

**TEST REPORT**  
**DYNAMIC FREQUENCY SELECTION REQUIREMENTS**  
**OF**

**FCC Part 15 Subpart E (UNII) & RSS-210**

**Xirrus, Inc.**

**Model(s): XS-3500-4, XS-3900-16, XS-3700-8**

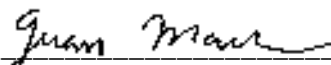
MANUFACTURER: Xirrus, Inc.  
370 North Westlake Blvd, Suite  
Westlake Village, CA 91362

TEST SITE: Elliott Laboratories, Inc.  
684 W. Maude Ave  
Sunnyvale, CA 94086

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AUTHORIZED SIGNATORY: \_\_\_\_\_

  
Juan Martinez  
Sr. EMC Engineer



2016-01

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Page 1 of 69

**TABLE OF CONTENTS**

**COVER PAGE..... 1**

**TABLE OF CONTENTS..... 2**

**LIST OF FIGURES AND TABLES ..... 3**

**SCOPE..... 5**

**OBJECTIVE..... 5**

**STATEMENT OF COMPLIANCE..... 5**

**DEVIATIONS FROM THE STANDARD ..... 5**

**EQUIPMENT UNDER TEST (EUT) DETAILS ..... 6**

    GENERAL.....6

    ENCLOSURE.....7

    MODIFICATIONS.....7

    SUPPORT EQUIPMENT.....7

    EUT INTERFACE PORTS.....7

    EUT OPERATION.....8

**TEST RESULTS..... 9**

    TEST RESULTS SUMMARY – FCC PART 15 & RSS-210, MASTER DEVICE .....9

    MEASUREMENT UNCERTAINTIES.....10

**DFS TEST METHODS..... 11**

    CONDUCTED TEST METHOD.....12

**DFS MEASUREMENT INSTRUMENTATION..... 13**

    RADAR GENERATION SYSTEM.....13

    CHANNEL MONITORING SYSTEM.....14

**DFS MEASUREMENT METHODS..... 15**

    DFS RADAR DETECTION BANDWIDTH .....15

    DFS – CHANNEL CLOSING TRANSMISSION TIME AND CHANNEL MOVE TIME.....15

    DFS CHANNEL AVAILABILITY CHECK TIME.....16

    UNIFORM LOADING.....16

    TRANSMIT POWER CONTROL (TPC).....16

**SAMPLE CALCULATIONS..... 17**

    DETECTION PROBABILITY / SUCCESS RATE.....17

    THRESHOLD LEVEL.....17

**APPENDIX A TEST EQUIPMENT CALIBRATION DATA ..... 18**

**APPENDIX B TEST DATA TABLES FOR RADAR DETECTION PROBABILITY ..... 19**

**APPENDIX C TEST DATA TABLES AND PLOTS FOR CHANNEL CLOSING..... 53**

    FCC PART 15 SUBPART E AND RSS-210 DATA .....53

**APPENDIX D TEST DATA – CHANNEL AVAILABILITY CHECK..... 58**

**APPENDIX E BANDWIDTH DETECTION ..... 62**

**APPENDIX F TEST DATA – UNIFORM LOADING..... 63**

<b>APPENDIX G BANDWIDTH DETECTION.....</b>	<b>67</b>
<b>APPENDIX H ANTENNA SPECIFICATION SHEET .....</b>	<b>68</b>
<b>APPENDIX I TEST CONFIGURATION PHOTOGRAPHS .....</b>	<b>69</b>

### *LIST OF FIGURES AND TABLES*

Table 1 FCC Part 15 Subpart E and RSS-210 Master Device Test Result Summary.....	9
Table 2 Summary of All Results.....	19
Table 3 FCC frequency hopping radar (Type 6) Test Results .....	32
Table 4 FCC Short Pulse Radar (Type 4) Test Results .....	34
Table 5 FCC Short Pulse Radar (Type 3) Test Results .....	35
Table 6 FCC Short Pulse Radar (Type 2) Test Results .....	37
Table 7 FCC Short Pulse Radar (Type 1) Test Results .....	38
Table 8 Long Sequence Waveform Summary .....	40
Table 9 Long Sequence Waveform Trial#1 (Detected).....	40
Table 10 Long Sequence Waveform Trial#2 (Detected).....	40
Table 11 Long Sequence Waveform Trial#3 (Detected).....	41
Table 12 Long Sequence Waveform Trial#4 (Detected).....	41
Table 13 Long Sequence Waveform Trial#5 (Detected).....	41
Table 14 Long Sequence Waveform Trial#6 (Detected).....	42
Table 15 Long Sequence Waveform Trial#7 (Detected).....	43
Table 16 Long Sequence Waveform Trial#8 (Detected).....	43
Table 17 Long Sequence Waveform Trial#9 (Detected).....	43
Table 18 Long Sequence Waveform Trial#10 (Detected).....	44
Table 19 Long Sequence Waveform Trial#11 (Detected).....	44
Table 20 Long Sequence Waveform Trial#12 (Detected).....	45
Table 21 Long Sequence Waveform Trial#13 (Detected).....	45
Table 22 Long Sequence Waveform Trial#14 (Detected).....	46
Table 23 Long Sequence Waveform Trial#15 (Detected).....	46
Table 24 Long Sequence Waveform Trial#16 (Detected).....	47
Table 25 Long Sequence Waveform Trial#17 (Detected).....	47
Table 26 Long Sequence Waveform Trial#18 (Detected).....	47
Table 27 Long Sequence Waveform Trial#19 (Detected).....	48
Table 28 Long Sequence Waveform Trial#20 (Detected).....	48
Table 29 Long Sequence Waveform Trial#21 (Detected).....	48
Table 30 Long Sequence Waveform Trial#22 (Detected).....	49
Table 31 Long Sequence Waveform Trial#23 (Detected).....	49
Table 32 Long Sequence Waveform Trial#24 (Detected).....	49
Table 33 Long Sequence Waveform Trial#25 (Detected).....	50
Table 34 Long Sequence Waveform Trial#26 (Detected).....	50
Table 35 Long Sequence Waveform Trial#27 (Detected).....	50
Table 36 Long Sequence Waveform Trial#28 (Detected).....	51
Table 37 Long Sequence Waveform Trial#29 (Detected).....	51
Table 38 Long Sequence Waveform Trial#30 (Detected).....	52
Table 39 FCC Part 15 Subpart E Channel Closing Test Results .....	53

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Figure 1 Test Configuration for Conducted Measurement Method.....	12
Figure 2 Plot of Initial CAC time (20,000ms window).....	58
Figure 3 Expected Loading For a 19 Channel System (1,000 Trials) .....	64
Figure 4 Expected Loading For a 9 Channel System (1,000 Trials) .....	64
Figure 5 Expected Loading For a 11 Channel System (1,000 Trials) .....	65
Figure 6 Expected Loading For a 19 Channel System (10,000 Trials) .....	65
Figure 7 Expected Loading For a 9 Channel System (10,000 Trials) .....	66
Figure 8 Expected Loading For a 11 Channel System (10,000 Trials) .....	66

## **SCOPE**

The Federal Communications Commission and the European Telecommunications Standards Institute (ETSI) publish standards regarding ElectroMagnetic Compatibility and Radio spectrum Matters for radio-communications devices. Tests have been performed on the Xirrus model XS-3500-4 in accordance with these standards.

- FCC Part 15 Subpart E Unlicensed National Information Infrastructure (U-NII) Devices
- RSS-210, Issue 6 Low-power License-exempt Radiocommunication Devices

Tests were performed in accordance with these standards together with the current published versions of the basic standards referenced therein as outlined in Elliott Laboratories test procedures.

The test results recorded herein are based on a single type test of the Xirrus model XS-3500-4 and therefore apply only to the tested sample. The sample was selected and prepared by Steve Smith of Xirrus, Inc. Testing of the XS-3500-4 was considered representative of the XS-3700-8 and XS-3900-16 as all three models use the same radio boards and the XS-3500-4 uses the lowest gain antenna (3dBi) versus 6dBi for the XS-3700-8 and XS-3900-16.

## **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 Xirrus, Inc. model XS-3500-4 complied with the DFS requirements of:

FCC Part 15.407(h)  
RSS-210, Issue 6

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.

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

The Xirrus, Inc. model XS-3500-4 is a Wi-Fi Access Point for wireless networking and internet access.

The sample was received on February 26, 2007 and tested on March 5, 2007. The EUT consisted of the following component(s):

Manufacturer	Model	Description	Serial Number
Xirrus, Inc.	XS-3500-4	AP master	X1350507005F8

The following marketing models are included in the report and are as follows:

XS-3500 Also sold as: XS4, WFX-3500, WFX-35  
 XS-3700 Also sold as: XS8, WFX-3700, WFX-37  
 XS-3900 Also sold as: XS16, WFX-3900, WFX-39

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

**Operating Modes**

- Master Device  
 Client Device  
 Client Device with In-Service Monitoring

**Antenna Gains / EIRP**

	5250 – 5350 MHz	5470 – 5725 MHz
Lowest Antenna Gain (dBi)	3	3
Highest Antenna Gain (dBi)	6	6
Output Power (dBm)	17	17

- Power can exceed 200mW eirp

**Channel Protocol**

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

**ENCLOSURE**

The EUT enclosure is primarily constructed of molded plastic. It measures approximately 31 cm in diameter by 6 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	R51	Server Laptop	99-MZ551	DoC
Toshiba	PSA60U-0CS01D	Support Laptop	X4051688Q	DoC
<i>IBM</i>	<i>R51</i>	<i>Client Laptop</i>	<i>99-MZ519</i>	<i>DoC</i>

Note1: The italicized device was the client device.

**EUT INTERFACE PORTS**

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

Port	Connected To	Cable(s)		
		Description	Shielded or Unshielded	Length(m)
Console	Toshiba Laptop	Serial	Shielded	.5
Gigbit1	IBM server	Cat5	Unshielded	1
ABG4	DFS equipment	Coaxial	Shielded	.5

#### **EUT OPERATION**

The EUT was operating with the following software.

Master Device: XS3.1

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.



**TEST RESULTS****TEST RESULTS SUMMARY – FCC Part 15 & RSS-210, MASTER DEVICE**

Description	Radar Type	Radar Frequency	Measured Value	Requirement	Test Data	Status
Channel Availability Check (CAC) Time	Type 1	5320 & 5600 MHz	69s	$\geq 60s$	Appendix D	Pass
CAC Detection Threshold	Type 1	5320 & 5600 MHz	-60dBm	-64dBm (see note 2)	Appendix D	Pass
In-Service Monitoring Detection Threshold	Type 1 Type 2 Type 3 Type 4 Type 5 Type 6	5320 MHz	-60dBm -60dBm -60dBm -60dBm -60dBm -60dBm	-64dBm (see note 2)	Appendix C	Pass
Channel closing transmission time	Type 1 Type 5	5320 MHz	0 ms 0 ms	$\leq 260ms$	Appendix C	Pass
Channel move time	Type 1 Type 5	5320 MHz	.194s 0s	$\leq 10s$	Appendix C	Pass
Non-occupancy period	N/A	5320 MHz	30 min	> 30 minutes	Appendix C	Pass
Bandwidth Detection		5320 MHz	19 MHz	Minimum 16 MHz	Appendix E	Pass
5600 – 5650 MHz CAC		5600 MHz	-60dBm	10 min continuous monitoring (Note1)	-	Pass
Uniform Loading		-	-	Uniform Loading	Refer to operational description	-

**Table 1 FCC Part 15 Subpart E and RSS-210 Master Device Test Result Summary**

**Note 1:** Per RSS-210 Section (A9.4)(2)(ii) **Additional requirements for the band 5600-5650 MHz:** devices operating in this band shall have a channel availability check time of 60 seconds for the first time the device is turned on. After that, if a channel has been flagged as containing a radar signal, either by a channel availability check or in-service monitoring, a 10-minute continuous monitoring of the flagged channel shall be required prior to use of that channel. Otherwise, other appropriate method such as channel exclusion is required.

