

Dynamic Frequency Selection (DFS) Test Report

C9124AXI-A, C9124AXI-B

FCC ID: LDK-HTIAK2282

IC: 2461N-HTIAK2282

5250-5350, 5470-5725 MHz

Against the following Specifications:

CFR47 Part 15.407

RSS247



Cisco Systems

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This report replaces any previously entered test report under EDCS – **21541318**. This test report has been electronically authorized and archived using the CISCO Engineering Document Control system.

SECTION 1: OVERVIEW	3
SECTION 2: ASSESSMENT INFORMATION.....	4
2.1 GENERAL.....	4
2.2 DATE OF TESTING	6
2.3 REPORT ISSUE DATE.....	6
2.4 TESTING FACILITIES	6
2.5 EQUIPMENT ASSESSED (EUT).....	6
SECTION 3: RESULT SUMMARY	7
3.1 RESULTS SUMMARY TABLE	7
SECTION 4: SAMPLE DETAILS.....	8
4.1 SAMPLE DETAILS	8
4.2 SYSTEM DETAILS	8
4.3 MODE OF OPERATION DETAILS	8
APPENDIX A: DYNAMIC FREQUENCY SELECTION (DFS).....	9
A.1 UNII DEVICE DESCRIPTION.....	9
A.2 DFS DETECTION THRESHOLDS.....	10
A.3 RADAR TEST WAVEFORMS.....	11
APPENDIX B: DYNAMIC FREQUENCY SELECTION / TEST RESULTS.....	15
CALIBRATION PLOTS.....	17
B.1 TEST PROCEDURE/RESULTS.....	33
B.2 UNII DETECTION BANDWIDTH.....	34
B.3 RADAR BURST AT THE BEGINNING OF THE CHANNEL AVAILABILITY CHECK TIME.....	47
B.4 RADAR BURST AT THE END OF THE CHANNEL AVAILABILITY CHECK TIME	48
B.5 IN-SERVICE MONITORING FOR CHANNEL MOVE TIME, CHANNEL CLOSING TRANSMISSION TIME AND NON- OCCUPANCY PERIOD	49
B.6 STATISTICAL PERFORMANCE CHECK	51
APPENDIX C: LIST OF TEST EQUIPMENT USED TO PERFORM THE TEST	183
APPENDIX D: PHOTOGRAPHS OF TEST SETUPS	185
APPENDIX E: SOFTWARE USED TO PERFORM TESTING	185
APPENDIX F: TEST PROCEDURES.....	185
APPENDIX G: SCOPE OF ACCREDITATION (A2LA CERTIFICATE NUMBER 1178-01)	185
APPENDIX H: TEST ASSESSMENT PLAN.....	185
APPENDIX I: WORST CASE JUSTIFICATION.....	185

DFS Test Report No: **EDCS – 21541318**

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

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%)
 - POE

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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DFS Test Report No: **EDCS – 21541318**

2.2 Date of testing

28-Feb-21 - 12-MAY-21

2.3 Report Issue Date

12-MAY-21

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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

Johanna Knudsen, Said Abdelwafi

2.5 Equipment Assessed (EUT)

C9124AXI-B

Section 3: Result Summary**3.1 Results Summary Table**

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	C9124AXI-B	Cisco Systems, Inc	074-125082-01 Pre-pilot	NA	See Mode	FOC2501146U
S02	Client “Skylake”	Lenovo/BRCM	NA	NA	NA	1836602426
S03	C9124AXI-B	Cisco Systems, Inc	074-125082-01 Pre-pilot	NA	See Mode	FOC2501140R
S04	Client Laptop T490	Lenovo	NA	NA	NA	PF-274C83

4.2 System Details

System Number	Description	Sample Description	Samples	System under test	Support equipment
1	Used for timing tests	C9124AXI-B	S01	☒	☐
		Skylake	S02	☐	☒
2	Used for Detection Bandwidth tests and Statistics except where noted in System #3 below	C9124AXI-B	S01	☒	☐
		Client Laptop	S04	☐	☒
3	Used for Statistics (Type 5)	C9124AXI-B	S03	☒	☐
		Client Laptop	S04	☐	☒

4.3 Mode of Operation Details

Mode#	Description	Comments
1	DFS testing for Timing Tests and Detection Bandwidth	Traffic: DFS Tests with traffic: at least 17% Traffic Loading using IPERF Image: Cisco AP Software, (ap1g6a), [sjc-ads-9175:/nobackup/rahulsi6/ithaca/c175_throttle/router] Compiled Thu Mar 11 23:25:06 PST 2021
2	DFS Test Mode – Statistics except Type 5	Traffic: DFS Tests with traffic: at least 17% Traffic Loading using IPERF Image: Cisco AP Software, (ap1g6a), [sjc-ads-3945:/nobackup/maruthib/c175t] Compiled Mon Apr 19 23:58:08 PDT 2021 ROM: Bootstrap program is U-Boot boot loader, BOOTLDR: U-Boot boot loader Version 17
3	DFS Test Mode – Statistics Type 5	Traffic: DFS Tests with traffic: at least 17% Traffic Loading using IPERF Image: Cisco AP Software, (ap1g6a), [cheetah-build9:/san1/BUILD/workspace/c175_throttle_mfg/label/mfg-ap1g6a] Compiled Sun Apr 25 18:59:26 GMT 2021 ROM: Bootstrap program is U-Boot boot loader, BOOTLDR: U-Boot boot loader Version 17

Appendix A: Dynamic Frequency Selection (DFS)

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

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

A.1 UNII Device Description

Refer to the Radio Theory of Operation for supported modes. The modes included in this report represent the worst-case data for all modes.

The following antennas are supported by this product series. The antenna info included in this test report was provided by the customer (Cisco business unit). The data included in this report represent the worst-case data for all antennas.

Ithaca (Internal Antenna) Model C9124AXI-x

Frequency	Antenna Name		Antenna Gain	
2.4GHz & 5GHz (Wi-Fi)	Antenna 1	TX/RX: internal	7dBi@2.4GHz	7dBi@5GHz
2.4GHz & 5GHz (Wi-Fi)	Antenna 2	TX/RX: internal	7dBi@2.4GHz	7dBi@5GHz
2.4GHz & 5GHz (Wi-Fi)	Antenna 3	TX/RX: internal	7dBi@2.4GHz	7dBi@5GHz
2.4GHz & 5GHz (Wi-Fi)	Antenna 4	TX/RX: internal	7dBi@2.4GHz	7dBi@5GHz
BLE	Antenna T	TX/RX: internal	5dBi	
2.4GHz & 5GHz (Aux)	Antenna A	TX/RX: internal	6dBi@2.4GHz	7dBi@5GHz
2.4GHz & 5GHz (Aux)	Antenna B	RX: internal	6dBi@2.4GHz	7dBi@5GHz

1. The maximum EIRP of the 5GHz equipment is 30 dBm, and the minimum possible EIRP is 9 dBm.

Antenna gain of 7dBi was added to -64 for a radar signal strength of -57dBm for most tests.

2. System testing was performed with IPERF traffic that streams continuously from the Master to the Client IP based system.

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 move</i> (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 $\left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{PRI_{\mu sec}} \right) \right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
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 (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000- 2000	1-3	8-20	80%	30

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

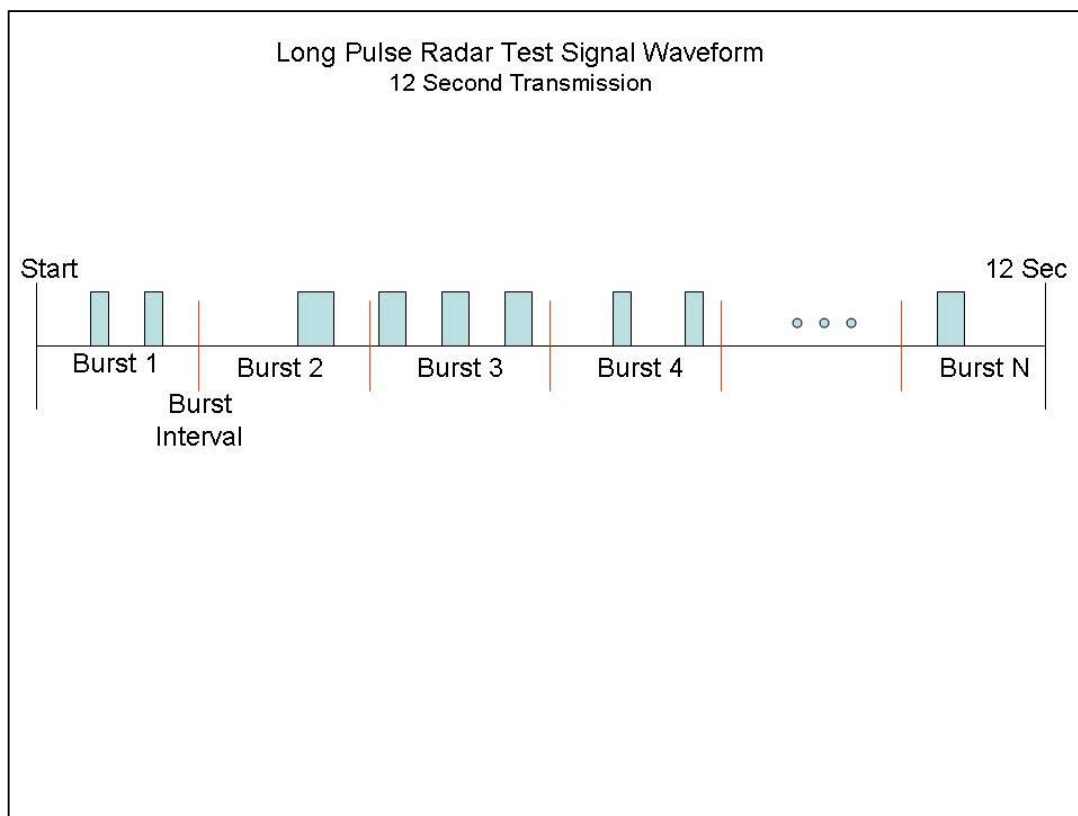
Each waveform is defined as follows:

- 1) The transmission period for the Long Pulse Radar test signal is 12 seconds.
- 2) There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst Count.
- 3) Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each Burst within the 12 second sequence may have a different number of pulses.
- 4) The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a Burst will have the same pulse width. Pulses in different Bursts may have different pulse widths.
- 5) Each pulse has a linear FM chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a Burst will have the same chirp width. Each pulse within a transmission period will have the same chirp width. The chirp is centered on the pulse. For example, with a radar frequency of 5300 MHz and a 20 MHz chirped signal, the chirp starts at 5290 MHz and ends at 5310 MHz.
- 6) If more than one pulse is present in a Burst, the time between the pulses will be between 1000 and 2000 microseconds, with the time being randomly chosen. If three pulses are present in a Burst, the time between the first and second pulses is chosen independently of the time between the second and third pulses.
- 7) The 12 second transmission period is divided into even intervals. The number of intervals is equal to Burst Count. Each interval is of length $(12,000,000 / \text{Burst Count})$ microseconds. Each interval contains one Burst. The start time for the Burst, relative to the beginning of the interval, is between 1 and $[(12,000,000 / \text{Burst Count}) - (\text{Total Burst Length}) + (\text{One Random PRI Interval})]$ microseconds, with the start time being randomly chosen. The step interval for the start time is 1 microsecond. The start time for each Burst is chosen randomly.

A representative example of a Long Pulse radar test waveform:

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

Graphical Representation of a Long Pulse radar Test Waveform



3. Long Pulse Radar Test Waveform

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

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

DFS Test Report No: **EDCS – 21541318**

Appendix B: Dynamic Frequency Selection / Test Results

Standards Reference

FCC 15.407 / RSS-247

Test Procedure

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

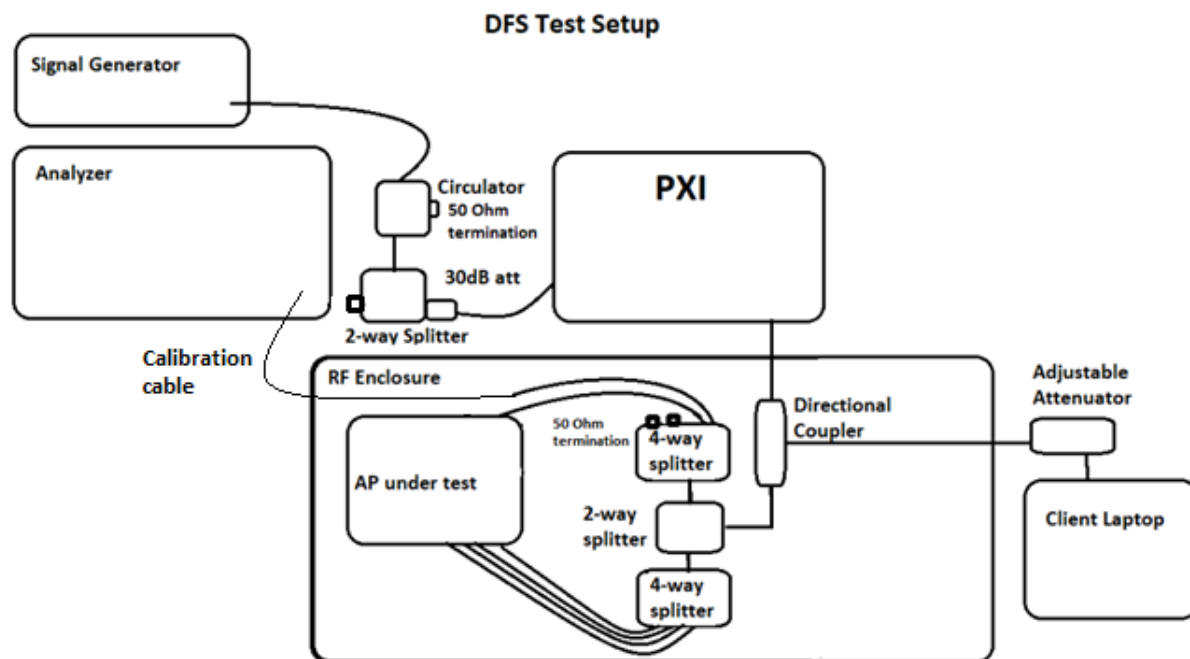
DFS Test parameters	
Span = 0 Hz RBW $\geq$ 3 MHz VBW $\geq$ 3 MHz Detector = Peak Trace = Single Sweep	
Tested By: Johanna Knudsen, Said Abdelwafi	Date of testing: 28-Feb-21 – 08-MAY-21
Test Result: PASS	

Test Equipment

See Appendix C for list of test equipment

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

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

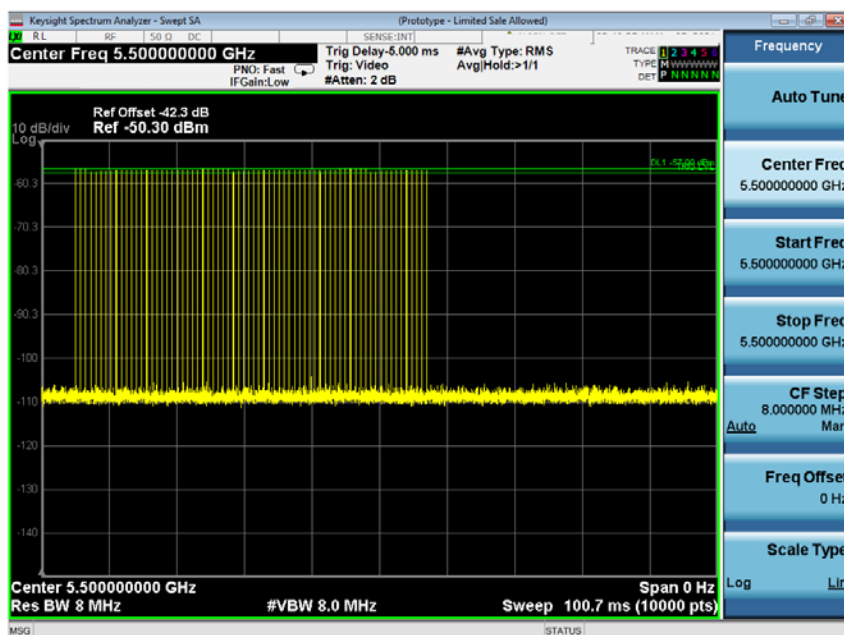


Conducted Calibration Setup

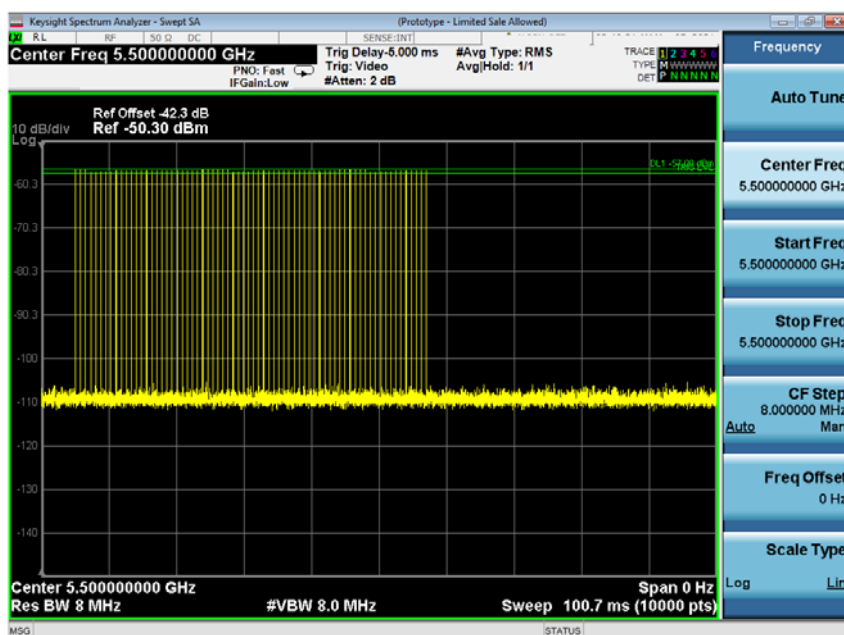
Calibration Plots

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

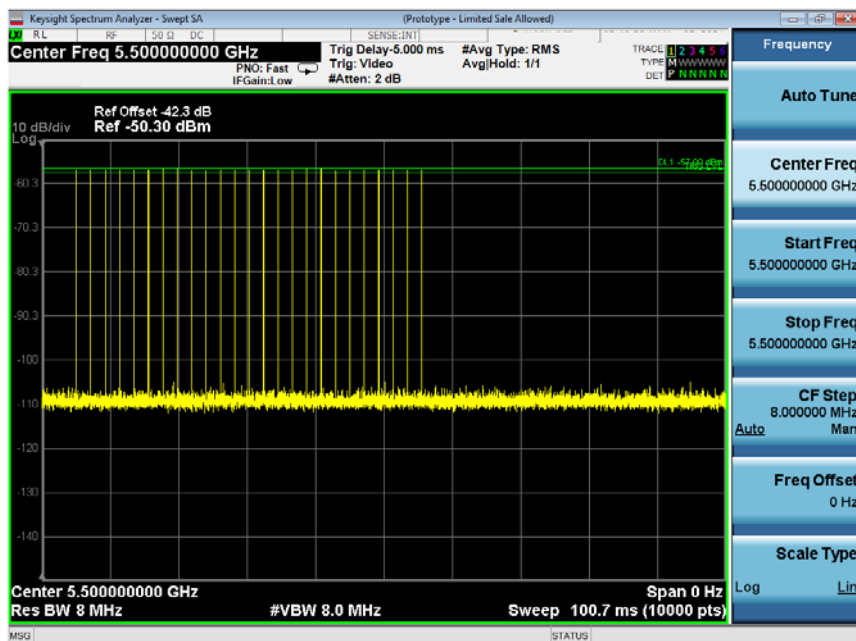
Calibration Plots – Bandwidth 20



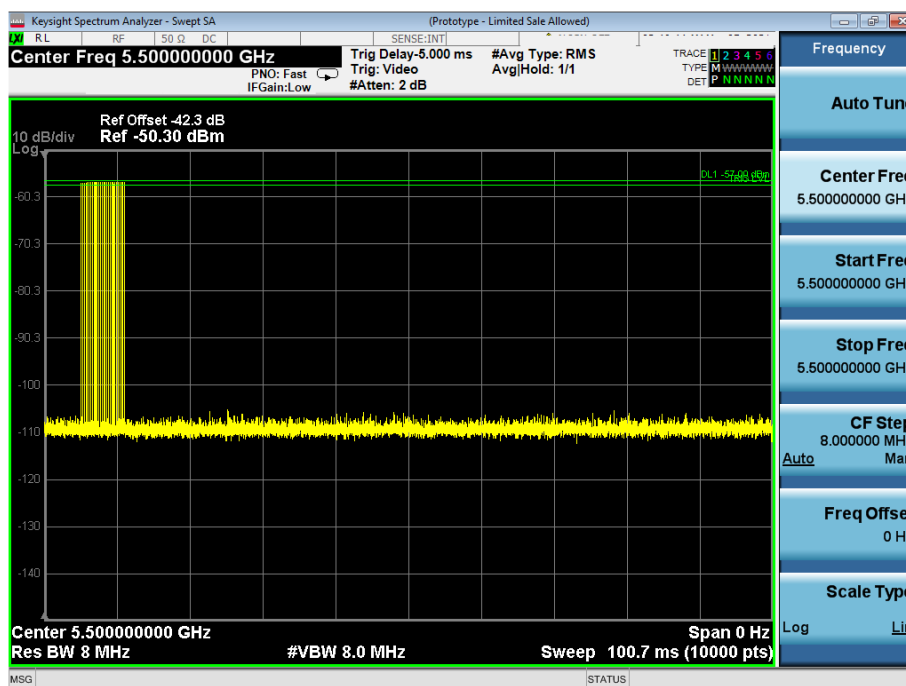
USA Bin 1A Radar Calibration BW20



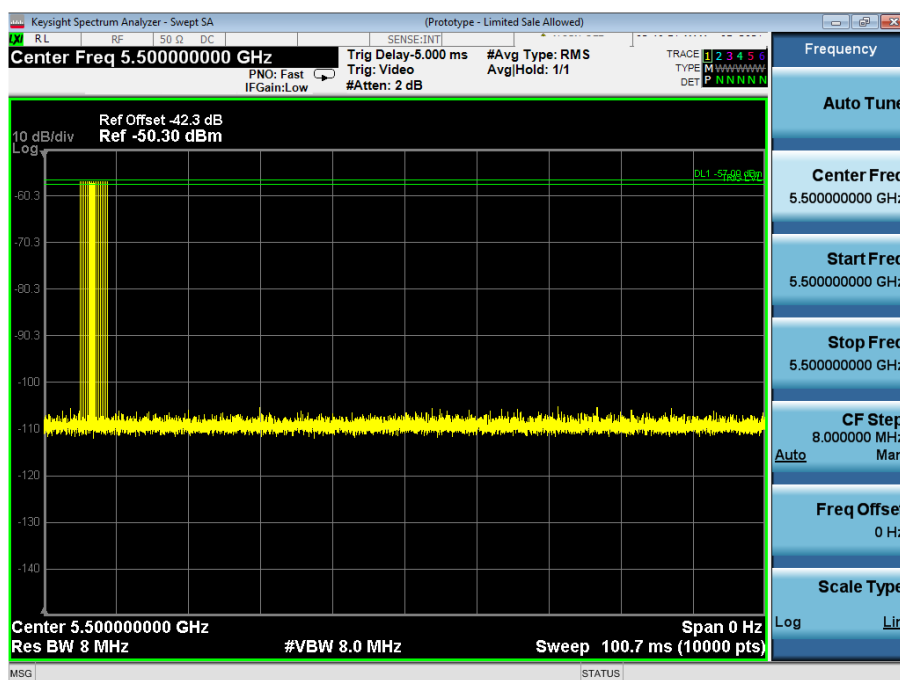
USA Bin 1B Radar Calibration BW20



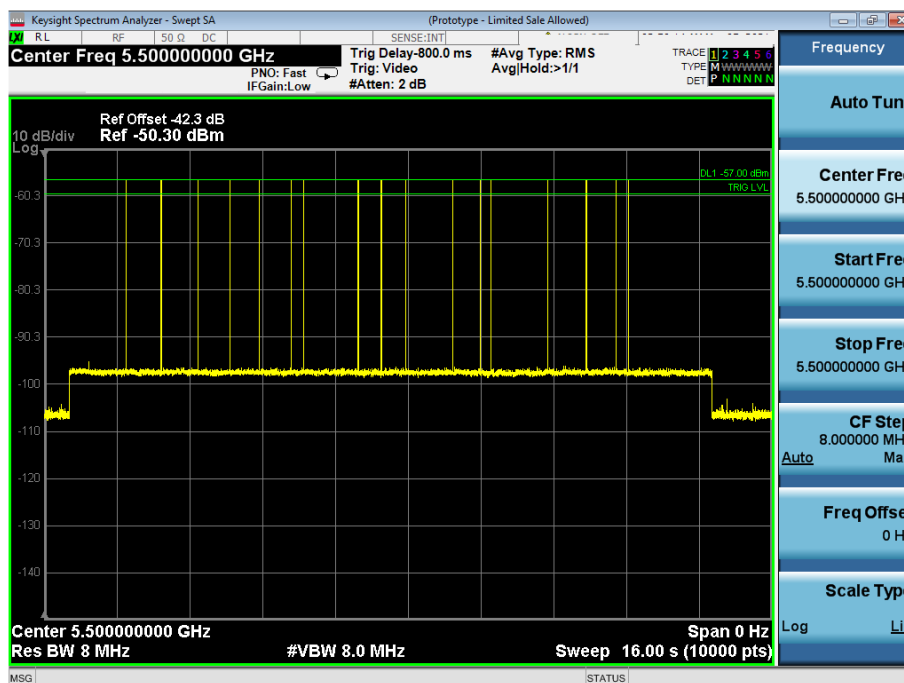
USA Bin 2 Radar Calibration BW20



USA Bin 3 Radar Calibration BW20

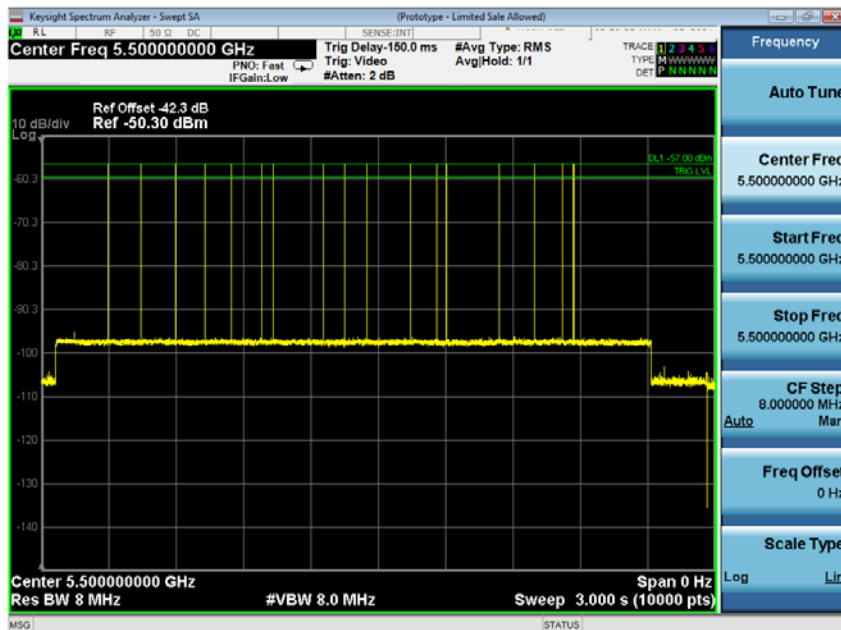


USA Bin 4 Radar Calibration BW20



USA Bin 5 Radar Calibration BW20

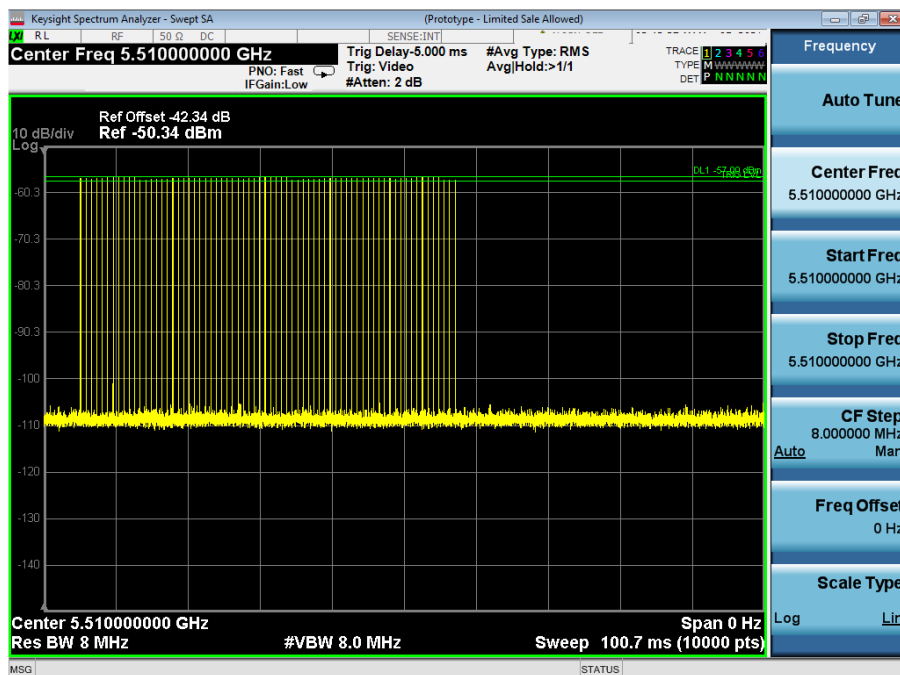
DFS Test Report No: **EDCS – 21541318**



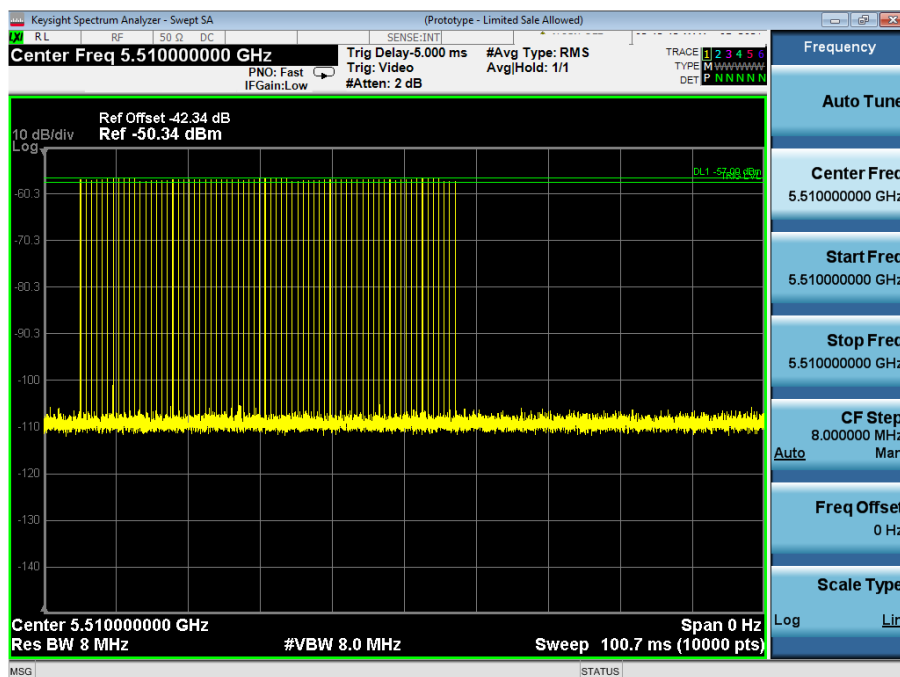
USA Frequency Hopping Radar Calibration BW20

