



Dynamic Frequency Selection (DFS) Test Report

AIR-CAP2702y-A-K9

Cisco Aironet 802.11ac Dual Band Access Point

FCC ID: LDK102091

IC: 2461B-102091

Also covers:

AIR-CAP2702y-T-K9, AIR-CAP2702y-Z-K9

y = E (External Antenna) and I (Internal Antenna)

5250-5350, 5470-5725 MHz

Against the following Specifications:

CFR47 Part 15.407

RSS210

Cisco Systems

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San Jose, CA 95134



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Dynamic Frequency Selection (DFS) Test Results

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.

1.0 UNII Device Description

1. The 2700 Series Cisco Aironet 802.11ac Access Point operates in the following bands:
 - a. 5150-5250 MHz
 - b. 5250-5350 MHz
 - c. 5470-5725 MHz (excluding 5600-5650 MHz)
 - d. 5725-5850 MHz
2. The maximum EIRP of the 5GHz equipment is 34 dBm, and the minimum possible EIRP is 2 dBm.

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

Frequency	Part Number	Antenna Type	Antenna Gain (dBi)
2.4/5 GHz	AIR-ANT2524DB-R	Dual-resonant black dipole	2 / 4
	AIR-ANT2524DW-R	Dual-resonant white dipole	2 / 4
	AIR-ANT2524DG-R	Dual-resonant gray dipole	2 / 4
	AIR-ANT2524V4C-R	Dual-resonant ceiling mount omni (4-pack)	2 / 4
	AIR-ANT2535SDW-R	Dual-resonant "stubby" monopole	3 / 5
	Internal	Omni-Directional	4 / 4
	AIR-ANT2544V4M-R	Dual-resonant omni (4-pack)	4 / 4
	AIR-ANT2566P4W-R	Dual-resonant "directional" antenna (4-pack)	6 / 6

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 106.5 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.

2.0 DFS Detection Thresholds

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

Maximum Transmit Power	Value (see note)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 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.	

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 80% of the 99% power bandwidth See Note 3.
Note 1: The instant that the <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> begins is as follows: - For the Short pulse radar Test Signals this instant is the end of the <i>Burst</i>. - For the Frequency Hopping radar Test Signal, this instant is the end of the last radar <i>Burst</i> generated. - For the Long Pulse radar Test Signal this instant is the end of the 12 second period defining the radar transmission. 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 <i>Channel</i> changes (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the <i>U-NII Detection Bandwidth</i> detection test, radar type 1 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.	

3.0 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 Trials
1	1	1428	18	60%	30
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

A minimum of 30 unique waveforms are required for each of the short pulse radar types 2 through 4. For short pulse radar type 1, the same waveform is used a minimum of 30 times. 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. The aggregate is the average of the percentage of successful detections of short pulse radar types 1-4.

2. Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

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

Each waveform is defined as follows:

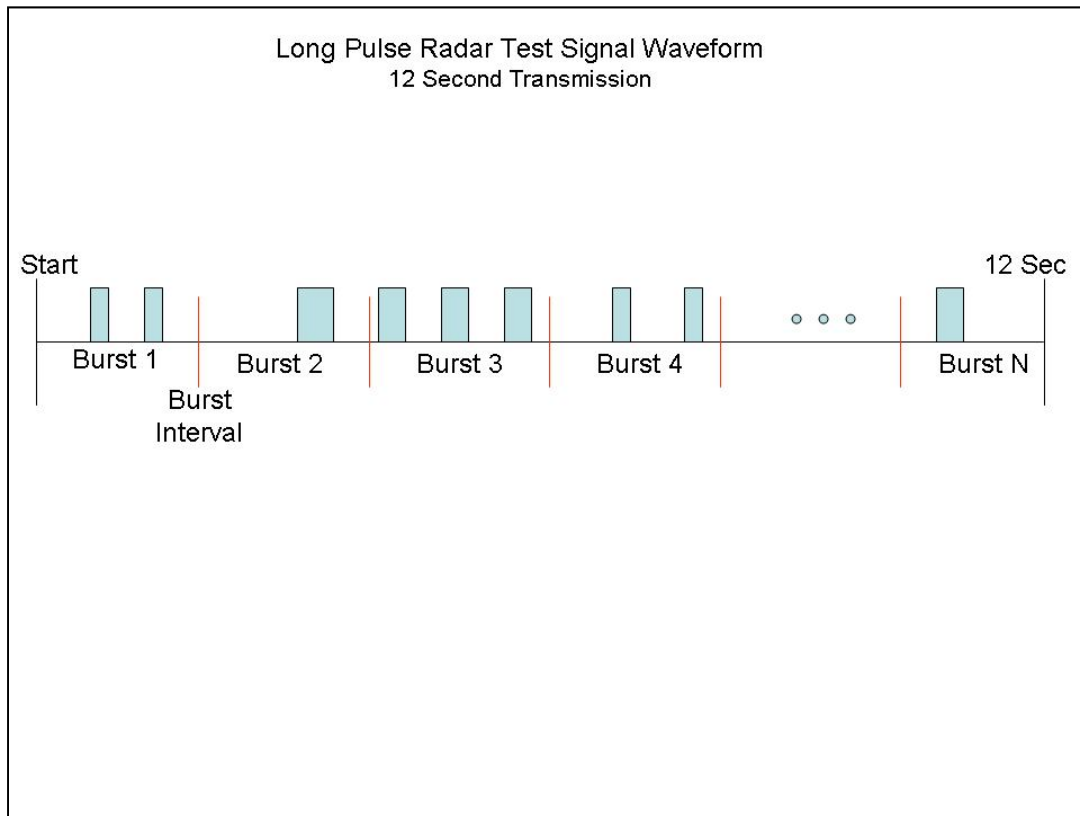
- 1) The transmission period for the Long Pulse Radar test signal is 12 seconds.
- 2) There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst_Count.
- 3) Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each Burst within the 12 second sequence may have a different number of pulses.
- 4) The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a Burst will have the same pulse width. Pulses in different Bursts may have different pulse widths.

- 5) Each pulse has a linear FM chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a Burst will have the same chirp width. Pulses in different Bursts may have different chirp widths. 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 independently.

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.

Frequency Hopping Radar Test Waveform

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

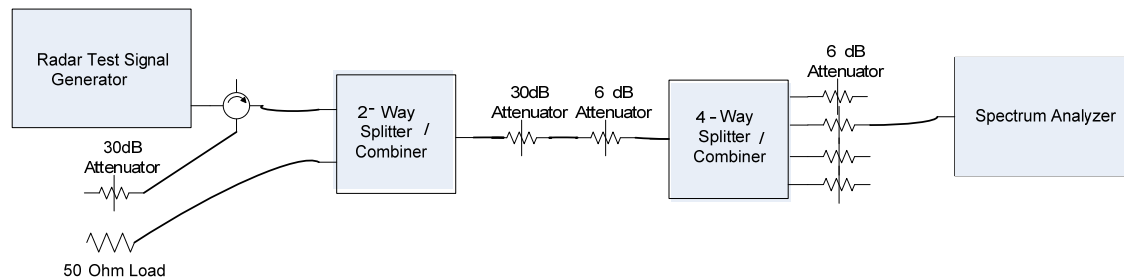
For the Frequency Hopping Radar Type, the same *Burst* parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected¹ from the hopping sequence defined by the following algorithm:

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.

4.0 Radar Waveform Calibration

1. 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

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω DC SENSE:INT ALIGN OFF 08:51:02 PM Oct 03, 2013

PNO: Fast Trig: Video Avg Type: Log-Pwr

IF Gain: Low Atten: 6 dB

TRACE 1 2 3 4 5
TYPE W W W W W
DET P H H H H H

Ref Offset -42.98 dB
Ref -50.00 dBm

10 dB/div
Log

-63.00 dBm
TRIG LVL

Center 5.490000000 GHz
ResBW 8 MHz #VBW 8.0 MHz Span 0 Hz
Sweep 100.0 ms (1001 pts)

MSG STATUS

Select Marker 1

Normal

Delta

Fixed

Off

Properties

More

1 of 2

Agilent Spectrum Analyzer - Swept SA

RL RF SO Q DC SENSE:INT ALIGN OFF 08:58:10 PM Oct 03, 2013

PNO: Fast Trig: Video Avg Type: Log-Pwr

IF Gain: Low Atten: 6 dB

TRACE 1 2 3 4 5
TYPE W W W W W
DET P N N N N N

Ref Offset -42.98 dB
Ref -50.00 dBm

10 dB/div
Log

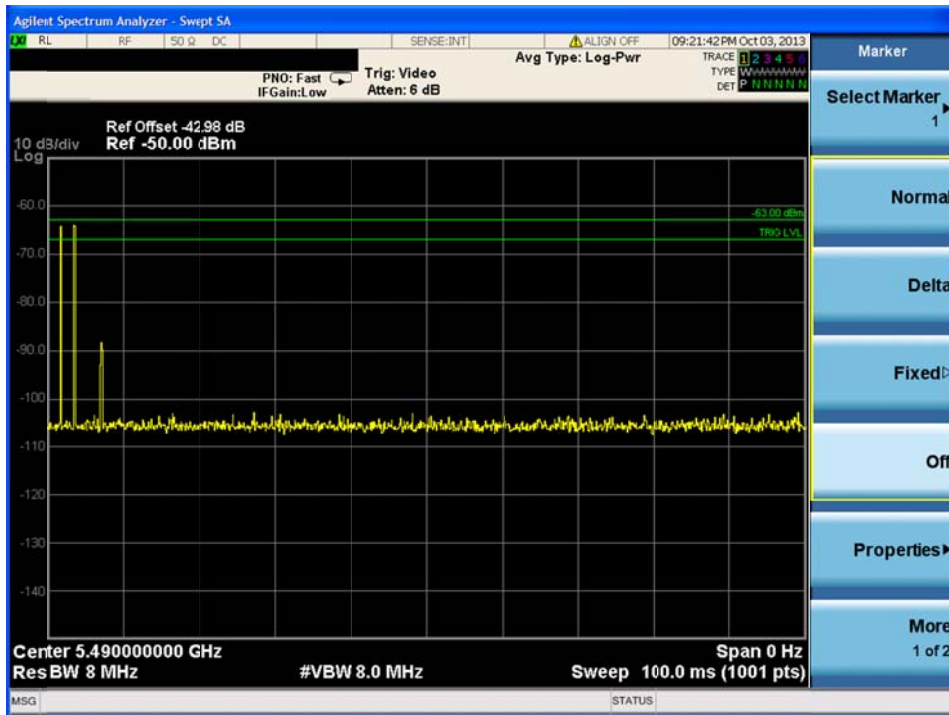
-60.00 dBm
TROO LVL

Center 5.490000000 GHz Span 0 Hz
ResBW 8 MHz #VBW 8.0 MHz Sweep 100.0 ms (1001 pts)

