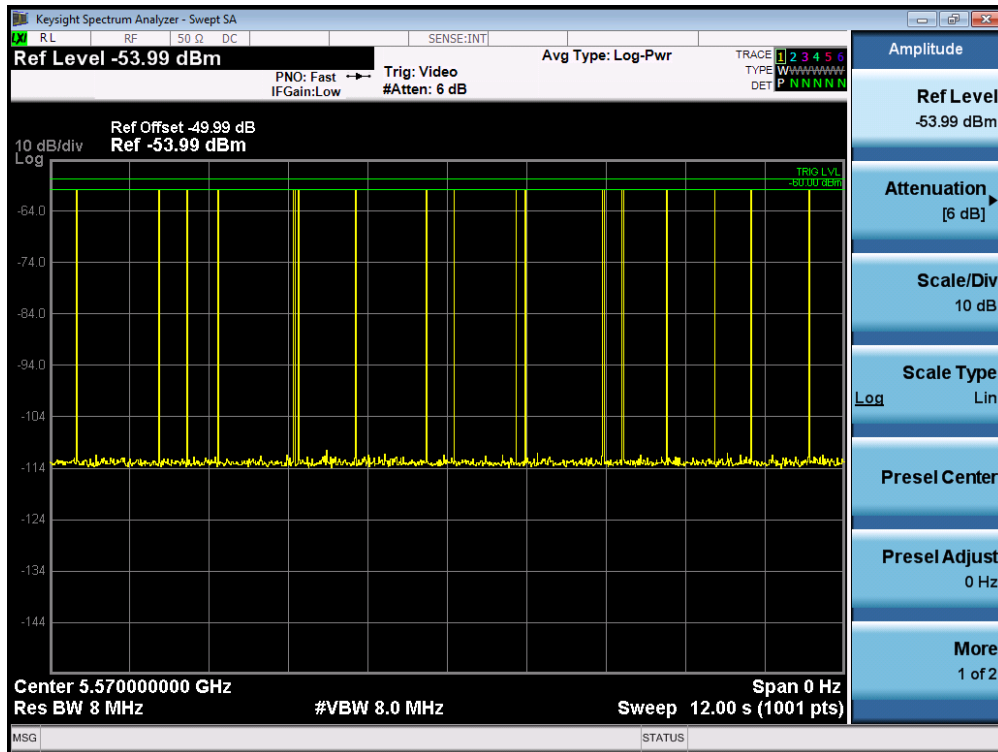
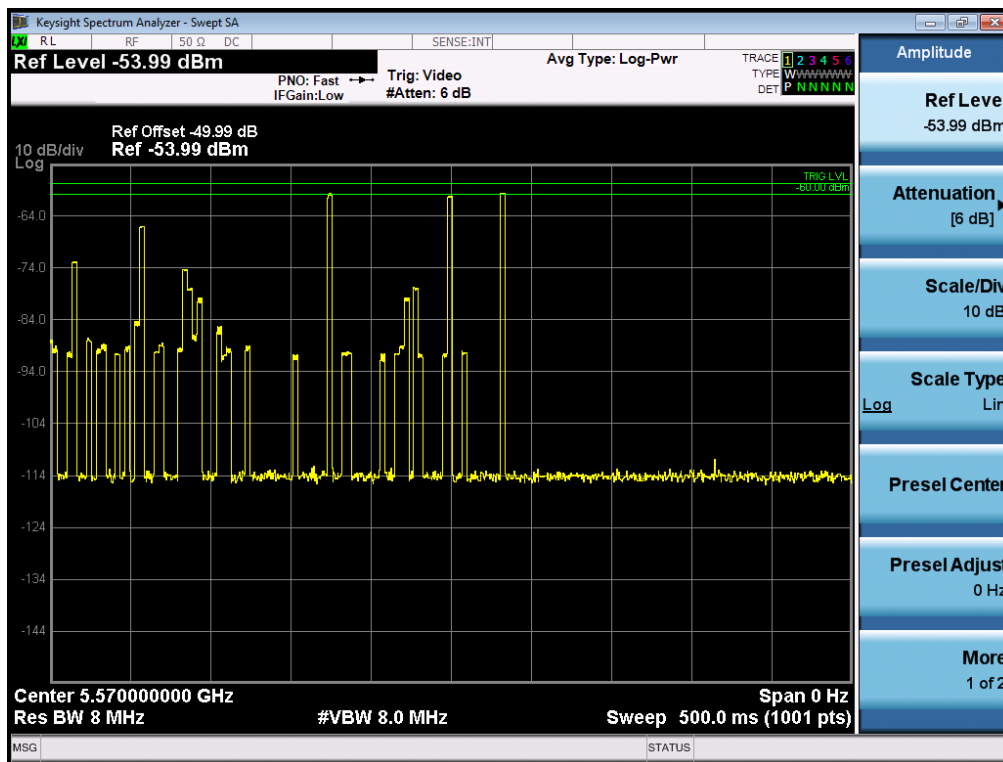
**USA Bin 5 Radar Calibration BW80****USA Frequency Hopping Radar Calibration BW80**

### Calibration Plots – Bandwidth 160

**USA Bin 0 Radar Calibration BW160****USA Bin 1A Radar Calibration BW160**

**USA Bin 1B Radar Calibration BW160****USA Bin 2 Radar Calibration BW160**

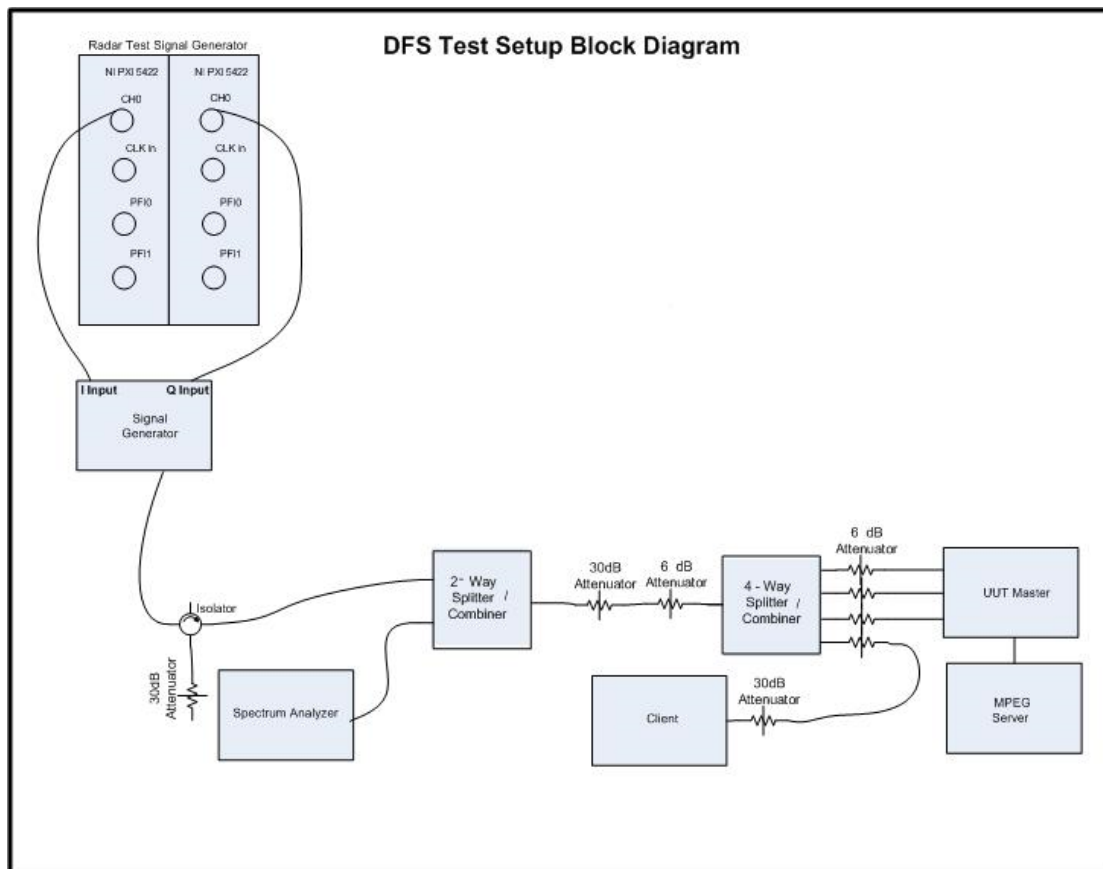
**USA Bin 3 Radar Calibration BW160****USA Bin 4 Radar Calibration BW160**

**USA Bin 5 Radar Calibration BW160****USA Frequency Hopping Radar Calibration BW160**

## B.1 Test Procedure/Results

A spectrum analyzer is used as a monitor to verify that the UUT 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. It is also used to monitor UUT transmissions during the Channel Availability Check Time.

Following is the test setup used to generate the Radar Waveforms, and for all DFS tests described herein.



**Conducted Setup: Radar Test Waveforms are injected into the Master**

## **B.2 UNII Detection Bandwidth**

### **Test Procedure**

**Ref.** KDB 905462 D02 UNII section 7.8.1

All DFS testing was done at 5500 MHz. The 99% channel bandwidth for 20MHz signals is 16 MHz, the the 99% channel bandwidth for 40MHz signals is 36 MHz, the 99% channel bandwidth for 80MHz signals is 76, and the 99% channel bandwidth for 160MHz signals is 78MHz per 80MHz section. See the 99% OBW section included below.

The generating equipment is configured as shown in the Conducted Test Setup above. A single *Burst* of the desired radar profile is produced at 5500MHz at a -63dBm level. Please note, there was 2dB of additional cable loss. Some radar signal levels are listed as -58dBm (lowest antenna gain plus 2dB of cable loss). The UUT is set up as a standalone device (no associated Client and no traffic).

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.

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  $F_L$ .

The U-NII Detection Bandwidth is calculated as follows:

$$\text{U-NII Detection Bandwidth} = F_H - F_L$$

The U-NII Detection Bandwidth must be at least 100% of the UUT transmitter 99% power bandwidth (16 MHz for 20MHz signals, 36 MHz for 40 MHz signals, 76 MHz for 80 MHz, and 78MHz for each 80+80 section of the 160MHz signals otherwise, the UUT does not comply with DFS requirements.

**99% Occupied Bandwidth**

| Frequency (MHz) | Mode            | Data Rate (Mbps) | 99% BW (MHz) |
|-----------------|-----------------|------------------|--------------|
| 5500            | Non HT20, 6Mbps | 6                | 16           |
| 5510            | HT/VHT40, M0    | m0               | 36           |
| 5530            | VHT80, M0x1     | m0x1             | 76           |
| 5570            | HE160, m0h1     | m0h1             | 78*          |

\*160MHz channel is split between different antenna paths. The lower 80MHz portion of the channel is transmitted on the ABCD antenna ports while the upper 80MHz portion is transmitted on the EFGH ports. Each 80MHz section was tested individually. 99% BW therefore shows a value of 78%.

**20MHz UNII Detection Bandwidth****USA Bin 0**

power=-60dB

| Radar Frequency | DFS Detection Trials (1=Detection, Blank= No Detection) |   |   |   |   |   |   |   |   |    |                    | Detection Bandwidth (MHz) | Limit (MHz) |
|-----------------|---------------------------------------------------------|---|---|---|---|---|---|---|---|----|--------------------|---------------------------|-------------|
|                 | 1                                                       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Detection Rate (%) |                           |             |
| 5490            | 0                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 90                 | 20                        | 18          |
| 5491            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5492            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5493            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5494            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5495            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5496            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5497            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5498            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5499            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5500            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5501            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5502            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5503            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5504            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5505            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5506            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5507            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5508            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5509            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5510            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |

**40MHz UNII Detection Bandwidth****USA Bin 0**

power=-60dB

| Radar Frequency | DFS Detection Trials (1=Detection, Blank= No Detection) |   |   |   |   |   |   |   |   |    |                    | Detection Bandwidth (MHz) | Limit (MHz) |
|-----------------|---------------------------------------------------------|---|---|---|---|---|---|---|---|----|--------------------|---------------------------|-------------|
|                 | 1                                                       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Detection Rate (%) |                           |             |
| 5490            | 0                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 90                 | 40                        | 36          |
| 5491            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5492            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5493            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5494            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5495            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5496            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5497            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5498            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5499            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5500            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5501            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5502            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5503            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5504            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5505            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5506            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5507            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5508            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5509            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5510            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5511            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5512            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5513            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5514            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5515            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5516            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5517            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5518            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5519            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5520            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5521            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5522            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5523            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5524            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5525            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5526            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |



|      |   |   |   |   |   |   |   |   |   |   |     |  |  |
|------|---|---|---|---|---|---|---|---|---|---|-----|--|--|
| 5527 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |  |  |
| 5528 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |  |  |
| 5529 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |  |  |
| 5530 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |  |  |

**80MHz UNII Detection Bandwidth****USA Bin 0**

power=-58dB

|                 | DFS Detection Trials (1=Detection, Blank= No Detection) |   |   |   |   |   |   |   |   |    |                    |                           |             |
|-----------------|---------------------------------------------------------|---|---|---|---|---|---|---|---|----|--------------------|---------------------------|-------------|
| Radar Frequency | 1                                                       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Detection Rate (%) | Detection Bandwidth (MHz) | Limit (MHz) |
| 5490            | 0                                                       | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1  | 80                 | 78                        | 76          |
| 5491            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5492            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5493            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5494            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5495            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5496            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5497            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5498            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5499            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5500            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5501            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5502            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5503            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5504            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5505            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5506            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5507            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5508            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5509            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5510            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5511            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5512            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5513            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5514            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5515            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5516            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5517            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5518            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5519            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5520            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5521            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5522            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5523            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5524            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5525            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |

|      |   |   |   |   |   |   |   |   |   |   |     |
|------|---|---|---|---|---|---|---|---|---|---|-----|
| 5526 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5527 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5528 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5529 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5530 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5531 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5532 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5533 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5534 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5535 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5536 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5537 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5538 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5539 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5540 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5541 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5542 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5543 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5544 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5545 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5546 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5547 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5548 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5549 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5550 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5551 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5552 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5553 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5554 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5555 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5556 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5557 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5558 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5559 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5560 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5561 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5562 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5563 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5564 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5565 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5566 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5567 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5568 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |



|      |   |   |   |   |   |   |   |   |   |   |     |  |  |
|------|---|---|---|---|---|---|---|---|---|---|-----|--|--|
| 5569 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |  |  |
| 5570 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |  |  |

**160MHz UNII Detection Bandwidth (upper portion of 80+80)**

| <b>USA Bin 0</b> | <b>DFS Detection Trials (1=Detection, Blank= No Detection)</b> |   |   |   |   |   |   |   |   |    |                    | <b>power=-58dB</b>        |             |
|------------------|----------------------------------------------------------------|---|---|---|---|---|---|---|---|----|--------------------|---------------------------|-------------|
| Radar Frequency  | 1                                                              | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Detection Rate (%) | Detection Bandwidth (MHz) | Limit (MHz) |
| 5250             | 0                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 90                 | 80                        | 78          |
| 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                |                           |             |
| 5256             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5257             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5258             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5259             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5260             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5261             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5262             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5263             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5264             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5265             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5266             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5267             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5268             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5269             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5270             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5271             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5272             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5273             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5274             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5275             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5276             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5277             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5278             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5279             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5280             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5281             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5282             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5283             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5284             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5285             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5286             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5287             | 1                                                              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |

|      |   |   |   |   |   |   |   |   |   |   |     |
|------|---|---|---|---|---|---|---|---|---|---|-----|
| 5288 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5289 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5290 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5291 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5292 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5293 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5294 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5295 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5296 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5297 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5298 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5299 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5300 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5301 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5302 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5303 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5304 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5305 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5306 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5307 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5308 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5309 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5310 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5311 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5312 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5313 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5314 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5315 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5316 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5317 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5318 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5319 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5320 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5321 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5322 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5323 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5324 | 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 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5329 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5330 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |

**160MHz UNII Detection Bandwidth (lower portion of 80+80)**

| USA Bin 0       | DFS Detection Trials (1=Detection, Blank= No Detection) |   |   |   |   |   |   |   |   |    |                    | power=-58dB               |             |
|-----------------|---------------------------------------------------------|---|---|---|---|---|---|---|---|----|--------------------|---------------------------|-------------|
| Radar Frequency | 1                                                       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Detection Rate (%) | Detection Bandwidth (MHz) | Limit (MHz) |
| 5490            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                | 80                        | 78          |
| 5491            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5492            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5493            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5494            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5495            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5496            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5497            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5498            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5499            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5500            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5501            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5502            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5503            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5504            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5505            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5506            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5507            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5508            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5509            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5510            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5511            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5512            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5513            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5514            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5515            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5516            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5517            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5518            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5519            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5520            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5521            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5522            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5523            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5524            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5525            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5526            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5527            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |

|      |   |   |   |   |   |   |   |   |   |   |     |
|------|---|---|---|---|---|---|---|---|---|---|-----|
| 5528 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5529 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5530 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5531 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5532 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5533 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5534 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5535 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5536 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5537 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5538 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5539 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5540 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5541 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5542 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5543 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5544 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5545 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5546 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5547 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5548 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5549 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5550 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5551 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5552 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5553 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5554 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5555 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5556 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5557 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5558 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5559 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5560 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5561 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5562 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5563 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5564 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5565 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5566 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5567 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5568 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5569 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5570 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |

**160MHz UNII Detection Bandwidth (upper portion of 80+80)**

| USA Bin 0       | DFS Detection Trials (1=Detection, Blank= No Detection) |   |   |   |   |   |   |   |   |    |                    | power=-58dB               |             |
|-----------------|---------------------------------------------------------|---|---|---|---|---|---|---|---|----|--------------------|---------------------------|-------------|
| Radar Frequency | 1                                                       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Detection Rate (%) | Detection Bandwidth (MHz) | Limit (MHz) |
| 5570            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                | 80                        | 78          |
| 5571            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5572            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5573            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5574            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5575            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5576            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5577            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5578            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5579            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5580            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5581            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5582            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5583            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5584            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5585            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5586            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5587            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5588            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5589            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5590            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5591            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5592            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5593            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5594            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5595            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5596            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5597            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5598            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5599            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5600            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5601            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5602            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5603            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5604            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5605            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5606            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |
| 5607            | 1                                                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100                |                           |             |

|      |   |   |   |   |   |   |   |   |   |   |     |
|------|---|---|---|---|---|---|---|---|---|---|-----|
| 5608 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5609 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5610 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5611 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5612 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5613 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5614 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5615 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5616 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5617 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5618 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5619 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5620 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5621 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5622 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5623 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5624 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5625 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5626 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5627 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5628 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5629 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5630 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5631 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5632 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5633 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5634 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5635 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5636 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5637 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5638 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5639 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5640 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5641 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5642 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5643 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5644 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5645 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5646 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5647 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5648 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5649 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| 5650 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |

### B.3 Initial Channel Availability Check Time

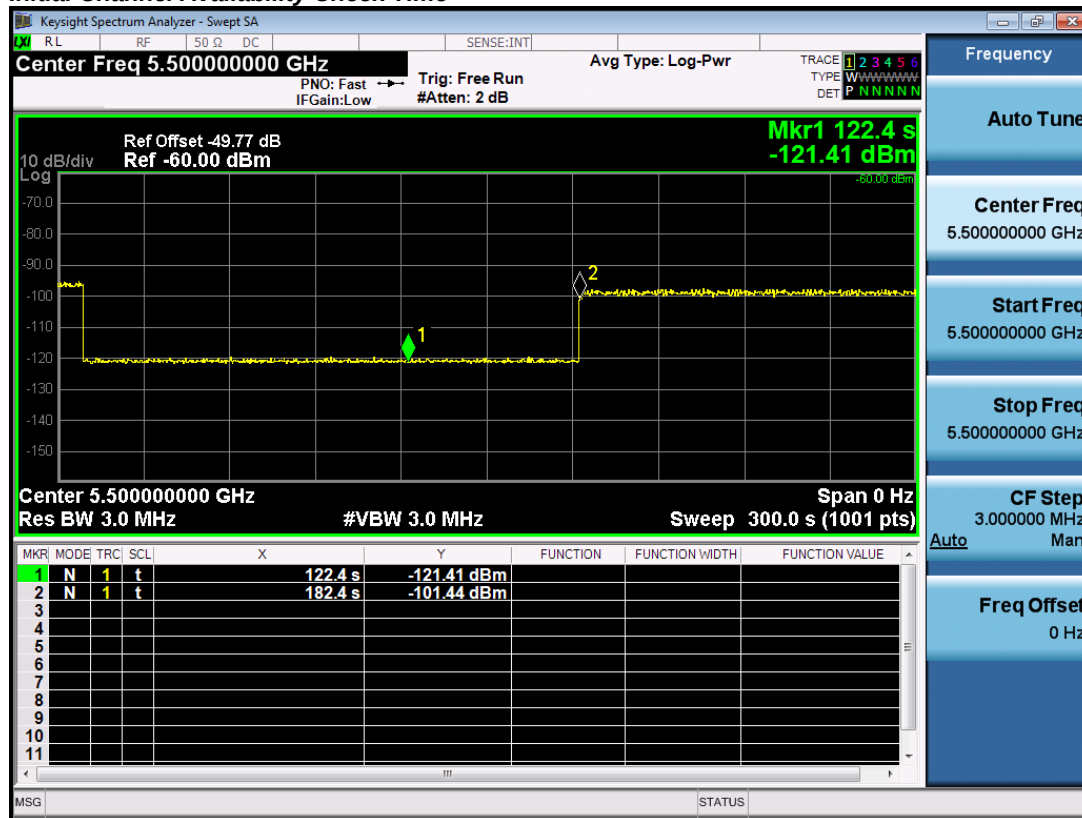
The tests that the UUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the U-NII device checks for Radar Waveforms for one minute on the test Channel. This test does not use any Radar Waveforms.

The U-NII device is powered on and instructed to operate at 5500 MHz. At the same time the UUT is powered on, the spectrum analyzer is set to zero span mode with a 3 MHz resolution bandwidth at 5500MHz with a 2.5 minute sweep time. The analyzer's sweep will be started the same time power is applied to the U-NII device.

The UUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.

The initial power up time of the UUT is indicated by marker 1 in the plot. Initial beacons/data transmissions are indicated by marker 2.

#### Initial Channel Availability Check Time



BW20

#### B.4 Radar Burst at the Beginning of the Channel Availability Check Time

The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB (-63dBm) occurs at the beginning of the Channel Availability Check Time.

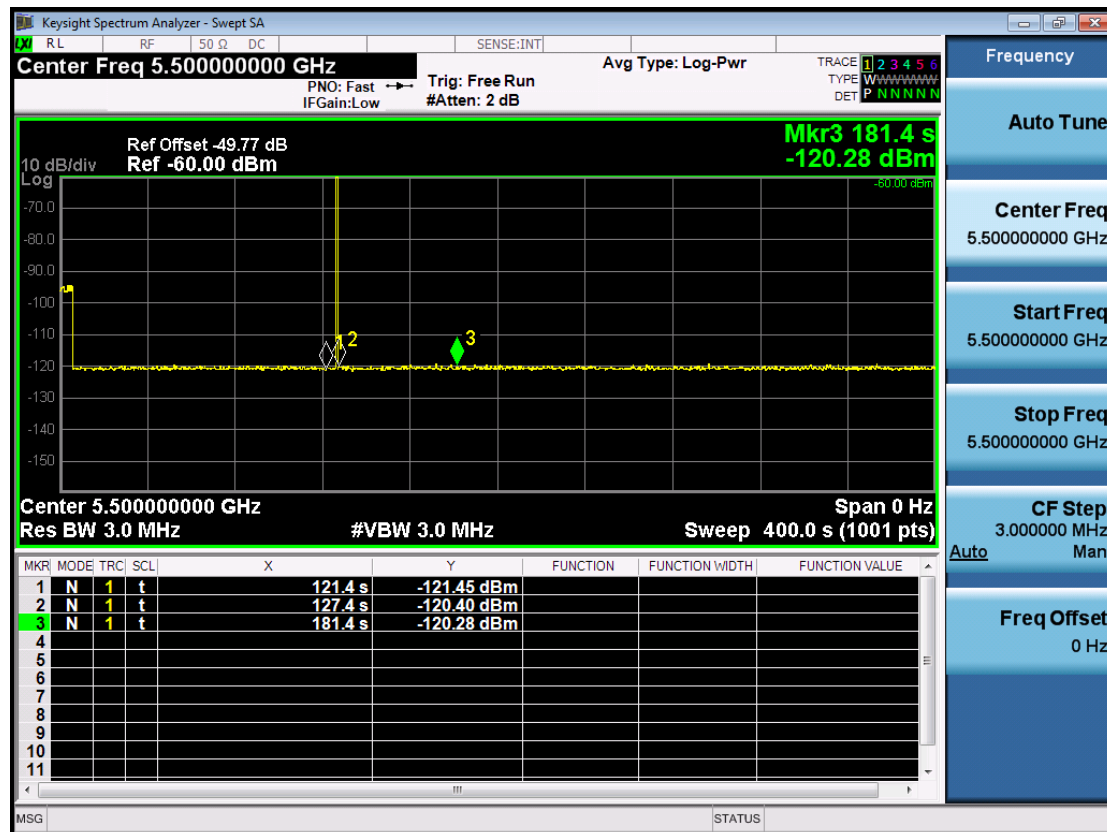
The UUT is powered on at  $T_0$ .  $T_1$  denotes the instant when the UUT has completed its power-up sequence. The Channel Availability Check Time commences at instant  $T_1$  and will end no sooner than  $T_1 + 60$  seconds.

A single Burst of short pulse of radar type 0 at -63 dBm will commence within a 6 second window starting at  $T_1$ .

Visual indication on the UUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions at 5500MHz will continue for 2.5 minutes after the radar Burst has been generated.

Verify that during the 2.5 minute measurement window no UUT transmissions occurred at 5500MHz.

#### Radar Burst at the Beginning of the Channel Availability Check Time



BW20

**B.5 Radar Burst at the End of the Channel Availability Check Time**

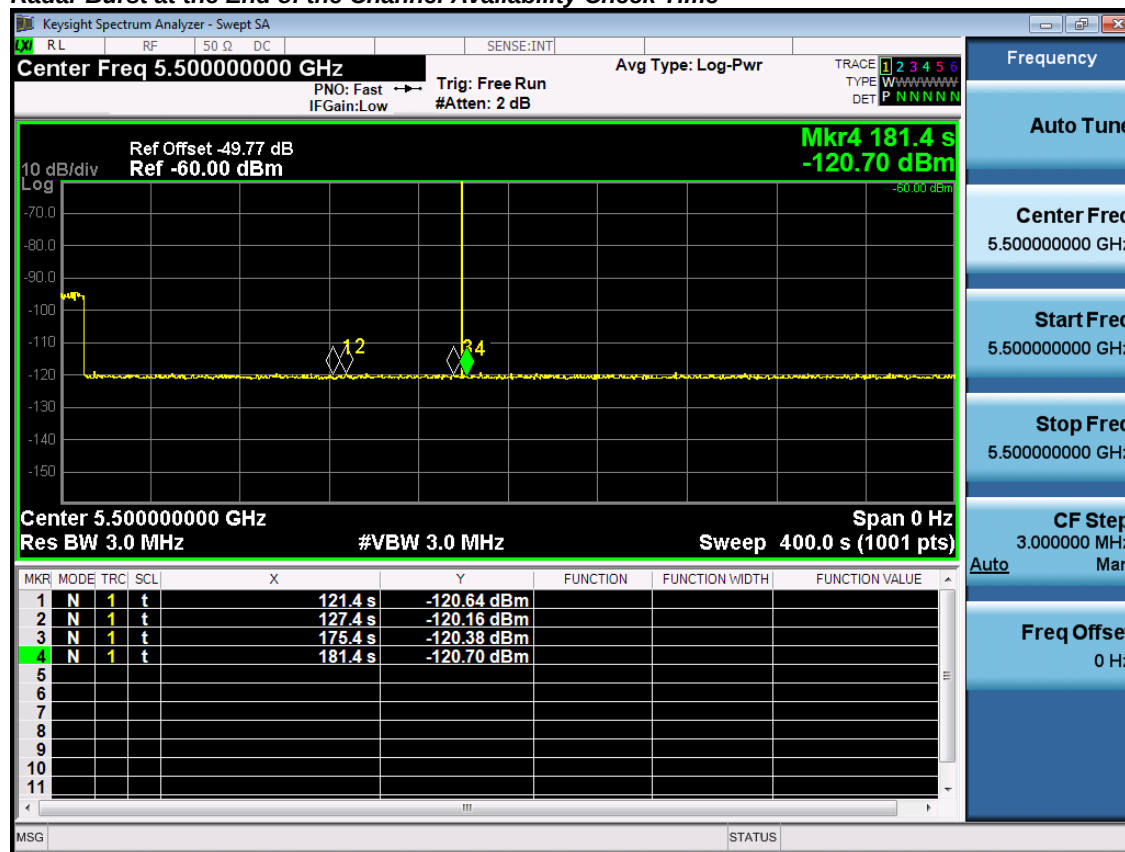
The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB (-63dBm) occurs at the end of the Channel Availability Check Time.

The UUT is powered on at  $T_0$ .  $T_1$  denotes the instant when the UUT has completed its power-up sequence. The Channel Availability Check Time commences at instant  $T_1$  and will end no sooner than  $T_1 + 60$  seconds.

A single Burst of short pulse of radar type 0 at -63 dBm will commence within a 6 second window starting at  $T_1 + 54$  seconds.

Visual indication on the UUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions at 5500MHz will continue for 2.5 minutes after the radar Burst has been generated.

Verify that during the 2.5 minute measurement window no UUT transmissions occurred at 5500MHz.

**Radar Burst at the End of the Channel Availability Check Time****BW20**

## B.6 In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period

These tests define how the following DFS parameters are verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time, and Non-Occupancy Period.

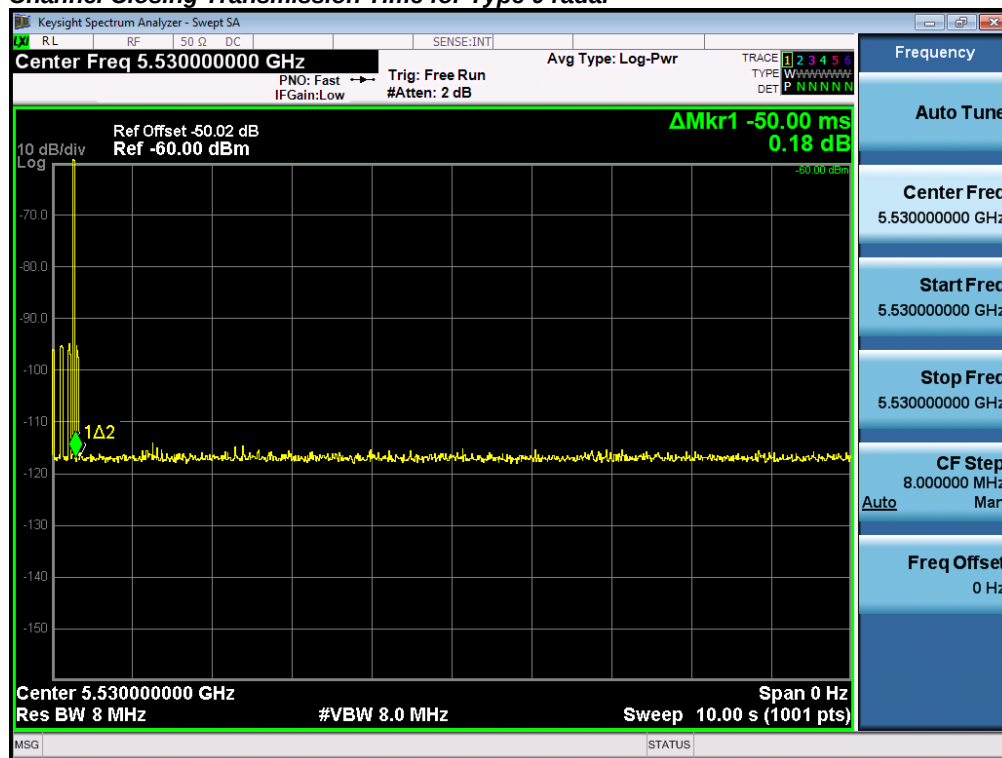
The steps below define the procedure to determine the above mentioned parameters when a radar Burst with a level equal to the DFS Detection Threshold + 1dB (-63dBm) is generated on the Operating Channel of the U-NII device.

A U-NII device operating as a Client Device will associate with the UUT (Master) at 5500 MHz.

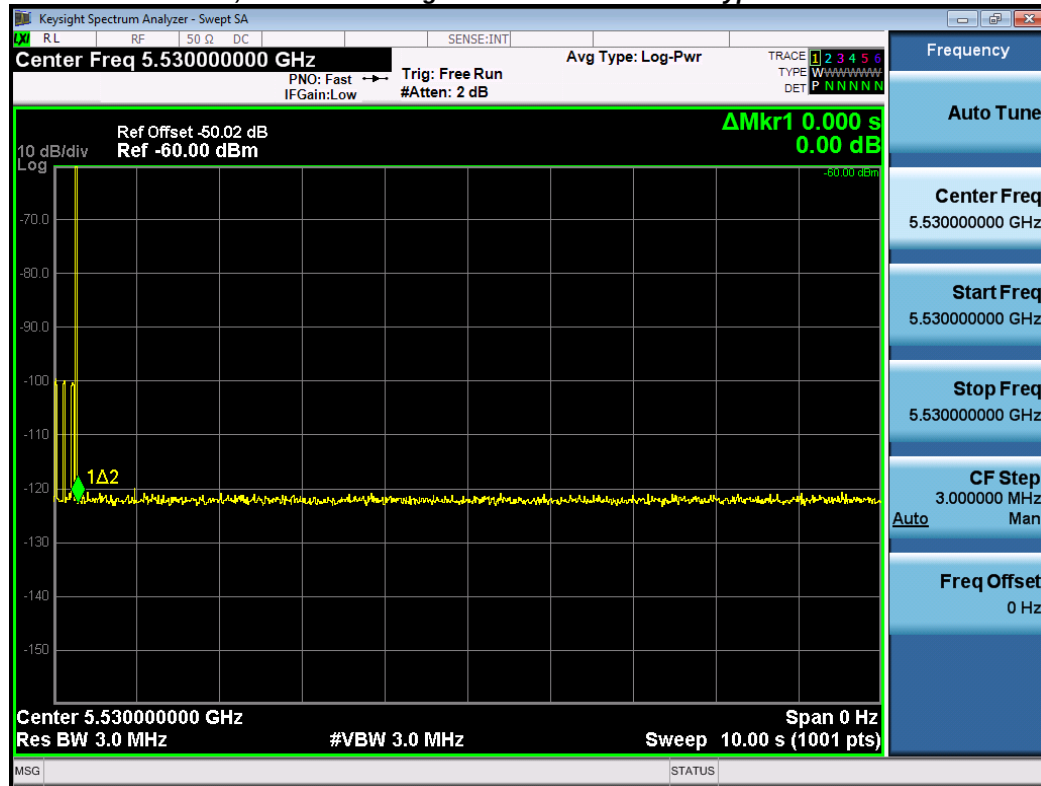
At time  $T_0$  the Radar Waveform generator sends a Burst of pulses for radar type 0 at -63dBm.

Observe the transmissions of the UUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). Compare the Channel Move Time and Channel Closing Transmission Time results to the limits defined in the *DFS Response requirement values table*.

### Channel Closing Transmission Time for Type 0 radar

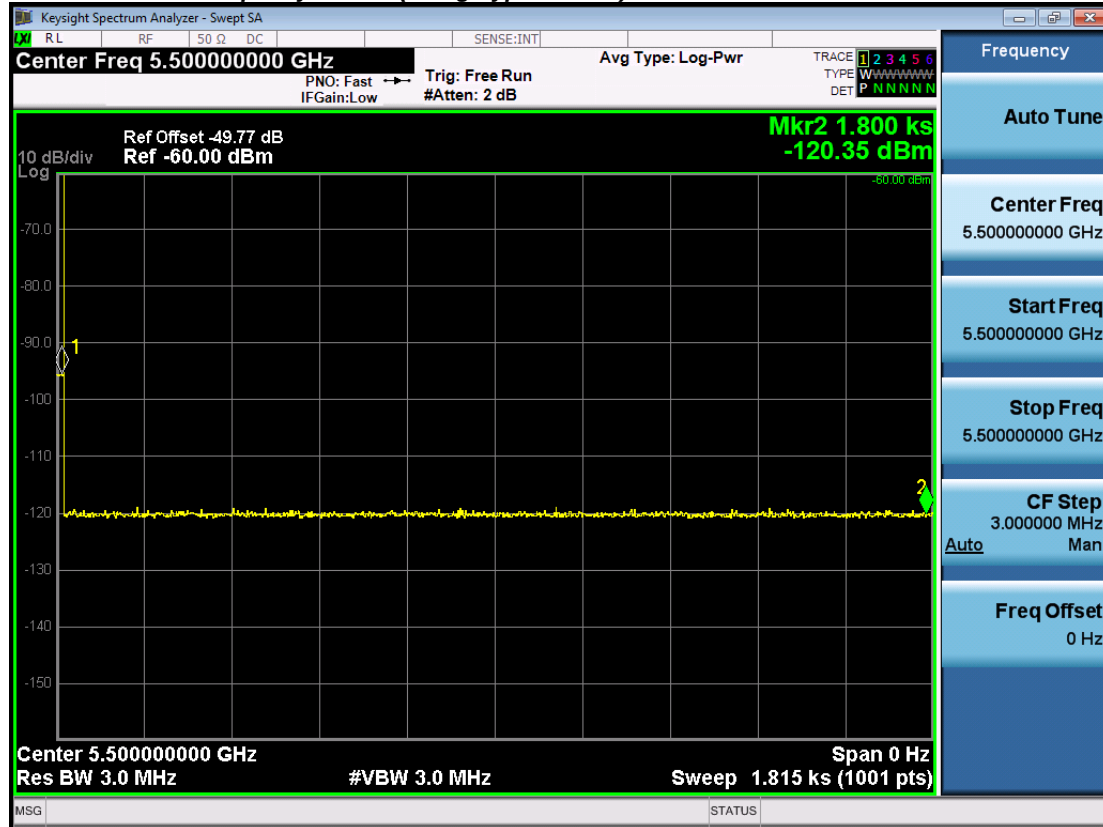


BW80

**Channel Move Time, Channel Closing Transmission Time for Type 0 radar****BW80**

Measure the UUT for more than 30 minutes following the channel close/move time to verify that the UUT does not resume any transmissions on this Channel.

**30 Minute Non-Occupancy Period (using Type 0 radar)**



**BW20**



## **B.7 Statistical Performance Check**

The steps below define the procedure to determine the minimum percentage of detection when a radar burst with a level equal to the DFS Detection Threshold + 1dB (-63dBm) is generated on the Operating Channel of the U-NII device.

A U-NII device operating as a Client Device will associate with the UUT (Master) at 5500 MHz.

The Radar Waveform generator sends the individual waveform for each of the radar types 1-6 at -63dbm. Statistical data will be gathered to determine the ability of the device to detect the radar test waveforms. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs. The percentage of successful detection is calculated by:

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

The Minimum number of trails, minimum percentage of successful detection and the average minimum percentage of successful detection are found in the *Radar Test Waveforms* section. The data represents the worst case detection for 20 MHz, 40 MHz, and 80 MHz signal bandwidths.

**Channel 5500 MHz, 20MHz BW, Statistical Performance****USA Bin 1A/1B**

freq=5500, rate=6, bw=18.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 18     | 1       | 3066     | 1                                | 93.3%                   | 60.0% |
| 2     | 5490      | 76     | 1       | 698      | 1                                |                         |       |
| 3     | 5492      | 65     | 1       | 818      | 1                                |                         |       |
| 4     | 5492      | 78     | 1       | 678      | 1                                |                         |       |
| 5     | 5494      | 83     | 1       | 638      | 1                                |                         |       |
| 6     | 5494      | 92     | 1       | 578      | 1                                |                         |       |
| 7     | 5495      | 67     | 1       | 798      | 1                                |                         |       |
| 8     | 5495      | 89     | 1       | 598      | 1                                |                         |       |
| 9     | 5496      | 83     | 1       | 638      | 1                                |                         |       |
| 10    | 5496      | 92     | 1       | 578      | 1                                |                         |       |
| 11    | 5497      | 59     | 1       | 898      | 1                                |                         |       |
| 12    | 5497      | 62     | 1       | 858      | 1                                |                         |       |
| 13    | 5498      | 102    | 1       | 518      | 1                                |                         |       |
| 14    | 5498      | 65     | 1       | 818      | 1                                |                         |       |
| 15    | 5500      | 68     | 1       | 778      | 1                                |                         |       |
| 16    | 5500      | 27     | 1       | 2021     | 1                                |                         |       |
| 17    | 5502      | 19     | 1       | 2836     | 1                                |                         |       |
| 18    | 5502      | 18     | 1       | 2990     | 0                                |                         |       |
| 19    | 5503      | 20     | 1       | 2772     | 1                                |                         |       |
| 20    | 5503      | 81     | 1       | 657      | 1                                |                         |       |
| 21    | 5504      | 26     | 1       | 2109     | 1                                |                         |       |
| 22    | 5504      | 18     | 1       | 2989     | 1                                |                         |       |
| 23    | 5505      | 32     | 1       | 1692     | 1                                |                         |       |
| 24    | 5505      | 19     | 1       | 2856     | 1                                |                         |       |
| 25    | 5506      | 39     | 1       | 1383     | 1                                |                         |       |
| 26    | 5506      | 40     | 1       | 1353     | 1                                |                         |       |
| 27    | 5508      | 83     | 1       | 641      | 1                                |                         |       |
| 28    | 5508      | 52     | 1       | 1022     | 1                                |                         |       |
| 29    | 5510      | 23     | 1       | 2393     | 1                                |                         |       |
| 30    | 5510      | 18     | 1       | 3054     | 0                                |                         |       |

**USA Bin 1A/1B**

freq=5500, rate=6, bw=18.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 59     | 1       | 898      | 1                                | 100.0%                  | 60.0% |
| 2     | 5490      | 59     | 1       | 898      | 1                                |                         |       |
| 3     | 5492      | 72     | 1       | 738      | 1                                |                         |       |
| 4     | 5492      | 68     | 1       | 778      | 1                                |                         |       |
| 5     | 5494      | 18     | 1       | 3066     | 1                                |                         |       |
| 6     | 5494      | 58     | 1       | 918      | 1                                |                         |       |
| 7     | 5495      | 18     | 1       | 3066     | 1                                |                         |       |
| 8     | 5495      | 68     | 1       | 778      | 1                                |                         |       |
| 9     | 5496      | 102    | 1       | 518      | 1                                |                         |       |
| 10    | 5496      | 57     | 1       | 938      | 1                                |                         |       |
| 11    | 5497      | 62     | 1       | 858      | 1                                |                         |       |
| 12    | 5497      | 83     | 1       | 638      | 1                                |                         |       |
| 13    | 5498      | 72     | 1       | 738      | 1                                |                         |       |
| 14    | 5498      | 18     | 1       | 3066     | 1                                |                         |       |
| 15    | 5500      | 61     | 1       | 878      | 1                                |                         |       |
| 16    | 5500      | 31     | 1       | 1726     | 1                                |                         |       |
| 17    | 5502      | 85     | 1       | 628      | 1                                |                         |       |
| 18    | 5502      | 22     | 1       | 2430     | 1                                |                         |       |
| 19    | 5503      | 23     | 1       | 2316     | 1                                |                         |       |
| 20    | 5503      | 27     | 1       | 1970     | 1                                |                         |       |
| 21    | 5504      | 22     | 1       | 2449     | 1                                |                         |       |
| 22    | 5504      | 30     | 1       | 1812     | 1                                |                         |       |
| 23    | 5505      | 63     | 1       | 850      | 1                                |                         |       |
| 24    | 5505      | 24     | 1       | 2287     | 1                                |                         |       |
| 25    | 5506      | 43     | 1       | 1228     | 1                                |                         |       |
| 26    | 5506      | 98     | 1       | 541      | 1                                |                         |       |
| 27    | 5508      | 19     | 1       | 2827     | 1                                |                         |       |
| 28    | 5508      | 19     | 1       | 2813     | 1                                |                         |       |
| 29    | 5510      | 36     | 1       | 1490     | 1                                |                         |       |
| 30    | 5510      | 19     | 1       | 2797     | 1                                |                         |       |


**USA Bin  
2**

freq=5500, rate=6, bw=18.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 23     | 3.2     | 222      | 1                                | 73.3%                   | 60.0% |
| 2     | 5490      | 28     | 3.2     | 176      | 0                                |                         |       |
| 3     | 5492      | 25     | 3       | 224      | 1                                |                         |       |
| 4     | 5492      | 28     | 3.7     | 165      | 0                                |                         |       |
| 5     | 5494      | 26     | 2.1     | 190      | 1                                |                         |       |
| 6     | 5494      | 23     | 1.9     | 189      | 0                                |                         |       |
| 7     | 5495      | 28     | 3.6     | 215      | 1                                |                         |       |
| 8     | 5495      | 27     | 3.1     | 204      | 0                                |                         |       |
| 9     | 5496      | 24     | 3.8     | 170      | 1                                |                         |       |
| 10    | 5496      | 28     | 2       | 179      | 1                                |                         |       |
| 11    | 5497      | 27     | 2.2     | 182      | 1                                |                         |       |
| 12    | 5497      | 24     | 4.5     | 155      | 1                                |                         |       |
| 13    | 5498      | 29     | 3.2     | 205      | 1                                |                         |       |
| 14    | 5498      | 28     | 3.8     | 164      | 1                                |                         |       |
| 15    | 5500      | 26     | 4.2     | 172      | 1                                |                         |       |
| 16    | 5500      | 25     | 1.3     | 153      | 1                                |                         |       |
| 17    | 5502      | 27     | 2.1     | 230      | 1                                |                         |       |
| 18    | 5502      | 23     | 2.7     | 207      | 1                                |                         |       |
| 19    | 5503      | 26     | 1.6     | 225      | 1                                |                         |       |
| 20    | 5503      | 27     | 1.7     | 150      | 1                                |                         |       |
| 21    | 5504      | 23     | 2.8     | 217      | 0                                |                         |       |
| 22    | 5504      | 26     | 3.5     | 167      | 1                                |                         |       |
| 23    | 5505      | 26     | 4.5     | 220      | 0                                |                         |       |
| 24    | 5505      | 26     | 1.9     | 220      | 1                                |                         |       |
| 25    | 5506      | 25     | 3.7     | 224      | 0                                |                         |       |
| 26    | 5506      | 25     | 1.9     | 156      | 1                                |                         |       |
| 27    | 5508      | 27     | 1.9     | 188      | 1                                |                         |       |
| 28    | 5508      | 29     | 2.6     | 177      | 1                                |                         |       |
| 29    | 5510      | 29     | 1.4     | 229      | 0                                |                         |       |
| 30    | 5510      | 26     | 3.7     | 195      | 1                                |                         |       |

**USA Bin****3**

freq=5500, rate=6, bw=18.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 17     | 6.9     | 455      | 1                                | 83.3%                   | 60.0% |
| 2     | 5490      | 18     | 7.5     | 272      | 1                                |                         |       |
| 3     | 5492      | 17     | 6.8     | 292      | 0                                |                         |       |
| 4     | 5492      | 18     | 7.1     | 394      | 1                                |                         |       |
| 5     | 5494      | 17     | 10      | 407      | 1                                |                         |       |
| 6     | 5494      | 17     | 6.2     | 451      | 1                                |                         |       |
| 7     | 5495      | 17     | 9       | 387      | 0                                |                         |       |
| 8     | 5495      | 17     | 7.6     | 293      | 1                                |                         |       |
| 9     | 5496      | 18     | 6.6     | 387      | 0                                |                         |       |
| 10    | 5496      | 16     | 7.3     | 450      | 1                                |                         |       |
| 11    | 5497      | 17     | 8.8     | 273      | 1                                |                         |       |
| 12    | 5497      | 17     | 9.7     | 208      | 0                                |                         |       |
| 13    | 5498      | 18     | 9.4     | 290      | 1                                |                         |       |
| 14    | 5498      | 18     | 8.1     | 394      | 1                                |                         |       |
| 15    | 5500      | 16     | 7.3     | 230      | 1                                |                         |       |
| 16    | 5500      | 18     | 6.5     | 337      | 1                                |                         |       |
| 17    | 5502      | 17     | 8.1     | 459      | 1                                |                         |       |
| 18    | 5502      | 17     | 10      | 222      | 1                                |                         |       |
| 19    | 5503      | 17     | 8.9     | 235      | 1                                |                         |       |
| 20    | 5503      | 17     | 9.2     | 373      | 1                                |                         |       |
| 21    | 5504      | 18     | 9.2     | 279      | 1                                |                         |       |
| 22    | 5504      | 17     | 7.8     | 447      | 1                                |                         |       |
| 23    | 5505      | 18     | 9.9     | 240      | 1                                |                         |       |
| 24    | 5505      | 16     | 9.2     | 305      | 1                                |                         |       |
| 25    | 5506      | 16     | 7.2     | 204      | 1                                |                         |       |
| 26    | 5506      | 16     | 8.8     | 291      | 1                                |                         |       |
| 27    | 5508      | 18     | 8.7     | 325      | 1                                |                         |       |
| 28    | 5508      | 18     | 7.4     | 297      | 1                                |                         |       |
| 29    | 5510      | 16     | 9.9     | 342      | 0                                |                         |       |
| 30    | 5510      | 18     | 8.5     | 295      | 1                                |                         |       |

**USA Bin****4**

freq=5500, rate=6, bw=18.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 16     | 19.6    | 338      | 0                                | 70.0%                   | 60.0% |
| 2     | 5490      | 16     | 14.1    | 279      | 1                                |                         |       |
| 3     | 5492      | 16     | 14.7    | 221      | 0                                |                         |       |
| 4     | 5492      | 15     | 15.1    | 261      | 1                                |                         |       |
| 5     | 5494      | 15     | 14.9    | 350      | 1                                |                         |       |
| 6     | 5494      | 15     | 17.2    | 318      | 1                                |                         |       |
| 7     | 5495      | 14     | 16.6    | 229      | 0                                |                         |       |
| 8     | 5495      | 15     | 13      | 291      | 1                                |                         |       |
| 9     | 5496      | 15     | 14.4    | 462      | 1                                |                         |       |
| 10    | 5496      | 15     | 16.4    | 272      | 0                                |                         |       |
| 11    | 5497      | 14     | 13.3    | 201      | 1                                |                         |       |
| 12    | 5497      | 12     | 16.8    | 218      | 1                                |                         |       |
| 13    | 5498      | 13     | 13.6    | 391      | 1                                |                         |       |
| 14    | 5498      | 13     | 14.7    | 231      | 1                                |                         |       |
| 15    | 5500      | 16     | 11.9    | 341      | 0                                |                         |       |
| 16    | 5500      | 15     | 18.6    | 362      | 1                                |                         |       |
| 17    | 5502      | 13     | 16.3    | 496      | 1                                |                         |       |
| 18    | 5502      | 12     | 18.9    | 317      | 1                                |                         |       |
| 19    | 5503      | 16     | 11.7    | 216      | 0                                |                         |       |
| 20    | 5503      | 12     | 14.2    | 462      | 1                                |                         |       |
| 21    | 5504      | 12     | 11.3    | 445      | 1                                |                         |       |
| 22    | 5504      | 13     | 14.5    | 408      | 1                                |                         |       |
| 23    | 5505      | 12     | 16.3    | 350      | 1                                |                         |       |
| 24    | 5505      | 14     | 16.6    | 358      | 1                                |                         |       |
| 25    | 5506      | 14     | 19.7    | 436      | 0                                |                         |       |
| 26    | 5506      | 12     | 12.7    | 421      | 1                                |                         |       |
| 27    | 5508      | 12     | 15.1    | 326      | 0                                |                         |       |
| 28    | 5508      | 16     | 19.1    | 228      | 1                                |                         |       |
| 29    | 5510      | 16     | 18.2    | 288      | 0                                |                         |       |
| 30    | 5510      | 14     | 19.5    | 345      | 1                                |                         |       |



**USA**  
**Bin 5**

freq=5500, rate=6, bw=18.0

| Trial | Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|-------------------------------|----------------------|-------|
| 1     | 1       | 1      | 5495            | 10          | 70      |                          |                          | 0.489816        | 1                             | 96.7%                | 80.0% |
| 2     | 1       | 2      | 5499            | 20          | 90      | 1549                     |                          | 0.59369         | 1                             |                      |       |
| 3     | 1       | 2      | 5495.8          | 12          | 90      | 1530                     |                          | 0.574159        | 1                             |                      |       |
| 4     | 1       | 3      | 5495.8          | 12          | 95      | 1535                     | 1395                     | 0.017262        | 1                             |                      |       |
| 5     | 1       | 2      | 5497            | 15          | 100     | 1351                     |                          | 0.301778        | 1                             |                      |       |
| 6     | 1       | 2      | 5494.2          | 8           | 55      | 1696                     |                          | 0.260997        | 1                             |                      |       |
| 7     | 1       | 1      | 5496.2          | 13          | 85      |                          |                          | 0.83143         | 1                             |                      |       |
| 8     | 1       | 1      | 5498.6          | 19          | 85      |                          |                          | 0.816349        | 0                             |                      |       |
| 9     | 1       | 2      | 5493            | 5           | 70      | 1241                     |                          | 0.817617        | 1                             |                      |       |
| 10    | 1       | 1      | 5495            | 10          | 65      |                          |                          | 0.37033         | 1                             |                      |       |
| 11    | 1       | 3      | 5500            | 17          | 80      | 1247                     | 1130                     | 0.773442        | 1                             |                      |       |
| 12    | 1       | 1      | 5500            | 12          | 55      |                          |                          | 0.379452        | 1                             |                      |       |
| 13    | 1       | 1      | 5500            | 16          | 70      |                          |                          | 0.08412         | 1                             |                      |       |
| 14    | 1       | 3      | 5500            | 12          | 90      | 1961                     | 1746                     | 0.913824        | 1                             |                      |       |
| 15    | 1       | 3      | 5500            | 13          | 55      | 1776                     | 1504                     | 0.071949        | 1                             |                      |       |
| 16    | 1       | 2      | 5500            | 6           | 85      | 1073                     |                          | 0.757266        | 1                             |                      |       |
| 17    | 1       | 2      | 5500            | 6           | 90      | 1209                     |                          | 0.797544        | 1                             |                      |       |
| 18    | 1       | 2      | 5500            | 6           | 70      | 1920                     |                          | 0.261071        | 1                             |                      |       |
| 19    | 1       | 1      | 5500            | 9           | 60      |                          |                          | 1.140646        | 1                             |                      |       |
| 20    | 1       | 1      | 5500            | 20          | 75      |                          |                          | 0.860837        | 1                             |                      |       |
| 21    | 1       | 3      | 5505            | 10          | 70      | 1328                     | 1909                     | 0.459015        | 1                             |                      |       |
| 22    | 1       | 3      | 5505.8          | 8           | 70      | 1387                     | 1608                     | 0.320261        | 1                             |                      |       |
| 23    | 1       | 2      | 5501.4          | 19          | 55      | 1002                     |                          | 0.309452        | 1                             |                      |       |
| 24    | 1       | 1      | 5505.4          | 9           | 75      |                          |                          | 0.300277        | 1                             |                      |       |
| 25    | 1       | 1      | 5503.8          | 13          | 100     |                          |                          | 1.344128        | 1                             |                      |       |
| 26    | 1       | 3      | 5504.6          | 11          | 60      | 1162                     | 1706                     | 0.271822        | 1                             |                      |       |
| 27    | 1       | 3      | 5502.6          | 16          | 75      | 1581                     | 1058                     | 0.363597        | 1                             |                      |       |
| 28    | 1       | 1      | 5501            | 20          | 50      |                          |                          | 0.14248         | 1                             |                      |       |
| 29    | 1       | 2      | 5501.4          | 19          | 100     | 1565                     |                          | 1.1779          | 1                             |                      |       |
| 30    | 1       | 3      | 5502.6          | 16          | 100     | 1793                     | 1299                     | 0.627173        | 1                             |                      |       |

**USA Frequency Hopping**

freq=5500, rate=6, bw=18.0

| Trial | Hop # | Freq (GHz) | Pulse Start (mS) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|-------|------------|------------------|-------------------------------|----------------------|-------|
| 1     | 11    | 5503       | 33               | 1                             | 96.7%                | 70.0% |
| 2     | 4     | 5498       | 12               | 1                             |                      |       |
| 3     | 1     | 5493       | 3                | 1                             |                      |       |
| 4     | 39    | 5496       | 117              | 1                             |                      |       |
| 5     | 3     | 5492       | 9                | 1                             |                      |       |
| 6     | 0     | 5509       | 0                | 1                             |                      |       |
| 7     | 14    | 5492       | 42               | 1                             |                      |       |
| 8     | 16    | 5501       | 48               | 1                             |                      |       |
| 9     | 19    | 5506       | 57               | 1                             |                      |       |
| 10    | 18    | 5500       | 54               | 1                             |                      |       |
| 11    | 32    | 5506       | 96               | 1                             |                      |       |
| 12    | 3     | 5500       | 9                | 1                             |                      |       |
| 13    | 1     | 5499       | 3                | 1                             |                      |       |
| 14    | 6     | 5491       | 18               | 1                             |                      |       |
| 15    | 11    | 5499       | 33               | 1                             |                      |       |
| 16    | 30    | 5498       | 90               | 1                             |                      |       |
| 17    | 2     | 5498       | 6                | 1                             |                      |       |
| 18    | 6     | 5509       | 18               | 1                             |                      |       |
| 19    | 50    | 5502       | 150              | 1                             |                      |       |
| 20    | 9     | 5507       | 27               | 1                             |                      |       |
| 21    | 7     | 5495       | 21               | 1                             |                      |       |
| 22    | 0     | 5495       | 0                | 1                             |                      |       |
| 23    | 1     | 5500       | 3                | 1                             |                      |       |
| 24    | 41    | 5507       | 123              | 1                             |                      |       |
| 25    | 31    | 5492       | 93               | 1                             |                      |       |
| 26    | 24    | 5499       | 72               | 1                             |                      |       |
| 27    | 14    | 5493       | 42               | 1                             |                      |       |
| 28    | 14    | 5501       | 42               | 0                             |                      |       |
| 29    | 16    | 5507       | 48               | 1                             |                      |       |
| 30    | 2     | 5507       | 6                | 1                             |                      |       |

In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is required and is calculated as follows:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (93.3\% + 100.0\% + 73.3\% + 83.3\% + 70.0\%)/5 = 84.0\% (>80\%)$$



## USA Bin 5 Trial #1

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5495            | 10          | 70      |                          |                          | 0.489816        |
| 2       | 1      | 5495            | 10          | 85      |                          |                          | 1.11684         |
| 3       | 1      | 5495            | 10          | 85      |                          |                          | 1.89484         |
| 4       | 1      | 5495            | 10          | 75      |                          |                          | 3.037734        |
| 5       | 3      | 5495            | 10          | 65      | 1939                     | 1738                     | 4.243484        |
| 6       | 1      | 5495            | 10          | 65      |                          |                          | 5.236859        |
| 7       | 3      | 5495            | 10          | 70      | 1629                     | 1484                     | 6.353214        |
| 8       | 1      | 5495            | 10          | 95      |                          |                          | 6.656281        |
| 9       | 1      | 5495            | 10          | 80      |                          |                          | 7.922814        |
| 10      | 1      | 5495            | 10          | 70      |                          |                          | 8.99099         |
| 11      | 2      | 5495            | 10          | 75      | 1530                     |                          | 9.87678         |
| 12      | 1      | 5495            | 10          | 70      |                          |                          | 10.547445       |
| 13      | 2      | 5495            | 10          | 50      | 1801                     |                          | 11.362628       |

## USA Bin 5 Trial #2

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5499            | 20          | 90      | 1549                     |                          | 0.59369         |
| 2       | 3      | 5499            | 20          | 85      | 1485                     | 1182                     | 0.991797        |
| 3       | 2      | 5499            | 20          | 50      | 1036                     |                          | 1.547372        |
| 4       | 2      | 5499            | 20          | 75      | 1713                     |                          | 2.658283        |
| 5       | 2      | 5499            | 20          | 90      | 1806                     |                          | 3.229044        |
| 6       | 2      | 5499            | 20          | 60      | 1686                     |                          | 3.782166        |
| 7       | 1      | 5499            | 20          | 90      |                          |                          | 4.717422        |
| 8       | 3      | 5499            | 20          | 85      | 1936                     | 1802                     | 5.449195        |
| 9       | 3      | 5499            | 20          | 90      | 1346                     | 1720                     | 6.268293        |
| 10      | 2      | 5499            | 20          | 95      | 1779                     |                          | 7.135206        |
| 11      | 2      | 5499            | 20          | 80      | 1781                     |                          | 7.571759        |
| 12      | 2      | 5499            | 20          | 90      | 1995                     |                          | 8.399745        |
| 13      | 1      | 5499            | 20          | 50      |                          |                          | 9.080698        |
| 14      | 3      | 5499            | 20          | 90      | 1675                     | 1155                     | 10.162553       |
| 15      | 3      | 5499            | 20          | 85      | 1300                     | 1176                     | 11.155355       |
| 16      | 3      | 5499            | 20          | 70      | 1901                     | 1965                     | 11.581509       |

## USA Bin 5 Trial #3

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5495.8          | 12          | 90      | 1530                     |                          | 0.574159        |
| 2       | 3      | 5495.8          | 12          | 75      | 1343                     | 1653                     | 2.903317        |
| 3       | 3      | 5495.8          | 12          | 90      | 1837                     | 1834                     | 4.314833        |



|   |   |        |    |    |      |      |           |
|---|---|--------|----|----|------|------|-----------|
| 4 | 2 | 5495.8 | 12 | 55 | 1446 |      | 5.047631  |
| 5 | 3 | 5495.8 | 12 | 75 | 1000 | 1608 | 6.828323  |
| 6 | 3 | 5495.8 | 12 | 50 | 1899 | 1231 | 7.921932  |
| 7 | 3 | 5495.8 | 12 | 90 | 1070 | 1111 | 10.071807 |
| 8 | 2 | 5495.8 | 12 | 50 | 1289 |      | 10.707283 |