DFS Test Report No: **EDCS – 21541318**

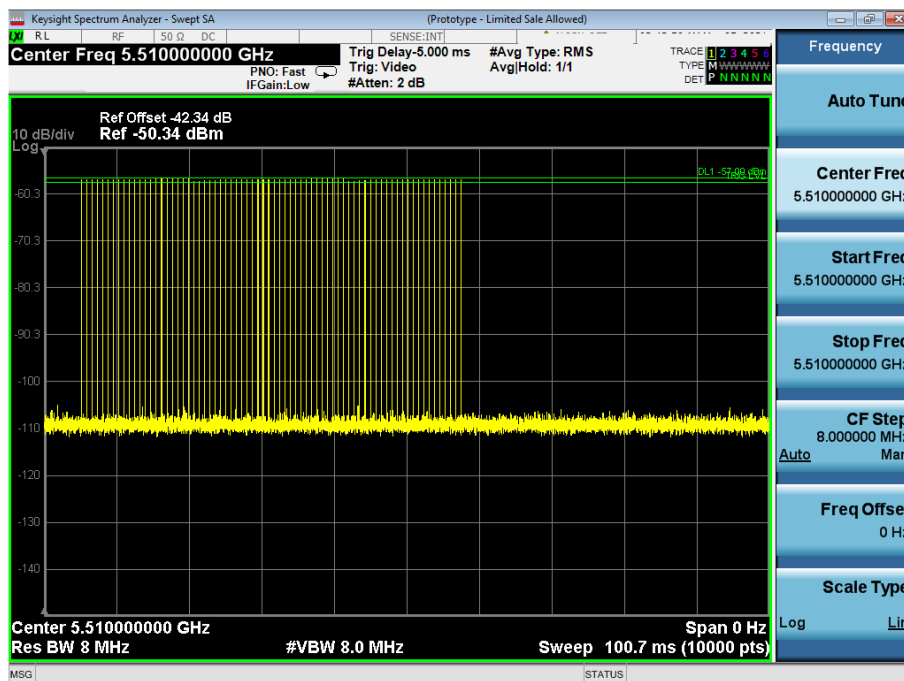
Calibration Plots – Bandwidth 40



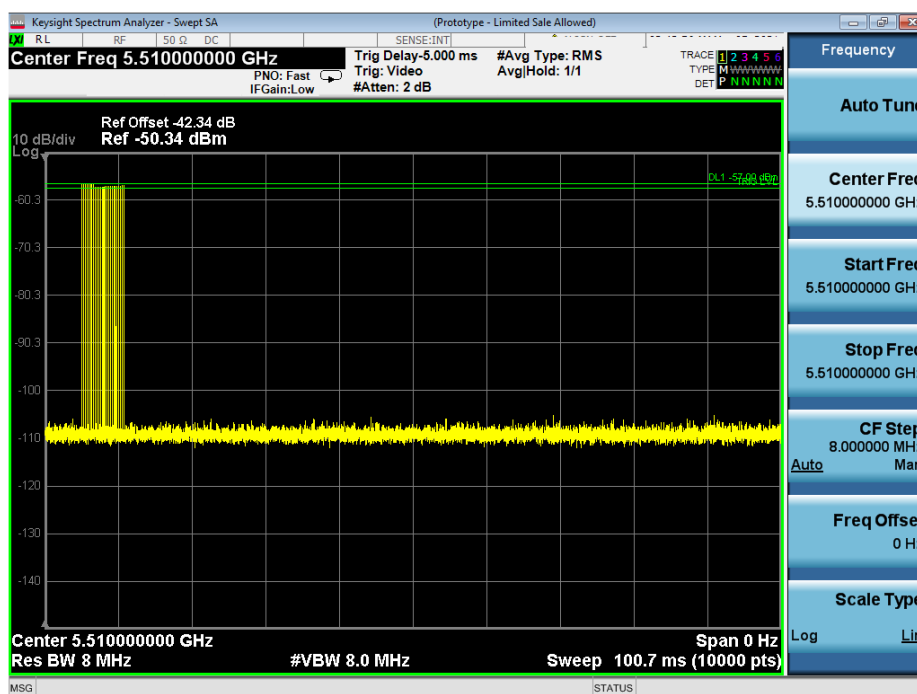
USA Bin 1A Radar Calibration BW40



USA Bin 1B Radar Calibration BW40

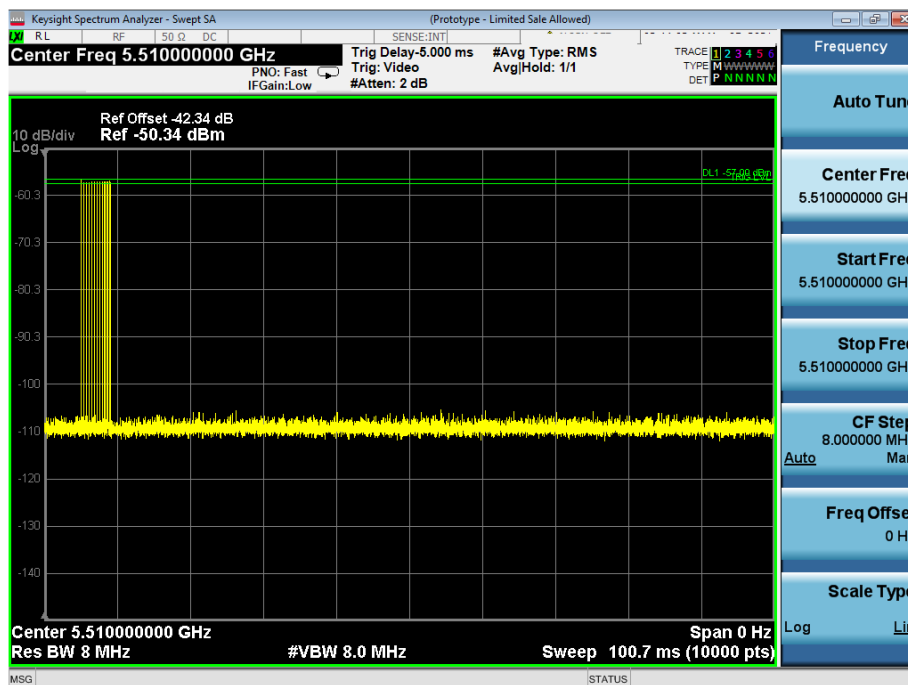


USA Bin 2 Radar Calibration BW40

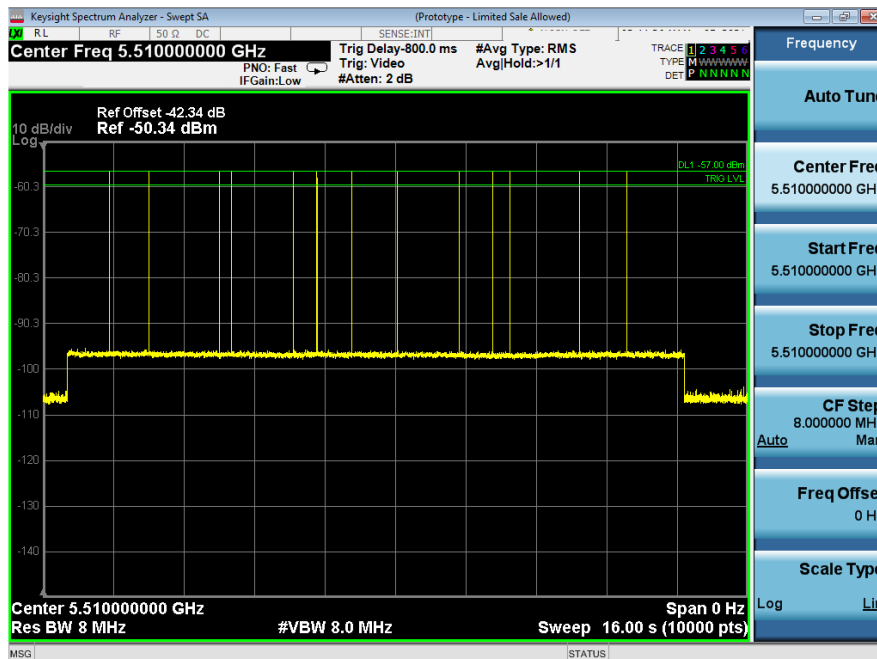


USA Bin 3 Radar Calibration BW40

DFS Test Report No: **EDCS – 21541318**

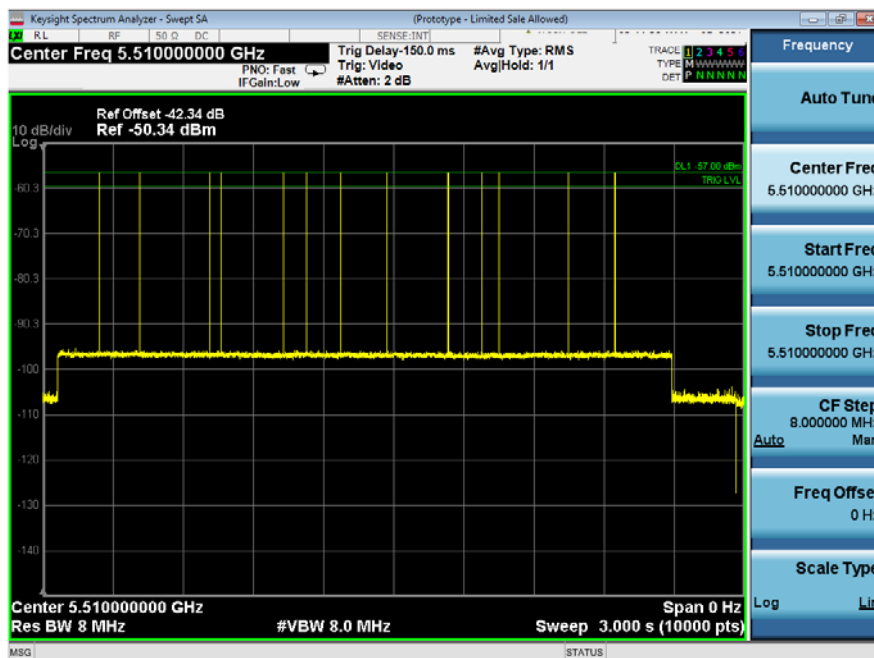


USA Bin 4 Radar Calibration BW40



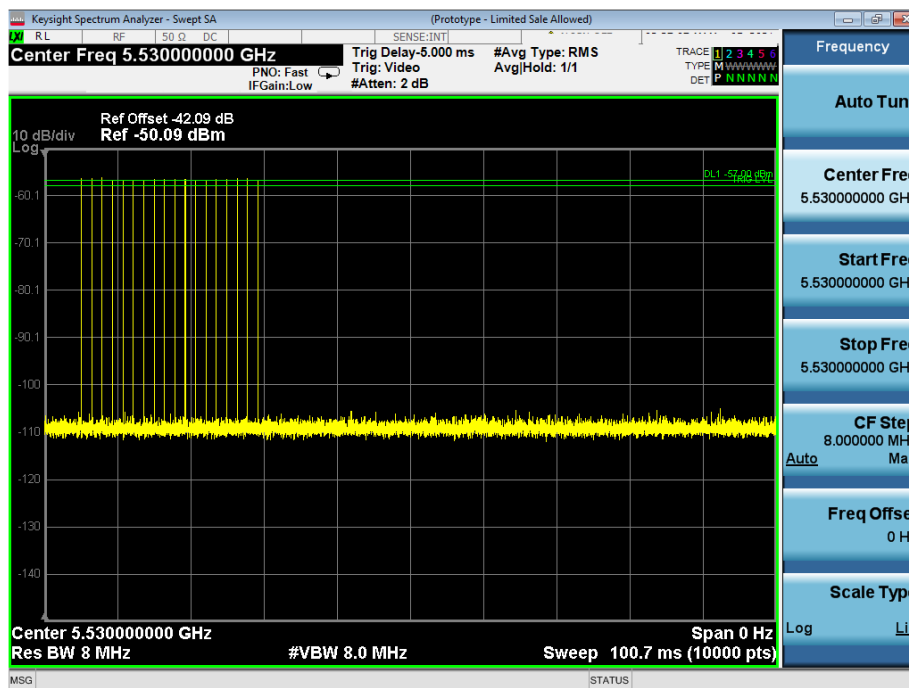
USA Bin 5 Radar Calibration BW40

DFS Test Report No: **EDCS – 21541318**

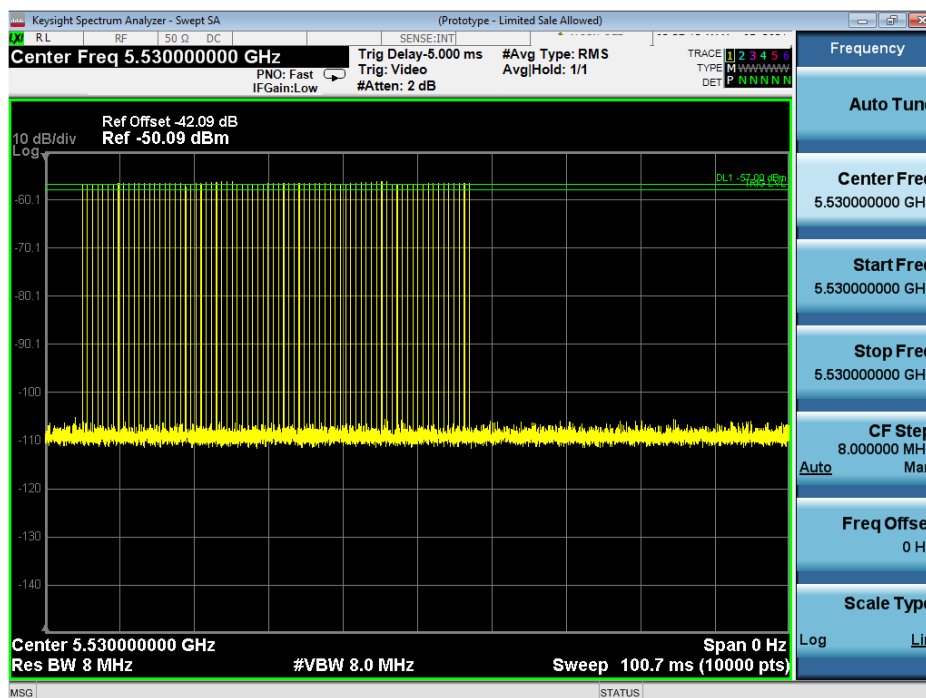


USA Frequency Hopping Radar Calibration BW40

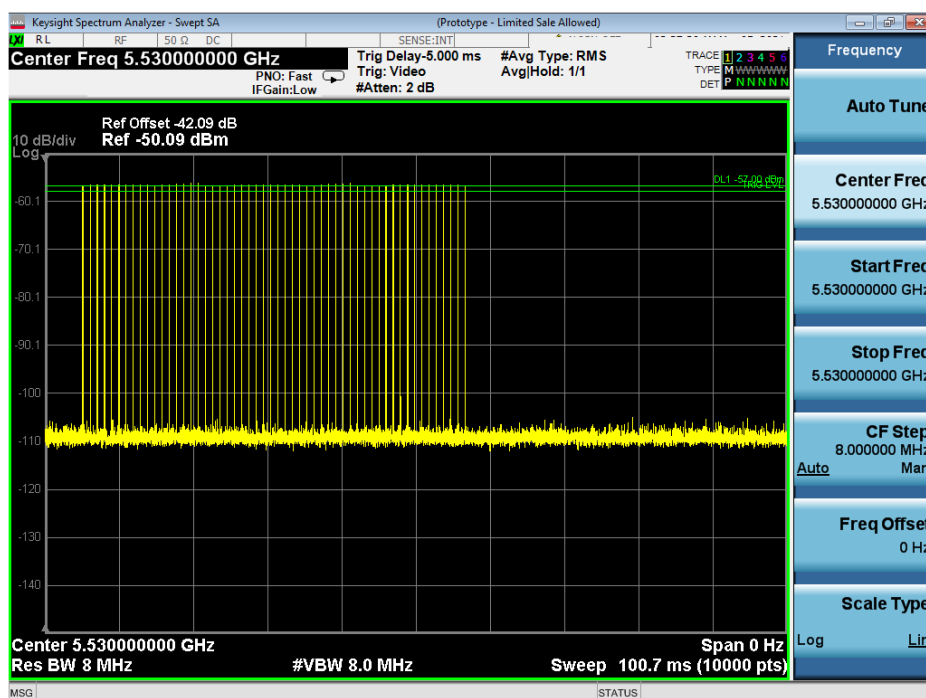
Calibration Plots – Bandwidth 80



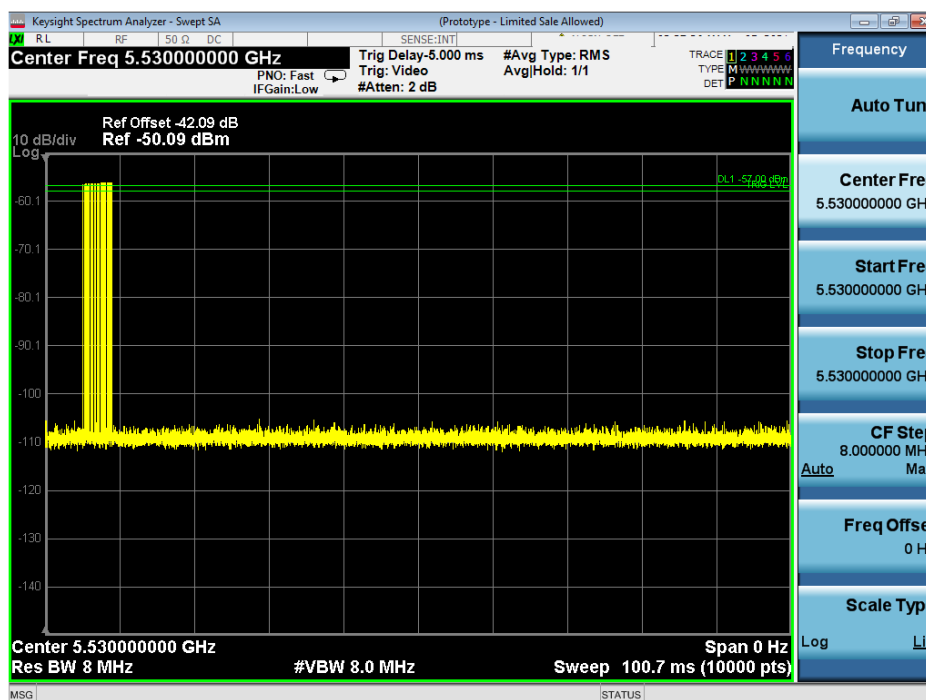
USA Bin 1A Radar Calibration BW80



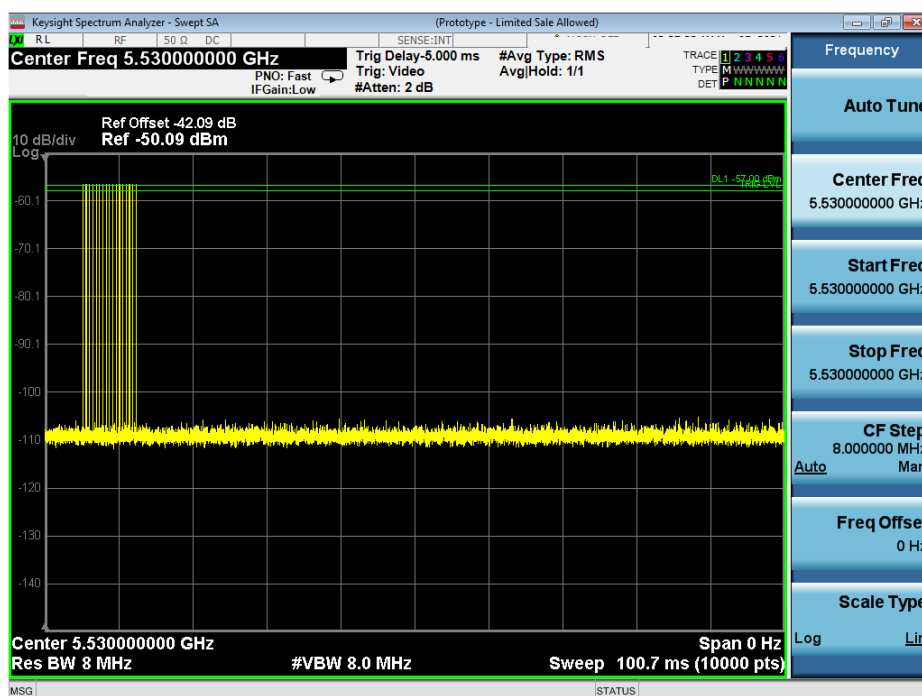
USA Bin 1B Radar Calibration BW80



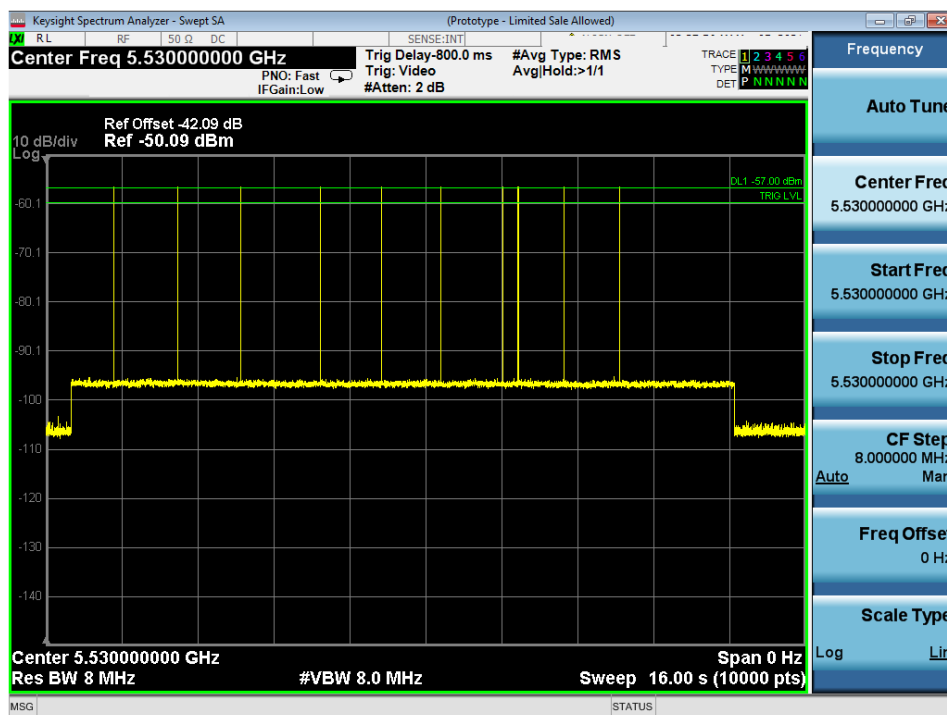
USA Bin 2 Radar Calibration BW80



USA Bin 3 Radar Calibration BW80

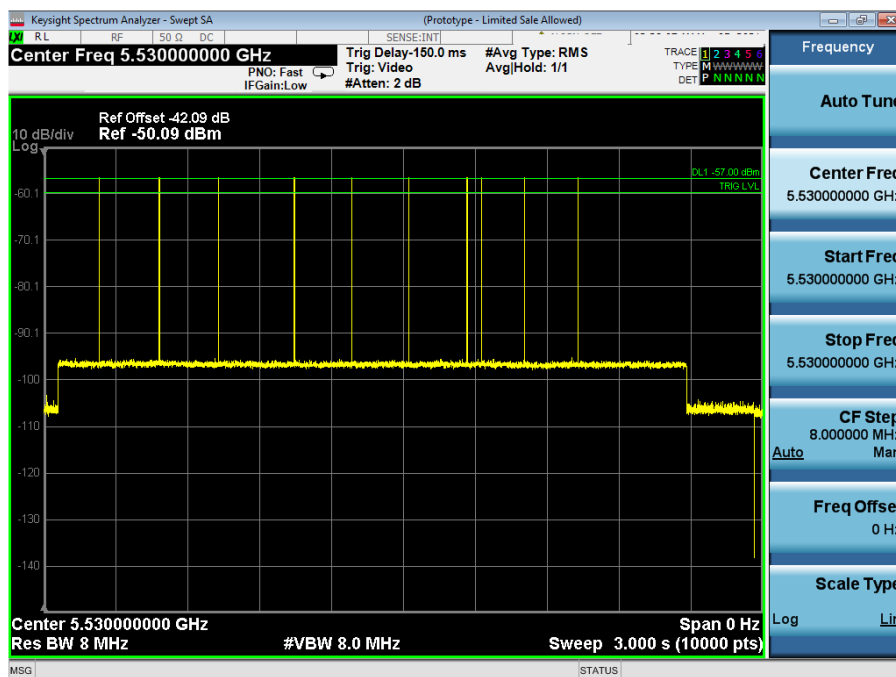


USA Bin 4 Radar Calibration BW80



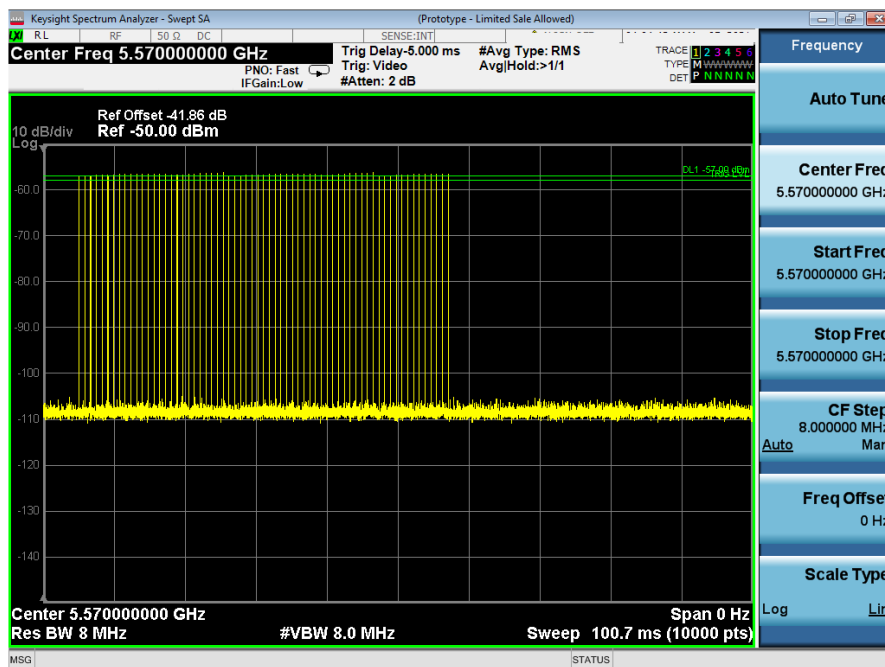
USA Bin 5 Radar Calibration BW80

DFS Test Report No: **EDCS – 21541318**

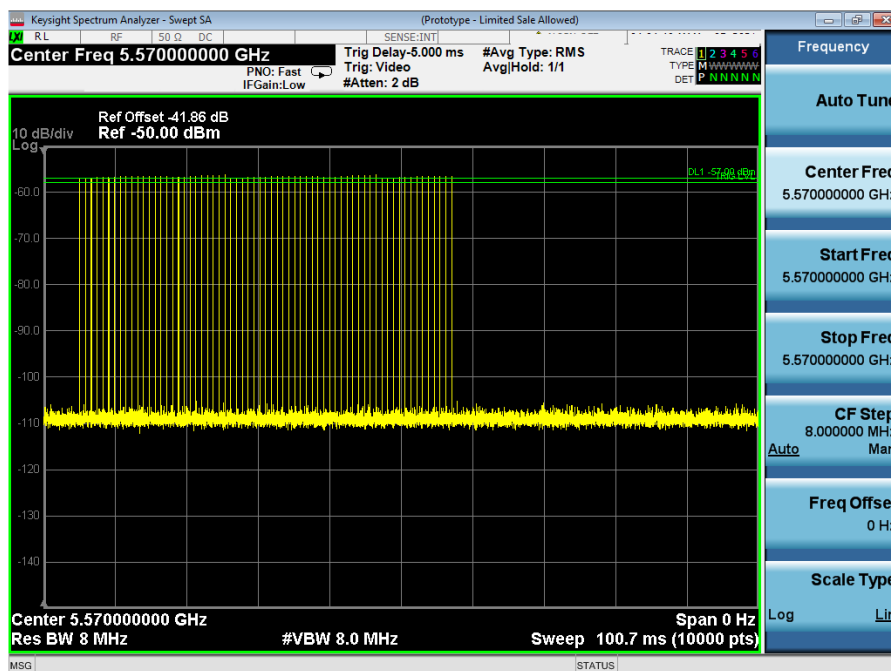


USA Frequency Hopping Radar Calibration BW80

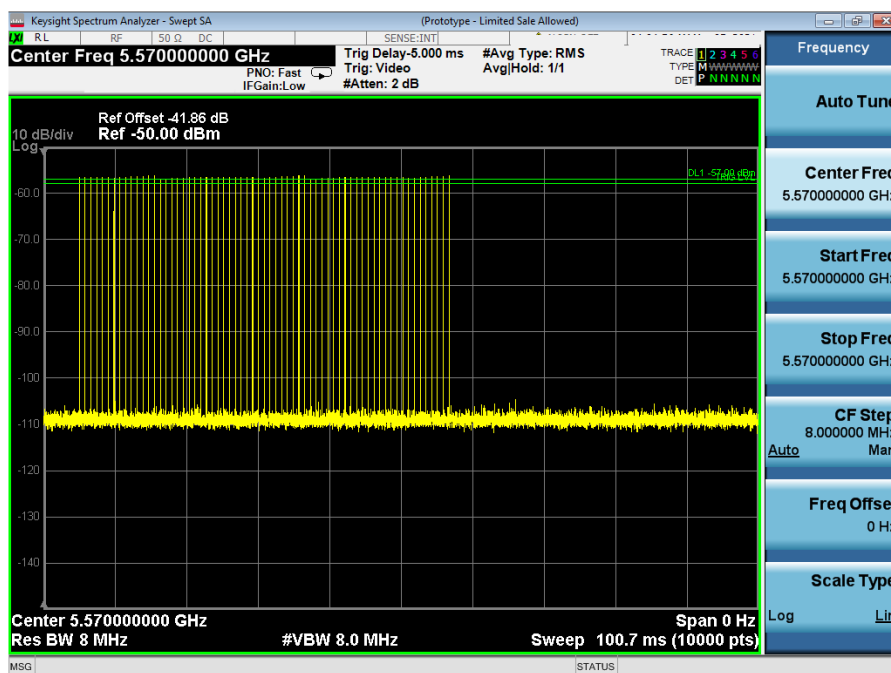
Calibration Plots – Bandwidth 160



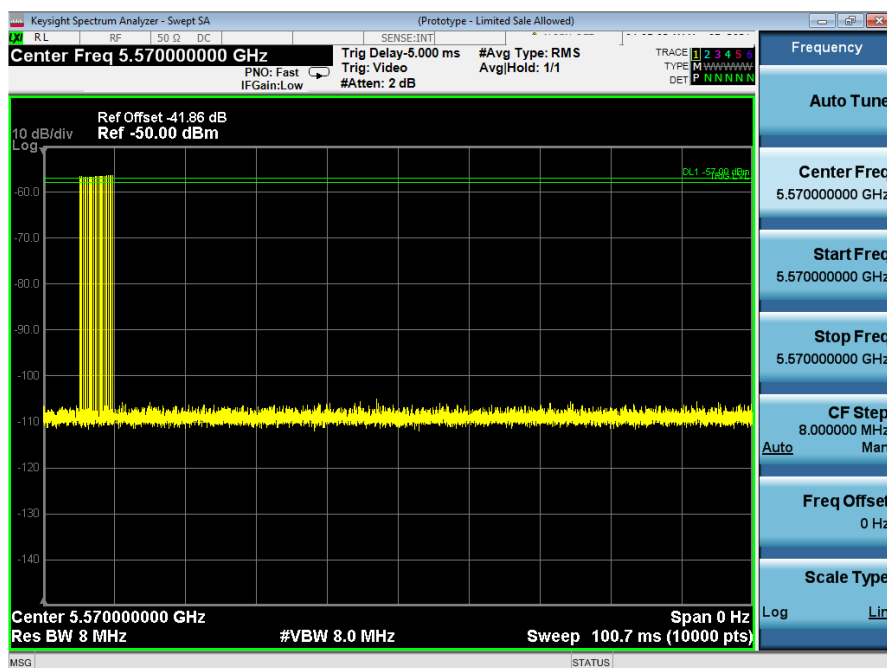
USA Bin 1A Radar Calibration BW160



USA Bin 1B Radar Calibration BW160

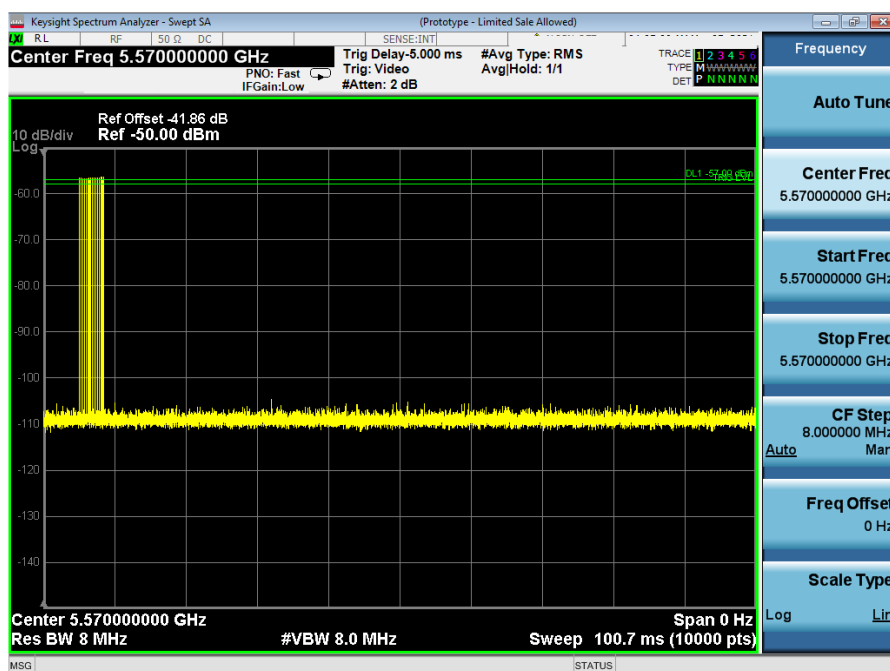


USA Bin 2 Radar Calibration BW160

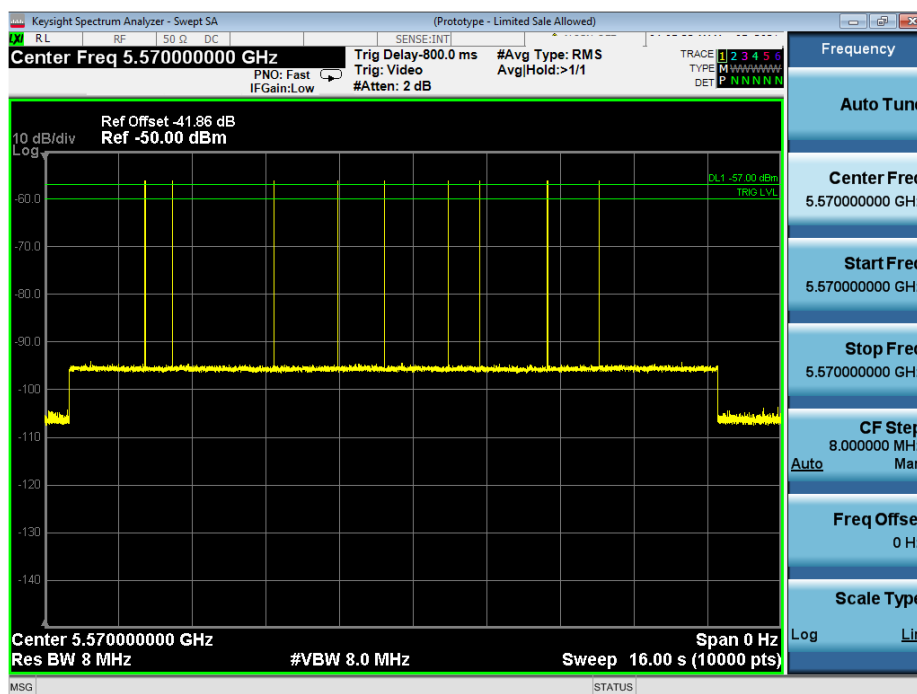


USA Bin 3 Radar Calibration BW160

DFS Test Report No: **EDCS – 21541318**

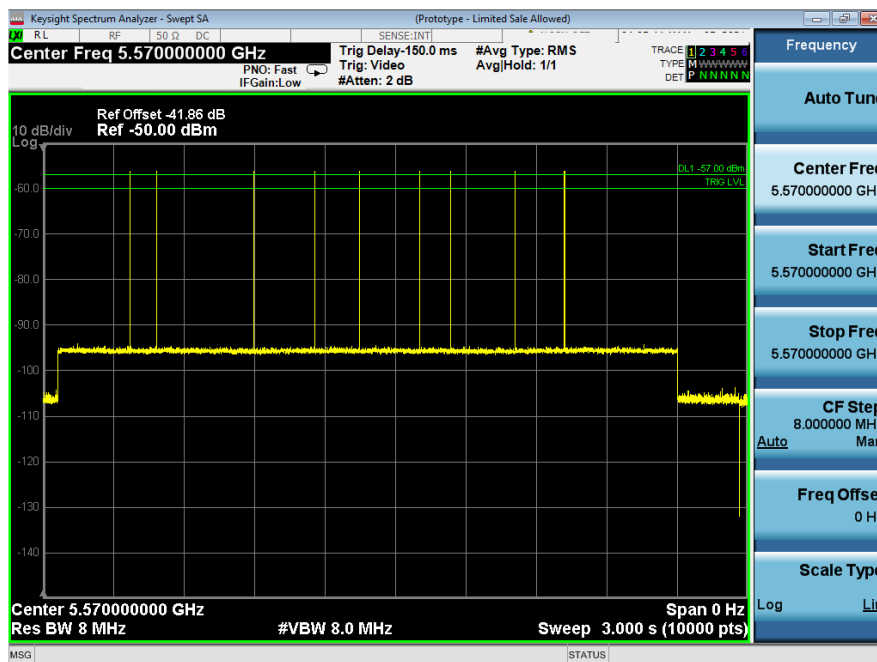


USA Bin 4 Radar Calibration BW160



USA Bin 5 Radar Calibration BW160

DFS Test Report No: **EDCS – 21541318**

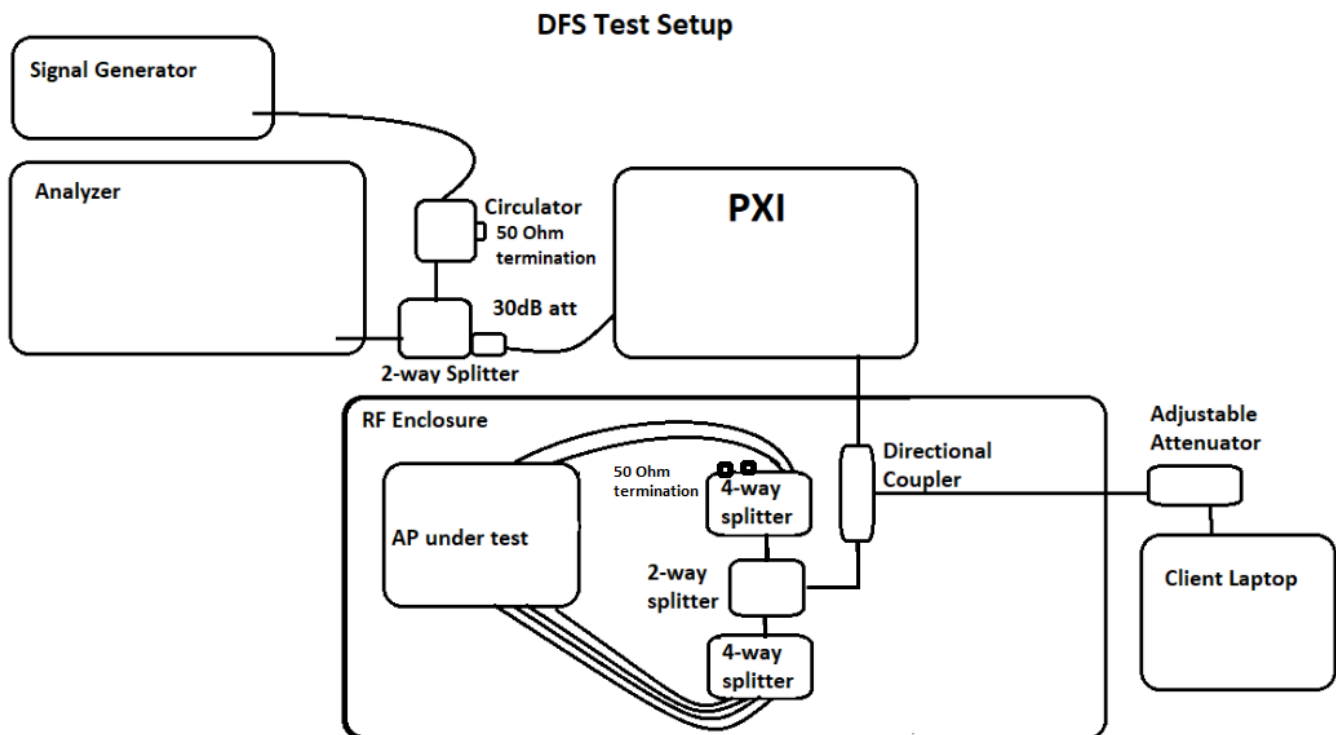


USA Frequency Hopping Radar Calibration BW160

B.1 Test Procedure/Results

A spectrum analyzer is used as a monitor to verify that the UUT has vacated the Channel within the (Channel Closing Transmission Time and Channel Move Time) and does not transmit on a Channel during the Non-Occupancy Period after the detection and Channel move. It is also used to monitor UUT transmissions during the Channel Availability Check Time.

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



Conducted Setup: Radar Test Waveforms are injected into the Master

B.2 UNII Detection Bandwidth

Test Procedure

Ref. KDB 905462 D02 UNII section 7.8.1

All DFS testing was done at 5500 MHz. The 99% channel bandwidth for 20MHz signals is 18.9 MHz, the the 99% channel bandwidth for 40MHz signals is 37.7 MHz, the 99% channel bandwidth for 80MHz signals is 77MHz, and the 99% channel bandwidth for 160MHz signals is 156MHz. See the 99% OBW section included below.

The generating equipment is configured as shown in the Conducted Test Setup above. A single *Burst* of the desired radar profile is produced at 5500MHz at a -58dBm 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 otherwise the UUT does not comply with DFS requirements.

DFS Test Report No: **EDCS – 21541318**

99% Occupied Bandwidth

Center Frequency (MHz)	Mode	Data Rate (Mbps)	99% BW (MHz)
5570	HE160, m0h1	m0h1	156
5500	HE20, m0h1	m0h1	18.9
5510	HE40, m0h1	m0h1	37.7
5530	HE80, m0h1	m0h1	77

DFS Test Report No: **EDCS – 21541318**

20MHz UNII Detection Bandwidth

USA Bin 0

power=-58dB

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)											Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)		
5490.55	1	1	1	1	1	1	1	1	1	1	100	18.9	18.9
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		
5509.45	1	1	1	1	1	1	1	1	1	1	100		

DFS Test Report No: **EDCS – 21541318**

40MHz UNII Detection Bandwidth

USA Bin 0

power=-58dB

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)											Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)		
5491.15	1	1	1	1	1	1	1	1	1	1	100	37.7	37.7
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		

DFS Test Report No: **EDCS – 21541318**

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		
5528.85	1	1	1	1	1	1	1	1	1	1	100		

DFS Test Report No: **EDCS – 21541318**

80MHz UNII Detection Bandwidth

USA Bin 0

power=-58dB

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)											Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)		
5491.5	1	1	1	1	1	1	1	1	1	1	100	77	77
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

DFS Test Report No: **EDCS – 21541318**

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		
5568.5	1	1	1	1	1	1	1	1	1	1	100		

DFS Test Report No: **EDCS – 21541318**

160MHz UNII Detection Bandwidth

USA Bin 0

power=-58dB

Radar Frequency	DFS Detection Trials (1=Detection, Blank= No Detection)											Detection Bandwidth (MHz)	Limit (MHz)
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)		
5492	1	1	1	1	1	1	1	1	1	1	100	156	156
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	0	1	1	1	1	1	1	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
5571	1	1	1	0	1	1	1	1	1	1	90
5572	1	1	1	1	1	1	1	1	1	1	100
5573	1	1	1	1	1	1	1	1	1	1	100
5574	1	1	1	0	1	1	1	0	1	1	93.3
5575	1	1	1	1	1	1	1	1	1	1	100
5576	1	1	1	1	1	1	1	1	1	1	100
5577	1	1	1	1	1	1	1	1	1	0	90
5578	1	1	1	1	1	1	1	1	1	1	100
5579	1	1	1	1	1	1	0	1	1	1	90
5580	1	1	1	1	1	1	1	1	1	1	100
5581	1	1	1	1	1	1	1	1	1	1	100
5582	1	1	1	1	1	1	1	1	1	1	100
5583	1	1	1	1	1	1	1	1	1	1	100
5584	1	1	1	1	1	1	1	1	1	1	100
5585	1	1	1	1	1	1	1	1	1	1	100
5586	1	1	1	1	1	1	1	1	1	1	100
5587	1	1	1	1	1	1	1	1	1	1	100
5588	1	1	1	1	1	1	1	1	1	1	100
5589	1	1	1	1	1	1	1	1	1	1	100
5590	1	1	1	1	1	1	1	1	1	1	100
5591	1	1	1	1	1	1	1	1	1	1	100
5592	1	1	1	1	1	1	1	1	1	1	100
5593	1	1	1	1	1	1	1	1	1	1	100
5594	1	1	1	1	1	1	1	1	1	1	100
5595	1	1	1	1	1	1	1	1	1	1	100
5596	1	1	1	1	1	1	1	1	1	1	100
5597	1	1	1	1	1	1	1	1	1	1	100
5598	1	1	1	1	1	1	1	1	1	1	100
5599	1	1	1	1	1	1	1	1	1	1	100
5600	1	1	1	1	1	1	1	1	1	1	100
5601	1	1	1	1	1	1	1	1	1	1	100
5602	1	1	1	1	1	1	1	1	1	1	100
5603	1	1	1	1	1	1	1	1	1	1	100
5604	1	1	1	1	1	1	1	1	1	1	100
5605	1	1	1	1	1	1	1	1	1	1	100

5606	1	1	1	1	1	1	1	1	1	1	100
5607	1	1	1	1	1	1	1	1	1	1	100
5608	1	1	1	1	1	1	1	1	1	1	100
5609	1	1	1	1	1	1	1	1	1	1	100
5610	1	1	1	1	1	1	1	1	1	1	100
5611	1	1	1	1	1	1	1	1	1	1	100
5612	1	1	1	1	1	1	1	1	1	1	100
5613	1	1	1	1	1	1	1	1	1	1	100
5614	1	1	1	1	1	1	1	1	1	1	100
5615	1	1	1	1	1	1	1	1	1	1	100
5616	1	1	1	1	1	1	1	1	1	1	100
5617	1	1	1	1	1	1	1	1	1	1	100
5618	1	1	1	1	1	1	1	1	1	1	100
5619	1	1	1	1	1	1	1	1	1	1	100
5620	1	1	1	1	1	1	1	1	1	1	100
5621	1	1	1	1	1	1	1	1	1	1	100
5622	1	1	1	1	1	1	1	1	1	1	100
5623	1	1	1	1	1	1	1	1	1	1	100
5624	1	1	1	1	1	1	1	1	1	1	100
5625	1	1	1	1	1	1	1	1	1	1	100
5626	1	1	1	1	1	1	1	1	1	1	100
5627	1	1	1	1	1	1	1	1	1	1	100
5628	1	1	1	1	1	1	1	1	1	1	100
5629	1	1	1	1	1	1	1	1	1	1	100
5630	1	1	1	1	1	1	1	1	1	1	100
5631	1	1	1	1	1	1	1	1	1	1	100
5632	1	1	1	1	1	1	1	1	1	1	100
5633	1	1	1	1	1	1	1	1	1	1	100
5634	1	1	1	1	1	1	1	1	1	1	100
5635	1	1	1	1	1	1	1	1	1	1	100
5636	1	1	1	1	1	1	1	1	1	1	100
5637	1	1	1	1	1	1	1	1	1	1	100
5638	1	1	1	1	1	1	1	1	1	1	100
5639	1	1	1	1	1	1	1	1	1	1	100
5640	1	1	1	1	1	1	1	1	1	1	100
5641	1	1	1	1	1	1	1	1	1	1	100
5642	1	1	1	1	1	1	1	1	1	1	100
5643	1	1	1	1	1	1	1	1	1	1	100
5644	1	1	1	1	1	1	1	1	1	1	100
5645	1	1	1	1	1	1	1	1	1	1	100

DFS Test Report No: **EDCS – 21541318**

5646	1	1	1	1	1	1	1	1	1	1	100		
5647	1	1	1	1	1	1	1	1	1	1	100		
5648	1	1	1	1	1	1	1	1	1	1	100		

B.3 Radar Burst at the Beginning of the Channel Availability Check Time

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

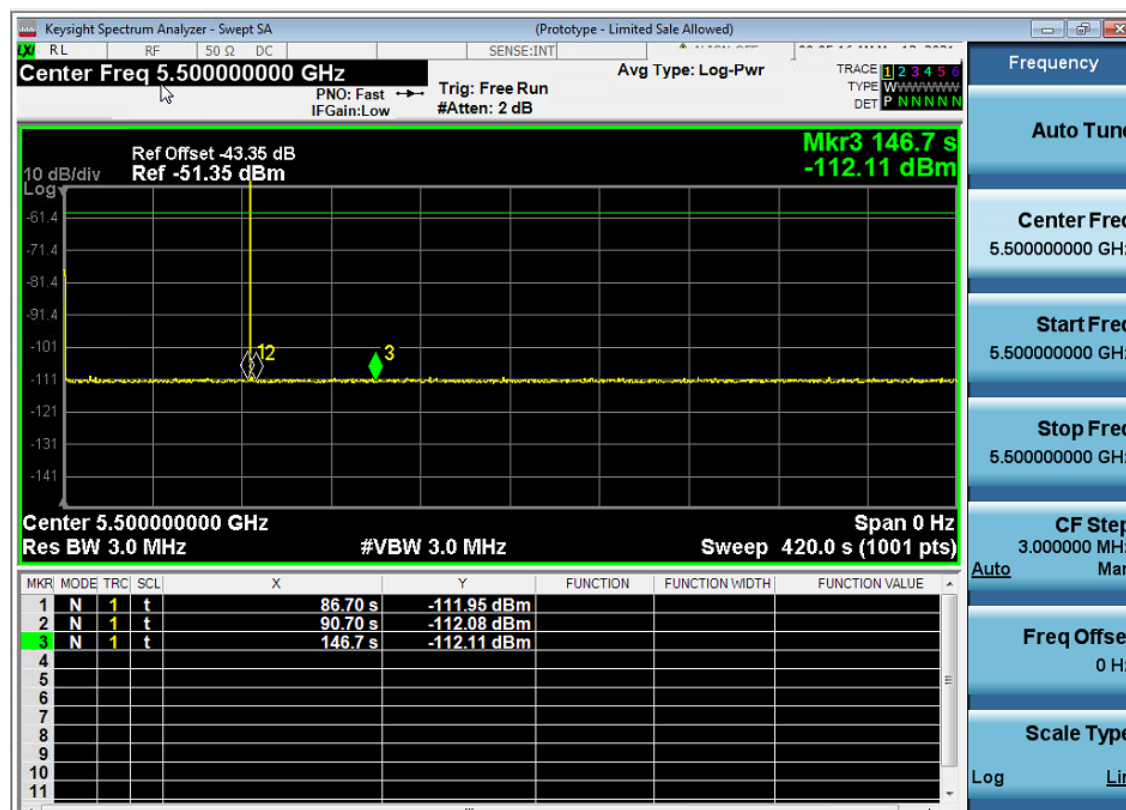
The UUT is powered on at T_0 . T_1 denotes the instant when the UUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T_1 and will end no sooner than $T_1 + 60$ seconds.

