



Dynamic Frequency Selection (DFS) Test Report

AIR-AP1815M-x-K9

(x=A,B)

Cisco Aironet 802.11ac Dual Band Access Points

FCC ID: LDK102110

IC: 2461B-102110

5250-5350, 5470-5725 MHz

Against the following Specifications:

CFR47 Part 15.407

RSS247

Cisco Systems

170 West Tasman Drive

San Jose, CA 95134

	
Author: Jose Aguirre Tested By:	Approved By: Jim Nicholson Title: Technical Leader, Engineering Revision: 1

This report replaces any previously entered test report under EDCS – 11591576. This test report has been electronically authorized and archived using the CISCO Engineering Document Control system.



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Section 1: Overview

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

Specifications:
CFR47 Part 15.407 RSS-247

RSS-247 section A9.3a allows the use of applicable FCC KDBs

Measurements were made in accordance with

- KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02



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	± 2 dB
conducted EIRP measurements	± 1.4 dB
radiated measurements	± 3.2 dB
frequency measurements	± 2.4 10 ⁻⁷
temperature measurements	± 0.54°
humidity measurements	± 2.3%
DC and low frequency measurements	± 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
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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.

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**2.2 Date of testing**

02-Feb-17 - 02-Feb-17

2.3 Report Issue Date

06-Feb-17

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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

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

Test Engineers

Jose Aguirre

2.5 Equipment Assessed (EUT)

AIR-AP1815M-B-K9



Section 3: Result Summary

3.1 Results Summary Table

Conducted emissions

Basic Standard	Technical Requirements / Details	Result
FCC 15.407 RSS-247	Dynamic Frequency Selection (DFS) Detection Threshold	Pass
FCC 15.407 RSS-247	Channel Availability Check Time	Pass
FCC 15.407 RSS-247	Channel Move Time	Pass
FCC 15.407 RSS-247	Channel Closing Time	Pass
FCC 15.407 RSS-247	Non-Occupancy Period	Pass
FCC 15.407 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	AIR-AP1815M-B-K9	Cisco Systems	P2	28bb3ae 8d7576e 238bd6a 752bdc8 dc74	8.4.1.10	RFDP3BCR336
S02	AIR-PWRINJ6	Cisco Systems	V01	NA	NA	C15456663000 247
S03	AIR-CAP3702I-A-K9	Cisco Systems	01	Uboot 2012.07	Linux ver 3.14.33	FCW19448XKK

4.2 System Details

System Number	Description	Samples	System under test	Support equipment
1	AIR-AP1815M-B-K9	S01	✘	✘
	Support Power Supply	S02	✘	✘
	Support Client Equipment	S03	✘	✘

4.3 Mode of Operation Details

Mode#	Description	Comments
1	Continuous Transmitting	Continuous Transmitting

All measurements were made in accordance with

- KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02



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

1. The Cisco Aironet 802.11ac Module operates in the following bands:
 - a. 5150-5250 MHz
 - b. 5250-5350 MHz
 - c. 5470-5725 MHz
 - d. 5725-5850 MHz
2. The maximum EIRP of the 5GHz equipment is 29 dBm, and the minimum possible EIRP is 10 dBm.

Below are the available 50 ohm antenna assemblies and their corresponding gains. 0dBi gain was used to set the -63 dBm threshold level (-64dBm +1 dB) during calibration of the test setup.

Frequency	Part Number	Antenna Type	Antenna Gain (dBi)
5GHz	Internal	omnidirectional	4

3. System testing was performed with the designated MPEG test file that streams full motion video at 30 frames per second from the Master to the Client IP based system.
4. The Master requires 99.000000 seconds to complete its power-on cycle.
5. Information regarding the parameters of the detected Radar Waveforms is not available to the end user.
6. 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 (See Notes 1, 2, and 3)
EIRP \geq 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
<p>Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.</p> <p>Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.</p> <p>Note 3: 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 See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.
<p>Note 1: <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>Note 2: 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>Note 3: 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	$\text{Roundup} \left\{ \begin{array}{l} \left(\frac{1}{360} \right) \cdot \\ \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \end{array} \right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec , with a minimum increment of 1 μsec , excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 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 μ 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

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355.0	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.

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

2. Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μ sec)	Chirp Width (MHz)	PRI (μ sec)	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:

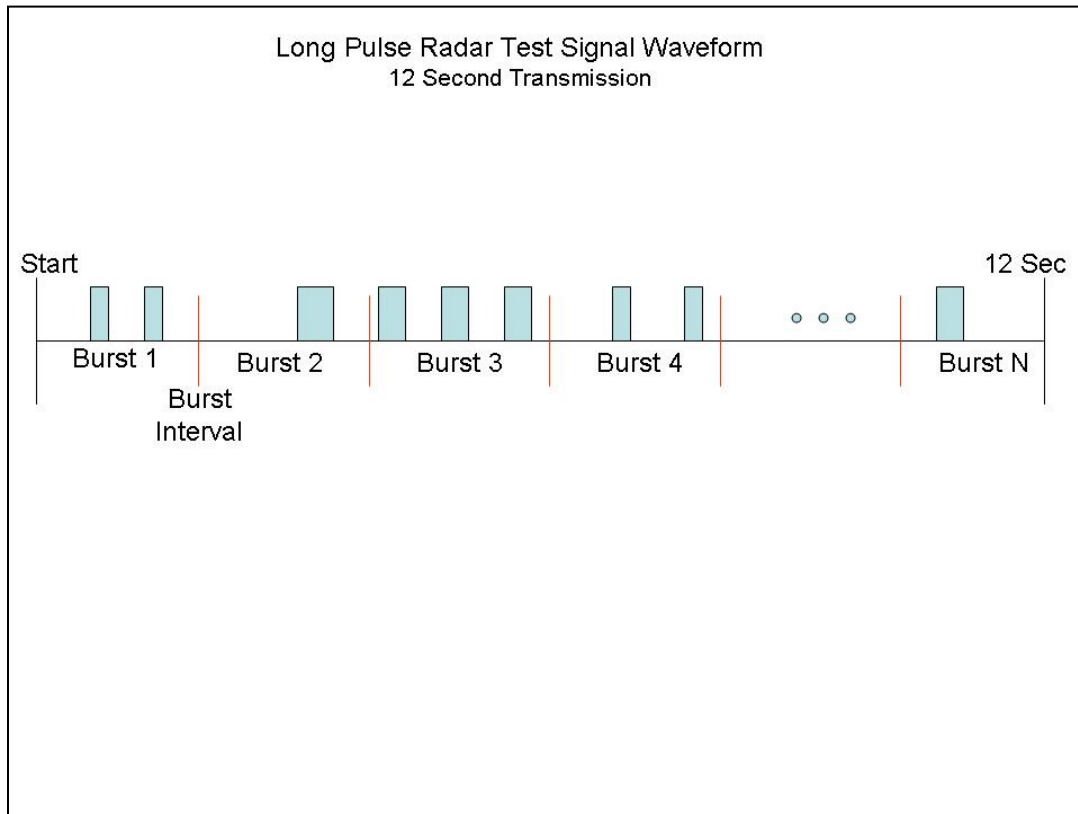
- 1) The transmission period for the Long Pulse Radar test signal is 12 seconds.
- 2) There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst Count.
- 3) Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly 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
2.



1. Long Pulse Radar Test Waveform

Radars 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 selected¹ 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

Test parameters
Span = 0 Hz RBW ≥ 3 MHz VBW ≥ 3 MHz Detector = Peak Trace = Single Sweep

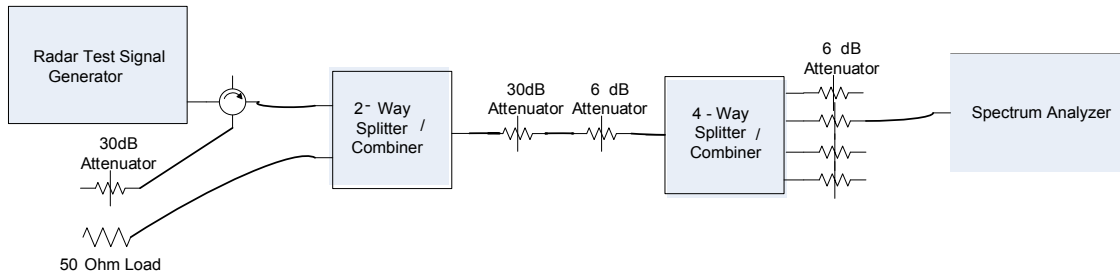
System Number	Description	Samples	System under test	Support equipment
1	AIR-AP1815M-B-K9	S01	✘	✘
	Support Power Supply	S02	✘	✘
	Support Client Equipment	S03	✘	✘

Tested By : Jose Aguirre	Date of testing: 02-Feb-17 - 02-Feb-17
Test Result : PASS	

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.

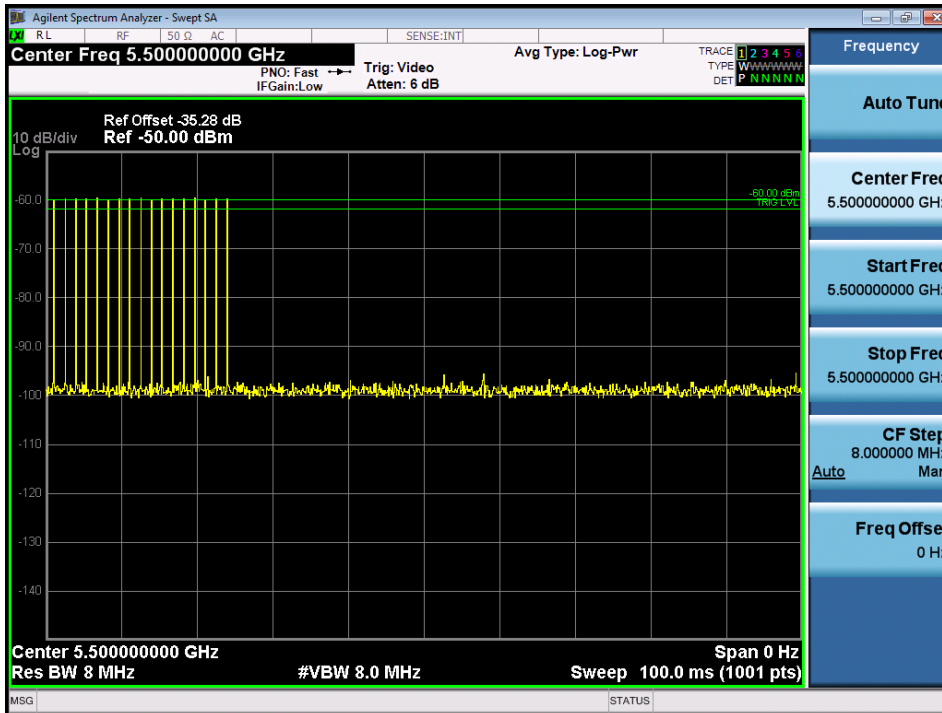
The signal generator amplitude was set so that the power level measured at the spectrum analyzer was -63dBm.



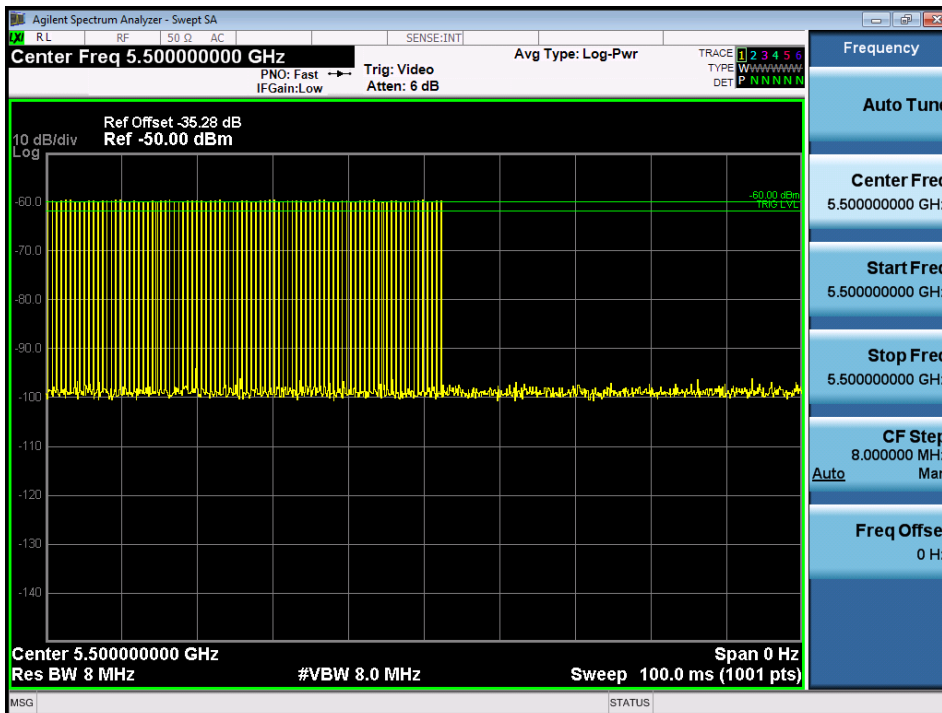
Conducted Calibration Setup



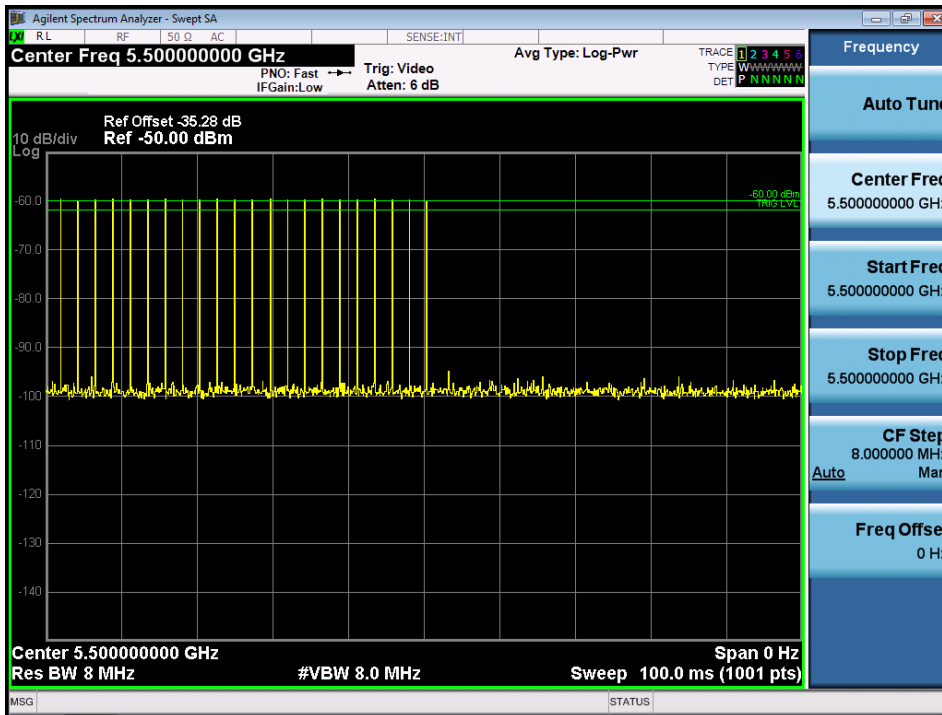
Following are the calibration plots for each of the required radar waveforms.



