

**Dynamic Frequency Selection (DFS) Test Report****AIR-AP1815W-x-K9**

(x=A,B)

Cisco Aironet 802.11ac Dual Band Access Points

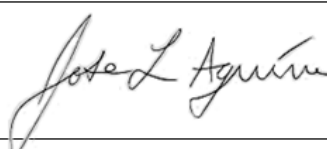
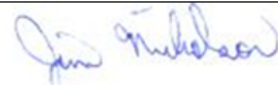
FCC ID: LDK102106

IC: 2461B-102106

5250-5350, 5470-5725 MHz**Against the following Specifications:****CFR47 Part 15.407****RSS247****Cisco Systems**

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San Jose, CA 95134

	
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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	$\pm 2.4 \cdot 10^{-7}$
temperature measurements	$\pm 0.54^\circ$
humidity measurements	$\pm 2.3\%$
DC and low frequency measurements	$\pm 2.5\%$

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

Radiated emissions (expanded uncertainty, confidence interval 95%)

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

Conducted emissions (expanded uncertainty, confidence interval 95%)

30 MHz – 40GHz	+/- 0.38 dB
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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**

16-Jan-17 - 17-Jan-17

2.3 Report Issue Date

18-Jan-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-AP1815W-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-AP1815W-B-K9	Cisco Systems	P2	8.3.15.124	AP1G5	FOC20454UBN
S02	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-AP1815W-B-K9	S01	☒	☐
	Support Client Equipment	S02	☐	☒

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 **Error! Reference source not found.** 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. 3dBi gain was used to set the -60 dBm threshold level (-64dBm +1 dB+3dB) during calibration of the test setup.

Frequency	Part Number	Antenna Type	Antenna Gain (dBi)
5GHz	Internal	omnidirectional	3

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 104 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
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01 v02r01.	

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.
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. 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. 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.	

A.3 Radar Test Waveforms

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

1. Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Numbers of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a	Roundup $\left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec , with a minimum increment of 1 μsec , excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 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.

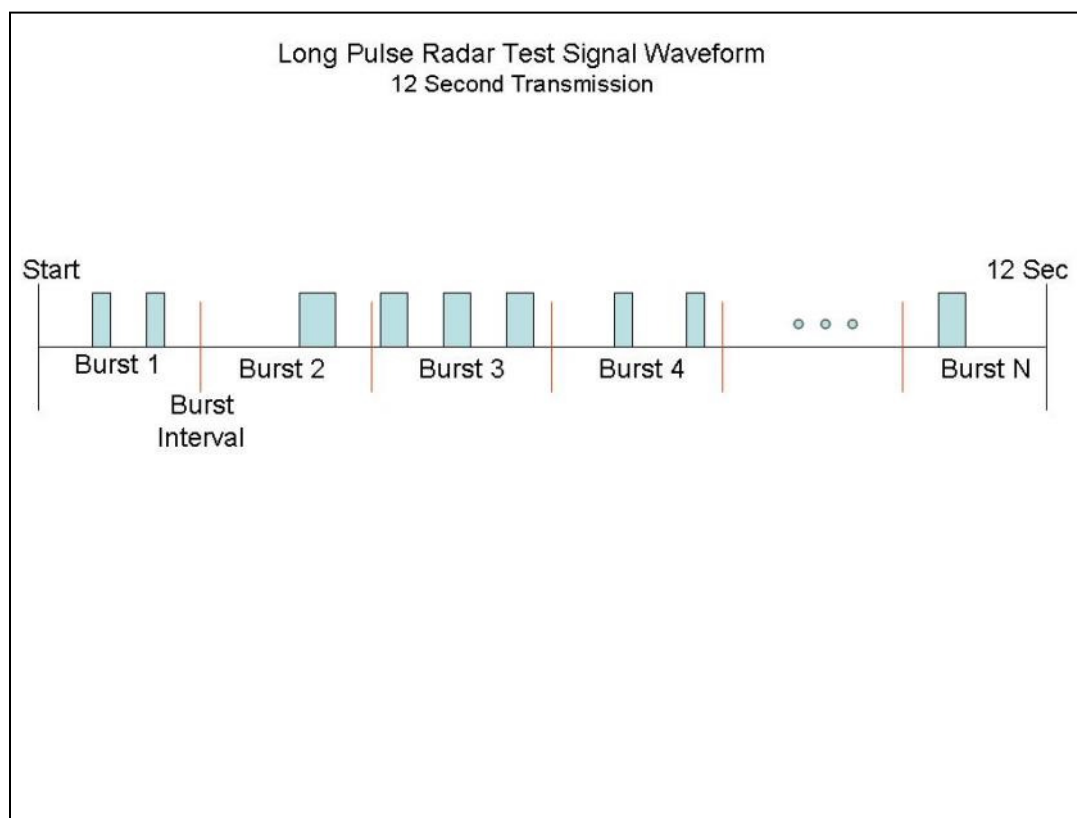
Each waveform is defined as follows:

- 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



3. Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μ sec)	PRI (μ sec)	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-AP1815W-B-K9	S01	☒	☐
	Support Client Equipment	S02	☐	☒

Tested By :

Jose Aguirre

Test Result : PASS

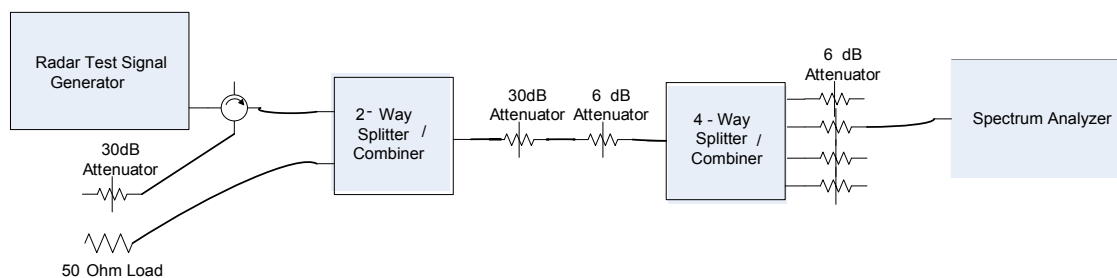
See Appendix C for list of test equipment

Date of testing:

16-Jan-17 - 17-Jan-17

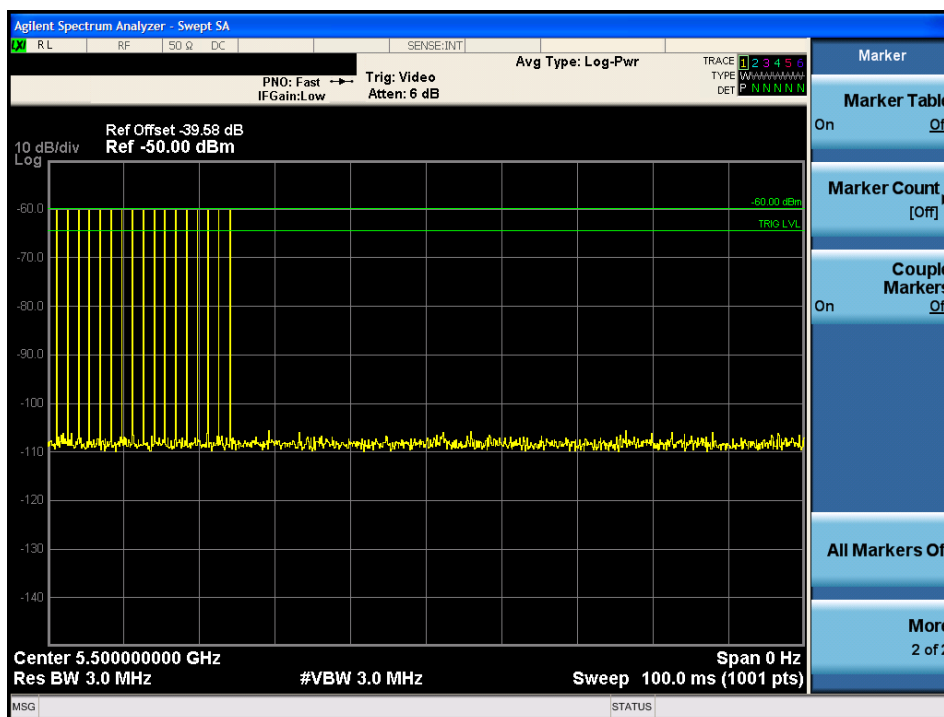
The following equipment setup was used to calibrate the conducted Radar Waveform. A spectrum analyzer was used to establish the test signal level for each radar type. During this process there were no transmissions by either the Master or Client Device. The spectrum analyzer was switched to the zero 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.

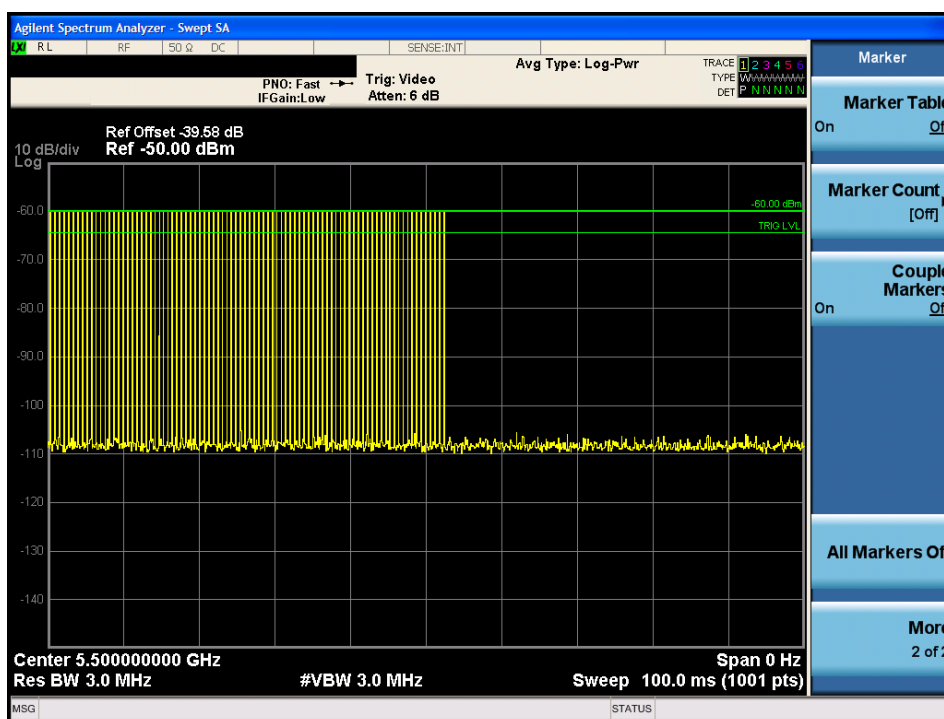


Conducted Calibration Setup

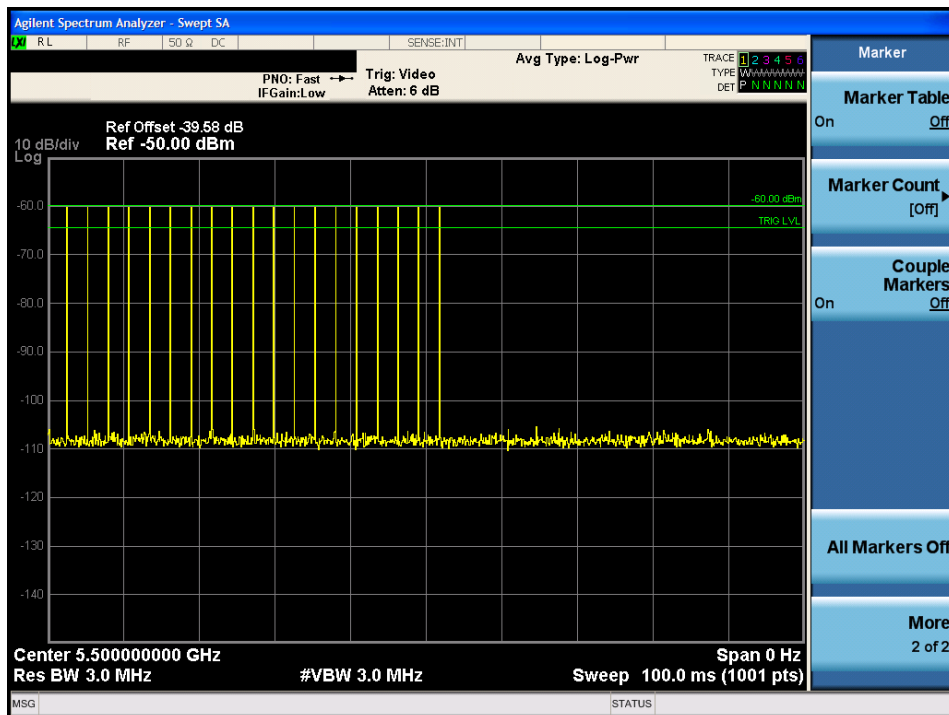
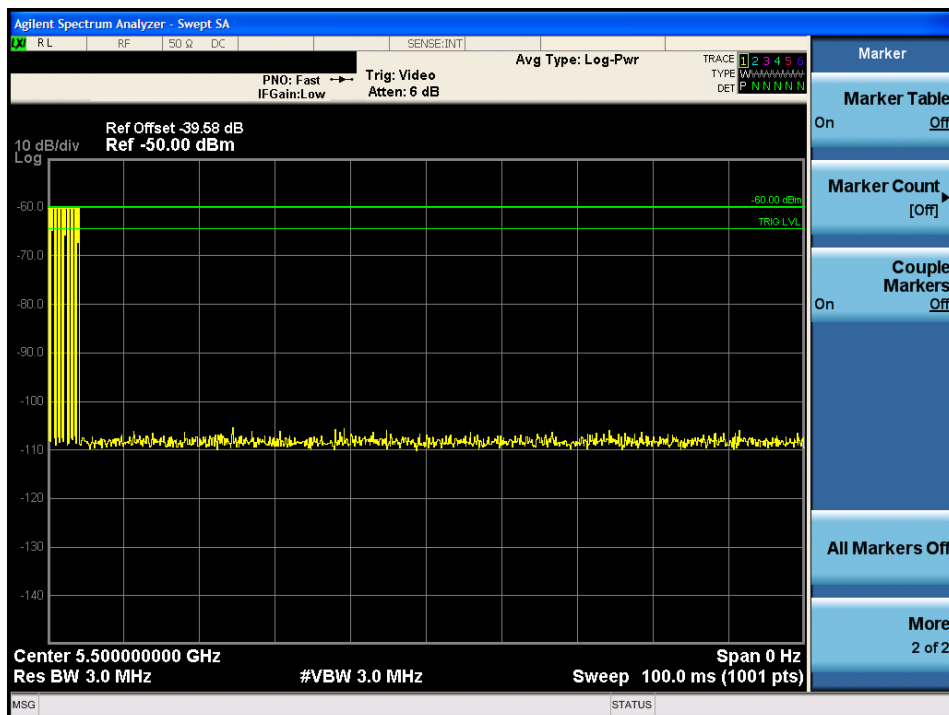
Following are the calibration plots for each of the required radar waveforms.

