

**TEST REPORT**

**Covering the  
DYNAMIC FREQUENCY SELECTION (DFS)  
REQUIREMENTS  
OF**

**FCC Part 15 Subpart E (UNII), RSS-210 Annex 9**

**Vivint, Inc.  
Model(s): SR1410**

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REPORT DATE: August 9, 2013

FINAL TEST DATE: April 17 through 18, 2013

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**REVISION HISTORY**

Rev #	Date	Comments	Modified By
-	08-09-2013	First Release	-

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## **SCOPE**

Test data has been taken pursuant to the relevant DFS requirements of the following standard(s):

- FCC Part 15 Subpart E Unlicensed National Information Infrastructure (U-NII) Devices.
- RSS-210 Annex 9 Local Area Network Devices.

Tests were performed in accordance with these standards together with the current published versions of the basic standards referenced therein as outlined in National Technical Systems - Silicon Valley test procedures. The test results recorded herein are based on a single type test of the Vivint, Inc. model SR1410 and therefore apply only to the tested sample. The sample was selected and prepared by Venkat Kalkunte of Vivint, Inc..

## **OBJECTIVE**

The objective of the manufacturer is to comply with the standards identified in the previous section. In order to demonstrate compliance, the manufacturer or a contracted laboratory makes measurements and takes the necessary steps to ensure that the equipment complies with the appropriate technical standards. Compliance with some DFS features is covered through a manufacturer statement or through observation of the device.

## **STATEMENT OF COMPLIANCE**

The tested sample of the Vivint, Inc. model SR1410 complied with the DFS requirements of FCC Part 15.407(h)(2), RSS-210 Annex 9.3.

Maintenance of compliance is the responsibility of the manufacturer. Any modifications to the product should be assessed to determine their potential impact on the compliance status of the device with respect to the standards detailed in this test report.

## **DEVIATIONS FROM THE STANDARD**

No deviations were made from the test methods and requirements covered by the scope of this report.

**TEST RESULTS****TEST RESULTS SUMMARY – FCC Part 15, MASTER DEVICE**

<b>Table 1 - FCC Part 15 Subpart E Master Device Test Result Summary</b>						
Description	Radar Type	EUT Frequency	Measured Value	Requirement	Test Data	Status
Channel Availability Check (CAC) Time	Type 1	5510MHz	61.9s	≥ 60s	Appendix D	Pass
CAC Detection Threshold	Type 1	5510MHz	-64dBm	-64dBm (See note 2)	Appendix D	Pass
In-Service Monitoring Detection Threshold	Type 1 Type 2 Type 3 Type 4 Type 5 Type 6	5510MHz	-64 dBm (note 2)	-64dBm (See note 2)	Appendix B	Pass
Bandwidth Detection	Type 1	Varies	32 MHz	80% of the 99% BW	Appendix B	Pass
Channel closing transmission time	Type 1 Type 5	5510MHz 5550MHz	1.8ms 0ms	≤ 260ms	Appendix C	Pass
Channel move time	Type 1 Type 5	5510MHz 5550MHz	0.131s 0s	≤ 10s	Appendix C	Pass
Non-occupancy period	-	5550MHz	> 30 min	> 30 minutes	Appendix C	Pass
Uniform Loading		-	-	Uniform Loading	Refer to operational description	Pass
1) Tests were performed using the radiated test method. 2) The measured detection threshold is based on testing the master device using the radiated test method when connected to an antenna with a nominal gain of 5 dBi. The limit is based on an eirp of more than 23 dBm. 3) The in-service monitoring detection threshold and detection probability measurements were made with the device operating in the 5500-5700 MHz band.						

**MEASUREMENT UNCERTAINTIES**

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level, with a coverage factor (k=2) and were calculated in accordance with UKAS document LAB 34.

Measurement	Measurement Unit	Expanded Uncertainty
Timing (Channel move time, aggregate transmission time)	ms	Timing resolution +/- 0.24%
Timing (non occupancy period)	seconds	5 seconds
DFS Threshold (radiated)	dBm	1.6
DFS Threshold (conducted)	dBm	1.2

**EQUIPMENT UNDER TEST (EUT) DETAILS****GENERAL**

The Vivint, Inc. model SR1410 is a multiple high-definition (HD) video transceiver that streams using 5GHz 4x4 802.11 over long haul mesh networks at very low packet error rates.

The sample was received on March 28, 2013 and tested on April 17 through 18, 2013. The EUT consisted of the following component(s):

Company	Model	Description	Serial Number	FCC ID
Vivint, Inc.	SR1410	Outdoor Access Point	100063	2AAAS-SR1410

The manufacturer declared values for the EUT operational characteristics that affect DFS are as follows:

**Operating Modes (5250 – 5350 MHz, 5470 – 5725 MHz)**

- Master Device 5250-5350 MHz
- Master Device 5470-5725 MHz (excluding 5600-5650 MHz)

**Antenna Gains / EIRP (5250 – 5350 MHz, 5470 – 5725 MHz)**

	5250 – 5350 MHz	5470 – 5725 MHz
Lowest Antenna Gain (dBi)	5	5
Highest Antenna Gain (dBi)	5	5
EIRP Output Power (dBm)	27.3	27.9

- Power can exceed 200mW eirp

**Channel Protocol**

- IP Based
- Frame Based
- OTHER \_\_\_\_\_

**OTHER EUT DETAILS**

The following EUT details should be noted:

Device supports 40MHz operation only.

Minimum of MCS8, 2 spatial streams

CDD and Beamforming operation

TPC supported

Master Device

Outdoor use



**ENCLOSURE**

The EUT enclosure is primarily constructed of cast aluminum. It measures approximately 10 cm wide by 16.2 cm deep by 6.5 cm high.

**MODIFICATIONS**

The EUT did not require modifications during testing in order to comply with the requirements of the standard(s) referenced in this test report.

**SUPPORT EQUIPMENT**

The following equipment was used as local support equipment for testing:

Manufacturer	Model	Description	Serial Number	FCC ID
IBM	T400	Laptop	L3-A2622	-
IBM	Thinkpad	Laptop	-	-
Sunny Computer Technology	SYS-1482-1212-W2	AC/DC Power Supply	-	-
<i>Vivint Wireless</i>	<i>SR1410</i>	<i>Video Transceiver</i>	<i>100038</i>	<i>2AAAS-SR1410</i>

The italicized device was the client device.

**EUT INTERFACE PORTS**

The I/O cabling configuration during testing was as follows:

Port	Connected To	Description	Cable(s)	
			Shielded or Unshielded	Length(m)
EUT - POE	Remote POE Injector- POE	CAT5	Unshielded	2
POE Injector - LAN	Laptop	CAT5	Shielded	15
POE Injector - DC	AC/DC Adapter	2wire	Unshielded	1.5

### *EUT OPERATION*

The EUT was operating with the following software. The software is secured by encryption to prevent the user from disabling the DFS function.

Master Device: R 8.3 v35.1.0.30

Client Device: R 8.3 v35.1.0.30

The manufacturer provided special software that over-rode the non-occupancy mechanism (allowing return to the same channel) for the purposes of determining the probability of detection. This test feature was disabled and the normal operating software enabled for verifying the 30-minute non-occupancy period and channel move time.

The start of the Channel Availability Check was the instant the command to change channel was sent.

During the in-service monitoring detection probability and channel moving tests the system was configured with a streaming video file from the master device (sourced by the PC connected to the master device via an Ethernet interface) to the client device.

The streamed file was the "FCC" test file and the client device was using Windows Media Player Classic as required by FCC Part 15 Subpart E

**RADAR WAVEFORMS**

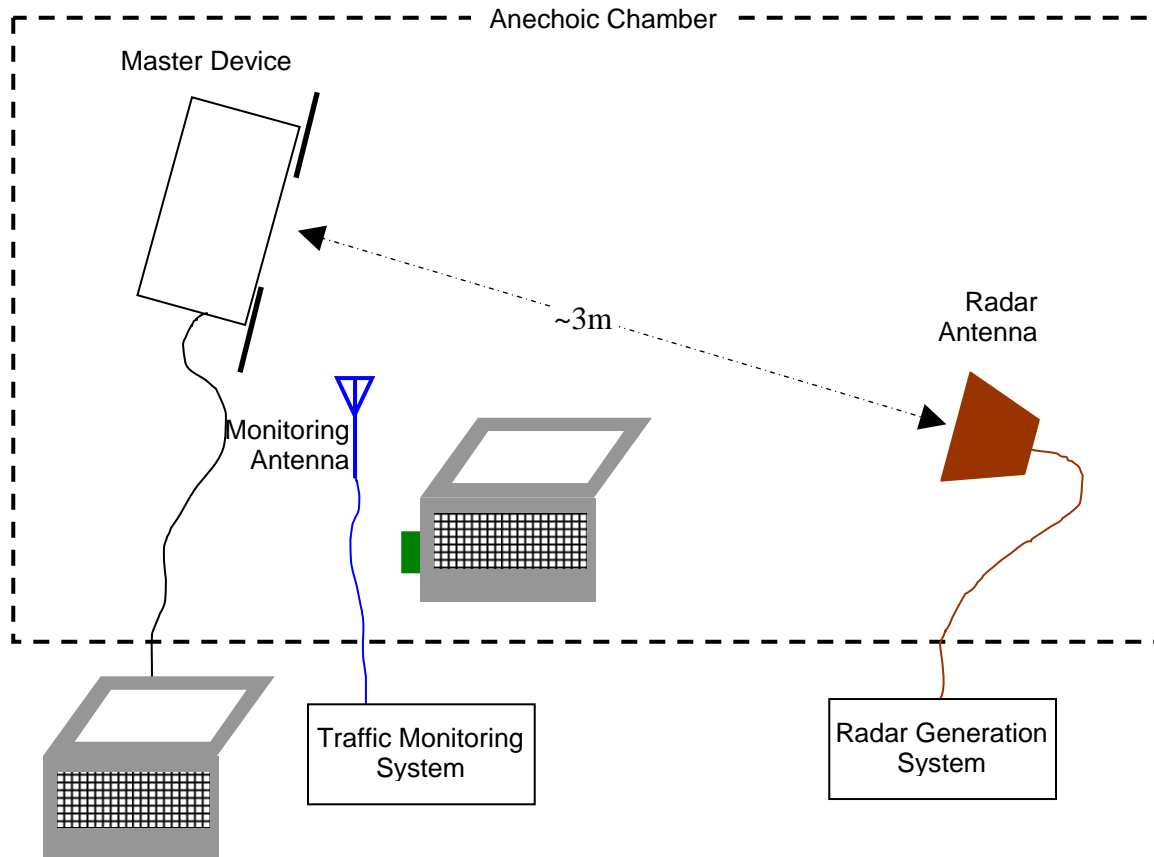
<b>Table 2 - FCC Short Pulse Radar Test Waveforms</b>					
Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses / burst	Minimum Detection Percentage	Minimum Number of Trials
1	1	1428	18	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120

<b>Table 3 - FCC Long Pulse Radar Test Waveforms</b>							
Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Pulses / burst	Number of Bursts	Minimum Detection Percentage	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

<b>Table 4 - FCC Frequency Hopping Radar Test Waveforms</b>							
Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses / hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Detection Percentage	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

**DFS TEST METHODS****RADIATED TEST METHOD**

The combination of master and slave devices is located in an anechoic chamber. The simulated radar waveform is transmitted from a directional horn antenna (typically an EMCO 3115) toward the unit performing the radar detection (radar detection device, RDD). Every effort is made to ensure that the main beam of the EUT's antenna is aligned with the radar-generating antenna.



**Figure 1 Test Configuration for radiated Measurement Method**

The signal level of the simulated waveform is set to a reference level equal to the threshold level (plus 1dB if testing against FCC requirements). Lower levels may also be applied on request of the manufacturer. The level reported is the level at the RDD antenna and so it is not corrected for the RDD's antenna gain. The RDD is configured with the lowest gain antenna assembly intended for use with the device.

The signal level is verified by measuring the CW signal level from the radar generation system using a reference antenna of gain  $G_{REF}$  (dBi). The radar signal level is calculated from the measured level,  $R$  (dBm), and any cable loss,  $L$  (dB), between the reference antenna and the measuring instrument:

$$\text{Applied level (dBm)} = R - G_{REF} + L$$

If both master and client devices have radar detection capability then the device not under test is positioned with absorbing material between its antenna and the radar generating antenna, and the radar level at the non RDD is verified to be at least 20dB below the threshold level to ensure that any responses are due to the RDD detecting radar.

The antenna connected to the channel monitoring subsystem is positioned to allow both master and client transmissions to be observed, with the level of the EUT's transmissions between 6 and 10dB higher than those from the other device.

## **DFS MEASUREMENT INSTRUMENTATION**

### **RADAR GENERATION SYSTEM**

An Agilent PSG is used as the radar-generating source. The integral arbitrary waveform generators are programmed using Agilent's "Pulse Building" software and National Technical Systems - Silicon Valley custom software to produce the required waveforms, with the capability to produce both un-modulated and modulated (FM Chirp) pulses. Where there are multiple values for a specific radar parameter then the software selects a value at random and, for FCC tests, the software verifies that the resulting waveform is truly unique.

With the exception of the hopping waveforms required by the FCC's rules (see below), the radar generator is set to a single frequency within the radar detection bandwidth of the EUT. The frequency is varied from trial to trial by stepping in 5MHz steps.

Frequency hopping radar waveforms are simulated using a time domain model. A randomly hopping sequence algorithm (which uses each channel in the hopping radar's range once in a hopping sequence) generates a hop sequence. A segment of the first 100 elements of the hop sequence are then examined to determine if it contains one or more frequencies within the radar detection bandwidth of the EUT. If it does not then the first element of the segment is discarded and the next frequency in the sequence is added. The process repeats until a valid segment is produced. The radar system is then programmed to produce bursts at time slots coincident with the frequencies within the segment that fall in the detection bandwidth. The frequency of the generator is stepped in 1 MHz increments across the EUT's detection range.

The radar signal level is verified during testing using a CW signal with the AGC function switched on. Correction factors to account for the fact that pulses are generated with the AGC functions switched off are measured annually and an offset is used to account for this in the software.

The generator output is connected to the coupling port of the conducted set-up or to the radar-generating antenna.

### CHANNEL MONITORING SYSTEM

Channel monitoring is achieved using a spectrum analyzer and digital storage oscilloscope. The analyzer is configured in a zero-span mode, center frequency set to the radar waveform's frequency or the center frequency of the EUT's operating channel. The IF output of the analyzer is connected to one input of the oscilloscope.

A signal generator output is set to send either the modulating signal directly or a pulse gate with an output pulse co-incident with each radar pulse. This output is connected to a second input on the oscilloscope and the oscilloscope displays both the channel traffic (via the if input) and the radar pulses on its display.

For in service monitoring tests the analyzer sweep time is set to > 20 seconds and the oscilloscope is configured with a data record length of 10 seconds for the short duration and frequency hopping waveforms, 20 seconds for the long duration waveforms. Both instruments are set for a single acquisition sequence. The analyzer is triggered 500ms before the start of the waveform and the oscilloscope is triggered directly by the modulating pulse train. Timing measurements for aggregate channel transmission time and channel move time are made from the oscilloscope data, with the end of the waveform clearly identified by the pulse train on one trace. The analyzer trace data is used to confirm that the last transmission occurred within the 10-second record of the oscilloscope. If necessary the record length of the oscilloscope is expanded to capture the last transmission on the channel prior to the channel move.

Channel availability check time timing plots are made using the analyzer. The analyzer is triggered at start of the EUT's channel availability check and used to verify that the EUT does not transmit when radar is applied during the check time.

The analyzer detector and oscilloscope sampling mode is set to peak detect for all plots.