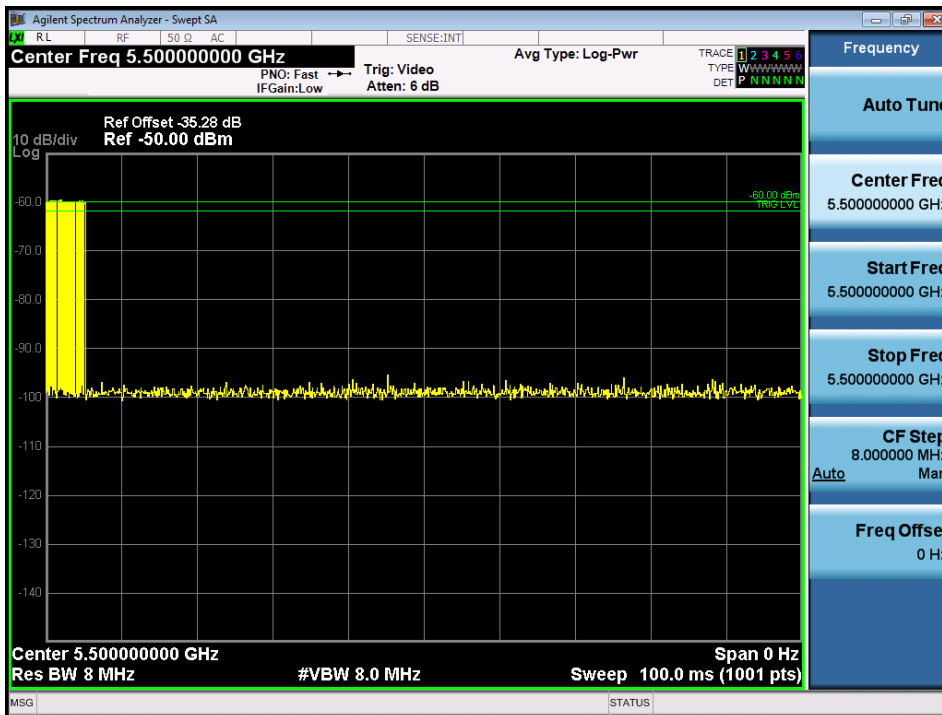
USA Bin 0 Radar Calibration



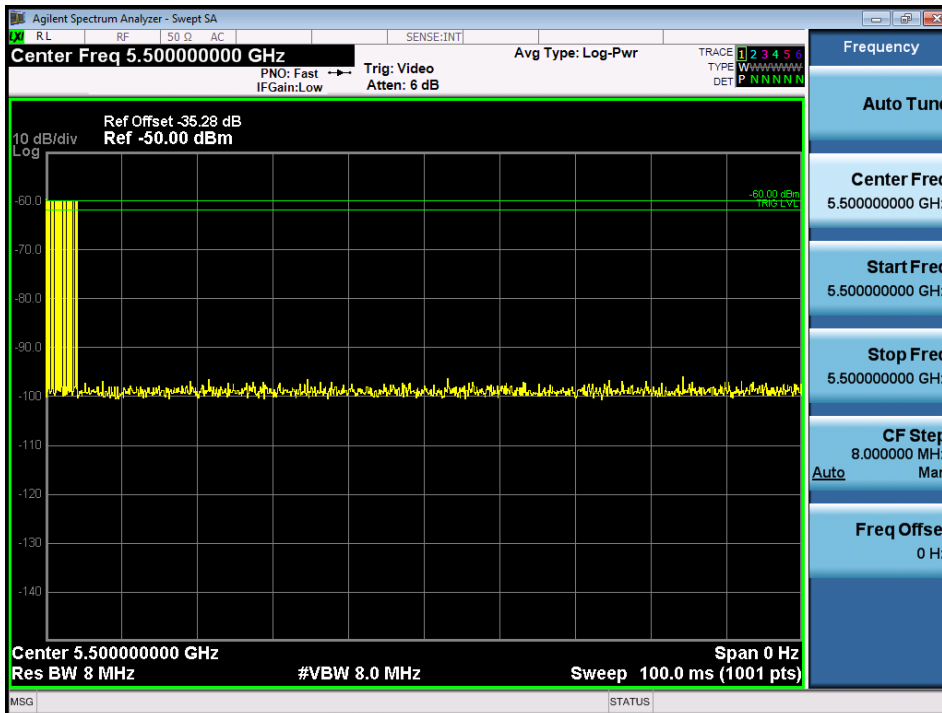
USA Bin 1A Radar Calibration



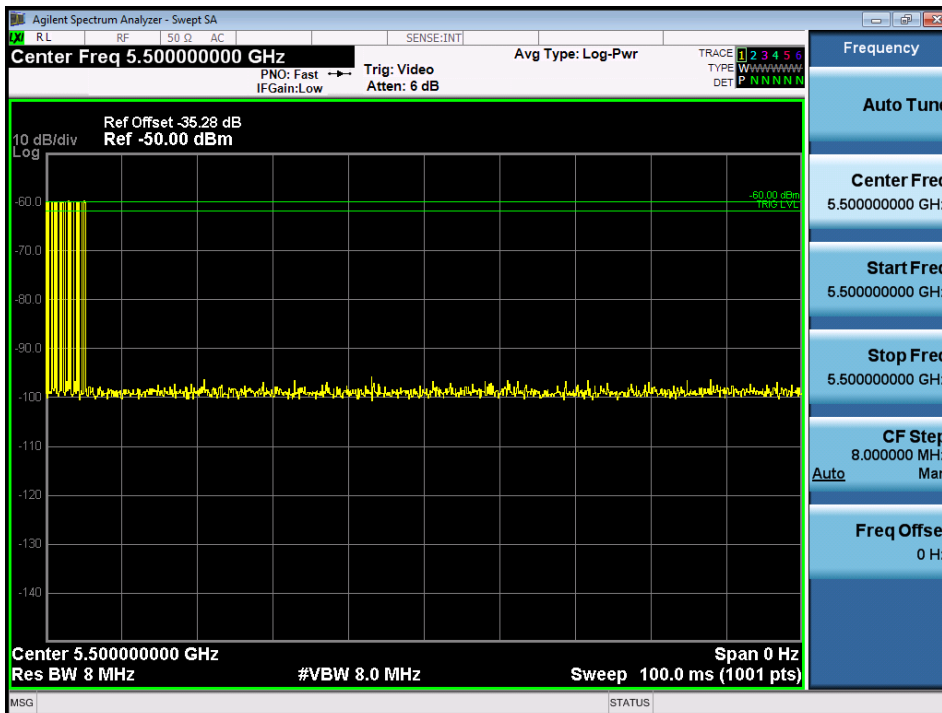
USA Bin 1B Radar Calibration



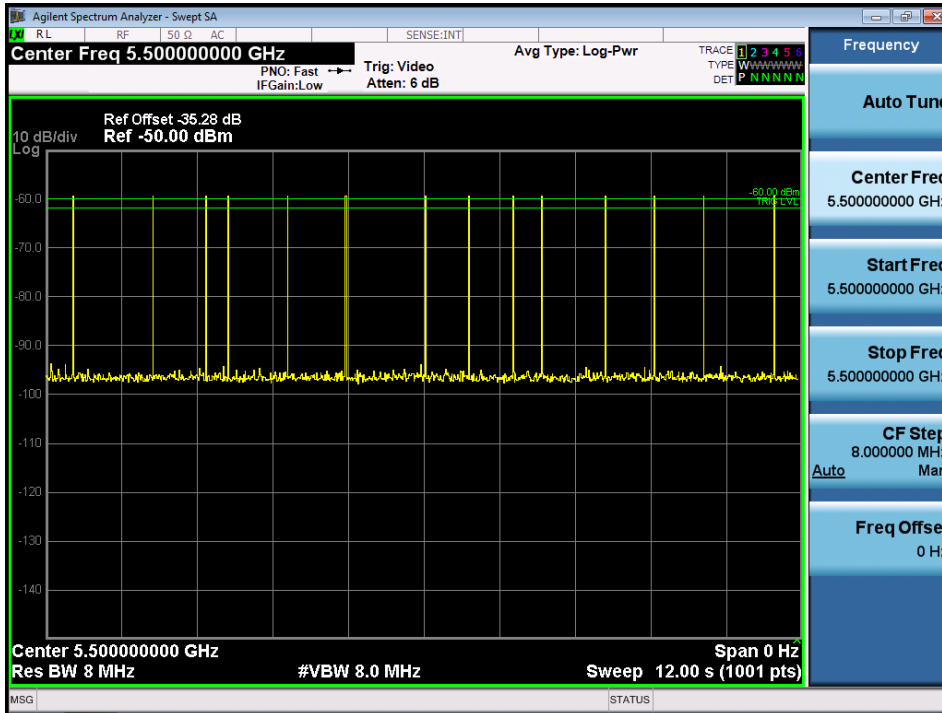
USA Bin 2 Radar Calibration



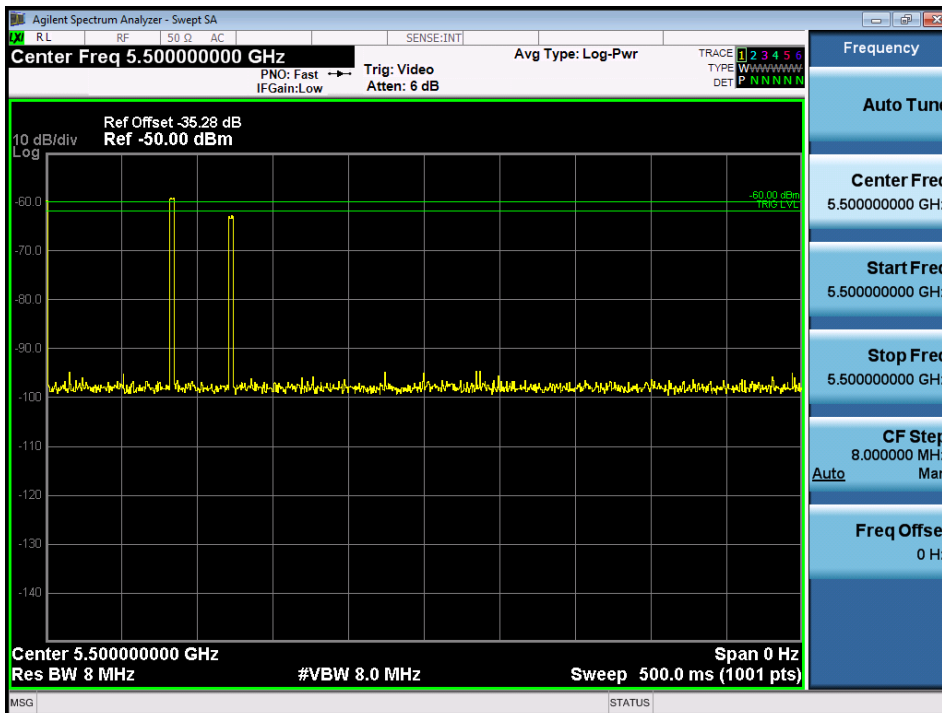
USA Bin 3 Radar Calibration



USA Bin 4 Radar Calibration



USA Bin 5 Radar Calibration

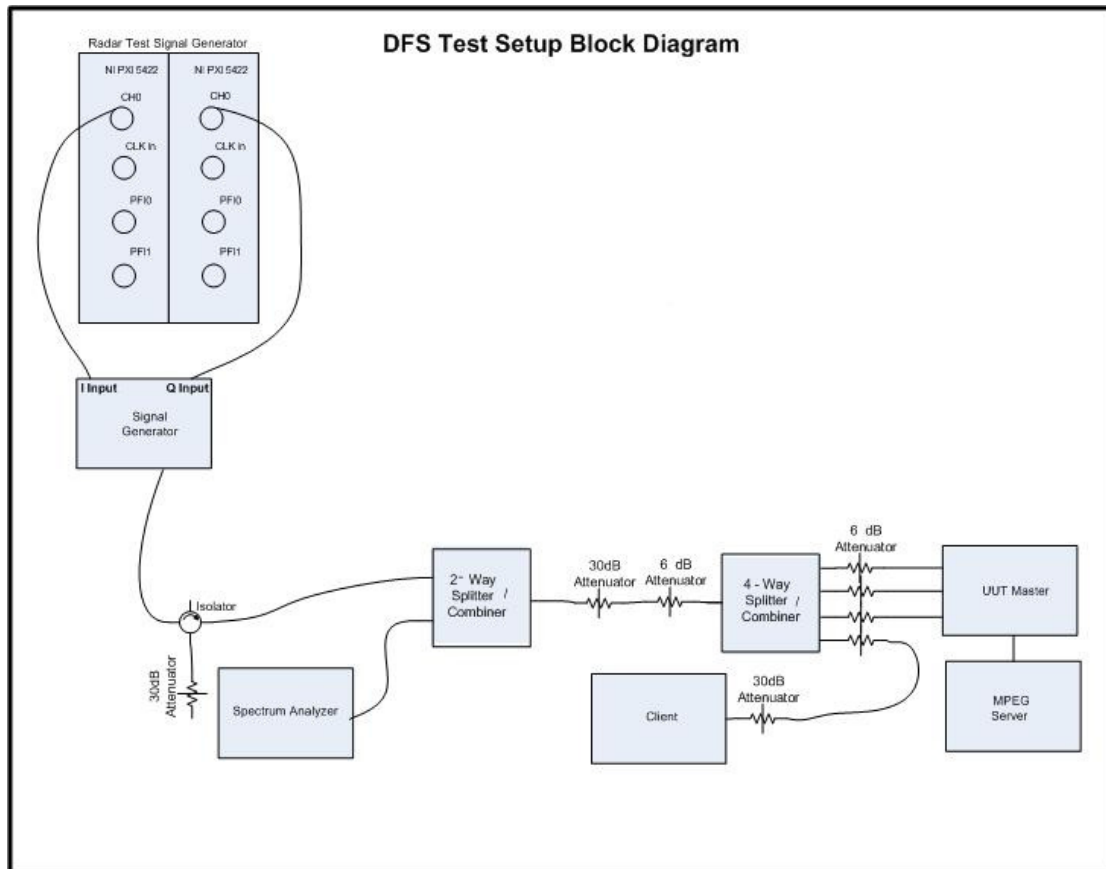


USA Frequency Hopping Radar Calibration

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 UNII 20 MHz channels for this device have identical Channel bandwidths, all 40 MHz channels have identical Channel bandwidths, and all 80 MHz channels have identical Channel bandwidths. Therefore, all DFS testing was done at 5500 MHz. The 99% channel bandwidth for 20MHz signals is 18 MHz, the the 99% channel bandwidth for 40MHz signals is 36 MHz, and the 99% channel bandwidth for 80MHz signals is 76. (See the 26dB BW section of the RF report for further measurement details).

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. 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 (18 MHz for 20MHz signals, 36 MHz for 40 MHz signals, and 76 MHz for 80 MHz signals); otherwise, the UUT does not comply with DFS requirements.

For the chirped Bin 5 radar, the U-NII Detection Bandwidth must be at least 80% of the UUT transmitter 99% power bandwidth (14 MHz for 20MHz signals, 28 MHz for 40 MHz signals, and 60 MHz for 80 MHz signals); otherwise, the UUT does not comply with DFS requirements.

**USA Bin 0 Radar**

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	20	17
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		

USA Bin 1A

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	20	17
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

USA Bin 1B

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	20	17
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		

USA Bin 2

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	20	17
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

USA Bin 3

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	20	17
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	1	100
5510	1	1	1	1	1	1	1	1	1	1	1	100

USA Bin 4

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	20	17
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		

USA Bin 5

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5493.5	1	1	1	1	1	1	1	1	1	1	100	20	17
5493.5	1	1	1	1	1	1	1	1	1	1	100		
5493.5	1	1	1	1	1	1	1	1	1	1	100		
5493.5	1	1	1	1	1	1	1	1	1	1	100		
5493.9	1	1	1	1	1	1	1	1	1	1	100		
5494.7	1	1	1	1	1	1	1	1	1	1	100		
5495.9	1	1	1	1	1	1	1	1	1	1	100		
5496.7	1	1	1	1	1	1	1	1	1	1	100		
5497.9	1	1	1	1	1	1	1	1	1	1	100		



5498.7	1	1	1	1	1	1	1	1	1	1	100
5500	1	1	1	1	1	1	1	1	1	1	100
5501.3	1	1	1	1	1	1	1	1	1	1	100
5502.1	1	1	1	1	1	1	1	1	1	1	100
5503.3	1	1	1	1	1	1	1	1	1	1	100
5504.1	1	1	1	1	1	1	1	1	1	1	100
5505.3	1	1	1	1	1	1	1	1	1	1	100
5506.1	1	1	1	1	1	1	1	1	1	1	100
5506.5	1	1	1	1	1	1	1	1	1	1	100
5506.5	1	1	1	1	1	1	1	1	1	1	100
5506.5	1	1	1	1	1	1	1	1	1	1	100

USA Frequency Hopping

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	20	17
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		


Channel 5510MHz, 40MHz BW
USA Bin 0

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	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

USA Bin 1A

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	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

USA Bin 1B

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	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

USA Bin 2

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	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

USA Bin 3

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	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

USA Bin 4

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	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

USA Bin 5

Radars	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5494	1	1	1	1	1	1	1	1	1	1	100	40	36
5494	1	1	1	1	1	1	1	1	1	1	100		
5494	1	1	1	1	1	1	1	1	1	1	100		
5494	1	1	1	1	1	1	1	1	1	1	100		
5494	1	1	1	1	1	1	1	1	1	1	100		
5494.8	1	1	1	1	1	1	1	1	1	1	100		
5496	1	1	1	1	1	1	1	1	1	1	100		
5496.8	1	1	1	1	1	1	1	1	1	1	100		
5498	1	1	1	1	1	1	1	1	1	1	100		
5498.8	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
5521.2	1	1	1	1	1	1	1	1	1	1	100
5522	1	1	1	1	1	1	1	1	1	1	100
5523.2	1	1	1	1	1	1	1	1	1	1	100
5524	1	1	1	1	1	1	1	1	1	1	100
5525.2	1	1	1	1	1	1	1	1	1	1	100
5526	1	1	1	1	1	1	1	1	1	1	100
5526	1	1	1	1	1	1	1	1	1	1	100
5526	1	1	1	1	1	1	1	1	1	1	100
5526	1	1	1	1	1	1	1	1	1	1	100
5526	1	1	1	1	1	1	1	1	1	1	100

USA Frequency Hopping

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	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



Channel 5530MHz, 80MHz BW

USA Bin 0

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	80	75
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



USA Bin 1A

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	80	75
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



USA Bin 1B

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	80	75
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



USA Bin 2

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	80	75
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



USA Bin 3

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	80	75
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



USA Bin 4

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	80	75
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



USA Bin 5

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5494.5	1	1	1	1	1	1	1	1	1	1	100	80	75
5494.5	1	1	1	1	1	1	1	1	1	1	100		
5494.5	1	1	1	1	1	1	1	1	1	1	100		
5494.5	1	1	1	1	1	1	1	1	1	1	100		
5494.5	1	1	1	1	1	1	1	1	1	1	100		
5494.9	1	1	1	1	1	1	1	1	1	1	100		
5495.7	1	1	1	1	1	1	1	1	1	1	100		
5496.9	1	1	1	1	1	1	1	1	1	1	100		
5497.7	1	1	1	1	1	1	1	1	1	1	100		
5498.9	1	1	1	1	1	1	1	1	1	1	100		
5499.7	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
5560.3	1	1	1	1	1	1	1	1	1	1	100
5561.1	1	1	1	1	1	1	1	1	1	1	100
5562.3	1	1	1	1	1	1	1	1	1	1	100
5563.1	1	1	1	1	1	1	1	1	1	1	100
5564.3	1	1	1	1	1	1	1	1	1	1	100
5565.1	1	1	1	1	1	1	1	1	1	1	100
5565.5	1	1	1	1	1	1	1	1	1	1	100
5565.5	1	1	1	1	1	1	1	1	1	1	100
5565.5	1	1	1	1	1	1	1	1	1	1	100
5565.5	1	1	1	1	1	1	1	1	1	1	100
5565.5	1	1	1	1	1	1	1	1	1	1	100



USA Frequency Hopping

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10			
5490	1	1	1	1	1	1	1	1	1	1	100	80	75
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



B.3 Initial Channel Availability Check Time

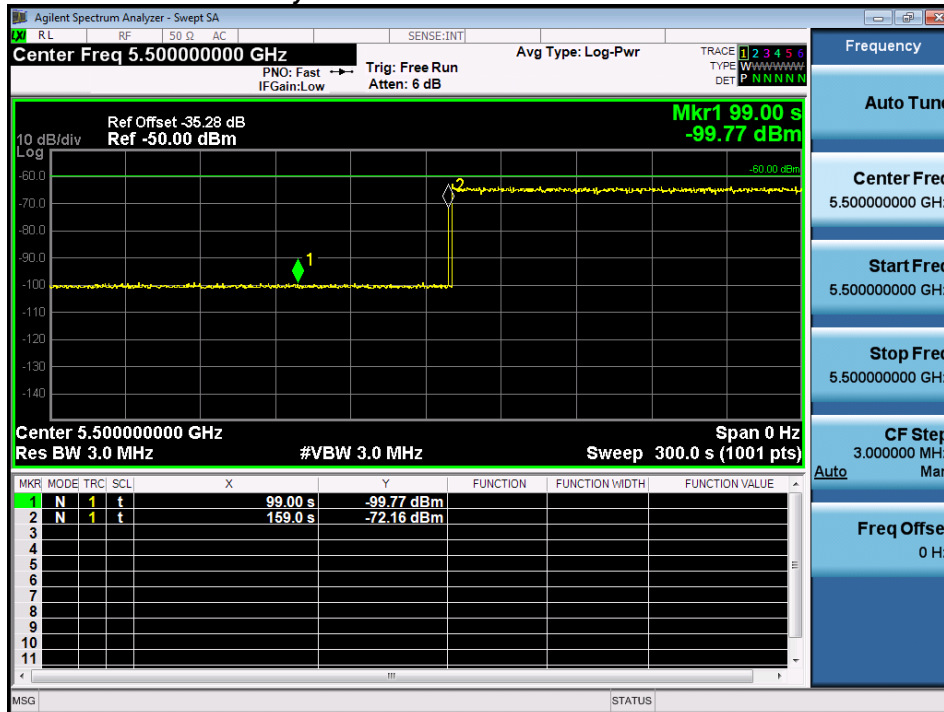
The tests that the UUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the U-NII device checks for Radar Waveforms for one minute on the test Channel. This test does not use any Radar Waveforms.

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





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.

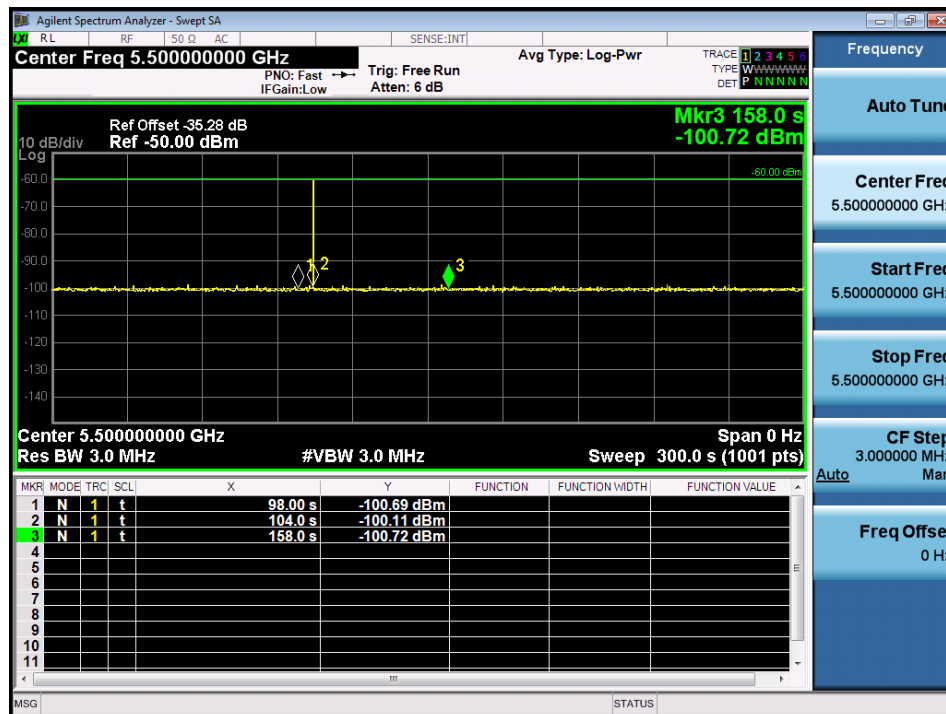
The UUT is powered on at T_0 . T_1 denotes the instant when the UUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T_1 and will end no sooner than $T_1 + 60$ seconds.

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





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

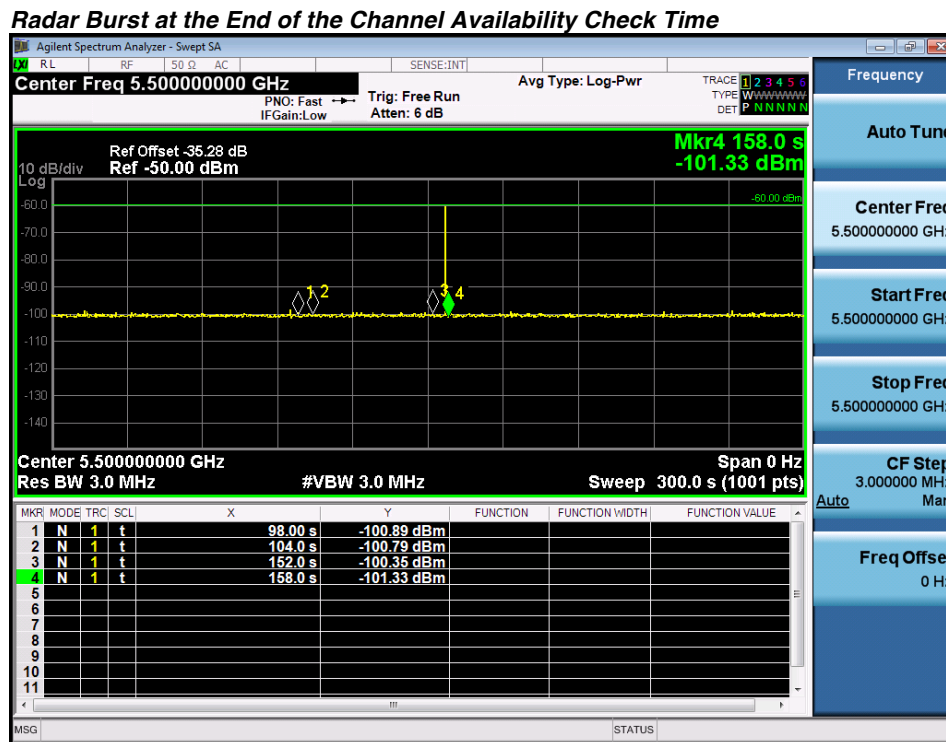
The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB (-63dBm) occurs at the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





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.