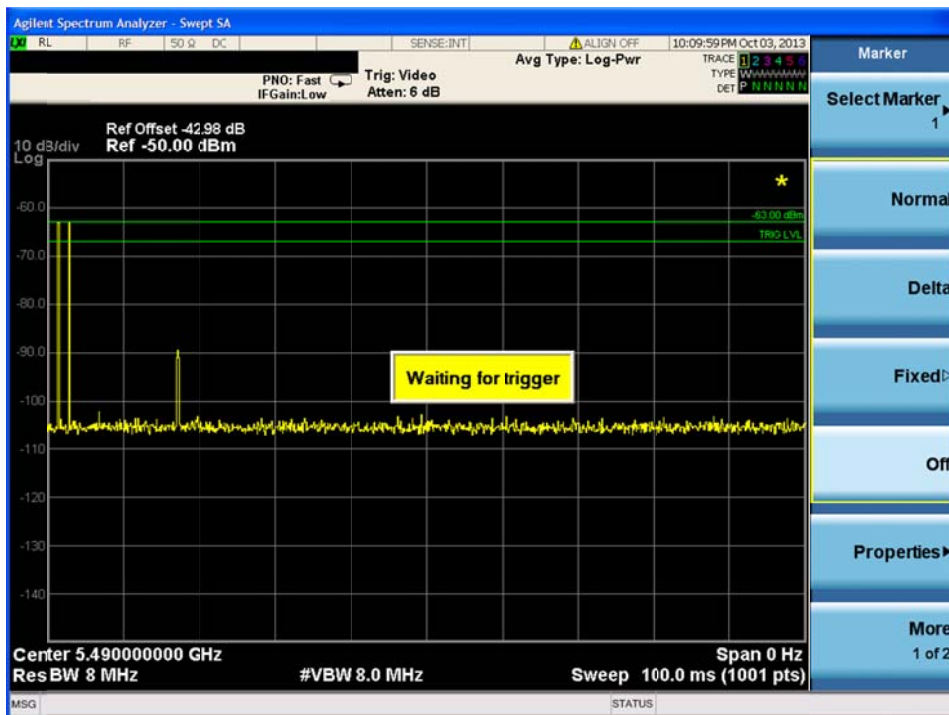
MSG STATUS

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USA Bin 5 Radar Calibration



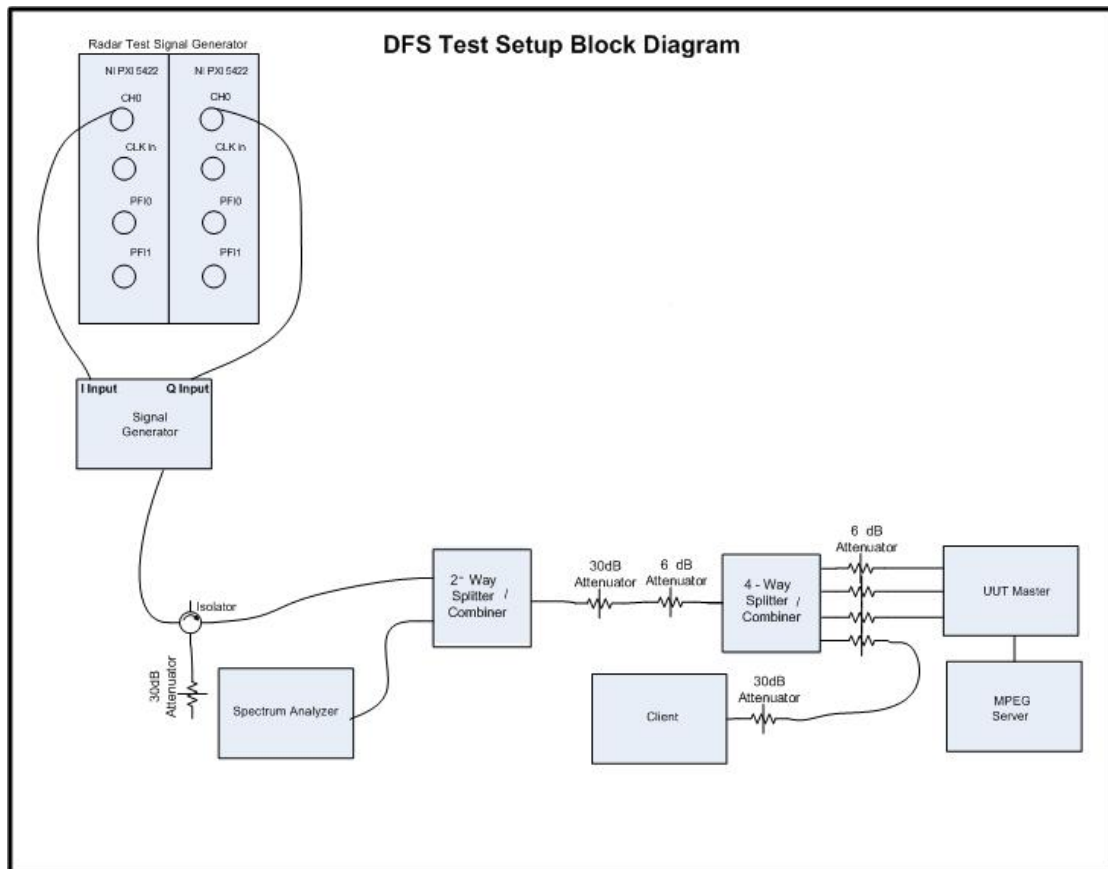
USA Frequency Hopping Radar Calibration

5.0 Test Procedure/Results

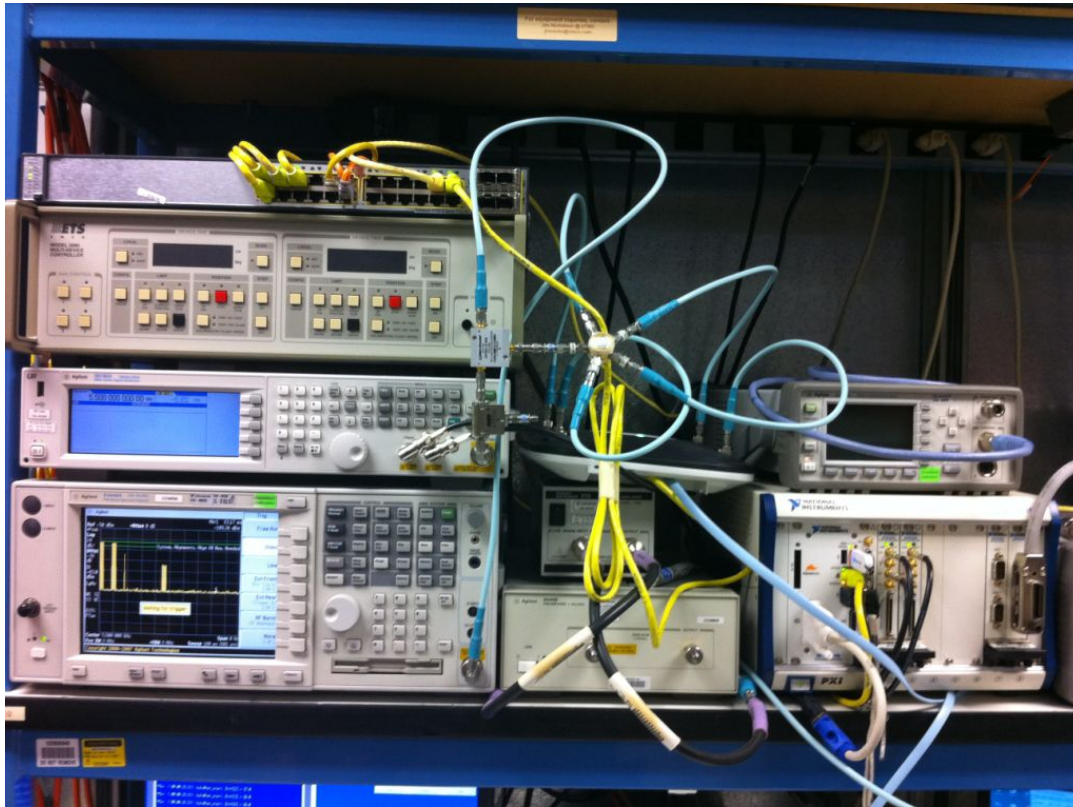
1. A spectrum analyzer is used as a monitor to verify that the UUT has vacated the Channel within the (Channel Closing Transmission Time and Channel Move Time, and does not transmit on a Channel

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



DFS Setup

The test setup is constructed of the following equipment:

Radar Test Signal Generator

National Instruments NI PXI-1042 8-Slot 3U Chassis

National Instruments NI PXI-5422 16-Bit 200MS/s Arbitrary Waveform Generator (Qty. 2)

Agilent N5182A MXG Signal Generator

Agilent E4448A Spectrum Analyzer

Mini-Circuits ZFSC-2-9G Splitter/Combiner (Qty. 1)

Weinschel 1594 4 to 1 power Splitter/Combiner (Qty. 1)

Ditom Microwave D3C-4080-11 Circulator/Isolator (Qty. 1)

Mini-Circuits BW-S30W2 30dB Attenuator (Qty. 4)

Mini-Circuits BW-S6W2 30dB Attenuator (Qty. 5)

Megaphase SF26 S1S1 36" Coaxial Cable (Qty. 2)

MicroCoax 18" Coaxial Cable (Qty. 3)

Dell 600M Laptop (Qty. 2: 1 for wireless client, 1 for MPEG server)

Cisco-Linksys WPC600N 802.11n NIC card (wireless client)

The waveform parameters from within the bounds of the signal type are selected randomly using uniform distribution.

3. **UNII Detection Bandwidth**

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 99% channel bandwidth for 40MHz signals is 36 MHz, and the 99% channel bandwidth for 80MHz signals is 72. (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 80% of the UUT transmitter 99% power bandwidth (14.4 MHz for 20MHz signals, 28.8 MHz for 40 MHz signals, and 57.6 MHz for 80 MHz signals), otherwise, the UUT does not comply with DFS requirements.

UNII Detection Bandwidth Results, 20MHz Signal Bandwidth

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

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

	DFS Detection Trials (1=Detection, Blank= No Detection)											
Radar Frequency	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)	Detection Bandwidth (MHz)
5490	1	1	1	1	1	1	1	1	1	1	100	20
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)
	1	2	3	4	5	6	7	8	9	10		
5490	0	0	0	0	0	0	0	0	0	0	0	16
5491	0	0	0	0	0	0	0	0	0	0	0	
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	0	0	0	0	0	0	0	0	0	0	0	
5510	0	0	0	0	0	0	0	0	0	0	0	

USA Bin 4 Radar

	DFS Detection Trials (1=Detection, Blank= No Detection)											
Radar Frequency	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)	Detection Bandwidth (MHz)
5490	1	1	1	1	1	1	1	1	1	1	100	20
5491	1	1	1	1	1	1	1	1	1	0	90	
5492	1	1	1	1	1	1	0	1	1	1	90	
5493	1	1	1	1	1	1	1	1	1	1	100	
5494	1	1	1	1	1	1	1	0	1	1	90	
5495	1	1	0	1	1	1	1	1	1	1	90	
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	0	1	1	1	1	1	90	

USA Bin 5 Radar

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)
	1	2	3	4	5	6	7	8	9	10		
5490	1	1	1	1	1	1	0	1	1	0	80	18
5491	1	1	1	1	1	1	1	1	1	1	100	
5492	1	1	1	1	1	1	1	1	1	0	90	
5493	1	1	1	1	1	1	1	0	1	1	90	
5494	1	1	1	1	1	1	1	1	1	1	100	
5495	1	1	1	1	1	0	1	1	1	1	90	
5496	1	1	1	1	1	1	1	1	1	1	100	
5497	1	1	1	1	1	1	1	0	1	1	90	
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	0	90	
5507	1	0	1	1	1	1	1	1	1	1	90	
5508	1	1	1	1	1	1	1	1	1	1	100	
5509	1	1	0	1	1	1	1	1	1	1	90	
5510	1	0	1	1	1	1	1	1	1	0	80	

USA Frequency Hopping Radar

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)
	1	2	3	4	5	6	7	8	9	10		
5490	1	1	1	1	1	1	1	1	1	1	100	36
5491	0	0	0	0	0	0	0	0	0	0	0	
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	0	0	0	0	0	0	0	0	0	0	0	
5530	1	1	1	1	1	1	1	1	1	1	100	

USA Bin 1 Radar

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)
	1	2	3	4	5	6	7	8	9	10		
5490	1	0	1	1	1	1	1	1	1	1	90	36
5491	0	0	0	0	0	0	0	0	0	0	0	
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	0	0	0	0	0	0	0	0	0	0	0	
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)
	1	2	3	4	5	6	7	8	9	10		
5490	1	0	0	1	1	0	0	1	1	0	50	34
5491	0	0	0	0	0	0	0	0	0	0	0	
5492	0	0	0	0	0	0	0	1	0	0	10	
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	0	1	0	0	1	0	0	0	40	
5529	0	0	0	0	0	0	0	0	0	0	0	
5530	0	1	0	1	0	0	0	0	1	0	30	

USA Bin 3 Radar

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)
	1	2	3	4	5	6	7	8	9	10		
5490	0	0	0	0	0	0	0	0	0	0	0	34
5491	0	0	0	0	0	0	0	0	0	0	0	
5492	0	0	0	0	0	0	0	0	0	0	0	
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	0	0	0	0	0	0	0	0	0	0	0	
5529	0	0	0	0	0	0	0	0	0	0	0	
5530	0	0	0	0	0	0	0	0	0	0	0	

USA Bin 4 Radar

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)
	1	2	3	4	5	6	7	8	9	10		
5490	1	1	1	1	1	1	1	1	1	1	100	40
5491	1	1	1	1	1	1	1	1	1	1	100	
5492	1	1	1	1	1	1	1	1	1	1	100	
5493	1	1	1	1	1	1	1	1	1	1	100	
5494	1	1	1	1	1	1	1	1	1	1	100	
5495	1	1	1	1	1	1	1	1	1	1	100	
5496	1	1	1	1	1	1	1	1	1	1	100	
5497	1	1	1	1	1	1	1	1	1	1	100	
5498	1	1	1	1	1	1	1	1	1	1	100	
5499	1	1	1	1	1	1	1	1	1	1	100	
5500	1	1	1	1	1	1	1	1	1	1	100	
5501	1	1	1	1	1	1	1	1	1	1	100	
5502	1	1	1	1	1	1	1	1	1	1	100	
5503	1	1	1	1	1	1	1	1	1	1	100	
5504	1	1	1	1	1	1	1	1	1	1	100	
5505	1	1	1	1	1	1	1	1	1	1	100	
5506	1	1	1	1	1	1	1	1	1	1	100	
5507	1	1	1	1	1	1	1	1	1	1	100	
5508	1	1	1	1	1	1	1	1	1	1	100	
5509	1	1	1	1	1	1	1	1	1	1	100	
5510	1	1	1	1	1	1	1	1	1	1	100	
5511	1	1	1	1	1	1	1	1	1	1	100	
5512	1	1	1	1	1	1	1	1	1	1	100	
5513	1	1	1	1	1	1	1	1	1	1	100	
5514	1	1	1	1	1	1	1	1	1	1	100	
5515	1	1	1	1	1	1	1	1	1	1	100	
5516	1	1	1	1	1	1	1	1	1	1	100	
5517	1	1	1	1	1	1	1	1	1	1	100	
5518	1	1	1	1	1	1	1	1	1	1	100	
5519	1	1	1	1	1	1	1	1	1	1	100	
5520	1	1	1	1	1	1	1	1	1	1	100	
5521	1	1	1	1	1	1	1	1	1	1	100	
5522	1	1	1	1	1	1	1	1	1	1	100	
5523	1	1	1	1	1	1	1	1	1	1	100	
5524	1	1	1	1	1	1	1	1	1	1	100	
5525	1	1	1	1	1	1	1	1	1	1	100	
5526	1	1	1	1	1	1	1	1	1	1	100	
5527	1	1	1	1	1	1	1	1	1	1	100	
5528	1	1	1	1	1	1	1	1	1	1	100	
5529	1	1	1	1	1	1	1	1	1	1	100	
5530	1	1	1	1	1	1	1	1	1	1	100	