## ***DFS MEASUREMENT METHODS***

### ***DFS RADAR DETECTION BANDWIDTH***

The radar detection bandwidth is determined by using FCC radar waveform 1 and applying radar pulses at offsets from the center channel frequency by multiples of 1MHz. These bursts are applied with no traffic on the channel. The first frequencies above and below the center channel frequency that have a detection rate below 90% define the radar bandwidth, the actual range being 1MHz below the upper frequency and 1MHz above the lower frequency.

### ***DFS – CHANNEL CLOSING TRANSMISSION TIME AND CHANNEL MOVE TIME***

Channel clearing and closing times are measured by applying a burst of radar with the device configured to change channel and by observing the channel for transmissions. The time between the end of the applied radar waveform and the final transmission on the channel is the channel move time.

The aggregate transmission closing time is measured in one of two ways:

FCC/KCC Notice No. 2010-48 – the total time of all individual transmissions from the EUT that are observed starting 200ms at the end of the last radar pulse in the waveform. This value is required to be less than 60ms.

ETSI – the total time of all individual transmissions from the EUT that are observed from the end of the last radar pulse in the waveform. This value is required to be less than 260ms.

### ***DFS – CHANNEL NON-OCCUPANCY AND VERIFICATION OF PASSIVE SCANNING***

The channel that was in use prior to radar detection by the master is additionally monitored for 30 minutes to ensure no transmissions on the vacated channel over the required non-occupancy period. This is achieved by tuning the spectrum analyzer to the vacated channel in zero-span mode and connecting the IF output to an oscilloscope. The oscilloscope is triggered by the radar pulse and set to provide a single sweep (in peak detect mode) that lasts for at least 30 minutes after the end of the channel move time.



#### *DFS CHANNEL AVAILABILITY CHECK TIME*

It is preferred that the EUT report when it starts the radar channel availability check. If the EUT does not report the start of the check time, then the time to start transmitting on a channel after switching the device on is measured to approximate the time from power-on to the end of the channel availability check. The start of the channel availability check is assumed to be 60 seconds prior to the first transmission on the channel.

To evaluate the channel availability check, a single burst of one radar type is applied within the first 2 seconds of the start of the channel availability check and it is verified that the device does not use the channel by continuing to monitor the channel for a period of at least 60 seconds. The test is repeated by applying a burst of radar in the last 2 seconds (i.e. between 58 and 60 seconds after the start of CAC when evaluating a 60-second CAC) of the channel availability check.

#### *UNIFORM LOADING*

Compliance with the FCC's channel loading requirement is demonstrated through the manufacturer's operational description for the device under test.

#### *TRANSMIT POWER CONTROL (TPC)*

Compliance with the transmit power control requirements for devices is demonstrated through measurements showing multiple power levels and manufacturer statements explaining how the power control is implemented.

## **SAMPLE CALCULATIONS**

### **DETECTION PROBABILITY / SUCCESS RATE**

The detection probability, or success rate, for any one radar waveform equals the number of successful trials divided by the total number of trials for that waveform.

In the case of the FCC requirements, for radar waveform types 1 through 4 an additional calculation is made to determine the average detection probability over all four radar waveform types. This calculation is the arithmetic mean of the four individual probabilities.

### **THRESHOLD LEVEL**

The threshold level is the level of the simulated radar waveform at the EUT's antenna. If the test is performed in a conducted fashion then the level at the rf input equals the level at the antenna plus the gain of the antenna assembly, in dBi. The gain of the antenna assembly equals the gain of the antenna minus the loss of the cabling between the rf input and the antenna. The lowest gain value for all antenna assemblies intended for use with the device is used when making this calculation.

If the test is performed using the radiated method then the threshold level is the level at the antenna.

**Appendix A Test Equipment Calibration Data**

<b><u>Manufacturer</u></b>	<b><u>Description</u></b>	<b><u>Model #</u></b>	<b><u>Asset #</u></b>	<b><u>Cal Due</u></b>
Agilent Technologies	PSG Vector Signal Generator	E8267C	1877	11-May-2013
Hewlett Packard	EMC Analyzer	8595EM	787	28-Aug-2013
Tektronix	Digital Phosphor Oscilloscope	TDS5052 B	2118	22-Oct-2013
ETS-Lindgren	Horn Antenna	3117	1662	25-May-2014

**Appendix B Test Data Tables for Radar Detection Probability**

<b>Table 5 - Detection Bandwidth Measurements (Bandwidth: +16MHz /-16MHz ) N40</b>					
EUT Frequency	Radar Type	Radar Frequency	Number Detected	Number Not Detected	Success (%)
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5493.00 MHz	2	3	40
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5494.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5495.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5496.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5497.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5498.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5499.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5500.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5501.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5502.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5503.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5504.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5505.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5506.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5507.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5508.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5509.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5510.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5511.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5512.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5513.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5514.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5515.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5516.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5517.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5518.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5519.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5520.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5521.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5522.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5523.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5524.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5525.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5526.00 MHz	10	0	100
5510.00 MHz	FCC Short Pulse Radar (Type 1)	5527.00 MHz	1	3	25

<b>Table 6 - Summary of All Results N40</b>				
Waveform Name	Pd (%)	Pd Required (%)	Number of Trials	Status
FCC Short Pulse Radar (Type 1)	100.0 %	60.0 %	30	PASSED
FCC Short Pulse Radar (Type 2)	100.0 %	60.0 %	30	PASSED
FCC Short Pulse Radar (Type 3)	100.0 %	60.0 %	30	PASSED
FCC Short Pulse Radar (Type 4)	90.0 %	60.0 %	30	PASSED
Aggregate of above results	97.5 %	80.0 %	120	PASSED
FCC frequency hopping radar (Type 6)	100.0 %	70.0 %	33	PASSED
Long Sequence	100.0 %	80.0 %	30	PASSED

<b>Table 7 - FCC Short Pulse Radar (Type 1) Results N40</b>						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	18	1.0	1428.0	Yes	5510.0MHz, -64.0dBm	Single burst
2	18	1.0	1428.0	Yes	5505.0MHz, -64.0dBm	Single burst
3	18	1.0	1428.0	Yes	5500.0MHz, -64.0dBm	Single burst
4	18	1.0	1428.0	Yes	5520.0MHz, -64.0dBm	Single burst
5	18	1.0	1428.0	Yes	5515.0MHz, -64.0dBm	Single burst
6	18	1.0	1428.0	Yes	5510.0MHz, -64.0dBm	Single burst
7	18	1.0	1428.0	Yes	5505.0MHz, -64.0dBm	Single burst
8	18	1.0	1428.0	Yes	5500.0MHz, -64.0dBm	Single burst
9	18	1.0	1428.0	Yes	5520.0MHz, -64.0dBm	Single burst
10	18	1.0	1428.0	Yes	5515.0MHz, -64.0dBm	Single burst
11	18	1.0	1428.0	Yes	5510.0MHz, -64.0dBm	Single burst
12	18	1.0	1428.0	Yes	5505.0MHz, -64.0dBm	Single burst
13	18	1.0	1428.0	Yes	5500.0MHz, -64.0dBm	Single burst
14	18	1.0	1428.0	Yes	5520.0MHz, -64.0dBm	Single burst
15	18	1.0	1428.0	Yes	5515.0MHz, -64.0dBm	Single burst
16	18	1.0	1428.0	Yes	5510.0MHz, -64.0dBm	Single burst
17	18	1.0	1428.0	Yes	5505.0MHz, -64.0dBm	Single burst
18	18	1.0	1428.0	Yes	5500.0MHz, -64.0dBm	Single burst
19	18	1.0	1428.0	Yes	5520.0MHz, -64.0dBm	Single burst
20	18	1.0	1428.0	Yes	5515.0MHz, -64.0dBm	Single burst
21	18	1.0	1428.0	Yes	5510.0MHz, -64.0dBm	Single burst
22	18	1.0	1428.0	Yes	5505.0MHz, -64.0dBm	Single burst
23	18	1.0	1428.0	Yes	5500.0MHz, -64.0dBm	Single burst
24	18	1.0	1428.0	Yes	5520.0MHz, -64.0dBm	Single burst
25	18	1.0	1428.0	Yes	5515.0MHz, -64.0dBm	Single burst
26	18	1.0	1428.0	Yes	5510.0MHz, -64.0dBm	Single burst
27	18	1.0	1428.0	Yes	5505.0MHz, -64.0dBm	Single burst
28	18	1.0	1428.0	Yes	5500.0MHz, -64.0dBm	Single burst
29	18	1.0	1428.0	Yes	5520.0MHz, -64.0dBm	Single burst
30	18	1.0	1428.0	Yes	5515.0MHz, -64.0dBm	Single burst

<b>Table 8 - FCC Short Pulse Radar (Type 2) Results N40</b>						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	28	4.8	199.0	Yes	5510.0MHz, -64.0dBm	Single burst
2	26	1.4	182.0	Yes	5505.0MHz, -64.0dBm	Single burst
3	24	4.5	188.0	Yes	5500.0MHz, -64.0dBm	Single burst
4	28	1.4	200.0	Yes	5520.0MHz, -64.0dBm	Single burst
5	25	1.3	186.0	Yes	5515.0MHz, -64.0dBm	Single burst
6	26	3.4	215.0	Yes	5510.0MHz, -64.0dBm	Single burst
7	27	3.9	212.0	Yes	5505.0MHz, -64.0dBm	Single burst
8	23	2.2	173.0	Yes	5500.0MHz, -64.0dBm	Single burst
9	26	2.4	217.0	Yes	5520.0MHz, -64.0dBm	Single burst
10	24	3.6	190.0	Yes	5515.0MHz, -64.0dBm	Single burst
11	26	2.7	192.0	Yes	5510.0MHz, -64.0dBm	Single burst
12	25	4.4	154.0	Yes	5505.0MHz, -64.0dBm	Single burst
13	24	3.3	199.0	Yes	5500.0MHz, -64.0dBm	Single burst
14	24	3.9	160.0	Yes	5520.0MHz, -64.0dBm	Single burst
15	28	2.6	197.0	Yes	5515.0MHz, -64.0dBm	Single burst
16	28	4.3	213.0	Yes	5510.0MHz, -64.0dBm	Single burst
17	26	1.4	211.0	Yes	5505.0MHz, -64.0dBm	Single burst
18	27	2.5	215.0	Yes	5500.0MHz, -64.0dBm	Single burst
19	28	3.6	181.0	Yes	5520.0MHz, -64.0dBm	Single burst
20	25	4.5	207.0	Yes	5515.0MHz, -64.0dBm	Single burst
21	25	1.3	197.0	Yes	5510.0MHz, -64.0dBm	Single burst
22	23	4.6	159.0	Yes	5505.0MHz, -64.0dBm	Single burst
23	25	2.0	189.0	Yes	5500.0MHz, -64.0dBm	Single burst
24	26	4.0	222.0	Yes	5520.0MHz, -64.0dBm	Single burst
25	27	2.4	176.0	Yes	5515.0MHz, -64.0dBm	Single burst
26	25	2.8	219.0	Yes	5510.0MHz, -64.0dBm	Single burst
27	29	2.1	173.0	Yes	5505.0MHz, -64.0dBm	Single burst
28	27	1.0	174.0	Yes	5500.0MHz, -64.0dBm	Single burst
29	28	3.1	162.0	Yes	5520.0MHz, -64.0dBm	Single burst
30	23	1.0	159.0	Yes	5515.0MHz, -64.0dBm	Single burst

<b>Table 9 - FCC Short Pulse Radar (Type 3) Results N40</b>						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	16	9.5	353.0	Yes	5510.0MHz, -64.0dBm	Single burst
2	16	9.2	270.0	Yes	5505.0MHz, -64.0dBm	Single burst
3	18	9.0	303.0	Yes	5500.0MHz, -64.0dBm	Single burst
4	16	6.1	251.0	Yes	5520.0MHz, -64.0dBm	Single burst
5	18	7.8	245.0	Yes	5515.0MHz, -64.0dBm	Single burst
6	18	7.7	340.0	Yes	5510.0MHz, -64.0dBm	Single burst
7	17	7.3	217.0	Yes	5505.0MHz, -64.0dBm	Single burst
8	17	8.8	334.0	Yes	5500.0MHz, -64.0dBm	Single burst
9	17	7.1	301.0	Yes	5520.0MHz, -64.0dBm	Single burst
10	17	9.5	258.0	Yes	5515.0MHz, -64.0dBm	Single burst
11	18	8.6	429.0	Yes	5510.0MHz, -64.0dBm	Single burst
12	17	6.9	224.0	Yes	5505.0MHz, -64.0dBm	Single burst
13	17	6.8	256.0	Yes	5500.0MHz, -64.0dBm	Single burst
14	18	9.6	446.0	Yes	5520.0MHz, -64.0dBm	Single burst
15	18	9.9	356.0	Yes	5515.0MHz, -64.0dBm	Single burst
16	17	9.2	496.0	Yes	5510.0MHz, -64.0dBm	Single burst
17	17	6.9	466.0	Yes	5505.0MHz, -64.0dBm	Single burst
18	16	9.3	467.0	Yes	5500.0MHz, -64.0dBm	Single burst
19	17	7.4	471.0	Yes	5520.0MHz, -64.0dBm	Single burst
20	17	6.2	343.0	Yes	5515.0MHz, -64.0dBm	Single burst
21	18	8.3	213.0	Yes	5510.0MHz, -64.0dBm	Single burst
22	17	6.3	230.0	Yes	5505.0MHz, -64.0dBm	Single burst
23	16	7.2	244.0	Yes	5500.0MHz, -64.0dBm	Single burst
24	17	8.4	374.0	Yes	5510.0MHz, -64.0dBm	Single burst
25	16	7.9	482.0	Yes	5505.0MHz, -64.0dBm	Single burst
26	17	7.8	241.0	Yes	5500.0MHz, -64.0dBm	Single burst
27	17	8.9	488.0	Yes	5520.0MHz, -64.0dBm	Single burst
28	17	7.5	418.0	Yes	5515.0MHz, -64.0dBm	Single burst
29	18	9.9	297.0	Yes	5510.0MHz, -64.0dBm	Single burst
30	17	6.2	462.0	Yes	5505.0MHz, -64.0dBm	Single burst

Table 10 - FCC Short Pulse Radar (Type 4) Results N40						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	13	14.2	425.0	No	5510.0MHz, -64.0dBm	Single burst
2	16	16.3	429.0	Yes	5505.0MHz, -64.0dBm	Single burst
3	14	11.0	276.0	Yes	5500.0MHz, -64.0dBm	Single burst
4	15	20.0	415.0	Yes	5520.0MHz, -64.0dBm	Single burst
5	15	15.6	397.0	Yes	5515.0MHz, -64.0dBm	Single burst
6	14	19.5	484.0	No	5510.0MHz, -64.0dBm	Single burst
7	13	16.5	202.0	Yes	5505.0MHz, -64.0dBm	Single burst
8	14	19.9	397.0	Yes	5500.0MHz, -64.0dBm	Single burst
9	14	13.3	317.0	Yes	5520.0MHz, -64.0dBm	Single burst
10	13	17.3	427.0	Yes	5515.0MHz, -64.0dBm	Single burst
11	15	11.7	340.0	Yes	5510.0MHz, -64.0dBm	Single burst
12	15	11.0	441.0	Yes	5505.0MHz, -64.0dBm	Single burst
13	13	17.6	268.0	Yes	5500.0MHz, -64.0dBm	Single burst
14	16	18.5	323.0	Yes	5520.0MHz, -64.0dBm	Single burst
15	14	15.4	369.0	Yes	5515.0MHz, -64.0dBm	Single burst
16	14	16.5	388.0	Yes	5510.0MHz, -64.0dBm	Single burst
17	13	13.5	362.0	Yes	5505.0MHz, -64.0dBm	Single burst
18	14	17.1	485.0	Yes	5500.0MHz, -64.0dBm	Single burst
19	16	12.6	308.0	Yes	5520.0MHz, -64.0dBm	Single burst
20	14	14.6	325.0	Yes	5515.0MHz, -64.0dBm	Single burst
21	15	15.0	213.0	Yes	5510.0MHz, -64.0dBm	Single burst
22	14	11.2	409.0	Yes	5505.0MHz, -64.0dBm	Single burst
23	15	18.5	336.0	Yes	5500.0MHz, -64.0dBm	Single burst
24	13	19.6	486.0	Yes	5520.0MHz, -64.0dBm	Single burst
25	13	12.2	372.0	Yes	5515.0MHz, -64.0dBm	Single burst
26	16	15.9	243.0	Yes	5510.0MHz, -64.0dBm	Single burst
27	15	13.9	349.0	No	5505.0MHz, -64.0dBm	Single burst
28	15	17.7	336.0	Yes	5500.0MHz, -64.0dBm	Single burst
29	13	18.7	494.0	Yes	5520.0MHz, -64.0dBm	Single burst
30	15	15.5	286.0	Yes	5515.0MHz, -64.0dBm	Single burst