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

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

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

Radar Burst at the Beginning of the Channel Availability Check Time



BW20

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

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

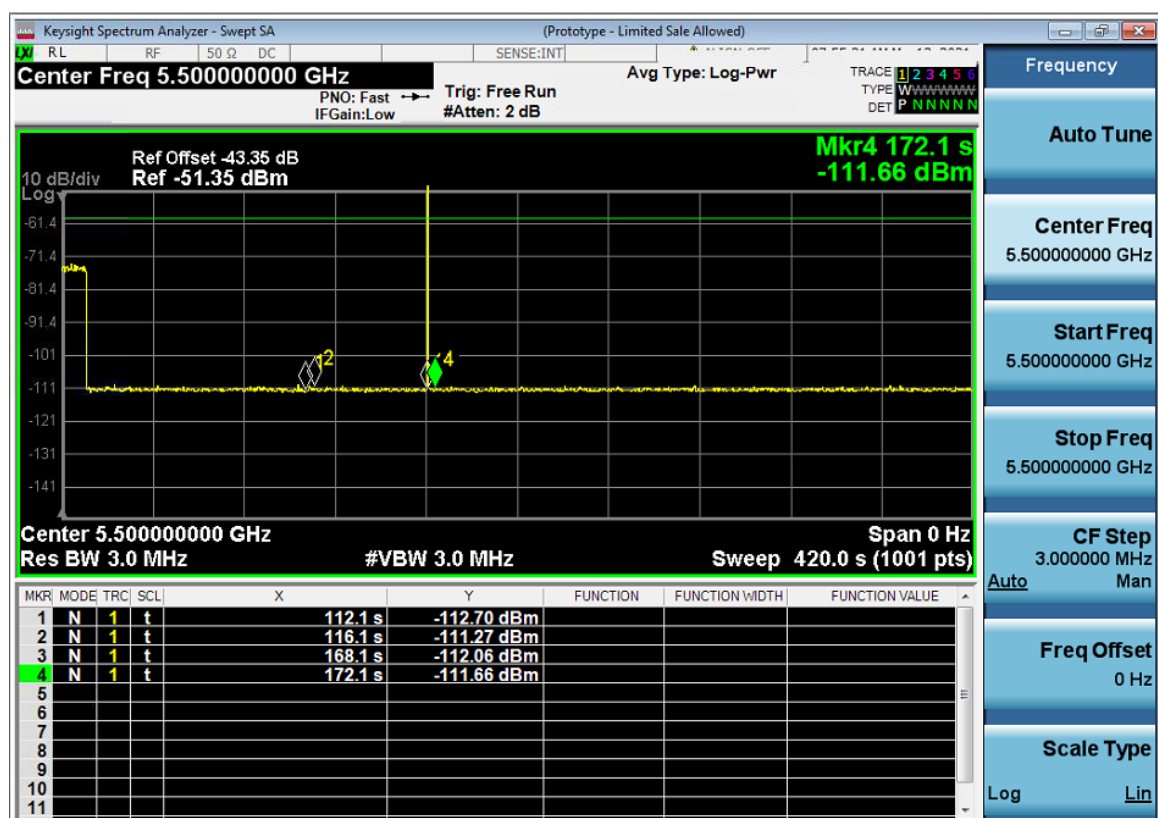
The UUT is powered on at T_0 . T_1 denotes the instant when the UUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T_1 and will end no sooner than $T_1 + 60$ seconds.

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

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

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

Radar Burst at the End of the Channel Availability Check Time



BW20

B.5 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.

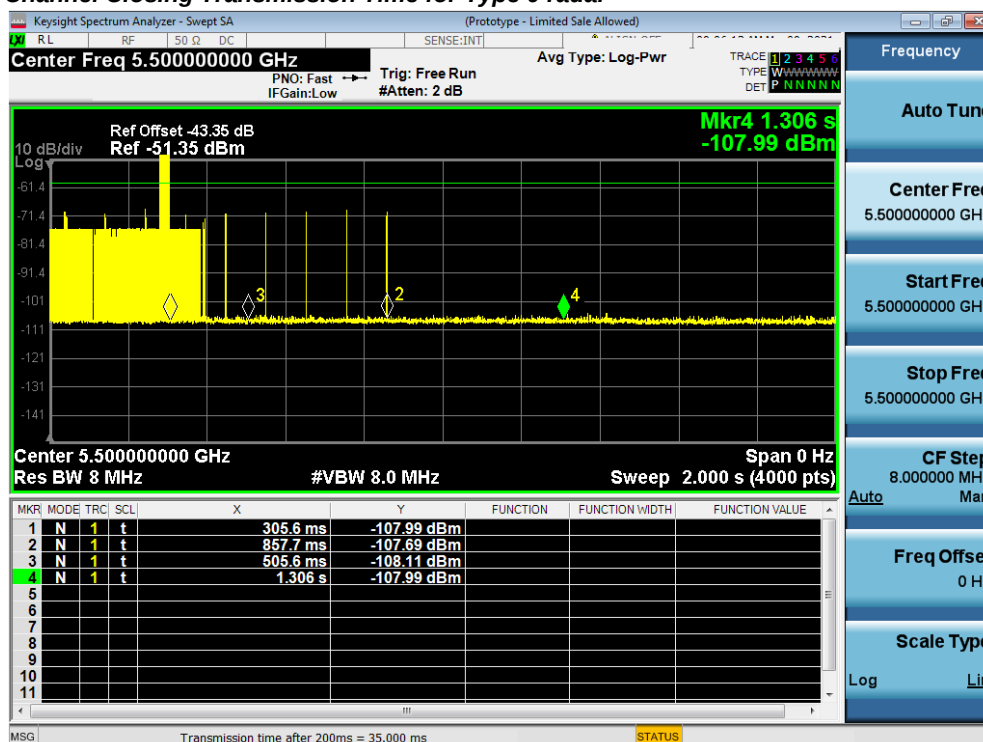
A U-NII device operating as a Client Device will associate with the UUT (Master) at 5500 MHz. Iperf traffic sent from the Master Device to the Client Device on the selected Channel for the entire period of the test.

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*.

The following plot demonstrates a channel close time of 200ms, with an aggregate of no more than 60 ms. Type 0 radar was used for this data.

Channel Closing Transmission Time for Type 0 radar



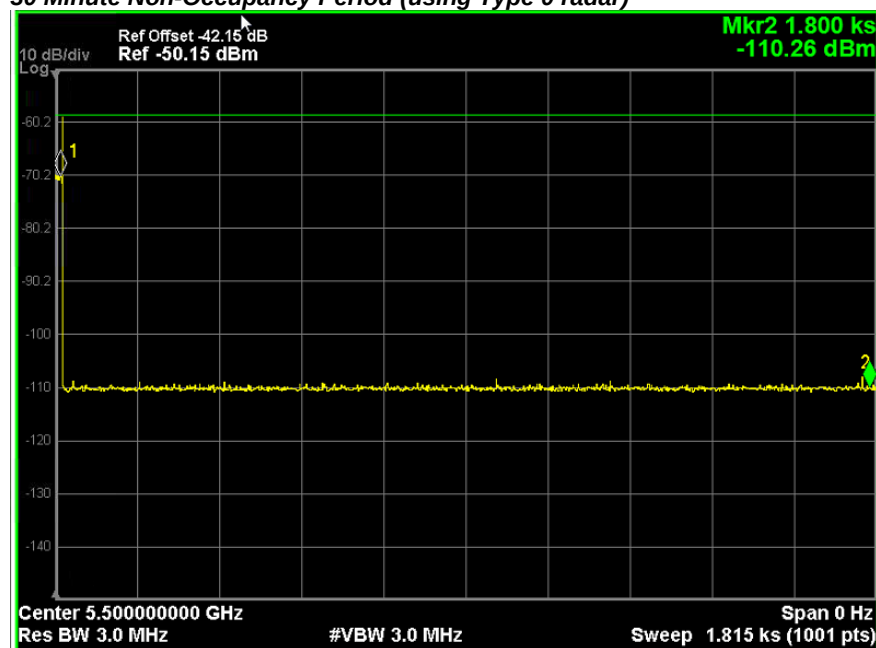
Channel Move Time for Type 0 radar



BW20

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

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



BW20

B.6 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 IPERF traffic 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, 40 MHz, and 80 MHz signal bandwidths.

DFS Test Report No: **EDCS – 21541318**

Channel 5500 MHz, 20MHz BW, Statistical Performance

Radar Signal Strength: -57dBm

USA Bin 1A/1B

freq=5500, bw=18.9

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5490.55	78	1	678	1	93.3%	60.0%
2	5490.55	83	1	638	1		
3	5490.55	72	1	738	1		
4	5490.55	68	1	778	1		
5	5494	63	1	838	1		
6	5494	58	1	918	1		
7	5494	65	1	818	1		
8	5496	57	1	938	1		
9	5496	95	1	558	1		
10	5496	18	1	3066	0		
11	5498	81	1	658	1		
12	5498	81	1	658	1		
13	5498	74	1	718	0		
14	5498	92	1	578	1		
15	5500	68	1	778	1		
16	5500	24	1	2289	1		
17	5500	37	1	1444	1		
18	5502	28	1	1900	1		
19	5502	25	1	2138	1		
20	5502	25	1	2170	1		
21	5504	19	1	2873	1		
22	5504	19	1	2872	1		
23	5504	38	1	1408	1		
24	5504	37	1	1442	1		
25	5506	30	1	1760	1		
26	5506	29	1	1829	1		
27	5506	38	1	1401	1		
28	5509.45	21	1	2549	1		
29	5509.45	28	1	1929	1		
30	5509.45	50	1	1066	1		

USA Bin 1A/1B

freq=5500, bw=18.9

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5490.55	86	1	618	1	100.0%	60.0%
2	5490.55	61	1	878	1		
3	5490.55	58	1	918	1		
4	5490.55	95	1	558	1		
5	5494	78	1	678	1		
6	5494	78	1	678	1		
7	5494	70	1	758	1		
8	5496	76	1	698	1		
9	5496	67	1	798	1		
10	5496	65	1	818	1		
11	5498	70	1	758	1		
12	5498	78	1	678	1		
13	5498	78	1	678	1		
14	5498	68	1	778	1		
15	5500	81	1	658	1		
16	5500	19	1	2885	1		
17	5500	32	1	1654	1		
18	5502	69	1	772	1		
19	5502	26	1	2094	1		
20	5502	21	1	2524	1		
21	5504	92	1	575	1		
22	5504	59	1	901	1		
23	5504	22	1	2403	1		
24	5504	26	1	2084	1		
25	5506	47	1	1128	1		
26	5506	19	1	2778	1		
27	5506	19	1	2833	1		
28	5509.45	28	1	1885	1		
29	5509.45	34	1	1562	1		
30	5509.45	18	1	2982	1		

USA Bin 2

freq=5500, bw=18.9

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5490.55	23	1	170	1	70.0%	60.0%
2	5490.55	27	4.5	223	1		
3	5490.55	23	4.5	207	1		
4	5490.55	25	3.4	170	1		
5	5494	28	4.1	219	1		
6	5494	26	2.5	152	1		
7	5494	29	3.1	189	1		
8	5496	27	4.7	216	1		
9	5496	24	2	215	1		
10	5496	27	1.3	174	1		
11	5498	26	4.3	177	0		
12	5498	29	3.2	190	0		
13	5498	28	4.6	161	0		
14	5498	26	4.7	158	1		
15	5500	29	2.6	212	1		
16	5500	26	3.4	153	1		
17	5500	29	2.9	150	1		
18	5502	23	3.7	219	0		
19	5502	23	2.6	162	0		
20	5502	27	3.1	164	0		
21	5504	28	1.5	222	0		
22	5504	29	4.7	199	0		
23	5504	26	1.7	197	1		
24	5504	28	1.5	169	1		
25	5506	27	1.5	166	0		
26	5506	28	4.1	152	1		
27	5506	29	1.8	214	1		
28	5509.45	24	5	189	1		
29	5509.45	28	2.1	165	1		
30	5509.45	25	2.5	202	1		

USA Bin 3

freq=5500, bw=18.9

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5490.55	17	8.9	246	1	76.7%	60.0%
2	5490.55	18	7.2	392	0		
3	5490.55	16	7.9	471	1		
4	5490.55	17	7.6	369	1		
5	5494	17	6.2	280	1		
6	5494	16	6.3	256	1		
7	5494	18	6.9	364	0		
8	5496	18	6.5	325	1		
9	5496	16	8.9	453	1		
10	5496	18	8.3	326	1		
11	5498	17	6.2	239	1		
12	5498	18	9.7	469	1		
13	5498	17	6.1	326	1		
14	5498	17	9.1	426	0		
15	5500	18	9.7	490	1		
16	5500	16	9.4	461	1		
17	5500	17	6.2	217	0		
18	5502	18	6.7	392	0		
19	5502	18	8.9	281	1		
20	5502	17	6.4	442	1		
21	5504	16	7.1	208	1		
22	5504	17	6.3	332	1		
23	5504	17	7.5	286	0		
24	5504	18	6.4	488	0		
25	5506	16	8.1	214	1		
26	5506	17	6.3	385	1		
27	5506	18	8.4	378	1		
28	5509.45	16	6.8	325	1		
29	5509.45	17	7.1	465	1		
30	5509.45	18	8.2	266	1		

USA Bin 4

freq=5500, bw=18.9

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5490.55	12	16.2	411	1	80.0%	60.0%
2	5490.55	13	12.8	232	1		
3	5490.55	13	14.6	415	1		
4	5490.55	15	18.9	370	1		
5	5494	12	14.6	383	1		
6	5494	16	14	214	0		
7	5494	15	16.6	480	1		
8	5496	14	12.8	462	0		
9	5496	13	18.1	462	1		
10	5496	15	16.3	461	0		
11	5498	16	15.6	264	1		
12	5498	15	12	240	1		
13	5498	16	13.7	265	1		
14	5498	12	12.2	252	1		
15	5500	15	18	414	1		
16	5500	16	12.6	417	1		
17	5500	13	13.7	249	1		
18	5502	14	16	397	1		
19	5502	16	16	245	1		
20	5502	13	15.6	260	0		
21	5504	14	12	309	1		
22	5504	14	12.5	392	0		
23	5504	14	19.1	452	1		
24	5504	12	13.1	383	1		
25	5506	16	12.1	446	1		
26	5506	13	19.1	426	1		
27	5506	16	18	239	0		
28	5509.45	16	16.4	277	1		
29	5509.45	14	18.2	484	1		
30	5509.45	15	14.1	200	1		

USA Bin 5

freq=5500, bw=18.9

Trial	Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)	1=Detection 0=No Detection	Detection Percentage	Limit
1	1	1	5498.1	19	95			0.12743	0	86.7%	80.0%
2	1	3	5498.6	20	60	1483	1767	0.361242	1		
3	1	3	5494.9	11	85	1875	1908	0.341304	1		
4	1	2	5494.1	9	55	1588		0.714935	1		
5	1	2	5495.4	12	80	1500		0.028032	1		
6	1	1	5498.1	19	95			0.275716	1		
7	1	2	5496.6	15	85	1284		0.37611	1		
8	1	1	5496.1	14	75			0.527238	1		
9	1	2	5497.4	17	60	1029		0.529612	1		
10	1	3	5496.1	14	60	1764	1660	0.309455	1		
11	1	1	5500	17	95			1.12821	1		
12	1	3	5500	19	70	1813	1462	0.358664	1		
13	1	3	5500	11	65	1451	1117	0.511038	1		
14	1	2	5500	13	90	1664		0.155055	1		
15	1	2	5500	16	65	1181		1.392449	1		
16	1	2	5500	9	85	1053		0.635887	1		
17	1	2	5500	7	50	1713		0.058188	0		
18	1	1	5500	10	85			0.476545	1		
19	1	3	5500	16	95	1663	1155	1.152695	0		
20	1	1	5500	5	95			0.864764	1		
21	1	3	5505.9	9	95	1488	1207	0.269399	1		
22	1	1	5501.9	19	55			0.041135	1		
23	1	3	5503.4	15	90	1190	1031	0.197822	1		
24	1	1	5501.9	19	80			0.305687	1		
25	1	1	5506.2	8	65			0.275202	1		
26	1	2	5503.4	15	70	1117		0.081126	1		
27	1	3	5505.4	10	80	1926	1409	0.254561	1		
28	1	2	5505.4	10	75	1571		0.221379	0		
29	1	3	5506.6	7	90	1627	1095	0.563619	1		
30	1	2	5507.1	6	100	1001		0.352669	1		

USA Frequency Hopping

freq=5500, bw=18.9

Trial	Hop #	Freq (GHz)	Pulse Start (mS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	7	5504	21	1	100.0%	70.0%
2	14	5502	42	1		
3	13	5501	39	1		
4	34	5494	102	1		
5	25	5493	75	1		
6	16	5506	48	1		
7	33	5500	99	1		
8	8	5494	24	1		
9	12	5501	36	1		
10	22	5506	66	1		
11	2	5503	6	1		
12	12	5503	36	1		
13	6	5502	18	1		
14	41	5502	123	1		
15	34	5504	102	1		
16	3	5497	9	1		
17	17	5492	51	1		
18	15	5495	45	1		
19	6	5497	18	1		
20	2	5498	6	1		
21	38	5503	114	1		
22	8	5508	24	1		
23	18	5506	54	1		
24	49	5493	147	1		
25	27	5504	81	1		
26	4	5495	12	1		
27	6	5509	18	1		
28	10	5495	30	1		
29	0	5491	0	1		
30	62	5505	186	1		

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

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (93.3\% + 100.0\% + 70.0\% + 76.7\% + 80)/5 = 84.0\% (>80\%)$$

Bin 5 Details

USA Bin 5 Trial #1

1	1	5498.1	19	95			0.127430
2	3	5498.1	19	70	1176	1683	1.07555
3	1	5498.1	19	85			1.959496
4	2	5498.1	19	80	1913		2.935009
5	3	5498.1	19	100	1200	1217	3.462515
6	2	5498.1	19	50	1969		4.453594
7	2	5498.1	19	85	1189		4.538797
8	1	5498.1	19	50			5.602038
9	3	5498.1	19	90	1761	1134	6.448075
10	1	5498.1	19	50			6.78138
11	3	5498.1	19	90	1391	1272	7.719297
12	3	5498.1	19	100	1549	1315	8.392985
13	3	5498.1	19	90	1656	1922	9.514513
14	2	5498.1	19	60	1029		9.969137
15	3	5498.1	19	75	1567	1086	10.642204
16	2	5498.1	19	55	1471		11.334345
0	0	0	0	0			0

USA Bin 5 Trial #2

1	3	5498.6	20	60	1483	1767	0.361242
2	3	5498.6	20	80	1729	1664	2.124988
3	1	5498.6	20	65			2.518628
4	1	5498.6	20	85			4.121666
5	2	5498.6	20	60	1798		4.495502
6	3	5498.6	20	95	1912	1528	5.848703
7	2	5498.6	20	80	1040		7.136513
8	3	5498.6	20	60	1517	1724	8.597171
9	3	5498.6	20	80	1683	1705	8.901053
10	3	5498.6	20	60	1383	1287	9.833425
11	3	5498.6	20	100	1888	1423	11.671862
0	0	0	0	0			0

USA Bin 5 Trial #3

1	3	5494.9	11	85	1875	1908	0.341304
2	1	5494.9	11	50			1.083263
3	2	5494.9	11	70	1220		1.554739
4	1	5494.9	11	75			2.348259
5	2	5494.9	11	100	1752		3.029674
6	3	5494.9	11	80	1130	1251	3.807269
7	2	5494.9	11	70	1791		4.443587
8	2	5494.9	11	100	1001		5.359347
9	3	5494.9	11	60	1504	1003	5.836791

DFS Test Report No: **EDCS – 21541318**

10	1	5494.9	11	95			6.435975
11	3	5494.9	11	55	1159	1869	7.361704
12	3	5494.9	11	60	1274	1242	8.105649
13	3	5494.9	11	85	1159	1633	8.485056
14	3	5494.9	11	85	1431	1747	9.511615
15	3	5494.9	11	55	1987	1955	10.423874
16	2	5494.9	11	50	1543		11.174326
17	2	5494.9	11	50	1258		11.595334
0	0	0	0	0			0
USA Bin 5 Trial #4							
1	2	5494.1	9	55	1588		0.714935
2	1	5494.1	9	55			1.259806
3	3	5494.1	9	90	1242	1545	3.020864
4	2	5494.1	9	95	1345		3.957714
5	3	5494.1	9	55	1131	1127	5.146717
6	1	5494.1	9	85			7.003031
7	3	5494.1	9	95	1727	1609	7.599984
8	1	5494.1	9	70			9.297179
9	2	5494.1	9	85	1109		9.949244
10	2	5494.1	9	55	1439		11.247168
0	0	0	0	0			0
USA Bin 5 Trial #5							
1	2	5495.4	12	80	1500		0.028032
2	1	5495.4	12	100			0.935612
3	3	5495.4	12	65	1338	1483	2.458297
4	3	5495.4	12	50	1328	1223	2.864585
5	2	5495.4	12	100	1392		4.1943
6	1	5495.4	12	100			5.432791
7	1	5495.4	12	95			5.952119
8	1	5495.4	12	95			6.813271
9	2	5495.4	12	50	1381		7.778818
10	2	5495.4	12	70	1915		8.724697
11	3	5495.4	12	95	1177	1398	9.908059
12	2	5495.4	12	60	1225		11.067713
13	2	5495.4	12	75	1931		11.412696
0	0	0	0	0			0
USA Bin 5 Trial #6							
1	1	5498.1	19	95			0.275716
2	3	5498.1	19	75	1803	1448	1.817209
3	1	5498.1	19	70			2.397626
4	3	5498.1	19	90	1803	1455	3.603672
5	3	5498.1	19	55	1591	1536	4.414757

DFS Test Report No: **EDCS – 21541318**

6	1	5498.1	19	75			5.448653
7	3	5498.1	19	60	1421	1678	6.075236
8	1	5498.1	19	65			7.045454
9	3	5498.1	19	50	1091	1372	8.934199
10	2	5498.1	19	50	1204		9.085912
11	2	5498.1	19	70	1983		10.923945
12	2	5498.1	19	90	1568		11.513576
0	0	0	0	0			0

USA Bin 5 Trial #7

1	2	5496.6	15	85	1284		0.376110
2	3	5496.6	15	65	1925	1924	0.813279
3	3	5496.6	15	70	1597	1376	1.624338
4	3	5496.6	15	55	1548	1749	3.083248
5	2	5496.6	15	75	1651		3.210628
6	1	5496.6	15	95			4.327659
7	1	5496.6	15	95			5.276249
8	3	5496.6	15	95	1187	1666	6.317824
9	2	5496.6	15	85	1062		7.038625
10	3	5496.6	15	50	1647	1304	7.883932
11	3	5496.6	15	90	1334	1263	8.227397
12	3	5496.6	15	90	1664	1208	9.169391
13	3	5496.6	15	55	1530	1171	9.903053
14	2	5496.6	15	60	1643		11.074055
15	2	5496.6	15	95	1365		11.304208
0	0	0	0	0			0

USA Bin 5 Trial #8

1	1	5496.1	14	75			0.527238
2	3	5496.1	14	55	1176	1286	2.770157
3	1	5496.1	14	85			3.773285
4	1	5496.1	14	50			5.733169
5	3	5496.1	14	95	1831	1286	6.336198
6	3	5496.1	14	70	1215	1925	7.6546
7	3	5496.1	14	90	1815	1963	9.281694
8	3	5496.1	14	65	1335	1265	10.684356
0	0	0	0	0			0

USA Bin 5 Trial #9

1	2	5497.4	17	60	1029		0.529612
2	2	5497.4	17	80	1845		1.643916
3	1	5497.4	17	50			1.903645
4	1	5497.4	17	90			3.571936
5	2	5497.4	17	85	1939		3.809875
6	3	5497.4	17	85	1089	1786	5.35936

DFS Test Report No: **EDCS – 21541318**

7	1	5497.4	17	50			6.238833
8	2	5497.4	17	85	1005		6.755126
9	3	5497.4	17	90	1347	1865	7.814386
10	3	5497.4	17	80	1723	1002	8.691417
11	1	5497.4	17	100			9.928063
12	1	5497.4	17	75			10.967494
13	3	5497.4	17	65	1948	1902	11.816287
0	0	0	0	0			0

USA Bin 5 Trial #10

1	3	5496.1	14	60	1764	1660	0.309455
2	1	5496.1	14	50			1.214365
3	3	5496.1	14	65	1078	1026	2.748718
4	1	5496.1	14	55			3.916744
5	1	5496.1	14	55			4.899404
6	1	5496.1	14	95			5.764365
7	1	5496.1	14	50			6.913224
8	2	5496.1	14	55	1506		8.359119
9	3	5496.1	14	75	1025	1519	9.45423
10	2	5496.1	14	80	1125		10.469751
11	3	5496.1	14	75	1932	1397	11.048826
0	0	0	0	0			0

USA Bin 5 Trial #11

1	1	5500.0	17	95			1.128210
2	3	5500	17	80	1645	1469	1.870359
3	1	5500	17	80			2.630717
4	2	5500	17	55	1543		4.757281
5	2	5500	17	50	1039		5.063008
6	2	5500	17	75	1040		7.171108
7	1	5500	17	50			7.457043
8	1	5500	17	90			9.02101
9	1	5500	17	50			10.005636
10	2	5500	17	65	1987		11.833915
0	0	0	0	0			0

USA Bin 5 Trial #12

1	3	5500.0	19	70	1813	1462	0.358664
2	3	5500	19	70	1183	1640	0.758116
3	2	5500	19	50	1151		1.975932
4	2	5500	19	55	1616		2.720552
5	1	5500	19	100			3.524518
6	1	5500	19	65			3.990419
7	3	5500	19	50	1545	1518	4.533666
8	2	5500	19	60	1158		5.515522

DFS Test Report No: **EDCS – 21541318**

9	2	5500	19	100	1577		5.953684
10	3	5500	19	90	1009	1791	6.938205
11	2	5500	19	50	1270		7.628806
12	2	5500	19	60	1814		8.460868
13	3	5500	19	70	1437	1684	8.68693
14	1	5500	19	60			9.435409
15	1	5500	19	65			10.190578
16	2	5500	19	60	1912		10.787993
17	3	5500	19	85	1902	1672	11.777404
0	0	0	0	0			0

USA Bin 5 Trial #13

1	3	5500.0	11	65	1451	1117	0.511038
2	3	5500	11	85	1228	1133	1.29616
3	3	5500	11	65	1452	1597	1.584583
4	2	5500	11	90	1185		2.304312
5	2	5500	11	80	1721		3.135558
6	1	5500	11	65			4.202465
7	1	5500	11	75			4.863712
8	3	5500	11	70	1044	1247	5.266159
9	3	5500	11	50	1020	1096	6.686019
10	1	5500	11	80			7.38161
11	1	5500	11	100			7.552756
12	3	5500	11	90	1694	1818	8.750219
13	2	5500	11	95	1046		9.052543
14	2	5500	11	55	1142		10.491308
15	3	5500	11	100	1328	1045	10.612491
16	3	5500	11	90	1358	1661	11.603925
0	0	0	0	0			0

USA Bin 5 Trial #14

1	2	5500.0	13	90	1664		0.155055
2	2	5500	13	75	1889		0.957558
3	2	5500	13	90	1057		1.906517
4	1	5500	13	80			2.539299
5	1	5500	13	70			3.210081
6	2	5500	13	70	1731		4.105609
7	2	5500	13	60	1505		5.205329
8	2	5500	13	90	1885		6.12331
9	1	5500	13	65			6.721657
10	1	5500	13	55			7.692187
11	2	5500	13	95	1803		8.336272
12	1	5500	13	100			9.49188
13	1	5500	13	55			10.014118

DFS Test Report No: **EDCS – 21541318**

14	1	5500	13	65			10.871932
15	3	5500	13	70	1767	1088	11.219599
0	0	0	0	0			0
USA Bin 5 Trial #15							
1	2	5500.0	16	65	1181		1.392449
2	1	5500	16	65			1.841427
3	3	5500	16	70	1905	1068	3.573986
4	3	5500	16	50	1989	1851	4.998421
5	1	5500	16	75			7.326625
6	3	5500	16	85	1830	1535	7.612993
7	3	5500	16	75	1001	1507	9.141205
8	1	5500	16	100			11.406334
0	0	0	0	0			0
USA Bin 5 Trial #16							
1	2	5500.0	9	85	1053		0.635887
2	2	5500	9	65	1317		1.092641
3	3	5500	9	100	1929	1160	1.895057
4	1	5500	9	80			2.762586
5	1	5500	9	80			3.596746
6	2	5500	9	80	1387		3.886117
7	3	5500	9	60	1718	1463	4.605423
8	2	5500	9	90	1528		5.960142
9	3	5500	9	50	1995	1829	6.564244
10	3	5500	9	85	1266	1349	7.06686
11	2	5500	9	70	1392		7.717635
12	1	5500	9	85			8.716321
13	1	5500	9	100			9.273613
14	3	5500	9	85	1480	1239	10.049851
15	1	5500	9	65			11.148174
16	1	5500	9	90			11.867554
0	0	0	0	0			0
USA Bin 5 Trial #17							
1	2	5500.0	7	50	1713		0.058188
2	2	5500	7	95	1524		1.015594
3	3	5500	7	70	1679	1729	2.167721
4	1	5500	7	70			3.199777
5	2	5500	7	75	1124		3.219093
6	3	5500	7	55	1670	1232	4.542469
7	3	5500	7	50	1215	1822	5.571126
8	1	5500	7	50			5.923433
9	2	5500	7	70	1908		6.482359
10	1	5500	7	70			7.967209

DFS Test Report No: **EDCS – 21541318**

11	2	5500	7	85	1951		8.210976
12	3	5500	7	55	1830	1033	9.529439
13	3	5500	7	95	1257	1191	10.165884
14	2	5500	7	55	1802		10.686214
15	3	5500	7	55	1523	1220	11.91655
0	0	0	0	0			0

USA Bin 5 Trial #18

1	1	5500.0	10	85			0.476545
2	2	5500	10	70	1740		0.914577
3	1	5500	10	70			2.38403
4	2	5500	10	85	1146		3.233044
5	2	5500	10	100	1297		4.241977
6	2	5500	10	75	1422		4.406508
7	1	5500	10	65			5.296375
8	3	5500	10	50	1115	1005	6.551937
9	2	5500	10	60	1703		7.497672
10	2	5500	10	85	1172		8.0106
11	3	5500	10	80	1975	1972	9.042614
12	3	5500	10	55	1709	1562	10.060558
13	2	5500	10	100	1839		10.539802
14	3	5500	10	100	1742	1396	11.250459
0	0	0	0	0			0

USA Bin 5 Trial #19

1	3	5500.0	16	95	1663	1155	1.152695
2	3	5500	16	100	1697	1328	2.338321
3	1	5500	16	50			4.314284
4	3	5500	16	100	1500	1593	5.740043
5	2	5500	16	85	1224		6.712894
6	1	5500	16	95			7.977986
7	1	5500	16	60			9.025564
8	1	5500	16	55			11.021726
0	0	0	0	0			0

USA Bin 5 Trial #20

1	1	5500.0	5	95			0.864764
2	3	5500	5	90	1058	1817	1.867994
3	3	5500	5	85	1784	1964	2.045808
4	1	5500	5	95			3.68722
5	1	5500	5	90			4.011486
6	2	5500	5	90	1357		5.16389
7	3	5500	5	70	1840	1758	6.464834
8	3	5500	5	75	1714	1940	7.513935
9	2	5500	5	60	1676		8.584062

DFS Test Report No: **EDCS – 21541318**

10	2	5500	5	95	1488		9.121164
11	3	5500	5	85	1305	1945	10.147934
12	3	5500	5	65	1405	1058	11.599625
0	0	0	0	0			0

USA Bin 5 Trial #21

1	3	5505.9	9	95	1488	1207	0.269399
2	3	5505.9	9	80	1871	1277	1.024117
3	2	5505.9	9	70	1342		1.60171
4	2	5505.9	9	85	1337		2.660872
5	3	5505.9	9	65	1895	1636	3.21746
6	3	5505.9	9	70	1117	1810	3.749413
7	2	5505.9	9	60	1924		4.518118
8	2	5505.9	9	90	1965		5.613076
9	3	5505.9	9	55	1788	1965	5.756115
10	1	5505.9	9	55			6.412401
11	2	5505.9	9	90	1335		7.417757
12	2	5505.9	9	100	2000		8.10794
13	1	5505.9	9	100			8.603655
14	2	5505.9	9	70	1346		9.345194
15	3	5505.9	9	60	1086	1412	10.412158
16	3	5505.9	9	75	1938	1356	11.211577
17	1	5505.9	9	85			11.378665
0	0	0	0	0			0

USA Bin 5 Trial #22

1	1	5501.9	19	55			0.041135
2	2	5501.9	19	50	1595		1.153644
3	3	5501.9	19	90	1386	1352	1.694492
4	3	5501.9	19	80	1993	1148	1.978275
5	3	5501.9	19	100	1308	1953	2.540167
6	1	5501.9	19	75			3.562805
7	1	5501.9	19	60			3.777283
8	1	5501.9	19	95			4.490498
9	2	5501.9	19	80	1835		5.148983
10	2	5501.9	19	50	1167		5.467471
11	2	5501.9	19	95	1841		6.099289
12	1	5501.9	19	75			7.11613
13	2	5501.9	19	50	1216		7.70688
14	1	5501.9	19	55			7.939218
15	3	5501.9	19	95	1644	1523	8.554031
16	1	5501.9	19	75			9.324785
17	3	5501.9	19	95	1319	1625	9.858164
18	2	5501.9	19	80	1194		10.511228

DFS Test Report No: **EDCS – 21541318**

19	1	5501.9	19	95			11.373365
20	3	5501.9	19	50	1902	1231	11.511769
0	0	0	0	0			0
USA Bin 5 Trial #23							
1	3	5503.4	15	90	1190	1031	0.197822
2	1	5503.4	15	70			1.168199
3	2	5503.4	15	100	1812		1.842921
4	2	5503.4	15	75	1507		2.714328
5	1	5503.4	15	85			3.545441
6	1	5503.4	15	55			4.022471
7	3	5503.4	15	75	1815	1210	4.939127
8	2	5503.4	15	55	1692		5.623462
9	2	5503.4	15	85	1884		6.629913
10	2	5503.4	15	85	1811		6.871234
11	2	5503.4	15	65	1550		8.109227
12	1	5503.4	15	100			8.319508
13	3	5503.4	15	100	1903	1730	9.041408
14	1	5503.4	15	65			10.120031
15	1	5503.4	15	50			10.864985
16	1	5503.4	15	75			11.575699
0	0	0	0	0			0
USA Bin 5 Trial #24							
1	1	5501.9	19	80			0.305687
2	2	5501.9	19	70	1253		1.616961
3	3	5501.9	19	85	1863	1262	2.26578
4	2	5501.9	19	75	1494		4.33683
5	3	5501.9	19	55	1300	1289	4.6126
6	2	5501.9	19	75	1459		5.704162
7	1	5501.9	19	90			7.025558
8	1	5501.9	19	65			8.25028
9	3	5501.9	19	65	1942	1028	9.519168
10	2	5501.9	19	65	1077		10.253536
11	2	5501.9	19	65	1503		11.932533
0	0	0	0	0			0
USA Bin 5 Trial #25							
1	1	5506.2	8	65			0.275202
2	2	5506.2	8	60	1565		1.127484
3	1	5506.2	8	100			2.374084
4	3	5506.2	8	60	1048	1710	3.358233
5	1	5506.2	8	85			3.851834
6	1	5506.2	8	65			4.722867
7	2	5506.2	8	60	1360		5.988001

DFS Test Report No: **EDCS – 21541318**

8	3	5506.2	8	80	1306	1637	6.403424
9	2	5506.2	8	60	1835		7.010771
10	3	5506.2	8	80	1894	1813	8.233027
11	3	5506.2	8	90	1466	1013	9.383055
12	3	5506.2	8	75	1680	1917	10.263946
13	1	5506.2	8	50			11.073482
14	1	5506.2	8	70			11.979833
0	0	0	0	0			0

USA Bin 5 Trial #26

1	2	5503.4	15	70	1117		0.081126
2	2	5503.4	15	100	1487		1.639523
3	2	5503.4	15	50	1647		2.430812
4	1	5503.4	15	95			3.950453
5	3	5503.4	15	100	1021	1789	4.471221
6	1	5503.4	15	95			5.231589
7	3	5503.4	15	70	1136	1255	6.27373
8	1	5503.4	15	55			7.198825
9	1	5503.4	15	75			8.362207
10	1	5503.4	15	85			9.13912
11	1	5503.4	15	60			10.050056
12	1	5503.4	15	65			11.495359
0	0	0	0	0			0