## USA Bin 5 Trial #4

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5495.8             | 12             | 95         | 1535                           | 1395                           | 0.017262           |
| 2       | 3      | 5495.8             | 12             | 50         | 1439                           | 1965                           | 1.575935           |
| 3       | 2      | 5495.8             | 12             | 50         | 1484                           |                                | 2.965779           |
| 4       | 2      | 5495.8             | 12             | 65         | 1237                           |                                | 3.843581           |
| 5       | 1      | 5495.8             | 12             | 55         |                                |                                | 5.307687           |
| 6       | 3      | 5495.8             | 12             | 70         | 1818                           | 1890                           | 6.098554           |
| 7       | 1      | 5495.8             | 12             | 95         |                                |                                | 7.467295           |
| 8       | 3      | 5495.8             | 12             | 65         | 1057                           | 1471                           | 7.646765           |
| 9       | 2      | 5495.8             | 12             | 70         | 1320                           |                                | 9.555221           |
| 10      | 2      | 5495.8             | 12             | 55         | 1821                           |                                | 10.255844          |
| 11      | 3      | 5495.8             | 12             | 95         | 1336                           | 1241                           | 11.639124          |

## USA Bin 5 Trial #5

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5497               | 15             | 100        | 1351                           |                                | 0.301778           |
| 2       | 3      | 5497               | 15             | 55         | 1448                           | 1815                           | 1.985012           |
| 3       | 2      | 5497               | 15             | 95         | 1082                           |                                | 2.456504           |
| 4       | 1      | 5497               | 15             | 85         |                                |                                | 4.352863           |
| 5       | 3      | 5497               | 15             | 90         | 1527                           | 1515                           | 5.081552           |
| 6       | 2      | 5497               | 15             | 85         | 1739                           |                                | 5.92749            |
| 7       | 3      | 5497               | 15             | 75         | 1579                           | 1070                           | 6.58187            |
| 8       | 2      | 5497               | 15             | 95         | 1600                           |                                | 8.708222           |
| 9       | 2      | 5497               | 15             | 90         | 1499                           |                                | 9.097534           |
| 10      | 2      | 5497               | 15             | 75         | 1323                           |                                | 10.05931           |
| 11      | 3      | 5497               | 15             | 85         | 1155                           | 1969                           | 10.991096          |

## USA Bin 5 Trial #6

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5494.2             | 8              | 55         | 1696                           |                                | 0.260997           |
| 2       | 3      | 5494.2             | 8              | 75         | 1027                           | 1310                           | 1.6798             |
| 3       | 2      | 5494.2             | 8              | 80         | 1845                           |                                | 3.573438           |
| 4       | 2      | 5494.2             | 8              | 55         | 1398                           |                                | 4.081377           |
| 5       | 3      | 5494.2             | 8              | 95         | 1662                           | 1336                           | 5.923117           |



|    |   |        |   |    |      |           |
|----|---|--------|---|----|------|-----------|
| 6  | 2 | 5494.2 | 8 | 90 | 1450 | 6.964493  |
| 7  | 1 | 5494.2 | 8 | 80 |      | 7.896429  |
| 8  | 2 | 5494.2 | 8 | 95 | 1314 | 8.605607  |
| 9  | 1 | 5494.2 | 8 | 60 |      | 9.760878  |
| 10 | 2 | 5494.2 | 8 | 95 | 1372 | 11.281459 |

## USA Bin 5 Trial #7

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5496.2          | 13          | 85      |                          |                          | 0.83143         |
| 2       | 2      | 5496.2          | 13          | 55      | 1794                     |                          | 1.527059        |
| 3       | 3      | 5496.2          | 13          | 85      | 1360                     | 1642                     | 3.557324        |
| 4       | 3      | 5496.2          | 13          | 60      | 1272                     | 1838                     | 5.544686        |
| 5       | 2      | 5496.2          | 13          | 70      | 1045                     |                          | 6.307607        |
| 6       | 2      | 5496.2          | 13          | 85      | 1707                     |                          | 8.565031        |
| 7       | 1      | 5496.2          | 13          | 80      |                          |                          | 10.081091       |
| 8       | 2      | 5496.2          | 13          | 90      | 1751                     |                          | 10.761845       |

## USA Bin 5 Trial #8

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5498.6          | 19          | 85      |                          |                          | 0.816349        |
| 2       | 2      | 5498.6          | 19          | 75      | 1412                     |                          | 1.963375        |
| 3       | 3      | 5498.6          | 19          | 75      | 1690                     | 1199                     | 3.170328        |
| 4       | 1      | 5498.6          | 19          | 85      |                          |                          | 4.584363        |
| 5       | 2      | 5498.6          | 19          | 85      | 1723                     |                          | 4.965032        |
| 6       | 1      | 5498.6          | 19          | 85      |                          |                          | 6.205693        |
| 7       | 2      | 5498.6          | 19          | 65      | 1471                     |                          | 8.186457        |
| 8       | 3      | 5498.6          | 19          | 55      | 1552                     | 1749                     | 8.94812         |
| 9       | 1      | 5498.6          | 19          | 70      |                          |                          | 10.379105       |
| 10      | 3      | 5498.6          | 19          | 80      | 1061                     | 1550                     | 11.304215       |

## USA Bin 5 Trial #9

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5493            | 5           | 70      | 1241                     |                          | 0.817617        |
| 2       | 2      | 5493            | 5           | 65      | 1758                     |                          | 2.094944        |
| 3       | 1      | 5493            | 5           | 90      |                          |                          | 3.45565         |
| 4       | 3      | 5493            | 5           | 65      | 1530                     | 1271                     | 4.80427         |
| 5       | 2      | 5493            | 5           | 60      | 1815                     |                          | 7.389685        |
| 6       | 2      | 5493            | 5           | 55      | 1536                     |                          | 8.042336        |
| 7       | 1      | 5493            | 5           | 60      |                          |                          | 9.012729        |
| 8       | 3      | 5493            | 5           | 60      | 1649                     | 1502                     | 10.799794       |

## USA Bin 5 Trial #10



| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5495            | 10          | 65      |                          |                          | 0.37033         |
| 2       | 3      | 5495            | 10          | 65      | 1951                     | 1755                     | 0.972135        |
| 3       | 3      | 5495            | 10          | 60      | 1490                     | 1434                     | 1.769424        |
| 4       | 3      | 5495            | 10          | 65      | 1311                     | 1238                     | 3.132917        |
| 5       | 2      | 5495            | 10          | 60      | 1751                     |                          | 3.619972        |
| 6       | 3      | 5495            | 10          | 50      | 1108                     | 1692                     | 4.890247        |
| 7       | 1      | 5495            | 10          | 75      |                          |                          | 5.17131         |
| 8       | 3      | 5495            | 10          | 95      | 1252                     | 1876                     | 6.68806         |
| 9       | 2      | 5495            | 10          | 70      | 1698                     |                          | 7.31196         |
| 10      | 3      | 5495            | 10          | 90      | 1649                     | 1572                     | 7.813692        |
| 11      | 2      | 5495            | 10          | 95      | 1249                     |                          | 8.927051        |
| 12      | 1      | 5495            | 10          | 50      |                          |                          | 9.773912        |
| 13      | 3      | 5495            | 10          | 70      | 1577                     | 1689                     | 10.944845       |
| 14      | 3      | 5495            | 10          | 90      | 1338                     | 1891                     | 11.371776       |

## USA Bin 5 Trial #11

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5500            | 17          | 80      | 1247                     | 1130                     | 0.773442        |
| 2       | 1      | 5500            | 17          | 80      |                          |                          | 2.041168        |
| 3       | 1      | 5500            | 17          | 70      |                          |                          | 3.267328        |
| 4       | 3      | 5500            | 17          | 75      | 1238                     | 1367                     | 3.797291        |
| 5       | 3      | 5500            | 17          | 75      | 1336                     | 1795                     | 4.377083        |
| 6       | 2      | 5500            | 17          | 55      | 1962                     |                          | 6.277853        |
| 7       | 1      | 5500            | 17          | 50      |                          |                          | 7.25072         |
| 8       | 3      | 5500            | 17          | 85      | 1002                     | 1921                     | 8.548286        |
| 9       | 3      | 5500            | 17          | 100     | 1989                     | 1434                     | 9.538255        |
| 10      | 2      | 5500            | 17          | 95      | 1096                     |                          | 10.38466        |
| 11      | 3      | 5500            | 17          | 60      | 1237                     | 1567                     | 11.619739       |

## USA Bin 5 Trial #12

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5500            | 12          | 55      |                          |                          | 0.379452        |
| 2       | 1      | 5500            | 12          | 60      |                          |                          | 2.009792        |
| 3       | 1      | 5500            | 12          | 80      |                          |                          | 3.977183        |
| 4       | 1      | 5500            | 12          | 95      |                          |                          | 5.281638        |
| 5       | 2      | 5500            | 12          | 70      | 1390                     |                          | 5.677272        |
| 6       | 1      | 5500            | 12          | 100     |                          |                          | 6.721739        |
| 7       | 1      | 5500            | 12          | 80      |                          |                          | 8.688774        |
| 8       | 1      | 5500            | 12          | 95      |                          |                          | 9.712292        |



9            2            5500            12            80            1332            11.035288  
USA Bin 5 Trial #13

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5500               | 16             | 70         |                                |                                | 0.08412            |
| 2       | 2      | 5500               | 16             | 50         | 1665                           |                                | 1.512275           |
| 3       | 2      | 5500               | 16             | 70         | 1559                           |                                | 2.687855           |
| 4       | 3      | 5500               | 16             | 95         | 1055                           | 1866                           | 3.504191           |
| 5       | 2      | 5500               | 16             | 55         | 1833                           |                                | 5.099796           |
| 6       | 3      | 5500               | 16             | 60         | 1737                           | 1371                           | 5.699446           |
| 7       | 2      | 5500               | 16             | 90         | 1750                           |                                | 7.281952           |
| 8       | 1      | 5500               | 16             | 90         |                                |                                | 7.892176           |
| 9       | 2      | 5500               | 16             | 55         | 1385                           |                                | 9.635442           |
| 10      | 3      | 5500               | 16             | 75         | 2000                           | 1439                           | 10.614035          |
| 11      | 2      | 5500               | 16             | 65         | 1826                           |                                | 11.557418          |

USA Bin 5 Trial #14

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5500               | 12             | 90         | 1961                           | 1746                           | 0.913824           |
| 2       | 2      | 5500               | 12             | 60         | 1605                           |                                | 2.130965           |
| 3       | 1      | 5500               | 12             | 65         |                                |                                | 2.556481           |
| 4       | 3      | 5500               | 12             | 60         | 1661                           | 1789                           | 4.162493           |
| 5       | 3      | 5500               | 12             | 60         | 1751                           | 1157                           | 5.314181           |
| 6       | 1      | 5500               | 12             | 50         |                                |                                | 6.776853           |
| 7       | 1      | 5500               | 12             | 50         |                                |                                | 7.231205           |
| 8       | 3      | 5500               | 12             | 60         | 1171                           | 1633                           | 9.348019           |
| 9       | 3      | 5500               | 12             | 90         | 1355                           | 1635                           | 10.651782          |
| 10      | 1      | 5500               | 12             | 55         |                                |                                | 11.571566          |

USA Bin 5 Trial #15

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5500               | 13             | 55         | 1776                           | 1504                           | 0.071949           |
| 2       | 3      | 5500               | 13             | 65         | 1606                           | 1705                           | 1.036276           |
| 3       | 1      | 5500               | 13             | 90         |                                |                                | 2.389868           |
| 4       | 1      | 5500               | 13             | 85         |                                |                                | 3.140035           |
| 5       | 1      | 5500               | 13             | 65         |                                |                                | 4.789497           |
| 6       | 1      | 5500               | 13             | 70         |                                |                                | 5.878525           |
| 7       | 1      | 5500               | 13             | 60         |                                |                                | 6.379488           |
| 8       | 2      | 5500               | 13             | 85         | 1177                           |                                | 7.982324           |
| 9       | 3      | 5500               | 13             | 75         | 1023                           | 1227                           | 8.26621            |
| 10      | 2      | 5500               | 13             | 75         | 1781                           |                                | 9.65867            |



|    |   |      |    |     |      |      |           |
|----|---|------|----|-----|------|------|-----------|
| 11 | 1 | 5500 | 13 | 50  |      |      | 10.059108 |
| 12 | 3 | 5500 | 13 | 100 | 1490 | 1207 | 11.858265 |

USA Bin 5 Trial #16

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5500            | 6           | 85      | 1073                     |                          | 0.757266        |
| 2       | 1      | 5500            | 6           | 60      |                          |                          | 1.274291        |
| 3       | 2      | 5500            | 6           | 85      | 1360                     |                          | 2.523944        |
| 4       | 1      | 5500            | 6           | 100     |                          |                          | 2.628778        |
| 5       | 1      | 5500            | 6           | 50      |                          |                          | 4.081719        |
| 6       | 1      | 5500            | 6           | 80      |                          |                          | 4.693928        |
| 7       | 3      | 5500            | 6           | 75      | 1579                     | 1382                     | 5.414876        |
| 8       | 2      | 5500            | 6           | 95      | 1651                     |                          | 6.266224        |
| 9       | 1      | 5500            | 6           | 100     |                          |                          | 7.187293        |
| 10      | 3      | 5500            | 6           | 95      | 1236                     | 1247                     | 8.236304        |
| 11      | 2      | 5500            | 6           | 75      | 1301                     |                          | 9.203358        |
| 12      | 2      | 5500            | 6           | 85      | 1950                     |                          | 9.559386        |
| 13      | 3      | 5500            | 6           | 75      | 1619                     | 1709                     | 10.291939       |
| 14      | 3      | 5500            | 6           | 60      | 1573                     | 1947                     | 11.25247        |

## USA Bin 5 Trial #17

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5500            | 6           | 90      | 1209                     |                          | 0.797544        |
| 2       | 2      | 5500            | 6           | 55      | 1934                     |                          | 1.464263        |
| 3       | 3      | 5500            | 6           | 85      | 1185                     | 1887                     | 1.902882        |
| 4       | 3      | 5500            | 6           | 70      | 1665                     | 1678                     | 2.742081        |
| 5       | 2      | 5500            | 6           | 65      | 1021                     |                          | 3.83839         |
| 6       | 1      | 5500            | 6           | 75      |                          |                          | 4.578217        |
| 7       | 3      | 5500            | 6           | 50      | 1784                     | 1405                     | 5.979569        |
| 8       | 3      | 5500            | 6           | 60      | 1568                     | 1395                     | 6.235497        |
| 9       | 2      | 5500            | 6           | 55      | 1197                     |                          | 6.883438        |
| 10      | 3      | 5500            | 6           | 50      | 1434                     | 1236                     | 7.930634        |
| 11      | 2      | 5500            | 6           | 65      | 1856                     |                          | 9.204496        |
| 12      | 1      | 5500            | 6           | 60      |                          |                          | 9.709625        |
| 13      | 2      | 5500            | 6           | 70      | 1540                     |                          | 10.987229       |
| 14      | 3      | 5500            | 6           | 65      | 1383                     | 1714                     | 11.251271       |

## USA Bin 5 Trial #18

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5500            | 6           | 70      | 1920                     |                          | 0.261071        |
| 2       | 3      | 5500            | 6           | 50      | 1828                     | 1961                     | 1.759665        |



|    |   |      |   |     |      |      |           |
|----|---|------|---|-----|------|------|-----------|
| 3  | 3 | 5500 | 6 | 60  | 1401 | 1293 | 2.57542   |
| 4  | 1 | 5500 | 6 | 75  |      |      | 4.309063  |
| 5  | 3 | 5500 | 6 | 95  | 1733 | 1619 | 4.781642  |
| 6  | 1 | 5500 | 6 | 60  |      |      | 6.386689  |
| 7  | 1 | 5500 | 6 | 75  |      |      | 6.592947  |
| 8  | 2 | 5500 | 6 | 100 | 1249 |      | 8.415663  |
| 9  | 3 | 5500 | 6 | 65  | 1793 | 1134 | 9.690813  |
| 10 | 1 | 5500 | 6 | 60  |      |      | 10.368498 |
| 11 | 3 | 5500 | 6 | 65  | 1487 | 1920 | 10.916093 |

## USA Bin 5 Trial #19

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5500            | 9           | 60      |                          |                          | 1.140646        |
| 2       | 1      | 5500            | 9           | 85      |                          |                          | 2.357364        |
| 3       | 2      | 5500            | 9           | 75      | 1738                     |                          | 3.077468        |
| 4       | 3      | 5500            | 9           | 70      | 1248                     | 1001                     | 5.292521        |
| 5       | 2      | 5500            | 9           | 85      | 1570                     |                          | 6.170331        |
| 6       | 2      | 5500            | 9           | 85      | 1549                     |                          | 8.362776        |
| 7       | 3      | 5500            | 9           | 90      | 1156                     | 1545                     | 9.940598        |
| 8       | 2      | 5500            | 9           | 70      | 1162                     |                          | 11.493083       |

## USA Bin 5 Trial #20

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5500            | 20          | 75      |                          |                          | 0.860837        |
| 2       | 2      | 5500            | 20          | 55      | 1564                     |                          | 2.377939        |
| 3       | 1      | 5500            | 20          | 60      |                          |                          | 3.950183        |
| 4       | 2      | 5500            | 20          | 90      | 1708                     |                          | 5.114278        |
| 5       | 2      | 5500            | 20          | 70      | 1453                     |                          | 5.906912        |
| 6       | 1      | 5500            | 20          | 65      |                          |                          | 7.908838        |
| 7       | 3      | 5500            | 20          | 85      | 1380                     | 1276                     | 9.318919        |
| 8       | 2      | 5500            | 20          | 75      | 1723                     |                          | 10.358057       |
| 9       | 1      | 5500            | 20          | 100     |                          |                          | 11.871842       |

## USA Bin 5 Trial #21

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5505            | 10          | 70      | 1328                     | 1909                     | 0.459015        |
| 2       | 1      | 5505            | 10          | 65      |                          |                          | 1.127061        |
| 3       | 3      | 5505            | 10          | 85      | 1999                     | 1072                     | 2.565463        |
| 4       | 1      | 5505            | 10          | 100     |                          |                          | 3.671627        |
| 5       | 1      | 5505            | 10          | 60      |                          |                          | 4.553291        |
| 6       | 1      | 5505            | 10          | 65      |                          |                          | 5.410037        |



|    |   |      |    |     |      |      |           |
|----|---|------|----|-----|------|------|-----------|
| 7  | 1 | 5505 | 10 | 55  |      |      | 6.443264  |
| 8  | 2 | 5505 | 10 | 80  | 1082 |      | 7.299942  |
| 9  | 2 | 5505 | 10 | 100 | 1905 |      | 7.552462  |
| 10 | 1 | 5505 | 10 | 100 |      |      | 8.457436  |
| 11 | 3 | 5505 | 10 | 95  | 1535 | 1849 | 9.440681  |
| 12 | 3 | 5505 | 10 | 75  | 1081 | 1003 | 10.712409 |
| 13 | 3 | 5505 | 10 | 80  | 1377 | 1655 | 11.548783 |

## USA Bin 5 Trial #22

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5505.8          | 8           | 70      | 1387                     | 1608                     | 0.320261        |
| 2       | 3      | 5505.8          | 8           | 100     | 1181                     | 1516                     | 2.493617        |
| 3       | 3      | 5505.8          | 8           | 85      | 1601                     | 1735                     | 4.230741        |
| 4       | 1      | 5505.8          | 8           | 85      |                          |                          | 5.686732        |
| 5       | 3      | 5505.8          | 8           | 90      | 1433                     | 1695                     | 7.110781        |
| 6       | 2      | 5505.8          | 8           | 80      | 1776                     |                          | 8.713886        |
| 7       | 1      | 5505.8          | 8           | 50      |                          |                          | 10.406775       |
| 8       | 3      | 5505.8          | 8           | 100     | 1348                     | 1098                     | 11.411578       |

## USA Bin 5 Trial #23

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5501.4          | 19          | 55      | 1002                     |                          | 0.309452        |
| 2       | 2      | 5501.4          | 19          | 75      | 1522                     |                          | 1.811626        |
| 3       | 2      | 5501.4          | 19          | 95      | 1046                     |                          | 3.495715        |
| 4       | 2      | 5501.4          | 19          | 50      | 1376                     |                          | 4.570295        |
| 5       | 1      | 5501.4          | 19          | 100     |                          |                          | 5.457515        |
| 6       | 1      | 5501.4          | 19          | 85      |                          |                          | 6.515937        |
| 7       | 3      | 5501.4          | 19          | 50      | 1295                     | 1779                     | 7.466673        |
| 8       | 1      | 5501.4          | 19          | 55      |                          |                          | 8.934505        |
| 9       | 1      | 5501.4          | 19          | 60      |                          |                          | 9.801099        |
| 10      | 2      | 5501.4          | 19          | 100     | 1277                     |                          | 11.167691       |

## USA Bin 5 Trial #24

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5505.4          | 9           | 75      |                          |                          | 0.300277        |
| 2       | 2      | 5505.4          | 9           | 90      | 1719                     |                          | 0.925444        |
| 3       | 1      | 5505.4          | 9           | 90      |                          |                          | 2.406206        |
| 4       | 1      | 5505.4          | 9           | 70      |                          |                          | 2.877726        |
| 5       | 1      | 5505.4          | 9           | 80      |                          |                          | 3.770984        |
| 6       | 2      | 5505.4          | 9           | 90      | 1776                     |                          | 4.925651        |
| 7       | 2      | 5505.4          | 9           | 75      | 1371                     |                          | 5.857459        |



|    |   |        |   |    |      |      |           |
|----|---|--------|---|----|------|------|-----------|
| 8  | 1 | 5505.4 | 9 | 75 |      |      | 6.647606  |
| 9  | 2 | 5505.4 | 9 | 85 | 1825 |      | 7.92064   |
| 10 | 3 | 5505.4 | 9 | 70 | 1498 | 1203 | 8.424244  |
| 11 | 3 | 5505.4 | 9 | 55 | 1905 | 1278 | 9.67302   |
| 12 | 3 | 5505.4 | 9 | 60 | 1550 | 1730 | 11.072925 |
| 13 | 3 | 5505.4 | 9 | 55 | 1281 | 1625 | 11.514348 |

## USA Bin 5 Trial #25

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5503.8          | 13          | 100     |                          |                          | 1.344128        |
| 2       | 2      | 5503.8          | 13          | 80      | 1365                     |                          | 2.462984        |
| 3       | 1      | 5503.8          | 13          | 50      |                          |                          | 3.263557        |
| 4       | 3      | 5503.8          | 13          | 60      | 1419                     | 1346                     | 5.513473        |
| 5       | 1      | 5503.8          | 13          | 100     |                          |                          | 6.798378        |
| 6       | 2      | 5503.8          | 13          | 80      | 1043                     |                          | 8.083115        |
| 7       | 2      | 5503.8          | 13          | 100     | 1152                     |                          | 10.34715        |
| 8       | 1      | 5503.8          | 13          | 100     |                          |                          | 11.587456       |

## USA Bin 5 Trial #26

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5504.6          | 11          | 60      | 1162                     | 1706                     | 0.271822        |
| 2       | 1      | 5504.6          | 11          | 75      |                          |                          | 1.700461        |
| 3       | 2      | 5504.6          | 11          | 90      | 1874                     |                          | 2.072076        |
| 4       | 1      | 5504.6          | 11          | 100     |                          |                          | 2.661917        |
| 5       | 1      | 5504.6          | 11          | 90      |                          |                          | 4.131166        |
| 6       | 3      | 5504.6          | 11          | 60      | 1331                     | 1453                     | 4.824241        |
| 7       | 1      | 5504.6          | 11          | 70      |                          |                          | 5.340394        |
| 8       | 3      | 5504.6          | 11          | 70      | 1283                     | 1870                     | 6.247569        |
| 9       | 2      | 5504.6          | 11          | 80      | 1330                     |                          | 7.136328        |
| 10      | 2      | 5504.6          | 11          | 80      | 1785                     |                          | 8.509151        |
| 11      | 1      | 5504.6          | 11          | 80      |                          |                          | 8.908273        |
| 12      | 3      | 5504.6          | 11          | 70      | 1873                     | 1483                     | 9.480447        |
| 13      | 2      | 5504.6          | 11          | 100     | 1793                     |                          | 10.529227       |
| 14      | 1      | 5504.6          | 11          | 85      |                          |                          | 11.561108       |

## USA Bin 5 Trial #27

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5502.6          | 16          | 75      | 1581                     | 1058                     | 0.363597        |
| 2       | 2      | 5502.6          | 16          | 60      | 1856                     |                          | 0.978307        |
| 3       | 2      | 5502.6          | 16          | 55      | 1944                     |                          | 1.321201        |
| 4       | 2      | 5502.6          | 16          | 95      | 1291                     |                          | 2.51513         |



|    |   |        |    |     |      |      |           |
|----|---|--------|----|-----|------|------|-----------|
| 5  | 3 | 5502.6 | 16 | 55  | 1860 | 1069 | 2.676118  |
| 6  | 3 | 5502.6 | 16 | 55  | 1619 | 1170 | 3.17772   |
| 7  | 3 | 5502.6 | 16 | 80  | 1936 | 1629 | 3.830065  |
| 8  | 3 | 5502.6 | 16 | 95  | 1136 | 1360 | 4.880191  |
| 9  | 2 | 5502.6 | 16 | 100 | 1391 |      | 5.323811  |
| 10 | 3 | 5502.6 | 16 | 85  | 1720 | 1857 | 6.220506  |
| 11 | 3 | 5502.6 | 16 | 65  | 1416 | 1936 | 6.404535  |
| 12 | 2 | 5502.6 | 16 | 75  | 1632 |      | 6.997305  |
| 13 | 3 | 5502.6 | 16 | 55  | 1643 | 1428 | 7.951892  |
| 14 | 3 | 5502.6 | 16 | 80  | 1886 | 1212 | 8.799441  |
| 15 | 3 | 5502.6 | 16 | 75  | 1042 | 1569 | 9.318224  |
| 16 | 2 | 5502.6 | 16 | 90  | 1245 |      | 9.81466   |
| 17 | 3 | 5502.6 | 16 | 75  | 1754 | 1514 | 10.681333 |
| 18 | 3 | 5502.6 | 16 | 80  | 1131 | 1644 | 10.982501 |
| 19 | 1 | 5502.6 | 16 | 85  |      |      | 11.561933 |

## USA Bin 5 Trial #28

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5501               | 20             | 50         |                                |                                | 0.14248            |
| 2       | 3      | 5501               | 20             | 90         | 1444                           | 1877                           | 2.519349           |
| 3       | 3      | 5501               | 20             | 50         | 1858                           | 1636                           | 3.157963           |
| 4       | 1      | 5501               | 20             | 100        |                                |                                | 4.397565           |
| 5       | 1      | 5501               | 20             | 90         |                                |                                | 6.196524           |
| 6       | 3      | 5501               | 20             | 50         | 1931                           | 1996                           | 7.426723           |
| 7       | 3      | 5501               | 20             | 70         | 1706                           | 1871                           | 8.574732           |
| 8       | 1      | 5501               | 20             | 85         |                                |                                | 10.164301          |
| 9       | 2      | 5501               | 20             | 95         | 1211                           |                                | 11.142438          |

## USA Bin 5 Trial #29

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5501.4             | 19             | 100        | 1565                           |                                | 1.1779             |
| 2       | 3      | 5501.4             | 19             | 65         | 1581                           | 1660                           | 2.505046           |
| 3       | 1      | 5501.4             | 19             | 100        |                                |                                | 3.729892           |
| 4       | 1      | 5501.4             | 19             | 100        |                                |                                | 4.044823           |
| 5       | 3      | 5501.4             | 19             | 95         | 1770                           | 1814                           | 5.868866           |
| 6       | 1      | 5501.4             | 19             | 65         |                                |                                | 7.736679           |
| 7       | 3      | 5501.4             | 19             | 60         | 1305                           | 1915                           | 8.382152           |
| 8       | 3      | 5501.4             | 19             | 60         | 1249                           | 1337                           | 10.656207          |
| 9       | 3      | 5501.4             | 19             | 80         | 1614                           | 1081                           | 11.743743          |

## USA Bin 5 Trial #30



| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5502.6             | 16             | 100        | 1793                           | 1299                           | 0.627173           |
| 2       | 3      | 5502.6             | 16             | 55         | 1110                           | 1684                           | 0.963916           |
| 3       | 2      | 5502.6             | 16             | 55         | 1175                           |                                | 1.742215           |
| 4       | 2      | 5502.6             | 16             | 80         | 1701                           |                                | 2.129867           |
| 5       | 2      | 5502.6             | 16             | 50         | 1783                           |                                | 2.650897           |
| 6       | 3      | 5502.6             | 16             | 65         | 1124                           | 1814                           | 3.560353           |
| 7       | 1      | 5502.6             | 16             | 75         |                                |                                | 4.040267           |
| 8       | 1      | 5502.6             | 16             | 65         |                                |                                | 4.54484            |
| 9       | 1      | 5502.6             | 16             | 90         |                                |                                | 5.258274           |
| 10      | 1      | 5502.6             | 16             | 70         |                                |                                | 5.906655           |
| 11      | 3      | 5502.6             | 16             | 50         | 1666                           | 1759                           | 6.62464            |
| 12      | 2      | 5502.6             | 16             | 60         | 1580                           |                                | 7.081598           |
| 13      | 2      | 5502.6             | 16             | 55         | 1788                           |                                | 7.604359           |
| 14      | 3      | 5502.6             | 16             | 70         | 1710                           | 1032                           | 8.676124           |
| 15      | 3      | 5502.6             | 16             | 95         | 1475                           | 1991                           | 9.167997           |
| 16      | 3      | 5502.6             | 16             | 55         | 1772                           | 1110                           | 9.803087           |
| 17      | 1      | 5502.6             | 16             | 55         |                                |                                | 10.585037          |
| 18      | 2      | 5502.6             | 16             | 70         | 1290                           |                                | 10.835535          |
| 19      | 2      | 5502.6             | 16             | 80         | 1339                           |                                | 11.509512          |

## USA Frequency Hopping Trial #1

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 11    | 5503          | 33                  |
| 28    | 5505          | 84                  |
| 71    | 5500          | 213                 |

## USA Frequency Hopping Trial #2

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5498          | 12                  |
| 50    | 5500          | 150                 |
| 57    | 5509          | 171                 |
| 59    | 5497          | 177                 |
| 64    | 5492          | 192                 |

## USA Frequency Hopping Trial #3

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5493          | 3                   |
| 7     | 5498          | 21                  |
| 31    | 5497          | 93                  |
| 32    | 5492          | 96                  |
| 34    | 5496          | 102                 |
| 63    | 5502          | 189                 |
| 82    | 5506          | 246                 |

## USA Frequency Hopping Trial #4

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 39    | 5496          | 117                 |
| 42    | 5493          | 126                 |
| 55    | 5491          | 165                 |
| 72    | 5506          | 216                 |

## USA Frequency Hopping Trial #5

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 3     | 5492          | 9                   |
| 49    | 5504          | 147                 |
| 61    | 5497          | 183                 |

## USA Frequency Hopping Trial #6

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5509          | 0                   |
| 36    | 5500          | 108                 |
| 50    | 5503          | 150                 |

## USA Frequency Hopping Trial #7



| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 14    | 5492          | 42                  |
| 18    | 5501          | 54                  |
| 46    | 5498          | 138                 |
| 76    | 5502          | 228                 |

## USA Frequency Hopping Trial #8

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 16    | 5501          | 48                  |
| 84    | 5493          | 252                 |

## USA Frequency Hopping Trial #9

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 19    | 5506          | 57                  |
| 44    | 5502          | 132                 |
| 55    | 5501          | 165                 |
| 64    | 5497          | 192                 |
| 99    | 5493          | 297                 |

## USA Frequency Hopping Trial #10

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 18    | 5500          | 54                  |
| 26    | 5495          | 78                  |
| 45    | 5507          | 135                 |
| 71    | 5508          | 213                 |

## USA Frequency Hopping Trial #11

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 32    | 5506          | 96                  |
| 55    | 5493          | 165                 |
| 72    | 5495          | 216                 |
| 89    | 5504          | 267                 |
| 91    | 5499          | 273                 |

## USA Frequency Hopping Trial #12

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 3     | 5500          | 9                   |
| 15    | 5492          | 45                  |
| 32    | 5502          | 96                  |
| 55    | 5493          | 165                 |
| 79    | 5506          | 237                 |

## USA Frequency Hopping Trial #13

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5499          | 3                   |
| 9     | 5506          | 27                  |
| 63    | 5508          | 189                 |
| 71    | 5503          | 213                 |
| 91    | 5500          | 273                 |

## USA Frequency Hopping Trial #14

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 6     | 5491          | 18                  |
| 8     | 5496          | 24                  |
| 36    | 5495          | 108                 |
| 79    | 5493          | 237                 |

## USA Frequency Hopping Trial #15

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 11    | 5499          | 33                  |
| 13    | 5506          | 39                  |
| 29    | 5503          | 87                  |
| 35    | 5493          | 105                 |
| 50    | 5509          | 150                 |
| 59    | 5498          | 177                 |

## USA Frequency Hopping Trial #16

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 30    | 5498          | 90                  |
| 53    | 5507          | 159                 |
| 59    | 5508          | 177                 |
| 73    | 5503          | 219                 |
| 98    | 5501          | 294                 |

## USA Frequency Hopping Trial #17

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5498          | 6                   |
| 6     | 5491          | 18                  |
| 58    | 5494          | 174                 |

## USA Frequency Hopping Trial #18

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 6     | 5509          | 18                  |
| 58    | 5504          | 174                 |

## USA Frequency Hopping Trial #19

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 50    | 5502          | 150                 |
| 59    | 5496          | 177                 |
| 61    | 5499          | 183                 |
| 88    | 5491          | 264                 |

## USA Frequency Hopping Trial #20

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 9     | 5507          | 27                  |
| 56    | 5499          | 168                 |
| 73    | 5500          | 219                 |

## USA Frequency Hopping Trial #21

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 7     | 5495          | 21                  |
| 12    | 5496          | 36                  |
| 35    | 5506          | 105                 |
| 53    | 5497          | 159                 |
| 99    | 5507          | 297                 |

## USA Frequency Hopping Trial #22

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5495          | 0                   |
| 21    | 5493          | 63                  |
| 27    | 5500          | 81                  |
| 43    | 5501          | 129                 |
| 48    | 5496          | 144                 |
| 50    | 5491          | 150                 |
| 73    | 5494          | 219                 |

## USA Frequency Hopping Trial #23

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5500          | 3                   |
| 54    | 5507          | 162                 |
| 63    | 5493          | 189                 |
| 80    | 5495          | 240                 |

## USA Frequency Hopping Trial #24

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 41    | 5507          | 123                 |
| 64    | 5509          | 192                 |
| 65    | 5493          | 195                 |
| 84    | 5496          | 252                 |

|    |      |     |
|----|------|-----|
| 85 | 5508 | 255 |
| 91 | 5495 | 273 |

## USA Frequency Hopping Trial #25

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 31    | 5492          | 93                  |
| 40    | 5496          | 120                 |
| 48    | 5508          | 144                 |
| 67    | 5509          | 201                 |
| 85    | 5498          | 255                 |

## USA Frequency Hopping Trial #26

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 24    | 5499          | 72                  |
| 34    | 5500          | 102                 |
| 39    | 5491          | 117                 |
| 45    | 5498          | 135                 |
| 46    | 5505          | 138                 |
| 86    | 5495          | 258                 |

## USA Frequency Hopping Trial #27

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 14    | 5493          | 42                  |
| 28    | 5491          | 84                  |
| 34    | 5500          | 102                 |
| 70    | 5498          | 210                 |
| 97    | 5502          | 291                 |

## USA Frequency Hopping Trial #28

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 14    | 5501          | 42                  |
| 50    | 5507          | 150                 |
| 86    | 5492          | 258                 |

## USA Frequency Hopping Trial #29

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 16    | 5507          | 48                  |
| 23    | 5496          | 69                  |
| 83    | 5503          | 249                 |
| 89    | 5501          | 267                 |
| 98    | 5492          | 294                 |

## USA Frequency Hopping Trial #30

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
|-------|---------------|---------------------|



|    |      |     |
|----|------|-----|
| 2  | 5507 | 6   |
| 25 | 5491 | 75  |
| 83 | 5496 | 249 |

**Channel 5510 MHz, 40MHz BW, Statistical Performance****USA Bin 1A/1B**

freq=5510, rate=m0, bw=36.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 74     | 1       | 718      | 0                                | 96.7%                   | 60.0% |
| 2     | 5490      | 59     | 1       | 898      | 1                                |                         |       |
| 3     | 5493      | 58     | 1       | 918      | 1                                |                         |       |
| 4     | 5493      | 67     | 1       | 798      | 1                                |                         |       |
| 5     | 5496      | 95     | 1       | 558      | 1                                |                         |       |
| 6     | 5496      | 70     | 1       | 758      | 1                                |                         |       |
| 7     | 5499      | 68     | 1       | 778      | 1                                |                         |       |
| 8     | 5499      | 18     | 1       | 3066     | 1                                |                         |       |
| 9     | 5502      | 63     | 1       | 838      | 1                                |                         |       |
| 10    | 5502      | 67     | 1       | 798      | 1                                |                         |       |
| 11    | 5505      | 95     | 1       | 558      | 1                                |                         |       |
| 12    | 5505      | 67     | 1       | 798      | 1                                |                         |       |
| 13    | 5508      | 99     | 1       | 538      | 1                                |                         |       |
| 14    | 5508      | 57     | 1       | 938      | 1                                |                         |       |
| 15    | 5510      | 63     | 1       | 838      | 1                                |                         |       |
| 16    | 5510      | 32     | 1       | 1656     | 1                                |                         |       |
| 17    | 5512      | 93     | 1       | 568      | 1                                |                         |       |
| 18    | 5512      | 45     | 1       | 1178     | 1                                |                         |       |
| 19    | 5515      | 19     | 1       | 2858     | 1                                |                         |       |
| 20    | 5515      | 45     | 1       | 1182     | 1                                |                         |       |
| 21    | 5518      | 39     | 1       | 1388     | 1                                |                         |       |
| 22    | 5518      | 21     | 1       | 2585     | 1                                |                         |       |
| 23    | 5521      | 33     | 1       | 1644     | 1                                |                         |       |
| 24    | 5521      | 43     | 1       | 1234     | 1                                |                         |       |
| 25    | 5524      | 19     | 1       | 2917     | 1                                |                         |       |
| 26    | 5524      | 46     | 1       | 1154     | 1                                |                         |       |
| 27    | 5527      | 26     | 1       | 2039     | 1                                |                         |       |
| 28    | 5527      | 46     | 1       | 1148     | 1                                |                         |       |
| 29    | 5530      | 40     | 1       | 1330     | 1                                |                         |       |
| 30    | 5530      | 31     | 1       | 1738     | 1                                |                         |       |

**USA Bin 1A/1B**

freq=5510, rate=m0, bw=36.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 57     | 1       | 938      | 1                                | 96.7%                   | 60.0% |
| 2     | 5490      | 61     | 1       | 878      | 1                                |                         |       |
| 3     | 5493      | 102    | 1       | 518      | 1                                |                         |       |
| 4     | 5493      | 59     | 1       | 898      | 1                                |                         |       |
| 5     | 5496      | 86     | 1       | 618      | 1                                |                         |       |
| 6     | 5496      | 68     | 1       | 778      | 1                                |                         |       |
| 7     | 5499      | 63     | 1       | 838      | 1                                |                         |       |
| 8     | 5499      | 62     | 1       | 858      | 1                                |                         |       |
| 9     | 5502      | 95     | 1       | 558      | 1                                |                         |       |
| 10    | 5502      | 18     | 1       | 3066     | 0                                |                         |       |
| 11    | 5505      | 78     | 1       | 678      | 1                                |                         |       |
| 12    | 5505      | 67     | 1       | 798      | 1                                |                         |       |
| 13    | 5508      | 95     | 1       | 558      | 1                                |                         |       |
| 14    | 5508      | 18     | 1       | 3066     | 1                                |                         |       |
| 15    | 5510      | 59     | 1       | 898      | 1                                |                         |       |
| 16    | 5510      | 25     | 1       | 2125     | 1                                |                         |       |
| 17    | 5512      | 20     | 1       | 2765     | 1                                |                         |       |
| 18    | 5512      | 45     | 1       | 1180     | 1                                |                         |       |
| 19    | 5515      | 46     | 1       | 1171     | 1                                |                         |       |
| 20    | 5515      | 47     | 1       | 1132     | 1                                |                         |       |
| 21    | 5518      | 20     | 1       | 2777     | 1                                |                         |       |
| 22    | 5518      | 53     | 1       | 1000     | 1                                |                         |       |
| 23    | 5521      | 22     | 1       | 2405     | 1                                |                         |       |
| 24    | 5521      | 25     | 1       | 2155     | 1                                |                         |       |
| 25    | 5524      | 21     | 1       | 2634     | 1                                |                         |       |
| 26    | 5524      | 50     | 1       | 1056     | 1                                |                         |       |
| 27    | 5527      | 69     | 1       | 776      | 1                                |                         |       |
| 28    | 5527      | 36     | 1       | 1481     | 1                                |                         |       |
| 29    | 5530      | 21     | 1       | 2596     | 1                                |                         |       |
| 30    | 5530      | 37     | 1       | 1434     | 1                                |                         |       |



**USA Bin  
2**

freq=5510, rate=m0, bw=36.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 24     | 2.6     | 171      | 1                                | 90.0%                   | 60.0% |
| 2     | 5490      | 24     | 2.5     | 189      | 0                                |                         |       |
| 3     | 5493      | 26     | 2.9     | 227      | 1                                |                         |       |
| 4     | 5493      | 25     | 3.6     | 218      | 1                                |                         |       |
| 5     | 5496      | 28     | 3.4     | 212      | 1                                |                         |       |
| 6     | 5496      | 23     | 3.9     | 175      | 1                                |                         |       |
| 7     | 5499      | 24     | 2       | 172      | 1                                |                         |       |
| 8     | 5499      | 28     | 3.3     | 181      | 1                                |                         |       |
| 9     | 5502      | 23     | 3.3     | 227      | 1                                |                         |       |
| 10    | 5502      | 28     | 2.4     | 179      | 1                                |                         |       |
| 11    | 5505      | 27     | 4.6     | 162      | 0                                |                         |       |
| 12    | 5505      | 28     | 4.3     | 198      | 1                                |                         |       |
| 13    | 5508      | 26     | 2.6     | 199      | 0                                |                         |       |
| 14    | 5508      | 28     | 4.9     | 169      | 1                                |                         |       |
| 15    | 5510      | 28     | 4.8     | 216      | 1                                |                         |       |
| 16    | 5510      | 27     | 4.6     | 203      | 1                                |                         |       |
| 17    | 5512      | 28     | 4.1     | 222      | 1                                |                         |       |
| 18    | 5512      | 23     | 3.2     | 215      | 1                                |                         |       |
| 19    | 5515      | 24     | 4       | 164      | 1                                |                         |       |
| 20    | 5515      | 25     | 1.5     | 206      | 1                                |                         |       |
| 21    | 5518      | 26     | 2.7     | 174      | 1                                |                         |       |
| 22    | 5518      | 27     | 4.9     | 186      | 1                                |                         |       |
| 23    | 5521      | 25     | 1.1     | 209      | 1                                |                         |       |
| 24    | 5521      | 25     | 1.7     | 192      | 1                                |                         |       |
| 25    | 5524      | 24     | 3.5     | 226      | 1                                |                         |       |
| 26    | 5524      | 25     | 2.8     | 174      | 1                                |                         |       |
| 27    | 5527      | 24     | 4.7     | 228      | 1                                |                         |       |
| 28    | 5527      | 26     | 4.3     | 197      | 1                                |                         |       |
| 29    | 5530      | 26     | 2.3     | 188      | 1                                |                         |       |
| 30    | 5530      | 28     | 3.6     | 204      | 1                                |                         |       |


**USA Bin  
3**

freq=5510, rate=m0, bw=36.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 18     | 7.9     | 323      | 1                                | 83.3%                   | 60.0% |
| 2     | 5490      | 16     | 9       | 355      | 0                                |                         |       |
| 3     | 5493      | 18     | 7       | 290      | 1                                |                         |       |
| 4     | 5493      | 16     | 8.8     | 206      | 1                                |                         |       |
| 5     | 5496      | 16     | 7.4     | 246      | 1                                |                         |       |
| 6     | 5496      | 17     | 9.8     | 263      | 1                                |                         |       |
| 7     | 5499      | 16     | 9       | 377      | 1                                |                         |       |
| 8     | 5499      | 16     | 9.3     | 248      | 1                                |                         |       |
| 9     | 5502      | 17     | 7.7     | 206      | 1                                |                         |       |
| 10    | 5502      | 17     | 8.9     | 464      | 1                                |                         |       |
| 11    | 5505      | 16     | 6.3     | 476      | 1                                |                         |       |
| 12    | 5505      | 17     | 6.9     | 395      | 1                                |                         |       |
| 13    | 5508      | 18     | 8       | 432      | 1                                |                         |       |
| 14    | 5508      | 17     | 7.3     | 267      | 0                                |                         |       |
| 15    | 5510      | 18     | 6.4     | 408      | 1                                |                         |       |
| 16    | 5510      | 18     | 7.1     | 478      | 1                                |                         |       |
| 17    | 5512      | 17     | 7       | 340      | 0                                |                         |       |
| 18    | 5512      | 17     | 9.4     | 370      | 1                                |                         |       |
| 19    | 5515      | 17     | 6.1     | 307      | 0                                |                         |       |
| 20    | 5515      | 17     | 6.9     | 492      | 1                                |                         |       |
| 21    | 5518      | 16     | 8.2     | 369      | 1                                |                         |       |
| 22    | 5518      | 16     | 9.8     | 493      | 1                                |                         |       |
| 23    | 5521      | 17     | 9.7     | 210      | 1                                |                         |       |
| 24    | 5521      | 16     | 9.6     | 458      | 1                                |                         |       |
| 25    | 5524      | 16     | 8.6     | 489      | 1                                |                         |       |
| 26    | 5524      | 17     | 8.9     | 479      | 0                                |                         |       |
| 27    | 5527      | 17     | 9.2     | 219      | 1                                |                         |       |
| 28    | 5527      | 18     | 7.9     | 291      | 1                                |                         |       |
| 29    | 5530      | 17     | 8.7     | 355      | 1                                |                         |       |
| 30    | 5530      | 17     | 6.8     | 470      | 1                                |                         |       |

**USA Bin****4**

freq=5510, rate=m0, bw=36.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 15     | 16.6    | 241      | 1                                | 86.7%                   | 60.0% |
| 2     | 5490      | 16     | 19.4    | 286      | 1                                |                         |       |
| 3     | 5493      | 13     | 14.1    | 477      | 1                                |                         |       |
| 4     | 5493      | 16     | 14.7    | 238      | 1                                |                         |       |
| 5     | 5496      | 15     | 17.5    | 436      | 1                                |                         |       |
| 6     | 5496      | 16     | 19.3    | 337      | 1                                |                         |       |
| 7     | 5499      | 16     | 12.4    | 300      | 1                                |                         |       |
| 8     | 5499      | 16     | 11.9    | 201      | 1                                |                         |       |
| 9     | 5502      | 16     | 14.7    | 409      | 1                                |                         |       |
| 10    | 5502      | 14     | 15.9    | 304      | 1                                |                         |       |
| 11    | 5505      | 12     | 18.5    | 311      | 0                                |                         |       |
| 12    | 5505      | 12     | 11.7    | 221      | 1                                |                         |       |
| 13    | 5508      | 13     | 18.9    | 289      | 1                                |                         |       |
| 14    | 5508      | 13     | 14.2    | 383      | 1                                |                         |       |
| 15    | 5510      | 16     | 15.3    | 285      | 0                                |                         |       |
| 16    | 5510      | 14     | 13      | 368      | 1                                |                         |       |
| 17    | 5512      | 15     | 11.4    | 403      | 1                                |                         |       |
| 18    | 5512      | 14     | 18.3    | 224      | 1                                |                         |       |
| 19    | 5515      | 13     | 19.8    | 439      | 1                                |                         |       |
| 20    | 5515      | 12     | 12.6    | 402      | 1                                |                         |       |
| 21    | 5518      | 15     | 13.1    | 469      | 1                                |                         |       |
| 22    | 5518      | 16     | 17.4    | 282      | 1                                |                         |       |
| 23    | 5521      | 13     | 18      | 420      | 1                                |                         |       |
| 24    | 5521      | 12     | 12.2    | 471      | 0                                |                         |       |
| 25    | 5524      | 12     | 17.3    | 497      | 1                                |                         |       |
| 26    | 5524      | 15     | 19.8    | 378      | 1                                |                         |       |
| 27    | 5527      | 14     | 18.4    | 473      | 1                                |                         |       |
| 28    | 5527      | 13     | 12.1    | 487      | 1                                |                         |       |
| 29    | 5530      | 16     | 13.9    | 359      | 1                                |                         |       |
| 30    | 5530      | 14     | 18.6    | 211      | 0                                |                         |       |



**USA**  
**Bin**  
**5**

freq=5510, rate=m0, bw=36.0

| Trial | Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|-------------------------------|----------------------|-------|
| 1     | 1       | 1      | 5498.8          | 17          | 80      |                          |                          | 0.277812        | 1                             | 100.0%               | 80.0% |
| 2     | 1       | 1      | 5496            | 10          | 65      |                          |                          | 1.302736        | 1                             |                      |       |
| 3     | 1       | 3      | 5494.8          | 7           | 95      | 1974                     | 1497                     | 0.237217        | 1                             |                      |       |
| 4     | 1       | 3      | 5498.4          | 16          | 50      | 1337                     | 1267                     | 0.854053        | 1                             |                      |       |
| 5     | 1       | 2      | 5496.4          | 11          | 60      | 1312                     |                          | 1.01104         | 1                             |                      |       |
| 6     | 1       | 1      | 5495.2          | 8           | 85      |                          |                          | 0.481287        | 1                             |                      |       |
| 7     | 1       | 3      | 5497.6          | 14          | 100     | 1401                     | 1004                     | 0.949106        | 1                             |                      |       |
| 8     | 1       | 1      | 5498            | 15          | 50      |                          |                          | 0.034463        | 1                             |                      |       |
| 9     | 1       | 1      | 5496            | 10          | 80      |                          |                          | 0.57657         | 1                             |                      |       |
| 10    | 1       | 3      | 5497.2          | 13          | 50      | 1215                     | 1123                     | 0.124971        | 1                             |                      |       |
| 11    | 1       | 1      | 5510            | 7           | 70      |                          |                          | 0.501386        | 1                             |                      |       |
| 12    | 1       | 1      | 5510            | 19          | 90      |                          |                          | 0.169372        | 1                             |                      |       |
| 13    | 1       | 3      | 5510            | 16          | 85      | 1366                     | 1311                     | 0.453745        | 1                             |                      |       |
| 14    | 1       | 3      | 5510            | 9           | 75      | 1595                     | 1611                     | 0.578435        | 1                             |                      |       |
| 15    | 1       | 3      | 5510            | 20          | 100     | 1090                     | 1708                     | 0.718705        | 1                             |                      |       |
| 16    | 1       | 1      | 5510            | 11          | 70      |                          |                          | 0.595195        | 1                             |                      |       |
| 17    | 1       | 2      | 5510            | 12          | 90      | 1522                     |                          | 1.014452        | 1                             |                      |       |
| 18    | 1       | 1      | 5510            | 16          | 85      |                          |                          | 0.641739        | 1                             |                      |       |
| 19    | 1       | 1      | 5510            | 19          | 50      |                          |                          | 0.54935         | 1                             |                      |       |
| 20    | 1       | 3      | 5510            | 14          | 85      | 1043                     | 1118                     | 0.077513        | 1                             |                      |       |
| 21    | 1       | 1      | 5524.4          | 9           | 75      |                          |                          | 0.707202        | 1                             |                      |       |
| 22    | 1       | 3      | 5525.2          | 7           | 50      | 1697                     | 1338                     | 0.244837        | 1                             |                      |       |
| 23    | 1       | 2      | 5524            | 10          | 50      | 1631                     |                          | 0.567593        | 1                             |                      |       |
| 24    | 1       | 2      | 5525.2          | 7           | 60      | 1236                     |                          | 1.117329        | 1                             |                      |       |
| 25    | 1       | 2      | 5520            | 20          | 90      | 1915                     |                          | 0.758801        | 1                             |                      |       |
| 26    | 1       | 2      | 5524            | 10          | 85      | 1694                     |                          | 0.064195        | 1                             |                      |       |
| 27    | 1       | 1      | 5520.8          | 18          | 75      |                          |                          | 0.080756        | 1                             |                      |       |
| 28    | 1       | 2      | 5520            | 20          | 100     | 1565                     |                          | 0.122576        | 1                             |                      |       |
| 29    | 1       | 1      | 5521.2          | 17          | 95      |                          |                          | 0.42912         | 1                             |                      |       |
| 30    | 1       | 1      | 5523.6          | 11          | 60      |                          |                          | 0.042081        | 1                             |                      |       |

freq=5510, rate=m0,  
bw=36.0

### USA Frequency Hopping

| Trial | Hop # | Freq (GHz) | Pulse Start (mS) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|-------|------------|------------------|-------------------------------|----------------------|-------|
| 1     | 3     | 5492       | 9                | 1                             | 100.0%               | 70.0% |
| 2     | 15    | 5523       | 45               | 1                             |                      |       |
| 3     | 27    | 5517       | 81               | 1                             |                      |       |
| 4     | 15    | 5504       | 45               | 1                             |                      |       |
| 5     | 21    | 5496       | 63               | 1                             |                      |       |
| 6     | 6     | 5518       | 18               | 1                             |                      |       |
| 7     | 4     | 5505       | 12               | 1                             |                      |       |
| 8     | 2     | 5501       | 6                | 1                             |                      |       |
| 9     | 8     | 5516       | 24               | 1                             |                      |       |
| 10    | 20    | 5493       | 60               | 1                             |                      |       |
| 11    | 6     | 5513       | 18               | 1                             |                      |       |
| 12    | 1     | 5503       | 3                | 1                             |                      |       |
| 13    | 5     | 5513       | 15               | 1                             |                      |       |
| 14    | 3     | 5523       | 9                | 1                             |                      |       |
| 15    | 24    | 5521       | 72               | 1                             |                      |       |
| 16    | 25    | 5499       | 75               | 1                             |                      |       |
| 17    | 79    | 5524       | 237              | 1                             |                      |       |
| 18    | 52    | 5493       | 156              | 1                             |                      |       |
| 19    | 7     | 5528       | 21               | 1                             |                      |       |
| 20    | 23    | 5528       | 69               | 1                             |                      |       |
| 21    | 9     | 5516       | 27               | 1                             |                      |       |
| 22    | 8     | 5527       | 24               | 1                             |                      |       |
| 23    | 0     | 5500       | 0                | 1                             |                      |       |
| 24    | 14    | 5507       | 42               | 1                             |                      |       |
| 25    | 13    | 5494       | 39               | 1                             |                      |       |
| 26    | 13    | 5524       | 39               | 1                             |                      |       |
| 27    | 5     | 5511       | 15               | 1                             |                      |       |
| 28    | 4     | 5516       | 12               | 1                             |                      |       |
| 29    | 7     | 5501       | 21               | 1                             |                      |       |
| 30    | 13    | 5505       | 39               | 1                             |                      |       |

### Channel 5510 MHz, 40MHz BW, Statistical Performance

In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is required and is calculated as follows:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (96.7\% + 96.7\% + 90.0\% + 83.3\% + 86.7\%)/5 = 90.7\% (>80\%)$$



## USA Bin 5 Trial #1

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5498.8          | 17          | 80      |                          |                          | 0.277812        |
| 2       | 1      | 5498.8          | 17          | 80      |                          |                          | 0.839129        |
| 3       | 3      | 5498.8          | 17          | 65      | 1559                     | 1591                     | 1.772928        |
| 4       | 3      | 5498.8          | 17          | 85      | 1180                     | 1534                     | 2.738069        |
| 5       | 3      | 5498.8          | 17          | 60      | 1544                     | 1696                     | 3.185546        |
| 6       | 1      | 5498.8          | 17          | 50      |                          |                          | 3.850013        |
| 7       | 2      | 5498.8          | 17          | 90      | 1510                     |                          | 5.035835        |
| 8       | 2      | 5498.8          | 17          | 60      | 1274                     |                          | 5.35228         |
| 9       | 2      | 5498.8          | 17          | 85      | 1879                     |                          | 6.586976        |
| 10      | 2      | 5498.8          | 17          | 90      | 1054                     |                          | 6.856042        |
| 11      | 3      | 5498.8          | 17          | 90      | 1250                     | 1626                     | 8.033771        |
| 12      | 3      | 5498.8          | 17          | 95      | 1210                     | 1052                     | 8.830176        |
| 13      | 2      | 5498.8          | 17          | 100     | 1974                     |                          | 9.458316        |
| 14      | 1      | 5498.8          | 17          | 50      |                          |                          | 9.860508        |
| 15      | 1      | 5498.8          | 17          | 50      |                          |                          | 10.693889       |
| 16      | 2      | 5498.8          | 17          | 90      | 1856                     |                          | 11.854423       |

## USA Bin 5 Trial #2

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5496            | 10          | 65      |                          |                          | 1.302736        |
| 2       | 2      | 5496            | 10          | 65      | 1928                     |                          | 2.746087        |
| 3       | 2      | 5496            | 10          | 70      | 1388                     |                          | 3.017665        |
| 4       | 3      | 5496            | 10          | 55      | 1005                     | 1053                     | 4.518475        |
| 5       | 1      | 5496            | 10          | 55      |                          |                          | 6.33579         |
| 6       | 1      | 5496            | 10          | 70      |                          |                          | 8.56943         |
| 7       | 1      | 5496            | 10          | 85      |                          |                          | 10.212788       |
| 8       | 3      | 5496            | 10          | 80      | 1770                     | 1697                     | 11.547939       |

## USA Bin 5 Trial #3

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5494.8          | 7           | 95      | 1974                     | 1497                     | 0.237217        |
| 2       | 1      | 5494.8          | 7           | 85      |                          |                          | 1.361581        |
| 3       | 1      | 5494.8          | 7           | 80      |                          |                          | 1.952972        |
| 4       | 3      | 5494.8          | 7           | 85      | 1954                     | 1904                     | 2.837777        |
| 5       | 1      | 5494.8          | 7           | 90      |                          |                          | 4.489647        |
| 6       | 3      | 5494.8          | 7           | 75      | 1977                     | 1231                     | 5.229771        |
| 7       | 1      | 5494.8          | 7           | 85      |                          |                          | 6.250089        |
| 8       | 2      | 5494.8          | 7           | 60      | 1720                     |                          | 6.927847        |



|    |   |        |   |    |      |      |           |
|----|---|--------|---|----|------|------|-----------|
| 9  | 3 | 5494.8 | 7 | 75 | 1220 | 1956 | 7.897961  |
| 10 | 3 | 5494.8 | 7 | 90 | 1989 | 1449 | 8.669156  |
| 11 | 1 | 5494.8 | 7 | 85 |      |      | 9.775609  |
| 12 | 2 | 5494.8 | 7 | 75 | 1134 |      | 10.169374 |
| 13 | 2 | 5494.8 | 7 | 90 | 1072 |      | 11.975506 |

## USA Bin 5 Trial #4

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5498.4             | 16             | 50         | 1337                           | 1267                           | 0.854053           |
| 2       | 2      | 5498.4             | 16             | 75         | 1467                           |                                | 1.338698           |
| 3       | 3      | 5498.4             | 16             | 100        | 1183                           | 1989                           | 1.918933           |
| 4       | 2      | 5498.4             | 16             | 90         | 1228                           |                                | 2.861848           |
| 5       | 2      | 5498.4             | 16             | 60         | 1095                           |                                | 4.212236           |
| 6       | 3      | 5498.4             | 16             | 65         | 1556                           | 1207                           | 4.755452           |
| 7       | 3      | 5498.4             | 16             | 75         | 1876                           | 1247                           | 5.669156           |
| 8       | 1      | 5498.4             | 16             | 50         |                                |                                | 6.517969           |
| 9       | 3      | 5498.4             | 16             | 100        | 1116                           | 1994                           | 7.584415           |
| 10      | 3      | 5498.4             | 16             | 55         | 1813                           | 1717                           | 9.150576           |
| 11      | 2      | 5498.4             | 16             | 75         | 1218                           |                                | 9.497424           |
| 12      | 3      | 5498.4             | 16             | 65         | 1093                           | 1190                           | 10.498499          |
| 13      | 2      | 5498.4             | 16             | 75         | 1760                           |                                | 11.227439          |

## USA Bin 5 Trial #5

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5496.4             | 11             | 60         | 1312                           |                                | 1.01104            |
| 2       | 1      | 5496.4             | 11             | 65         |                                |                                | 1.569879           |
| 3       | 1      | 5496.4             | 11             | 80         |                                |                                | 3.585195           |
| 4       | 1      | 5496.4             | 11             | 70         |                                |                                | 4.756514           |
| 5       | 1      | 5496.4             | 11             | 95         |                                |                                | 5.900406           |
| 6       | 3      | 5496.4             | 11             | 55         | 1265                           | 1644                           | 6.941385           |
| 7       | 1      | 5496.4             | 11             | 90         |                                |                                | 7.41979            |
| 8       | 3      | 5496.4             | 11             | 55         | 1939                           | 1008                           | 9.034906           |
| 9       | 3      | 5496.4             | 11             | 55         | 1611                           | 1104                           | 9.686948           |
| 10      | 3      | 5496.4             | 11             | 75         | 1855                           | 1891                           | 11.553534          |