USA Bin 5 Radar

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)
	1	2	3	4	5	6	7	8	9	10		
5490	1	1	1	0	1	1	1	1	1	1	90	40
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	0	1	90	
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)
	1	2	3	4	5	6	7	8	9	10		
5490	0	0	0	0	0	0	0	0	0	0	0	68
5491	0	0	0	0	0	0	0	0	0	0	0	
5492	0	0	0	0	0	0	0	0	0	0	0	
5493	0	0	0	0	0	0	0	0	0	0	0	
5494	0	0	0	0	0	0	0	0	0	0	0	
5495	0	0	0	0	0	0	0	0	0	0	0	
5496	1	1	1	1	1	1	1	1	1	1	100	
5497	1	1	1	1	1	1	1	1	1	1	100	
5498	1	1	1	1	1	1	1	1	1	1	100	
5499	1	1	1	1	1	1	1	1	1	1	100	
5500	1	1	1	1	1	1	1	1	1	1	100	
5501	1	1	1	1	1	1	1	1	1	1	100	
5502	1	1	1	1	1	1	1	1	1	1	100	
5503	1	1	1	1	1	1	1	1	1	1	100	
5504	1	1	1	1	1	1	1	1	1	1	100	
5505	1	1	1	1	1	1	1	1	1	1	100	
5506	1	1	1	1	1	1	1	1	1	1	100	
5507	1	1	1	1	1	1	1	1	1	1	100	
5508	1	1	1	1	1	1	1	1	1	1	100	
5509	1	1	1	1	1	1	1	1	1	1	100	
5510	1	1	1	1	1	1	1	1	1	1	100	
5511	1	1	1	1	1	1	1	1	1	1	100	
5512	1	1	1	1	1	1	1	1	1	1	100	
5513	1	1	1	1	1	1	1	1	1	1	100	
5514	1	1	1	1	1	1	1	1	1	1	100	
5515	1	1	1	1	1	1	1	1	1	1	100	
5516	1	1	1	1	1	1	1	1	1	1	100	
5517	1	1	1	1	1	1	1	1	1	1	100	
5518	1	1	1	1	1	1	1	1	1	1	100	
5519	1	1	1	1	1	1	1	1	1	1	100	
5520	1	1	1	1	1	1	1	1	1	1	100	
5521	1	1	1	1	1	1	1	1	1	1	100	
5522	1	1	1	1	1	1	1	1	1	1	100	
5523	1	1	1	1	1	1	1	1	1	1	100	
5524	1	1	1	1	1	1	1	1	1	1	100	
5525	1	1	1	1	1	1	1	1	1	1	100	
5526	1	1	1	1	1	1	1	1	1	1	100	
5527	1	1	1	1	1	1	1	1	1	1	100	
5528	1	1	1	1	1	1	1	1	1	1	100	
5529	1	1	1	1	1	1	1	1	1	1	100	
5530	1	1	1	1	1	1	1	1	1	1	100	
5531	1	1	1	1	1	1	1	1	1	1	100	

5532	1	1	1	1	1	1	1	1	1	1	100
5533	1	1	1	1	1	1	1	1	1	1	100
5534	1	1	1	1	1	1	1	1	1	1	100
5535	1	1	1	1	1	1	1	1	1	1	100
5536	1	1	1	1	1	1	1	1	1	1	100
5537	1	1	1	1	1	1	1	1	1	1	100
5538	1	1	1	1	1	1	1	1	1	1	100
5539	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	100
5541	1	1	1	1	1	1	1	1	1	1	100
5542	1	1	1	1	1	1	1	1	1	1	100
5543	1	1	1	1	1	1	1	1	1	1	100
5544	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	100
5546	1	1	1	1	1	1	1	1	1	1	100
5547	1	1	1	1	1	1	1	1	1	1	100
5548	1	1	1	1	1	1	1	1	1	1	100
5549	1	1	1	1	1	1	1	1	1	1	100
5550	1	1	1	1	1	1	1	1	1	1	100
5551	1	1	1	1	1	1	1	1	1	1	100
5552	1	1	1	1	1	1	1	1	1	1	100
5553	1	1	1	1	1	1	1	0	1	1	90
5554	1	1	1	1	1	0	1	1	1	1	90
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	0	0	0	0	0	0	0	0	0	0	0
5566	0	0	0	0	0	0	0	0	0	0	0
5567	0	0	0	0	0	0	0	0	0	0	0
5568	0	0	0	0	0	0	0	0	0	0	0
5569	0	0	0	0	0	0	0	0	0	0	0
5570	0	0	0	0	0	0	0	0	0	0	0

USA Bin 1 Radar

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)
	1	2	3	4	5	6	7	8	9	10		
5490	0	0	0	0	0	0	0	0	0	0	0	68
5491	0	0	0	0	0	0	0	0	0	0	0	
5492	0	0	0	0	0	0	0	0	0	0	0	
5493	0	0	0	0	0	0	0	0	0	0	0	
5494	0	0	0	0	0	0	0	0	0	0	0	
5495	0	0	0	0	0	0	0	0	0	0	0	
5496	1	1	1	1	1	1	1	1	1	1	100	
5497	1	1	1	1	1	1	1	1	1	1	100	
5498	1	1	1	1	1	1	1	1	1	1	100	
5499	1	1	1	1	1	1	1	1	1	1	100	
5500	1	1	1	1	1	1	1	1	1	1	100	
5501	1	1	1	1	1	1	1	1	1	1	100	
5502	1	1	1	1	1	1	1	1	1	1	100	
5503	1	1	1	1	1	1	1	1	1	1	100	
5504	1	1	1	1	1	1	1	1	1	1	100	
5505	1	1	1	1	1	1	1	1	1	1	100	
5506	1	1	1	1	1	1	1	1	1	1	100	
5507	1	1	1	1	1	1	1	1	1	1	100	
5508	1	1	1	1	1	1	1	1	1	1	100	
5509	1	1	1	1	1	1	1	1	1	1	100	
5510	1	1	1	1	1	1	1	1	1	1	100	
5511	1	1	1	1	1	1	1	1	1	1	100	
5512	1	1	1	1	1	1	1	1	1	1	100	
5513	1	1	1	1	1	1	1	1	1	1	100	
5514	1	1	1	1	1	1	1	1	1	1	100	
5515	1	1	1	1	1	1	1	1	1	1	100	
5516	1	1	1	1	1	1	1	1	1	1	100	
5517	1	1	1	1	1	1	1	1	1	1	100	
5518	1	1	1	1	1	1	1	1	1	1	100	
5519	1	1	1	1	1	1	1	1	1	1	100	
5520	1	1	1	1	1	1	1	1	1	1	100	
5521	1	1	1	1	1	1	1	1	1	1	100	
5522	1	1	1	1	1	1	1	1	1	1	100	
5523	1	1	1	1	1	1	1	1	1	1	100	
5524	1	1	1	1	1	1	1	1	1	1	100	
5525	1	1	1	1	1	1	1	1	1	1	100	
5526	1	1	1	1	1	1	1	1	1	1	100	
5527	1	1	1	1	1	1	1	1	1	1	100	
5528	1	1	1	1	1	1	1	1	1	1	100	
5529	1	1	1	1	1	1	1	1	1	1	100	
5530	1	1	1	1	1	1	1	1	1	1	100	
5531	1	1	1	1	1	1	1	1	1	1	100	

5532	1	1	1	1	1	1	1	1	1	1	100
5533	1	1	1	1	1	1	1	1	1	1	100
5534	1	1	1	1	1	1	1	1	1	1	100
5535	1	1	1	1	1	1	1	1	1	1	100
5536	1	1	1	1	1	1	1	1	1	1	100
5537	1	1	1	1	1	1	1	1	1	1	100
5538	1	1	1	1	1	1	1	1	1	1	100
5539	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	100
5541	1	1	1	1	1	1	1	1	1	1	100
5542	1	1	1	1	1	1	1	1	1	1	100
5543	1	1	1	1	1	1	1	1	1	1	100
5544	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	100
5546	1	1	1	1	1	1	1	1	1	1	100
5547	1	1	1	1	1	1	1	1	1	1	100
5548	1	1	1	1	1	1	1	1	1	1	100
5549	1	1	1	1	1	1	1	1	1	1	100
5550	1	1	1	1	1	1	1	1	1	1	100
5551	1	1	1	1	1	1	1	1	1	1	100
5552	1	1	1	1	1	1	1	1	1	1	100
5553	1	1	1	1	1	1	1	1	1	1	100
5554	1	1	1	1	1	1	1	1	1	1	100
5555	1	1	1	1	1	1	1	1	1	1	100
5556	1	1	1	1	1	1	1	1	1	1	100
5557	1	1	1	1	1	1	1	1	1	1	100
5558	1	1	1	1	1	1	1	1	1	1	100
5559	1	1	1	1	1	1	1	1	1	1	100
5560	1	1	1	1	1	1	1	1	1	1	100
5561	1	1	1	1	1	1	1	1	1	1	100
5562	1	1	1	1	1	1	1	1	1	1	100
5563	1	1	1	1	1	1	1	1	1	1	100
5564	1	1	1	1	1	1	1	1	1	1	100
5565	0	0	0	0	0	0	0	0	0	0	0
5566	0	0	0	0	0	0	0	0	0	0	0
5567	0	0	0	0	0	0	0	0	0	0	0
5568	0	0	0	0	0	0	0	0	0	0	0
5569	0	0	0	0	0	0	0	0	0	0	0
5570	0	0	0	0	0	0	0	0	0	0	0

USA Bin 2 Radar

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)
	1	2	3	4	5	6	7	8	9	10		
5490	0	0	0	0	0	0	0	0	0	0	0	68
5491	0	0	0	0	0	0	0	0	0	0	0	
5492	0	0	0	0	0	0	0	0	0	0	0	
5493	0	0	0	0	0	0	0	0	0	0	0	
5494	0	0	0	0	0	0	0	0	0	0	0	
5495	0	0	0	0	0	0	0	0	0	0	0	
5496	1	1	1	1	1	1	1	1	1	1	100	
5497	1	1	1	1	1	1	1	1	1	1	100	
5498	1	1	1	1	1	1	1	1	1	1	100	
5499	1	1	1	1	1	1	1	1	1	1	100	
5500	1	1	1	1	1	1	1	1	1	1	100	
5501	1	1	1	1	1	1	1	1	1	1	100	
5502	1	1	1	1	1	1	1	1	1	1	100	
5503	1	1	1	1	1	1	1	1	1	1	100	
5504	1	1	1	1	1	1	1	1	1	1	100	
5505	1	1	1	1	1	1	1	1	1	1	100	
5506	1	1	1	1	1	1	1	1	1	1	100	
5507	1	1	1	1	1	1	1	1	1	1	100	
5508	1	1	1	1	1	1	1	1	1	1	100	
5509	1	1	1	1	1	1	1	1	1	1	100	
5510	1	1	1	1	1	1	1	1	1	1	100	
5511	1	1	1	1	1	1	1	1	1	1	100	
5512	1	1	1	1	1	1	1	1	1	1	100	
5513	1	1	1	1	1	1	1	1	1	1	100	
5514	1	1	1	1	1	1	1	1	1	1	100	
5515	1	1	1	1	1	1	1	1	1	1	100	
5516	1	1	1	1	1	1	1	1	1	1	100	
5517	1	1	1	1	1	1	1	1	1	1	100	
5518	1	1	1	1	1	1	1	1	1	1	100	
5519	1	1	1	1	1	1	1	1	1	1	100	
5520	1	1	1	1	1	1	1	1	1	1	100	
5521	1	1	1	1	1	1	1	1	1	1	100	
5522	1	1	1	1	1	1	1	1	1	1	100	
5523	1	1	1	1	1	1	1	1	1	1	100	
5524	1	1	1	1	1	1	1	1	1	1	100	
5525	1	1	1	1	1	1	1	1	1	1	100	
5526	1	1	1	1	1	1	1	1	1	1	100	
5527	1	1	1	1	1	1	1	1	1	1	100	
5528	1	1	1	1	1	1	1	1	1	1	100	
5529	1	1	1	1	1	1	1	1	1	1	100	
5530	1	1	1	1	1	1	1	1	1	1	100	
5531	1	1	1	1	1	1	1	1	1	1	100	