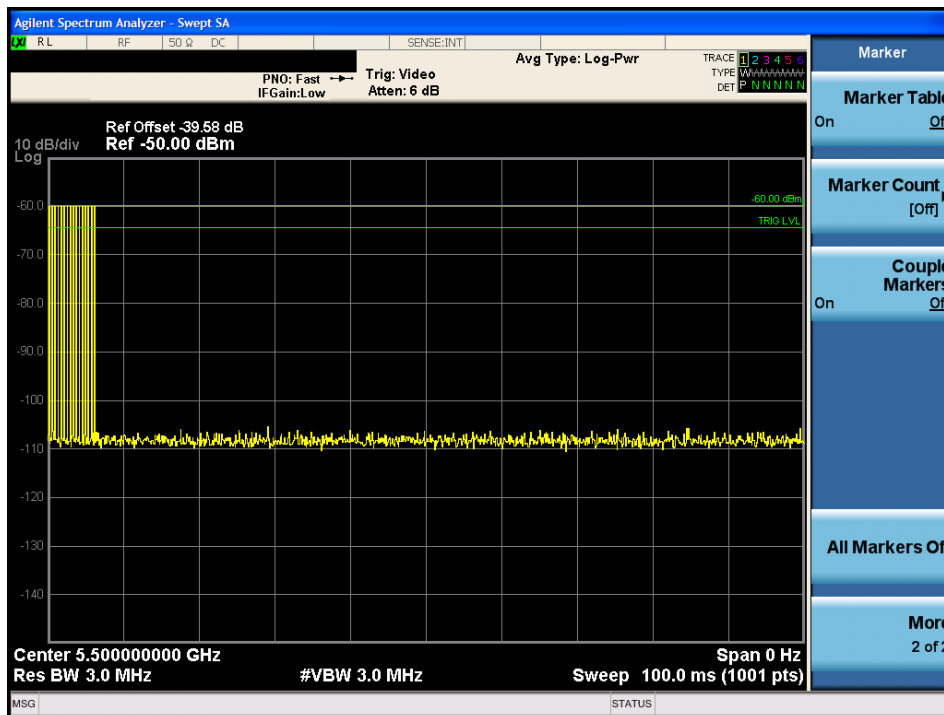


USA Bin 0 Radar Calibration

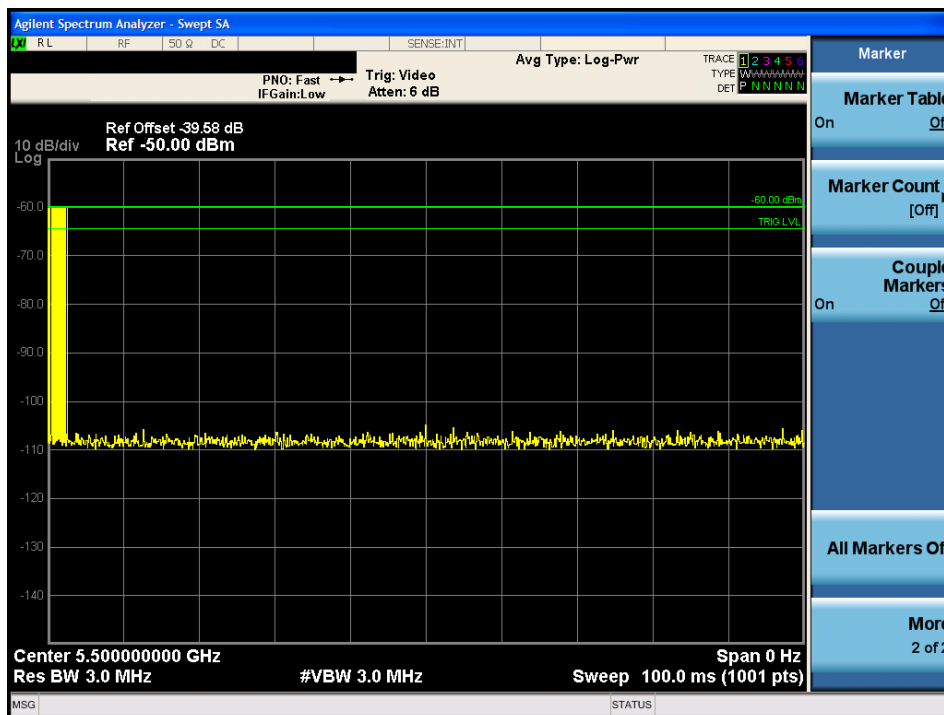


USA Bin 1A Radar Calibration

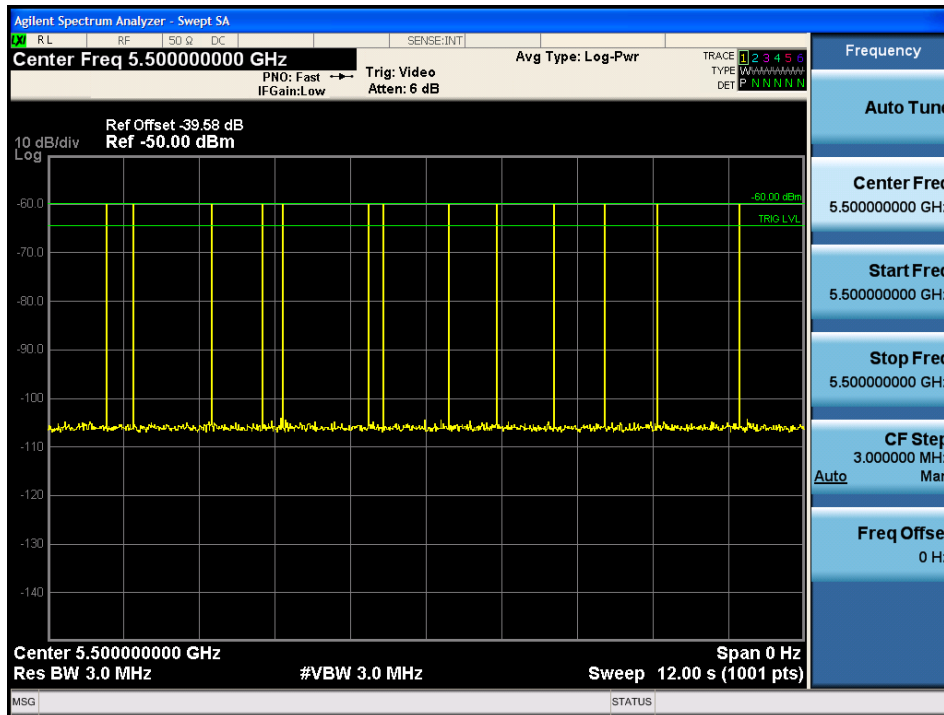
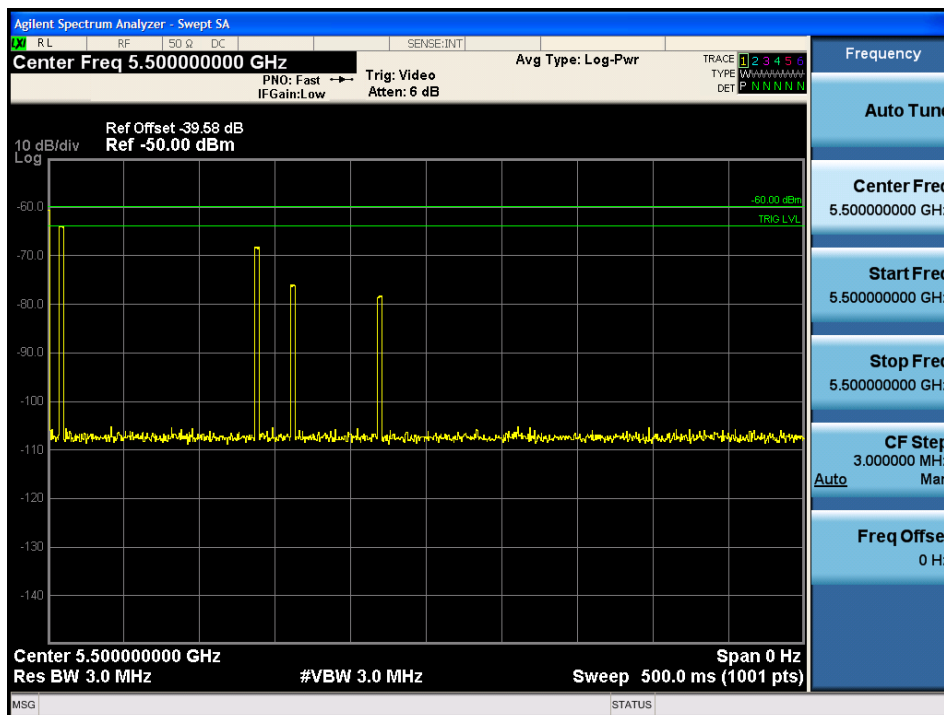
**USA Bin 1B Radar Calibration****USA Bin 2 Radar Calibration**



USA Bin 3 Radar Calibration



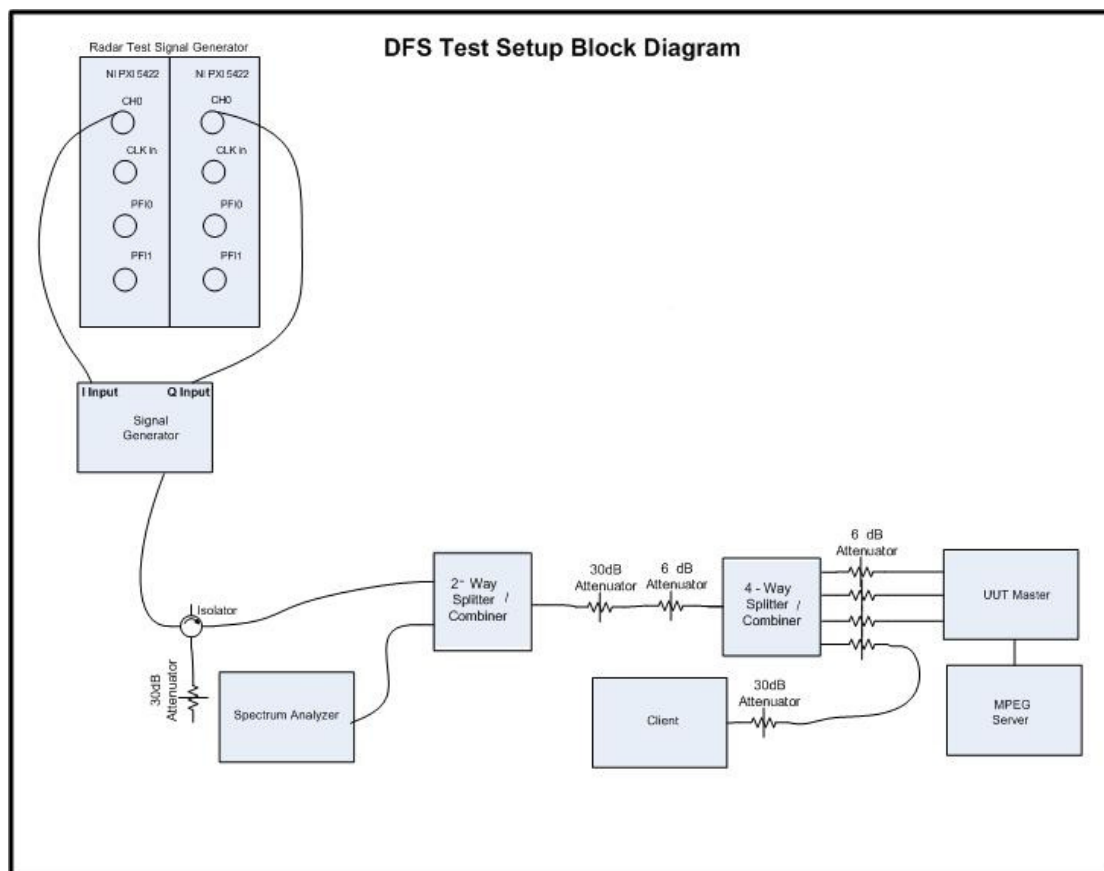
USA Bin 4 Radar Calibration

**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

**Title:** DFS Setup



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.



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 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



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



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

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



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 4 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			
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		
5506.5	1	1	1	1	1	1	1	1	1	1	100		

USA Bin 5 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 Frequency Hopping 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	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 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	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



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



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

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



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

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	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		
5526	1	1	1	1	1	1	1	1	1	1	100		

USA Bin 5 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	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 Frequency Hopping 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	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		

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			
5530	1	1	1	1	1	1	1	1	1	1	100	80	75
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 0 Radar (cont)

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		

USA Bin 1A 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			
5530	1	1	1	1	1	1	1	1	1	1	100	80	75
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 (cont)



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		

USA Bin 1B 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			
5530	1	1	1	1	1	1	1	1	1	1	100	80	75
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 (cont)



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		

USA Bin 2 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			
5530	1	1	1	1	1	1	1	1	1	1	100	80	75
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 (cont)



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		

USA Bin 3 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			
5530	1	1	1	1	1	1	1	1	1	1	100	80	75
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 (cont)

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		

USA Bin 4 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			
5530	1	1	1	1	1	1	1	1	1	1	100	80	75
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 (cont)



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		

USA Bin 5 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			
5530	1	1	1	1	1	1	1	1	1	1	100	80	75
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		
5565.5	1	1	1	1	1	1	1	1	1	1	100		

USA Bin 5 Radar (cont)



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		

USA Frequency Hopping 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			
5530	1	1	1	1	1	1	1	1	1	1	100	80	75
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 Frequency Hopping Radar (cont)

B.3 Initial Channel Availability Check Time

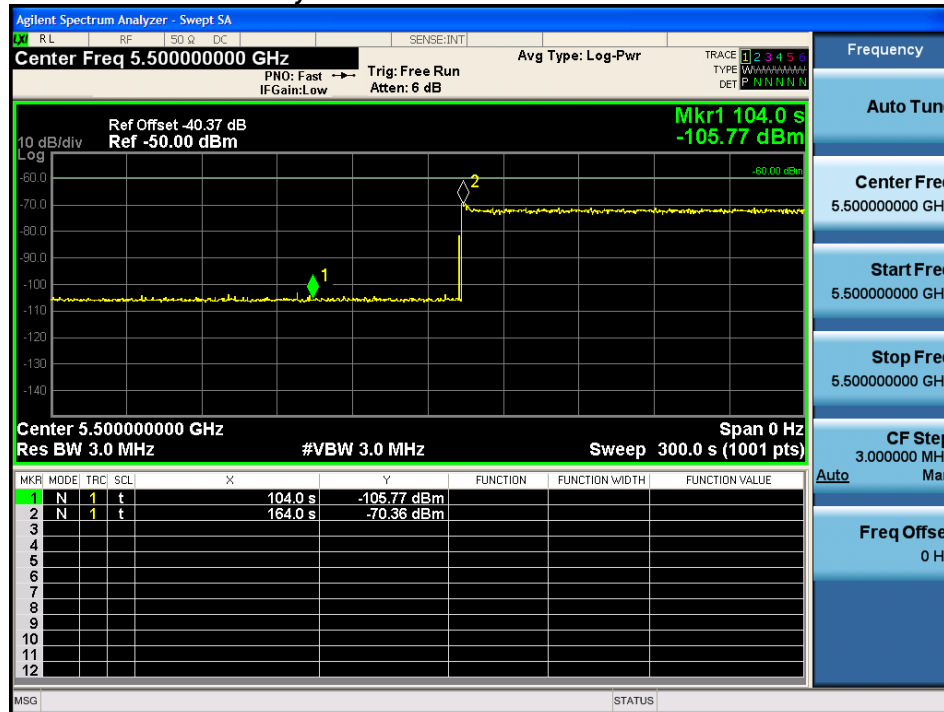
The tests that the UUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the U-NII device checks for Radar Waveforms for one minute on the test Channel. This test does not use any Radar Waveforms.

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.

Radar Burst at the End of the Channel Availability Check Time



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.

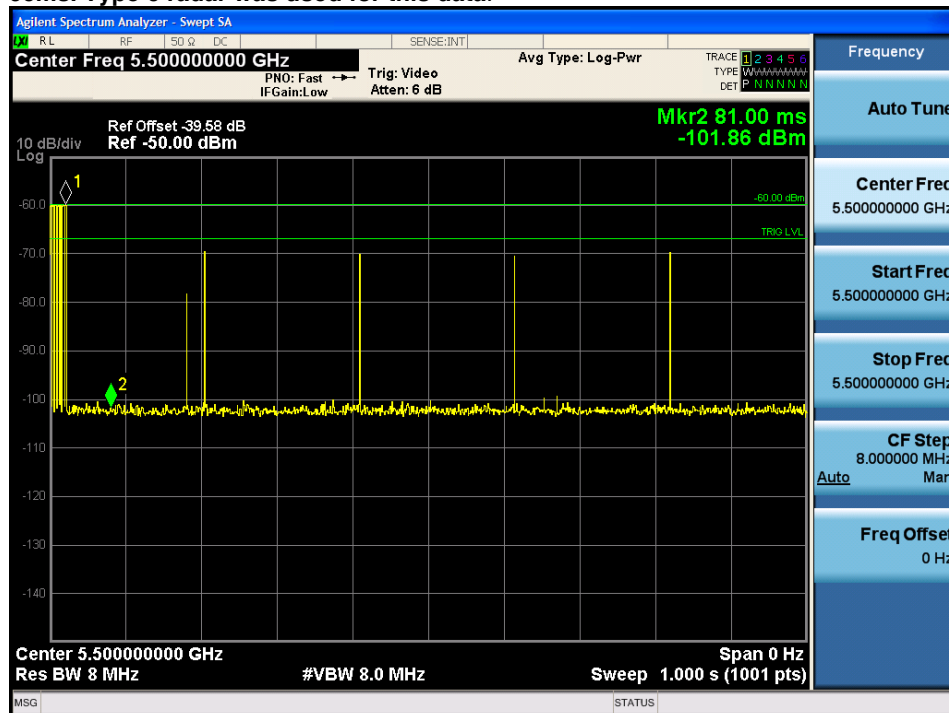
The steps below define the procedure to determine the above mentioned parameters when a radar Burst with a level equal to the DFS Detection Threshold + 1dB (-63dBm) is generated on the Operating Channel of the U-NII device.

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.