## USA Bin 5 Trial #6

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5495.2             | 8              | 85         |                                |                                | 0.481287           |
| 2       | 1      | 5495.2             | 8              | 70         |                                |                                | 1.200201           |
| 3       | 3      | 5495.2             | 8              | 65         | 1762                           | 1242                           | 1.77249            |
| 4       | 1      | 5495.2             | 8              | 50         |                                |                                | 2.782447           |



|    |   |        |   |     |      |      |           |
|----|---|--------|---|-----|------|------|-----------|
| 5  | 3 | 5495.2 | 8 | 90  | 1236 | 1215 | 3.070665  |
| 6  | 1 | 5495.2 | 8 | 50  |      |      | 3.859438  |
| 7  | 2 | 5495.2 | 8 | 80  | 1816 |      | 4.26761   |
| 8  | 1 | 5495.2 | 8 | 100 |      |      | 5.252861  |
| 9  | 3 | 5495.2 | 8 | 90  | 1753 | 1304 | 5.774358  |
| 10 | 1 | 5495.2 | 8 | 80  |      |      | 6.93058   |
| 11 | 2 | 5495.2 | 8 | 55  | 1317 |      | 7.483337  |
| 12 | 2 | 5495.2 | 8 | 70  | 1463 |      | 8.201659  |
| 13 | 1 | 5495.2 | 8 | 50  |      |      | 8.793979  |
| 14 | 3 | 5495.2 | 8 | 65  | 1449 | 1723 | 9.251653  |
| 15 | 3 | 5495.2 | 8 | 100 | 1707 | 1892 | 10.317925 |
| 16 | 2 | 5495.2 | 8 | 75  | 1523 |      | 10.777576 |
| 17 | 3 | 5495.2 | 8 | 80  | 1959 | 1444 | 11.950703 |

## USA Bin 5 Trial #7

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5497.6             | 14             | 100        | 1401                           | 1004                           | 0.949106           |
| 2       | 3      | 5497.6             | 14             | 75         | 1187                           | 1869                           | 1.505839           |
| 3       | 3      | 5497.6             | 14             | 65         | 1569                           | 1702                           | 3.440402           |
| 4       | 1      | 5497.6             | 14             | 95         |                                |                                | 4.704601           |
| 5       | 2      | 5497.6             | 14             | 75         | 1894                           |                                | 5.411245           |
| 6       | 3      | 5497.6             | 14             | 55         | 1370                           | 1771                           | 7.0641             |
| 7       | 3      | 5497.6             | 14             | 100        | 1338                           | 1955                           | 7.797803           |
| 8       | 2      | 5497.6             | 14             | 100        | 1954                           |                                | 9.536957           |
| 9       | 2      | 5497.6             | 14             | 75         | 1222                           |                                | 9.770222           |
| 10      | 2      | 5497.6             | 14             | 90         | 1442                           |                                | 11.727182          |

## USA Bin 5 Trial #8

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5498               | 15             | 50         |                                |                                | 0.034463           |
| 2       | 2      | 5498               | 15             | 100        | 1983                           |                                | 1.320407           |
| 3       | 1      | 5498               | 15             | 85         |                                |                                | 2.315472           |
| 4       | 2      | 5498               | 15             | 100        | 1697                           |                                | 2.914431           |
| 5       | 2      | 5498               | 15             | 70         | 1382                           |                                | 3.586621           |
| 6       | 1      | 5498               | 15             | 100        |                                |                                | 5.059715           |
| 7       | 2      | 5498               | 15             | 75         | 1744                           |                                | 5.864193           |
| 8       | 2      | 5498               | 15             | 100        | 1839                           |                                | 6.845049           |
| 9       | 1      | 5498               | 15             | 65         |                                |                                | 7.687686           |
| 10      | 2      | 5498               | 15             | 70         | 1373                           |                                | 8.111724           |
| 11      | 3      | 5498               | 15             | 80         | 1628                           | 1174                           | 9.356095           |
| 12      | 1      | 5498               | 15             | 60         |                                |                                | 9.449308           |
| 13      | 1      | 5498               | 15             | 60         |                                |                                | 10.626052          |



14            3            5498            15            50            1183            1547            11.377684  
USA Bin 5 Trial #9

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5496               | 10             | 80         |                                |                                | 0.57657            |
| 2       | 3      | 5496               | 10             | 95         | 1754                           | 1519                           | 1.045377           |
| 3       | 1      | 5496               | 10             | 75         |                                |                                | 1.766861           |
| 4       | 3      | 5496               | 10             | 75         | 1599                           | 1255                           | 3.191718           |
| 5       | 1      | 5496               | 10             | 100        |                                |                                | 3.835989           |
| 6       | 2      | 5496               | 10             | 90         | 1290                           |                                | 4.363615           |
| 7       | 2      | 5496               | 10             | 100        | 1426                           |                                | 5.977772           |
| 8       | 3      | 5496               | 10             | 65         | 1315                           | 1796                           | 6.810127           |
| 9       | 1      | 5496               | 10             | 60         |                                |                                | 6.889072           |
| 10      | 1      | 5496               | 10             | 70         |                                |                                | 8.300517           |
| 11      | 2      | 5496               | 10             | 90         | 1303                           |                                | 8.639131           |
| 12      | 1      | 5496               | 10             | 70         |                                |                                | 9.849136           |
| 13      | 2      | 5496               | 10             | 90         | 1304                           |                                | 10.363157          |
| 14      | 2      | 5496               | 10             | 90         | 1334                           |                                | 11.31122           |

USA Bin 5 Trial #10

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5497.2             | 13             | 50         | 1215                           | 1123                           | 0.124971           |
| 2       | 3      | 5497.2             | 13             | 60         | 1355                           | 1500                           | 1.743139           |
| 3       | 1      | 5497.2             | 13             | 75         |                                |                                | 2.702521           |
| 4       | 1      | 5497.2             | 13             | 70         |                                |                                | 3.65844            |
| 5       | 1      | 5497.2             | 13             | 90         |                                |                                | 4.751776           |
| 6       | 1      | 5497.2             | 13             | 100        |                                |                                | 5.003871           |
| 7       | 1      | 5497.2             | 13             | 60         |                                |                                | 6.71641            |
| 8       | 1      | 5497.2             | 13             | 50         |                                |                                | 7.07208            |
| 9       | 1      | 5497.2             | 13             | 100        |                                |                                | 8.185631           |
| 10      | 1      | 5497.2             | 13             | 90         |                                |                                | 9.981112           |
| 11      | 3      | 5497.2             | 13             | 95         | 1869                           | 1845                           | 10.221187          |
| 12      | 3      | 5497.2             | 13             | 95         | 1055                           | 1143                           | 11.921556          |

USA Bin 5 Trial #11

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5510               | 7              | 70         |                                |                                | 0.501386           |
| 2       | 2      | 5510               | 7              | 70         | 1468                           |                                | 1.165369           |
| 3       | 2      | 5510               | 7              | 100        | 1927                           |                                | 1.853672           |
| 4       | 2      | 5510               | 7              | 100        | 1498                           |                                | 3.177141           |
| 5       | 2      | 5510               | 7              | 55         | 1286                           |                                | 3.468829           |



|    |   |      |   |     |      |      |           |
|----|---|------|---|-----|------|------|-----------|
| 6  | 2 | 5510 | 7 | 95  | 1258 |      | 4.288514  |
| 7  | 1 | 5510 | 7 | 75  |      |      | 5.194976  |
| 8  | 1 | 5510 | 7 | 80  |      |      | 5.854046  |
| 9  | 3 | 5510 | 7 | 70  | 1666 | 1586 | 6.741605  |
| 10 | 2 | 5510 | 7 | 70  | 1022 |      | 7.329882  |
| 11 | 2 | 5510 | 7 | 100 | 1072 |      | 8.582997  |
| 12 | 3 | 5510 | 7 | 70  | 1998 | 1614 | 9.228684  |
| 13 | 2 | 5510 | 7 | 95  | 1672 |      | 10.235165 |
| 14 | 2 | 5510 | 7 | 95  | 1043 |      | 11.162043 |
| 15 | 1 | 5510 | 7 | 65  |      |      | 11.217618 |

## USA Bin 5 Trial #12

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5510            | 19          | 90      |                          |                          | 0.169372        |
| 2       | 2      | 5510            | 19          | 85      | 1367                     |                          | 2.629235        |
| 3       | 3      | 5510            | 19          | 70      | 1703                     | 1878                     | 3.555867        |
| 4       | 1      | 5510            | 19          | 85      |                          |                          | 4.881935        |
| 5       | 1      | 5510            | 19          | 85      |                          |                          | 6.104688        |
| 6       | 1      | 5510            | 19          | 55      |                          |                          | 7.78136         |
| 7       | 1      | 5510            | 19          | 60      |                          |                          | 9.039133        |
| 8       | 1      | 5510            | 19          | 90      |                          |                          | 10.978613       |

## USA Bin 5 Trial #13

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5510            | 16          | 85      | 1366                     | 1311                     | 0.453745        |
| 2       | 2      | 5510            | 16          | 50      | 1922                     |                          | 1.710812        |
| 3       | 1      | 5510            | 16          | 75      |                          |                          | 2.191098        |
| 4       | 3      | 5510            | 16          | 60      | 1158                     | 1710                     | 3.065937        |
| 5       | 1      | 5510            | 16          | 80      |                          |                          | 3.669694        |
| 6       | 1      | 5510            | 16          | 65      |                          |                          | 4.65843         |
| 7       | 1      | 5510            | 16          | 70      |                          |                          | 5.273057        |
| 8       | 1      | 5510            | 16          | 65      |                          |                          | 6.751964        |
| 9       | 1      | 5510            | 16          | 70      |                          |                          | 7.41562         |
| 10      | 3      | 5510            | 16          | 60      | 1714                     | 1442                     | 8.439635        |
| 11      | 3      | 5510            | 16          | 85      | 1669                     | 1960                     | 8.63144         |
| 12      | 3      | 5510            | 16          | 55      | 1546                     | 1051                     | 9.588934        |
| 13      | 3      | 5510            | 16          | 95      | 1472                     | 1651                     | 10.43196        |
| 14      | 3      | 5510            | 16          | 55      | 1655                     | 1291                     | 11.520209       |

## USA Bin 5 Trial #14

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|



|    |   |      |   |     |      |      |           |
|----|---|------|---|-----|------|------|-----------|
| 1  | 3 | 5510 | 9 | 75  | 1595 | 1611 | 0.578435  |
| 2  | 1 | 5510 | 9 | 100 |      |      | 1.345755  |
| 3  | 1 | 5510 | 9 | 70  |      |      | 2.004081  |
| 4  | 2 | 5510 | 9 | 90  | 1558 |      | 3.661637  |
| 5  | 1 | 5510 | 9 | 55  |      |      | 4.336212  |
| 6  | 1 | 5510 | 9 | 95  |      |      | 5.287131  |
| 7  | 2 | 5510 | 9 | 60  | 1308 |      | 5.896004  |
| 8  | 3 | 5510 | 9 | 70  | 1631 | 1844 | 7.039439  |
| 9  | 3 | 5510 | 9 | 100 | 1265 | 1322 | 7.881291  |
| 10 | 2 | 5510 | 9 | 65  | 1096 |      | 8.311787  |
| 11 | 1 | 5510 | 9 | 100 |      |      | 9.375501  |
| 12 | 2 | 5510 | 9 | 85  | 1481 |      | 10.512173 |
| 13 | 3 | 5510 | 9 | 90  | 1922 | 1881 | 11.517059 |

## USA Bin 5 Trial #15

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5510               | 20             | 100        | 1090                           | 1708                           | 0.718705           |
| 2       | 2      | 5510               | 20             | 65         | 1790                           |                                | 1.119193           |
| 3       | 1      | 5510               | 20             | 85         |                                |                                | 2.240347           |
| 4       | 3      | 5510               | 20             | 80         | 1891                           | 1521                           | 3.328025           |
| 5       | 1      | 5510               | 20             | 80         |                                |                                | 3.635697           |
| 6       | 2      | 5510               | 20             | 60         | 1631                           |                                | 4.98389            |
| 7       | 2      | 5510               | 20             | 90         | 1035                           |                                | 5.476632           |
| 8       | 1      | 5510               | 20             | 90         |                                |                                | 6.587831           |
| 9       | 3      | 5510               | 20             | 65         | 1844                           | 1348                           | 7.291516           |
| 10      | 2      | 5510               | 20             | 55         | 1199                           |                                | 8.213115           |
| 11      | 1      | 5510               | 20             | 55         |                                |                                | 8.612684           |
| 12      | 3      | 5510               | 20             | 80         | 1938                           | 1801                           | 9.476755           |
| 13      | 2      | 5510               | 20             | 85         | 1260                           |                                | 10.779354          |
| 14      | 1      | 5510               | 20             | 60         |                                |                                | 11.588102          |

## USA Bin 5 Trial #16

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5510               | 11             | 70         |                                |                                | 0.595195           |
| 2       | 1      | 5510               | 11             | 95         |                                |                                | 2.985832           |
| 3       | 1      | 5510               | 11             | 65         |                                |                                | 3.91105            |
| 4       | 2      | 5510               | 11             | 80         | 1264                           |                                | 5.107414           |
| 5       | 2      | 5510               | 11             | 75         | 1563                           |                                | 6.795874           |
| 6       | 2      | 5510               | 11             | 65         | 1550                           |                                | 8.770394           |
| 7       | 1      | 5510               | 11             | 60         |                                |                                | 9.011981           |
| 8       | 2      | 5510               | 11             | 100        | 1427                           |                                | 11.849576          |

## USA Bin 5 Trial #17

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5510               | 12             | 90         | 1522                           |                                | 1.014452           |
| 2       | 3      | 5510               | 12             | 90         | 1823                           | 1943                           | 2.353193           |
| 3       | 3      | 5510               | 12             | 55         | 1067                           | 1856                           | 3.776202           |
| 4       | 1      | 5510               | 12             | 75         |                                |                                | 5.979655           |
| 5       | 2      | 5510               | 12             | 100        | 1984                           |                                | 6.540873           |
| 6       | 2      | 5510               | 12             | 65         | 1492                           |                                | 8.583447           |
| 7       | 2      | 5510               | 12             | 60         | 1931                           |                                | 9.836416           |
| 8       | 3      | 5510               | 12             | 70         | 1468                           | 1725                           | 10.545772          |

## USA Bin 5 Trial #18

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5510               | 16             | 85         |                                |                                | 0.641739           |
| 2       | 3      | 5510               | 16             | 100        | 1271                           | 1471                           | 1.361722           |
| 3       | 3      | 5510               | 16             | 95         | 1482                           | 1908                           | 1.948984           |
| 4       | 1      | 5510               | 16             | 90         |                                |                                | 2.732211           |
| 5       | 2      | 5510               | 16             | 70         | 1626                           |                                | 2.830753           |
| 6       | 3      | 5510               | 16             | 55         | 1364                           | 1572                           | 3.675831           |
| 7       | 3      | 5510               | 16             | 65         | 1569                           | 1580                           | 4.532607           |
| 8       | 3      | 5510               | 16             | 65         | 1771                           | 1148                           | 5.172864           |
| 9       | 2      | 5510               | 16             | 95         | 1697                           |                                | 6.156586           |
| 10      | 3      | 5510               | 16             | 75         | 1912                           | 1670                           | 6.781827           |
| 11      | 2      | 5510               | 16             | 100        | 1909                           |                                | 7.491432           |
| 12      | 3      | 5510               | 16             | 55         | 1392                           | 1010                           | 8.160821           |
| 13      | 3      | 5510               | 16             | 65         | 1113                           | 1145                           | 8.91133            |
| 14      | 1      | 5510               | 16             | 95         |                                |                                | 9.633555           |
| 15      | 1      | 5510               | 16             | 60         |                                |                                | 10.540871          |
| 16      | 2      | 5510               | 16             | 100        | 1520                           |                                | 11.173778          |
| 17      | 1      | 5510               | 16             | 80         |                                |                                | 11.419325          |

## USA Bin 5 Trial #19

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5510               | 19             | 50         |                                |                                | 0.54935            |
| 2       | 2      | 5510               | 19             | 85         | 1811                           |                                | 1.273438           |
| 3       | 2      | 5510               | 19             | 65         | 1950                           |                                | 2.363444           |
| 4       | 3      | 5510               | 19             | 80         | 1679                           | 1323                           | 3.138737           |
| 5       | 1      | 5510               | 19             | 95         |                                |                                | 3.959294           |
| 6       | 2      | 5510               | 19             | 80         | 1338                           |                                | 4.751871           |
| 7       | 2      | 5510               | 19             | 50         | 1107                           |                                | 4.981837           |
| 8       | 3      | 5510               | 19             | 60         | 1206                           | 1204                           | 5.769438           |



|    |   |      |    |    |      |      |           |
|----|---|------|----|----|------|------|-----------|
| 9  | 3 | 5510 | 19 | 95 | 1476 | 1398 | 6.987692  |
| 10 | 3 | 5510 | 19 | 85 | 1273 | 1231 | 7.597449  |
| 11 | 1 | 5510 | 19 | 85 |      |      | 8.230698  |
| 12 | 1 | 5510 | 19 | 75 |      |      | 9.244036  |
| 13 | 2 | 5510 | 19 | 95 | 1490 |      | 10.103798 |
| 14 | 2 | 5510 | 19 | 65 | 1495 |      | 10.872695 |
| 15 | 2 | 5510 | 19 | 60 | 1439 |      | 11.536978 |

## USA Bin 5 Trial #20

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5510               | 14             | 85         | 1043                           | 1118                           | 0.077513           |
| 2       | 3      | 5510               | 14             | 60         | 1953                           | 1227                           | 1.86486            |
| 3       | 3      | 5510               | 14             | 60         | 1577                           | 1756                           | 2.322736           |
| 4       | 2      | 5510               | 14             | 50         | 1680                           |                                | 3.153416           |
| 5       | 1      | 5510               | 14             | 65         |                                |                                | 4.502178           |
| 6       | 2      | 5510               | 14             | 50         | 1119                           |                                | 5.467398           |
| 7       | 2      | 5510               | 14             | 90         | 1285                           |                                | 6.263288           |
| 8       | 2      | 5510               | 14             | 100        | 1326                           |                                | 7.703943           |
| 9       | 3      | 5510               | 14             | 95         | 1723                           | 1287                           | 8.03467            |
| 10      | 3      | 5510               | 14             | 70         | 1374                           | 1770                           | 9.754273           |
| 11      | 1      | 5510               | 14             | 95         |                                |                                | 10.676433          |
| 12      | 1      | 5510               | 14             | 70         |                                |                                | 11.814172          |

## USA Bin 5 Trial #21

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5524.4             | 9              | 75         |                                |                                | 0.707202           |
| 2       | 2      | 5524.4             | 9              | 80         | 1906                           |                                | 2.037956           |
| 3       | 1      | 5524.4             | 9              | 80         |                                |                                | 3.153815           |
| 4       | 1      | 5524.4             | 9              | 90         |                                |                                | 4.019813           |
| 5       | 1      | 5524.4             | 9              | 95         |                                |                                | 4.625734           |
| 6       | 1      | 5524.4             | 9              | 80         |                                |                                | 5.73951            |
| 7       | 1      | 5524.4             | 9              | 75         |                                |                                | 6.592596           |
| 8       | 2      | 5524.4             | 9              | 95         | 1452                           |                                | 8.703353           |
| 9       | 1      | 5524.4             | 9              | 90         |                                |                                | 8.912704           |
| 10      | 3      | 5524.4             | 9              | 50         | 1897                           | 1982                           | 10.167947          |
| 11      | 1      | 5524.4             | 9              | 85         |                                |                                | 11.276649          |

## USA Bin 5 Trial #22

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5525.2             | 7              | 50         | 1697                           | 1338                           | 0.244837           |
| 2       | 2      | 5525.2             | 7              | 100        | 1384                           |                                | 0.992345           |



|    |   |        |   |     |      |      |           |
|----|---|--------|---|-----|------|------|-----------|
| 3  | 3 | 5525.2 | 7 | 75  | 1323 | 1474 | 1.350834  |
| 4  | 3 | 5525.2 | 7 | 60  | 1917 | 1952 | 2.484476  |
| 5  | 3 | 5525.2 | 7 | 80  | 1318 | 1141 | 2.94022   |
| 6  | 2 | 5525.2 | 7 | 80  | 1126 |      | 3.572448  |
| 7  | 3 | 5525.2 | 7 | 55  | 1600 | 1342 | 3.792193  |
| 8  | 2 | 5525.2 | 7 | 70  | 1351 |      | 4.637762  |
| 9  | 2 | 5525.2 | 7 | 55  | 1054 |      | 5.416376  |
| 10 | 1 | 5525.2 | 7 | 80  |      |      | 5.941438  |
| 11 | 3 | 5525.2 | 7 | 80  | 1053 | 1203 | 6.751434  |
| 12 | 3 | 5525.2 | 7 | 80  | 1019 | 1808 | 7.210765  |
| 13 | 2 | 5525.2 | 7 | 100 | 1198 |      | 8.182601  |
| 14 | 3 | 5525.2 | 7 | 80  | 1354 | 1729 | 8.83051   |
| 15 | 1 | 5525.2 | 7 | 60  |      |      | 9.243929  |
| 16 | 3 | 5525.2 | 7 | 60  | 1796 | 1794 | 9.623683  |
| 17 | 1 | 5525.2 | 7 | 55  |      |      | 10.348578 |
| 18 | 1 | 5525.2 | 7 | 100 |      |      | 11.321794 |
| 19 | 3 | 5525.2 | 7 | 90  | 1347 | 1227 | 11.881734 |

## USA Bin 5 Trial #23

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5524               | 10             | 50         | 1631                           |                                | 0.567593           |
| 2       | 2      | 5524               | 10             | 50         | 1900                           |                                | 2.341631           |
| 3       | 1      | 5524               | 10             | 85         |                                |                                | 3.777428           |
| 4       | 1      | 5524               | 10             | 80         |                                |                                | 4.895554           |
| 5       | 2      | 5524               | 10             | 80         | 1591                           |                                | 5.5128             |
| 6       | 1      | 5524               | 10             | 95         |                                |                                | 7.806962           |
| 7       | 2      | 5524               | 10             | 100        | 1124                           |                                | 8.579724           |
| 8       | 1      | 5524               | 10             | 50         |                                |                                | 10.341936          |
| 9       | 1      | 5524               | 10             | 80         |                                |                                | 11.765676          |

## USA Bin 5 Trial #24

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5525.2             | 7              | 60         | 1236                           |                                | 1.117329           |
| 2       | 1      | 5525.2             | 7              | 65         |                                |                                | 1.982345           |
| 3       | 3      | 5525.2             | 7              | 65         | 1739                           | 1067                           | 2.903819           |
| 4       | 2      | 5525.2             | 7              | 100        | 1329                           |                                | 3.900215           |
| 5       | 3      | 5525.2             | 7              | 85         | 1950                           | 1366                           | 5.838072           |
| 6       | 1      | 5525.2             | 7              | 70         |                                |                                | 6.319584           |
| 7       | 2      | 5525.2             | 7              | 75         | 1296                           |                                | 7.427899           |
| 8       | 1      | 5525.2             | 7              | 65         |                                |                                | 9.460622           |
| 9       | 2      | 5525.2             | 7              | 50         | 1270                           |                                | 10.063994          |
| 10      | 3      | 5525.2             | 7              | 80         | 1693                           | 1166                           | 10.962338          |



## USA Bin 5 Trial #25

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5520               | 20             | 90         | 1915                           |                                | 0.758801           |
| 2       | 2      | 5520               | 20             | 65         | 1923                           |                                | 1.673161           |
| 3       | 1      | 5520               | 20             | 85         |                                |                                | 3.049865           |
| 4       | 2      | 5520               | 20             | 80         | 1502                           |                                | 3.885893           |
| 5       | 1      | 5520               | 20             | 90         |                                |                                | 4.960446           |
| 6       | 3      | 5520               | 20             | 80         | 1206                           | 1410                           | 6.134034           |
| 7       | 3      | 5520               | 20             | 50         | 1565                           | 1522                           | 6.554786           |
| 8       | 1      | 5520               | 20             | 60         |                                |                                | 8.042345           |
| 9       | 1      | 5520               | 20             | 100        |                                |                                | 9.65914            |
| 10      | 1      | 5520               | 20             | 50         |                                |                                | 10.488014          |
| 11      | 1      | 5520               | 20             | 75         |                                |                                | 11.008318          |

## USA Bin 5 Trial #26

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5524               | 10             | 85         | 1694                           |                                | 0.064195           |
| 2       | 3      | 5524               | 10             | 75         | 1686                           | 1582                           | 1.170829           |
| 3       | 2      | 5524               | 10             | 100        | 1486                           |                                | 2.3717             |
| 4       | 1      | 5524               | 10             | 55         |                                |                                | 3.54212            |
| 5       | 3      | 5524               | 10             | 75         | 1090                           | 1003                           | 4.05631            |
| 6       | 3      | 5524               | 10             | 70         | 1147                           | 1180                           | 5.895192           |
| 7       | 3      | 5524               | 10             | 90         | 1404                           | 1135                           | 6.530272           |
| 8       | 3      | 5524               | 10             | 90         | 1461                           | 1615                           | 7.808665           |
| 9       | 2      | 5524               | 10             | 55         | 1641                           |                                | 8.285012           |
| 10      | 3      | 5524               | 10             | 80         | 1708                           | 1585                           | 9.615666           |
| 11      | 3      | 5524               | 10             | 85         | 1242                           | 1409                           | 10.803747          |
| 12      | 2      | 5524               | 10             | 90         | 1725                           |                                | 11.276255          |

## USA Bin 5 Trial #27

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5520.8             | 18             | 75         |                                |                                | 0.080756           |
| 2       | 2      | 5520.8             | 18             | 65         | 1667                           |                                | 1.895901           |
| 3       | 3      | 5520.8             | 18             | 70         | 1518                           | 1388                           | 2.861873           |
| 4       | 1      | 5520.8             | 18             | 65         |                                |                                | 3.642826           |
| 5       | 2      | 5520.8             | 18             | 80         | 1777                           |                                | 5.339366           |
| 6       | 1      | 5520.8             | 18             | 90         |                                |                                | 6.260865           |
| 7       | 2      | 5520.8             | 18             | 80         | 1247                           |                                | 6.660955           |
| 8       | 2      | 5520.8             | 18             | 60         | 1935                           |                                | 8.07795            |
| 9       | 2      | 5520.8             | 18             | 85         | 1193                           |                                | 9.27208            |



|    |   |        |    |    |      |           |
|----|---|--------|----|----|------|-----------|
| 10 | 1 | 5520.8 | 18 | 60 |      | 10.465948 |
| 11 | 2 | 5520.8 | 18 | 75 | 1609 | 11.499907 |

USA Bin 5 Trial #28

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5520            | 20          | 100     | 1565                     |                          | 0.122576        |
| 2       | 1      | 5520            | 20          | 85      |                          |                          | 0.880474        |
| 3       | 1      | 5520            | 20          | 65      |                          |                          | 1.553232        |
| 4       | 2      | 5520            | 20          | 80      | 1759                     |                          | 2.025973        |
| 5       | 2      | 5520            | 20          | 80      | 1659                     |                          | 2.931706        |
| 6       | 2      | 5520            | 20          | 95      | 1179                     |                          | 3.03098         |
| 7       | 1      | 5520            | 20          | 95      |                          |                          | 3.963453        |
| 8       | 3      | 5520            | 20          | 75      | 1013                     | 1068                     | 4.741613        |
| 9       | 1      | 5520            | 20          | 55      |                          |                          | 4.948259        |
| 10      | 2      | 5520            | 20          | 55      | 1883                     |                          | 5.862093        |
| 11      | 2      | 5520            | 20          | 85      | 1167                     |                          | 6.56653         |
| 12      | 3      | 5520            | 20          | 70      | 1227                     | 1293                     | 7.024063        |
| 13      | 3      | 5520            | 20          | 50      | 1405                     | 1730                     | 7.441472        |
| 14      | 1      | 5520            | 20          | 70      |                          |                          | 7.892734        |
| 15      | 2      | 5520            | 20          | 70      | 1225                     |                          | 8.667244        |
| 16      | 1      | 5520            | 20          | 75      |                          |                          | 9.07631         |
| 17      | 2      | 5520            | 20          | 65      | 1979                     |                          | 9.80849         |
| 18      | 2      | 5520            | 20          | 60      | 1800                     |                          | 10.317746       |
| 19      | 3      | 5520            | 20          | 70      | 1326                     | 1215                     | 11.070465       |
| 20      | 2      | 5520            | 20          | 60      | 1161                     |                          | 11.675632       |

## USA Bin 5 Trial #29

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5521.2          | 17          | 95      |                          |                          | 0.42912         |
| 2       | 3      | 5521.2          | 17          | 80      | 1125                     | 1531                     | 1.266486        |
| 3       | 2      | 5521.2          | 17          | 95      | 1993                     |                          | 2.374016        |
| 4       | 3      | 5521.2          | 17          | 55      | 1572                     | 1320                     | 4.22436         |
| 5       | 3      | 5521.2          | 17          | 100     | 1685                     | 1221                     | 4.440697        |
| 6       | 1      | 5521.2          | 17          | 75      |                          |                          | 6.357325        |
| 7       | 1      | 5521.2          | 17          | 95      |                          |                          | 7.445717        |
| 8       | 3      | 5521.2          | 17          | 95      | 1789                     | 1369                     | 8.687285        |
| 9       | 1      | 5521.2          | 17          | 70      |                          |                          | 9.019925        |
| 10      | 3      | 5521.2          | 17          | 95      | 1728                     | 1266                     | 10.433235       |
| 11      | 1      | 5521.2          | 17          | 75      |                          |                          | 11.086973       |

## USA Bin 5 Trial #30



| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5523.6             | 11             | 60         |                                |                                | 0.042081           |
| 2       | 2      | 5523.6             | 11             | 80         | 1693                           |                                | 1.422578           |
| 3       | 2      | 5523.6             | 11             | 50         | 1315                           |                                | 2.724962           |
| 4       | 3      | 5523.6             | 11             | 85         | 1160                           | 1732                           | 3.466092           |
| 5       | 3      | 5523.6             | 11             | 100        | 1975                           | 1632                           | 4.441871           |
| 6       | 2      | 5523.6             | 11             | 95         | 1155                           |                                | 5.688568           |
| 7       | 3      | 5523.6             | 11             | 65         | 1164                           | 1060                           | 6.996487           |
| 8       | 1      | 5523.6             | 11             | 100        |                                |                                | 8.164451           |
| 9       | 2      | 5523.6             | 11             | 95         | 1583                           |                                | 8.960696           |
| 10      | 2      | 5523.6             | 11             | 85         | 1765                           |                                | 9.818373           |
| 11      | 3      | 5523.6             | 11             | 60         | 1296                           | 1503                           | 11.574381          |

## USA Frequency Hopping Trial #1

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 3     | 5492          | 9                   |
| 19    | 5524          | 57                  |
| 29    | 5498          | 87                  |
| 30    | 5528          | 90                  |
| 74    | 5509          | 222                 |
| 85    | 5522          | 255                 |
| 90    | 5527          | 270                 |

## USA Frequency Hopping Trial #2

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 15    | 5523          | 45                  |
| 24    | 5503          | 72                  |
| 43    | 5520          | 129                 |
| 46    | 5513          | 138                 |
| 62    | 5504          | 186                 |
| 70    | 5516          | 210                 |
| 73    | 5508          | 219                 |
| 98    | 5498          | 294                 |

## USA Frequency Hopping Trial #3

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 27    | 5517          | 81                  |
| 96    | 5506          | 288                 |

## USA Frequency Hopping Trial #4

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 15    | 5504          | 45                  |
| 39    | 5525          | 117                 |
| 58    | 5513          | 174                 |
| 68    | 5519          | 204                 |
| 75    | 5522          | 225                 |
| 76    | 5500          | 228                 |
| 85    | 5518          | 255                 |

## USA Frequency Hopping Trial #5

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 21    | 5496          | 63                  |
| 26    | 5524          | 78                  |
| 37    | 5498          | 111                 |
| 41    | 5522          | 123                 |
| 43    | 5510          | 129                 |

|    |      |     |
|----|------|-----|
| 45 | 5518 | 135 |
| 50 | 5509 | 150 |
| 55 | 5504 | 165 |
| 63 | 5526 | 189 |
| 68 | 5508 | 204 |
| 86 | 5519 | 258 |
| 90 | 5507 | 270 |

## USA Frequency Hopping Trial #6

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 6     | 5518          | 18                  |
| 7     | 5522          | 21                  |
| 9     | 5524          | 27                  |
| 22    | 5495          | 66                  |
| 70    | 5510          | 210                 |
| 75    | 5497          | 225                 |
| 79    | 5517          | 237                 |

## USA Frequency Hopping Trial #7

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5505          | 12                  |
| 42    | 5515          | 126                 |
| 63    | 5493          | 189                 |
| 84    | 5509          | 252                 |
| 88    | 5521          | 264                 |

## USA Frequency Hopping Trial #8

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5501          | 6                   |
| 37    | 5510          | 111                 |
| 38    | 5527          | 114                 |
| 53    | 5509          | 159                 |
| 59    | 5492          | 177                 |
| 76    | 5499          | 228                 |
| 83    | 5514          | 249                 |
| 93    | 5521          | 279                 |

## USA Frequency Hopping Trial #9

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 8     | 5516          | 24                  |
| 9     | 5510          | 27                  |
| 15    | 5527          | 45                  |
| 18    | 5513          | 54                  |
| 21    | 5523          | 63                  |

|    |      |     |
|----|------|-----|
| 22 | 5492 | 66  |
| 32 | 5526 | 96  |
| 62 | 5521 | 186 |
| 64 | 5503 | 192 |
| 72 | 5515 | 216 |
| 85 | 5512 | 255 |

## USA Frequency Hopping Trial #10

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 20    | 5493          | 60                  |
| 40    | 5502          | 120                 |
| 76    | 5517          | 228                 |
| 85    | 5509          | 255                 |
| 88    | 5516          | 264                 |

## USA Frequency Hopping Trial #11

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 6     | 5513          | 18                  |
| 60    | 5494          | 180                 |
| 67    | 5514          | 201                 |
| 85    | 5511          | 255                 |
| 87    | 5518          | 261                 |
| 90    | 5525          | 270                 |
| 99    | 5517          | 297                 |

## USA Frequency Hopping Trial #12

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5503          | 3                   |
| 3     | 5512          | 9                   |
| 7     | 5523          | 21                  |
| 39    | 5496          | 117                 |
| 40    | 5515          | 120                 |
| 64    | 5506          | 192                 |
| 68    | 5498          | 204                 |
| 69    | 5517          | 207                 |
| 72    | 5520          | 216                 |
| 85    | 5527          | 255                 |
| 95    | 5494          | 285                 |

## USA Frequency Hopping Trial #13

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5513          | 15                  |
| 23    | 5523          | 69                  |
| 24    | 5527          | 72                  |

|    |      |     |
|----|------|-----|
| 35 | 5517 | 105 |
| 37 | 5521 | 111 |
| 51 | 5505 | 153 |
| 59 | 5493 | 177 |
| 62 | 5515 | 186 |
| 63 | 5510 | 189 |
| 69 | 5494 | 207 |
| 78 | 5503 | 234 |
| 92 | 5511 | 276 |
| 95 | 5525 | 285 |

**USA Frequency Hopping Trial #14**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 3     | 5523          | 9                   |
| 7     | 5501          | 21                  |
| 24    | 5506          | 72                  |
| 26    | 5500          | 78                  |
| 36    | 5515          | 108                 |
| 41    | 5494          | 123                 |
| 44    | 5513          | 132                 |
| 68    | 5496          | 204                 |
| 77    | 5510          | 231                 |

**USA Frequency Hopping Trial #15**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 24    | 5521          | 72                  |
| 25    | 5495          | 75                  |
| 32    | 5501          | 96                  |
| 34    | 5494          | 102                 |
| 36    | 5526          | 108                 |
| 40    | 5525          | 120                 |
| 43    | 5508          | 129                 |
| 44    | 5522          | 132                 |
| 75    | 5515          | 225                 |
| 95    | 5492          | 285                 |
| 99    | 5507          | 297                 |

**USA Frequency Hopping Trial #16**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 25    | 5499          | 75                  |
| 29    | 5524          | 87                  |
| 76    | 5517          | 228                 |
| 87    | 5520          | 261                 |
| 92    | 5495          | 276                 |

## USA Frequency Hopping Trial #17

|       | Freq  | Pulse Start |
|-------|-------|-------------|
| Hop # | (GHz) | (mS)        |
| 79    | 5524  | 237         |
| 83    | 5513  | 249         |
| 92    | 5497  | 276         |

## USA Frequency Hopping Trial #18

|       | Freq  | Pulse Start |
|-------|-------|-------------|
| Hop # | (GHz) | (mS)        |
| 52    | 5493  | 156         |
| 61    | 5527  | 183         |
| 62    | 5508  | 186         |

## USA Frequency Hopping Trial #19

|       | Freq  | Pulse Start |
|-------|-------|-------------|
| Hop # | (GHz) | (mS)        |
| 7     | 5528  | 21          |
| 70    | 5504  | 210         |
| 99    | 5517  | 297         |

## USA Frequency Hopping Trial #20

|       | Freq  | Pulse Start |
|-------|-------|-------------|
| Hop # | (GHz) | (mS)        |
| 23    | 5528  | 69          |
| 29    | 5524  | 87          |
| 32    | 5504  | 96          |
| 56    | 5508  | 168         |
| 59    | 5498  | 177         |
| 72    | 5512  | 216         |
| 81    | 5501  | 243         |
| 88    | 5523  | 264         |
| 89    | 5496  | 267         |

## USA Frequency Hopping Trial #21

|       | Freq  | Pulse Start |
|-------|-------|-------------|
| Hop # | (GHz) | (mS)        |
| 9     | 5516  | 27          |
| 29    | 5526  | 87          |
| 79    | 5494  | 237         |
| 90    | 5502  | 270         |

## USA Frequency Hopping Trial #22

|       | Freq  | Pulse Start |
|-------|-------|-------------|
| Hop # | (GHz) | (mS)        |
| 8     | 5527  | 24          |
| 20    | 5508  | 60          |
| 26    | 5501  | 78          |
| 31    | 5520  | 93          |

|    |      |     |
|----|------|-----|
| 35 | 5523 | 105 |
| 43 | 5495 | 129 |
| 46 | 5525 | 138 |
| 50 | 5509 | 150 |
| 62 | 5492 | 186 |
| 74 | 5515 | 222 |
| 99 | 5526 | 297 |

## USA Frequency Hopping Trial #23

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5500          | 0                   |
| 7     | 5493          | 21                  |
| 33    | 5518          | 99                  |
| 34    | 5508          | 102                 |
| 48    | 5523          | 144                 |
| 51    | 5525          | 153                 |
| 63    | 5498          | 189                 |
| 76    | 5526          | 228                 |
| 86    | 5515          | 258                 |
| 87    | 5516          | 261                 |
| 98    | 5505          | 294                 |

## USA Frequency Hopping Trial #24

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 14    | 5507          | 42                  |
| 16    | 5501          | 48                  |
| 30    | 5493          | 90                  |
| 37    | 5497          | 111                 |
| 50    | 5494          | 150                 |
| 51    | 5514          | 153                 |
| 76    | 5510          | 228                 |
| 86    | 5526          | 258                 |

## USA Frequency Hopping Trial #25

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 13    | 5494          | 39                  |
| 25    | 5522          | 75                  |
| 31    | 5493          | 93                  |
| 36    | 5511          | 108                 |
| 58    | 5505          | 174                 |
| 64    | 5526          | 192                 |
| 71    | 5503          | 213                 |
| 99    | 5495          | 297                 |

## USA Frequency Hopping Trial #26

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 13    | 5524          | 39                  |
| 72    | 5511          | 216                 |
| 73    | 5506          | 219                 |
| 74    | 5523          | 222                 |
| 78    | 5494          | 234                 |

## USA Frequency Hopping Trial #27

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5511          | 15                  |
| 9     | 5527          | 27                  |
| 23    | 5503          | 69                  |
| 28    | 5496          | 84                  |
| 57    | 5517          | 171                 |
| 66    | 5526          | 198                 |
| 72    | 5523          | 216                 |
| 73    | 5520          | 219                 |
| 77    | 5509          | 231                 |
| 80    | 5513          | 240                 |
| 85    | 5506          | 255                 |
| 88    | 5521          | 264                 |

## USA Frequency Hopping Trial #28

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5516          | 12                  |
| 6     | 5509          | 18                  |
| 12    | 5507          | 36                  |
| 22    | 5528          | 66                  |
| 31    | 5526          | 93                  |
| 35    | 5500          | 105                 |
| 36    | 5495          | 108                 |
| 49    | 5505          | 147                 |
| 57    | 5523          | 171                 |
| 60    | 5497          | 180                 |
| 68    | 5506          | 204                 |
| 74    | 5496          | 222                 |

## USA Frequency Hopping Trial #29

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 7     | 5501          | 21                  |
| 11    | 5518          | 33                  |
| 36    | 5528          | 108                 |
| 38    | 5521          | 114                 |



|    |      |     |
|----|------|-----|
| 42 | 5512 | 126 |
| 53 | 5520 | 159 |
| 79 | 5511 | 237 |
| 80 | 5494 | 240 |
| 90 | 5523 | 270 |

## USA Frequency Hopping Trial #30

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 13    | 5505          | 39                  |
| 22    | 5519          | 66                  |
| 36    | 5501          | 108                 |
| 40    | 5504          | 120                 |
| 57    | 5518          | 171                 |
| 66    | 5510          | 198                 |
| 78    | 5508          | 234                 |
| 96    | 5514          | 288                 |

**Channel 5530 MHz, 80MHz BW, Statistical Performance****USA Bin 1A/1B**

freq=5530, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|-----------|--------|---------|----------|-------------------------------|----------------------|-------|
| 1     | 5490      | 78     | 1       | 678      | 1                             | 96.7%                | 60.0% |
| 2     | 5490      | 57     | 1       | 938      | 1                             |                      |       |
| 3     | 5496      | 86     | 1       | 618      | 1                             |                      |       |
| 4     | 5496      | 81     | 1       | 658      | 1                             |                      |       |
| 5     | 5502      | 83     | 1       | 638      | 1                             |                      |       |
| 6     | 5502      | 62     | 1       | 858      | 1                             |                      |       |
| 7     | 5508      | 57     | 1       | 938      | 1                             |                      |       |
| 8     | 5508      | 72     | 1       | 738      | 1                             |                      |       |
| 9     | 5514      | 102    | 1       | 518      | 1                             |                      |       |
| 10    | 5514      | 89     | 1       | 598      | 1                             |                      |       |
| 11    | 5520      | 76     | 1       | 698      | 1                             |                      |       |
| 12    | 5520      | 86     | 1       | 618      | 1                             |                      |       |
| 13    | 5526      | 74     | 1       | 718      | 0                             |                      |       |
| 14    | 5526      | 62     | 1       | 858      | 1                             |                      |       |
| 15    | 5530      | 59     | 1       | 898      | 1                             |                      |       |
| 16    | 5530      | 97     | 1       | 545      | 1                             |                      |       |
| 17    | 5534      | 45     | 1       | 1179     | 1                             |                      |       |
| 18    | 5534      | 43     | 1       | 1249     | 1                             |                      |       |
| 19    | 5540      | 70     | 1       | 759      | 1                             |                      |       |
| 20    | 5540      | 41     | 1       | 1306     | 1                             |                      |       |
| 21    | 5546      | 24     | 1       | 2228     | 1                             |                      |       |
| 22    | 5546      | 48     | 1       | 1108     | 1                             |                      |       |
| 23    | 5552      | 38     | 1       | 1414     | 1                             |                      |       |
| 24    | 5552      | 65     | 1       | 815      | 1                             |                      |       |
| 25    | 5558      | 30     | 1       | 1783     | 1                             |                      |       |
| 26    | 5558      | 19     | 1       | 2798     | 1                             |                      |       |
| 27    | 5564      | 20     | 1       | 2683     | 1                             |                      |       |
| 28    | 5564      | 30     | 1       | 1804     | 1                             |                      |       |
| 29    | 5570      | 19     | 1       | 2864     | 1                             |                      |       |
| 30    | 5570      | 32     | 1       | 1694     | 1                             |                      |       |

**USA Bin 1A/1B**

freq=5530, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|-------------------------------|-------------------------|-------|
| 1     | 5490      | 99     | 1       | 538      | 1                             | 93.3%                   | 60.0% |
| 2     | 5490      | 59     | 1       | 898      | 1                             |                         |       |
| 3     | 5496      | 68     | 1       | 778      | 1                             |                         |       |
| 4     | 5496      | 59     | 1       | 898      | 1                             |                         |       |
| 5     | 5502      | 89     | 1       | 598      | 1                             |                         |       |
| 6     | 5502      | 18     | 1       | 3066     | 1                             |                         |       |
| 7     | 5508      | 63     | 1       | 838      | 1                             |                         |       |
| 8     | 5508      | 92     | 1       | 578      | 1                             |                         |       |
| 9     | 5514      | 65     | 1       | 818      | 1                             |                         |       |
| 10    | 5514      | 65     | 1       | 818      | 1                             |                         |       |
| 11    | 5520      | 62     | 1       | 858      | 1                             |                         |       |
| 12    | 5520      | 70     | 1       | 758      | 1                             |                         |       |
| 13    | 5526      | 70     | 1       | 758      | 1                             |                         |       |
| 14    | 5526      | 68     | 1       | 778      | 1                             |                         |       |
| 15    | 5530      | 74     | 1       | 718      | 0                             |                         |       |
| 16    | 5530      | 20     | 1       | 2672     | 1                             |                         |       |
| 17    | 5534      | 23     | 1       | 2306     | 1                             |                         |       |
| 18    | 5534      | 22     | 1       | 2503     | 1                             |                         |       |
| 19    | 5540      | 36     | 1       | 1483     | 1                             |                         |       |
| 20    | 5540      | 18     | 1       | 3042     | 1                             |                         |       |
| 21    | 5546      | 18     | 1       | 2977     | 1                             |                         |       |
| 22    | 5546      | 65     | 1       | 815      | 1                             |                         |       |
| 23    | 5552      | 23     | 1       | 2375     | 1                             |                         |       |
| 24    | 5552      | 28     | 1       | 1903     | 1                             |                         |       |
| 25    | 5558      | 39     | 1       | 1365     | 1                             |                         |       |
| 26    | 5558      | 20     | 1       | 2730     | 1                             |                         |       |
| 27    | 5564      | 27     | 1       | 1970     | 1                             |                         |       |
| 28    | 5564      | 43     | 1       | 1229     | 1                             |                         |       |
| 29    | 5570      | 21     | 1       | 2629     | 1                             |                         |       |
| 30    | 5570      | 37     | 1       | 1464     | 0                             |                         |       |


**USA Bin  
2**

freq=5530, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|-------------------------------|-------------------------|-------|
| 1     | 5490      | 28     | 3.7     | 229      | 1                             | 80.0%                   | 60.0% |
| 2     | 5490      | 24     | 5       | 227      | 1                             |                         |       |
| 3     | 5496      | 28     | 2.5     | 229      | 1                             |                         |       |
| 4     | 5496      | 24     | 3.6     | 191      | 1                             |                         |       |
| 5     | 5502      | 23     | 5       | 220      | 1                             |                         |       |
| 6     | 5502      | 23     | 2.2     | 164      | 0                             |                         |       |
| 7     | 5508      | 29     | 2.4     | 155      | 1                             |                         |       |
| 8     | 5508      | 24     | 3.1     | 218      | 1                             |                         |       |
| 9     | 5514      | 24     | 1.7     | 192      | 1                             |                         |       |
| 10    | 5514      | 28     | 4.9     | 189      | 0                             |                         |       |
| 11    | 5520      | 26     | 2.3     | 206      | 1                             |                         |       |
| 12    | 5520      | 27     | 2.6     | 208      | 1                             |                         |       |
| 13    | 5526      | 26     | 2.2     | 205      | 1                             |                         |       |
| 14    | 5526      | 27     | 4.1     | 169      | 1                             |                         |       |
| 15    | 5530      | 26     | 3.2     | 161      | 1                             |                         |       |
| 16    | 5530      | 26     | 1.9     | 166      | 1                             |                         |       |
| 17    | 5534      | 23     | 1.6     | 201      | 1                             |                         |       |
| 18    | 5534      | 23     | 2.1     | 178      | 1                             |                         |       |
| 19    | 5540      | 28     | 4.1     | 164      | 1                             |                         |       |
| 20    | 5540      | 27     | 2.2     | 230      | 1                             |                         |       |
| 21    | 5546      | 25     | 4.9     | 157      | 1                             |                         |       |
| 22    | 5546      | 24     | 4.5     | 190      | 1                             |                         |       |
| 23    | 5552      | 27     | 4.4     | 175      | 0                             |                         |       |
| 24    | 5552      | 25     | 4.4     | 172      | 1                             |                         |       |
| 25    | 5558      | 29     | 1       | 164      | 0                             |                         |       |
| 26    | 5558      | 25     | 2.6     | 216      | 1                             |                         |       |
| 27    | 5564      | 26     | 4.8     | 157      | 0                             |                         |       |
| 28    | 5564      | 26     | 4.2     | 216      | 1                             |                         |       |
| 29    | 5570      | 23     | 4.9     | 164      | 0                             |                         |       |
| 30    | 5570      | 24     | 1.8     | 206      | 1                             |                         |       |



**USA Bin**  
**3**

freq=5530, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|-------------------------------|-------------------------|-------|
| 1     | 5490      | 17     | 9.8     | 290      | 1                             | 86.7%                   | 60.0% |
| 2     | 5490      | 17     | 9.7     | 272      | 1                             |                         |       |
| 3     | 5496      | 18     | 8.3     | 294      | 1                             |                         |       |
| 4     | 5496      | 16     | 9.4     | 471      | 1                             |                         |       |
| 5     | 5502      | 17     | 9.7     | 340      | 1                             |                         |       |
| 6     | 5502      | 17     | 6.8     | 362      | 1                             |                         |       |
| 7     | 5508      | 16     | 7.7     | 249      | 1                             |                         |       |
| 8     | 5508      | 18     | 6.4     | 314      | 1                             |                         |       |
| 9     | 5514      | 18     | 6.7     | 287      | 1                             |                         |       |
| 10    | 5514      | 18     | 8.8     | 225      | 1                             |                         |       |
| 11    | 5520      | 18     | 7.6     | 388      | 1                             |                         |       |
| 12    | 5520      | 18     | 8.1     | 460      | 1                             |                         |       |
| 13    | 5526      | 18     | 8.9     | 454      | 1                             |                         |       |
| 14    | 5526      | 16     | 6       | 249      | 1                             |                         |       |
| 15    | 5530      | 17     | 8.6     | 288      | 1                             |                         |       |
| 16    | 5530      | 17     | 6.4     | 384      | 0                             |                         |       |
| 17    | 5534      | 16     | 9.7     | 401      | 1                             |                         |       |
| 18    | 5534      | 18     | 7.2     | 227      | 1                             |                         |       |
| 19    | 5540      | 17     | 8.3     | 300      | 1                             |                         |       |
| 20    | 5540      | 18     | 6.4     | 246      | 1                             |                         |       |
| 21    | 5546      | 18     | 6.4     | 302      | 1                             |                         |       |
| 22    | 5546      | 18     | 7       | 461      | 1                             |                         |       |
| 23    | 5552      | 16     | 7.8     | 336      | 1                             |                         |       |
| 24    | 5552      | 18     | 6.9     | 327      | 0                             |                         |       |
| 25    | 5558      | 18     | 9.9     | 331      | 1                             |                         |       |
| 26    | 5558      | 17     | 7.3     | 302      | 1                             |                         |       |
| 27    | 5564      | 18     | 9.5     | 200      | 1                             |                         |       |
| 28    | 5564      | 18     | 9.7     | 274      | 1                             |                         |       |
| 29    | 5570      | 17     | 9.1     | 483      | 0                             |                         |       |
| 30    | 5570      | 16     | 8.1     | 303      | 0                             |                         |       |


**USA Bin  
4**

freq=5530, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|-------------------------------|-------------------------|-------|
| 1     | 5490      | 13     | 12.8    | 220      | 1                             | 90.0%                   | 60.0% |
| 2     | 5490      | 13     | 14.3    | 267      | 1                             |                         |       |
| 3     | 5496      | 15     | 11.8    | 283      | 1                             |                         |       |
| 4     | 5496      | 13     | 16.9    | 463      | 1                             |                         |       |
| 5     | 5502      | 15     | 17.4    | 452      | 1                             |                         |       |
| 6     | 5502      | 12     | 15.7    | 424      | 1                             |                         |       |
| 7     | 5508      | 12     | 12.3    | 495      | 1                             |                         |       |
| 8     | 5508      | 16     | 13.5    | 479      | 0                             |                         |       |
| 9     | 5514      | 15     | 17      | 492      | 1                             |                         |       |
| 10    | 5514      | 13     | 15.8    | 414      | 1                             |                         |       |
| 11    | 5520      | 15     | 16.6    | 287      | 1                             |                         |       |
| 12    | 5520      | 14     | 19.4    | 279      | 1                             |                         |       |
| 13    | 5526      | 14     | 18.4    | 286      | 1                             |                         |       |
| 14    | 5526      | 12     | 13.1    | 299      | 1                             |                         |       |
| 15    | 5530      | 14     | 13.3    | 257      | 1                             |                         |       |
| 16    | 5530      | 13     | 14.6    | 487      | 1                             |                         |       |
| 17    | 5534      | 16     | 11.6    | 414      | 0                             |                         |       |
| 18    | 5534      | 14     | 13.2    | 482      | 1                             |                         |       |
| 19    | 5540      | 12     | 13.6    | 235      | 0                             |                         |       |
| 20    | 5540      | 12     | 18.7    | 350      | 1                             |                         |       |
| 21    | 5546      | 13     | 18.2    | 400      | 1                             |                         |       |
| 22    | 5546      | 14     | 11.6    | 364      | 1                             |                         |       |
| 23    | 5552      | 12     | 18.8    | 330      | 1                             |                         |       |
| 24    | 5552      | 15     | 14.7    | 427      | 1                             |                         |       |
| 25    | 5558      | 15     | 17.5    | 203      | 1                             |                         |       |
| 26    | 5558      | 12     | 12.5    | 449      | 1                             |                         |       |
| 27    | 5564      | 14     | 12.3    | 379      | 1                             |                         |       |
| 28    | 5564      | 15     | 16.9    | 276      | 1                             |                         |       |
| 29    | 5570      | 14     | 19      | 417      | 1                             |                         |       |
| 30    | 5570      | 13     | 17.8    | 268      | 1                             |                         |       |

**USA  
Bin  
5**

freq=5530, rate=m0x1, bw=76.0

| Trial | Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|-------------------------------|----------------------|-------|
| 1     | 1       | 2      | 5494.4          | 6           | 90      | 1878                     |                          | 0.527538        | 1                             | 100.0%               | 80.0% |
| 2     | 1       | 3      | 5495.2          | 8           | 55      | 1269                     | 1165                     | 0.515975        | 1                             |                      |       |
| 3     | 1       | 3      | 5494.8          | 7           | 70      | 1466                     | 1926                     | 0.708538        | 1                             |                      |       |
| 4     | 1       | 2      | 5498            | 15          | 90      | 1126                     |                          | 0.379861        | 1                             |                      |       |
| 5     | 1       | 1      | 5500            | 20          | 100     |                          |                          | 0.544421        | 1                             |                      |       |
| 6     | 1       | 1      | 5495.6          | 9           | 65      |                          |                          | 0.410507        | 1                             |                      |       |
| 7     | 1       | 2      | 5498.8          | 17          | 65      | 1312                     |                          | 0.834105        | 1                             |                      |       |
| 8     | 1       | 2      | 5500            | 20          | 50      | 1390                     |                          | 0.258487        | 1                             |                      |       |
| 9     | 1       | 1      | 5498.8          | 17          | 85      |                          |                          | 0.021272        | 1                             |                      |       |
| 10    | 1       | 1      | 5499.6          | 19          | 55      |                          |                          | 1.092394        | 1                             |                      |       |
| 11    | 1       | 2      | 5530            | 13          | 55      | 1619                     |                          | 0.543511        | 1                             |                      |       |
| 12    | 1       | 3      | 5530            | 14          | 95      | 1446                     | 1524                     | 1.013737        | 1                             |                      |       |
| 13    | 1       | 3      | 5530            | 19          | 60      | 1783                     | 1086                     | 0.113887        | 1                             |                      |       |
| 14    | 1       | 1      | 5530            | 16          | 55      |                          |                          | 0.493028        | 1                             |                      |       |
| 15    | 1       | 3      | 5530            | 6           | 50      | 1895                     | 1068                     | 0.624269        | 1                             |                      |       |
| 16    | 1       | 3      | 5530            | 7           | 80      | 1620                     | 1793                     | 0.346691        | 1                             |                      |       |
| 17    | 1       | 3      | 5530            | 8           | 60      | 1302                     | 1612                     | 0.401274        | 1                             |                      |       |
| 18    | 1       | 3      | 5530            | 15          | 60      | 1223                     | 1333                     | 0.433776        | 1                             |                      |       |
| 19    | 1       | 2      | 5530            | 10          | 100     | 1605                     |                          | 0.589135        | 1                             |                      |       |
| 20    | 1       | 3      | 5530            | 15          | 95      | 1940                     | 1838                     | 0.509965        | 1                             |                      |       |
| 21    | 1       | 3      | 5563.2          | 12          | 90      | 1750                     | 1321                     | 0.000314        | 1                             |                      |       |
| 22    | 1       | 1      | 5562            | 15          | 75      |                          |                          | 0.310557        | 1                             |                      |       |
| 23    | 1       | 2      | 5565.6          | 6           | 65      | 1739                     |                          | 0.648253        | 1                             |                      |       |
| 24    | 1       | 1      | 5562.4          | 14          | 75      |                          |                          | 0.68883         | 1                             |                      |       |
| 25    | 1       | 2      | 5565.2          | 7           | 80      | 1335                     |                          | 0.340653        | 1                             |                      |       |
| 26    | 1       | 1      | 5562.4          | 14          | 95      |                          |                          | 0.292705        | 1                             |                      |       |
| 27    | 1       | 2      | 5565.2          | 7           | 80      | 1922                     |                          | 0.307929        | 1                             |                      |       |
| 28    | 1       | 2      | 5564            | 10          | 55      | 1334                     |                          | 0.63894         | 1                             |                      |       |
| 29    | 1       | 1      | 5560            | 20          | 85      |                          |                          | 0.262217        | 1                             |                      |       |
| 30    | 1       | 3      | 5566            | 5           | 55      | 1843                     | 1449                     | 0.544306        | 1                             |                      |       |

In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is required and is calculated as follows:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (96.7\% + 93.3\% + 80.0\% + 86.7\% + 90.0)/5 = 89.3\% (>80\%)$$

**USA Frequency Hopping**

freq=5530, rate=m0x1, bw=76.0

| Trial | Hop # | Freq (GHz) | Pulse Start (mS) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|-------|------------|------------------|-------------------------------|----------------------|-------|
| 1     | 6     | 5514       | 18               | 1                             | 100.0%               | 70.0% |
| 2     | 39    | 5511       | 117              | 1                             |                      |       |
| 3     | 7     | 5531       | 21               | 1                             |                      |       |
| 4     | 11    | 5504       | 33               | 1                             |                      |       |
| 5     | 5     | 5548       | 15               | 1                             |                      |       |
| 6     | 0     | 5534       | 0                | 1                             |                      |       |
| 7     | 0     | 5517       | 0                | 1                             |                      |       |
| 8     | 2     | 5512       | 6                | 1                             |                      |       |
| 9     | 11    | 5492       | 33               | 1                             |                      |       |
| 10    | 16    | 5540       | 48               | 1                             |                      |       |
| 11    | 7     | 5554       | 21               | 1                             |                      |       |
| 12    | 14    | 5566       | 42               | 1                             |                      |       |
| 13    | 3     | 5530       | 9                | 1                             |                      |       |
| 14    | 5     | 5500       | 15               | 1                             |                      |       |
| 15    | 2     | 5531       | 6                | 1                             |                      |       |
| 16    | 21    | 5499       | 63               | 1                             |                      |       |
| 17    | 0     | 5527       | 0                | 1                             |                      |       |
| 18    | 6     | 5562       | 18               | 1                             |                      |       |
| 19    | 4     | 5568       | 12               | 1                             |                      |       |
| 20    | 2     | 5548       | 6                | 1                             |                      |       |
| 21    | 0     | 5509       | 0                | 1                             |                      |       |
| 22    | 0     | 5516       | 0                | 1                             |                      |       |
| 23    | 7     | 5532       | 21               | 1                             |                      |       |
| 24    | 18    | 5523       | 54               | 1                             |                      |       |
| 25    | 5     | 5511       | 15               | 1                             |                      |       |
| 26    | 13    | 5496       | 39               | 1                             |                      |       |
| 27    | 16    | 5547       | 48               | 1                             |                      |       |
| 28    | 3     | 5521       | 9                | 1                             |                      |       |
| 29    | 12    | 5538       | 36               | 1                             |                      |       |
| 30    | 0     | 5502       | 0                | 1                             |                      |       |



## USA Bin 5 Trial #1

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5494.4          | 6           | 90      | 1878                     |                          | 0.527538        |
| 2       | 3      | 5494.4          | 6           | 55      | 1143                     | 1077                     | 1.639071        |
| 3       | 3      | 5494.4          | 6           | 55      | 1166                     | 1252                     | 3.717444        |
| 4       | 1      | 5494.4          | 6           | 90      |                          |                          | 4.447025        |
| 5       | 3      | 5494.4          | 6           | 75      | 1972                     | 1474                     | 5.584445        |
| 6       | 1      | 5494.4          | 6           | 50      |                          |                          | 6.88831         |
| 7       | 2      | 5494.4          | 6           | 90      | 1563                     |                          | 8.258724        |
| 8       | 2      | 5494.4          | 6           | 90      | 1777                     |                          | 10.133846       |
| 9       | 3      | 5494.4          | 6           | 55      | 1446                     | 1345                     | 11.708298       |

## USA Bin 5 Trial #2

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5495.2          | 8           | 55      | 1269                     | 1165                     | 0.515975        |
| 2       | 2      | 5495.2          | 8           | 80      | 1093                     |                          | 1.580578        |
| 3       | 2      | 5495.2          | 8           | 90      | 1891                     |                          | 2.107772        |
| 4       | 1      | 5495.2          | 8           | 70      |                          |                          | 3.1572          |
| 5       | 3      | 5495.2          | 8           | 95      | 1728                     | 1970                     | 3.271678        |
| 6       | 3      | 5495.2          | 8           | 75      | 1865                     | 1175                     | 4.306539        |
| 7       | 3      | 5495.2          | 8           | 50      | 1089                     | 1506                     | 4.861364        |
| 8       | 2      | 5495.2          | 8           | 65      | 1262                     |                          | 5.741421        |
| 9       | 2      | 5495.2          | 8           | 80      | 1239                     |                          | 7.116134        |
| 10      | 3      | 5495.2          | 8           | 90      | 1369                     | 1579                     | 7.581007        |
| 11      | 2      | 5495.2          | 8           | 60      | 1060                     |                          | 8.164062        |
| 12      | 1      | 5495.2          | 8           | 75      |                          |                          | 9.507295        |
| 13      | 1      | 5495.2          | 8           | 80      |                          |                          | 10.161097       |
| 14      | 1      | 5495.2          | 8           | 75      |                          |                          | 10.74644        |
| 15      | 3      | 5495.2          | 8           | 95      | 1399                     | 1491                     | 11.741783       |