5532	1	1	1	1	1	1	1	1	1	1	100
5533	1	1	1	1	1	1	1	1	1	1	100
5534	1	1	1	1	1	1	1	1	1	1	100
5535	1	1	1	1	1	1	1	1	1	1	100
5536	1	1	1	1	1	1	1	1	1	1	100
5537	1	1	1	1	1	1	1	1	1	1	100
5538	1	1	1	1	1	1	1	1	1	1	100
5539	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	100
5541	1	1	1	1	1	1	1	1	1	1	100
5542	1	1	1	1	1	1	1	1	1	1	100
5543	1	1	1	1	1	1	1	1	1	1	100
5544	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	100
5546	1	1	1	1	1	1	1	1	1	1	100
5547	1	1	1	1	1	1	1	1	1	1	100
5548	1	1	1	1	1	1	1	1	1	1	100
5549	1	1	1	1	1	1	1	1	1	1	100
5550	1	1	1	1	1	1	1	1	1	1	100
5551	1	1	1	1	1	1	1	1	1	1	100
5552	1	1	1	1	1	1	1	1	1	1	100
5553	1	1	1	1	1	1	1	1	1	1	100
5554	1	1	1	1	1	1	1	1	1	1	100
5555	1	1	1	1	1	1	1	1	1	1	100
5556	1	1	1	1	1	1	1	1	1	1	100
5557	1	1	1	1	1	1	1	1	1	1	100
5558	1	1	1	1	1	1	1	1	1	1	100
5559	1	1	1	1	1	1	1	1	1	1	100
5560	1	1	1	1	1	1	1	1	1	1	100
5561	1	1	1	1	1	1	1	1	1	1	100
5562	1	1	1	1	1	1	1	1	1	1	100
5563	1	1	1	1	1	1	1	1	1	1	100
5564	1	1	1	1	1	1	1	1	1	1	100
5565	0	0	0	0	0	0	0	0	0	0	0
5566	0	0	0	0	0	0	0	0	0	0	0
5567	0	0	0	0	0	0	0	0	0	0	0
5568	0	0	0	0	0	0	0	0	0	0	0
5569	0	0	0	0	0	0	0	0	0	0	0
5570	0	0	0	0	0	0	0	0	0	0	0

USA Bin 3 Radar

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)
	1	2	3	4	5	6	7	8	9	10		
5490	0	0	0	0	0	0	0	0	0	0	0	68
5491	0	0	0	0	0	0	0	0	0	0	0	
5492	0	0	0	0	0	0	0	0	0	0	0	
5493	0	0	0	0	0	0	0	0	0	0	0	
5494	0	0	0	0	0	0	0	0	0	0	0	
5495	0	0	0	0	0	0	0	0	0	0	0	
5496	1	1	1	1	1	1	1	1	1	1	100	
5497	1	1	1	1	1	1	1	1	1	1	100	
5498	1	1	1	1	1	1	1	1	1	1	100	
5499	1	1	1	1	1	1	1	1	1	1	100	
5500	1	1	1	1	1	1	1	1	1	1	100	
5501	1	1	1	1	1	1	1	1	1	1	100	
5502	1	1	1	1	1	1	1	1	1	1	100	
5503	1	1	1	1	1	1	1	1	1	1	100	
5504	1	1	1	1	1	1	1	1	1	1	100	
5505	1	1	1	1	1	1	1	1	1	1	100	
5506	1	1	1	1	1	1	1	1	1	1	100	
5507	1	1	1	1	1	1	1	1	1	1	100	
5508	1	1	1	1	1	1	1	1	1	1	100	
5509	1	1	1	1	1	1	1	1	1	1	100	
5510	1	1	1	1	1	1	1	1	1	1	100	
5511	1	1	1	1	1	1	1	1	1	1	100	
5512	1	1	1	1	1	1	1	1	1	1	100	
5513	1	1	1	1	1	1	1	1	1	1	100	
5514	1	1	1	1	1	1	1	1	1	1	100	
5515	1	1	1	1	1	1	1	1	1	1	100	
5516	1	1	1	1	1	1	1	1	1	1	100	
5517	1	1	1	1	1	1	1	1	1	1	100	
5518	1	1	1	1	1	1	1	1	1	1	100	
5519	1	1	1	1	1	1	1	1	1	1	100	
5520	1	1	1	1	1	1	1	1	1	1	100	
5521	1	1	1	1	1	1	1	1	1	1	100	
5522	1	1	1	1	1	1	1	1	1	1	100	
5523	1	1	1	1	1	1	1	1	1	1	100	
5524	1	1	1	1	1	1	1	1	1	1	100	
5525	1	1	1	1	1	1	1	1	1	1	100	
5526	1	1	1	1	1	1	1	1	1	1	100	
5527	1	1	1	1	1	1	1	1	1	1	100	
5528	1	1	1	1	1	1	1	1	1	1	100	
5529	1	1	1	1	1	1	1	1	1	1	100	
5530	1	1	1	1	1	1	1	1	1	1	100	
5531	1	1	1	1	1	1	1	1	1	1	100	

5532	1	1	1	1	1	1	1	1	1	1	100
5533	1	1	1	1	1	1	1	1	1	1	100
5534	1	1	1	1	1	1	1	1	1	1	100
5535	1	1	1	1	1	1	1	1	1	1	100
5536	1	1	1	1	1	1	1	1	1	1	100
5537	1	1	1	1	1	1	1	1	1	1	100
5538	1	1	1	1	1	1	1	1	1	1	100
5539	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	100
5541	1	1	1	1	1	1	1	1	1	1	100
5542	1	1	1	1	1	1	1	1	1	1	100
5543	1	1	1	1	1	1	1	1	1	1	100
5544	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	100
5546	1	1	1	1	1	1	1	1	1	1	100
5547	1	1	1	1	1	1	1	1	1	1	100
5548	1	1	1	1	1	1	1	1	1	1	100
5549	1	1	1	1	1	1	1	1	1	1	100
5550	1	1	1	1	1	1	1	1	1	1	100
5551	1	1	1	1	1	1	1	1	1	1	100
5552	1	1	1	1	1	1	1	1	1	1	100
5553	1	1	1	1	1	1	1	1	1	1	100
5554	1	1	1	1	1	1	1	1	1	1	100
5555	1	1	1	1	1	1	1	1	1	1	100
5556	1	1	1	1	1	1	1	1	1	1	100
5557	1	1	1	1	1	1	1	1	1	1	100
5558	1	1	1	1	1	1	1	1	1	1	100
5559	1	1	1	1	1	1	1	1	1	1	100
5560	1	1	1	1	1	1	1	1	1	1	100
5561	1	1	1	1	1	1	1	1	1	1	100
5562	1	1	1	1	1	1	1	1	1	1	100
5563	1	1	1	1	1	1	1	1	1	1	100
5564	1	1	1	1	1	1	1	1	1	1	100
5565	0	0	0	0	0	0	0	0	0	0	0
5566	0	0	0	0	0	0	0	0	0	0	0
5567	0	0	0	0	0	0	0	0	0	0	0
5568	0	0	0	0	0	0	0	0	0	0	0
5569	0	0	0	0	0	0	0	0	0	0	0
5570	0	0	0	0	0	0	0	0	0	0	0

USA Bin 4 Radar

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)
	1	2	3	4	5	6	7	8	9	10		
5490	1	1	1	1	1	1	1	1	1	1	100	80
5491	1	1	1	1	1	1	1	1	1	1	100	
5492	1	1	1	1	1	1	1	1	1	1	100	
5493	1	1	1	1	1	1	1	1	1	1	100	
5494	1	1	1	1	1	1	1	1	1	1	100	
5495	1	1	1	1	1	1	1	1	1	1	100	
5496	1	1	1	1	1	1	1	1	1	1	100	
5497	1	1	1	1	1	1	1	1	1	1	100	
5498	1	1	1	1	1	1	1	1	1	1	100	
5499	1	1	1	1	1	1	1	1	1	1	100	
5500	1	1	1	1	1	1	1	1	1	1	100	
5501	1	1	1	1	1	1	1	1	1	1	100	
5502	1	1	1	1	1	1	1	1	1	1	100	
5503	1	1	1	1	1	1	1	1	1	1	100	
5504	1	1	1	1	1	1	1	1	1	1	100	
5505	1	1	1	1	1	1	1	1	1	1	100	
5506	1	1	1	1	1	1	1	1	1	1	100	
5507	1	1	1	1	1	1	1	1	1	1	100	
5508	1	1	1	1	1	1	1	1	1	1	100	
5509	1	1	1	1	1	1	1	1	1	1	100	
5510	1	1	1	1	1	1	1	1	1	1	100	
5511	1	1	1	1	1	1	1	1	1	1	100	
5512	1	1	1	1	1	1	1	1	1	1	100	
5513	1	1	1	1	1	1	1	1	1	1	100	
5514	1	1	1	1	1	1	1	1	1	1	100	
5515	1	1	1	1	1	1	1	1	1	1	100	
5516	1	1	1	1	1	1	1	1	1	1	100	
5517	1	1	1	1	1	1	1	1	1	1	100	
5518	1	1	1	1	1	1	1	1	1	1	100	
5519	1	1	1	1	1	1	1	1	1	1	100	
5520	1	1	1	1	1	1	1	1	1	1	100	
5521	1	1	1	1	1	1	1	1	1	1	100	
5522	1	1	1	1	1	1	1	1	1	1	100	
5523	1	1	1	1	1	1	1	1	1	1	100	
5524	1	1	1	1	1	1	1	1	1	1	100	
5525	1	1	1	1	1	1	1	1	1	1	100	
5526	1	1	1	1	1	1	1	1	1	1	100	
5527	1	1	1	1	1	1	1	1	1	1	100	
5528	1	1	1	1	1	1	1	1	1	1	100	
5529	1	1	1	1	1	1	1	1	1	1	100	
5530	1	1	1	1	1	1	1	1	1	1	100	
5531	1	1	1	1	1	1	1	1	1	1	100	

5532	1	1	1	1	1	1	1	1	1	1	100
5533	1	1	1	1	1	1	1	1	1	1	100
5534	1	1	1	1	1	1	1	1	1	1	100
5535	1	1	1	1	1	1	1	1	1	1	100
5536	1	1	1	1	1	1	1	1	1	1	100
5537	1	1	1	1	1	1	1	1	1	1	100
5538	1	1	1	1	1	1	1	1	1	1	100
5539	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	100
5541	1	1	1	1	1	1	1	1	1	1	100
5542	1	1	1	1	1	1	1	1	1	1	100
5543	1	1	1	1	1	1	1	1	1	1	100
5544	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	100
5546	1	1	1	1	1	1	1	1	1	1	100
5547	1	1	1	1	1	1	1	1	1	1	100
5548	1	1	1	1	1	1	1	1	1	1	100
5549	1	1	1	1	1	1	1	1	1	1	100
5550	1	1	1	1	1	1	1	1	1	1	100
5551	1	1	1	1	1	1	1	1	1	1	100
5552	1	1	1	1	1	1	1	1	1	1	100
5553	1	1	1	1	1	1	1	1	1	1	100
5554	1	1	1	1	1	1	1	1	1	1	100
5555	1	1	1	1	1	1	1	1	1	1	100
5556	1	1	1	1	1	1	1	1	1	1	100
5557	1	1	1	1	1	1	1	1	1	1	100
5558	1	1	1	1	1	1	1	1	1	1	100
5559	1	1	1	1	1	1	1	1	1	1	100
5560	1	1	1	1	1	1	1	1	1	1	100
5561	1	1	1	1	1	1	1	1	1	1	100
5562	1	1	1	1	1	1	1	1	1	1	100
5563	1	1	1	1	1	1	1	1	1	1	100
5564	1	1	1	1	1	1	1	1	1	1	100
5565	1	1	1	1	1	1	1	1	1	1	100
5566	1	1	1	1	1	1	1	1	1	1	100
5567	1	1	1	1	1	1	1	1	1	1	100
5568	1	1	1	1	1	1	1	0	1	1	90
5569	1	1	1	1	1	1	1	1	1	1	100
5570	1	1	1	1	1	1	1	1	1	1	100