USA Bin 5 Trial #27

1	3	5505.4	10	80	1926	1409	0.254561
2	2	5505.4	10	50	1844		1.016752
3	1	5505.4	10	80			1.639174
4	2	5505.4	10	90	1598		2.501891
5	1	5505.4	10	90			3.317242
6	2	5505.4	10	65	1222		3.528789
7	3	5505.4	10	75	1059	1161	4.52407
8	3	5505.4	10	75	1471	1177	5.180846
9	2	5505.4	10	75	1016		5.334247
10	3	5505.4	10	50	1842	1034	6.15291
11	2	5505.4	10	90	1705		6.865621
12	2	5505.4	10	55	1549		7.370205
13	2	5505.4	10	90	1920		8.161913
14	1	5505.4	10	90			8.795228
15	1	5505.4	10	95			9.681347
16	2	5505.4	10	90	1648		10.65492
17	3	5505.4	10	75	1425	1621	10.699876
18	3	5505.4	10	65	1196	1672	11.930422
0	0	0	0	0			0

USA Bin 5 Trial #28

1	2	5505.4	10	75	1571		0.221379
2	3	5505.4	10	60	1036	1452	1.985384
3	2	5505.4	10	90	1453		3.371073
4	1	5505.4	10	50			3.781323
5	3	5505.4	10	55	1016	1335	5.219143
6	1	5505.4	10	85			6.511657
7	1	5505.4	10	75			7.573381
8	3	5505.4	10	95	1158	1054	8.989009
9	3	5505.4	10	100	1121	1453	10.197586
10	2	5505.4	10	95	1953		11.903342
0	0	0	0	0			0

USA Bin 5 Trial #29

1	3	5506.6	7	90	1627	1095	0.563619
2	3	5506.6	7	50	1962	1681	0.634262
3	1	5506.6	7	55			1.769268
4	3	5506.6	7	70	1073	1443	2.456149
5	3	5506.6	7	90	1980	1550	3.019733
6	1	5506.6	7	55			3.660982
7	3	5506.6	7	80	1355	1705	3.894068
8	2	5506.6	7	55	1326		5.008949
9	2	5506.6	7	95	1511		5.570044
10	1	5506.6	7	90			5.805975
11	1	5506.6	7	60			6.854347
12	2	5506.6	7	90	1995		7.499505
13	1	5506.6	7	80			7.914333
14	3	5506.6	7	55	1746	1119	8.607394
15	3	5506.6	7	55	1765	1171	9.334736
16	2	5506.6	7	95	1174		9.899081
17	3	5506.6	7	90	1743	1105	10.497879
18	2	5506.6	7	60	1975		11.300487
19	2	5506.6	7	70	1194		11.931907
0	0	0	0	0			0

USA Bin 5 Trial #30

1	2	5507.1	6	100	1001		0.352669
2	2	5507.1	6	65	1896		2.604169
3	1	5507.1	6	95			4.16616
4	3	5507.1	6	55	1512	1487	5.766557
5	3	5507.1	6	100	1144	1189	6.56159
6	2	5507.1	6	80	1765		8.74121
7	2	5507.1	6	85	1361		10.421108
8	1	5507.1	6	60			10.61434

Bin 6 Details

USA Frequency Hopping Trial #1

13	5506	39
27	5509	81
59	5508	177
0	0	0

USA Frequency Hopping Trial #2

7	5493	21
48	5502	144
51	5503	153
56	5495	168
81	5496	243
98	5494	294
0	0	0

USA Frequency Hopping Trial #3

2	5507	6
34	5496	102
35	5509	105
90	5506	270
99	5499	297
0	0	0

USA Frequency Hopping Trial #4

8	5502	24
14	5506	42
33	5499	99
71	5507	213
85	5503	255
0	0	0

USA Frequency Hopping Trial #5

4	5494	12
13	5493	39
25	5504	75
52	5505	156
75	5497	225
79	5506	237
0	0	0

USA Frequency Hopping Trial #6

29	5509	87
83	5507	249
0	0	0

USA Frequency Hopping Trial #7

13	5497	39
66	5503	198
0	0	0

USA Frequency Hopping Trial #8

6	5492	18
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32	5498	96
37	5509	111
76	5501	228
0	0	0

USA Frequency Hopping Trial #9

12	5495	36
95	5501	285
0	0	0

USA Frequency Hopping Trial #10

34	5507	102
61	5497	183
72	5494	216
0	0	0

USA Frequency Hopping Trial #11

1	5497	3
15	5499	45
19	5496	57
51	5493	153
0	0	0

USA Frequency Hopping Trial #12

5	5496	15
22	5499	66
56	5501	168
61	5507	183
70	5498	210
81	5502	243
0	0	0

USA Frequency Hopping Trial #13

4	5503	12
27	5506	81
47	5508	141
0	0	0

USA Frequency Hopping Trial #14

2	5507	6
13	5500	39
36	5494	108
56	5493	168
61	5495	183
0	0	0

USA Frequency Hopping Trial #15

19	5496	57
28	5506	84
32	5498	96
46	5502	138
0	0	0

USA Frequency Hopping Trial #16

25	5495	75
86	5504	258
91	5494	273
99	5509	297
0	0	0

USA Frequency Hopping Trial #17

44	5494	132
64	5501	192
70	5495	210
0	0	0

USA Frequency Hopping Trial #18

43	5507	129
73	5505	219
90	5509	270
0	0	0

USA Frequency Hopping Trial #19

18	5504	54
60	5493	180
70	5497	210
77	5509	231
79	5501	237
89	5499	267
90	5495	270
0	0	0

USA Frequency Hopping Trial #20

14	5503	42
35	5494	105
62	5492	186
97	5502	291
0	0	0

USA Frequency Hopping Trial #21

21	5507	63
40	5493	120
44	5508	132
98	5499	294
0	0	0

USA Frequency Hopping Trial #22

19	5505	57
24	5492	72
25	5499	75
73	5501	219
98	5508	294
0	0	0

USA Frequency Hopping Trial #23

1	5496	3
32	5509	96

35	5505	105
61	5491	183
75	5494	225
91	5503	273
0	0	0

USA Frequency Hopping Trial #24

0	5508	0
10	5498	30
0	0	0

USA Frequency Hopping Trial #25

12	5498	36
98	5499	294
0	0	0

USA Frequency Hopping Trial #26

35	5495	105
60	5492	180
80	5502	240
84	5501	252
0	0	0

USA Frequency Hopping Trial #27

22	5498	66
23	5509	69
37	5497	111
45	5502	135
81	5506	243
0	0	0

USA Frequency Hopping Trial #28

35	5507	105
86	5505	258
0	0	0

USA Frequency Hopping Trial #29

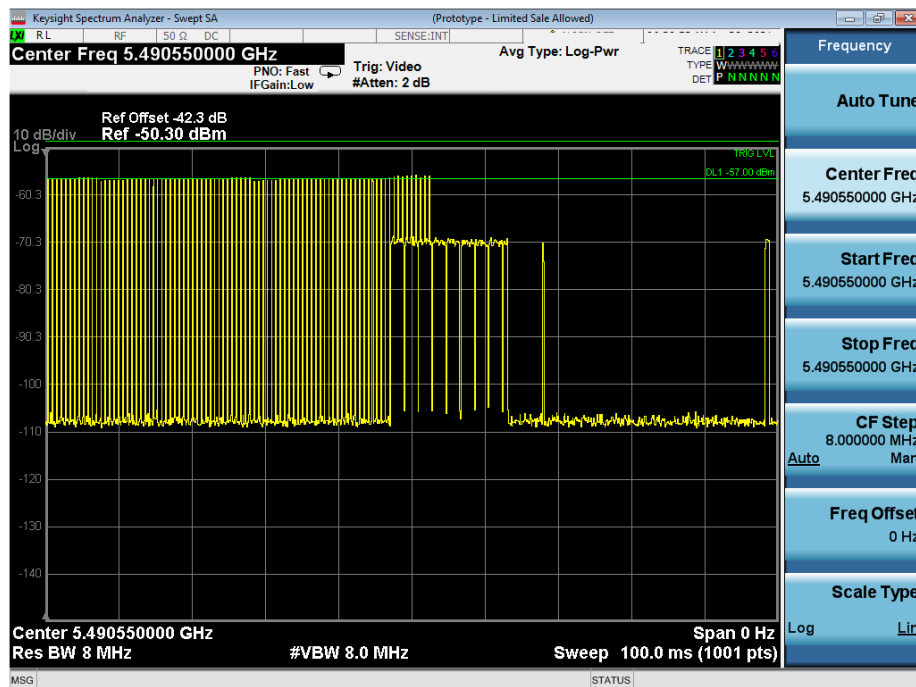
12	5508	36
44	5498	132
51	5497	153
55	5502	165
59	5505	177
86	5493	258
0	0	0

USA Frequency Hopping Trial #30

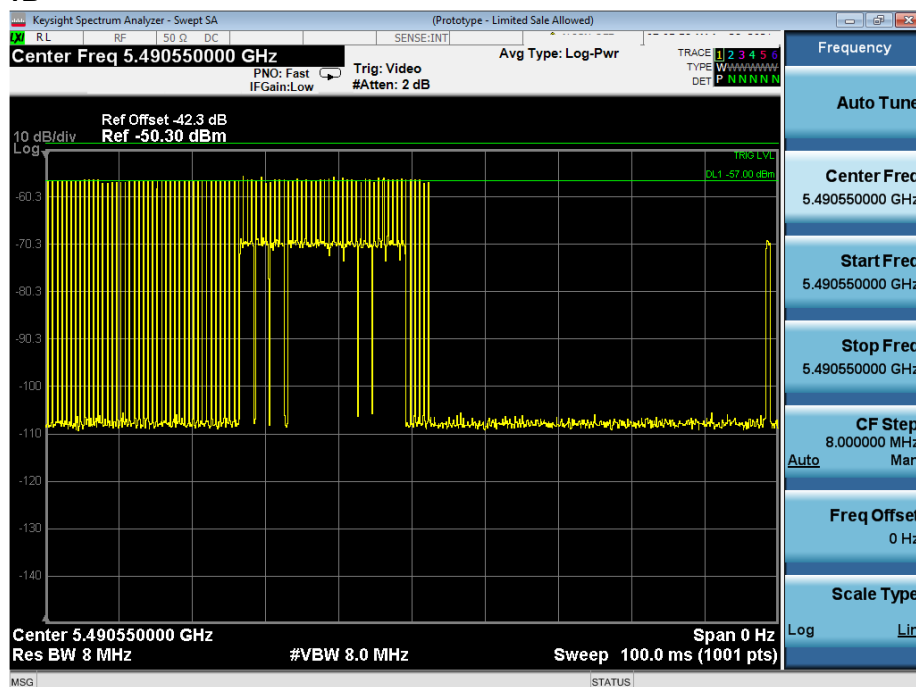
40	5492	120
81	5504	243
0	0	0

Stats Plots

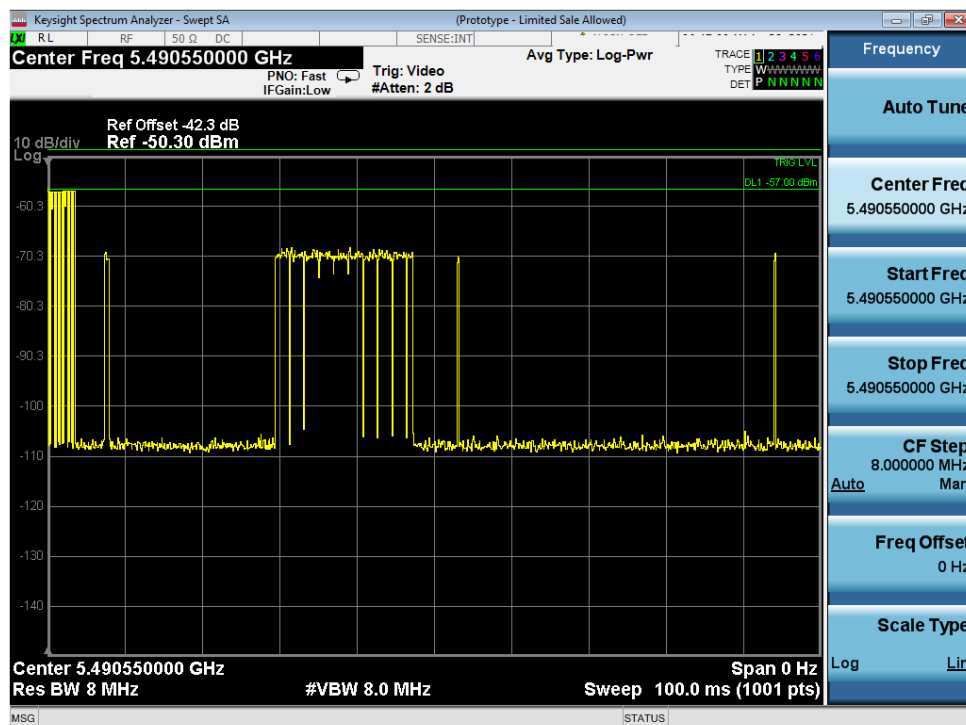
1A



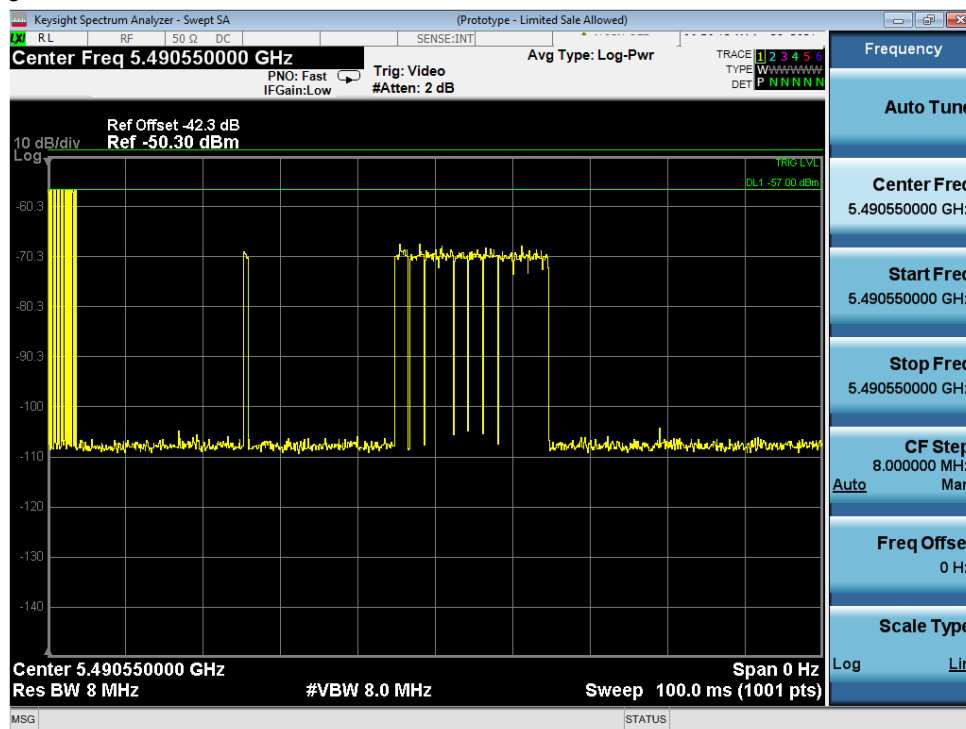
1B



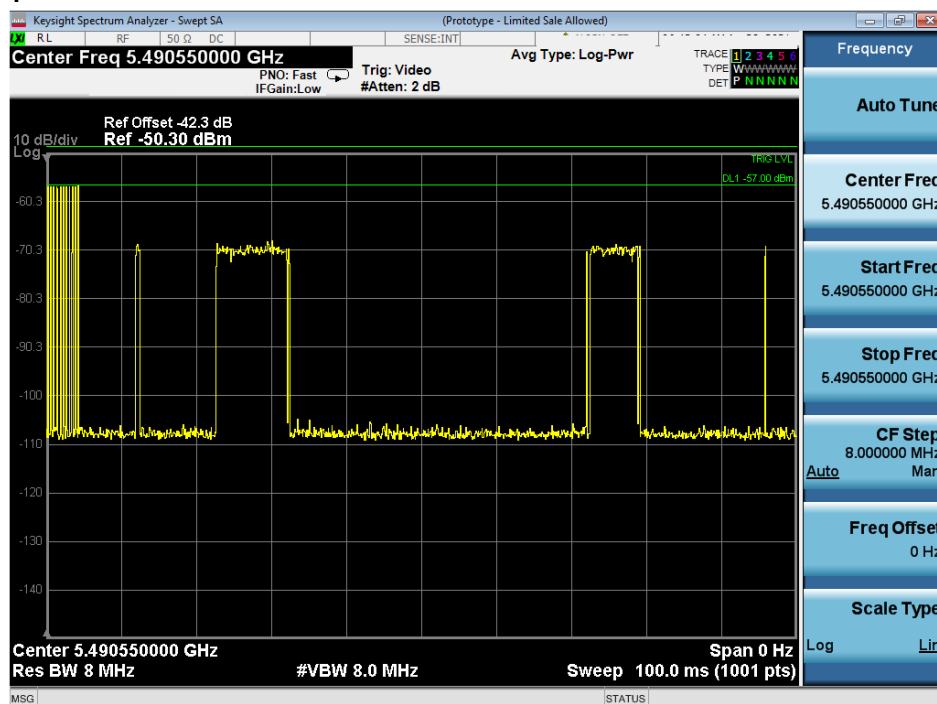
2



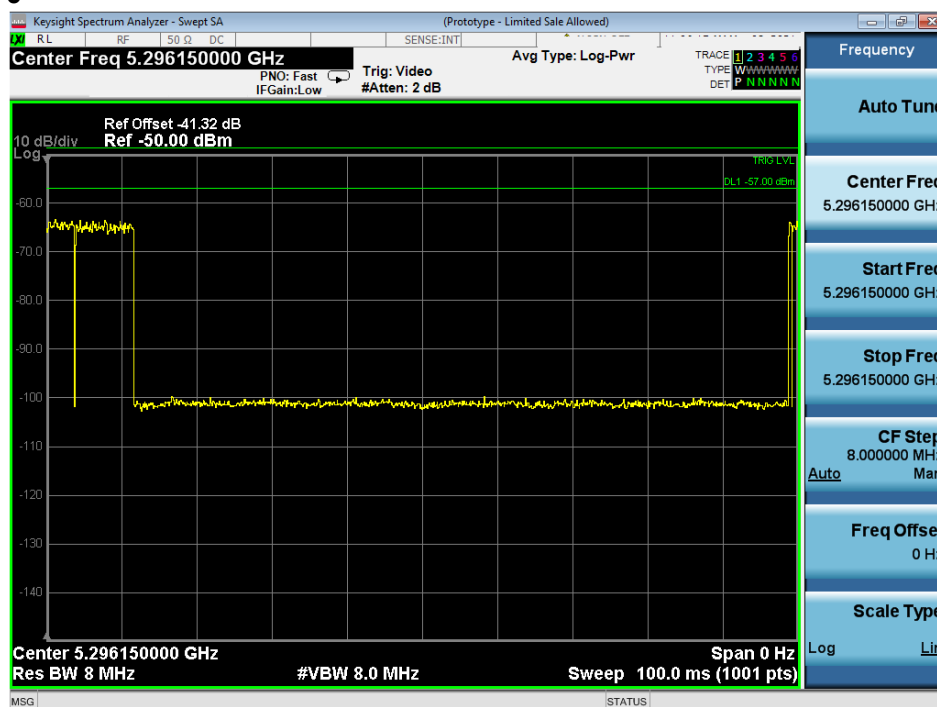
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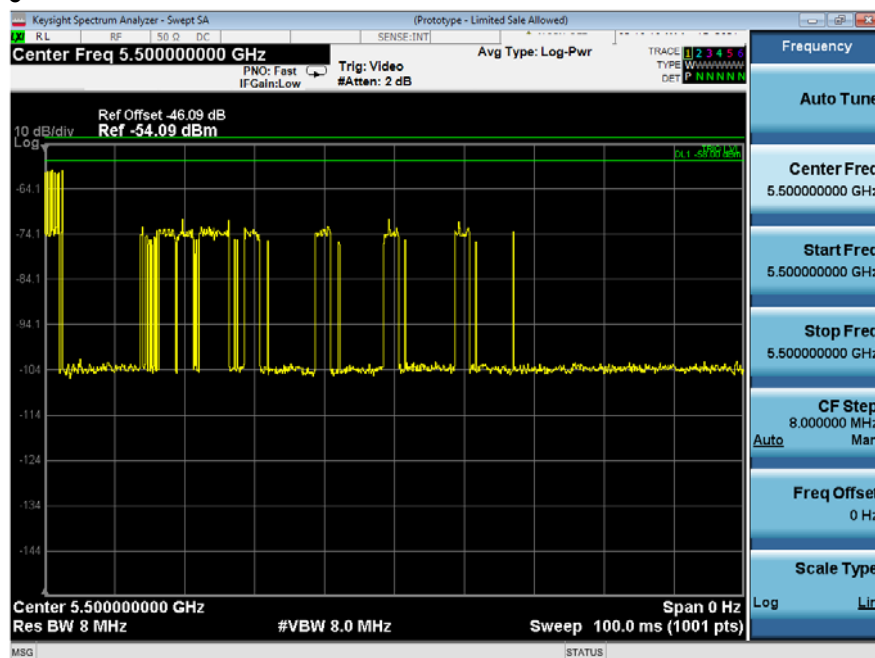
4



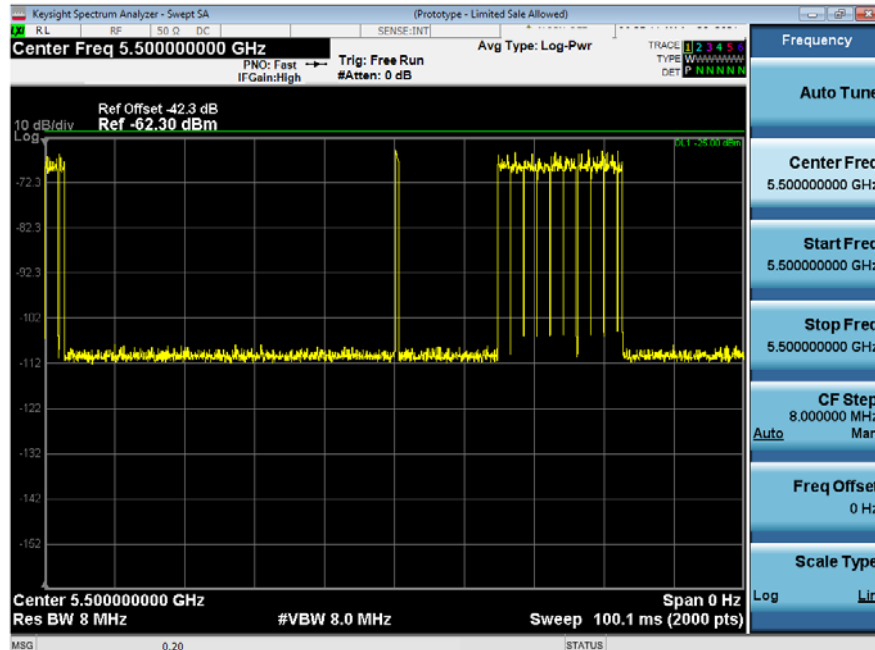
5



6



Traffic Plot



Channel 5510 MHz, 40MHz BW, Statistical Performance

Radar Signal Strength: -57dBm

USA Bin 1A

freq=5510, bw=37.7

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5491.1	70	1	758	1	90.0%	60.0%
2	5491.1	62	1	858	0		
3	5493	59	1	898	1		
4	5493	58	1	918	1		
5	5496	18	1	3066	1		
6	5496	89	1	598	1		
7	5499	76	1	698	1		
8	5499	61	1	878	1		
9	5502	18	1	3066	1		
10	5502	76	1	698	1		
11	5505	76	1	698	1		
12	5505	74	1	718	0		
13	5508	67	1	798	1		
14	5508	74	1	718	0		
15	5510	81	1	658	1		
16	5510	44	1	1204	1		
17	5512	19	1	2900	1		
18	5512	24	1	2205	1		
19	5515	29	1	1882	1		
20	5515	59	1	896	1		
21	5518	18	1	2970	1		
22	5518	40	1	1342	1		
23	5521	29	1	1875	1		
24	5521	83	1	639	1		
25	5524	55	1	966	1		
26	5524	24	1	2247	1		
27	5527	32	1	1675	1		
28	5527	93	1	573	1		
29	5528.9	20	1	2652	1		
30	5528.9	32	1	1688	1		

USA Bin 1B

freq=5510, bw=37.7

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5491.1	59	1	898	1	96.7%	60.0%
2	5491.1	18	1	3066	1		
3	5493	89	1	598	1		
4	5493	81	1	658	1		
5	5496	89	1	598	1		
6	5496	95	1	558	1		
7	5499	61	1	878	1		
8	5499	83	1	638	1		
9	5502	65	1	818	1		
10	5502	65	1	818	1		
11	5505	63	1	838	1		
12	5505	83	1	638	1		
13	5508	61	1	878	1		
14	5508	68	1	778	1		
15	5510	89	1	598	1		
16	5510	20	1	2700	1		
17	5512	68	1	785	1		
18	5512	21	1	2565	1		
19	5515	22	1	2451	0		
20	5515	29	1	1831	1		
21	5518	28	1	1891	1		
22	5518	34	1	1594	1		
23	5521	25	1	2113	1		
24	5521	28	1	1938	1		
25	5524	62	1	862	1		
26	5524	19	1	2882	1		
27	5527	66	1	805	1		
28	5527	50	1	1064	1		
29	5528.9	59	1	907	1		
30	5528.9	22	1	2476	1		

USA Bin 2

freq=5510, bw=37.7

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5491.1	23	2.7	199	1	80.0%	60.0%
2	5491.1	23	1.5	222	0		
3	5493	25	2.9	229	1		
4	5493	25	5	171	1		
5	5496	23	2.3	223	1		
6	5496	26	2.7	170	0		
7	5499	23	5	188	1		
8	5499	23	2.8	210	1		
9	5502	27	2.2	157	0		
10	5502	28	3.3	185	0		
11	5505	23	3.5	217	1		
12	5505	25	4.2	196	1		
13	5508	29	2.1	151	1		
14	5508	28	4.5	173	0		
15	5510	24	4.8	180	1		
16	5510	25	2.3	207	1		
17	5512	26	3.3	203	1		
18	5512	27	3.6	209	1		
19	5515	27	3	221	0		
20	5515	27	3	160	1		
21	5518	23	4.9	230	1		
22	5518	27	1.3	226	1		
23	5521	27	1.1	227	1		
24	5521	24	3.4	176	1		
25	5524	29	3.9	219	1		
26	5524	28	4.4	230	1		
27	5527	27	3.8	152	1		
28	5527	23	3.6	203	1		
29	5528.9	24	4.2	202	1		
30	5528.9	25	4.8	191	1		

USA Bin 3

freq=5510, bw=37.7

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5491.1	17	7.9	361	1	73.3%	60.0%
2	5491.1	18	9.5	350	1		
3	5493	16	9.4	324	1		
4	5493	16	6.7	474	0		
5	5496	18	10	282	1		
6	5496	17	9.9	475	1		
7	5499	17	8.6	489	1		
8	5499	17	9.3	378	0		
9	5502	17	9.2	409	1		
10	5502	17	7	451	0		
11	5505	18	7.8	364	0		
12	5505	17	9.8	438	0		
13	5508	18	6.4	481	1		
14	5508	18	6.7	499	1		
15	5510	16	7.8	262	0		
16	5510	17	7.8	341	1		
17	5512	16	9.4	271	1		
18	5512	17	7.4	219	1		
19	5515	17	8.5	202	1		
20	5515	17	6.1	219	1		
21	5518	16	7.8	234	1		
22	5518	16	8.5	220	1		
23	5521	16	9.7	246	0		
24	5521	18	6.3	463	1		
25	5524	18	7.3	442	1		
26	5524	18	6.7	477	1		
27	5527	17	8.1	439	1		
28	5527	16	9.8	326	1		
29	5528.9	17	8.3	227	0		
30	5528.9	18	9.8	413	1		

USA Bin 4

freq=5510, bw=37.7

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5491.1	16	14.9	436	1	93.3%	60.0%
2	5491.1	13	12.2	353	1		
3	5493	13	17.7	331	1		
4	5493	16	16.5	308	1		
5	5496	13	12.5	301	1		
6	5496	13	16.9	270	1		
7	5499	14	14.8	307	1		
8	5499	13	17.3	302	1		
9	5502	14	15.1	235	1		
10	5502	12	12.4	302	1		
11	5505	16	12.3	272	0		
12	5505	15	19.5	386	1		
13	5508	12	19	389	1		
14	5508	12	16.7	300	1		
15	5510	16	13.8	217	1		
16	5510	13	13.8	305	1		
17	5512	16	17	312	1		
18	5512	12	14.5	204	1		
19	5515	13	18.7	270	1		
20	5515	15	18.5	404	1		
21	5518	14	13.7	407	0		
22	5518	14	14.9	393	1		
23	5521	16	12.2	408	1		
24	5521	14	12.5	476	1		
25	5524	12	11.6	219	1		
26	5524	13	11.1	316	1		
27	5527	15	11.1	224	1		
28	5527	14	11.6	388	1		
29	5528.9	12	19.3	273	1		
30	5528.9	16	14.7	276	1		

USA Bin 5

freq=5510, rate=6, bw=37.7

Trial	Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)	1=Detection 0=No Detection	Detection Percentage	Limit
1	1	1	5497.6	16	65			0.562673	1	83.3%	80.0%
2	1	3	5496.4	13	90	1413	1243	0.665275	1		
3	1	2	5498.4	18	80	1150		0.262478	1		
4	1	3	5494.8	9	75	1891	1838	0.409633	1		
5	1	2	5494.8	9	90	1356		0.241559	1		
6	1	3	5495.9	12	90	1894	1912	0.52372	1		
7	1	3	5495.6	11	100	1678	1696	0.673923	1		
8	1	2	5495.1	10	95	1010		0.280665	0		
9	1	1	5493.1	5	90			0.470191	1		
10	1	1	5498.4	18	65			0.439213	0		
11	1	1	5510	20	70			0.148142	1		
12	1	1	5510	5	85			0.212558	0		
13	1	3	5510	12	55	1868	1100	0.679366	1		
14	1	1	5510	20	55			0.238247	1		
15	1	2	5510	17	65	1099		0.427445	1		
16	1	1	5510	17	100			1.03262	1		
17	1	2	5510	13	50	1976		0.590241	1		
18	1	2	5510	17	75	1627		0.12643	1		
19	1	3	5510	10	95	1536	1814	1.300824	1		
20	1	3	5510	9	95	1364	1652	0.784314	1		
21	1	1	5520.9	20	90			0.451071	0		
22	1	2	5522.1	17	55	1962		0.344407	1		
23	1	3	5522.1	17	100	1241	1049	1.087672	1		
24	1	2	5526.1	7	60	1806		0.031459	1		
25	1	2	5522.9	15	60	1617		0.829536	1		
26	1	1	5521.6	18	55			0.171772	1		
27	1	2	5522.1	17	80	1644		0.659094	0		
28	1	1	5521.2	19	100			0.4421	1		
29	1	2	5523.6	13	60	1924		0.538913	1		
30	1	2	5526.1	7	90	1705		0.334901	1		

USA Frequency Hopping					freq=5510, bw=37.7	
Trial	Hop #	Freq (GHz)	Pulse Start (mS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	9	5523	27	1	100.0%	70.0%
2	6	5494	18	1		
3	6	5495	18	1		
4	14	5500	42	1		
5	17	5515	51	1		
6	0	5522	0	1		
7	20	5518	60	1		
8	7	5527	21	1		
9	1	5515	3	1		
10	1	5507	3	1		
11	0	5511	0	1		
12	46	5502	138	1		
13	1	5515	3	1		
14	25	5524	75	1		
15	5	5506	15	1		
16	40	5503	120	1		
17	10	5517	30	1		
18	0	5492	0	1		
19	0	5492	0	1		
20	18	5517	54	1		
21	1	5501	3	1		
22	5	5501	15	1		
23	3	5508	9	1		
24	9	5492	27	1		
25	7	5511	21	1		
26	17	5502	51	1		
27	30	5495	90	1		
28	0	5522	0	1		
29	9	5493	27	1		
30	24	5518	72	1		

Channel 5510 MHz, 40MHz BW, Statistical Performance

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

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (90\% + 96.7\% + 80\% + 73.3\% + 93.3)/5 = 86.66\% (>80\%)$$

Bin 5 Details

USA Bin 5 Trial #1

1	1	5497.6	16	65			0.562673
2	1	5497.6	16	55			1.752576
3	3	5497.6	16	75	1184	1308	2.813875
4	2	5497.6	16	80	1851		4.116902
5	1	5497.6	16	60			5.551603
6	1	5497.6	16	55			7.143197
7	1	5497.6	16	95			8.111054
8	1	5497.6	16	100			8.999476
9	3	5497.6	16	70	1727	1333	10.648726
10	1	5497.6	16	60			11.070988
0	0	0	0	0			0

USA Bin 5 Trial #2

1	1	5494.8	9	95			2.549636
1	3	5496.4	13	90	1413	1243	0.665275
2	2	5496.4	13	85	1927		1.3924
3	2	5496.4	13	100	1470		2.766712
4	2	5496.4	13	80	1788		3.549821
5	2	5496.4	13	55	1419		4.33921
6	3	5496.4	13	70	1015	1028	5.016395
7	1	5496.4	13	95			5.942824
8	2	5496.4	13	65	1776		7.195917
9	1	5496.4	13	50			8.165803
10	2	5496.4	13	95	1351		9.154229
11	1	5496.4	13	80			9.776138
12	3	5496.4	13	50	1161	1978	10.383467
13	2	5496.4	13	75	1713		11.388593
0	0	0	0	0			0

USA Bin 5 Trial #3

1	1	5493.6	6	50			8.514954
1	2	5498.4	18	80	1150		0.262478
2	3	5498.4	18	50	1328	1281	0.695415
3	3	5498.4	18	80	1952	1206	1.613512
4	1	5498.4	18	65			2.072683
5	2	5498.4	18	85	1334		2.986399
6	2	5498.4	18	65	1464		3.324878
7	1	5498.4	18	55			4.183485
8	1	5498.4	18	70			4.311828
9	2	5498.4	18	95	1155		5.138262
10	1	5498.4	18	65			5.760593
11	2	5498.4	18	90	1567		6.162927
12	3	5498.4	18	60	1767	1047	6.865213
13	2	5498.4	18	85	1499		7.772111

DFS Test Report No: **EDCS – 21541318**

14	1	5498.4	18	65			8.362761
15	3	5498.4	18	70	1325	1334	8.733649
16	3	5498.4	18	60	1654	1940	9.557422
17	3	5498.4	18	95	1427	1743	9.763137
18	1	5498.4	18	60			10.732454
19	2	5498.4	18	55	1404		10.844378
20	2	5498.4	18	95	1359		11.454175
0	0	0	0	0			0
USA Bin 5 Trial #4	2	5493.1	5	75	1701		3.147625
1	3	5494.8	9	75	1891	1838	0.409633
2	2	5494.8	9	50	1393		0.868331
3	3	5494.8	9	85	1040	1161	2.096282
4	2	5494.8	9	90	1376		2.755812
5	1	5494.8	9	50			3.190568
6	3	5494.8	9	75	1558	1318	3.815595
7	3	5494.8	9	90	1345	1497	4.792071
8	3	5494.8	9	55	1763	1658	5.51132
9	3	5494.8	9	95	1451	1716	6.148283
10	2	5494.8	9	100	1931		7.186026
11	3	5494.8	9	100	1841	1367	7.817436
12	3	5494.8	9	100	1552	1647	8.893642
13	1	5494.8	9	60			9.206094
14	3	5494.8	9	80	1741	1065	9.754589
15	3	5494.8	9	55	1331	1705	10.531743
16	2	5494.8	9	55	1011		11.744205
0	0	0	0	0			0
USA Bin 5 Trial #5	3	5497.1	15	85	1569	1315	2.888676
1	2	5494.8	9	90	1356		0.241559
2	3	5494.8	9	75	1064	1453	1.856318
3	2	5494.8	9	100	1444		3.60508
4	3	5494.8	9	75	1717	1422	4.766713
5	2	5494.8	9	55	1955		6.484145
6	2	5494.8	9	90	1971		6.886763
7	1	5494.8	9	55			8.76105
8	2	5494.8	9	50	1587		9.619278
9	3	5494.8	9	60	1210	1157	11.073192
0	0	0	0	0			0
USA Bin 5 Trial #6	1	5497.1	15	85			10.547715
1	3	5495.9	12	90	1894	1912	0.523720
2	3	5495.9	12	50	1056	1159	1.11734
3	2	5495.9	12	60	1014		1.690133
4	2	5495.9	12	60	1434		2.242231

DFS Test Report No: **EDCS – 21541318**

5	2	5495.9	12	55	1037		3.022175
6	2	5495.9	12	100	1068		4.032805
7	3	5495.9	12	70	1215	1250	4.238067
8	2	5495.9	12	55	1455		5.475527
9	1	5495.9	12	50			6.220416
10	3	5495.9	12	55	1022	1983	6.744478
11	3	5495.9	12	60	1458	1452	7.098239
12	3	5495.9	12	65	1282	1483	8.152283
13	1	5495.9	12	70			8.489666
14	3	5495.9	12	95	1062	1663	9.30715
15	2	5495.9	12	95	1210		10.457841
16	3	5495.9	12	90	1156	1661	11.211742
17	3	5495.9	12	80	1282	1898	11.822039
0	0	0	0	0			0
USA Bin 5 Trial #7	3	5499.1	20	100	1535	1269	9.082526
1	3	5495.6	11	100	1678	1696	0.673923
2	1	5495.6	11	55			1.48696
3	2	5495.6	11	95	1723		2.106662
4	3	5495.6	11	60	1681	1704	2.560789
5	1	5495.6	11	65			3.366893
6	1	5495.6	11	85			3.868471
7	3	5495.6	11	100	1838	1459	4.915142
8	1	5495.6	11	60			5.620738
9	1	5495.6	11	80			6.642951
10	3	5495.6	11	95	1083	1934	6.977503
11	1	5495.6	11	85			7.950822
12	2	5495.6	11	55	1527		8.935671
13	1	5495.6	11	80			9.526153
14	1	5495.6	11	70			10.382508
15	2	5495.6	11	100	1089		10.725063
16	2	5495.6	11	75	1962		11.638577
0	0	0	0	0			0
USA Bin 5 Trial #8	0	0	0	0			0
1	2	5495.1	10	95	1010		0.280665
2	3	5495.1	10	60	1169	1517	1.594208
3	1	5495.1	10	90			2.321404
4	2	5495.1	10	85	1434		3.194209
5	3	5495.1	10	55	1825	1314	4.25169
6	1	5495.1	10	55			5.432112
7	1	5495.1	10	60			6.919996
8	1	5495.1	10	75			7.651608
9	2	5495.1	10	95	1632		8.691013

10	1	5495.1	10	85			9.746621
11	2	5495.1	10	85	1500		10.608608
12	3	5495.1	10	65	1923	1753	11.436598
0	0	0	0	0			0
USA Bin 5 Trial #9	1	5497.1	15	90			1.975625
1	1	5493.1	5	90			0.470191
2	3	5493.1	5	90	1064	1028	1.453465
3	1	5493.1	5	80			2.348752
4	1	5493.1	5	85			3.113914
5	3	5493.1	5	75	1264	1945	4.387516
6	2	5493.1	5	95	1532		5.015687
7	3	5493.1	5	70	1457	1368	6.533125
8	3	5493.1	5	90	1723	1191	7.933144
9	2	5493.1	5	60	1214		8.020994
10	2	5493.1	5	90	1697		9.161995
11	2	5493.1	5	60	1042		10.299389
12	1	5493.1	5	95			11.720851
0	0	0	0	0			0
USA Bin 5 Trial #10	1	5497.1	15	85			11.185489
1	1	5498.4	18	65			0.439213
2	2	5498.4	18	75	1693		1.410163
3	2	5498.4	18	60	1046		2.066838
4	3	5498.4	18	80	1081	1070	2.890022
5	3	5498.4	18	60	1227	1511	4.066569
6	2	5498.4	18	100	1965		4.431097
7	1	5498.4	18	100			5.911646
8	1	5498.4	18	70			6.269255
9	3	5498.4	18	75	1909	1059	7.233102
10	1	5498.4	18	65			7.84182
11	1	5498.4	18	55			9.190206
12	1	5498.4	18	65			9.8589
13	3	5498.4	18	75	1170	1776	10.550581
14	1	5498.4	18	65			11.950903
0	0	0	0	0			0
USA Bin 5 Trial #11	0	0	0	0			0
1	1	5510.0	20	70			0.148142
2	2	5510	20	60	1692		1.082837
3	3	5510	20	95	1254	1738	1.336624
4	2	5510	20	50	1093		2.223038
5	2	5510	20	95	1422		2.452372
6	1	5510	20	95			3.007896
7	3	5510	20	55	1326	1560	3.786604