## USA Bin 5 Trial #3

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5494.8          | 7           | 70      | 1466                     | 1926                     | 0.708538        |
| 2       | 1      | 5494.8          | 7           | 100     |                          |                          | 0.970549        |
| 3       | 2      | 5494.8          | 7           | 65      | 1320                     |                          | 2.258233        |
| 4       | 3      | 5494.8          | 7           | 50      | 1333                     | 1336                     | 2.778225        |
| 5       | 2      | 5494.8          | 7           | 65      | 1703                     |                          | 3.725614        |
| 6       | 1      | 5494.8          | 7           | 95      |                          |                          | 5.155361        |
| 7       | 2      | 5494.8          | 7           | 90      | 1221                     |                          | 6.306268        |
| 8       | 1      | 5494.8          | 7           | 65      |                          |                          | 6.660123        |



|    |   |        |   |    |      |      |           |
|----|---|--------|---|----|------|------|-----------|
| 9  | 1 | 5494.8 | 7 | 70 |      |      | 7.430482  |
| 10 | 3 | 5494.8 | 7 | 60 | 1860 | 1635 | 8.50408   |
| 11 | 1 | 5494.8 | 7 | 75 |      |      | 9.246205  |
| 12 | 3 | 5494.8 | 7 | 70 | 1100 | 1428 | 10.359219 |
| 13 | 1 | 5494.8 | 7 | 65 |      |      | 11.90085  |

## USA Bin 5 Trial #4

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5498               | 15             | 90         | 1126                           |                                | 0.379861           |
| 2       | 1      | 5498               | 15             | 90         |                                |                                | 1.347996           |
| 3       | 2      | 5498               | 15             | 85         | 1471                           |                                | 1.600105           |
| 4       | 3      | 5498               | 15             | 65         | 1726                           | 1072                           | 2.963993           |
| 5       | 1      | 5498               | 15             | 90         |                                |                                | 3.236537           |
| 6       | 1      | 5498               | 15             | 65         |                                |                                | 4.786729           |
| 7       | 3      | 5498               | 15             | 60         | 1602                           | 1126                           | 5.31217            |
| 8       | 1      | 5498               | 15             | 90         |                                |                                | 5.886672           |
| 9       | 2      | 5498               | 15             | 85         | 1444                           |                                | 7.051867           |
| 10      | 1      | 5498               | 15             | 75         |                                |                                | 7.330334           |
| 11      | 1      | 5498               | 15             | 75         |                                |                                | 8.616474           |
| 12      | 2      | 5498               | 15             | 95         | 1176                           |                                | 8.870037           |
| 13      | 3      | 5498               | 15             | 70         | 1335                           | 1503                           | 10.036747          |
| 14      | 3      | 5498               | 15             | 90         | 1240                           | 1759                           | 10.837323          |
| 15      | 2      | 5498               | 15             | 55         | 1557                           |                                | 11.501146          |

## USA Bin 5 Trial #5

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5500               | 20             | 100        |                                |                                | 0.544421           |
| 2       | 3      | 5500               | 20             | 55         | 1972                           | 1267                           | 1.144652           |
| 3       | 1      | 5500               | 20             | 65         |                                |                                | 2.068155           |
| 4       | 2      | 5500               | 20             | 70         | 1656                           |                                | 3.220583           |
| 5       | 2      | 5500               | 20             | 100        | 1060                           |                                | 4.131996           |
| 6       | 1      | 5500               | 20             | 95         |                                |                                | 4.951395           |
| 7       | 1      | 5500               | 20             | 85         |                                |                                | 5.371207           |
| 8       | 1      | 5500               | 20             | 100        |                                |                                | 6.5713             |
| 9       | 1      | 5500               | 20             | 75         |                                |                                | 7.098462           |
| 10      | 1      | 5500               | 20             | 55         |                                |                                | 8.385852           |
| 11      | 1      | 5500               | 20             | 95         |                                |                                | 8.804789           |
| 12      | 1      | 5500               | 20             | 65         |                                |                                | 9.49053            |
| 13      | 2      | 5500               | 20             | 60         | 1810                           |                                | 10.554968          |
| 14      | 3      | 5500               | 20             | 70         | 1493                           | 1725                           | 11.676705          |

## USA Bin 5 Trial #6



| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5495.6          | 9           | 65      |                          |                          | 0.410507        |
| 2       | 3      | 5495.6          | 9           | 85      | 1203                     | 1988                     | 1.290941        |
| 3       | 1      | 5495.6          | 9           | 65      |                          |                          | 2.091898        |
| 4       | 2      | 5495.6          | 9           | 100     | 1357                     |                          | 2.749053        |
| 5       | 1      | 5495.6          | 9           | 50      |                          |                          | 3.429018        |
| 6       | 3      | 5495.6          | 9           | 100     | 1789                     | 1909                     | 3.693703        |
| 7       | 2      | 5495.6          | 9           | 85      | 1188                     |                          | 4.514458        |
| 8       | 2      | 5495.6          | 9           | 80      | 1764                     |                          | 5.078162        |
| 9       | 1      | 5495.6          | 9           | 75      |                          |                          | 6.191743        |
| 10      | 3      | 5495.6          | 9           | 90      | 1530                     | 1654                     | 6.381576        |
| 11      | 1      | 5495.6          | 9           | 60      |                          |                          | 7.728762        |
| 12      | 2      | 5495.6          | 9           | 85      | 1513                     |                          | 8.459007        |
| 13      | 3      | 5495.6          | 9           | 65      | 1581                     | 1580                     | 8.527995        |
| 14      | 1      | 5495.6          | 9           | 95      |                          |                          | 9.55244         |
| 15      | 2      | 5495.6          | 9           | 85      | 1189                     |                          | 10.379388       |
| 16      | 3      | 5495.6          | 9           | 50      | 1228                     | 1875                     | 11.247925       |
| 17      | 1      | 5495.6          | 9           | 65      |                          |                          | 11.564037       |

## USA Bin 5 Trial #7

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5498.8          | 17          | 65      | 1312                     |                          | 0.834105        |
| 2       | 1      | 5498.8          | 17          | 75      |                          |                          | 2.610015        |
| 3       | 2      | 5498.8          | 17          | 65      | 1468                     |                          | 3.530728        |
| 4       | 1      | 5498.8          | 17          | 50      |                          |                          | 5.159707        |
| 5       | 3      | 5498.8          | 17          | 90      | 1311                     | 1419                     | 5.515037        |
| 6       | 3      | 5498.8          | 17          | 55      | 1103                     | 1686                     | 7.830209        |
| 7       | 3      | 5498.8          | 17          | 55      | 1277                     | 1032                     | 9.322097        |
| 8       | 2      | 5498.8          | 17          | 80      | 1730                     |                          | 9.635388        |
| 9       | 1      | 5498.8          | 17          | 95      |                          |                          | 10.94383        |

## USA Bin 5 Trial #8

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5500            | 20          | 50      | 1390                     |                          | 0.258487        |
| 2       | 3      | 5500            | 20          | 80      | 1776                     | 1316                     | 1.329913        |
| 3       | 2      | 5500            | 20          | 65      | 1450                     |                          | 1.871413        |
| 4       | 3      | 5500            | 20          | 100     | 1446                     | 1204                     | 3.194983        |
| 5       | 3      | 5500            | 20          | 50      | 1483                     | 1816                     | 3.903329        |
| 6       | 2      | 5500            | 20          | 50      | 1957                     |                          | 4.272836        |
| 7       | 1      | 5500            | 20          | 80      |                          |                          | 5.012536        |



|    |   |      |    |    |      |      |           |
|----|---|------|----|----|------|------|-----------|
| 8  | 1 | 5500 | 20 | 70 |      |      | 5.889243  |
| 9  | 2 | 5500 | 20 | 65 | 1562 |      | 6.416126  |
| 10 | 1 | 5500 | 20 | 60 |      |      | 7.387619  |
| 11 | 1 | 5500 | 20 | 85 |      |      | 8.694163  |
| 12 | 2 | 5500 | 20 | 85 | 1381 |      | 8.892206  |
| 13 | 3 | 5500 | 20 | 95 | 1418 | 1403 | 9.666278  |
| 14 | 3 | 5500 | 20 | 65 | 1543 | 1362 | 10.908297 |
| 15 | 2 | 5500 | 20 | 90 | 1066 |      | 11.462236 |

## USA Bin 5 Trial #9

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5498.8          | 17          | 85      |                          |                          | 0.021272        |
| 2       | 3      | 5498.8          | 17          | 85      | 1291                     | 1973                     | 0.950823        |
| 3       | 1      | 5498.8          | 17          | 65      |                          |                          | 2.021708        |
| 4       | 2      | 5498.8          | 17          | 50      | 1687                     |                          | 2.730079        |
| 5       | 2      | 5498.8          | 17          | 80      | 1121                     |                          | 3.406177        |
| 6       | 2      | 5498.8          | 17          | 80      | 1829                     |                          | 4.265546        |
| 7       | 1      | 5498.8          | 17          | 60      |                          |                          | 4.761987        |
| 8       | 1      | 5498.8          | 17          | 55      |                          |                          | 5.986279        |
| 9       | 1      | 5498.8          | 17          | 50      |                          |                          | 6.294157        |
| 10      | 1      | 5498.8          | 17          | 90      |                          |                          | 6.871096        |
| 11      | 1      | 5498.8          | 17          | 50      |                          |                          | 7.90471         |
| 12      | 1      | 5498.8          | 17          | 100     |                          |                          | 8.521112        |
| 13      | 1      | 5498.8          | 17          | 50      |                          |                          | 9.116233        |
| 14      | 2      | 5498.8          | 17          | 90      | 1645                     |                          | 10.454264       |
| 15      | 2      | 5498.8          | 17          | 100     | 1757                     |                          | 11.110256       |
| 16      | 3      | 5498.8          | 17          | 95      | 1387                     | 1224                     | 11.705323       |

## USA Bin 5 Trial #10

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5499.6          | 19          | 55      |                          |                          | 1.092394        |
| 2       | 3      | 5499.6          | 19          | 50      | 1596                     | 1073                     | 1.248938        |
| 3       | 3      | 5499.6          | 19          | 70      | 1332                     | 1882                     | 2.983547        |
| 4       | 1      | 5499.6          | 19          | 90      |                          |                          | 4.064539        |
| 5       | 3      | 5499.6          | 19          | 60      | 1699                     | 1908                     | 5.881433        |
| 6       | 1      | 5499.6          | 19          | 85      |                          |                          | 6.478791        |
| 7       | 3      | 5499.6          | 19          | 75      | 1331                     | 1706                     | 7.339107        |
| 8       | 2      | 5499.6          | 19          | 80      | 1156                     |                          | 8.609498        |
| 9       | 2      | 5499.6          | 19          | 55      | 1097                     |                          | 10.185462       |
| 10      | 2      | 5499.6          | 19          | 90      | 1750                     |                          | 11.787754       |

## USA Bin 5 Trial #11



| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5530               | 13             | 55         | 1619                           |                                | 0.543511           |
| 2       | 1      | 5530               | 13             | 95         |                                |                                | 1.009273           |
| 3       | 3      | 5530               | 13             | 80         | 1480                           | 1489                           | 1.446746           |
| 4       | 2      | 5530               | 13             | 100        | 1989                           |                                | 2.72487            |
| 5       | 3      | 5530               | 13             | 70         | 1291                           | 1978                           | 3.239586           |
| 6       | 1      | 5530               | 13             | 50         |                                |                                | 3.73238            |
| 7       | 2      | 5530               | 13             | 65         | 1130                           |                                | 4.534495           |
| 8       | 3      | 5530               | 13             | 100        | 1045                           | 1217                           | 5.64446            |
| 9       | 1      | 5530               | 13             | 60         |                                |                                | 6.190389           |
| 10      | 3      | 5530               | 13             | 55         | 1038                           | 1561                           | 6.398731           |
| 11      | 3      | 5530               | 13             | 100        | 1574                           | 1257                           | 7.322688           |
| 12      | 2      | 5530               | 13             | 50         | 1633                           |                                | 8.230231           |
| 13      | 2      | 5530               | 13             | 90         | 1250                           |                                | 8.890569           |
| 14      | 3      | 5530               | 13             | 50         | 1930                           | 1571                           | 9.59286            |
| 15      | 1      | 5530               | 13             | 70         |                                |                                | 10.405098          |
| 16      | 1      | 5530               | 13             | 80         |                                |                                | 11.113083          |
| 17      | 1      | 5530               | 13             | 75         |                                |                                | 11.784097          |

## USA Bin 5 Trial #12

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5530               | 14             | 95         | 1446                           | 1524                           | 1.013737           |
| 2       | 3      | 5530               | 14             | 95         | 1684                           | 1543                           | 1.458759           |
| 3       | 1      | 5530               | 14             | 55         |                                |                                | 3.161276           |
| 4       | 3      | 5530               | 14             | 90         | 1416                           | 1184                           | 3.508104           |
| 5       | 2      | 5530               | 14             | 85         | 1954                           |                                | 4.896298           |
| 6       | 1      | 5530               | 14             | 75         |                                |                                | 5.625368           |
| 7       | 2      | 5530               | 14             | 100        | 1093                           |                                | 7.208913           |
| 8       | 3      | 5530               | 14             | 50         | 1648                           | 1563                           | 7.660345           |
| 9       | 3      | 5530               | 14             | 50         | 1569                           | 1110                           | 8.752077           |
| 10      | 2      | 5530               | 14             | 80         | 1259                           |                                | 10.119826          |
| 11      | 3      | 5530               | 14             | 90         | 1887                           | 1908                           | 11.593608          |

## USA Bin 5 Trial #13

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5530               | 19             | 60         | 1783                           | 1086                           | 0.113887           |
| 2       | 2      | 5530               | 19             | 90         | 1954                           |                                | 1.406715           |
| 3       | 3      | 5530               | 19             | 60         | 1355                           | 1940                           | 2.152663           |
| 4       | 1      | 5530               | 19             | 65         |                                |                                | 3.019516           |
| 5       | 2      | 5530               | 19             | 95         | 1774                           |                                | 3.922236           |



|    |   |      |    |     |      |      |           |
|----|---|------|----|-----|------|------|-----------|
| 6  | 2 | 5530 | 19 | 60  | 1996 |      | 4.607863  |
| 7  | 3 | 5530 | 19 | 100 | 1142 | 1128 | 5.020326  |
| 8  | 2 | 5530 | 19 | 70  | 1836 |      | 5.910548  |
| 9  | 2 | 5530 | 19 | 80  | 1096 |      | 6.443912  |
| 10 | 3 | 5530 | 19 | 60  | 1283 | 1861 | 7.822308  |
| 11 | 1 | 5530 | 19 | 95  |      |      | 8.171149  |
| 12 | 1 | 5530 | 19 | 70  |      |      | 9.38122   |
| 13 | 2 | 5530 | 19 | 50  | 1789 |      | 9.668928  |
| 14 | 1 | 5530 | 19 | 70  |      |      | 10.738741 |
| 15 | 1 | 5530 | 19 | 55  |      |      | 11.903242 |

## USA Bin 5 Trial #14

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5530               | 16             | 55         |                                |                                | 0.493028           |
| 2       | 2      | 5530               | 16             | 100        | 1029                           |                                | 1.320723           |
| 3       | 1      | 5530               | 16             | 95         |                                |                                | 1.942838           |
| 4       | 3      | 5530               | 16             | 80         | 1586                           | 1241                           | 2.585506           |
| 5       | 1      | 5530               | 16             | 75         |                                |                                | 3.514333           |
| 6       | 3      | 5530               | 16             | 80         | 1686                           | 1035                           | 3.85973            |
| 7       | 1      | 5530               | 16             | 85         |                                |                                | 4.414926           |
| 8       | 1      | 5530               | 16             | 95         |                                |                                | 5.129639           |
| 9       | 1      | 5530               | 16             | 65         |                                |                                | 6.059973           |
| 10      | 1      | 5530               | 16             | 75         |                                |                                | 6.573523           |
| 11      | 3      | 5530               | 16             | 90         | 1956                           | 1053                           | 7.356261           |
| 12      | 1      | 5530               | 16             | 100        |                                |                                | 8.075724           |
| 13      | 2      | 5530               | 16             | 70         | 1438                           |                                | 8.592101           |
| 14      | 3      | 5530               | 16             | 100        | 1694                           | 1161                           | 9.325854           |
| 15      | 2      | 5530               | 16             | 100        | 1389                           |                                | 10.433984          |
| 16      | 1      | 5530               | 16             | 100        |                                |                                | 10.667761          |
| 17      | 3      | 5530               | 16             | 75         | 1641                           | 1194                           | 11.797761          |

## USA Bin 5 Trial #15

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5530               | 6              | 50         | 1895                           | 1068                           | 0.624269           |
| 2       | 2      | 5530               | 6              | 95         | 1861                           |                                | 1.042699           |
| 3       | 1      | 5530               | 6              | 90         |                                |                                | 1.504321           |
| 4       | 3      | 5530               | 6              | 75         | 1523                           | 1201                           | 2.169295           |
| 5       | 1      | 5530               | 6              | 85         |                                |                                | 2.565634           |
| 6       | 2      | 5530               | 6              | 85         | 1735                           |                                | 3.622865           |
| 7       | 1      | 5530               | 6              | 70         |                                |                                | 4.054572           |
| 8       | 1      | 5530               | 6              | 85         |                                |                                | 4.585251           |
| 9       | 2      | 5530               | 6              | 55         | 1394                           |                                | 5.188074           |



|    |   |      |   |     |      |      |           |
|----|---|------|---|-----|------|------|-----------|
| 10 | 3 | 5530 | 6 | 90  | 1805 | 1557 | 6.27199   |
| 11 | 3 | 5530 | 6 | 65  | 1143 | 1541 | 6.620955  |
| 12 | 2 | 5530 | 6 | 55  | 1093 |      | 7.065377  |
| 13 | 3 | 5530 | 6 | 85  | 1044 | 1960 | 7.905573  |
| 14 | 2 | 5530 | 6 | 100 | 1611 |      | 8.311902  |
| 15 | 2 | 5530 | 6 | 55  | 1897 |      | 9.431744  |
| 16 | 1 | 5530 | 6 | 65  |      |      | 9.725613  |
| 17 | 1 | 5530 | 6 | 60  |      |      | 10.191194 |
| 18 | 1 | 5530 | 6 | 95  |      |      | 11.240778 |
| 19 | 1 | 5530 | 6 | 75  |      |      | 11.519393 |

## USA Bin 5 Trial #16

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5530               | 7              | 80         | 1620                           | 1793                           | 0.346691           |
| 2       | 3      | 5530               | 7              | 95         | 1251                           | 1643                           | 1.006127           |
| 3       | 3      | 5530               | 7              | 100        | 1670                           | 1573                           | 1.755908           |
| 4       | 3      | 5530               | 7              | 60         | 1726                           | 1899                           | 2.519531           |
| 5       | 2      | 5530               | 7              | 60         | 1314                           |                                | 3.034848           |
| 6       | 2      | 5530               | 7              | 90         | 1718                           |                                | 4.136321           |
| 7       | 3      | 5530               | 7              | 65         | 1246                           | 1484                           | 4.630582           |
| 8       | 3      | 5530               | 7              | 100        | 1790                           | 1757                           | 5.496627           |
| 9       | 1      | 5530               | 7              | 95         |                                |                                | 6.471566           |
| 10      | 1      | 5530               | 7              | 85         |                                |                                | 6.867067           |
| 11      | 3      | 5530               | 7              | 60         | 1532                           | 1349                           | 7.587798           |
| 12      | 2      | 5530               | 7              | 95         | 1197                           |                                | 8.264838           |
| 13      | 3      | 5530               | 7              | 85         | 1586                           | 1550                           | 9.741896           |
| 14      | 3      | 5530               | 7              | 50         | 1861                           | 1038                           | 10.299822          |
| 15      | 2      | 5530               | 7              | 75         | 1364                           |                                | 10.581939          |
| 16      | 1      | 5530               | 7              | 65         |                                |                                | 11.801069          |

## USA Bin 5 Trial #17

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5530               | 8              | 60         | 1302                           | 1612                           | 0.401274           |
| 2       | 2      | 5530               | 8              | 100        | 1437                           |                                | 0.725527           |
| 3       | 2      | 5530               | 8              | 50         | 1772                           |                                | 1.788534           |
| 4       | 1      | 5530               | 8              | 80         |                                |                                | 1.921055           |
| 5       | 1      | 5530               | 8              | 100        |                                |                                | 2.67382            |
| 6       | 2      | 5530               | 8              | 100        | 1498                           |                                | 3.04689            |
| 7       | 1      | 5530               | 8              | 85         |                                |                                | 3.899341           |
| 8       | 1      | 5530               | 8              | 95         |                                |                                | 4.771206           |
| 9       | 1      | 5530               | 8              | 100        |                                |                                | 5.040612           |
| 10      | 2      | 5530               | 8              | 90         | 1833                           |                                | 5.770709           |



|    |   |      |   |     |      |      |           |
|----|---|------|---|-----|------|------|-----------|
| 11 | 1 | 5530 | 8 | 100 |      |      | 6.147812  |
| 12 | 3 | 5530 | 8 | 90  | 1535 | 1057 | 6.797864  |
| 13 | 1 | 5530 | 8 | 50  |      |      | 7.699988  |
| 14 | 2 | 5530 | 8 | 70  | 1418 |      | 7.989422  |
| 15 | 3 | 5530 | 8 | 100 | 1069 | 1248 | 8.437558  |
| 16 | 3 | 5530 | 8 | 65  | 1639 | 1478 | 9.146754  |
| 17 | 1 | 5530 | 8 | 100 |      |      | 10.010449 |
| 18 | 1 | 5530 | 8 | 100 |      |      | 10.382854 |
| 19 | 1 | 5530 | 8 | 60  |      |      | 10.917882 |
| 20 | 1 | 5530 | 8 | 90  |      |      | 11.747175 |

## USA Bin 5 Trial #18

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5530               | 15             | 60         | 1223                           | 1333                           | 0.433776           |
| 2       | 1      | 5530               | 15             | 80         |                                |                                | 0.956318           |
| 3       | 3      | 5530               | 15             | 90         | 1487                           | 1637                           | 1.383687           |
| 4       | 3      | 5530               | 15             | 70         | 1603                           | 1211                           | 2.092619           |
| 5       | 2      | 5530               | 15             | 50         | 1027                           |                                | 2.487926           |
| 6       | 2      | 5530               | 15             | 85         | 1748                           |                                | 3.430019           |
| 7       | 1      | 5530               | 15             | 95         |                                |                                | 3.763351           |
| 8       | 2      | 5530               | 15             | 65         | 1811                           |                                | 4.715886           |
| 9       | 3      | 5530               | 15             | 85         | 1626                           | 1194                           | 4.917817           |
| 10      | 3      | 5530               | 15             | 95         | 1187                           | 1749                           | 5.545551           |
| 11      | 1      | 5530               | 15             | 95         |                                |                                | 6.338605           |
| 12      | 3      | 5530               | 15             | 80         | 1054                           | 1011                           | 6.912983           |
| 13      | 2      | 5530               | 15             | 60         | 1421                           |                                | 7.610881           |
| 14      | 3      | 5530               | 15             | 55         | 1010                           | 1545                           | 8.227889           |
| 15      | 1      | 5530               | 15             | 70         |                                |                                | 8.53177            |
| 16      | 3      | 5530               | 15             | 100        | 1024                           | 1720                           | 9.085238           |
| 17      | 2      | 5530               | 15             | 70         | 1749                           |                                | 10.097047          |
| 18      | 3      | 5530               | 15             | 75         | 1034                           | 1485                           | 10.573944          |
| 19      | 2      | 5530               | 15             | 70         | 1539                           |                                | 11.022919          |
| 20      | 1      | 5530               | 15             | 95         |                                |                                | 11.73574           |

## USA Bin 5 Trial #19

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5530               | 10             | 100        | 1605                           |                                | 0.589135           |
| 2       | 1      | 5530               | 10             | 75         |                                |                                | 0.711594           |
| 3       | 2      | 5530               | 10             | 85         | 1497                           |                                | 1.807914           |
| 4       | 2      | 5530               | 10             | 55         | 1393                           |                                | 2.15574            |
| 5       | 2      | 5530               | 10             | 95         | 1952                           |                                | 3.192012           |
| 6       | 1      | 5530               | 10             | 75         |                                |                                | 3.676446           |



|    |   |      |    |     |      |      |           |
|----|---|------|----|-----|------|------|-----------|
| 7  | 3 | 5530 | 10 | 50  | 1251 | 1878 | 4.360898  |
| 8  | 1 | 5530 | 10 | 50  |      |      | 5.121686  |
| 9  | 1 | 5530 | 10 | 90  |      |      | 5.365447  |
| 10 | 3 | 5530 | 10 | 95  | 1283 | 1978 | 6.433461  |
| 11 | 1 | 5530 | 10 | 100 |      |      | 7.059527  |
| 12 | 1 | 5530 | 10 | 85  |      |      | 7.709406  |
| 13 | 1 | 5530 | 10 | 75  |      |      | 8.504651  |
| 14 | 3 | 5530 | 10 | 80  | 1772 | 1929 | 9.212628  |
| 15 | 2 | 5530 | 10 | 50  | 1359 |      | 9.750792  |
| 16 | 2 | 5530 | 10 | 100 | 1682 |      | 10.250711 |
| 17 | 3 | 5530 | 10 | 55  | 1484 | 1760 | 10.85004  |
| 18 | 3 | 5530 | 10 | 85  | 2000 | 1586 | 11.563178 |

## USA Bin 5 Trial #20

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5530               | 15             | 95         | 1940                           | 1838                           | 0.509965           |
| 2       | 3      | 5530               | 15             | 95         | 1769                           | 1101                           | 0.76879            |
| 3       | 2      | 5530               | 15             | 85         | 1695                           |                                | 1.414154           |
| 4       | 2      | 5530               | 15             | 90         | 1354                           |                                | 2.293782           |
| 5       | 2      | 5530               | 15             | 75         | 1230                           |                                | 3.04768            |
| 6       | 3      | 5530               | 15             | 65         | 1234                           | 1135                           | 3.367971           |
| 7       | 1      | 5530               | 15             | 70         |                                |                                | 4.374865           |
| 8       | 1      | 5530               | 15             | 90         |                                |                                | 4.824749           |
| 9       | 1      | 5530               | 15             | 50         |                                |                                | 5.44855            |
| 10      | 2      | 5530               | 15             | 80         | 1292                           |                                | 6.120179           |
| 11      | 1      | 5530               | 15             | 65         |                                |                                | 7.235769           |
| 12      | 3      | 5530               | 15             | 80         | 1864                           | 1340                           | 7.354004           |
| 13      | 2      | 5530               | 15             | 65         | 1247                           |                                | 8.001101           |
| 14      | 3      | 5530               | 15             | 85         | 1638                           | 1957                           | 9.106388           |
| 15      | 2      | 5530               | 15             | 70         | 1186                           |                                | 9.859695           |
| 16      | 2      | 5530               | 15             | 85         | 1680                           |                                | 10.330584          |
| 17      | 1      | 5530               | 15             | 75         |                                |                                | 11.288589          |
| 18      | 1      | 5530               | 15             | 85         |                                |                                | 11.630254          |

## USA Bin 5 Trial #21

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5563.2             | 12             | 90         | 1750                           | 1321                           | 0.000314           |
| 2       | 1      | 5563.2             | 12             | 90         |                                |                                | 1.454488           |
| 3       | 2      | 5563.2             | 12             | 80         | 1889                           |                                | 2.944788           |
| 4       | 3      | 5563.2             | 12             | 70         | 1422                           | 1075                           | 4.077754           |
| 5       | 2      | 5563.2             | 12             | 90         | 1536                           |                                | 5.310916           |
| 6       | 3      | 5563.2             | 12             | 50         | 1993                           | 1594                           | 5.931146           |



|    |   |        |    |    |      |      |           |
|----|---|--------|----|----|------|------|-----------|
| 7  | 3 | 5563.2 | 12 | 60 | 1464 | 1036 | 6.662208  |
| 8  | 3 | 5563.2 | 12 | 65 | 1286 | 1003 | 8.222027  |
| 9  | 1 | 5563.2 | 12 | 70 |      |      | 9.193592  |
| 10 | 2 | 5563.2 | 12 | 85 | 1209 |      | 10.744248 |
| 11 | 1 | 5563.2 | 12 | 50 |      |      | 11.15355  |

## USA Bin 5 Trial #22

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5562               | 15             | 75         |                                |                                | 0.310557           |
| 2       | 1      | 5562               | 15             | 50         |                                |                                | 1.541519           |
| 3       | 3      | 5562               | 15             | 75         | 1416                           | 1516                           | 2.589422           |
| 4       | 2      | 5562               | 15             | 50         | 1537                           |                                | 4.734921           |
| 5       | 2      | 5562               | 15             | 65         | 1658                           |                                | 5.013169           |
| 6       | 3      | 5562               | 15             | 70         | 1200                           | 1311                           | 7.061175           |
| 7       | 3      | 5562               | 15             | 70         | 1882                           | 1839                           | 8.245046           |
| 8       | 2      | 5562               | 15             | 90         | 1216                           |                                | 9.193944           |
| 9       | 1      | 5562               | 15             | 65         |                                |                                | 9.783008           |
| 10      | 1      | 5562               | 15             | 50         |                                |                                | 11.057262          |

## USA Bin 5 Trial #23

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5565.6             | 6              | 65         | 1739                           |                                | 0.648253           |
| 2       | 1      | 5565.6             | 6              | 80         |                                |                                | 0.780455           |
| 3       | 1      | 5565.6             | 6              | 85         |                                |                                | 1.83148            |
| 4       | 1      | 5565.6             | 6              | 55         |                                |                                | 2.503886           |
| 5       | 2      | 5565.6             | 6              | 80         | 1051                           |                                | 3.366461           |
| 6       | 3      | 5565.6             | 6              | 60         | 1347                           | 1546                           | 4.398261           |
| 7       | 2      | 5565.6             | 6              | 90         | 1531                           |                                | 4.768579           |
| 8       | 1      | 5565.6             | 6              | 80         |                                |                                | 5.934526           |
| 9       | 1      | 5565.6             | 6              | 80         |                                |                                | 6.602774           |
| 10      | 2      | 5565.6             | 6              | 100        | 1948                           |                                | 6.99766            |
| 11      | 2      | 5565.6             | 6              | 100        | 1959                           |                                | 8.019074           |
| 12      | 2      | 5565.6             | 6              | 60         | 1280                           |                                | 8.879092           |
| 13      | 2      | 5565.6             | 6              | 90         | 1691                           |                                | 9.564135           |
| 14      | 3      | 5565.6             | 6              | 65         | 1003                           | 1159                           | 10.455576          |
| 15      | 2      | 5565.6             | 6              | 50         | 1813                           |                                | 10.517556          |
| 16      | 1      | 5565.6             | 6              | 75         |                                |                                | 11.631168          |

## USA Bin 5 Trial #24

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5562.4             | 14             | 75         |                                |                                | 0.68883            |



|   |   |        |    |    |      |      |           |
|---|---|--------|----|----|------|------|-----------|
| 2 | 2 | 5562.4 | 14 | 90 | 1248 |      | 1.512197  |
| 3 | 3 | 5562.4 | 14 | 85 | 1660 | 1457 | 3.687802  |
| 4 | 1 | 5562.4 | 14 | 90 |      |      | 5.929181  |
| 5 | 1 | 5562.4 | 14 | 90 |      |      | 7.321654  |
| 6 | 2 | 5562.4 | 14 | 60 | 1477 |      | 8.786836  |
| 7 | 1 | 5562.4 | 14 | 70 |      |      | 9.475945  |
| 8 | 3 | 5562.4 | 14 | 55 | 1737 | 1037 | 11.634014 |

## USA Bin 5 Trial #25

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5565.2             | 7              | 80         | 1335                           |                                | 0.340653           |
| 2       | 3      | 5565.2             | 7              | 50         | 1633                           | 1355                           | 1.01253            |
| 3       | 1      | 5565.2             | 7              | 50         |                                |                                | 1.833707           |
| 4       | 2      | 5565.2             | 7              | 75         | 1869                           |                                | 2.201633           |
| 5       | 1      | 5565.2             | 7              | 50         |                                |                                | 3.087074           |
| 6       | 3      | 5565.2             | 7              | 55         | 1339                           | 1479                           | 3.732144           |
| 7       | 2      | 5565.2             | 7              | 50         | 1608                           |                                | 4.751195           |
| 8       | 1      | 5565.2             | 7              | 55         |                                |                                | 5.516413           |
| 9       | 3      | 5565.2             | 7              | 90         | 1117                           | 1388                           | 5.759574           |
| 10      | 3      | 5565.2             | 7              | 55         | 1899                           | 1692                           | 6.354937           |
| 11      | 1      | 5565.2             | 7              | 85         |                                |                                | 7.639202           |
| 12      | 2      | 5565.2             | 7              | 55         | 1637                           |                                | 7.817663           |
| 13      | 1      | 5565.2             | 7              | 50         |                                |                                | 9.158608           |
| 14      | 1      | 5565.2             | 7              | 100        |                                |                                | 9.761792           |
| 15      | 1      | 5565.2             | 7              | 90         |                                |                                | 9.896923           |
| 16      | 3      | 5565.2             | 7              | 60         | 1066                           | 1387                           | 10.816191          |
| 17      | 1      | 5565.2             | 7              | 65         |                                |                                | 11.375738          |

## USA Bin 5 Trial #26

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5562.4             | 14             | 95         |                                |                                | 0.292705           |
| 2       | 3      | 5562.4             | 14             | 90         | 1772                           | 1876                           | 0.983444           |
| 3       | 2      | 5562.4             | 14             | 75         | 1492                           |                                | 1.537029           |
| 4       | 2      | 5562.4             | 14             | 80         | 1927                           |                                | 2.57433            |
| 5       | 1      | 5562.4             | 14             | 100        |                                |                                | 3.134446           |
| 6       | 3      | 5562.4             | 14             | 80         | 1421                           | 1780                           | 4.013827           |
| 7       | 1      | 5562.4             | 14             | 95         |                                |                                | 4.588466           |
| 8       | 2      | 5562.4             | 14             | 60         | 1232                           |                                | 5.608851           |
| 9       | 1      | 5562.4             | 14             | 50         |                                |                                | 6.420384           |
| 10      | 2      | 5562.4             | 14             | 75         | 1438                           |                                | 6.803991           |
| 11      | 1      | 5562.4             | 14             | 65         |                                |                                | 8.017531           |
| 12      | 1      | 5562.4             | 14             | 95         |                                |                                | 8.427424           |



|    |   |        |    |     |      |      |           |
|----|---|--------|----|-----|------|------|-----------|
| 13 | 2 | 5562.4 | 14 | 90  | 1707 |      | 9.612219  |
| 14 | 2 | 5562.4 | 14 | 55  | 1631 |      | 10.110934 |
| 15 | 3 | 5562.4 | 14 | 100 | 1423 | 1801 | 10.538354 |
| 16 | 2 | 5562.4 | 14 | 95  | 1334 |      | 11.634823 |

## USA Bin 5 Trial #27

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5565.2          | 7           | 80      | 1922                     |                          | 0.307929        |
| 2       | 3      | 5565.2          | 7           | 70      | 1012                     | 1151                     | 1.20888         |
| 3       | 3      | 5565.2          | 7           | 80      | 1466                     | 1299                     | 1.850834        |
| 4       | 2      | 5565.2          | 7           | 90      | 1189                     |                          | 2.439746        |
| 5       | 2      | 5565.2          | 7           | 60      | 1741                     |                          | 3.730245        |
| 6       | 3      | 5565.2          | 7           | 60      | 1772                     | 1360                     | 4.227358        |
| 7       | 3      | 5565.2          | 7           | 50      | 1720                     | 1472                     | 5.39292         |
| 8       | 2      | 5565.2          | 7           | 95      | 1741                     |                          | 5.622803        |
| 9       | 3      | 5565.2          | 7           | 100     | 1373                     | 1109                     | 6.760101        |
| 10      | 3      | 5565.2          | 7           | 95      | 1521                     | 1882                     | 7.954003        |
| 11      | 3      | 5565.2          | 7           | 55      | 1107                     | 1567                     | 8.136487        |
| 12      | 3      | 5565.2          | 7           | 55      | 1115                     | 1509                     | 8.847757        |
| 13      | 2      | 5565.2          | 7           | 80      | 1246                     |                          | 9.892496        |
| 14      | 3      | 5565.2          | 7           | 75      | 1431                     | 1421                     | 10.976451       |
| 15      | 3      | 5565.2          | 7           | 65      | 1680                     | 1891                     | 11.368307       |

## USA Bin 5 Trial #28

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5564            | 10          | 55      | 1334                     |                          | 0.63894         |
| 2       | 2      | 5564            | 10          | 85      | 1919                     |                          | 1.33338         |
| 3       | 2      | 5564            | 10          | 90      | 1017                     |                          | 2.445069        |
| 4       | 3      | 5564            | 10          | 95      | 1874                     | 1917                     | 3.304365        |
| 5       | 2      | 5564            | 10          | 70      | 1155                     |                          | 4.236326        |
| 6       | 2      | 5564            | 10          | 75      | 1351                     |                          | 4.896633        |
| 7       | 2      | 5564            | 10          | 75      | 1019                     |                          | 5.24871         |
| 8       | 3      | 5564            | 10          | 90      | 1224                     | 1505                     | 6.321663        |
| 9       | 2      | 5564            | 10          | 85      | 1495                     |                          | 6.961499        |
| 10      | 1      | 5564            | 10          | 80      |                          |                          | 7.8533          |
| 11      | 3      | 5564            | 10          | 85      | 1724                     | 1284                     | 8.771069        |
| 12      | 2      | 5564            | 10          | 70      | 1408                     |                          | 9.461523        |
| 13      | 2      | 5564            | 10          | 95      | 1388                     |                          | 11.024664       |
| 14      | 2      | 5564            | 10          | 65      | 1937                     |                          | 11.207944       |

## USA Bin 5 Trial #29



| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5560            | 20          | 85      |                          |                          | 0.262217        |
| 2       | 1      | 5560            | 20          | 50      |                          |                          | 0.757453        |
| 3       | 1      | 5560            | 20          | 80      |                          |                          | 1.561489        |
| 4       | 1      | 5560            | 20          | 60      |                          |                          | 2.321394        |
| 5       | 2      | 5560            | 20          | 50      | 1531                     |                          | 2.696263        |
| 6       | 3      | 5560            | 20          | 50      | 1081                     | 1829                     | 3.632351        |
| 7       | 3      | 5560            | 20          | 85      | 1922                     | 1531                     | 4.322763        |
| 8       | 1      | 5560            | 20          | 55      |                          |                          | 4.639768        |
| 9       | 2      | 5560            | 20          | 75      | 1795                     |                          | 5.162327        |
| 10      | 2      | 5560            | 20          | 65      | 1355                     |                          | 6.298924        |
| 11      | 2      | 5560            | 20          | 65      | 1047                     |                          | 6.850496        |
| 12      | 1      | 5560            | 20          | 55      |                          |                          | 7.260507        |
| 13      | 1      | 5560            | 20          | 50      |                          |                          | 7.804787        |
| 14      | 3      | 5560            | 20          | 75      | 1610                     | 1542                     | 8.29778         |
| 15      | 3      | 5560            | 20          | 55      | 1602                     | 1845                     | 9.097226        |
| 16      | 1      | 5560            | 20          | 85      |                          |                          | 9.776687        |
| 17      | 3      | 5560            | 20          | 55      | 1691                     | 1899                     | 10.501919       |
| 18      | 2      | 5560            | 20          | 50      | 1496                     |                          | 11.127744       |
| 19      | 2      | 5560            | 20          | 75      | 1288                     |                          | 11.726423       |

## USA Bin 5 Trial #30

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5566            | 5           | 55      | 1843                     | 1449                     | 0.544306        |
| 2       | 3      | 5566            | 5           | 60      | 1166                     | 1804                     | 0.623703        |
| 3       | 1      | 5566            | 5           | 65      |                          |                          | 1.341141        |
| 4       | 1      | 5566            | 5           | 100     |                          |                          | 2.370306        |
| 5       | 3      | 5566            | 5           | 55      | 1585                     | 1546                     | 2.675094        |
| 6       | 2      | 5566            | 5           | 75      | 1361                     |                          | 3.059241        |
| 7       | 3      | 5566            | 5           | 80      | 1959                     | 1041                     | 3.602287        |
| 8       | 1      | 5566            | 5           | 55      |                          |                          | 4.368394        |
| 9       | 3      | 5566            | 5           | 65      | 1228                     | 1435                     | 4.93359         |
| 10      | 1      | 5566            | 5           | 50      |                          |                          | 5.995785        |
| 11      | 2      | 5566            | 5           | 70      | 1851                     |                          | 6.021805        |
| 12      | 3      | 5566            | 5           | 75      | 1227                     | 1719                     | 7.127389        |
| 13      | 1      | 5566            | 5           | 100     |                          |                          | 7.501269        |
| 14      | 2      | 5566            | 5           | 100     | 1734                     |                          | 8.096501        |
| 15      | 1      | 5566            | 5           | 95      |                          |                          | 8.506332        |
| 16      | 3      | 5566            | 5           | 50      | 1003                     | 1006                     | 9.22063         |
| 17      | 2      | 5566            | 5           | 80      | 1444                     |                          | 9.711304        |
| 18      | 1      | 5566            | 5           | 70      |                          |                          | 10.208561       |



|    |   |      |   |    |      |      |           |
|----|---|------|---|----|------|------|-----------|
| 19 | 3 | 5566 | 5 | 80 | 1628 | 1381 | 11.309908 |
| 20 | 3 | 5566 | 5 | 50 | 1355 | 1253 | 11.610829 |

## USA Frequency Hopping Trial #1

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 6     | 5514          | 18                  |
| 9     | 5512          | 27                  |
| 10    | 5552          | 30                  |
| 15    | 5560          | 45                  |
| 17    | 5541          | 51                  |
| 19    | 5540          | 57                  |
| 38    | 5496          | 114                 |
| 42    | 5557          | 126                 |
| 44    | 5522          | 132                 |
| 51    | 5556          | 153                 |
| 55    | 5493          | 165                 |
| 94    | 5527          | 282                 |

## USA Frequency Hopping Trial #2

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 39    | 5511          | 117                 |
| 54    | 5568          | 162                 |
| 62    | 5525          | 186                 |
| 63    | 5541          | 189                 |
| 70    | 5557          | 210                 |
| 72    | 5529          | 216                 |
| 74    | 5519          | 222                 |
| 79    | 5567          | 237                 |
| 89    | 5553          | 267                 |

## USA Frequency Hopping Trial #3

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 7     | 5531          | 21                  |
| 9     | 5545          | 27                  |
| 11    | 5554          | 33                  |
| 19    | 5516          | 57                  |
| 30    | 5544          | 90                  |
| 39    | 5563          | 117                 |
| 41    | 5562          | 123                 |
| 46    | 5549          | 138                 |
| 55    | 5551          | 165                 |
| 63    | 5522          | 189                 |
| 64    | 5498          | 192                 |
| 71    | 5557          | 213                 |
| 73    | 5504          | 219                 |

## USA Frequency Hopping Trial #4

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 11    | 5504          | 33                  |
| 19    | 5513          | 57                  |
| 25    | 5549          | 75                  |
| 26    | 5538          | 78                  |
| 28    | 5541          | 84                  |
| 41    | 5520          | 123                 |
| 43    | 5495          | 129                 |
| 46    | 5554          | 138                 |
| 49    | 5497          | 147                 |
| 66    | 5503          | 198                 |
| 67    | 5506          | 201                 |
| 68    | 5567          | 204                 |
| 71    | 5545          | 213                 |
| 85    | 5508          | 255                 |

**USA Frequency Hopping Trial #5**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5548          | 15                  |
| 13    | 5535          | 39                  |
| 15    | 5567          | 45                  |
| 18    | 5533          | 54                  |
| 37    | 5515          | 111                 |
| 46    | 5504          | 138                 |
| 48    | 5529          | 144                 |
| 54    | 5506          | 162                 |
| 65    | 5521          | 195                 |
| 67    | 5493          | 201                 |
| 71    | 5538          | 213                 |
| 79    | 5557          | 237                 |
| 81    | 5550          | 243                 |
| 97    | 5541          | 291                 |

**USA Frequency Hopping Trial #6**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5534          | 0                   |
| 18    | 5552          | 54                  |
| 20    | 5536          | 60                  |
| 32    | 5522          | 96                  |
| 38    | 5498          | 114                 |
| 48    | 5512          | 144                 |
| 56    | 5544          | 168                 |
| 60    | 5518          | 180                 |

|    |      |     |
|----|------|-----|
| 65 | 5537 | 195 |
| 66 | 5557 | 198 |
| 69 | 5539 | 207 |
| 70 | 5508 | 210 |
| 76 | 5551 | 228 |
| 97 | 5500 | 291 |

**USA Frequency Hopping Trial #7**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5517          | 0                   |
| 11    | 5508          | 33                  |
| 13    | 5516          | 39                  |
| 14    | 5542          | 42                  |
| 35    | 5545          | 105                 |
| 39    | 5515          | 117                 |
| 40    | 5548          | 120                 |
| 43    | 5527          | 129                 |
| 44    | 5506          | 132                 |
| 54    | 5524          | 162                 |
| 55    | 5523          | 165                 |
| 63    | 5501          | 189                 |
| 65    | 5550          | 195                 |
| 68    | 5541          | 204                 |
| 82    | 5540          | 246                 |
| 86    | 5521          | 258                 |
| 88    | 5552          | 264                 |
| 90    | 5509          | 270                 |
| 99    | 5530          | 297                 |

**USA Frequency Hopping Trial #8**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5512          | 6                   |
| 3     | 5544          | 9                   |
| 18    | 5531          | 54                  |
| 21    | 5547          | 63                  |
| 32    | 5510          | 96                  |
| 34    | 5515          | 102                 |
| 35    | 5567          | 105                 |
| 36    | 5524          | 108                 |
| 42    | 5538          | 126                 |
| 46    | 5532          | 138                 |
| 47    | 5526          | 141                 |
| 52    | 5522          | 156                 |
| 59    | 5528          | 177                 |

|    |      |     |
|----|------|-----|
| 66 | 5559 | 198 |
| 93 | 5500 | 279 |

## USA Frequency Hopping Trial #9

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 11    | 5492          | 33                  |
| 12    | 5563          | 36                  |
| 23    | 5561          | 69                  |
| 26    | 5507          | 78                  |
| 33    | 5522          | 99                  |
| 55    | 5494          | 165                 |
| 56    | 5542          | 168                 |
| 76    | 5519          | 228                 |
| 82    | 5499          | 246                 |
| 88    | 5555          | 264                 |
| 90    | 5496          | 270                 |
| 91    | 5557          | 273                 |
| 96    | 5504          | 288                 |
| 98    | 5516          | 294                 |

## USA Frequency Hopping Trial #10

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 16    | 5540          | 48                  |
| 22    | 5503          | 66                  |
| 28    | 5563          | 84                  |
| 33    | 5519          | 99                  |
| 42    | 5557          | 126                 |
| 46    | 5531          | 138                 |
| 49    | 5562          | 147                 |
| 52    | 5555          | 156                 |
| 56    | 5500          | 168                 |
| 60    | 5517          | 180                 |
| 61    | 5498          | 183                 |
| 77    | 5550          | 231                 |
| 81    | 5565          | 243                 |
| 82    | 5508          | 246                 |
| 85    | 5521          | 255                 |

## USA Frequency Hopping Trial #11

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 7     | 5554          | 21                  |
| 12    | 5519          | 36                  |
| 14    | 5504          | 42                  |
| 19    | 5506          | 57                  |

|    |      |     |
|----|------|-----|
| 31 | 5522 | 93  |
| 34 | 5545 | 102 |
| 38 | 5518 | 114 |
| 40 | 5548 | 120 |
| 47 | 5525 | 141 |
| 50 | 5534 | 150 |
| 51 | 5558 | 153 |
| 55 | 5568 | 165 |
| 59 | 5544 | 177 |
| 63 | 5567 | 189 |
| 64 | 5556 | 192 |
| 65 | 5510 | 195 |
| 66 | 5498 | 198 |
| 73 | 5493 | 219 |
| 77 | 5502 | 231 |
| 87 | 5539 | 261 |
| 92 | 5503 | 276 |
| 94 | 5512 | 282 |
| 98 | 5540 | 294 |

## USA Frequency Hopping Trial #12

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 14    | 5566          | 42                  |
| 36    | 5505          | 108                 |
| 38    | 5553          | 114                 |
| 40    | 5563          | 120                 |
| 47    | 5557          | 141                 |
| 48    | 5498          | 144                 |
| 59    | 5528          | 177                 |
| 60    | 5496          | 180                 |
| 69    | 5520          | 207                 |
| 77    | 5504          | 231                 |
| 80    | 5515          | 240                 |
| 81    | 5508          | 243                 |
| 82    | 5550          | 246                 |
| 88    | 5561          | 264                 |
| 89    | 5545          | 267                 |
| 92    | 5558          | 276                 |
| 93    | 5507          | 279                 |
| 96    | 5526          | 288                 |

## USA Frequency Hopping Trial #13

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 3     | 5530          | 9                   |

|    |      |     |
|----|------|-----|
| 5  | 5508 | 15  |
| 13 | 5518 | 39  |
| 19 | 5531 | 57  |
| 20 | 5550 | 60  |
| 27 | 5544 | 81  |
| 37 | 5540 | 111 |
| 38 | 5507 | 114 |
| 46 | 5566 | 138 |
| 49 | 5495 | 147 |
| 53 | 5513 | 159 |
| 55 | 5506 | 165 |
| 56 | 5559 | 168 |
| 60 | 5502 | 180 |
| 61 | 5498 | 183 |
| 70 | 5505 | 210 |
| 85 | 5562 | 255 |
| 97 | 5551 | 291 |
| 99 | 5529 | 297 |

**USA Frequency Hopping Trial #14**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5500          | 15                  |
| 6     | 5507          | 18                  |
| 10    | 5514          | 30                  |
| 20    | 5523          | 60                  |
| 21    | 5559          | 63                  |
| 26    | 5494          | 78                  |
| 49    | 5545          | 147                 |
| 53    | 5495          | 159                 |
| 58    | 5506          | 174                 |
| 60    | 5508          | 180                 |
| 67    | 5521          | 201                 |
| 72    | 5551          | 216                 |
| 73    | 5549          | 219                 |
| 75    | 5531          | 225                 |
| 77    | 5557          | 231                 |
| 81    | 5517          | 243                 |
| 82    | 5550          | 246                 |
| 86    | 5556          | 258                 |
| 88    | 5510          | 264                 |
| 99    | 5512          | 297                 |

**USA Frequency Hopping Trial #15**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
|-------|---------------|---------------------|

|    |      |     |
|----|------|-----|
| 2  | 5531 | 6   |
| 10 | 5547 | 30  |
| 12 | 5513 | 36  |
| 16 | 5548 | 48  |
| 33 | 5567 | 99  |
| 57 | 5511 | 171 |
| 63 | 5498 | 189 |
| 64 | 5554 | 192 |
| 70 | 5506 | 210 |
| 75 | 5537 | 225 |
| 76 | 5523 | 228 |
| 81 | 5521 | 243 |
| 82 | 5532 | 246 |
| 83 | 5529 | 249 |
| 84 | 5517 | 252 |
| 90 | 5495 | 270 |
| 98 | 5503 | 294 |

**USA Frequency Hopping Trial #16**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 21    | 5499          | 63                  |
| 29    | 5532          | 87                  |
| 30    | 5545          | 90                  |
| 33    | 5553          | 99                  |
| 45    | 5517          | 135                 |
| 47    | 5509          | 141                 |
| 50    | 5554          | 150                 |
| 57    | 5551          | 171                 |
| 63    | 5531          | 189                 |
| 67    | 5566          | 201                 |
| 73    | 5536          | 219                 |
| 75    | 5556          | 225                 |
| 80    | 5520          | 240                 |
| 82    | 5515          | 246                 |
| 85    | 5521          | 255                 |
| 95    | 5512          | 285                 |

**USA Frequency Hopping Trial #17**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5527          | 0                   |
| 6     | 5492          | 18                  |
| 13    | 5541          | 39                  |
| 22    | 5556          | 66                  |
| 27    | 5549          | 81                  |

|    |      |     |
|----|------|-----|
| 29 | 5516 | 87  |
| 45 | 5560 | 135 |
| 48 | 5515 | 144 |
| 54 | 5511 | 162 |
| 67 | 5564 | 201 |
| 86 | 5513 | 258 |
| 94 | 5502 | 282 |
| 96 | 5544 | 288 |

## USA Frequency Hopping Trial #18

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 6     | 5562          | 18                  |
| 12    | 5541          | 36                  |
| 13    | 5552          | 39                  |
| 16    | 5500          | 48                  |
| 23    | 5565          | 69                  |
| 34    | 5550          | 102                 |
| 35    | 5532          | 105                 |
| 40    | 5504          | 120                 |
| 42    | 5563          | 126                 |
| 52    | 5561          | 156                 |
| 61    | 5557          | 183                 |
| 62    | 5497          | 186                 |
| 63    | 5533          | 189                 |
| 66    | 5512          | 198                 |
| 71    | 5544          | 213                 |
| 78    | 5531          | 234                 |
| 80    | 5555          | 240                 |
| 84    | 5548          | 252                 |
| 97    | 5526          | 291                 |
| 99    | 5506          | 297                 |

## USA Frequency Hopping Trial #19

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5568          | 12                  |
| 7     | 5513          | 21                  |
| 12    | 5566          | 36                  |
| 19    | 5556          | 57                  |
| 24    | 5518          | 72                  |
| 29    | 5494          | 87                  |
| 31    | 5545          | 93                  |
| 33    | 5495          | 99                  |
| 36    | 5506          | 108                 |
| 42    | 5528          | 126                 |

|    |      |     |
|----|------|-----|
| 58 | 5530 | 174 |
| 73 | 5562 | 219 |
| 75 | 5502 | 225 |
| 88 | 5511 | 264 |
| 94 | 5557 | 282 |

## USA Frequency Hopping Trial #20

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5548          | 6                   |
| 7     | 5523          | 21                  |
| 26    | 5528          | 78                  |
| 32    | 5558          | 96                  |
| 39    | 5511          | 117                 |
| 41    | 5521          | 123                 |
| 61    | 5509          | 183                 |
| 68    | 5564          | 204                 |
| 71    | 5530          | 213                 |
| 73    | 5497          | 219                 |
| 86    | 5500          | 258                 |
| 87    | 5567          | 261                 |
| 90    | 5545          | 270                 |
| 92    | 5516          | 276                 |
| 94    | 5561          | 282                 |

## USA Frequency Hopping Trial #21

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5509          | 0                   |
| 5     | 5534          | 15                  |
| 6     | 5516          | 18                  |
| 7     | 5545          | 21                  |
| 9     | 5538          | 27                  |
| 19    | 5494          | 57                  |
| 21    | 5528          | 63                  |
| 32    | 5549          | 96                  |
| 33    | 5542          | 99                  |
| 34    | 5523          | 102                 |
| 44    | 5530          | 132                 |
| 45    | 5496          | 135                 |
| 48    | 5502          | 144                 |
| 59    | 5514          | 177                 |
| 67    | 5543          | 201                 |
| 68    | 5507          | 204                 |
| 76    | 5492          | 228                 |
| 80    | 5547          | 240                 |

|    |      |     |
|----|------|-----|
| 96 | 5563 | 288 |
| 99 | 5519 | 297 |

**USA Frequency Hopping Trial #22**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5516          | 0                   |
| 2     | 5538          | 6                   |
| 4     | 5522          | 12                  |
| 7     | 5540          | 21                  |
| 12    | 5566          | 36                  |
| 13    | 5568          | 39                  |
| 14    | 5495          | 42                  |
| 20    | 5557          | 60                  |
| 24    | 5527          | 72                  |
| 30    | 5542          | 90                  |
| 33    | 5551          | 99                  |
| 36    | 5541          | 108                 |
| 44    | 5507          | 132                 |
| 48    | 5518          | 144                 |
| 57    | 5550          | 171                 |
| 63    | 5563          | 189                 |
| 70    | 5544          | 210                 |
| 72    | 5567          | 216                 |
| 78    | 5523          | 234                 |
| 89    | 5546          | 267                 |
| 94    | 5553          | 282                 |

**USA Frequency Hopping Trial #23**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 7     | 5532          | 21                  |
| 8     | 5535          | 24                  |
| 13    | 5537          | 39                  |
| 17    | 5562          | 51                  |
| 18    | 5505          | 54                  |
| 37    | 5515          | 111                 |
| 45    | 5498          | 135                 |
| 60    | 5564          | 180                 |
| 61    | 5545          | 183                 |
| 69    | 5525          | 207                 |
| 79    | 5511          | 237                 |
| 82    | 5500          | 246                 |
| 89    | 5553          | 267                 |
| 90    | 5533          | 270                 |
| 95    | 5492          | 285                 |

|    |      |     |
|----|------|-----|
| 96 | 5555 | 288 |
| 97 | 5566 | 291 |

**USA Frequency Hopping Trial #24**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 18    | 5523          | 54                  |
| 26    | 5544          | 78                  |
| 32    | 5551          | 96                  |
| 41    | 5520          | 123                 |
| 43    | 5553          | 129                 |
| 58    | 5563          | 174                 |
| 67    | 5509          | 201                 |
| 82    | 5561          | 246                 |
| 98    | 5493          | 294                 |

**USA Frequency Hopping Trial #25**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5511          | 15                  |
| 12    | 5513          | 36                  |
| 13    | 5541          | 39                  |
| 30    | 5539          | 90                  |
| 37    | 5492          | 111                 |
| 39    | 5555          | 117                 |
| 47    | 5540          | 141                 |
| 48    | 5510          | 144                 |
| 57    | 5494          | 171                 |
| 58    | 5496          | 174                 |
| 77    | 5493          | 231                 |
| 85    | 5532          | 255                 |
| 89    | 5534          | 267                 |

**USA Frequency Hopping Trial #26**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 13    | 5496          | 39                  |
| 23    | 5507          | 69                  |
| 26    | 5552          | 78                  |
| 27    | 5538          | 81                  |
| 34    | 5543          | 102                 |
| 39    | 5505          | 117                 |
| 40    | 5532          | 120                 |
| 45    | 5534          | 135                 |
| 49    | 5529          | 147                 |
| 52    | 5522          | 156                 |
| 55    | 5518          | 165                 |

|    |      |     |
|----|------|-----|
| 56 | 5536 | 168 |
| 58 | 5495 | 174 |
| 61 | 5503 | 183 |
| 96 | 5502 | 288 |

## USA Frequency Hopping Trial #27

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 16    | 5547          | 48                  |
| 19    | 5538          | 57                  |
| 23    | 5532          | 69                  |
| 24    | 5564          | 72                  |
| 29    | 5517          | 87                  |
| 33    | 5528          | 99                  |
| 36    | 5496          | 108                 |
| 38    | 5505          | 114                 |
| 42    | 5543          | 126                 |
| 54    | 5554          | 162                 |
| 61    | 5540          | 183                 |
| 71    | 5503          | 213                 |
| 78    | 5544          | 234                 |
| 90    | 5551          | 270                 |
| 93    | 5539          | 279                 |

## USA Frequency Hopping Trial #28

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 3     | 5521          | 9                   |
| 12    | 5508          | 36                  |
| 18    | 5547          | 54                  |
| 23    | 5529          | 69                  |
| 26    | 5492          | 78                  |
| 31    | 5516          | 93                  |
| 32    | 5501          | 96                  |
| 38    | 5542          | 114                 |
| 44    | 5500          | 132                 |
| 46    | 5558          | 138                 |
| 49    | 5494          | 147                 |
| 50    | 5531          | 150                 |
| 63    | 5566          | 189                 |
| 67    | 5497          | 201                 |
| 69    | 5532          | 207                 |
| 72    | 5503          | 216                 |
| 77    | 5496          | 231                 |
| 79    | 5555          | 237                 |
| 83    | 5499          | 249                 |

|    |      |     |
|----|------|-----|
| 86 | 5502 | 258 |
| 98 | 5520 | 294 |
| 99 | 5505 | 297 |

## USA Frequency Hopping Trial #29

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 12    | 5538          | 36                  |
| 13    | 5520          | 39                  |
| 24    | 5494          | 72                  |
| 28    | 5529          | 84                  |
| 33    | 5564          | 99                  |
| 35    | 5548          | 105                 |
| 36    | 5534          | 108                 |
| 44    | 5525          | 132                 |
| 53    | 5512          | 159                 |
| 56    | 5559          | 168                 |
| 57    | 5505          | 171                 |
| 67    | 5561          | 201                 |
| 75    | 5506          | 225                 |
| 77    | 5554          | 231                 |
| 80    | 5547          | 240                 |
| 88    | 5507          | 264                 |
| 89    | 5536          | 267                 |
| 98    | 5563          | 294                 |

## USA Frequency Hopping Trial #30

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5502          | 0                   |
| 7     | 5518          | 21                  |
| 10    | 5540          | 30                  |
| 12    | 5493          | 36                  |
| 19    | 5497          | 57                  |
| 20    | 5495          | 60                  |
| 21    | 5499          | 63                  |
| 24    | 5568          | 72                  |
| 37    | 5496          | 111                 |
| 46    | 5510          | 138                 |
| 56    | 5545          | 168                 |
| 60    | 5529          | 180                 |
| 67    | 5562          | 201                 |
| 75    | 5515          | 225                 |
| 77    | 5526          | 231                 |
| 81    | 5492          | 243                 |