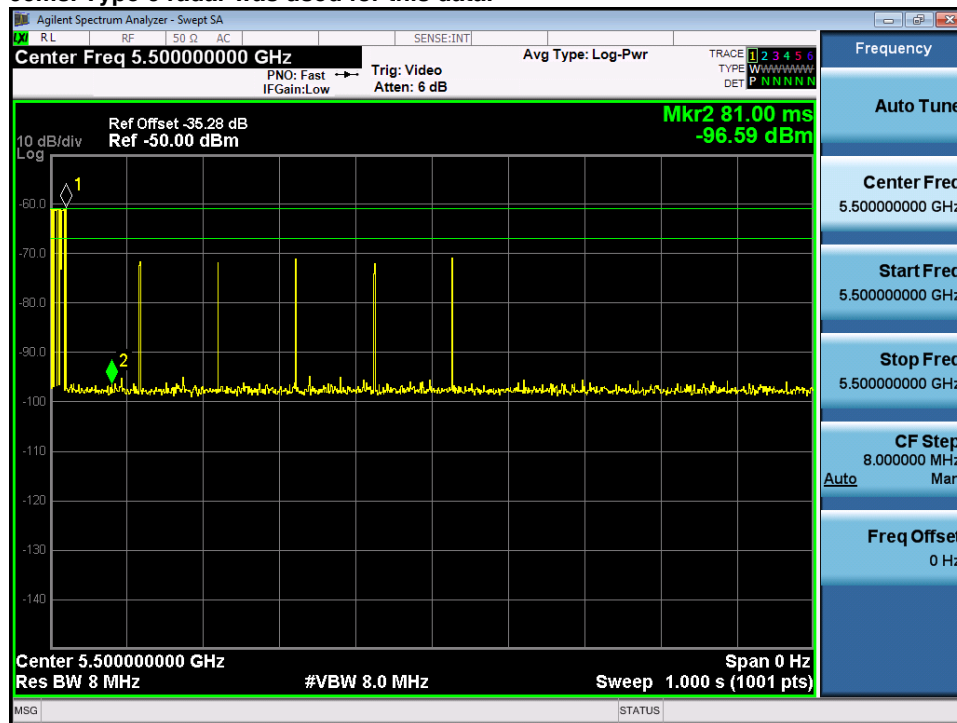
The steps below define the procedure to determine the above mentioned parameters when a radar Burst with a level equal to the DFS Detection Threshold + 1dB (-63dBm) is generated on the Operating Channel of the U-NII device.

A U-NII device operating as a Client Device will associate with the UUT (Master) at 5500 MHz. Stream the MPEG test file from the Master Device to the Client Device on the selected Channel for the entire period of the test.

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*.

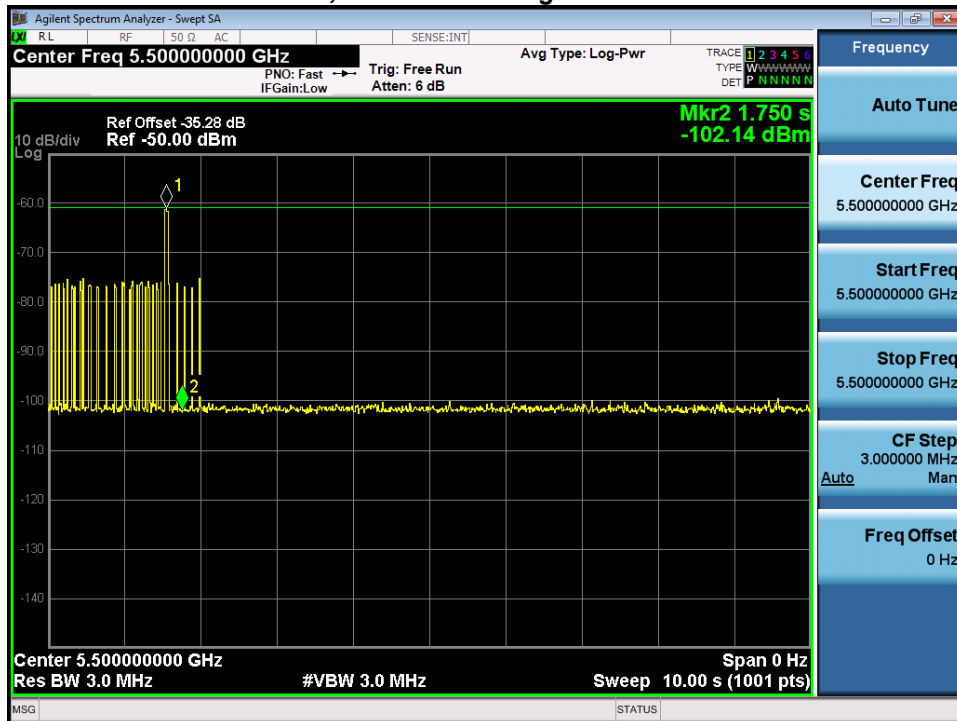
Marker 1 indicates the end of the radar pulse, Marker 2 is equal to marker 1 + 50ms. The plot demonstrates a closing time of 50ms or less. The aggregate beacons are visually verified less than 60ms. Type 0 radar was used for this data.



Channel close time = 50ms



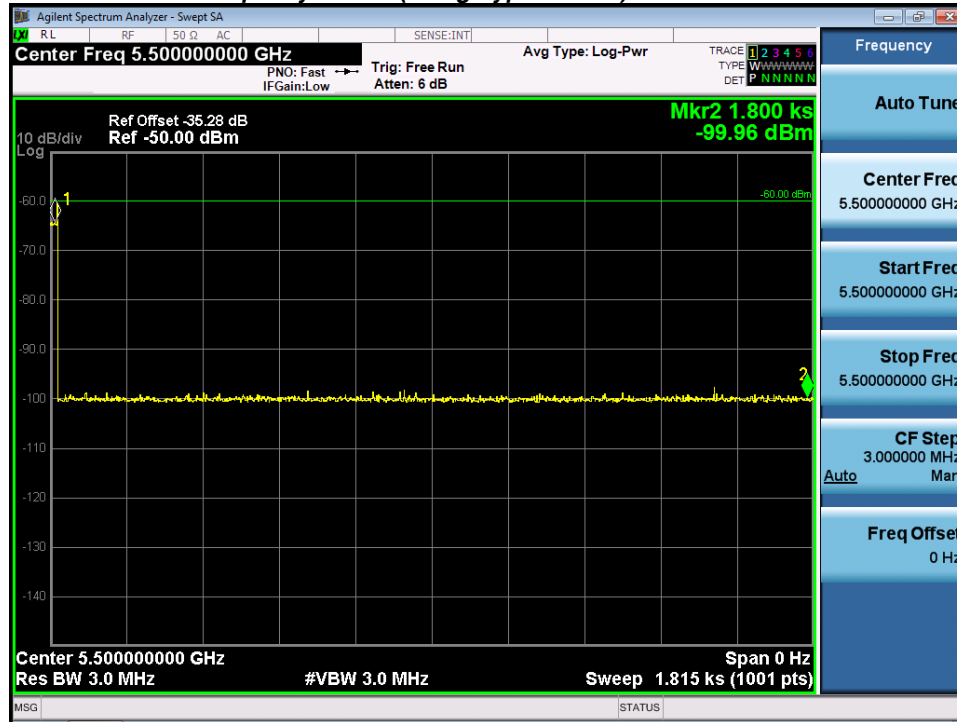
Channel Move Time, Channel Closing Transmission Time for





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)



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 + 1 dB (-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. Stream the MPEG test file from the Master Device to the Client Device on the selected Channel for the entire period of the test.

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.

KDB 905462 D02 UNII DFS compliance procedure New Rules v02:

Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

Statistical Performance Check

1. One frequency will be chosen from the *Operating Channels* of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands
2. In case the UUT is a U-NII device operating as a *Client Device* (with or without Radar Detection), a U-NII device operating as a *Master Device* will be used to allow the UUT (Client device) to *Associate* with the *Master Device*. In case the UUT is a *Master Device*, a U-NII device operating as a *Client Device* will be used and it is assumed that the Client will *Associate* with the UUT (Master). In both cases for conducted tests, the *Radar Waveform* generator will be connected to the *Master Device*. For radiated tests, the emissions of the *Radar Waveform* generator will be directed towards the *Master Device*. If the *Master Device* has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
3. Stream the channel loading test file from the *Master Device* to the Client Device on the test *Channel* for the entire period of the test.
4. At time T_0 the *Radar Waveform* generator sends the individual waveform for each of the Radar Types 1- 6 in **Tables 5-7**, at levels defined in **Table 3**, on the *Operating Channel*. An additional 1 dB is added to the radar test signal to ensure it is at or above the *DFS Detection Threshold*, accounting for equipment variations/errors.
5. Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Radar Type 0 to ensure detection occurs.

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

Short Radar Pulses Test

Once the performance requirements check is complete, statistical data will be gathered, to determine the ability of the device to detect the radar test waveforms (Short Pulse Radar Types 1-4) found in Table 5. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trials. The percentage of successful detection is calculated by:

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

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

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4}$$

The minimum number of trails, minimum percentage of successful detection and the aggregate minimum percentage of successful detection are found in Table 5.

Long Pulse Radar Test

Statistical data will be gathered to determine the ability of the device to detect the Long Pulse Radar Type 5 found in Table 6. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trials.

Three subsets of trials will be performed with a minimum of ten trials per subset. The subset of trials differ in where the Long Pulse Type 5 Signal is tuned in frequency:

- a) the Channel center frequency (Figure 18);
- b) tuned frequencies such that 90% of the Long Pulse Type 5 frequency modulation is within the low edge of the UUT Occupied Bandwidth (Figure 19); and
- c) tuned frequencies such that 90% of the Long Pulse Type 5 frequency modulation is within the high edge of the UUT Occupied Bandwidth (Figure 20).

For subset case 1: the center frequency of the signal generator will remain fixed at the center of the UUT Channel.

For subset case 2: to retain 90% frequency overlap between the radar signal and the UUT Occupied Bandwidth, the center frequency of the signal generator will vary for each of the ten trials in subset case 2. The center frequency of the signal generator for each trial is calculated by: $FL + (0.4 * \text{Chirp Width [in MHz]})$

For subset case 3: to retain 90% frequency overlap between the radar signal and the UUT *Occupied Bandwidth*, the center frequency of the signal generator will vary for each of the ten trials in subset case 3. The center frequency of the signal generator for each trial is calculated by $FH - (0.4 * \text{Chirp Width [in MHz]})$

Frequency Hopping Radar Test

Statistical data will be gathered to determine the ability of the device to detect the Frequency Hopping radar test signal (radar type 6) found in Table 7. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.

**Test Channels:**

Channel 5500MHz 20MHz BW data see page 62
 Channel 5510MHz 40MHz BW data see page 78
 Channel 5530MHz 80MHz BW data see page 106

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

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	74	1	718	1	93.3%	60.0%
2	5492	63	1	838	1		
3	5492	83	1	638	1		
4	5492	83	1	638	1		
5	5492	99	1	538	1		
6	5492	61	1	878	1		
7	5495	68	1	778	1		
8	5495	18	1	3066	0		
9	5495	67	1	798	1		
10	5495	78	1	678	1		
11	5495	99	1	538	1		
12	5495	102	1	518	1		
13	5500	68	1	778	1		
14	5500	72	1	738	1		
15	5500	78	1	678	1		
16	5500	26	1	2048	1		
17	5500	19	1	2780	1		
18	5500	25	1	2170	1		
19	5505	83	1	639	1		
20	5505	69	1	772	1		
21	5505	32	1	1678	1		
22	5505	20	1	2724	1		
23	5505	61	1	872	1		
24	5505	26	1	2082	1		
25	5508	20	1	2639	1		
26	5508	38	1	1416	1		
27	5508	21	1	2603	0		
28	5508	21	1	2579	1		
29	5508	48	1	1103	1		
30	5508	18	1	2948	1		



Channel 5500MHz, 20MHz BW, USA Bin 2 Radar Statistical Performance

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	24	4.8	210	1	90.0%	60.0%
2	5492	25	2.7	212	1		
3	5492	28	2	219	1		
4	5492	28	3.6	224	1		
5	5492	27	3.6	158	1		
6	5492	24	2.8	208	1		
7	5495	29	4	193	1		
8	5495	26	1.5	206	1		
9	5495	25	4.6	227	1		
10	5495	27	3	189	1		
11	5495	25	3.9	182	0		
12	5495	27	2.6	155	0		
13	5500	26	3.3	196	1		
14	5500	23	3.4	186	1		
15	5500	29	2.9	215	1		
16	5500	27	1.3	202	1		
17	5500	23	1.9	184	1		
18	5500	29	1.4	225	1		
19	5505	24	4.8	157	0		
20	5505	28	4.6	153	1		
21	5505	25	3.2	191	1		
22	5505	29	1.8	201	1		
23	5505	23	2	177	1		
24	5505	23	4.7	206	1		
25	5508	23	3.7	214	1		
26	5508	25	3.2	170	1		
27	5508	27	2.8	159	1		
28	5508	25	2.3	195	1		
29	5508	24	4.1	151	1		
30	5508	23	1.6	163	1		


Channel 5500MHz, 20MHz BW, USA Bin 3 Radar Statistical Performance

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	18	9.8	203	1	73.3%	60.0%
2	5492	18	6.2	363	0		
3	5492	16	6.7	246	1		
4	5492	16	6.6	405	1		
5	5492	18	9.6	427	1		
6	5492	17	8.9	227	1		
7	5495	16	9.4	264	1		
8	5495	17	9.2	408	1		
9	5495	16	8.1	248	0		
10	5495	17	8	286	1		
11	5495	17	6.8	261	0		
12	5495	17	7.5	213	1		
13	5500	16	9.5	441	0		
14	5500	17	8.8	267	1		
15	5500	16	9.5	499	1		
16	5500	18	9.8	458	1		
17	5500	17	6.2	269	1		
18	5500	18	6.5	413	0		
19	5505	18	8.8	498	0		
20	5505	18	8.1	406	1		
21	5505	18	6.8	468	1		
22	5505	18	7.4	379	0		
23	5505	16	6.6	274	1		
24	5505	16	6.1	317	1		
25	5508	17	9.4	472	0		
26	5508	17	7	379	1		
27	5508	18	6	278	1		
28	5508	18	10	370	1		
29	5508	18	7.2	211	1		
30	5508	18	7.4	288	1		



Channel 5500MHz, 20MHz BW, USA Bin 4 Radar Statistical Performance

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	12	12.7	216	1	80.0%	60.0%
2	5492	12	16.9	217	0		
3	5492	16	16.2	476	1		
4	5492	12	19.7	313	1		
5	5492	16	11.5	295	1		
6	5492	14	18.5	309	1		
7	5495	12	16.3	224	1		
8	5495	15	12.8	236	1		
9	5495	13	12.2	499	1		
10	5495	13	17.2	329	1		
11	5495	16	19.1	214	0		
12	5495	15	16	362	0		
13	5500	14	18.2	480	1		
14	5500	14	13.1	435	1		
15	5500	13	12.1	440	1		
16	5500	12	16.7	399	1		
17	5500	16	17.6	219	1		
18	5500	15	18	461	1		
19	5505	14	13.8	287	1		
20	5505	13	19.4	355	1		
21	5505	13	17.6	336	0		
22	5505	12	19.7	362	1		
23	5505	16	17.2	259	1		
24	5505	14	11.5	251	0		
25	5508	13	16.9	395	1		
26	5508	13	18.6	255	0		
27	5508	15	19.9	276	1		
28	5508	15	18.8	454	1		
29	5508	16	19.5	271	1		
30	5508	16	14.2	332	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:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (93.3\% + 90.0\% + 73.3\% + 80.0\%) / 4 = 84.2\% > 80\%$$



*See the Bin5 Radar Characteristics at the end of this report.

Channel 5500MHz, 20MHz BW, USA Bin 5 Radar Statistical Performance

Trial #	Name	1=Detection 0=No Detection	Detection Percentage	Limit
1	USA Bin 5 Radar Test 1	1	100.0%	80.0%
2	USA Bin 5 Radar Test 2	1		
3	USA Bin 5 Radar Test 3	1		
4	USA Bin 5 Radar Test 4	1		
5	USA Bin 5 Radar Test 5	1		
6	USA Bin 5 Radar Test 6	1		
7	USA Bin 5 Radar Test 7	1		
8	USA Bin 5 Radar Test 8	1		
9	USA Bin 5 Radar Test 9	1		
10	USA Bin 5 Radar Test 10	1		
11	USA Bin 5 Radar Test 11	1		
12	USA Bin 5 Radar Test 12	1		
13	USA Bin 5 Radar Test 13	1		
14	USA Bin 5 Radar Test 14	1		
15	USA Bin 5 Radar Test 15	1		
16	USA Bin 5 Radar Test 16	1		
17	USA Bin 5 Radar Test 17	1		
18	USA Bin 5 Radar Test 18	1		
19	USA Bin 5 Radar Test 19	1		
20	USA Bin 5 Radar Test 20	1		
21	USA Bin 5 Radar Test 21	1		
22	USA Bin 5 Radar Test 22	1		
23	USA Bin 5 Radar Test 23	1		
24	USA Bin 5 Radar Test 24	1		
25	USA Bin 5 Radar Test 25	1		
26	USA Bin 5 Radar Test 26	1		
27	USA Bin 5 Radar Test 27	1		
28	USA Bin 5 Radar Test 28	1		
29	USA Bin 5 Radar Test 29	1		
30	USA Bin 5 Radar Test 30	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	5494.2	8	70	1115		0.65464
2	1	5494.2	8	85			0.845149
3	1	5494.2	8	85			1.867386
4	3	5494.2	8	65	1821	1435	2.622585
5	2	5494.2	8	50	1747		2.877172
6	1	5494.2	8	65			3.518419
7	1	5494.2	8	85			4.552524
8	3	5494.2	8	95	1178	1077	5.102756
9	2	5494.2	8	95	1853		5.80691
10	3	5494.2	8	60	1484	1496	6.199579
11	1	5494.2	8	90			7.036108
12	2	5494.2	8	75	1944		7.577964
13	2	5494.2	8	50	1646		8.54137
14	1	5494.2	8	70			9.255616
15	1	5494.2	8	85			9.776238
16	3	5494.2	8	100	1045	1636	10.339299
17	2	5494.2	8	55	1952		11.169727
18	1	5494.2	8	75			11.925622

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	5494.2	8	55	1826		0.096493
2	1	5494.2	8	80			1.533075
3	3	5494.2	8	100	1644	1654	2.524448
4	1	5494.2	8	75			3.690366
5	1	5494.2	8	80			4.433935
6	3	5494.2	8	70	1887	1755	4.958837
7	1	5494.2	8	60			5.807334
8	3	5494.2	8	55	1545	1467	7.291463
9	3	5494.2	8	50	1430	1775	7.654158
10	3	5494.2	8	95	1775	1334	9.193404
11	2	5494.2	8	55	1946		9.512505
12	1	5494.2	8	70			10.998894
13	2	5494.2	8	80	1540		11.729448

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	5494.6	9	75	1439	1591	0.696808
2	2	5494.6	9	60	1000		1.300955
3	3	5494.6	9	70	1568	1920	1.985762
4	2	5494.6	9	75	1747		3.031212
5	3	5494.6	9	75	1745	1534	4.27798
6	2	5494.6	9	90	1333		4.685379
7	3	5494.6	9	75	1382	1346	5.863658
8	3	5494.6	9	50	1066	1413	6.458279
9	3	5494.6	9	95	1595	1330	7.416112
10	1	5494.6	9	70			8.32906
11	2	5494.6	9	80	1061		8.590818
12	3	5494.6	9	60	1449	1488	9.468839
13	2	5494.6	9	55	1883		10.83048
14	1	5494.6	9	100			11.732648

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	3	5495.8	12	85	1699	1912	0.203236
2	1	5495.8	12	55			1.901978
3	1	5495.8	12	65			2.590604
4	3	5495.8	12	85	1616	1221	4.03592
5	2	5495.8	12	50	1559		4.914307
6	1	5495.8	12	100			5.930509
7	2	5495.8	12	55	1257		7.299583
8	2	5495.8	12	90	1593		8.679145
9	2	5495.8	12	95	1547		8.902202
10	2	5495.8	12	90	1798		10.246934
11	1	5495.8	12	85			11.631488