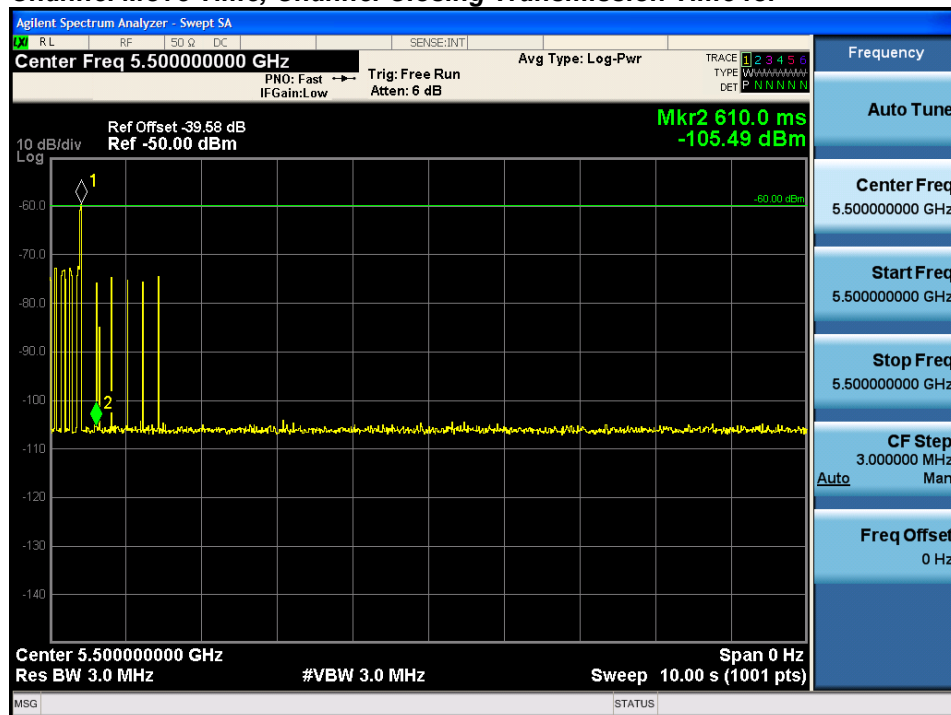
At time T_0 the Radar Waveform generator sends a Burst of pulses for radar type 0 at -63dBm.

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.

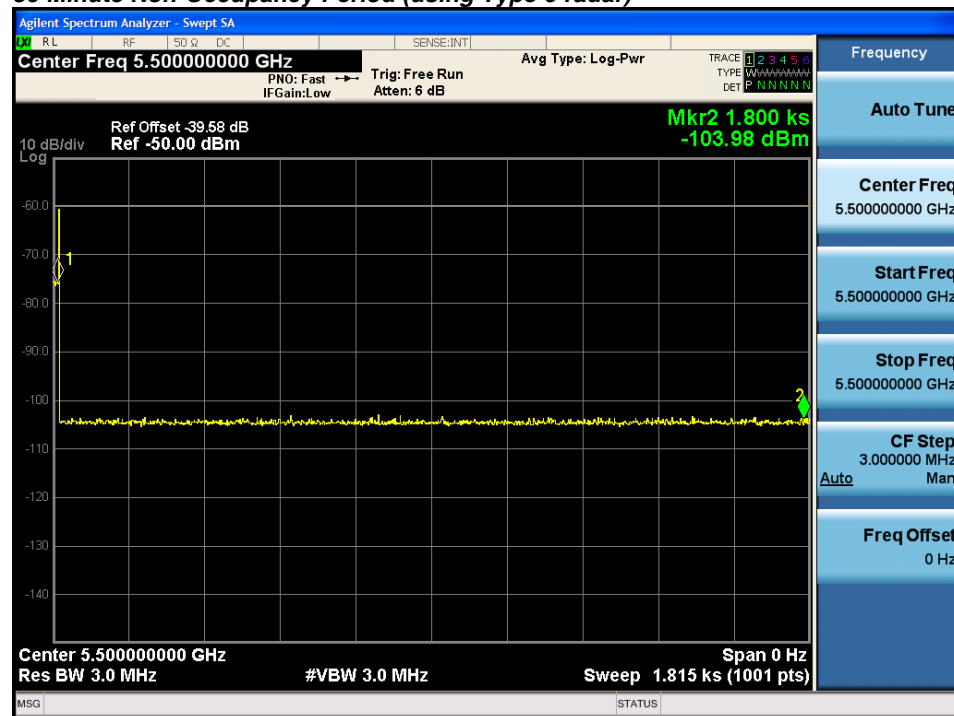


Channel Close time of 50ms

**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:

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

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.

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:

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

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 trials, 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: $FL + (0.4 * Chirp Width [in MHz])$

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 $FH - (0.4 * Chirp Width [in MHz])$

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 64
Channel 5510MHz 40MHz BW data	see page 87
Channel 5530MHz 80MHz BW data	see page 113

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	62	1	858	1	100.0%	60.0%
2	5492	62	1	858	1		
3	5492	81	1	658	1		
4	5492	58	1	918	1		
5	5492	95	1	558	1		
6	5492	74	1	718	1		
7	5495	59	1	898	1		
8	5495	81	1	658	1		
9	5495	18	1	3066	1		
10	5495	99	1	538	1		
11	5495	81	1	658	1		
12	5495	89	1	598	1		
13	5500	76	1	698	1		
14	5500	67	1	798	1		
15	5500	18	1	3066	1		
16	5500	37	1	1438	1		
17	5500	21	1	2529	1		
18	5500	23	1	2295	1		
19	5505	24	1	2249	1		
20	5505	68	1	784	1		
21	5505	98	1	541	1		
22	5505	19	1	2840	1		
23	5505	39	1	1384	1		
24	5505	42	1	1275	1		
25	5508	26	1	2064	1		
26	5508	57	1	926	1		
27	5508	24	1	2271	1		
28	5508	21	1	2583	1		
29	5508	30	1	1762	1		
30	5508	60	1	884	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	28	3.6	181	1	76.7%	60.0%
2	5492	25	3.4	189	1		
3	5492	26	2.6	216	1		
4	5492	29	1.6	198	1		
5	5492	23	2.1	157	1		
6	5492	27	4.5	214	0		
7	5495	25	1.7	205	1		
8	5495	28	2.9	203	1		
9	5495	27	4.5	163	0		
10	5495	26	4.8	197	1		
11	5495	26	4.5	181	1		
12	5495	29	1.9	212	1		
13	5500	23	4.8	154	0		
14	5500	28	1.9	150	1		
15	5500	26	1.4	164	1		
16	5500	29	1.4	172	0		
17	5500	26	4.9	215	1		
18	5500	24	1.4	214	1		
19	5505	23	2.3	182	0		
20	5505	25	2.2	188	1		
21	5505	27	4.6	230	1		
22	5505	27	2.4	188	0		
23	5505	24	2.8	223	1		
24	5505	29	1.3	205	1		
25	5508	25	1.4	168	1		
26	5508	26	4	173	1		
27	5508	27	1.5	200	1		
28	5508	24	1.3	194	1		
29	5508	25	2	173	0		
30	5508	25	4	215	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	6.2	326	1	80.0%	60.0%
2	5492	18	9.4	413	1		
3	5492	18	7.4	432	1		
4	5492	16	8.5	336	1		
5	5492	18	9.6	379	1		
6	5492	17	6	292	0		
7	5495	18	7.4	378	1		
8	5495	17	8.8	496	1		
9	5495	16	7	281	1		
10	5495	16	6	360	0		
11	5495	16	7.2	411	1		
12	5495	18	6.1	431	1		
13	5500	16	9.2	341	1		
14	5500	18	7.5	255	0		
15	5500	17	6	219	1		
16	5500	18	7.6	426	1		
17	5500	16	10	370	1		
18	5500	18	6.2	338	0		
19	5505	17	8.4	361	1		
20	5505	17	7.1	317	1		
21	5505	16	8.8	273	1		
22	5505	17	8.1	462	0		
23	5505	17	9.9	345	1		
24	5505	16	7.7	466	1		
25	5508	18	6	387	1		
26	5508	16	7	307	1		
27	5508	17	7.4	259	1		
28	5508	18	7.5	210	1		
29	5508	16	6.1	493	0		
30	5508	17	8.6	235	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	14	14.5	484	1	80.0%	60.0%
2	5492	15	16	318	1		
3	5492	14	11.9	480	1		
4	5492	13	19	208	1		
5	5492	14	19.4	482	1		
6	5492	13	18.8	253	1		
7	5495	13	17.4	331	0		
8	5495	13	18.9	435	1		
9	5495	14	12.5	341	0		
10	5495	14	17.1	400	1		
11	5495	15	11.7	348	1		
12	5495	14	19.2	390	1		
13	5500	12	15.3	346	1		
14	5500	14	12.4	257	1		
15	5500	12	18.3	344	1		
16	5500	14	12.9	434	0		
17	5500	14	15.2	490	1		
18	5500	13	16.6	404	1		
19	5505	16	14	360	1		
20	5505	15	13.8	357	0		
21	5505	14	14.7	441	1		
22	5505	15	17.8	283	1		
23	5505	12	14.4	277	1		
24	5505	12	13.9	391	0		
25	5508	12	11.9	431	1		
26	5508	15	17.3	324	1		
27	5508	14	11.7	459	1		
28	5508	14	15.2	451	0		
29	5508	13	18.1	317	1		
30	5508	12	11.4	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:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100.0\% + 76.7\% + 80.0\% + 80.0\%) / 4 = 84.2\% > 80\%$$



*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	5499.5	20	95	1875		0.486177
2	1	5499.5	20	80			1.466882
3	3	5499.5	20	55	1995	1193	1.888844
4	2	5499.5	20	65	1906		2.822452
5	1	5499.5	20	100			3.867714
6	3	5499.5	20	55	1010	1566	4.844733
7	3	5499.5	20	55	1909	1369	6.441848
8	3	5499.5	20	85	1531	1359	6.781214
9	1	5499.5	20	95			7.767905
10	3	5499.5	20	70	1709	1067	8.526929
11	2	5499.5	20	85	1169		9.548799
12	2	5499.5	20	75	1631		10.372847
13	2	5499.5	20	75	1535		11.683148

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	5496.7	13	65	1530	1281	1.168339
2	3	5496.7	13	80	1245	1895	1.747127
3	3	5496.7	13	55	1545	1358	2.563541
4	1	5496.7	13	95			4.230214
5	3	5496.7	13	100	1116	1659	4.849614
6	2	5496.7	13	65	1886		7.023489
7	3	5496.7	13	95	1761	1283	7.619507
8	3	5496.7	13	70	1804	1826	8.694893
9	2	5496.7	13	100	1529		9.992191
10	2	5496.7	13	80	1954		11.563469

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	5495.9	11	50			0.838348
2	1	5495.9	11	50			1.557508
3	3	5495.9	11	95	1953	1622	2.618392
4	1	5495.9	11	85			3.414317
5	3	5495.9	11	55	1168	1473	4.106968
6	1	5495.9	11	80			4.724195
7	1	5495.9	11	50			6.011451
8	3	5495.9	11	65	1347	1515	7.08355
9	2	5495.9	11	60	1574		7.895967
10	1	5495.9	11	85			8.599986



11	2	5495.9	11	95	1283		10.120454
12	2	5495.9	11	50	1594		11.065997
13	3	5495.9	11	75	1535	1258	11.41452

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	5496.3	12	85	1477	1102	0.391444
2	1	5496.3	12	60			0.726758
3	2	5496.3	12	100	1936		1.576322
4	3	5496.3	12	85	1983	1811	1.814346
5	1	5496.3	12	65			2.571879
6	2	5496.3	12	85	1145		3.584888
7	2	5496.3	12	55	1726		3.91592
8	2	5496.3	12	60	1956		4.363147
9	1	5496.3	12	75			4.954127
10	1	5496.3	12	65			5.62013
11	3	5496.3	12	75	1313	1047	6.124646
12	3	5496.3	12	95	1435	1305	6.804072
13	3	5496.3	12	70	1288	1106	7.477956
14	1	5496.3	12	95			8.162469
15	1	5496.3	12	70			8.892772
16	1	5496.3	12	65			9.355377
17	3	5496.3	12	70	1697	1849	9.863421
18	2	5496.3	12	50	1418		10.380788
19	3	5496.3	12	80	1662	1535	11.227344
20	1	5496.3	12	95			11.40541

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	2	5495.5	10	85	1683		0.196705
2	1	5495.5	10	85			1.488627
3	2	5495.5	10	95	1063		1.787689
4	3	5495.5	10	50	1541	1249	2.976422
5	3	5495.5	10	55	1677	1674	3.305758
6	3	5495.5	10	95	1133	1369	4.268385
7	1	5495.5	10	55			5.148976
8	1	5495.5	10	95			5.845159
9	3	5495.5	10	75	1286	1451	6.041729
10	2	5495.5	10	95	1329		7.474442
11	3	5495.5	10	100	1138	1486	7.663837
12	2	5495.5	10	75	1340		8.719933
13	2	5495.5	10	60	1082		9.118634
14	3	5495.5	10	80	1342	1170	10.045688



15	1	5495.5	10	60		11.232244
16	1	5495.5	10	70		11.856523

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	5494.3	7	65	1888		0.766047
2	1	5494.3	7	95			1.891749
3	3	5494.3	7	55	1719	1895	2.247105
4	1	5494.3	7	95			3.521021
5	2	5494.3	7	100	1071		4.15475
6	1	5494.3	7	50			5.24988
7	1	5494.3	7	50			6.599476
8	1	5494.3	7	75			7.808841
9	2	5494.3	7	80	1198		8.788823
10	1	5494.3	7	75			9.777038
11	3	5494.3	7	80	1432	1439	10.109326
12	1	5494.3	7	70			11.675055

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	5495.1	9	50	1060		1.454316
2	3	5495.1	9	80	1502	1661	2.31559
3	1	5495.1	9	55			3.397428
4	3	5495.1	9	65	1563	1949	5.193455
5	3	5495.1	9	60	1841	1146	6.428906
6	3	5495.1	9	75	1665	1812	8.665564
7	2	5495.1	9	55	1522		9.076864
8	1	5495.1	9	90			11.823568

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	5493.9	6	80			0.381225
2	2	5493.9	6	90	1310		0.839561
3	3	5493.9	6	70	1444	1255	1.766302
4	3	5493.9	6	95	1542	1049	2.949401
5	1	5493.9	6	60			3.358149
6	2	5493.9	6	100	1298		4.10371
7	2	5493.9	6	65	1752		5.49495
8	3	5493.9	6	60	1009	1853	5.971541
9	2	5493.9	6	55	1175		6.88911
10	1	5493.9	6	85			7.966995
11	1	5493.9	6	100			8.250592



12	1	5493.9	6	80			9.044984
13	1	5493.9	6	80			10.225862
14	1	5493.9	6	70			10.565096
15	3	5493.9	6	50	1336	1641	11.839589
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	5495.9	11	80			0.463764
2	1	5495.9	11	95			0.841865
3	3	5495.9	11	55	1677	1522	1.661693
4	2	5495.9	11	55	1650		1.891786
5	1	5495.9	11	95			2.711317
6	2	5495.9	11	90	1893		3.553289
7	1	5495.9	11	60			3.713634
8	2	5495.9	11	60	1878		4.658959
9	2	5495.9	11	70	1943		5.006993
10	2	5495.9	11	95	1139		5.60088
11	3	5495.9	11	85	1790	1758	6.179183
12	1	5495.9	11	65			6.875413
13	1	5495.9	11	90			7.431326
14	2	5495.9	11	75	1944		8.216161
15	2	5495.9	11	50	1769		8.643902
16	2	5495.9	11	60	1225		9.381906
17	3	5495.9	11	85	1165	1726	10.133448
18	2	5495.9	11	65	1956		10.747552
19	2	5495.9	11	50	1857		11.362298
20	1	5495.9	11	95			11.978485

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	5497.9	16	70	1192	1789	0.631424
2	1	5497.9	16	50			0.89141
3	1	5497.9	16	90			2.102819
4	1	5497.9	16	50			2.865625
5	1	5497.9	16	95			3.410294
6	3	5497.9	16	60	1889	1938	4.480445
7	3	5497.9	16	75	1338	1450	4.832916
8	3	5497.9	16	85	1972	1279	6.317043
9	1	5497.9	16	95			7.059538
10	3	5497.9	16	100	1831	1569	7.414946
11	1	5497.9	16	75			8.50011
12	2	5497.9	16	50	1596		9.239053
13	3	5497.9	16	75	1630	1139	10.3544



14	2	5497.9	16	85	1430	10.433845
15	2	5497.9	16	85	1105	11.621293

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	5500	12	60	1537		0.692978
2	2	5500	12	90	1958		0.994137
3	2	5500	12	95	1000		2.441804
4	2	5500	12	80	1868		2.608544
5	1	5500	12	85			3.692672
6	2	5500	12	75	1923		4.701399
7	3	5500	12	85	1702	1769	5.565514
8	1	5500	12	60			6.304333
9	3	5500	12	90	1669	1888	7.681571
10	3	5500	12	55	1088	1856	7.750169
11	3	5500	12	50	1583	1355	8.920026
12	2	5500	12	80	1399		9.527542
13	2	5500	12	90	1957		10.830273
14	1	5500	12	80			11.80072