**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

## DFS TEST METHODS

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  $G$  (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:

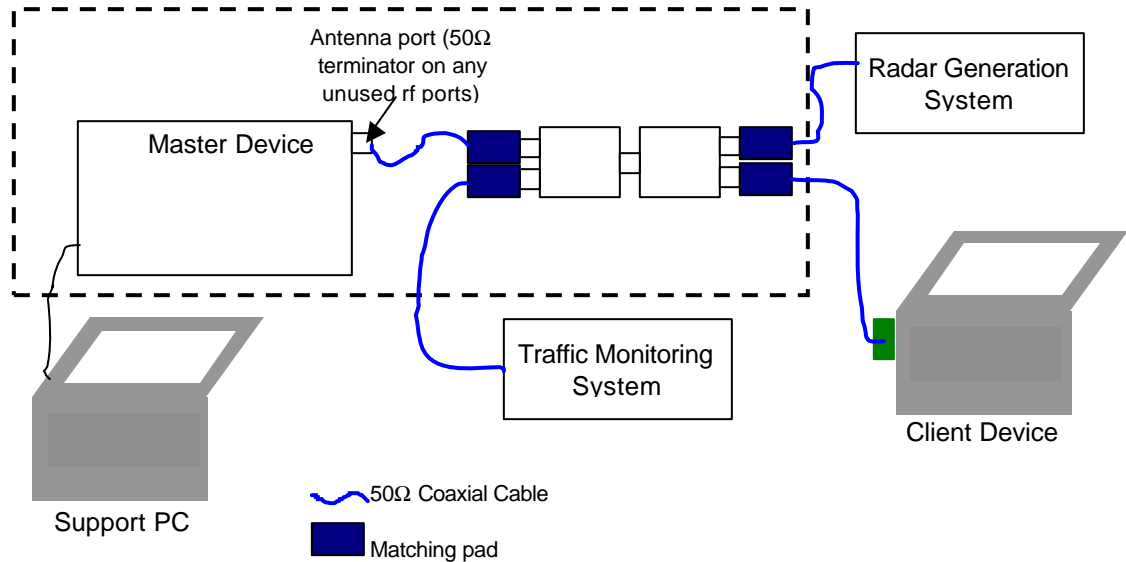
$$\text{Applied level (dBm)} = R - G_{REF} + L$$

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.

**CONDUCTED TEST METHOD**

The combination of master and slave devices is located in an anechoic chamber. The simulated radar waveform is coupled into the unit performing the radar detection (radar detection device, RDD) via couplers and attenuators.



**Figure 1 Test Configuration for Conducted 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 signal level is verified by measuring the CW signal level at the coupling point to the RDD antenna port. The radar signal level is calculated from the measured level, R (dBm) and the lowest gain antenna assembly intended for use with the RDD, GRDD (dBi):

$$\text{Applied level (dBm)} = R - \text{GRDD}$$

If both master and client devices have radar detection capability then 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 Elliott 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.

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 on of the radar waveforms (in the FCC case, the selection is limited to the short duration burst waveforms) and applying radar pulses at offset 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 radar burst 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 two ways:

FCC – 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 AVAILABILITY CHECK TIME**

It is preferred that the EUT report when it starts the radar channel availability check. In this case a single burst of one radar type is applied within 6 seconds of observing the start of the channel availability check and it is verified that the device does not use the channel. The test is repeated by applying a radar burst no sooner than 54 seconds and no later than 60 seconds after the start of the 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.

#### **UNIFORM LOADING**

Compliance with the channel loading requirement, where appropriate (i.e. when channel selection is not determined under control of the network), is demonstrated through the manufacturer's statement(s).

#### **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>
Hewlett Packard	EMC Spectrum Analyzer, 9 kHz - 6.5 GHz	8595EM	780	05-Sep-07
Tektronix	1 GHz Oscilloscope	TDS5104	1435	10-Apr-07
EMCO	Antenna, Horn, 1-18 GHz	3117	1662	07-Apr-07
Agilent	Vector Signal Generator (250kHz - 20GHz)	E8267C	1877	23-Nov-07

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

Waveform Name	Success Rate	Number of Trials
FCC frequency hopping radar (Type 6)	100.0 %	40
FCC Short Pulse Radar (Type 4)	86.7 %	30
FCC Short Pulse Radar (Type 3)	100.0 %	30
FCC Short Pulse Radar (Type 2)	96.7 %	30
FCC Short Pulse Radar (Type 1)	90.0 %	30
Long Sequence	100.0 %	30