8	2	5510	20	60	1234		4.696002
9	2	5510	20	100	1257		5.278362
10	1	5510	20	55			5.695875
11	2	5510	20	100	1807		6.311402
12	1	5510	20	80			6.998234
13	3	5510	20	75	1858	1100	7.582462
14	2	5510	20	75	1133		8.072977
15	2	5510	20	80	1831		8.890837
16	2	5510	20	55	1940		9.266095
17	1	5510	20	60			9.856819
18	3	5510	20	65	1066	1134	10.761323
19	2	5510	20	90	1846		10.959214
20	1	5510	20	90			11.415957
0	0	0	0	0			0
USA Bin 5 Trial #12	1	5510	20	80			6.224006
1	1	5510.0	5	85			0.212558
2	3	5510	5	50	1734	1295	1.237992
3	2	5510	5	55	1345		2.356228
4	1	5510	5	70			2.828764
5	1	5510	5	100			3.954382
6	2	5510	5	85	1066		4.703594
7	2	5510	5	90	1554		5.331143
8	2	5510	5	90	1253		6.248476
9	2	5510	5	85	1411		6.487599
10	3	5510	5	90	1918	1561	7.478653
11	1	5510	5	90			8.665302
12	3	5510	5	95	1579	1994	9.518965
13	3	5510	5	50	1392	1010	9.626958
14	3	5510	5	70	1281	1476	11.118861
15	3	5510	5	85	1250	1185	11.514782
0	0	0	0	0			0
USA Bin 5 Trial #13	1	5510	12	65			5.731045
1	3	5510.0	12	55	1868	1100	0.679366
2	2	5510	12	65	1935		2.297485
3	1	5510	12	50			3.01772
4	2	5510	12	65	1199		4.202943
5	3	5510	12	70	1562	1630	6.533903
6	2	5510	12	85	1698		7.706701
7	2	5510	12	70	1636		8.610193
8	1	5510	12	95			9.503581
9	1	5510	12	80			10.689787
0	0	0	0	0			0

USA Bin 5 Trial #14	1	5510.0	9	100			0.029368
1	1	5510.0	20	55			0.238247
2	3	5510	20	80	1266	1545	0.776128
3	2	5510	20	80	1320		1.805125
4	2	5510	20	50	1861		2.598379
5	3	5510	20	65	1117	1364	2.85119
6	2	5510	20	80	1592		3.641572
7	3	5510	20	65	1481	1302	4.014772
8	2	5510	20	65	1354		5.155694
9	1	5510	20	100			5.794774
10	3	5510	20	75	1302	1757	6.235014
11	1	5510	20	70			7.304183
12	3	5510	20	50	1263	1801	7.82203
13	1	5510	20	55			8.539938
14	1	5510	20	90			8.735146
15	3	5510	20	60	1549	1083	9.843019
16	2	5510	20	90	1528		10.436091
17	2	5510	20	90	1491		11.061011
18	1	5510	20	90			11.428483
0	0	0	0	0			0
USA Bin 5 Trial #15	3	5510	17	60	1580	1832	5.557616
1	2	5510.0	17	65	1099		0.427445
2	1	5510	17	95			2.011237
3	1	5510	17	85			2.925084
4	1	5510	17	60			4.988263
5	3	5510	17	85	1805	1979	6.15357
6	1	5510	17	50			6.820894
7	3	5510	17	65	1780	1685	8.413542
8	1	5510	17	70			9.411391
9	1	5510	17	75			11.131204
0	0	0	0	0			0
USA Bin 5 Trial #16	0	0	0	0			0
1	1	5510.0	17	100			1.032620
2	2	5510	17	95	1018		2.197198
3	3	5510	17	85	1802	1425	3.280144
4	2	5510	17	95	1044		5.195215
5	3	5510	17	75	1214	1260	5.438102
6	2	5510	17	55	1527		7.130156
7	3	5510	17	85	1935	1888	8.964013
8	1	5510	17	70			9.399448
9	1	5510	17	85			11.342114
0	0	0	0	0			0

DFS Test Report No: **EDCS – 21541318**

USA Bin 5 Trial #17	2	5510	16	90	1436		5.479207
1	2	5510.0	13	50	1976		0.590241
2	2	5510	13	50	1982		0.746507
3	2	5510	13	90	1093		1.367917
4	3	5510	13	85	1096	1480	2.240949
5	2	5510	13	90	1552		2.736365
6	2	5510	13	80	1028		3.571219
7	3	5510	13	65	1614	1448	4.287249
8	3	5510	13	65	1899	1993	4.989496
9	2	5510	13	80	1498		5.934695
10	2	5510	13	65	1073		6.554635
11	3	5510	13	100	1287	1733	7.26568
12	3	5510	13	70	1795	1443	7.789102
13	3	5510	13	80	1969	1850	8.636109
14	1	5510	13	85			9.301513
15	1	5510	13	60			9.490683
16	2	5510	13	50	1954		10.317358
17	2	5510	13	55	1474		10.949181
18	3	5510	13	55	1813	1977	11.793925
0	0	0	0	0			0
USA Bin 5 Trial #18	1	5510	5	80			9.370352
1	2	5510.0	17	75	1627		0.126430
2	3	5510	17	85	1886	1395	1.371451
3	2	5510	17	90	1706		1.447329
4	3	5510	17	95	1404	1465	2.332851
5	3	5510	17	95	1674	1026	3.374494
6	1	5510	17	80			3.994298
7	3	5510	17	90	1415	1354	4.929688
8	1	5510	17	90			5.103904
9	1	5510	17	75			6.286444
10	3	5510	17	75	1824	1704	7.028467
11	3	5510	17	70	1728	1757	7.399084
12	3	5510	17	90	1632	1758	8.177976
13	3	5510	17	70	1051	1572	8.961529
14	1	5510	17	55			9.590495
15	3	5510	17	50	1076	1608	10.321875
16	1	5510	17	70			10.779387
17	2	5510	17	65	1228		11.440988
0	0	0	0	0			0
USA Bin 5 Trial #19	3	5510	9	100	1832	1831	7.494038
1	3	5510.0	10	95	1536	1814	1.300824
2	3	5510	10	50	1147	1082	1.87954

3	1	5510	10	75			3.861957
4	1	5510	10	90			4.2511
5	2	5510	10	85	1878		5.459557
6	2	5510	10	100	1197		7.502664
7	1	5510	10	95			8.373322
8	2	5510	10	75	1376		10.140498
9	2	5510	10	100	1173		11.867117
0	0	0	0	0			0
USA Bin 5 Trial #20	3	5510	7	90	1171	1163	3.927102
1	3	5510.0	9	95	1364	1652	0.784314
2	2	5510	9	100	1021		1.035236
3	1	5510	9	85			2.054761
4	2	5510	9	80	1687		3.073424
5	2	5510	9	65	1562		3.549615
6	1	5510	9	80			4.76236
7	1	5510	9	80			4.888616
8	2	5510	9	80	1553		6.28766
9	3	5510	9	80	1251	1976	6.436096
10	1	5510	9	95			7.358147
11	3	5510	9	75	1450	1077	8.112076
12	2	5510	9	95	1185		9.274816
13	3	5510	9	75	1274	1076	9.801776
14	2	5510	9	60	1469		10.644014
15	3	5510	9	70	1395	1786	11.350883
0	0	0	0	0			0
USA Bin 5 Trial #21	1	5523.2	14	75			2.320156
1	1	5520.9	20	90			0.451071
2	1	5520.9	20	95			1.222673
3	1	5520.9	20	55			1.588909
4	3	5520.9	20	80	1699	1084	2.300626
5	1	5520.9	20	65			2.860548
6	1	5520.9	20	80			3.698155
7	3	5520.9	20	90	1811	1388	4.061314
8	2	5520.9	20	75	1512		4.667974
9	3	5520.9	20	85	1332	1607	5.224312
10	2	5520.9	20	55	1510		6.112478
11	2	5520.9	20	70	1396		6.40424
12	1	5520.9	20	70			7.169693
13	1	5520.9	20	70			7.638219
14	2	5520.9	20	95	1708		8.606363
15	2	5520.9	20	55	1771		9.290727
16	3	5520.9	20	55	1263	1436	9.82417

17	1	5520.9	20	65			10.498976
18	1	5520.9	20	55			11.357215
19	3	5520.9	20	95	1763	1964	11.70583
0	0	0	0	0			0
USA Bin 5 Trial #22	3	5526.9	5	80	1063	1326	6.924027
1	2	5522.1	17	55	1962		0.344407
2	3	5522.1	17	95	1325	1780	0.924897
3	3	5522.1	17	100	1808	1531	1.925216
4	2	5522.1	17	50	1011		2.241011
5	2	5522.1	17	85	1204		3.473719
6	3	5522.1	17	80	1844	1740	4.212551
7	3	5522.1	17	70	1016	1552	4.520534
8	1	5522.1	17	60			5.023307
9	1	5522.1	17	95			6.178296
10	1	5522.1	17	60			6.596406
11	3	5522.1	17	60	1694	1225	7.262256
12	1	5522.1	17	80			8.376402
13	3	5522.1	17	55	1423	1466	9.140386
14	1	5522.1	17	55			9.774146
15	2	5522.1	17	85	1557		10.083692
16	2	5522.1	17	95	1648		10.595449
17	2	5522.1	17	90	1210		11.365347
0	0	0	0	0			0
USA Bin 5 Trial #23	2	5524.1	12	95	1114		10.999531
1	3	5522.1	17	100	1241	1049	1.087672
2	1	5522.1	17	75			1.907911
3	2	5522.1	17	60	1167		2.952651
4	1	5522.1	17	55			3.393363
5	1	5522.1	17	75			4.951387
6	1	5522.1	17	90			6.530287
7	3	5522.1	17	85	1185	1806	6.629838
8	1	5522.1	17	60			8.564313
9	3	5522.1	17	90	1424	1066	8.740599
10	2	5522.1	17	75	1206		9.914299
11	3	5522.1	17	55	1442	1386	11.643356
0	0	0	0	0			0
USA Bin 5 Trial #24	2	5526.9	5	70	1124		8.139025
1	2	5526.1	7	60	1806		0.031459
2	2	5526.1	7	50	1098		2.946197
3	2	5526.1	7	55	1200		3.254507
4	3	5526.1	7	85	1904	1432	5.873094
5	1	5526.1	7	95			6.896949

	6	1	5526.1	7	80		8.834155
	7	2	5526.1	7	55	1803	9.132431
	8	3	5526.1	7	100	1880	11.46047
	0	0	0	0	0		0
USA Bin 5 Trial #25	3	5524.9	10	85	1902	1217	2.820138
1	2	5522.9	15	60	1617		0.829536
2	2	5522.9	15	50	1950		0.97048
3	2	5522.9	15	80	1320		2.36706
4	1	5522.9	15	75			3.153032
5	3	5522.9	15	85	1097	1389	4.411954
6	1	5522.9	15	80			4.806946
7	3	5522.9	15	55	1864	1074	6.182192
8	3	5522.9	15	60	1725	1041	7.032543
9	2	5522.9	15	60	1401		7.60879
10	3	5522.9	15	55	1166	1518	9.169017
11	2	5522.9	15	65	1867		9.912449
12	1	5522.9	15	95			10.967307
13	1	5522.9	15	50			11.29354
0	0	0	0	0			0
USA Bin 5 Trial #26	1	5526.4	6	60			10.336983
1	1	5521.6	18	55			0.171772
2	2	5521.6	18	85	1602		2.092311
3	2	5521.6	18	85	1011		3.249244
4	1	5521.6	18	90			4.071296
5	3	5521.6	18	85	1749	1655	4.835281
6	2	5521.6	18	85	1545		6.583495
7	3	5521.6	18	55	1422	1340	7.410707
8	2	5521.6	18	80	1941		8.412223
9	2	5521.6	18	70	1679		9.712078
10	1	5521.6	18	95			11.721255
0	0	0	0	0			0
USA Bin 5 Trial #27	1	5522.9	15	90			8.32456
1	2	5522.1	17	80	1644		0.659094
2	3	5522.1	17	75	1104	1715	1.251538
3	3	5522.1	17	75	1636	1819	1.585389
4	3	5522.1	17	65	1674	1741	2.42311
5	2	5522.1	17	60	1373		3.374009
6	1	5522.1	17	85			3.761092
7	2	5522.1	17	50	1980		4.403418
8	2	5522.1	17	55	1962		5.546892
9	2	5522.1	17	70	1220		5.92337
10	2	5522.1	17	90	1216		6.548679

11	2	5522.1	17	50	1149		7.752448
12	1	5522.1	17	70			8.139214
13	3	5522.1	17	75	1222	1208	8.949432
14	3	5522.1	17	80	1630	1946	9.495421
15	1	5522.1	17	70			10.342674
16	1	5522.1	17	80			11.140351
17	1	5522.1	17	65			11.927194
0	0	0	0	0			0
USA Bin 5 Trial #28	3	5521.6	18	65	1938	1616	10.995023
1	1	5521.2	19	100			0.442100
2	1	5521.2	19	60			1.094359
3	1	5521.2	19	60			1.635854
4	3	5521.2	19	95	1893	1170	1.909611
5	1	5521.2	19	65			2.546216
6	1	5521.2	19	50			3.124017
7	2	5521.2	19	90	1539		3.981094
8	2	5521.2	19	75	1676		4.77519
9	3	5521.2	19	60	1190	1597	5.288979
10	3	5521.2	19	90	1524	1076	5.945463
11	1	5521.2	19	70			6.018264
12	3	5521.2	19	55	1916	1912	6.683506
13	3	5521.2	19	55	1439	1267	7.460044
14	2	5521.2	19	55	1557		8.106498
15	1	5521.2	19	85			8.690477
16	1	5521.2	19	70			9.32832
17	3	5521.2	19	85	1136	1498	9.986173
18	1	5521.2	19	90			10.270499
19	3	5521.2	19	95	1578	1807	11.049513
20	3	5521.2	19	90	1305	1199	11.60826
0	0	0	0	0			0
USA Bin 5 Trial #29	1	5522.9	15	50			8.954831
1	2	5523.6	13	60	1924		0.538913
2	1	5523.6	13	60			1.007031
3	3	5523.6	13	80	1120	1205	1.512657
4	2	5523.6	13	60	1084		2.569773
5	3	5523.6	13	85	1384	1166	3.678464
6	1	5523.6	13	55			4.432637
7	2	5523.6	13	90	1565		4.717972
8	3	5523.6	13	70	1321	1636	5.317866
9	1	5523.6	13	80			6.136376
10	2	5523.6	13	95	1906		7.490319
11	1	5523.6	13	50			7.990412

12	1	5523.6	13	75			8.657045
13	1	5523.6	13	75			9.057725
14	3	5523.6	13	75	1688	1851	10.14976
15	2	5523.6	13	80	1099		11.004641
16	3	5523.6	13	85	1818	1632	11.367742
0	0	0	0	0			0
USA Bin 5 Trial #30	2	5524.1	12	50	1363		7.822078
1	2	5526.1	7	90	1705		0.334901
2	3	5526.1	7	90	1392	1786	2.257038
3	2	5526.1	7	65	1954		3.198657
4	3	5526.1	7	50	1178	1640	4.324642
5	2	5526.1	7	90	1684		6.441855
6	2	5526.1	7	60	1471		7.886059
7	2	5526.1	7	90	1502		8.94157
8	2	5526.1	7	50	1814		9.711624
9	2	5526.1	7	90	1452		10.680096
0	0	0	0	0			0

Bin 6 Details

USA Frequency Hopping Trial #1

9	5523	27
32	5526	96
48	5507	144
86	5522	258
96	5528	288
0	0	0

USA Frequency Hopping Trial #2

6	5494	18
7	5508	21
16	5493	48
18	5520	54
32	5509	96
56	5515	168
71	5502	213
99	5512	297
0	0	0

USA Frequency Hopping Trial #3

6	5495	18
19	5514	57
50	5523	150
51	5515	153
55	5497	165
70	5499	210
77	5524	231
0	0	0

USA Frequency Hopping Trial #4

14	5500	42
17	5513	51
26	5498	78
29	5502	87
42	5503	126
91	5527	273
0	0	0

USA Frequency Hopping Trial #5

17	5515	51
19	5494	57
69	5508	207
74	5495	222
79	5512	237
96	5518	288
99	5516	297
0	0	0

USA Frequency Hopping Trial #6

0	5522	0
9	5529	27
14	5501	42
28	5524	84
35	5526	105
62	5506	186
85	5521	255
90	5502	270
0	0	0

USA Frequency Hopping Trial #7

20	5518	60
23	5521	69
31	5503	93
33	5508	99
39	5506	117
40	5495	120
81	5515	243
82	5509	246
90	5525	270
0	0	0

USA Frequency Hopping Trial #8

7	5527	21
36	5493	108
58	5510	174
60	5502	180
92	5500	276
0	0	0

USA Frequency Hopping Trial #9

1	5515	3
19	5505	57
25	5528	75
38	5492	114
50	5499	150
69	5518	207

70 5516 210
 99 5497 297
 0 0 0

USA Frequency Hopping Trial #10

1 5507 3
 3 5498 9
 5 5514 15
 17 5501 51
 31 5516 93
 33 5500 99
 35 5510 105
 57 5517 171
 75 5504 225
 87 5524 261
 0 0 0

USA Frequency Hopping Trial #11

0 5511 0
 7 5505 21
 10 5502 30
 11 5501 33
 12 5518 36
 39 5517 117
 43 5496 129
 55 5503 165
 85 5492 255
 93 5513 279
 99 5520 297
 0 0 0

USA Frequency Hopping Trial #12

46 5502 138
 50 5504 150
 65 5506 195
 66 5507 198
 67 5512 201
 83 5500 249
 89 5508 267
 93 5493 279
 0 0 0

USA Frequency Hopping Trial #13

1 5515 3
 21 5523 63
 37 5505 111
 48 5507 144
 53 5496 159
 67 5514 201
 0 0 0

USA Frequency Hopping Trial #14

25 5524 75
 28 5522 84
 36 5527 108
 60 5498 180
 79 5494 237

83	5519	249
98	5523	294
0	0	0

USA Frequency Hopping Trial #15

5	5506	15
15	5523	45
53	5516	159
59	5508	177
67	5518	201
78	5519	234
89	5501	267
93	5529	279
94	5507	282
0	0	0

USA Frequency Hopping Trial #16

40	5503	120
48	5523	144
64	5529	192
73	5497	219
75	5492	225
98	5501	294
99	5518	297
0	0	0

USA Frequency Hopping Trial #17

10	5517	30
12	5526	36
24	5494	72
31	5499	93
47	5504	141
50	5501	150
0	0	0

USA Frequency Hopping Trial #18

0	5492	0
27	5523	81
50	5515	150
52	5517	156
0	0	0

USA Frequency Hopping Trial #19

0	5492	0
6	5527	18
50	5524	150
56	5519	168
61	5510	183
65	5509	195
67	5513	201
71	5517	213
73	5505	219
74	5499	222
88	5511	264
98	5506	294
99	5493	297
0	0	0

USA Frequency Hopping Trial #20

18	5517	54
21	5527	63
31	5519	93
76	5524	228
80	5498	240
0	0	0

USA Frequency Hopping Trial #21

1	5501	3
7	5493	21
15	5507	45
19	5514	57
49	5513	147
57	5508	171
83	5505	249
85	5524	255
0	0	0

USA Frequency Hopping Trial #22

5	5501	15
9	5508	27
10	5514	30
12	5504	36
30	5520	90
43	5511	129
45	5516	135
48	5496	144
52	5493	156
58	5525	174
71	5507	213
72	5506	216
0	0	0

USA Frequency Hopping Trial #23

3	5508	9
7	5500	21
23	5529	69
25	5501	75
41	5527	123
61	5498	183
70	5506	210
77	5502	231
0	0	0

USA Frequency Hopping Trial #24

9	5492	27
16	5525	48
19	5502	57
23	5516	69
48	5528	144
58	5527	174
62	5501	186
86	5507	258
87	5518	261
90	5526	270

0 0 0
USA Frequency Hopping Trial #25

7	5511	21
16	5508	48
25	5516	75
47	5519	141
79	5514	237
80	5492	240
89	5506	267
90	5493	270

0 0 0
USA Frequency Hopping Trial #26

17	5502	51
32	5511	96
59	5515	177

0 0 0
USA Frequency Hopping Trial #27

30	5495	90
33	5521	99
34	5518	102
54	5500	162
55	5494	165
61	5511	183
68	5510	204
69	5498	207
80	5508	240

0 0 0
USA Frequency Hopping Trial #28

0	5522	0
21	5495	63
24	5512	72
32	5501	96
46	5529	138
61	5496	183
86	5518	258
97	5499	291

0 0 0
USA Frequency Hopping Trial #29

9	5493	27
19	5512	57
46	5529	138
53	5511	159
54	5496	162
61	5516	183
64	5499	192
76	5507	228
86	5526	258

0 0 0
USA Frequency Hopping Trial #30

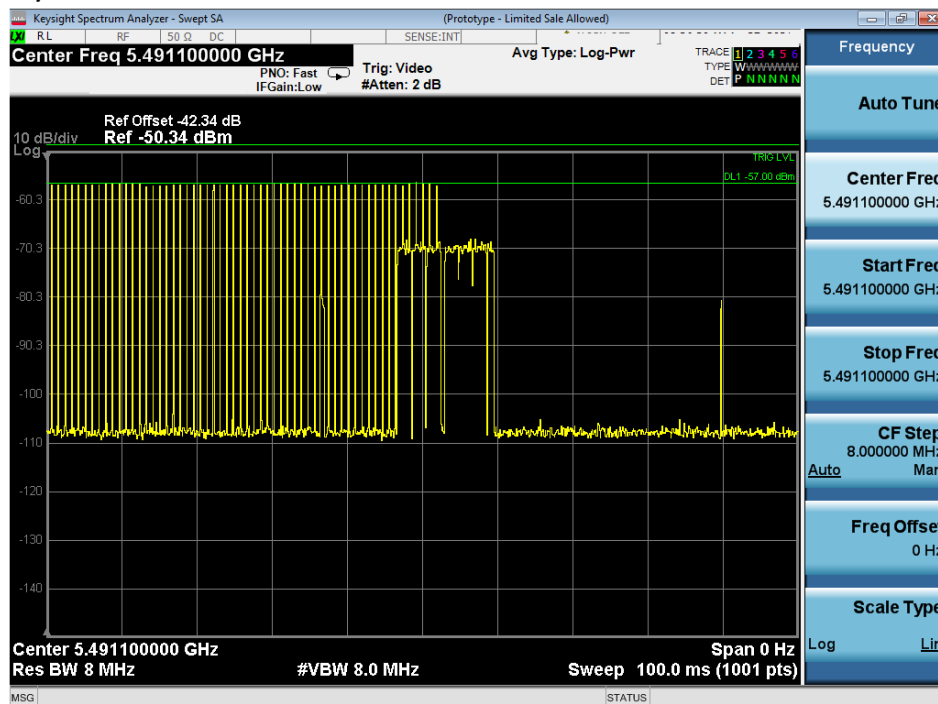
24	5518	72
33	5525	99
34	5513	102

DFS Test Report No: **EDCS – 21541318**

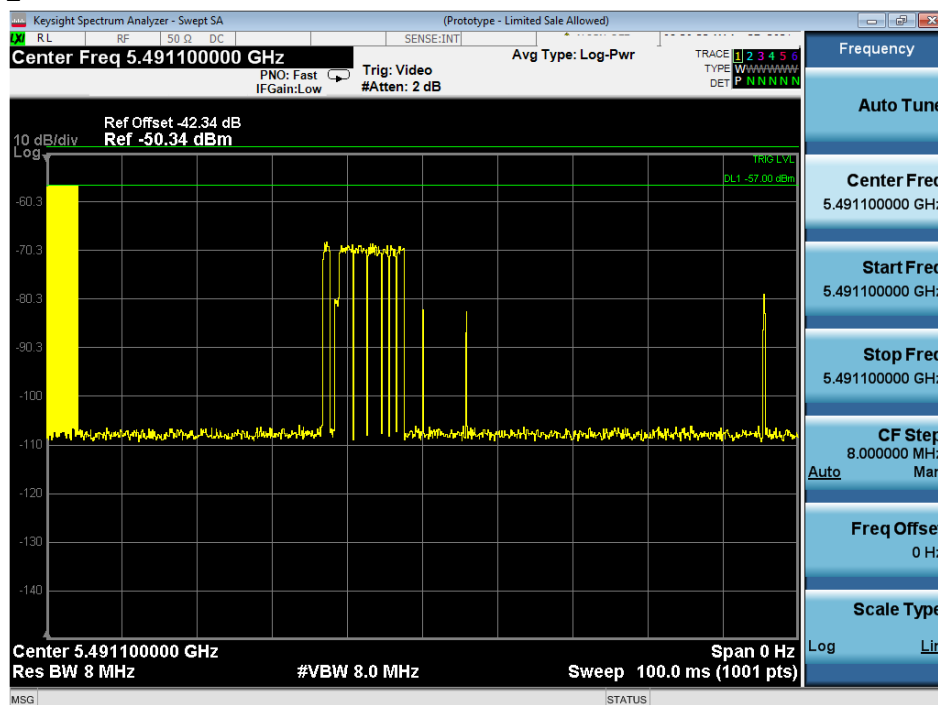
39	5492	117
56	5509	168
67	5495	201
90	5515	270
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Stats Plots

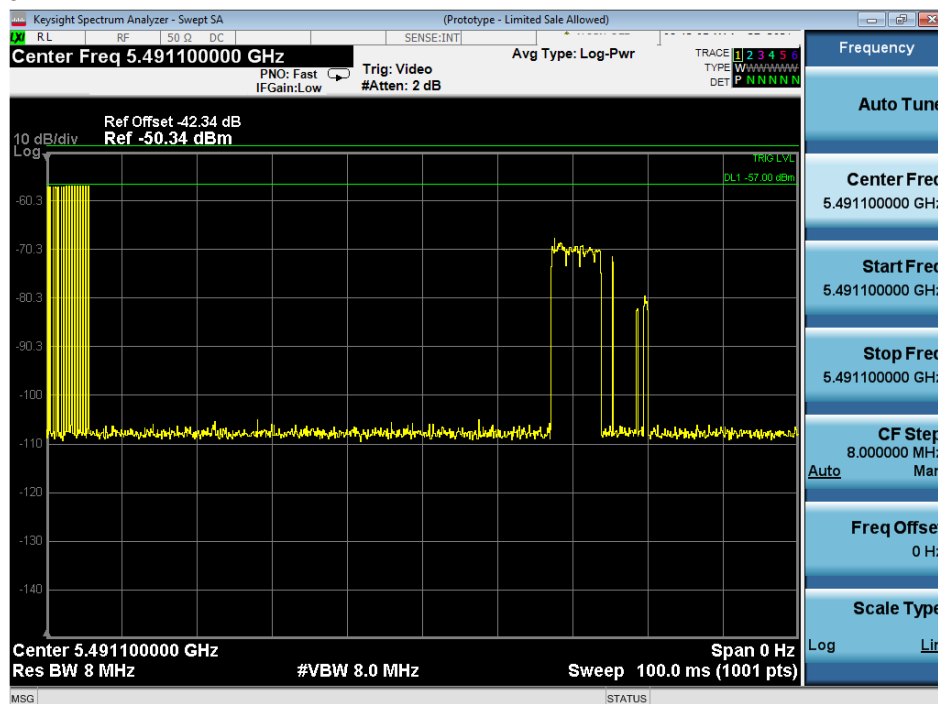
1A/1B



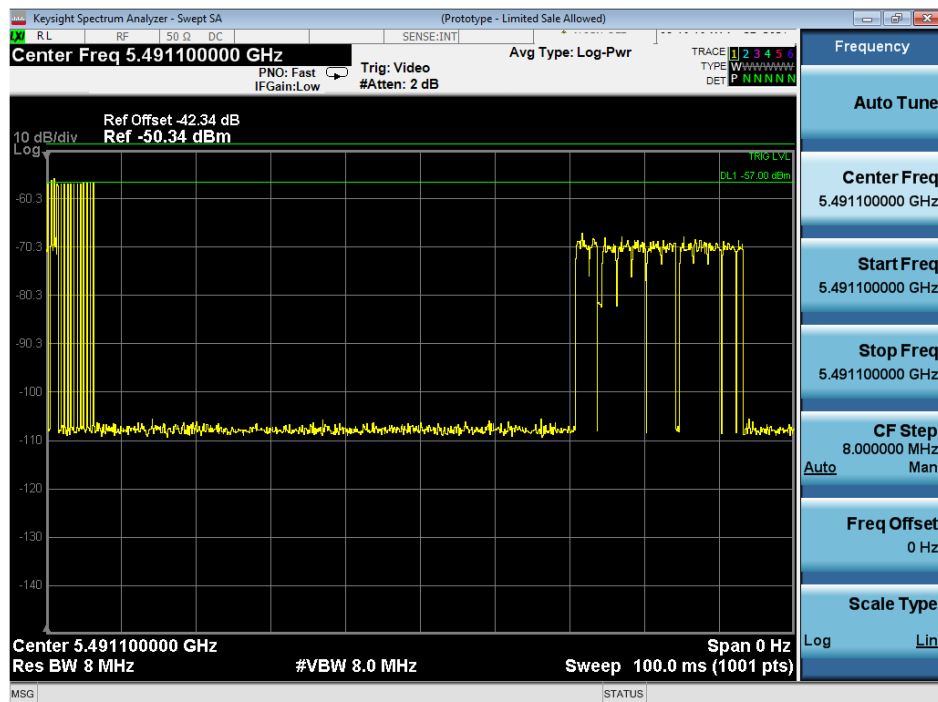
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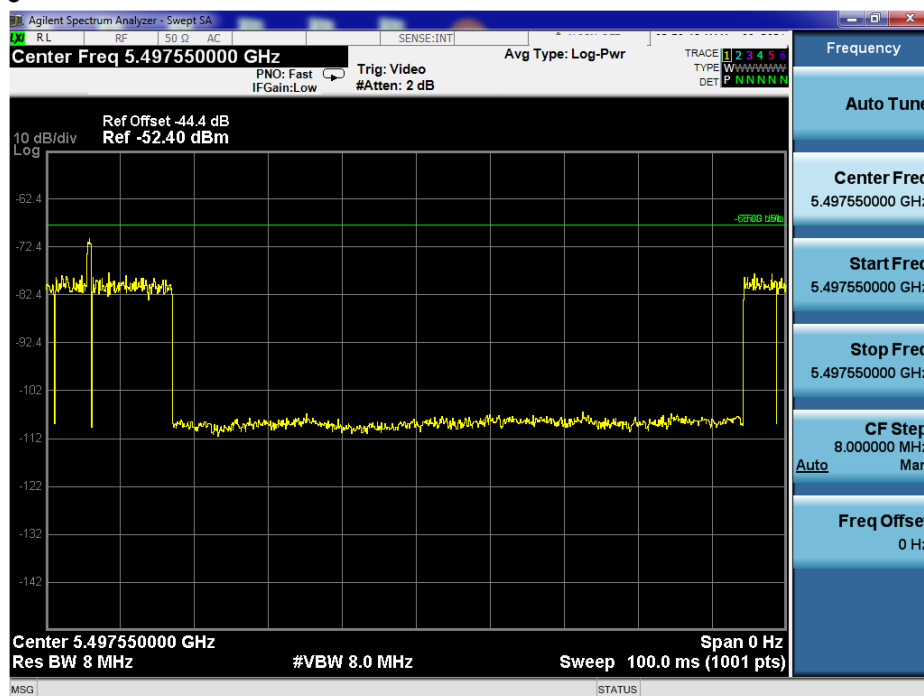
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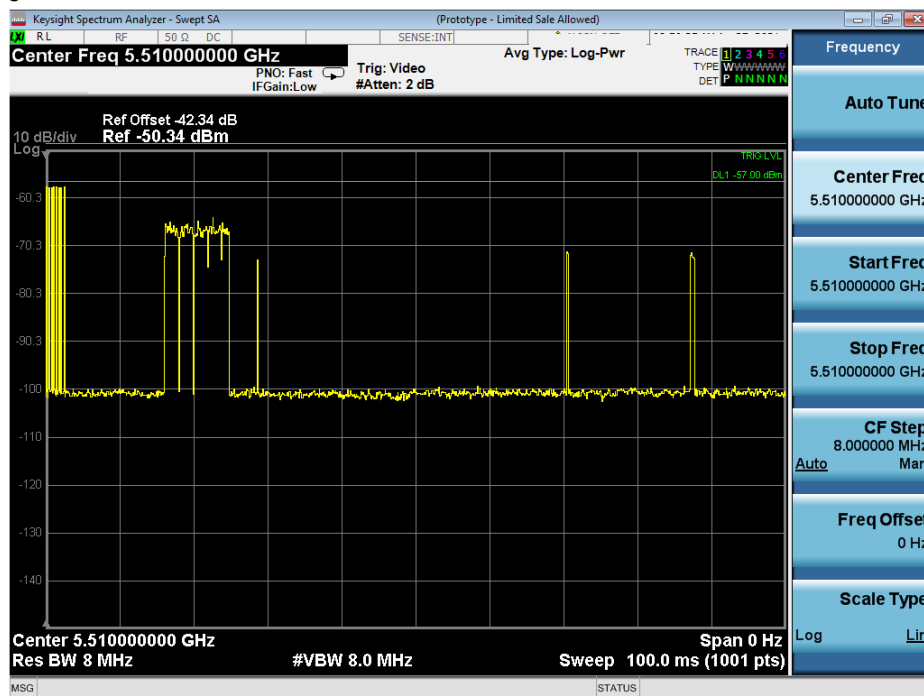
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5

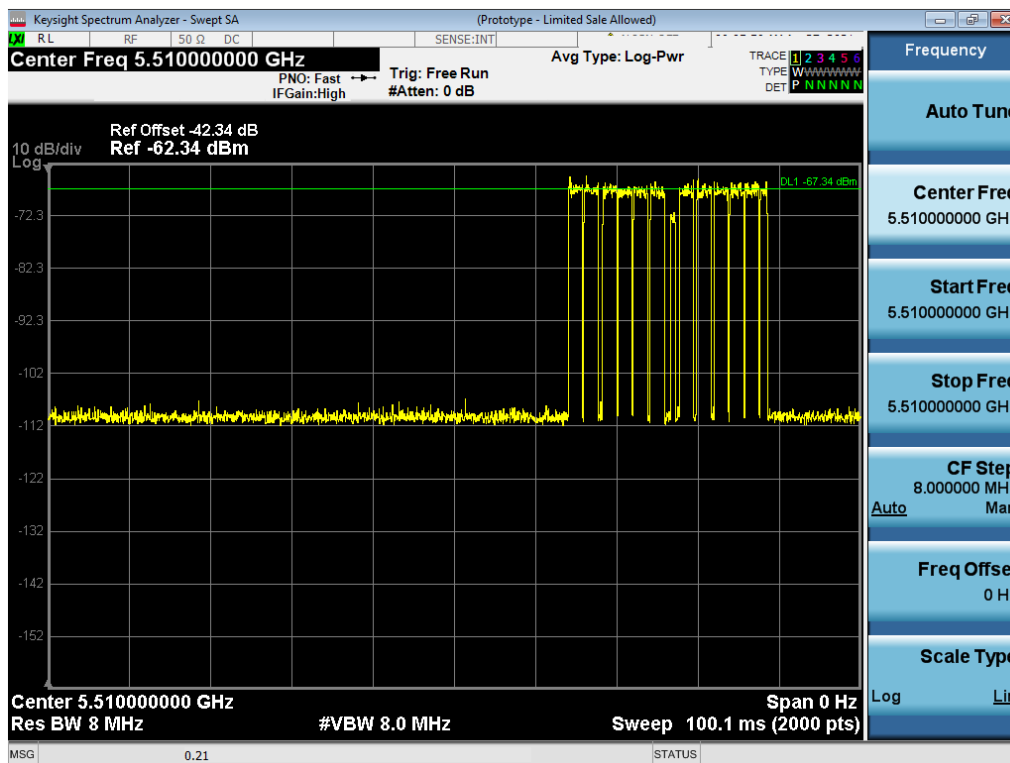


6



DFS Test Report No: **EDCS – 21541318**

Traffic Plot



DFS Test Report No: **EDCS – 21541318**

Channel 5530 MHz, 80MHz BW, Statistical Performance

Radar Signal Strength: -57dBm

USA Bin 1A

freq=5530, bw=77.0

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5491.5	99	1	538	1	96.7%	60.0%
2	5491.5	92	1	578	1		
3	5498	102	1	518	1		
4	5498	89	1	598	1		
5	5502	83	1	638	1		
6	5502	18	1	3066	1		
7	5508	76	1	698	1		
8	5508	65	1	818	1		
9	5514	67	1	798	1		
10	5514	72	1	738	1		
11	5520	59	1	898	1		
12	5520	74	1	718	0		
13	5526	78	1	678	1		
14	5526	81	1	658	1		
15	5530	95	1	558	1		
16	5530	30	1	1762	1		
17	5534	24	1	2291	1		
18	5534	55	1	967	1		
19	5540	31	1	1759	1		
20	5540	33	1	1620	1		
21	5546	21	1	2537	1		
22	5546	27	1	1970	1		
23	5552	60	1	883	1		
24	5552	26	1	2041	1		
25	5558	56	1	957	1		
26	5558	26	1	2044	1		
27	5562	22	1	2447	1		
28	5562	24	1	2260	1		
29	5568.5	64	1	830	1		
30	5568.5	43	1	1248	1		

USA Bin 1B

freq=5530, bw=77.0

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5491.5	74	1	718	0	93.3%	60.0%
2	5491.5	70	1	758	1		
3	5498	74	1	718	0		
4	5498	62	1	858	1		
5	5502	62	1	858	1		
6	5502	18	1	3066	1		
7	5508	61	1	878	1		
8	5508	72	1	738	1		
9	5514	57	1	938	1		
10	5514	62	1	858	1		
11	5520	89	1	598	1		
12	5520	62	1	858	1		
13	5526	59	1	898	1		
14	5526	61	1	878	1		
15	5530	68	1	778	1		
16	5530	58	1	916	1		
17	5534	49	1	1095	1		
18	5534	57	1	937	1		
19	5540	21	1	2605	1		
20	5540	20	1	2639	1		
21	5546	19	1	2797	1		
22	5546	37	1	1434	1		
23	5552	31	1	1729	1		
24	5552	96	1	554	1		
25	5558	24	1	2257	1		
26	5558	21	1	2596	1		
27	5562	28	1	1934	1		
28	5562	42	1	1287	1		
29	5568.5	28	1	1939	1		
30	5568.5	19	1	2845	1		

USA Bin 2

freq=5530, bw=77.0

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5491.5	28	5	168	1	90.0%	60.0%
2	5491.5	29	3.4	204	1		
3	5498	28	4.6	165	1		
4	5498	23	4.9	194	1		
5	5502	29	2.3	220	0		
6	5502	28	3.6	186	1		
7	5508	24	5	228	1		
8	5508	29	4.9	170	1		
9	5514	28	2	171	1		
10	5514	23	3.6	182	1		
11	5520	26	4.8	212	0		
12	5520	25	1.3	178	1		
13	5526	26	2.2	194	1		
14	5526	25	4.7	191	1		
15	5530	28	4	180	1		
16	5530	25	4.6	206	1		
17	5534	28	4.6	151	1		
18	5534	26	4.5	179	1		
19	5540	23	4	214	1		
20	5540	23	4	166	1		
21	5546	27	2.2	159	1		
22	5546	28	4.2	209	1		
23	5552	27	2.2	156	1		
24	5552	24	2.1	160	1		
25	5558	29	3.7	205	1		
26	5558	25	3.8	161	1		
27	5562	23	4	184	0		
28	5562	26	3.8	217	1		
29	5568.5	25	4.8	194	1		
30	5568.5	25	2.9	162	1		