USA Bin 5 Trial #12

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	5500	7	55	1324	1241	0.665496
2	1	5500	7	90			1.709913
3	2	5500	7	65	1666		2.546961
4	1	5500	7	75			3.60065
5	3	5500	7	75	1398	1391	5.09606
6	2	5500	7	85	1500		7.101793
7	2	5500	7	70	1047		7.273027
8	3	5500	7	60	1724	1261	9.529009
9	3	5500	7	95	1517	1270	10.06626
10	3	5500	7	100	1575	1792	11.464354

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	17	100			0.695322
2	1	5500	17	70			1.955868
3	1	5500	17	65			3.083405
4	2	5500	17	70	1356		3.35703
5	2	5500	17	65	1893		5.45166
6	2	5500	17	100	1526		5.930683
7	3	5500	17	55	1641	1560	7.127863



8	3	5500	17	50	1753	1821	7.730775
9	1	5500	17	50			9.32209
10	1	5500	17	70			10.359905
11	3	5500	17	50	1092	1204	11.699609

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	5500	8	80	1794		0.677489
2	1	5500	8	60			1.993739
3	2	5500	8	55	1204		2.614868
4	1	5500	8	85			3.245923
5	2	5500	8	50	1788		4.291513
6	1	5500	8	100			5.98714
7	3	5500	8	75	1961	1367	6.551587
8	1	5500	8	75			7.094772
9	2	5500	8	60	1015		8.688895
10	2	5500	8	50	1879		9.688475
11	3	5500	8	80	1877	1915	10.164642
12	1	5500	8	60			11.92417

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	3	5500	15	60	1501	1417	0.123564
2	2	5500	15	50	1020		1.426025
3	2	5500	15	100	1274		1.737153
4	2	5500	15	90	1758		3.307228
5	1	5500	15	65			3.557627
6	2	5500	15	100	1553		5.084824
7	1	5500	15	60			5.697297
8	3	5500	15	60	1787	1907	6.678333
9	1	5500	15	70			7.446608
10	3	5500	15	65	1492	1468	8.275356
11	2	5500	15	100	1738		9.264231
12	1	5500	15	75			9.674465
13	2	5500	15	100	1691		10.946978
14	3	5500	15	70	1963	1306	11.375162

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	7	100	1653	1291	0.534701
2	1	5500	7	75			1.756398
3	2	5500	7	75	1906		2.562893



4	1	5500	7	85			3.337934
5	3	5500	7	65	1127	1491	4.517339
6	3	5500	7	50	1388	1769	5.531252
7	3	5500	7	90	1542	1922	6.292382
8	3	5500	7	75	1119	1939	7.328742
9	1	5500	7	55			7.451941
10	3	5500	7	65	1757	1139	8.588102
11	1	5500	7	90			9.532179
12	2	5500	7	95	1209		11.014819
13	3	5500	7	80	1501	1739	11.348601

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	18	55			0.235113
2	3	5500	18	70	1627	1358	1.768186
3	2	5500	18	80	1621		3.718418
4	3	5500	18	75	1488	1133	4.902696
5	3	5500	18	85	1905	1450	5.514266
6	2	5500	18	70	1210		7.235751
7	2	5500	18	70	1567		8.80394
8	3	5500	18	50	1132	1214	9.999495
9	1	5500	18	55			10.904424

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	1	5500	19	80			0.308479
2	1	5500	19	90			1.549406
3	2	5500	19	70	1753		3.275908
4	3	5500	19	100	1143	1804	4.187733
5	2	5500	19	50	1815		6.448617
6	2	5500	19	100	1406		7.355556
7	1	5500	19	95			8.139317
8	3	5500	19	50	1262	1558	9.998658
9	2	5500	19	90	1299		10.720199

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	12	100	1418		0.35299
2	3	5500	12	75	1264	1805	0.913262
3	2	5500	12	50	1507		1.626987
4	1	5500	12	60			2.399034
5	1	5500	12	80			3.419784



6	2	5500	12	75	1445		4.202617
7	3	5500	12	50	1584	1768	4.548222
8	2	5500	12	80	1482		5.94177
9	2	5500	12	100	1442		6.473749
10	2	5500	12	75	1326		7.430693
11	2	5500	12	55	1245		7.527126
12	3	5500	12	75	1857	1523	8.436324
13	3	5500	12	95	1885	1767	9.610685
14	1	5500	12	100			10.453561
15	1	5500	12	95			11.114818
16	1	5500	12	75			11.866296

USA Bin 5 Trial #20

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	5500	18	55			0.473509
2	2	5500	18	75	1649		0.764052
3	2	5500	18	85	1408		2.057288
4	1	5500	18	50			2.311383
5	2	5500	18	70	1076		3.446112
6	3	5500	18	80	1474	1761	4.000713
7	3	5500	18	60	1584	1484	5.099175
8	1	5500	18	65			5.666941
9	3	5500	18	85	1065	1588	6.671302
10	2	5500	18	95	1762		7.458881
11	2	5500	18	65	1938		8.172085
12	3	5500	18	50	1596	1459	8.785951
13	1	5500	18	60			9.142332
14	2	5500	18	55	1896		9.840026
15	1	5500	18	65			11.066492
16	1	5500	18	60			11.375935

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	1	5501.7	17	85			0.28512
2	3	5501.7	17	80	1221	1149	1.646721
3	1	5501.7	17	90			2.875617
4	3	5501.7	17	65	1053	1008	3.577606
5	2	5501.7	17	100	1297		4.603847
6	2	5501.7	17	75	1470		5.069929
7	2	5501.7	17	85	1301		6.211289
8	2	5501.7	17	70	1280		7.399792
9	1	5501.7	17	95			8.804697
10	3	5501.7	17	65	1547	1910	9.745653



11	3	5501.7	17	75	1168	1814	10.59998
12	2	5501.7	17	60	1936		11.766222

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	5502.1	16	50	1945		0.002154
2	2	5502.1	16	85	1700		1.39352
3	2	5502.1	16	85	1141		2.728279
4	2	5502.1	16	100	1621		3.866619
5	2	5502.1	16	65	1971		4.979059
6	3	5502.1	16	80	1042	1522	6.238791
7	2	5502.1	16	50	1837		8.160959
8	2	5502.1	16	65	1570		8.705109
9	2	5502.1	16	50	1627		10.062665
10	3	5502.1	16	75	1395	1418	11.315068

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	5502.1	16	90			0.615102
2	2	5502.1	16	90	1137		1.076023
3	1	5502.1	16	95			1.972499
4	2	5502.1	16	80	1892		2.353433
5	3	5502.1	16	75	1164	1505	3.504751
6	1	5502.1	16	95			4.214351
7	1	5502.1	16	65			4.560033
8	2	5502.1	16	75	1154		5.430752
9	1	5502.1	16	60			6.683755
10	3	5502.1	16	70	1990	1542	6.814923
11	1	5502.1	16	90			8.020441
12	1	5502.1	16	85			8.58398
13	3	5502.1	16	60	1342	1833	9.539554
14	2	5502.1	16	55	1682		10.180938
15	1	5502.1	16	55			10.596983
16	1	5502.1	16	65			11.519832

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	5505.7	7	55			0.427677
2	1	5505.7	7	60			0.750252
3	3	5505.7	7	60	1985	1622	1.485443
4	2	5505.7	7	90	1618		1.838598
5	2	5505.7	7	80	1398		2.73091



6	2	5505.7	7	85	1289		3.034572
7	1	5505.7	7	85			4.112263
8	1	5505.7	7	75			4.539096
9	2	5505.7	7	80	1270		5.331935
10	3	5505.7	7	100	1874	1179	5.475534
11	3	5505.7	7	55	1647	1908	6.217223
12	3	5505.7	7	100	1183	1781	6.967579
13	3	5505.7	7	55	1676	1655	7.565924
14	3	5505.7	7	60	1099	1756	7.862645
15	3	5505.7	7	80	1546	1364	8.667073
16	1	5505.7	7	85			9.396266
17	3	5505.7	7	70	1161	1931	9.610232
18	1	5505.7	7	60			10.665802
19	3	5505.7	7	65	1575	1692	11.174168
20	3	5505.7	7	60	1261	1968	11.613789

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	5503.3	13	80	1947		0.289695
2	3	5503.3	13	75	1261	1458	1.385321
3	2	5503.3	13	70	1520		2.208365
4	2	5503.3	13	55	1897		3.095969
5	3	5503.3	13	75	1942	1039	3.754392
6	1	5503.3	13	75			4.469767
7	3	5503.3	13	65	1995	1344	5.0857
8	2	5503.3	13	60	1071		6.351912
9	2	5503.3	13	80	1645		6.421568
10	2	5503.3	13	70	1616		7.743648
11	3	5503.3	13	80	1395	1502	8.431716
12	2	5503.3	13	75	1857		8.964978
13	2	5503.3	13	50	1418		10.003784
14	1	5503.3	13	95			10.570167
15	2	5503.3	13	60	1753		11.445185

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	5506.1	6	100	1030	1222	0.020278
2	3	5506.1	6	100	1129	1595	1.518877
3	3	5506.1	6	60	1328	1894	2.373193
4	3	5506.1	6	80	1029	1892	3.571965
5	2	5506.1	6	65	1669		3.941316
6	3	5506.1	6	85	1092	1352	5.125109
7	3	5506.1	6	75	1435	1317	5.858465



8	3	5506.1	6	60	1867	1966	7.364006
9	3	5506.1	6	65	1218	1476	7.487226
10	1	5506.1	6	90			9.012041
11	2	5506.1	6	90	1520		9.418819
12	2	5506.1	6	50	1401		11.03012
13	2	5506.1	6	75	1454		11.35123

USA Bin 5 Trial #27

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	5504.1	11	55			0.250161
2	2	5504.1	11	95	1418		1.492669
3	2	5504.1	11	100	1554		2.70571
4	1	5504.1	11	75			4.214955
5	3	5504.1	11	70	1603	1489	4.828561
6	3	5504.1	11	90	1627	1143	7.144752
7	2	5504.1	11	70	1313		8.268686
8	1	5504.1	11	90			9.08142
9	1	5504.1	11	65			10.330838
10	3	5504.1	11	75	1984	1805	11.097587

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	5506.1	6	90	1820	1437	0.353348
2	2	5506.1	6	60	1849		1.963033
3	2	5506.1	6	75	1902		2.977001
4	1	5506.1	6	60			3.975294
5	1	5506.1	6	90			5.072449
6	3	5506.1	6	70	1765	1801	6.379468
7	1	5506.1	6	50			7.346444
8	3	5506.1	6	55	1731	1259	8.221574
9	3	5506.1	6	75	1252	1062	9.489542
10	3	5506.1	6	75	1121	1043	9.938485
11	3	5506.1	6	75	1669	1708	11.312199

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	5506.5	5	100	1732	1189	0.001315
2	3	5506.5	5	100	1904	1859	1.365996
3	3	5506.5	5	80	1726	1439	3.519383
4	2	5506.5	5	80	1217		3.714749
5	1	5506.5	5	60			5.423928
6	3	5506.5	5	70	1884	1312	6.317624



7	1	5506.5	5	55			7.902429
8	3	5506.5	5	55	1444	1278	9.098765
9	2	5506.5	5	60	1324		10.795903
10	3	5506.5	5	85	1771	1848	11.882879

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	5506.5	5	75			1.482734
2	3	5506.5	5	80	1555	1821	2.970988
3	1	5506.5	5	75			4.218106
4	2	5506.5	5	75	1446		5.755923
5	2	5506.5	5	95	1395		6.864784
6	2	5506.5	5	75	1216		7.981125
7	2	5506.5	5	75	1311		9.097131
8	1	5506.5	5	70			11.117856

*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	100.0%	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)
32	5509	96
43	5507	129
47	5506	141
70	5494	210

USA Frequency Hopping Trial #2

Hop #	Freq (GHz)	Pulse Start (mS)
5	5500	15
52	5494	156
72	5492	216
78	5496	234

USA Frequency Hopping Trial #3

Hop #	Freq (GHz)	Pulse Start (mS)
18	5505	54
40	5507	120
45	5494	135
51	5506	153
56	5491	168

USA Frequency Hopping Trial #4

Hop #	Freq (GHz)	Pulse Start (mS)
1	5496	3
3	5505	9
21	5502	63
26	5509	78
45	5507	135
83	5506	249

USA Frequency Hopping Trial #5

Hop #	Freq (GHz)	Pulse Start (mS)
27	5506	81
88	5501	264
89	5496	267

USA Frequency Hopping Trial #6

Hop #	Freq (GHz)	Pulse Start (mS)
37	5496	111
42	5504	126
76	5497	228

USA Frequency Hopping Trial #7

Hop #	Freq (GHz)	Pulse Start (mS)
56	5505	168

USA Frequency Hopping Trial #8

Hop #	Freq (GHz)	Pulse Start (mS)
16	5504	48
19	5508	57
75	5503	225
90	5498	270
99	5509	297

USA Frequency Hopping Trial #9

Hop #	Freq (GHz)	Pulse Start (mS)
31	5499	93
74	5508	222

USA Frequency Hopping Trial #10

Hop #	Freq (GHz)	Pulse Start (mS)
36	5491	108
40	5505	120
59	5509	177
77	5507	231

USA Frequency Hopping Trial #11

Hop #	Freq (GHz)	Pulse Start (mS)
18	5509	54
47	5505	141
58	5493	174
93	5507	279

USA Frequency Hopping Trial #12

Hop #	Freq (GHz)	Pulse Start (mS)
14	5496	42
50	5504	150
75	5508	225
85	5494	255
92	5499	276
96	5501	288

USA Frequency Hopping Trial #13

Hop #	Freq (GHz)	Pulse Start (mS)
27	5495	81
42	5492	126
44	5503	132



61	5498	183
69	5501	207
73	5499	219

USA Frequency Hopping Trial #14

Hop #	Freq (GHz)	Pulse Start (mS)
12	5503	36
17	5509	51
68	5507	204
77	5501	231
94	5504	282

USA Frequency Hopping Trial #15

Hop #	Freq (GHz)	Pulse Start (mS)
5	5503	15
20	5501	60
68	5499	204
86	5496	258

USA Frequency Hopping Trial #16

Hop #	Freq (GHz)	Pulse Start (mS)
3	5509	9
32	5492	96
40	5501	120
43	5495	129
57	5505	171
75	5502	225

USA Frequency Hopping Trial #17

Hop #	Freq (GHz)	Pulse Start (mS)
15	5492	45
18	5508	54
82	5509	246

USA Frequency Hopping Trial #18

Hop #	Freq (GHz)	Pulse Start (mS)
2	5498	6
30	5491	90
94	5495	282

USA Frequency Hopping Trial #19

Hop #	Freq (GHz)	Pulse Start (mS)
24	5506	72
49	5508	147
64	5491	192

95	5492	285
USA Frequency Hopping Trial #20		
	Freq	Pulse Start
Hop #	(GHz)	(mS)
8	5509	24
23	5503	69
82	5505	246
85	5506	255

USA Frequency Hopping Trial #21		
	Freq	Pulse Start
Hop #	(GHz)	(mS)
19	5499	57
25	5501	75
42	5505	126
63	5496	189
93	5508	279

USA Frequency Hopping Trial #22		
	Freq	Pulse Start
Hop #	(GHz)	(mS)
27	5501	81
37	5496	111
43	5509	129
76	5508	228

USA Frequency Hopping Trial #23		
	Freq	Pulse Start
Hop #	(GHz)	(mS)
6	5504	18
11	5509	33
27	5499	81
35	5496	105
51	5497	153
54	5500	162
71	5492	213

USA Frequency Hopping Trial #24		
	Freq	Pulse Start
Hop #	(GHz)	(mS)
51	5498	153
69	5504	207
70	5501	210
72	5502	216
84	5495	252
95	5505	285

USA Frequency Hopping Trial #25		
	Freq	Pulse Start
Hop #	(GHz)	(mS)



48	5496	144
55	5507	165
62	5494	186
79	5509	237
84	5501	252

USA Frequency Hopping Trial #26

Hop #	Freq (GHz)	Pulse Start (mS)
24	5506	72
25	5493	75
46	5498	138
77	5495	231

USA Frequency Hopping Trial #27

Hop #	Freq (GHz)	Pulse Start (mS)
9	5503	27
56	5495	168
60	5507	180
63	5500	189
96	5492	288

USA Frequency Hopping Trial #28

Hop #	Freq (GHz)	Pulse Start (mS)
9	5500	27
14	5498	42
32	5504	96
35	5507	105
55	5491	165
80	5503	240
82	5492	246
93	5495	279