USA Bin 5 Radar

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)										Detection Rate (%)	Detection Bandwidth (MHz)
	1	2	3	4	5	6	7	8	9	10		
5490	1	0	0	1	1	0	1	1	1	1	70	64
5491	1	0	0	1	0	0	0	1	1	1	50	
5492	1	1	1	0	0	1	1	1	0	1	70	
5493	1	1	1	1	0	1	1	0	1	1	80	
5494	1	1	1	1	1	0	0	1	1	1	80	
5495	1	1	1	1	1	0	0	1	0	1	70	
5496	0	1	1	0	1	1	1	1	1	1	80	
5497	1	1	1	1	1	0	1	1	1	1	90	
5498	1	1	1	1	1	1	1	1	1	1	100	
5499	1	1	1	1	1	1	1	1	1	1	100	
5500	1	1	1	1	1	1	1	1	1	1	100	
5501	1	1	1	1	1	1	1	1	1	1	100	
5502	1	1	1	1	1	1	1	1	1	1	100	
5503	1	1	1	1	1	1	1	1	1	1	100	
5504	1	1	1	1	1	1	1	1	1	1	100	
5505	1	1	1	1	1	1	1	1	1	1	100	
5506	1	1	1	1	1	1	1	1	1	1	100	
5507	1	1	1	1	1	1	1	1	1	1	100	
5508	1	1	1	1	1	1	1	1	1	1	100	
5509	1	1	1	1	1	1	1	1	1	1	100	
5510	1	1	1	1	1	1	1	1	1	1	100	
5511	1	1	1	1	1	1	1	1	1	1	100	
5512	1	1	1	1	1	1	1	1	1	1	100	
5513	1	1	1	1	1	1	1	1	1	1	100	
5514	1	1	1	1	1	1	1	1	1	1	100	
5515	1	1	1	1	1	1	1	1	1	1	100	
5516	1	1	1	1	1	1	1	1	1	1	100	
5517	1	1	1	1	1	1	1	1	1	1	100	
5518	1	1	1	1	1	1	1	1	1	1	100	
5519	1	1	1	1	1	1	1	1	1	1	100	
5520	1	1	1	1	1	1	1	1	1	1	100	
5521	1	1	1	1	1	1	1	1	1	1	100	
5522	1	1	1	1	1	1	1	1	1	1	100	
5523	1	1	1	1	1	1	1	1	1	1	100	
5524	1	1	1	1	1	1	1	1	1	1	100	
5525	1	1	1	1	1	1	1	1	1	1	100	
5526	1	1	1	1	1	1	1	1	1	1	100	
5527	1	1	1	1	1	1	1	1	1	1	100	
5528	1	1	1	1	1	1	1	1	1	1	100	
5529	1	1	1	1	1	1	1	1	1	1	100	
5530	1	1	1	1	1	1	1	1	1	1	100	
5531	1	1	1	1	1	1	1	1	1	1	100	

5532	1	1	1	1	1	1	1	1	1	1	100
5533	1	1	1	1	1	1	1	1	1	1	100
5534	1	1	1	1	1	1	1	1	1	1	100
5535	1	1	1	1	1	1	1	1	1	1	100
5536	1	1	1	1	1	1	1	1	1	1	100
5537	1	1	1	1	1	1	1	1	1	1	100
5538	1	1	1	1	1	1	1	1	1	1	100
5539	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	100
5541	1	1	1	1	1	1	1	1	1	1	100
5542	1	1	1	1	1	1	1	1	1	1	100
5543	1	1	1	1	1	1	1	1	1	1	100
5544	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	100
5546	1	1	1	1	1	1	1	1	1	1	100
5547	1	1	1	1	1	1	1	1	1	1	100
5548	1	1	1	1	1	1	1	1	1	1	100
5549	1	1	1	1	1	1	1	1	1	1	100
5550	1	1	1	1	1	1	1	1	1	1	100
5551	1	1	1	1	1	1	1	1	1	1	100
5552	1	1	1	1	1	1	1	1	1	1	100
5553	1	1	1	1	1	1	1	1	1	1	100
5554	1	1	1	1	1	1	1	1	1	1	100
5555	1	1	1	1	1	1	1	1	1	1	100
5556	1	1	1	1	1	1	1	1	1	1	100
5557	1	1	1	1	1	1	1	1	1	1	100
5558	1	1	1	1	1	1	1	1	1	1	100
5559	1	1	1	1	1	1	1	1	1	1	100
5560	1	1	1	1	1	1	1	1	1	1	100
5561	1	1	1	1	1	1	1	1	1	1	100
5562	1	1	1	1	1	1	1	1	1	0	90
5563	1	1	1	1	0	1	1	0	1	1	80
5564	0	1	1	0	1	1	1	1	1	1	80
5565	1	1	1	1	1	1	1	0	1	0	80
5566	1	1	1	1	0	1	1	1	1	1	90
5567	1	1	1	0	1	1	0	1	1	1	80
5568	1	1	1	1	1	1	1	1	1	1	100
5569	1	0	1	0	0	1	1	1	1	1	70
5570	1	0	1	1	1	0	1	0	1	0	60

USA Frequency Hopping Radar

4. 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 1R.

Initial Channel Availability Check Time



5. 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.

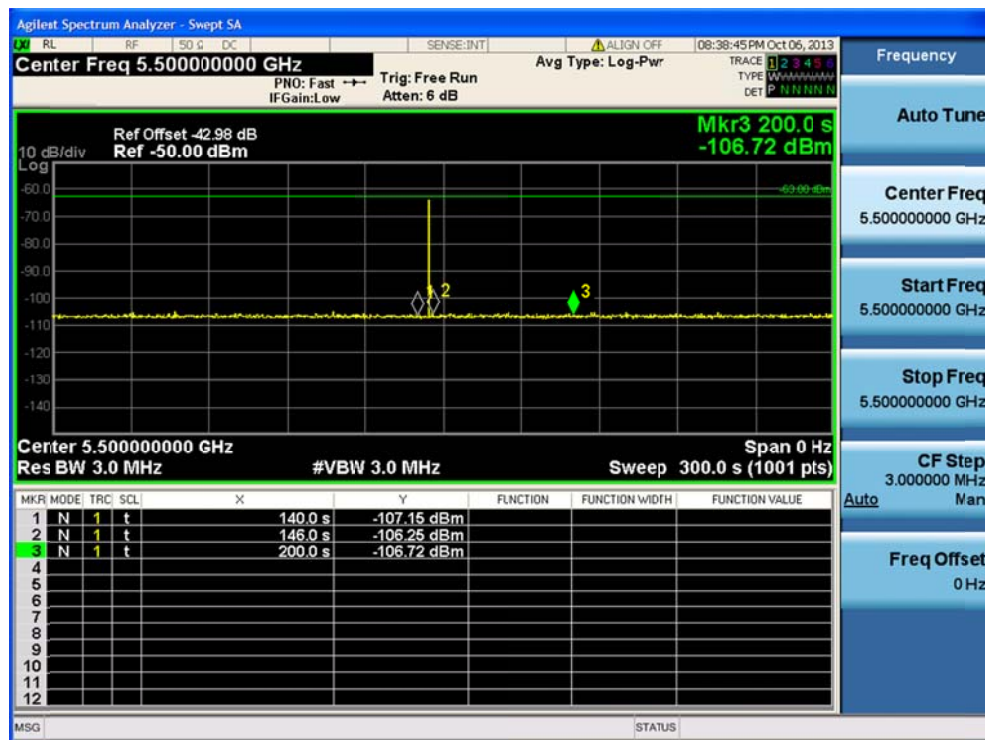
The UUT is powered on at T_0 . T_1 denotes the instant when the UUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T_1 and will end no sooner than $T_1 + 60$ seconds.

A single Burst of short pulse of radar type 1 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



6. 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 1 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



7. 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.

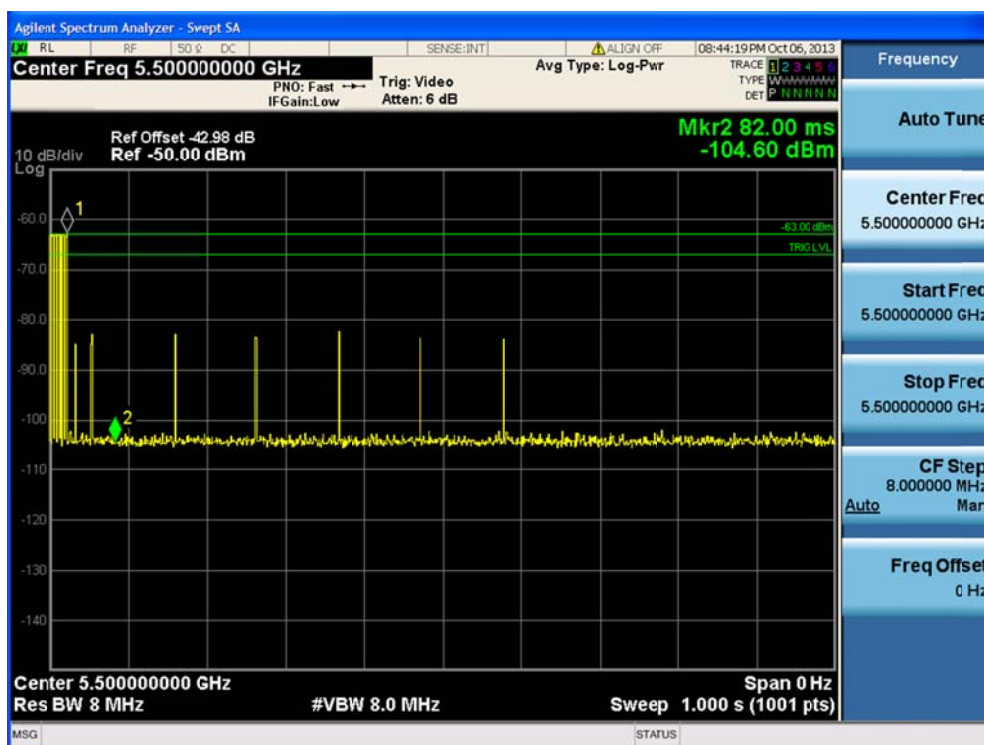
The steps below define the procedure to determine the above mentioned parameters when a radar Burst with a level equal to the DFS Detection Threshold + 1dB (-63dBm) is generated on the Operating Channel of the U-NII device.

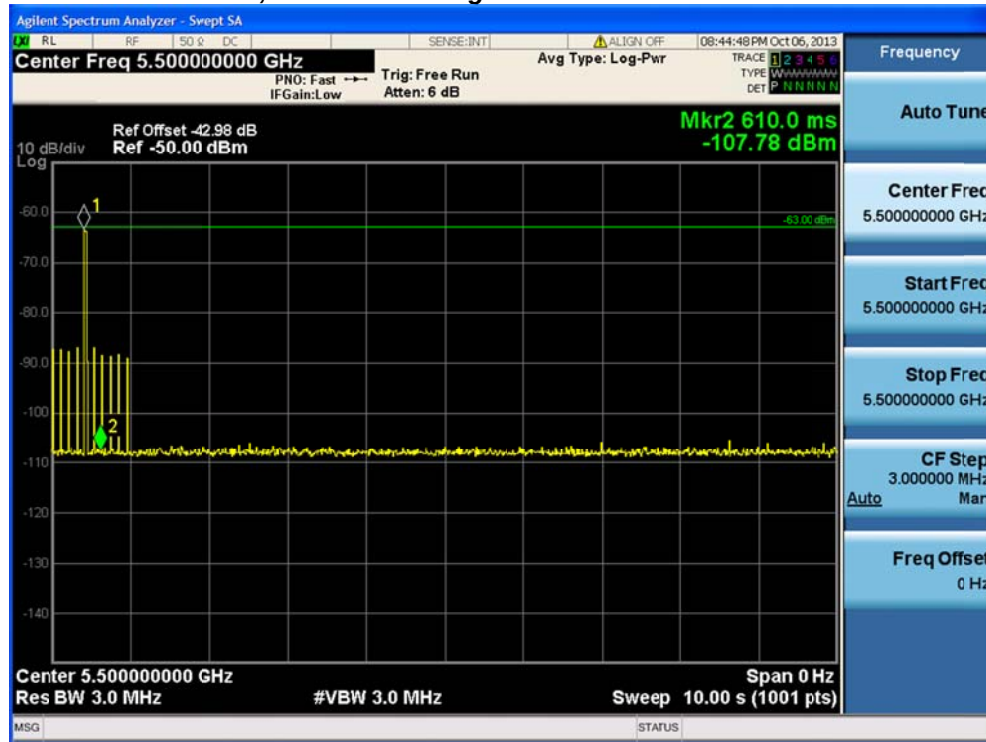
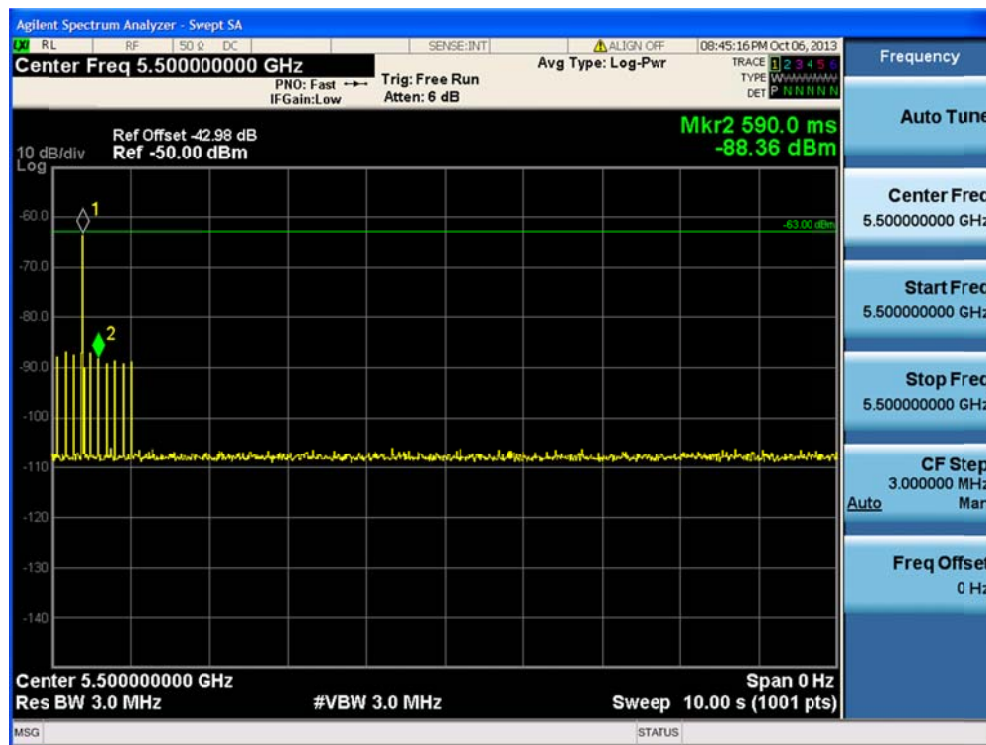
A U-NII device operating as a Client Device will associate with the UUT (Master) at 5500 MHz. Stream the MPEG test file from the Master Device to the Client Device on the selected Channel for the entire period of the test.