USA Bin 3

freq=5530, bw=77.0

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5491.5	18	6.7	307	1	86.7%	60.0%
2	5491.5	18	7	240	1		
3	5498	18	6	478	0		
4	5498	18	8.4	214	1		
5	5502	18	6.6	273	1		
6	5502	17	7.8	460	1		
7	5508	17	6.2	268	1		
8	5508	17	6.9	458	1		
9	5514	16	7.9	372	1		
10	5514	17	9.1	342	1		
11	5520	16	8.4	270	1		
12	5520	18	9	439	1		
13	5526	16	9.1	370	1		
14	5526	16	7	268	1		
15	5530	16	9.8	355	1		
16	5530	16	9.8	247	1		
17	5534	16	8.9	348	1		
18	5534	17	9.5	322	0		
19	5540	17	7.5	261	0		
20	5540	16	9.8	401	1		
21	5546	16	8.1	485	1		
22	5546	18	8.3	316	1		
23	5552	17	6.5	350	1		
24	5552	18	6.4	286	1		
25	5558	17	10	220	1		
26	5558	16	7.2	263	0		
27	5562	18	6.1	265	1		
28	5562	17	9.8	227	1		
29	5568.5	16	10	460	1		
30	5568.5	16	7.5	311	1		

USA Bin 4

freq=5530, bw=77.0

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5491.5	15	15.1	321	1	76.7%	60.0%
2	5491.5	14	12.9	337	1		
3	5498	13	17.4	488	1		
4	5498	14	18.1	363	1		
5	5502	16	14.8	407	1		
6	5502	13	11.5	499	1		
7	5508	14	13.8	407	0		
8	5508	16	13.1	272	0		
9	5514	16	12	477	1		
10	5514	15	14.4	481	1		
11	5520	14	13.6	342	0		
12	5520	14	16.4	431	1		
13	5526	14	13.2	346	1		
14	5526	13	13.2	257	0		
15	5530	13	16.8	439	1		
16	5530	15	18.3	392	1		
17	5534	14	16.7	365	0		
18	5534	13	14.2	310	0		
19	5540	15	15	375	1		
20	5540	14	11.2	496	1		
21	5546	15	16.3	213	1		
22	5546	15	11	330	1		
23	5552	12	16.1	266	1		
24	5552	13	19.1	349	0		
25	5558	14	12.1	426	1		
26	5558	16	19.2	437	1		
27	5562	14	13.7	336	1		
28	5562	13	18.1	370	1		
29	5568.5	15	15	229	1		
30	5568.5	13	11.3	485	1		

USA Bin 5

freq=5530, bw=77.0

Trial	Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)	1=Detection 0=No Detection	Detection Percentage	Limit
1	1	3	5498.3	17	60	1176	1732	0.203265	1	100.0%	80.0%
2	1	1	5497.5	15	100			0.171776	1		
3	1	2	5497.9	16	90	1772		0.501709	1		
4	1	1	5495.9	11	65			0.363031	1		
5	1	3	5496.3	12	75	1854	1328	0.722998	1		
6	1	2	5494.3	7	65	1492		0.580501	1		
7	1	2	5497.1	14	80	1965		0.456255	1		
8	1	3	5497.1	14	60	1678	1160	0.397478	1		
9	1	3	5497.9	16	65	1150	1136	0.305675	1		
10	1	2	5494.7	8	100	1376		0.571025	1		
11	1	3	5530	9	55	1554	1876	0.165807	1		
12	1	3	5530	8	65	1801	1814	0.44535	1		
13	1	2	5530	17	50	1879		1.049197	1		
14	1	3	5530	18	80	1607	1822	0.920041	1		
15	1	1	5530	17	90			0.683412	1		
16	1	3	5530	11	80	1402	1003	0.533192	1		
17	1	1	5530	8	85			1.226338	1		
18	1	3	5530	14	95	1038	1258	0.862521	1		
19	1	2	5530	10	95	1569		0.159431	1		
20	1	1	5530	17	60			1.104713	1		
21	1	1	5563.7	12	85			0.200252	1		
22	1	2	5564.9	9	85	1445		0.072166	1		
23	1	2	5562.5	15	70	1556		0.807979	1		
24	1	2	5562.1	16	70	1999		0.556579	1		
25	1	3	5564.5	10	75	1412	1595	0.673722	1		
26	1	1	5565.7	7	60			0.57077	1		
27	1	1	5566.1	6	70			0.785237	1		
28	1	1	5563.3	13	60			0.319375	1		
29	1	2	5561.7	17	65	1830		0.378125	1		
30	1	1	5565.7	7	95			1.103011	1		

USA Frequency Hopping

freq=5530, bw=77.0

Trial	Hop #	Freq (GHz)	Pulse Start (mS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	0	5563	0	1	100.0%	70.0%
2	7	5540	21	1		
3	3	5532	9	1		
4	8	5561	24	1		
5	0	5544	0	1		
6	2	5562	6	1		
7	1	5495	3	1		
8	4	5514	12	1		
9	1	5543	3	1		
10	1	5557	3	1		
11	7	5519	21	1		
12	3	5535	9	1		
13	1	5554	3	1		
14	2	5495	6	1		
15	1	5539	3	1		
16	4	5552	12	1		
17	0	5526	0	1		
18	13	5521	39	1		
19	4	5540	12	1		
20	10	5543	30	1		
21	1	5544	3	1		
22	1	5554	3	1		
23	0	5553	0	1		
24	1	5501	3	1		
25	3	5510	9	1		
26	2	5495	6	1		
27	5	5495	15	1		
28	5	5567	15	1		
29	1	5523	3	1		
30	5	5507	15	1		

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

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (96.7\% + 93.3\% + 90.0\% + 86.7\% + 76.7)/5 = 88.7\% (>80\%)$$

Bin 5 Details
USA Bin 5 Trial #1

1	3	5498.3	17	60	1176	1732	0.203265
2	2	5498.3	17	70	1482		1.302337
3	1	5498.3	17	100			1.679236
4	1	5498.3	17	85			2.240894
5	1	5498.3	17	95			2.9655
6	2	5498.3	17	60	1537		3.808604
7	2	5498.3	17	60	1442		4.627247
8	1	5498.3	17	95			5.064132
9	3	5498.3	17	75	1988	1439	5.716253
10	1	5498.3	17	50			6.077807
11	2	5498.3	17	65	1983		6.684938
12	1	5498.3	17	50			7.904905
13	3	5498.3	17	90	1647	1763	8.246226
14	2	5498.3	17	80	1324		9.099638
15	3	5498.3	17	60	1519	1572	9.387656
16	1	5498.3	17	65			10.204141
17	1	5498.3	17	70			11.135794
18	2	5498.3	17	90	1174		11.381047
0	0	0	0	0			0

USA Bin 5 Trial #2

1	1	5497.5	15	100			0.171776
2	3	5497.5	15	85	1642	1625	1.786407
3	3	5497.5	15	80	1185	1210	2.141843
4	2	5497.5	15	65	1133		3.040261
5	1	5497.5	15	65			4.143825
6	1	5497.5	15	60			5.151423
7	3	5497.5	15	55	1553	1366	6.88591
8	2	5497.5	15	65	1484		7.660748
9	1	5497.5	15	75			8.464443
10	2	5497.5	15	85	1811		9.721176
11	2	5497.5	15	95	1601		10.235658
12	3	5497.5	15	55	1337	1876	11.208899
0	0	0	0	0			0

USA Bin 5 Trial #3

1	2	5497.9	16	90	1772		0.501709
2	3	5497.9	16	80	1360	1152	0.834402
3	2	5497.9	16	100	1292		1.668065
4	1	5497.9	16	75			2.615784
5	1	5497.9	16	100			3.598063

DFS Test Report No: **EDCS – 21541318**

6	2	5497.9	16	65	1565		3.943282
7	3	5497.9	16	85	1874	1777	5.09502
8	1	5497.9	16	85			5.653968
9	3	5497.9	16	55	1969	1355	6.171818
10	2	5497.9	16	95	1522		6.877648
11	2	5497.9	16	65	1401		7.738998
12	1	5497.9	16	55			8.480333
13	3	5497.9	16	70	1214	1858	9.323244
14	1	5497.9	16	70			10.258477
15	2	5497.9	16	50	1383		10.678952
16	1	5497.9	16	60			11.937099
0	0	0	0	0			0

USA Bin 5 Trial #4

1	1	5495.9	11	65			0.363031
2	2	5495.9	11	65	1024		1.395664
3	3	5495.9	11	75	1701	1455	2.216397
4	2	5495.9	11	70	1159		2.778802
5	2	5495.9	11	80	1780		4.145775
6	1	5495.9	11	100			4.801024
7	1	5495.9	11	80			5.598192
8	3	5495.9	11	70	1975	1997	7.233063
9	2	5495.9	11	80	1178		7.496485
10	1	5495.9	11	55			8.50866
11	3	5495.9	11	60	1806	1920	9.79311
12	3	5495.9	11	70	1828	1841	10.696117
13	3	5495.9	11	100	1734	1348	11.790883
0	0	0	0	0			0

USA Bin 5 Trial #5

1	3	5496.3	12	75	1854	1328	0.722998
2	1	5496.3	12	95			0.960766
3	2	5496.3	12	55	1855		2.328894
4	2	5496.3	12	75	1266		2.75819
5	2	5496.3	12	90	1304		3.492
6	2	5496.3	12	95	1307		4.383738
7	1	5496.3	12	95			5.02558
8	3	5496.3	12	75	1291	1327	5.854806
9	1	5496.3	12	55			7.184353
10	3	5496.3	12	75	1718	1839	7.798261
11	2	5496.3	12	80	1379		8.198659
12	1	5496.3	12	70			9.249055
13	1	5496.3	12	65			10.199144
14	2	5496.3	12	50	1767		11.189663

DFS Test Report No: **EDCS – 21541318**

15	2	5496.3	12	50	1511		11.207315
0	0	0	0	0			0
USA Bin 5 Trial #6							
1	2	5494.3	7	65	1492		0.580501
2	1	5494.3	7	80			1.069662
3	2	5494.3	7	50	1004		1.615786
4	2	5494.3	7	55	1562		2.092514
5	3	5494.3	7	60	1436	1503	2.412732
6	2	5494.3	7	85	1958		3.518189
7	3	5494.3	7	100	1371	1471	3.966869
8	1	5494.3	7	85			4.456913
9	2	5494.3	7	85	1160		5.257169
10	3	5494.3	7	95	1205	1476	5.525696
11	3	5494.3	7	95	1027	1056	6.179793
12	2	5494.3	7	65	1471		6.819228
13	1	5494.3	7	60			7.771407
14	3	5494.3	7	65	1300	1516	8.154446
15	1	5494.3	7	70			8.410399
16	1	5494.3	7	85			9.107798
17	2	5494.3	7	50	1267		9.964657
18	2	5494.3	7	100	1388		10.56541
19	1	5494.3	7	70			11.22272
20	2	5494.3	7	60	1718		11.958789
0	0	0	0	0			0
USA Bin 5 Trial #7							
1	2	5497.1	14	80	1965		0.456255
2	2	5497.1	14	70	1224		0.954142
3	1	5497.1	14	50			1.787792
4	3	5497.1	14	65	1009	1660	2.560901
5	3	5497.1	14	65	1556	1815	3.283395
6	3	5497.1	14	70	1598	1872	3.500477
7	2	5497.1	14	65	1517		4.088123
8	1	5497.1	14	100			5.32601
9	3	5497.1	14	60	1963	1128	5.466109
10	2	5497.1	14	60	1825		6.509065
11	3	5497.1	14	60	1430	1524	6.864705
12	3	5497.1	14	80	1041	1134	7.372943
13	2	5497.1	14	65	1811		8.257107
14	1	5497.1	14	50			8.997804
15	3	5497.1	14	75	1163	1064	9.765355
16	3	5497.1	14	90	1281	1833	10.279395
17	2	5497.1	14	60	1769		11.174427

DFS Test Report No: **EDCS – 21541318**

18	1	5497.1	14	85			11.472867
0	0	0	0	0			0
USA Bin 5 Trial #8							
1	3	5497.1	14	60	1678	1160	0.397478
2	3	5497.1	14	65	1315	1373	1.311012
3	3	5497.1	14	60	1816	1831	2.506492
4	2	5497.1	14	75	1387		3.26466
5	2	5497.1	14	80	1568		4.789202
6	3	5497.1	14	95	1635	1772	5.886982
7	2	5497.1	14	100	1993		6.111955
8	2	5497.1	14	70	1602		7.255024
9	3	5497.1	14	70	1102	1689	8.660306
10	1	5497.1	14	50			9.335269
11	1	5497.1	14	90			10.002895
12	1	5497.1	14	50			11.592408
0	0	0	0	0			0
USA Bin 5 Trial #9							
1	3	5497.9	16	65	1150	1136	0.305675
2	2	5497.9	16	85	1561		0.969773
3	1	5497.9	16	85			2.045663
4	2	5497.9	16	55	1470		2.25846
5	1	5497.9	16	100			3.11075
6	3	5497.9	16	55	1342	1690	4.18053
7	2	5497.9	16	95	1756		5.165317
8	1	5497.9	16	70			5.377839
9	1	5497.9	16	100			6.544405
10	3	5497.9	16	75	1929	1828	7.172954
11	3	5497.9	16	95	1762	1462	7.511454
12	3	5497.9	16	50	1532	1385	8.861014
13	2	5497.9	16	85	1906		9.373956
14	1	5497.9	16	100			10.380603
15	3	5497.9	16	95	1995	1655	10.540989
16	1	5497.9	16	65			11.379716
0	0	0	0	0			0
USA Bin 5 Trial #10							
1	2	5494.7	8	100	1376		0.571025
2	2	5494.7	8	95	1119		1.271571
3	3	5494.7	8	70	1553	1558	1.524296
4	2	5494.7	8	75	1418		2.921995
5	3	5494.7	8	65	1197	1351	3.301898
6	3	5494.7	8	65	1819	1060	4.477896
7	3	5494.7	8	90	1626	1156	4.578264

DFS Test Report No: **EDCS – 21541318**

8	1	5494.7	8	50			5.532235
9	2	5494.7	8	65	1165		6.555901
10	3	5494.7	8	95	1623	1056	6.86712
11	2	5494.7	8	60	1525		7.988332
12	2	5494.7	8	95	1224		8.763976
13	3	5494.7	8	60	1061	1572	9.262327
14	2	5494.7	8	75	1953		10.170677
15	3	5494.7	8	65	1955	1127	10.602369
16	1	5494.7	8	85			11.491787
0	0	0	0	0			0

USA Bin 5 Trial #11

1	3	5530.0	9	55	1554	1876	0.165807
2	3	5530	9	80	1180	1263	1.406707
3	2	5530	9	70	1680		2.38666
4	3	5530	9	60	1481	1052	3.89918
5	2	5530	9	50	1964		4.891248
6	3	5530	9	55	1245	1181	5.595657
7	1	5530	9	70			7.512762
8	1	5530	9	95			8.648952
9	1	5530	9	65			8.786378
10	2	5530	9	100	1158		10.615772
11	3	5530	9	65	1091	1391	11.142463
0	0	0	0	0			0

USA Bin 5 Trial #12

1	3	5530.0	8	65	1801	1814	0.445350
2	3	5530	8	65	1118	1197	1.410182
3	1	5530	8	75			1.613899
4	3	5530	8	90	1310	1279	2.729505
5	2	5530	8	90	1373		3.139033
6	3	5530	8	70	1636	1750	4.451195
7	1	5530	8	55			4.824143
8	2	5530	8	85	1192		5.506698
9	1	5530	8	70			6.378471
10	1	5530	8	65			7.39254
11	2	5530	8	65	1089		8.216326
12	3	5530	8	80	1836	1846	8.826225
13	1	5530	8	65			9.219024
14	2	5530	8	55	1074		9.954008
15	3	5530	8	100	1863	1741	11.235037
16	3	5530	8	50	1493	1735	11.322834
0	0	0	0	0			0

USA Bin 5 Trial #13

DFS Test Report No: **EDCS – 21541318**

1	2	5530.0	17	50	1879		1.049197
2	2	5530	17	100	1179		2.062821
3	2	5530	17	95	1602		2.580329
4	1	5530	17	100			3.34811
5	2	5530	17	75	1270		5.132487
6	2	5530	17	55	1976		6.490822
7	3	5530	17	60	1747	1817	7.143251
8	2	5530	17	85	1743		7.664854
9	1	5530	17	95			8.782154
10	1	5530	17	75			10.07839
11	3	5530	17	75	1479	1771	11.849476
0	0	0	0	0			0

USA Bin 5 Trial #14

1	3	5530.0	18	80	1607	1822	0.920041
2	2	5530	18	100	1727		2.185901
3	1	5530	18	75			3.002639
4	3	5530	18	100	1431	1570	4.312009
5	3	5530	18	65	1296	1386	5.519609
6	2	5530	18	70	1509		7.751509
7	2	5530	18	80	1049		8.352635
8	2	5530	18	75	1224		9.91269
9	1	5530	18	75			11.265245
0	0	0	0	0			0

USA Bin 5 Trial #15

1	1	5530.0	17	90			0.683412
2	2	5530	17	75	1591		1.396876
3	1	5530	17	60			2.703559
4	2	5530	17	55	1930		3.904485
5	3	5530	17	80	1847	1277	5.782519
6	3	5530	17	65	1264	1976	6.999377
7	3	5530	17	70	1084	1851	7.423934
8	2	5530	17	65	1187		9.581137
9	1	5530	17	50			10.145719
10	1	5530	17	80			11.731724
0	0	0	0	0			0

USA Bin 5 Trial #16

1	3	5530.0	11	80	1402	1003	0.533192
2	1	5530	11	65			1.72319
3	3	5530	11	80	1650	1881	2.256446
4	2	5530	11	70	1136		3.943537
5	1	5530	11	50			4.9297
6	2	5530	11	60	1296		5.92487

DFS Test Report No: **EDCS – 21541318**

7	2	5530	11	85	1534		6.48901
8	2	5530	11	55	1838		7.075034
9	1	5530	11	95			8.899925
10	3	5530	11	90	1836	1803	9.050269
11	3	5530	11	95	1908	1591	10.867614
12	1	5530	11	60			11.086096
0	0	0	0	0			0

USA Bin 5 Trial #17

1	1	5530.0	8	85			1.226338
2	3	5530	8	80	1087	1558	2.497224
3	2	5530	8	85	1789		3.897979
4	1	5530	8	80			5.089041
5	2	5530	8	50	1800		6.014918
6	3	5530	8	100	1766	1126	6.811594
7	3	5530	8	95	1006	1895	8.833215
8	1	5530	8	100			9.348135
9	1	5530	8	70			11.778962
0	0	0	0	0			0

USA Bin 5 Trial #18

1	3	5530.0	14	95	1038	1258	0.862521
2	1	5530	14	95			1.524143
3	3	5530	14	90	1804	1634	1.874897
4	1	5530	14	65			3.390612
5	2	5530	14	55	1716		4.53865
6	1	5530	14	80			4.806043
7	2	5530	14	75	1894		5.877282
8	2	5530	14	70	1749		6.823723
9	3	5530	14	95	1065	1915	7.793441
10	3	5530	14	70	1482	1876	9.034117
11	2	5530	14	60	1089		9.324
12	2	5530	14	75	1023		10.166111
13	2	5530	14	55	1942		11.160571
0	0	0	0	0			0

USA Bin 5 Trial #19

1	2	5530.0	10	95	1569		0.159431
2	3	5530	10	95	1917	1888	1.509939
3	2	5530	10	55	1415		2.761426
4	1	5530	10	75			3.825524
5	2	5530	10	50	1461		4.81994
6	2	5530	10	85	1503		5.861711
7	1	5530	10	85			7.233342
8	1	5530	10	55			8.603585

DFS Test Report No: **EDCS – 21541318**

9	3	5530	10	65	1037	1257	8.797469
10	3	5530	10	70	1658	1075	9.959706
11	2	5530	10	55	1808		10.969007
0	0	0	0	0			0

USA Bin 5 Trial #20

1	1	5530.0	17	60			1.104713
2	3	5530	17	100	1226	1471	1.250468
3	1	5530	17	60			3.067846
4	1	5530	17	55			3.720788
5	2	5530	17	80	1108		5.559636
6	1	5530	17	100			6.899588
7	3	5530	17	60	1727	1970	8.383447
8	1	5530	17	50			8.845555
9	1	5530	17	95			10.36503
10	3	5530	17	90	1089	1127	10.811568
0	0	0	0	0			0

USA Bin 5 Trial #21

1	1	5563.7	12	85			0.200252
2	1	5563.7	12	65			1.189079
3	1	5563.7	12	65			1.760377
4	3	5563.7	12	80	1648	1843	2.605491
5	2	5563.7	12	50	1190		2.914731
6	2	5563.7	12	80	1642		3.407232
7	3	5563.7	12	75	1894	1186	4.275514
8	3	5563.7	12	85	1185	1226	5.298364
9	2	5563.7	12	70	1931		5.50107
10	3	5563.7	12	50	1495	1716	6.386219
11	1	5563.7	12	65			7.196792
12	3	5563.7	12	95	1064	1379	7.514718
13	2	5563.7	12	90	1103		8.248411
14	3	5563.7	12	50	1892	1857	8.999556
15	1	5563.7	12	100			9.674305
16	2	5563.7	12	95	1436		10.127483
17	1	5563.7	12	60			11.000882
18	1	5563.7	12	75			11.736051
0	0	0	0	0			0

USA Bin 5 Trial #22

1	2	5564.9	9	85	1445		0.072166
2	3	5564.9	9	75	1072	1764	1.671095
3	1	5564.9	9	55			2.050538
4	3	5564.9	9	55	1303	1073	3.677099
5	3	5564.9	9	75	1440	1730	3.842765

DFS Test Report No: **EDCS – 21541318**

6	3	5564.9	9	65	1043	1758	5.192221
7	3	5564.9	9	90	1232	1450	5.733479
8	1	5564.9	9	95			6.573861
9	1	5564.9	9	85			8.192627
10	2	5564.9	9	95	1357		8.422595
11	1	5564.9	9	95			9.736095
12	1	5564.9	9	55			10.684341
13	2	5564.9	9	95	1403		11.71212
0	0	0	0	0			0

USA Bin 5 Trial #23

1	2	5562.5	15	70	1556		0.807979
2	3	5562.5	15	85	1255	1674	0.887485
3	1	5562.5	15	80			2.045204
4	1	5562.5	15	65			3.398223
5	1	5562.5	15	65			4.216698
6	3	5562.5	15	85	1483	1760	4.777437
7	3	5562.5	15	55	1060	1465	5.32896
8	3	5562.5	15	55	1720	1637	6.388739
9	1	5562.5	15	75			7.173063
10	2	5562.5	15	85	1302		8.470699
11	2	5562.5	15	50	1111		9.056914
12	3	5562.5	15	55	1366	1207	9.647049
13	2	5562.5	15	75	1125		10.452617
14	2	5562.5	15	95	1630		11.678198
0	0	0	0	0			0

USA Bin 5 Trial #24

1	2	5562.1	16	70	1999		0.556579
2	3	5562.1	16	75	1016	1750	1.763482
3	1	5562.1	16	70			2.656825
4	1	5562.1	16	60			4.026702
5	1	5562.1	16	60			5.358266
6	2	5562.1	16	95	1061		6.494439
7	3	5562.1	16	65	1066	1599	8.26437
8	2	5562.1	16	65	1252		8.480492
9	3	5562.1	16	70	1353	1891	10.755139
10	3	5562.1	16	55	1976	1825	11.738852
0	0	0	0	0			0

USA Bin 5 Trial #25

1	3	5564.5	10	75	1412	1595	0.673722
2	2	5564.5	10	55	1558		1.548195
3	2	5564.5	10	55	1290		1.73875
4	1	5564.5	10	50			3.330026

DFS Test Report No: **EDCS – 21541318**

5	3	5564.5	10	90	1332	1061	4.140118
6	3	5564.5	10	65	1262	1795	4.823018
7	1	5564.5	10	55			5.741189
8	1	5564.5	10	100			6.747607
9	1	5564.5	10	90			6.966075
10	1	5564.5	10	90			7.911957
11	3	5564.5	10	50	1095	1845	8.713948
12	3	5564.5	10	70	1388	1890	9.488335
13	2	5564.5	10	90	1984		11.033563
14	1	5564.5	10	70			11.482488
0	0	0	0	0			0

USA Bin 5 Trial #26

1	1	5565.7	7	60			0.570770
2	1	5565.7	7	50			1.454966
3	2	5565.7	7	65	1346		2.504224
4	3	5565.7	7	90	1690	1620	3.890517
5	1	5565.7	7	65			5.052233
6	2	5565.7	7	100	1122		5.819351
7	1	5565.7	7	80			6.843223
8	1	5565.7	7	70			7.715912
9	3	5565.7	7	50	1487	1290	9.594668
10	1	5565.7	7	95			10.826422
11	1	5565.7	7	85			11.402183
0	0	0	0	0			0

USA Bin 5 Trial #27

1	1	5566.1	6	70			0.785237
2	3	5566.1	6	65	1318	1363	1.460302
3	2	5566.1	6	75	1810		2.655927
4	2	5566.1	6	50	1126		3.50976
5	3	5566.1	6	55	1685	1474	4.490381
6	2	5566.1	6	60	1359		4.810054
7	2	5566.1	6	70	1818		5.745332
8	3	5566.1	6	90	1135	1614	6.746736
9	2	5566.1	6	90	1707		8.158571
10	3	5566.1	6	90	1065	1709	9.087782
11	3	5566.1	6	75	1033	1140	9.254898
12	1	5566.1	6	65			10.4629
13	3	5566.1	6	85	1272	1410	11.29792
0	0	0	0	0			0

USA Bin 5 Trial #28

1	1	5563.3	13	60			0.319375
2	3	5563.3	13	85	1418	1386	1.481288

DFS Test Report No: **EDCS – 21541318**

3	2	5563.3	13	90	1040		3.395915
4	3	5563.3	13	95	1467	1767	3.779142
5	1	5563.3	13	75			4.943649
6	2	5563.3	13	90	1479		6.555423
7	3	5563.3	13	85	1095	1380	7.264327
8	2	5563.3	13	60	1273		9.294409
9	2	5563.3	13	90	1268		9.777967
10	1	5563.3	13	60			11.760417
0	0	0	0	0			0

USA Bin 5 Trial #29

1	2	5561.7	17	65	1830		0.378125
2	3	5561.7	17	70	1867	1735	0.942816
3	2	5561.7	17	65	1880		1.395989
4	2	5561.7	17	55	1376		2.100371
5	1	5561.7	17	85			2.891583
6	1	5561.7	17	65			3.537471
7	3	5561.7	17	80	1964	1264	4.105184
8	3	5561.7	17	55	1508	1299	4.698853
9	1	5561.7	17	95			5.608789
10	3	5561.7	17	90	1387	1877	5.77845
11	2	5561.7	17	55	1094		6.601716
12	1	5561.7	17	65			7.472322
13	1	5561.7	17	75			7.930025
14	1	5561.7	17	95			8.659258
15	1	5561.7	17	75			8.969499
16	1	5561.7	17	75			10.033585
17	1	5561.7	17	100			10.483387
18	1	5561.7	17	50			11.336323
19	2	5561.7	17	70	1580		11.516629
0	0	0	0	0			0

USA Bin 5 Trial #30

1	1	5565.7	7	95			1.103011
2	3	5565.7	7	100	1381	1751	2.262285
3	2	5565.7	7	60	1179		4.247305
4	1	5565.7	7	70			5.058964
5	3	5565.7	7	65	1427	1150	6.803785
6	2	5565.7	7	85	1116		8.923236
7	1	5565.7	7	100			9.537572
8	1	5565.7	7	100			11.140004
0	0	0	0	0			0

Bin 6 Details

USA Frequency Hopping Trial #1

0	5563	0
1	5558	3
17	5535	51
18	5544	54
28	5561	84
29	5536	87
30	5506	90
37	5546	111
39	5514	117
42	5517	126
46	5513	138
48	5554	144
63	5538	189
64	5549	192
65	5521	195
80	5501	240
87	5569	261
0	0	0

USA Frequency Hopping Trial #2

7	5540	21
12	5491	36
18	5519	54
20	5511	60
26	5532	78
33	5565	99
40	5499	120
46	5509	138
63	5544	189
77	5559	231
80	5494	240
82	5530	246
95	5556	285
97	5505	291
0	0	0

USA Frequency Hopping Trial #3

3	5532	9
7	5518	21
8	5537	24
11	5563	33
35	5514	105
43	5528	129
46	5551	138
55	5522	165
61	5499	183
63	5561	189
67	5540	201
70	5525	210
71	5504	213
77	5517	231

84	5506	252
85	5562	255
96	5492	288
99	5505	297
0	0	0

USA Frequency Hopping Trial #4

8	5561	24
27	5526	81
39	5535	117
52	5540	156
54	5521	162
71	5499	213
72	5548	216
84	5505	252
85	5492	255
86	5497	258
0	0	0

USA Frequency Hopping Trial #5

0	5544	0
16	5548	48
17	5508	51
18	5561	54
27	5531	81
28	5527	84
36	5493	108
44	5567	132
47	5512	141
51	5547	153
53	5562	159
62	5521	186
68	5530	204
69	5541	207
97	5560	291
0	0	0

USA Frequency Hopping Trial #6

2	5562	6
9	5551	27
18	5538	54
38	5511	114
41	5524	123
48	5536	144
53	5493	159
60	5496	180
71	5514	213
86	5532	258
89	5529	267
90	5497	270
91	5557	273
95	5499	285
0	0	0

USA Frequency Hopping Trial #7

1	5495	3
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10	5513	30
11	5541	33
14	5553	42
19	5528	57
20	5519	60
23	5542	69
28	5560	84
30	5514	90
37	5523	111
38	5521	114
39	5504	117
46	5533	138
54	5532	162
60	5544	180
64	5559	192
66	5547	198
67	5526	201
69	5530	207
71	5511	213
73	5491	219
74	5531	222
78	5569	234
79	5548	237
85	5543	255
88	5527	264
89	5508	267
96	5492	288
0	0	0

USA Frequency Hopping Trial #8

4	5514	12
9	5506	27
21	5528	63
22	5564	66
24	5530	72
37	5529	111
40	5540	120
43	5525	129
58	5494	174
66	5493	198
78	5535	234
80	5499	240
86	5522	258
95	5501	285
0	0	0

USA Frequency Hopping Trial #9

1	5543	3
4	5494	12
9	5509	27
11	5551	33
17	5516	51
38	5506	114
43	5499	129

44	5559	132
53	5508	159
55	5532	165
61	5492	183
65	5536	195
70	5522	210
71	5493	213
72	5569	216
76	5564	228
77	5558	231
80	5523	240
83	5524	249
85	5513	255
0	0	0

USA Frequency Hopping Trial #10

1	5557	3
3	5528	9
4	5522	12
6	5565	18
18	5544	54
22	5496	66
25	5491	75
30	5566	90
31	5498	93
39	5508	117
44	5543	132
46	5541	138
51	5506	153
63	5515	189
65	5556	195
73	5553	219
77	5532	231
83	5520	249
0	0	0

USA Frequency Hopping Trial #11

7	5519	21
9	5554	27
13	5531	39
15	5530	45
22	5545	66
26	5536	78
30	5522	90
35	5549	105
36	5539	108
45	5559	135
49	5563	147
54	5525	162
58	5547	174
61	5556	183
66	5515	198
67	5548	201
71	5516	213

81	5553	243
86	5527	258
87	5505	261
89	5529	267
90	5543	270
99	5512	297
0	0	0

USA Frequency Hopping Trial #12

3	5535	9
6	5520	18
10	5550	30
15	5542	45
19	5532	57
33	5526	99
39	5522	117
40	5554	120
41	5557	123
42	5516	126
43	5562	129
47	5549	141
49	5491	147
50	5560	150
51	5563	153
52	5514	156
55	5495	165
56	5551	168
62	5556	186
65	5564	195
71	5530	213
91	5569	273
92	5500	276
94	5518	282
0	0	0

USA Frequency Hopping Trial #13

1	5554	3
2	5514	6
3	5551	9
10	5518	30
11	5558	33
16	5539	48
22	5534	66
29	5509	87
31	5510	93
37	5503	111
42	5538	126
43	5552	129
50	5527	150
61	5561	183
70	5565	210
79	5523	237
80	5496	240
89	5494	267

95	5515	285
0	0	0

USA Frequency Hopping Trial #14

2	5495	6
4	5516	12
5	5559	15
9	5515	27
20	5553	60
21	5538	63
24	5498	72
25	5566	75
28	5540	84
31	5520	93
35	5552	105
41	5541	123
48	5507	144
54	5558	162
55	5554	165
65	5564	195
71	5529	213
83	5532	249
85	5534	255
87	5494	261
95	5492	285
96	5531	288
0	0	0

USA Frequency Hopping Trial #15

1	5539	3
3	5515	9
10	5552	30
17	5511	51
20	5553	60
23	5519	69
25	5563	75
33	5491	99
34	5525	102
37	5528	111
39	5545	117
57	5522	171
62	5536	186
69	5542	207
72	5538	216
88	5505	264
93	5504	279
99	5549	297
0	0	0

USA Frequency Hopping Trial #16

4	5552	12
6	5546	18
7	5537	21
13	5520	39
14	5565	42

16	5533	48
19	5491	57
20	5553	60
21	5535	63
35	5497	105
38	5507	114
39	5513	117
44	5524	132
57	5500	171
62	5568	186
70	5501	210
83	5557	249
87	5493	261
96	5560	288
0	0	0

USA Frequency Hopping Trial #17

0	5526	0
8	5559	24
13	5553	39
14	5562	42
18	5497	54
20	5509	60
21	5565	63
30	5534	90
35	5551	105
36	5494	108
39	5501	117
40	5515	120
47	5508	141
52	5498	156
55	5563	165
58	5567	174
63	5519	189
73	5554	219
79	5566	237
83	5493	249
90	5537	270
0	0	0

USA Frequency Hopping Trial #18

13	5521	39
14	5556	42
20	5544	60
29	5502	87
30	5527	90
38	5562	114
48	5567	144
49	5495	147
65	5540	195
69	5510	207
70	5545	210
73	5529	219
81	5512	243

85	5530	255
92	5568	276
0	0	0

USA Frequency Hopping Trial #19

4	5540	12
5	5568	15
12	5554	36
13	5522	39
15	5495	45
16	5537	48
23	5546	69
27	5500	81
28	5507	84
49	5525	147
52	5499	156
56	5536	168
63	5523	189
70	5547	210
75	5535	225
80	5542	240
87	5545	261
0	0	0

USA Frequency Hopping Trial #20

10	5543	30
14	5515	42
18	5520	54
28	5531	84
29	5510	87
34	5495	102
51	5517	153
58	5502	174
68	5558	204
69	5562	207
76	5498	228
81	5526	243
84	5547	252
86	5530	258
89	5553	267
93	5551	279
95	5545	285
97	5533	291
99	5514	297
0	0	0

USA Frequency Hopping Trial #21

1	5544	3
3	5527	9
9	5498	27
23	5526	69
33	5502	99
34	5519	102
35	5554	105
47	5523	141

53	5550	159
54	5536	162
60	5547	180
66	5563	198
85	5542	255
97	5551	291
98	5537	294
0	0	0

USA Frequency Hopping Trial #22

1	5554	3
13	5527	39
14	5568	42
18	5533	54
20	5502	60
24	5563	72
29	5541	87
32	5521	96
46	5513	138
49	5551	147
50	5491	150
59	5492	177
63	5564	189
72	5545	216
75	5537	225
91	5559	273
94	5506	282
95	5512	285
0	0	0

USA Frequency Hopping Trial #23

0	5553	0
5	5520	15
13	5528	39
15	5503	45
18	5531	54
25	5550	75
32	5516	96
48	5537	144
53	5564	159
59	5540	177
63	5544	189
83	5521	249
84	5518	252
90	5494	270
91	5561	273
94	5558	282
96	5506	288
97	5565	291
98	5548	294
0	0	0

USA Frequency Hopping Trial #24

1	5501	3
11	5527	33

13	5495	39
14	5502	42
17	5541	51
19	5557	57
20	5567	60
31	5508	93
36	5561	108
38	5509	114
43	5507	129
46	5500	138
52	5520	156
54	5547	162
56	5511	168
66	5531	198
67	5499	201
70	5491	210
72	5512	216
84	5498	252
0	0	0

USA Frequency Hopping Trial #25

3	5510	9
6	5499	18
27	5549	81
28	5566	84
31	5544	93
38	5522	114
40	5492	120
41	5500	123
51	5502	153
66	5563	198
67	5567	201
69	5508	207
78	5535	234
84	5523	252
85	5547	255
89	5517	267
92	5559	276
0	0	0

USA Frequency Hopping Trial #26

2	5495	6
3	5566	9
5	5553	15
8	5525	24
10	5507	30
17	5555	51
18	5543	54
19	5557	57
21	5539	63
35	5536	105
36	5535	108
39	5567	117
49	5512	147

51	5568	153
52	5561	156
53	5524	159
54	5515	162
56	5517	168
59	5532	177
86	5501	258
92	5505	276
93	5514	279
99	5516	297
0	0	0

USA Frequency Hopping Trial #27

5	5495	15
8	5548	24
13	5518	39
14	5537	42
18	5507	54
20	5515	60
21	5565	63
24	5523	72
25	5533	75
27	5510	81
31	5498	93
35	5531	105
36	5496	108
37	5539	111
39	5499	117
50	5508	150
51	5536	153
65	5563	195
72	5564	216
75	5506	225
81	5561	243
83	5516	249
85	5502	255
95	5543	285
0	0	0

USA Frequency Hopping Trial #28

5	5567	15
14	5521	42
23	5543	69
25	5564	75
29	5524	87
30	5515	90
38	5535	114
39	5501	117
40	5522	120
41	5504	123
46	5500	138
48	5562	144
61	5513	183
62	5547	186

70	5520	210
75	5540	225
79	5499	237
81	5534	243
85	5517	255
89	5526	267
0	0	0

USA Frequency Hopping Trial #29

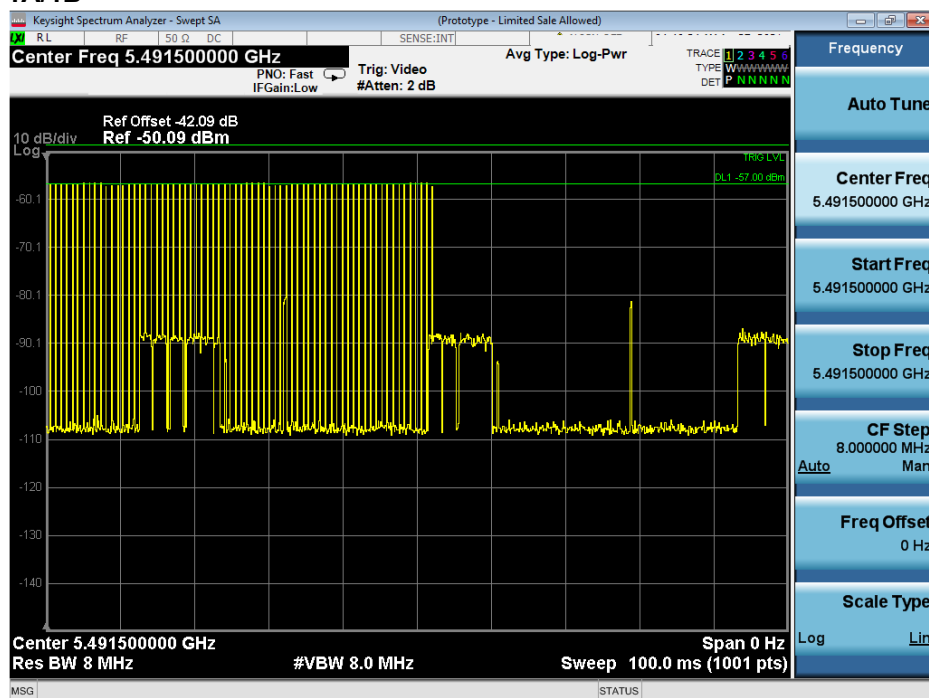
1	5523	3
6	5549	18
7	5546	21
8	5538	24
16	5519	48
19	5494	57
24	5520	72
27	5569	81
38	5535	114
39	5565	117
45	5497	135
65	5566	195
70	5548	210
73	5533	219
74	5542	222
82	5503	246
88	5505	264
92	5516	276
0	0	0