**Table 11 - Long Sequence Waveform Summary N40**

Long Sequence Trial	Result	Radar Frequency / Amplitude
Trial #1	Detected	5510.0MHz, -64.0dBm
Trial #2	Detected	5505.0MHz, -64.0dBm
Trial #3	Detected	5500.0MHz, -64.0dBm
Trial #4	Detected	5520.0MHz, -64.0dBm
Trial #5	Detected	5515.0MHz, -64.0dBm
Trial #6	Detected	5510.0MHz, -64.0dBm
Trial #7	Detected	5505.0MHz, -64.0dBm
Trial #8	Detected	5500.0MHz, -64.0dBm
Trial #9	Detected	5520.0MHz, -64.0dBm
Trial #10	Detected	5515.0MHz, -64.0dBm
Trial #11	Detected	5510.0MHz, -64.0dBm
Trial #12	Detected	5505.0MHz, -64.0dBm
Trial #13	Detected	5500.0MHz, -64.0dBm
Trial #14	Detected	5520.0MHz, -64.0dBm
Trial #15	Detected	5515.0MHz, -64.0dBm
Trial #16	Detected	5510.0MHz, -64.0dBm
Trial #17	Detected	5505.0MHz, -64.0dBm
Trial #18	Detected	5500.0MHz, -64.0dBm
Trial #19	Detected	5520.0MHz, -64.0dBm
Trial #20	Detected	5515.0MHz, -64.0dBm
Trial #21	Detected	5510.0MHz, -64.0dBm
Trial #22	Detected	5505.0MHz, -64.0dBm
Trial #23	Detected	5500.0MHz, -64.0dBm
Trial #24	Detected	5520.0MHz, -64.0dBm
Trial #25	Detected	5515.0MHz, -64.0dBm
Trial #26	Detected	5510.0MHz, -64.0dBm
Trial #27	Detected	5505.0MHz, -64.0dBm
Trial #28	Detected	5500.0MHz, -64.0dBm
Trial #29	Detected	5520.0MHz, -64.0dBm
Trial #30	Detected	5515.0MHz, -64.0dBm

**Table 12 - Long Sequence Waveform Trial#1 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	1	60.5	19	-	-	1.156437
2	3	72.1	18	1863.0	1008.0	2.018888
3	1	96.2	19	-	-	3.173041
4	1	58.7	13	-	-	4.310802
5	3	97.1	14	1775.0	1640.0	6.466735
6	2	70.9	17	1607.0	-	7.633881
7	3	70.0	18	1416.0	1682.0	8.854853
8	1	94.2	12	-	-	9.923176
9	2	54.2	18	1762.0	-	10.737920

**Table 13 - Long Sequence Waveform Trial#2 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	3	57.9	15	1914.0	1806.0	0.866181
2	3	98.6	9	1602.0	1123.0	1.348630
3	3	58.4	7	1852.0	1226.0	2.239673
4	3	51.3	6	1197.0	1217.0	3.257723
5	3	55.8	9	1021.0	1047.0	3.913795
6	1	76.4	17	-	-	4.719474
7	1	58.1	13	-	-	6.076604
8	2	93.2	17	1496.0	-	6.565877
9	3	93.9	19	1591.0	1872.0	8.067505
10	2	52.5	10	1125.0	-	8.535583
11	1	94.6	11	-	-	9.859053
12	1	58.4	8	-	-	10.369203
13	2	65.3	12	1529.0	-	11.584006

**Table 14 - Long Sequence Waveform Trial#3 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	69.2	19	1512.0	-	0.154359
2	2	89.0	18	1449.0	-	2.005899
3	3	86.6	16	1644.0	1825.0	2.705438
4	1	91.9	8	-	-	5.234643
5	2	77.7	17	1060.0	-	6.145313
6	2	89.3	5	1450.0	-	7.159244
7	2	98.3	20	1438.0	-	8.907631
8	2	90.6	9	1852.0	-	9.562955
9	1	80.1	8	-	-	11.749307

**Table 15 - Long Sequence Waveform Trial#4 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	1	54.3	15	-	-	0.815017
2	1	83.2	13	-	-	1.195124
3	1	64.8	12	-	-	2.867451
4	2	87.0	8	1565.0	-	3.479029
5	2	97.4	20	1389.0	-	4.838255
6	3	85.8	15	1704.0	1189.0	5.622381
7	3	62.9	11	1775.0	1291.0	6.830347
8	1	67.5	19	-	-	7.029487
9	2	70.2	13	1399.0	-	8.388614
10	1	65.5	9	-	-	9.468842
11	3	93.3	17	1798.0	1826.0	10.296120
12	1	69.3	9	-	-	11.982122

**Table 16 - Long Sequence Waveform Trial#5 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	95.1	20	1576.0	-	0.463063
2	1	62.6	7	-	-	0.972945
3	3	62.0	16	1488.0	1487.0	1.503348
4	3	96.8	15	1929.0	1238.0	2.127909
5	3	56.7	10	1013.0	1043.0	2.623825
6	2	73.9	18	1755.0	-	3.783399
7	2	59.0	14	1564.0	-	4.336078
8	3	94.6	15	1556.0	1834.0	5.037113
9	1	62.1	17	-	-	5.483539
10	3	76.7	15	1412.0	1437.0	5.893439
11	2	81.2	8	1131.0	-	6.438891
12	2	77.1	6	1014.0	-	7.391844
13	2	50.3	5	1895.0	-	7.713068
14	1	88.1	17	-	-	8.358494
15	2	74.4	18	1695.0	-	9.275123
16	2	67.2	10	1476.0	-	9.570923
17	2	77.6	16	1484.0	-	10.502565
18	1	96.6	8	-	-	11.171048
19	1	87.7	13	-	-	11.553442

**Table 17 - Long Sequence Waveform Trial#6 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	1	85.5	10	-	-	0.572745
2	1	54.3	18	-	-	1.044502
3	1	66.1	15	-	-	2.023613
4	2	80.9	13	1684.0	-	2.696157
5	1	88.1	5	-	-	3.182851
6	2	72.3	16	1503.0	-	3.889437
7	2	73.1	10	1106.0	-	4.754417
8	2	50.7	20	1265.0	-	5.354966
9	2	54.5	17	1005.0	-	6.332703
10	3	89.5	20	1114.0	1750.0	6.530276
11	3	52.9	7	1821.0	1479.0	7.257882
12	1	60.5	11	-	-	7.811222
13	1	81.3	15	-	-	8.845526
14	3	92.4	18	1570.0	1859.0	9.577316
15	2	75.3	18	1257.0	-	10.320026
16	2	87.3	13	1421.0	-	11.055564
17	2	56.0	6	1582.0	-	11.840890

**Table 18 - Long Sequence Waveform Trial#7 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	54.2	14	1562.0	-	0.458356
2	1	72.6	5	-	-	1.110094
3	3	82.6	19	1918.0	1502.0	3.212218
4	1	56.2	10	-	-	4.300259
5	3	82.2	13	1703.0	1145.0	4.855018
6	3	91.2	10	1163.0	1779.0	5.703740
7	2	60.4	10	1034.0	-	7.075340
8	2	50.8	10	1514.0	-	8.052996
9	1	70.9	20	-	-	9.303649
10	3	65.4	14	1363.0	1309.0	10.559756
11	1	67.7	8	-	-	11.268709

**Table 19 - Long Sequence Waveform Trial#8 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	1	50.1	8	-	-	0.619521
2	2	93.1	16	1628.0	-	1.469431
3	2	53.7	13	1787.0	-	1.918108
4	2	59.8	9	1136.0	-	2.725656
5	1	71.3	17	-	-	3.412044
6	1	92.2	10	-	-	3.796323
7	2	51.1	13	1319.0	-	4.552935
8	2	55.8	7	1856.0	-	5.962864
9	2	75.7	19	1891.0	-	6.384122
10	3	60.0	13	1811.0	1237.0	7.459652
11	2	79.7	12	1673.0	-	7.581913
12	2	92.6	7	1862.0	-	8.280428
13	2	68.9	13	1253.0	-	9.664625
14	2	52.0	15	1696.0	-	10.405624
15	2	63.4	11	1632.0	-	11.014745
16	1	85.7	12	-	-	11.389472

**Table 20 - Long Sequence Waveform Trial#9 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	65.7	15	1264.0	-	0.411005
2	2	68.5	9	1190.0	-	0.940027
3	1	83.9	20	-	-	1.895358
4	3	55.2	5	1427.0	1418.0	2.662787
5	2	70.9	13	1414.0	-	2.921198
6	2	96.0	19	1757.0	-	4.171107
7	3	54.4	17	1815.0	1031.0	4.466168
8	3	80.2	10	1310.0	1698.0	5.350385
9	3	54.2	7	1278.0	1022.0	6.127625
10	1	85.9	6	-	-	6.755984
11	1	79.8	16	-	-	7.751411
12	1	84.1	8	-	-	8.258535
13	2	83.5	9	1411.0	-	8.893883
14	2	81.9	5	1457.0	-	9.294404
15	2	56.4	15	1424.0	-	10.038265
16	1	59.4	5	-	-	10.851038
17	3	62.7	19	1713.0	1372.0	11.509278

**Table 21 - Long Sequence Waveform Trial#10 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	1	94.8	11	-	-	0.008044
2	3	92.9	9	1474.0	1657.0	1.934718
3	3	95.7	12	1406.0	1009.0	2.643184
4	3	94.8	14	1338.0	1815.0	3.794919
5	1	79.5	11	-	-	4.843776
6	1	58.5	10	-	-	5.699857
7	3	67.6	13	1398.0	1287.0	6.123553
8	1	81.8	10	-	-	7.401580
9	1	65.9	5	-	-	8.439172
10	2	76.3	20	1531.0	-	9.679026
11	3	74.9	15	1594.0	1545.0	10.803862
12	3	51.2	20	1211.0	1332.0	11.228235

**Table 22 - Long Sequence Waveform Trial#11 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	3	71.4	18	1825.0	1463.0	0.870880
2	2	64.2	9	1285.0	-	1.490273
3	2	70.2	6	1153.0	-	2.168723
4	2	50.1	15	1721.0	-	3.671673
5	2	59.5	5	1422.0	-	3.871144
6	2	72.9	18	1107.0	-	5.459236
7	1	72.5	5	-	-	6.278984
8	1	62.3	6	-	-	6.867657
9	3	60.6	7	1195.0	1731.0	7.649495
10	3	52.7	10	1846.0	1957.0	9.036587
11	3	53.2	18	1020.0	1064.0	9.605242
12	2	70.3	17	1182.0	-	10.480232
13	1	61.7	13	-	-	11.401927

**Table 23 - Long Sequence Waveform Trial#12 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	3	80.7	7	1286.0	1014.0	0.048524
2	1	66.1	11	-	-	0.839832
3	3	61.3	7	1672.0	1307.0	2.249666
4	2	93.0	20	1927.0	-	3.051266
5	1	65.4	14	-	-	3.973328
6	2	62.0	11	1151.0	-	4.661110
7	2	56.2	19	1792.0	-	5.306541
8	3	69.9	11	1122.0	1758.0	5.681225
9	2	79.8	14	1822.0	-	7.113591
10	2	62.8	6	1390.0	-	7.945584
11	1	79.5	5	-	-	8.537877
12	3	84.9	13	1441.0	1305.0	9.474247
13	1	53.2	9	-	-	10.123737
14	2	97.5	8	1892.0	-	11.099844
15	1	67.2	10	-	-	11.476474

**Table 24 - Long Sequence Waveform Trial#13 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	79.8	9	1846.0	-	0.007848
2	2	91.2	17	1848.0	-	0.964241
3	3	62.5	10	1079.0	1902.0	1.663110
4	2	87.0	6	1074.0	-	2.136616
5	3	85.2	20	1077.0	1368.0	3.312063
6	2	78.7	13	1806.0	-	3.835209
7	1	89.1	15	-	-	4.615978
8	2	74.9	7	1555.0	-	5.099257
9	3	99.5	6	1470.0	1952.0	5.730339
10	2	69.9	8	1133.0	-	6.247558
11	2	80.5	19	1067.0	-	7.103225
12	1	85.8	19	-	-	7.649490
13	3	53.2	12	1380.0	1187.0	8.017021

**Table 24 - Long Sequence Waveform Trial#13 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
14	1	53.1	8	-	-	8.740438
15	2	68.4	12	1840.0	-	9.741116
16	2	51.8	19	1835.0	-	10.024947
17	1	94.9	17	-	-	11.330984
18	3	92.5	15	1671.0	1553.0	11.708368

**Table 25 - Long Sequence Waveform Trial#14 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	3	52.8	15	1116.0	1796.0	0.345502
2	2	83.7	10	1175.0	-	1.555173
3	3	56.7	6	1527.0	1453.0	3.833579
4	2	80.9	16	1097.0	-	4.921554
5	2	85.3	19	1413.0	-	5.556239
6	3	80.7	14	1127.0	1263.0	7.519910
7	2	62.5	6	1574.0	-	8.808506
8	3	76.2	17	1512.0	1224.0	10.143601
9	1	71.7	9	-	-	10.849796

**Table 26 - Long Sequence Waveform Trial#15 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	1	50.6	16	-	-	0.243543
2	3	59.8	10	1892.0	1806.0	0.966063
3	1	56.0	19	-	-	1.914233
4	3	54.8	13	1930.0	1902.0	2.565348
5	2	79.0	15	1296.0	-	2.797904
6	2	95.3	11	1197.0	-	3.358081
7	1	91.7	11	-	-	4.247550
8	3	73.3	13	1775.0	1480.0	5.207476
9	2	64.7	6	1491.0	-	5.782893
10	2	67.1	8	1012.0	-	6.251040
11	3	73.3	7	1114.0	1814.0	6.974017
12	3	89.9	13	1148.0	1028.0	7.356168
13	2	70.2	5	1342.0	-	8.302095
14	2	73.0	9	1176.0	-	8.841284
15	2	79.9	10	1951.0	-	9.924100
16	2	58.5	12	1158.0	-	10.214242
17	3	84.1	15	1512.0	1906.0	11.015703
18	3	55.3	15	1856.0	1039.0	11.765154

**Table 27 - Long Sequence Waveform Trial#16 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	1	88.7	7	-	-	0.307341
2	3	71.2	16	1500.0	1148.0	0.752803
3	3	97.5	13	1369.0	1578.0	1.870942
4	3	85.7	10	1868.0	1430.0	2.447539
5	2	69.7	13	1369.0	-	3.302706