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	5498.6	19	65			0.034865
2	3	5498.6	19	70	1980	1998	1.40179
3	1	5498.6	19	55			2.096971
4	1	5498.6	19	60			2.937336
5	2	5498.6	19	80	1887		3.24732
6	3	5498.6	19	55	1003	1520	4.445809
7	2	5498.6	19	65	1497		5.302409



8	1	5498.6	19	70			6.167021
9	2	5498.6	19	100	1307		7.176437
10	3	5498.6	19	60	1330	1800	7.528073
11	1	5498.6	19	85			8.413542
12	2	5498.6	19	75	1726		9.547309
13	2	5498.6	19	55	1450		10.340494
14	3	5498.6	19	95	1185	1838	10.641703
15	3	5498.6	19	90	1973	1870	11.295894

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	2	5498.6	19	80	1542		1.428543
2	3	5498.6	19	75	1301	1129	1.737124
3	3	5498.6	19	50	1455	1922	3.092174
4	1	5498.6	19	100			4.518448
5	3	5498.6	19	55	1049	1537	6.060273
6	1	5498.6	19	65			7.562337
7	1	5498.6	19	50			9.264664
8	1	5498.6	19	55			10.742237

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	3	5494.6	9	55	1587	1510	0.526622
2	1	5494.6	9	60			0.656972
3	3	5494.6	9	90	1749	1711	1.28783
4	3	5494.6	9	70	1140	1144	2.348121
5	2	5494.6	9	75	1129		3.067838
6	1	5494.6	9	50			3.703361
7	3	5494.6	9	80	1000	1924	4.284815
8	2	5494.6	9	75	1654		4.515674
9	1	5494.6	9	95			5.200423
10	2	5494.6	9	85	1271		5.87876
11	3	5494.6	9	55	1504	1235	6.676731
12	2	5494.6	9	95	1374		7.576379
13	2	5494.6	9	55	1811		7.907907
14	3	5494.6	9	90	1108	1544	8.372539
15	1	5494.6	9	65			9.421209
16	3	5494.6	9	75	1510	1816	9.564913
17	3	5494.6	9	80	1823	1742	10.229386
18	1	5494.6	9	85			11.178585
19	2	5494.6	9	90	1679		11.701626

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	5494.6	9	70			0.479228
2	2	5494.6	9	60	1977		0.814053
3	1	5494.6	9	85			2.147264
4	1	5494.6	9	90			2.830598
5	2	5494.6	9	100	1173		3.404597
6	2	5494.6	9	70	1862		3.893377
7	1	5494.6	9	100			4.711165
8	1	5494.6	9	60			5.352053
9	1	5494.6	9	80			6.642719
10	1	5494.6	9	65			7.029961
11	1	5494.6	9	85			7.50787
12	1	5494.6	9	100			8.3958
13	1	5494.6	9	100			9.100277
14	1	5494.6	9	95			10.468261
15	1	5494.6	9	65			10.884293
16	1	5494.6	9	55			11.385532

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	5494.6	9	50			0.075654
2	2	5494.6	9	55	1386		1.039178
3	2	5494.6	9	90	1404		1.695806
4	2	5494.6	9	100	1642		2.384239
5	3	5494.6	9	55	1002	1762	3.00986
6	2	5494.6	9	60	1637		3.664517
7	3	5494.6	9	65	1137	1934	4.324793
8	1	5494.6	9	70			4.747086
9	1	5494.6	9	55			5.168385
10	2	5494.6	9	85	1069		5.941644
11	2	5494.6	9	50	1306		6.677414
12	1	5494.6	9	50			7.2763
13	1	5494.6	9	100			7.902466
14	2	5494.6	9	55	1816		8.748924
15	3	5494.6	9	70	1827	1709	8.887626
16	3	5494.6	9	100	1594	1240	9.960258



17	1	5494.6	9	85			10.698458
18	1	5494.6	9	85			11.254204
19	1	5494.6	9	55			11.417396
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	5497	15	60			0.202967
2	1	5497	15	80			2.032179
3	3	5497	15	90	1153	1996	3.493139
4	2	5497	15	50	1050		4.894802
5	2	5497	15	100	1466		6.372411
6	2	5497	15	100	1055		6.893585
7	2	5497	15	85	1975		8.47895
8	1	5497	15	65			10.503807
9	3	5497	15	90	1695	1987	11.587313
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	20	60	1708	1575	0.479731
2	2	5500	20	85	1010		1.359701
3	1	5500	20	60			2.134574
4	1	5500	20	65			2.910039
5	2	5500	20	70	1794		3.925459
6	1	5500	20	65			4.589731
7	2	5500	20	80	1603		5.1422
8	1	5500	20	90			5.713645
9	2	5500	20	50	1589		7.142907
10	2	5500	20	75	1152		7.279673
11	1	5500	20	50			8.215552
12	3	5500	20	55	1225	1143	9.02776
13	1	5500	20	100			10.313373
14	3	5500	20	100	1800	1704	10.915711
15	3	5500	20	50	1318	1840	11.909556
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	5500	8	70	1227		0.010401
2	1	5500	8	65			0.744165
3	2	5500	8	70	1500		1.35115
4	3	5500	8	75	1391	1489	2.333593
5	2	5500	8	100	1015		2.669442
6	3	5500	8	95	1935	1005	3.427147
7	2	5500	8	60	1418		4.484927
8	3	5500	8	55	1155	1980	4.944702
9	2	5500	8	55	1343		5.668303
10	3	5500	8	80	1483	1584	6.328011
11	2	5500	8	60	1004		6.667555
12	2	5500	8	85	1280		7.777986
13	2	5500	8	55	1500		8.483518
14	3	5500	8	55	1046	1652	8.723718
15	1	5500	8	50			9.694658
16	2	5500	8	50	1932		10.640882
17	3	5500	8	50	1449	1464	10.98113
18	1	5500	8	100			11.593006
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	5500	18	65			0.133418
2	1	5500	18	65			0.809056
3	2	5500	18	70	1982		2.000724
4	1	5500	18	65			2.173292
5	2	5500	18	60	1933		3.484137
6	3	5500	18	90	1713	1420	3.626636
7	1	5500	18	55			4.787549
8	1	5500	18	80			5.422964
9	1	5500	18	100			6.31557
10	3	5500	18	85	1121	1290	6.600376
11	3	5500	18	95	1834	1284	7.154638
12	1	5500	18	80			8.077425
13	3	5500	18	70	1048	1815	8.626055
14	3	5500	18	70	1332	1840	9.357825
15	3	5500	18	65	1298	1844	10.500665
16	1	5500	18	55			11.252299
17	2	5500	18	75	1539		11.379853
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	5500	12	80	1367	1692	0.151841
2	1	5500	12	70			1.01



3	2	5500	12	50	1398		1.550228
4	1	5500	12	100			2.286846
5	3	5500	12	85	1898	1252	2.833674
6	1	5500	12	75			3.923311
7	2	5500	12	55	1987		4.342401
8	3	5500	12	90	1766	1991	4.793906
9	3	5500	12	90	1946	1821	5.896341
10	1	5500	12	65			6.115428
11	1	5500	12	85			6.753629
12	1	5500	12	90			7.505624
13	2	5500	12	100	1969		8.361243
14	3	5500	12	95	1633	1273	8.731363
15	3	5500	12	80	1221	1552	9.430782
16	2	5500	12	60	1681		10.659628
17	2	5500	12	75	1988		10.933732
18	3	5500	12	55	1251	1327	11.560341

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	5500	15	100	1320		1.384168
2	1	5500	15	85			2.637407
3	1	5500	15	90			3.244786
4	3	5500	15	85	1930	1809	4.531811
5	2	5500	15	75	1583		6.350996
6	3	5500	15	85	1481	1511	7.644224
7	2	5500	15	100	1240		9.144741
8	2	5500	15	60	1498		10.756823

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	3	5500	19	60	1508	1674	0.590157
2	2	5500	19	65	1783		1.183686
3	3	5500	19	60	1116	1654	1.330429
4	2	5500	19	95	1407		2.306741
5	1	5500	19	70			2.429841
6	3	5500	19	50	1108	1894	3.370673
7	2	5500	19	80	1194		3.949014
8	1	5500	19	100			4.7421
9	2	5500	19	85	1225		4.957335
10	1	5500	19	90			5.824458
11	1	5500	19	50			6.297084
12	2	5500	19	55	1146		7.146366
13	3	5500	19	80	1232	1863	7.500584
14	2	5500	19	55	1555		7.899488
15	2	5500	19	55	1288		8.450731
16	2	5500	19	55	1270		9.308737
17	3	5500	19	70	1709	1157	10.015016
18	1	5500	19	55			10.716743
19	2	5500	19	60	1047		11.197949
20	3	5500	19	80	1970	1340	11.651018

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	5500	12	85			0.252567
2	3	5500	12	95	1859	1621	0.74739
3	1	5500	12	90			1.439267
4	2	5500	12	65	1009		2.056423
5	3	5500	12	75	1678	1624	2.808094
6	3	5500	12	75	1584	1038	3.106056
7	3	5500	12	95	1254	1266	3.690926
8	3	5500	12	95	1232	1851	4.756886
9	1	5500	12	65			4.939599
10	1	5500	12	80			5.489487
11	1	5500	12	55			6.40261
12	3	5500	12	100	1110	1243	6.879259
13	3	5500	12	90	1487	1991	7.771734
14	1	5500	12	75			8.173866
15	3	5500	12	65	1452	1960	8.5904
16	2	5500	12	75	1547		9.549312
17	1	5500	12	100			10.132986
18	3	5500	12	50	1258	1532	10.776402
19	2	5500	12	55	1839		10.945712
20	2	5500	12	95	1591		11.630845

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	5500	8	60	1698	1901	0.13083
2	3	5500	8	65	1759	1903	1.689194
3	1	5500	8	90			2.60188



4	3	5500	8	70	1385	1020	3.134428
5	2	5500	8	90	1204		4.233175
6	1	5500	8	65			5.521113
7	2	5500	8	70	1761		6.40664
8	1	5500	8	100			7.524455
9	1	5500	8	70			8.746294
10	3	5500	8	50	1405	1974	9.21043
11	1	5500	8	75			10.970586
12	3	5500	8	65	1408	1313	11.412698
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	2	5500	15	95	1940		0.597466
2	3	5500	15	65	1145	1061	1.202275
3	1	5500	15	85			2.189952
4	3	5500	15	100	1235	1411	3.043825
5	2	5500	15	95	1199		3.257496
6	1	5500	15	70			4.023375
7	2	5500	15	60	1272		5.27008
8	3	5500	15	65	1968	1581	6.107884
9	3	5500	15	50	1485	1894	6.6941
10	2	5500	15	50	1485		7.812296
11	2	5500	15	80	1127		8.652807
12	3	5500	15	60	1183	1035	9.051718
13	3	5500	15	60	1023	1799	10.273623
14	2	5500	15	90	1441		10.879978
15	2	5500	15	55	1887		11.29445
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	3	5500	5	55	1994	1742	0.218165
2	1	5500	5	100			1.010516
3	1	5500	5	60			1.983637
4	1	5500	5	55			2.275231
5	2	5500	5	65	1857		3.141208
6	1	5500	5	95			3.814012
7	3	5500	5	90	1242	1437	4.520996
8	3	5500	5	50	1394	1232	5.616079
9	3	5500	5	60	1887	1260	6.306135
10	1	5500	5	70			6.601532
11	3	5500	5	55	1788	1078	7.185598
12	1	5500	5	65			8.12878
13	2	5500	5	80	1654		8.763602
14	1	5500	5	70			9.713851
15	2	5500	5	85	1775		10.444449
16	1	5500	5	65			10.794268
17	3	5500	5	50	1358	1839	11.402165
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	5503.8	13	100	1187		0.616476
2	2	5503.8	13	100	1756		1.011354
3	2	5503.8	13	100	1008		2.28001
4	3	5503.8	13	100	1502	1799	3.230139
5	3	5503.8	13	60	1856	1178	3.757301
6	1	5503.8	13	60			4.590238
7	1	5503.8	13	85			5.770889
8	1	5503.8	13	90			6.220185
9	3	5503.8	13	90	1596	1380	7.604461
10	3	5503.8	13	50	1112	1076	7.762609
11	1	5503.8	13	50			8.849209
12	1	5503.8	13	85			9.572566
13	2	5503.8	13	50	1038		10.691894
14	3	5503.8	13	60	1517	1556	11.441982
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	5504.6	11	65	1132	1370	0.611579
2	3	5504.6	11	60	1391	1121	1.793251
3	3	5504.6	11	85	1713	1730	3.211999
4	1	5504.6	11	95			5.084596
5	2	5504.6	11	90	1338		6.633
6	2	5504.6	11	50	1540		7.691715
7	1	5504.6	11	55			10.128654
8	3	5504.6	11	85	1742	1110	10.834544
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	1	5505.4	9	65			0.604852



2	2	5505.4	9	80	1738		0.766596
3	2	5505.4	9	75	1348		1.966587
4	3	5505.4	9	50	1681	1609	2.484831
5	3	5505.4	9	80	1967	1338	3.079572
6	2	5505.4	9	70	1375		3.868804
7	1	5505.4	9	80			4.458899
8	2	5505.4	9	100	1613		5.287796
9	2	5505.4	9	100	1601		6.082907
10	1	5505.4	9	50			6.503058
11	2	5505.4	9	100	1816		7.419027
12	1	5505.4	9	50			8.154521
13	3	5505.4	9	60	1060	1859	8.630284
14	2	5505.4	9	75	1128		9.811861
15	3	5505.4	9	100	1384	1709	10.559006
16	2	5505.4	9	50	1929		10.852798
17	1	5505.4	9	70			11.883273

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	70			0.237733
2	3	5505.4	9	85	1508	1329	0.963423
3	3	5505.4	9	65	1715	1375	1.691161
4	1	5505.4	9	95			2.214385
5	3	5505.4	9	65	1792	1880	2.452209
6	1	5505.4	9	55			3.069002
7	3	5505.4	9	85	1194	1328	3.631604
8	1	5505.4	9	95			4.499696
9	1	5505.4	9	90			5.279965
10	2	5505.4	9	55	1572		5.490217
11	2	5505.4	9	95	1117		6.17163
12	1	5505.4	9	60			6.798645
13	3	5505.4	9	90	1032	1170	7.397136
14	2	5505.4	9	55	1745		8.057485
15	1	5505.4	9	85			8.959393
16	3	5505.4	9	80	1689	1943	9.430854
17	3	5505.4	9	75	1139	1575	9.927115
18	2	5505.4	9	75	1523		10.559077
19	1	5505.4	9	55			11.105428
20	3	5505.4	9	85	1356	1390	11.81671

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	15	90			0.204141
2	2	5503	15	75	1659		1.142088
3	2	5503	15	65	1886		1.746152
4	2	5503	15	70	1736		2.45018
5	1	5503	15	100			2.725894
6	3	5503	15	55	1795	1470	3.563732
7	3	5503	15	95	1179	1562	4.070414
8	3	5503	15	80	1047	1334	5.329089
9	1	5503	15	70			5.78547
10	1	5503	15	95			6.29756
11	1	5503	15	50			7.016316
12	1	5503	15	55			7.988345
13	1	5503	15	55			8.581685
14	1	5503	15	55			9.027766
15	1	5503	15	70			9.481722
16	1	5503	15	70			10.596571
17	2	5503	15	75	1609		11.21675
18	1	5503	15	75			11.883385

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	5506.6	6	75	1421	1798	0.888504
2	3	5506.6	6	85	1281	1636	1.072939
3	3	5506.6	6	90	1234	1780	2.151591
4	2	5506.6	6	75	1364		3.609162
5	1	5506.6	6	50			3.972702
6	2	5506.6	6	90	1576		5.143996
7	3	5506.6	6	85	1438	1415	6.189314
8	1	5506.6	6	65			7.187414
9	2	5506.6	6	60	1644		7.964361
10	3	5506.6	6	60	1611	1650	8.9376
11	1	5506.6	6	85			9.281371
12	2	5506.6	6	55	1878		10.944268
13	1	5506.6	6	90			11.209909

USA Bin 5 Trial #27

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
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1	3	5501	20	90	1359	1839	0.703585
2	3	5501	20	55	1864	1976	2.026599
3	1	5501	20	70			2.995611
4	1	5501	20	75			4.245234
5	2	5501	20	80	1109		5.335301
6	1	5501	20	80			6.15695
7	1	5501	20	100			6.694159
8	1	5501	20	60			8.505412
9	2	5501	20	75	1870		8.948507
10	1	5501	20	90			10.212299
11	3	5501	20	80	1925	1593	11.259961
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	5501.8	18	100	1876		0.276435
2	2	5501.8	18	50	1626		0.871147
3	2	5501.8	18	70	1261		2.165839
4	3	5501.8	18	95	1663	1314	2.475727
5	1	5501.8	18	50			3.295838
6	1	5501.8	18	60			4.627361
7	1	5501.8	18	70			5.568439
8	1	5501.8	18	60			5.999673
9	3	5501.8	18	85	1176	1397	7.001338
10	2	5501.8	18	90	1279		7.684526
11	2	5501.8	18	50	1178		8.42297
12	1	5501.8	18	75			9.256167
13	3	5501.8	18	80	1992	1978	10.165543
14	1	5501.8	18	100			10.834579
15	1	5501.8	18	100			11.375794
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	5501	20	80			1.214246
2	3	5501	20	55	1440	1563	2.993569
3	1	5501	20	60			3.135486
4	1	5501	20	95			5.544689
5	1	5501	20	85			6.39279
6	2	5501	20	65	1072		8.933581
7	1	5501	20	65			10.205781
8	1	5501	20	90			11.869212
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	5506.2	7	70	1439	1032	0.149167
2	3	5506.2	7	65	1664	1056	1.41938
3	3	5506.2	7	65	1250	1370	2.834669
4	1	5506.2	7	90			5.083415
5	3	5506.2	7	70	1836	1810	6.031151
6	2	5506.2	7	100	1920		7.027958
7	1	5506.2	7	55			8.152552
8	2	5506.2	7	90	1915		9.338572
9	2	5506.2	7	80	1096		11.623561



*See the Bin6 Radar Characteristics at the end of this report.