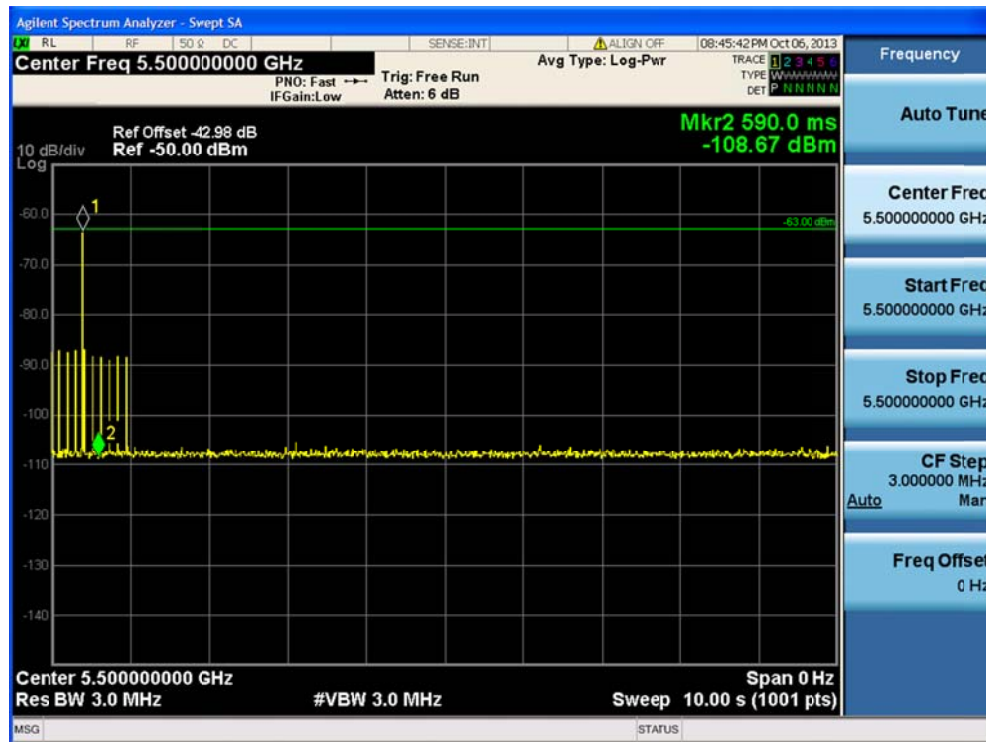
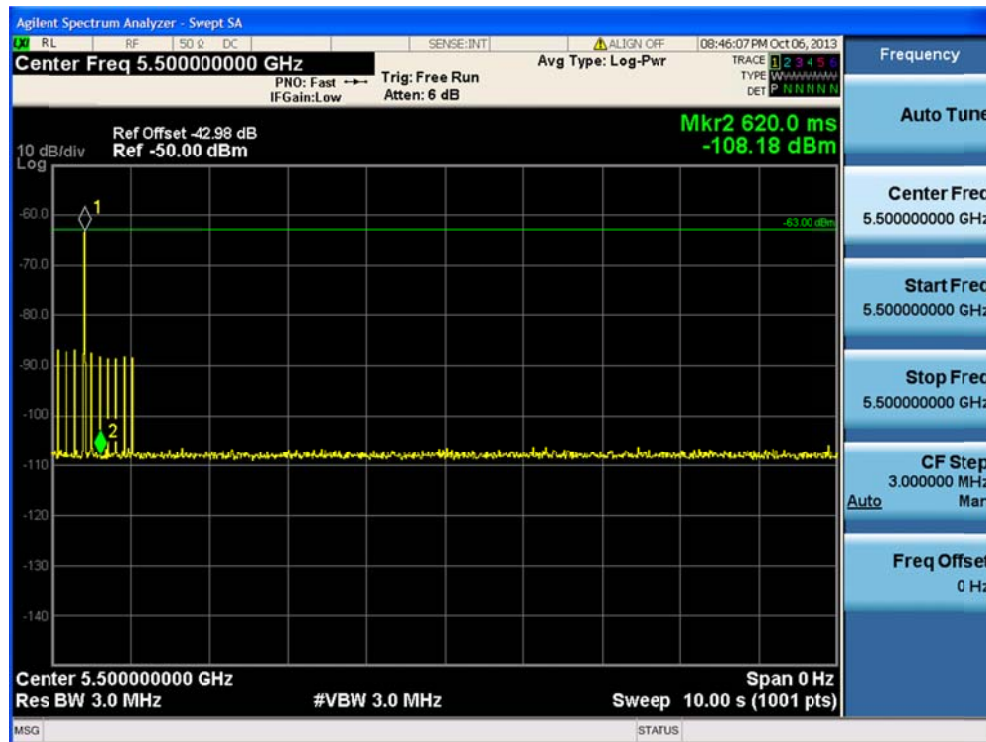
At time T_0 the Radar Waveform generator sends a Burst of pulses for each of the radar types at -63dBm.

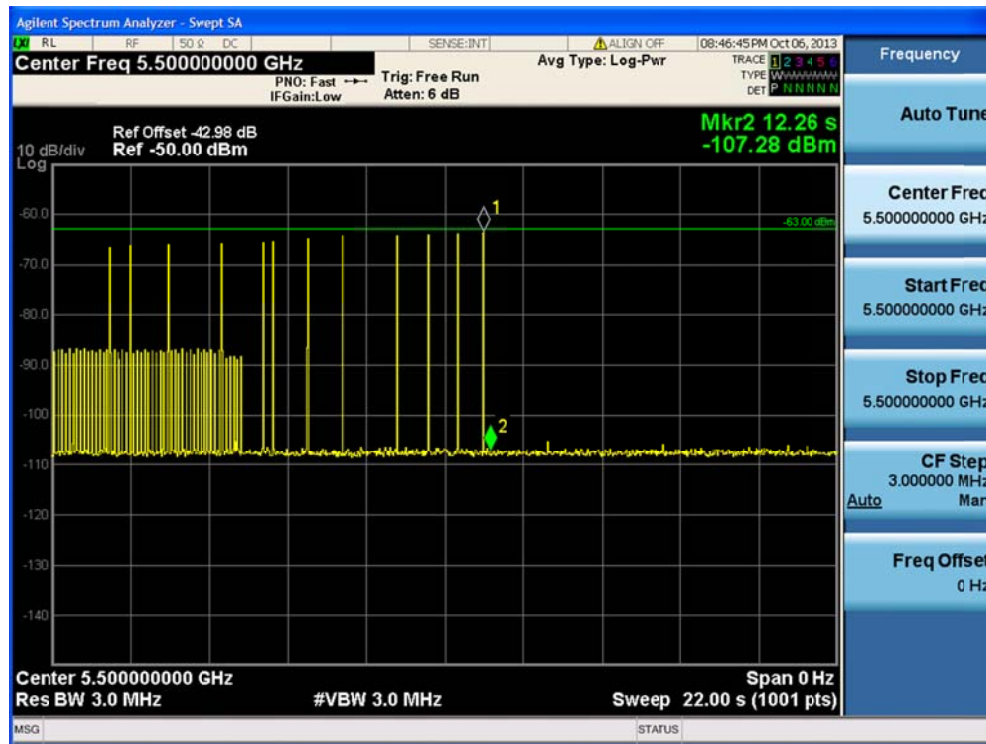
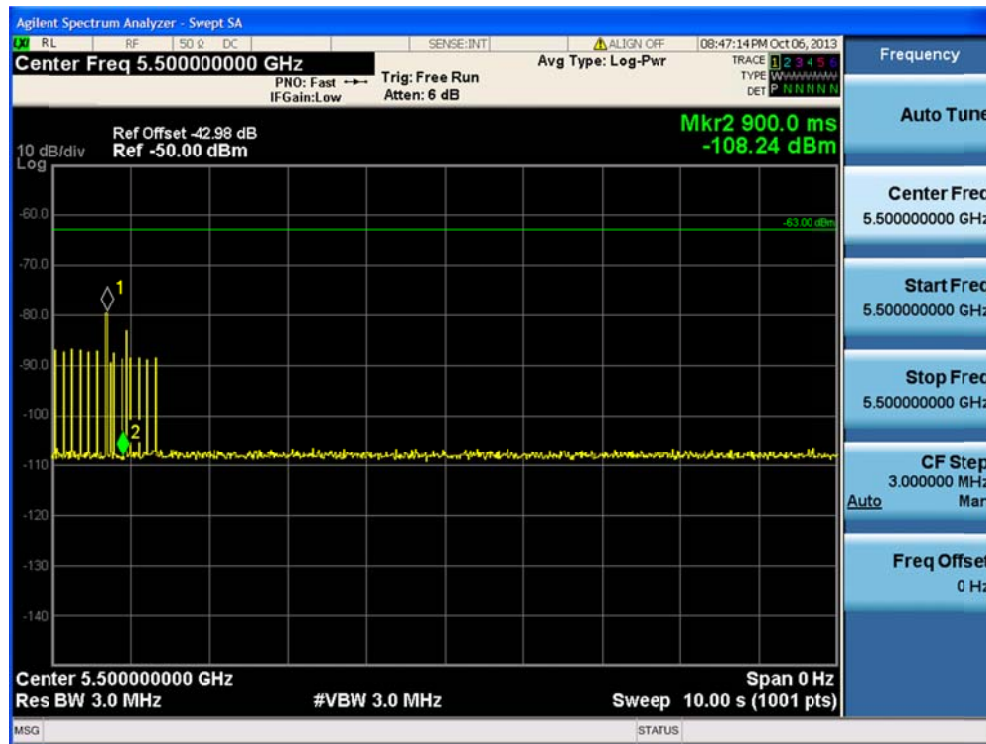
Observe the transmissions of the UUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). Compare the Channel Move Time and Channel Closing Transmission Time results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

The following plot demonstrates a channel close time of 50ms, with an aggregate of no more than 60 ms. Type 1 radar was used for this data.



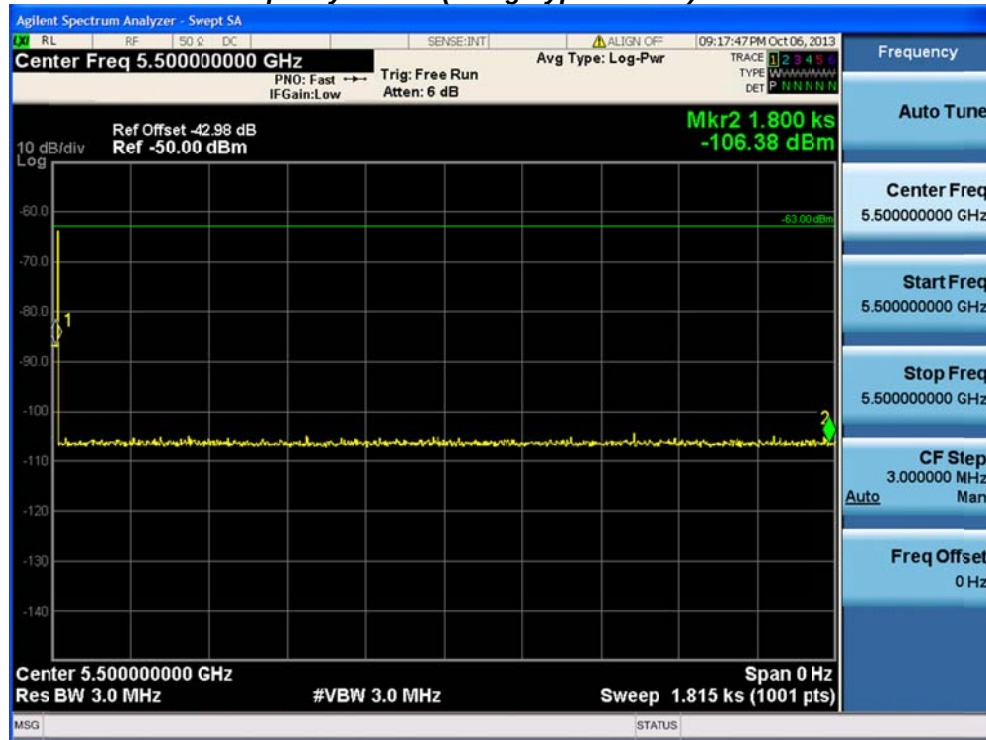
Channel Move Time, Channel Closing Transmission Time for USA Bin 1**Channel Move Time, Channel Closing Transmission Time for USA Bin 2**

Channel Move Time, Channel Closing Transmission Time for USA Bin 3**Channel Move Time, Channel Closing Transmission Time for USA Bin 4**

Channel Move Time, Channel Closing Transmission Time for USA Bin 5**Channel Move Time, Channel Closing Transmission Time for USA Frequency Hopping**

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 1 radar)



8. **Statistical Performance Check**

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

A U-NII device operating as a Client Device will associate with the UUT (Master) at 5500 MHz. 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. The data represents the worst case detection for 20 MHz and 40 MHz signal bandwidths.