**Table 27 - Long Sequence Waveform Trial#16 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
6	2	90.9	17	1482.0	-	3.501731
7	1	56.3	10	-	-	4.041772
8	3	55.9	7	1847.0	1803.0	4.736579
9	3	68.3	9	1800.0	1882.0	5.382673
10	1	80.8	12	-	-	6.567896
11	3	62.2	6	1651.0	1517.0	6.789982
12	1	81.8	17	-	-	7.737189
13	2	77.2	8	1876.0	-	8.137461
14	3	65.4	8	1073.0	1268.0	9.283445
15	1	85.3	14	-	-	9.672009
16	1	52.3	20	-	-	10.580443
17	3	73.3	9	1666.0	1492.0	10.966233
18	2	63.3	7	1285.0	-	11.750696

**Table 28 - Long Sequence Waveform Trial#17 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	66.8	15	1358.0	-	0.021793
2	1	90.6	10	-	-	1.091490
3	2	73.3	19	1497.0	-	1.913651
4	1	74.7	6	-	-	2.791493
5	2	89.2	17	1250.0	-	3.501343
6	2	66.0	12	1550.0	-	3.995983
7	2	53.8	15	1479.0	-	5.081944
8	3	73.6	14	1627.0	1769.0	5.905280
9	3	95.0	8	1833.0	1092.0	6.242715
10	2	99.3	15	1250.0	-	6.958428
11	3	79.3	17	1398.0	1245.0	7.619601
12	1	66.8	19	-	-	8.318847
13	2	89.2	18	1315.0	-	9.341197
14	2	60.6	7	1991.0	-	10.357386
15	2	67.5	13	1174.0	-	10.504044
16	1	89.9	16	-	-	11.708596

**Table 29 - Long Sequence Waveform Trial#18 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	3	66.6	16	1805.0	1969.0	0.508454
2	2	61.7	13	1530.0	-	1.406989
3	3	92.9	10	1619.0	1912.0	1.685575
4	2	65.2	5	1357.0	-	2.659382
5	1	99.7	10	-	-	2.982937
6	2	94.2	11	1561.0	-	3.862064
7	2	79.9	20	1927.0	-	4.420215
8	3	66.2	6	1953.0	1248.0	5.577565
9	2	58.7	15	1504.0	-	5.999790
10	3	52.9	13	1132.0	1971.0	6.763691
11	2	71.2	15	1263.0	-	7.745634
12	3	71.0	12	1670.0	1270.0	8.102461
13	3	77.2	9	1365.0	1521.0	9.089716



**Table 29 - Long Sequence Waveform Trial#18 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
14	2	50.9	8	1401.0	-	9.398863
15	2	89.1	7	1968.0	-	10.292764
16	2	86.6	8	1443.0	-	11.063985
17	3	93.7	7	1999.0	1381.0	11.896909

**Table 30 - Long Sequence Waveform Trial#19 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	3	94.6	6	1992.0	1100.0	0.219645
2	3	52.7	10	1741.0	1171.0	0.926470
3	3	59.0	7	1529.0	1895.0	1.927151
4	2	57.6	15	1048.0	-	2.315641
5	2	98.9	5	1318.0	-	2.933204
6	2	96.5	13	1738.0	-	3.667093
7	2	73.0	8	1125.0	-	4.345156
8	2	83.4	7	1536.0	-	5.078168
9	2	58.0	12	1986.0	-	5.866702
10	2	88.1	11	1171.0	-	6.611280
11	3	98.2	18	1851.0	1636.0	7.082669
12	2	71.3	14	1674.0	-	7.692197
13	1	80.9	19	-	-	8.097223
14	2	52.1	13	1810.0	-	9.098340
15	3	66.1	17	1785.0	1537.0	9.983923
16	1	98.2	6	-	-	10.636216
17	2	95.2	18	1402.0	-	10.820314
18	2	94.6	14	1620.0	-	11.763682

**Table 31 - Long Sequence Waveform Trial#20 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	1	53.7	6	-	-	0.739788
2	2	99.2	8	1204.0	-	2.153277
3	1	51.8	7	-	-	3.496818
4	2	99.9	18	1213.0	-	5.541636
5	3	81.1	17	1249.0	1449.0	6.737600
6	2	67.8	20	1622.0	-	8.519197
7	2	89.8	18	1267.0	-	10.371831
8	3	72.0	8	1439.0	1939.0	11.501312

**Table 32 - Long Sequence Waveform Trial#21 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	3	71.8	18	1522.0	1126.0	0.430767
2	3	85.9	10	1815.0	1326.0	0.632252
3	3	53.9	10	1363.0	1546.0	1.588051
4	2	63.7	12	1746.0	-	2.069073
5	1	68.1	14	-	-	2.688648
6	1	53.8	9	-	-	3.508653
7	2	65.1	19	1126.0	-	3.884226

**Table 32 - Long Sequence Waveform Trial#21 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
8	3	67.8	16	1017.0	1345.0	4.568394
9	2	96.3	16	1962.0	-	5.199547
10	2	95.8	12	1679.0	-	5.554381
11	2	71.3	7	1492.0	-	6.166173
12	2	95.1	7	1857.0	-	6.894249
13	3	97.2	15	1487.0	1193.0	7.598499
14	2	95.0	14	1416.0	-	8.302842
15	3	70.3	5	1877.0	1843.0	8.777601
16	2	67.0	14	1187.0	-	9.312125
17	2	62.9	12	1836.0	-	9.979117
18	3	66.4	18	1380.0	1024.0	10.782938
19	1	68.1	15	-	-	11.093370
20	3	52.6	9	1920.0	1107.0	11.863857

**Table 33 - Long Sequence Waveform Trial#22 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	82.1	13	1696.0	-	0.649954
2	1	54.5	15	-	-	0.882321
3	2	56.8	8	1913.0	-	1.955781
4	1	94.1	5	-	-	2.445134
5	3	75.2	9	1823.0	1688.0	3.123863
6	2	80.2	16	1673.0	-	3.343296
7	1	98.2	10	-	-	4.443932
8	2	92.7	5	1233.0	-	5.141105
9	3	85.0	12	1614.0	1262.0	5.681824
10	2	77.4	16	1602.0	-	6.332825
11	2	85.3	6	1101.0	-	7.035427
12	2	82.7	20	1032.0	-	7.566871
13	2	59.7	6	1909.0	-	8.555528
14	2	62.9	16	1909.0	-	8.953735
15	2	88.6	18	1218.0	-	9.992745
16	1	63.9	19	-	-	10.378059
17	2	73.3	8	1428.0	-	11.319229
18	1	62.0	17	-	-	11.831847

**Table 34 - Long Sequence Waveform Trial#23 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	3	81.3	15	1783.0	1845.0	0.753838
2	1	91.1	7	-	-	1.440765
3	2	99.6	6	1276.0	-	2.919325
4	2	73.3	16	1120.0	-	4.231955
5	2	64.6	13	1267.0	-	4.677768
6	2	87.8	13	1218.0	-	5.852219
7	1	73.5	12	-	-	7.504578
8	2	92.6	13	1573.0	-	8.659848
9	3	55.6	11	1397.0	1085.0	9.229460
10	1	68.0	7	-	-	9.954417
11	3	59.0	17	1665.0	1109.0	11.544987

**Table 35 - Long Sequence Waveform Trial#24 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	83.2	11	1820.0	-	0.422497
2	3	63.2	11	1571.0	1936.0	1.370991
3	2	80.4	6	1900.0	-	1.758439
4	3	51.6	14	1018.0	1129.0	2.598865
5	2	93.4	16	1299.0	-	3.643142
6	1	60.5	12	-	-	4.681569
7	2	88.5	15	1110.0	-	4.847600
8	1	95.8	20	-	-	5.840454
9	3	58.5	17	1411.0	1346.0	6.569788
10	1	97.6	17	-	-	7.321811
11	3	77.6	6	1694.0	1410.0	8.602333
12	3	50.6	14	1639.0	1977.0	9.335812
13	3	87.4	6	1291.0	1320.0	10.237826
14	1	64.2	13	-	-	10.490967
15	2	86.9	18	1721.0	-	11.901237

**Table 36 - Long Sequence Waveform Trial#25 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	96.6	10	1152.0	-	0.500299
2	3	77.9	6	1638.0	1693.0	1.573225
3	2	97.8	13	1260.0	-	1.789042
4	2	81.6	16	1290.0	-	2.769777
5	2	88.0	19	1562.0	-	3.435850
6	2	88.1	7	1439.0	-	4.534309
7	3	82.9	13	1369.0	1030.0	5.566352
8	3	87.7	18	1128.0	1091.0	6.816563
9	2	69.0	19	1416.0	-	7.051208
10	1	87.6	12	-	-	8.048752
11	3	64.8	13	1965.0	1129.0	9.253390
12	2	54.7	15	2000.0	-	9.980558
13	3	62.4	11	1306.0	1817.0	10.460838
14	1	71.6	15	-	-	11.870852

**Table 37 - Long Sequence Waveform Trial#26 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	1	52.6	12	-	-	0.276395
2	2	60.8	12	1565.0	-	1.462650
3	1	75.9	19	-	-	2.203016
4	3	56.2	18	1369.0	1840.0	2.494691
5	3	64.1	17	1099.0	1149.0	3.162899
6	1	81.2	18	-	-	4.294106
7	2	60.0	13	1190.0	-	4.830361
8	2	72.5	11	1028.0	-	5.575476
9	2	75.2	6	1956.0	-	6.715877
10	2	78.9	9	1439.0	-	7.234580
11	2	70.6	16	1301.0	-	7.919313
12	1	76.3	15	-	-	8.303710

**Table 37 - Long Sequence Waveform Trial#26 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
13	1	62.3	8	-	-	9.129932
14	2	84.7	9	1126.0	-	9.760625
15	2	68.7	6	1543.0	-	10.659969
16	3	66.6	15	1095.0	1055.0	11.643227

**Table 38 - Long Sequence Waveform Trial#27 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	51.4	6	1829.0	-	0.500189
2	2	63.0	10	1030.0	-	1.514981
3	2	71.4	14	1062.0	-	1.963003
4	2	90.5	15	1199.0	-	3.125778
5	2	58.2	11	1526.0	-	3.964374
6	1	69.8	11	-	-	4.786763
7	3	74.1	6	1634.0	1877.0	5.348560
8	2	68.8	12	1882.0	-	6.658349
9	2	73.8	19	1943.0	-	6.860186
10	1	62.6	17	-	-	7.869309
11	1	73.8	12	-	-	8.893269
12	2	68.9	10	1317.0	-	9.759474
13	2	89.5	8	1312.0	-	10.409927
14	2	95.0	18	1169.0	-	11.806644

**Table 39 - Long Sequence Waveform Trial#28 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	3	65.1	11	1027.0	1695.0	0.419691
2	3	83.3	9	1029.0	1971.0	1.654240
3	2	77.3	8	1127.0	-	1.899454
4	1	50.2	15	-	-	2.976943
5	1	64.4	15	-	-	4.019546
6	3	65.4	19	1953.0	1255.0	4.456830
7	3	55.7	11	1582.0	1482.0	5.531841
8	2	93.9	17	1970.0	-	6.832940
9	1	73.6	14	-	-	7.293430
10	2	76.9	15	1349.0	-	8.104670
11	2	98.4	17	1237.0	-	8.683294
12	3	92.9	15	1312.0	1986.0	9.607465
13	2	81.8	14	1431.0	-	10.565384
14	3	65.6	20	1163.0	1024.0	11.926768

**Table 40 - Long Sequence Waveform Trial#29 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	1	52.6	15	-	-	0.479147
2	1	56.8	13	-	-	1.124824
3	3	54.5	18	1627.0	1914.0	1.493871
4	1	60.9	20	-	-	2.137334
5	1	93.5	6	-	-	2.627224

**Table 40 - Long Sequence Waveform Trial#29 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
6	2	92.6	14	1719.0	-	3.351881
7	2	87.8	13	1283.0	-	3.902438
8	3	73.6	9	1503.0	1242.0	4.671224
9	1	70.5	11	-	-	5.102579
10	1	59.5	16	-	-	5.962417
11	2	91.4	11	1668.0	-	6.475015
12	1	84.3	8	-	-	7.272067
13	2	94.3	15	1439.0	-	7.863083
14	3	77.7	14	1837.0	1662.0	8.756055
15	1	65.5	9	-	-	9.293371
16	3	74.4	5	1622.0	1624.0	9.882652
17	2	55.4	16	1763.0	-	10.325525
18	2	62.4	19	1276.0	-	10.812890
19	2	78.1	15	1383.0	-	11.985882

**Table 41 - Long Sequence Waveform Trial#30 (Detected) N40**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	66.0	18	1394.0	-	0.448618
2	2	91.7	6	1788.0	-	1.176102
3	1	97.8	7	-	-	1.809539
4	2	93.6	20	1817.0	-	2.838391
5	2	89.0	6	1945.0	-	4.216012
6	3	56.5	17	1809.0	1036.0	4.387096
7	2	86.8	13	1302.0	-	5.844062
8	1	79.7	15	-	-	6.324646
9	2	94.2	6	1795.0	-	7.674032
10	2	93.1	16	1881.0	-	8.215527
11	2	61.9	18	1306.0	-	9.264224
12	2	95.1	5	1476.0	-	10.158253
13	3	79.8	5	1658.0	1664.0	10.928397
14	2	89.3	15	1861.0	-	11.767484

Table 42 - FCC frequency hopping radar (Type 6) Results N40						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	9	1.0	333.0	Yes	5525.0MHz, -64.0dBm	Hop sequence: 5429, 5324, 5468, 5257, 5365, 5318, 5600, 5567, 5453, 5690, 5407, 5258, 5411, 5343, 5375, 5605, 5599, 5660, 5654, 5672, 5471, 5467, 5596, 5329, 5517, 5597, 5679, 5555, 5570, 5635, 5595, 5337, 5406, 5436, 5618, 5449, 5475, 5519, 5726, 5328, 5275, 5254, 5706, 5617, 5656, 5423, 5535, 5630, 5357, 5504, 5330, 5717, 5472, 5507, 5481, 5579, 5551, 5641, 5347, 5550, 5602, 5457, 5666, 5439, 5445, 5623, 5542, 5483, 5447, 5432, 5587, 5354, 5503, 5397, 5607, 5358, 5702, 5521, 5261, 5674, 5582, 5552, 5658, 5639, 5356, 5646, 5295, 5456, 5404, 5520, 5446, 5508, 5546, 5518, 5484, 5719, 5718, 5610, 5376, 5561 (9 hits)
2	9	1.0	333.0	Yes	5526.0MHz, -64.0dBm	Hop sequence: 5407, 5454, 5391, 5358, 5467, 5273, 5545, 5638, 5539, 5462, 5687, 5302, 5701, 5445, 5328, 5710, 5466, 5375, 5429, 5356, 5498, 5720, 5603, 5666, 5311, 5289, 5551, 5296, 5501, 5511, 5443, 5632, 5432, 5668, 5470, 5409, 5663, 5718, 5290, 5318, 5610, 5723, 5366, 5607, 5575, 5344, 5576, 5589, 5713, 5557, 5441, 5442, 5295, 5532, 5433, 5600, 5628, 5390, 5305, 5725, 5709, 5353, 5431, 5570, 5503, 5667, 5606, 5262, 5636, 5662, 5326, 5611, 5518, 5672, 5499, 5613, 5696, 5319, 5574, 5379, 5581, 5412, 5645, 5269, 5270, 5683, 5384, 5259, 5364, 5292, 5485, 5272, 5592, 5493, 5401, 5333, 5585, 5377, 5362, 5571 (6 hits)
3	9	1.0	333.0	Yes	5494.0MHz, -64.0dBm	Hop sequence: 5357, 5498, 5452, 5649, 5615, 5328, 5668, 5258, 5425, 5623, 5557, 5625, 5579, 5716, 5373, 5374, 5410, 5613, 5713, 5250, 5262, 5690, 5724, 5651, 5365, 5588, 5268, 5475, 5545, 5313, 5527, 5359, 5645, 5381, 5255, 5617, 5550, 5285, 5496, 5558, 5260, 5693, 5382, 5712, 5708, 5721, 5350, 5499, 5543, 5477, 5270, 5539, 5436, 5380, 5458, 5629, 5339, 5413, 5608, 5372, 5520, 5631, 5478, 5573, 5541, 5414, 5536, 5428, 5647, 5537, 5364, 5305, 5419, 5638, 5704, 5523, 5444, 5635, 5560, 5599, 5394, 5276, 5389, 5377, 5639, 5652, 5665, 5700, 5341, 5283, 5568, 5472, 5584, 5281, 5461, 5269, 5666, 5317, 5564, 5612 (5 hits)
4	9	1.0	333.0	Yes	5495.0MHz, -64.0dBm	Hop sequence: 5522, 5334, 5506, 5379, 5455, 5590, 5429, 5321, 5724, 5651, 5453, 5498, 5260, 5487, 5353, 5717, 5559, 5628, 5562, 5350, 5477, 5341, 5720, 5567, 5438, 5500, 5715,