Channel 5500MHz, 20MHz BW, USA Frequency Hopping Radar Statistical Performance

Trial #	Name	1=Detection 0=No Detection	Detection Percentage	Limit
1	USA Bin 6 Radar Test 1	1	93.3%	70.0%
2	USA Bin 6 Radar Test 2	1		
3	USA Bin 6 Radar Test 3	1		
4	USA Bin 6 Radar Test 4	1		
5	USA Bin 6 Radar Test 5	1		
6	USA Bin 6 Radar Test 6	1		
7	USA Bin 6 Radar Test 7	1		
8	USA Bin 6 Radar Test 8	1		
9	USA Bin 6 Radar Test 9	1		
10	USA Bin 6 Radar Test 10	1		
11	USA Bin 6 Radar Test 11	1		
12	USA Bin 6 Radar Test 12	1		
13	USA Bin 6 Radar Test 13	1		
14	USA Bin 6 Radar Test 14	1		
15	USA Bin 6 Radar Test 15	1		
16	USA Bin 6 Radar Test 16	1		
17	USA Bin 6 Radar Test 17	1		
18	USA Bin 6 Radar Test 18	1		
19	USA Bin 6 Radar Test 19	1		
20	USA Bin 6 Radar Test 20	1		
21	USA Bin 6 Radar Test 21	1		
22	USA Bin 6 Radar Test 22	1		
23	USA Bin 6 Radar Test 23	1		
24	USA Bin 6 Radar Test 24	0		
25	USA Bin 6 Radar Test 25	1		
26	USA Bin 6 Radar Test 26	0		
27	USA Bin 6 Radar Test 27	1		
28	USA Bin 6 Radar Test 28	1		
29	USA Bin 6 Radar Test 29	1		
30	USA Bin 6 Radar Test 30	1		



USA Frequency Hopping Trial #1

Hop #	Freq (GHz)	Pulse Start (mS)
2	5494	6
10	5501	30
36	5492	108
50	5497	150

USA Frequency Hopping Trial #2

Hop #	Freq (GHz)	Pulse Start (mS)
49	5497	147
68	5504	204
82	5509	246

USA Frequency Hopping Trial #3

Hop #	Freq (GHz)	Pulse Start (mS)
47	5506	141
53	5505	159
63	5497	189
99	5493	297

USA Frequency Hopping Trial #4

Hop #	Freq (GHz)	Pulse Start (mS)
2	5502	6
41	5505	123
49	5495	147
74	5494	222

USA Frequency Hopping Trial #5

Hop #	Freq (GHz)	Pulse Start (mS)
60	5501	180
66	5495	198
76	5507	228

USA Frequency Hopping Trial #6

Hop #	Freq (GHz)	Pulse Start (mS)
0	5495	0
20	5506	60
30	5503	90

USA Frequency Hopping Trial #7

Hop #	Freq (GHz)	Pulse Start (mS)
36	5497	108
73	5500	219
75	5494	225

USA Frequency Hopping Trial #8

Hop #	Freq (GHz)	Pulse Start (mS)
31	5496	93
32	5507	96
33	5495	99
78	5502	234

USA Frequency Hopping Trial #9

Hop #	Freq (GHz)	Pulse Start (mS)
11	5508	33
35	5507	105
41	5493	123
76	5498	228
97	5506	291

USA Frequency Hopping Trial #10

Hop #	Freq (GHz)	Pulse Start (mS)
3	5503	9
35	5506	105
36	5492	108
40	5504	120
47	5505	141
62	5500	186
70	5496	210
83	5497	249

USA Frequency Hopping Trial #11

Hop #	Freq (GHz)	Pulse Start (mS)
3	5503	9
16	5507	48
18	5496	54
27	5498	81
35	5509	105



79	5499	237
USA Frequency Hopping Trial #12		
Hop #	Freq (GHz)	Pulse Start (mS)
5	5492	15
8	5494	24
USA Frequency Hopping Trial #13		
Hop #	Freq (GHz)	Pulse Start (mS)
5	5495	15
59	5498	177
93	5509	279
USA Frequency Hopping Trial #14		
Hop #	Freq (GHz)	Pulse Start (mS)
13	5499	39
29	5496	87
55	5509	165
77	5494	231
80	5503	240
USA Frequency Hopping Trial #15		
Hop #	Freq (GHz)	Pulse Start (mS)
55	5506	165
68	5495	204
74	5509	222
USA Frequency Hopping Trial #16		
Hop #	Freq (GHz)	Pulse Start (mS)
35	5500	105
49	5507	147
88	5496	264
USA Frequency Hopping Trial #17		
Hop #	Freq (GHz)	Pulse Start (mS)
19	5508	57
39	5507	117
82	5493	246
93	5498	279
USA Frequency Hopping Trial #18		
Hop #	Freq (GHz)	Pulse Start (mS)
27	5497	81
79	5501	237
USA Frequency Hopping Trial #19		
Hop #	Freq (GHz)	Pulse Start (mS)
15	5500	45
20	5495	60
41	5503	123
59	5502	177
USA Frequency Hopping Trial #20		
Hop #	Freq (GHz)	Pulse Start (mS)
12	5496	36
42	5497	126
58	5493	174
60	5498	180
61	5505	183
USA Frequency Hopping Trial #21		
Hop #	Freq (GHz)	Pulse Start (mS)
11	5492	33
18	5491	54
93	5508	279
94	5497	282
USA Frequency Hopping Trial #22		
Hop #	Freq (GHz)	Pulse Start (mS)
14	5505	42
34	5503	102
36	5491	108
52	5509	156
78	5504	234
99	5507	297
USA Frequency Hopping Trial #23		
Hop #	Freq (GHz)	Pulse Start (mS)
72	5503	216
USA Frequency Hopping Trial #24		
Hop #	Freq (GHz)	Pulse Start (mS)



22	5497	66
USA Frequency Hopping Trial #25		
Hop #	Freq (GHz)	Pulse Start (mS)
2	5491	6
12	5505	36
26	5495	78
36	5504	108
62	5500	186
72	5497	216
86	5503	258
94	5496	282
USA Frequency Hopping Trial #26		
Hop #	Freq (GHz)	Pulse Start (mS)
64	5505	192
USA Frequency Hopping Trial #27		
Hop #	Freq (GHz)	Pulse Start (mS)
37	5505	111
54	5497	162
USA Frequency Hopping Trial #28		
Hop #	Freq (GHz)	Pulse Start (mS)
20	5505	60
37	5497	111
USA Frequency Hopping Trial #29		
Hop #	Freq (GHz)	Pulse Start (mS)
18	5503	54
29	5498	87
70	5499	210
79	5502	237
USA Frequency Hopping Trial #30		
Hop #	Freq (GHz)	Pulse Start (mS)
34	5491	102
57	5505	171
69	5509	207
70	5495	210
79	5507	237
82	5492	246


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

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	74	1	718	1	100.0%	60.0%
2	5492	61	1	878	1		
3	5492	92	1	578	1		
4	5492	81	1	658	1		
5	5492	58	1	918	1		
6	5492	65	1	818	1		
7	5500	76	1	698	1		
8	5500	72	1	738	1		
9	5500	58	1	918	1		
10	5500	58	1	918	1		
11	5500	74	1	718	1		
12	5500	65	1	818	1		
13	5510	86	1	618	1		
14	5510	70	1	758	1		
15	5510	92	1	578	1		
16	5510	26	1	2044	1		
17	5510	30	1	1789	1		
18	5510	29	1	1874	1		
19	5520	23	1	2324	1		
20	5520	25	1	2174	1		
21	5520	28	1	1916	1		
22	5520	35	1	1522	1		
23	5520	71	1	747	1		
24	5520	18	1	2992	1		
25	5528	20	1	2748	1		
26	5528	39	1	1364	1		
27	5528	60	1	890	1		
28	5528	50	1	1071	1		
29	5528	35	1	1525	1		
30	5528	19	1	2799	1		



Channel 5510MHz, 40MHz BW, USA Bin 2 Radar Statistical Performance

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	23	4.7	186	0	80.0%	60.0%
2	5492	26	1.5	151	1		
3	5492	25	2.3	180	1		
4	5492	26	2.7	211	1		
5	5492	24	2	159	1		
6	5492	28	3.1	220	1		
7	5500	24	1	214	1		
8	5500	26	3	202	0		
9	5500	26	3.8	215	0		
10	5500	24	2.2	230	1		
11	5500	26	1.7	197	1		
12	5500	26	4.6	175	1		
13	5510	26	1.1	191	1		
14	5510	23	3.4	212	1		
15	5510	26	4.7	229	1		
16	5510	29	3.3	224	1		
17	5510	23	1.5	182	1		
18	5510	25	2.9	224	1		
19	5520	25	1	174	0		
20	5520	27	1.3	211	1		
21	5520	26	4.3	229	1		
22	5520	25	2.6	227	1		
23	5520	26	1.8	166	1		
24	5520	25	3.8	183	1		
25	5528	24	4.4	193	1		
26	5528	28	3.9	221	0		
27	5528	24	2.4	175	0		
28	5528	24	2.8	223	1		
29	5528	24	1.2	190	1		
30	5528	25	3	151	1		



Channel 5510MHz, 40MHz BW, USA Bin 3 Radar Statistical Performance

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	18	6.7	404	1	90.0%	60.0%
2	5492	18	8.8	354	1		
3	5492	17	6.5	440	1		
4	5492	17	6.6	322	1		
5	5492	16	6.9	378	1		
6	5492	18	8.6	277	1		
7	5500	17	9.8	487	1		
8	5500	18	8.8	450	0		
9	5500	18	8.5	345	1		
10	5500	16	8.7	374	1		
11	5500	18	8.7	464	1		
12	5500	18	7.2	471	1		
13	5510	18	9.2	480	1		
14	5510	18	6.6	438	1		
15	5510	17	7.5	449	1		
16	5510	17	8.3	332	0		
17	5510	18	9.3	239	1		
18	5510	16	6.8	318	1		
19	5520	18	7.4	206	0		
20	5520	17	6.1	226	1		
21	5520	17	7.6	485	1		
22	5520	16	8.5	261	1		
23	5520	18	6	486	1		
24	5520	18	6.9	357	1		
25	5528	16	8	295	1		
26	5528	17	7.1	219	1		
27	5528	17	9.2	437	1		
28	5528	18	7.4	345	1		
29	5528	16	8.3	230	1		
30	5528	16	6.2	461	1		

Channel 5510MHz, 40MHz BW, USA Bin 4 Radar Statistical Performance

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	12	17.6	429	1	76.7%	60.0%
2	5492	14	12	314	1		
3	5492	14	14.6	315	1		
4	5492	12	15.9	443	1		
5	5492	14	12.6	444	1		
6	5492	16	17.4	492	0		
7	5500	16	17	488	1		
8	5500	13	11.6	393	0		
9	5500	14	13.9	308	1		
10	5500	16	14.5	477	0		
11	5500	14	11.1	351	1		
12	5500	13	14.3	279	1		
13	5510	15	13.2	354	0		
14	5510	16	11.8	329	1		
15	5510	15	13	281	1		
16	5510	16	11.2	349	0		
17	5510	14	19	215	1		
18	5510	14	17	231	1		
19	5520	14	15.1	393	0		
20	5520	14	11.3	328	1		
21	5520	16	12.2	443	1		
22	5520	16	16	413	1		
23	5520	16	14.8	244	0		
24	5520	15	11.5	305	1		
25	5528	15	18	429	1		
26	5528	13	14.8	491	1		
27	5528	16	16.8	326	1		
28	5528	16	18.3	236	1		
29	5528	14	13.7	229	1		
30	5528	12	16.6	307	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:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100.0\% + 80.0\% + 90.0\% + 76.7\%) / 4 = 86.6\% > 80\%$$



*See the Bin5 Radar Characteristics at the end of this report.

Channel 5510MHz, 40MHz BW, USA Bin 5 Radar Statistical Performance

Trial #	Name	1=Detection 0=No Detection	Detection Percentage	Limit
1	USA Bin 5 Radar Test 1	1	100%	80.0%
2	USA Bin 5 Radar Test 2	1		
3	USA Bin 5 Radar Test 3	1		
4	USA Bin 5 Radar Test 4	1		
5	USA Bin 5 Radar Test 5	1		
6	USA Bin 5 Radar Test 6	1		
7	USA Bin 5 Radar Test 7	1		
8	USA Bin 5 Radar Test 8	1		
9	USA Bin 5 Radar Test 9	1		
10	USA Bin 5 Radar Test 10	1		
11	USA Bin 5 Radar Test 11	1		
12	USA Bin 5 Radar Test 12	1		
13	USA Bin 5 Radar Test 13	1		
14	USA Bin 5 Radar Test 14	1		
15	USA Bin 5 Radar Test 15	1		
16	USA Bin 5 Radar Test 16	1		
17	USA Bin 5 Radar Test 17	1		
18	USA Bin 5 Radar Test 18	1		
19	USA Bin 5 Radar Test 19	1		
20	USA Bin 5 Radar Test 20	1		
21	USA Bin 5 Radar Test 21	1		
22	USA Bin 5 Radar Test 22	1		
23	USA Bin 5 Radar Test 23	1		
24	USA Bin 5 Radar Test 24	1		
25	USA Bin 5 Radar Test 25	1		
26	USA Bin 5 Radar Test 26	1		
27	USA Bin 5 Radar Test 27	1		
28	USA Bin 5 Radar Test 28	1		
29	USA Bin 5 Radar Test 29	1		
30	USA Bin 5 Radar Test 30	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	3	5498.8	17	85	1806	1591	0.481101
2	2	5498.8	17	70	1696		1.198339
3	1	5498.8	17	95			1.710931
4	2	5498.8	17	100	1778		1.962455
5	2	5498.8	17	100	1549		2.765536
6	1	5498.8	17	95			3.64199
7	1	5498.8	17	100			4.304778
8	1	5498.8	17	50			4.80082
9	2	5498.8	17	75	1483		5.433416
10	2	5498.8	17	100	1923		6.250241
11	3	5498.8	17	95	1011	1903	6.729894
12	2	5498.8	17	80	1705		7.447436
13	1	5498.8	17	55			7.911809
14	1	5498.8	17	50			8.411351
15	3	5498.8	17	85	1607	1732	8.891958
16	3	5498.8	17	90	1028	1814	9.752887
17	2	5498.8	17	80	1138		10.546591
18	1	5498.8	17	85			11.101971
19	1	5498.8	17	100			11.669472

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	5496.8	12	50	1993	1151	0.478559
2	2	5496.8	12	65	1318		1.023377
3	1	5496.8	12	100			1.822206
4	1	5496.8	12	70			2.47738
5	3	5496.8	12	70	1936	1816	2.552925
6	3	5496.8	12	80	1919	1262	3.259945
7	1	5496.8	12	80			3.94383
8	1	5496.8	12	90			5.026784
9	3	5496.8	12	55	1297	1136	5.080848
10	2	5496.8	12	100	1983		5.709303
11	3	5496.8	12	70	1906	1584	6.592271
12	2	5496.8	12	90	1223		7.045472
13	2	5496.8	12	55	1395		7.937481
14	1	5496.8	12	60			8.539761
15	3	5496.8	12	90	1799	1603	8.980126
16	3	5496.8	12	65	1025	1387	9.539305
17	3	5496.8	12	95	1630	1102	10.650688
18	3	5496.8	12	85	1725	1443	11.071257



19 1 5496.8 12 50 11.572387
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	5494	5	75	1115		0.200552
2	2	5494	5	55	1487		1.777601
3	2	5494	5	75	1284		2.109987
4	3	5494	5	95	1843	1110	2.92851
5	2	5494	5	80	1043		3.721601
6	3	5494	5	100	1953	1522	5.424836
7	1	5494	5	50			5.551691
8	1	5494	5	85			6.717106
9	2	5494	5	50	1950		7.530962
10	2	5494	5	75	1147		8.5079
11	2	5494	5	60	1017		9.486762
12	1	5494	5	75			10.204725
13	2	5494	5	100	1294		11.870376

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	1	5500	20	60			0.69396
2	1	5500	20	100			1.676513
3	1	5500	20	50			2.474538
4	1	5500	20	65			3.14312
5	1	5500	20	60			3.840772
6	2	5500	20	55	1726		5.534482
7	1	5500	20	60			6.342368
8	2	5500	20	95	1377		6.851793
9	2	5500	20	100	1165		7.799798
10	2	5500	20	65	1096		8.347732
11	3	5500	20	60	1490	1837	9.309747
12	3	5500	20	95	1068	1041	10.500477
13	3	5500	20	60	1199	1260	11.47408

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	5496.4	11	90			0.498705
2	2	5496.4	11	80	1664		1.480847
3	1	5496.4	11	85			2.049662
4	1	5496.4	11	75			2.908014
5	1	5496.4	11	90			3.471
6	1	5496.4	11	50			4.840723



7	3	5496.4	11	80	1838	1106	5.907463
8	1	5496.4	11	70			6.491985
9	3	5496.4	11	100	1220	1443	7.116558
10	3	5496.4	11	90	1674	1816	8.137771
11	1	5496.4	11	80			9.151034
12	3	5496.4	11	65	1338	1080	9.467016
13	2	5496.4	11	100	1047		11.096011
14	3	5496.4	11	100	1142	1772	11.390677

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	3	5498.4	16	55	1427	1430	0.186388
2	3	5498.4	16	80	1040	1191	1.538933
3	2	5498.4	16	90	1497		2.749064
4	2	5498.4	16	60	1404		2.935281
5	3	5498.4	16	65	1940	1546	4.340837
6	2	5498.4	16	85	1163		5.19777
7	1	5498.4	16	90			5.941512
8	3	5498.4	16	50	1650	1220	7.278847
9	2	5498.4	16	65	1712		8.271461
10	3	5498.4	16	70	1346	1808	9.208554
11	3	5498.4	16	65	1621	1772	10.138355
12	1	5498.4	16	50			10.506286
13	3	5498.4	16	65	1651	1822	11.827511

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	5494.8	7	70	1937		0.550148
2	1	5494.8	7	100			0.821071
3	3	5494.8	7	50	1844	1400	1.683259
4	2	5494.8	7	100	1442		2.491525
5	2	5494.8	7	70	1236		2.997797
6	1	5494.8	7	70			3.459188
7	2	5494.8	7	85	1055		4.046965
8	2	5494.8	7	85	1687		4.862528
9	1	5494.8	7	95			5.466782
10	1	5494.8	7	65			6.132184
11	3	5494.8	7	70	1492	1878	7.075841
12	2	5494.8	7	65	1275		7.538664
13	2	5494.8	7	65	1193		8.392422
14	3	5494.8	7	50	1801	1712	9.154918
15	2	5494.8	7	80	1052		9.782976
16	3	5494.8	7	95	1027	1434	10.235297



17	1	5494.8	7	60		11.177177
18	2	5494.8	7	100	1672	11.755399

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	5497.6	14	55			0.314862
2	3	5497.6	14	60	1706	1088	0.727359
3	3	5497.6	14	80	1617	1426	1.652671
4	3	5497.6	14	85	1360	1229	2.483604
5	3	5497.6	14	95	1885	1101	2.618944
6	2	5497.6	14	60	1163		3.467377
7	2	5497.6	14	50	1757		3.844673
8	3	5497.6	14	50	1869	1505	4.47399
9	1	5497.6	14	50			5.343176
10	1	5497.6	14	70			5.978309
11	2	5497.6	14	90	1743		6.376368
12	1	5497.6	14	90			6.962658
13	3	5497.6	14	75	1620	1184	8.043878
14	2	5497.6	14	80	1299		8.294783
15	1	5497.6	14	85			9.346845
16	1	5497.6	14	65			10.02803
17	1	5497.6	14	75			10.607243
18	1	5497.6	14	100			11.347639
19	1	5497.6	14	60			11.673302

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	5498	15	95	1021		0.455854
2	3	5498	15	80	1324	1251	1.200832
3	1	5498	15	70			1.652947
4	1	5498	15	70			2.255738
5	2	5498	15	80	1852		3.153471
6	2	5498	15	55	1358		3.65606
7	3	5498	15	65	1051	1252	4.306272
8	1	5498	15	55			5.014465
9	2	5498	15	65	1833		5.910056
10	1	5498	15	95			6.065714
11	1	5498	15	75			6.826012
12	2	5498	15	80	1113		7.588547
13	3	5498	15	85	1382	1191	8.267245
14	3	5498	15	100	1199	1234	8.754716
15	3	5498	15	100	1691	1341	9.421533
16	2	5498	15	65	1609		10.055786



17	3	5498	15	65	1631	1770	10.727358
18	2	5498	15	55	1081		11.490634

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	3	5498	15	75	1882	1808	0.445157
2	2	5498	15	55	1159		0.767806
3	3	5498	15	100	1607	1932	1.673311
4	3	5498	15	95	1957	1717	2.352736
5	3	5498	15	95	1348	1532	2.683134
6	1	5498	15	85			3.286103
7	3	5498	15	55	1390	1036	3.649434
8	3	5498	15	90	1053	1084	4.622358
9	3	5498	15	90	1134	1790	4.854414
10	1	5498	15	90			5.774237
11	1	5498	15	55			6.003361
12	2	5498	15	80	1172		7.185317
13	1	5498	15	75			7.256689
14	2	5498	15	60	1429		7.832303
15	3	5498	15	60	1495	1977	8.878366
16	3	5498	15	75	1081	1571	9.589687
17	3	5498	15	70	1224	1634	9.828425
18	3	5498	15	60	1716	1408	10.613657
19	1	5498	15	80			10.932638
20	1	5498	15	80			11.936187

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	5510	7	85			0.612218
2	2	5510	7	50	1740		1.261544
3	1	5510	7	95			1.8473
4	1	5510	7	75			2.935764
5	1	5510	7	90			4.087112
6	3	5510	7	85	1781	1886	4.338428
7	1	5510	7	100			5.365322
8	2	5510	7	70	1670		6.293361
9	1	5510	7	70			7.301637
10	3	5510	7	100	1257	1623	7.908941
11	1	5510	7	55			8.635059
12	2	5510	7	70	1574		9.836569
13	1	5510	7	55			10.64748
14	1	5510	7	50			11.818234

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	5510	7	85	1315		0.1444
2	1	5510	7	75			1.785
3	3	5510	7	100	1945	1860	2.819157
4	2	5510	7	60	1304		3.853172
5	1	5510	7	70			4.37846
6	3	5510	7	80	1530	1733	5.967344
7	2	5510	7	65	1493		6.741038
8	1	5510	7	70			7.887213
9	3	5510	7	55	1744	1410	9.743527
10	1	5510	7	60			9.903288
11	1	5510	7	55			11.411806

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	10	60	1622	1426	0.286429
2	3	5510	10	55	1044	1607	1.277562
3	2	5510	10	50	1118		1.541358
4	1	5510	10	85			2.569174
5	2	5510	10	95	1886		3.263312
6	2	5510	10	95	1413		3.755691
7	2	5510	10	95	1676		4.434655
8	1	5510	10	100			4.902031
9	1	5510	10	100			5.444709
10	1	5510	10	90			6.246301
11	2	5510	10	65	1008		7.101055
12	2	5510	10	50	1369		7.82716
13	2	5510	10	100	1428		8.616133
14	1	5510	10	75			8.933397
15	2	5510	10	80	1478		9.832316
16	1	5510	10	85			10.005017
17	2	5510	10	95	1084		11.316826
18	1	5510	10	65			11.604965

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	5510	14	70	1127		0.991667
2	1	5510	14	85			1.110945
3	3	5510	14	100	1961	1379	2.504114
4	1	5510	14	90			3.301454
5	1	5510	14	80			4.447466