**Channel 5250 MHz, 160MHz BW, Statistical Performance (upper section of 80+80)****USA Bin 1A/1B**

freq=5290, rate=m0x1, bw=78.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5250      | 18     | 1       | 3066     | 1                                | 100.0%                  | 60.0% |
| 2     | 5250      | 99     | 1       | 538      | 1                                |                         |       |
| 3     | 5256      | 61     | 1       | 878      | 1                                |                         |       |
| 4     | 5256      | 59     | 1       | 898      | 1                                |                         |       |
| 5     | 5262      | 61     | 1       | 878      | 1                                |                         |       |
| 6     | 5262      | 57     | 1       | 938      | 1                                |                         |       |
| 7     | 5268      | 65     | 1       | 818      | 1                                |                         |       |
| 8     | 5268      | 70     | 1       | 758      | 1                                |                         |       |
| 9     | 5274      | 70     | 1       | 758      | 1                                |                         |       |
| 10    | 5274      | 99     | 1       | 538      | 1                                |                         |       |
| 11    | 5280      | 67     | 1       | 798      | 1                                |                         |       |
| 12    | 5280      | 72     | 1       | 738      | 1                                |                         |       |
| 13    | 5286      | 74     | 1       | 718      | 1                                |                         |       |
| 14    | 5286      | 61     | 1       | 878      | 1                                |                         |       |
| 15    | 5290      | 81     | 1       | 658      | 1                                |                         |       |
| 16    | 5290      | 30     | 1       | 1798     | 1                                |                         |       |
| 17    | 5294      | 27     | 1       | 1972     | 1                                |                         |       |
| 18    | 5294      | 19     | 1       | 2801     | 1                                |                         |       |
| 19    | 5300      | 24     | 1       | 2236     | 1                                |                         |       |
| 20    | 5300      | 57     | 1       | 936      | 1                                |                         |       |
| 21    | 5306      | 30     | 1       | 1800     | 1                                |                         |       |
| 22    | 5306      | 20     | 1       | 2706     | 1                                |                         |       |
| 23    | 5312      | 41     | 1       | 1299     | 1                                |                         |       |
| 24    | 5312      | 29     | 1       | 1860     | 1                                |                         |       |
| 25    | 5318      | 33     | 1       | 1632     | 1                                |                         |       |
| 26    | 5318      | 88     | 1       | 603      | 1                                |                         |       |
| 27    | 5324      | 94     | 1       | 565      | 1                                |                         |       |
| 28    | 5324      | 27     | 1       | 1959     | 1                                |                         |       |
| 29    | 5330      | 19     | 1       | 2874     | 1                                |                         |       |
| 30    | 5330      | 21     | 1       | 2637     | 1                                |                         |       |

**USA Bin 1A/1B**

freq=5290, rate=m0x1, bw=78.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|-------------------------------|-------------------------|-------|
| 1     | 5250      | 78     | 1       | 678      | 1                             | 100.0%                  | 60.0% |
| 2     | 5250      | 65     | 1       | 818      | 1                             |                         |       |
| 3     | 5256      | 81     | 1       | 658      | 1                             |                         |       |
| 4     | 5256      | 70     | 1       | 758      | 1                             |                         |       |
| 5     | 5262      | 65     | 1       | 818      | 1                             |                         |       |
| 6     | 5262      | 74     | 1       | 718      | 1                             |                         |       |
| 7     | 5268      | 67     | 1       | 798      | 1                             |                         |       |
| 8     | 5268      | 92     | 1       | 578      | 1                             |                         |       |
| 9     | 5274      | 95     | 1       | 558      | 1                             |                         |       |
| 10    | 5274      | 76     | 1       | 698      | 1                             |                         |       |
| 11    | 5280      | 67     | 1       | 798      | 1                             |                         |       |
| 12    | 5280      | 92     | 1       | 578      | 1                             |                         |       |
| 13    | 5286      | 18     | 1       | 3066     | 1                             |                         |       |
| 14    | 5286      | 81     | 1       | 658      | 1                             |                         |       |
| 15    | 5290      | 92     | 1       | 578      | 1                             |                         |       |
| 16    | 5290      | 50     | 1       | 1059     | 1                             |                         |       |
| 17    | 5294      | 25     | 1       | 2143     | 1                             |                         |       |
| 18    | 5294      | 45     | 1       | 1198     | 1                             |                         |       |
| 19    | 5300      | 23     | 1       | 2388     | 1                             |                         |       |
| 20    | 5300      | 25     | 1       | 2184     | 1                             |                         |       |
| 21    | 5306      | 23     | 1       | 2371     | 1                             |                         |       |
| 22    | 5306      | 20     | 1       | 2754     | 1                             |                         |       |
| 23    | 5312      | 35     | 1       | 1518     | 1                             |                         |       |
| 24    | 5312      | 72     | 1       | 739      | 1                             |                         |       |
| 25    | 5318      | 29     | 1       | 1860     | 1                             |                         |       |
| 26    | 5318      | 19     | 1       | 2921     | 1                             |                         |       |
| 27    | 5324      | 36     | 1       | 1482     | 1                             |                         |       |
| 28    | 5324      | 23     | 1       | 2313     | 1                             |                         |       |
| 29    | 5330      | 22     | 1       | 2499     | 1                             |                         |       |
| 30    | 5330      | 62     | 1       | 857      | 1                             |                         |       |



**USA Bin**  
**2**

freq=5290, rate=m0x1, bw=78.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|-------------------------------|-------------------------|-------|
| 1     | 5250      | 24     | 2       | 201      | 1                             | 100.0%                  | 60.0% |
| 2     | 5250      | 25     | 5       | 165      | 1                             |                         |       |
| 3     | 5256      | 25     | 1.7     | 212      | 1                             |                         |       |
| 4     | 5256      | 27     | 1.5     | 155      | 1                             |                         |       |
| 5     | 5262      | 24     | 4.4     | 227      | 1                             |                         |       |
| 6     | 5262      | 27     | 3.5     | 209      | 1                             |                         |       |
| 7     | 5268      | 28     | 3.7     | 150      | 1                             |                         |       |
| 8     | 5268      | 23     | 1.7     | 178      | 1                             |                         |       |
| 9     | 5274      | 25     | 2.1     | 214      | 1                             |                         |       |
| 10    | 5274      | 29     | 1.2     | 189      | 1                             |                         |       |
| 11    | 5280      | 27     | 4.9     | 172      | 1                             |                         |       |
| 12    | 5280      | 27     | 3       | 217      | 1                             |                         |       |
| 13    | 5286      | 28     | 1.4     | 219      | 1                             |                         |       |
| 14    | 5286      | 29     | 1.3     | 193      | 1                             |                         |       |
| 15    | 5290      | 26     | 1.9     | 184      | 1                             |                         |       |
| 16    | 5290      | 24     | 4.4     | 179      | 1                             |                         |       |
| 17    | 5294      | 25     | 4.9     | 179      | 1                             |                         |       |
| 18    | 5294      | 29     | 1.4     | 170      | 1                             |                         |       |
| 19    | 5300      | 25     | 2.6     | 192      | 1                             |                         |       |
| 20    | 5300      | 27     | 4.6     | 204      | 1                             |                         |       |
| 21    | 5306      | 28     | 4.2     | 191      | 1                             |                         |       |
| 22    | 5306      | 24     | 3.3     | 184      | 1                             |                         |       |
| 23    | 5312      | 24     | 3.6     | 209      | 1                             |                         |       |
| 24    | 5312      | 23     | 2.4     | 167      | 1                             |                         |       |
| 25    | 5318      | 27     | 2.9     | 206      | 1                             |                         |       |
| 26    | 5318      | 23     | 2.6     | 168      | 1                             |                         |       |
| 27    | 5324      | 29     | 1.3     | 223      | 1                             |                         |       |
| 28    | 5324      | 23     | 4.8     | 177      | 1                             |                         |       |
| 29    | 5330      | 23     | 1.9     | 179      | 1                             |                         |       |
| 30    | 5330      | 23     | 4       | 224      | 1                             |                         |       |



**USA Bin**  
**3**

freq=5290, rate=m0x1, bw=78.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|-------------------------------|-------------------------|-------|
| 1     | 5250      | 18     | 6.1     | 450      | 1                             | 100.0%                  | 60.0% |
| 2     | 5250      | 16     | 6.1     | 323      | 1                             |                         |       |
| 3     | 5256      | 17     | 7.9     | 295      | 1                             |                         |       |
| 4     | 5256      | 18     | 6.4     | 457      | 1                             |                         |       |
| 5     | 5262      | 17     | 9.8     | 276      | 1                             |                         |       |
| 6     | 5262      | 17     | 8.8     | 440      | 1                             |                         |       |
| 7     | 5268      | 18     | 7.9     | 394      | 1                             |                         |       |
| 8     | 5268      | 16     | 9.3     | 276      | 1                             |                         |       |
| 9     | 5274      | 16     | 10      | 362      | 1                             |                         |       |
| 10    | 5274      | 17     | 9.1     | 421      | 1                             |                         |       |
| 11    | 5280      | 18     | 7       | 348      | 1                             |                         |       |
| 12    | 5280      | 16     | 8.5     | 340      | 1                             |                         |       |
| 13    | 5286      | 16     | 7.8     | 231      | 1                             |                         |       |
| 14    | 5286      | 17     | 6.3     | 339      | 1                             |                         |       |
| 15    | 5290      | 17     | 9.8     | 451      | 1                             |                         |       |
| 16    | 5290      | 17     | 8.4     | 349      | 1                             |                         |       |
| 17    | 5294      | 18     | 6.2     | 270      | 1                             |                         |       |
| 18    | 5294      | 16     | 7.6     | 432      | 1                             |                         |       |
| 19    | 5300      | 16     | 6.3     | 437      | 1                             |                         |       |
| 20    | 5300      | 16     | 9.5     | 226      | 1                             |                         |       |
| 21    | 5306      | 16     | 7.7     | 207      | 1                             |                         |       |
| 22    | 5306      | 16     | 6.4     | 306      | 1                             |                         |       |
| 23    | 5312      | 17     | 7.7     | 481      | 1                             |                         |       |
| 24    | 5312      | 16     | 8.6     | 299      | 1                             |                         |       |
| 25    | 5318      | 18     | 8.8     | 434      | 1                             |                         |       |
| 26    | 5318      | 17     | 6.3     | 377      | 1                             |                         |       |
| 27    | 5324      | 18     | 9.1     | 417      | 1                             |                         |       |
| 28    | 5324      | 17     | 9.3     | 289      | 1                             |                         |       |
| 29    | 5330      | 16     | 7.1     | 362      | 1                             |                         |       |
| 30    | 5330      | 18     | 7.3     | 256      | 1                             |                         |       |

**USA Bin****4**

freq=5290, rate=m0x1, bw=78.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|-------------------------------|-------------------------|-------|
| 1     | 5250      | 15     | 19.6    | 335      | 1                             | 100.0%                  | 60.0% |
| 2     | 5250      | 14     | 15.8    | 263      | 1                             |                         |       |
| 3     | 5256      | 13     | 13.5    | 349      | 1                             |                         |       |
| 4     | 5256      | 14     | 13.6    | 231      | 1                             |                         |       |
| 5     | 5262      | 16     | 11.4    | 420      | 1                             |                         |       |
| 6     | 5262      | 15     | 12.8    | 458      | 1                             |                         |       |
| 7     | 5268      | 14     | 16.7    | 274      | 1                             |                         |       |
| 8     | 5268      | 16     | 12.4    | 280      | 1                             |                         |       |
| 9     | 5274      | 13     | 17.5    | 423      | 1                             |                         |       |
| 10    | 5274      | 16     | 15.3    | 496      | 1                             |                         |       |
| 11    | 5280      | 12     | 14      | 424      | 1                             |                         |       |
| 12    | 5280      | 15     | 12.6    | 309      | 1                             |                         |       |
| 13    | 5286      | 13     | 11.7    | 304      | 1                             |                         |       |
| 14    | 5286      | 15     | 12.4    | 245      | 1                             |                         |       |
| 15    | 5290      | 15     | 19.2    | 417      | 1                             |                         |       |
| 16    | 5290      | 14     | 16.4    | 229      | 1                             |                         |       |
| 17    | 5294      | 16     | 19.5    | 304      | 1                             |                         |       |
| 18    | 5294      | 12     | 17.9    | 483      | 1                             |                         |       |
| 19    | 5300      | 14     | 12.1    | 460      | 1                             |                         |       |
| 20    | 5300      | 15     | 14.2    | 432      | 1                             |                         |       |
| 21    | 5306      | 15     | 16      | 366      | 1                             |                         |       |
| 22    | 5306      | 14     | 17.4    | 492      | 1                             |                         |       |
| 23    | 5312      | 16     | 16.2    | 302      | 1                             |                         |       |
| 24    | 5312      | 13     | 16.5    | 259      | 1                             |                         |       |
| 25    | 5318      | 13     | 11.3    | 257      | 1                             |                         |       |
| 26    | 5318      | 14     | 11.3    | 260      | 1                             |                         |       |
| 27    | 5324      | 14     | 13.2    | 253      | 1                             |                         |       |
| 28    | 5324      | 16     | 11.6    | 452      | 1                             |                         |       |
| 29    | 5330      | 13     | 17.3    | 312      | 1                             |                         |       |
| 30    | 5330      | 12     | 17.8    | 372      | 1                             |                         |       |

In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is required and is calculated as follows:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100.0\% + 100.0\% + 100.0\% + 100.0\% + 100.0\%)/5 = 100.0\% (>80\%)$$



**USA**  
**Bin 5**

freq=5290, rate=m0x1, bw=78.0

| Trial | Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|-------------------------------|----------------------|-------|
| 1     | 1       | 1      | 5256.2          | 13          | 70      |                          |                          | 0.037908        | 1                             | 100.0%               | 80.0% |
| 2     | 1       | 1      | 5254.6          | 9           | 65      |                          |                          | 0.382584        | 1                             |                      |       |
| 3     | 1       | 3      | 5257.8          | 17          | 95      | 1668                     | 1123                     | 0.518814        | 1                             |                      |       |
| 4     | 1       | 3      | 5258.6          | 19          | 100     | 1762                     | 1443                     | 0.761306        | 1                             |                      |       |
| 5     | 1       | 1      | 5258.2          | 18          | 95      |                          |                          | 0.015409        | 1                             |                      |       |
| 6     | 1       | 1      | 5255.4          | 11          | 70      |                          |                          | 0.343618        | 1                             |                      |       |
| 7     | 1       | 1      | 5253.4          | 6           | 80      |                          |                          | 0.087401        | 1                             |                      |       |
| 8     | 1       | 3      | 5257.8          | 17          | 90      | 1830                     | 1577                     | 0.499066        | 1                             |                      |       |
| 9     | 1       | 3      | 5257.4          | 16          | 70      | 1275                     | 1436                     | 0.344055        | 1                             |                      |       |
| 10    | 1       | 2      | 5253.8          | 7           | 50      | 1862                     |                          | 0.441688        | 1                             |                      |       |
| 11    | 1       | 1      | 5290            | 15          | 65      |                          |                          | 0.48785         | 1                             |                      |       |
| 12    | 1       | 3      | 5290            | 6           | 85      | 1069                     | 1518                     | 0.355712        | 1                             |                      |       |
| 13    | 1       | 1      | 5290            | 5           | 75      |                          |                          | 1.211562        | 1                             |                      |       |
| 14    | 1       | 2      | 5290            | 6           | 100     | 1631                     |                          | 0.084936        | 1                             |                      |       |
| 15    | 1       | 2      | 5290            | 10          | 60      | 1991                     |                          | 0.200873        | 1                             |                      |       |
| 16    | 1       | 1      | 5290            | 20          | 65      |                          |                          | 0.265157        | 1                             |                      |       |
| 17    | 1       | 2      | 5290            | 20          | 100     | 1907                     |                          | 0.069398        | 1                             |                      |       |
| 18    | 1       | 2      | 5290            | 19          | 55      | 1203                     |                          | 0.362932        | 1                             |                      |       |
| 19    | 1       | 1      | 5290            | 15          | 95      |                          |                          | 0.244281        | 1                             |                      |       |
| 20    | 1       | 2      | 5290            | 10          | 55      | 1398                     |                          | 0.247958        | 1                             |                      |       |
| 21    | 1       | 2      | 5323.8          | 13          | 100     | 1376                     |                          | 0.242456        | 1                             |                      |       |
| 22    | 1       | 2      | 5325            | 10          | 65      | 1776                     |                          | 0.646263        | 1                             |                      |       |
| 23    | 1       | 2      | 5326.2          | 7           | 95      | 1099                     |                          | 0.592037        | 1                             |                      |       |
| 24    | 1       | 3      | 5325.4          | 9           | 90      | 1691                     | 1538                     | 0.088251        | 1                             |                      |       |
| 25    | 1       | 2      | 5321.8          | 18          | 80      | 1286                     |                          | 0.35724         | 1                             |                      |       |
| 26    | 1       | 3      | 5322.2          | 17          | 80      | 1264                     | 1625                     | 1.467184        | 1                             |                      |       |
| 27    | 1       | 1      | 5323.4          | 14          | 95      |                          |                          | 0.427118        | 1                             |                      |       |
| 28    | 1       | 3      | 5321            | 20          | 75      | 1068                     | 1443                     | 0.044287        | 1                             |                      |       |
| 29    | 1       | 3      | 5321.8          | 18          | 65      | 1720                     | 1102                     | 0.379658        | 1                             |                      |       |
| 30    | 1       | 2      | 5325            | 10          | 65      | 1193                     |                          | 0.090318        | 1                             |                      |       |

**USA Frequency Hopping**

freq=5290, rate=m0x1, bw=78.0

| Trial | Hop # | Freq (GHz) | Pulse Start (mS) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|-------|------------|------------------|-------------------------------|----------------------|-------|
| 1     | 0     | 5305       | 0                | 1                             | 100.0%               | 70.0% |
| 2     | 4     | 5274       | 12               | 1                             |                      |       |
| 3     | 6     | 5300       | 18               | 1                             |                      |       |
| 4     | 6     | 5313       | 18               | 1                             |                      |       |
| 5     | 10    | 5304       | 30               | 1                             |                      |       |
| 6     | 4     | 5273       | 12               | 1                             |                      |       |
| 7     | 21    | 5270       | 63               | 1                             |                      |       |
| 8     | 5     | 5268       | 15               | 1                             |                      |       |
| 9     | 1     | 5315       | 3                | 1                             |                      |       |
| 10    | 7     | 5251       | 21               | 1                             |                      |       |
| 11    | 5     | 5274       | 15               | 1                             |                      |       |
| 12    | 1     | 5251       | 3                | 1                             |                      |       |
| 13    | 4     | 5329       | 12               | 1                             |                      |       |
| 14    | 6     | 5286       | 18               | 1                             |                      |       |
| 15    | 0     | 5287       | 0                | 1                             |                      |       |
| 16    | 3     | 5256       | 9                | 1                             |                      |       |
| 17    | 5     | 5268       | 15               | 1                             |                      |       |
| 18    | 4     | 5292       | 12               | 1                             |                      |       |
| 19    | 3     | 5290       | 9                | 1                             |                      |       |
| 20    | 2     | 5294       | 6                | 1                             |                      |       |
| 21    | 7     | 5300       | 21               | 1                             |                      |       |
| 22    | 9     | 5304       | 27               | 1                             |                      |       |
| 23    | 9     | 5285       | 27               | 1                             |                      |       |
| 24    | 1     | 5259       | 3                | 1                             |                      |       |
| 25    | 8     | 5276       | 24               | 1                             |                      |       |
| 26    | 5     | 5316       | 15               | 1                             |                      |       |
| 27    | 9     | 5283       | 27               | 1                             |                      |       |
| 28    | 2     | 5322       | 6                | 1                             |                      |       |
| 29    | 7     | 5283       | 21               | 1                             |                      |       |
| 30    | 1     | 5255       | 3                | 1                             |                      |       |



## USA Bin 5 Trial #1

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5256.2          | 13          | 70      |                          |                          | 0.037908        |
| 2       | 1      | 5256.2          | 13          | 100     |                          |                          | 1.907966        |
| 3       | 3      | 5256.2          | 13          | 80      | 1847                     | 1297                     | 3.18229         |
| 4       | 3      | 5256.2          | 13          | 65      | 1330                     | 1953                     | 4.073659        |
| 5       | 2      | 5256.2          | 13          | 60      | 1104                     |                          | 5.529196        |
| 6       | 3      | 5256.2          | 13          | 80      | 1433                     | 1936                     | 7.307825        |
| 7       | 3      | 5256.2          | 13          | 65      | 1889                     | 1319                     | 8.183533        |
| 8       | 2      | 5256.2          | 13          | 60      | 1186                     |                          | 9.626748        |
| 9       | 1      | 5256.2          | 13          | 95      |                          |                          | 10.684585       |

## USA Bin 5 Trial #2

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5254.6          | 9           | 65      |                          |                          | 0.382584        |
| 2       | 2      | 5254.6          | 9           | 95      | 1578                     |                          | 0.948638        |
| 3       | 2      | 5254.6          | 9           | 95      | 1963                     |                          | 1.824494        |
| 4       | 3      | 5254.6          | 9           | 95      | 1194                     | 1365                     | 2.701388        |
| 5       | 1      | 5254.6          | 9           | 90      |                          |                          | 3.752468        |
| 6       | 1      | 5254.6          | 9           | 80      |                          |                          | 4.289183        |
| 7       | 3      | 5254.6          | 9           | 90      | 1231                     | 1746                     | 5.850166        |
| 8       | 2      | 5254.6          | 9           | 95      | 1980                     |                          | 6.543317        |
| 9       | 2      | 5254.6          | 9           | 90      | 1000                     |                          | 7.071371        |
| 10      | 3      | 5254.6          | 9           | 100     | 1785                     | 1493                     | 7.743932        |
| 11      | 3      | 5254.6          | 9           | 55      | 1567                     | 1013                     | 8.593879        |
| 12      | 3      | 5254.6          | 9           | 80      | 1298                     | 1522                     | 9.756762        |
| 13      | 2      | 5254.6          | 9           | 85      | 1805                     |                          | 10.734173       |
| 14      | 3      | 5254.6          | 9           | 90      | 1181                     | 1510                     | 11.889441       |

## USA Bin 5 Trial #3

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5257.8          | 17          | 95      | 1668                     | 1123                     | 0.518814        |
| 2       | 1      | 5257.8          | 17          | 70      |                          |                          | 1.25618         |
| 3       | 1      | 5257.8          | 17          | 95      |                          |                          | 1.577177        |
| 4       | 2      | 5257.8          | 17          | 70      | 1744                     |                          | 2.395992        |
| 5       | 1      | 5257.8          | 17          | 85      |                          |                          | 3.084726        |
| 6       | 1      | 5257.8          | 17          | 70      |                          |                          | 3.775976        |
| 7       | 2      | 5257.8          | 17          | 60      | 1440                     |                          | 4.058531        |
| 8       | 1      | 5257.8          | 17          | 75      |                          |                          | 4.886304        |
| 9       | 2      | 5257.8          | 17          | 75      | 1861                     |                          | 5.521465        |



|    |   |        |    |     |      |      |           |
|----|---|--------|----|-----|------|------|-----------|
| 10 | 3 | 5257.8 | 17 | 60  | 1778 | 1814 | 6.075429  |
| 11 | 1 | 5257.8 | 17 | 95  |      |      | 6.663966  |
| 12 | 1 | 5257.8 | 17 | 55  |      |      | 7.346259  |
| 13 | 3 | 5257.8 | 17 | 80  | 1408 | 1891 | 8.048121  |
| 14 | 2 | 5257.8 | 17 | 50  | 1873 |      | 8.610227  |
| 15 | 1 | 5257.8 | 17 | 75  |      |      | 9.118376  |
| 16 | 2 | 5257.8 | 17 | 100 | 1577 |      | 10.084056 |
| 17 | 3 | 5257.8 | 17 | 50  | 1443 | 1143 | 10.488555 |
| 18 | 3 | 5257.8 | 17 | 85  | 1520 | 1268 | 10.834604 |
| 19 | 1 | 5257.8 | 17 | 65  |      |      | 11.805918 |

## USA Bin 5 Trial #4

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5258.6             | 19             | 100        | 1762                           | 1443                           | 0.761306           |
| 2       | 2      | 5258.6             | 19             | 65         | 1563                           |                                | 1.376869           |
| 3       | 3      | 5258.6             | 19             | 80         | 1035                           | 1137                           | 3.065785           |
| 4       | 3      | 5258.6             | 19             | 90         | 1129                           | 1966                           | 4.258191           |
| 5       | 2      | 5258.6             | 19             | 85         | 1141                           |                                | 5.464751           |
| 6       | 2      | 5258.6             | 19             | 55         | 1529                           |                                | 6.083695           |
| 7       | 2      | 5258.6             | 19             | 60         | 1158                           |                                | 8.119455           |
| 8       | 1      | 5258.6             | 19             | 65         |                                |                                | 9.097236           |
| 9       | 3      | 5258.6             | 19             | 85         | 1276                           | 1638                           | 9.718549           |
| 10      | 1      | 5258.6             | 19             | 80         |                                |                                | 11.669684          |

## USA Bin 5 Trial #5

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5258.2             | 18             | 95         |                                |                                | 0.015409           |
| 2       | 2      | 5258.2             | 18             | 100        | 1814                           |                                | 1.816548           |
| 3       | 1      | 5258.2             | 18             | 50         |                                |                                | 3.940419           |
| 4       | 1      | 5258.2             | 18             | 90         |                                |                                | 5.350849           |
| 5       | 1      | 5258.2             | 18             | 60         |                                |                                | 6.96003            |
| 6       | 2      | 5258.2             | 18             | 95         | 1013                           |                                | 8.311405           |
| 7       | 3      | 5258.2             | 18             | 60         | 1464                           | 1538                           | 9.837434           |
| 8       | 2      | 5258.2             | 18             | 70         | 1529                           |                                | 11.929222          |

## USA Bin 5 Trial #6

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5255.4             | 11             | 70         |                                |                                | 0.343618           |
| 2       | 1      | 5255.4             | 11             | 65         |                                |                                | 1.196059           |
| 3       | 3      | 5255.4             | 11             | 95         | 1323                           | 1084                           | 1.902454           |
| 4       | 3      | 5255.4             | 11             | 95         | 1992                           | 1753                           | 2.682902           |



|    |   |        |    |     |      |      |           |
|----|---|--------|----|-----|------|------|-----------|
| 5  | 3 | 5255.4 | 11 | 85  | 1661 | 1976 | 3.140761  |
| 6  | 2 | 5255.4 | 11 | 80  | 1726 |      | 3.90922   |
| 7  | 2 | 5255.4 | 11 | 80  | 1816 |      | 4.477728  |
| 8  | 1 | 5255.4 | 11 | 80  |      |      | 5.047132  |
| 9  | 3 | 5255.4 | 11 | 55  | 1591 | 1790 | 6.069157  |
| 10 | 3 | 5255.4 | 11 | 55  | 1019 | 1636 | 6.701601  |
| 11 | 2 | 5255.4 | 11 | 85  | 1573 |      | 7.179835  |
| 12 | 1 | 5255.4 | 11 | 60  |      |      | 8.057074  |
| 13 | 1 | 5255.4 | 11 | 60  |      |      | 8.696004  |
| 14 | 2 | 5255.4 | 11 | 85  | 1148 |      | 9.411191  |
| 15 | 2 | 5255.4 | 11 | 70  | 1177 |      | 10.140425 |
| 16 | 2 | 5255.4 | 11 | 100 | 1084 |      | 10.963844 |
| 17 | 3 | 5255.4 | 11 | 70  | 1263 | 1327 | 11.309612 |

## USA Bin 5 Trial #7

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5253.4          | 6           | 80      |                          |                          | 0.087401        |
| 2       | 1      | 5253.4          | 6           | 70      |                          |                          | 1.092982        |
| 3       | 2      | 5253.4          | 6           | 55      | 1280                     |                          | 1.764636        |
| 4       | 3      | 5253.4          | 6           | 95      | 1283                     | 1253                     | 2.955723        |
| 5       | 1      | 5253.4          | 6           | 70      |                          |                          | 3.862483        |
| 6       | 1      | 5253.4          | 6           | 70      |                          |                          | 4.15792         |
| 7       | 2      | 5253.4          | 6           | 80      | 1841                     |                          | 5.250735        |
| 8       | 3      | 5253.4          | 6           | 65      | 1639                     | 1971                     | 6.120849        |
| 9       | 3      | 5253.4          | 6           | 80      | 1684                     | 1641                     | 6.696873        |
| 10      | 3      | 5253.4          | 6           | 85      | 1676                     | 1673                     | 7.265414        |
| 11      | 1      | 5253.4          | 6           | 90      |                          |                          | 8.112721        |
| 12      | 2      | 5253.4          | 6           | 55      | 1276                     |                          | 9.323446        |
| 13      | 1      | 5253.4          | 6           | 60      |                          |                          | 10.116143       |
| 14      | 2      | 5253.4          | 6           | 80      | 1139                     |                          | 11.048679       |
| 15      | 2      | 5253.4          | 6           | 90      | 1146                     |                          | 11.31978        |

## USA Bin 5 Trial #8

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5257.8          | 17          | 90      | 1830                     | 1577                     | 0.499066        |
| 2       | 1      | 5257.8          | 17          | 85      |                          |                          | 1.168808        |
| 3       | 3      | 5257.8          | 17          | 55      | 1407                     | 1835                     | 1.299015        |
| 4       | 1      | 5257.8          | 17          | 95      |                          |                          | 2.126315        |
| 5       | 3      | 5257.8          | 17          | 65      | 1964                     | 1455                     | 2.556166        |
| 6       | 2      | 5257.8          | 17          | 100     | 1221                     |                          | 3.144734        |
| 7       | 2      | 5257.8          | 17          | 90      | 1606                     |                          | 3.874729        |
| 8       | 3      | 5257.8          | 17          | 70      | 1776                     | 1163                     | 4.214972        |



|    |   |        |    |     |      |      |           |
|----|---|--------|----|-----|------|------|-----------|
| 9  | 1 | 5257.8 | 17 | 80  |      |      | 4.8331    |
| 10 | 1 | 5257.8 | 17 | 75  |      |      | 5.50461   |
| 11 | 2 | 5257.8 | 17 | 90  | 1441 |      | 6.357344  |
| 12 | 2 | 5257.8 | 17 | 50  | 1004 |      | 6.677868  |
| 13 | 3 | 5257.8 | 17 | 95  | 1646 | 1299 | 7.548835  |
| 14 | 1 | 5257.8 | 17 | 75  |      |      | 8.129046  |
| 15 | 1 | 5257.8 | 17 | 55  |      |      | 8.806123  |
| 16 | 2 | 5257.8 | 17 | 55  | 1584 |      | 9.217924  |
| 17 | 1 | 5257.8 | 17 | 100 |      |      | 9.996133  |
| 18 | 3 | 5257.8 | 17 | 95  | 1401 | 1002 | 10.673108 |
| 19 | 3 | 5257.8 | 17 | 70  | 1482 | 1743 | 11.365683 |
| 20 | 1 | 5257.8 | 17 | 80  |      |      | 11.669701 |

## USA Bin 5 Trial #9

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5257.4             | 16             | 70         | 1275                           | 1436                           | 0.344055           |
| 2       | 1      | 5257.4             | 16             | 60         |                                |                                | 1.136              |
| 3       | 2      | 5257.4             | 16             | 55         | 1359                           |                                | 2.24475            |
| 4       | 2      | 5257.4             | 16             | 100        | 1166                           |                                | 2.603173           |
| 5       | 2      | 5257.4             | 16             | 100        | 1778                           |                                | 3.445191           |
| 6       | 3      | 5257.4             | 16             | 80         | 1671                           | 1925                           | 4.935819           |
| 7       | 1      | 5257.4             | 16             | 80         |                                |                                | 5.930923           |
| 8       | 1      | 5257.4             | 16             | 55         |                                |                                | 6.539969           |
| 9       | 1      | 5257.4             | 16             | 75         |                                |                                | 7.317599           |
| 10      | 2      | 5257.4             | 16             | 95         | 1816                           |                                | 7.985332           |
| 11      | 1      | 5257.4             | 16             | 55         |                                |                                | 9.06719            |
| 12      | 3      | 5257.4             | 16             | 85         | 1801                           | 1070                           | 9.990158           |
| 13      | 1      | 5257.4             | 16             | 75         |                                |                                | 11.076452          |
| 14      | 2      | 5257.4             | 16             | 60         | 1929                           |                                | 11.527866          |

## USA Bin 5 Trial #10

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5253.8             | 7              | 50         | 1862                           |                                | 0.441688           |
| 2       | 3      | 5253.8             | 7              | 50         | 1650                           | 1477                           | 1.632166           |
| 3       | 3      | 5253.8             | 7              | 80         | 1151                           | 1450                           | 2.78799            |
| 4       | 3      | 5253.8             | 7              | 75         | 1233                           | 1887                           | 3.272253           |
| 5       | 2      | 5253.8             | 7              | 90         | 1605                           |                                | 4.137231           |
| 6       | 2      | 5253.8             | 7              | 55         | 1640                           |                                | 5.763552           |
| 7       | 1      | 5253.8             | 7              | 100        |                                |                                | 6.112854           |
| 8       | 2      | 5253.8             | 7              | 80         | 1176                           |                                | 7.44026            |
| 9       | 2      | 5253.8             | 7              | 65         | 1041                           |                                | 8.231022           |
| 10      | 1      | 5253.8             | 7              | 80         |                                |                                | 9.692628           |



|    |   |        |   |    |      |           |
|----|---|--------|---|----|------|-----------|
| 11 | 1 | 5253.8 | 7 | 50 |      | 10.650639 |
| 12 | 2 | 5253.8 | 7 | 85 | 1202 | 11.498865 |

USA Bin 5 Trial #11

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5290            | 15          | 65      |                          |                          | 0.48785         |
| 2       | 2      | 5290            | 15          | 50      | 1741                     |                          | 1.540343        |
| 3       | 2      | 5290            | 15          | 90      | 1003                     |                          | 3.494541        |
| 4       | 3      | 5290            | 15          | 85      | 1078                     | 1665                     | 4.830954        |
| 5       | 1      | 5290            | 15          | 65      |                          |                          | 7.444481        |
| 6       | 1      | 5290            | 15          | 50      |                          |                          | 8.357126        |
| 7       | 1      | 5290            | 15          | 60      |                          |                          | 10.461664       |
| 8       | 3      | 5290            | 15          | 90      | 1611                     | 1978                     | 11.175103       |

## USA Bin 5 Trial #12

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5290            | 6           | 85      | 1069                     | 1518                     | 0.355712        |
| 2       | 3      | 5290            | 6           | 65      | 1597                     | 1458                     | 1.593941        |
| 3       | 2      | 5290            | 6           | 95      | 1391                     |                          | 1.769658        |
| 4       | 2      | 5290            | 6           | 60      | 1514                     |                          | 3.214189        |
| 5       | 2      | 5290            | 6           | 65      | 1345                     |                          | 3.664847        |
| 6       | 2      | 5290            | 6           | 85      | 1148                     |                          | 4.911115        |
| 7       | 1      | 5290            | 6           | 90      |                          |                          | 5.996135        |
| 8       | 1      | 5290            | 6           | 60      |                          |                          | 6.472216        |
| 9       | 2      | 5290            | 6           | 95      | 1174                     |                          | 7.196476        |
| 10      | 1      | 5290            | 6           | 55      |                          |                          | 7.902885        |
| 11      | 2      | 5290            | 6           | 70      | 1752                     |                          | 9.340278        |
| 12      | 2      | 5290            | 6           | 65      | 1634                     |                          | 10.058493       |
| 13      | 1      | 5290            | 6           | 85      |                          |                          | 11.105731       |
| 14      | 3      | 5290            | 6           | 90      | 1878                     | 1184                     | 11.557883       |

## USA Bin 5 Trial #13

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5290            | 5           | 75      |                          |                          | 1.211562        |
| 2       | 1      | 5290            | 5           | 65      |                          |                          | 2.209042        |
| 3       | 3      | 5290            | 5           | 80      | 1792                     | 1131                     | 3.50696         |
| 4       | 3      | 5290            | 5           | 90      | 1756                     | 1855                     | 4.546598        |
| 5       | 3      | 5290            | 5           | 80      | 1999                     | 1984                     | 6.417073        |
| 6       | 3      | 5290            | 5           | 85      | 1771                     | 1718                     | 7.626876        |
| 7       | 1      | 5290            | 5           | 85      |                          |                          | 8.47839         |
| 8       | 1      | 5290            | 5           | 55      |                          |                          | 10.123996       |

9 1 5290 5 80 11.43274  
USA Bin 5 Trial #14

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5290            | 6           | 100     | 1631                     |                          | 0.084936        |
| 2       | 2      | 5290            | 6           | 70      | 1955                     |                          | 1.116207        |
| 3       | 1      | 5290            | 6           | 65      |                          |                          | 2.138588        |
| 4       | 1      | 5290            | 6           | 55      |                          |                          | 3.653949        |
| 5       | 2      | 5290            | 6           | 60      | 1189                     |                          | 4.818729        |
| 6       | 3      | 5290            | 6           | 55      | 1991                     | 1322                     | 5.294067        |
| 7       | 2      | 5290            | 6           | 100     | 1979                     |                          | 6.431733        |
| 8       | 3      | 5290            | 6           | 60      | 1449                     | 1991                     | 7.132886        |
| 9       | 3      | 5290            | 6           | 90      | 1014                     | 1091                     | 8.76599         |
| 10      | 2      | 5290            | 6           | 80      | 1738                     |                          | 9.855622        |
| 11      | 3      | 5290            | 6           | 85      | 1809                     | 1843                     | 10.058629       |
| 12      | 2      | 5290            | 6           | 100     | 1244                     |                          | 11.378739       |

USA Bin 5 Trial #15

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5290            | 10          | 60      | 1991                     |                          | 0.200873        |
| 2       | 3      | 5290            | 10          | 90      | 1279                     | 1994                     | 1.711089        |
| 3       | 1      | 5290            | 10          | 95      |                          |                          | 2.321807        |
| 4       | 2      | 5290            | 10          | 100     | 1352                     |                          | 3.847486        |
| 5       | 2      | 5290            | 10          | 55      | 1472                     |                          | 4.903555        |
| 6       | 2      | 5290            | 10          | 90      | 1298                     |                          | 5.96943         |
| 7       | 3      | 5290            | 10          | 75      | 1233                     | 1380                     | 7.525173        |
| 8       | 3      | 5290            | 10          | 95      | 1601                     | 1317                     | 8.064918        |
| 9       | 2      | 5290            | 10          | 80      | 1974                     |                          | 9.225276        |
| 10      | 2      | 5290            | 10          | 100     | 1739                     |                          | 10.807377       |
| 11      | 3      | 5290            | 10          | 50      | 1639                     | 1072                     | 11.725147       |

USA Bin 5 Trial #16

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5290            | 20          | 65      |                          |                          | 0.265157        |
| 2       | 1      | 5290            | 20          | 80      |                          |                          | 1.24071         |
| 3       | 3      | 5290            | 20          | 75      | 1441                     | 1086                     | 2.03079         |
| 4       | 1      | 5290            | 20          | 60      |                          |                          | 3.3217          |
| 5       | 1      | 5290            | 20          | 60      |                          |                          | 3.974649        |
| 6       | 3      | 5290            | 20          | 60      | 1815                     | 1006                     | 4.93092         |
| 7       | 1      | 5290            | 20          | 50      |                          |                          | 6.423165        |
| 8       | 3      | 5290            | 20          | 55      | 1599                     | 1334                     | 6.513554        |



|    |   |      |    |    |      |      |           |
|----|---|------|----|----|------|------|-----------|
| 9  | 3 | 5290 | 20 | 50 | 1777 | 1097 | 7.784892  |
| 10 | 1 | 5290 | 20 | 65 |      |      | 9.1043    |
| 11 | 3 | 5290 | 20 | 75 | 1830 | 1832 | 9.86928   |
| 12 | 3 | 5290 | 20 | 80 | 1344 | 1031 | 10.853278 |
| 13 | 1 | 5290 | 20 | 85 |      |      | 11.106088 |

## USA Bin 5 Trial #17

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5290            | 20          | 100     | 1907                     |                          | 0.069398        |
| 2       | 2      | 5290            | 20          | 50      | 1133                     |                          | 1.790595        |
| 3       | 2      | 5290            | 20          | 70      | 1808                     |                          | 3.009529        |
| 4       | 2      | 5290            | 20          | 50      | 1175                     |                          | 4.128055        |
| 5       | 3      | 5290            | 20          | 95      | 1159                     | 1481                     | 5.62305         |
| 6       | 3      | 5290            | 20          | 65      | 1662                     | 1076                     | 6.987934        |
| 7       | 3      | 5290            | 20          | 55      | 1542                     | 1748                     | 8.653162        |
| 8       | 2      | 5290            | 20          | 90      | 1400                     |                          | 10.562907       |
| 9       | 1      | 5290            | 20          | 80      |                          |                          | 11.77477        |

## USA Bin 5 Trial #18

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5290            | 19          | 55      | 1203                     |                          | 0.362932        |
| 2       | 2      | 5290            | 19          | 50      | 1223                     |                          | 1.191457        |
| 3       | 2      | 5290            | 19          | 100     | 1077                     |                          | 1.762347        |
| 4       | 3      | 5290            | 19          | 75      | 1925                     | 1501                     | 2.137223        |
| 5       | 3      | 5290            | 19          | 55      | 1361                     | 1630                     | 3.079839        |
| 6       | 1      | 5290            | 19          | 50      |                          |                          | 3.833163        |
| 7       | 3      | 5290            | 19          | 85      | 1141                     | 1187                     | 4.418973        |
| 8       | 1      | 5290            | 19          | 85      |                          |                          | 5.398974        |
| 9       | 3      | 5290            | 19          | 70      | 1385                     | 1836                     | 6.103826        |
| 10      | 1      | 5290            | 19          | 55      |                          |                          | 6.712911        |
| 11      | 3      | 5290            | 19          | 55      | 1515                     | 1539                     | 7.622607        |
| 12      | 1      | 5290            | 19          | 55      |                          |                          | 8.012068        |
| 13      | 3      | 5290            | 19          | 55      | 1840                     | 1610                     | 8.847173        |
| 14      | 2      | 5290            | 19          | 85      | 1961                     |                          | 9.258699        |
| 15      | 1      | 5290            | 19          | 50      |                          |                          | 10.195104       |
| 16      | 1      | 5290            | 19          | 85      |                          |                          | 10.948038       |
| 17      | 2      | 5290            | 19          | 90      | 1641                     |                          | 11.317228       |

## USA Bin 5 Trial #19

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5290            | 15          | 95      |                          |                          | 0.244281        |



|    |   |      |    |     |      |      |           |
|----|---|------|----|-----|------|------|-----------|
| 2  | 3 | 5290 | 15 | 100 | 1501 | 1042 | 1.31476   |
| 3  | 1 | 5290 | 15 | 75  |      |      | 1.694841  |
| 4  | 1 | 5290 | 15 | 95  |      |      | 2.093913  |
| 5  | 3 | 5290 | 15 | 100 | 1244 | 1150 | 3.173513  |
| 6  | 3 | 5290 | 15 | 90  | 1005 | 1094 | 3.726689  |
| 7  | 1 | 5290 | 15 | 50  |      |      | 4.350708  |
| 8  | 3 | 5290 | 15 | 85  | 1164 | 1251 | 5.204492  |
| 9  | 3 | 5290 | 15 | 85  | 1562 | 1898 | 5.516842  |
| 10 | 2 | 5290 | 15 | 50  | 1535 |      | 6.256922  |
| 11 | 3 | 5290 | 15 | 50  | 1863 | 1918 | 6.783579  |
| 12 | 3 | 5290 | 15 | 70  | 1593 | 1894 | 7.426467  |
| 13 | 3 | 5290 | 15 | 90  | 1384 | 1240 | 8.570227  |
| 14 | 1 | 5290 | 15 | 95  |      |      | 9.025214  |
| 15 | 3 | 5290 | 15 | 95  | 1188 | 1184 | 9.643178  |
| 16 | 1 | 5290 | 15 | 90  |      |      | 10.294015 |
| 17 | 1 | 5290 | 15 | 95  |      |      | 10.782518 |
| 18 | 1 | 5290 | 15 | 50  |      |      | 11.846385 |

## USA Bin 5 Trial #20

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5290            | 10          | 55      | 1398                     |                          | 0.247958        |
| 2       | 1      | 5290            | 10          | 95      |                          |                          | 1.904656        |
| 3       | 1      | 5290            | 10          | 55      |                          |                          | 3.00006         |
| 4       | 1      | 5290            | 10          | 50      |                          |                          | 3.420969        |
| 5       | 3      | 5290            | 10          | 55      | 1622                     | 1123                     | 4.993514        |
| 6       | 3      | 5290            | 10          | 65      | 1590                     | 1736                     | 5.699678        |
| 7       | 2      | 5290            | 10          | 65      | 1272                     |                          | 6.684597        |
| 8       | 3      | 5290            | 10          | 50      | 1409                     | 1563                     | 8.184983        |
| 9       | 1      | 5290            | 10          | 80      |                          |                          | 9.282177        |
| 10      | 3      | 5290            | 10          | 75      | 1869                     | 1124                     | 9.866541        |
| 11      | 3      | 5290            | 10          | 100     | 1552                     | 1807                     | 11.015356       |

## USA Bin 5 Trial #21

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5323.8          | 13          | 100     | 1376                     |                          | 0.242456        |
| 2       | 2      | 5323.8          | 13          | 55      | 1270                     |                          | 1.710805        |
| 3       | 1      | 5323.8          | 13          | 95      |                          |                          | 2.56141         |
| 4       | 2      | 5323.8          | 13          | 60      | 1299                     |                          | 2.871665        |
| 5       | 3      | 5323.8          | 13          | 80      | 1691                     | 1580                     | 4.052652        |
| 6       | 3      | 5323.8          | 13          | 95      | 1263                     | 1244                     | 4.839322        |
| 7       | 1      | 5323.8          | 13          | 80      |                          |                          | 5.474344        |
| 8       | 1      | 5323.8          | 13          | 60      |                          |                          | 6.640292        |



|    |   |        |    |     |      |      |           |
|----|---|--------|----|-----|------|------|-----------|
| 9  | 1 | 5323.8 | 13 | 70  |      |      | 7.136592  |
| 10 | 3 | 5323.8 | 13 | 65  | 1986 | 1240 | 7.808521  |
| 11 | 3 | 5323.8 | 13 | 50  | 1287 | 1652 | 9.019687  |
| 12 | 3 | 5323.8 | 13 | 100 | 1894 | 1691 | 10.094018 |
| 13 | 3 | 5323.8 | 13 | 50  | 1035 | 1292 | 11.006306 |
| 14 | 3 | 5323.8 | 13 | 75  | 1462 | 1832 | 11.263153 |

## USA Bin 5 Trial #22

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5325            | 10          | 65      | 1776                     |                          | 0.646263        |
| 2       | 1      | 5325            | 10          | 55      |                          |                          | 1.161884        |
| 3       | 3      | 5325            | 10          | 70      | 1853                     | 1879                     | 1.367461        |
| 4       | 1      | 5325            | 10          | 95      |                          |                          | 2.189313        |
| 5       | 1      | 5325            | 10          | 65      |                          |                          | 3.230601        |
| 6       | 3      | 5325            | 10          | 90      | 1632                     | 1719                     | 3.45561         |
| 7       | 1      | 5325            | 10          | 95      |                          |                          | 4.389045        |
| 8       | 1      | 5325            | 10          | 65      |                          |                          | 5.072125        |
| 9       | 3      | 5325            | 10          | 90      | 1728                     | 1820                     | 5.764772        |
| 10      | 3      | 5325            | 10          | 65      | 1344                     | 1940                     | 6.611002        |
| 11      | 1      | 5325            | 10          | 50      |                          |                          | 6.887537        |
| 12      | 2      | 5325            | 10          | 80      | 1126                     |                          | 7.866064        |
| 13      | 1      | 5325            | 10          | 50      |                          |                          | 8.270689        |
| 14      | 3      | 5325            | 10          | 50      | 1136                     | 1668                     | 8.749031        |
| 15      | 3      | 5325            | 10          | 60      | 1717                     | 1056                     | 9.460519        |
| 16      | 3      | 5325            | 10          | 85      | 1603                     | 1641                     | 10.635623       |
| 17      | 3      | 5325            | 10          | 70      | 1178                     | 1273                     | 10.711978       |
| 18      | 1      | 5325            | 10          | 85      |                          |                          | 11.461271       |

## USA Bin 5 Trial #23

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5326.2          | 7           | 95      | 1099                     |                          | 0.592037        |
| 2       | 3      | 5326.2          | 7           | 95      | 1924                     | 1352                     | 1.379797        |
| 3       | 3      | 5326.2          | 7           | 90      | 1441                     | 1823                     | 3.363312        |
| 4       | 3      | 5326.2          | 7           | 65      | 1783                     | 1705                     | 3.934318        |
| 5       | 1      | 5326.2          | 7           | 100     |                          |                          | 5.685618        |
| 6       | 3      | 5326.2          | 7           | 70      | 1347                     | 1347                     | 6.689242        |
| 7       | 3      | 5326.2          | 7           | 95      | 1754                     | 1938                     | 7.430135        |
| 8       | 2      | 5326.2          | 7           | 65      | 1825                     |                          | 9.345079        |
| 9       | 2      | 5326.2          | 7           | 85      | 1596                     |                          | 10.525954       |
| 10      | 2      | 5326.2          | 7           | 70      | 1987                     |                          | 11.796205       |

## USA Bin 5 Trial #24



| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5325.4          | 9           | 90      | 1691                     | 1538                     | 0.088251        |
| 2       | 3      | 5325.4          | 9           | 80      | 1092                     | 1971                     | 1.274234        |
| 3       | 1      | 5325.4          | 9           | 65      |                          |                          | 2.105384        |
| 4       | 3      | 5325.4          | 9           | 100     | 1267                     | 1620                     | 2.302697        |
| 5       | 2      | 5325.4          | 9           | 50      | 1546                     |                          | 3.436003        |
| 6       | 3      | 5325.4          | 9           | 55      | 1912                     | 1628                     | 3.844454        |
| 7       | 2      | 5325.4          | 9           | 95      | 1139                     |                          | 4.83428         |
| 8       | 1      | 5325.4          | 9           | 75      |                          |                          | 5.372083        |
| 9       | 1      | 5325.4          | 9           | 50      |                          |                          | 5.777346        |
| 10      | 1      | 5325.4          | 9           | 65      |                          |                          | 6.603095        |
| 11      | 3      | 5325.4          | 9           | 55      | 1226                     | 1974                     | 7.58946         |
| 12      | 1      | 5325.4          | 9           | 60      |                          |                          | 7.978255        |
| 13      | 3      | 5325.4          | 9           | 85      | 1166                     | 1982                     | 8.827486        |
| 14      | 3      | 5325.4          | 9           | 85      | 1408                     | 1348                     | 9.588541        |
| 15      | 2      | 5325.4          | 9           | 85      | 1267                     |                          | 10.288663       |
| 16      | 1      | 5325.4          | 9           | 80      |                          |                          | 10.672097       |
| 17      | 1      | 5325.4          | 9           | 65      |                          |                          | 11.638039       |

## USA Bin 5 Trial #25

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5321.8          | 18          | 80      | 1286                     |                          | 0.35724         |
| 2       | 3      | 5321.8          | 18          | 50      | 1145                     | 1013                     | 1.021077        |
| 3       | 3      | 5321.8          | 18          | 70      | 1370                     | 1526                     | 1.612379        |
| 4       | 2      | 5321.8          | 18          | 60      | 1699                     |                          | 2.762702        |
| 5       | 2      | 5321.8          | 18          | 85      | 1716                     |                          | 3.309568        |
| 6       | 3      | 5321.8          | 18          | 70      | 1772                     | 1675                     | 4.611743        |
| 7       | 3      | 5321.8          | 18          | 85      | 1873                     | 1248                     | 5.306425        |
| 8       | 3      | 5321.8          | 18          | 95      | 1240                     | 1262                     | 6.306776        |
| 9       | 2      | 5321.8          | 18          | 90      | 1442                     |                          | 6.958766        |
| 10      | 3      | 5321.8          | 18          | 50      | 1833                     | 1041                     | 7.233168        |
| 11      | 3      | 5321.8          | 18          | 75      | 1101                     | 1690                     | 8.075873        |
| 12      | 3      | 5321.8          | 18          | 55      | 1620                     | 1089                     | 9.350014        |
| 13      | 2      | 5321.8          | 18          | 75      | 1502                     |                          | 9.664032        |
| 14      | 2      | 5321.8          | 18          | 50      | 1839                     |                          | 11.107811       |
| 15      | 3      | 5321.8          | 18          | 70      | 1706                     | 1147                     | 11.725497       |

## USA Bin 5 Trial #26

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5322.2          | 17          | 80      | 1264                     | 1625                     | 1.467184        |



|   |   |        |    |     |      |      |           |
|---|---|--------|----|-----|------|------|-----------|
| 2 | 2 | 5322.2 | 17 | 55  | 1512 |      | 2.102188  |
| 3 | 3 | 5322.2 | 17 | 100 | 1907 | 1873 | 3.695499  |
| 4 | 3 | 5322.2 | 17 | 85  | 1665 | 1245 | 4.714832  |
| 5 | 3 | 5322.2 | 17 | 85  | 1756 | 1235 | 6.911051  |
| 6 | 3 | 5322.2 | 17 | 100 | 1285 | 1398 | 7.756706  |
| 7 | 2 | 5322.2 | 17 | 55  | 1586 |      | 9.39208   |
| 8 | 1 | 5322.2 | 17 | 70  |      |      | 11.128968 |

## USA Bin 5 Trial #27

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5323.4          | 14          | 95      |                          |                          | 0.427118        |
| 2       | 3      | 5323.4          | 14          | 85      | 1184                     | 1526                     | 1.197253        |
| 3       | 3      | 5323.4          | 14          | 80      | 1505                     | 1881                     | 2.52234         |
| 4       | 2      | 5323.4          | 14          | 55      | 1792                     |                          | 3.056781        |
| 5       | 2      | 5323.4          | 14          | 75      | 1919                     |                          | 3.751783        |
| 6       | 3      | 5323.4          | 14          | 55      | 1265                     | 1282                     | 4.830763        |
| 7       | 3      | 5323.4          | 14          | 65      | 1111                     | 1454                     | 6.12733         |
| 8       | 1      | 5323.4          | 14          | 60      |                          |                          | 6.691578        |
| 9       | 3      | 5323.4          | 14          | 50      | 1236                     | 1462                     | 7.910122        |
| 10      | 1      | 5323.4          | 14          | 80      |                          |                          | 8.411508        |
| 11      | 1      | 5323.4          | 14          | 85      |                          |                          | 10.075572       |
| 12      | 2      | 5323.4          | 14          | 70      | 1198                     |                          | 10.641235       |
| 13      | 3      | 5323.4          | 14          | 60      | 1238                     | 1759                     | 11.215531       |

## USA Bin 5 Trial #28

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5321            | 20          | 75      | 1068                     | 1443                     | 0.044287        |
| 2       | 1      | 5321            | 20          | 75      |                          |                          | 1.487441        |
| 3       | 2      | 5321            | 20          | 50      | 1635                     |                          | 1.751974        |
| 4       | 1      | 5321            | 20          | 65      |                          |                          | 3.249024        |
| 5       | 2      | 5321            | 20          | 70      | 1672                     |                          | 3.955499        |
| 6       | 1      | 5321            | 20          | 50      |                          |                          | 4.86541         |
| 7       | 1      | 5321            | 20          | 60      |                          |                          | 5.201836        |
| 8       | 2      | 5321            | 20          | 95      | 1649                     |                          | 6.815113        |
| 9       | 1      | 5321            | 20          | 100     |                          |                          | 6.918093        |
| 10      | 2      | 5321            | 20          | 70      | 1348                     |                          | 7.96061         |
| 11      | 2      | 5321            | 20          | 70      | 1706                     |                          | 8.574341        |
| 12      | 3      | 5321            | 20          | 55      | 1652                     | 1102                     | 9.613166        |
| 13      | 2      | 5321            | 20          | 100     | 1120                     |                          | 10.991648       |
| 14      | 1      | 5321            | 20          | 90      |                          |                          | 11.294298       |

## USA Bin 5 Trial #29



| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5321.8             | 18             | 65         | 1720                           | 1102                           | 0.379658           |
| 2       | 1      | 5321.8             | 18             | 100        |                                |                                | 1.356563           |
| 3       | 1      | 5321.8             | 18             | 95         |                                |                                | 1.95668            |
| 4       | 2      | 5321.8             | 18             | 80         | 1316                           |                                | 2.737214           |
| 5       | 1      | 5321.8             | 18             | 60         |                                |                                | 3.540696           |
| 6       | 1      | 5321.8             | 18             | 95         |                                |                                | 4.449509           |
| 7       | 2      | 5321.8             | 18             | 60         | 1150                           |                                | 4.658169           |
| 8       | 1      | 5321.8             | 18             | 95         |                                |                                | 5.542783           |
| 9       | 2      | 5321.8             | 18             | 95         | 1983                           |                                | 6.352761           |
| 10      | 1      | 5321.8             | 18             | 85         |                                |                                | 7.414639           |
| 11      | 3      | 5321.8             | 18             | 95         | 1503                           | 1199                           | 7.764964           |
| 12      | 1      | 5321.8             | 18             | 95         |                                |                                | 8.903776           |
| 13      | 3      | 5321.8             | 18             | 70         | 1287                           | 1258                           | 9.641242           |
| 14      | 1      | 5321.8             | 18             | 65         |                                |                                | 10.485507          |
| 15      | 2      | 5321.8             | 18             | 100        | 1055                           |                                | 11.182251          |
| 16      | 3      | 5321.8             | 18             | 95         | 1433                           | 1802                           | 11.744605          |

## USA Bin 5 Trial #30

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5325               | 10             | 65         | 1193                           |                                | 0.090318           |
| 2       | 1      | 5325               | 10             | 85         |                                |                                | 2.231497           |
| 3       | 2      | 5325               | 10             | 65         | 1837                           |                                | 3.702594           |
| 4       | 2      | 5325               | 10             | 55         | 1863                           |                                | 4.788421           |
| 5       | 3      | 5325               | 10             | 75         | 1235                           | 1189                           | 7.46137            |
| 6       | 2      | 5325               | 10             | 100        | 1690                           |                                | 8.478924           |
| 7       | 1      | 5325               | 10             | 50         |                                |                                | 9.858372           |
| 8       | 3      | 5325               | 10             | 90         | 1114                           | 1669                           | 11.26694           |

## USA Frequency Hopping Trial #1

| Hop # | Freq (GHz) | Pulse Start (mS) |
|-------|------------|------------------|
| 0     | 5305       | 0                |
| 2     | 5302       | 6                |
| 8     | 5284       | 24               |
| 22    | 5263       | 66               |
| 38    | 5321       | 114              |
| 60    | 5274       | 180              |
| 72    | 5297       | 216              |
| 74    | 5309       | 222              |
| 75    | 5254       | 225              |
| 80    | 5266       | 240              |
| 82    | 5308       | 246              |
| 88    | 5299       | 264              |
| 92    | 5323       | 276              |
| 93    | 5328       | 279              |

## USA Frequency Hopping Trial #2

| Hop # | Freq (GHz) | Pulse Start (mS) |
|-------|------------|------------------|
| 4     | 5274       | 12               |
| 5     | 5288       | 15               |
| 10    | 5277       | 30               |
| 12    | 5317       | 36               |
| 15    | 5323       | 45               |
| 18    | 5310       | 54               |
| 22    | 5327       | 66               |
| 24    | 5265       | 72               |
| 34    | 5319       | 102              |
| 44    | 5291       | 132              |
| 58    | 5321       | 174              |
| 81    | 5302       | 243              |
| 82    | 5261       | 246              |
| 83    | 5312       | 249              |
| 84    | 5284       | 252              |
| 94    | 5253       | 282              |
| 99    | 5292       | 297              |

## USA Frequency Hopping Trial #3

| Hop # | Freq (GHz) | Pulse Start (mS) |
|-------|------------|------------------|
| 6     | 5300       | 18               |
| 11    | 5269       | 33               |
| 12    | 5279       | 36               |
| 23    | 5270       | 69               |

|    |      |     |
|----|------|-----|
| 25 | 5263 | 75  |
| 34 | 5303 | 102 |
| 47 | 5302 | 141 |
| 50 | 5324 | 150 |
| 52 | 5308 | 156 |
| 61 | 5284 | 183 |
| 79 | 5299 | 237 |
| 80 | 5293 | 240 |
| 84 | 5314 | 252 |
| 90 | 5304 | 270 |
| 97 | 5325 | 291 |

**USA Frequency Hopping Trial #4**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 6     | 5313          | 18                  |
| 10    | 5269          | 30                  |
| 14    | 5316          | 42                  |
| 17    | 5302          | 51                  |
| 19    | 5296          | 57                  |
| 20    | 5307          | 60                  |
| 27    | 5320          | 81                  |
| 29    | 5327          | 87                  |
| 35    | 5310          | 105                 |
| 45    | 5257          | 135                 |
| 50    | 5277          | 150                 |
| 51    | 5285          | 153                 |
| 66    | 5268          | 198                 |
| 76    | 5298          | 228                 |
| 80    | 5328          | 240                 |
| 86    | 5287          | 258                 |
| 87    | 5317          | 261                 |
| 94    | 5311          | 282                 |
| 96    | 5260          | 288                 |
| 98    | 5295          | 294                 |
| 99    | 5284          | 297                 |

**USA Frequency Hopping Trial #5**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 10    | 5304          | 30                  |
| 11    | 5265          | 33                  |
| 21    | 5312          | 63                  |
| 34    | 5277          | 102                 |
| 50    | 5323          | 150                 |
| 59    | 5255          | 177                 |

|    |      |     |
|----|------|-----|
| 61 | 5305 | 183 |
| 83 | 5311 | 249 |
| 94 | 5321 | 282 |
| 95 | 5261 | 285 |

## USA Frequency Hopping Trial #6

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5273          | 12                  |
| 6     | 5303          | 18                  |
| 10    | 5265          | 30                  |
| 13    | 5309          | 39                  |
| 20    | 5260          | 60                  |
| 22    | 5279          | 66                  |
| 26    | 5300          | 78                  |
| 29    | 5292          | 87                  |
| 32    | 5276          | 96                  |
| 54    | 5325          | 162                 |
| 57    | 5263          | 171                 |
| 62    | 5328          | 186                 |
| 76    | 5286          | 228                 |
| 81    | 5270          | 243                 |
| 84    | 5274          | 252                 |
| 88    | 5271          | 264                 |
| 92    | 5312          | 276                 |
| 95    | 5313          | 285                 |