Table 42 - FCC frequency hopping radar (Type 6) Results N40						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5362, 5610, 5262, 5310, 5719, 5598, 5431, 5725, 5530, 5488, 5292, 5588, 5356, 5312, 5490, 5456, 5536, 5679, 5425, 5684, 5646, 5448, 5561, 5339, 5469, 5367, 5424, 5634, 5649, 5340, 5694, 5575, 5565, 5388, 5295, 5678, 5308, 5472, 5675, 5324, 5333, 5641, 5556, 5257, 5347, 5601, 5711, 5459, 5512, 5592, 5645, 5591, 5640, 5275, 5314, 5406, 5555, 5445, 5707, 5609, 5655, 5311, 5520, 5454, 5363, 5604, 5528, 5491, 5407, 5553, 5625, 5343, 5251 (6 hits)
5	9	1.0	333.0	Yes	5496.0MHz, -64.0dBm	Hop sequence: 5718, 5278, 5537, 5643, 5460, 5334, 5606, 5680, 5544, 5310, 5458, 5440, 5359, 5265, 5673, 5377, 5682, 5418, 5329, 5295, 5565, 5438, 5268, 5287, 5621, 5545, 5715, 5358, 5292, 5526, 5681, 5317, 5483, 5653, 5692, 5508, 5708, 5470, 5363, 5474, 5646, 5439, 5315, 5595, 5309, 5336, 5373, 5255, 5272, 5515, 5378, 5687, 5253, 5530, 5525, 5348, 5576, 5429, 5482, 5346, 5531, 5491, 5338, 5517, 5711, 5477, 5541, 5500, 5607, 5493, 5266, 5275, 5514, 5274, 5688, 5683, 5720, 5548, 5426, 5475, 5647, 5472, 5496, 5627, 5605, 5345, 5435, 5618, 5461, 5408, 5561, 5342, 5589, 5602, 5277, 5573, 5654, 5430, 5597, 5288 (8 hits)
6	9	1.0	333.0	Yes	5497.0MHz, -64.0dBm	Hop sequence: 5389, 5290, 5406, 5673, 5327, 5612, 5478, 5299, 5286, 5606, 5483, 5291, 5581, 5502, 5325, 5676, 5473, 5278, 5292, 5629, 5533, 5412, 5575, 5363, 5536, 5656, 5548, 5665, 5717, 5347, 5341, 5711, 5266, 5400, 5698, 5474, 5631, 5361, 5605, 5277, 5688, 5526, 5515, 5409, 5328, 5721, 5324, 5535, 5674, 5267, 5658, 5543, 5592, 5262, 5368, 5713, 5579, 5413, 5399, 5460, 5430, 5464, 5646, 5622, 5322, 5544, 5690, 5367, 5404, 5547, 5349, 5557, 5518, 5314, 5639, 5318, 5657, 5645, 5300, 5542, 5428, 5561, 5434, 5710, 5513, 5256, 5604, 5463, 5380, 5726, 5703, 5582, 5484, 5620, 5320, 5638, 5408, 5304, 5427, 5345 (5 hits)
7	9	1.0	333.0	Yes	5498.0MHz, -64.0dBm	Hop sequence: 5654, 5682, 5591, 5360, 5317, 5665, 5585, 5578, 5412, 5371, 5531, 5571, 5516, 5669, 5632, 5311, 5291, 5333, 5719, 5514, 5703, 5398, 5566, 5648, 5252, 5251, 5722, 5577, 5523, 5365, 5313, 5532, 5309, 5390, 5507, 5278, 5341, 5372, 5348, 5600, 5336, 5435, 5386, 5473, 5659, 5519, 5553, 5490, 5556, 5715, 5405, 5567, 5326, 5445, 5549, 5651, 5434, 5442, 5454, 5487, 5324, 5443, 5250, 5453, 5370, 5495, 5547, 5430, 5530,

Table 42 - FCC frequency hopping radar (Type 6) Results N40						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5692, 5414, 5266, 5646, 5258, 5440, 5400, 5508, 5354, 5609, 5477, 5419, 5451, 5689, 5468, 5663, 5521, 5563, 5432, 5402, 5496, 5275, 5502, 5611, 5253, 5460, 5537, 5595, 5559, 5526, 5319 (11 hits)
8	9	1.0	333.0	Yes	5499.0MHz, -64.0dBm	Hop sequence: 5290, 5709, 5380, 5450, 5461, 5723, 5632, 5566, 5429, 5320, 5602, 5496, 5689, 5271, 5697, 5462, 5486, 5373, 5359, 5356, 5401, 5654, 5264, 5412, 5471, 5615, 5598, 5314, 5574, 5704, 5404, 5695, 5536, 5717, 5692, 5472, 5286, 5321, 5550, 5663, 5287, 5596, 5680, 5514, 5296, 5637, 5310, 5638, 5693, 5530, 5325, 5703, 5708, 5714, 5372, 5487, 5705, 5500, 5316, 5560, 5300, 5520, 5595, 5358, 5265, 5424, 5398, 5507, 5605, 5707, 5493, 5485, 5688, 5267, 5268, 5543, 5379, 5435, 5468, 5583, 5570, 5333, 5694, 5495, 5328, 5565, 5406, 5433, 5446, 5281, 5430, 5657, 5557, 5474, 5648, 5368, 5467, 5263, 5650, 5571 (6 hits)
9	9	1.0	333.0	Yes	5500.0MHz, -64.0dBm	Hop sequence: 5715, 5656, 5627, 5532, 5695, 5274, 5676, 5555, 5650, 5259, 5407, 5563, 5660, 5613, 5446, 5531, 5369, 5648, 5413, 5703, 5651, 5359, 5376, 5513, 5256, 5393, 5252, 5528, 5652, 5721, 5694, 5517, 5267, 5690, 5679, 5467, 5609, 5444, 5545, 5599, 5663, 5421, 5591, 5610, 5354, 5447, 5666, 5697, 5699, 5456, 5297, 5642, 5696, 5395, 5544, 5673, 5422, 5541, 5633, 5624, 5289, 5527, 5495, 5293, 5261, 5539, 5578, 5558, 5453, 5600, 5428, 5685, 5689, 5451, 5303, 5665, 5535, 5387, 5548, 5282, 5298, 5587, 5580, 5265, 5270, 5452, 5693, 5649, 5709, 5380, 5474, 5684, 5692, 5549, 5611, 5367, 5431, 5373, 5349, 5423 (3 hits)
10	9	1.0	333.0	Yes	5501.0MHz, -64.0dBm	Hop sequence: 5575, 5454, 5437, 5288, 5493, 5697, 5671, 5263, 5650, 5593, 5394, 5308, 5414, 5278, 5532, 5565, 5381, 5255, 5276, 5349, 5636, 5376, 5630, 5408, 5701, 5624, 5545, 5561, 5345, 5266, 5578, 5357, 5294, 5361, 5485, 5626, 5433, 5268, 5549, 5277, 5438, 5612, 5694, 5329, 5711, 5611, 5655, 5643, 5296, 5395, 5388, 5390, 5657, 5313, 5337, 5642, 5372, 5359, 5309, 5712, 5702, 5562, 5649, 5638, 5658, 5524, 5595, 5506, 5676, 5324, 5463, 5327, 5508, 5298, 5590, 5564, 5721, 5419, 5529, 5302, 5555, 5270, 5653, 5543, 5319, 5518, 5695, 5699, 5632, 5280, 5346, 5374, 5576, 5387, 5320, 5662, 5413, 5401, 5705, 5311 (4 hits)
11	9	1.0	333.0	Yes	5502.0MHz,	Hop sequence: 5450, 5263, 5468,



Table 42 - FCC frequency hopping radar (Type 6) Results N40						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
					-64.0dBm	5562, 5429, 5367, 5513, 5336, 5523, 5454, 5596, 5687, 5669, 5251, 5532, 5430, 5539, 5445, 5678, 5472, 5695, 5579, 5610, 5402, 5440, 5283, 5362, 5443, 5654, 5510, 5378, 5433, 5257, 5328, 5587, 5613, 5631, 5404, 5439, 5616, 5653, 5269, 5319, 5576, 5684, 5516, 5719, 5638, 5672, 5618, 5364, 5310, 5542, 5483, 5381, 5302, 5393, 5635, 5673, 5413, 5306, 5640, 5467, 5533, 5431, 5261, 5686, 5524, 5312, 5688, 5583, 5586, 5549, 5706, 5511, 5626, 5514, 5317, 5459, 5489, 5355, 5451, 5409, 5685, 5682, 5497, 5481, 5569, 5606, 5498, 5485, 5426, 5461, 5278, 5453, 5377, 5384, 5664, 5715, 5358 (9 hits)
12	9	1.0	333.0	Yes	5503.0MHz, -64.0dBm	Hop sequence: 5680, 5660, 5642, 5269, 5334, 5717, 5279, 5606, 5559, 5365, 5542, 5664, 5613, 5682, 5417, 5402, 5496, 5543, 5321, 5563, 5551, 5458, 5305, 5282, 5590, 5421, 5368, 5649, 5401, 5433, 5347, 5589, 5501, 5419, 5525, 5586, 5309, 5604, 5473, 5636, 5461, 5722, 5491, 5422, 5700, 5494, 5596, 5570, 5450, 5678, 5581, 5601, 5685, 5725, 5453, 5615, 5476, 5298, 5272, 5254, 5367, 5684, 5454, 5291, 5386, 5534, 5456, 5568, 5350, 5622, 5273, 5441, 5343, 5595, 5716, 5475, 5349, 5677, 5337, 5394, 5663, 5302, 5694, 5579, 5535, 5715, 5645, 5520, 5373, 5610, 5573, 5405, 5548, 5250, 5470, 5288, 5256, 5295, 5701, 5260 (5 hits)
13	9	1.0	333.0	Yes	5504.0MHz, -64.0dBm	Hop sequence: 5437, 5448, 5637, 5447, 5251, 5255, 5571, 5555, 5464, 5308, 5392, 5292, 5344, 5505, 5591, 5334, 5321, 5717, 5723, 5699, 5632, 5543, 5515, 5421, 5562, 5558, 5335, 5320, 5517, 5368, 5652, 5452, 5326, 5578, 5271, 5669, 5623, 5291, 5581, 5477, 5541, 5602, 5270, 5350, 5716, 5267, 5636, 5533, 5579, 5722, 5664, 5485, 5701, 5441, 5443, 5261, 5597, 5290, 5540, 5667, 5313, 5569, 5277, 5486, 5496, 5583, 5644, 5385, 5403, 5254, 5668, 5377, 5370, 5539, 5499, 5284, 5700, 5527, 5689, 5520, 5696, 5640, 5582, 5278, 5460, 5494, 5250, 5506, 5513, 5519, 5698, 5287, 5347, 5312, 5356, 5634, 5375, 5264, 5480, 5451 (10 hits)
14	9	1.0	333.0	Yes	5505.0MHz, -64.0dBm	Hop sequence: 5562, 5580, 5302, 5625, 5519, 5634, 5297, 5439, 5342, 5541, 5260, 5675, 5330, 5545, 5492, 5582, 5613, 5502, 5499, 5418, 5461, 5287, 5536, 5433, 5537, 5377, 5327, 5656, 5616, 5706, 5291, 5653, 5556, 5540, 5514, 5558, 5429, 5500, 5360, 5584, 5725, 5617, 5255, 5425, 5688,

Table 42 - FCC frequency hopping radar (Type 6) Results N40						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5535, 5505, 5325, 5671, 5349, 5353, 5709, 5691, 5699, 5660, 5715, 5595, 5487, 5547, 5450, 5566, 5268, 5551, 5348, 5564, 5382, 5372, 5374, 5446, 5254, 5356, 5644, 5423, 5713, 5588, 5440, 5472, 5649, 5583, 5290, 5366, 5412, 5409, 5281, 5335, 5532, 5640, 5251, 5370, 5589, 5387, 5549, 5606, 5534, 5388, 5261, 5664, 5364, 5631, 5331 (6 hits)
15	9	1.0	333.0	Yes	5506.0MHz, -64.0dBm	Hop sequence: 5343, 5611, 5626, 5597, 5411, 5561, 5452, 5414, 5501, 5428, 5489, 5296, 5605, 5399, 5504, 5627, 5275, 5261, 5258, 5290, 5319, 5531, 5699, 5683, 5692, 5666, 5515, 5603, 5440, 5339, 5589, 5334, 5331, 5602, 5344, 5628, 5471, 5371, 5358, 5556, 5313, 5375, 5278, 5507, 5488, 5351, 5554, 5419, 5463, 5622, 5486, 5617, 5668, 5629, 5350, 5270, 5381, 5635, 5397, 5669, 5582, 5680, 5590, 5281, 5655, 5682, 5283, 5329, 5498, 5681, 5254, 5460, 5422, 5705, 5433, 5510, 5656, 5535, 5421, 5415, 5532, 5402, 5272, 5426, 5312, 5500, 5260, 5469, 5636, 5302, 5373, 5306, 5324, 5684, 5372, 5566, 5349, 5310, 5586, 5579 (7 hits)
16	9	1.0	333.0	Yes	5507.0MHz, -64.0dBm	Hop sequence: 5518, 5448, 5685, 5667, 5671, 5675, 5623, 5367, 5316, 5616, 5309, 5551, 5580, 5384, 5618, 5662, 5365, 5306, 5390, 5680, 5584, 5653, 5620, 5558, 5358, 5424, 5696, 5356, 5287, 5535, 5354, 5466, 5704, 5379, 5391, 5296, 5292, 5480, 5657, 5301, 5452, 5722, 5275, 5418, 5434, 5563, 5625, 5588, 5326, 5500, 5632, 5718, 5548, 5646, 5690, 5330, 5504, 5295, 5349, 5351, 5389, 5299, 5458, 5432, 5288, 5460, 5439, 5697, 5476, 5436, 5724, 5506, 5256, 5257, 5374, 5684, 5720, 5564, 5355, 5721, 5706, 5423, 5687, 5415, 5631, 5522, 5545, 5373, 5554, 5294, 5473, 5347, 5388, 5310, 5645, 5401, 5383, 5417, 5621, 5503 (6 hits)
17	9	1.0	333.0	Yes	5508.0MHz, -64.0dBm	Hop sequence: 5320, 5435, 5690, 5590, 5463, 5586, 5428, 5309, 5510, 5601, 5367, 5720, 5567, 5571, 5426, 5687, 5639, 5554, 5453, 5524, 5338, 5664, 5399, 5459, 5369, 5335, 5345, 5354, 5604, 5657, 5396, 5513, 5693, 5491, 5622, 5458, 5315, 5712, 5312, 5292, 5517, 5331, 5578, 5275, 5370, 5480, 5503, 5411, 5287, 5392, 5592, 5266, 5566, 5376, 5521, 5661, 5644, 5483, 5519, 5711, 5608, 5583, 5518, 5674, 5258, 5621, 5462, 5456, 5339, 5615, 5655, 5719, 5708, 5688, 5404, 5443, 5633, 5382, 5439, 5285, 5527, 5648, 5297, 5637, 5542, 5444, 5612,