USA Bin 1 Radar Statistical Performance

Trial #	PW	PRI	Pulses	1=Detection 0=No Detection	Detection Percentage	Limit
1	18	1	1428	1	86.7%	60.0%
2	18	1	1428	1		
3	18	1	1428	1		
4	18	1	1428	1		
5	18	1	1428	1		
6	18	1	1428	1		
7	18	1	1428	0		
8	18	1	1428	0		
9	18	1	1428	1		
10	18	1	1428	1		
11	18	1	1428	1		
12	18	1	1428	1		
13	18	1	1428	1		
14	18	1	1428	1		
15	18	1	1428	1		
16	18	1	1428	1		
17	18	1	1428	1		
18	18	1	1428	1		
19	18	1	1428	1		
20	18	1	1428	1		
21	18	1	1428	1		
22	18	1	1428	1		
23	18	1	1428	1		
24	18	1	1428	1		
25	18	1	1428	0		
26	18	1	1428	1		
27	18	1	1428	1		
28	18	1	1428	1		
29	18	1	1428	1		
30	18	1	1428	0		

USA Bin 2 Radar Statistical Performance

Trial #	PW	PRI	Pulses	1=Detection 0=No Detection	Detection Percentage	Limit
1	29	2.9	191	1	83.3%	60.0%
2	23	4.5	172	0		
3	25	3.1	183	1		
4	28	2.9	209	0		
5	24	1.9	201	1		
6	24	2.1	222	1		
7	25	3.4	199	1		
8	29	4.5	186	1		
9	27	3.4	176	0		
10	29	2.5	213	1		
11	27	1.1	169	1		
12	27	1.2	189	1		
13	24	3.3	188	1		
14	27	3.4	224	1		
15	26	1.2	227	0		
16	29	3.5	159	1		
17	25	3.5	172	1		
18	28	3.8	215	0		
19	24	4.8	183	1		
20	24	3.4	218	1		
21	26	1.8	166	1		
22	28	2.3	170	1		
23	27	2.1	193	1		
24	28	2.8	220	1		
25	29	3.5	172	1		
26	24	4.4	169	1		
27	25	1.7	228	1		
28	23	1.7	152	1		
29	24	5	179	1		
30	23	1.2	220	1		

USA Bin 3 Radar Statistical Performance

Trial #	PW	PRI	Pulses	1=Detection 0=No Detection	Detection Percentage	Limit
1	18	9.8	420	1	80.0%	60.0%
2	16	8	345	0		
3	16	6.4	340	1		
4	18	8.5	229	1		
5	16	6.4	346	1		
6	17	8.4	312	1		
7	17	7.9	496	1		
8	17	6.1	421	1		
9	17	8.3	244	0		
10	17	9.7	329	1		
11	17	9.8	312	1		
12	16	8.6	495	1		
13	16	7.2	274	1		
14	17	8.3	408	1		
15	18	8.4	345	0		
16	16	8.9	333	1		
17	16	9.4	442	1		
18	17	10	214	0		
19	16	8.5	327	1		
20	16	10	266	1		
21	17	6.7	486	1		
22	17	8.4	262	1		
23	18	6	368	1		
24	17	6	289	1		
25	16	6.7	289	1		
26	17	7.9	393	1		
27	18	7.3	279	1		
28	16	9.6	500	1		
29	17	9.1	334	0		
30	18	9.8	460	0		

USA Bin 4 Radar Statistical Performance

Trial #	PW	PRI	Pulses	1=Detection 0=No Detection	Detection Percentage	Limit
1	14	18.7	391	1	86.7%	60.0%
2	16	16.9	201	1		
3	14	16.3	461	1		
4	15	18.4	220	0		
5	12	16.1	444	1		
6	13	19.1	291	0		
7	14	19.1	437	1		
8	16	15	354	1		
9	16	14.3	409	1		
10	12	14.6	435	1		
11	14	13.6	489	0		
12	15	18.2	242	1		
13	15	11.1	307	1		
14	15	16.5	277	1		
15	14	16.3	455	1		
16	15	16	350	0		
17	14	18.4	251	1		
18	16	14.1	206	1		
19	14	16.7	218	1		
20	13	18.3	345	1		
21	16	13.6	490	1		
22	13	13.5	466	1		
23	14	12.8	467	1		
24	14	12.2	435	1		
25	12	15	461	1		
26	14	16.3	499	1		
27	12	12.3	376	1		
28	13	18.6	298	1		
29	14	15.6	251	1		
30	14	11.1	284	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:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (86.7\% + 83.3\% + 80.0\% + 86.7\%) / 4 = 84.2\% (>80\%)$$

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

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		

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

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 Bin 5 Trial #1

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	20	55	1082		0.240252
2	2	18	55	1004		0.807807
3	3	5	85	1367	1880	1.612434
4	1	12	90			2.120267
5	2	16	60	1252		3.126291
6	3	5	100	1056	1359	3.583747
7	2	5	60	1023		4.301418
8	3	5	90	1411	1656	5.249867
9	2	17	55	1897		5.829727
10	2	11	50	1954		6.51286
11	1	20	65			7.473767
12	1	9	75			8.102484
13	2	8	100	1994		9.155181
14	3	16	55	1321	1695	9.682434
15	1	7	70			10.38326
16	3	20	90	1648	1755	11.077497
17	3	10	55	1577	1586	11.672798

USA Bin 5 Trial #2

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	8	65			0.4911
2	2	9	95	1721		1.157769
3	3	11	80	1462	1586	1.693009
4	3	15	80	1989	1817	2.527172
5	1	20	80			2.822517
6	1	8	95			3.69647
7	3	5	55	1036	1542	4.607356
8	3	14	55	1833	1858	4.879175
9	2	6	50	1068		5.64412
10	1	16	60			6.51393
11	3	12	60	1762	1170	7.048077
12	2	14	75	1650		7.896795
13	2	7	55	1374		8.175713
14	1	6	70			9.306719
15	1	15	60			9.887741
16	1	16	85			10.29207
17	1	5	55			10.934505
18	2	10	80	1697		11.36841

USA Bin 5 Trial #3

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	17	65	1512	1139	1.148879
2	2	5	65	1327		2.285906
3	2	10	85	1932		3.36486
4	1	5	80			4.424039
5	3	12	100	1796	1784	5.657736
6	1	6	50			7.148978
7	1	12	80			7.819745
8	2	8	75	1762		8.95348



9	3	13	95	1207	1895	10.710846
10	2	16	90	1873		11.788011
USA Bin 5 Trial #4						
Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	6	60	1550	1727	1.022835
2	2	8	70	1001		2.521889
3	1	7	75			2.922423
4	2	10	50	1333		4.316285
5	1	8	85			5.940284
6	1	5	55			7.207561
7	3	19	50	1982	1773	9.318042
8	1	13	95			10.033573
9	1	8	80			10.999905
USA Bin 5 Trial #5						
Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	16	50	1132		0.294716
2	1	20	80			2.982369
3	1	20	75			3.493122
4	3	7	90	1853	1933	4.926226
5	2	5	75	1842		7.254728
6	3	5	55	1218	1217	7.74554
7	2	17	65	1251		9.748782
8	1	15	50			10.623303
USA Bin 5 Trial #6						
Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	16	90			0.065991
2	1	7	95			0.809236
3	1	13	65			1.565187
4	2	17	65	1691		2.199308
5	2	10	65	1912		2.667558
6	3	19	90	1855	1811	3.408376
7	1	18	80			3.881536
8	1	19	55			4.508149
9	3	14	60	1189	1494	5.216515
10	2	18	100	1313		5.898668
11	2	16	95	1710		6.398133
12	3	11	70	1558	1539	7.037678
13	2	12	60	1288		7.276457
14	3	18	50	1100	1423	8.133964
15	2	10	90	1438		8.869869
16	3	5	60	1654	1464	9.084427
17	2	17	85	1168		9.977536
18	1	10	80			10.303819
19	3	12	100	1312	1266	11.19469
20	3	14	95	1653	1514	11.971377
USA Bin 5 Trial #7						
Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	19	80	1359		0.07146
2	1	6	85			2.089543



3	1	15	100			2.977354
4	2	8	65	1258		4.063244
5	3	7	85	1119	1850	4.773843
6	2	6	75	1121		6.130765
7	2	10	70	1195		6.939433
8	2	13	75	1278		8.416481
9	3	11	75	1729	1771	9.389097
10	3	7	70	1045	1523	10.224897
11	2	17	95	1499		11.028412

USA Bin 5 Trial #8

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	7	80			0.230674
2	1	5	80			1.35551
3	2	7	80	1510		1.895093
4	1	14	90			2.789797
5	3	5	75	1452	1005	3.379492
6	1	19	70			4.061117
7	3	5	90	1395	1794	4.670295
8	1	10	50			5.623445
9	3	14	90	1486	1626	6.152417
10	1	10	85			6.994674
11	1	15	100			8.17455
12	1	15	75			8.555141
13	1	20	100			9.316086
14	2	14	65	1558		10.131332
15	1	15	70			10.686887
16	1	12	70			11.852708

USA Bin 5 Trial #9

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	15	70			1.038294
2	3	9	60	1889	1900	1.658596
3	1	10	80			3.242917
4	2	16	75	1384		4.216476
5	1	13	90			5.506238
6	3	5	80	1183	1848	7.229619
7	3	17	85	1321	1199	8.720052
8	3	9	50	1092	1074	10.174805
9	3	10	60	1717	1819	11.280058

USA Bin 5 Trial #10

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	8	100	1379	1970	0.934434
2	2	20	85	1139		1.342596
3	2	11	80	1823		3.860711
4	3	10	90	1327	1181	4.033317
5	1	7	75			6.154001
6	3	14	80	1155	1826	7.622618
7	3	16	65	1056	1983	8.848954
8	1	10	70			9.799637
9	1	13	75			11.155072



USA Bin 5 Trial #11

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	9	100			0.073928
2	2	16	80	1135		1.678153
3	2	20	85	1531		3.148753
4	3	6	100	1028	1444	5.307519
5	2	11	90	1306		6.611895
6	1	15	65			6.699562
7	3	18	75	1775	1291	9.125521
8	2	11	55	1132		9.443201
9	3	8	100	1780	1812	11.391918

USA Bin 5 Trial #12

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	5	100	1199		0.177226
2	3	17	100	1928	1663	0.640818
3	2	8	85	1106		1.721398
4	3	19	70	1730	1876	2.310143
5	3	20	65	1491	1776	2.554934
6	3	14	75	1813	1167	3.565045
7	2	17	50	1893		4.018736
8	3	15	85	1271	1362	4.552332
9	2	17	55	1366		5.269939
10	2	13	65	1134		6.003975
11	1	11	70			6.649504
12	3	13	60	1470	1929	7.56598
13	3	8	80	1928	1551	7.949416
14	3	14	70	1268	1380	8.48899
15	2	13	85	1829		9.469209
16	2	18	55	1786		9.98944
17	2	11	50	1002		10.717618
18	1	8	65			11.219925
19	1	20	60			11.979897

USA Bin 5 Trial #13

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	6	65	1318		0.697278
2	3	8	55	1896	1268	1.631534
3	2	8	95	1292		2.305888
4	3	14	100	1419	1203	2.93374
5	3	17	65	1157	1098	4.075995
6	1	17	85			5.20476
7	3	15	90	1173	1275	6.045715
8	1	6	95			6.53417
9	1	10	70			7.854041
10	3	13	70	1341	1919	9.059119
11	2	15	90	1578		9.818745
12	1	15	75			10.721275
13	3	10	55	1882	1504	11.517878

USA Bin 5 Trial #14

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
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1	3	10	65	1790	1175	0.765946
2	2	17	55	1987		2.089974
3	1	5	50			2.91838
4	1	17	90			3.688259
5	2	14	55	1989		5.51667
6	3	14	75	1865	1340	6.447548
7	3	18	100	1460	1139	7.404096
8	2	19	80	1822		8.773778
9	3	10	55	1030	1174	10.433736
10	3	8	75	1434	1796	11.058415