6	2	5510	14	100	1754		6.091143
7	1	5510	14	55			6.984461
8	3	5510	14	100	1274	1528	7.86974
9	2	5510	14	90	1922		9.398872
10	3	5510	14	55	1805	1325	9.835302
11	3	5510	14	100	1509	1414	11.985179

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	1	5510	17	70			0.946058
2	3	5510	17	60	1683	1505	1.896326
3	1	5510	17	100			3.192213
4	2	5510	17	55	1593		4.042678
5	1	5510	17	100			6.269701
6	1	5510	17	55			6.827274
7	3	5510	17	100	1019	1388	8.957204
8	2	5510	17	75	1956		10.132235
9	2	5510	17	100	1490		11.5903

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	5510	11	90			0.104221
2	3	5510	11	100	1168	1365	1.4436
3	3	5510	11	60	1908	1908	2.388073
4	1	5510	11	60			3.071649
5	1	5510	11	75			3.662342
6	3	5510	11	70	1031	1326	4.960476
7	3	5510	11	100	1388	1352	5.469597
8	1	5510	11	100			6.222272
9	2	5510	11	85	1683		7.611226
10	2	5510	11	60	1899		7.854698
11	3	5510	11	95	1861	1573	8.579435
12	2	5510	11	70	1337		10.257847
13	2	5510	11	55	1132		10.704932
14	3	5510	11	60	1744	1435	11.573602

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	5510	9	85	1030		0.162071
2	1	5510	9	95			1.094321
3	2	5510	9	70	1924		1.89013
4	1	5510	9	50			2.300157



5	3	5510	9	70	1005	1106	2.872397
6	3	5510	9	55	1742	1335	3.250777
7	3	5510	9	50	1737	1392	4.298145
8	3	5510	9	60	1746	1077	4.532582
9	3	5510	9	60	1601	1810	5.188995
10	2	5510	9	65	1777		6.144853
11	3	5510	9	95	1494	1295	6.361365
12	2	5510	9	100	1330		7.337963
13	1	5510	9	75			8.169914
14	2	5510	9	55	1990		8.411164
15	2	5510	9	75	1496		9.276038
16	2	5510	9	95	1706		9.937323
17	2	5510	9	80	1434		10.538927
18	2	5510	9	70	1351		11.154649
19	3	5510	9	80	1692	1023	11.795222

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	5510	5	90	1547	1617	0.128282
2	1	5510	5	80			0.724366
3	2	5510	5	55	1197		1.494905
4	2	5510	5	65	1187		2.375905
5	3	5510	5	55	2000	1094	2.888615
6	3	5510	5	65	1093	1587	3.402352
7	3	5510	5	55	1748	1030	3.621543
8	3	5510	5	55	1443	1782	4.524871
9	2	5510	5	55	1912		5.389901
10	3	5510	5	100	1499	1821	5.727784
11	3	5510	5	85	1106	1810	6.529469
12	1	5510	5	65			7.12291
13	2	5510	5	100	1045		7.725816
14	2	5510	5	100	1373		7.911614
15	1	5510	5	70			8.659713
16	3	5510	5	100	1781	1475	9.08801
17	3	5510	5	60	1414	1979	9.839417
18	2	5510	5	65	1627		10.46198
19	3	5510	5	80	1055	1640	10.810418
20	3	5510	5	50	1443	1229	11.906532

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	3	5510	13	65	1060	1441	0.361901
2	1	5510	13	65			0.831189



3	1	5510	13	70			1.355742
4	2	5510	13	55	1489		1.883071
5	2	5510	13	60	1045		2.467014
6	1	5510	13	65			3.002059
7	1	5510	13	85			4.187952
8	2	5510	13	90	1974		4.249349
9	2	5510	13	70	1222		5.08986
10	2	5510	13	100	1328		5.737412
11	2	5510	13	90	1061		6.386886
12	2	5510	13	80	1664		6.907174
13	3	5510	13	85	1688	1828	7.360942
14	3	5510	13	65	1870	1573	7.884364
15	3	5510	13	100	1372	1424	8.861726
16	3	5510	13	70	1942	1823	9.316807
17	2	5510	13	65	1058		9.863255
18	1	5510	13	75			10.369196
19	3	5510	13	50	1630	1572	10.871355
20	3	5510	13	70	1021	1971	11.64216

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	5510	9	60			0.048638
2	1	5510	9	60			1.097031
3	1	5510	9	65			1.767288
4	3	5510	9	55	1977	1847	2.336144
5	3	5510	9	50	1134	1722	2.791602
6	2	5510	9	80	1041		3.570098
7	3	5510	9	90	1687	1456	3.858115
8	1	5510	9	95			4.504196
9	3	5510	9	100	1281	1569	5.151154
10	2	5510	9	95	1280		5.998405
11	3	5510	9	90	1346	1307	6.198749
12	1	5510	9	80			6.989396
13	2	5510	9	75	1671		7.213028
14	2	5510	9	90	1975		8.193693
15	2	5510	9	90	1556		8.504395
16	1	5510	9	100			9.476947
17	2	5510	9	65	1669		9.922398
18	3	5510	9	60	1605	1644	10.274823
19	1	5510	9	85			10.850154
20	3	5510	9	90	1634	1118	11.7208

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	5523.6	11	90	1644		0.102796
2	2	5523.6	11	70	1675		1.735543
3	2	5523.6	11	100	1510		3.912111
4	3	5523.6	11	85	1925	1159	5.899131
5	2	5523.6	11	80	1043		6.481294
6	3	5523.6	11	50	1255	1695	7.769907
7	2	5523.6	11	50	1044		10.172422
8	2	5523.6	11	60	1069		11.739526

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	5520.8	18	85	1836		0.491586
2	1	5520.8	18	90			1.368292
3	3	5520.8	18	70	1582	1039	1.887057
4	2	5520.8	18	75	1570		2.656579
5	2	5520.8	18	100	1097		3.671122
6	1	5520.8	18	100			4.245177
7	3	5520.8	18	60	1187	1046	5.027244
8	2	5520.8	18	75	1887		6.263453
9	1	5520.8	18	60			6.540854
10	3	5520.8	18	70	1591	1841	7.465319
11	3	5520.8	18	90	1515	1960	8.080526
12	2	5520.8	18	90	1487		9.005174
13	3	5520.8	18	75	1518	1661	10.302476
14	1	5520.8	18	90			11.126297
15	1	5520.8	18	90			11.496132

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	3	5522.8	13	85	1101	1887	0.24204
2	1	5522.8	13	60			0.805287
3	2	5522.8	13	95	1476		2.364323
4	3	5522.8	13	50	1802	1266	2.736609
5	3	5522.8	13	95	1757	1386	3.853243
6	2	5522.8	13	95	1291		4.441971
7	1	5522.8	13	50			5.070996
8	3	5522.8	13	50	1235	1396	6.336231
9	2	5522.8	13	90	1870		6.799609
10	1	5522.8	13	90			7.620642
11	1	5522.8	13	60			8.360382



12	2	5522.8	13	65	1602		8.966905
13	3	5522.8	13	50	1988	1264	9.634914
14	2	5522.8	13	90	1410		11.161118
15	2	5522.8	13	80	1944		11.298991

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	5524.4	9	65	1955	1401	0.128244
2	2	5524.4	9	75	1519		0.812332
3	2	5524.4	9	80	1548		1.648854
4	3	5524.4	9	55	1816	1529	2.669844
5	1	5524.4	9	65			3.510151
6	3	5524.4	9	85	1159	1825	4.328252
7	1	5524.4	9	95			4.537885
8	2	5524.4	9	90	1410		5.61702
9	2	5524.4	9	70	1531		6.602204
10	2	5524.4	9	90	1522		7.022052
11	3	5524.4	9	65	1697	1019	8.189436
12	2	5524.4	9	65	1831		8.989384
13	1	5524.4	9	70			9.362378
14	3	5524.4	9	100	1526	1165	10.419724
15	2	5524.4	9	85	1860		11.151864
16	3	5524.4	9	85	1176	1471	11.664168

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	5521.6	16	60	1585		0.46493
2	3	5521.6	16	100	1577	1916	1.666876
3	2	5521.6	16	80	1762		2.194395
4	1	5521.6	16	55			3.005883
5	2	5521.6	16	75	1319		4.024664
6	1	5521.6	16	80			5.121041
7	3	5521.6	16	75	1963	1168	5.824214
8	3	5521.6	16	90	1880	1838	7.155595
9	1	5521.6	16	80			7.820743
10	1	5521.6	16	50			8.420952
11	2	5521.6	16	50	1150		9.612227
12	1	5521.6	16	90			10.349666
13	2	5521.6	16	65	1030		11.182692

USA Bin 5 Trial #26

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
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1	1	5524.8	8	70			0.622748
2	3	5524.8	8	90	1116	1165	1.270741
3	2	5524.8	8	100	1375		3.302131
4	1	5524.8	8	70			4.336761
5	2	5524.8	8	75	1234		5.518285
6	1	5524.8	8	90			6.281787
7	3	5524.8	8	85	1826	1520	8.235746
8	2	5524.8	8	70	1483		8.552572
9	1	5524.8	8	80			10.763623
10	1	5524.8	8	95			11.802155

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	5524.8	8	50	1523	1714	0.41969
2	3	5524.8	8	50	1117	1572	0.806757
3	2	5524.8	8	80	1775		2.083522
4	1	5524.8	8	60			2.957925
5	2	5524.8	8	90	1223		3.005838
6	1	5524.8	8	90			3.971775
7	2	5524.8	8	65	1290		5.061236
8	3	5524.8	8	50	1608	1617	5.974083
9	2	5524.8	8	50	1775		6.389923
10	2	5524.8	8	85	1901		7.438008
11	3	5524.8	8	75	1299	1607	7.864843
12	1	5524.8	8	55			8.74574
13	3	5524.8	8	80	1685	1827	9.560976
14	3	5524.8	8	65	1163	1316	9.798672
15	3	5524.8	8	70	1227	1765	11.147475
16	2	5524.8	8	95	1369		11.708062

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	5522.4	14	90	1086	1773	0.211288
2	3	5522.4	14	60	1177	1959	1.607825
3	2	5522.4	14	100	1750		2.278914
4	3	5522.4	14	75	1905	1072	3.340152
5	1	5522.4	14	55			4.152245
6	1	5522.4	14	65			4.375842
7	1	5522.4	14	90			5.471692
8	1	5522.4	14	55			6.357116
9	3	5522.4	14	80	1404	1462	7.418414
10	1	5522.4	14	100			7.903906
11	3	5522.4	14	90	1974	1277	9.241078



12	3	5522.4	14	55	1719	1375	9.697335
13	2	5522.4	14	85	1087		10.986706
14	2	5522.4	14	65	1931		11.795363

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	3	5523.2	12	65	1809	1065	0.629058
2	2	5523.2	12	95	1803		1.111646
3	3	5523.2	12	100	1978	1903	1.614065
4	2	5523.2	12	75	1027		2.328182
5	1	5523.2	12	90			2.883681
6	3	5523.2	12	75	1338	1420	3.66654
7	2	5523.2	12	100	1392		4.478911
8	3	5523.2	12	80	1291	1507	5.330435
9	1	5523.2	12	80			6.026846
10	1	5523.2	12	60			7.006468
11	2	5523.2	12	80	1322		7.571851
12	1	5523.2	12	60			8.374509
13	2	5523.2	12	85	1159		8.635187
14	2	5523.2	12	95	1221		9.4768
15	1	5523.2	12	50			10.003122
16	2	5523.2	12	100	1012		10.825555
17	2	5523.2	12	50	1797		11.543095

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	1	5521.6	16	85			0.439608
2	3	5521.6	16	60	1917	1606	0.892557
3	3	5521.6	16	70	1534	1109	1.677207
4	2	5521.6	16	65	1840		2.293602
5	2	5521.6	16	85	1215		3.067636
6	3	5521.6	16	65	1350	1217	3.520246
7	1	5521.6	16	90			4.58691
8	2	5521.6	16	50	1217		5.076889
9	1	5521.6	16	70			5.88823
10	2	5521.6	16	85	1993		6.479988
11	2	5521.6	16	70	1273		6.72182
12	3	5521.6	16	80	1717	1199	7.442327
13	1	5521.6	16	95			8.341668
14	1	5521.6	16	60			9.161717
15	3	5521.6	16	100	1781	1630	9.792277
16	2	5521.6	16	80	1085		10.445968
17	3	5521.6	16	50	1087	1522	11.116332



18 3 5521.6 16 90 1858 1459 11.469917



*See the Bin6 Radar Characteristics at the end of this report.

Channel 5510MHz, 40MHz BW, USA Frequency Hopping Radar Statistical Performance

Trial #	Name	1=Detection 0=No Detection	Detection Percentage	Limit
1	USA Bin 6 Radar Test 1	1	100%	70.0%
2	USA Bin 6 Radar Test 2	1		
3	USA Bin 6 Radar Test 3	1		
4	USA Bin 6 Radar Test 4	1		
5	USA Bin 6 Radar Test 5	1		
6	USA Bin 6 Radar Test 6	1		
7	USA Bin 6 Radar Test 7	1		
8	USA Bin 6 Radar Test 8	1		
9	USA Bin 6 Radar Test 9	1		
10	USA Bin 6 Radar Test 10	1		
11	USA Bin 6 Radar Test 11	1		
12	USA Bin 6 Radar Test 12	1		
13	USA Bin 6 Radar Test 13	1		
14	USA Bin 6 Radar Test 14	1		
15	USA Bin 6 Radar Test 15	1		
16	USA Bin 6 Radar Test 16	1		
17	USA Bin 6 Radar Test 17	1		
18	USA Bin 6 Radar Test 18	1		
19	USA Bin 6 Radar Test 19	1		
20	USA Bin 6 Radar Test 20	1		
21	USA Bin 6 Radar Test 21	1		
22	USA Bin 6 Radar Test 22	1		
23	USA Bin 6 Radar Test 23	1		
24	USA Bin 6 Radar Test 24	1		
25	USA Bin 6 Radar Test 25	1		
26	USA Bin 6 Radar Test 26	1		
27	USA Bin 6 Radar Test 27	1		
28	USA Bin 6 Radar Test 28	1		
29	USA Bin 6 Radar Test 29	1		
30	USA Bin 6 Radar Test 30	1		



USA Frequency Hopping Trial #1

Hop #	Freq (GHz)	Pulse Start (mS)
10	5527	30
11	5512	33
38	5511	114
44	5523	132
92	5526	276
98	5502	294

USA Frequency Hopping Trial #2

Hop #	Freq (GHz)	Pulse Start (mS)
14	5528	42
17	5497	51
23	5499	69
35	5517	105
58	5506	174
67	5508	201
88	5493	264
94	5523	282

USA Frequency Hopping Trial #3

Hop #	Freq (GHz)	Pulse Start (mS)
33	5496	99
51	5522	153
53	5495	159
71	5497	213
79	5518	237
80	5521	240

USA Frequency Hopping Trial #4

Hop #	Freq (GHz)	Pulse Start (mS)
18	5523	54
24	5493	72
27	5524	81
46	5520	138
47	5525	141
57	5522	171
65	5519	195
80	5505	240
83	5512	249
93	5518	279

USA Frequency Hopping Trial #5

Hop #	Freq (GHz)	Pulse Start (mS)
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17	5523	51
22	5527	66
25	5518	75
39	5511	117
60	5500	180
64	5505	192
68	5499	204
95	5526	285

USA Frequency Hopping Trial #6

Hop #	Freq (GHz)	Pulse Start (mS)
8	5509	24
16	5499	48
19	5513	57
20	5493	60
22	5523	66
27	5527	81
45	5501	135
60	5522	180
68	5498	204
71	5518	213
84	5507	252
93	5511	279
96	5497	288
99	5525	297

USA Frequency Hopping Trial #7

Hop #	Freq (GHz)	Pulse Start (mS)
3	5506	9
13	5527	39
31	5519	93
32	5511	96
37	5521	111
76	5501	228

USA Frequency Hopping Trial #8

Hop #	Freq (GHz)	Pulse Start (mS)
14	5493	42
60	5504	180
92	5524	276

USA Frequency Hopping Trial #9

Hop #	Freq (GHz)	Pulse Start (mS)
0	5502	0
2	5507	6



12	5506	36
21	5504	63
59	5521	177
60	5517	180
93	5499	279

USA Frequency Hopping Trial #10

Hop #	Freq (GHz)	Pulse Start (mS)
17	5527	51
50	5500	150

USA Frequency Hopping Trial #11

Hop #	Freq (GHz)	Pulse Start (mS)
3	5502	9
32	5505	96
47	5492	141
55	5510	165
56	5528	168
59	5515	177
66	5494	198
79	5523	237
91	5506	273
94	5521	282
95	5519	285
96	5526	288

USA Frequency Hopping Trial #12

Hop #	Freq (GHz)	Pulse Start (mS)
17	5501	51
31	5511	93
35	5495	105
45	5503	135
48	5520	144
50	5518	150
53	5500	159
64	5509	192
78	5499	234
84	5506	252

USA Frequency Hopping Trial #13

Hop #	Freq (GHz)	Pulse Start (mS)
24	5525	72
40	5524	120
42	5494	126
52	5505	156



81 5493 243

USA Frequency Hopping Trial #14

Hop #	Freq (GHz)	Pulse Start (mS)
27	5525	81
54	5497	162
59	5500	177
72	5520	216
92	5494	276

USA Frequency Hopping Trial #15

Hop #	Freq (GHz)	Pulse Start (mS)
1	5522	3
4	5526	12
48	5494	144
92	5502	276
97	5521	291

USA Frequency Hopping Trial #16

Hop #	Freq (GHz)	Pulse Start (mS)
24	5511	72
32	5497	96
47	5498	141
68	5503	204
82	5517	246
87	5526	261
90	5506	270
93	5520	279

USA Frequency Hopping Trial #17

Hop #	Freq (GHz)	Pulse Start (mS)
1	5511	3
9	5505	27
11	5519	33
26	5528	78
40	5521	120
47	5513	141
51	5493	153
55	5507	165
60	5524	180
69	5526	207
90	5504	270
96	5494	288

USA Frequency Hopping Trial #18



Hop #	Freq (GHz)	Pulse Start (mS)
0	5500	0
20	5492	60
32	5527	96
49	5495	147
54	5506	162
55	5508	165
61	5499	183
66	5526	198
80	5504	240
85	5524	255
86	5497	258

USA Frequency Hopping Trial #19

Hop #	Freq (GHz)	Pulse Start (mS)
9	5528	27
11	5514	33
12	5515	36
17	5516	51
38	5527	114
45	5511	135
98	5519	294

USA Frequency Hopping Trial #20

Hop #	Freq (GHz)	Pulse Start (mS)
0	5499	0
11	5509	33
13	5505	39
23	5501	69
39	5513	117
49	5506	147
71	5507	213
93	5519	279

USA Frequency Hopping Trial #21

Hop #	Freq (GHz)	Pulse Start (mS)
26	5507	78
30	5495	90
35	5519	105
37	5510	111
51	5522	153
78	5506	234
92	5494	276
96	5505	288



99 5497 297

USA Frequency Hopping Trial #22

Hop #	Freq (GHz)	Pulse Start (mS)
2	5509	6
41	5497	123
55	5515	165
56	5516	168
95	5500	285

USA Frequency Hopping Trial #23

Hop #	Freq (GHz)	Pulse Start (mS)
0	5497	0
19	5513	57
25	5524	75
38	5510	114
50	5512	150
51	5517	153
59	5504	177
64	5495	192
65	5498	195
97	5502	291

USA Frequency Hopping Trial #24

Hop #	Freq (GHz)	Pulse Start (mS)
14	5503	42
18	5514	54
26	5525	78
56	5502	168
70	5520	210
87	5501	261
97	5523	291

USA Frequency Hopping Trial #25

Hop #	Freq (GHz)	Pulse Start (mS)
0	5502	0
7	5518	21
19	5513	57
20	5501	60
36	5508	108
44	5497	132
45	5507	135
48	5493	144
60	5517	180
68	5523	204



71	5498	213
83	5510	249
99	5500	297

USA Frequency Hopping Trial #26

Hop #	Freq (GHz)	Pulse Start (mS)
21	5500	63
22	5506	66
30	5505	90
54	5496	162
65	5513	195
70	5503	210
71	5522	213

USA Frequency Hopping Trial #27

Hop #	Freq (GHz)	Pulse Start (mS)
0	5523	0
11	5506	33
18	5524	54
20	5501	60
23	5494	69
33	5499	99
46	5519	138
48	5513	144
80	5504	240
97	5510	291

USA Frequency Hopping Trial #28

Hop #	Freq (GHz)	Pulse Start (mS)
1	5496	3
9	5510	27
23	5524	69
26	5493	78
32	5525	96
36	5522	108
40	5518	120
45	5499	135
51	5492	153
59	5519	177
73	5498	219
88	5526	264