**Table 2 Summary of All Results**

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
0	9	1.0	333.0	Yes	5312.0MHz, -60.0dBm	5637, 5579, 5266, 5545, 5678, 5565, 5658, 5629, 5341, 5639, 5351, 5499, 5475, 5259, 5702, 5418, 5495, 5432, 5587, 5688, 5695, 5715, 5406, 5451, 5278, 5288, 5296, 5529, 5324, 5393, 5674, 5273, 5440, 5714, 5386, 5614, 5608, 5635, 5438, 5402, 5364, 5283, 5566, 5392, 5660, 5449, 5400, 5320, 5348, 5467, 5408, 5366, 5651, 5624, 5652, 5267, 5619, 5279, 5286, 5643, 5501, 5346, 5458, 5331, 5680, 5537, 5430, 5686, 5503, 5620, 5474, 5295, 5710, 5391, 5592, 5521, 5487, 5493, 5447, 5403, 5711, 5380, 5407, 5659, 5657, 5601, 5575, 5330, 5490, 5524, 5362, 5290, 5258, 5717, 5613, 5372, 5448, 5515, 5677, 5275 (10 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
1	9	1.0	333.0	Yes	5313.0MHz, -60.0dBm	5665, 5566, 5589, 5636, 5655, 5556, 5422, 5376, 5324, 5255, 5306, 5658, 5662, 5504, 5614, 5712, 5537, 5459, 5506, 5631, 5340, 5541, 5280, 5304, 5511, 5328, 5649, 5646, 5467, 5439, 5580, 5442, 5560, 5271, 5608, 5652, 5625, 5601, 5329, 5440, 5479, 5468, 5516, 5317, 5577, 5508, 5603, 5661, 5326, 5429, 5356, 5574, 5630, 5430, 5473, 5289, 5548, 5664, 5267, 5377, 5597, 5607, 5624, 5617, 5482, 5447, 5526, 5644, 5259, 5532, 5309, 5503, 5494, 5460, 5353, 5711, 5323, 5572, 5409, 5313, 5690, 5252, 5643, 5295, 5677, 5533, 5388, 5343, 5563, 5486, 5250, 5483, 5554, 5581, 5718, 5270, 5359, 5544, 5438, 5545 (13 hits)
2	9	1.0	333.0	Yes	5314.0MHz, -60.0dBm	5676, 5449, 5594, 5481, 5637, 5614, 5484, 5596, 5327, 5377, 5398, 5502, 5598, 5323, 5713, 5482, 5381, 5664, 5444, 5647, 5334, 5513, 5571, 5503, 5431, 5701, 5433, 5525, 5300, 5597, 5619, 5395, 5652, 5388, 5643, 5328, 5617, 5581, 5697, 5568, 5438, 5696, 5412, 5311, 5299, 5635, 5317, 5538, 5335, 5352, 5546, 5600, 5313, 5307, 5282, 5289, 5445, 5472, 5333, 5580, 5321, 5471, 5339, 5508, 5496, 5281, 5270, 5531, 5509, 5410, 5683, 5721, 5356, 5718, 5671, 5565, 5575, 5455, 5715, 5627, 5418, 5453, 5666, 5326, 5606, 5659, 5640, 5368, 5330, 5651, 5369, 5589, 5504, 5275, 5698, 5280, 5539, 5610, 5510, 5415 (16 hits)
3	9	1.0	333.0	Yes	5315.0MHz, -60.0dBm	5285, 5582, 5375, 5412, 5310, 5682, 5470, 5270, 5370, 5513, 5383, 5290, 5712, 5353, 5469, 5596, 5501, 5555, 5500, 5581, 5598, 5432, 5359, 5645, 5308, 5514, 5573, 5667, 5568, 5543, 5433, 5492, 5567, 5537, 5311, 5561, 5591, 5504, 5698, 5352, 5422, 5385, 5722, 5328, 5618, 5425, 5420, 5575, 5498, 5350, 5714, 5650, 5724, 5395, 5649, 5676, 5602, 5632, 5556, 5672, 5468, 5348, 5287, 5335, 5614, 5529, 5515, 5319, 5710, 5413, 5407, 5652, 5646, 5356, 5456, 5636, 5473, 5588, 5677, 5325, 5510, 5337, 5258, 5577, 5586, 5471, 5451, 5390, 5263, 5648, 5640, 5479, 5489, 5668, 5377, 5341, 5704, 5446, 5521, 5524 (12 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
4	9	1.0	333.0	Yes	5316.0MHz, -60.0dBm	5526, 5364, 5253, 5682, 5534, 5693, 5484, 5527, 5509, 5580, 5360, 5500, 5315, 5512, 5473, 5675, 5421, 5720, 5325, 5271, 5521, 5358, 5537, 5341, 5598, 5298, 5681, 5694, 5591, 5267, 5604, 5305, 5668, 5464, 5403, 5337, 5401, 5329, 5352, 5661, 5438, 5548, 5288, 5414, 5423, 5679, 5552, 5716, 5669, 5454, 5406, 5567, 5528, 5652, 5289, 5279, 5626, 5607, 5466, 5353, 5462, 5439, 5428, 5541, 5605, 5557, 5601, 5356, 5483, 5258, 5542, 5714, 5391, 5657, 5513, 5559, 5659, 5436, 5465, 5260, 5361, 5623, 5603, 5450, 5578, 5263, 5687, 5574, 5511, 5381, 5628, 5712, 5350, 5397, 5284, 5383, 5349, 5688, 5481, 5256 (9 hits)
5	9	1.0	333.0	Yes	5317.0MHz, -60.0dBm	5598, 5542, 5392, 5641, 5552, 5580, 5656, 5485, 5635, 5630, 5717, 5579, 5572, 5251, 5690, 5367, 5308, 5265, 5587, 5468, 5654, 5372, 5335, 5484, 5323, 5387, 5712, 5699, 5389, 5473, 5380, 5292, 5510, 5368, 5505, 5480, 5599, 5254, 5622, 5513, 5523, 5285, 5481, 5462, 5511, 5685, 5562, 5406, 5430, 5327, 5267, 5537, 5570, 5546, 5417, 5270, 5370, 5410, 5517, 5519, 5474, 5494, 5307, 5492, 5345, 5501, 5315, 5607, 5452, 5446, 5441, 5419, 5455, 5343, 5339, 5602, 5697, 5663, 5470, 5675, 5605, 5314, 5592, 5625, 5412, 5553, 5604, 5324, 5461, 5709, 5439, 5673, 5376, 5657, 5704, 5282, 5400, 5429, 5293, 5284 (13 hits)
6	9	1.0	333.0	Yes	5318.0MHz, -60.0dBm	5298, 5294, 5437, 5590, 5602, 5577, 5429, 5657, 5715, 5392, 5467, 5357, 5601, 5300, 5643, 5535, 5543, 5464, 5579, 5523, 5370, 5326, 5655, 5412, 5347, 5266, 5584, 5710, 5353, 5402, 5481, 5683, 5638, 5442, 5488, 5571, 5502, 5395, 5658, 5634, 5706, 5678, 5435, 5719, 5594, 5289, 5336, 5375, 5586, 5274, 5562, 5534, 5452, 5350, 5303, 5253, 5286, 5483, 5705, 5559, 5560, 5516, 5697, 5639, 5480, 5305, 5317, 5647, 5628, 5310, 5645, 5414, 5407, 5389, 5470, 5685, 5611, 5360, 5329, 5291, 5374, 5656, 5440, 5262, 5492, 5631, 5328, 5327, 5557, 5285, 5539, 5708, 5613, 5297, 5642, 5501, 5687, 5676, 5251, 5463 (16 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
7	9	1.0	333.0	Yes	5319.0MHz, -60.0dBm	5466, 5470, 5276, 5679, 5671, 5428, 5313, 5484, 5541, 5461, 5381, 5304, 5285, 5380, 5307, 5623, 5400, 5711, 5446, 5416, 5356, 5371, 5655, 5680, 5619, 5542, 5447, 5723, 5608, 5300, 5483, 5267, 5275, 5279, 5522, 5672, 5539, 5268, 5274, 5337, 5606, 5490, 5666, 5341, 5601, 5667, 5426, 5448, 5670, 5669, 5265, 5476, 5640, 5538, 5469, 5554, 5261, 5646, 5464, 5254, 5415, 5510, 5626, 5597, 5482, 5355, 5722, 5531, 5533, 5316, 5649, 5622, 5592, 5331, 5399, 5340, 5641, 5317, 5560, 5598, 5414, 5556, 5303, 5302, 5526, 5546, 5292, 5647, 5311, 5508, 5388, 5564, 5405, 5553, 5578, 5664, 5502, 5398, 5678, 5374 (14 hits)
8	9	1.0	333.0	Yes	5320.0MHz, -60.0dBm	5306, 5351, 5359, 5684, 5295, 5287, 5294, 5559, 5459, 5510, 5557, 5709, 5504, 5285, 5376, 5644, 5524, 5697, 5474, 5601, 5583, 5661, 5293, 5642, 5393, 5260, 5579, 5683, 5546, 5528, 5538, 5479, 5356, 5637, 5550, 5672, 5433, 5647, 5565, 5387, 5687, 5680, 5508, 5654, 5328, 5626, 5591, 5619, 5669, 5527, 5639, 5463, 5314, 5394, 5269, 5690, 5349, 5609, 5562, 5526, 5460, 5353, 5623, 5289, 5424, 5336, 5614, 5586, 5692, 5456, 5476, 5315, 5281, 5381, 5657, 5573, 5442, 5470, 5621, 5420, 5270, 5258, 5506, 5265, 5651, 5722, 5290, 5345, 5696, 5340, 5298, 5370, 5682, 5480, 5556, 5561, 5467, 5257, 5275, 5509 (13 hits)
9	9	1.0	333.0	Yes	5321.0MHz, -60.0dBm	5438, 5259, 5310, 5628, 5445, 5352, 5392, 5468, 5254, 5384, 5403, 5428, 5321, 5459, 5529, 5489, 5639, 5303, 5311, 5649, 5354, 5507, 5488, 5261, 5532, 5328, 5589, 5398, 5478, 5567, 5482, 5457, 5614, 5472, 5280, 5432, 5523, 5313, 5318, 5481, 5305, 5626, 5495, 5531, 5578, 5514, 5672, 5308, 5440, 5334, 5467, 5542, 5513, 5677, 5397, 5550, 5263, 5720, 5619, 5291, 5376, 5708, 5652, 5539, 5360, 5461, 5330, 5722, 5343, 5496, 5377, 5568, 5429, 5535, 5520, 5588, 5625, 5640, 5272, 5706, 5433, 5716, 5632, 5417, 5594, 5715, 5621, 5587, 5299, 5289, 5598, 5563, 5480, 5564, 5502, 5405, 5543, 5576, 5690, 5484 (14 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
10	9	1.0	333.0	Yes	5322.0MHz, -60.0dBm	5535, 5454, 5416, 5387, 5647, 5620, 5498, 5480, 5650, 5383, 5286, 5377, 5468, 5627, 5664, 5357, 5690, 5334, 5688, 5507, 5701, 5633, 5631, 5333, 5319, 5264, 5421, 5265, 5632, 5609, 5379, 5417, 5522, 5617, 5662, 5389, 5589, 5682, 5618, 5314, 5420, 5414, 5283, 5270, 5595, 5686, 5361, 5702, 5685, 5359, 5492, 5568, 5312, 5321, 5374, 5571, 5271, 5503, 5593, 5378, 5308, 5392, 5676, 5269, 5444, 5549, 5626, 5284, 5640, 5653, 5508, 5475, 5674, 5388, 5456, 5600, 5366, 5275, 5493, 5373, 5340, 5659, 5309, 5648, 5390, 5708, 5506, 5285, 5393, 5268, 5488, 5453, 5557, 5665, 5644, 5305, 5460, 5601, 5329, 5294 (12 hits)
11	9	1.0	333.0	Yes	5323.0MHz, -60.0dBm	5430, 5538, 5440, 5626, 5560, 5490, 5567, 5380, 5396, 5517, 5368, 5654, 5374, 5326, 5542, 5663, 5467, 5333, 5510, 5724, 5347, 5501, 5636, 5648, 5540, 5459, 5414, 5395, 5436, 5272, 5637, 5622, 5644, 5584, 5342, 5655, 5495, 5675, 5627, 5420, 5406, 5292, 5712, 5503, 5556, 5409, 5476, 5528, 5335, 5274, 5290, 5352, 5358, 5311, 5474, 5269, 5566, 5701, 5377, 5611, 5402, 5541, 5426, 5346, 5564, 5280, 5453, 5521, 5624, 5715, 5382, 5610, 5605, 5568, 5553, 5607, 5658, 5525, 5700, 5520, 5705, 5642, 5417, 5614, 5343, 5416, 5511, 5674, 5275, 5716, 5271, 5652, 5351, 5608, 5307, 5419, 5669, 5329, 5350, 5550 (13 hits)
12	9	1.0	333.0	Yes	5324.0MHz, -60.0dBm	5297, 5319, 5652, 5719, 5644, 5292, 5515, 5491, 5308, 5419, 5325, 5709, 5449, 5462, 5715, 5610, 5597, 5623, 5285, 5384, 5414, 5558, 5604, 5723, 5437, 5582, 5486, 5443, 5495, 5474, 5547, 5374, 5612, 5425, 5426, 5406, 5651, 5689, 5493, 5372, 5342, 5633, 5566, 5436, 5500, 5489, 5387, 5403, 5672, 5390, 5700, 5674, 5681, 5505, 5714, 5289, 5593, 5624, 5411, 5503, 5524, 5463, 5363, 5391, 5698, 5298, 5355, 5559, 5481, 5300, 5277, 5455, 5295, 5361, 5706, 5370, 5717, 5590, 5614, 5456, 5554, 5328, 5448, 5439, 5690, 5336, 5510, 5581, 5465, 5398, 5362, 5343, 5434, 5659, 5480, 5618, 5441, 5348, 5584, 5603 (13 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
13	9	1.0	333.0	Yes	5325.0MHz, -60.0dBm	5376, 5528, 5541, 5283, 5464, 5679, 5644, 5290, 5661, 5459, 5545, 5565, 5371, 5446, 5714, 5534, 5700, 5524, 5587, 5583, 5561, 5703, 5465, 5326, 5695, 5318, 5708, 5710, 5362, 5490, 5269, 5551, 5413, 5478, 5368, 5507, 5358, 5404, 5634, 5592, 5594, 5453, 5253, 5523, 5702, 5380, 5403, 5691, 5458, 5680, 5387, 5278, 5348, 5669, 5618, 5265, 5663, 5274, 5496, 5311, 5306, 5656, 5651, 5285, 5438, 5385, 5467, 5558, 5352, 5606, 5480, 5322, 5502, 5626, 5688, 5431, 5684, 5350, 5475, 5300, 5334, 5542, 5264, 5571, 5444, 5445, 5598, 5525, 5678, 5723, 5399, 5254, 5260, 5712, 5284, 5392, 5709, 5324, 5466, 5701 (11 hits)
14	9	1.0	333.0	Yes	5326.0MHz, -60.0dBm	5325, 5647, 5574, 5399, 5388, 5433, 5273, 5366, 5502, 5465, 5323, 5283, 5253, 5414, 5395, 5493, 5659, 5390, 5270, 5473, 5713, 5580, 5586, 5508, 5376, 5671, 5513, 5522, 5585, 5315, 5311, 5568, 5583, 5675, 5489, 5576, 5640, 5280, 5693, 5317, 5654, 5478, 5303, 5373, 5463, 5279, 5629, 5611, 5612, 5578, 5546, 5421, 5597, 5686, 5601, 5335, 5341, 5310, 5271, 5698, 5263, 5656, 5723, 5682, 5636, 5296, 5466, 5694, 5475, 5516, 5397, 5501, 5518, 5462, 5268, 5457, 5626, 5284, 5485, 5350, 5718, 5679, 5411, 5400, 5575, 5347, 5309, 5564, 5661, 5379, 5529, 5592, 5346, 5593, 5258, 5624, 5362, 5591, 5715, 5251 (14 hits)
15	9	1.0	333.0	Yes	5327.0MHz, -60.0dBm	5493, 5615, 5687, 5432, 5412, 5614, 5690, 5376, 5712, 5477, 5476, 5394, 5589, 5435, 5277, 5709, 5356, 5497, 5398, 5471, 5291, 5588, 5309, 5482, 5698, 5505, 5585, 5640, 5578, 5453, 5431, 5502, 5592, 5302, 5484, 5630, 5390, 5331, 5559, 5355, 5421, 5271, 5461, 5464, 5593, 5320, 5691, 5357, 5631, 5598, 5261, 5388, 5541, 5595, 5542, 5584, 5340, 5636, 5638, 5411, 5358, 5348, 5367, 5594, 5532, 5360, 5298, 5386, 5710, 5674, 5554, 5268, 5267, 5406, 5602, 5604, 5334, 5492, 5265, 5339, 5605, 5448, 5329, 5671, 5275, 5483, 5410, 5706, 5570, 5391, 5362, 5608, 5563, 5427, 5393, 5315, 5658, 5646, 5562, 5491 (12 hits)



Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
16	9	1.0	333.0	Yes	5328.0MHz, -60.0dBm	5375, 5479, 5382, 5638, 5568, 5306, 5688, 5449, 5312, 5622, 5534, 5478, 5321, 5575, 5308, 5687, 5386, 5620, 5685, 5438, 5298, 5610, 5261, 5316, 5268, 5705, 5398, 5525, 5388, 5467, 5593, 5494, 5576, 5591, 5331, 5256, 5270, 5359, 5546, 5427, 5401, 5443, 5451, 5541, 5704, 5590, 5461, 5351, 5673, 5307, 5434, 5364, 5284, 5565, 5464, 5424, 5632, 5347, 5471, 5649, 5582, 5502, 5526, 5379, 5663, 5255, 5557, 5328, 5344, 5282, 5683, 5713, 5617, 5422, 5642, 5286, 5712, 5391, 5695, 5315, 5470, 5516, 5571, 5405, 5674, 5442, 5506, 5574, 5269, 5283, 5678, 5579, 5314, 5700, 5483, 5512, 5329, 5277, 5260, 5333 (15 hits)
17	9	1.0	333.0	Yes	5329.0MHz, -60.0dBm	5344, 5615, 5668, 5353, 5592, 5535, 5488, 5582, 5529, 5716, 5263, 5311, 5706, 5379, 5303, 5404, 5537, 5453, 5350, 5595, 5545, 5657, 5683, 5539, 5397, 5413, 5330, 5295, 5422, 5590, 5510, 5403, 5346, 5472, 5694, 5409, 5575, 5542, 5492, 5326, 5720, 5507, 5671, 5460, 5638, 5278, 5445, 5714, 5577, 5251, 5591, 5417, 5646, 5599, 5262, 5593, 5443, 5532, 5373, 5399, 5602, 5616, 5439, 5449, 5337, 5462, 5520, 5554, 5525, 5376, 5519, 5401, 5421, 5253, 5304, 5692, 5647, 5601, 5470, 5285, 5297, 5420, 5320, 5598, 5357, 5431, 5266, 5573, 5533, 5665, 5571, 5351, 5603, 5693, 5680, 5382, 5341, 5283, 5547, 5358 (13 hits)
18	9	1.0	333.0	Yes	5330.0MHz, -60.0dBm	5400, 5711, 5520, 5390, 5631, 5581, 5398, 5255, 5521, 5583, 5487, 5274, 5464, 5717, 5476, 5468, 5679, 5720, 5690, 5362, 5724, 5601, 5553, 5599, 5273, 5423, 5604, 5333, 5295, 5259, 5644, 5483, 5663, 5430, 5563, 5633, 5334, 5713, 5588, 5416, 5439, 5552, 5555, 5336, 5722, 5652, 5541, 5547, 5699, 5326, 5518, 5667, 5420, 5671, 5622, 5666, 5441, 5339, 5515, 5618, 5391, 5710, 5636, 5721, 5394, 5378, 5262, 5682, 5381, 5322, 5298, 5454, 5473, 5448, 5564, 5635, 5632, 5335, 5687, 5616, 5392, 5267, 5316, 5268, 5317, 5611, 5519, 5709, 5477, 5444, 5285, 5560, 5658, 5706, 5529, 5264, 5364, 5366, 5252, 5446 (11 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
19	9	1.0	333.0	Yes	5331.0MHz, -60.0dBm	5319, 5612, 5332, 5685, 5398, 5560, 5594, 5275, 5662, 5552, 5291, 5561, 5380, 5450, 5371, 5565, 5397, 5695, 5308, 5570, 5526, 5571, 5547, 5628, 5447, 5709, 5675, 5313, 5444, 5309, 5251, 5407, 5395, 5524, 5674, 5394, 5521, 5273, 5437, 5663, 5723, 5286, 5478, 5438, 5658, 5350, 5376, 5688, 5317, 5626, 5421, 5725, 5655, 5264, 5435, 5427, 5333, 5453, 5368, 5553, 5400, 5448, 5254, 5650, 5510, 5504, 5495, 5661, 5272, 5490, 5666, 5556, 5290, 5620, 5679, 5652, 5566, 5473, 5664, 5494, 5355, 5641, 5630, 5388, 5644, 5457, 5507, 5471, 5300, 5420, 5691, 5689, 5690, 5715, 5268, 5369, 5707, 5702, 5266, 5540 (11 hits)
20	9	1.0	333.0	Yes	5312.0MHz, -60.0dBm	5695, 5534, 5430, 5645, 5356, 5390, 5272, 5289, 5324, 5307, 5293, 5689, 5413, 5654, 5328, 5418, 5498, 5368, 5632, 5503, 5608, 5407, 5704, 5437, 5455, 5499, 5323, 5468, 5471, 5417, 5581, 5507, 5363, 5637, 5283, 5329, 5568, 5639, 5448, 5389, 5303, 5440, 5424, 5279, 5626, 5562, 5591, 5255, 5273, 5525, 5678, 5251, 5495, 5465, 5692, 5576, 5699, 5318, 5522, 5483, 5332, 5529, 5615, 5410, 5267, 5259, 5546, 5330, 5282, 5545, 5427, 5398, 5434, 5653, 5280, 5367, 5721, 5720, 5569, 5319, 5473, 5605, 5580, 5394, 5433, 5277, 5630, 5475, 5377, 5691, 5429, 5302, 5372, 5694, 5425, 5462, 5349, 5309, 5469, 5338 (15 hits)
21	9	1.0	333.0	Yes	5313.0MHz, -60.0dBm	5471, 5582, 5617, 5476, 5698, 5367, 5673, 5301, 5602, 5266, 5619, 5575, 5641, 5299, 5315, 5263, 5494, 5437, 5487, 5548, 5630, 5559, 5333, 5436, 5417, 5577, 5666, 5346, 5307, 5670, 5620, 5703, 5429, 5662, 5637, 5378, 5598, 5449, 5634, 5560, 5642, 5397, 5252, 5653, 5431, 5381, 5276, 5317, 5557, 5702, 5365, 5467, 5477, 5565, 5382, 5699, 5434, 5485, 5609, 5606, 5543, 5360, 5591, 5402, 5483, 5348, 5518, 5450, 5626, 5547, 5588, 5583, 5585, 5444, 5395, 5716, 5291, 5267, 5311, 5422, 5689, 5592, 5336, 5416, 5657, 5441, 5681, 5454, 5313, 5527, 5590, 5448, 5384, 5338, 5608, 5521, 5722, 5500, 5652, 5684 (13 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
22	9	1.0	333.0	Yes	5314.0MHz, -60.0dBm	5479, 5646, 5518, 5372, 5495, 5536, 5705, 5474, 5529, 5724, 5477, 5287, 5377, 5537, 5510, 5330, 5501, 5687, 5357, 5395, 5657, 5296, 5567, 5533, 5642, 5559, 5291, 5456, 5444, 5367, 5673, 5309, 5589, 5643, 5718, 5273, 5320, 5706, 5251, 5588, 5683, 5452, 5437, 5384, 5402, 5587, 5262, 5277, 5545, 5672, 5411, 5324, 5605, 5371, 5568, 5353, 5455, 5458, 5511, 5641, 5306, 5270, 5622, 5712, 5674, 5522, 5700, 5421, 5503, 5397, 5526, 5667, 5446, 5613, 5583, 5651, 5523, 5544, 5574, 5268, 5389, 5289, 5682, 5515, 5338, 5380, 5579, 5499, 5415, 5569, 5253, 5598, 5491, 5342, 5710, 5483, 5686, 5321, 5653, 5401 (10 hits)
23	9	1.0	333.0	Yes	5315.0MHz, -60.0dBm	5265, 5650, 5272, 5691, 5718, 5634, 5267, 5686, 5448, 5528, 5457, 5439, 5719, 5321, 5417, 5450, 5287, 5271, 5414, 5675, 5550, 5614, 5305, 5403, 5320, 5711, 5498, 5617, 5442, 5283, 5430, 5463, 5390, 5551, 5425, 5499, 5469, 5255, 5663, 5295, 5506, 5446, 5638, 5368, 5391, 5611, 5577, 5537, 5406, 5509, 5502, 5411, 5607, 5515, 5573, 5347, 5696, 5314, 5512, 5697, 5428, 5666, 5646, 5404, 5645, 5597, 5455, 5315, 5701, 5302, 5722, 5387, 5301, 5584, 5310, 5317, 5619, 5680, 5422, 5409, 5652, 5592, 5522, 5636, 5420, 5331, 5721, 5350, 5282, 5626, 5565, 5620, 5635, 5704, 5690, 5398, 5538, 5644, 5637, 5604 (13 hits)
24	9	1.0	333.0	Yes	5316.0MHz, -60.0dBm	5461, 5276, 5637, 5459, 5280, 5614, 5277, 5600, 5591, 5585, 5725, 5633, 5420, 5350, 5385, 5449, 5653, 5546, 5460, 5480, 5709, 5623, 5691, 5538, 5458, 5254, 5663, 5374, 5486, 5328, 5311, 5386, 5415, 5413, 5489, 5360, 5450, 5561, 5370, 5331, 5573, 5524, 5717, 5552, 5469, 5361, 5542, 5605, 5669, 5686, 5692, 5463, 5429, 5388, 5482, 5343, 5434, 5282, 5586, 5376, 5569, 5352, 5279, 5403, 5335, 5431, 5268, 5481, 5619, 5512, 5340, 5251, 5419, 5366, 5685, 5543, 5642, 5603, 5258, 5362, 5473, 5563, 5518, 5708, 5673, 5658, 5677, 5701, 5453, 5285, 5322, 5589, 5534, 5319, 5273, 5682, 5437, 5638, 5346, 5485 (10 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
25	9	1.0	333.0	Yes	5317.0MHz, -60.0dBm	5371, 5635, 5591, 5553, 5287, 5657, 5506, 5677, 5691, 5268, 5516, 5377, 5546, 5289, 5378, 5647, 5469, 5520, 5693, 5437, 5641, 5387, 5314, 5276, 5672, 5527, 5495, 5352, 5711, 5533, 5725, 5484, 5617, 5580, 5645, 5485, 5446, 5466, 5714, 5540, 5256, 5517, 5355, 5332, 5444, 5401, 5288, 5619, 5309, 5255, 5335, 5474, 5661, 5391, 5699, 5555, 5680, 5390, 5655, 5372, 5350, 5551, 5298, 5330, 5347, 5569, 5690, 5695, 5658, 5400, 5458, 5525, 5633, 5623, 5536, 5436, 5418, 5581, 5441, 5563, 5510, 5505, 5552, 5608, 5698, 5475, 5331, 5321, 5292, 5395, 5556, 5410, 5450, 5324, 5682, 5589, 5337, 5394, 5297, 5578 (14 hits)
26	9	1.0	333.0	Yes	5318.0MHz, -60.0dBm	5567, 5349, 5530, 5293, 5697, 5559, 5493, 5529, 5360, 5276, 5505, 5288, 5618, 5321, 5488, 5344, 5677, 5689, 5500, 5542, 5400, 5521, 5593, 5675, 5323, 5449, 5411, 5334, 5446, 5327, 5314, 5576, 5682, 5650, 5339, 5709, 5557, 5489, 5403, 5701, 5663, 5466, 5373, 5544, 5718, 5326, 5338, 5653, 5517, 5459, 5668, 5659, 5393, 5555, 5609, 5685, 5492, 5336, 5600, 5619, 5371, 5610, 5694, 5475, 5303, 5286, 5342, 5629, 5495, 5322, 5437, 5253, 5708, 5484, 5553, 5578, 5419, 5632, 5603, 5381, 5346, 5707, 5621, 5414, 5490, 5620, 5615, 5409, 5378, 5612, 5299, 5636, 5666, 5425, 5317, 5604, 5580, 5391, 5545, 5370 (18 hits)
27	9	1.0	333.0	Yes	5319.0MHz, -60.0dBm	5641, 5638, 5291, 5709, 5654, 5374, 5376, 5580, 5419, 5336, 5573, 5635, 5587, 5521, 5423, 5449, 5534, 5671, 5588, 5489, 5586, 5620, 5324, 5373, 5657, 5302, 5415, 5532, 5484, 5328, 5370, 5557, 5693, 5526, 5555, 5613, 5673, 5347, 5540, 5456, 5685, 5562, 5384, 5441, 5616, 5260, 5363, 5314, 5704, 5531, 5306, 5503, 5527, 5708, 5495, 5575, 5421, 5509, 5273, 5268, 5315, 5478, 5418, 5517, 5271, 5332, 5407, 5477, 5606, 5318, 5340, 5585, 5312, 5518, 5497, 5434, 5304, 5612, 5523, 5289, 5292, 5544, 5392, 5405, 5647, 5361, 5681, 5259, 5623, 5560, 5688, 5331, 5473, 5366, 5372, 5632, 5520, 5720, 5322, 5294 (18 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