## USA Frequency Hopping Trial #7

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 21    | 5270          | 63                  |
| 26    | 5328          | 78                  |
| 38    | 5278          | 114                 |
| 48    | 5285          | 144                 |
| 53    | 5297          | 159                 |
| 55    | 5301          | 165                 |
| 70    | 5254          | 210                 |
| 78    | 5295          | 234                 |
| 83    | 5289          | 249                 |

## USA Frequency Hopping Trial #8

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5268          | 15                  |
| 8     | 5292          | 24                  |
| 15    | 5316          | 45                  |
| 16    | 5329          | 48                  |

|    |      |     |
|----|------|-----|
| 19 | 5289 | 57  |
| 22 | 5302 | 66  |
| 26 | 5321 | 78  |
| 31 | 5312 | 93  |
| 43 | 5306 | 129 |
| 45 | 5283 | 135 |
| 47 | 5284 | 141 |
| 54 | 5322 | 162 |
| 72 | 5309 | 216 |
| 74 | 5254 | 222 |
| 77 | 5255 | 231 |
| 78 | 5308 | 234 |
| 79 | 5261 | 237 |
| 92 | 5277 | 276 |
| 98 | 5270 | 294 |
| 99 | 5303 | 297 |

**USA Frequency Hopping Trial #9**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5315          | 3                   |
| 6     | 5290          | 18                  |
| 19    | 5284          | 57                  |
| 22    | 5261          | 66                  |
| 26    | 5295          | 78                  |
| 40    | 5299          | 120                 |
| 47    | 5288          | 141                 |
| 53    | 5303          | 159                 |
| 61    | 5254          | 183                 |
| 64    | 5289          | 192                 |
| 70    | 5283          | 210                 |
| 72    | 5252          | 216                 |
| 74    | 5280          | 222                 |
| 76    | 5262          | 228                 |
| 83    | 5256          | 249                 |
| 84    | 5266          | 252                 |
| 94    | 5285          | 282                 |

**USA Frequency Hopping Trial #10**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 7     | 5251          | 21                  |
| 9     | 5261          | 27                  |
| 22    | 5286          | 66                  |
| 23    | 5310          | 69                  |
| 30    | 5323          | 90                  |

|    |      |     |
|----|------|-----|
| 42 | 5301 | 126 |
| 44 | 5313 | 132 |
| 45 | 5252 | 135 |
| 47 | 5306 | 141 |
| 56 | 5311 | 168 |
| 57 | 5287 | 171 |
| 64 | 5277 | 192 |
| 70 | 5271 | 210 |
| 73 | 5317 | 219 |
| 74 | 5319 | 222 |
| 79 | 5253 | 237 |
| 80 | 5309 | 240 |
| 87 | 5285 | 261 |
| 88 | 5305 | 264 |

## USA Frequency Hopping Trial #11

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5274          | 15                  |
| 23    | 5308          | 69                  |
| 30    | 5253          | 90                  |
| 31    | 5293          | 93                  |
| 34    | 5280          | 102                 |
| 35    | 5304          | 105                 |
| 38    | 5321          | 114                 |
| 39    | 5322          | 117                 |
| 42    | 5262          | 126                 |
| 45    | 5310          | 135                 |
| 51    | 5284          | 153                 |
| 54    | 5263          | 162                 |
| 64    | 5289          | 192                 |
| 66    | 5327          | 198                 |
| 67    | 5312          | 201                 |
| 74    | 5296          | 222                 |
| 75    | 5276          | 225                 |
| 83    | 5265          | 249                 |
| 84    | 5316          | 252                 |
| 93    | 5306          | 279                 |

## USA Frequency Hopping Trial #12

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5251          | 3                   |
| 2     | 5284          | 6                   |
| 5     | 5265          | 15                  |
| 9     | 5271          | 27                  |

|    |      |     |
|----|------|-----|
| 17 | 5267 | 51  |
| 18 | 5303 | 54  |
| 22 | 5252 | 66  |
| 23 | 5254 | 69  |
| 24 | 5263 | 72  |
| 33 | 5253 | 99  |
| 38 | 5287 | 114 |
| 54 | 5293 | 162 |
| 62 | 5294 | 186 |
| 64 | 5311 | 192 |
| 69 | 5278 | 207 |
| 72 | 5305 | 216 |
| 74 | 5300 | 222 |
| 80 | 5306 | 240 |
| 82 | 5269 | 246 |
| 87 | 5255 | 261 |
| 88 | 5289 | 264 |
| 91 | 5301 | 273 |
| 93 | 5266 | 279 |
| 96 | 5329 | 288 |
| 97 | 5316 | 291 |

**USA Frequency Hopping Trial #13**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5329          | 12                  |
| 5     | 5275          | 15                  |
| 7     | 5301          | 21                  |
| 12    | 5285          | 36                  |
| 13    | 5308          | 39                  |
| 21    | 5257          | 63                  |
| 40    | 5288          | 120                 |
| 45    | 5268          | 135                 |
| 55    | 5279          | 165                 |
| 61    | 5266          | 183                 |
| 66    | 5286          | 198                 |
| 68    | 5267          | 204                 |
| 70    | 5289          | 210                 |
| 72    | 5265          | 216                 |
| 74    | 5316          | 222                 |
| 75    | 5299          | 225                 |
| 76    | 5255          | 228                 |
| 77    | 5318          | 231                 |
| 79    | 5313          | 237                 |
| 87    | 5303          | 261                 |

|    |      |     |
|----|------|-----|
| 91 | 5278 | 273 |
| 93 | 5262 | 279 |
| 99 | 5311 | 297 |

**USA Frequency Hopping Trial #14**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 6     | 5286          | 18                  |
| 10    | 5292          | 30                  |
| 11    | 5317          | 33                  |
| 29    | 5297          | 87                  |
| 35    | 5326          | 105                 |
| 37    | 5288          | 111                 |
| 41    | 5327          | 123                 |
| 47    | 5328          | 141                 |
| 58    | 5271          | 174                 |
| 63    | 5302          | 189                 |
| 71    | 5293          | 213                 |
| 74    | 5275          | 222                 |
| 87    | 5273          | 261                 |
| 91    | 5272          | 273                 |
| 95    | 5281          | 285                 |

**USA Frequency Hopping Trial #15**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5287          | 0                   |
| 5     | 5328          | 15                  |
| 10    | 5293          | 30                  |
| 23    | 5269          | 69                  |
| 30    | 5315          | 90                  |
| 31    | 5272          | 93                  |
| 41    | 5301          | 123                 |
| 42    | 5311          | 126                 |
| 43    | 5299          | 129                 |
| 49    | 5286          | 147                 |
| 51    | 5253          | 153                 |
| 57    | 5267          | 171                 |
| 60    | 5264          | 180                 |
| 61    | 5284          | 183                 |
| 66    | 5271          | 198                 |
| 85    | 5327          | 255                 |
| 93    | 5314          | 279                 |
| 98    | 5256          | 294                 |

**USA Frequency Hopping Trial #16**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 3     | 5256          | 9                   |
| 13    | 5294          | 39                  |
| 22    | 5273          | 66                  |
| 25    | 5260          | 75                  |
| 33    | 5257          | 99                  |
| 35    | 5280          | 105                 |
| 37    | 5269          | 111                 |
| 53    | 5326          | 159                 |
| 60    | 5281          | 180                 |
| 65    | 5261          | 195                 |
| 79    | 5275          | 237                 |
| 82    | 5318          | 246                 |
| 83    | 5271          | 249                 |
| 89    | 5268          | 267                 |
| 92    | 5254          | 276                 |
| 94    | 5298          | 282                 |
| 96    | 5258          | 288                 |

## USA Frequency Hopping Trial #17

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5268          | 15                  |
| 9     | 5322          | 27                  |
| 10    | 5283          | 30                  |
| 15    | 5259          | 45                  |
| 17    | 5289          | 51                  |
| 21    | 5257          | 63                  |
| 22    | 5262          | 66                  |
| 25    | 5293          | 75                  |
| 36    | 5313          | 108                 |
| 40    | 5275          | 120                 |
| 42    | 5323          | 126                 |
| 45    | 5311          | 135                 |
| 53    | 5267          | 159                 |
| 55    | 5305          | 165                 |
| 63    | 5290          | 189                 |
| 68    | 5252          | 204                 |
| 70    | 5296          | 210                 |
| 75    | 5307          | 225                 |
| 76    | 5264          | 228                 |
| 81    | 5260          | 243                 |
| 92    | 5298          | 276                 |

## USA Frequency Hopping Trial #18

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5292          | 12                  |
| 6     | 5305          | 18                  |
| 11    | 5275          | 33                  |
| 13    | 5256          | 39                  |
| 19    | 5255          | 57                  |
| 36    | 5281          | 108                 |
| 47    | 5295          | 141                 |
| 62    | 5315          | 186                 |
| 64    | 5309          | 192                 |
| 71    | 5282          | 213                 |
| 80    | 5301          | 240                 |
| 82    | 5317          | 246                 |
| 89    | 5328          | 267                 |
| 94    | 5257          | 282                 |
| 99    | 5254          | 297                 |

## USA Frequency Hopping Trial #19

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 3     | 5290          | 9                   |
| 8     | 5314          | 24                  |
| 12    | 5271          | 36                  |
| 24    | 5296          | 72                  |
| 25    | 5293          | 75                  |
| 31    | 5309          | 93                  |
| 46    | 5255          | 138                 |
| 51    | 5258          | 153                 |
| 54    | 5328          | 162                 |
| 56    | 5284          | 168                 |
| 58    | 5327          | 174                 |
| 60    | 5292          | 180                 |
| 77    | 5272          | 231                 |
| 78    | 5276          | 234                 |
| 83    | 5252          | 249                 |
| 88    | 5283          | 264                 |
| 89    | 5278          | 267                 |
| 91    | 5313          | 273                 |

## USA Frequency Hopping Trial #20

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5294          | 6                   |
| 20    | 5280          | 60                  |
| 24    | 5283          | 72                  |

|    |      |     |
|----|------|-----|
| 32 | 5265 | 96  |
| 49 | 5257 | 147 |
| 60 | 5298 | 180 |
| 69 | 5329 | 207 |
| 73 | 5303 | 219 |
| 76 | 5314 | 228 |
| 82 | 5318 | 246 |

## USA Frequency Hopping Trial #21

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 7     | 5300          | 21                  |
| 8     | 5275          | 24                  |
| 10    | 5305          | 30                  |
| 13    | 5313          | 39                  |
| 21    | 5304          | 63                  |
| 29    | 5297          | 87                  |
| 30    | 5267          | 90                  |
| 32    | 5280          | 96                  |
| 37    | 5322          | 111                 |
| 39    | 5289          | 117                 |
| 49    | 5251          | 147                 |
| 57    | 5308          | 171                 |
| 71    | 5293          | 213                 |
| 75    | 5285          | 225                 |
| 78    | 5283          | 234                 |
| 87    | 5257          | 261                 |
| 88    | 5287          | 264                 |
| 91    | 5279          | 273                 |
| 93    | 5310          | 279                 |
| 94    | 5255          | 282                 |

## USA Frequency Hopping Trial #22

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 9     | 5304          | 27                  |
| 11    | 5288          | 33                  |
| 13    | 5264          | 39                  |
| 19    | 5293          | 57                  |
| 26    | 5261          | 78                  |
| 35    | 5315          | 105                 |
| 36    | 5266          | 108                 |
| 38    | 5255          | 114                 |
| 39    | 5269          | 117                 |
| 45    | 5292          | 135                 |
| 55    | 5329          | 165                 |

|    |      |     |
|----|------|-----|
| 66 | 5298 | 198 |
| 72 | 5301 | 216 |
| 77 | 5253 | 231 |
| 81 | 5258 | 243 |
| 85 | 5272 | 255 |
| 89 | 5263 | 267 |
| 92 | 5320 | 276 |
| 94 | 5267 | 282 |

**USA Frequency Hopping Trial #23**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 9     | 5285          | 27                  |
| 12    | 5324          | 36                  |
| 22    | 5316          | 66                  |
| 25    | 5317          | 75                  |
| 26    | 5279          | 78                  |
| 45    | 5293          | 135                 |
| 47    | 5306          | 141                 |
| 50    | 5286          | 150                 |
| 57    | 5321          | 171                 |
| 61    | 5252          | 183                 |
| 73    | 5302          | 219                 |
| 74    | 5280          | 222                 |
| 85    | 5274          | 255                 |
| 90    | 5315          | 270                 |
| 92    | 5325          | 276                 |
| 97    | 5261          | 291                 |
| 98    | 5260          | 294                 |

**USA Frequency Hopping Trial #24**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5259          | 3                   |
| 12    | 5292          | 36                  |
| 14    | 5285          | 42                  |
| 17    | 5273          | 51                  |
| 20    | 5300          | 60                  |
| 30    | 5271          | 90                  |
| 32    | 5322          | 96                  |
| 35    | 5279          | 105                 |
| 44    | 5284          | 132                 |
| 45    | 5278          | 135                 |
| 46    | 5299          | 138                 |
| 49    | 5261          | 147                 |
| 53    | 5264          | 159                 |

|    |      |     |
|----|------|-----|
| 57 | 5316 | 171 |
| 63 | 5274 | 189 |
| 85 | 5329 | 255 |
| 95 | 5306 | 285 |

## USA Frequency Hopping Trial #25

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 8     | 5276          | 24                  |
| 11    | 5290          | 33                  |
| 14    | 5255          | 42                  |
| 15    | 5251          | 45                  |
| 16    | 5279          | 48                  |
| 19    | 5309          | 57                  |
| 21    | 5317          | 63                  |
| 30    | 5289          | 90                  |
| 37    | 5253          | 111                 |
| 53    | 5302          | 159                 |
| 54    | 5314          | 162                 |
| 70    | 5278          | 210                 |
| 73    | 5281          | 219                 |
| 74    | 5325          | 222                 |
| 75    | 5294          | 225                 |
| 76    | 5283          | 228                 |
| 79    | 5261          | 237                 |
| 82    | 5291          | 246                 |
| 85    | 5273          | 255                 |
| 87    | 5265          | 261                 |
| 91    | 5275          | 273                 |

## USA Frequency Hopping Trial #26

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5316          | 15                  |
| 7     | 5279          | 21                  |
| 19    | 5268          | 57                  |
| 22    | 5259          | 66                  |
| 27    | 5267          | 81                  |
| 29    | 5315          | 87                  |
| 33    | 5324          | 99                  |
| 35    | 5289          | 105                 |
| 54    | 5262          | 162                 |
| 59    | 5305          | 177                 |
| 66    | 5325          | 198                 |
| 68    | 5286          | 204                 |
| 74    | 5284          | 222                 |

|    |      |     |
|----|------|-----|
| 77 | 5328 | 231 |
| 81 | 5252 | 243 |
| 85 | 5295 | 255 |
| 88 | 5294 | 264 |
| 90 | 5263 | 270 |
| 91 | 5320 | 273 |
| 92 | 5270 | 276 |
| 95 | 5266 | 285 |

## USA Frequency Hopping Trial #27

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 9     | 5283          | 27                  |
| 13    | 5328          | 39                  |
| 20    | 5301          | 60                  |
| 21    | 5313          | 63                  |
| 23    | 5253          | 69                  |
| 30    | 5281          | 90                  |
| 51    | 5252          | 153                 |
| 55    | 5302          | 165                 |
| 57    | 5282          | 171                 |
| 60    | 5303          | 180                 |
| 75    | 5288          | 225                 |
| 81    | 5273          | 243                 |
| 98    | 5286          | 294                 |

## USA Frequency Hopping Trial #28

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5322          | 6                   |
| 19    | 5320          | 57                  |
| 36    | 5281          | 108                 |
| 38    | 5257          | 114                 |
| 47    | 5267          | 141                 |
| 56    | 5295          | 168                 |
| 58    | 5316          | 174                 |
| 59    | 5315          | 177                 |
| 67    | 5255          | 201                 |
| 79    | 5317          | 237                 |
| 82    | 5279          | 246                 |
| 86    | 5291          | 258                 |
| 87    | 5286          | 261                 |
| 89    | 5277          | 267                 |
| 92    | 5303          | 276                 |

## USA Frequency Hopping Trial #29



| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 7     | 5283          | 21                  |
| 8     | 5296          | 24                  |
| 17    | 5251          | 51                  |
| 20    | 5290          | 60                  |
| 21    | 5285          | 63                  |
| 35    | 5261          | 105                 |
| 47    | 5288          | 141                 |
| 49    | 5256          | 147                 |
| 50    | 5318          | 150                 |
| 52    | 5327          | 156                 |
| 59    | 5297          | 177                 |
| 75    | 5305          | 225                 |
| 78    | 5274          | 234                 |
| 82    | 5309          | 246                 |
| 93    | 5298          | 279                 |
| 95    | 5286          | 285                 |

## USA Frequency Hopping Trial #30

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5255          | 3                   |
| 5     | 5276          | 15                  |
| 15    | 5314          | 45                  |
| 19    | 5321          | 57                  |
| 21    | 5328          | 63                  |
| 22    | 5323          | 66                  |
| 26    | 5275          | 78                  |
| 33    | 5309          | 99                  |
| 34    | 5305          | 102                 |
| 39    | 5279          | 117                 |
| 40    | 5259          | 120                 |
| 41    | 5297          | 123                 |
| 50    | 5272          | 150                 |
| 53    | 5310          | 159                 |
| 67    | 5253          | 201                 |
| 68    | 5299          | 204                 |
| 69    | 5306          | 207                 |
| 72    | 5289          | 216                 |
| 75    | 5294          | 225                 |
| 76    | 5296          | 228                 |
| 77    | 5302          | 231                 |

**Channel 5570 MHz, 160MHz BW, Statistical Performance (lower section of 80+80)****USA Bin 1A/1B**

freq=5530, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 59     | 1       | 898      | 1                                | 100.0%                  | 60.0% |
| 2     | 5490      | 86     | 1       | 618      | 1                                |                         |       |
| 3     | 5496      | 70     | 1       | 758      | 1                                |                         |       |
| 4     | 5496      | 99     | 1       | 538      | 1                                |                         |       |
| 5     | 5502      | 18     | 1       | 3066     | 1                                |                         |       |
| 6     | 5502      | 81     | 1       | 658      | 1                                |                         |       |
| 7     | 5508      | 72     | 1       | 738      | 1                                |                         |       |
| 8     | 5508      | 86     | 1       | 618      | 1                                |                         |       |
| 9     | 5514      | 58     | 1       | 918      | 1                                |                         |       |
| 10    | 5514      | 57     | 1       | 938      | 1                                |                         |       |
| 11    | 5520      | 70     | 1       | 758      | 1                                |                         |       |
| 12    | 5520      | 89     | 1       | 598      | 1                                |                         |       |
| 13    | 5526      | 89     | 1       | 598      | 1                                |                         |       |
| 14    | 5526      | 70     | 1       | 758      | 1                                |                         |       |
| 15    | 5530      | 74     | 1       | 718      | 1                                |                         |       |
| 16    | 5530      | 24     | 1       | 2257     | 1                                |                         |       |
| 17    | 5534      | 34     | 1       | 1571     | 1                                |                         |       |
| 18    | 5534      | 68     | 1       | 786      | 1                                |                         |       |
| 19    | 5540      | 59     | 1       | 905      | 1                                |                         |       |
| 20    | 5540      | 45     | 1       | 1187     | 1                                |                         |       |
| 21    | 5546      | 74     | 1       | 717      | 1                                |                         |       |
| 22    | 5546      | 23     | 1       | 2343     | 1                                |                         |       |
| 23    | 5552      | 33     | 1       | 1623     | 1                                |                         |       |
| 24    | 5552      | 35     | 1       | 1510     | 1                                |                         |       |
| 25    | 5558      | 24     | 1       | 2229     | 1                                |                         |       |
| 26    | 5558      | 24     | 1       | 2237     | 1                                |                         |       |
| 27    | 5564      | 38     | 1       | 1400     | 1                                |                         |       |
| 28    | 5564      | 42     | 1       | 1264     | 1                                |                         |       |
| 29    | 5570      | 18     | 1       | 3007     | 1                                |                         |       |
| 30    | 5570      | 50     | 1       | 1063     | 1                                |                         |       |

**USA Bin 1A/1B**

freq=5530, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 86     | 1       | 618      | 1                                | 100.0%                  | 60.0% |
| 2     | 5490      | 76     | 1       | 698      | 1                                |                         |       |
| 3     | 5496      | 70     | 1       | 758      | 1                                |                         |       |
| 4     | 5496      | 76     | 1       | 698      | 1                                |                         |       |
| 5     | 5502      | 81     | 1       | 658      | 1                                |                         |       |
| 6     | 5502      | 81     | 1       | 658      | 1                                |                         |       |
| 7     | 5508      | 61     | 1       | 878      | 1                                |                         |       |
| 8     | 5508      | 92     | 1       | 578      | 1                                |                         |       |
| 9     | 5514      | 65     | 1       | 818      | 1                                |                         |       |
| 10    | 5514      | 99     | 1       | 538      | 1                                |                         |       |
| 11    | 5520      | 81     | 1       | 658      | 1                                |                         |       |
| 12    | 5520      | 102    | 1       | 518      | 1                                |                         |       |
| 13    | 5526      | 76     | 1       | 698      | 1                                |                         |       |
| 14    | 5526      | 99     | 1       | 538      | 1                                |                         |       |
| 15    | 5530      | 70     | 1       | 758      | 1                                |                         |       |
| 16    | 5530      | 70     | 1       | 764      | 1                                |                         |       |
| 17    | 5534      | 48     | 1       | 1119     | 1                                |                         |       |
| 18    | 5534      | 73     | 1       | 729      | 1                                |                         |       |
| 19    | 5540      | 24     | 1       | 2278     | 1                                |                         |       |
| 20    | 5540      | 39     | 1       | 1359     | 1                                |                         |       |
| 21    | 5546      | 88     | 1       | 602      | 1                                |                         |       |
| 22    | 5546      | 21     | 1       | 2555     | 1                                |                         |       |
| 23    | 5552      | 24     | 1       | 2282     | 1                                |                         |       |
| 24    | 5552      | 45     | 1       | 1188     | 1                                |                         |       |
| 25    | 5558      | 20     | 1       | 2693     | 1                                |                         |       |
| 26    | 5558      | 29     | 1       | 1855     | 1                                |                         |       |
| 27    | 5564      | 39     | 1       | 1359     | 1                                |                         |       |
| 28    | 5564      | 47     | 1       | 1125     | 1                                |                         |       |
| 29    | 5570      | 49     | 1       | 1084     | 1                                |                         |       |
| 30    | 5570      | 39     | 1       | 1361     | 1                                |                         |       |



**USA Bin**  
**2**

freq=5530, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 26     | 3       | 222      | 1                                | 100.0%                  | 60.0% |
| 2     | 5490      | 28     | 1.3     | 207      | 1                                |                         |       |
| 3     | 5496      | 27     | 4.4     | 170      | 1                                |                         |       |
| 4     | 5496      | 26     | 1.1     | 211      | 1                                |                         |       |
| 5     | 5502      | 25     | 3.5     | 164      | 1                                |                         |       |
| 6     | 5502      | 26     | 4.9     | 201      | 1                                |                         |       |
| 7     | 5508      | 29     | 1.3     | 209      | 1                                |                         |       |
| 8     | 5508      | 28     | 2.2     | 208      | 1                                |                         |       |
| 9     | 5514      | 28     | 5       | 193      | 1                                |                         |       |
| 10    | 5514      | 29     | 2.1     | 215      | 1                                |                         |       |
| 11    | 5520      | 28     | 3.4     | 208      | 1                                |                         |       |
| 12    | 5520      | 24     | 5       | 192      | 1                                |                         |       |
| 13    | 5526      | 25     | 3.3     | 177      | 1                                |                         |       |
| 14    | 5526      | 23     | 2.9     | 227      | 1                                |                         |       |
| 15    | 5530      | 28     | 2.2     | 215      | 1                                |                         |       |
| 16    | 5530      | 24     | 3.6     | 208      | 1                                |                         |       |
| 17    | 5534      | 28     | 2.1     | 173      | 1                                |                         |       |
| 18    | 5534      | 29     | 1.3     | 220      | 1                                |                         |       |
| 19    | 5540      | 25     | 3.4     | 227      | 1                                |                         |       |
| 20    | 5540      | 29     | 3.2     | 151      | 1                                |                         |       |
| 21    | 5546      | 26     | 4.3     | 225      | 1                                |                         |       |
| 22    | 5546      | 27     | 2.7     | 210      | 1                                |                         |       |
| 23    | 5552      | 24     | 4.6     | 230      | 1                                |                         |       |
| 24    | 5552      | 27     | 2.4     | 160      | 1                                |                         |       |
| 25    | 5558      | 23     | 4.3     | 175      | 1                                |                         |       |
| 26    | 5558      | 25     | 2       | 156      | 1                                |                         |       |
| 27    | 5564      | 24     | 1.9     | 198      | 1                                |                         |       |
| 28    | 5564      | 24     | 3.6     | 198      | 1                                |                         |       |
| 29    | 5570      | 28     | 2.3     | 172      | 1                                |                         |       |
| 30    | 5570      | 24     | 4.9     | 229      | 1                                |                         |       |


**USA Bin  
3**

freq=5530, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 17     | 9.6     | 300      | 1                                | 100.0%                  | 60.0% |
| 2     | 5490      | 16     | 8       | 494      | 1                                |                         |       |
| 3     | 5496      | 17     | 9.8     | 461      | 1                                |                         |       |
| 4     | 5496      | 18     | 8.7     | 296      | 1                                |                         |       |
| 5     | 5502      | 18     | 7.5     | 318      | 1                                |                         |       |
| 6     | 5502      | 17     | 8.1     | 225      | 1                                |                         |       |
| 7     | 5508      | 17     | 7.5     | 271      | 1                                |                         |       |
| 8     | 5508      | 17     | 9.6     | 435      | 1                                |                         |       |
| 9     | 5514      | 16     | 8.6     | 357      | 1                                |                         |       |
| 10    | 5514      | 16     | 9.6     | 324      | 1                                |                         |       |
| 11    | 5520      | 18     | 8.4     | 382      | 1                                |                         |       |
| 12    | 5520      | 17     | 6.1     | 438      | 1                                |                         |       |
| 13    | 5526      | 17     | 7       | 215      | 1                                |                         |       |
| 14    | 5526      | 18     | 8       | 204      | 1                                |                         |       |
| 15    | 5530      | 18     | 7       | 207      | 1                                |                         |       |
| 16    | 5530      | 16     | 7.8     | 352      | 1                                |                         |       |
| 17    | 5534      | 16     | 7.3     | 321      | 1                                |                         |       |
| 18    | 5534      | 18     | 9.4     | 412      | 1                                |                         |       |
| 19    | 5540      | 18     | 7.3     | 409      | 1                                |                         |       |
| 20    | 5540      | 17     | 7.2     | 224      | 1                                |                         |       |
| 21    | 5546      | 16     | 7.1     | 390      | 1                                |                         |       |
| 22    | 5546      | 16     | 6.5     | 277      | 1                                |                         |       |
| 23    | 5552      | 17     | 9.6     | 345      | 1                                |                         |       |
| 24    | 5552      | 16     | 7.2     | 493      | 1                                |                         |       |
| 25    | 5558      | 18     | 8.3     | 332      | 1                                |                         |       |
| 26    | 5558      | 16     | 8.5     | 358      | 1                                |                         |       |
| 27    | 5564      | 18     | 9.3     | 291      | 1                                |                         |       |
| 28    | 5564      | 16     | 8.7     | 376      | 1                                |                         |       |
| 29    | 5570      | 17     | 6.8     | 270      | 1                                |                         |       |
| 30    | 5570      | 17     | 8.9     | 263      | 1                                |                         |       |

**USA Bin****4**

freq=5530, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5490      | 14     | 12.3    | 351      | 1                                | 100.0%                  | 60.0% |
| 2     | 5490      | 13     | 17.1    | 319      | 1                                |                         |       |
| 3     | 5496      | 14     | 17.7    | 333      | 1                                |                         |       |
| 4     | 5496      | 14     | 13.2    | 206      | 1                                |                         |       |
| 5     | 5502      | 16     | 16.9    | 232      | 1                                |                         |       |
| 6     | 5502      | 13     | 15.1    | 292      | 1                                |                         |       |
| 7     | 5508      | 12     | 13      | 273      | 1                                |                         |       |
| 8     | 5508      | 15     | 11.8    | 216      | 1                                |                         |       |
| 9     | 5514      | 16     | 19.2    | 381      | 1                                |                         |       |
| 10    | 5514      | 14     | 18.5    | 450      | 1                                |                         |       |
| 11    | 5520      | 16     | 18.3    | 399      | 1                                |                         |       |
| 12    | 5520      | 13     | 17.6    | 304      | 1                                |                         |       |
| 13    | 5526      | 16     | 11.9    | 419      | 1                                |                         |       |
| 14    | 5526      | 16     | 16      | 360      | 1                                |                         |       |
| 15    | 5530      | 12     | 19.5    | 404      | 1                                |                         |       |
| 16    | 5530      | 15     | 15.2    | 475      | 1                                |                         |       |
| 17    | 5534      | 14     | 14.8    | 433      | 1                                |                         |       |
| 18    | 5534      | 12     | 11.7    | 249      | 1                                |                         |       |
| 19    | 5540      | 15     | 13.4    | 413      | 1                                |                         |       |
| 20    | 5540      | 14     | 11.5    | 378      | 1                                |                         |       |
| 21    | 5546      | 16     | 19.8    | 304      | 1                                |                         |       |
| 22    | 5546      | 12     | 12.7    | 211      | 1                                |                         |       |
| 23    | 5552      | 13     | 19      | 343      | 1                                |                         |       |
| 24    | 5552      | 14     | 15.2    | 387      | 1                                |                         |       |
| 25    | 5558      | 15     | 16.2    | 319      | 1                                |                         |       |
| 26    | 5558      | 15     | 14.5    | 437      | 1                                |                         |       |
| 27    | 5564      | 13     | 15.7    | 444      | 1                                |                         |       |
| 28    | 5564      | 14     | 12.1    | 424      | 1                                |                         |       |
| 29    | 5570      | 15     | 11.5    | 217      | 1                                |                         |       |
| 30    | 5570      | 16     | 11.9    | 368      | 1                                |                         |       |

In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is required and is calculated as follows:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100.0\% + 100.0\% + 100.0\% + 100.0\% + 100.0\%)/5 = 100.0\% (>80\%)$$



**USA**  
**Bin**  
**5**

freq=5530, rate=m0x1, bw=76.0

| Trial | Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|-------------------------------|----------------------|-------|
| 1     | 1       | 3      | 5494            | 5           | 100     | 1727                     | 1760                     | 0.21942         | 1                             | 100.0%               | 80.0% |
| 2     | 1       | 3      | 5500            | 20          | 90      | 1491                     | 1866                     | 0.57701         | 1                             |                      |       |
| 3     | 1       | 3      | 5497.2          | 13          | 95      | 1701                     | 1527                     | 0.718817        | 1                             |                      |       |
| 4     | 1       | 3      | 5498            | 15          | 65      | 1280                     | 1376                     | 0.528805        | 1                             |                      |       |
| 5     | 1       | 3      | 5495.2          | 8           | 60      | 1545                     | 1909                     | 0.243732        | 1                             |                      |       |
| 6     | 1       | 1      | 5497.2          | 13          | 90      |                          |                          | 0.693085        | 1                             |                      |       |
| 7     | 1       | 2      | 5497.2          | 13          | 60      | 1647                     |                          | 0.098896        | 1                             |                      |       |
| 8     | 1       | 3      | 5495.6          | 9           | 90      | 1192                     | 1012                     | 0.218608        | 1                             |                      |       |
| 9     | 1       | 2      | 5498.8          | 17          | 80      | 1735                     |                          | 0.437115        | 1                             |                      |       |
| 10    | 1       | 2      | 5495.2          | 8           | 80      | 1581                     |                          | 0.454067        | 1                             |                      |       |
| 11    | 1       | 3      | 5530            | 18          | 55      | 1632                     | 1657                     | 0.390057        | 1                             |                      |       |
| 12    | 1       | 2      | 5530            | 16          | 75      | 1402                     |                          | 0.049508        | 1                             |                      |       |
| 13    | 1       | 1      | 5530            | 14          | 65      |                          |                          | 0.088706        | 1                             |                      |       |
| 14    | 1       | 1      | 5530            | 13          | 80      |                          |                          | 0.588809        | 1                             |                      |       |
| 15    | 1       | 1      | 5530            | 16          | 100     |                          |                          | 0.224699        | 1                             |                      |       |
| 16    | 1       | 2      | 5530            | 13          | 90      | 1005                     |                          | 0.522349        | 1                             |                      |       |
| 17    | 1       | 2      | 5530            | 20          | 90      | 1672                     |                          | 0.204286        | 1                             |                      |       |
| 18    | 1       | 3      | 5530            | 7           | 95      | 1228                     | 1121                     | 0.641095        | 1                             |                      |       |
| 19    | 1       | 2      | 5530            | 12          | 70      | 1068                     |                          | 0.028618        | 1                             |                      |       |
| 20    | 1       | 3      | 5530            | 8           | 80      | 1360                     | 1222                     | 0.608681        | 1                             |                      |       |
| 21    | 1       | 1      | 5565.2          | 7           | 50      |                          |                          | 0.679073        | 1                             |                      |       |
| 22    | 1       | 2      | 5566            | 5           | 80      | 1705                     |                          | 0.183496        | 1                             |                      |       |
| 23    | 1       | 2      | 5564            | 10          | 85      | 1735                     |                          | 1.414471        | 1                             |                      |       |
| 24    | 1       | 2      | 5566            | 5           | 85      | 1164                     |                          | 0.151262        | 1                             |                      |       |
| 25    | 1       | 3      | 5566            | 5           | 75      | 1404                     | 1764                     | 0.346994        | 1                             |                      |       |
| 26    | 1       | 2      | 5562            | 15          | 75      | 1444                     |                          | 0.883371        | 1                             |                      |       |
| 27    | 1       | 3      | 5561.2          | 17          | 55      | 1522                     | 1131                     | 0.290263        | 1                             |                      |       |
| 28    | 1       | 3      | 5566            | 5           | 60      | 1752                     | 1573                     | 0.310775        | 1                             |                      |       |
| 29    | 1       | 1      | 5564            | 10          | 100     |                          |                          | 0.906037        | 1                             |                      |       |
| 30    | 1       | 2      | 5564.8          | 8           | 100     | 1967                     |                          | 1.258259        | 1                             |                      |       |

freq=5530, rate=m0x1,  
bw=76.0

**USA Frequency Hopping**

| Trial | Hop # | Freq (GHz) | Pulse Start (mS) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|-------|------------|------------------|-------------------------------|----------------------|-------|
| 1     | 5     | 5553       | 15               | 1                             | 100.0%               | 70.0% |
| 2     | 7     | 5506       | 21               | 1                             |                      |       |
| 3     | 10    | 5500       | 30               | 1                             |                      |       |
| 4     | 11    | 5547       | 33               | 1                             |                      |       |
| 5     | 2     | 5492       | 6                | 1                             |                      |       |
| 6     | 1     | 5558       | 3                | 1                             |                      |       |
| 7     | 0     | 5546       | 0                | 1                             |                      |       |
| 8     | 6     | 5553       | 18               | 1                             |                      |       |
| 9     | 3     | 5512       | 9                | 1                             |                      |       |
| 10    | 0     | 5538       | 0                | 1                             |                      |       |
| 11    | 2     | 5508       | 6                | 1                             |                      |       |
| 12    | 13    | 5506       | 39               | 1                             |                      |       |
| 13    | 11    | 5508       | 33               | 1                             |                      |       |
| 14    | 1     | 5528       | 3                | 1                             |                      |       |
| 15    | 2     | 5536       | 6                | 1                             |                      |       |
| 16    | 3     | 5518       | 9                | 1                             |                      |       |
| 17    | 2     | 5531       | 6                | 1                             |                      |       |
| 18    | 2     | 5563       | 6                | 1                             |                      |       |
| 19    | 2     | 5523       | 6                | 1                             |                      |       |
| 20    | 0     | 5563       | 0                | 1                             |                      |       |
| 21    | 1     | 5559       | 3                | 1                             |                      |       |
| 22    | 4     | 5531       | 12               | 1                             |                      |       |
| 23    | 0     | 5496       | 0                | 1                             |                      |       |
| 24    | 0     | 5550       | 0                | 1                             |                      |       |
| 25    | 3     | 5534       | 9                | 1                             |                      |       |
| 26    | 33    | 5492       | 99               | 1                             |                      |       |
| 27    | 4     | 5537       | 12               | 1                             |                      |       |
| 28    | 1     | 5557       | 3                | 1                             |                      |       |
| 29    | 3     | 5564       | 9                | 1                             |                      |       |
| 30    | 15    | 5533       | 45               | 1                             |                      |       |



## USA Bin 5 Trial #1

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5494               | 5              | 100        | 1727                           | 1760                           | 0.21942            |
| 2       | 3      | 5494               | 5              | 90         | 1512                           | 1051                           | 0.882587           |
| 3       | 3      | 5494               | 5              | 50         | 1289                           | 1174                           | 1.392912           |
| 4       | 3      | 5494               | 5              | 50         | 1084                           | 1097                           | 1.869963           |
| 5       | 2      | 5494               | 5              | 85         | 1621                           |                                | 2.627763           |
| 6       | 1      | 5494               | 5              | 60         |                                |                                | 3.001702           |
| 7       | 1      | 5494               | 5              | 75         |                                |                                | 3.806767           |
| 8       | 3      | 5494               | 5              | 65         | 1731                           | 1320                           | 4.620658           |
| 9       | 1      | 5494               | 5              | 65         |                                |                                | 4.858816           |
| 10      | 1      | 5494               | 5              | 65         |                                |                                | 5.508761           |
| 11      | 2      | 5494               | 5              | 70         | 1946                           |                                | 6.076808           |
| 12      | 1      | 5494               | 5              | 75         |                                |                                | 6.631661           |
| 13      | 1      | 5494               | 5              | 100        |                                |                                | 7.533736           |
| 14      | 3      | 5494               | 5              | 80         | 1581                           | 1223                           | 8.033662           |
| 15      | 1      | 5494               | 5              | 55         |                                |                                | 8.94361            |
| 16      | 2      | 5494               | 5              | 75         | 1666                           |                                | 9.294623           |
| 17      | 1      | 5494               | 5              | 60         |                                |                                | 9.631779           |
| 18      | 3      | 5494               | 5              | 80         | 1083                           | 1796                           | 10.712783          |
| 19      | 3      | 5494               | 5              | 60         | 1753                           | 1531                           | 10.924569          |
| 20      | 1      | 5494               | 5              | 50         |                                |                                | 11.792624          |

## USA Bin 5 Trial #2

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5500               | 20             | 90         | 1491                           | 1866                           | 0.57701            |
| 2       | 2      | 5500               | 20             | 100        | 1073                           |                                | 0.714561           |
| 3       | 2      | 5500               | 20             | 85         | 1219                           |                                | 1.344733           |
| 4       | 1      | 5500               | 20             | 65         |                                |                                | 2.645095           |
| 5       | 2      | 5500               | 20             | 65         | 1984                           |                                | 2.713675           |
| 6       | 1      | 5500               | 20             | 95         |                                |                                | 3.4454             |
| 7       | 1      | 5500               | 20             | 100        |                                |                                | 4.142665           |
| 8       | 3      | 5500               | 20             | 80         | 1304                           | 1374                           | 5.009681           |
| 9       | 1      | 5500               | 20             | 90         |                                |                                | 5.901703           |
| 10      | 1      | 5500               | 20             | 100        |                                |                                | 6.173744           |
| 11      | 3      | 5500               | 20             | 85         | 1268                           | 1595                           | 6.801503           |
| 12      | 3      | 5500               | 20             | 70         | 1104                           | 1990                           | 7.505661           |
| 13      | 1      | 5500               | 20             | 100        |                                |                                | 8.335477           |
| 14      | 1      | 5500               | 20             | 80         |                                |                                | 9.047741           |
| 15      | 2      | 5500               | 20             | 60         | 1683                           |                                | 9.428643           |
| 16      | 1      | 5500               | 20             | 75         |                                |                                | 10.569209          |



|    |   |      |    |    |      |      |           |
|----|---|------|----|----|------|------|-----------|
| 17 | 3 | 5500 | 20 | 70 | 1637 | 1531 | 10.959747 |
| 18 | 2 | 5500 | 20 | 75 | 1508 |      | 11.551954 |

USA Bin 5 Trial #3

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5497.2             | 13             | 95         | 1701                           | 1527                           | 0.718817           |
| 2       | 2      | 5497.2             | 13             | 60         | 1978                           |                                | 1.264117           |
| 3       | 2      | 5497.2             | 13             | 55         | 1528                           |                                | 2.228368           |
| 4       | 1      | 5497.2             | 13             | 80         |                                |                                | 2.978037           |
| 5       | 1      | 5497.2             | 13             | 85         |                                |                                | 3.774523           |
| 6       | 2      | 5497.2             | 13             | 50         | 1096                           |                                | 4.362645           |
| 7       | 3      | 5497.2             | 13             | 60         | 1478                           | 1155                           | 5.98933            |
| 8       | 1      | 5497.2             | 13             | 70         |                                |                                | 6.290264           |
| 9       | 1      | 5497.2             | 13             | 55         |                                |                                | 6.892161           |
| 10      | 1      | 5497.2             | 13             | 85         |                                |                                | 8.325284           |
| 11      | 1      | 5497.2             | 13             | 55         |                                |                                | 9.290104           |
| 12      | 3      | 5497.2             | 13             | 85         | 1909                           | 1368                           | 9.679732           |
| 13      | 1      | 5497.2             | 13             | 65         |                                |                                | 10.865895          |
| 14      | 2      | 5497.2             | 13             | 60         | 1533                           |                                | 11.695431          |

## USA Bin 5 Trial #4

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5498               | 15             | 65         | 1280                           | 1376                           | 0.528805           |
| 2       | 2      | 5498               | 15             | 70         | 1298                           |                                | 0.866462           |
| 3       | 2      | 5498               | 15             | 65         | 1015                           |                                | 1.446137           |
| 4       | 2      | 5498               | 15             | 95         | 1292                           |                                | 2.202562           |
| 5       | 3      | 5498               | 15             | 80         | 1373                           | 1948                           | 2.82827            |
| 6       | 2      | 5498               | 15             | 75         | 1375                           |                                | 3.097222           |
| 7       | 2      | 5498               | 15             | 75         | 1783                           |                                | 4.040845           |
| 8       | 2      | 5498               | 15             | 70         | 1753                           |                                | 4.663828           |
| 9       | 2      | 5498               | 15             | 80         | 1164                           |                                | 4.980276           |
| 10      | 1      | 5498               | 15             | 80         |                                |                                | 5.775429           |
| 11      | 3      | 5498               | 15             | 60         | 1930                           | 1617                           | 6.292168           |
| 12      | 3      | 5498               | 15             | 80         | 1835                           | 1674                           | 6.744516           |
| 13      | 1      | 5498               | 15             | 80         |                                |                                | 7.670071           |
| 14      | 1      | 5498               | 15             | 50         |                                |                                | 7.898779           |
| 15      | 3      | 5498               | 15             | 85         | 1496                           | 1883                           | 8.873156           |
| 16      | 2      | 5498               | 15             | 85         | 1627                           |                                | 9.102015           |
| 17      | 1      | 5498               | 15             | 80         |                                |                                | 10.169682          |
| 18      | 1      | 5498               | 15             | 65         |                                |                                | 10.501595          |
| 19      | 2      | 5498               | 15             | 80         | 1163                           |                                | 10.981236          |
| 20      | 3      | 5498               | 15             | 90         | 1144                           | 1268                           | 11.848227          |

## USA Bin 5 Trial #5

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5495.2          | 8           | 60      | 1545                     | 1909                     | 0.243732        |
| 2       | 3      | 5495.2          | 8           | 85      | 1648                     | 1243                     | 1.520977        |
| 3       | 3      | 5495.2          | 8           | 65      | 1240                     | 1489                     | 1.854272        |
| 4       | 3      | 5495.2          | 8           | 85      | 1371                     | 1517                     | 2.894628        |
| 5       | 3      | 5495.2          | 8           | 100     | 1384                     | 1376                     | 3.656023        |
| 6       | 1      | 5495.2          | 8           | 70      |                          |                          | 4.061948        |
| 7       | 1      | 5495.2          | 8           | 75      |                          |                          | 5.519564        |
| 8       | 3      | 5495.2          | 8           | 50      | 1218                     | 1844                     | 6.170672        |
| 9       | 2      | 5495.2          | 8           | 60      | 1094                     |                          | 7.136856        |
| 10      | 1      | 5495.2          | 8           | 80      |                          |                          | 7.337233        |
| 11      | 1      | 5495.2          | 8           | 80      |                          |                          | 8.35241         |
| 12      | 3      | 5495.2          | 8           | 60      | 1650                     | 1163                     | 8.96015         |
| 13      | 3      | 5495.2          | 8           | 80      | 1564                     | 1985                     | 10.195592       |
| 14      | 1      | 5495.2          | 8           | 95      |                          |                          | 10.756817       |
| 15      | 3      | 5495.2          | 8           | 65      | 1079                     | 1936                     | 11.794214       |

## USA Bin 5 Trial #6

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5497.2          | 13          | 90      |                          |                          | 0.693085        |
| 2       | 1      | 5497.2          | 13          | 85      |                          |                          | 2.014966        |
| 3       | 1      | 5497.2          | 13          | 90      |                          |                          | 3.062444        |
| 4       | 3      | 5497.2          | 13          | 95      | 1516                     | 1316                     | 3.415074        |
| 5       | 2      | 5497.2          | 13          | 90      | 1418                     |                          | 4.551367        |
| 6       | 2      | 5497.2          | 13          | 70      | 1434                     |                          | 5.800619        |
| 7       | 1      | 5497.2          | 13          | 70      |                          |                          | 7.610059        |
| 8       | 3      | 5497.2          | 13          | 75      | 1299                     | 1080                     | 8.582459        |
| 9       | 2      | 5497.2          | 13          | 100     | 1867                     |                          | 9.170352        |
| 10      | 2      | 5497.2          | 13          | 60      | 1308                     |                          | 10.311682       |
| 11      | 2      | 5497.2          | 13          | 90      | 1094                     |                          | 11.017903       |

## USA Bin 5 Trial #7

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5497.2          | 13          | 60      | 1647                     |                          | 0.098896        |
| 2       | 1      | 5497.2          | 13          | 100     |                          |                          | 2.128178        |
| 3       | 2      | 5497.2          | 13          | 75      | 1478                     |                          | 2.886619        |
| 4       | 3      | 5497.2          | 13          | 100     | 1455                     | 1081                     | 4.228846        |
| 5       | 2      | 5497.2          | 13          | 85      | 1070                     |                          | 4.99199         |
| 6       | 3      | 5497.2          | 13          | 55      | 1360                     | 1146                     | 6.429734        |



|    |   |        |    |    |      |      |           |
|----|---|--------|----|----|------|------|-----------|
| 7  | 3 | 5497.2 | 13 | 75 | 1880 | 1127 | 7.621817  |
| 8  | 2 | 5497.2 | 13 | 70 | 1252 |      | 8.994294  |
| 9  | 3 | 5497.2 | 13 | 50 | 1372 | 1154 | 9.611064  |
| 10 | 2 | 5497.2 | 13 | 75 | 1242 |      | 11.065269 |

USA Bin 5 Trial #8

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5495.6             | 9              | 90         | 1192                           | 1012                           | 0.218608           |
| 2       | 1      | 5495.6             | 9              | 85         |                                |                                | 0.920162           |
| 3       | 1      | 5495.6             | 9              | 80         |                                |                                | 1.464654           |
| 4       | 2      | 5495.6             | 9              | 65         | 1685                           |                                | 2.717439           |
| 5       | 3      | 5495.6             | 9              | 60         | 1856                           | 1379                           | 3.161086           |
| 6       | 1      | 5495.6             | 9              | 90         |                                |                                | 4.111388           |
| 7       | 1      | 5495.6             | 9              | 65         |                                |                                | 4.674754           |
| 8       | 1      | 5495.6             | 9              | 100        |                                |                                | 5.452205           |
| 9       | 2      | 5495.6             | 9              | 100        | 1373                           |                                | 5.838223           |
| 10      | 1      | 5495.6             | 9              | 95         |                                |                                | 6.651677           |
| 11      | 3      | 5495.6             | 9              | 75         | 1812                           | 1340                           | 7.554052           |
| 12      | 1      | 5495.6             | 9              | 75         |                                |                                | 7.807902           |
| 13      | 3      | 5495.6             | 9              | 70         | 1395                           | 1180                           | 9.171656           |
| 14      | 1      | 5495.6             | 9              | 60         |                                |                                | 9.427835           |
| 15      | 2      | 5495.6             | 9              | 95         | 1647                           |                                | 10.125558          |
| 16      | 2      | 5495.6             | 9              | 80         | 1498                           |                                | 10.71843           |
| 17      | 1      | 5495.6             | 9              | 80         |                                |                                | 11.439104          |

## USA Bin 5 Trial #9

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5498.8             | 17             | 80         | 1735                           |                                | 0.437115           |
| 2       | 3      | 5498.8             | 17             | 85         | 1266                           | 1214                           | 1.426183           |
| 3       | 1      | 5498.8             | 17             | 95         |                                |                                | 1.961939           |
| 4       | 1      | 5498.8             | 17             | 75         |                                |                                | 2.944872           |
| 5       | 1      | 5498.8             | 17             | 50         |                                |                                | 3.868418           |
| 6       | 2      | 5498.8             | 17             | 70         | 1364                           |                                | 4.699424           |
| 7       | 1      | 5498.8             | 17             | 100        |                                |                                | 5.304975           |
| 8       | 1      | 5498.8             | 17             | 100        |                                |                                | 5.616849           |
| 9       | 1      | 5498.8             | 17             | 85         |                                |                                | 7.169264           |
| 10      | 3      | 5498.8             | 17             | 95         | 1694                           | 1936                           | 7.253991           |
| 11      | 3      | 5498.8             | 17             | 65         | 1144                           | 1427                           | 8.596377           |
| 12      | 1      | 5498.8             | 17             | 95         |                                |                                | 9.245843           |
| 13      | 3      | 5498.8             | 17             | 80         | 1611                           | 1585                           | 10.333788          |
| 14      | 1      | 5498.8             | 17             | 50         |                                |                                | 11.174104          |
| 15      | 1      | 5498.8             | 17             | 85         |                                |                                | 11.298391          |



## USA Bin 5 Trial #10

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5495.2             | 8              | 80         | 1581                           |                                | 0.454067           |
| 2       | 1      | 5495.2             | 8              | 65         |                                |                                | 0.661126           |
| 3       | 3      | 5495.2             | 8              | 80         | 1246                           | 1507                           | 1.462214           |
| 4       | 1      | 5495.2             | 8              | 100        |                                |                                | 2.118397           |
| 5       | 3      | 5495.2             | 8              | 55         | 1128                           | 1837                           | 2.968763           |
| 6       | 2      | 5495.2             | 8              | 50         | 1239                           |                                | 3.493634           |
| 7       | 3      | 5495.2             | 8              | 50         | 1218                           | 1516                           | 4.058126           |
| 8       | 3      | 5495.2             | 8              | 65         | 1269                           | 1244                           | 4.763312           |
| 9       | 2      | 5495.2             | 8              | 70         | 1459                           |                                | 5.285714           |
| 10      | 1      | 5495.2             | 8              | 85         |                                |                                | 5.568483           |
| 11      | 2      | 5495.2             | 8              | 100        | 1057                           |                                | 6.243833           |
| 12      | 2      | 5495.2             | 8              | 75         | 1596                           |                                | 6.638631           |
| 13      | 1      | 5495.2             | 8              | 100        |                                |                                | 7.398152           |
| 14      | 1      | 5495.2             | 8              | 90         |                                |                                | 8.072812           |
| 15      | 3      | 5495.2             | 8              | 60         | 1630                           | 1300                           | 8.957475           |
| 16      | 1      | 5495.2             | 8              | 55         |                                |                                | 9.315769           |
| 17      | 2      | 5495.2             | 8              | 95         | 1550                           |                                | 10.004162          |
| 18      | 3      | 5495.2             | 8              | 50         | 1480                           | 1881                           | 10.259392          |
| 19      | 3      | 5495.2             | 8              | 75         | 1847                           | 1588                           | 10.843961          |
| 20      | 2      | 5495.2             | 8              | 70         | 1785                           |                                | 11.932368          |

## USA Bin 5 Trial #11

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5530               | 18             | 55         | 1632                           | 1657                           | 0.390057           |
| 2       | 2      | 5530               | 18             | 70         | 1354                           |                                | 1.016417           |
| 3       | 2      | 5530               | 18             | 60         | 1253                           |                                | 1.771615           |
| 4       | 1      | 5530               | 18             | 60         |                                |                                | 2.589897           |
| 5       | 2      | 5530               | 18             | 95         | 1919                           |                                | 3.711948           |
| 6       | 1      | 5530               | 18             | 95         |                                |                                | 4.844104           |
| 7       | 1      | 5530               | 18             | 95         |                                |                                | 5.634508           |
| 8       | 1      | 5530               | 18             | 75         |                                |                                | 6.533076           |
| 9       | 2      | 5530               | 18             | 55         | 1345                           |                                | 7.569654           |
| 10      | 1      | 5530               | 18             | 80         |                                |                                | 8.531496           |
| 11      | 1      | 5530               | 18             | 85         |                                |                                | 9.396345           |
| 12      | 1      | 5530               | 18             | 95         |                                |                                | 10.190701          |
| 13      | 3      | 5530               | 18             | 50         | 1349                           | 1964                           | 10.664315          |
| 14      | 3      | 5530               | 18             | 65         | 1959                           | 1959                           | 11.509397          |

## USA Bin 5 Trial #12

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5530            | 16          | 75      | 1402                     |                          | 0.049508        |
| 2       | 2      | 5530            | 16          | 75      | 1123                     |                          | 2.68856         |
| 3       | 2      | 5530            | 16          | 75      | 1044                     |                          | 4.248808        |
| 4       | 3      | 5530            | 16          | 65      | 1139                     | 1869                     | 5.735509        |
| 5       | 1      | 5530            | 16          | 60      |                          |                          | 6.376397        |
| 6       | 2      | 5530            | 16          | 95      | 1695                     |                          | 7.971956        |
| 7       | 3      | 5530            | 16          | 80      | 1367                     | 1984                     | 9.240861        |
| 8       | 3      | 5530            | 16          | 90      | 1426                     | 1970                     | 11.852667       |

## USA Bin 5 Trial #13

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5530            | 14          | 65      |                          |                          | 0.088706        |
| 2       | 1      | 5530            | 14          | 55      |                          |                          | 1.004411        |
| 3       | 3      | 5530            | 14          | 70      | 1209                     | 1824                     | 1.881535        |
| 4       | 1      | 5530            | 14          | 55      |                          |                          | 2.680685        |
| 5       | 1      | 5530            | 14          | 75      |                          |                          | 3.19887         |
| 6       | 2      | 5530            | 14          | 100     | 1024                     |                          | 4.037809        |
| 7       | 2      | 5530            | 14          | 90      | 1206                     |                          | 4.466405        |
| 8       | 1      | 5530            | 14          | 90      |                          |                          | 5.035312        |
| 9       | 1      | 5530            | 14          | 60      |                          |                          | 6.289597        |
| 10      | 2      | 5530            | 14          | 60      | 1695                     |                          | 6.484242        |
| 11      | 1      | 5530            | 14          | 100     |                          |                          | 7.559421        |
| 12      | 1      | 5530            | 14          | 50      |                          |                          | 8.10231         |
| 13      | 3      | 5530            | 14          | 75      | 1915                     | 1113                     | 8.722998        |
| 14      | 2      | 5530            | 14          | 50      | 1651                     |                          | 9.407539        |
| 15      | 1      | 5530            | 14          | 60      |                          |                          | 10.255108       |
| 16      | 3      | 5530            | 14          | 70      | 1487                     | 1832                     | 11.14368        |
| 17      | 1      | 5530            | 14          | 55      |                          |                          | 11.34549        |

## USA Bin 5 Trial #14

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5530            | 13          | 80      |                          |                          | 0.588809        |
| 2       | 1      | 5530            | 13          | 80      |                          |                          | 1.043791        |
| 3       | 1      | 5530            | 13          | 70      |                          |                          | 1.882248        |
| 4       | 3      | 5530            | 13          | 100     | 1170                     | 1044                     | 2.672058        |
| 5       | 1      | 5530            | 13          | 90      |                          |                          | 2.958442        |
| 6       | 3      | 5530            | 13          | 95      | 1580                     | 1062                     | 4.176702        |
| 7       | 3      | 5530            | 13          | 50      | 1313                     | 1819                     | 4.55215         |
| 8       | 2      | 5530            | 13          | 65      | 1841                     |                          | 5.256082        |



|    |   |      |    |    |      |      |           |
|----|---|------|----|----|------|------|-----------|
| 9  | 1 | 5530 | 13 | 80 |      |      | 5.766288  |
| 10 | 1 | 5530 | 13 | 85 |      |      | 6.430704  |
| 11 | 1 | 5530 | 13 | 95 |      |      | 7.358898  |
| 12 | 1 | 5530 | 13 | 80 |      |      | 8.438027  |
| 13 | 3 | 5530 | 13 | 70 | 1270 | 1420 | 8.882154  |
| 14 | 2 | 5530 | 13 | 95 | 1880 |      | 9.493306  |
| 15 | 3 | 5530 | 13 | 50 | 1015 | 1171 | 10.48815  |
| 16 | 2 | 5530 | 13 | 85 | 1996 |      | 10.957763 |
| 17 | 3 | 5530 | 13 | 55 | 1480 | 1356 | 11.468685 |

## USA Bin 5 Trial #15

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5530               | 16             | 100        |                                |                                | 0.224699           |
| 2       | 2      | 5530               | 16             | 70         | 1181                           |                                | 2.567192           |
| 3       | 3      | 5530               | 16             | 85         | 1043                           | 1103                           | 3.742955           |
| 4       | 2      | 5530               | 16             | 50         | 1668                           |                                | 4.791294           |
| 5       | 1      | 5530               | 16             | 70         |                                |                                | 6.331185           |
| 6       | 3      | 5530               | 16             | 60         | 1876                           | 1314                           | 7.138827           |
| 7       | 2      | 5530               | 16             | 100        | 1035                           |                                | 8.237269           |
| 8       | 3      | 5530               | 16             | 95         | 1736                           | 1280                           | 10.20428           |
| 9       | 2      | 5530               | 16             | 50         | 1297                           |                                | 10.88475           |

## USA Bin 5 Trial #16

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5530               | 13             | 90         | 1005                           |                                | 0.522349           |
| 2       | 3      | 5530               | 13             | 100        | 1016                           | 1198                           | 1.431554           |
| 3       | 1      | 5530               | 13             | 50         |                                |                                | 2.021721           |
| 4       | 3      | 5530               | 13             | 65         | 1661                           | 1476                           | 3.56041            |
| 5       | 1      | 5530               | 13             | 80         |                                |                                | 4.091092           |
| 6       | 3      | 5530               | 13             | 65         | 1590                           | 1403                           | 5.178773           |
| 7       | 2      | 5530               | 13             | 95         | 1269                           |                                | 5.950298           |
| 8       | 1      | 5530               | 13             | 60         |                                |                                | 6.564678           |
| 9       | 2      | 5530               | 13             | 55         | 1574                           |                                | 8.039011           |
| 10      | 1      | 5530               | 13             | 80         |                                |                                | 8.755693           |
| 11      | 2      | 5530               | 13             | 60         | 1975                           |                                | 9.610062           |
| 12      | 2      | 5530               | 13             | 55         | 1952                           |                                | 10.441568          |
| 13      | 2      | 5530               | 13             | 55         | 1037                           |                                | 11.331992          |

## USA Bin 5 Trial #17

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5530               | 20             | 90         | 1672                           |                                | 0.204286           |



|    |   |      |    |     |      |      |           |
|----|---|------|----|-----|------|------|-----------|
| 2  | 3 | 5530 | 20 | 95  | 1124 | 1391 | 1.16771   |
| 3  | 2 | 5530 | 20 | 60  | 1701 |      | 2.02366   |
| 4  | 1 | 5530 | 20 | 55  |      |      | 2.7748    |
| 5  | 2 | 5530 | 20 | 85  | 1744 |      | 3.659894  |
| 6  | 3 | 5530 | 20 | 55  | 1877 | 1285 | 4.115689  |
| 7  | 3 | 5530 | 20 | 95  | 1766 | 1697 | 5.072902  |
| 8  | 1 | 5530 | 20 | 80  |      |      | 5.76701   |
| 9  | 1 | 5530 | 20 | 90  |      |      | 6.228557  |
| 10 | 3 | 5530 | 20 | 90  | 1146 | 1185 | 7.376255  |
| 11 | 2 | 5530 | 20 | 100 | 1599 |      | 8.165648  |
| 12 | 1 | 5530 | 20 | 50  |      |      | 8.798984  |
| 13 | 3 | 5530 | 20 | 70  | 1534 | 1624 | 9.557536  |
| 14 | 1 | 5530 | 20 | 90  |      |      | 10.37561  |
| 15 | 2 | 5530 | 20 | 95  | 1921 |      | 11.217785 |
| 16 | 3 | 5530 | 20 | 85  | 1163 | 1635 | 11.571348 |

## USA Bin 5 Trial #18

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5530               | 7              | 95         | 1228                           | 1121                           | 0.641095           |
| 2       | 3      | 5530               | 7              | 65         | 1601                           | 1310                           | 0.804808           |
| 3       | 2      | 5530               | 7              | 100        | 1544                           |                                | 1.587862           |
| 4       | 2      | 5530               | 7              | 80         | 1961                           |                                | 2.059559           |
| 5       | 1      | 5530               | 7              | 75         |                                |                                | 2.989759           |
| 6       | 3      | 5530               | 7              | 75         | 1281                           | 1702                           | 3.336035           |
| 7       | 2      | 5530               | 7              | 50         | 1994                           |                                | 4.405611           |
| 8       | 1      | 5530               | 7              | 55         |                                |                                | 4.983419           |
| 9       | 1      | 5530               | 7              | 100        |                                |                                | 5.825445           |
| 10      | 3      | 5530               | 7              | 70         | 1536                           | 1446                           | 6.198653           |
| 11      | 3      | 5530               | 7              | 50         | 1383                           | 1365                           | 6.697683           |
| 12      | 3      | 5530               | 7              | 70         | 1693                           | 1506                           | 7.355427           |
| 13      | 1      | 5530               | 7              | 60         |                                |                                | 8.457358           |
| 14      | 2      | 5530               | 7              | 85         | 1620                           |                                | 9.007785           |
| 15      | 1      | 5530               | 7              | 95         |                                |                                | 9.92488            |
| 16      | 3      | 5530               | 7              | 85         | 1123                           | 1016                           | 10.634424          |
| 17      | 3      | 5530               | 7              | 60         | 1815                           | 1747                           | 10.815801          |
| 18      | 1      | 5530               | 7              | 95         |                                |                                | 11.560835          |