USA Frequency Hopping Trial #29

Hop #	Freq (GHz)	Pulse Start (mS)
10	5509	30
37	5507	111
55	5495	165
56	5500	168

USA Frequency Hopping Trial #30

Hop #	Freq (GHz)	Pulse Start (mS)
26	5497	78
29	5508	87
36	5503	108
80	5501	240


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	63	1	838	1	100.0%	60.0%
2	5492	58	1	918	1		
3	5492	81	1	658	1		
4	5492	78	1	678	1		
5	5492	78	1	678	1		
6	5492	65	1	818	1		
7	5500	61	1	878	1		
8	5500	61	1	878	1		
9	5500	102	1	518	1		
10	5500	74	1	718	1		
11	5500	99	1	538	1		
12	5500	102	1	518	1		
13	5510	61	1	878	1		
14	5510	86	1	618	1		
15	5510	72	1	738	1		
16	5510	26	1	2072	1		
17	5510	22	1	2507	1		
18	5510	19	1	2785	1		
19	5520	26	1	2109	1		
20	5520	31	1	1756	1		
21	5520	20	1	2730	1		
22	5520	52	1	1029	1		
23	5520	19	1	2835	1		
24	5520	24	1	2266	1		
25	5528	21	1	2604	1		
26	5528	21	1	2590	1		
27	5528	96	1	550	1		
28	5528	24	1	2293	1		
29	5528	88	1	603	1		
30	5528	35	1	1512	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	29	3.3	198	1	90.0%	60.0%
2	5492	29	3.5	170	1		
3	5492	27	3	215	0		
4	5492	29	2.1	188	1		
5	5492	26	2.6	179	1		
6	5492	26	4.6	178	1		
7	5500	24	4.8	197	1		
8	5500	29	4.6	172	1		
9	5500	28	3.3	192	1		
10	5500	29	1.2	151	1		
11	5500	27	2.6	172	1		
12	5500	25	1.2	189	1		
13	5510	29	2	167	1		
14	5510	25	3.9	167	1		
15	5510	24	2.4	170	1		
16	5510	29	3.2	161	1		
17	5510	25	4.5	153	1		
18	5510	26	3	190	1		
19	5520	23	2.8	172	1		
20	5520	28	2.3	186	0		
21	5520	23	2.5	199	1		
22	5520	29	2.7	152	1		
23	5520	25	4.8	197	1		
24	5520	26	2.7	222	1		
25	5528	27	3.9	164	0		
26	5528	26	2.7	190	1		
27	5528	27	2.5	201	1		
28	5528	26	4.6	201	1		
29	5528	27	4.9	207	1		
30	5528	26	2.5	215	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	7.8	357	1	83.3%	60.0%
2	5492	16	8	327	0		
3	5492	16	8.6	392	1		
4	5492	18	8.4	259	1		
5	5492	16	6.5	359	1		
6	5492	16	9.5	438	0		
7	5500	18	8.7	321	1		
8	5500	18	9.5	300	1		
9	5500	16	9.5	387	1		
10	5500	16	9.6	452	0		
11	5500	16	6.8	293	1		
12	5500	16	6.2	482	1		
13	5510	16	8.9	462	1		
14	5510	18	6.9	401	0		
15	5510	17	9.5	486	1		
16	5510	17	10	306	1		
17	5510	16	6	354	1		
18	5510	17	9	208	1		
19	5520	16	9	208	1		
20	5520	16	7.2	390	1		
21	5520	18	8	304	1		
22	5520	18	6.6	231	1		
23	5520	18	7.5	394	1		
24	5520	16	9.9	399	1		
25	5528	16	7	362	0		
26	5528	18	7.5	250	1		
27	5528	16	8.2	240	1		
28	5528	16	7.8	303	1		
29	5528	18	8.3	405	1		
30	5528	16	8.2	335	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	16	19.9	331	1	83.3%	60.0%
2	5492	12	11.1	357	0		
3	5492	16	19.4	274	1		
4	5492	12	11.3	338	1		
5	5492	13	18.5	413	1		
6	5492	14	14.3	382	1		
7	5500	12	14.5	429	1		
8	5500	14	13.5	216	1		
9	5500	13	14.9	212	0		
10	5500	14	19.7	330	1		
11	5500	15	15.7	485	1		
12	5500	13	13.7	399	1		
13	5510	16	13.7	453	0		
14	5510	16	15.1	344	1		
15	5510	15	13.9	272	1		
16	5510	13	14.2	246	1		
17	5510	14	17.1	454	0		
18	5510	15	19.8	246	1		
19	5520	12	16.3	465	1		
20	5520	16	13.6	318	1		
21	5520	15	15.2	214	1		
22	5520	15	19.7	481	1		
23	5520	14	13.8	213	1		
24	5520	14	13.5	495	1		
25	5528	12	12.5	394	1		
26	5528	15	13.3	436	1		
27	5528	14	14.9	375	1		
28	5528	15	13.9	365	0		
29	5528	12	18.6	348	1		
30	5528	12	11.4	257	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:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100.0\% + 90.0\% + 83.3\% + 83.3\%) / 4 = 89.2\% > 80\%$$



*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	100.0%	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	3	5494.4	6	80	1417	1085	0.857801
2	3	5494.4	6	60	1396	1382	1.577468
3	3	5494.4	6	75	1322	1733	2.405958
4	1	5494.4	6	75			3.144426
5	2	5494.4	6	90	1487		3.757861
6	3	5494.4	6	60	1823	1040	5.275886
7	2	5494.4	6	85	1713		5.850867
8	1	5494.4	6	75			6.86905
9	1	5494.4	6	85			7.589902
10	3	5494.4	6	95	1732	1212	8.480634
11	1	5494.4	6	95			10.103678
12	3	5494.4	6	90	1938	1587	10.774911
13	3	5494.4	6	85	1632	1744	11.20456

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	5500	20	95	1314	1080	0.235885
2	3	5500	20	100	1024	1955	2.407015
3	3	5500	20	100	1623	1888	3.215205
4	3	5500	20	90	1609	1696	4.487352
5	2	5500	20	60	1845		6.461856
6	3	5500	20	75	1413	1153	6.790345
7	3	5500	20	90	1555	1336	8.684449
8	1	5500	20	100			10.255638
9	1	5500	20	65			11.402189

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	5496	10	95	1833		0.727859
2	2	5496	10	90	1643		1.058744
3	3	5496	10	85	1538	1910	2.178816
4	3	5496	10	80	1013	1865	2.905821
5	2	5496	10	80	1370		3.081021
6	1	5496	10	80			4.415383
7	1	5496	10	90			4.794371
8	1	5496	10	75			5.57834
9	1	5496	10	100			6.006855
10	2	5496	10	100	1760		6.755004
11	2	5496	10	75	1172		7.840678



12	1	5496	10	50			8.9075
13	3	5496	10	80	1730	1037	9.044019
14	3	5496	10	60	1263	1779	9.884015
15	1	5496	10	50			10.691857
16	3	5496	10	70	1265	1551	11.744282

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	5494.8	7	65			0.713033
2	3	5494.8	7	85	1024	1759	0.816889
3	2	5494.8	7	65	1500		1.988363
4	3	5494.8	7	55	1743	1316	2.358891
5	1	5494.8	7	55			3.041354
6	1	5494.8	7	75			4.474034
7	3	5494.8	7	70	1700	1751	4.739263
8	2	5494.8	7	100	1964		5.944094
9	1	5494.8	7	65			6.385004
10	3	5494.8	7	90	1653	1656	6.990986
11	1	5494.8	7	90			7.80475
12	3	5494.8	7	80	1636	1811	8.929058
13	2	5494.8	7	95	1776		9.595819
14	3	5494.8	7	90	1183	1686	10.227573
15	3	5494.8	7	100	1636	1702	11.237978
16	2	5494.8	7	70	1482		11.626385

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	2	5499.6	19	95	1173		0.697737
2	3	5499.6	19	90	1229	1226	1.011476
3	3	5499.6	19	80	1904	1794	1.860566
4	3	5499.6	19	50	1830	1747	2.560738
5	2	5499.6	19	85	1273		3.230327
6	2	5499.6	19	95	1561		3.656858
7	1	5499.6	19	55			4.878708
8	1	5499.6	19	90			5.120507
9	1	5499.6	19	75			6.139607
10	1	5499.6	19	95			6.525339
11	3	5499.6	19	85	1293	1972	7.448781
12	3	5499.6	19	80	1128	1893	7.862372
13	3	5499.6	19	90	1069	1205	8.646636
14	3	5499.6	19	90	1987	1585	9.558566
15	2	5499.6	19	55	1406		10.529826
16	3	5499.6	19	75	1484	1290	10.7736



17 1 5499.6 19 50 11.768298
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	5494.4	6	50	1945		0.031702
2	1	5494.4	6	65			0.982559
3	2	5494.4	6	70	1173		1.624133
4	1	5494.4	6	55			2.548202
5	2	5494.4	6	50	1393		2.833097
6	3	5494.4	6	50	1926	1462	3.638183
7	3	5494.4	6	65	1678	1831	4.314399
8	1	5494.4	6	100			5.409058
9	2	5494.4	6	95	1195		5.99501
10	2	5494.4	6	70	1840		6.846389
11	2	5494.4	6	55	1863		7.604314
12	1	5494.4	6	70			8.12811
13	2	5494.4	6	55	1363		8.625092
14	1	5494.4	6	80			9.286082
15	3	5494.4	6	75	1305	1542	10.032325
16	1	5494.4	6	80			11.08611
17	1	5494.4	6	85			11.656069

USA Bin 5 Trial #7

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	5498.4	16	65	1524		0.639286
2	3	5498.4	16	50	1541	1496	1.272199
3	1	5498.4	16	50			1.834808
4	2	5498.4	16	60	1013		2.295706
5	3	5498.4	16	85	1315	1491	3.033195
6	3	5498.4	16	60	1925	1815	3.583703
7	1	5498.4	16	85			4.859736
8	1	5498.4	16	70			5.613013
9	1	5498.4	16	80			6.304104
10	3	5498.4	16	65	1061	1695	6.380774
11	2	5498.4	16	100	1510		7.634888
12	2	5498.4	16	100	1138		8.262474
13	2	5498.4	16	60	1357		8.496033
14	2	5498.4	16	90	1832		9.531082
15	3	5498.4	16	65	1155	1542	10.179956
16	3	5498.4	16	50	1552	1444	11.214065
17	3	5498.4	16	65	1917	1763	11.588732

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	5496.4	11	55			0.646095
2	1	5496.4	11	60			1.048956
3	1	5496.4	11	65			1.613578
4	3	5496.4	11	55	1994	1753	2.163359
5	1	5496.4	11	60			3.098792
6	1	5496.4	11	50			3.7459
7	1	5496.4	11	75			4.019914
8	3	5496.4	11	50	1288	1761	4.902043
9	3	5496.4	11	100	1225	1169	5.37266
10	2	5496.4	11	95	1475		6.086315
11	2	5496.4	11	90	1380		7.181021
12	2	5496.4	11	80	1707		7.72622
13	2	5496.4	11	90	1514		8.353303
14	1	5496.4	11	60			8.685764
15	1	5496.4	11	95			9.494517
16	1	5496.4	11	70			10.316358
17	2	5496.4	11	50	1288		10.867536
18	3	5496.4	11	60	1829	1171	11.548627

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	5496.8	12	50			0.001562
2	2	5496.8	12	60	1548		0.905403
3	1	5496.8	12	80			2.12307
4	1	5496.8	12	65			2.346784
5	1	5496.8	12	60			3.146845
6	1	5496.8	12	80			4.049853
7	2	5496.8	12	55	1960		4.812287
8	3	5496.8	12	55	1428	1116	5.749232
9	1	5496.8	12	100			6.422175
10	1	5496.8	12	85			6.91068
11	3	5496.8	12	65	1595	1417	7.828973
12	1	5496.8	12	60			8.384129
13	1	5496.8	12	95			9.092839
14	2	5496.8	12	70	1422		9.751615
15	2	5496.8	12	70	1128		11.205342
16	3	5496.8	12	85	1939	1859	11.786906

USA Bin 5 Trial #10

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
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1	2	5496.4	11	80	1244		0.243289
2	1	5496.4	11	80			1.030391
3	2	5496.4	11	60	1218		1.793566
4	3	5496.4	11	70	1123	1171	2.127054
5	2	5496.4	11	85	1360		2.909724
6	1	5496.4	11	100			4.10166
7	3	5496.4	11	80	1843	1473	4.554105
8	2	5496.4	11	100	1323		5.578243
9	1	5496.4	11	90			5.810725
10	3	5496.4	11	85	1888	1559	6.767705
11	1	5496.4	11	75			7.387569
12	2	5496.4	11	100	1994		8.026179
13	1	5496.4	11	95			8.702606
14	1	5496.4	11	65			9.620727
15	2	5496.4	11	80	1450		10.212447
16	1	5496.4	11	65			11.007634
17	2	5496.4	11	70	1003		11.494931

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	5510	6	80	1299	1670	0.650398
2	1	5510	6	60			1.348304
3	2	5510	6	65	1729		2.313261
4	1	5510	6	90			3.779073
5	3	5510	6	50	1750	1487	4.244006
6	2	5510	6	80	1785		5.441883
7	2	5510	6	95	1350		6.359553
8	2	5510	6	60	1276		7.091596
9	1	5510	6	100			8.5764
10	3	5510	6	75	1743	1775	9.452446
11	3	5510	6	85	1424	1875	10.515435
12	2	5510	6	95	1547		11.154404

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	8	70	1713		0.896804
2	2	5510	8	75	1577		2.003872
3	1	5510	8	55			2.930096
4	2	5510	8	95	1035		3.481098
5	1	5510	8	90			4.563139
6	1	5510	8	60			5.690316
7	1	5510	8	85			6.61539
8	3	5510	8	70	1094	1131	8.050193



9	2	5510	8	60	1449		9.202103
10	2	5510	8	60	1209		10.003336
11	3	5510	8	80	1797	1229	11.140609

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	5510	11	70			0.281812
2	2	5510	11	50	1306		0.69056
3	3	5510	11	80	1706	1493	1.78502
4	3	5510	11	80	1550	1111	2.234942
5	1	5510	11	80			2.744106
6	1	5510	11	80			3.352103
7	3	5510	11	80	1248	1264	3.827422
8	2	5510	11	95	1833		5.012367
9	1	5510	11	60			5.401969
10	2	5510	11	100	1335		6.016363
11	3	5510	11	70	1880	1463	6.473273
12	3	5510	11	65	1442	1433	7.129968
13	3	5510	11	95	1796	1177	8.167269
14	3	5510	11	75	1887	1262	8.354197
15	2	5510	11	85	1791		9.207088
16	1	5510	11	80			10.052201
17	2	5510	11	60	1754		10.152279
18	3	5510	11	100	1872	1216	11.164872
19	3	5510	11	55	1860	1666	11.962876

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	50	1465		0.207442
2	2	5510	14	80	1756		0.683054
3	1	5510	14	95			1.758366
4	1	5510	14	70			2.382178
5	2	5510	14	85	1243		2.436506
6	1	5510	14	70			3.159073
7	1	5510	14	90			3.858813
8	1	5510	14	70			4.363611
9	1	5510	14	95			4.907615
10	2	5510	14	85	1948		5.897769
11	2	5510	14	75	1196		6.418193
12	1	5510	14	75			7.094078
13	1	5510	14	65			7.35906
14	3	5510	14	100	1007	1917	8.251905
15	2	5510	14	90	1460		8.773309



16	3	5510	14	85	1113	1397	9.462107
17	2	5510	14	50	1240		9.918024
18	3	5510	14	70	1588	1700	10.649315
19	2	5510	14	70	1439		10.936159
20	3	5510	14	60	1410	1338	11.529364

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	3	5510	19	80	1404	1724	1.07731
2	3	5510	19	100	1508	1373	1.596297
3	3	5510	19	60	1112	1209	3.448465
4	3	5510	19	75	1076	1530	4.89876
5	2	5510	19	100	1491		5.756974
6	3	5510	19	95	1240	1465	7.729644
7	2	5510	19	60	1963		8.766712
8	1	5510	19	90			10.237999
9	1	5510	19	70			11.577966

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	5510	18	85	1713	1572	0.794344
2	1	5510	18	80			1.300766
3	2	5510	18	85	1162		3.090701
4	1	5510	18	65			4.434622
5	3	5510	18	55	1843	1539	4.830457
6	1	5510	18	65			6.814354
7	2	5510	18	75	1703		7.626924
8	2	5510	18	70	1339		8.646503
9	3	5510	18	95	1365	1857	9.994835
10	2	5510	18	75	1905		11.844996

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	6	70	1567		0.107052
2	3	5510	6	50	1541	1518	0.964924
3	2	5510	6	70	1327		1.858169
4	2	5510	6	50	1092		3.136727
5	3	5510	6	90	1056	1938	3.878566
6	2	5510	6	60	1350		4.268299
7	2	5510	6	65	1982		4.961609
8	1	5510	6	80			5.788458
9	3	5510	6	100	1651	1164	6.532236



10	1	5510	6	85			7.819377
11	2	5510	6	90	1587		8.223526
12	1	5510	6	60			9.549766
13	3	5510	6	80	1712	1345	9.654525
14	1	5510	6	90			10.994505
15	2	5510	6	55	1928		11.433292

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	10	100	1277	1532	0.895087
2	2	5510	10	65	1679		2.226744
3	1	5510	10	50			3.913476
4	1	5510	10	90			4.736454
5	1	5510	10	60			5.652666
6	1	5510	10	100			7.220372
7	3	5510	10	100	1948	1641	8.561384
8	1	5510	10	80			10.244715
9	2	5510	10	50	1912		11.406127