USA Frequency Hopping Trial #30

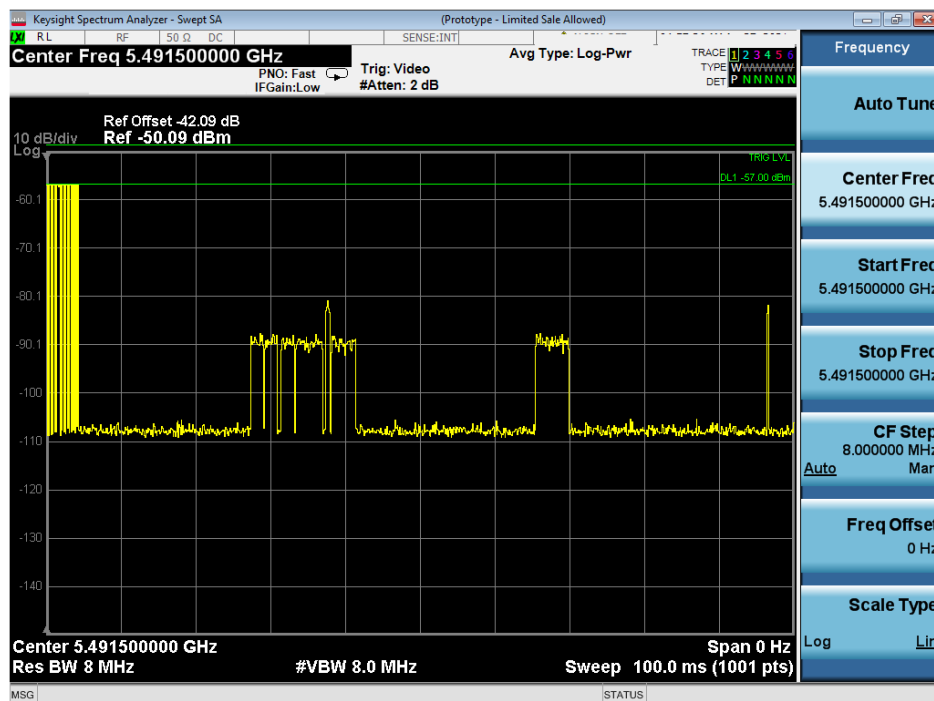
5	5507	15
14	5552	42
17	5550	51
25	5519	75
35	5538	105
44	5536	132
47	5499	141
53	5502	159
64	5525	192
66	5491	198
75	5515	225
81	5501	243
86	5520	258
89	5549	267
96	5530	288
97	5537	291
0	0	0

Stats Plots

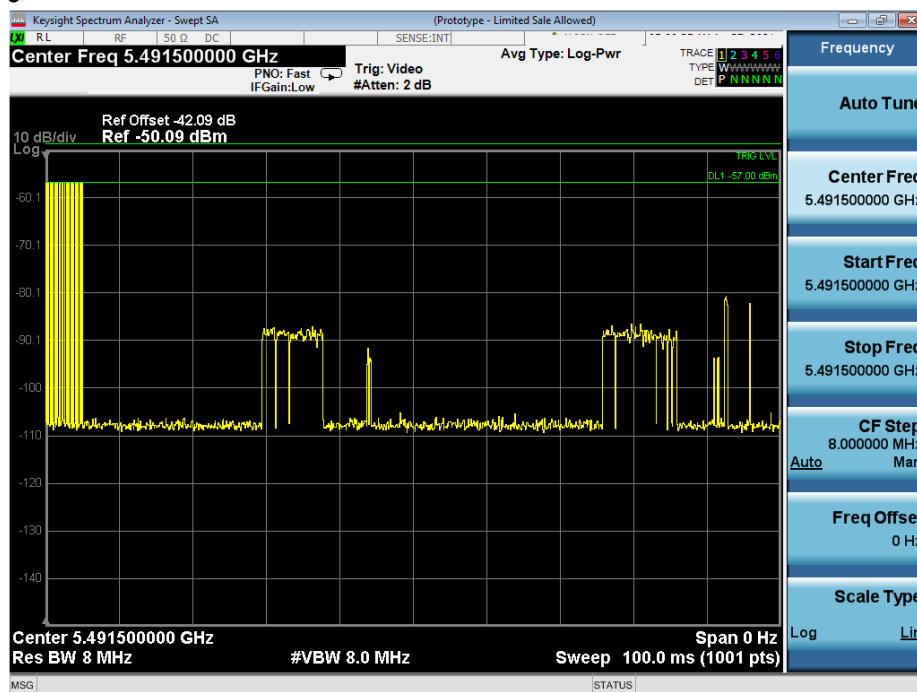
1A/1B



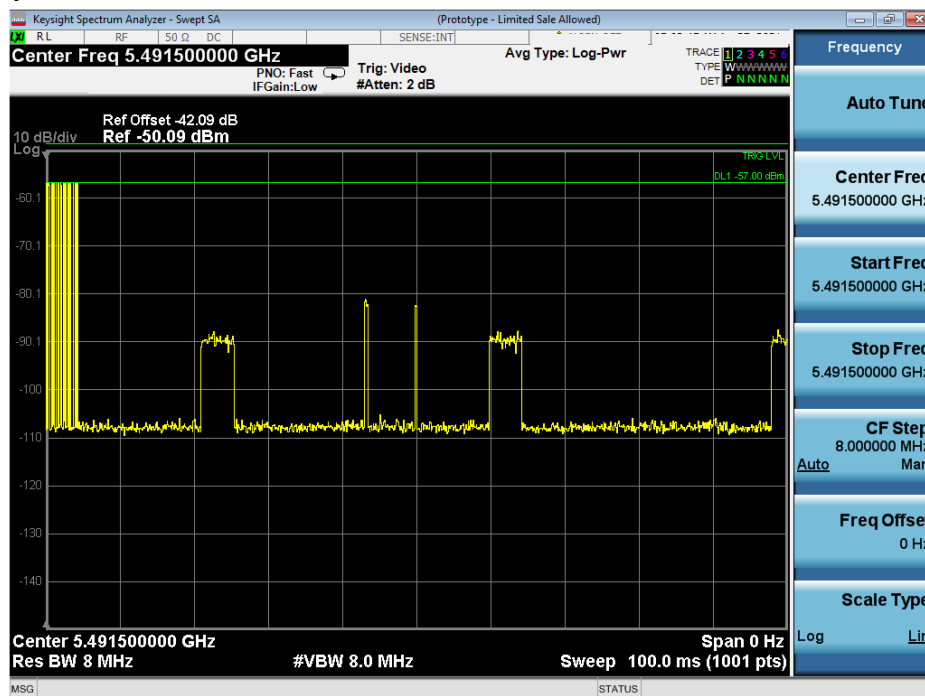
2



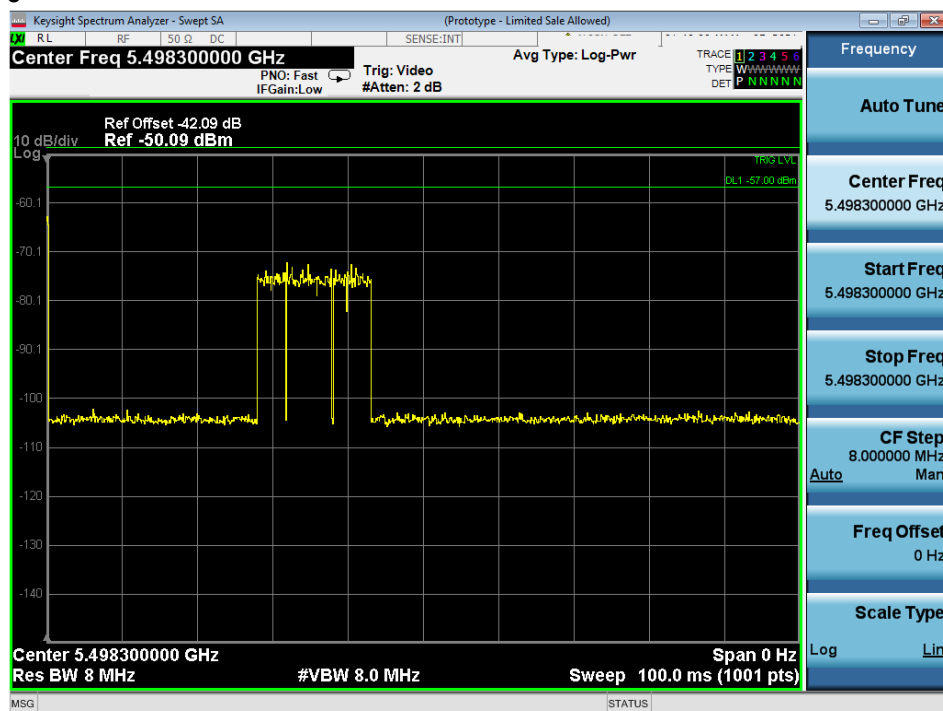
3



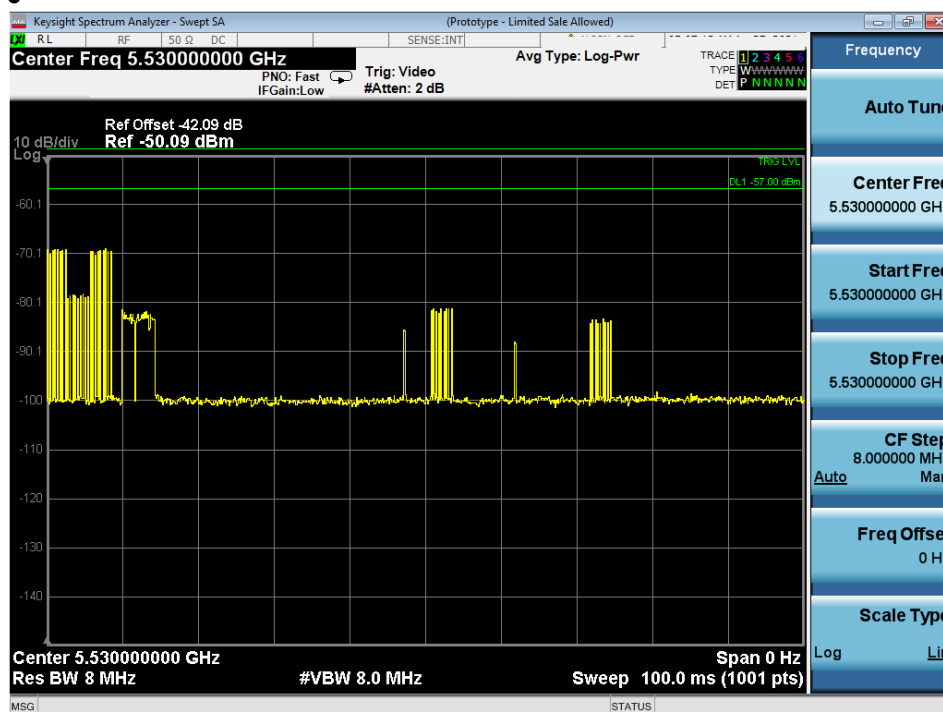
4



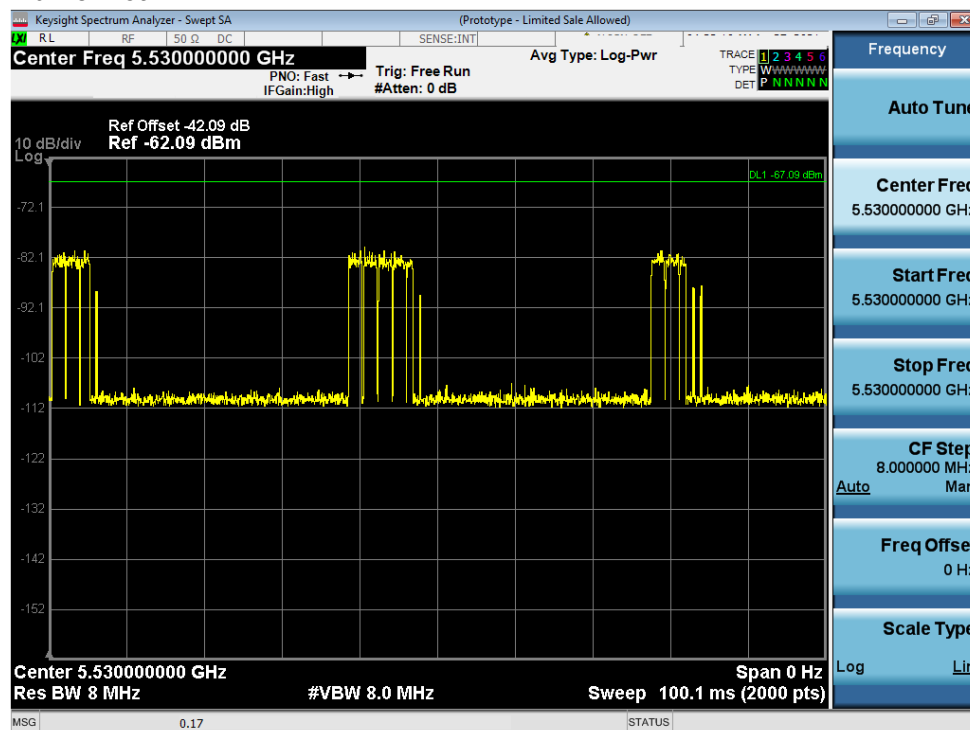
5



6



Traffic Plot



DFS Test Report No: **EDCS – 21541318**

Channel 5570 MHz, 160MHz BW, Statistical Performance

Radar Signal Strenth: -57dBm

USA Bin 1A

freq=5570, bw=156.0

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	59	1	898	1	93.3%	60.0%
2	5492	74	1	718	0		
3	5511	99	1	538	1		
4	5511	102	1	518	1		
5	5522	83	1	638	1		
6	5522	89	1	598	1		
7	5533	89	1	598	1		
8	5533	67	1	798	1		
9	5544	58	1	918	1		
10	5544	58	1	918	0		
11	5555	81	1	658	1		
12	5555	102	1	518	1		
13	5566	63	1	838	1		
14	5566	78	1	678	1		
15	5570	63	1	838	1		
16	5570	18	1	3014	1		
17	5574	61	1	871	1		
18	5574	26	1	2098	1		
19	5585	19	1	2904	1		
20	5585	45	1	1179	1		
21	5596	25	1	2114	1		
22	5596	30	1	1770	1		
23	5607	47	1	1145	1		
24	5607	20	1	2709	1		
25	5618	19	1	2861	1		
26	5618	38	1	1396	1		
27	5629	25	1	2194	1		
28	5629	21	1	2567	1		
29	5648	46	1	1148	1		
30	5648	18	1	3006	1		

USA Bin 1B

freq=5570, bw=156.0

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	83	1	638	1	96.7%	60.0%
2	5492	86	1	618	1		
3	5511	95	1	558	1		
4	5511	92	1	578	1		
5	5522	18	1	3066	1		
6	5522	65	1	818	1		
7	5533	89	1	598	1		
8	5533	68	1	778	1		
9	5544	102	1	518	1		
10	5544	95	1	558	1		
11	5555	62	1	858	1		
12	5555	62	1	858	1		
13	5566	70	1	758	1		
14	5566	63	1	838	1		
15	5570	61	1	878	1		
16	5570	19	1	2860	1		
17	5574	35	1	1514	1		
18	5574	87	1	613	1		
19	5585	24	1	2266	1		
20	5585	25	1	2143	1		
21	5596	30	1	1776	1		
22	5596	53	1	1008	1		
23	5607	20	1	2742	0		
24	5607	19	1	2795	1		
25	5618	46	1	1171	1		
26	5618	18	1	3025	1		
27	5629	21	1	2564	1		
28	5629	79	1	669	1		
29	5648	21	1	2627	1		
30	5648	43	1	1240	1		

USA Bin 2

freq=5570, bw=156.0

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	25	3.5	178	1	93.3%	60.0%
2	5492	29	3	227	1		
3	5511	29	1.7	209	1		
4	5511	23	4	196	1		
5	5522	23	2.2	214	1		
6	5522	26	1.5	174	0		
7	5533	27	1.8	193	1		
8	5533	29	3.3	152	1		
9	5544	27	1.2	216	1		
10	5544	23	3	204	1		
11	5555	23	1.3	228	1		
12	5555	26	3.2	217	1		
13	5566	23	4	227	1		
14	5566	27	2.5	195	1		
15	5570	27	2.3	190	1		
16	5570	29	1.7	160	1		
17	5574	23	1.9	179	1		
18	5574	26	4.8	215	1		
19	5585	26	3.9	154	1		
20	5585	28	4.5	222	1		
21	5596	23	3.1	192	1		
22	5596	26	3.2	166	0		
23	5607	26	1.5	214	1		
24	5607	29	1.7	218	1		
25	5618	29	3	218	1		
26	5618	28	4.8	178	1		
27	5629	27	3.6	225	1		
28	5629	28	2.9	221	1		
29	5648	24	3.7	179	1		
30	5648	26	2.7	217	1		

USA Bin 3

freq=5570, bw=156.0

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	16	7.6	213	1	93.3%	60.0%
2	5492	16	9.8	289	1		
3	5511	16	9.3	379	0		
4	5511	16	6.4	202	1		
5	5522	16	7.7	202	1		
6	5522	16	10	362	0		
7	5533	18	8.2	420	1		
8	5533	18	9.5	326	1		
9	5544	17	7.5	407	1		
10	5544	17	8.1	277	1		
11	5555	17	7.6	451	1		
12	5555	16	8.9	263	1		
13	5566	17	6.9	415	1		
14	5566	18	9.3	412	1		
15	5570	16	8.3	410	1		
16	5570	16	6.6	214	1		
17	5574	16	9.8	412	1		
18	5574	18	6.2	461	1		
19	5585	17	6.8	410	1		
20	5585	18	9.2	293	1		
21	5596	17	9	492	1		
22	5596	17	6.9	216	1		
23	5607	18	6.1	243	1		
24	5607	17	6.3	404	1		
25	5618	16	7.1	444	1		
26	5618	18	7.2	347	1		
27	5629	18	6.2	480	1		
28	5629	16	8.8	355	1		
29	5648	18	8.8	242	1		
30	5648	16	7.6	333	1		

USA Bin 4

freq=5570, bw=156.0

Trial	Frequency	Pulses	PW (uS)	PRI (uS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	5492	15	18.7	363	1	86.7%	60.0%
2	5492	13	15.9	282	1		
3	5511	16	15.6	368	1		
4	5511	14	18.6	368	1		
5	5522	15	12.6	462	1		
6	5522	15	20	257	1		
7	5533	12	13.9	327	1		
8	5533	16	15.8	491	1		
9	5544	16	14.6	442	0		
10	5544	16	11.8	442	1		
11	5555	13	15.4	280	1		
12	5555	14	14	478	1		
13	5566	14	14.5	224	0		
14	5566	15	15.5	448	0		
15	5570	16	19.1	304	1		
16	5570	12	11.6	429	1		
17	5574	12	18	238	1		
18	5574	14	16	245	1		
19	5585	14	11.9	229	1		
20	5585	16	18.7	289	1		
21	5596	12	15.4	277	1		
22	5596	15	19.2	259	1		
23	5607	16	11	320	1		
24	5607	13	15.4	441	1		
25	5618	14	19.6	378	1		
26	5618	12	13.7	290	1		
27	5629	16	16.6	455	0		
28	5629	13	12.4	213	1		
29	5648	12	16.3	338	1		
30	5648	13	17.5	464	1		

USA Bin 5

freq=5570, bw=156.0

Trial	Burst #	Pulses	Frequency (MHz)	Chirp (MHz)	PW (uS)	Inter-pulse spacing (uS)	Inter-pulse spacing (uS)	Pulse Start (S)	1=Detection 0=No Detection	Detection Percentage	Limit
1	1	3	5498.4	16	90	1666	1001	0.522591	1	100.0%	80.0%
2	1	3	5494.8	7	85	1330	1546	0.569751	1		
3	1	3	5498.4	16	95	1293	1519	0.587893	1		
4	1	3	5499.6	19	80	1291	1180	0.574145	1		
5	1	1	5500	20	65			0.45997	1		
6	1	2	5494.4	6	85	1488		0.457658	1		
7	1	3	5500	20	80	1955	1000	0.481495	1		
8	1	1	5494	5	90			0.366504	1		
9	1	3	5498.8	17	75	1057	1976	0.747092	1		
10	1	3	5496.8	12	75	1210	1375	0.976321	1		
11	1	2	5570	6	70	1322		1.053424	1		
12	1	1	5570	12	80			0.563739	1		
13	1	1	5570	17	65			0.358885	1		
14	1	2	5570	18	50	1378		0.616945	1		
15	1	3	5570	9	100	1079	1471	0.055237	1		
16	1	2	5570	19	95	1860		0.067655	1		
17	1	1	5570	12	55			0.287803	1		
18	1	2	5570	12	70	1508		0.43024	1		
19	1	3	5570	10	50	1653	1979	0.605277	1		
20	1	3	5570	14	85	1184	1592	0.546564	1		
21	1	2	5642.4	14	65	1465		0.951937	1		
22	1	1	5644.8	8	50			1.073422	1		
23	1	2	5644.4	9	70	1787		0.135101	1		
24	1	1	5640.8	18	95			0.612663	1		
25	1	1	5644.8	8	50			0.305807	1		
26	1	1	5644.8	8	90			0.276654	1		
27	1	2	5640	20	75	1761		0.052725	1		
28	1	1	5645.2	7	90			0.847792	1		
29	1	3	5640.4	19	95	1250	1645	0.654663	1		
30	1	2	5644	10	90	1198		1.325546	1		

USA Frequency Hopping					freq=5570, bw=156.0	
Trial	Hop #	Freq (GHz)	Pulse Start (mS)	1=Detection 0=No Detection	Detection Percentage	Limit
1	3	5514	9	1	100.0%	70.0%
2	2	5573	6	1		
3	8	5626	24	1		
4	5	5647	15	1		
5	1	5511	3	1		
6	0	5506	0	1		
7	2	5552	6	1		
8	1	5541	3	1		
9	2	5536	6	1		
10	5	5526	15	1		
11	9	5495	27	1		
12	6	5514	18	1		
13	3	5501	9	1		
14	0	5614	0	1		
15	1	5637	3	1		
16	5	5518	15	1		
17	3	5569	9	1		
18	2	5521	6	1		
19	2	5590	6	1		
20	4	5615	12	1		
21	1	5615	3	1		
22	1	5541	3	1		
23	0	5519	0	1		
24	1	5558	3	1		
25	2	5506	6	1		
26	0	5562	0	1		
27	8	5633	24	1		
28	12	5647	36	1		
29	1	5615	3	1		
30	0	5629	0	1		

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

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (93.3\% + 96.7\% + 93.3\% + 93.3\% + 86.7\%) / 5 = 92.7\% (>80\%)$$

Bin 5 Details

USA Bin 5 Trial #1

1	3	5498.4	16	90	1666	1001	0.522591
2	1	5498.4	16	50			1.0697
3	2	5498.4	16	80	1659		2.402222
4	1	5498.4	16	85			2.657547
5	1	5498.4	16	55			3.670816
6	3	5498.4	16	50	1534	1617	4.773835
7	1	5498.4	16	95			5.596097
8	3	5498.4	16	80	1042	1769	6.758311
9	2	5498.4	16	50	1278		7.571463
10	1	5498.4	16	95			8.195791
11	1	5498.4	16	75			8.876839
12	1	5498.4	16	95			9.965086
13	2	5498.4	16	60	1627		10.904656
14	2	5498.4	16	70	1101		11.207328
0	0	0	0	0			0

USA Bin 5 Trial #2

1	3	5494.8	7	85	1330	1546	0.569751
2	2	5494.8	7	55	1052		1.157985
3	3	5494.8	7	55	1853	1412	1.525512
4	1	5494.8	7	75			2.096642
5	1	5494.8	7	80			2.761516
6	3	5494.8	7	60	1466	1424	3.552956
7	1	5494.8	7	85			4.598718
8	2	5494.8	7	65	1389		4.985823
9	1	5494.8	7	60			5.733928
10	3	5494.8	7	70	1482	1006	6.383802
11	3	5494.8	7	95	1953	1812	7.179532
12	1	5494.8	7	55			7.909417
13	3	5494.8	7	75	1873	1504	8.079313
14	2	5494.8	7	50	1778		9.230961
15	3	5494.8	7	60	1426	1523	9.550037
16	2	5494.8	7	65	1049		10.571943
17	1	5494.8	7	60			10.781193
18	2	5494.8	7	90	1614		11.729819
0	0	0	0	0			0

USA Bin 5 Trial #3

1	3	5498.4	16	95	1293	1519	0.587893
2	2	5498.4	16	95	1721		1.650743
3	2	5498.4	16	80	1951		2.063186
4	3	5498.4	16	80	1551	1695	3.469781
5	1	5498.4	16	85			3.912289
6	1	5498.4	16	90			5.498802
7	2	5498.4	16	85	1336		5.909495

DFS Test Report No: **EDCS – 21541318**

8	2	5498.4	16	75	1245		6.618508
9	3	5498.4	16	60	1212	1358	7.851075
10	2	5498.4	16	90	1460		9.045678
11	1	5498.4	16	60			9.57213
12	2	5498.4	16	75	1600		10.333159
13	2	5498.4	16	60	1691		11.911397
0	0	0	0	0			0

USA Bin 5 Trial #4

1	3	5499.6	19	80	1291	1180	0.574145
2	1	5499.6	19	60			1.437252
3	2	5499.6	19	60	1053		1.892918
4	1	5499.6	19	95			2.802916
5	1	5499.6	19	85			3.938213
6	2	5499.6	19	60	1959		4.413719
7	2	5499.6	19	65	1666		4.944093
8	3	5499.6	19	60	1371	1375	6.369842
9	1	5499.6	19	60			6.602098
10	2	5499.6	19	60	1820		7.428917
11	1	5499.6	19	60			8.282732
12	2	5499.6	19	50	1754		9.50942
13	1	5499.6	19	70			10.338333
14	3	5499.6	19	95	1498	1914	10.614453
15	3	5499.6	19	80	1606	1785	11.629305
0	0	0	0	0			0

USA Bin 5 Trial #5

1	1	5500.0	20	65			0.459970
2	3	5500	20	85	1538	1957	1.386811
3	2	5500	20	60	1087		1.674954
4	1	5500	20	70			2.535094
5	1	5500	20	90			3.055403
6	3	5500	20	55	1653	1544	3.597941
7	1	5500	20	55			4.335067
8	3	5500	20	50	1430	1964	5.112723
9	2	5500	20	50	1725		5.732423
10	3	5500	20	90	1539	1220	6.64562
11	3	5500	20	50	1083	1603	7.219979
12	3	5500	20	90	1394	1050	8.311058
13	3	5500	20	55	1390	1307	8.638084
14	3	5500	20	80	1304	1068	9.358062
15	2	5500	20	70	1781		9.894483
16	3	5500	20	65	1514	1144	10.860491
17	1	5500	20	60			11.846001
0	0	0	0	0			0

USA Bin 5 Trial #6

1	2	5494.4	6	85	1488		0.457658
2	1	5494.4	6	100			1.785348

DFS Test Report No: **EDCS – 21541318**

3	1	5494.4	6	100			2.569985
4	1	5494.4	6	80			3.049959
5	1	5494.4	6	50			4.289431
6	1	5494.4	6	65			5.546015
7	3	5494.4	6	100	1434	1260	6.225503
8	2	5494.4	6	80	1586		7.821117
9	1	5494.4	6	70			8.1575
10	1	5494.4	6	70			9.626836
11	1	5494.4	6	75			10.570554
12	2	5494.4	6	85	1726		11.430752
0	0	0	0	0			0

USA Bin 5 Trial #7

1	3	5500.0	20	80	1955	1000	0.481495
2	1	5500	20	65			1.145281
3	3	5500	20	80	1688	1391	1.731272
4	3	5500	20	95	1268	1714	2.431368
5	3	5500	20	70	1535	1037	2.715262
6	2	5500	20	65	1420		3.833535
7	2	5500	20	75	1642		4.283539
8	3	5500	20	75	1947	1020	5.072051
9	3	5500	20	65	1225	1668	5.687876
10	2	5500	20	100	1571		6.220033
11	3	5500	20	75	1143	1922	7.028405
12	3	5500	20	85	1147	1060	7.529269
13	1	5500	20	100			8.153017
14	3	5500	20	75	1345	1880	8.792368
15	2	5500	20	90	1661		9.500312
16	3	5500	20	70	1104	1847	10.540873
17	1	5500	20	90			10.724226
18	2	5500	20	85	1406		11.531074
0	0	0	0	0			0

USA Bin 5 Trial #8

1	1	5494.0	5	90			0.366504
2	1	5494	5	90			1.104979
3	3	5494	5	65	1912	1579	2.668265
4	1	5494	5	85			3.650934
5	1	5494	5	50			4.247219
6	1	5494	5	50			5.371267
7	1	5494	5	70			6.289076
8	1	5494	5	70			6.964788
9	2	5494	5	65	1617		8.006754
10	1	5494	5	55			8.663654
11	3	5494	5	90	1010	1699	9.760891
12	1	5494	5	50			10.633068
13	3	5494	5	65	1194	1427	11.700547
0	0	0	0	0			0

USA Bin 5 Trial #9

1	3	5498.8	17	75	1057	1976	0.747092
2	3	5498.8	17	100	1782	1191	1.151098
3	1	5498.8	17	55			1.751432
4	2	5498.8	17	65	1924		2.730902
5	1	5498.8	17	55			3.34914
6	2	5498.8	17	90	1969		4.656999
7	2	5498.8	17	90	1093		5.563174
8	1	5498.8	17	70			5.737431
9	3	5498.8	17	95	1828	1213	7.156517
10	1	5498.8	17	55			7.310899
11	2	5498.8	17	90	1945		8.603
12	3	5498.8	17	55	1051	1716	9.332004
13	2	5498.8	17	80	1855		10.386437
14	3	5498.8	17	85	1888	1677	10.669509
15	2	5498.8	17	60	1642		11.208068
0	0	0	0	0			0

USA Bin 5 Trial #10

1	3	5496.8	12	75	1210	1375	0.976321
2	3	5496.8	12	100	1071	1371	1.126671
3	1	5496.8	12	95			2.100581
4	2	5496.8	12	95	1222		3.306245
5	3	5496.8	12	65	1291	1000	4.007545
6	1	5496.8	12	90			5.277362
7	1	5496.8	12	75			6.238728
8	1	5496.8	12	75			7.919206
9	3	5496.8	12	100	1782	1157	8.402901
10	3	5496.8	12	75	1278	1498	9.61875
11	1	5496.8	12	50			10.758498
12	2	5496.8	12	100	1034		11.21601
0	0	0	0	0			0

USA Bin 5 Trial #11

1	2	5570.0	6	70	1322		1.053424
2	1	5570	6	85			1.575693
3	2	5570	6	80	1011		2.84976
4	1	5570	6	80			3.874697
5	1	5570	6	95			5.178229
6	3	5570	6	65	1405	1177	5.910886
7	1	5570	6	50			6.820391
8	1	5570	6	90			7.920501
9	2	5570	6	55	1696		9.762422
10	3	5570	6	100	1084	1645	9.946449
11	2	5570	6	95	1390		11.68439
0	0	0	0	0			0

USA Bin 5 Trial #12

1	1	5570.0	12	80			0.563739
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DFS Test Report No: **EDCS – 21541318**

2	3	5570	12	90	1378	1636	1.258677
3	1	5570	12	75			1.95474
4	3	5570	12	50	1805	1874	3.506947
5	1	5570	12	95			4.429717
6	3	5570	12	50	1039	1473	5.024517
7	1	5570	12	90			6.030405
8	3	5570	12	50	1399	1558	6.563079
9	1	5570	12	55			7.519226
10	1	5570	12	70			8.680162
11	3	5570	12	90	1084	1224	9.925804
12	1	5570	12	85			11.050376
13	1	5570	12	65			11.203868
0	0	0	0	0			0

USA Bin 5 Trial #13

1	1	5570.0	17	65			0.358885
2	3	5570	17	80	1694	1887	1.933821
3	2	5570	17	95	1868		2.251733
4	1	5570	17	60			3.080315
5	1	5570	17	55			4.51151
6	3	5570	17	60	2000	1251	5.707681
7	1	5570	17	85			6.158423
8	2	5570	17	60	1448		7.089442
9	3	5570	17	70	1621	1571	8.909378
10	2	5570	17	50	1767		9.488472
11	2	5570	17	75	1044		10.332681
12	2	5570	17	80	1713		11.112106
0	0	0	0	0			0

USA Bin 5 Trial #14

1	2	5570.0	18	50	1378		0.616945
2	2	5570	18	100	1963		1.23459
3	2	5570	18	75	1564		2.522617
4	2	5570	18	90	1896		2.813197
5	1	5570	18	85			3.482396
6	1	5570	18	80			4.98749
7	2	5570	18	70	1123		5.922011
8	2	5570	18	75	1589		6.78662
9	1	5570	18	70			7.376581
10	1	5570	18	100			7.921472
11	2	5570	18	50	1102		9.142732
12	1	5570	18	100			10.059464
13	1	5570	18	50			10.492966
14	3	5570	18	65	1914	1702	11.959542
0	0	0	0	0			0

USA Bin 5 Trial #15

1	3	5570.0	9	100	1079	1471	0.055237
2	2	5570	9	65	1893		1.265284

DFS Test Report No: **EDCS – 21541318**

3	3	5570	9	95	1211	1440	1.873595
4	2	5570	9	70	1316		2.8729
5	2	5570	9	90	2000		3.803503
6	2	5570	9	65	1872		4.339429
7	3	5570	9	95	1428	1504	5.457709
8	2	5570	9	50	1523		5.805204
9	3	5570	9	60	1622	1245	6.632302
10	1	5570	9	90			7.993254
11	3	5570	9	65	1428	1912	8.585293
12	2	5570	9	95	1191		9.117644
13	2	5570	9	65	1612		10.052507
14	3	5570	9	95	1391	1230	10.944623
15	2	5570	9	85	1792		11.81431
0	0	0	0	0			0

USA Bin 5 Trial #16

1	2	5570.0	19	95	1860		0.067655
2	2	5570	19	50	1515		0.715589
3	1	5570	19	70			1.720117
4	1	5570	19	55			2.028363
5	1	5570	19	50			2.89829
6	3	5570	19	75	1118	1198	3.007509
7	2	5570	19	85	1354		4.180487
8	1	5570	19	100			4.357755
9	3	5570	19	85	1968	1748	4.819061
10	2	5570	19	90	1652		5.731078
11	1	5570	19	70			6.100161
12	3	5570	19	55	1447	1005	7.183895
13	1	5570	19	95			7.569251
14	3	5570	19	90	1997	1375	8.291325
15	3	5570	19	100	1163	1835	8.641961
16	1	5570	19	85			9.599329
17	1	5570	19	65			10.062439
18	1	5570	19	85			10.733169
19	1	5570	19	100			11.221888
20	3	5570	19	55	1628	1396	11.642511
0	0	0	0	0			0

USA Bin 5 Trial #17

1	1	5570.0	12	55			0.287803
2	3	5570	12	90	1080	1724	1.700773
3	1	5570	12	65			2.140005
4	1	5570	12	55			2.612126
5	1	5570	12	80			4.281929
6	3	5570	12	95	1628	1310	4.952459
7	2	5570	12	50	1871		5.714622
8	3	5570	12	90	1452	1503	6.342551
9	3	5570	12	50	1494	1250	6.985405

DFS Test Report No: **EDCS – 21541318**

10	3	5570	12	80	1510	1387	8.382637
11	3	5570	12	80	1048	1572	9.302264
12	2	5570	12	70	1391		9.527209
13	3	5570	12	55	1105	1129	11.11292
14	1	5570	12	85			11.331428
0	0	0	0	0			0

USA Bin 5 Trial #18

1	2	5570.0	12	70	1508		0.430240
2	3	5570	12	80	1792	1061	0.799965
3	3	5570	12	95	1848	1724	1.716198
4	3	5570	12	65	1668	1248	2.027889
5	1	5570	12	70			2.644964
6	2	5570	12	60	1591		3.661769
7	2	5570	12	75	1110		4.038274
8	3	5570	12	90	1658	1096	4.655656
9	3	5570	12	65	1578	1326	5.166728
10	3	5570	12	90	1870	1257	6.241792
11	2	5570	12	75	1544		6.784444
12	3	5570	12	50	1653	1160	7.191367
13	3	5570	12	65	1976	1083	8.016636
14	2	5570	12	75	1539		8.718934
15	1	5570	12	65			9.194165
16	3	5570	12	65	1162	1468	9.609199
17	1	5570	12	55			10.417737
18	3	5570	12	65	1118	1106	10.862853
19	2	5570	12	75	1134		11.634161
0	0	0	0	0			0

USA Bin 5 Trial #19

1	3	5570.0	10	50	1653	1979	0.605277
2	3	5570	10	85	1791	1397	0.720068
3	1	5570	10	90			1.532208
4	2	5570	10	80	1444		2.388484
5	2	5570	10	75	1211		2.947236
6	3	5570	10	80	1079	1316	3.757247
7	2	5570	10	85	1935		3.790392
8	2	5570	10	95	1503		4.807406
9	3	5570	10	80	1800	1624	5.445495
10	2	5570	10	90	1083		5.930377
11	1	5570	10	55			6.457853
12	1	5570	10	50			7.157667
13	3	5570	10	50	1875	1896	7.808458
14	3	5570	10	60	1351	1631	8.538386
15	3	5570	10	60	1999	1076	9.031732
16	1	5570	10	85			9.680697
17	2	5570	10	80	1082		10.73422
18	3	5570	10	60	1873	1405	10.811567

DFS Test Report No: **EDCS – 21541318**

19	1	5570	10	80		11.95408
0	0	0	0	0		0

USA Bin 5 Trial #20

1	3	5570.0	14	85	1184	1592	0.546564
2	2	5570	14	60	1090		1.431502
3	2	5570	14	60	1601		3.122367
4	1	5570	14	60			3.353342
5	1	5570	14	50			4.502827
6	1	5570	14	75			6.205711
7	1	5570	14	95			6.661247
8	1	5570	14	70			8.323242
9	2	5570	14	75	1220		8.878394
10	3	5570	14	90	1688	1298	10.791974
11	1	5570	14	90			11.501566
0	0	0	0	0			0

USA Bin 5 Trial #21

1	2	5642.4	14	65	1465		0.951937
2	3	5642.4	14	55	1677	1572	1.820986
3	1	5642.4	14	55			2.74692
4	3	5642.4	14	85	1276	1739	3.98425
5	1	5642.4	14	80			4.833031
6	2	5642.4	14	80	1030		6.131652
7	3	5642.4	14	90	1050	1294	7.776851
8	2	5642.4	14	60	1977		8.899925
9	1	5642.4	14	95			10.021405
10	1	5642.4	14	70			11.522814
0	0	0	0	0			0

USA Bin 5 Trial #22

1	1	5644.8	8	50			1.073422
2	2	5644.8	8	50	1135		1.474255
3	1	5644.8	8	60			2.439183
4	1	5644.8	8	90			3.983896
5	2	5644.8	8	75	1099		5.501046
6	1	5644.8	8	70			6.247716
7	1	5644.8	8	100			7.510338
8	2	5644.8	8	80	1045		8.52143
9	3	5644.8	8	95	1055	1347	10.156715
10	2	5644.8	8	95	1445		11.205535
0	0	0	0	0			0

USA Bin 5 Trial #23

1	2	5644.4	9	70	1787		0.135101
2	2	5644.4	9	80	1158		1.028196
3	2	5644.4	9	60	1989		2.190208
4	2	5644.4	9	60	1803		2.692514
5	1	5644.4	9	95			3.361725
6	1	5644.4	9	100			4.171026

DFS Test Report No: **EDCS – 21541318**

7	2	5644.4	9	95	1871		4.900361
8	3	5644.4	9	60	1302	1468	6.081559
9	3	5644.4	9	75	1387	1174	7.160488
10	1	5644.4	9	55			7.934882
11	2	5644.4	9	100	1643		8.092965
12	2	5644.4	9	75	1532		9.274242
13	3	5644.4	9	50	1881	1217	10.098563
14	1	5644.4	9	50			11.193779
15	1	5644.4	9	70			11.892468
0	0	0	0	0			0

USA Bin 5 Trial #24

1	1	5640.8	18	95			0.612663
2	3	5640.8	18	75	1334	1934	1.413835
3	3	5640.8	18	80	1174	1457	2.117622
4	2	5640.8	18	55	1518		3.188675
5	3	5640.8	18	100	1341	1640	3.579219
6	1	5640.8	18	90			4.007115
7	3	5640.8	18	65	1950	1800	5.284747
8	1	5640.8	18	70			6.01937
9	1	5640.8	18	100			6.429153
10	3	5640.8	18	50	1799	1695	7.446888
11	2	5640.8	18	80	1700		8.233766
12	2	5640.8	18	60	1958		9.319118
13	3	5640.8	18	65	1926	1029	9.982054
14	3	5640.8	18	90	1302	1863	10.549705
15	2	5640.8	18	65	1388		11.398262
0	0	0	0	0			0