Table 42 - FCC frequency hopping radar (Type 6) Results N40						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5631, 5606, 5548, 5311, 5329, 5580, 5365, 5487, 5371, 5385, 5502, 5659, 5422 (9 hits)
18	9	1.0	333.0	Yes	5509.0MHz, -64.0dBm	Hop sequence: 5567, 5396, 5490, 5595, 5385, 5440, 5456, 5710, 5424, 5485, 5266, 5459, 5358, 5609, 5292, 5539, 5560, 5494, 5618, 5616, 5486, 5294, 5415, 5438, 5674, 5586, 5509, 5422, 5558, 5395, 5525, 5480, 5498, 5483, 5524, 5360, 5556, 5342, 5470, 5580, 5253, 5642, 5251, 5314, 5543, 5372, 5541, 5596, 5615, 5637, 5328, 5698, 5533, 5357, 5517, 5472, 5625, 5713, 5660, 5503, 5264, 5376, 5563, 5429, 5666, 5387, 5718, 5610, 5449, 5716, 5457, 5519, 5297, 5271, 5365, 5340, 5478, 5566, 5268, 5695, 5330, 5437, 5692, 5466, 5413, 5675, 5531, 5452, 5719, 5282, 5488, 5654, 5554, 5726, 5465, 5303, 5685, 5285, 5714, 5574 (8 hits)
19	9	1.0	333.0	Yes	5510.0MHz, -64.0dBm	Hop sequence: 5721, 5717, 5326, 5311, 5387, 5695, 5291, 5400, 5552, 5470, 5467, 5389, 5257, 5594, 5574, 5449, 5685, 5340, 5704, 5638, 5293, 5278, 5398, 5640, 5631, 5628, 5339, 5686, 5635, 5513, 5424, 5680, 5401, 5301, 5359, 5611, 5481, 5577, 5502, 5627, 5276, 5529, 5515, 5378, 5541, 5666, 5388, 5397, 5545, 5654, 5266, 5601, 5367, 5528, 5590, 5390, 5306, 5303, 5364, 5317, 5442, 5435, 5538, 5394, 5445, 5699, 5687, 5431, 5665, 5465, 5341, 5318, 5272, 5274, 5349, 5342, 5610, 5307, 5584, 5725, 5521, 5466, 5509, 5393, 5300, 5490, 5363, 5438, 5604, 5561, 5373, 5689, 5691, 5609, 5718, 5425, 5264, 5669, 5448, 5632 (5 hits)
20	9	1.0	333.0	Yes	5511.0MHz, -64.0dBm	Hop sequence: 5382, 5545, 5566, 5375, 5591, 5645, 5464, 5258, 5574, 5519, 5720, 5512, 5344, 5472, 5497, 5569, 5579, 5473, 5313, 5342, 5411, 5563, 5265, 5532, 5659, 5420, 5298, 5606, 5617, 5291, 5354, 5371, 5336, 5406, 5404, 5536, 5273, 5523, 5263, 5436, 5562, 5520, 5649, 5683, 5724, 5715, 5392, 5282, 5629, 5703, 5251, 5486, 5622, 5260, 5463, 5447, 5325, 5309, 5264, 5640, 5663, 5580, 5432, 5361, 5352, 5633, 5718, 5333, 5669, 5680, 5306, 5509, 5553, 5644, 5600, 5276, 5428, 5414, 5417, 5294, 5460, 5594, 5301, 5691, 5661, 5416, 5621, 5364, 5300, 5395, 5713, 5443, 5310, 5511, 5454, 5612, 5692, 5450, 5679, 5287 (7 hits)
21	9	1.0	333.0	Yes	5512.0MHz, -64.0dBm	Hop sequence: 5427, 5455, 5335, 5607, 5361, 5255, 5471, 5605, 5451, 5586, 5501, 5308, 5273, 5411, 5355, 5400, 5517, 5694, 5573, 5310, 5382,

Table 42 - FCC frequency hopping radar (Type 6) Results N40						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5452, 5253, 5564, 5289, 5431, 5670, 5394, 5563, 5458, 5574, 5306, 5442, 5649, 5489, 5473, 5699, 5444, 5321, 5620, 5367, 5672, 5627, 5348, 5559, 5399, 5719, 5474, 5640, 5631, 5434, 5712, 5403, 5381, 5429, 5706, 5575, 5302, 5617, 5294, 5562, 5500, 5282, 5422, 5351, 5481, 5536, 5516, 5629, 5638, 5669, 5556, 5717, 5611, 5358, 5433, 5468, 5432, 5698, 5687, 5608, 5524, 5612, 5293, 5313, 5401, 5469, 5456, 5702, 5665, 5565, 5329, 5588, 5550, 5616, 5683, 5666, 5673, 5537, 5301 (5 hits)
22	9	1.0	333.0	Yes	5513.0MHz, -64.0dBm	Hop sequence: 5544, 5654, 5660, 5442, 5558, 5417, 5472, 5427, 5401, 5267, 5599, 5343, 5395, 5523, 5512, 5573, 5420, 5533, 5650, 5461, 5475, 5536, 5549, 5263, 5710, 5563, 5606, 5291, 5278, 5596, 5522, 5339, 5725, 5625, 5434, 5509, 5391, 5484, 5601, 5348, 5683, 5392, 5271, 5268, 5674, 5500, 5696, 5657, 5388, 5685, 5607, 5686, 5408, 5488, 5469, 5259, 5624, 5679, 5644, 5556, 5457, 5569, 5521, 5662, 5347, 5477, 5287, 5602, 5640, 5722, 5503, 5707, 5718, 5453, 5397, 5493, 5466, 5334, 5483, 5605, 5281, 5514, 5421, 5615, 5320, 5439, 5616, 5363, 5713, 5567, 5655, 5335, 5314, 5490, 5645, 5300, 5317, 5508, 5351, 5639 (9 hits)
23	9	1.0	333.0	Yes	5514.0MHz, -64.0dBm	Hop sequence: 5399, 5688, 5333, 5701, 5413, 5300, 5691, 5497, 5251, 5572, 5471, 5360, 5510, 5382, 5346, 5316, 5613, 5384, 5320, 5459, 5625, 5718, 5368, 5312, 5711, 5470, 5393, 5619, 5335, 5666, 5252, 5585, 5268, 5681, 5600, 5575, 5602, 5606, 5427, 5660, 5636, 5511, 5559, 5523, 5434, 5551, 5376, 5302, 5454, 5637, 5295, 5355, 5473, 5716, 5327, 5380, 5630, 5334, 5423, 5325, 5669, 5254, 5566, 5498, 5604, 5723, 5580, 5586, 5455, 5514, 5270, 5608, 5292, 5309, 5678, 5629, 5706, 5651, 5623, 5546, 5484, 5402, 5332, 5482, 5542, 5721, 5522, 5638, 5477, 5576, 5571, 5676, 5322, 5587, 5499, 5633, 5642, 5296, 5323, 5556 (8 hits)
24	9	1.0	333.0	Yes	5515.0MHz, -64.0dBm	Hop sequence: 5328, 5501, 5723, 5289, 5253, 5568, 5375, 5283, 5577, 5443, 5692, 5504, 5385, 5519, 5481, 5606, 5720, 5377, 5538, 5361, 5299, 5372, 5634, 5301, 5566, 5582, 5573, 5620, 5317, 5268, 5325, 5464, 5251, 5545, 5629, 5584, 5516, 5671, 5383, 5717, 5706, 5379, 5684, 5342, 5374, 5562, 5506, 5332, 5485, 5297, 5624, 5387, 5416, 5419, 5256, 5575, 5288, 5592, 5318, 5348, 5660, 5662, 5604,

Table 42 - FCC frequency hopping radar (Type 6) Results N40						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5718, 5479, 5589, 5638, 5597, 5560, 5343, 5521, 5683, 5300, 5609, 5689, 5576, 5254, 5340, 5494, 5672, 5429, 5491, 5724, 5439, 5537, 5716, 5518, 5431, 5725, 5722, 5558, 5687, 5291, 5391, 5467, 5483, 5540, 5347, 5586, 5402 (8 hits)
25	9	1.0	333.0	Yes	5516.0MHz, -64.0dBm	Hop sequence: 5452, 5595, 5711, 5556, 5405, 5275, 5566, 5508, 5490, 5513, 5387, 5572, 5537, 5722, 5354, 5612, 5682, 5317, 5533, 5639, 5551, 5292, 5613, 5560, 5641, 5550, 5427, 5285, 5501, 5305, 5260, 5524, 5634, 5699, 5386, 5324, 5674, 5528, 5673, 5522, 5463, 5297, 5453, 5547, 5440, 5320, 5277, 5443, 5442, 5316, 5400, 5587, 5496, 5289, 5295, 5570, 5606, 5308, 5365, 5487, 5696, 5540, 5377, 5678, 5559, 5378, 5643, 5498, 5544, 5655, 5269, 5693, 5705, 5328, 5434, 5450, 5520, 5472, 5525, 5310, 5280, 5723, 5346, 5676, 5546, 5449, 5660, 5597, 5456, 5477, 5670, 5416, 5296, 5351, 5319, 5686, 5336, 5592, 5531, 5259 (9 hits)
26	9	1.0	333.0	Yes	5517.0MHz, -64.0dBm	Hop sequence: 5306, 5621, 5628, 5680, 5469, 5546, 5602, 5353, 5606, 5632, 5527, 5409, 5347, 5303, 5596, 5641, 5517, 5630, 5318, 5636, 5662, 5371, 5284, 5408, 5291, 5550, 5451, 5508, 5663, 5419, 5300, 5290, 5478, 5421, 5315, 5548, 5323, 5552, 5542, 5723, 5493, 5634, 5345, 5714, 5551, 5443, 5426, 5295, 5344, 5429, 5535, 5688, 5612, 5465, 5354, 5263, 5684, 5416, 5500, 5281, 5633, 5270, 5372, 5660, 5553, 5458, 5712, 5442, 5613, 5544, 5262, 5719, 5618, 5509, 5702, 5654, 5264, 5362, 5573, 5348, 5381, 5484, 5692, 5519, 5696, 5352, 5311, 5472, 5379, 5579, 5391, 5724, 5491, 5610, 5286, 5650, 5445, 5512, 5366, 5614 (6 hits)
27	9	1.0	333.0	Yes	5518.0MHz, -64.0dBm	Hop sequence: 5587, 5477, 5618, 5680, 5711, 5721, 5489, 5534, 5354, 5715, 5431, 5549, 5573, 5285, 5561, 5593, 5707, 5290, 5596, 5705, 5481, 5420, 5391, 5433, 5699, 5483, 5679, 5486, 5436, 5630, 5490, 5572, 5635, 5478, 5330, 5466, 5409, 5430, 5415, 5491, 5605, 5318, 5668, 5378, 5304, 5388, 5704, 5554, 5465, 5553, 5469, 5288, 5344, 5447, 5312, 5323, 5361, 5684, 5583, 5448, 5332, 5355, 5393, 5343, 5252, 5492, 5500, 5381, 5540, 5685, 5385, 5250, 5518, 5338, 5411, 5557, 5662, 5284, 5418, 5289, 5548, 5253, 5722, 5309, 5262, 5364, 5449, 5523, 5688, 5471, 5368, 5687, 5461, 5663, 5660, 5501, 5503, 5656, 5695, 5568 (5 hits)

Table 42 - FCC frequency hopping radar (Type 6) Results N40						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
28	9	1.0	333.0	Yes	5519.0MHz, -64.0dBm	Hop sequence: 5262, 5335, 5329, 5311, 5477, 5599, 5590, 5571, 5323, 5391, 5708, 5579, 5497, 5676, 5382, 5508, 5534, 5660, 5627, 5648, 5269, 5549, 5691, 5537, 5710, 5637, 5705, 5309, 5539, 5291, 5465, 5429, 5711, 5668, 5443, 5564, 5569, 5380, 5553, 5390, 5624, 5533, 5348, 5331, 5715, 5473, 5403, 5474, 5412, 5545, 5433, 5647, 5446, 5690, 5409, 5258, 5617, 5398, 5603, 5675, 5688, 5326, 5319, 5717, 5689, 5544, 5509, 5595, 5481, 5493, 5525, 5568, 5498, 5494, 5393, 5622, 5616, 5541, 5273, 5669, 5435, 5310, 5437, 5482, 5716, 5723, 5484, 5684, 5662, 5492, 5368, 5649, 5337, 5695, 5374, 5653, 5313, 5725, 5365, 5659 (6 hits)
29	9	1.0	333.0	Yes	5520.0MHz, -64.0dBm	Hop sequence: 5614, 5524, 5358, 5660, 5715, 5381, 5486, 5441, 5703, 5564, 5606, 5531, 5695, 5603, 5707, 5578, 5583, 5304, 5487, 5496, 5276, 5266, 5288, 5547, 5353, 5503, 5491, 5344, 5455, 5709, 5589, 5533, 5665, 5452, 5692, 5348, 5597, 5377, 5490, 5309, 5386, 5725, 5374, 5502, 5694, 5537, 5311, 5572, 5416, 5673, 5252, 5622, 5708, 5349, 5445, 5685, 5498, 5253, 5586, 5690, 5467, 5281, 5713, 5355, 5567, 5302, 5325, 5545, 5601, 5644, 5590, 5394, 5716, 5376, 5279, 5720, 5500, 5646, 5476, 5343, 5552, 5300, 5645, 5338, 5517, 5363, 5448, 5450, 5592, 5268, 5475, 5693, 5588, 5721, 5275, 5396, 5260, 5560, 5273, 5408 (7 hits)
30	9	1.0	333.0	Yes	5521.0MHz, -64.0dBm	Hop sequence: 5666, 5547, 5340, 5377, 5325, 5638, 5480, 5299, 5375, 5582, 5362, 5594, 5591, 5408, 5699, 5541, 5379, 5694, 5258, 5322, 5315, 5716, 5558, 5406, 5624, 5386, 5442, 5370, 5359, 5454, 5656, 5263, 5548, 5308, 5698, 5409, 5350, 5427, 5670, 5576, 5410, 5457, 5704, 5252, 5369, 5569, 5416, 5590, 5527, 5499, 5695, 5417, 5421, 5462, 5254, 5712, 5367, 5538, 5425, 5664, 5396, 5577, 5678, 5560, 5281, 5500, 5438, 5289, 5626, 5627, 5673, 5284, 5468, 5520, 5592, 5688, 5571, 5304, 5639, 5441, 5655, 5610, 5411, 5357, 5567, 5653, 5349, 5279, 5507, 5711, 5574, 5280, 5351, 5691, 5474, 5599, 5319, 5654, 5287, 5546 (4 hits)
31	9	1.0	333.0	Yes	5522.0MHz, -64.0dBm	Hop sequence: 5608, 5712, 5440, 5445, 5472, 5393, 5647, 5417, 5489, 5286, 5528, 5674, 5400, 5322, 5685, 5552, 5369, 5586, 5694, 5616, 5667, 5723, 5687, 5700, 5378, 5485, 5439, 5389, 5416, 5387, 5328, 5404, 5507, 5367, 5257, 5676, 5376, 5553, 5359,