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	5510	7	90	1246		0.68506
2	1	5510	7	55			2.120198
3	2	5510	7	100	1440		3.240487
4	3	5510	7	60	1040	1302	4.250392
5	2	5510	7	85	1155		4.591384
6	2	5510	7	85	1122		5.499945
7	3	5510	7	50	1939	1813	7.007252
8	2	5510	7	55	1416		8.543266
9	1	5510	7	70			9.209794
10	1	5510	7	70			10.835569
11	2	5510	7	50	1334		11.123559

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	5510	17	65	1439	1161	0.296866
2	1	5510	17	95			1.395396
3	1	5510	17	55			1.826971
4	1	5510	17	100			2.326775
5	2	5510	17	50	1018		3.560459
6	3	5510	17	85	1014	1337	4.302369
7	3	5510	17	65	1453	1284	4.998339



8	2	5510	17	80	1331		5.879709
9	1	5510	17	70			6.023581
10	1	5510	17	90			6.84097
11	2	5510	17	95	1441		7.660428
12	3	5510	17	100	1521	1285	8.957797
13	1	5510	17	90			9.260016
14	2	5510	17	100	1426		10.211751
15	2	5510	17	75	1325		11.214701
16	1	5510	17	50			11.954308

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	1	5524.4	9	70			0.514319
2	1	5524.4	9	70			0.892208
3	2	5524.4	9	90	1122		1.658032
4	2	5524.4	9	70	1503		1.931905
5	3	5524.4	9	90	1086	1683	2.885342
6	1	5524.4	9	50			3.103062
7	1	5524.4	9	95			4.043384
8	3	5524.4	9	100	1109	1258	4.425639
9	2	5524.4	9	85	1669		4.961196
10	2	5524.4	9	70	1321		5.85953
11	1	5524.4	9	55			6.064663
12	3	5524.4	9	100	1279	1568	6.914467
13	1	5524.4	9	80			7.644302
14	3	5524.4	9	90	1969	1832	7.933239
15	1	5524.4	9	55			8.472426
16	1	5524.4	9	70			9.519025
17	2	5524.4	9	55	1915		10.054576
18	3	5524.4	9	65	1764	1045	10.596508
19	1	5524.4	9	55			10.999469
20	3	5524.4	9	80	1726	1531	11.879046

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	5525.6	6	55	1923		1.191881
2	2	5525.6	6	65	1216		1.782936
3	3	5525.6	6	80	1730	1324	3.595631
4	1	5525.6	6	55			4.79527
5	2	5525.6	6	75	1028		5.349076
6	1	5525.6	6	80			7.174631
7	2	5525.6	6	95	1029		7.936989
8	1	5525.6	6	85			8.960497



9	3	5525.6	6	75	1618	1463	10.413369
10	1	5525.6	6	60			11.177136

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	5525.6	6	100	1339	1568	0.702198
2	2	5525.6	6	70	1273		1.678825
3	2	5525.6	6	85	1162		2.760469
4	1	5525.6	6	85			4.539802
5	3	5525.6	6	100	1285	1025	5.886504
6	3	5525.6	6	55	1055	1450	6.848089
7	3	5525.6	6	65	1615	1672	8.802226
8	2	5525.6	6	100	1559		9.874065
9	3	5525.6	6	90	1820	1378	11.852088

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	5525.6	6	50			0.413701
2	1	5525.6	6	85			1.197377
3	1	5525.6	6	65			1.978101
4	2	5525.6	6	70	1902		2.439332
5	3	5525.6	6	65	1432	1457	2.787239
6	3	5525.6	6	95	1578	1799	3.95301
7	2	5525.6	6	95	1830		4.580069
8	1	5525.6	6	55			4.853
9	3	5525.6	6	60	1076	1386	5.962712
10	3	5525.6	6	50	1521	1173	6.071394
11	2	5525.6	6	90	1488		6.722509
12	2	5525.6	6	95	1800		7.601888
13	2	5525.6	6	95	1049		8.109562
14	3	5525.6	6	55	1766	1440	9.201579
15	1	5525.6	6	75			9.400325
16	1	5525.6	6	85			10.175633
17	3	5525.6	6	60	1472	1734	10.855793
18	1	5525.6	6	95			11.593532

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	5522.8	13	80	1071		0.593119
2	3	5522.8	13	70	1754	1999	1.498879
3	3	5522.8	13	70	1309	1291	2.035455
4	3	5522.8	13	50	1733	1624	3.396051



5	3	5522.8	13	55	1107	1874	3.97928
6	3	5522.8	13	90	1105	1975	5.029809
7	1	5522.8	13	95			5.728596
8	2	5522.8	13	65	1456		7.194147
9	3	5522.8	13	60	1761	1563	7.947451
10	1	5522.8	13	80			9.202974
11	2	5522.8	13	100	1979		9.747704
12	2	5522.8	13	70	1819		10.831935
13	2	5522.8	13	55	1564		11.900936

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	5522.8	13	90			0.083342
2	2	5522.8	13	50	1141		0.643137
3	2	5522.8	13	65	1024		1.385644
4	2	5522.8	13	90	1783		2.263613
5	1	5522.8	13	50			2.695221
6	3	5522.8	13	75	1081	1111	3.329797
7	2	5522.8	13	75	1778		3.78456
8	2	5522.8	13	75	1194		4.417515
9	3	5522.8	13	55	1778	1866	4.863154
10	3	5522.8	13	100	1818	1131	5.4485
11	1	5522.8	13	95			6.264766
12	1	5522.8	13	100			6.700512
13	3	5522.8	13	95	1333	1555	7.521928
14	2	5522.8	13	60	1323		8.167966
15	1	5522.8	13	100			8.502705
16	1	5522.8	13	55			9.297826
17	1	5522.8	13	100			9.660324
18	1	5522.8	13	80			10.558439
19	3	5522.8	13	50	1387	1318	10.937736
20	2	5522.8	13	90	1395		11.615151

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	5521.2	17	90	1318		0.216514
2	2	5521.2	17	85	1374		1.771152
3	1	5521.2	17	65			3.496657
4	1	5521.2	17	80			5.76641
5	2	5521.2	17	70	1920		6.192222
6	3	5521.2	17	60	1872	1642	8.375234
7	2	5521.2	17	55	1352		9.785668
8	2	5521.2	17	70	1052		11.411266



USA Bin 5 Trial #28

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	5524.4	9	50			0.000005
2	3	5524.4	9	75	1765	1187	2.694326
3	1	5524.4	9	90			3.060184
4	2	5524.4	9	70	1154		5.585563
5	3	5524.4	9	60	1167	1783	7.125665
6	3	5524.4	9	65	1697	1664	8.816347
7	3	5524.4	9	55	1839	1752	9.979778
8	3	5524.4	9	55	1870	1187	11.215849

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	5520.8	18	70			0.26286
2	3	5520.8	18	80	1311	1452	1.2674
3	2	5520.8	18	70	1177		2.784573
4	2	5520.8	18	50	1021		4.720027
5	2	5520.8	18	80	1842		5.849037
6	1	5520.8	18	85			6.759978
7	1	5520.8	18	55			8.130501
8	2	5520.8	18	80	1443		8.832096
9	1	5520.8	18	65			10.303187
10	3	5520.8	18	65	1263	1727	11.22025

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	2	5523.6	11	65	1013		0.094463
2	1	5523.6	11	50			2.228749
3	3	5523.6	11	55	1157	1775	3.027123
4	1	5523.6	11	70			4.305105
5	2	5523.6	11	55	1575		4.95598
6	1	5523.6	11	80			6.031045
7	1	5523.6	11	70			8.070621
8	3	5523.6	11	60	1013	1365	8.846613
9	2	5523.6	11	85	1178		10.006755
10	2	5523.6	11	95	1488		11.686725

*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	100.0%	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)
17	5512	51
20	5501	60
30	5492	90
33	5521	99
43	5495	129
51	5498	153
80	5493	240
86	5520	258
93	5510	279

USA Frequency Hopping Trial #2

Hop #	Freq (GHz)	Pulse Start (mS)
3	5506	9
6	5513	18
12	5492	36
51	5510	153
62	5526	186
66	5496	198
70	5517	210
74	5503	222
87	5499	261

USA Frequency Hopping Trial #3

Hop #	Freq (GHz)	Pulse Start (mS)
53	5515	159
61	5506	183
67	5522	201
74	5495	222
83	5513	249

USA Frequency Hopping Trial #4

Hop #	Freq (GHz)	Pulse Start (mS)
11	5499	33
16	5514	48
24	5498	72
40	5494	120
73	5521	219
80	5500	240
90	5524	270
94	5511	282
97	5509	291

USA Frequency Hopping Trial #5



Hop #	Freq (GHz)	Pulse Start (mS)
0	5506	0
9	5514	27
10	5524	30
11	5511	33
27	5509	81
38	5518	114
44	5492	132
74	5523	222
84	5519	252
91	5527	273

USA Frequency Hopping Trial #6

Hop #	Freq (GHz)	Pulse Start (mS)
2	5507	6
25	5517	75
34	5522	102
38	5511	114
43	5523	129
51	5493	153
58	5502	174
60	5509	180
63	5518	189
83	5508	249
84	5510	252

USA Frequency Hopping Trial #7

Hop #	Freq (GHz)	Pulse Start (mS)
16	5514	48
17	5512	51
21	5523	63
26	5492	78
27	5527	81
32	5497	96
37	5507	111
41	5505	123
55	5496	165
75	5528	225
79	5510	237
95	5522	285

USA Frequency Hopping Trial #8

Hop #	Freq (GHz)	Pulse Start (mS)
5	5504	15



47	5517	141
51	5493	153
72	5512	216
98	5509	294

USA Frequency Hopping Trial #9

Hop #	Freq (GHz)	Pulse Start (mS)
8	5507	24
15	5495	45
30	5516	90
59	5503	177
65	5492	195
80	5494	240
81	5496	243

USA Frequency Hopping Trial #10

Hop #	Freq (GHz)	Pulse Start (mS)
27	5517	81
54	5522	162
56	5527	168
80	5507	240
91	5521	273
94	5515	282

USA Frequency Hopping Trial #11

Hop #	Freq (GHz)	Pulse Start (mS)
3	5526	9
10	5497	30
12	5504	36
19	5523	57
33	5496	99
40	5498	120
48	5515	144
55	5521	165
75	5492	225
82	5507	246
84	5513	252
89	5503	267
97	5524	291

USA Frequency Hopping Trial #12

Hop #	Freq (GHz)	Pulse Start (mS)
15	5500	45
27	5516	81
29	5517	87



36	5507	108
52	5523	156
83	5525	249
92	5499	276

USA Frequency Hopping Trial #13

Hop #	Freq (GHz)	Pulse Start (mS)
29	5526	87
34	5499	102
39	5528	117
45	5506	135
56	5515	168

USA Frequency Hopping Trial #14

Hop #	Freq (GHz)	Pulse Start (mS)
2	5495	6
9	5503	27
12	5519	36
41	5508	123
65	5496	195
99	5522	297

USA Frequency Hopping Trial #15

Hop #	Freq (GHz)	Pulse Start (mS)
12	5523	36
49	5502	147
61	5511	183
75	5514	225
91	5512	273
95	5501	285

USA Frequency Hopping Trial #16

Hop #	Freq (GHz)	Pulse Start (mS)
45	5516	135
46	5492	138
51	5521	153
53	5526	159
73	5506	219
76	5495	228
96	5497	288

USA Frequency Hopping Trial #17

Hop #	Freq (GHz)	Pulse Start (mS)
13	5507	39
21	5493	63

23	5501	69
34	5521	102
35	5513	105
40	5496	120
41	5506	123
71	5492	213
77	5504	231
80	5497	240
86	5514	258
87	5516	261
93	5526	279

USA Frequency Hopping Trial #18

Hop #	Freq (GHz)	Pulse Start (mS)
4	5522	12
9	5520	27
31	5526	93
89	5516	267
91	5524	273

USA Frequency Hopping Trial #19

Hop #	Freq (GHz)	Pulse Start (mS)
9	5493	27
13	5515	39
25	5516	75
33	5504	99
51	5526	153
54	5498	162
55	5492	165
58	5524	174
62	5503	186
75	5506	225

USA Frequency Hopping Trial #20

Hop #	Freq (GHz)	Pulse Start (mS)
5	5512	15
17	5519	51
26	5502	78
27	5503	81
38	5494	114
40	5513	120
60	5518	180
67	5525	201
70	5508	210
83	5505	249

USA Frequency Hopping Trial #21

Hop #	Freq (GHz)	Pulse Start (mS)
0	5515	0
17	5517	51
42	5519	126
98	5505	294

USA Frequency Hopping Trial #22

Hop #	Freq (GHz)	Pulse Start (mS)
3	5518	9
10	5499	30
16	5507	48
25	5493	75
61	5503	183

USA Frequency Hopping Trial #23

Hop #	Freq (GHz)	Pulse Start (mS)
25	5524	75
33	5504	99
72	5525	216
74	5518	222
92	5528	276
98	5523	294

USA Frequency Hopping Trial #24

Hop #	Freq (GHz)	Pulse Start (mS)
4	5526	12
11	5528	33
20	5524	60
28	5518	84
39	5511	117
43	5525	129
65	5500	195

USA Frequency Hopping Trial #25

Hop #	Freq (GHz)	Pulse Start (mS)
1	5526	3
7	5512	21
11	5515	33
39	5494	117
72	5499	216
84	5495	252
97	5523	291
98	5497	294



USA Frequency Hopping Trial #26

Hop #	Freq (GHz)	Pulse Start (mS)
4	5519	12
13	5528	39
15	5516	45
21	5514	63
49	5500	147
55	5522	165

USA Frequency Hopping Trial #27

Hop #	Freq (GHz)	Pulse Start (mS)
1	5502	3
5	5492	15
11	5495	33
18	5524	54
29	5522	87
52	5497	156
66	5493	198
86	5508	258
91	5511	273
98	5514	294
99	5525	297

USA Frequency Hopping Trial #28

Hop #	Freq (GHz)	Pulse Start (mS)
15	5528	45
17	5511	51
41	5521	123
57	5498	171
59	5524	177
74	5500	222
80	5517	240
95	5514	285

USA Frequency Hopping Trial #29

Hop #	Freq (GHz)	Pulse Start (mS)
4	5498	12
16	5520	48
46	5524	138
71	5497	213
72	5493	216
87	5506	261

USA Frequency Hopping Trial #30



Hop #	Freq (GHz)	Pulse Start (mS)
8	5513	24
24	5499	72
40	5517	120
44	5528	132
47	5523	141
60	5501	180
84	5524	252
88	5510	264


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	81	1	658	1	100.0%	60.0%
2	5492	59	1	898	1		
3	5492	102	1	518	1		
4	5492	70	1	758	1		
5	5500	72	1	738	1		
6	5500	70	1	758	1		
7	5500	62	1	858	1		
8	5500	86	1	618	1		
9	5520	67	1	798	1		
10	5520	86	1	618	1		
11	5520	81	1	658	1		
12	5520	99	1	538	1		
13	5530	61	1	878	1		
14	5530	92	1	578	1		
15	5530	58	1	918	1		
16	5530	46	1	1148	1		
17	5530	41	1	1292	1		
18	5530	29	1	1877	1		
19	5540	32	1	1702	1		
20	5540	24	1	2208	1		
21	5540	20	1	2764	1		
22	5540	22	1	2456	1		
23	5560	23	1	2384	1		
24	5560	46	1	1167	1		
25	5560	76	1	700	1		
26	5560	21	1	2545	1		
27	5568	21	1	2515	1		
28	5568	41	1	1301	1		
29	5568	20	1	2759	1		
30	5568	20	1	2702	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	28	3.5	218	1	86.7%	60.0%
2	5492	24	4.4	192	1		
3	5492	29	3.5	166	1		
4	5492	28	3.8	195	1		
5	5500	28	4.4	153	1		
6	5500	26	4.3	157	1		
7	5500	23	5	197	1		
8	5500	27	1.2	167	1		
9	5520	23	4.6	198	1		
10	5520	26	1.4	183	1		
11	5520	26	1.4	202	1		
12	5520	28	2.3	219	1		
13	5530	27	1.4	151	1		
14	5530	27	1.1	226	1		
15	5530	28	3.1	158	1		
16	5530	27	1.8	201	1		
17	5530	27	1	213	1		
18	5530	28	1.8	221	1		
19	5540	24	2.4	181	1		
20	5540	24	4.2	213	1		
21	5540	27	2.8	154	1		
22	5540	28	4.3	181	1		
23	5560	26	4.4	205	1		
24	5560	25	4.8	200	0		
25	5560	25	3.3	228	1		
26	5560	23	3.9	182	0		
27	5568	28	2.3	177	0		
28	5568	25	4.3	226	1		
29	5568	24	2.7	152	0		
30	5568	25	1.7	183	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	401	1	73.3%	60.0%
2	5492	17	6.7	306	1		
3	5492	17	8.6	397	1		
4	5492	18	6.9	327	0		
5	5500	17	8.9	319	1		
6	5500	17	7	354	1		
7	5500	16	7	259	1		
8	5500	16	8.4	369	1		
9	5520	17	8	411	0		
10	5520	17	9.7	463	0		
11	5520	18	7.3	304	1		
12	5520	16	7.4	303	1		
13	5530	16	8.4	422	1		
14	5530	18	9	497	1		
15	5530	16	6.1	484	1		
16	5530	18	8.8	359	1		
17	5530	18	6.2	314	1		
18	5530	17	8.2	387	0		
19	5540	17	6.8	379	0		
20	5540	18	6.3	380	1		
21	5540	18	8.4	316	1		
22	5540	18	7.2	446	1		
23	5560	17	6.4	448	1		
24	5560	18	9.8	219	0		
25	5560	18	8.9	241	0		
26	5560	16	6.5	391	1		
27	5568	16	9.5	421	1		
28	5568	16	9.7	389	1		
29	5568	17	6.8	206	1		
30	5568	17	9.7	278	0		