USA Bin 5 Trial #25

1	1	5644.8	8	50			0.305807
2	1	5644.8	8	95			0.888852
3	3	5644.8	8	65	1885	1862	1.804193
4	3	5644.8	8	95	1382	1517	2.725234
5	1	5644.8	8	80			2.967698
6	3	5644.8	8	75	1285	1193	3.896999
7	1	5644.8	8	70			4.69742
8	3	5644.8	8	100	1609	1291	5.139099
9	2	5644.8	8	80	1775		6.243571
10	3	5644.8	8	90	1400	1962	6.986445
11	3	5644.8	8	60	1581	1281	7.12097
12	3	5644.8	8	55	1250	1153	7.99529
13	1	5644.8	8	75			9.023259
14	2	5644.8	8	85	1475		9.82854
15	1	5644.8	8	75			10.077845
16	3	5644.8	8	65	1910	1372	11.061177
17	1	5644.8	8	95			11.841511
0	0	0	0	0			0

USA Bin 5 Trial #26

1	1	5644.8	8	90			0.276654
2	3	5644.8	8	60	1663	1977	1.581215
3	2	5644.8	8	60	1612		1.741508
4	2	5644.8	8	65	1141		2.740634
5	3	5644.8	8	65	1885	1501	3.69504
6	2	5644.8	8	50	1193		4.711017
7	1	5644.8	8	95			5.189682
8	1	5644.8	8	90			5.75776
9	2	5644.8	8	80	1693		6.762358
10	2	5644.8	8	100	1891		7.452457
11	2	5644.8	8	50	1812		8.553534
12	1	5644.8	8	85			9.133527
13	3	5644.8	8	55	1095	1531	10.335445
14	1	5644.8	8	50			10.745537
15	1	5644.8	8	65			11.599689
0	0	0	0	0			0

USA Bin 5 Trial #27

1	2	5640.0	20	75	1761		0.052725
2	3	5640	20	65	1964	1716	1.864734
3	2	5640	20	50	1679		3.049049
4	1	5640	20	100			5.072237
5	2	5640	20	60	1734		6.532546
6	3	5640	20	50	1484	1546	7.814507
7	1	5640	20	95			8.864942
8	1	5640	20	85			10.359648
9	1	5640	20	90			11.151737
0	0	0	0	0			0

USA Bin 5 Trial #28

1	1	5645.2	7	90			0.847792
2	3	5645.2	7	100	1821	1804	1.382687
3	3	5645.2	7	65	1957	1397	2.436059
4	3	5645.2	7	70	1237	1864	3.784741
5	3	5645.2	7	70	1064	1877	4.46179
6	1	5645.2	7	55			5.591656
7	2	5645.2	7	90	1216		6.86875
8	2	5645.2	7	70	1951		7.637502
9	2	5645.2	7	100	1561		8.877735
10	2	5645.2	7	90	1644		9.086834
11	1	5645.2	7	100			10.139693
12	1	5645.2	7	95			11.927836
0	0	0	0	0			0

USA Bin 5 Trial #29

1	3	5640.4	19	95	1250	1645	0.654663
2	1	5640.4	19	60			1.253755
3	2	5640.4	19	70	1566		2.082124

DFS Test Report No: **EDCS – 21541318**

4	3	5640.4	19	80	1260	1851	2.204511
5	2	5640.4	19	95	1006		3.410362
6	2	5640.4	19	100	1869		3.672399
7	1	5640.4	19	55			4.264326
8	1	5640.4	19	80			5.586057
9	1	5640.4	19	70			5.78772
10	3	5640.4	19	65	1932	1736	6.838138
11	2	5640.4	19	80	1703		7.582172
12	2	5640.4	19	60	1143		8.319891
13	2	5640.4	19	60	1482		9.097889
14	1	5640.4	19	70			9.816317
15	1	5640.4	19	85			9.937878
16	1	5640.4	19	60			10.996204
17	1	5640.4	19	60			11.744485
0	0	0	0	0			0

USA Bin 5 Trial #30

1	2	5644.0	10	90	1198		1.325546
2	2	5644	10	65	1649		2.285161
3	3	5644	10	90	1798	1890	3.346521
4	3	5644	10	50	1983	1574	4.778715
5	2	5644	10	60	1258		7.04161
6	3	5644	10	90	1097	1672	8.885501
7	1	5644	10	65			9.654343
8	3	5644	10	65	1565	1953	11.145293
0	0	0	0	0			0

Bin 6 Details

USA Frequency Hopping Trial #1

3	5514	9
11	5644	33
14	5610	42
15	5530	45
18	5624	54
23	5601	69
26	5541	78
28	5568	84
29	5536	87
36	5511	108
37	5531	111
46	5589	138
47	5586	141
48	5611	144
54	5513	162
55	5565	165
65	5639	195
69	5518	207
73	5641	219
74	5606	222
80	5521	240
83	5633	249
86	5612	258
87	5507	261
96	5528	288
98	5627	294
0	0	0

USA Frequency Hopping Trial #2

2	5573	6
3	5643	9
5	5630	15
8	5610	24
11	5589	33
13	5529	39
15	5612	45
24	5520	72
28	5554	84
32	5532	96
33	5571	99
34	5591	102
38	5594	114
41	5503	123
42	5539	126
43	5627	129
44	5621	132
47	5618	141
48	5633	144
49	5504	147
55	5617	165

DFS Test Report No: **EDCS – 21541318**

57	5541	171
58	5514	174
70	5537	210
72	5545	216
73	5497	219
75	5619	225
77	5519	231
81	5509	243
82	5567	246
84	5507	252
89	5522	267
90	5622	270
96	5629	288
0	0	0

USA Frequency Hopping Trial #3

8	5626	24
9	5627	27
13	5540	39
14	5494	42
15	5569	45
17	5609	51
19	5577	57
20	5601	60
26	5534	78
27	5613	81
29	5562	87
31	5544	93
37	5586	111
38	5606	114
40	5579	120
44	5546	132
49	5525	147
50	5531	150
52	5505	156
54	5619	162
57	5506	171
63	5520	189
65	5524	195
67	5492	201
69	5558	207
70	5599	210
71	5566	213
74	5641	222
75	5554	225
80	5560	240
82	5508	246
84	5644	252
86	5563	258
92	5618	276
0	0	0

USA Frequency Hopping Trial #4

5	5647	15
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6	5496	18
16	5540	48
17	5599	51
18	5556	54
22	5505	66
23	5634	69
26	5618	78
34	5509	102
37	5492	111
39	5587	117
41	5591	123
43	5576	129
44	5613	132
46	5493	138
47	5494	141
49	5610	147
53	5630	159
55	5520	165
57	5517	171
61	5519	183
64	5585	192
66	5516	198
71	5503	213
72	5559	216
76	5508	228
78	5601	234
84	5646	252
88	5624	264
90	5639	270
92	5524	276
0	0	0

USA Frequency Hopping Trial #5

1	5511	3
12	5625	36
14	5624	42
15	5551	45
25	5575	75
27	5536	81
28	5589	84
32	5593	96
36	5529	108
38	5548	114
40	5539	120
42	5642	126
43	5604	129
50	5615	150
58	5498	174
63	5595	189
64	5535	192
67	5641	201
69	5647	207
71	5499	213

75	5620	225
82	5573	246
84	5585	252
85	5640	255
89	5546	267
90	5576	270
93	5567	279
94	5525	282
96	5580	288
98	5611	294
99	5494	297
0	0	0

USA Frequency Hopping Trial #6

0	5506	0
1	5586	3
7	5539	21
12	5494	36
22	5626	66
34	5644	102
36	5531	108
40	5603	120
43	5504	129
48	5607	144
55	5632	165
56	5638	168
59	5498	177
64	5493	192
65	5591	195
67	5500	201
75	5562	225
77	5615	231
79	5496	237
80	5599	240
81	5646	243
83	5612	249
84	5579	252
89	5545	267
93	5567	279
94	5578	282
95	5623	285
97	5554	291
0	0	0

USA Frequency Hopping Trial #7

2	5552	6
3	5540	9
4	5533	12
5	5597	15
9	5507	27
14	5529	42
20	5505	60
28	5555	84
30	5636	90

33	5565	99
38	5641	114
42	5546	126
45	5627	135
48	5609	144
51	5525	153
53	5645	159
57	5498	171
59	5643	177
61	5566	183
62	5587	186
63	5568	189
64	5504	192
65	5590	195
68	5571	204
71	5549	213
81	5608	243
83	5522	249
84	5619	252
86	5616	258
90	5592	270
92	5613	276
99	5599	297
0	0	0

USA Frequency Hopping Trial #8

1	5541	3
5	5627	15
8	5557	24
9	5597	27
10	5531	30
13	5505	39
14	5554	42
18	5589	54
19	5630	57
20	5643	60
24	5579	72
28	5522	84
33	5599	99
35	5548	105
42	5636	126
43	5581	129
44	5624	132
48	5622	144
49	5545	147
51	5532	153
59	5559	177
61	5533	183
64	5547	192
69	5562	207
72	5575	216
76	5580	228
90	5625	270

91	5498	273
94	5585	282
95	5537	285
96	5644	288
98	5546	294
0	0	0

USA Frequency Hopping Trial #9

2	5536	6
7	5625	21
8	5642	24
9	5501	27
11	5597	33
13	5559	39
16	5524	48
19	5495	57
21	5545	63
28	5574	84
32	5630	96
42	5607	126
43	5511	129
44	5510	132
48	5570	144
60	5563	180
74	5576	222
76	5502	228
77	5539	231
79	5646	237
83	5575	249
84	5493	252
86	5533	258
87	5521	261
89	5638	267
90	5601	270
97	5550	291
98	5566	294
99	5648	297
0	0	0

USA Frequency Hopping Trial #10

5	5526	15
7	5551	21
10	5623	30
11	5643	33
12	5573	36
13	5580	39
16	5520	48
20	5606	60
21	5622	63
25	5634	75
26	5641	78
29	5495	87
30	5512	90
31	5524	93

33	5637	99
36	5583	108
38	5539	114
40	5522	120
41	5514	123
42	5511	126
43	5568	129
44	5600	132
49	5625	147
52	5570	156
53	5594	159
57	5543	171
58	5595	174
59	5601	177
60	5599	180
63	5587	189
64	5635	192
71	5503	213
72	5560	216
73	5507	219
74	5579	222
75	5496	225
78	5572	234
90	5529	270
96	5591	288
0	0	0

USA Frequency Hopping Trial #11

9	5495	27
10	5523	30
11	5556	33
13	5522	39
18	5637	54
19	5648	57
20	5606	60
22	5567	66
25	5568	75
26	5645	78
31	5554	93
32	5493	96
36	5639	108
38	5506	114
39	5601	117
46	5544	138
47	5572	141
51	5542	153
58	5546	174
59	5618	177
62	5557	186
65	5619	195
73	5492	219
76	5548	228
79	5613	237

80	5558	240
88	5605	264
89	5537	267
91	5610	273
93	5543	279
0	0	0

USA Frequency Hopping Trial #12

6	5514	18
12	5515	36
14	5564	42
17	5604	51
22	5589	66
25	5630	75
33	5544	99
34	5617	102
40	5560	120
43	5601	129
44	5518	132
45	5542	135
46	5533	138
47	5644	141
49	5648	147
50	5582	150
51	5625	153
55	5521	165
56	5613	168
58	5520	174
59	5645	177
60	5496	180
61	5511	183
63	5620	189
64	5627	192
65	5579	195
70	5535	210
76	5584	228
79	5588	237
84	5517	252
87	5558	261
90	5583	270
96	5621	288
99	5559	297
0	0	0

USA Frequency Hopping Trial #13

3	5501	9
4	5494	12
12	5636	36
15	5594	45
19	5599	57
26	5645	78
28	5644	84
29	5576	87
34	5598	102

36	5604	108
37	5619	111
38	5647	114
39	5542	117
44	5538	132
50	5567	150
53	5557	159
55	5545	165
59	5603	177
60	5586	180
61	5585	183
62	5529	186
63	5566	189
65	5539	195
74	5555	222
77	5521	231
80	5635	240
83	5533	249
87	5610	261
91	5535	273
93	5530	279
94	5612	282
0	0	0

USA Frequency Hopping Trial #14

0	5614	0
2	5556	6
6	5634	18
7	5563	21
18	5558	54
22	5505	66
24	5641	72
25	5611	75
26	5495	78
29	5536	87
32	5594	96
34	5622	102
35	5608	105
39	5604	117
44	5591	132
45	5553	135
46	5607	138
49	5603	147
50	5519	150
52	5633	156
56	5529	168
58	5572	174
60	5573	180
63	5568	189
65	5576	195
66	5630	198
70	5615	210
77	5541	231

88	5593	264
90	5498	270
98	5546	294
99	5566	297
0	0	0

USA Frequency Hopping Trial #15

1	5637	3
3	5500	9
4	5587	12
5	5568	15
7	5549	21
8	5583	24
9	5628	27
10	5642	30
17	5516	51
33	5613	99
34	5629	102
36	5617	108
41	5636	123
45	5533	135
46	5554	138
58	5532	174
61	5494	183
62	5547	186
65	5536	195
67	5591	201
70	5638	210
74	5618	222
75	5514	225
78	5635	234
79	5552	237
80	5526	240
93	5623	279
96	5643	288
97	5496	291
0	0	0

USA Frequency Hopping Trial #16

5	5518	15
7	5559	21
14	5603	42
16	5615	48
26	5646	78
27	5564	81
30	5622	90
31	5636	93
33	5507	99
35	5535	105
51	5558	153
52	5638	156
60	5606	180
61	5607	183
63	5593	189

65	5592	195
69	5617	207
70	5543	210
74	5519	222
77	5567	231
79	5600	237
91	5515	273
92	5540	276
96	5512	288
98	5587	294
0	0	0

USA Frequency Hopping Trial #17

3	5569	9
10	5541	30
15	5626	45
19	5610	57
23	5563	69
26	5570	78
32	5548	96
35	5603	105
40	5524	120
41	5513	123
42	5558	126
43	5503	129
44	5561	132
46	5638	138
49	5537	147
52	5551	156
53	5622	159
60	5592	180
62	5506	186
64	5499	192
66	5495	198
68	5648	204
71	5560	213
72	5512	216
77	5515	231
78	5635	234
80	5585	240
87	5516	261
88	5601	264
89	5530	267
91	5564	273
92	5600	276
93	5599	279
98	5576	294
0	0	0

USA Frequency Hopping Trial #18

2	5521	6
3	5579	9
11	5517	33
15	5621	45

21	5629	63
22	5556	66
23	5639	69
26	5633	78
28	5533	84
33	5584	99
34	5494	102
35	5528	105
38	5587	114
39	5623	117
43	5577	129
48	5612	144
50	5510	150
51	5511	153
61	5515	183
62	5616	186
63	5605	189
64	5501	192
65	5571	195
67	5611	201
68	5586	204
72	5539	216
83	5544	249
92	5504	276
95	5625	285
0	0	0

USA Frequency Hopping Trial #19

2	5590	6
3	5531	9
4	5549	12
6	5606	18
7	5528	21
9	5572	27
12	5605	36
17	5565	51
26	5500	78
31	5638	93
34	5558	102
37	5545	111
43	5614	129
44	5612	132
45	5562	135
51	5619	153
62	5595	186
67	5596	201
69	5622	207
70	5492	210
72	5533	216
73	5560	219
74	5609	222
75	5574	225
77	5516	231

84	5564	252
85	5582	255
88	5553	264
98	5620	294
0	0	0

USA Frequency Hopping Trial #20

4	5615	12
8	5510	24
10	5642	30
11	5588	33
13	5610	39
22	5595	66
23	5630	69
24	5596	72
25	5591	75
32	5641	96
35	5498	105
36	5524	108
39	5618	117
42	5598	126
43	5512	129
52	5605	156
53	5552	159
57	5531	171
58	5538	174
61	5503	183
62	5636	186
64	5513	192
68	5577	204
83	5621	249
87	5601	261
88	5539	264
91	5548	273
92	5626	276
98	5579	294
0	0	0

USA Frequency Hopping Trial #21

1	5615	3
2	5540	6
5	5553	15
8	5518	24
9	5606	27
16	5551	48
22	5523	66
25	5535	75
29	5517	87
36	5563	108
44	5586	132
45	5509	135
46	5493	138
47	5582	141
49	5585	147

57	5629	171
58	5610	174
59	5549	177
61	5494	183
70	5583	210
71	5541	213
73	5620	219
77	5521	231
78	5534	234
80	5548	240
81	5561	243
84	5602	252
85	5566	255
88	5618	264
93	5546	279
94	5531	282
99	5632	297
0	0	0

USA Frequency Hopping Trial #22

1	5541	3
4	5610	12
5	5579	15
7	5576	21
8	5614	24
9	5521	27
13	5496	39
18	5607	54
19	5539	57
21	5562	63
23	5578	69
24	5629	72
25	5591	75
26	5512	78
29	5624	87
33	5586	99
38	5570	114
41	5565	123
42	5566	126
44	5528	132
45	5627	135
50	5604	150
54	5634	162
57	5572	171
66	5612	198
69	5505	207
71	5532	213
72	5616	216
75	5499	225
77	5641	231
79	5618	237
81	5589	243
86	5568	258

91	5645	273
93	5636	279
94	5494	282
95	5506	285
97	5608	291
98	5575	294
0	0	0

USA Frequency Hopping Trial #23

0	5519	0
1	5532	3
12	5571	36
13	5608	39
16	5630	48
20	5493	60
22	5511	66
23	5554	69
25	5622	75
26	5637	78
27	5540	81
38	5586	114
41	5496	123
44	5549	132
47	5542	141
51	5556	153
53	5537	159
55	5632	165
56	5536	168
60	5621	180
62	5516	186
63	5561	189
69	5575	207
73	5534	219
77	5631	231
90	5644	270
96	5565	288
98	5525	294
0	0	0

USA Frequency Hopping Trial #24

1	5558	3
2	5608	6
4	5551	12
13	5547	39
16	5627	48
19	5589	57
20	5520	60
21	5568	63
27	5641	81
34	5572	102
38	5584	114
43	5546	129
44	5531	132
48	5605	144

50	5574	150
58	5564	174
60	5504	180
62	5513	186
66	5562	198
72	5618	216
79	5552	237
83	5497	249
84	5603	252
85	5505	255
88	5514	264
90	5496	270
93	5559	279
95	5607	285
0	0	0

USA Frequency Hopping Trial #25

2	5506	6
3	5496	9
4	5602	12
14	5589	42
21	5587	63
24	5597	72
25	5566	75
26	5639	78
27	5604	81
31	5521	93
32	5638	96
34	5560	102
40	5611	120
46	5585	138
50	5551	150
52	5596	156
53	5545	159
56	5582	168
57	5583	171
58	5512	174
60	5562	180
62	5543	186
67	5593	201
70	5497	210
74	5574	222
77	5514	231
78	5592	234
79	5600	237
80	5495	240
81	5536	243
83	5612	249
85	5620	255
86	5523	258
89	5492	267
91	5637	273
92	5614	276

93 5590 279
0 0 0

USA Frequency Hopping Trial #26

0 5562 0
3 5597 9
12 5646 36
13 5515 39
14 5600 42
15 5566 45
16 5518 48
18 5620 54
22 5612 66
23 5497 69
27 5623 81
30 5601 90
34 5517 102
37 5500 111
44 5618 132
50 5551 150
61 5637 183
63 5559 189
72 5622 216
74 5540 222
77 5569 231
80 5575 240
87 5546 261
88 5552 264
90 5579 270
91 5584 273
92 5553 276
93 5627 279
96 5590 288
99 5493 297
0 0 0

USA Frequency Hopping Trial #27

8 5633 24
14 5619 42
16 5523 48
17 5596 51
18 5606 54
22 5554 66
29 5515 87
40 5609 120
47 5627 141
48 5632 144
49 5506 147
50 5594 150
53 5635 159
54 5555 162
59 5531 177
61 5567 183
65 5640 195

68	5526	204
69	5550	207
75	5646	225
81	5552	243
83	5643	249
86	5511	258
87	5595	261
88	5602	264
89	5573	267
90	5612	270
93	5562	279
99	5645	297
0	0	0

USA Frequency Hopping Trial #28

12	5647	36
18	5543	54
27	5644	81
32	5565	96
33	5633	99
35	5634	105
36	5494	108
37	5558	111
41	5623	123
42	5528	126
46	5597	138
50	5609	150
52	5527	156
54	5559	162
61	5532	183
63	5533	189
64	5504	192
68	5629	204
69	5576	207
70	5598	210
78	5575	234
83	5507	249
88	5600	264
90	5538	270
92	5637	276
96	5544	288
0	0	0

USA Frequency Hopping Trial #29

1	5615	3
3	5514	9
5	5631	15
6	5501	18
10	5607	30
15	5504	45
16	5513	48
20	5548	60
22	5512	66
28	5626	84

29	5520	87
33	5595	99
34	5573	102
35	5644	105
41	5566	123
45	5552	135
46	5641	138
48	5599	144
49	5559	147
54	5509	162
56	5617	168
61	5598	183
62	5546	186
66	5549	198
73	5503	219
74	5634	222
75	5510	225
79	5521	237
81	5608	243
82	5542	246
84	5562	252
87	5638	261
88	5582	264
94	5637	282
99	5645	297
0	0	0

USA Frequency Hopping Trial #30

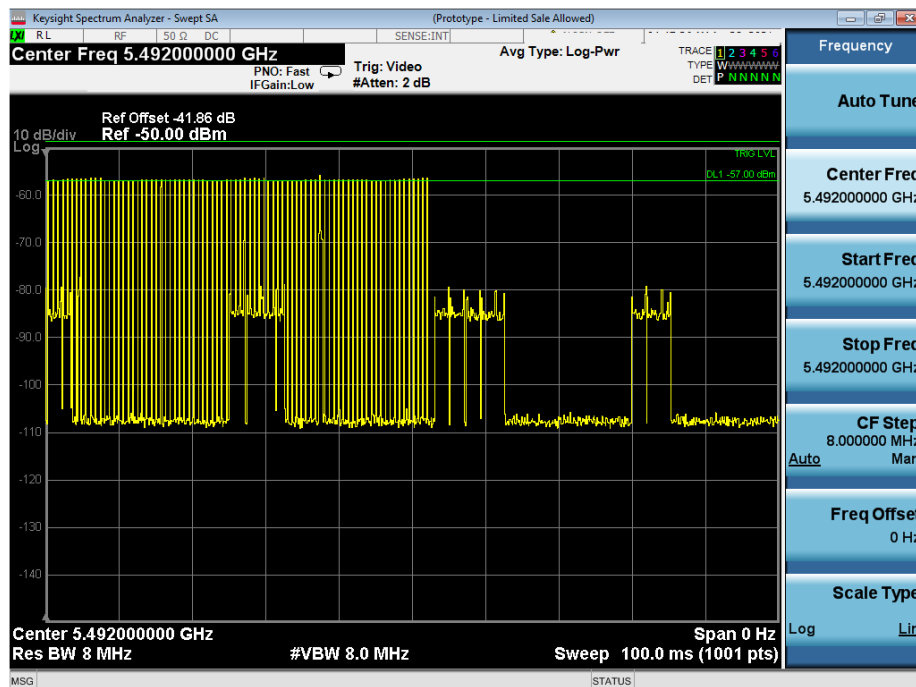
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2	5566	6
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5	5531	15
12	5521	36
13	5557	39
15	5534	45
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20	5513	60
21	5612	63
26	5549	78
28	5547	84
31	5526	93
33	5509	99
35	5608	105
36	5619	108
37	5602	111
40	5567	120
45	5500	135
47	5554	141
49	5610	147
52	5556	156
59	5563	177
66	5575	198
72	5504	216

DFS Test Report No: **EDCS – 21541318**

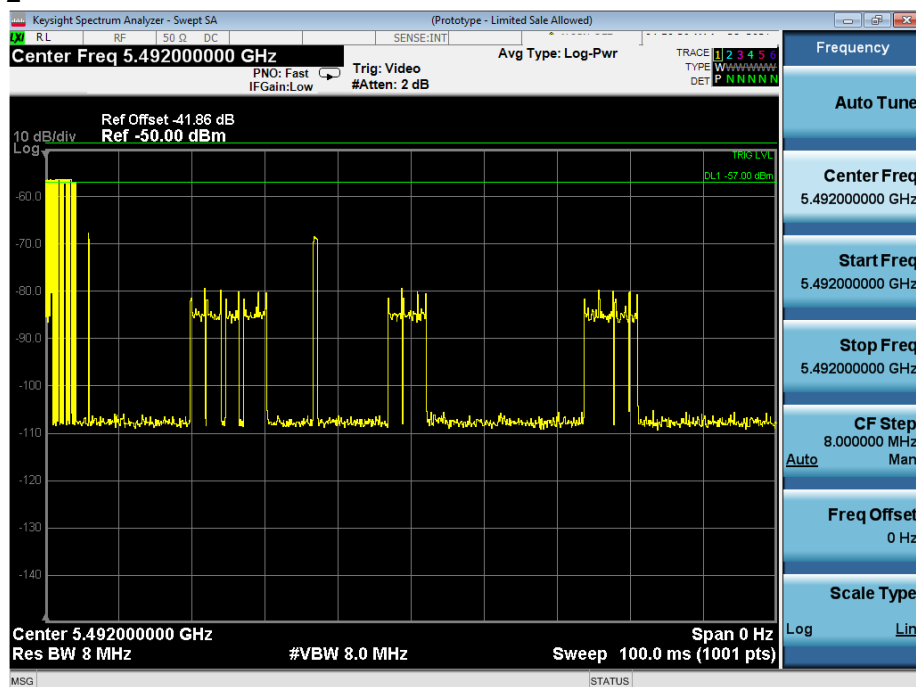
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75	5589	225
77	5572	231
82	5505	246
85	5605	255
88	5593	264
89	5628	267
92	5594	276
96	5518	288
98	5545	294
0	0	0

Stats Plots

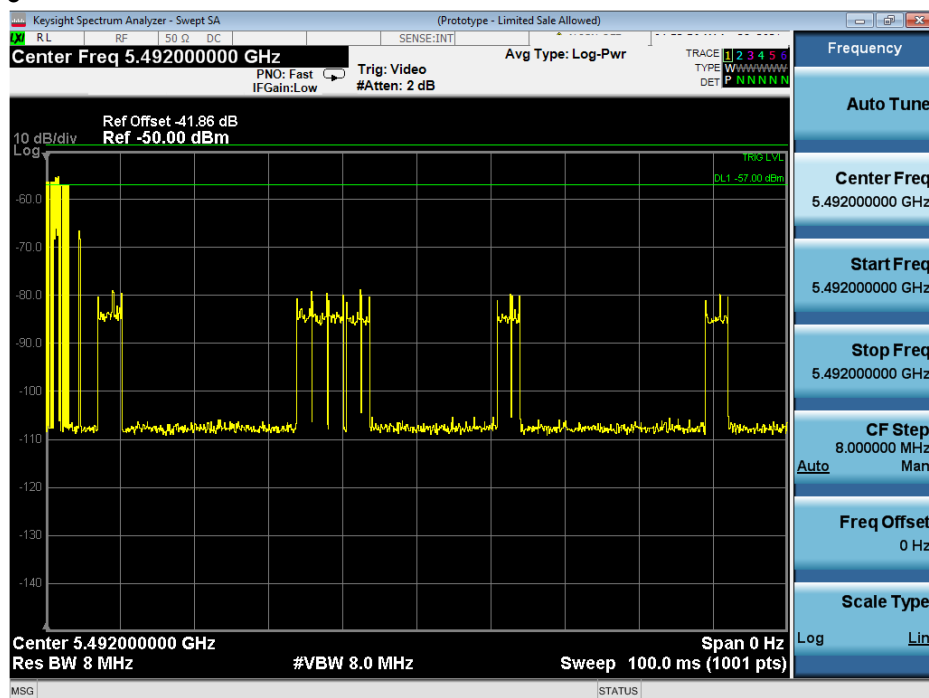
1A/1B



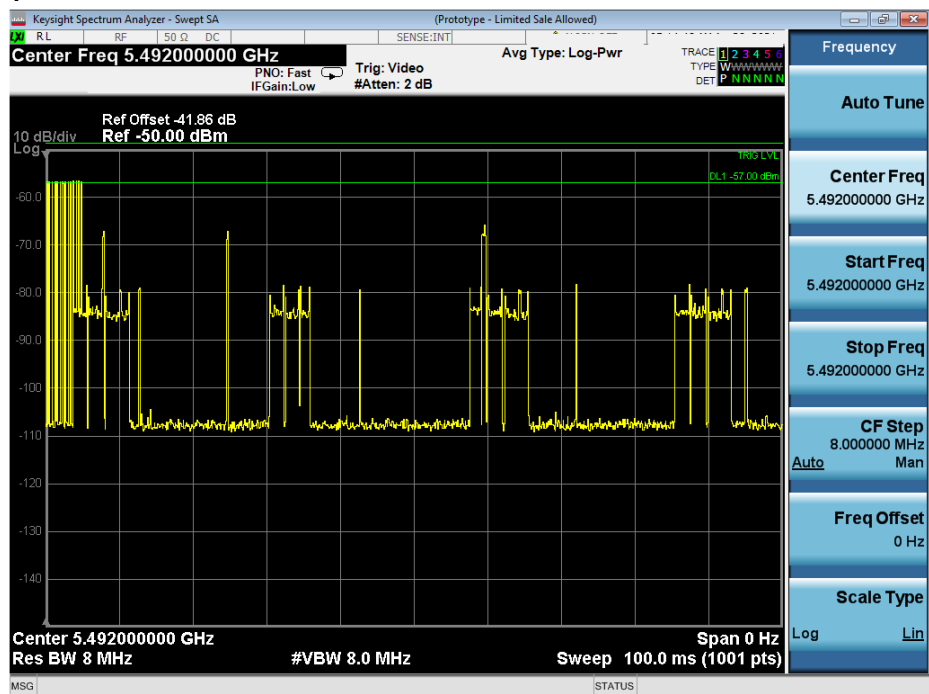
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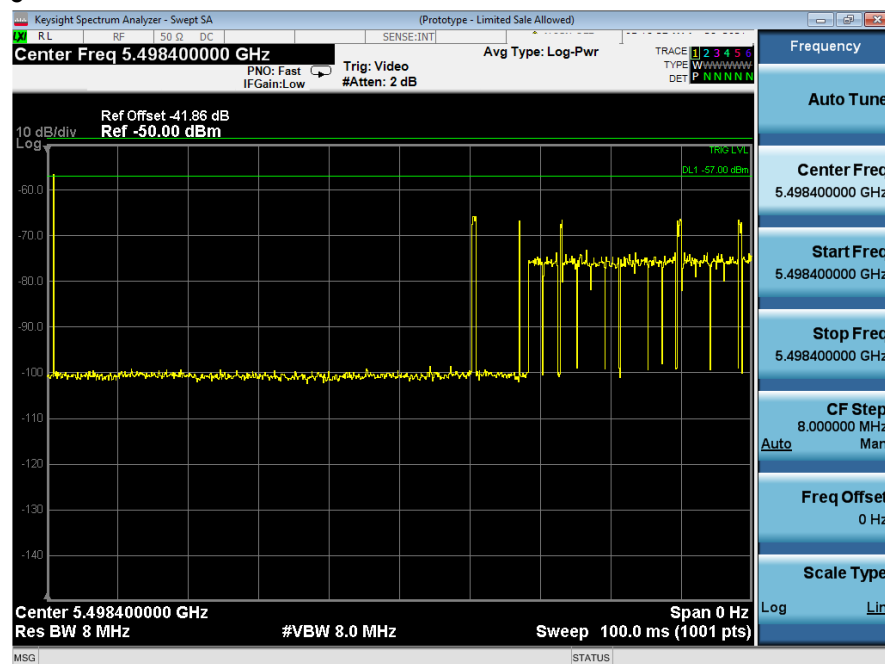
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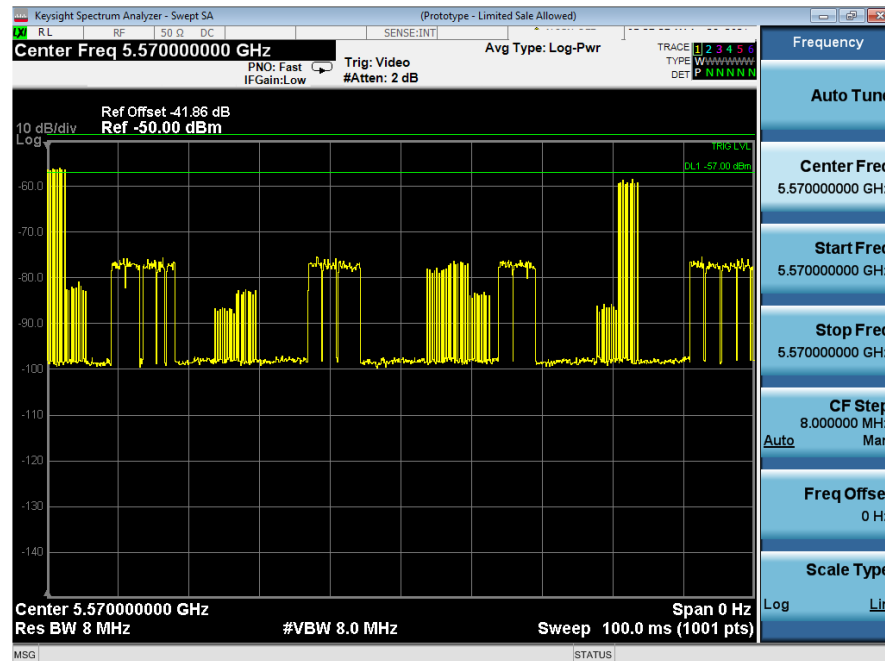
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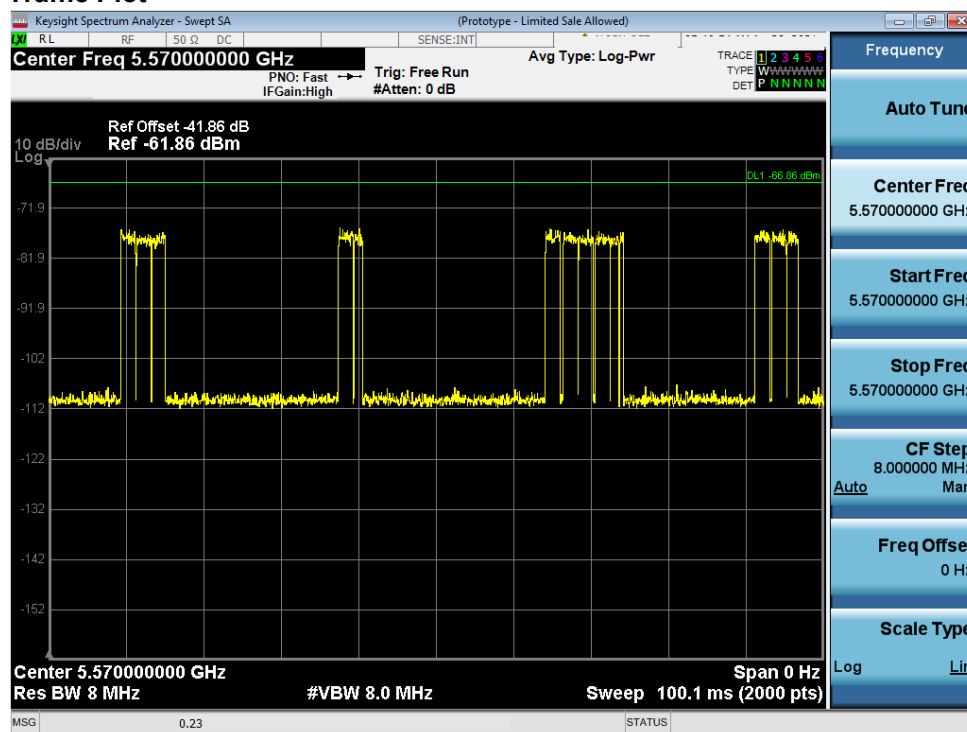
5



6



Traffic Plot



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

Equip#	Manufacturer/ Model	Description	Last Cal	Next Cal
57475	Cisco ATIL	Automation Test Insertion Loss	Cal Not Required	
55095	National Instruments PXI-1042Q	Chassis	Cal Not Required	
57236	National Instruments PXI-8115	Embedded Controller	Cal Not Required	
57227	NATIONAL INSTRUMENTS/PXI-5422	200 MS/s, 16-bit Arbitrary Waveform Generator	28-Sep-20	28-Sep-21
57225	NATIONAL INSTRUMENTS/PXI-5422	200 MS/s, 16-bit Arbitrary Waveform Generator	28-Sep-20	28-Sep-21
57243	National Instruments/PXI-2799	Switch 1x1	Verify Before Use	
57242	National Instruments/PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Verify Before Use	
56090	National Instruments/PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Verify Before Use	
54303	Keysight/N5182B	MXG X-Series RF Vector Signal Generator	12-Jan-21	12-Jan-22
53614	Keysight/ N9030A-550	PXA Signal Analyzer, 3Hz to 50GHz	13-Jul-20	13-Jul-21
36717	RF Coaxial Cable-SMA	Radio Test Cable, SMA-SMA	10 Dec 2020	10 Dec 2021
56112	PASTERNAK/PE6072	SMA 50 Ohm Termination	9-Mar-21	9-Mar-22
55558	MINI-CIRCUITS/ZFSC-2-10G	SPLITTER, 2-10GHZ	23-Sep-20	23-Sep-21
49492	JFW/50HF-010	SMA 10 dB Attenuator	15-Jan-21	15-Jan-22
49490	JFW/50HF-010	SMA 10 dB Attenuator	15-Jan-21	15-Jan-22
58690	DITOM/ D3C2060	SPLITTER	21-Jan-21	21-Jan-22
51805	HUBER + SUHNER/Sucoflex101PE	40 GHz Cable, K-Type	26-Jan-21	26-Jan-22
55365	Pulsar/ PS4-09-452/4S	Splitter	27-Aug-20	27-Aug-21
42002	MINI-CIRCUITS/ BWS30W2+	SMA 30dB Attenuator	4-Mar-21	4-Mar-22
55582	Aeroflex/BWS30-W2	30dB SMA Attenuator	4-Mar-21	4-Mar-22
55581	Aeroflex/BWS30-W2	30dB SMA Attenuator	4-Mar-21	4-Mar-22
49428	MINI-CIRCUITS/ ZFSC-2-10G	SPLITTER, 2-10GHZ	10 Feb 2021	10 Feb 2022

DFS Test Report No: **EDCS – 21541318**

55913	DYNAWAVE/SMSM-A2PH-012	SMA Cable, 12 IN	27 Oct 2020	27 Oct 2021
58282	Pulsar/ PS4-09-452/4S	Splitter	27 Aug 2020	27 Aug 2021
58278	Pulsar/ PS4-09-452/4S	Splitter	27 Aug 2020	27 Aug 2021
56117	PASTERNAK/PE6072	SMA 50 Ohm Termination	26-Jan-21	26-Jan-22
56129	PASTERNAK/PE6072	SMA 50 Ohm Termination	26-Jan-21	26 Jan 2022
55926	Dynawave/SMSM-A2PH-012	SMA Cable, 12 IN	27 Oct 2020	27 Oct 2021
58256	Comet/ T7611-4	WEB SENSOR FOR REMOTE THERMOMETER HYGROMETER	3-Feb-21	3-Feb-22
20490	Keysight (Agilent/HP)/ 8710-1765	PRESET TORQUE WRENCH, 8lb-in	9-Mar-21	9-Mar-22

Appendix D: Photographs of Test Setups

EUT Photos have been omitted from this test report. Photos can be found in the supplementary exhibit included in the submission and EDCS# 21541319.

Appendix E: Software Used to Perform Testing

Cisco Internal LabView Radio Test Automation Software – DFS Automation Main version 152, 155

Appendix F: Test Procedures

Measurements were made in accordance with

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

Test procedures are summarized below:

FCC DFS Test Procedures	EDCS # 1445052
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Appendix G: Scope of Accreditation (A2LA certificate number 1178-01)

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

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

Appendix H: Test Assessment Plan

Compliance Test Plan (Excel) EDCS# 21468205
Target Power Tables EDCS# 19766956

Appendix I: Worst Case Justification

N/A