USA Bin 5 Trial #15

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	7	80	1662	1877	0.517857
2	1	13	70			2.01213
3	2	14	70	1618		3.784205
4	1	8	55			4.307826
5	3	16	100	1482	1808	6.621157
6	1	10	100			7.324269
7	2	7	55	1293		9.077417
8	3	8	90	1225	1164	10.567763
9	3	5	50	1197	1829	11.514252

USA Bin 5 Trial #16

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	10	85	1180		0.509857
2	1	20	60			1.580909
3	3	16	60	1197	1915	2.619766
4	3	5	100	1286	1873	3.537431
5	3	20	85	1330	1159	3.771021
6	2	20	75	1284		4.891612
7	1	8	55			5.563807
8	1	8	50			7.297703
9	2	19	100	1276		8.027793
10	3	11	55	1593	1998	9.049902
11	2	5	70	1262		9.336206
12	1	15	50			10.245072
13	2	6	55	1109		11.282882

USA Bin 5 Trial #17

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	11	95	1374	1286	0.994337
2	2	13	70	1269		1.921256
3	1	8	85			2.659136
4	1	7	50			4.152461
5	3	17	95	1734	1002	5.030125
6	1	5	65			5.762947
7	1	16	60			7.457463
8	1	18	65			8.503552
9	1	8	70			9.383894
10	2	18	55	1022		10.018035
11	1	14	60			11.072557



USA Bin 5 Trial #18

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	15	95	1399		0.672345
2	3	16	50	1260	1248	1.266698
3	1	17	85			2.111085
4	3	18	75	1385	1968	3.106434
5	1	13	85			3.69421
6	1	18	75			5.17906
7	2	19	80	1701		6.259437
8	1	10	65			7.06279
9	1	12	55			7.981447
10	3	19	75	1229	1153	8.985265
11	2	9	85	1984		9.981563
12	1	20	95			10.317055
13	2	10	65	1779		11.240367

USA Bin 5 Trial #19

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	5	70	1141	1185	0.174747
2	2	9	100	1895		1.308081
3	1	9	55			1.827904
4	2	10	85	1377		2.461488
5	1	20	80			3.341366
6	3	19	85	1934	1902	3.689234
7	1	18	65			4.662567
8	3	7	95	1212	1365	5.370736
9	3	12	85	1109	1744	5.873118
10	3	11	100	1097	1551	6.597917
11	1	5	50			7.452706
12	1	13	55			8.111782
13	2	5	55	1911		8.750199
14	2	15	50	1705		9.574113
15	3	15	85	1549	1549	10.475553
16	2	19	80	1096		11.092841
17	1	20	65			11.658096

USA Bin 5 Trial #20

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	10	70	1388		0.639546
2	1	5	75			1.318087
3	3	8	80	1736	1089	2.72932
4	1	7	50			3.989028
5	2	7	65	1929		5.046043
6	1	11	80			6.225245
7	1	6	95			6.873388
8	3	6	75	1043	1940	8.572209
9	1	17	80			9.113659
10	1	10	70			10.509347
11	3	12	55	1325	1643	11.883057

USA Bin 5 Trial #21

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
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1	2	5	65	1511		0.291311
2	3	7	65	1217	1958	1.842214
3	3	7	100	1995	1692	2.567454
4	2	16	80	1753		3.779217
5	3	16	60	1895	1853	4.343217
6	2	13	50	1588		5.31306
7	1	9	80			6.047427
8	2	15	90	1167		7.495581
9	2	5	55	1049		8.24273
10	3	8	50	1718	1801	9.886301
11	2	16	90	1888		10.53872
12	2	18	60	1780		11.046399

USA Bin 5 Trial #22

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	9	65	1198	1958	0.628074
2	2	11	95	1582		1.178162
3	2	18	60	1721		2.123354
4	3	17	90	1063	1622	2.517936
5	3	12	65	1851	1647	3.174772
6	2	16	65	1397		4.301193
7	2	14	90	1828		5.183245
8	1	15	75			5.387334
9	2	18	60	1445		6.013362
10	2	11	55	1391		7.205253
11	2	11	65	1262		8.207257
12	3	20	80	1565	1603	8.769059
13	2	9	55	1915		9.501714
14	1	19	50			10.107702
15	1	14	80			10.847527
16	1	16	80			11.417588

USA Bin 5 Trial #23

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	16	70	1095	1553	1.147605
2	1	13	85			1.777311
3	1	5	70			3.399816
4	1	8	55			5.162006
5	3	10	85	1397	1262	5.345265
6	1	17	100			6.973819
7	1	14	70			8.651647
8	2	13	100	1000		10.622445
9	3	5	75	1890	1185	11.721422

USA Bin 5 Trial #24

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	13	80	1853		0.363804
2	3	18	65	1080	1151	0.959485
3	1	16	85			1.926015
4	2	9	90	1492		2.65737
5	2	19	60	1058		4.220553
6	3	14	60	1579	1753	4.519892



7	1	19	60			5.609882
8	1	17	95			6.683183
9	2	18	50	1269		7.246141
10	3	9	90	1702	1219	7.796263
11	2	20	55	1057		9.335975
12	3	13	95	1266	1592	9.635631
13	3	7	75	1543	1352	10.651245
14	1	19	80			11.701128

USA Bin 5 Trial #25

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	17	90	1074	1146	0.910172
2	2	13	100	1595		1.981496
3	1	8	80			4.021982
4	2	15	100	1177		5.576749
5	3	6	70	1621	1410	6.751176
6	3	9	50	1737	1456	8.20584
7	3	10	100	1772	1741	9.749662
8	2	15	85	1056		10.729988

USA Bin 5 Trial #26

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	8	65			0.414365
2	3	18	100	1695	1374	1.230471
3	3	6	55	1392	1745	1.762065
4	1	17	50			3.076298
5	1	10	85			3.623563
6	1	18	75			4.50051
7	3	10	100	1322	1683	5.343216
8	1	15	75			6.341556
9	2	18	85	1827		7.109124
10	3	17	95	1558	1732	7.833328
11	3	17	50	1581	1313	8.127563
12	2	15	80	1826		9.158511
13	3	16	95	1594	1821	9.752367
14	2	20	70	1612		11.081072
15	3	8	80	1228	1956	11.900808

USA Bin 5 Trial #27

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	17	75			0.225401
2	2	20	60	1848		1.71274
3	3	14	75	1796	1182	2.713798
4	1	7	55			3.856232
5	3	20	65	1240	1936	4.555055
6	2	15	80	1043		5.461737
7	3	12	90	1540	1964	6.292631
8	1	16	80			7.162295
9	1	7	95			8.969118
10	3	19	90	1991	1961	9.599278
11	1	5	100			10.532919
12	1	12	70			11.102397



USA Bin 5 Trial #28

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	2	9	70	1295		0.735061
2	3	7	55	1465	1040	0.869066
3	2	7	95	1926		2.027799
4	2	18	55	1587		2.852676
5	2	10	85	1479		3.315197
6	2	19	95	1849		4.562706
7	1	14	80			5.369041
8	3	7	95	1461	1582	5.829974
9	3	8	100	1602	1573	6.723704
10	1	20	85			7.310282
11	3	17	65	1258	1078	8.481924
12	1	20	55			9.41103
13	1	13	75			9.746663
14	1	7	80			11.011173
15	1	15	65			11.556365

USA Bin 5 Trial #29

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	1	15	95			0.451084
2	3	6	65	1339	1640	1.995882
3	2	5	100	1095		2.836422
4	1	8	95			3.511173
5	3	5	100	1808	1521	5.115911
6	1	17	65			5.848785
7	3	17	75	1358	1368	7.526493
8	2	19	70	1659		8.663268
9	3	14	80	1234	1100	9.253208
10	1	14	95			10.438888
11	2	16	100	1747		11.354563

USA Bin 5 Trial #30

Burst #	Pulses	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)
1	3	14	55	1026	1426	1.059967
2	1	13	95			2.068526
3	2	19	95	1011		4.241476
4	1	14	50			5.111499
5	1	16	90			6.035186
6	2	12	95	1719		8.377821
7	3	6	70	1890	1629	9.608719
8	3	5	85	1523	1456	10.725334

USA Frequency Hopping Trial #1

Hop #	Freq (GHz)	Pulse Start (mS)
17	5506	51
24	5499	72

USA Frequency Hopping Trial #2

Hop #	Freq (GHz)	Pulse Start (mS)
9	5493	27
11	5497	33
17	5500	51
24	5495	72
30	5498	90
31	5492	93
72	5506	216

USA Frequency Hopping Trial #3

Hop #	Freq (GHz)	Pulse Start (mS)
43	5494	129
57	5498	171
62	5507	186
81	5501	243

USA Frequency Hopping Trial #4

Hop #	Freq (GHz)	Pulse Start (mS)
11	5505	33
51	5499	153
84	5492	252

USA Frequency Hopping Trial #5

Hop #	Freq (GHz)	Pulse Start (mS)
37	5500	111
41	5494	123
97	5506	291

USA Frequency Hopping Trial #6

Hop #	Freq (GHz)	Pulse Start (mS)
36	5508	108
62	5493	186

USA Frequency Hopping Trial #7

Hop #	Freq (GHz)	Pulse Start (mS)
23	5499	69
28	5493	84
45	5492	135
68	5498	204

USA Frequency Hopping Trial #8

Hop #	Freq (GHz)	Pulse Start (mS)
42	5497	126
66	5501	198

USA Frequency Hopping Trial #9

Hop #	Freq (GHz)	Pulse Start (mS)
84	5492	252
96	5506	288

USA Frequency Hopping Trial #10

Hop #	Freq (GHz)	Pulse Start (mS)
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8	5493	24
16	5506	48
71	5503	213
82	5504	246

USA Frequency Hopping Trial #11

Hop #	Freq (GHz)	Pulse Start (mS)
40	5497	120
58	5492	174
64	5495	192
68	5500	204
74	5494	222
89	5502	267

USA Frequency Hopping Trial #12

Hop #	Freq (GHz)	Pulse Start (mS)
22	5497	66

USA Frequency Hopping Trial #13

Hop #	Freq (GHz)	Pulse Start (mS)
46	5493	138
47	5501	141
64	5492	192
84	5503	252

USA Frequency Hopping Trial #14

Hop #	Freq (GHz)	Pulse Start (mS)
7	5499	21
35	5496	105
36	5494	108
39	5506	117
90	5497	270

USA Frequency Hopping Trial #15

Hop #	Freq (GHz)	Pulse Start (mS)
14	5504	42
31	5495	93
40	5501	120
62	5494	186
77	5491	231

USA Frequency Hopping Trial #16

Hop #	Freq (GHz)	Pulse Start (mS)
6	5504	18
39	5495	117
69	5491	207
78	5505	234

USA Frequency Hopping Trial #17

Hop #	Freq (GHz)	Pulse Start (mS)
38	5505	114
67	5495	201
75	5500	225
77	5501	231

USA Frequency Hopping Trial #18

Hop #	Freq (GHz)	Pulse Start (mS)
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8	5497	24
59	5500	177
USA Frequency Hopping Trial #19		
Hop #	Freq (GHz)	Pulse Start (mS)
33	5505	99
95	5499	285
99	5508	297
USA Frequency Hopping Trial #20		
Hop #	Freq (GHz)	Pulse Start (mS)
38	5498	114
60	5508	180
98	5496	294
USA Frequency Hopping Trial #21		
Hop #	Freq (GHz)	Pulse Start (mS)
52	5497	156
71	5492	213
USA Frequency Hopping Trial #22		
Hop #	Freq (GHz)	Pulse Start (mS)
0	5498	0
36	5491	108
40	5499	120
92	5495	276
USA Frequency Hopping Trial #23		
Hop #	Freq (GHz)	Pulse Start (mS)
16	5503	48
32	5493	96
65	5491	195
98	5502	294
USA Frequency Hopping Trial #24		
Hop #	Freq (GHz)	Pulse Start (mS)
7	5495	21
47	5509	141
86	5494	258
USA Frequency Hopping Trial #25		
Hop #	Freq (GHz)	Pulse Start (mS)
8	5502	24
44	5497	132
64	5503	192
USA Frequency Hopping Trial #26		
Hop #	Freq (GHz)	Pulse Start (mS)
45	5494	135
62	5491	186
85	5497	255
94	5507	282
98	5505	294
USA Frequency Hopping Trial #27		
Hop #	Freq (GHz)	Pulse Start (mS)
5	5496	15
48	5498	144



55	5506	165
63	5495	189
66	5508	198

USA Frequency Hopping Trial #28

Hop #	Freq (GHz)	Pulse Start (mS)
20	5502	60
36	5497	108
40	5500	120
57	5508	171

USA Frequency Hopping Trial #29

Hop #	Freq (GHz)	Pulse Start (mS)
2	5507	6
20	5496	60
32	5497	96
80	5506	240
91	5508	273

USA Frequency Hopping Trial #30

Hop #	Freq (GHz)	Pulse Start (mS)
85	5497	255
91	5495	273