## USA Bin 5 Trial #19

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5530               | 12             | 70         | 1068                           |                                | 0.028618           |
| 2       | 3      | 5530               | 12             | 50         | 1800                           | 1576                           | 1.142821           |
| 3       | 3      | 5530               | 12             | 70         | 1298                           | 1824                           | 1.582638           |



|    |   |      |    |     |      |      |           |
|----|---|------|----|-----|------|------|-----------|
| 4  | 3 | 5530 | 12 | 80  | 1399 | 1965 | 2.617335  |
| 5  | 2 | 5530 | 12 | 90  | 1467 |      | 3.269068  |
| 6  | 2 | 5530 | 12 | 80  | 1004 |      | 3.456183  |
| 7  | 3 | 5530 | 12 | 95  | 1330 | 1163 | 4.657876  |
| 8  | 2 | 5530 | 12 | 90  | 1280 |      | 4.709817  |
| 9  | 1 | 5530 | 12 | 95  |      |      | 5.799677  |
| 10 | 1 | 5530 | 12 | 55  |      |      | 6.180324  |
| 11 | 2 | 5530 | 12 | 70  | 1783 |      | 6.970822  |
| 12 | 1 | 5530 | 12 | 80  |      |      | 7.938414  |
| 13 | 2 | 5530 | 12 | 70  | 1484 |      | 8.194647  |
| 14 | 2 | 5530 | 12 | 80  | 1909 |      | 9.206897  |
| 15 | 2 | 5530 | 12 | 80  | 1327 |      | 9.34106   |
| 16 | 1 | 5530 | 12 | 100 |      |      | 10.217696 |
| 17 | 2 | 5530 | 12 | 50  | 1742 |      | 10.689219 |
| 18 | 3 | 5530 | 12 | 50  | 1346 | 1421 | 11.982136 |

## USA Bin 5 Trial #20

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5530               | 8              | 80         | 1360                           | 1222                           | 0.608681           |
| 2       | 3      | 5530               | 8              | 75         | 1734                           | 1716                           | 0.812699           |
| 3       | 2      | 5530               | 8              | 80         | 1498                           |                                | 1.479088           |
| 4       | 1      | 5530               | 8              | 50         |                                |                                | 2.455144           |
| 5       | 2      | 5530               | 8              | 95         | 1321                           |                                | 3.20538            |
| 6       | 2      | 5530               | 8              | 55         | 1080                           |                                | 3.721733           |
| 7       | 3      | 5530               | 8              | 70         | 1447                           | 1128                           | 4.209103           |
| 8       | 3      | 5530               | 8              | 100        | 1554                           | 1063                           | 5.21536            |
| 9       | 2      | 5530               | 8              | 65         | 1730                           |                                | 5.563183           |
| 10      | 3      | 5530               | 8              | 95         | 1600                           | 1682                           | 6.463417           |
| 11      | 2      | 5530               | 8              | 75         | 1910                           |                                | 6.954338           |
| 12      | 2      | 5530               | 8              | 55         | 1266                           |                                | 7.953975           |
| 13      | 3      | 5530               | 8              | 55         | 1861                           | 1180                           | 8.187086           |
| 14      | 3      | 5530               | 8              | 65         | 1644                           | 1198                           | 9.050742           |
| 15      | 3      | 5530               | 8              | 70         | 1389                           | 1819                           | 9.860159           |
| 16      | 2      | 5530               | 8              | 55         | 1487                           |                                | 10.09796           |
| 17      | 3      | 5530               | 8              | 95         | 1958                           | 1518                           | 11.328036          |
| 18      | 3      | 5530               | 8              | 85         | 1196                           | 1600                           | 11.831925          |

## USA Bin 5 Trial #21

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5565.2             | 7              | 50         |                                |                                | 0.679073           |
| 2       | 3      | 5565.2             | 7              | 80         | 1584                           | 1404                           | 1.973924           |
| 3       | 2      | 5565.2             | 7              | 95         | 1532                           |                                | 2.437711           |



|    |   |        |   |     |      |      |           |
|----|---|--------|---|-----|------|------|-----------|
| 4  | 1 | 5565.2 | 7 | 100 |      |      | 3.392099  |
| 5  | 3 | 5565.2 | 7 | 100 | 1104 | 1304 | 4.261015  |
| 6  | 1 | 5565.2 | 7 | 60  |      |      | 5.312615  |
| 7  | 2 | 5565.2 | 7 | 95  | 1957 |      | 6.459145  |
| 8  | 2 | 5565.2 | 7 | 85  | 1001 |      | 7.328338  |
| 9  | 3 | 5565.2 | 7 | 60  | 1563 | 1341 | 8.953572  |
| 10 | 1 | 5565.2 | 7 | 50  |      |      | 9.476564  |
| 11 | 1 | 5565.2 | 7 | 95  |      |      | 10.892149 |
| 12 | 3 | 5565.2 | 7 | 55  | 1191 | 1549 | 11.451423 |

USA Bin 5 Trial #22

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5566            | 5           | 80      | 1705                     |                          | 0.183496        |
| 2       | 3      | 5566            | 5           | 90      | 1692                     | 1615                     | 1.122393        |
| 3       | 1      | 5566            | 5           | 50      |                          |                          | 1.492442        |
| 4       | 2      | 5566            | 5           | 60      | 1777                     |                          | 2.68414         |
| 5       | 1      | 5566            | 5           | 55      |                          |                          | 3.309421        |
| 6       | 2      | 5566            | 5           | 50      | 1367                     |                          | 4.209222        |
| 7       | 2      | 5566            | 5           | 100     | 1722                     |                          | 4.772804        |
| 8       | 2      | 5566            | 5           | 90      | 1009                     |                          | 5.068801        |
| 9       | 1      | 5566            | 5           | 80      |                          |                          | 5.673724        |
| 10      | 3      | 5566            | 5           | 95      | 1233                     | 1141                     | 6.997207        |
| 11      | 3      | 5566            | 5           | 70      | 1758                     | 1496                     | 7.315678        |
| 12      | 1      | 5566            | 5           | 95      |                          |                          | 7.906878        |
| 13      | 3      | 5566            | 5           | 50      | 1595                     | 1221                     | 8.59491         |
| 14      | 1      | 5566            | 5           | 70      |                          |                          | 9.452141        |
| 15      | 1      | 5566            | 5           | 95      |                          |                          | 10.163447       |
| 16      | 3      | 5566            | 5           | 55      | 1307                     | 1731                     | 10.984479       |
| 17      | 3      | 5566            | 5           | 85      | 1820                     | 1450                     | 11.509443       |

USA Bin 5 Trial #23

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5564            | 10          | 85      | 1735                     |                          | 1.414471        |
| 2       | 2      | 5564            | 10          | 100     | 1402                     |                          | 2.966476        |
| 3       | 1      | 5564            | 10          | 60      |                          |                          | 3.212789        |
| 4       | 1      | 5564            | 10          | 90      |                          |                          | 5.99083         |
| 5       | 3      | 5564            | 10          | 90      | 1044                     | 1004                     | 6.910299        |
| 6       | 2      | 5564            | 10          | 65      | 1109                     |                          | 8.294011        |
| 7       | 3      | 5564            | 10          | 90      | 1109                     | 1290                     | 9.662517        |
| 8       | 3      | 5564            | 10          | 50      | 1548                     | 1776                     | 11.419174       |

USA Bin 5 Trial #24



| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5566            | 5           | 85      | 1164                     |                          | 0.151262        |
| 2       | 1      | 5566            | 5           | 70      |                          |                          | 0.952409        |
| 3       | 3      | 5566            | 5           | 80      | 1273                     | 1760                     | 1.917087        |
| 4       | 1      | 5566            | 5           | 60      |                          |                          | 2.803012        |
| 5       | 1      | 5566            | 5           | 90      |                          |                          | 3.321441        |
| 6       | 3      | 5566            | 5           | 65      | 1279                     | 1009                     | 4.312165        |
| 7       | 3      | 5566            | 5           | 55      | 1208                     | 1927                     | 4.952042        |
| 8       | 2      | 5566            | 5           | 60      | 1984                     |                          | 5.837049        |
| 9       | 1      | 5566            | 5           | 50      |                          |                          | 6.462869        |
| 10      | 1      | 5566            | 5           | 65      |                          |                          | 7.254119        |
| 11      | 1      | 5566            | 5           | 50      |                          |                          | 7.534795        |
| 12      | 1      | 5566            | 5           | 50      |                          |                          | 8.334314        |
| 13      | 1      | 5566            | 5           | 55      |                          |                          | 9.001518        |
| 14      | 1      | 5566            | 5           | 85      |                          |                          | 10.385916       |
| 15      | 2      | 5566            | 5           | 80      | 1526                     |                          | 10.561033       |
| 16      | 3      | 5566            | 5           | 60      | 1925                     | 1428                     | 11.825818       |

## USA Bin 5 Trial #25

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5566            | 5           | 75      | 1404                     | 1764                     | 0.346994        |
| 2       | 3      | 5566            | 5           | 70      | 1603                     | 1134                     | 1.251135        |
| 3       | 2      | 5566            | 5           | 90      | 1392                     |                          | 2.173655        |
| 4       | 3      | 5566            | 5           | 85      | 1221                     | 1979                     | 2.340208        |
| 5       | 2      | 5566            | 5           | 50      | 1216                     |                          | 3.460496        |
| 6       | 3      | 5566            | 5           | 65      | 1826                     | 1880                     | 4.381286        |
| 7       | 2      | 5566            | 5           | 50      | 1058                     |                          | 4.953114        |
| 8       | 1      | 5566            | 5           | 70      |                          |                          | 5.979338        |
| 9       | 3      | 5566            | 5           | 70      | 1022                     | 1700                     | 6.459744        |
| 10      | 3      | 5566            | 5           | 55      | 2000                     | 1623                     | 7.479207        |
| 11      | 2      | 5566            | 5           | 70      | 1295                     |                          | 7.844014        |
| 12      | 2      | 5566            | 5           | 50      | 1021                     |                          | 8.525398        |
| 13      | 3      | 5566            | 5           | 60      | 1186                     | 1264                     | 9.093213        |
| 14      | 3      | 5566            | 5           | 60      | 1326                     | 1100                     | 10.262273       |
| 15      | 1      | 5566            | 5           | 70      |                          |                          | 10.948792       |
| 16      | 2      | 5566            | 5           | 90      | 1887                     |                          | 11.585856       |

## USA Bin 5 Trial #26

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5562            | 15          | 75      | 1444                     |                          | 0.883371        |



|    |   |      |    |    |      |      |           |
|----|---|------|----|----|------|------|-----------|
| 2  | 1 | 5562 | 15 | 85 |      |      | 2.129818  |
| 3  | 1 | 5562 | 15 | 85 |      |      | 3.082508  |
| 4  | 2 | 5562 | 15 | 50 | 1754 |      | 3.677531  |
| 5  | 3 | 5562 | 15 | 80 | 1430 | 1747 | 5.305425  |
| 6  | 1 | 5562 | 15 | 85 |      |      | 6.251886  |
| 7  | 1 | 5562 | 15 | 60 |      |      | 7.656504  |
| 8  | 3 | 5562 | 15 | 65 | 1485 | 1814 | 9.373857  |
| 9  | 3 | 5562 | 15 | 80 | 1627 | 1849 | 10.407758 |
| 10 | 3 | 5562 | 15 | 50 | 1203 | 1633 | 11.020261 |

USA Bin 5 Trial #27

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5561.2          | 17          | 55      | 1522                     | 1131                     | 0.290263        |
| 2       | 3      | 5561.2          | 17          | 100     | 1049                     | 1795                     | 1.148273        |
| 3       | 2      | 5561.2          | 17          | 55      | 1957                     |                          | 1.366124        |
| 4       | 3      | 5561.2          | 17          | 80      | 1814                     | 1346                     | 2.368735        |
| 5       | 3      | 5561.2          | 17          | 50      | 1523                     | 1522                     | 2.860474        |
| 6       | 1      | 5561.2          | 17          | 70      |                          |                          | 3.427392        |
| 7       | 1      | 5561.2          | 17          | 75      |                          |                          | 4.060091        |
| 8       | 1      | 5561.2          | 17          | 80      |                          |                          | 4.473898        |
| 9       | 2      | 5561.2          | 17          | 65      | 1422                     |                          | 5.173452        |
| 10      | 2      | 5561.2          | 17          | 80      | 1798                     |                          | 5.435882        |
| 11      | 1      | 5561.2          | 17          | 65      |                          |                          | 6.285691        |
| 12      | 3      | 5561.2          | 17          | 90      | 1716                     | 1816                     | 6.651371        |
| 13      | 1      | 5561.2          | 17          | 60      |                          |                          | 7.536875        |
| 14      | 2      | 5561.2          | 17          | 50      | 1037                     |                          | 7.958272        |
| 15      | 1      | 5561.2          | 17          | 85      |                          |                          | 8.681199        |
| 16      | 1      | 5561.2          | 17          | 95      |                          |                          | 9.587114        |
| 17      | 1      | 5561.2          | 17          | 85      |                          |                          | 9.968312        |
| 18      | 2      | 5561.2          | 17          | 55      | 1438                     |                          | 10.598405       |
| 19      | 1      | 5561.2          | 17          | 90      |                          |                          | 11.307069       |
| 20      | 3      | 5561.2          | 17          | 90      | 1820                     | 1509                     | 11.420662       |

USA Bin 5 Trial #28

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5566            | 5           | 60      | 1752                     | 1573                     | 0.310775        |
| 2       | 2      | 5566            | 5           | 55      | 1010                     |                          | 1.528258        |
| 3       | 2      | 5566            | 5           | 60      | 1128                     |                          | 1.900669        |
| 4       | 3      | 5566            | 5           | 60      | 1780                     | 1150                     | 2.953629        |
| 5       | 2      | 5566            | 5           | 50      | 1352                     |                          | 4.491875        |
| 6       | 1      | 5566            | 5           | 95      |                          |                          | 5.0003          |
| 7       | 3      | 5566            | 5           | 75      | 1948                     | 1418                     | 6.371117        |



|    |   |      |   |     |      |      |           |
|----|---|------|---|-----|------|------|-----------|
| 8  | 1 | 5566 | 5 | 55  |      |      | 6.688416  |
| 9  | 3 | 5566 | 5 | 85  | 1627 | 1411 | 7.860761  |
| 10 | 3 | 5566 | 5 | 90  | 1665 | 1741 | 8.66725   |
| 11 | 3 | 5566 | 5 | 80  | 1320 | 1712 | 10.048806 |
| 12 | 1 | 5566 | 5 | 95  |      |      | 10.347872 |
| 13 | 2 | 5566 | 5 | 100 | 1662 |      | 11.137991 |

USA Bin 5 Trial #29

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5564               | 10             | 100        |                                |                                | 0.906037           |
| 2       | 3      | 5564               | 10             | 50         | 1542                           | 1728                           | 1.042445           |
| 3       | 2      | 5564               | 10             | 55         | 1978                           |                                | 2.059501           |
| 4       | 1      | 5564               | 10             | 85         |                                |                                | 3.215973           |
| 5       | 3      | 5564               | 10             | 85         | 1348                           | 1060                           | 4.214969           |
| 6       | 2      | 5564               | 10             | 80         | 1887                           |                                | 5.010387           |
| 7       | 3      | 5564               | 10             | 90         | 1222                           | 1649                           | 6.852273           |
| 8       | 2      | 5564               | 10             | 75         | 1354                           |                                | 7.873133           |
| 9       | 1      | 5564               | 10             | 75         |                                |                                | 8.203507           |
| 10      | 2      | 5564               | 10             | 70         | 1784                           |                                | 9.051572           |
| 11      | 3      | 5564               | 10             | 95         | 1619                           | 1112                           | 10.63189           |
| 12      | 1      | 5564               | 10             | 70         |                                |                                | 11.872145          |

USA Bin 5 Trial #30

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5564.8             | 8              | 100        | 1967                           |                                | 1.258259           |
| 2       | 3      | 5564.8             | 8              | 70         | 1598                           | 1420                           | 2.316637           |
| 3       | 3      | 5564.8             | 8              | 65         | 1689                           | 1786                           | 3.620011           |
| 4       | 1      | 5564.8             | 8              | 50         |                                |                                | 4.653861           |
| 5       | 1      | 5564.8             | 8              | 50         |                                |                                | 5.916168           |
| 6       | 2      | 5564.8             | 8              | 100        | 1163                           |                                | 7.719079           |
| 7       | 3      | 5564.8             | 8              | 95         | 1501                           | 1349                           | 8.902315           |
| 8       | 3      | 5564.8             | 8              | 55         | 1749                           | 1993                           | 10.268083          |
| 9       | 1      | 5564.8             | 8              | 75         |                                |                                | 11.524606          |

## USA Frequency Hopping Trial #1

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5553          | 15                  |
| 7     | 5509          | 21                  |
| 10    | 5533          | 30                  |
| 12    | 5506          | 36                  |
| 15    | 5521          | 45                  |
| 20    | 5555          | 60                  |
| 27    | 5545          | 81                  |
| 32    | 5547          | 96                  |
| 43    | 5520          | 129                 |
| 58    | 5526          | 174                 |
| 64    | 5563          | 192                 |
| 65    | 5496          | 195                 |
| 72    | 5556          | 216                 |
| 76    | 5531          | 228                 |
| 79    | 5500          | 237                 |
| 85    | 5552          | 255                 |
| 87    | 5492          | 261                 |
| 97    | 5566          | 291                 |

## USA Frequency Hopping Trial #2

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 7     | 5506          | 21                  |
| 15    | 5531          | 45                  |
| 20    | 5529          | 60                  |
| 41    | 5509          | 123                 |
| 44    | 5548          | 132                 |
| 47    | 5544          | 141                 |
| 53    | 5501          | 159                 |
| 55    | 5504          | 165                 |
| 62    | 5525          | 186                 |
| 67    | 5517          | 201                 |
| 68    | 5547          | 204                 |
| 79    | 5542          | 237                 |
| 85    | 5510          | 255                 |
| 96    | 5564          | 288                 |
| 97    | 5567          | 291                 |

## USA Frequency Hopping Trial #3

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 10    | 5500          | 30                  |
| 23    | 5519          | 69                  |

|    |      |     |
|----|------|-----|
| 41 | 5568 | 123 |
| 49 | 5518 | 147 |
| 50 | 5535 | 150 |
| 72 | 5505 | 216 |
| 73 | 5553 | 219 |
| 86 | 5503 | 258 |
| 91 | 5526 | 273 |
| 92 | 5508 | 276 |
| 98 | 5524 | 294 |

**USA Frequency Hopping Trial #4**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 11    | 5547          | 33                  |
| 14    | 5494          | 42                  |
| 17    | 5517          | 51                  |
| 19    | 5493          | 57                  |
| 23    | 5556          | 69                  |
| 36    | 5538          | 108                 |
| 51    | 5534          | 153                 |
| 54    | 5558          | 162                 |
| 61    | 5548          | 183                 |
| 64    | 5502          | 192                 |
| 66    | 5529          | 198                 |
| 68    | 5564          | 204                 |
| 75    | 5508          | 225                 |
| 76    | 5522          | 228                 |
| 78    | 5510          | 234                 |
| 81    | 5533          | 243                 |
| 94    | 5532          | 282                 |

**USA Frequency Hopping Trial #5**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5492          | 6                   |
| 6     | 5550          | 18                  |
| 15    | 5562          | 45                  |
| 18    | 5518          | 54                  |
| 21    | 5531          | 63                  |
| 23    | 5566          | 69                  |
| 24    | 5541          | 72                  |
| 32    | 5506          | 96                  |
| 33    | 5513          | 99                  |
| 38    | 5536          | 114                 |
| 42    | 5523          | 126                 |
| 43    | 5509          | 129                 |

|    |      |     |
|----|------|-----|
| 49 | 5547 | 147 |
| 50 | 5528 | 150 |
| 52 | 5564 | 156 |
| 59 | 5521 | 177 |
| 62 | 5535 | 186 |
| 70 | 5555 | 210 |
| 84 | 5538 | 252 |
| 95 | 5534 | 285 |
| 98 | 5567 | 294 |

## USA Frequency Hopping Trial #6

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5558          | 3                   |
| 2     | 5512          | 6                   |
| 6     | 5527          | 18                  |
| 8     | 5518          | 24                  |
| 10    | 5530          | 30                  |
| 37    | 5539          | 111                 |
| 38    | 5568          | 114                 |
| 43    | 5564          | 129                 |
| 44    | 5566          | 132                 |
| 51    | 5511          | 153                 |
| 55    | 5495          | 165                 |
| 62    | 5531          | 186                 |
| 67    | 5556          | 201                 |
| 68    | 5514          | 204                 |
| 69    | 5493          | 207                 |
| 75    | 5529          | 225                 |
| 79    | 5500          | 237                 |
| 84    | 5494          | 252                 |
| 85    | 5565          | 255                 |
| 86    | 5525          | 258                 |
| 88    | 5549          | 264                 |
| 91    | 5496          | 273                 |
| 93    | 5498          | 279                 |

## USA Frequency Hopping Trial #7

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5546          | 0                   |
| 5     | 5518          | 15                  |
| 8     | 5555          | 24                  |
| 25    | 5516          | 75                  |
| 26    | 5568          | 78                  |
| 37    | 5495          | 111                 |

|    |      |     |
|----|------|-----|
| 46 | 5502 | 138 |
| 54 | 5536 | 162 |
| 64 | 5552 | 192 |
| 74 | 5496 | 222 |
| 81 | 5510 | 243 |
| 84 | 5540 | 252 |
| 85 | 5529 | 255 |
| 87 | 5557 | 261 |

## USA Frequency Hopping Trial #8

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 6     | 5553          | 18                  |
| 7     | 5564          | 21                  |
| 13    | 5560          | 39                  |
| 18    | 5555          | 54                  |
| 25    | 5525          | 75                  |
| 30    | 5558          | 90                  |
| 40    | 5505          | 120                 |
| 48    | 5530          | 144                 |
| 53    | 5517          | 159                 |
| 60    | 5516          | 180                 |
| 69    | 5550          | 207                 |
| 78    | 5512          | 234                 |
| 81    | 5526          | 243                 |
| 92    | 5533          | 276                 |

## USA Frequency Hopping Trial #9

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 3     | 5512          | 9                   |
| 6     | 5554          | 18                  |
| 14    | 5519          | 42                  |
| 15    | 5500          | 45                  |
| 16    | 5497          | 48                  |
| 18    | 5529          | 54                  |
| 22    | 5553          | 66                  |
| 25    | 5549          | 75                  |
| 29    | 5518          | 87                  |
| 47    | 5561          | 141                 |
| 50    | 5568          | 150                 |
| 54    | 5505          | 162                 |
| 58    | 5551          | 174                 |
| 60    | 5517          | 180                 |
| 73    | 5534          | 219                 |
| 90    | 5536          | 270                 |

## USA Frequency Hopping Trial #10

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5538          | 0                   |
| 1     | 5555          | 3                   |
| 3     | 5524          | 9                   |
| 5     | 5512          | 15                  |
| 6     | 5559          | 18                  |
| 17    | 5528          | 51                  |
| 19    | 5545          | 57                  |
| 26    | 5562          | 78                  |
| 33    | 5560          | 99                  |
| 40    | 5497          | 120                 |
| 41    | 5568          | 123                 |
| 61    | 5533          | 183                 |
| 62    | 5544          | 186                 |
| 70    | 5503          | 210                 |
| 77    | 5543          | 231                 |
| 83    | 5546          | 249                 |
| 96    | 5507          | 288                 |

## USA Frequency Hopping Trial #11

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5508          | 6                   |
| 13    | 5510          | 39                  |
| 17    | 5507          | 51                  |
| 23    | 5553          | 69                  |
| 35    | 5512          | 105                 |
| 47    | 5523          | 141                 |
| 51    | 5500          | 153                 |
| 52    | 5514          | 156                 |
| 53    | 5497          | 159                 |
| 58    | 5527          | 174                 |
| 70    | 5528          | 210                 |
| 82    | 5555          | 246                 |
| 83    | 5549          | 249                 |
| 89    | 5541          | 267                 |
| 92    | 5506          | 276                 |
| 94    | 5536          | 282                 |
| 98    | 5552          | 294                 |

## USA Frequency Hopping Trial #12

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 13    | 5506          | 39                  |

|    |      |     |
|----|------|-----|
| 15 | 5538 | 45  |
| 22 | 5551 | 66  |
| 24 | 5497 | 72  |
| 26 | 5566 | 78  |
| 31 | 5553 | 93  |
| 33 | 5516 | 99  |
| 37 | 5534 | 111 |
| 51 | 5556 | 153 |
| 62 | 5564 | 186 |
| 77 | 5509 | 231 |
| 87 | 5535 | 261 |
| 90 | 5494 | 270 |
| 92 | 5554 | 276 |

**USA Frequency Hopping Trial #13**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 11    | 5508          | 33                  |
| 14    | 5558          | 42                  |
| 36    | 5523          | 108                 |
| 41    | 5564          | 123                 |
| 60    | 5557          | 180                 |
| 81    | 5567          | 243                 |
| 84    | 5551          | 252                 |
| 88    | 5504          | 264                 |
| 95    | 5533          | 285                 |

**USA Frequency Hopping Trial #14**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5528          | 3                   |
| 3     | 5516          | 9                   |
| 7     | 5553          | 21                  |
| 9     | 5559          | 27                  |
| 24    | 5512          | 72                  |
| 27    | 5525          | 81                  |
| 30    | 5544          | 90                  |
| 35    | 5506          | 105                 |
| 36    | 5497          | 108                 |
| 37    | 5495          | 111                 |
| 48    | 5545          | 144                 |
| 50    | 5535          | 150                 |
| 71    | 5504          | 213                 |
| 83    | 5543          | 249                 |
| 84    | 5500          | 252                 |
| 85    | 5519          | 255                 |

|                                 |       |             |
|---------------------------------|-------|-------------|
| 93                              | 5521  | 279         |
| USA Frequency Hopping Trial #15 |       |             |
|                                 | Freq  | Pulse Start |
| Hop #                           | (GHz) | (mS)        |
| 2                               | 5536  | 6           |
| 10                              | 5509  | 30          |
| 21                              | 5496  | 63          |
| 27                              | 5510  | 81          |
| 33                              | 5546  | 99          |
| 34                              | 5544  | 102         |
| 35                              | 5503  | 105         |
| 45                              | 5548  | 135         |
| 52                              | 5560  | 156         |
| 59                              | 5506  | 177         |
| 66                              | 5518  | 198         |
| 67                              | 5505  | 201         |
| 72                              | 5550  | 216         |
| 75                              | 5515  | 225         |
| 78                              | 5547  | 234         |
| 92                              | 5549  | 276         |
| 95                              | 5563  | 285         |

|                                 |       |             |
|---------------------------------|-------|-------------|
| USA Frequency Hopping Trial #16 |       |             |
|                                 | Freq  | Pulse Start |
| Hop #                           | (GHz) | (mS)        |
| 3                               | 5518  | 9           |
| 5                               | 5566  | 15          |
| 7                               | 5522  | 21          |
| 11                              | 5540  | 33          |
| 12                              | 5512  | 36          |
| 14                              | 5505  | 42          |
| 24                              | 5494  | 72          |
| 35                              | 5513  | 105         |
| 45                              | 5493  | 135         |
| 62                              | 5501  | 186         |
| 65                              | 5544  | 195         |
| 85                              | 5562  | 255         |

|                                 |       |             |
|---------------------------------|-------|-------------|
| USA Frequency Hopping Trial #17 |       |             |
|                                 | Freq  | Pulse Start |
| Hop #                           | (GHz) | (mS)        |
| 2                               | 5531  | 6           |
| 13                              | 5544  | 39          |
| 20                              | 5546  | 60          |
| 40                              | 5567  | 120         |
| 45                              | 5561  | 135         |

|    |      |     |
|----|------|-----|
| 46 | 5527 | 138 |
| 47 | 5559 | 141 |
| 55 | 5537 | 165 |
| 56 | 5541 | 168 |
| 59 | 5509 | 177 |
| 62 | 5517 | 186 |
| 72 | 5510 | 216 |
| 76 | 5535 | 228 |
| 83 | 5524 | 249 |
| 85 | 5512 | 255 |
| 99 | 5525 | 297 |

**USA Frequency Hopping Trial #18**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5563          | 6                   |
| 8     | 5521          | 24                  |
| 9     | 5502          | 27                  |
| 17    | 5511          | 51                  |
| 18    | 5515          | 54                  |
| 37    | 5545          | 111                 |
| 38    | 5493          | 114                 |
| 45    | 5513          | 135                 |
| 47    | 5495          | 141                 |
| 50    | 5501          | 150                 |
| 57    | 5557          | 171                 |
| 62    | 5554          | 186                 |
| 68    | 5544          | 204                 |
| 71    | 5533          | 213                 |
| 74    | 5494          | 222                 |
| 75    | 5504          | 225                 |
| 78    | 5519          | 234                 |
| 80    | 5527          | 240                 |
| 83    | 5564          | 249                 |
| 87    | 5548          | 261                 |
| 91    | 5516          | 273                 |

**USA Frequency Hopping Trial #19**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5523          | 6                   |
| 8     | 5556          | 24                  |
| 10    | 5494          | 30                  |
| 12    | 5528          | 36                  |
| 13    | 5541          | 39                  |
| 16    | 5555          | 48                  |

|    |      |     |
|----|------|-----|
| 19 | 5537 | 57  |
| 23 | 5522 | 69  |
| 35 | 5533 | 105 |
| 61 | 5496 | 183 |
| 65 | 5498 | 195 |
| 67 | 5558 | 201 |
| 68 | 5550 | 204 |
| 78 | 5493 | 234 |
| 87 | 5564 | 261 |
| 89 | 5562 | 267 |
| 90 | 5559 | 270 |

**USA Frequency Hopping Trial #20**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5563          | 0                   |
| 2     | 5545          | 6                   |
| 33    | 5525          | 99                  |
| 46    | 5500          | 138                 |
| 48    | 5524          | 144                 |
| 49    | 5522          | 147                 |
| 53    | 5493          | 159                 |
| 65    | 5537          | 195                 |
| 66    | 5544          | 198                 |
| 73    | 5535          | 219                 |
| 79    | 5536          | 237                 |
| 84    | 5554          | 252                 |
| 85    | 5538          | 255                 |
| 90    | 5503          | 270                 |
| 96    | 5492          | 288                 |

**USA Frequency Hopping Trial #21**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5559          | 3                   |
| 21    | 5546          | 63                  |
| 25    | 5558          | 75                  |
| 29    | 5553          | 87                  |
| 30    | 5504          | 90                  |
| 39    | 5538          | 117                 |
| 43    | 5567          | 129                 |
| 44    | 5557          | 132                 |
| 46    | 5496          | 138                 |
| 67    | 5566          | 201                 |
| 71    | 5531          | 213                 |
| 82    | 5555          | 246                 |

|    |      |     |
|----|------|-----|
| 84 | 5522 | 252 |
| 85 | 5523 | 255 |
| 86 | 5515 | 258 |
| 94 | 5513 | 282 |

## USA Frequency Hopping Trial #22

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5531          | 12                  |
| 10    | 5499          | 30                  |
| 14    | 5554          | 42                  |
| 16    | 5564          | 48                  |
| 20    | 5500          | 60                  |
| 21    | 5511          | 63                  |
| 27    | 5541          | 81                  |
| 35    | 5521          | 105                 |
| 40    | 5515          | 120                 |
| 44    | 5543          | 132                 |
| 54    | 5512          | 162                 |
| 67    | 5501          | 201                 |
| 73    | 5494          | 219                 |
| 82    | 5565          | 246                 |
| 96    | 5518          | 288                 |
| 97    | 5522          | 291                 |

## USA Frequency Hopping Trial #23

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5496          | 0                   |
| 6     | 5553          | 18                  |
| 10    | 5550          | 30                  |
| 17    | 5511          | 51                  |
| 22    | 5514          | 66                  |
| 23    | 5530          | 69                  |
| 29    | 5519          | 87                  |
| 30    | 5498          | 90                  |
| 56    | 5539          | 168                 |
| 61    | 5515          | 183                 |
| 75    | 5560          | 225                 |
| 77    | 5547          | 231                 |
| 78    | 5568          | 234                 |
| 83    | 5536          | 249                 |
| 90    | 5540          | 270                 |
| 91    | 5513          | 273                 |
| 95    | 5518          | 285                 |
| 96    | 5507          | 288                 |

## USA Frequency Hopping Trial #24

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5550          | 0                   |
| 5     | 5503          | 15                  |
| 11    | 5534          | 33                  |
| 31    | 5496          | 93                  |
| 34    | 5563          | 102                 |
| 39    | 5511          | 117                 |
| 49    | 5552          | 147                 |
| 53    | 5531          | 159                 |
| 55    | 5509          | 165                 |
| 57    | 5566          | 171                 |
| 59    | 5508          | 177                 |
| 61    | 5541          | 183                 |
| 74    | 5561          | 222                 |
| 84    | 5519          | 252                 |
| 97    | 5513          | 291                 |
| 98    | 5559          | 294                 |

## USA Frequency Hopping Trial #25

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 3     | 5534          | 9                   |
| 12    | 5558          | 36                  |
| 16    | 5513          | 48                  |
| 31    | 5518          | 93                  |
| 37    | 5544          | 111                 |
| 41    | 5540          | 123                 |
| 49    | 5497          | 147                 |
| 53    | 5530          | 159                 |
| 62    | 5563          | 186                 |
| 69    | 5545          | 207                 |
| 78    | 5557          | 234                 |
| 79    | 5522          | 237                 |
| 83    | 5551          | 249                 |
| 84    | 5524          | 252                 |
| 85    | 5543          | 255                 |
| 87    | 5525          | 261                 |
| 88    | 5547          | 264                 |
| 93    | 5507          | 279                 |
| 96    | 5561          | 288                 |
| 98    | 5523          | 294                 |

## USA Frequency Hopping Trial #26

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 33    | 5492          | 99                  |
| 36    | 5497          | 108                 |
| 39    | 5555          | 117                 |
| 45    | 5520          | 135                 |
| 53    | 5562          | 159                 |
| 59    | 5542          | 177                 |
| 67    | 5540          | 201                 |
| 70    | 5503          | 210                 |
| 74    | 5543          | 222                 |
| 77    | 5500          | 231                 |
| 88    | 5513          | 264                 |
| 89    | 5544          | 267                 |
| 91    | 5524          | 273                 |
| 94    | 5545          | 282                 |
| 98    | 5514          | 294                 |

## USA Frequency Hopping Trial #27

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5537          | 12                  |
| 5     | 5502          | 15                  |
| 6     | 5545          | 18                  |
| 9     | 5556          | 27                  |
| 20    | 5493          | 60                  |
| 25    | 5497          | 75                  |
| 26    | 5522          | 78                  |
| 28    | 5528          | 84                  |
| 31    | 5548          | 93                  |
| 35    | 5511          | 105                 |
| 44    | 5527          | 132                 |
| 47    | 5507          | 141                 |
| 81    | 5560          | 243                 |
| 92    | 5559          | 276                 |

## USA Frequency Hopping Trial #28

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5557          | 3                   |
| 4     | 5564          | 12                  |
| 5     | 5504          | 15                  |
| 8     | 5494          | 24                  |
| 18    | 5518          | 54                  |
| 45    | 5517          | 135                 |
| 51    | 5537          | 153                 |

|    |      |     |
|----|------|-----|
| 58 | 5565 | 174 |
| 61 | 5554 | 183 |
| 67 | 5550 | 201 |
| 69 | 5549 | 207 |
| 77 | 5558 | 231 |
| 83 | 5546 | 249 |
| 92 | 5539 | 276 |
| 97 | 5527 | 291 |

## USA Frequency Hopping Trial #29

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 3     | 5564          | 9                   |
| 5     | 5529          | 15                  |
| 9     | 5517          | 27                  |
| 11    | 5513          | 33                  |
| 12    | 5540          | 36                  |
| 15    | 5541          | 45                  |
| 20    | 5535          | 60                  |
| 34    | 5563          | 102                 |
| 35    | 5493          | 105                 |
| 38    | 5528          | 114                 |
| 46    | 5510          | 138                 |
| 47    | 5543          | 141                 |
| 49    | 5556          | 147                 |
| 60    | 5534          | 180                 |
| 61    | 5526          | 183                 |
| 63    | 5525          | 189                 |
| 66    | 5561          | 198                 |
| 71    | 5499          | 213                 |
| 74    | 5536          | 222                 |
| 78    | 5557          | 234                 |
| 84    | 5560          | 252                 |
| 90    | 5552          | 270                 |
| 93    | 5512          | 279                 |

## USA Frequency Hopping Trial #30

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 15    | 5533          | 45                  |
| 20    | 5551          | 60                  |
| 27    | 5524          | 81                  |
| 30    | 5515          | 90                  |
| 31    | 5539          | 93                  |
| 35    | 5492          | 105                 |
| 40    | 5544          | 120                 |



|    |      |     |
|----|------|-----|
| 47 | 5493 | 141 |
| 57 | 5532 | 171 |
| 64 | 5550 | 192 |
| 69 | 5554 | 207 |
| 72 | 5546 | 216 |
| 75 | 5538 | 225 |
| 79 | 5500 | 237 |
| 82 | 5542 | 246 |
| 83 | 5540 | 249 |
| 89 | 5531 | 267 |

**Channel 5570 MHz, 160MHz BW, Statistical Performance (upper section of 80+80)****USA Bin 1A/1B**

freq=5610, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5570      | 65     | 1       | 818      | 1                                | 100.0%                  | 60.0% |
| 2     | 5570      | 57     | 1       | 938      | 1                                |                         |       |
| 3     | 5576      | 83     | 1       | 638      | 1                                |                         |       |
| 4     | 5576      | 78     | 1       | 678      | 1                                |                         |       |
| 5     | 5582      | 68     | 1       | 778      | 1                                |                         |       |
| 6     | 5582      | 86     | 1       | 618      | 1                                |                         |       |
| 7     | 5588      | 102    | 1       | 518      | 1                                |                         |       |
| 8     | 5588      | 58     | 1       | 918      | 1                                |                         |       |
| 9     | 5594      | 102    | 1       | 518      | 1                                |                         |       |
| 10    | 5594      | 61     | 1       | 878      | 1                                |                         |       |
| 11    | 5600      | 67     | 1       | 798      | 1                                |                         |       |
| 12    | 5600      | 102    | 1       | 518      | 1                                |                         |       |
| 13    | 5606      | 67     | 1       | 798      | 1                                |                         |       |
| 14    | 5606      | 59     | 1       | 898      | 1                                |                         |       |
| 15    | 5610      | 18     | 1       | 3066     | 1                                |                         |       |
| 16    | 5610      | 62     | 1       | 852      | 1                                |                         |       |
| 17    | 5614      | 19     | 1       | 2874     | 1                                |                         |       |
| 18    | 5614      | 50     | 1       | 1077     | 1                                |                         |       |
| 19    | 5620      | 43     | 1       | 1240     | 1                                |                         |       |
| 20    | 5620      | 19     | 1       | 2896     | 1                                |                         |       |
| 21    | 5626      | 25     | 1       | 2114     | 1                                |                         |       |
| 22    | 5626      | 32     | 1       | 1676     | 1                                |                         |       |
| 23    | 5632      | 21     | 1       | 2620     | 1                                |                         |       |
| 24    | 5632      | 29     | 1       | 1853     | 1                                |                         |       |
| 25    | 5638      | 45     | 1       | 1188     | 1                                |                         |       |
| 26    | 5638      | 72     | 1       | 737      | 1                                |                         |       |
| 27    | 5644      | 81     | 1       | 659      | 1                                |                         |       |
| 28    | 5644      | 19     | 1       | 2848     | 1                                |                         |       |
| 29    | 5650      | 52     | 1       | 1032     | 1                                |                         |       |
| 30    | 5650      | 31     | 1       | 1711     | 1                                |                         |       |

**USA Bin 1A/1B**

freq=5610, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5570      | 95     | 1       | 558      | 1                                | 100.0%                  | 60.0% |
| 2     | 5570      | 74     | 1       | 718      | 1                                |                         |       |
| 3     | 5576      | 102    | 1       | 518      | 1                                |                         |       |
| 4     | 5576      | 99     | 1       | 538      | 1                                |                         |       |
| 5     | 5582      | 58     | 1       | 918      | 1                                |                         |       |
| 6     | 5582      | 99     | 1       | 538      | 1                                |                         |       |
| 7     | 5588      | 95     | 1       | 558      | 1                                |                         |       |
| 8     | 5588      | 62     | 1       | 858      | 1                                |                         |       |
| 9     | 5594      | 72     | 1       | 738      | 1                                |                         |       |
| 10    | 5594      | 72     | 1       | 738      | 1                                |                         |       |
| 11    | 5600      | 63     | 1       | 838      | 1                                |                         |       |
| 12    | 5600      | 102    | 1       | 518      | 1                                |                         |       |
| 13    | 5606      | 74     | 1       | 718      | 1                                |                         |       |
| 14    | 5606      | 74     | 1       | 718      | 1                                |                         |       |
| 15    | 5610      | 68     | 1       | 778      | 1                                |                         |       |
| 16    | 5610      | 39     | 1       | 1363     | 1                                |                         |       |
| 17    | 5614      | 66     | 1       | 801      | 1                                |                         |       |
| 18    | 5614      | 25     | 1       | 2164     | 1                                |                         |       |
| 19    | 5620      | 22     | 1       | 2439     | 1                                |                         |       |
| 20    | 5620      | 18     | 1       | 3035     | 1                                |                         |       |
| 21    | 5626      | 51     | 1       | 1050     | 1                                |                         |       |
| 22    | 5626      | 21     | 1       | 2553     | 1                                |                         |       |
| 23    | 5632      | 37     | 1       | 1440     | 1                                |                         |       |
| 24    | 5632      | 30     | 1       | 1799     | 1                                |                         |       |
| 25    | 5638      | 21     | 1       | 2573     | 1                                |                         |       |
| 26    | 5638      | 34     | 1       | 1558     | 1                                |                         |       |
| 27    | 5644      | 58     | 1       | 922      | 1                                |                         |       |
| 28    | 5644      | 25     | 1       | 2113     | 1                                |                         |       |
| 29    | 5650      | 31     | 1       | 1752     | 1                                |                         |       |
| 30    | 5650      | 19     | 1       | 2787     | 1                                |                         |       |

**USA Bin****2**

freq=5610, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5570      | 26     | 3.8     | 186      | 1                                | 100.0%                  | 60.0% |
| 2     | 5570      | 26     | 3.9     | 230      | 1                                |                         |       |
| 3     | 5576      | 27     | 3.3     | 200      | 1                                |                         |       |
| 4     | 5576      | 24     | 3.4     | 223      | 1                                |                         |       |
| 5     | 5582      | 28     | 2.7     | 230      | 1                                |                         |       |
| 6     | 5582      | 23     | 2.4     | 207      | 1                                |                         |       |
| 7     | 5588      | 26     | 2.2     | 198      | 1                                |                         |       |
| 8     | 5588      | 24     | 5       | 228      | 1                                |                         |       |
| 9     | 5594      | 28     | 1.1     | 204      | 1                                |                         |       |
| 10    | 5594      | 28     | 1.6     | 188      | 1                                |                         |       |
| 11    | 5600      | 25     | 4.1     | 172      | 1                                |                         |       |
| 12    | 5600      | 29     | 2.1     | 159      | 1                                |                         |       |
| 13    | 5606      | 25     | 3.5     | 155      | 1                                |                         |       |
| 14    | 5606      | 28     | 1.9     | 172      | 1                                |                         |       |
| 15    | 5610      | 23     | 4.6     | 166      | 1                                |                         |       |
| 16    | 5610      | 29     | 2.2     | 206      | 1                                |                         |       |
| 17    | 5614      | 25     | 3.3     | 207      | 1                                |                         |       |
| 18    | 5614      | 25     | 1.5     | 227      | 1                                |                         |       |
| 19    | 5620      | 24     | 3.9     | 166      | 1                                |                         |       |
| 20    | 5620      | 23     | 2.9     | 178      | 1                                |                         |       |
| 21    | 5626      | 28     | 1.8     | 200      | 1                                |                         |       |
| 22    | 5626      | 27     | 2.3     | 196      | 1                                |                         |       |
| 23    | 5632      | 26     | 4       | 175      | 1                                |                         |       |
| 24    | 5632      | 25     | 4.3     | 227      | 1                                |                         |       |
| 25    | 5638      | 24     | 1.5     | 207      | 1                                |                         |       |
| 26    | 5638      | 28     | 2.5     | 222      | 1                                |                         |       |
| 27    | 5644      | 27     | 3.8     | 173      | 1                                |                         |       |
| 28    | 5644      | 27     | 4.3     | 177      | 1                                |                         |       |
| 29    | 5650      | 23     | 1.7     | 189      | 1                                |                         |       |
| 30    | 5650      | 24     | 2.5     | 218      | 1                                |                         |       |


**USA Bin  
3**

freq=5610, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5570      | 17     | 6       | 456      | 1                                | 100.0%                  | 60.0% |
| 2     | 5570      | 18     | 7.9     | 407      | 1                                |                         |       |
| 3     | 5576      | 16     | 7.8     | 476      | 1                                |                         |       |
| 4     | 5576      | 18     | 9.4     | 323      | 1                                |                         |       |
| 5     | 5582      | 17     | 10      | 487      | 1                                |                         |       |
| 6     | 5582      | 16     | 8.1     | 479      | 1                                |                         |       |
| 7     | 5588      | 17     | 9       | 211      | 1                                |                         |       |
| 8     | 5588      | 18     | 7.7     | 262      | 1                                |                         |       |
| 9     | 5594      | 17     | 6.1     | 337      | 1                                |                         |       |
| 10    | 5594      | 16     | 7.3     | 383      | 1                                |                         |       |
| 11    | 5600      | 17     | 8.5     | 329      | 1                                |                         |       |
| 12    | 5600      | 18     | 6.9     | 476      | 1                                |                         |       |
| 13    | 5606      | 16     | 8.1     | 315      | 1                                |                         |       |
| 14    | 5606      | 18     | 8       | 490      | 1                                |                         |       |
| 15    | 5610      | 18     | 6.4     | 433      | 1                                |                         |       |
| 16    | 5610      | 16     | 8.5     | 370      | 1                                |                         |       |
| 17    | 5614      | 17     | 6.7     | 214      | 1                                |                         |       |
| 18    | 5614      | 17     | 8       | 225      | 1                                |                         |       |
| 19    | 5620      | 18     | 7.4     | 462      | 1                                |                         |       |
| 20    | 5620      | 16     | 7.4     | 452      | 1                                |                         |       |
| 21    | 5626      | 18     | 6       | 407      | 1                                |                         |       |
| 22    | 5626      | 16     | 9.5     | 369      | 1                                |                         |       |
| 23    | 5632      | 16     | 7.2     | 276      | 1                                |                         |       |
| 24    | 5632      | 18     | 6.6     | 330      | 1                                |                         |       |
| 25    | 5638      | 17     | 8.8     | 359      | 1                                |                         |       |
| 26    | 5638      | 18     | 9.3     | 243      | 1                                |                         |       |
| 27    | 5644      | 18     | 10      | 210      | 1                                |                         |       |
| 28    | 5644      | 17     | 7.7     | 414      | 1                                |                         |       |
| 29    | 5650      | 18     | 8.6     | 209      | 1                                |                         |       |
| 30    | 5650      | 17     | 7.4     | 466      | 1                                |                         |       |

**USA Bin****4**

freq=5610, rate=m0x1, bw=76.0

| Trial | Frequency | Pulses | PW (uS) | PRI (uS) | 1=Detection<br>0=No<br>Detection | Detection<br>Percentage | Limit |
|-------|-----------|--------|---------|----------|----------------------------------|-------------------------|-------|
| 1     | 5570      | 14     | 11.6    | 223      | 1                                | 100.0%                  | 60.0% |
| 2     | 5570      | 12     | 18.3    | 344      | 1                                |                         |       |
| 3     | 5576      | 14     | 13      | 289      | 1                                |                         |       |
| 4     | 5576      | 14     | 14.5    | 415      | 1                                |                         |       |
| 5     | 5582      | 15     | 18.2    | 470      | 1                                |                         |       |
| 6     | 5582      | 15     | 13.4    | 351      | 1                                |                         |       |
| 7     | 5588      | 16     | 19.9    | 385      | 1                                |                         |       |
| 8     | 5588      | 16     | 15.7    | 374      | 1                                |                         |       |
| 9     | 5594      | 14     | 11.1    | 255      | 1                                |                         |       |
| 10    | 5594      | 12     | 15.1    | 230      | 1                                |                         |       |
| 11    | 5600      | 14     | 11.8    | 296      | 1                                |                         |       |
| 12    | 5600      | 12     | 16.2    | 478      | 1                                |                         |       |
| 13    | 5606      | 12     | 12      | 252      | 1                                |                         |       |
| 14    | 5606      | 16     | 19.7    | 340      | 1                                |                         |       |
| 15    | 5610      | 16     | 19.7    | 241      | 1                                |                         |       |
| 16    | 5610      | 12     | 18.8    | 226      | 1                                |                         |       |
| 17    | 5614      | 16     | 13.9    | 498      | 1                                |                         |       |
| 18    | 5614      | 15     | 15      | 356      | 1                                |                         |       |
| 19    | 5620      | 16     | 11.7    | 313      | 1                                |                         |       |
| 20    | 5620      | 15     | 19.1    | 403      | 1                                |                         |       |
| 21    | 5626      | 16     | 15.1    | 272      | 1                                |                         |       |
| 22    | 5626      | 15     | 16      | 238      | 1                                |                         |       |
| 23    | 5632      | 15     | 15.6    | 339      | 1                                |                         |       |
| 24    | 5632      | 16     | 17.7    | 411      | 1                                |                         |       |
| 25    | 5638      | 14     | 12.4    | 342      | 1                                |                         |       |
| 26    | 5638      | 12     | 12.3    | 274      | 1                                |                         |       |
| 27    | 5644      | 15     | 17.1    | 430      | 1                                |                         |       |
| 28    | 5644      | 14     | 15.8    | 377      | 1                                |                         |       |
| 29    | 5650      | 14     | 18.8    | 454      | 1                                |                         |       |
| 30    | 5650      | 14     | 11.6    | 285      | 1                                |                         |       |

In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is required and is calculated as follows:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100.0\% + 100.0\% + 100.0\% + 100.0\% + 100.0\%)/5 = 100.0\% (>80\%)$$



USA  
Bin  
5

freq=5610, rate=m0x1, bw=76.0

| Trial | Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|-------------------------------|----------------------|-------|
| 1     | 1       | 3      | 5576.8          | 12          | 75      | 1924                     | 1120                     | 0.272061        | 1                             | 100.0%               | 80.0% |
| 2     | 1       | 2      | 5578.4          | 16          | 50      | 1576                     |                          | 1.16778         | 1                             |                      |       |
| 3     | 1       | 3      | 5578.4          | 16          | 90      | 1385                     | 1831                     | 0.180893        | 1                             |                      |       |
| 4     | 1       | 2      | 5575.6          | 9           | 60      | 1649                     |                          | 0.081909        | 1                             |                      |       |
| 5     | 1       | 1      | 5576.8          | 12          | 50      |                          |                          | 0.099292        | 1                             |                      |       |
| 6     | 1       | 1      | 5574.4          | 6           | 95      |                          |                          | 0.672357        | 1                             |                      |       |
| 7     | 1       | 2      | 5577.2          | 13          | 65      | 1473                     |                          | 1.055282        | 1                             |                      |       |
| 8     | 1       | 2      | 5579.2          | 18          | 80      | 1940                     |                          | 0.47584         | 1                             |                      |       |
| 9     | 1       | 2      | 5579.2          | 18          | 75      | 1120                     |                          | 0.721675        | 1                             |                      |       |
| 10    | 1       | 3      | 5575.6          | 9           | 80      | 1538                     | 1216                     | 0.215113        | 1                             |                      |       |
| 11    | 1       | 3      | 5610            | 20          | 65      | 1280                     | 1929                     | 0.221877        | 1                             |                      |       |
| 12    | 1       | 2      | 5610            | 6           | 75      | 1862                     |                          | 0.03127         | 1                             |                      |       |
| 13    | 1       | 1      | 5610            | 9           | 95      |                          |                          | 1.060897        | 1                             |                      |       |
| 14    | 1       | 1      | 5610            | 18          | 100     |                          |                          | 0.379902        | 1                             |                      |       |
| 15    | 1       | 2      | 5610            | 16          | 70      | 1801                     |                          | 1.097662        | 1                             |                      |       |
| 16    | 1       | 2      | 5610            | 14          | 85      | 1961                     |                          | 0.03197         | 1                             |                      |       |
| 17    | 1       | 1      | 5610            | 16          | 55      |                          |                          | 0.371896        | 1                             |                      |       |
| 18    | 1       | 3      | 5610            | 7           | 95      | 1354                     | 1491                     | 0.270441        | 1                             |                      |       |
| 19    | 1       | 2      | 5610            | 14          | 65      | 1476                     |                          | 0.619638        | 1                             |                      |       |
| 20    | 1       | 2      | 5610            | 19          | 60      | 1541                     |                          | 0.692563        | 1                             |                      |       |
| 21    | 1       | 3      | 5640.8          | 18          | 55      | 1603                     | 1892                     | 0.371707        | 1                             |                      |       |
| 22    | 1       | 2      | 5643.6          | 11          | 60      | 1592                     |                          | 0.161097        | 1                             |                      |       |
| 23    | 1       | 3      | 5640            | 20          | 75      | 1555                     | 1326                     | 0.046555        | 1                             |                      |       |
| 24    | 1       | 3      | 5640.8          | 18          | 65      | 1924                     | 1586                     | 0.368777        | 1                             |                      |       |
| 25    | 1       | 2      | 5640.8          | 18          | 50      | 1258                     |                          | 0.47552         | 1                             |                      |       |
| 26    | 1       | 1      | 5643.2          | 12          | 50      |                          |                          | 0.534259        | 1                             |                      |       |
| 27    | 1       | 2      | 5645.2          | 7           | 85      | 1628                     |                          | 0.431111        | 1                             |                      |       |
| 28    | 1       | 1      | 5644.8          | 8           | 100     |                          |                          | 0.577327        | 1                             |                      |       |
| 29    | 1       | 3      | 5644.4          | 9           | 50      | 1167                     | 1032                     | 0.348749        | 1                             |                      |       |
| 30    | 1       | 2      | 5641.6          | 16          | 60      | 1357                     |                          | 0.875282        | 1                             |                      |       |



freq=5610, rate=m0x1,  
bw=76.0

### USA Frequency Hopping

| Trial | Hop # | Freq (GHz) | Pulse Start (mS) | 1=Detection<br>0=No Detection | Detection Percentage | Limit |
|-------|-------|------------|------------------|-------------------------------|----------------------|-------|
| 1     | 0     | 5600       | 0                | 1                             | 100.0%               | 70.0% |
| 2     | 4     | 5612       | 12               | 1                             |                      |       |
| 3     | 8     | 5596       | 24               | 1                             |                      |       |
| 4     | 5     | 5599       | 15               | 1                             |                      |       |
| 5     | 1     | 5647       | 3                | 1                             |                      |       |
| 6     | 2     | 5607       | 6                | 1                             |                      |       |
| 7     | 2     | 5608       | 6                | 1                             |                      |       |
| 8     | 11    | 5633       | 33               | 1                             |                      |       |
| 9     | 1     | 5622       | 3                | 1                             |                      |       |
| 10    | 1     | 5635       | 3                | 1                             |                      |       |
| 11    | 16    | 5602       | 48               | 1                             |                      |       |
| 12    | 2     | 5626       | 6                | 1                             |                      |       |
| 13    | 8     | 5625       | 24               | 1                             |                      |       |
| 14    | 0     | 5583       | 0                | 1                             |                      |       |
| 15    | 1     | 5579       | 3                | 1                             |                      |       |
| 16    | 6     | 5575       | 18               | 1                             |                      |       |
| 17    | 14    | 5589       | 42               | 1                             |                      |       |
| 18    | 1     | 5643       | 3                | 1                             |                      |       |
| 19    | 2     | 5622       | 6                | 1                             |                      |       |
| 20    | 5     | 5572       | 15               | 1                             |                      |       |
| 21    | 4     | 5612       | 12               | 1                             |                      |       |
| 22    | 0     | 5647       | 0                | 1                             |                      |       |
| 23    | 4     | 5589       | 12               | 1                             |                      |       |
| 24    | 0     | 5580       | 0                | 1                             |                      |       |
| 25    | 4     | 5641       | 12               | 1                             |                      |       |
| 26    | 1     | 5591       | 3                | 1                             |                      |       |
| 27    | 7     | 5587       | 21               | 1                             |                      |       |
| 28    | 1     | 5604       | 3                | 1                             |                      |       |
| 29    | 8     | 5591       | 24               | 1                             |                      |       |
| 30    | 0     | 5582       | 0                | 1                             |                      |       |



## USA Bin 5 Trial #1

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5576.8             | 12             | 75         | 1924                           | 1120                           | 0.272061           |
| 2       | 2      | 5576.8             | 12             | 95         | 1762                           |                                | 0.949607           |
| 3       | 1      | 5576.8             | 12             | 80         |                                |                                | 1.618094           |
| 4       | 3      | 5576.8             | 12             | 65         | 1572                           | 1964                           | 2.431535           |
| 5       | 3      | 5576.8             | 12             | 50         | 1566                           | 1940                           | 3.186463           |
| 6       | 3      | 5576.8             | 12             | 80         | 1699                           | 2000                           | 3.741281           |
| 7       | 2      | 5576.8             | 12             | 95         | 1997                           |                                | 4.266012           |
| 8       | 1      | 5576.8             | 12             | 100        |                                |                                | 5.444558           |
| 9       | 1      | 5576.8             | 12             | 80         |                                |                                | 6.135122           |
| 10      | 3      | 5576.8             | 12             | 55         | 1358                           | 1212                           | 6.57064            |
| 11      | 3      | 5576.8             | 12             | 50         | 1566                           | 1995                           | 7.383551           |
| 12      | 1      | 5576.8             | 12             | 80         |                                |                                | 8.424463           |
| 13      | 3      | 5576.8             | 12             | 85         | 1282                           | 1041                           | 9.143716           |
| 14      | 3      | 5576.8             | 12             | 70         | 1830                           | 1162                           | 9.184309           |
| 15      | 1      | 5576.8             | 12             | 80         |                                |                                | 10.574964          |
| 16      | 3      | 5576.8             | 12             | 50         | 1450                           | 1052                           | 11.217382          |
| 17      | 1      | 5576.8             | 12             | 55         |                                |                                | 11.765827          |

## USA Bin 5 Trial #2

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5578.4             | 16             | 50         | 1576                           |                                | 1.16778            |
| 2       | 3      | 5578.4             | 16             | 80         | 1355                           | 1618                           | 1.230749           |
| 3       | 1      | 5578.4             | 16             | 80         |                                |                                | 2.731154           |
| 4       | 2      | 5578.4             | 16             | 95         | 1308                           |                                | 3.660106           |
| 5       | 3      | 5578.4             | 16             | 65         | 1129                           | 1787                           | 5.73397            |
| 6       | 3      | 5578.4             | 16             | 90         | 1450                           | 1552                           | 7.192354           |
| 7       | 3      | 5578.4             | 16             | 85         | 1951                           | 1061                           | 7.990055           |
| 8       | 1      | 5578.4             | 16             | 95         |                                |                                | 8.564739           |
| 9       | 1      | 5578.4             | 16             | 90         |                                |                                | 10.163316          |
| 10      | 1      | 5578.4             | 16             | 70         |                                |                                | 11.211302          |

## USA Bin 5 Trial #3

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5578.4             | 16             | 90         | 1385                           | 1831                           | 0.180893           |
| 2       | 3      | 5578.4             | 16             | 95         | 1073                           | 1639                           | 1.735376           |
| 3       | 1      | 5578.4             | 16             | 60         |                                |                                | 2.672049           |
| 4       | 2      | 5578.4             | 16             | 90         | 1326                           |                                | 4.703704           |
| 5       | 2      | 5578.4             | 16             | 65         | 1842                           |                                | 5.414228           |



|    |   |        |    |    |      |      |           |
|----|---|--------|----|----|------|------|-----------|
| 6  | 3 | 5578.4 | 16 | 90 | 1304 | 1861 | 7.052611  |
| 7  | 1 | 5578.4 | 16 | 85 |      |      | 7.7638    |
| 8  | 3 | 5578.4 | 16 | 90 | 1593 | 1006 | 9.094616  |
| 9  | 2 | 5578.4 | 16 | 70 | 1306 |      | 10.540733 |
| 10 | 2 | 5578.4 | 16 | 95 | 1909 |      | 11.495455 |

## USA Bin 5 Trial #4

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5575.6          | 9           | 60      | 1649                     |                          | 0.081909        |
| 2       | 2      | 5575.6          | 9           | 100     | 1593                     |                          | 1.126356        |
| 3       | 3      | 5575.6          | 9           | 70      | 1706                     | 1643                     | 1.81446         |
| 4       | 2      | 5575.6          | 9           | 60      | 1351                     |                          | 2.085729        |
| 5       | 2      | 5575.6          | 9           | 85      | 1671                     |                          | 3.033479        |
| 6       | 2      | 5575.6          | 9           | 60      | 1358                     |                          | 3.265112        |
| 7       | 3      | 5575.6          | 9           | 60      | 1867                     | 1521                     | 4.10485         |
| 8       | 2      | 5575.6          | 9           | 100     | 1070                     |                          | 4.610468        |
| 9       | 3      | 5575.6          | 9           | 70      | 1276                     | 1888                     | 5.120589        |
| 10      | 1      | 5575.6          | 9           | 55      |                          |                          | 6.172041        |
| 11      | 2      | 5575.6          | 9           | 55      | 1942                     |                          | 6.520496        |
| 12      | 2      | 5575.6          | 9           | 90      | 1870                     |                          | 7.406515        |
| 13      | 3      | 5575.6          | 9           | 90      | 1773                     | 1503                     | 7.920458        |
| 14      | 1      | 5575.6          | 9           | 55      |                          |                          | 8.403508        |
| 15      | 2      | 5575.6          | 9           | 50      | 1159                     |                          | 9.279834        |
| 16      | 1      | 5575.6          | 9           | 95      |                          |                          | 9.750134        |
| 17      | 3      | 5575.6          | 9           | 75      | 1570                     | 1884                     | 10.388692       |
| 18      | 1      | 5575.6          | 9           | 85      |                          |                          | 10.921993       |
| 19      | 1      | 5575.6          | 9           | 70      |                          |                          | 11.402331       |