Table 42 - FCC frequency hopping radar (Type 6) Results N40						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5488, 5344, 5501, 5461, 5494, 5374, 5332, 5567, 5539, 5536, 5484, 5697, 5577, 5689, 5525, 5350, 5579, 5272, 5677, 5672, 5276, 5299, 5337, 5377, 5258, 5282, 5584, 5662, 5580, 5614, 5454, 5526, 5517, 5624, 5607, 5664, 5398, 5318, 5293, 5641, 5279, 5351, 5621, 5657, 5399, 5529, 5406, 5716, 5510, 5522, 5516, 5688, 5433, 5595, 5493, 5250, 5302, 5598, 5421, 5693, 5717 (9 hits)
32	9	1.0	333.0	Yes	5523.0MHz, -64.0dBm	Hop sequence: 5694, 5539, 5526, 5596, 5321, 5324, 5374, 5557, 5428, 5309, 5412, 5558, 5576, 5393, 5518, 5593, 5349, 5372, 5463, 5631, 5379, 5382, 5254, 5331, 5289, 5564, 5296, 5719, 5320, 5491, 5344, 5258, 5471, 5431, 5348, 5301, 5297, 5550, 5401, 5417, 5716, 5651, 5532, 5632, 5421, 5445, 5277, 5446, 5606, 5717, 5725, 5291, 5612, 5430, 5261, 5535, 5472, 5489, 5283, 5529, 5522, 5566, 5475, 5721, 5684, 5310, 5366, 5462, 5373, 5595, 5591, 5490, 5414, 5265, 5420, 5570, 5440, 5404, 5655, 5513, 5260, 5614, 5390, 5515, 5678, 5362, 5253, 5619, 5633, 5422, 5441, 5325, 5667, 5555, 5652, 5346, 5470, 5660, 5307, 5509 (6 hits)
33	9	1.0	333.0	Yes	5524.0MHz, -64.0dBm	Hop sequence: 5591, 5456, 5365, 5705, 5548, 5309, 5398, 5678, 5549, 5524, 5551, 5542, 5280, 5538, 5710, 5312, 5403, 5491, 5424, 5278, 5509, 5704, 5521, 5460, 5516, 5396, 5496, 5355, 5680, 5391, 5484, 5657, 5479, 5256, 5427, 5685, 5458, 5537, 5289, 5401, 5617, 5539, 5462, 5307, 5250, 5311, 5501, 5274, 5604, 5629, 5254, 5571, 5470, 5580, 5722, 5411, 5474, 5499, 5699, 5701, 5659, 5472, 5532, 5717, 5619, 5421, 5600, 5407, 5713, 5360, 5302, 5564, 5560, 5621, 5457, 5386, 5694, 5351, 5612, 5525, 5376, 5563, 5476, 5389, 5587, 5517, 5569, 5709, 5543, 5613, 5724, 5653, 5445, 5367, 5272, 5361, 5529, 5554, 5672, 5373 (9 hits)

**Appendix C Test Data Tables and Plots for Channel Closing****FCC PART 15 SUBPART E Channel Closing Measurements**

<b>Table 43 - FCC Part 15 Subpart E Channel Closing Test Results</b>					
Waveform Type	Channel Closing Transmission Time <sup>1</sup>		Channel Move Time		Result
	Measured	Limit	Measured	Limit	
Radar Type 1	1.8ms	60 ms	0.131s	10 s	Pass
Radar Type 5	0ms	60 ms	0s	10 s	Pass

After the final channel closing test the channel was monitored for a further 30 minutes. No transmissions occurred on the channel.

<sup>1</sup> Channel closing time for FCC measurements is the aggregate transmission time starting from 200ms after the end of the radar signal to the completion of the channel move.



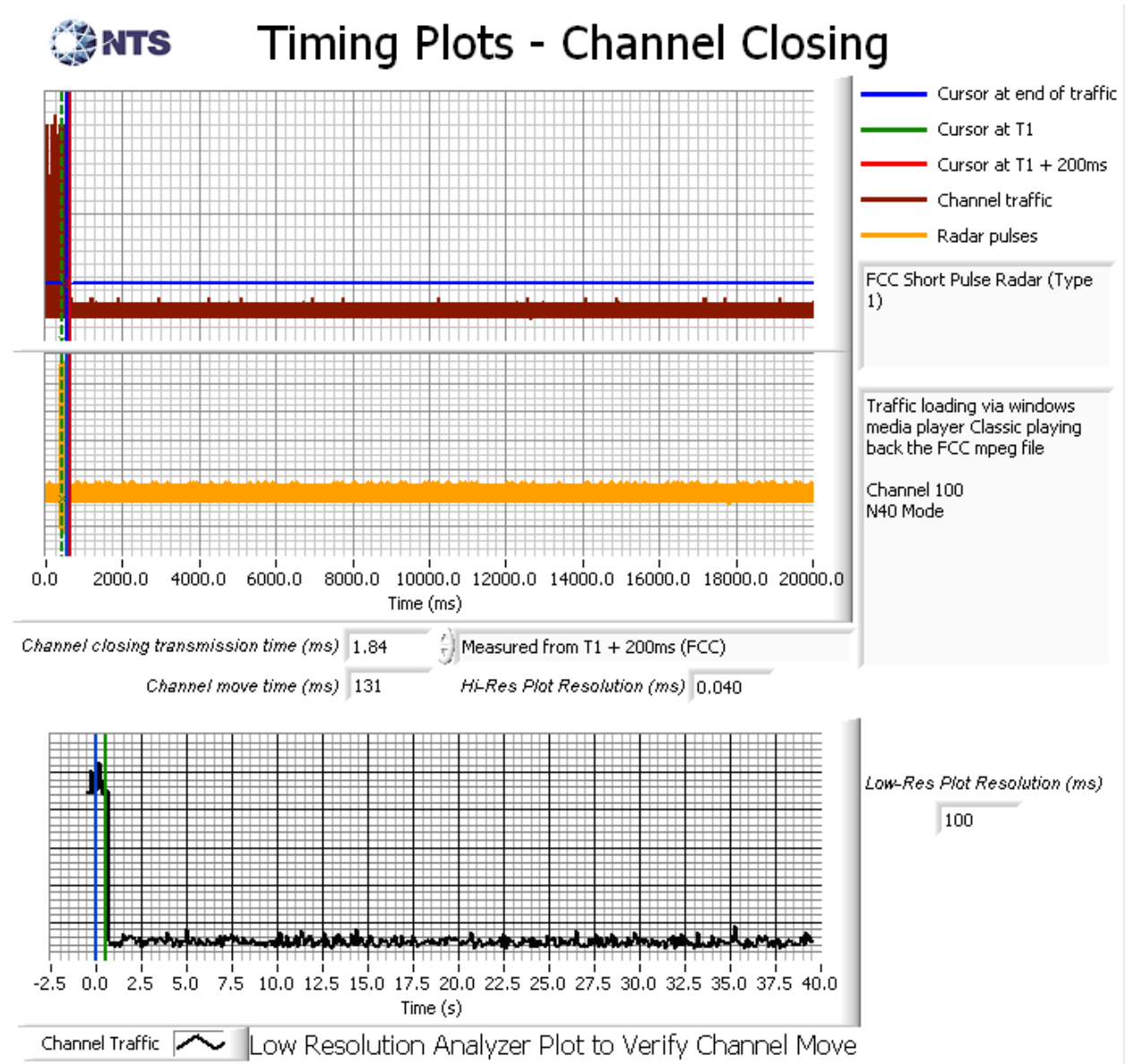


Figure 2 Channel Closing Time and Channel Move Time – 40 second plot Type 1

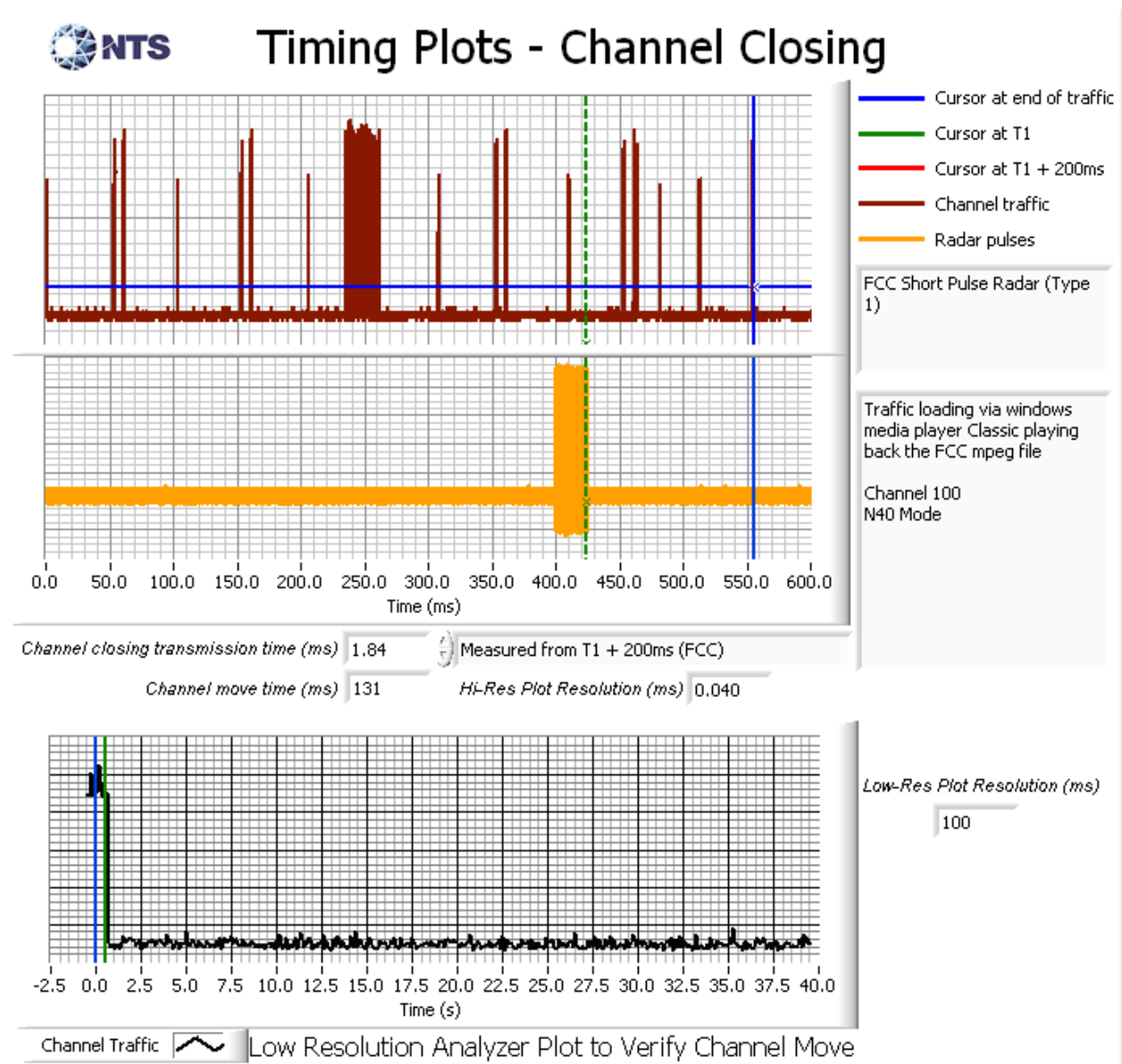


Figure 3 Close-Up of Transmissions Occurring More Than 200ms After The End of Radar Type 1