USA Frequency Hopping Trial #29

Hop #	Freq (GHz)	Pulse Start (mS)
4	5495	12



6	5503	18
7	5521	21
28	5497	84
55	5527	165
60	5523	180
68	5496	204
74	5506	222
81	5504	243
88	5513	264

USA Frequency Hopping Trial #30

Hop #	Freq (GHz)	Pulse Start (mS)
11	5494	33
30	5500	90
42	5527	126
57	5506	171
84	5509	252



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

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	65	1	818	1	100.0%	60.0%
2	5492	102	1	518	1		
3	5492	74	1	718	1		
4	5492	62	1	858	1		
5	5500	86	1	618	1		
6	5500	72	1	738	1		
7	5500	74	1	718	1		
8	5500	83	1	638	1		
9	5520	99	1	538	1		
10	5520	86	1	618	1		
11	5520	89	1	598	1		
12	5520	57	1	938	1		
13	5530	68	1	778	1		
14	5530	57	1	938	1		
15	5530	76	1	698	1		
16	5530	86	1	619	1		
17	5530	96	1	552	1		
18	5530	19	1	2927	1		
19	5540	27	1	1958	1		
20	5540	40	1	1336	1		
21	5540	19	1	2904	1		
22	5540	18	1	3039	1		
23	5560	26	1	2092	1		
24	5560	51	1	1052	1		
25	5560	20	1	2755	1		
26	5560	23	1	2372	1		
27	5568	25	1	2161	1		
28	5568	22	1	2406	1		
29	5568	27	1	1993	1		
30	5568	32	1	1682	1		


Channel 5530MHz, 80MHz BW, USA Bin 2 Radar Statistical Performance

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	27	2.6	183	0	80.0%	60.0%
2	5492	27	3.1	159	1		
3	5492	28	3	175	1		
4	5492	26	2.1	171	1		
5	5500	26	4.1	212	1		
6	5500	23	2.7	159	1		
7	5500	24	5	229	1		
8	5500	25	1.3	197	0		
9	5520	29	3.3	201	1		
10	5520	23	2.3	180	1		
11	5520	24	4	167	1		
12	5520	25	1.3	225	1		
13	5530	28	2.6	201	1		
14	5530	28	4.4	199	0		
15	5530	23	1.6	228	1		
16	5530	25	2	211	0		
17	5530	27	2.8	206	1		
18	5530	27	2.6	171	1		
19	5540	27	2.4	181	0		
20	5540	29	4.9	162	1		
21	5540	23	2.5	197	1		
22	5540	28	2	183	1		
23	5560	24	1.6	226	1		
24	5560	29	2.3	185	1		
25	5560	26	1.5	169	0		
26	5560	25	4.7	169	1		
27	5568	29	4.2	204	1		
28	5568	25	1.2	158	1		
29	5568	27	3.1	160	1		
30	5568	26	4.6	197	1		



Channel 5530MHz, 80MHz BW, USA Bin 3 Radar Statistical Performance

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	18	7.2	458	0	80.0%	60.0%
2	5492	16	8.4	242	0		
3	5492	18	9.7	310	1		
4	5492	16	9.6	288	0		
5	5500	16	7.9	326	1		
6	5500	16	8.1	245	1		
7	5500	17	6.5	447	1		
8	5500	17	8	387	1		
9	5520	18	7.5	463	1		
10	5520	18	7.9	243	1		
11	5520	17	7.9	447	1		
12	5520	17	6.3	295	1		
13	5530	17	7.8	461	1		
14	5530	16	9.2	218	1		
15	5530	16	9.3	347	1		
16	5530	17	8	222	1		
17	5530	18	7.3	407	1		
18	5530	18	9.9	301	0		
19	5540	16	8.9	387	0		
20	5540	18	9.9	448	1		
21	5540	18	6.5	323	1		
22	5540	16	7.5	341	1		
23	5560	18	9.7	297	1		
24	5560	17	8.2	364	0		
25	5560	18	9.7	318	1		
26	5560	17	6.2	490	1		
27	5568	17	6.4	207	1		
28	5568	18	6.2	254	1		
29	5568	18	7.6	428	1		
30	5568	16	6	476	1		

Channel 5530MHz, 80MHz BW, USA Bin 4 Radar Statistical Performance

Trial	Radar Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	12	17.2	203	1	86.7%	60.0%
2	5492	16	14.5	285	1		
3	5492	13	13.8	260	1		
4	5492	15	17.4	459	1		
5	5500	15	14.7	477	1		
6	5500	12	15.7	212	0		
7	5500	12	18.5	265	1		
8	5500	12	19.3	252	1		
9	5520	15	12.5	336	1		
10	5520	14	14.3	203	1		
11	5520	12	17.6	472	1		
12	5520	15	13	244	1		
13	5530	14	15.3	240	1		
14	5530	15	12.5	244	1		
15	5530	13	19	318	1		
16	5530	13	12.3	363	1		
17	5530	14	16.5	371	1		
18	5530	16	12.2	376	1		
19	5540	14	15.8	476	1		
20	5540	15	19.2	337	0		
21	5540	14	13.8	274	0		
22	5540	13	14.3	381	0		
23	5560	14	19.2	359	1		
24	5560	16	15.3	322	1		
25	5560	14	14.9	400	1		
26	5560	15	15	335	1		
27	5568	14	11.4	240	1		
28	5568	13	14.3	427	1		
29	5568	16	11.2	217	1		
30	5568	15	11.7	206	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:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100.0\% + 80.0\% + 80.0\% + 86.7\%) / 4 = 86.7\% > 80\%$$

*See the Bin5 Radar Characteristics at the end of this report.

Channel 5530MHz, 80MHz BW, USA Bin 5 Radar Statistical Performance

Trial #	Name	1=Detection 0=No Detection	Detection Percentage	Limit
1	USA Bin 5 Radar Test 1	1	100%	80.0%
2	USA Bin 5 Radar Test 2	1		
3	USA Bin 5 Radar Test 3	1		
4	USA Bin 5 Radar Test 4	1		
5	USA Bin 5 Radar Test 5	1		
6	USA Bin 5 Radar Test 6	1		
7	USA Bin 5 Radar Test 7	1		
8	USA Bin 5 Radar Test 8	1		
9	USA Bin 5 Radar Test 9	1		
10	USA Bin 5 Radar Test 10	1		
11	USA Bin 5 Radar Test 11	1		
12	USA Bin 5 Radar Test 12	1		
13	USA Bin 5 Radar Test 13	1		
14	USA Bin 5 Radar Test 14	1		
15	USA Bin 5 Radar Test 15	1		
16	USA Bin 5 Radar Test 16	1		
17	USA Bin 5 Radar Test 17	1		
18	USA Bin 5 Radar Test 18	1		
19	USA Bin 5 Radar Test 19	1		
20	USA Bin 5 Radar Test 20	1		
21	USA Bin 5 Radar Test 21	1		
22	USA Bin 5 Radar Test 22	1		
23	USA Bin 5 Radar Test 23	1		
24	USA Bin 5 Radar Test 24	1		
25	USA Bin 5 Radar Test 25	1		
26	USA Bin 5 Radar Test 26	1		
27	USA Bin 5 Radar Test 27	1		
28	USA Bin 5 Radar Test 28	1		
29	USA Bin 5 Radar Test 29	1		
30	USA Bin 5 Radar Test 30	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	5496.8	12	80			0.737172
2	1	5496.8	12	100			1.514836
3	2	5496.8	12	80	1976		2.774641
4	3	5496.8	12	75	1876	1998	3.484525
5	3	5496.8	12	70	1482	1437	4.127978
6	1	5496.8	12	60			5.891279
7	1	5496.8	12	85			6.304627
8	2	5496.8	12	100	1764		7.974242
9	2	5496.8	12	60	1943		8.850952
10	3	5496.8	12	100	1197	1994	9.480651
11	1	5496.8	12	70			10.05784
12	3	5496.8	12	80	1989	1951	11.617012

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	5496.8	12	100			0.552723
2	2	5496.8	12	55	1090		0.750774
3	3	5496.8	12	65	1595	1998	1.616248
4	1	5496.8	12	80			2.201624
5	3	5496.8	12	90	1464	1451	2.915665
6	3	5496.8	12	100	1595	1080	4.226762
7	2	5496.8	12	90	1620		4.724501
8	2	5496.8	12	75	1617		5.030914
9	1	5496.8	12	85			6.051499
10	1	5496.8	12	90			6.955481
11	2	5496.8	12	70	1929		7.218226
12	2	5496.8	12	60	1711		8.17874
13	1	5496.8	12	50			8.644075
14	3	5496.8	12	75	1740	1347	9.860125
15	3	5496.8	12	85	1385	1648	10.075675
16	3	5496.8	12	90	1384	1286	10.895245
17	2	5496.8	12	55	1256		11.815082

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	1	5496.4	11	100			0.289848
2	2	5496.4	11	65	1706		1.95568
3	1	5496.4	11	55			3.689273
4	1	5496.4	11	100			4.897461



5	3	5496.4	11	65	1027	1334	6.590159
6	3	5496.4	11	55	1406	1115	6.712906
7	1	5496.4	11	50			8.406337
8	2	5496.4	11	50	1208		10.643549
9	1	5496.4	11	80			11.734344

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	5497.2	13	95	1642		0.924625
2	1	5497.2	13	50			2.686766
3	2	5497.2	13	100	1623		3.473018
4	2	5497.2	13	100	1446		4.863616
5	3	5497.2	13	50	1600	1575	6.298432
6	2	5497.2	13	60	1808		8.677837
7	1	5497.2	13	75			9.40478
8	2	5497.2	13	80	1281		10.745769

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	5499.2	18	90	1739	1416	0.114466
2	3	5499.2	18	100	1082	1486	1.295243
3	2	5499.2	18	55	1746		1.552311
4	2	5499.2	18	50	1757		2.605217
5	3	5499.2	18	55	1557	1857	2.852851
6	1	5499.2	18	95			4.084784
7	2	5499.2	18	80	1369		4.414513
8	1	5499.2	18	70			5.010197
9	3	5499.2	18	65	1177	1817	5.70415
10	2	5499.2	18	95	1695		6.853122
11	1	5499.2	18	70			7.319467
12	3	5499.2	18	50	1844	1465	8.048952
13	2	5499.2	18	50	1497		9.135141
14	2	5499.2	18	75	1784		9.735444
15	3	5499.2	18	75	1612	1210	10.348282
16	3	5499.2	18	90	1850	1322	11.097755
17	1	5499.2	18	60			11.665237

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	5495.2	8	55			0.730229
2	1	5495.2	8	50			1.919229
3	2	5495.2	8	95	1710		3.109454



4	3	5495.2	8	75	1378	1685	3.776861
5	2	5495.2	8	75	1814		5.277801
6	2	5495.2	8	70	1645		6.310803
7	1	5495.2	8	65			6.890022
8	2	5495.2	8	65	1228		8.041852
9	3	5495.2	8	50	1926	1987	9.674218
10	2	5495.2	8	80	1412		10.476029
11	2	5495.2	8	60	1823		11.155122

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	3	5499.2	18	50	1959	1418	0.619524
2	3	5499.2	18	90	1534	1941	0.686136
3	2	5499.2	18	75	1272		1.441155
4	1	5499.2	18	55			2.488424
5	2	5499.2	18	95	1919		2.944382
6	2	5499.2	18	80	1245		3.628862
7	1	5499.2	18	75			4.101784
8	2	5499.2	18	50	1364		4.797656
9	3	5499.2	18	55	1720	1333	5.936627
10	2	5499.2	18	55	1146		6.308769
11	3	5499.2	18	75	1301	1103	7.222603
12	1	5499.2	18	80			7.885676
13	1	5499.2	18	95			8.047956
14	2	5499.2	18	60	1922		9.158557
15	3	5499.2	18	65	1961	1978	9.690046
16	2	5499.2	18	80	1152		10.399822
17	3	5499.2	18	100	1515	1955	11.114813
18	2	5499.2	18	100	1330		11.679381

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	5499.6	19	80	1399		0.076528
2	2	5499.6	19	50	1964		2.225432
3	2	5499.6	19	70	1921		3.409817
4	2	5499.6	19	80	1888		4.602429
5	2	5499.6	19	95	1506		5.189774
6	2	5499.6	19	85	1023		6.597269
7	2	5499.6	19	80	1034		7.201677
8	3	5499.6	19	65	1685	1580	9.14518
9	2	5499.6	19	85	1349		9.920159
10	3	5499.6	19	95	1443	1968	11.560908

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	3	5498.8	17	85	1166	1111	0.469842
2	1	5498.8	17	100			1.494425
3	2	5498.8	17	90	1671		2.481137
4	3	5498.8	17	55	1744	1689	2.982962
5	1	5498.8	17	70			3.736538
6	1	5498.8	17	80			4.802359
7	2	5498.8	17	65	1444		5.155535
8	3	5498.8	17	90	1520	1983	6.3799
9	3	5498.8	17	90	1683	1281	7.455581
10	2	5498.8	17	90	1606		7.956311
11	2	5498.8	17	65	1624		9.027876
12	2	5498.8	17	100	1517		10.210534
13	1	5498.8	17	85			10.893171
14	3	5498.8	17	50	1747	1000	11.858978

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	5500	20	50			0.970818
2	2	5500	20	85	1943		1.629553
3	3	5500	20	95	1785	1012	2.7677
4	1	5500	20	100			4.474239
5	1	5500	20	90			5.611171
6	1	5500	20	95			6.125479
7	2	5500	20	80	1595		7.907206
8	1	5500	20	55			9.191201
9	2	5500	20	50	1998		9.67118
10	2	5500	20	85	1850		11.820023

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	2	5530	11	65	1673		0.476534
2	1	5530	11	80			1.443516
3	3	5530	11	80	1723	1768	2.138659
4	3	5530	11	50	1925	1247	2.834965
5	1	5530	11	55			4.057555
6	1	5530	11	60			4.847618
7	3	5530	11	50	1027	1522	5.561713
8	3	5530	11	100	1172	1872	6.361566
9	1	5530	11	65			7.666735
10	2	5530	11	100	1390		7.942276



11	1	5530	11	70			9.162912
12	1	5530	11	80			10.034387
13	3	5530	11	65	1208	1998	10.318412
14	1	5530	11	100			11.145725

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	15	55	1705		0.590444
2	3	5530	15	65	1214	1897	0.822844
3	3	5530	15	90	1672	1565	1.85832
4	3	5530	15	75	1625	1339	2.468414
5	2	5530	15	65	1275		2.980155
6	3	5530	15	90	1406	1127	3.438741
7	3	5530	15	70	1040	1123	3.848225
8	3	5530	15	50	1313	1149	4.424714
9	2	5530	15	65	1188		5.17186
10	3	5530	15	85	1202	1025	5.910015
11	3	5530	15	100	1933	1134	6.927761
12	2	5530	15	55	1039		7.131604
13	3	5530	15	75	1686	1850	8.026042
14	1	5530	15	85			8.522208
15	2	5530	15	100	1570		9.302758
16	2	5530	15	100	1854		9.594232
17	3	5530	15	50	1226	1213	10.497406
18	1	5530	15	75			11.227226
19	2	5530	15	100	1238		11.512711

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	2	5530	19	65	1032		0.517095
2	1	5530	19	65			1.388937
3	2	5530	19	55	1855		2.202774
4	1	5530	19	50			2.70657
5	3	5530	19	85	1833	1432	3.005207
6	3	5530	19	100	1240	1723	4.390175
7	3	5530	19	100	1622	1895	5.122581
8	3	5530	19	60	1322	1200	5.498271
9	3	5530	19	85	1200	1364	6.032328
10	1	5530	19	85			7.427343
11	3	5530	19	85	1048	1746	8.002871
12	2	5530	19	75	1146		8.480944
13	3	5530	19	50	1929	1343	9.347009
14	2	5530	19	100	1109		10.032398



15	1	5530	19	75		11.186462
16	2	5530	19	100	1173	11.549265

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	5530	7	50	1100		0.002341
2	1	5530	7	65			0.916911
3	1	5530	7	100			1.479905
4	2	5530	7	75	1978		2.170074
5	2	5530	7	90	1224		2.972741
6	2	5530	7	70	1726		3.282086
7	1	5530	7	80			4.060357
8	3	5530	7	55	1809	1914	4.366299
9	1	5530	7	100			4.81583
10	2	5530	7	95	1925		5.492502
11	3	5530	7	50	1299	1875	6.331281
12	1	5530	7	60			6.891854
13	1	5530	7	85			7.215266
14	3	5530	7	60	1688	1181	8.391895
15	2	5530	7	85	1146		8.751186
16	3	5530	7	95	1707	1207	9.330189
17	3	5530	7	70	1220	1493	9.907851
18	2	5530	7	65	1049		10.539807
19	2	5530	7	75	1602		11.000195
20	1	5530	7	75			11.656408

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	5530	13	60	1488		0.423533
2	3	5530	13	95	1639	1796	1.115112
3	1	5530	13	80			1.706199
4	2	5530	13	65	1920		2.092481
5	2	5530	13	80	1113		2.639722
6	3	5530	13	70	1874	1204	3.698742
7	1	5530	13	60			4.09551
8	2	5530	13	75	1612		4.445861
9	3	5530	13	85	1627	1172	5.055468
10	1	5530	13	65			6.295533
11	1	5530	13	80			6.655145
12	2	5530	13	50	1756		7.080762
13	1	5530	13	65			7.808061
14	2	5530	13	90	1395		8.740353
15	2	5530	13	75	1958		9.063618



16	1	5530	13	90			9.530344
17	3	5530	13	90	1943	1594	10.507107
18	2	5530	13	70	1366		10.931297
19	2	5530	13	50	1967		11.59965

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	5530	11	50	1963		0.34426
2	2	5530	11	60	1652		1.275118
3	2	5530	11	60	1912		2.177456
4	3	5530	11	100	1726	1435	2.558533
5	2	5530	11	75	1664		3.616786
6	3	5530	11	95	1907	1336	4.431409
7	2	5530	11	80	1584		4.703347
8	2	5530	11	55	1216		5.958167
9	2	5530	11	95	1574		6.147741
10	2	5530	11	90	1365		7.229876
11	1	5530	11	90			8.124917
12	3	5530	11	95	1953	1022	8.889465
13	3	5530	11	60	1418	1012	9.690816
14	2	5530	11	90	1023		10.024391
15	3	5530	11	70	1485	1815	10.874335
16	3	5530	11	95	1093	1927	11.946149

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	5530	5	70			0.562582
2	1	5530	5	90			0.978881
3	1	5530	5	95			1.962698
4	1	5530	5	100			3.072607
5	2	5530	5	50	1374		3.936439
6	1	5530	5	100			4.834697
7	3	5530	5	100	1254	1783	5.551013
8	2	5530	5	75	1692		6.729311
9	2	5530	5	50	1448		8.068735
10	1	5530	5	90			8.834009
11	3	5530	5	65	1063	1657	10.060738
12	3	5530	5	80	1298	1793	10.911962
13	3	5530	5	50	1664	1930	11.732164

USA Bin 5 Trial #18

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
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1	1	5530	9	75			0.359431
2	2	5530	9	60	1468		1.140822
3	3	5530	9	90	1015	1254	2.061044
4	2	5530	9	100	1448		2.447524
5	2	5530	9	75	1776		3.856236
6	2	5530	9	85	1264		4.635092
7	3	5530	9	95	1616	1388	4.963031
8	2	5530	9	90	1697		6.039619
9	1	5530	9	90			7.044414
10	2	5530	9	85	1241		7.691634
11	2	5530	9	85	1012		8.064458
12	2	5530	9	50	1396		9.129823
13	3	5530	9	80	1616	1468	10.287096
14	2	5530	9	100	1958		11.007532
15	1	5530	9	65			11.349815

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	2	5530	15	60	1324		0.754629
2	3	5530	15	70	1489	1891	1.516793
3	2	5530	15	55	1019		1.786837
4	2	5530	15	50	1703		2.639891
5	1	5530	15	100			3.295746
6	1	5530	15	65			4.69526
7	1	5530	15	90			4.985172
8	2	5530	15	80	1689		5.630225
9	2	5530	15	95	1951		6.424571
10	1	5530	15	65			7.525864
11	3	5530	15	60	1164	1336	8.022395
12	1	5530	15	85			9.57165
13	3	5530	15	75	1839	1329	9.6919
14	3	5530	15	60	1729	1732	11.139233
15	1	5530	15	70			11.283829

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	5530	9	90			0.995768
2	2	5530	9	85	1161		2.234084
3	1	5530	9	55			3.139588
4	2	5530	9	50	1013		3.864249
5	1	5530	9	70			5.025926
6	3	5530	9	90	1493	1802	6.782096
7	1	5530	9	80			7.77206