28	9	1.0	333.0	Yes	5320.0MHz, -60.0dBm	5502, 5487, 5623, 5344, 5720, 5494, 5626, 5624, 5573, 5699, 5687, 5525, 5562, 5507, 5293, 5503, 5295, 5400, 5484, 5723, 5707, 5311, 5467, 5711, 5671, 5274, 5651, 5429, 5380, 5275, 5553, 5664, 5685, 5283, 5606, 5605, 5590, 5693, 5700, 5638, 5538, 5540, 5576, 5321, 5427, 5273, 5358, 5486, 5552, 5546, 5267, 5491, 5251, 5341, 5469, 5279, 5508, 5613, 5309, 5498, 5621, 5396, 5347, 5609, 5460, 5264, 5263, 5324, 5253, 5438, 5513, 5391, 5545, 5616, 5533, 5379, 5304, 5657, 5310, 5376, 5284, 5410, 5313, 5704, 5402, 5476, 5478, 5718, 5485, 5401, 5692, 5634, 5394, 5482, 5291, 5362, 5537, 5627, 5257, 5418 (13 hits)
29	9	1.0	333.0	Yes	5321.0MHz, -60.0dBm	5634, 5507, 5490, 5685, 5349, 5664, 5451, 5391, 5309, 5386, 5466, 5449, 5441, 5306, 5603, 5398, 5556, 5575, 5299, 5418, 5658, 5265, 5367, 5385, 5501, 5680, 5493, 5392, 5705, 5307, 5322, 5587, 5529, 5476, 5323, 5260, 5625, 5523, 5257, 5287, 5258, 5259, 5671, 5549, 5710, 5505, 5304, 5637, 5692, 5693, 5499, 5365, 5346, 5399, 5437, 5408, 5474, 5364, 5381, 5310, 5421, 5614, 5457, 5484, 5429, 5642, 5550, 5467, 5580, 5651, 5500, 5563, 5446, 5424, 5454, 5619, 5542, 5631, 5338, 5696, 5459, 5683, 5439, 5722, 5517, 5641, 5725, 5273, 5333, 5617, 5654, 5566, 5572, 5648, 5520, 5712, 5607, 5606, 5291, 5296 (14 hits)
30	9	1.0	333.0	Yes	5322.0MHz, -60.0dBm	5501, 5473, 5395, 5677, 5256, 5421, 5434, 5708, 5310, 5656, 5662, 5723, 5345, 5399, 5472, 5335, 5703, 5539, 5459, 5649, 5257, 5362, 5428, 5323, 5375, 5603, 5583, 5676, 5624, 5273, 5287, 5552, 5371, 5300, 5710, 5327, 5427, 5285, 5564, 5343, 5689, 5336, 5497, 5458, 5512, 5596, 5284, 5409, 5330, 5312, 5610, 5407, 5625, 5652, 5431, 5707, 5718, 5651, 5644, 5672, 5259, 5474, 5616, 5361, 5639, 5444, 5378, 5280, 5391, 5358, 5301, 5589, 5481, 5260, 5332, 5509, 5675, 5719, 5276, 5432, 5699, 5660, 5302, 5524, 5681, 5299, 5540, 5471, 5542, 5566, 5410, 5587, 5578, 5663, 5621, 5507, 5631, 5423, 5270, 5505 (14 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
31	9	1.0	333.0	Yes	5323.0MHz, -60.0dBm	5517, 5575, 5561, 5545, 5463, 5611, 5486, 5684, 5309, 5396, 5578, 5574, 5277, 5333, 5300, 5676, 5717, 5526, 5590, 5394, 5423, 5276, 5515, 5702, 5690, 5651, 5435, 5562, 5264, 5310, 5607, 5350, 5525, 5448, 5439, 5506, 5340, 5663, 5478, 5622, 5692, 5620, 5315, 5415, 5672, 5349, 5614, 5475, 5535, 5344, 5524, 5363, 5603, 5581, 5372, 5256, 5714, 5383, 5508, 5547, 5251, 5500, 5364, 5280, 5601, 5449, 5521, 5566, 5291, 5629, 5567, 5511, 5386, 5311, 5653, 5434, 5384, 5326, 5379, 5442, 5644, 5495, 5541, 5492, 5457, 5546, 5662, 5488, 5665, 5592, 5322, 5716, 5430, 5303, 5613, 5388, 5440, 5474, 5634, 5465 (14 hits)
32	9	1.0	333.0	Yes	5324.0MHz, -60.0dBm	5446, 5309, 5260, 5317, 5569, 5711, 5376, 5308, 5663, 5707, 5417, 5511, 5429, 5265, 5254, 5331, 5329, 5703, 5398, 5303, 5553, 5427, 5667, 5562, 5527, 5418, 5287, 5467, 5396, 5431, 5630, 5724, 5651, 5479, 5575, 5529, 5621, 5581, 5397, 5512, 5497, 5528, 5494, 5602, 5391, 5458, 5273, 5498, 5351, 5477, 5504, 5517, 5474, 5538, 5469, 5615, 5257, 5583, 5687, 5600, 5522, 5567, 5297, 5424, 5492, 5410, 5689, 5395, 5556, 5313, 5386, 5390, 5407, 5673, 5627, 5618, 5619, 5560, 5275, 5332, 5300, 5491, 5637, 5294, 5437, 5643, 5263, 5605, 5401, 5366, 5408, 5690, 5533, 5660, 5468, 5392, 5587, 5378, 5354, 5508 (11 hits)
33	9	1.0	333.0	Yes	5325.0MHz, -60.0dBm	5687, 5379, 5441, 5345, 5375, 5648, 5414, 5256, 5706, 5698, 5647, 5587, 5582, 5720, 5274, 5440, 5491, 5393, 5283, 5253, 5590, 5662, 5564, 5363, 5605, 5624, 5319, 5508, 5407, 5556, 5615, 5260, 5258, 5446, 5694, 5544, 5596, 5528, 5538, 5496, 5294, 5669, 5425, 5320, 5705, 5315, 5534, 5466, 5643, 5371, 5558, 5625, 5309, 5313, 5570, 5255, 5676, 5512, 5344, 5304, 5449, 5330, 5310, 5521, 5302, 5654, 5547, 5633, 5299, 5433, 5370, 5493, 5553, 5461, 5280, 5361, 5626, 5724, 5479, 5276, 5584, 5711, 5439, 5434, 5589, 5678, 5636, 5432, 5610, 5588, 5464, 5535, 5494, 5635, 5268, 5703, 5652, 5699, 5303, 5305 (15 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
34	9	1.0	333.0	Yes	5326.0MHz, -60.0dBm	5606, 5465, 5262, 5696, 5543, 5442, 5611, 5502, 5553, 5690, 5282, 5334, 5699, 5320, 5598, 5302, 5464, 5522, 5281, 5707, 5411, 5655, 5322, 5443, 5468, 5401, 5377, 5357, 5540, 5273, 5446, 5667, 5629, 5612, 5659, 5445, 5714, 5505, 5423, 5651, 5294, 5274, 5576, 5489, 5353, 5626, 5340, 5332, 5550, 5406, 5388, 5289, 5350, 5343, 5580, 5662, 5587, 5566, 5453, 5637, 5283, 5448, 5622, 5403, 5497, 5721, 5517, 5650, 5321, 5474, 5515, 5538, 5541, 5469, 5386, 5278, 5467, 5533, 5685, 5504, 5393, 5703, 5486, 5475, 5482, 5495, 5408, 5717, 5704, 5303, 5410, 5252, 5341, 5508, 5275, 5277, 5255, 5426, 5425, 5630 (12 hits)
35	9	1.0	333.0	Yes	5327.0MHz, -60.0dBm	5455, 5526, 5600, 5584, 5663, 5400, 5274, 5608, 5654, 5648, 5665, 5627, 5447, 5506, 5431, 5592, 5515, 5540, 5479, 5443, 5399, 5474, 5278, 5631, 5725, 5520, 5270, 5590, 5287, 5331, 5697, 5591, 5601, 5418, 5565, 5383, 5620, 5481, 5537, 5413, 5404, 5442, 5354, 5453, 5680, 5702, 5258, 5684, 5658, 5628, 5575, 5647, 5338, 5347, 5480, 5579, 5530, 5499, 5596, 5393, 5294, 5693, 5387, 5517, 5435, 5408, 5382, 5437, 5655, 5630, 5703, 5332, 5315, 5507, 5311, 5491, 5339, 5633, 5613, 5629, 5612, 5346, 5419, 5436, 5318, 5567, 5685, 5458, 5686, 5265, 5482, 5689, 5577, 5598, 5682, 5554, 5603, 5341, 5552, 5414 (3 hits)
36	9	1.0	333.0	Yes	5328.0MHz, -60.0dBm	5675, 5511, 5598, 5469, 5301, 5367, 5256, 5487, 5661, 5691, 5264, 5483, 5400, 5686, 5694, 5406, 5380, 5584, 5303, 5638, 5539, 5699, 5542, 5596, 5393, 5682, 5438, 5491, 5500, 5354, 5332, 5329, 5320, 5617, 5429, 5502, 5467, 5646, 5300, 5525, 5392, 5570, 5433, 5474, 5710, 5518, 5583, 5702, 5705, 5501, 5384, 5324, 5273, 5437, 5446, 5536, 5676, 5343, 5681, 5613, 5448, 5724, 5449, 5295, 5722, 5424, 5517, 5588, 5417, 5618, 5266, 5270, 5625, 5421, 5523, 5492, 5291, 5450, 5345, 5540, 5614, 5476, 5370, 5489, 5605, 5504, 5385, 5714, 5551, 5657, 5685, 5603, 5553, 5318, 5495, 5648, 5590, 5376, 5604, 5490 (4 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
37	9	1.0	333.0	Yes	5329.0MHz, -60.0dBm	5251, 5526, 5644, 5581, 5655, 5250, 5506, 5600, 5616, 5681, 5477, 5721, 5605, 5597, 5565, 5290, 5557, 5363, 5575, 5342, 5323, 5347, 5259, 5334, 5348, 5367, 5292, 5690, 5411, 5509, 5337, 5539, 5503, 5424, 5518, 5696, 5522, 5408, 5377, 5395, 5350, 5382, 5669, 5357, 5294, 5473, 5620, 5534, 5331, 5680, 5521, 5312, 5403, 5618, 5711, 5632, 5507, 5702, 5544, 5416, 5704, 5531, 5601, 5339, 5398, 5413, 5324, 5642, 5535, 5657, 5536, 5687, 5682, 5306, 5572, 5470, 5358, 5574, 5630, 5414, 5289, 5469, 5562, 5295, 5676, 5505, 5520, 5615, 5592, 5341, 5364, 5490, 5442, 5606, 5368, 5298, 5393, 5360, 5698, 5300 (4 hits)
38	9	1.0	333.0	Yes	5330.0MHz, -60.0dBm	5298, 5537, 5400, 5687, 5443, 5593, 5328, 5501, 5403, 5570, 5634, 5528, 5251, 5643, 5365, 5281, 5277, 5526, 5650, 5563, 5552, 5282, 5356, 5520, 5297, 5594, 5372, 5420, 5359, 5527, 5329, 5515, 5312, 5652, 5713, 5439, 5606, 5668, 5438, 5259, 5608, 5490, 5436, 5296, 5422, 5605, 5555, 5377, 5540, 5567, 5597, 5633, 5358, 5596, 5278, 5256, 5333, 5427, 5507, 5549, 5408, 5639, 5595, 5337, 5287, 5384, 5696, 5495, 5485, 5536, 5351, 5676, 5638, 5629, 5628, 5612, 5658, 5352, 5586, 5674, 5383, 5694, 5512, 5681, 5691, 5655, 5502, 5291, 5388, 5343, 5724, 5452, 5392, 5270, 5471, 5701, 5546, 5366, 5554, 5330 (4 hits)
39	9	1.0	333.0	Yes	5331.0MHz, -60.0dBm	5386, 5347, 5706, 5311, 5392, 5674, 5270, 5711, 5290, 5503, 5616, 5342, 5555, 5302, 5352, 5552, 5510, 5591, 5486, 5468, 5373, 5349, 5354, 5695, 5502, 5725, 5723, 5414, 5259, 5580, 5296, 5415, 5560, 5456, 5704, 5390, 5700, 5336, 5600, 5326, 5485, 5562, 5653, 5396, 5613, 5256, 5377, 5525, 5437, 5627, 5409, 5585, 5688, 5714, 5358, 5449, 5539, 5550, 5697, 5321, 5541, 5265, 5601, 5685, 5399, 5389, 5475, 5421, 5457, 5278, 5382, 5690, 5303, 5592, 5667, 5615, 5680, 5638, 5573, 5681, 5419, 5313, 5625, 5433, 5588, 5462, 5724, 5315, 5298, 5283, 5678, 5413, 5291, 5434, 5617, 5547, 5398, 5299, 5360, 5663 (4 hits)