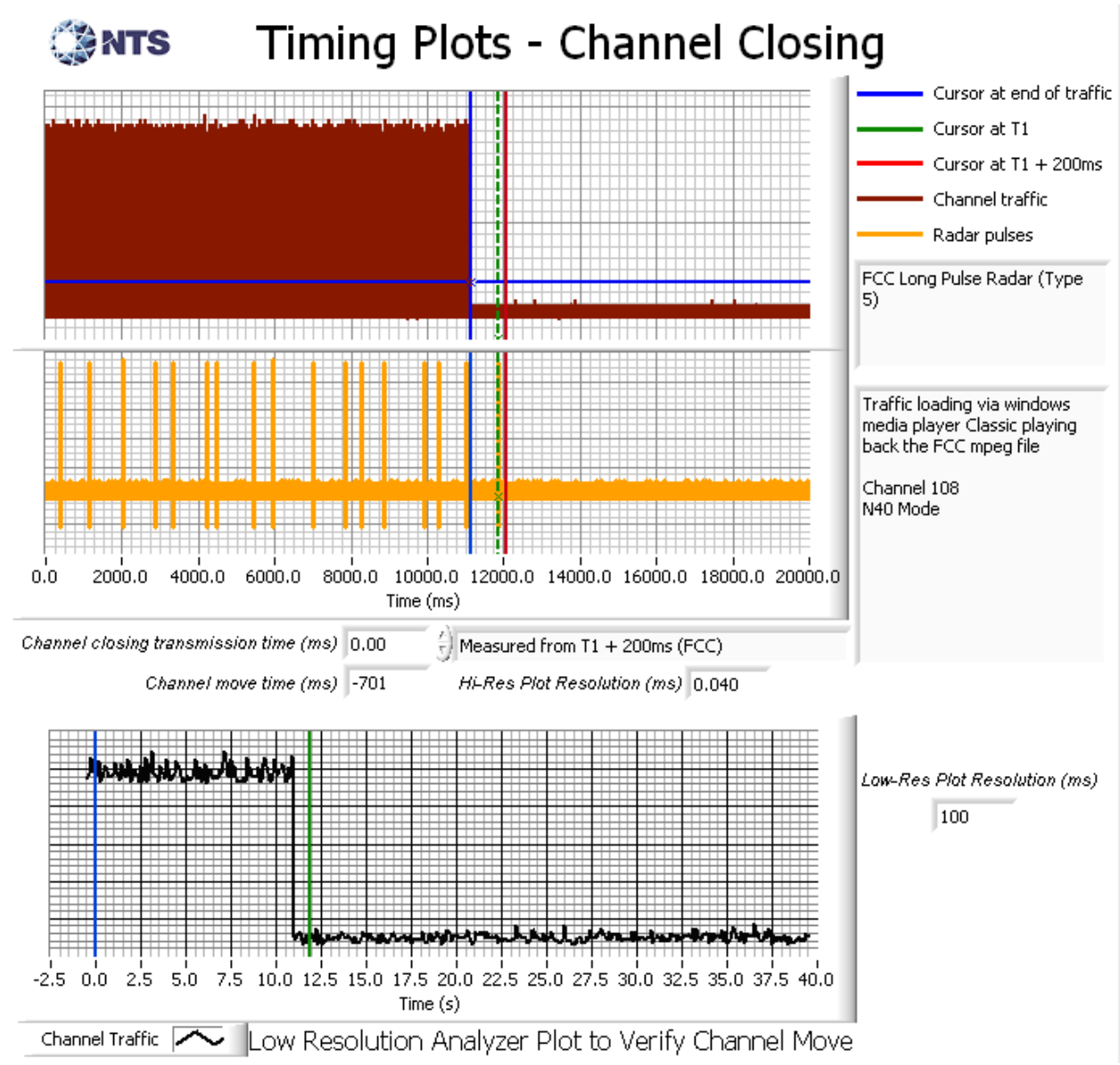


Figure 4 Channel Closing Time and Channel Move Time – 40 second plot Type 5

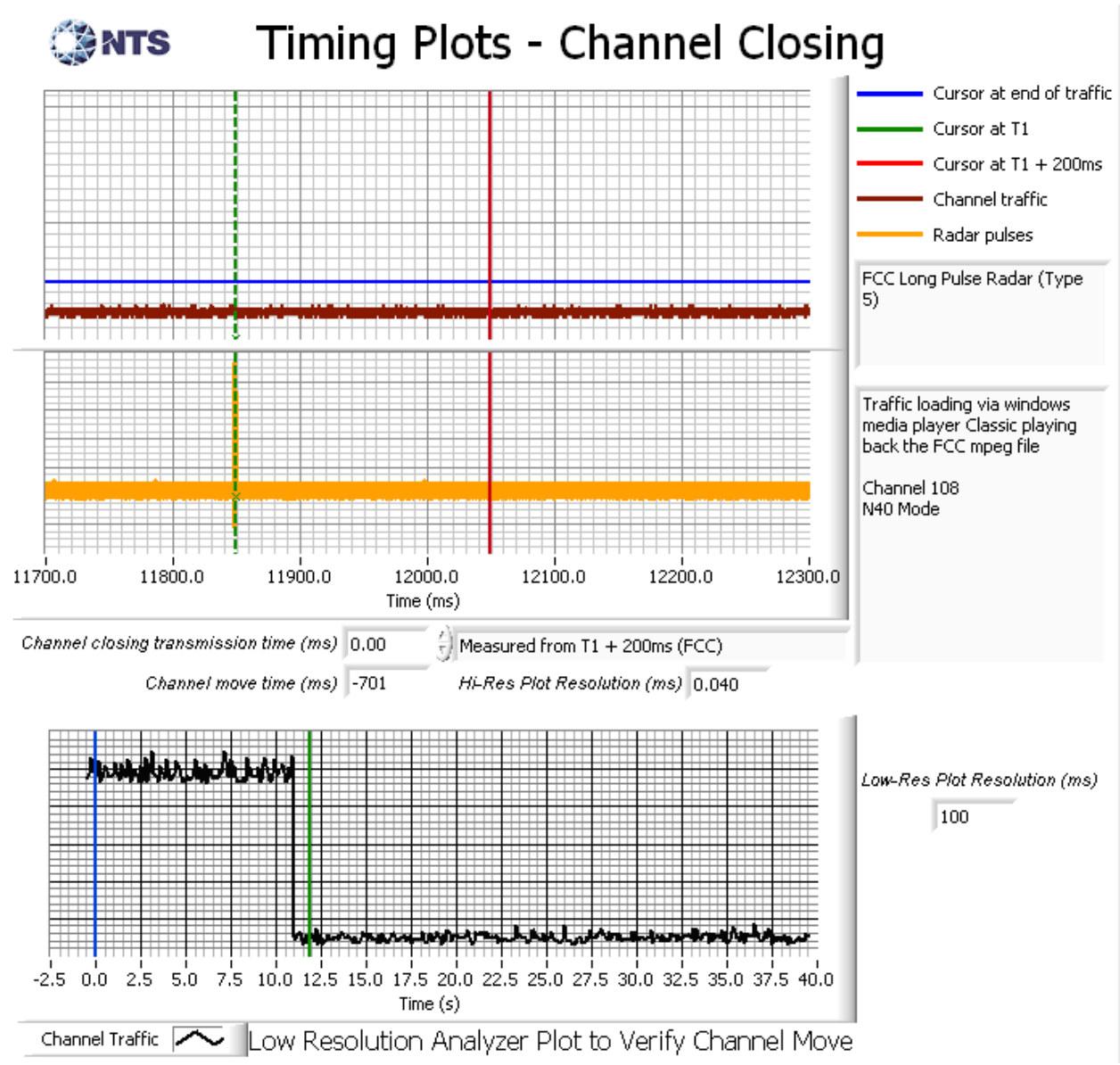
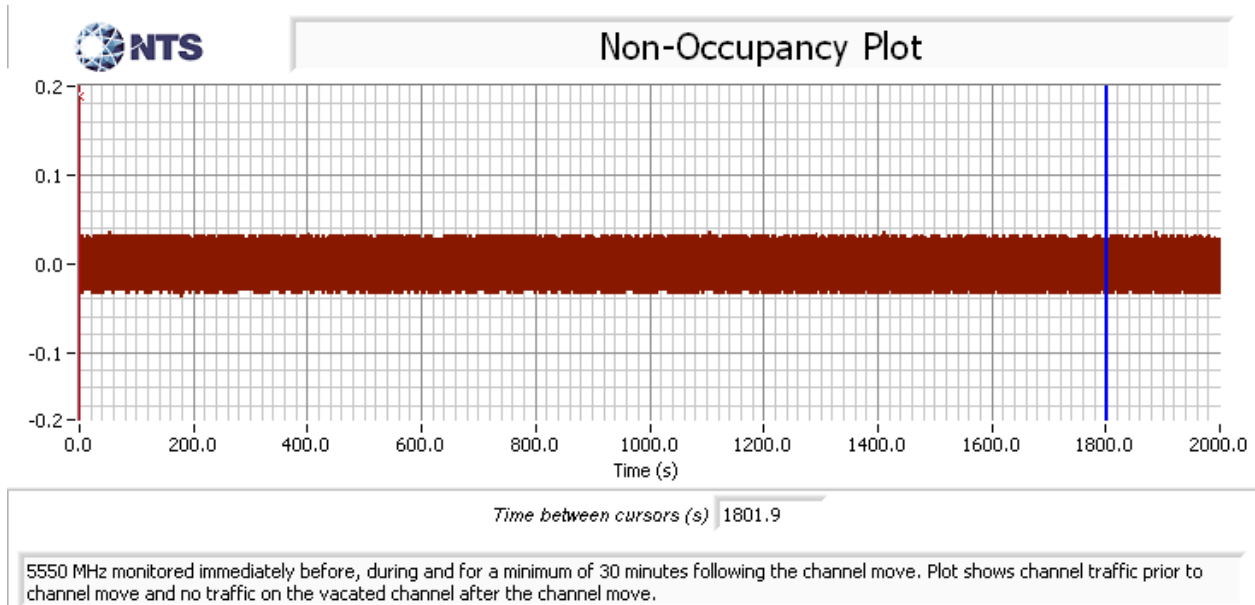


Figure 5 Close-Up of Transmissions Occurring More Than 200ms After The End of Radar Type 5



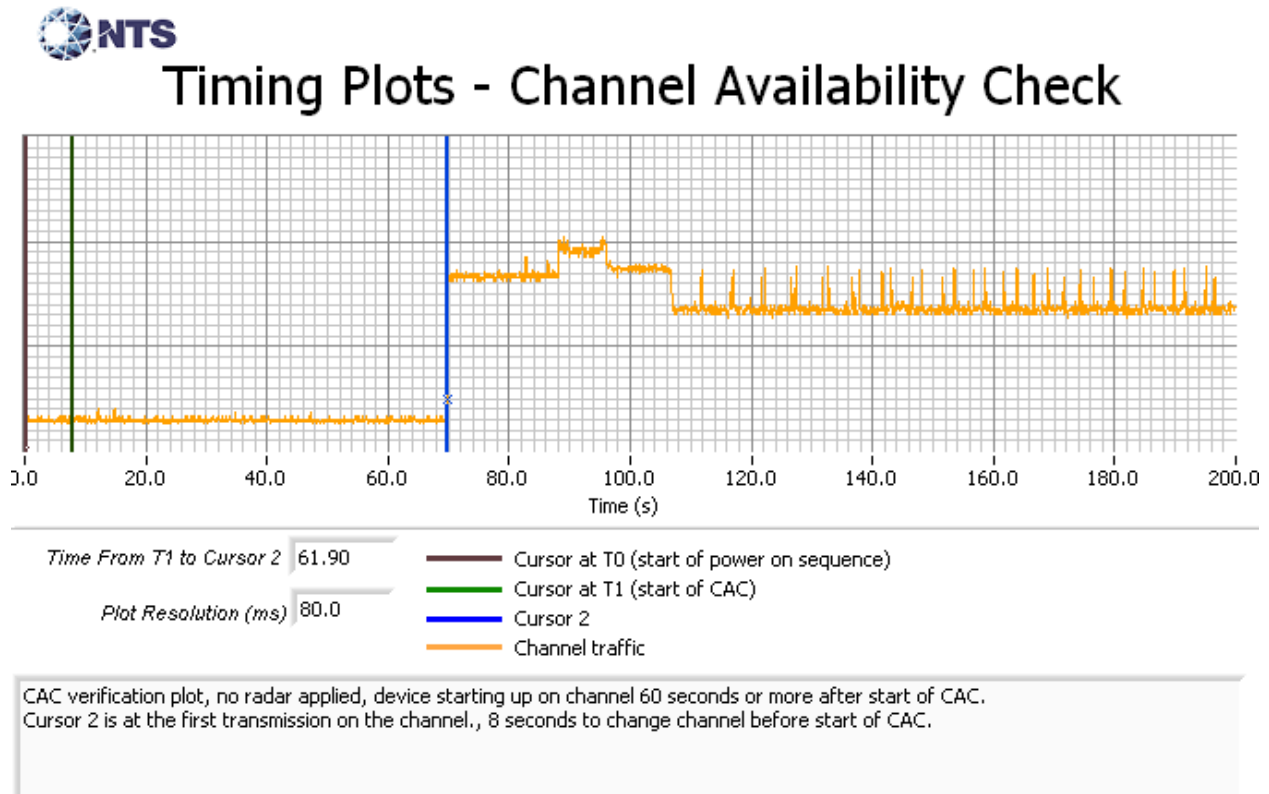
**Figure 6 Radar Channel Non-Occupancy Plot**

The non-occupancy plot was made over a 30-minute time period following the channel move time with the analyzer IF output connected to the scope and tuned to the vacated channel. No transmissions were observed after the channel move had been completed.

**Appendix D Test Data – Channel Availability Check**

5250- 5350 MHz, 5470 – 5725 MHz

The first plot shows the first transmissions on a channel after restarting/power cycling the master device, with no radar applied during the CAC. The start of CAC is assumed to be 60 seconds before the first transmission as indicated by the green cursor line.

**Figure 7 Plot of EUT Start-Up After CAC**

The channel availability check (CAC) was made by applying type 1 radar during either the first 6 seconds or last 6 seconds of the CAC period.

The level of the radar signal applied was -64dBm. Measurements were made on channel 100 (5510 MHz).

The start time is the same for each of the plots and the green cursor is positioned to coincide with the start of the Channel Availability Check period based on the plot taken with no radar applied during the CAC.

The plots show that there were no transmissions on the channel after the radar burst was applied during the CAC, and confirm that the CAC is at least 60 seconds. The description of “Channel Traffic” in the plot legend indicates the transmissions from both the radar system and the EUT on the start-up channel. In all cases only the radar burst is observed. The resolution of the plot is not fine enough to resolve the individual pulses within the burst.



## Timing Plots - Channel Availability Check

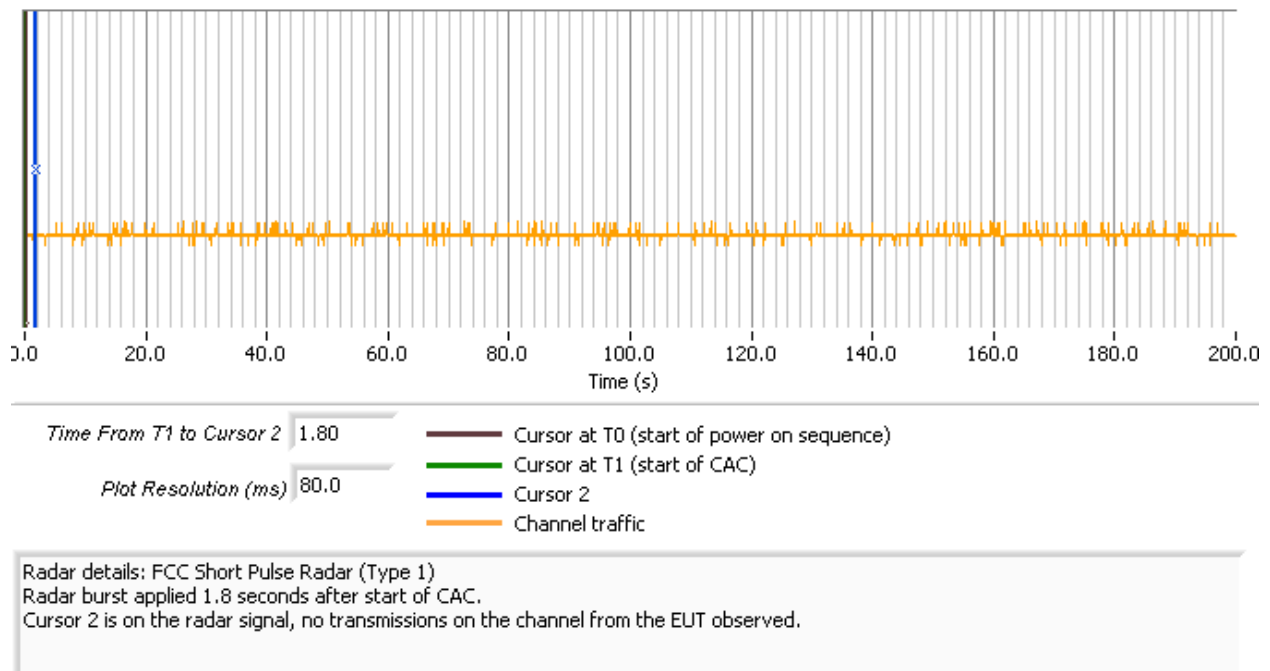


Figure 8 Radar Applied At Start of CAC



## Timing Plots - Channel Availability Check

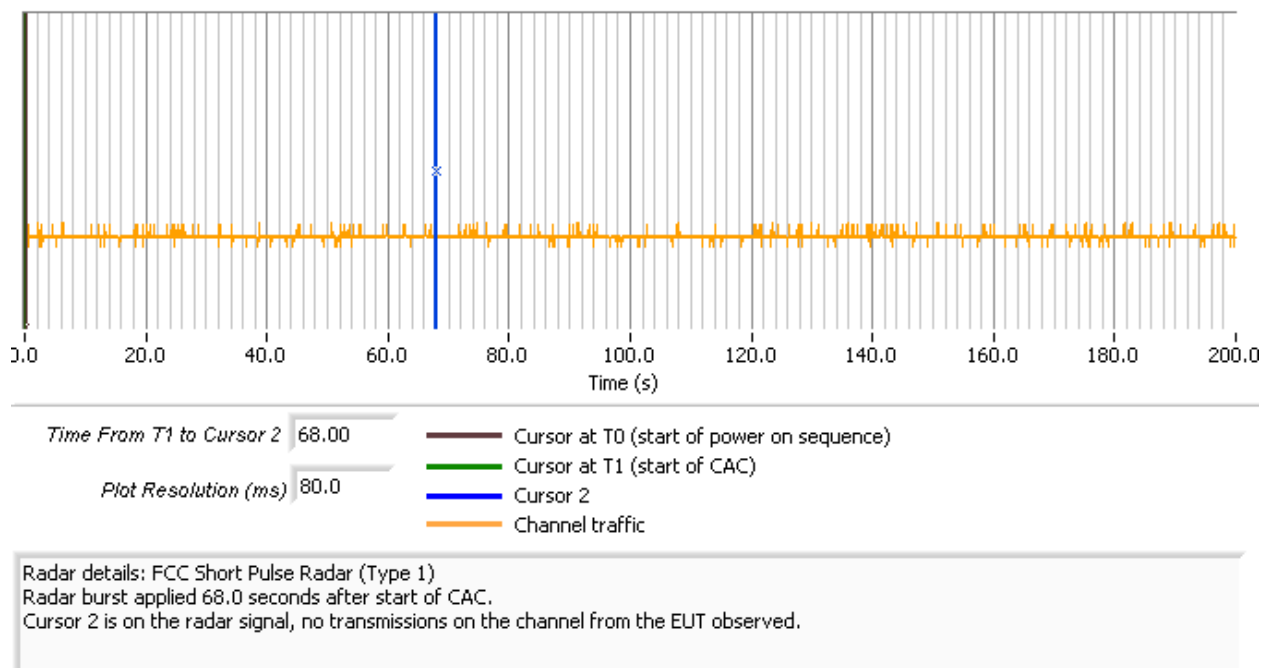


Figure 9 Radar Applied At End of CAC

### *Appendix E Antenna Specification*

Frequency Range: 2.4GHz, 5.8Ghz  
Impedance: 50Ω  
V.S.W.R.:  $\leq 2.0$   
Gain: 5.0dBi,  
Radiation: Omni  
Polarization: Vertical  
Electrical Wave:  $1/4\lambda$ , array



Appendix F Test Configuration Photograph(s)