8	1	5530	9	90		9.558257
9	1	5530	9	55		10.270731
10	2	5530	9	90	1170	11.787205

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	5562	15	80	1633	1912	0.667193
2	2	5562	15	70	1071		1.680873
3	3	5562	15	85	1249	1338	3.583562
4	1	5562	15	100			4.772535
5	2	5562	15	75	1887		6.686693
6	1	5562	15	90			7.823375
7	3	5562	15	90	1888	1076	9.562531
8	3	5562	15	80	1746	1796	11.942517

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	1	5561.2	17	65			0.030577
2	3	5561.2	17	95	1848	1759	1.20264
3	1	5561.2	17	90			2.289994
4	2	5561.2	17	90	1415		2.472886
5	2	5561.2	17	85	1334		3.255467
6	3	5561.2	17	60	1776	1968	4.399168
7	2	5561.2	17	60	1534		5.468658
8	3	5561.2	17	95	1850	1306	6.124775
9	3	5561.2	17	70	1395	1932	6.868926
10	1	5561.2	17	90			7.836382
11	1	5561.2	17	100			8.37746
12	1	5561.2	17	65			8.895167
13	1	5561.2	17	50			9.890461
14	2	5561.2	17	85	1476		10.903519
15	3	5561.2	17	50	1773	1044	11.940807

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	3	5564	10	100	1931	1434	1.006031
2	2	5564	10	50	1980		2.870328
3	2	5564	10	80	1758		4.241911
4	3	5564	10	60	1811	1744	5.477975
5	3	5564	10	75	1189	1903	6.686783
6	1	5564	10	85			8.971767
7	2	5564	10	95	1393		10.480377



8 2 5564 10 60 1805 10.867754
 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	5565.2	7	70			0.276317
2	1	5565.2	7	95			0.990727
3	3	5565.2	7	80	1843	1401	2.206988
4	1	5565.2	7	80			3.136298
5	2	5565.2	7	85	1186		3.464289
6	3	5565.2	7	55	1275	1375	5.016859
7	2	5565.2	7	80	1259		5.991972
8	2	5565.2	7	100	1551		6.458595
9	2	5565.2	7	80	1309		7.18761
10	3	5565.2	7	55	1532	1900	8.026294
11	3	5565.2	7	55	1241	1649	9.248437
12	1	5565.2	7	70			10.013022
13	3	5565.2	7	75	1889	1866	10.621946
14	3	5565.2	7	70	1531	1801	11.788956

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	5564	10	75			1.080321
2	1	5564	10	75			1.327064
3	3	5564	10	90	1819	1777	3.567274
4	2	5564	10	85	1958		4.663567
5	2	5564	10	55	1137		4.893579
6	3	5564	10	70	1169	1039	7.115856
7	3	5564	10	65	1362	1861	7.298272
8	3	5564	10	60	1213	1275	9.4533
9	2	5564	10	85	1902		10.060613
10	1	5564	10	90			10.993241

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	1	5562.4	14	60			0.428524
2	3	5562.4	14	85	1907	1039	1.78208
3	3	5562.4	14	90	1907	1327	2.410073
4	2	5562.4	14	95	1528		3.358829
5	1	5562.4	14	85			3.886793
6	1	5562.4	14	55			5.20496
7	1	5562.4	14	50			5.615968
8	2	5562.4	14	80	1665		7.333123



9	3	5562.4	14	60	1192	1030	7.808299
10	2	5562.4	14	55	1079		8.945023
11	3	5562.4	14	70	1089	1264	9.534659
12	3	5562.4	14	70	1156	1190	10.220475
13	3	5562.4	14	95	1676	1682	11.830143

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	5561.2	17	60	1255		0.894077
2	2	5561.2	17	55	1947		1.570365
3	1	5561.2	17	75			2.523786
4	3	5561.2	17	55	1206	1736	3.75947
5	1	5561.2	17	85			4.883924
6	1	5561.2	17	80			5.384444
7	2	5561.2	17	60	1523		6.334074
8	2	5561.2	17	50	1733		7.138096
9	2	5561.2	17	95	1516		8.952532
10	3	5561.2	17	70	1210	1978	9.591568
11	3	5561.2	17	70	1529	1221	10.160307
12	2	5561.2	17	95	1535		11.523793

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	5560	20	70	1416	1316	0.211233
2	1	5560	20	75			1.631354
3	1	5560	20	90			2.206824
4	2	5560	20	75	1262		4.359976
5	2	5560	20	65	1416		5.097623
6	2	5560	20	100	1036		6.349143
7	3	5560	20	65	1180	1716	7.549519
8	2	5560	20	80	1297		7.68947
9	1	5560	20	100			9.501997
10	1	5560	20	95			10.712991
11	3	5560	20	85	1815	1806	11.598755

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	3	5565.6	6	85	1410	1436	0.306347
2	3	5565.6	6	55	1956	1843	1.608914
3	2	5565.6	6	55	1622		4.42248
4	1	5565.6	6	90			4.958463
5	1	5565.6	6	85			7.278245



6	3	5565.6	6	85	1664	1956	8.022162
7	2	5565.6	6	55	1302		9.084972
8	1	5565.6	6	100			11.637145

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	5560	20	75	1656	1819	1.257056
2	1	5560	20	80			2.548146
3	3	5560	20	100	1969	1797	3.807837
4	1	5560	20	80			4.551831
5	3	5560	20	95	1226	1702	5.528027
6	1	5560	20	95			7.516728
7	2	5560	20	80	1800		8.475744
8	2	5560	20	70	1539		9.861582
9	1	5560	20	80			11.209098



*See the Bin6 Radar Characteristics at the end of this report.

Channel 5530MHz, 80MHz BW, USA Frequency Hopping Radar Statistical Performance

Trial #	Name	1=Detection 0=No Detection	Detection Percentage	Limit
1	USA Bin 6 Radar Test 1	1	100%	70.0%
2	USA Bin 6 Radar Test 2	1		
3	USA Bin 6 Radar Test 3	1		
4	USA Bin 6 Radar Test 4	1		
5	USA Bin 6 Radar Test 5	1		
6	USA Bin 6 Radar Test 6	1		
7	USA Bin 6 Radar Test 7	1		
8	USA Bin 6 Radar Test 8	1		
9	USA Bin 6 Radar Test 9	1		
10	USA Bin 6 Radar Test 10	1		
11	USA Bin 6 Radar Test 11	1		
12	USA Bin 6 Radar Test 12	1		
13	USA Bin 6 Radar Test 13	1		
14	USA Bin 6 Radar Test 14	1		
15	USA Bin 6 Radar Test 15	1		
16	USA Bin 6 Radar Test 16	1		
17	USA Bin 6 Radar Test 17	1		
18	USA Bin 6 Radar Test 18	1		
19	USA Bin 6 Radar Test 19	1		
20	USA Bin 6 Radar Test 20	1		
21	USA Bin 6 Radar Test 21	1		
22	USA Bin 6 Radar Test 22	1		
23	USA Bin 6 Radar Test 23	1		
24	USA Bin 6 Radar Test 24	1		
25	USA Bin 6 Radar Test 25	1		
26	USA Bin 6 Radar Test 26	1		
27	USA Bin 6 Radar Test 27	1		
28	USA Bin 6 Radar Test 28	1		
29	USA Bin 6 Radar Test 29	1		
30	USA Bin 6 Radar Test 30	1		



USA Frequency Hopping Trial #1

Hop #	Freq (GHz)	Pulse Start (mS)
9	5515	27
14	5498	42
15	5534	45
16	5551	48
28	5521	84
36	5566	108
37	5565	111
43	5549	129
46	5523	138
47	5561	141
51	5517	153
61	5538	183
65	5556	195
68	5524	204
93	5559	279
97	5507	291
99	5533	297

USA Frequency Hopping Trial #2

Hop #	Freq (GHz)	Pulse Start (mS)
6	5530	18
7	5555	21
13	5553	39
15	5554	45
16	5512	48
26	5536	78
35	5533	105
38	5565	114
42	5518	126
45	5500	135
56	5509	168
59	5494	177
64	5557	192
65	5531	195
69	5548	207
73	5516	219
74	5539	222
75	5550	225
82	5508	246
93	5542	279
94	5510	282

USA Frequency Hopping Trial #3



Hop #	Freq (GHz)	Pulse Start (mS)
6	5508	18
13	5503	39
18	5532	54
22	5537	66
23	5533	69
28	5549	84
45	5529	135
48	5540	144
55	5542	165
65	5560	195
68	5493	204
69	5518	207
73	5567	219
76	5547	228
78	5539	234
83	5512	249
95	5568	285
97	5524	291

USA Frequency Hopping Trial #4

Hop #	Freq (GHz)	Pulse Start (mS)
1	5548	3
12	5529	36
21	5558	63
27	5519	81
35	5496	105
36	5518	108
43	5511	129
45	5534	135
59	5523	177
65	5567	195
66	5559	198
74	5521	222
81	5555	243
85	5501	255
86	5494	258

USA Frequency Hopping Trial #5

Hop #	Freq (GHz)	Pulse Start (mS)
0	5498	0
1	5496	3
2	5512	6
7	5544	21



15	5540	45
20	5505	60
21	5562	63
30	5493	90
32	5537	96
43	5507	129
48	5521	144
50	5550	150
77	5535	231
85	5532	255
90	5526	270
98	5548	294

USA Frequency Hopping Trial #6

Hop #	Freq (GHz)	Pulse Start (mS)
6	5546	18
7	5497	21
14	5515	42
15	5564	45
18	5524	54
37	5534	111
38	5530	114
49	5525	147
52	5529	156
56	5503	168
57	5560	171
60	5568	180
75	5514	225
76	5541	228
92	5493	276
93	5535	279
96	5501	288

USA Frequency Hopping Trial #7

Hop #	Freq (GHz)	Pulse Start (mS)
13	5493	39
18	5516	54
25	5561	75
34	5507	102
36	5542	108
45	5549	135
46	5514	138
50	5538	150
53	5541	159
56	5566	168



72	5540	216
83	5523	249
94	5555	282

USA Frequency Hopping Trial #8

Hop #	Freq (GHz)	Pulse Start (mS)
16	5547	48
17	5533	51
22	5537	66
36	5496	108
40	5554	120
43	5561	129
45	5557	135
51	5552	153
57	5542	171
62	5544	186
67	5511	201
75	5498	225
81	5567	243
89	5540	267
95	5503	285
97	5534	291

USA Frequency Hopping Trial #9

Hop #	Freq (GHz)	Pulse Start (mS)
1	5513	3
10	5567	30
11	5568	33
13	5507	39
27	5545	81
30	5560	90
48	5510	144
70	5530	210
73	5543	219
83	5535	249
86	5499	258
91	5552	273
92	5547	276
95	5501	285
99	5522	297

USA Frequency Hopping Trial #10

Hop #	Freq (GHz)	Pulse Start (mS)
9	5508	27
17	5516	51



20	5564	60
23	5552	69
29	5504	87
30	5499	90
33	5496	99
43	5517	129
52	5501	156
57	5549	171
58	5536	174
65	5522	195
66	5568	198
70	5530	210
75	5514	225
76	5531	228
87	5518	261
88	5495	264
98	5550	294

USA Frequency Hopping Trial #11

Hop #	Freq (GHz)	Pulse Start (mS)
16	5539	48
19	5545	57
20	5505	60
21	5536	63
31	5500	93
33	5552	99
34	5557	102
39	5550	117
46	5502	138
49	5504	147
61	5506	183
63	5558	189
65	5559	195
66	5527	198
73	5514	219
76	5507	228
80	5534	240
96	5523	288

USA Frequency Hopping Trial #12

Hop #	Freq (GHz)	Pulse Start (mS)
0	5542	0
4	5558	12
17	5526	51
19	5504	57



20	5545	60
27	5528	81
32	5568	96
36	5498	108
44	5562	132
46	5537	138
52	5560	156
54	5534	162
60	5549	180
61	5547	183
64	5506	192
66	5565	198
67	5519	201
69	5567	207
80	5512	240
83	5492	249
84	5511	252
92	5541	276

USA Frequency Hopping Trial #13

Hop #	Freq (GHz)	Pulse Start (mS)
8	5517	24
15	5512	45
27	5546	81
32	5549	96
36	5547	108
41	5516	123
47	5559	141
50	5524	150
54	5492	162
55	5543	165
58	5552	174
64	5505	192
72	5560	216
74	5545	222
77	5565	231
79	5561	237
85	5509	255
91	5498	273
96	5501	288

USA Frequency Hopping Trial #14

Hop #	Freq (GHz)	Pulse Start (mS)
10	5548	30
33	5557	99



34	5506	102
35	5531	105
45	5568	135
50	5493	150
55	5511	165
57	5509	171
61	5503	183
68	5552	204
70	5522	210
86	5537	258
94	5547	282

USA Frequency Hopping Trial #15

Hop #	Freq (GHz)	Pulse Start (mS)
8	5544	24
15	5555	45
16	5508	48
19	5565	57
22	5496	66
23	5521	69
26	5562	78
28	5536	84
32	5492	96
33	5517	99
38	5553	114
43	5513	129
47	5516	141
53	5525	159
55	5502	165
57	5528	171
64	5559	192
68	5522	204
70	5501	210
79	5500	237
90	5523	270

USA Frequency Hopping Trial #16

Hop #	Freq (GHz)	Pulse Start (mS)
19	5544	57
21	5495	63
26	5533	78
28	5546	84
38	5563	114
41	5534	123
54	5538	162



58	5552	174
61	5551	183
63	5514	189
70	5517	210
74	5540	222
90	5528	270
92	5529	276

USA Frequency Hopping Trial #17

Hop #	Freq (GHz)	Pulse Start (mS)
2	5533	6
5	5513	15
24	5566	72
37	5504	111
52	5498	156
58	5501	174
63	5551	189
77	5530	231
83	5502	249
85	5522	255
89	5529	267
95	5495	285

USA Frequency Hopping Trial #18

Hop #	Freq (GHz)	Pulse Start (mS)
4	5541	12
5	5549	15
7	5512	21
13	5564	39
21	5494	63
34	5496	102
36	5556	108
50	5534	150
58	5511	174
59	5565	177
64	5504	192
65	5561	195
74	5521	222
75	5531	225
77	5500	231
79	5499	237
86	5566	258
91	5560	273
92	5557	276
95	5532	285



99 5528 297

USA Frequency Hopping Trial #19

Hop #	Freq (GHz)	Pulse Start (mS)
3	5553	9
7	5538	21
19	5511	57
20	5568	60
26	5554	78
44	5529	132
46	5516	138
57	5537	171
61	5497	183
74	5551	222
77	5541	231
80	5559	240
81	5558	243
83	5501	249
94	5546	282

USA Frequency Hopping Trial #20

Hop #	Freq (GHz)	Pulse Start (mS)
3	5531	9
14	5517	42
20	5492	60
25	5522	75
42	5556	126
48	5528	144
50	5495	150
55	5503	165
68	5552	204
71	5493	213
72	5535	216
94	5494	282
99	5520	297

USA Frequency Hopping Trial #21

Hop #	Freq (GHz)	Pulse Start (mS)
0	5497	0
8	5549	24
12	5553	36
15	5539	45
18	5547	54
19	5517	57
24	5561	72



25	5558	75
33	5528	99
35	5537	105
43	5563	129
52	5535	156
68	5495	204
69	5519	207
72	5504	216
80	5507	240
81	5520	243
85	5524	255
96	5542	288
97	5525	291

USA Frequency Hopping Trial #22

Hop #	Freq (GHz)	Pulse Start (mS)
11	5545	33
20	5550	60
26	5529	78
27	5511	81
32	5519	96
39	5553	117
41	5507	123
42	5537	126
49	5532	147
51	5551	153
60	5503	180
62	5492	186
74	5504	222
76	5533	228
81	5524	243
82	5510	246
84	5555	252
88	5523	264
97	5496	291
98	5552	294

USA Frequency Hopping Trial #23

Hop #	Freq (GHz)	Pulse Start (mS)
1	5541	3
8	5493	24
19	5558	57
23	5498	69
28	5567	84
31	5539	93



33	5564	99
47	5512	141
49	5518	147
51	5533	153
57	5532	171
64	5549	192
67	5510	201
70	5492	210
75	5506	225
92	5526	276
98	5516	294

USA Frequency Hopping Trial #24

Hop #	Freq (GHz)	Pulse Start (mS)
0	5535	0
4	5521	12
5	5559	15
24	5548	72
27	5565	81
28	5520	84
29	5493	87
36	5499	108
41	5498	123
61	5540	183
64	5531	192
66	5513	198
67	5532	201
74	5522	222
88	5564	264
93	5555	279
96	5495	288

USA Frequency Hopping Trial #25

Hop #	Freq (GHz)	Pulse Start (mS)
6	5544	18
11	5521	33
13	5520	39
27	5568	81
35	5510	105
43	5524	129
46	5497	138
49	5534	147
53	5495	159
62	5503	186
67	5492	201



68	5517	204
71	5530	213
83	5511	249
90	5509	270
97	5528	291

USA Frequency Hopping Trial #26

Hop #	Freq (GHz)	Pulse Start (mS)
5	5504	15
13	5546	39
24	5534	72
30	5503	90
40	5501	120
50	5510	150
53	5550	159
59	5497	177
65	5548	195
67	5492	201
77	5531	231
98	5552	294
99	5520	297

USA Frequency Hopping Trial #27

Hop #	Freq (GHz)	Pulse Start (mS)
2	5514	6
19	5502	57
23	5515	69
36	5519	108
38	5548	114
40	5549	120
41	5499	123
44	5531	132
45	5554	135
52	5523	156
56	5525	168
65	5507	195
69	5520	207
90	5498	270
91	5517	273
94	5551	282
96	5506	288

USA Frequency Hopping Trial #28

Hop #	Freq (GHz)	Pulse Start (mS)
4	5529	12



6	5543	18
10	5565	30
12	5566	36
14	5517	42
16	5508	48
18	5525	54
33	5562	99
38	5507	114
47	5544	141
49	5515	147
51	5554	153
58	5548	174
62	5539	186
65	5526	195
66	5516	198
73	5559	219
77	5550	231
78	5535	234
86	5564	258

USA Frequency Hopping Trial #29

Hop #	Freq (GHz)	Pulse Start (mS)
1	5494	3
4	5524	12
11	5499	33
41	5523	123
47	5547	141
54	5544	162
65	5502	195
66	5555	198
67	5565	201
69	5550	207
72	5505	216
77	5548	231
84	5526	252
86	5538	258
90	5549	270
96	5513	288

USA Frequency Hopping Trial #30

Hop #	Freq (GHz)	Pulse Start (mS)
0	5526	0
2	5549	6
10	5550	30
13	5529	39



19	5566	57
20	5499	60
38	5493	114
59	5543	177
65	5548	195
76	5516	228
78	5512	234
80	5557	240
83	5545	249
95	5518	285


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

Equip#	Manufacturer/ Model	Description	Last Cal	Next Due
CIS-49514	National Instruments /PXI-1042	DFS Automation System	Cal before Use	Cal before Use
	National Instruments /PXI-5422	16-Bit 200MS/s AWG	Cal before Use	Cal before Use
	National Instruments /PXI-5422	16-Bit 200MS/s AWG	Cal before Use	Cal before Use
	National Instruments /PXI-2796	40GHz Dual 6x1 Multiplex	Cal before Use	Cal before Use
CIS055579	BWS20-W2 Aeroflex	SMA 20dB Attenuator	21-Jul-16	21-Jul-17
CIS055577	BWS20-W2 Aeroflex	SMA 20dB Attenuator	21-Jul-16	21-Jul-17
CIS054696	D3C2060 Ditom	Circulator	14-Nov-16	14-Nov-17
CIS054657	ZFSC-2-10G Mini-Circuits	Splitter	19-Sep-16	19-Sep-17
CIS055561	F120-S1S1-48 MegaPhase	SMA Cable 48"	15-Jul-16	15-Jul-17
CIS054635	F120-S1S1-48 Megaphase	SMA cable 48"	15-Jul-16	15-Jul-17
CIS055843	SMSM-A2PH-012 Dynawave	12" SMA Cable	29-Sep-16	29-Sep-17
CIS055842	SMSM-A2PH-012 Dynawave	12" SMA cable	29-Sep-16	29-Sep-17
CIS055874	SMSM-A2PH-024 Dynawave	24" SMA Cable	7-Oct-16	7-Oct-17
CIS055872	SMSM-A2PH-024 Dynawave	24" SMA Cable	7-Oct-16	7-Oct-17
CIS055868	SMSM-A2PH-024 Dynawave	24" SMA Cable	7-Oct-16	7-Oct-17
CIS055867	SMSM-A2PH-024 Dynawave	24" SMA Cable	7-Oct-16	7-Oct-17
CIS055170	RFLT4WDC40GK RF Lambda	4 Way Power Divider 40GHz	29-Nov-16	29-Nov-17
CIS050721	N9030A Keysight	PXA Signal Analyzer	30-Mar-16	30-Mar-17
CIS054303	N5182B Keysight	MXG X-Series RF Vector Signal Generator	6-Apr-16	6-Apr-17



End