Table 3 FCC frequency hopping radar (Type 6) Test Results

Trial #	Pulses/ Burst	Pulse	PRI (us)	Detected?	Fr (MHz)	Hop seq.
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	Burst	Width (us)			and level (dBm)	
0	14	12.3	327.0	Yes	5320.0MHz, -60.0dBm	N/A
1	15	16.7	260.0	Yes	5320.0MHz, -60.0dBm	N/A
2	16	12.9	241.0	Yes	5320.0MHz, -60.0dBm	N/A
3	15	11.4	210.0	Yes	5320.0MHz, -60.0dBm	N/A
4	15	15.6	246.0	Yes	5320.0MHz, -60.0dBm	N/A
5	13	18.9	437.0	Yes	5320.0MHz, -60.0dBm	N/A
6	13	11.3	349.0	Yes	5320.0MHz, -60.0dBm	N/A
7	16	19.3	292.0	No	5320.0MHz, -60.0dBm	N/A
8	14	18.8	357.0	Yes	5320.0MHz, -60.0dBm	N/A
9	12	12.3	431.0	Yes	5320.0MHz, -60.0dBm	N/A
10	15	15.3	411.0	Yes	5320.0MHz, -60.0dBm	N/A
11	15	12.0	266.0	Yes	5320.0MHz, -60.0dBm	N/A
12	13	16.6	425.0	Yes	5320.0MHz, -60.0dBm	N/A
13	14	19.2	467.0	Yes	5320.0MHz, -60.0dBm	N/A
14	16	12.1	289.0	Yes	5320.0MHz, -60.0dBm	N/A
15	12	13.4	480.0	Yes	5320.0MHz, -60.0dBm	N/A
16	12	18.9	349.0	Yes	5320.0MHz, -60.0dBm	N/A
17	16	11.8	259.0	Yes	5320.0MHz, -60.0dBm	N/A
18	15	11.9	229.0	Yes	5320.0MHz, -60.0dBm	N/A
19	14	18.2	441.0	Yes	5320.0MHz, -60.0dBm	N/A
20	13	19.2	371.0	Yes	5320.0MHz, -60.0dBm	N/A
21	14	14.1	283.0	No	5320.0MHz,	N/A

					-60.0dBm	
22	16	17.6	393.0	No	5320.0MHz, -60.0dBm	N/A
23	13	14.3	403.0	Yes	5320.0MHz, -60.0dBm	N/A
24	14	16.1	249.0	Yes	5320.0MHz, -60.0dBm	N/A
25	14	17.0	409.0	Yes	5320.0MHz, -60.0dBm	N/A
26	14	20.0	251.0	No	5320.0MHz, -60.0dBm	N/A
27	14	12.2	258.0	Yes	5320.0MHz, -60.0dBm	N/A
28	13	17.3	245.0	Yes	5320.0MHz, -60.0dBm	N/A
29	13	15.3	493.0	Yes	5320.0MHz, -60.0dBm	N/A

Table 4 FCC Short Pulse Radar (Type 4) Test Results

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
0	16	6.8	431.0	Yes	5320.0MHz, -60.0dBm	N/A
1	17	6.9	224.0	Yes	5320.0MHz, -60.0dBm	N/A
2	17	6.1	294.0	Yes	5320.0MHz, -60.0dBm	N/A
3	18	8.5	309.0	Yes	5320.0MHz, -60.0dBm	N/A
4	16	8.1	486.0	Yes	5320.0MHz, -60.0dBm	N/A
5	16	6.6	458.0	Yes	5320.0MHz, -60.0dBm	N/A
6	16	6.4	395.0	Yes	5320.0MHz, -60.0dBm	N/A
7	16	9.0	295.0	Yes	5320.0MHz, -60.0dBm	N/A
8	16	7.6	391.0	Yes	5320.0MHz, -60.0dBm	N/A
9	17	8.7	413.0	Yes	5320.0MHz, -60.0dBm	N/A
10	17	6.7	477.0	Yes	5320.0MHz, -60.0dBm	N/A
11	18	9.5	399.0	Yes	5320.0MHz,	N/A

					-60.0dBm	
12	18	8.9	442.0	Yes	5320.0MHz, -60.0dBm	N/A
13	18	9.5	482.0	Yes	5320.0MHz, -60.0dBm	N/A
14	18	6.9	389.0	Yes	5320.0MHz, -60.0dBm	N/A
15	16	7.5	479.0	Yes	5320.0MHz, -60.0dBm	N/A
16	18	7.7	264.0	Yes	5320.0MHz, -60.0dBm	N/A
17	17	8.2	398.0	Yes	5320.0MHz, -60.0dBm	N/A
18	17	8.0	465.0	Yes	5320.0MHz, -60.0dBm	N/A
19	18	7.5	210.0	Yes	5320.0MHz, -60.0dBm	N/A
20	18	7.7	202.0	Yes	5320.0MHz, -60.0dBm	N/A
21	17	9.8	228.0	Yes	5320.0MHz, -60.0dBm	N/A
22	17	10.0	428.0	Yes	5320.0MHz, -60.0dBm	N/A
23	18	9.6	353.0	Yes	5320.0MHz, -60.0dBm	N/A
24	16	6.7	458.0	Yes	5320.0MHz, -60.0dBm	N/A
25	18	8.6	209.0	Yes	5320.0MHz, -60.0dBm	N/A
26	17	8.1	314.0	Yes	5320.0MHz, -60.0dBm	N/A
27	16	9.1	420.0	Yes	5320.0MHz, -60.0dBm	N/A
28	17	6.9	305.0	Yes	5320.0MHz, -60.0dBm	N/A
29	16	9.6	403.0	Yes	5320.0MHz, -60.0dBm	N/A

Table 5 FCC Short Pulse Radar (Type 3) Test Results

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
0	23	4.8	168.0	Yes	5320.0MHz, -60.0dBm	N/A
1	25	4.0	202.0	Yes	5320.0MHz,	N/A

					-60.0dBm	
2	24	4.2	205.0	Yes	5320.0MHz, -60.0dBm	N/A
3	24	3.6	150.0	Yes	5320.0MHz, -60.0dBm	N/A
4	26	2.0	165.0	Yes	5320.0MHz, -60.0dBm	N/A
5	28	2.0	165.0	Yes	5320.0MHz, -60.0dBm	N/A
6	28	3.4	198.0	Yes	5320.0MHz, -60.0dBm	N/A
7	25	1.3	161.0	Yes	5320.0MHz, -60.0dBm	N/A
8	26	1.1	184.0	Yes	5320.0MHz, -60.0dBm	N/A
9	24	2.8	200.0	Yes	5320.0MHz, -60.0dBm	N/A
10	25	1.9	224.0	Yes	5320.0MHz, -60.0dBm	N/A
11	29	3.4	190.0	Yes	5320.0MHz, -60.0dBm	N/A
12	29	3.8	185.0	Yes	5320.0MHz, -60.0dBm	N/A
13	27	4.7	201.0	Yes	5320.0MHz, -60.0dBm	N/A
14	27	2.6	196.0	Yes	5320.0MHz, -60.0dBm	N/A
15	24	1.1	221.0	Yes	5320.0MHz, -60.0dBm	N/A
16	27	4.2	183.0	Yes	5320.0MHz, -60.0dBm	N/A
17	27	1.3	152.0	Yes	5320.0MHz, -60.0dBm	N/A
18	29	3.3	157.0	Yes	5320.0MHz, -60.0dBm	N/A
19	26	2.5	170.0	Yes	5320.0MHz, -60.0dBm	N/A
20	25	3.9	199.0	Yes	5320.0MHz, -60.0dBm	N/A
21	24	4.1	213.0	No	5320.0MHz, -60.0dBm	N/A
22	29	2.7	185.0	Yes	5320.0MHz, -60.0dBm	N/A
23	25	3.5	177.0	Yes	5320.0MHz, -60.0dBm	N/A

24	23	2.5	159.0	Yes	5320.0MHz, -60.0dBm	N/A
25	28	4.5	187.0	Yes	5320.0MHz, -60.0dBm	N/A
26	28	1.0	222.0	Yes	5320.0MHz, -60.0dBm	N/A
27	27	3.9	179.0	Yes	5320.0MHz, -60.0dBm	N/A
28	27	3.4	227.0	Yes	5320.0MHz, -60.0dBm	N/A
29	27	2.2	224.0	Yes	5320.0MHz, -60.0dBm	N/A

**Table 6 FCC Short Pulse Radar (Type 2) Test Results**

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
0	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
1	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
2	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
3	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
4	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
5	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
6	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
7	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
8	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
9	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
10	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
11	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
12	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
13	18	1.0	1428.0	No	5320.0MHz, -60.0dBm	N/A

14	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
15	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
16	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
17	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
18	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
19	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
20	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
21	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
22	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
23	18	1.0	1428.0	No	5320.0MHz, -60.0dBm	N/A
24	18	1.0	1428.0	No	5320.0MHz, -60.0dBm	N/A
25	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
26	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
27	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
28	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A
29	18	1.0	1428.0	Yes	5320.0MHz, -60.0dBm	N/A

Table 7 FCC Short Pulse Radar (Type 1) Test Results

Long Sequence Trial	Result	Radar Frequency / Amplitude
Trial #1	Detected	5320.0MHz, -60.0dBm
Trial #2	Detected	5320.0MHz, -60.0dBm
Trial #3	Detected	5320.0MHz, -60.0dBm
Trial #4	Detected	5320.0MHz, -60.0dBm
Trial #5	Detected	5320.0MHz, -60.0dBm

Trial #6	Detected	5320.0MHz, -60.0dBm
Trial #7	Detected	5320.0MHz, -60.0dBm
Trial #8	Detected	5320.0MHz, -60.0dBm
Trial #9	Detected	5320.0MHz, -60.0dBm
Trial #10	Detected	5320.0MHz, -60.0dBm
Trial #11	Detected	5320.0MHz, -60.0dBm
Trial #12	Detected	5320.0MHz, -60.0dBm
Trial #13	Detected	5320.0MHz, -60.0dBm
Trial #14	Detected	5320.0MHz, -60.0dBm
Trial #15	Detected	5320.0MHz, -60.0dBm
Trial #16	Detected	5320.0MHz, -60.0dBm
Trial #17	Detected	5320.0MHz, -60.0dBm
Trial #18	Detected	5320.0MHz, -60.0dBm
Trial #19	Detected	5320.0MHz, -60.0dBm
Trial #20	Detected	5320.0MHz, -60.0dBm
Trial #21	Detected	5320.0MHz, -60.0dBm
Trial #22	Detected	5320.0MHz, -60.0dBm
Trial #23	Detected	5320.0MHz, -60.0dBm
Trial #24	Detected	5320.0MHz, -60.0dBm
Trial #25	Detected	5320.0MHz, -60.0dBm
Trial #26	Detected	5320.0MHz, -60.0dBm
Trial #27	Detected	5320.0MHz, -60.0dBm
Trial #28	Detected	5320.0MHz,