**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	14	14.6	487	1	70.0%	60.0%
2	5492	12	16.2	303	1		
3	5492	13	15.7	382	1		
4	5492	15	15.8	377	0		
5	5500	15	13.2	236	0		
6	5500	15	12.6	439	1		
7	5500	16	13.5	214	0		
8	5500	16	18.6	287	0		
9	5520	16	18.6	423	0		
10	5520	16	17	398	1		
11	5520	16	18.1	232	0		
12	5520	16	18.6	350	0		
13	5530	12	19.1	473	1		
14	5530	13	15.4	418	1		
15	5530	16	15.3	461	1		
16	5530	14	15.4	447	1		
17	5530	14	15.3	382	1		
18	5530	15	18.1	445	0		
19	5540	16	18.3	463	1		
20	5540	16	12.8	270	1		
21	5540	16	17.3	344	1		
22	5540	14	11.3	396	1		
23	5560	15	19.8	454	1		
24	5560	14	17	325	1		
25	5560	16	12	223	1		
26	5560	15	18.7	363	1		
27	5568	13	13.2	225	1		
28	5568	13	18.5	406	1		
29	5568	15	13.9	384	1		
30	5568	16	16.2	488	0		

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

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100.0\% + 86.7\% + 73.3\% + 70.0\%) / 4 = 82.5\% > 80\%$$

*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	100.0%	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	3	5498.1	14	55	1718	1902	0.685078
2	3	5498.1	14	75	1006	1377	2.144463
3	3	5498.1	14	100	1387	1395	3.29493
4	3	5498.1	14	65	1817	1712	4.429373
5	3	5498.1	14	100	1548	1080	4.907416
6	2	5498.1	14	95	1862		6.872878
7	3	5498.1	14	100	1232	1031	7.744873
8	3	5498.1	14	100	1155	1267	9.347315
9	3	5498.1	14	90	1452	1186	10.605818
10	1	5498.1	14	60			11.619027

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	5496.9	11	75	1966		0.094491
2	1	5496.9	11	75			1.17432
3	3	5496.9	11	55	1314	1643	2.083599
4	3	5496.9	11	65	1278	1030	3.711533
5	2	5496.9	11	55	1870		4.433037
6	3	5496.9	11	60	1682	1880	5.499789
7	2	5496.9	11	100	1758		6.057243
8	1	5496.9	11	95			7.411109
9	3	5496.9	11	80	1659	1936	8.838302
10	1	5496.9	11	55			9.49967
11	1	5496.9	11	55			10.227743
12	2	5496.9	11	70	1506		11.360448

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	5497.7	13	85			0.414408
2	2	5497.7	13	70	1903		1.056693
3	1	5497.7	13	85			1.442691
4	1	5497.7	13	50			2.416471
5	2	5497.7	13	80	1472		2.863556
6	1	5497.7	13	75			3.620629
7	2	5497.7	13	65	1652		4.622501
8	2	5497.7	13	95	1237		5.202356
9	3	5497.7	13	55	1495	1254	6.255019
10	3	5497.7	13	85	1787	1829	6.991782
11	1	5497.7	13	60			7.087682



12	1	5497.7	13	90		7.986336
13	2	5497.7	13	95	1934	8.69008
14	2	5497.7	13	75	1085	9.652182
15	2	5497.7	13	70	1982	10.160638
16	2	5497.7	13	70	1817	11.257447
17	2	5497.7	13	70	1656	11.65143

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	5499.7	18	70			0.657051
2	1	5499.7	18	60			1.418935
3	2	5499.7	18	90	1832		1.900497
4	2	5499.7	18	70	1262		3.277295
5	1	5499.7	18	65			4.178014
6	3	5499.7	18	100	1018	1411	5.138928
7	3	5499.7	18	70	1779	1883	5.29115
8	1	5499.7	18	100			6.338153
9	3	5499.7	18	75	1773	1122	7.023495
10	3	5499.7	18	55	1330	1029	7.814321
11	1	5499.7	18	50			8.591046
12	2	5499.7	18	80	1425		9.675728
13	1	5499.7	18	60			10.319842
14	2	5499.7	18	70	1407		11.875786

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	2	5496.5	10	100	1663		0.25127
2	1	5496.5	10	55			0.681709
3	2	5496.5	10	85	1672		1.748745
4	3	5496.5	10	100	1023	1714	2.556335
5	1	5496.5	10	65			2.674406
6	1	5496.5	10	80			3.758286
7	1	5496.5	10	65			4.353709
8	2	5496.5	10	75	1425		5.159248
9	3	5496.5	10	100	1209	1530	5.534329
10	3	5496.5	10	90	1171	1392	6.472831
11	2	5496.5	10	75	1702		6.870365
12	2	5496.5	10	55	1322		7.973845
13	3	5496.5	10	100	1788	1188	8.097557
14	3	5496.5	10	80	1806	1271	8.931019
15	1	5496.5	10	100			9.833227
16	1	5496.5	10	60			10.338292
17	2	5496.5	10	60	1798		10.988571



18 3 5496.5 10 100 1399 1561 11.604567
USA Bin 5 Trial #6

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	5497.7	13	50			0.43344
2	1	5497.7	13	55			1.097572
3	2	5497.7	13	70	1303		1.804714
4	1	5497.7	13	100			2.599323
5	3	5497.7	13	90	1219	1531	3.738375
6	3	5497.7	13	50	1616	1085	4.700401
7	1	5497.7	13	85			4.825285
8	1	5497.7	13	55			5.964495
9	2	5497.7	13	85	1499		7.052074
10	1	5497.7	13	80			7.813421
11	3	5497.7	13	55	1368	1126	8.138922
12	1	5497.7	13	65			9.106414
13	2	5497.7	13	75	1073		9.791919
14	3	5497.7	13	70	1094	1019	11.04954
15	3	5497.7	13	90	1224	1838	11.985592

USA Bin 5 Trial #7

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	5494.5	5	85			0.358512
2	1	5494.5	5	50			1.172782
3	1	5494.5	5	85			2.210877
4	1	5494.5	5	70			3.052651
5	3	5494.5	5	90	1050	1820	4.518049
6	1	5494.5	5	65			5.113509
7	3	5494.5	5	65	1415	1286	6.280771
8	2	5494.5	5	55	1799		7.113882
9	1	5494.5	5	90			7.588942
10	1	5494.5	5	65			8.644117
11	1	5494.5	5	95			9.753267
12	2	5494.5	5	90	1695		11.053343
13	1	5494.5	5	50			11.44728

USA Bin 5 Trial #8

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	5500.5	20	60	1618		0.540454
2	1	5500.5	20	60			1.223578
3	3	5500.5	20	90	1455	1251	1.525732
4	2	5500.5	20	80	1391		2.603219



5	3	5500.5	20	85	1863	1517	3.074237
6	2	5500.5	20	65	1194		3.407456
7	3	5500.5	20	70	1640	1452	4.616632
8	1	5500.5	20	90			5.084657
9	2	5500.5	20	75	1523		5.412034
10	3	5500.5	20	95	1188	1217	6.282935
11	1	5500.5	20	85			7.187591
12	2	5500.5	20	100	1860		7.490986
13	1	5500.5	20	60			8.206841
14	3	5500.5	20	55	1699	1768	9.237261
15	2	5500.5	20	80	1159		9.669156
16	2	5500.5	20	100	1266		10.579061
17	2	5500.5	20	65	1616		10.988097
18	2	5500.5	20	65	1223		11.809759

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	5498.9	16	55	1000	1576	0.269744
2	3	5498.9	16	60	1588	1630	1.148389
3	2	5498.9	16	80	1010		1.881101
4	3	5498.9	16	75	1346	1524	2.645917
5	2	5498.9	16	65	1428		3.833221
6	2	5498.9	16	95	1508		4.114877
7	3	5498.9	16	55	1006	1685	5.250521
8	2	5498.9	16	80	1832		5.908472
9	1	5498.9	16	70			6.465357
10	2	5498.9	16	50	1730		7.417129
11	3	5498.9	16	80	1904	1434	8.182772
12	1	5498.9	16	75			9.143025
13	2	5498.9	16	90	1114		10.043904
14	1	5498.9	16	100			10.688805
15	2	5498.9	16	85	1992		11.80962

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	2	5498.1	14	80	1512		0.148593
2	1	5498.1	14	80			2.42616
3	1	5498.1	14	55			4.365179
4	2	5498.1	14	95	1945		4.550284
5	2	5498.1	14	85	1147		7.170965
6	3	5498.1	14	70	1813	1445	7.628408
7	3	5498.1	14	80	1411	1981	9.411711
8	2	5498.1	14	50	1655		10.793964



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	5530	8	70	1299	1357	0.263442
2	2	5530	8	65	1283		2.083544
3	2	5530	8	65	1698		2.579572
4	2	5530	8	80	1235		3.629647
5	3	5530	8	70	1385	1240	5.797032
6	2	5530	8	60	1384		6.797307
7	1	5530	8	65			7.557777
8	2	5530	8	55	1170		9.140875
9	1	5530	8	80			10.367051
10	2	5530	8	55	1754		11.775077

USA Bin 5 Trial #12

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	5530	18	70	1414	1662	0.340675
2	3	5530	18	65	1460	1553	1.156249
3	3	5530	18	60	1329	1413	1.384958
4	1	5530	18	80			2.410676
5	1	5530	18	60			3.072369
6	3	5530	18	90	1553	1470	3.356186
7	3	5530	18	100	1783	1027	4.001038
8	1	5530	18	70			4.599696
9	2	5530	18	100	1872		5.406148
10	2	5530	18	85	1291		5.885506
11	1	5530	18	100			6.723188
12	2	5530	18	90	1373		7.050286
13	2	5530	18	85	1447		7.807593
14	2	5530	18	50	1789		8.431419
15	2	5530	18	75	1341		9.187172
16	3	5530	18	55	1290	1332	9.76627
17	1	5530	18	80			10.197932
18	1	5530	18	50			11.294195
19	1	5530	18	50			11.487607

USA Bin 5 Trial #13

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	5530	5	95			0.353015
2	1	5530	5	90			1.279628
3	1	5530	5	90			2.665574
4	1	5530	5	60			4.331831



5	1	5530	5	55			4.887155
6	1	5530	5	85			5.633004
7	3	5530	5	70	1464	1683	7.308832
8	2	5530	5	65	1254		8.646445
9	1	5530	5	100			8.799028
10	2	5530	5	95	1044		10.391682
11	1	5530	5	80			11.459714

USA Bin 5 Trial #14

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	5530	20	95			0.164288
2	2	5530	20	50	1161		1.14742
3	1	5530	20	70			2.4656
4	2	5530	20	85	1786		2.719433
5	3	5530	20	65	1496	1289	3.80565
6	1	5530	20	50			4.81487
7	3	5530	20	60	1898	1172	5.241748
8	3	5530	20	65	1230	1059	6.582521
9	3	5530	20	90	1187	1687	7.494895
10	3	5530	20	80	1258	1707	8.107178
11	1	5530	20	85			8.865189
12	2	5530	20	65	1374		9.91277
13	1	5530	20	95			10.543866
14	2	5530	20	75	1270		11.735605

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	5530	19	50			0.061975
2	2	5530	19	95	1324		0.957245
3	2	5530	19	85	1708		1.568017
4	1	5530	19	75			2.279868
5	3	5530	19	50	1742	1562	2.879253
6	3	5530	19	60	1141	1166	3.157806
7	1	5530	19	70			3.881548
8	3	5530	19	60	1519	1674	4.751241
9	1	5530	19	90			5.004835
10	2	5530	19	100	1137		5.796306
11	1	5530	19	55			6.079613
12	1	5530	19	60			6.602374
13	3	5530	19	75	1767	1303	7.611491
14	1	5530	19	80			8.232515
15	1	5530	19	60			8.556765
16	1	5530	19	65			9.194905



17	1	5530	19	95		9.944002
18	1	5530	19	65		10.293419
19	1	5530	19	85		11.222064
20	2	5530	19	95	1408	11.510703

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	5530	9	70	1229	1151	0.247213
2	1	5530	9	75			0.668107
3	3	5530	9	55	1891	1601	1.957663
4	1	5530	9	55			2.087894
5	2	5530	9	60	1738		2.672425
6	1	5530	9	100			3.673169
7	2	5530	9	70	1259		4.125228
8	3	5530	9	90	1215	1552	5.315744
9	3	5530	9	55	1978	1774	5.572251
10	1	5530	9	75			6.116453
11	1	5530	9	60			6.852957
12	3	5530	9	95	1374	1292	7.88267
13	3	5530	9	75	1978	1021	8.565609
14	1	5530	9	50			8.669961
15	2	5530	9	100	1577		9.496661
16	3	5530	9	70	1607	1928	10.100687
17	1	5530	9	100			10.905222
18	2	5530	9	95	1238		11.991003

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	20	85			0.44127
2	1	5530	20	75			0.916371
3	2	5530	20	75	1936		1.653256
4	3	5530	20	85	1843	1889	1.969827
5	3	5530	20	55	1585	1323	2.612904
6	2	5530	20	90	1827		3.067343
7	3	5530	20	90	1432	1237	4.187313
8	3	5530	20	80	1865	1091	4.508261
9	3	5530	20	95	1211	1916	4.995882
10	1	5530	20	65			5.526372
11	1	5530	20	65			6.014194
12	1	5530	20	95			6.836225
13	2	5530	20	60	1912		7.585589
14	1	5530	20	90			8.288195
15	3	5530	20	75	1714	1246	8.548546



16	3	5530	20	95	1290	1386	9.033718
17	1	5530	20	65			9.990743
18	1	5530	20	60			10.378614
19	1	5530	20	85			11.034254
20	3	5530	20	100	1253	1745	11.751053

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	5530	18	55	1084	1349	0.109956
2	3	5530	18	95	1946	1126	1.082507
3	3	5530	18	85	1580	1548	1.765703
4	1	5530	18	60			2.66904
5	2	5530	18	60	1127		3.394475
6	3	5530	18	65	1095	1007	4.692844
7	2	5530	18	60	1676		5.07818
8	3	5530	18	70	1398	1847	6.292045
9	1	5530	18	65			7.172289
10	3	5530	18	85	1130	1105	7.876496
11	2	5530	18	100	1202		8.210833
12	1	5530	18	95			8.944579
13	3	5530	18	55	1579	1054	9.958378
14	2	5530	18	80	1889		11.173026
15	1	5530	18	50			11.479398

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	16	60	1784		0.959022
2	3	5530	16	50	1060	1725	1.656352
3	1	5530	16	100			2.245151
4	3	5530	16	60	1900	1478	4.199664
5	1	5530	16	100			4.723279
6	2	5530	16	60	1942		6.431533
7	2	5530	16	60	1464		6.784243
8	3	5530	16	75	1486	1063	7.801337
9	1	5530	16	90			9.01926
10	3	5530	16	50	1885	1272	10.003406
11	3	5530	16	60	1785	1621	11.422785

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	15	55			0.059472
2	2	5530	15	80	1105		1.03298



3	1	5530	15	80			2.017955
4	1	5530	15	55			3.136906
5	2	5530	15	95	1438		3.722938
6	1	5530	15	95			4.806448
7	3	5530	15	95	1835	1237	5.965043
8	1	5530	15	75			6.517376
9	3	5530	15	95	1409	1460	7.432286
10	1	5530	15	100			8.367406
11	3	5530	15	85	1300	1665	8.901171
12	1	5530	15	55			9.614892
13	2	5530	15	80	1402		10.402418
14	2	5530	15	55	1795		11.890867