## USA Bin 5 Trial #5

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5576.8          | 12          | 50      |                          |                          | 0.099292        |
| 2       | 3      | 5576.8          | 12          | 60      | 1830                     | 1868                     | 1.035082        |
| 3       | 1      | 5576.8          | 12          | 90      |                          |                          | 2.448476        |
| 4       | 2      | 5576.8          | 12          | 60      | 1807                     |                          | 3.397008        |
| 5       | 3      | 5576.8          | 12          | 60      | 1575                     | 1397                     | 3.825648        |
| 6       | 1      | 5576.8          | 12          | 75      |                          |                          | 4.779121        |
| 7       | 2      | 5576.8          | 12          | 80      | 1928                     |                          | 5.667257        |
| 8       | 1      | 5576.8          | 12          | 65      |                          |                          | 6.533679        |
| 9       | 3      | 5576.8          | 12          | 70      | 1688                     | 1245                     | 7.488704        |
| 10      | 1      | 5576.8          | 12          | 75      |                          |                          | 7.758077        |
| 11      | 2      | 5576.8          | 12          | 85      | 1119                     |                          | 9.102565        |
| 12      | 3      | 5576.8          | 12          | 100     | 1126                     | 1735                     | 10.154224       |



|    |   |        |    |     |      |           |
|----|---|--------|----|-----|------|-----------|
| 13 | 1 | 5576.8 | 12 | 100 |      | 11.114599 |
| 14 | 2 | 5576.8 | 12 | 95  | 1006 | 11.981863 |

## USA Bin 5 Trial #6

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5574.4          | 6           | 95      |                          |                          | 0.672357        |
| 2       | 1      | 5574.4          | 6           | 75      |                          |                          | 1.166345        |
| 3       | 3      | 5574.4          | 6           | 80      | 1015                     | 1995                     | 2.68159         |
| 4       | 1      | 5574.4          | 6           | 75      |                          |                          | 3.47177         |
| 5       | 2      | 5574.4          | 6           | 90      | 1777                     |                          | 3.747456        |
| 6       | 2      | 5574.4          | 6           | 85      | 1897                     |                          | 4.799552        |
| 7       | 1      | 5574.4          | 6           | 55      |                          |                          | 5.601623        |
| 8       | 2      | 5574.4          | 6           | 90      | 1273                     |                          | 6.881399        |
| 9       | 2      | 5574.4          | 6           | 95      | 1792                     |                          | 8.169325        |
| 10      | 3      | 5574.4          | 6           | 50      | 1981                     | 1265                     | 8.933836        |
| 11      | 3      | 5574.4          | 6           | 90      | 1365                     | 1289                     | 9.32023         |
| 12      | 3      | 5574.4          | 6           | 90      | 1507                     | 1546                     | 10.622693       |
| 13      | 1      | 5574.4          | 6           | 80      |                          |                          | 11.493865       |

## USA Bin 5 Trial #7

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5577.2          | 13          | 65      | 1473                     |                          | 1.055282        |
| 2       | 2      | 5577.2          | 13          | 65      | 1695                     |                          | 2.283453        |
| 3       | 2      | 5577.2          | 13          | 100     | 1413                     |                          | 3.94018         |
| 4       | 3      | 5577.2          | 13          | 75      | 1106                     | 1656                     | 5.662745        |
| 5       | 1      | 5577.2          | 13          | 55      |                          |                          | 7.127132        |
| 6       | 3      | 5577.2          | 13          | 95      | 1971                     | 1427                     | 7.717252        |
| 7       | 3      | 5577.2          | 13          | 80      | 1580                     | 1810                     | 9.390395        |
| 8       | 1      | 5577.2          | 13          | 95      |                          |                          | 10.597098       |

## USA Bin 5 Trial #8

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5579.2          | 18          | 80      | 1940                     |                          | 0.47584         |
| 2       | 1      | 5579.2          | 18          | 70      |                          |                          | 0.825247        |
| 3       | 2      | 5579.2          | 18          | 60      | 1473                     |                          | 1.657718        |
| 4       | 1      | 5579.2          | 18          | 90      |                          |                          | 2.809816        |
| 5       | 1      | 5579.2          | 18          | 95      |                          |                          | 3.919743        |
| 6       | 2      | 5579.2          | 18          | 60      | 1127                     |                          | 4.225941        |
| 7       | 3      | 5579.2          | 18          | 55      | 1052                     | 1716                     | 5.350409        |
| 8       | 3      | 5579.2          | 18          | 55      | 1559                     | 1059                     | 5.827713        |
| 9       | 2      | 5579.2          | 18          | 75      | 1680                     |                          | 6.441401        |



|    |   |        |    |    |      |      |           |
|----|---|--------|----|----|------|------|-----------|
| 10 | 2 | 5579.2 | 18 | 90 | 1458 |      | 7.781306  |
| 11 | 1 | 5579.2 | 18 | 75 |      |      | 8.545728  |
| 12 | 1 | 5579.2 | 18 | 75 |      |      | 9.220508  |
| 13 | 2 | 5579.2 | 18 | 90 | 1124 |      | 10.027125 |
| 14 | 3 | 5579.2 | 18 | 85 | 1476 | 1821 | 10.668369 |
| 15 | 1 | 5579.2 | 18 | 65 |      |      | 11.73859  |

## USA Bin 5 Trial #9

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5579.2             | 18             | 75         | 1120                           |                                | 0.721675           |
| 2       | 2      | 5579.2             | 18             | 65         | 1173                           |                                | 2.029659           |
| 3       | 1      | 5579.2             | 18             | 75         |                                |                                | 3.610397           |
| 4       | 1      | 5579.2             | 18             | 60         |                                |                                | 5.023409           |
| 5       | 2      | 5579.2             | 18             | 65         | 1390                           |                                | 7.390646           |
| 6       | 3      | 5579.2             | 18             | 50         | 1313                           | 1329                           | 7.989646           |
| 7       | 2      | 5579.2             | 18             | 80         | 1157                           |                                | 9.410303           |
| 8       | 2      | 5579.2             | 18             | 95         | 1660                           |                                | 11.772358          |

## USA Bin 5 Trial #10

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5575.6             | 9              | 80         | 1538                           | 1216                           | 0.215113           |
| 2       | 2      | 5575.6             | 9              | 100        | 1834                           |                                | 1.309028           |
| 3       | 2      | 5575.6             | 9              | 75         | 1740                           |                                | 2.695045           |
| 4       | 1      | 5575.6             | 9              | 70         |                                |                                | 3.647799           |
| 5       | 1      | 5575.6             | 9              | 55         |                                |                                | 4.406462           |
| 6       | 1      | 5575.6             | 9              | 95         |                                |                                | 4.648467           |
| 7       | 3      | 5575.6             | 9              | 65         | 1455                           | 1153                           | 6.195764           |
| 8       | 2      | 5575.6             | 9              | 100        | 1307                           |                                | 6.980952           |
| 9       | 1      | 5575.6             | 9              | 75         |                                |                                | 7.674825           |
| 10      | 3      | 5575.6             | 9              | 90         | 1232                           | 1198                           | 8.430982           |
| 11      | 3      | 5575.6             | 9              | 60         | 1920                           | 1196                           | 9.47964            |
| 12      | 1      | 5575.6             | 9              | 50         |                                |                                | 10.884292          |
| 13      | 3      | 5575.6             | 9              | 100        | 1056                           | 1810                           | 11.884774          |

## USA Bin 5 Trial #11

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5610               | 20             | 65         | 1280                           | 1929                           | 0.221877           |
| 2       | 2      | 5610               | 20             | 95         | 1504                           |                                | 0.862648           |
| 3       | 3      | 5610               | 20             | 60         | 1556                           | 1361                           | 1.74771            |
| 4       | 3      | 5610               | 20             | 100        | 1394                           | 1873                           | 1.862712           |
| 5       | 1      | 5610               | 20             | 75         |                                |                                | 2.568123           |



|    |   |      |    |     |      |      |           |
|----|---|------|----|-----|------|------|-----------|
| 6  | 2 | 5610 | 20 | 95  | 1519 |      | 3.222159  |
| 7  | 2 | 5610 | 20 | 65  | 1626 |      | 3.777667  |
| 8  | 3 | 5610 | 20 | 85  | 1486 | 1104 | 4.585002  |
| 9  | 3 | 5610 | 20 | 65  | 1265 | 1199 | 5.375669  |
| 10 | 2 | 5610 | 20 | 75  | 1245 |      | 5.791568  |
| 11 | 3 | 5610 | 20 | 100 | 1816 | 1029 | 6.420725  |
| 12 | 1 | 5610 | 20 | 75  |      |      | 6.936332  |
| 13 | 1 | 5610 | 20 | 90  |      |      | 7.758736  |
| 14 | 2 | 5610 | 20 | 70  | 1534 |      | 8.213152  |
| 15 | 2 | 5610 | 20 | 85  | 1568 |      | 8.437133  |
| 16 | 2 | 5610 | 20 | 85  | 1999 |      | 9.045503  |
| 17 | 2 | 5610 | 20 | 65  | 1236 |      | 9.69274   |
| 18 | 3 | 5610 | 20 | 75  | 1788 | 1398 | 10.473668 |
| 19 | 1 | 5610 | 20 | 80  |      |      | 10.812149 |
| 20 | 3 | 5610 | 20 | 95  | 1412 | 1430 | 11.60341  |

## USA Bin 5 Trial #12

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5610               | 6              | 75         | 1862                           |                                | 0.03127            |
| 2       | 2      | 5610               | 6              | 55         | 1571                           |                                | 1.206389           |
| 3       | 1      | 5610               | 6              | 55         |                                |                                | 1.875692           |
| 4       | 3      | 5610               | 6              | 100        | 1029                           | 1685                           | 2.5431             |
| 5       | 1      | 5610               | 6              | 60         |                                |                                | 3.021608           |
| 6       | 1      | 5610               | 6              | 55         |                                |                                | 3.556206           |
| 7       | 2      | 5610               | 6              | 85         | 1687                           |                                | 4.582173           |
| 8       | 1      | 5610               | 6              | 95         |                                |                                | 4.988494           |
| 9       | 3      | 5610               | 6              | 80         | 1976                           | 1636                           | 5.521862           |
| 10      | 1      | 5610               | 6              | 95         |                                |                                | 6.251143           |
| 11      | 1      | 5610               | 6              | 55         |                                |                                | 6.666912           |
| 12      | 1      | 5610               | 6              | 75         |                                |                                | 7.37889            |
| 13      | 1      | 5610               | 6              | 95         |                                |                                | 8.143217           |
| 14      | 2      | 5610               | 6              | 55         | 1868                           |                                | 9.137964           |
| 15      | 2      | 5610               | 6              | 55         | 1501                           |                                | 9.487681           |
| 16      | 3      | 5610               | 6              | 95         | 1694                           | 1416                           | 10.368272          |
| 17      | 2      | 5610               | 6              | 100        | 1447                           |                                | 11.305581          |
| 18      | 3      | 5610               | 6              | 65         | 1723                           | 1240                           | 11.359506          |

## USA Bin 5 Trial #13

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 1      | 5610               | 9              | 95         |                                |                                | 1.060897           |
| 2       | 2      | 5610               | 9              | 70         | 1496                           |                                | 1.693361           |
| 3       | 1      | 5610               | 9              | 60         |                                |                                | 2.311701           |



|    |   |      |   |    |      |      |           |
|----|---|------|---|----|------|------|-----------|
| 4  | 3 | 5610 | 9 | 90 | 1749 | 1782 | 4.199527  |
| 5  | 1 | 5610 | 9 | 50 |      |      | 5.06305   |
| 6  | 3 | 5610 | 9 | 95 | 1405 | 1887 | 6.326668  |
| 7  | 3 | 5610 | 9 | 75 | 1467 | 1310 | 6.814386  |
| 8  | 2 | 5610 | 9 | 95 | 1621 |      | 8.311172  |
| 9  | 3 | 5610 | 9 | 60 | 1990 | 1666 | 8.811572  |
| 10 | 1 | 5610 | 9 | 95 |      |      | 10.764763 |
| 11 | 1 | 5610 | 9 | 75 |      |      | 11.104583 |

## USA Bin 5 Trial #14

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5610            | 18          | 100     |                          |                          | 0.379902        |
| 2       | 2      | 5610            | 18          | 100     | 1448                     |                          | 1.381552        |
| 3       | 3      | 5610            | 18          | 95      | 1630                     | 1417                     | 2.507079        |
| 4       | 2      | 5610            | 18          | 60      | 1468                     |                          | 3.504837        |
| 5       | 1      | 5610            | 18          | 85      |                          |                          | 4.508709        |
| 6       | 2      | 5610            | 18          | 70      | 1965                     |                          | 5.503904        |
| 7       | 2      | 5610            | 18          | 85      | 1519                     |                          | 6.623889        |
| 8       | 2      | 5610            | 18          | 100     | 1703                     |                          | 7.222438        |
| 9       | 1      | 5610            | 18          | 65      |                          |                          | 8.064374        |
| 10      | 1      | 5610            | 18          | 90      |                          |                          | 9.676699        |
| 11      | 2      | 5610            | 18          | 65      | 1421                     |                          | 10.374883       |
| 12      | 3      | 5610            | 18          | 50      | 1936                     | 1849                     | 11.206054       |

## USA Bin 5 Trial #15

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5610            | 16          | 70      | 1801                     |                          | 1.097662        |
| 2       | 2      | 5610            | 16          | 100     | 1347                     |                          | 1.440677        |
| 3       | 3      | 5610            | 16          | 70      | 1723                     | 1691                     | 3.264741        |
| 4       | 3      | 5610            | 16          | 85      | 1767                     | 1233                     | 4.696394        |
| 5       | 3      | 5610            | 16          | 100     | 1498                     | 1339                     | 4.805286        |
| 6       | 2      | 5610            | 16          | 95      | 1076                     |                          | 6.831152        |
| 7       | 2      | 5610            | 16          | 85      | 1303                     |                          | 7.67576         |
| 8       | 3      | 5610            | 16          | 90      | 1089                     | 1846                     | 8.878829        |
| 9       | 1      | 5610            | 16          | 100     |                          |                          | 10.153616       |
| 10      | 3      | 5610            | 16          | 60      | 1545                     | 1628                     | 11.216843       |

## USA Bin 5 Trial #16

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5610            | 14          | 85      | 1961                     |                          | 0.03197         |
| 2       | 2      | 5610            | 14          | 65      | 1361                     |                          | 1.973248        |



|    |   |      |    |     |      |      |           |
|----|---|------|----|-----|------|------|-----------|
| 3  | 3 | 5610 | 14 | 100 | 1494 | 1199 | 2.317065  |
| 4  | 3 | 5610 | 14 | 75  | 1864 | 1391 | 4.236624  |
| 5  | 1 | 5610 | 14 | 100 |      |      | 5.200299  |
| 6  | 2 | 5610 | 14 | 60  | 1634 |      | 5.845155  |
| 7  | 1 | 5610 | 14 | 80  |      |      | 7.1542    |
| 8  | 3 | 5610 | 14 | 50  | 1627 | 1239 | 8.600012  |
| 9  | 2 | 5610 | 14 | 80  | 1060 |      | 9.70705   |
| 10 | 3 | 5610 | 14 | 100 | 1987 | 1426 | 10.671315 |
| 11 | 1 | 5610 | 14 | 80  |      |      | 11.42315  |

## USA Bin 5 Trial #17

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5610            | 16          | 55      |                          |                          | 0.371896        |
| 2       | 2      | 5610            | 16          | 85      | 1614                     |                          | 2.139852        |
| 3       | 2      | 5610            | 16          | 55      | 1849                     |                          | 3.463161        |
| 4       | 3      | 5610            | 16          | 70      | 1178                     | 1991                     | 4.728754        |
| 5       | 1      | 5610            | 16          | 55      |                          |                          | 6.044353        |
| 6       | 1      | 5610            | 16          | 75      |                          |                          | 7.358046        |
| 7       | 2      | 5610            | 16          | 50      | 1057                     |                          | 8.546009        |
| 8       | 1      | 5610            | 16          | 65      |                          |                          | 10.566339       |
| 9       | 3      | 5610            | 16          | 85      | 1078                     | 1627                     | 11.499133       |

## USA Bin 5 Trial #18

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 3      | 5610            | 7           | 95      | 1354                     | 1491                     | 0.270441        |
| 2       | 1      | 5610            | 7           | 95      |                          |                          | 1.00604         |
| 3       | 3      | 5610            | 7           | 100     | 1031                     | 1268                     | 1.300634        |
| 4       | 2      | 5610            | 7           | 55      | 1154                     |                          | 2.125294        |
| 5       | 3      | 5610            | 7           | 95      | 1390                     | 1638                     | 2.731635        |
| 6       | 3      | 5610            | 7           | 100     | 1612                     | 1371                     | 3.724621        |
| 7       | 2      | 5610            | 7           | 70      | 1244                     |                          | 4.22506         |
| 8       | 1      | 5610            | 7           | 85      |                          |                          | 4.505027        |
| 9       | 1      | 5610            | 7           | 55      |                          |                          | 5.499973        |
| 10      | 3      | 5610            | 7           | 50      | 1320                     | 1831                     | 6.107187        |
| 11      | 3      | 5610            | 7           | 95      | 1005                     | 1541                     | 6.517402        |
| 12      | 3      | 5610            | 7           | 95      | 1280                     | 1495                     | 6.96141         |
| 13      | 2      | 5610            | 7           | 90      | 1926                     |                          | 7.918329        |
| 14      | 2      | 5610            | 7           | 75      | 1389                     |                          | 8.379975        |
| 15      | 2      | 5610            | 7           | 50      | 1605                     |                          | 8.961401        |
| 16      | 1      | 5610            | 7           | 85      |                          |                          | 9.974576        |
| 17      | 3      | 5610            | 7           | 80      | 1379                     | 1781                     | 10.590784       |
| 18      | 2      | 5610            | 7           | 100     | 1900                     |                          | 11.096947       |



19            1            5610            7            55            11.563889  
USA Bin 5 Trial #19

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5610               | 14             | 65         | 1476                           |                                | 0.619638           |
| 2       | 2      | 5610               | 14             | 90         | 1661                           |                                | 2.268514           |
| 3       | 1      | 5610               | 14             | 65         |                                |                                | 2.607854           |
| 4       | 2      | 5610               | 14             | 60         | 1170                           |                                | 3.859453           |
| 5       | 3      | 5610               | 14             | 50         | 1914                           | 1800                           | 5.206144           |
| 6       | 3      | 5610               | 14             | 90         | 1912                           | 1892                           | 6.424527           |
| 7       | 3      | 5610               | 14             | 80         | 1349                           | 1091                           | 7.335237           |
| 8       | 3      | 5610               | 14             | 95         | 1261                           | 1821                           | 8.997533           |
| 9       | 3      | 5610               | 14             | 75         | 1393                           | 1327                           | 10.691177          |
| 10      | 2      | 5610               | 14             | 95         | 1542                           |                                | 10.854196          |

USA Bin 5 Trial #20

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5610               | 19             | 60         | 1541                           |                                | 0.692563           |
| 2       | 1      | 5610               | 19             | 85         |                                |                                | 1.246645           |
| 3       | 3      | 5610               | 19             | 65         | 1986                           | 1011                           | 1.797621           |
| 4       | 2      | 5610               | 19             | 60         | 1057                           |                                | 2.736141           |
| 5       | 2      | 5610               | 19             | 95         | 1312                           |                                | 2.954554           |
| 6       | 3      | 5610               | 19             | 75         | 1915                           | 1531                           | 4.054745           |
| 7       | 1      | 5610               | 19             | 60         |                                |                                | 4.669708           |
| 8       | 1      | 5610               | 19             | 55         |                                |                                | 5.342736           |
| 9       | 3      | 5610               | 19             | 60         | 1872                           | 1782                           | 5.707619           |
| 10      | 2      | 5610               | 19             | 100        | 1478                           |                                | 6.468937           |
| 11      | 1      | 5610               | 19             | 70         |                                |                                | 7.251485           |
| 12      | 2      | 5610               | 19             | 90         | 1141                           |                                | 8.179594           |
| 13      | 3      | 5610               | 19             | 80         | 1022                           | 1501                           | 8.972116           |
| 14      | 3      | 5610               | 19             | 95         | 1149                           | 1078                           | 9.838536           |
| 15      | 3      | 5610               | 19             | 70         | 1554                           | 1188                           | 10.458824          |
| 16      | 1      | 5610               | 19             | 70         |                                |                                | 10.890729          |
| 17      | 1      | 5610               | 19             | 55         |                                |                                | 11.734487          |

USA Bin 5 Trial #21

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5640.8             | 18             | 55         | 1603                           | 1892                           | 0.371707           |
| 2       | 2      | 5640.8             | 18             | 90         | 1228                           |                                | 0.768994           |
| 3       | 3      | 5640.8             | 18             | 95         | 1911                           | 1523                           | 1.843459           |
| 4       | 2      | 5640.8             | 18             | 80         | 1918                           |                                | 2.384965           |



|    |   |        |    |    |      |      |           |
|----|---|--------|----|----|------|------|-----------|
| 5  | 2 | 5640.8 | 18 | 70 | 1982 |      | 3.1443    |
| 6  | 1 | 5640.8 | 18 | 50 |      |      | 3.518335  |
| 7  | 2 | 5640.8 | 18 | 60 | 1504 |      | 3.890483  |
| 8  | 3 | 5640.8 | 18 | 90 | 1700 | 1880 | 4.645226  |
| 9  | 1 | 5640.8 | 18 | 80 |      |      | 5.387979  |
| 10 | 2 | 5640.8 | 18 | 95 | 1706 |      | 6.068115  |
| 11 | 2 | 5640.8 | 18 | 55 | 1917 |      | 6.822765  |
| 12 | 2 | 5640.8 | 18 | 50 | 1145 |      | 7.487307  |
| 13 | 1 | 5640.8 | 18 | 60 |      |      | 7.705089  |
| 14 | 2 | 5640.8 | 18 | 85 | 1239 |      | 8.376248  |
| 15 | 1 | 5640.8 | 18 | 50 |      |      | 9.054842  |
| 16 | 3 | 5640.8 | 18 | 75 | 1451 | 1818 | 9.868436  |
| 17 | 1 | 5640.8 | 18 | 90 |      |      | 10.490686 |
| 18 | 2 | 5640.8 | 18 | 50 | 1598 |      | 11.134124 |
| 19 | 3 | 5640.8 | 18 | 50 | 1261 | 1751 | 11.597914 |

## USA Bin 5 Trial #22

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5643.6             | 11             | 60         | 1592                           |                                | 0.161097           |
| 2       | 3      | 5643.6             | 11             | 55         | 1363                           | 1990                           | 1.024138           |
| 3       | 3      | 5643.6             | 11             | 80         | 1045                           | 1809                           | 1.332309           |
| 4       | 3      | 5643.6             | 11             | 95         | 1868                           | 1323                           | 2.315312           |
| 5       | 2      | 5643.6             | 11             | 90         | 1157                           |                                | 2.763677           |
| 6       | 3      | 5643.6             | 11             | 55         | 1159                           | 1707                           | 3.181389           |
| 7       | 2      | 5643.6             | 11             | 95         | 1365                           |                                | 4.043134           |
| 8       | 3      | 5643.6             | 11             | 60         | 1754                           | 1350                           | 4.21789            |
| 9       | 3      | 5643.6             | 11             | 70         | 1343                           | 1516                           | 5.211302           |
| 10      | 1      | 5643.6             | 11             | 95         |                                |                                | 5.633969           |
| 11      | 3      | 5643.6             | 11             | 55         | 1770                           | 1292                           | 6.36982            |
| 12      | 2      | 5643.6             | 11             | 90         | 1776                           |                                | 6.795774           |
| 13      | 2      | 5643.6             | 11             | 50         | 1839                           |                                | 7.28934            |
| 14      | 2      | 5643.6             | 11             | 65         | 1554                           |                                | 8.311761           |
| 15      | 3      | 5643.6             | 11             | 90         | 1765                           | 1211                           | 8.739537           |
| 16      | 2      | 5643.6             | 11             | 50         | 1738                           |                                | 9.340274           |
| 17      | 2      | 5643.6             | 11             | 90         | 1612                           |                                | 9.838764           |
| 18      | 3      | 5643.6             | 11             | 65         | 1817                           | 1992                           | 10.34409           |
| 19      | 3      | 5643.6             | 11             | 85         | 1421                           | 1730                           | 11.035513          |
| 20      | 1      | 5643.6             | 11             | 80         |                                |                                | 11.665968          |

## USA Bin 5 Trial #23

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5640               | 20             | 75         | 1555                           | 1326                           | 0.046555           |



|    |   |      |    |     |      |      |           |
|----|---|------|----|-----|------|------|-----------|
| 2  | 3 | 5640 | 20 | 75  | 1083 | 1225 | 1.364156  |
| 3  | 3 | 5640 | 20 | 55  | 1389 | 1870 | 2.107843  |
| 4  | 2 | 5640 | 20 | 60  | 1235 |      | 2.95836   |
| 5  | 1 | 5640 | 20 | 50  |      |      | 3.75452   |
| 6  | 3 | 5640 | 20 | 85  | 1205 | 1866 | 4.847883  |
| 7  | 1 | 5640 | 20 | 55  |      |      | 5.782177  |
| 8  | 1 | 5640 | 20 | 90  |      |      | 7.004129  |
| 9  | 1 | 5640 | 20 | 85  |      |      | 7.592125  |
| 10 | 3 | 5640 | 20 | 60  | 1812 | 1466 | 8.514212  |
| 11 | 3 | 5640 | 20 | 100 | 1540 | 1397 | 9.888321  |
| 12 | 2 | 5640 | 20 | 55  | 1083 |      | 10.32725  |
| 13 | 1 | 5640 | 20 | 100 |      |      | 11.611268 |

## USA Bin 5 Trial #24

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5640.8             | 18             | 65         | 1924                           | 1586                           | 0.368777           |
| 2       | 1      | 5640.8             | 18             | 95         |                                |                                | 1.607638           |
| 3       | 1      | 5640.8             | 18             | 75         |                                |                                | 2.40984            |
| 4       | 1      | 5640.8             | 18             | 80         |                                |                                | 3.871966           |
| 5       | 3      | 5640.8             | 18             | 55         | 1005                           | 1283                           | 4.319648           |
| 6       | 2      | 5640.8             | 18             | 75         | 1620                           |                                | 5.309837           |
| 7       | 3      | 5640.8             | 18             | 50         | 1159                           | 1373                           | 6.891159           |
| 8       | 3      | 5640.8             | 18             | 85         | 1359                           | 1966                           | 7.385397           |
| 9       | 3      | 5640.8             | 18             | 95         | 1965                           | 1123                           | 8.562916           |
| 10      | 2      | 5640.8             | 18             | 70         | 1294                           |                                | 9.007219           |
| 11      | 3      | 5640.8             | 18             | 60         | 1942                           | 1532                           | 10.66665           |
| 12      | 2      | 5640.8             | 18             | 75         | 1853                           |                                | 11.07882           |

## USA Bin 5 Trial #25

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5640.8             | 18             | 50         | 1258                           |                                | 0.47552            |
| 2       | 2      | 5640.8             | 18             | 70         | 1859                           |                                | 2.07699            |
| 3       | 2      | 5640.8             | 18             | 80         | 1165                           |                                | 3.612472           |
| 4       | 3      | 5640.8             | 18             | 75         | 1210                           | 1624                           | 5.019901           |
| 5       | 3      | 5640.8             | 18             | 85         | 1449                           | 1220                           | 6.171963           |
| 6       | 2      | 5640.8             | 18             | 50         | 1326                           |                                | 8.002133           |
| 7       | 2      | 5640.8             | 18             | 85         | 1800                           |                                | 9.681985           |
| 8       | 1      | 5640.8             | 18             | 85         |                                |                                | 11.537776          |

## USA Bin 5 Trial #26

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|



|    |   |        |    |     |      |      |           |
|----|---|--------|----|-----|------|------|-----------|
| 1  | 1 | 5643.2 | 12 | 50  |      |      | 0.534259  |
| 2  | 1 | 5643.2 | 12 | 80  |      |      | 1.553114  |
| 3  | 3 | 5643.2 | 12 | 100 | 1420 | 1023 | 2.620141  |
| 4  | 3 | 5643.2 | 12 | 95  | 1158 | 1965 | 3.311821  |
| 5  | 2 | 5643.2 | 12 | 60  | 1348 |      | 4.32831   |
| 6  | 2 | 5643.2 | 12 | 50  | 1864 |      | 5.18044   |
| 7  | 1 | 5643.2 | 12 | 75  |      |      | 6.298282  |
| 8  | 3 | 5643.2 | 12 | 70  | 1367 | 1161 | 6.570298  |
| 9  | 2 | 5643.2 | 12 | 90  | 1656 |      | 7.497531  |
| 10 | 2 | 5643.2 | 12 | 50  | 1266 |      | 8.436665  |
| 11 | 1 | 5643.2 | 12 | 75  |      |      | 9.386118  |
| 12 | 2 | 5643.2 | 12 | 100 | 1276 |      | 10.229771 |
| 13 | 1 | 5643.2 | 12 | 90  |      |      | 11.491283 |

## USA Bin 5 Trial #27

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 2      | 5645.2          | 7           | 85      | 1628                     |                          | 0.431111        |
| 2       | 2      | 5645.2          | 7           | 60      | 1794                     |                          | 2.308447        |
| 3       | 2      | 5645.2          | 7           | 90      | 1071                     |                          | 3.743868        |
| 4       | 3      | 5645.2          | 7           | 55      | 1318                     | 1516                     | 4.958609        |
| 5       | 3      | 5645.2          | 7           | 60      | 1259                     | 1216                     | 5.615475        |
| 6       | 2      | 5645.2          | 7           | 85      | 1170                     |                          | 7.331219        |
| 7       | 1      | 5645.2          | 7           | 65      |                          |                          | 9.13154         |
| 8       | 1      | 5645.2          | 7           | 55      |                          |                          | 10.226719       |
| 9       | 1      | 5645.2          | 7           | 60      |                          |                          | 11.479927       |

## USA Bin 5 Trial #28

| Burst # | Pulses | Frequency (MHz) | Chirp (MHz) | PW (uS) | Inter-pulse spacing (uS) | Inter-pulse spacing (uS) | Pulse Start (S) |
|---------|--------|-----------------|-------------|---------|--------------------------|--------------------------|-----------------|
| 1       | 1      | 5644.8          | 8           | 100     |                          |                          | 0.577327        |
| 2       | 3      | 5644.8          | 8           | 80      | 1937                     | 1516                     | 0.991889        |
| 3       | 1      | 5644.8          | 8           | 90      |                          |                          | 2.519076        |
| 4       | 3      | 5644.8          | 8           | 65      | 1562                     | 1285                     | 2.832135        |
| 5       | 2      | 5644.8          | 8           | 85      | 1864                     |                          | 3.791403        |
| 6       | 2      | 5644.8          | 8           | 65      | 1939                     |                          | 5.303794        |
| 7       | 3      | 5644.8          | 8           | 90      | 1097                     | 1680                     | 5.852572        |
| 8       | 2      | 5644.8          | 8           | 65      | 1052                     |                          | 6.558569        |
| 9       | 3      | 5644.8          | 8           | 55      | 1434                     | 1828                     | 7.718503        |
| 10      | 1      | 5644.8          | 8           | 55      |                          |                          | 9.188391        |
| 11      | 2      | 5644.8          | 8           | 80      | 1766                     |                          | 9.350069        |
| 12      | 1      | 5644.8          | 8           | 50      |                          |                          | 10.201238       |
| 13      | 1      | 5644.8          | 8           | 60      |                          |                          | 11.979474       |

## USA Bin 5 Trial #29



| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 3      | 5644.4             | 9              | 50         | 1167                           | 1032                           | 0.348749           |
| 2       | 1      | 5644.4             | 9              | 100        |                                |                                | 1.136987           |
| 3       | 3      | 5644.4             | 9              | 100        | 1404                           | 1954                           | 1.902601           |
| 4       | 1      | 5644.4             | 9              | 100        |                                |                                | 2.508336           |
| 5       | 2      | 5644.4             | 9              | 70         | 1594                           |                                | 2.792715           |
| 6       | 1      | 5644.4             | 9              | 90         |                                |                                | 3.82645            |
| 7       | 3      | 5644.4             | 9              | 60         | 1898                           | 1741                           | 4.611316           |
| 8       | 1      | 5644.4             | 9              | 100        |                                |                                | 5.166582           |
| 9       | 3      | 5644.4             | 9              | 85         | 1671                           | 1450                           | 5.348307           |
| 10      | 1      | 5644.4             | 9              | 85         |                                |                                | 6.343802           |
| 11      | 1      | 5644.4             | 9              | 70         |                                |                                | 6.771256           |
| 12      | 1      | 5644.4             | 9              | 70         |                                |                                | 7.711742           |
| 13      | 3      | 5644.4             | 9              | 80         | 1589                           | 1426                           | 8.465862           |
| 14      | 2      | 5644.4             | 9              | 90         | 1867                           |                                | 8.982135           |
| 15      | 3      | 5644.4             | 9              | 90         | 1330                           | 1893                           | 9.462369           |
| 16      | 1      | 5644.4             | 9              | 60         |                                |                                | 10.274471          |
| 17      | 2      | 5644.4             | 9              | 85         | 1436                           |                                | 10.904089          |
| 18      | 2      | 5644.4             | 9              | 50         | 1930                           |                                | 11.791479          |

## USA Bin 5 Trial #30

| Burst # | Pulses | Frequency<br>(MHz) | Chirp<br>(MHz) | PW<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Inter-pulse<br>spacing<br>(uS) | Pulse Start<br>(S) |
|---------|--------|--------------------|----------------|------------|--------------------------------|--------------------------------|--------------------|
| 1       | 2      | 5641.6             | 16             | 60         | 1357                           |                                | 0.875282           |
| 2       | 2      | 5641.6             | 16             | 55         | 1602                           |                                | 1.72883            |
| 3       | 1      | 5641.6             | 16             | 60         |                                |                                | 2.153599           |
| 4       | 1      | 5641.6             | 16             | 85         |                                |                                | 3.550557           |
| 5       | 3      | 5641.6             | 16             | 50         | 1825                           | 1543                           | 4.811097           |
| 6       | 3      | 5641.6             | 16             | 65         | 1931                           | 1604                           | 5.379435           |
| 7       | 2      | 5641.6             | 16             | 80         | 1633                           |                                | 6.042805           |
| 8       | 3      | 5641.6             | 16             | 65         | 1130                           | 1059                           | 7.169887           |
| 9       | 2      | 5641.6             | 16             | 65         | 1455                           |                                | 8.667055           |
| 10      | 3      | 5641.6             | 16             | 60         | 1436                           | 1525                           | 9.382175           |
| 11      | 3      | 5641.6             | 16             | 60         | 1971                           | 1360                           | 10.941892          |
| 12      | 3      | 5641.6             | 16             | 70         | 1722                           | 1823                           | 11.724467          |

## USA Frequency Hopping Trial #1

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5600          | 0                   |
| 2     | 5647          | 6                   |
| 21    | 5574          | 63                  |
| 24    | 5602          | 72                  |
| 38    | 5632          | 114                 |
| 44    | 5630          | 132                 |
| 47    | 5603          | 141                 |
| 48    | 5612          | 144                 |
| 49    | 5617          | 147                 |
| 53    | 5599          | 159                 |
| 62    | 5604          | 186                 |
| 64    | 5622          | 192                 |
| 65    | 5582          | 195                 |
| 87    | 5611          | 261                 |
| 90    | 5640          | 270                 |

## USA Frequency Hopping Trial #2

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5612          | 12                  |
| 12    | 5582          | 36                  |
| 25    | 5641          | 75                  |
| 31    | 5620          | 93                  |
| 37    | 5574          | 111                 |
| 57    | 5579          | 171                 |
| 58    | 5643          | 174                 |
| 64    | 5614          | 192                 |
| 67    | 5607          | 201                 |
| 70    | 5589          | 210                 |
| 73    | 5586          | 219                 |
| 75    | 5593          | 225                 |
| 91    | 5572          | 273                 |
| 96    | 5647          | 288                 |

## USA Frequency Hopping Trial #3

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 8     | 5596          | 24                  |
| 10    | 5624          | 30                  |
| 15    | 5600          | 45                  |
| 23    | 5591          | 69                  |
| 40    | 5633          | 120                 |
| 42    | 5572          | 126                 |

|    |      |     |
|----|------|-----|
| 54 | 5629 | 162 |
| 58 | 5614 | 174 |
| 59 | 5610 | 177 |
| 67 | 5587 | 201 |
| 70 | 5599 | 210 |
| 72 | 5611 | 216 |
| 73 | 5644 | 219 |
| 74 | 5585 | 222 |
| 75 | 5592 | 225 |
| 78 | 5625 | 234 |
| 82 | 5639 | 246 |
| 92 | 5586 | 276 |
| 93 | 5602 | 279 |
| 96 | 5642 | 288 |

## USA Frequency Hopping Trial #4

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5599          | 15                  |
| 8     | 5581          | 24                  |
| 13    | 5598          | 39                  |
| 20    | 5630          | 60                  |
| 33    | 5582          | 99                  |
| 35    | 5576          | 105                 |
| 38    | 5586          | 114                 |
| 42    | 5578          | 126                 |
| 44    | 5585          | 132                 |
| 46    | 5648          | 138                 |
| 47    | 5645          | 141                 |
| 55    | 5577          | 165                 |
| 63    | 5621          | 189                 |
| 73    | 5589          | 219                 |
| 77    | 5572          | 231                 |
| 79    | 5580          | 237                 |
| 90    | 5615          | 270                 |

## USA Frequency Hopping Trial #5

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5647          | 3                   |
| 18    | 5580          | 54                  |
| 19    | 5585          | 57                  |
| 24    | 5624          | 72                  |
| 26    | 5642          | 78                  |
| 29    | 5577          | 87                  |
| 31    | 5581          | 93                  |

|    |      |     |
|----|------|-----|
| 44 | 5594 | 132 |
| 55 | 5615 | 165 |
| 56 | 5579 | 168 |
| 69 | 5608 | 207 |
| 70 | 5616 | 210 |
| 73 | 5607 | 219 |
| 85 | 5606 | 255 |
| 86 | 5643 | 258 |
| 90 | 5613 | 270 |

## USA Frequency Hopping Trial #6

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5607          | 6                   |
| 3     | 5636          | 9                   |
| 11    | 5613          | 33                  |
| 15    | 5648          | 45                  |
| 40    | 5618          | 120                 |
| 42    | 5632          | 126                 |
| 43    | 5585          | 129                 |
| 49    | 5580          | 147                 |
| 51    | 5609          | 153                 |
| 64    | 5640          | 192                 |
| 71    | 5573          | 213                 |
| 88    | 5586          | 264                 |
| 96    | 5590          | 288                 |
| 99    | 5614          | 297                 |

## USA Frequency Hopping Trial #7

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5608          | 6                   |
| 5     | 5642          | 15                  |
| 10    | 5575          | 30                  |
| 19    | 5582          | 57                  |
| 20    | 5629          | 60                  |
| 22    | 5605          | 66                  |
| 25    | 5637          | 75                  |
| 28    | 5619          | 84                  |
| 30    | 5640          | 90                  |
| 46    | 5600          | 138                 |
| 54    | 5598          | 162                 |
| 63    | 5603          | 189                 |
| 73    | 5586          | 219                 |
| 76    | 5625          | 228                 |
| 81    | 5616          | 243                 |



|    |      |     |
|----|------|-----|
| 90 | 5574 | 270 |
| 91 | 5612 | 273 |
| 94 | 5594 | 282 |
| 95 | 5576 | 285 |

## USA Frequency Hopping Trial #8

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 11    | 5633          | 33                  |
| 14    | 5634          | 42                  |
| 26    | 5643          | 78                  |
| 29    | 5625          | 87                  |
| 30    | 5573          | 90                  |
| 50    | 5576          | 150                 |
| 57    | 5629          | 171                 |
| 58    | 5641          | 174                 |
| 71    | 5596          | 213                 |
| 74    | 5581          | 222                 |
| 77    | 5631          | 231                 |
| 78    | 5610          | 234                 |
| 84    | 5619          | 252                 |
| 86    | 5594          | 258                 |
| 92    | 5603          | 276                 |
| 94    | 5622          | 282                 |
| 96    | 5642          | 288                 |
| 97    | 5644          | 291                 |

## USA Frequency Hopping Trial #9

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5622          | 3                   |
| 7     | 5609          | 21                  |
| 11    | 5624          | 33                  |
| 14    | 5582          | 42                  |
| 22    | 5614          | 66                  |
| 29    | 5643          | 87                  |
| 30    | 5586          | 90                  |
| 34    | 5641          | 102                 |
| 39    | 5600          | 117                 |
| 47    | 5615          | 141                 |
| 52    | 5574          | 156                 |
| 67    | 5645          | 201                 |
| 70    | 5620          | 210                 |
| 73    | 5625          | 219                 |
| 74    | 5605          | 222                 |
| 77    | 5632          | 231                 |

|    |      |     |
|----|------|-----|
| 81 | 5601 | 243 |
| 83 | 5579 | 249 |
| 98 | 5626 | 294 |

## USA Frequency Hopping Trial #10

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5635          | 3                   |
| 13    | 5637          | 39                  |
| 17    | 5611          | 51                  |
| 20    | 5622          | 60                  |
| 38    | 5615          | 114                 |
| 40    | 5591          | 120                 |
| 49    | 5596          | 147                 |
| 53    | 5594          | 159                 |
| 59    | 5572          | 177                 |
| 61    | 5580          | 183                 |
| 75    | 5578          | 225                 |
| 79    | 5617          | 237                 |
| 80    | 5636          | 240                 |
| 83    | 5589          | 249                 |
| 91    | 5613          | 273                 |
| 99    | 5588          | 297                 |

## USA Frequency Hopping Trial #11

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 16    | 5602          | 48                  |
| 31    | 5645          | 93                  |
| 36    | 5623          | 108                 |
| 37    | 5587          | 111                 |
| 38    | 5625          | 114                 |
| 47    | 5643          | 141                 |
| 57    | 5578          | 171                 |
| 72    | 5635          | 216                 |
| 75    | 5605          | 225                 |
| 81    | 5629          | 243                 |
| 83    | 5579          | 249                 |
| 88    | 5648          | 264                 |
| 89    | 5598          | 267                 |
| 96    | 5640          | 288                 |

## USA Frequency Hopping Trial #12

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5626          | 6                   |
| 3     | 5611          | 9                   |

|    |      |     |
|----|------|-----|
| 14 | 5585 | 42  |
| 22 | 5614 | 66  |
| 28 | 5606 | 84  |
| 42 | 5640 | 126 |
| 46 | 5644 | 138 |
| 48 | 5615 | 144 |
| 52 | 5616 | 156 |
| 54 | 5594 | 162 |
| 60 | 5586 | 180 |
| 62 | 5627 | 186 |
| 83 | 5580 | 249 |
| 93 | 5645 | 279 |
| 94 | 5579 | 282 |
| 96 | 5646 | 288 |

**USA Frequency Hopping Trial #13**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 8     | 5625          | 24                  |
| 13    | 5578          | 39                  |
| 33    | 5630          | 99                  |
| 40    | 5580          | 120                 |
| 44    | 5592          | 132                 |
| 57    | 5585          | 171                 |
| 63    | 5610          | 189                 |
| 71    | 5609          | 213                 |
| 73    | 5618          | 219                 |
| 74    | 5623          | 222                 |
| 75    | 5589          | 225                 |
| 83    | 5597          | 249                 |
| 89    | 5612          | 267                 |
| 97    | 5593          | 291                 |
| 98    | 5647          | 294                 |

**USA Frequency Hopping Trial #14**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5583          | 0                   |
| 9     | 5629          | 27                  |
| 10    | 5632          | 30                  |
| 21    | 5572          | 63                  |
| 25    | 5581          | 75                  |
| 30    | 5599          | 90                  |
| 35    | 5575          | 105                 |
| 36    | 5625          | 108                 |
| 38    | 5585          | 114                 |



|    |      |     |
|----|------|-----|
| 42 | 5631 | 126 |
| 55 | 5647 | 165 |
| 61 | 5602 | 183 |
| 65 | 5617 | 195 |
| 78 | 5615 | 234 |

## USA Frequency Hopping Trial #15

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5579          | 3                   |
| 18    | 5585          | 54                  |
| 19    | 5590          | 57                  |
| 22    | 5587          | 66                  |
| 28    | 5597          | 84                  |
| 35    | 5628          | 105                 |
| 39    | 5606          | 117                 |
| 62    | 5622          | 186                 |
| 68    | 5583          | 204                 |
| 69    | 5625          | 207                 |
| 71    | 5619          | 213                 |
| 75    | 5580          | 225                 |
| 76    | 5648          | 228                 |
| 77    | 5620          | 231                 |
| 79    | 5644          | 237                 |
| 85    | 5609          | 255                 |
| 89    | 5642          | 267                 |
| 95    | 5572          | 285                 |
| 96    | 5624          | 288                 |

## USA Frequency Hopping Trial #16

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 6     | 5575          | 18                  |
| 8     | 5581          | 24                  |
| 18    | 5587          | 54                  |
| 20    | 5608          | 60                  |
| 36    | 5592          | 108                 |
| 37    | 5577          | 111                 |
| 45    | 5594          | 135                 |
| 51    | 5579          | 153                 |
| 59    | 5630          | 177                 |
| 68    | 5620          | 204                 |
| 74    | 5596          | 222                 |
| 75    | 5598          | 225                 |

## USA Frequency Hopping Trial #17

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 14    | 5589          | 42                  |
| 15    | 5636          | 45                  |
| 28    | 5574          | 84                  |
| 44    | 5627          | 132                 |
| 50    | 5619          | 150                 |
| 51    | 5623          | 153                 |
| 66    | 5625          | 198                 |
| 75    | 5629          | 225                 |
| 88    | 5575          | 264                 |
| 94    | 5621          | 282                 |

## USA Frequency Hopping Trial #18

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5643          | 3                   |
| 2     | 5635          | 6                   |
| 13    | 5622          | 39                  |
| 17    | 5626          | 51                  |
| 25    | 5607          | 75                  |
| 26    | 5600          | 78                  |
| 27    | 5634          | 81                  |
| 29    | 5620          | 87                  |
| 36    | 5628          | 108                 |
| 44    | 5642          | 132                 |
| 48    | 5609          | 144                 |
| 51    | 5633          | 153                 |
| 55    | 5639          | 165                 |
| 56    | 5627          | 168                 |
| 57    | 5617          | 171                 |
| 60    | 5608          | 180                 |
| 65    | 5576          | 195                 |
| 66    | 5580          | 198                 |
| 67    | 5625          | 201                 |
| 84    | 5606          | 252                 |
| 88    | 5629          | 264                 |
| 89    | 5619          | 267                 |
| 95    | 5613          | 285                 |

## USA Frequency Hopping Trial #19

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 2     | 5622          | 6                   |
| 10    | 5642          | 30                  |
| 11    | 5601          | 33                  |

|    |      |     |
|----|------|-----|
| 23 | 5639 | 69  |
| 34 | 5578 | 102 |
| 44 | 5581 | 132 |
| 45 | 5605 | 135 |
| 49 | 5637 | 147 |
| 53 | 5638 | 159 |
| 54 | 5628 | 162 |
| 55 | 5629 | 165 |
| 57 | 5640 | 171 |
| 59 | 5624 | 177 |
| 72 | 5608 | 216 |
| 74 | 5632 | 222 |
| 85 | 5644 | 255 |
| 86 | 5643 | 258 |
| 88 | 5615 | 264 |
| 92 | 5600 | 276 |
| 93 | 5597 | 279 |
| 99 | 5594 | 297 |

**USA Frequency Hopping Trial #20**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 5     | 5572          | 15                  |
| 9     | 5600          | 27                  |
| 13    | 5594          | 39                  |
| 17    | 5588          | 51                  |
| 19    | 5643          | 57                  |
| 20    | 5620          | 60                  |
| 23    | 5641          | 69                  |
| 25    | 5616          | 75                  |
| 33    | 5590          | 99                  |
| 57    | 5574          | 171                 |
| 60    | 5583          | 180                 |
| 61    | 5586          | 183                 |
| 80    | 5624          | 240                 |
| 93    | 5595          | 279                 |

**USA Frequency Hopping Trial #21**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5612          | 12                  |
| 26    | 5628          | 78                  |
| 33    | 5623          | 99                  |
| 39    | 5609          | 117                 |
| 49    | 5607          | 147                 |
| 56    | 5574          | 168                 |

|    |      |     |
|----|------|-----|
| 68 | 5578 | 204 |
| 69 | 5584 | 207 |
| 74 | 5605 | 222 |
| 79 | 5611 | 237 |
| 85 | 5604 | 255 |
| 96 | 5577 | 288 |
| 97 | 5645 | 291 |

## USA Frequency Hopping Trial #22

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5647          | 0                   |
| 3     | 5622          | 9                   |
| 5     | 5611          | 15                  |
| 13    | 5621          | 39                  |
| 19    | 5590          | 57                  |
| 21    | 5591          | 63                  |
| 22    | 5648          | 66                  |
| 36    | 5626          | 108                 |
| 38    | 5620          | 114                 |
| 41    | 5577          | 123                 |
| 42    | 5607          | 126                 |
| 46    | 5627          | 138                 |
| 48    | 5593          | 144                 |
| 56    | 5636          | 168                 |
| 61    | 5594          | 183                 |
| 63    | 5578          | 189                 |
| 69    | 5628          | 207                 |
| 74    | 5644          | 222                 |
| 77    | 5625          | 231                 |
| 78    | 5583          | 234                 |
| 92    | 5579          | 276                 |
| 96    | 5619          | 288                 |
| 97    | 5612          | 291                 |

## USA Frequency Hopping Trial #23

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5589          | 12                  |
| 8     | 5604          | 24                  |
| 18    | 5619          | 54                  |
| 23    | 5613          | 69                  |
| 26    | 5616          | 78                  |
| 31    | 5610          | 93                  |
| 37    | 5625          | 111                 |
| 52    | 5636          | 156                 |

|    |      |     |
|----|------|-----|
| 54 | 5586 | 162 |
| 57 | 5584 | 171 |
| 58 | 5590 | 174 |
| 59 | 5602 | 177 |
| 60 | 5621 | 180 |
| 62 | 5595 | 186 |
| 76 | 5580 | 228 |
| 77 | 5576 | 231 |
| 86 | 5627 | 258 |
| 89 | 5572 | 267 |
| 98 | 5624 | 294 |

**USA Frequency Hopping Trial #24**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5580          | 0                   |
| 2     | 5586          | 6                   |
| 6     | 5574          | 18                  |
| 12    | 5585          | 36                  |
| 22    | 5588          | 66                  |
| 25    | 5612          | 75                  |
| 33    | 5603          | 99                  |
| 34    | 5644          | 102                 |
| 39    | 5591          | 117                 |
| 45    | 5598          | 135                 |
| 52    | 5614          | 156                 |
| 69    | 5626          | 207                 |
| 76    | 5625          | 228                 |
| 77    | 5575          | 231                 |
| 85    | 5597          | 255                 |

**USA Frequency Hopping Trial #25**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 4     | 5641          | 12                  |
| 5     | 5609          | 15                  |
| 7     | 5638          | 21                  |
| 16    | 5628          | 48                  |
| 21    | 5573          | 63                  |
| 24    | 5621          | 72                  |
| 31    | 5627          | 93                  |
| 47    | 5617          | 141                 |
| 49    | 5631          | 147                 |
| 52    | 5630          | 156                 |
| 69    | 5574          | 207                 |
| 81    | 5626          | 243                 |

|    |      |     |
|----|------|-----|
| 85 | 5611 | 255 |
| 97 | 5636 | 291 |
| 99 | 5599 | 297 |

**USA Frequency Hopping Trial #26**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5591          | 3                   |
| 3     | 5580          | 9                   |
| 12    | 5607          | 36                  |
| 22    | 5630          | 66                  |
| 23    | 5623          | 69                  |
| 27    | 5602          | 81                  |
| 29    | 5622          | 87                  |
| 30    | 5604          | 90                  |
| 37    | 5574          | 111                 |
| 47    | 5615          | 141                 |
| 67    | 5586          | 201                 |
| 69    | 5643          | 207                 |
| 79    | 5629          | 237                 |
| 81    | 5628          | 243                 |
| 85    | 5575          | 255                 |
| 88    | 5572          | 264                 |
| 97    | 5608          | 291                 |

**USA Frequency Hopping Trial #27**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 7     | 5587          | 21                  |
| 10    | 5590          | 30                  |
| 15    | 5642          | 45                  |
| 29    | 5604          | 87                  |
| 38    | 5630          | 114                 |
| 40    | 5623          | 120                 |
| 43    | 5600          | 129                 |
| 46    | 5633          | 138                 |
| 50    | 5594          | 150                 |
| 52    | 5591          | 156                 |
| 58    | 5626          | 174                 |
| 65    | 5607          | 195                 |
| 66    | 5647          | 198                 |
| 67    | 5577          | 201                 |
| 81    | 5638          | 243                 |
| 82    | 5578          | 246                 |
| 90    | 5597          | 270                 |

**USA Frequency Hopping Trial #28**

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 1     | 5604          | 3                   |
| 3     | 5601          | 9                   |
| 10    | 5633          | 30                  |
| 13    | 5636          | 39                  |
| 22    | 5609          | 66                  |
| 34    | 5622          | 102                 |
| 59    | 5634          | 177                 |
| 66    | 5587          | 198                 |
| 69    | 5577          | 207                 |
| 83    | 5617          | 249                 |
| 92    | 5584          | 276                 |
| 93    | 5603          | 279                 |
| 95    | 5616          | 285                 |

## USA Frequency Hopping Trial #29

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 8     | 5591          | 24                  |
| 13    | 5618          | 39                  |
| 14    | 5648          | 42                  |
| 30    | 5643          | 90                  |
| 41    | 5628          | 123                 |
| 45    | 5635          | 135                 |
| 49    | 5644          | 147                 |
| 50    | 5598          | 150                 |
| 62    | 5599          | 186                 |
| 71    | 5647          | 213                 |
| 75    | 5627          | 225                 |
| 77    | 5614          | 231                 |
| 82    | 5582          | 246                 |
| 87    | 5636          | 261                 |

## USA Frequency Hopping Trial #30

| Hop # | Freq<br>(GHz) | Pulse Start<br>(mS) |
|-------|---------------|---------------------|
| 0     | 5582          | 0                   |
| 22    | 5581          | 66                  |
| 27    | 5623          | 81                  |
| 50    | 5577          | 150                 |
| 52    | 5602          | 156                 |
| 57    | 5626          | 171                 |
| 63    | 5575          | 189                 |
| 74    | 5615          | 222                 |
| 93    | 5629          | 279                 |



95      5601      285

**Appendix C: List of Test Equipment Used to perform the test**

| Equip# | Manufacturer/ Model            | Description                                   | Last Cal         | Next Cal  |
|--------|--------------------------------|-----------------------------------------------|------------------|-----------|
| 57478  | Cisco ATIL                     | Automation Test Insertion Loss                | Cal Not Required |           |
| 55096  | National Instruments PXI-1042Q | Chassis                                       | Cal Not Required |           |
| 57239  | National Instruments PXI-8115  | Embedded Controller                           | Cal Not Required |           |
| 57225  | National Instruments PXI-5422  | 200 MS/s, 16-bit Arbitrary Waveform Generator | 2-Oct-19         | 2-Oct-20  |
| 57226  | National Instruments PXI-5422  | 200 MS/s, 16-bit Arbitrary Waveform Generator | 2-Oct-19         | 2-Oct-20  |
| 57250  | National Instruments PXI-2796  | 40 GHz Dual 6x1 Multiplexer (SP6T)            | Cal Not Required |           |
| 56093  | National Instruments PXI-2796  | 40 GHz Dual 6x1 Multiplexer (SP6T)            | Cal Not Required |           |
| 57251  | National Instruments PXI-2799  | Switch 1x1                                    | Cal Not Required |           |
| 53615  | Agilent N9030A-550             | PXA Signal Analyzer, 3Hz to 50GHz             | 16-Jul-19        | 16-Jul-20 |
| 49515  | Keysight N5182B                | MXG X-Series RF Vector Signal Generator       | 26-Sep-19        | 26-Sep-20 |
| 7329   | Omega CT485B                   | Chart Recorder                                | 18-Feb-19        | 18-Feb-20 |
| 56329  | Pasternack PE5019-1            | Torque wrench                                 | 28-Feb-19        | 28-Feb-20 |
| 47283  | HUBER + SUHNER Sucoflex 102E   | 40GHz Cable K Connector                       | 20-Jun-19        | 20-Jun-20 |
| 49428* | Mini-Circuits ZFSC-2-10G       | SPLITTER, 2-10GHZ                             | 27-Nov-19        | 27-Nov-20 |
| 55585  | AEROFLEX BWS30-W2              | 30dB SMA Attenuator                           | 13-Aug-19        | 13-Aug-20 |
| 49429  | Mini-Circuits ZFSC-2-10G       | SPLITTER, 2-10GHZ                             | 25-Jan-19        | 25-Jan-20 |
| 54623  | Megaphase RA08-S1S1-18         | SMA Cable                                     | 2-Aug-19         | 2-Aug-20  |
| 54674  | Megaphase RA08-S1S1-12         | SMA Cable                                     | 2-Aug-19         | 2-Aug-20  |
| 54607* | Pulsar PS4-09-452/4S           | Splitter                                      | 27-Nov-19        | 27-Nov-20 |
| 55559  | Mini-Circuits ZFSC-2-10G       | SPLITTER, 2-10GHZ                             | 27-Jun-19        | 27-Jun-20 |
| 55366  | Pulsar PS4-09-452/4S           | Splitter                                      | 12-Apr-19        | 12-Apr-20 |
| 54620  | Megaphase RA08-S1S1-12         | SMA Cable                                     | 2-Aug-19         | 2-Aug-20  |
| 54616  | Megaphase RA08-S1S1-12         | SMA Cable                                     | 2-Aug-19         | 2-Aug-20  |
| 54614  | Megaphase RA08-S1S1-12         | SMA Cable                                     | 2-Aug-19         | 2-Aug-20  |
| 54617  | Megaphase RA08-S1S1-12         | SMA Cable                                     | 2-Aug-19         | 2-Aug-20  |
| 45162  | KRYTAR 1850                    | 500MHz to 18.5 GHz SMA Directional Coupler    | 30-Apr-19        | 30-Apr-20 |
| 44583  | Mini-Circuits ZFSC-2-10G       | SPLITTER, 2-10GHZ                             | 18-Jun-19        | 18-Jun-20 |
| 54615  | Megaphase                      | RA08-S1S1-12                                  | 1-Aug-19         | 1-Aug-20  |
| 54611  | Megaphase                      | RA08-S1S1-12                                  | 1-Aug-19         | 1-Aug-20  |
| 56062  | Pulsar                         | PS4-09-452/4S                                 | 12-Apr-19        | 12-Apr-20 |
| 56109  | Pasternack PE6072              | SMA 50 Ohm Termination                        | 30-Jan-19        | 30-Jan-20 |
| 54408  | HUBER + SUHNER Sucoflex 102E   | 40GHz Cable K Connector                       | 20-Jun-19        | 20-Jun-20 |
| 54011  | Aeroflex/Weinschel 3054        | Variable Attenuator 10-60dB 6GHz              | 12-Apr-19        | 12-Apr-20 |
| 54405  | HUBER + SUHNER Sucoflex 102    | RF Cable 2.4mm - N Type 18GHz                 | 24-Apr-19        | 24-Apr-20 |
| 54695* | DITOM D3C2060                  | Splitter                                      | 27-Nov-19        | 27-Nov-20 |

\*please note, testing was paused while CIS#49428, CIS#54607, and CIS#54695 were calibrated

## Appendix D: Photographs of Test Setups

EUT Photos have been omitted from this test report. Photos can be found in the supplementary exhibit included in the submission and EDCS# 18337365.

## Appendix E: Software Used to Perform Testing

Cisco Internal LabView Radio Test Automation Software – DFS Automation Main rev29, 47

## Appendix F: Test Procedures

Measurements were made in accordance with

- KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02
- RSS-247 section A9.3a allows the use of applicable FCC KDBs

Test procedures are summarized below:

|                         |                |
|-------------------------|----------------|
| FCC DFS Test Procedures | EDCS # 1445052 |
|-------------------------|----------------|

## Appendix G: Scope of Accreditation (A2LA certificate number 1178-01)

The scope of accreditation of Cisco Systems, Inc. can be found on the A2LA web page at:

<http://www.a2la.org/scopepdf/1178-01.pdf>

## Appendix H: Test Assessment Plan

Compliance Test Plan (Excel) EDCS# 18216607

Radio Test Plan: EDCS# 18486508

## Appendix I: Worst Case Justification

N/A

## Appendix J: UUT Software Info

Cisco AP Software, (ap1g6a), [sjc-ads-2610:/nobackup/rthangac/work/gh\_c8\_20sep/router]

Technical Support: <http://www.cisco.com/techsupport>

Copyright (c) 1986-2019 by Cisco Systems, Inc.

Compiled Mon Sep 23 05:43:03 PDT 2019

ROM: Bootstrap program is U-Boot boot loader

BOOTLDR: U-Boot boot loader Version 115

Cisco AP Software, (ap1g6a), [build-lnx-059:/san2/BUILD/workspace/Nightly-Cheetah-ap1g6a-mfg-c171\_throttle]

Technical Support: <http://www.cisco.com/techsupport>

Copyright (c) 1986-2019 by Cisco Systems, Inc.

Compiled Tue Oct 22 08:04:29 PDT 2019

ROM: Bootstrap program is U-Boot boot loader

BOOTLDR: U-Boot boot loader Version 118