		-60.0dBm
Trial #29	Detected	5320.0MHz, -60.0dBm
Trial #30	Detected	5320.0MHz, -60.0dBm

**Table 8 Long Sequence Waveform Summary**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	1	90.1	9	-	-	0.938943
1	3	85.7	7	1609.0	1793.0	1.601444
2	2	55.5	17	1883.0	-	3.692367
3	2	83.4	18	1192.0	-	4.670211
4	2	97.6	15	1436.0	-	6.644530
5	2	73.4	12	1852.0	-	6.999017
6	1	62.1	10	-	-	8.551229
7	1	66.4	6	-	-	10.453444
8	2	93.8	11	1600.0	-	11.671942

**Table 9 Long Sequence Waveform Trial#1 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	66.1	14	1157.0	-	0.565264
1	2	60.6	17	1992.0	-	0.888000
2	1	51.8	20	-	-	1.771501
3	2	84.7	8	1793.0	-	3.064936
4	1	95.7	15	-	-	3.746808
5	3	66.9	6	1445.0	1542.0	4.807555
6	3	65.7	15	1032.0	1058.0	5.670773
7	2	71.0	6	1754.0	-	6.651217
8	3	90.6	16	1174.0	1860.0	7.711150
9	3	74.8	20	1290.0	1569.0	8.356950
10	2	56.9	17	1735.0	-	9.087821
11	1	88.9	7	-	-	10.247248
12	3	99.7	10	1210.0	1932.0	10.488961
13	2	90.7	10	1602.0	-	11.990267

**Table 10 Long Sequence Waveform Trial#2 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	87.1	11	1467.0	1027.0	0.958719
1	2	62.5	7	1666.0	-	1.670555
2	1	84.0	11	-	-	3.367955



3	2	71.4	11	1770.0	-	4.524206
4	1	94.8	11	-	-	6.504414
5	3	74.8	13	1854.0	1632.0	7.140634
6	2	89.1	9	1857.0	-	8.922893
7	3	97.5	17	1214.0	1357.0	10.533903
8	3	94.1	17	1500.0	1185.0	10.767634

**Table 11 Long Sequence Waveform Trial#3 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	55.8	15	1375.0	-	0.484649
1	2	57.6	15	1444.0	-	1.066041
2	2	92.1	18	1114.0	-	1.758025
3	2	56.2	17	1998.0	-	2.498145
4	1	64.0	15	-	-	3.199526
5	2	85.4	12	1016.0	-	4.068709
6	2	64.4	9	1135.0	-	5.029520
7	2	97.0	9	1677.0	-	5.387296
8	2	74.4	18	1506.0	-	6.170608
9	2	95.9	15	1729.0	-	6.772718
10	2	65.0	14	1988.0	-	8.059239
11	1	52.5	10	-	-	8.960999
12	1	84.4	11	-	-	9.485773
13	2	99.4	14	1969.0	-	10.468127
14	2	73.4	10	1548.0	-	10.656555
15	3	97.8	17	1183.0	1080.0	11.636665

**Table 12 Long Sequence Waveform Trial#4 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	61.0	12	1717.0	1289.0	0.399635
1	3	86.4	10	1313.0	1313.0	1.759537
2	2	68.2	19	1582.0	-	3.013171
3	2	83.4	9	1166.0	-	4.568805
4	1	92.7	19	-	-	5.084366
5	2	79.4	8	1427.0	-	6.396479
6	1	64.2	11	-	-	7.250374
7	1	69.4	10	-	-	8.501136
8	3	61.0	14	1345.0	1916.0	10.447672
9	2	68.0	18	1718.0	-	11.946923

**Table 13 Long Sequence Waveform Trial#5 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
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#	Pulses	Width (us)	(MHz)	(us)	(us)	
0	2	56.4	18	1373.0	-	0.370058
1	2	50.8	12	1050.0	-	0.685925
2	3	80.8	9	1929.0	1195.0	1.578160
3	1	63.8	5	-	-	2.191797
4	1	71.2	7	-	-	2.723992
5	1	64.5	6	-	-	3.417061
6	2	68.2	7	1940.0	-	4.146939
7	1	91.5	5	-	-	4.428178
8	2	92.9	6	1478.0	-	5.070651
9	2	66.0	15	1629.0	-	6.218514
10	3	84.8	15	1337.0	1421.0	6.564081
11	3	84.5	13	1617.0	1678.0	7.378915
12	2	65.7	15	1936.0	-	7.951047
13	3	56.1	8	1726.0	1360.0	8.443340
14	3	70.6	7	1761.0	1107.0	9.255025
15	2	93.6	8	1053.0	-	9.499632
16	2	86.0	16	1243.0	-	10.153004
17	2	76.4	5	1094.0	-	11.078739
18	3	50.7	16	1348.0	1545.0	11.423551

Table 14 Long Sequence Waveform Trial#6 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	1	98.8	8	-	-	0.170915
1	2	80.8	16	1350.0	-	0.746849
2	1	76.3	20	-	-	1.469457
3	2	59.7	19	1508.0	-	2.370930
4	3	85.8	14	1456.0	1219.0	2.952636
5	3	97.2	12	1080.0	1753.0	3.377283
6	2	59.1	14	1978.0	-	3.661284
7	1	89.8	8	-	-	4.531508
8	1	56.0	6	-	-	4.960458
9	2	83.7	10	1029.0	-	5.671711
10	3	70.3	6	1587.0	1777.0	6.058017
11	1	75.3	6	-	-	7.020033
12	2	99.2	10	1270.0	-	7.620578
13	2	75.8	9	1877.0	-	8.378361
14	2	84.6	16	1699.0	-	8.953585
15	2	61.2	16	1421.0	-	9.097514
16	1	58.9	16	-	-	9.940675
17	2	69.6	5	1942.0	-	10.692772
18	3	73.8	14	1315.0	1622.0	11.367364
19	2	56.5	13	1419.0	-	11.796260

**Table 15 Long Sequence Waveform Trial#7 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	71.1	19	1617.0	-	0.861482
1	2	70.6	10	1655.0	-	2.396842
2	1	86.1	15	-	-	3.204388
3	2	96.8	8	1880.0	-	4.203278
4	1	79.4	15	-	-	6.053460
5	2	95.1	6	1605.0	-	7.012497
6	2	86.5	8	1168.0	-	8.740169
7	1	93.9	9	-	-	10.357250
8	2	69.9	5	1698.0	-	11.065480

**Table 16 Long Sequence Waveform Trial#8 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	81.7	14	1627.0	-	0.494611
1	1	63.4	12	-	-	1.209088
2	2	51.9	18	1376.0	-	1.755608
3	3	88.5	8	1512.0	1122.0	2.487103
4	1	72.5	6	-	-	3.151046
5	2	83.2	10	1584.0	-	3.922029
6	2	81.2	11	1091.0	-	4.572578
7	2	65.4	15	1806.0	-	5.065830
8	1	63.5	11	-	-	5.891807
9	2	93.9	8	1322.0	-	6.131153
10	2	76.1	11	1411.0	-	6.756202
11	1	53.9	8	-	-	7.478314
12	3	87.6	15	1341.0	1461.0	8.136138
13	2	96.1	18	1604.0	-	8.868841
14	1	74.9	11	-	-	9.546908
15	3	55.7	20	1667.0	1868.0	10.399931
16	2	74.3	7	1572.0	-	11.035939
17	1	75.1	8	-	-	11.549499

**Table 17 Long Sequence Waveform Trial#9 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	1	90.6	10	-	-	0.389684
1	2	53.5	9	1291.0	-	1.063392
2	2	96.2	5	1575.0	-	1.243845
3	3	72.3	12	1731.0	1760.0	1.991218

4	2	54.7	17	1698.0	-	2.862629
5	2	99.1	19	1503.0	-	3.595151
6	2	79.4	9	1761.0	-	3.909284
7	2	85.6	20	1809.0	-	4.692931
8	2	94.3	14	1953.0	-	5.360274
9	3	86.7	18	1541.0	1988.0	5.827412
10	1	60.9	14	-	-	6.076091
11	2	87.4	6	1529.0	-	6.933402
12	2	81.2	8	1071.0	-	7.325598
13	3	69.6	12	1347.0	1218.0	7.858201
14	2	62.2	20	1251.0	-	8.617943
15	2	75.5	7	1242.0	-	9.210485
16	1	86.3	9	-	-	9.818018
17	2	85.0	18	1217.0	-	10.227016
18	3	75.1	12	1017.0	1545.0	11.329489
19	3	78.4	15	1725.0	1882.0	11.671684

Table 18 Long Sequence Waveform Trial#10 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	59.5	16	1037.0	-	0.335027
1	3	89.1	20	1146.0	1506.0	1.293623
2	1	62.1	19	-	-	1.921125
3	1	74.4	14	-	-	2.087934
4	2	63.6	10	1720.0	-	3.233703
5	2	82.1	19	1022.0	-	3.692900
6	1	81.1	6	-	-	4.434717
7	1	59.9	15	-	-	5.076434
8	2	83.8	10	1705.0	-	5.965566
9	1	63.6	17	-	-	6.218848
10	3	59.0	12	1569.0	1688.0	6.689957
11	2	71.3	8	1611.0	-	7.416054
12	2	69.9	8	1661.0	-	8.514697
13	1	77.1	7	-	-	9.082823
14	2	65.0	5	1124.0	-	9.640559
15	2	82.0	18	1161.0	-	10.051733
16	2	67.6	11	1934.0	-	10.667177
17	1	70.1	16	-	-	11.692810

Table 19 Long Sequence Waveform Trial#11 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	54.8	12	1276.0	-	0.502060

1	1	88.1	17	-	-	1.045842
2	2	51.3	7	1604.0	-	1.746670
3	2	50.5	19	1428.0	-	2.251316
4	2	81.5	12	1785.0	-	3.300305
5	2	62.0	15	1711.0	-	3.800711
6	2	67.9	15	1091.0	-	4.421240
7	1	59.8	14	-	-	5.245697
8	1	79.7	13	-	-	6.185737
9	2	90.1	10	1212.0	-	6.617525
10	2	84.7	11	1567.0	-	7.222116
11	2	86.5	17	1709.0	-	8.209263
12	2	62.4	9	1715.0	-	8.494073
13	2	83.6	14	1953.0	-	9.748799
14	3	67.0	14	1250.0	1343.0	10.314145
15	1	61.3	7	-	-	10.993475
16	1	63.8	20	-	-	11.805038

Table 20 Long Sequence Waveform Trial#12 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	54.8	15	1023.0	1815.0	0.360349
1	3	55.8	15	1957.0	1795.0	1.784079
2	3	69.7	6	1224.0	1976.0	3.138464
3	2	82.7	6	1248.0	-	3.290793
4	2	77.5	19	1648.0	-	5.358910
5	2	77.3	8	1033.0	-	6.214938
6	2	62.7	6	1861.0	-	7.157725
7	3	73.5	18	1790.0	1806.0	8.218164
8	3	86.0	19	1418.0	1350.0	9.082198
9	2	83.3	6	1113.0	-	10.377538
10	2	65.1	15	1847.0	-	11.578607

Table 21 Long Sequence Waveform Trial#13 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	93.1	5	1938.0	-	0.625661
1	2	51.4	8	1066.0	-	0.974934
2	3	70.8	15	1720.0	1426.0	2.306609
3	1	94.1	18	-	-	2.997178
4	2	69.6	10	1488.0	-	3.422341
5	3	64.8	10	1402.0	1596.0	4.316339
6	2	52.3	6	1774.0	-	5.288767
7	1	85.8	15	-	-	6.320356