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	1	5562.3	13	55			0.15449
2	1	5562.3	13	70			1.412786
3	1	5562.3	13	55			2.913192
4	3	5562.3	13	55	1953	1037	3.342473
5	2	5562.3	13	75	1971		4.200162
6	1	5562.3	13	70			5.170305
7	2	5562.3	13	55	1314		6.481699
8	3	5562.3	13	60	1024	1191	7.031499
9	2	5562.3	13	55	1423		8.386198
10	2	5562.3	13	70	1685		9.495645
11	2	5562.3	13	50	1802		10.490822
12	1	5562.3	13	100			11.982281

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	5562.7	12	75	1900		0.84495
2	1	5562.7	12	85			1.634728
3	3	5562.7	12	55	1293	1686	2.777616
4	1	5562.7	12	85			3.810807
5	1	5562.7	12	70			5.23785
6	2	5562.7	12	80	1718		6.581709
7	3	5562.7	12	65	1223	1540	8.239648
8	2	5562.7	12	90	1818		9.126828
9	3	5562.7	12	65	1107	1926	9.986597
10	3	5562.7	12	80	1639	1752	10.86461

USA Bin 5 Trial #23



Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	5559.9	19	60	1092		0.416354
2	3	5559.9	19	75	1524	1070	1.36569
3	1	5559.9	19	65			2.013825
4	1	5559.9	19	95			2.15905
5	1	5559.9	19	70			3.414533
6	1	5559.9	19	50			3.705508
7	3	5559.9	19	50	1834	1625	4.376917
8	1	5559.9	19	100			5.555729
9	2	5559.9	19	85	1474		5.896846
10	3	5559.9	19	50	1661	1379	6.735353
11	2	5559.9	19	100	1049		7.47876
12	1	5559.9	19	60			8.09031
13	2	5559.9	19	85	1604		8.904415
14	1	5559.9	19	90			9.384974
15	3	5559.9	19	95	1158	1876	9.971038
16	2	5559.9	19	55	1974		10.988275
17	2	5559.9	19	60	1799		11.296357

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	5563.9	9	95	1838	1480	0.690321
2	2	5563.9	9	50	1094		0.882302
3	2	5563.9	9	50	1694		2.533947
4	1	5563.9	9	70			2.885297
5	1	5563.9	9	55			3.607506
6	3	5563.9	9	55	1289	1247	4.958723
7	2	5563.9	9	70	1068		5.198569
8	2	5563.9	9	60	1766		6.539772
9	2	5563.9	9	50	1669		7.189235
10	3	5563.9	9	75	1151	1533	8.530732
11	1	5563.9	9	65			8.721753
12	3	5563.9	9	85	1136	1069	10.211758
13	3	5563.9	9	50	1758	1523	10.750322
14	3	5563.9	9	85	1925	1877	11.144407

USA Bin 5 Trial #25

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	5560.3	18	95	1184	1539	0.313019
2	1	5560.3	18	60			2.454939
3	2	5560.3	18	85	1355		2.847833



4	3	5560.3	18	60	1601	1264	4.374946
5	1	5560.3	18	60			6.632576
6	2	5560.3	18	65	1745		6.851762
7	3	5560.3	18	75	1699	1180	9.3241
8	3	5560.3	18	60	1502	1697	9.944765
9	3	5560.3	18	95	1325	1375	10.70389

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	5561.5	15	80	1005	1462	0.180212
2	2	5561.5	15	55	1368		1.965716
3	1	5561.5	15	100			2.728684
4	2	5561.5	15	75	1883		3.763259
5	3	5561.5	15	75	1744	1441	5.307443
6	3	5561.5	15	80	1095	1202	6.105642
7	3	5561.5	15	80	1791	1096	6.602999
8	1	5561.5	15	60			8.593049
9	1	5561.5	15	50			9.004121
10	3	5561.5	15	90	1466	1988	10.69081
11	2	5561.5	15	100	1161		11.676766

USA Bin 5 Trial #27

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	5565.1	6	50			1.176519
2	1	5565.1	6	55			1.95994
3	3	5565.1	6	80	1460	1811	2.749525
4	3	5565.1	6	65	1294	1886	5.319619
5	2	5565.1	6	50	1042		6.54092
6	1	5565.1	6	95			7.247148
7	2	5565.1	6	100	1825		9.051686
8	3	5565.1	6	55	1551	1904	9.548665
9	2	5565.1	6	95	1072		10.8908

USA Bin 5 Trial #28

Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	5565.1	6	80			0.139682
2	2	5565.1	6	50	1552		1.28967
3	2	5565.1	6	65	1459		2.11427
4	1	5565.1	6	65			3.113727
5	3	5565.1	6	80	1492	1816	4.573605
6	3	5565.1	6	85	1352	1418	4.693131
7	2	5565.1	6	55	1257		6.324546



8	1	5565.1	6	60			6.596192
9	3	5565.1	6	100	1083	1897	8.144071
10	1	5565.1	6	100			8.474147
11	3	5565.1	6	55	1493	1278	9.288623
12	1	5565.1	6	95			10.929515
13	3	5565.1	6	70	1076	1929	11.119439

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	5564.7	7	100	1848	1569	0.24629
2	2	5564.7	7	85	1220		1.44564
3	2	5564.7	7	50	1153		2.785635
4	3	5564.7	7	100	1357	1655	3.941422
5	3	5564.7	7	85	1339	1549	4.661312
6	2	5564.7	7	80	1602		5.722922
7	2	5564.7	7	90	1061		6.84824
8	2	5564.7	7	100	1872		8.449666
9	2	5564.7	7	55	1093		9.425481
10	1	5564.7	7	60			10.240119
11	2	5564.7	7	85	1647		11.372575

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	5561.1	16	80			0.658134
2	2	5561.1	16	50	1128		1.435625
3	2	5561.1	16	95	1509		1.513937
4	1	5561.1	16	85			2.417476
5	3	5561.1	16	90	1306	1273	3.288573
6	2	5561.1	16	60	1603		4.493656
7	2	5561.1	16	80	1854		4.890412
8	2	5561.1	16	90	1649		5.511642
9	3	5561.1	16	70	1814	1844	6.333446
10	2	5561.1	16	100	1092		6.764299
11	1	5561.1	16	60			7.763619
12	1	5561.1	16	70			8.72411
13	2	5561.1	16	95	1592		9.68759
14	3	5561.1	16	75	1349	1971	9.900319
15	3	5561.1	16	65	1219	1144	10.936151
16	1	5561.1	16	70			11.295704

*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	100.0%	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)
0	5556	0
4	5500	12
11	5531	33
12	5548	36
15	5541	45
32	5493	96
39	5543	117
42	5566	126
43	5516	129
52	5563	156
55	5568	165
62	5557	186
79	5536	237
81	5555	243
84	5538	252
86	5497	258
95	5509	285

USA Frequency Hopping Trial #2

Hop #	Freq (GHz)	Pulse Start (mS)
22	5522	66
25	5493	75
47	5494	141
50	5543	150
77	5557	231
81	5535	243
85	5555	255
91	5510	273
93	5554	279
97	5556	291
99	5497	297

USA Frequency Hopping Trial #3

Hop #	Freq (GHz)	Pulse Start (mS)
9	5561	27
22	5520	66
27	5529	81
35	5545	105
37	5526	111
58	5499	174
59	5532	177
65	5496	195



68	5542	204
77	5541	231
81	5552	243
85	5508	255
90	5521	270
91	5493	273
94	5551	282
97	5514	291

USA Frequency Hopping Trial #4

Hop #	Freq (GHz)	Pulse Start (mS)
2	5538	6
10	5559	30
14	5560	42
19	5525	57
24	5550	72
33	5506	99
34	5520	102
36	5527	108
37	5546	111
38	5512	114
43	5561	129
52	5531	156
56	5552	168
69	5500	207
72	5529	216
75	5556	225
79	5493	237

USA Frequency Hopping Trial #5

Hop #	Freq (GHz)	Pulse Start (mS)
3	5554	9
5	5505	15
20	5533	60
28	5495	84
29	5500	87
33	5549	99
69	5498	207
83	5514	249
85	5532	255
98	5564	294
99	5512	297

USA Frequency Hopping Trial #6

Hop #	Freq (GHz)	Pulse Start (mS)
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9	5492	27
14	5542	42
16	5529	48
27	5548	81
30	5493	90
44	5514	132
47	5554	141
49	5530	147
55	5526	165
59	5513	177
60	5511	180
65	5498	195
67	5520	201
75	5495	225
77	5510	231
83	5507	249
89	5523	267
94	5518	282
96	5538	288

USA Frequency Hopping Trial #7

Hop #	Freq (GHz)	Pulse Start (mS)
7	5526	21
9	5535	27
10	5530	30
15	5542	45
18	5552	54
25	5564	75
37	5522	111
48	5556	144
59	5546	177
70	5548	210
71	5562	213
72	5538	216
79	5511	237
86	5541	258
91	5515	273

USA Frequency Hopping Trial #8

Hop #	Freq (GHz)	Pulse Start (mS)
7	5541	21
36	5543	108
41	5533	123
42	5497	126
43	5508	129



46	5562	138
57	5553	171
71	5514	213
78	5492	234
85	5504	255
88	5564	264
90	5503	270
93	5555	279
94	5545	282

USA Frequency Hopping Trial #9

Hop #	Freq (GHz)	Pulse Start (mS)
4	5501	12
23	5507	69
29	5493	87
31	5515	93
32	5528	96
35	5513	105
52	5555	156
55	5546	165
57	5545	171
64	5508	192
81	5561	243
83	5498	249
91	5525	273
92	5522	276
96	5540	288

USA Frequency Hopping Trial #10

Hop #	Freq (GHz)	Pulse Start (mS)
6	5560	18
10	5559	30
17	5549	51
24	5507	72
27	5497	81
31	5517	93
38	5533	114
41	5550	123
43	5554	129
44	5532	132
46	5564	138
54	5503	162
55	5552	165
72	5553	216
81	5568	243



90	5504	270
91	5495	273
95	5518	285
96	5530	288
98	5556	294

USA Frequency Hopping Trial #11

Hop #	Freq (GHz)	Pulse Start (mS)
2	5510	6
3	5558	9
9	5563	27
12	5504	36
16	5531	48
17	5553	51
27	5567	81
34	5493	102
40	5509	120
42	5499	126
45	5559	135
50	5549	150
51	5545	153
67	5539	201
72	5520	216
77	5516	231
85	5526	255
86	5564	258
88	5514	264
90	5495	270
95	5500	285
98	5551	294

USA Frequency Hopping Trial #12

Hop #	Freq (GHz)	Pulse Start (mS)
0	5541	0
3	5566	9
13	5494	39
17	5550	51
23	5516	69
26	5502	78
34	5518	102
40	5511	120
50	5536	150
60	5535	180
62	5495	186
64	5553	192



76	5531	228
77	5508	231
91	5551	273
98	5534	294
99	5539	297

USA Frequency Hopping Trial #13

Hop #	Freq (GHz)	Pulse Start (mS)
2	5500	6
8	5540	24
17	5512	51
22	5553	66
31	5544	93
34	5521	102
39	5509	117
45	5561	135
48	5508	144
49	5526	147
58	5498	174
59	5552	177
67	5547	201
70	5494	210
75	5507	225
77	5501	231
79	5511	237
88	5556	264
91	5537	273

USA Frequency Hopping Trial #14

Hop #	Freq (GHz)	Pulse Start (mS)
7	5550	21
11	5505	33
19	5508	57
21	5561	63
59	5556	177
60	5512	180
64	5537	192
74	5536	222
76	5530	228
89	5526	267
95	5541	285
97	5497	291
99	5539	297

USA Frequency Hopping Trial #15

Hop #	Freq (GHz)	Pulse Start (mS)
1	5558	3
3	5536	9
5	5495	15
21	5566	63
33	5526	99
35	5501	105
44	5506	132
51	5556	153
64	5563	192
71	5502	213
73	5561	219
86	5550	258
92	5521	276
96	5562	288

USA Frequency Hopping Trial #16

Hop #	Freq (GHz)	Pulse Start (mS)
1	5549	3
2	5542	6
4	5504	12
9	5550	27
14	5495	42
15	5523	45
19	5521	57
27	5552	81
31	5558	93
33	5551	99
49	5539	147
53	5560	159
62	5501	186
65	5510	195
71	5563	213
72	5516	216
78	5512	234
81	5503	243
84	5492	252
86	5556	258

USA Frequency Hopping Trial #17

Hop #	Freq (GHz)	Pulse Start (mS)
24	5553	72
29	5530	87
30	5566	90



39	5495	117
42	5532	126
58	5567	174
63	5521	189
66	5492	198
68	5512	204
72	5525	216
75	5563	225
79	5519	237
92	5565	276
93	5499	279

USA Frequency Hopping Trial #18

Hop #	Freq (GHz)	Pulse Start (mS)
12	5531	36
15	5549	45
20	5548	60
29	5535	87
52	5528	156
66	5518	198
69	5519	207
76	5492	228
80	5537	240
85	5552	255
90	5544	270
93	5533	279
99	5523	297

USA Frequency Hopping Trial #19

Hop #	Freq (GHz)	Pulse Start (mS)
5	5531	15
9	5524	27
17	5527	51
21	5502	63
29	5551	87
45	5513	135
46	5521	138
47	5554	141
52	5498	156
58	5558	174
62	5568	186
63	5503	189
71	5508	213
76	5492	228
85	5530	255

87	5539	261
94	5549	282
97	5548	291

USA Frequency Hopping Trial #20

Hop #	Freq (GHz)	Pulse Start (mS)
18	5554	54
35	5552	105
36	5525	108
40	5520	120
42	5511	126
43	5537	129
47	5496	141
53	5543	159
60	5568	180
61	5499	183
63	5500	189
76	5516	228
82	5548	246
93	5526	279
94	5556	282

USA Frequency Hopping Trial #21

Hop #	Freq (GHz)	Pulse Start (mS)
4	5555	12
8	5534	24
11	5505	33
12	5566	36
25	5507	75
26	5524	78
38	5503	114
48	5516	144
52	5542	156
66	5532	198
70	5533	210
74	5525	222
75	5553	225
78	5539	234
79	5537	237
85	5529	255
91	5501	273
93	5554	279
96	5559	288

USA Frequency Hopping Trial #22

Hop #	Freq (GHz)	Pulse Start (mS)
1	5514	3
2	5507	6
3	5501	9
19	5499	57
20	5543	60
21	5551	63
22	5523	66
23	5524	69
24	5511	72
27	5493	81
34	5567	102
36	5560	108
49	5544	147
62	5547	186
70	5555	210
71	5556	213
92	5565	276
98	5541	294

USA Frequency Hopping Trial #23

Hop #	Freq (GHz)	Pulse Start (mS)
6	5565	18
7	5540	21
9	5549	27
24	5542	72
26	5519	78
29	5563	87
39	5524	117
49	5537	147
60	5529	180
74	5539	222
75	5558	225
76	5554	228
77	5548	231
99	5510	297

USA Frequency Hopping Trial #24

Hop #	Freq (GHz)	Pulse Start (mS)
0	5540	0
2	5541	6
31	5498	93
34	5554	102
36	5520	108



37	5559	111
49	5557	147
51	5562	153
55	5552	165
61	5529	183

USA Frequency Hopping Trial #25

Hop #	Freq (GHz)	Pulse Start (mS)
21	5544	63
24	5534	72
26	5517	78
27	5500	81
39	5521	117
50	5553	150
59	5545	177
64	5494	192
65	5562	195
66	5509	198
67	5505	201
86	5564	258
87	5535	261
91	5497	273
96	5495	288

USA Frequency Hopping Trial #26

Hop #	Freq (GHz)	Pulse Start (mS)
23	5551	69
27	5497	81
32	5514	96
39	5520	117
41	5530	123
52	5554	156
55	5535	165
57	5557	171
63	5529	189
92	5523	276

USA Frequency Hopping Trial #27

Hop #	Freq (GHz)	Pulse Start (mS)
11	5542	33
12	5496	36
20	5503	60
27	5539	81
30	5493	90
43	5520	129

45	5549	135
50	5521	150
57	5517	171
58	5526	174
73	5497	219
76	5556	228
80	5562	240
85	5500	255
90	5525	270
95	5559	285
96	5523	288

USA Frequency Hopping Trial #28

Hop #	Freq (GHz)	Pulse Start (mS)
4	5524	12
7	5493	21
11	5497	33
12	5534	36
34	5525	102
36	5505	108
41	5507	123
44	5539	132
47	5543	141
52	5549	156
55	5530	165
56	5568	168
59	5508	177
64	5546	192
72	5564	216
83	5494	249
92	5555	276
93	5513	279
94	5521	282
95	5532	285

USA Frequency Hopping Trial #29

Hop #	Freq (GHz)	Pulse Start (mS)
12	5532	36
17	5561	51
18	5522	54
40	5520	120
44	5534	132
50	5499	150
63	5560	189
74	5504	222



77	5495	231
94	5494	282
97	5515	291

USA Frequency Hopping Trial #30

Hop #	Freq (GHz)	Pulse Start (mS)
10	5497	30
21	5519	63
39	5557	117
53	5518	159
54	5544	162
62	5541	186
67	5515	201
74	5492	222
75	5546	225
84	5553	252

**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