8	3	60.8	14	1871.0	1165.0	6.560039
9	1	98.8	14	-	-	7.446346
10	3	99.3	14	1148.0	1306.0	8.241265
11	3	60.6	8	1599.0	1461.0	9.179075
12	2	78.6	11	1592.0	-	9.700842
13	3	63.2	14	1693.0	1038.0	10.849288
14	3	93.5	6	1282.0	1248.0	11.302877

Table 22 Long Sequence Waveform Trial#14 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	53.3	11	1271.0	-	1.047279
1	2	63.0	20	1168.0	-	1.984918
2	3	55.2	9	1117.0	1576.0	3.615876
3	2	50.8	16	1411.0	-	4.301608
4	1	85.3	19	-	-	6.504984
5	2	58.6	14	1792.0	-	6.979368
6	2	94.6	13	1808.0	-	8.817434
7	1	57.1	11	-	-	9.891596
8	1	61.2	15	-	-	11.909953

Table 23 Long Sequence Waveform Trial#15 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	94.6	19	1482.0	-	0.115886
1	2	79.3	6	1384.0	-	0.700860
2	1	57.2	9	-	-	1.594697
3	1	93.7	20	-	-	2.392706
4	2	61.7	9	1230.0	-	2.570469
5	3	98.4	8	1184.0	1673.0	3.543663
6	1	69.7	10	-	-	4.071675
7	2	70.8	8	1933.0	-	4.735552
8	2	76.4	11	1145.0	-	5.439925
9	2	62.8	19	1502.0	-	5.832045
10	2	83.8	6	1843.0	-	6.542520
11	1	85.5	15	-	-	7.292547
12	2	93.5	14	1524.0	-	7.649896
13	3	90.9	7	1918.0	1544.0	8.422224
14	3	90.1	12	1249.0	1486.0	9.353705
15	2	72.2	17	1861.0	-	9.956572
16	2	96.7	6	1599.0	-	10.654630
17	2	67.6	10	1297.0	-	10.829763
18	2	65.7	14	1041.0	-	11.570132

**Table 24 Long Sequence Waveform Trial#16 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	71.2	9	1243.0	-	0.561885
1	2	87.2	19	1137.0	-	0.801597
2	3	76.8	18	1531.0	1140.0	1.731966
3	3	87.8	7	1121.0	1547.0	2.431979
4	2	96.5	7	1993.0	-	3.628670
5	1	74.6	17	-	-	4.131390
6	2	77.3	9	1372.0	-	5.099138
7	1	85.9	6	-	-	5.875866
8	2	88.8	17	1107.0	-	6.530409
9	2	67.5	16	1341.0	-	7.544131
10	2	69.1	6	1914.0	-	8.176510
11	2	88.5	15	1657.0	-	9.399754
12	1	76.1	18	-	-	9.676657
13	2	95.7	6	1149.0	-	10.901736
14	2	96.3	14	1566.0	-	11.437453

**Table 25 Long Sequence Waveform Trial#17 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	50.7	20	1451.0	-	0.566167
1	2	96.2	10	1335.0	-	0.982397
2	1	84.1	19	-	-	2.566343
3	2	66.5	8	1190.0	-	3.603418
4	3	74.3	10	1629.0	1831.0	4.337544
5	2	95.3	19	1892.0	-	5.480901
6	1	78.2	12	-	-	6.033702
7	2	68.5	20	1794.0	-	7.307281
8	3	86.3	17	1517.0	1909.0	8.018801
9	2	91.9	11	1446.0	-	9.222425
10	2	61.9	10	1899.0	-	10.107378
11	1	80.3	18	-	-	10.472903
12	2	95.9	15	1380.0	-	11.166191

**Table 26 Long Sequence Waveform Trial#18 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	1	97.0	17	-	-	0.348162
1	1	94.4	12	-	-	2.163194
2	3	54.0	7	1629.0	1838.0	2.727229

3	3	67.4	7	1706.0	1153.0	4.804848
4	2	69.7	16	1487.0	-	6.248039
5	2	87.8	15	1848.0	-	6.812807
6	1	83.9	15	-	-	8.602307
7	2	78.0	14	1916.0	-	9.793174
8	2	79.1	11	1799.0	-	10.763904

**Table 27 Long Sequence Waveform Trial#19 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	89.7	18	1144.0	1557.0	0.809134
1	1	69.8	12	-	-	1.315459
2	2	89.6	13	1567.0	-	3.062228
3	3	64.7	11	1478.0	1796.0	4.319223
4	2	94.1	14	1725.0	-	5.725071
5	2	81.2	6	1176.0	-	7.142751
6	2	69.7	14	1589.0	-	7.575074
7	2	62.3	6	1750.0	-	9.313890
8	2	88.5	10	1367.0	-	10.588489
9	2	70.6	19	1905.0	-	11.505272

**Table 28 Long Sequence Waveform Trial#20 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	50.1	5	1992.0	1817.0	0.565591
1	3	73.5	14	1344.0	1570.0	1.204636
2	1	50.6	5	-	-	2.830020
3	1	93.1	11	-	-	4.780194
4	1	54.7	16	-	-	5.895218
5	2	90.8	8	1386.0	-	6.696982
6	1	61.8	15	-	-	8.189811
7	2	80.6	11	1636.0	-	8.719695
8	1	51.1	5	-	-	9.913088
9	1	89.5	6	-	-	10.950756

**Table 29 Long Sequence Waveform Trial#21 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	65.6	7	1028.0	-	0.328583
1	2	61.6	15	1028.0	-	1.699701
2	1	60.3	16	-	-	2.188327
3	1	52.0	18	-	-	3.141578
4	2	50.8	19	1648.0	-	3.627603



5	2	92.5	14	1670.0	-	5.040562
6	3	66.3	16	1825.0	1136.0	5.492587
7	3	77.3	10	1038.0	1697.0	6.816226
8	2	68.0	14	1380.0	-	7.294558
9	2	70.1	11	1830.0	-	8.358645
10	2	62.5	13	1502.0	-	8.825924
11	1	65.5	9	-	-	9.518989
12	2	93.1	13	1431.0	-	10.628408
13	2	91.4	17	1930.0	-	11.171228

**Table 30 Long Sequence Waveform Trial#22 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	1	80.9	13	-	-	0.478237
1	1	89.0	6	-	-	1.263160
2	2	78.4	15	1265.0	-	3.582507
3	1	90.1	10	-	-	4.716079
4	2	77.3	10	1105.0	-	5.502266
5	3	95.8	7	1235.0	1713.0	6.744471
6	3	74.3	18	1165.0	1347.0	7.468405
7	3	81.7	9	1125.0	1446.0	8.429233
8	1	85.9	17	-	-	9.678070
9	2	64.3	11	1413.0	-	11.362163

**Table 31 Long Sequence Waveform Trial#23 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	61.3	15	1687.0	1267.0	0.781383
1	2	78.2	17	1357.0	-	1.748966
2	2	64.5	7	1712.0	-	2.237774
3	1	92.7	8	-	-	3.254390
4	2	90.7	10	1319.0	-	4.712705
5	1	90.8	18	-	-	5.662037
6	2	52.3	11	1426.0	-	6.195857
7	2	79.1	11	1910.0	-	7.277961
8	1	50.1	8	-	-	8.253243
9	2	89.4	9	1764.0	-	9.685956
10	3	56.9	19	1579.0	1167.0	10.045492
11	2	90.9	10	1223.0	-	11.480340

**Table 32 Long Sequence Waveform Trial#24 (Detected)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
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0	2	94.3	17	1668.0	-	0.143449
1	2	96.7	13	1118.0	-	1.715005
2	3	90.0	15	1720.0	1744.0	2.900412
3	2	99.8	13	1982.0	-	3.787612
4	1	75.2	15	-	-	5.232050
5	3	97.2	7	1263.0	1427.0	5.963735
6	1	64.5	14	-	-	7.465626
7	2	55.6	18	1490.0	-	8.466963
8	3	79.5	10	1490.0	1014.0	9.383637
9	2	95.8	11	1041.0	-	10.026367
10	1	57.3	13	-	-	11.195284

Table 33 Long Sequence Waveform Trial#25 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	1	91.7	19	-	-	0.051019
1	3	66.0	17	1131.0	1788.0	2.027458
2	1	66.4	10	-	-	3.469280
3	3	66.2	7	1375.0	1854.0	4.521441
4	3	53.0	13	1005.0	1243.0	5.598316
5	3	62.1	15	1678.0	1975.0	6.302026
6	2	75.0	11	1736.0	-	7.930993
7	2	54.3	20	1095.0	-	8.822294
8	3	92.1	20	1567.0	1287.0	9.715363
9	3	61.4	9	1861.0	1747.0	11.283241

Table 34 Long Sequence Waveform Trial#26 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	97.5	14	1947.0	-	1.109227
1	1	80.5	7	-	-	1.762484
2	2	93.4	6	1757.0	-	3.554656
3	2	94.9	20	1685.0	-	5.875072
4	2	60.9	11	1302.0	-	6.451127
5	3	60.2	11	1668.0	1037.0	7.578821
6	2	63.9	15	1974.0	-	9.955079
7	2	59.4	20	1420.0	-	10.833874

Table 35 Long Sequence Waveform Trial#27 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	1	90.0	20	-	-	0.600203
1	3	78.4	12	1731.0	1953.0	0.962970

2	1	57.1	20	-	-	1.842856
3	2	52.0	9	1587.0	-	2.489266
4	1	84.3	13	-	-	3.199704
5	3	99.7	12	1195.0	1468.0	3.754298
6	1	56.9	6	-	-	4.426531
7	3	54.2	17	1150.0	1242.0	5.138114
8	2	97.2	19	1423.0	-	5.512482
9	2	89.1	8	1246.0	-	6.098242
10	1	92.9	15	-	-	7.001598
11	2	92.3	9	1712.0	-	7.657571
12	2	98.3	7	1775.0	-	8.345341
13	1	84.2	5	-	-	9.188203
14	2	94.8	11	1122.0	-	9.412709
15	2	69.4	14	1517.0	-	10.096512
16	3	78.4	18	1085.0	1854.0	10.989502
17	2	91.2	19	1542.0	-	11.459365

Table 36 Long Sequence Waveform Trial#28 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	83.5	12	1341.0	-	0.671260
1	2	52.7	15	1702.0	-	1.305541
2	1	74.5	18	-	-	2.307541
3	2	63.2	19	1110.0	-	3.656613
4	2	83.7	19	1372.0	-	3.948668
5	2	67.2	12	1578.0	-	5.321481
6	1	60.3	7	-	-	6.390582
7	2	71.8	13	1480.0	-	6.498148
8	2	63.5	13	1979.0	-	8.153101
9	2	66.6	10	1327.0	-	8.797377
10	2	74.7	8	1202.0	-	9.542209
11	1	71.7	9	-	-	10.556762
12	1	76.1	15	-	-	11.779217

Table 37 Long Sequence Waveform Trial#29 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	77.8	11	1484.0	1330.0	0.808280
1	2	97.3	7	1818.0	-	2.164677
2	2	72.7	10	1038.0	-	3.287212
3	2	76.2	6	1246.0	-	3.610634
4	1	93.6	15	-	-	5.770002
5	1	92.1	11	-	-	7.121533

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6	2	93.1	8	1172.0	-	7.873425
7	2	73.6	14	1096.0	-	8.643986
8	1	95.6	16	-	-	10.120316
9	1	96.8	17	-	-	11.882874

**Table 38 Long Sequence Waveform Trial#30 (Detected)**

**Appendix C Test Data Tables and Plots for Channel Closing****FCC PART 15 SUBPART E AND RSS-210 DATA**

Waveform Type	Channel Closing Transmission Time <sup>1</sup>		Channel Move Time		Result
	Measured	Limit	Measured	Limit	
Radar Type 1	0 ms	60 ms	.194s	10 s	Pass
Radar Type 5	0 ms	60 ms	0s	10 s	Pass

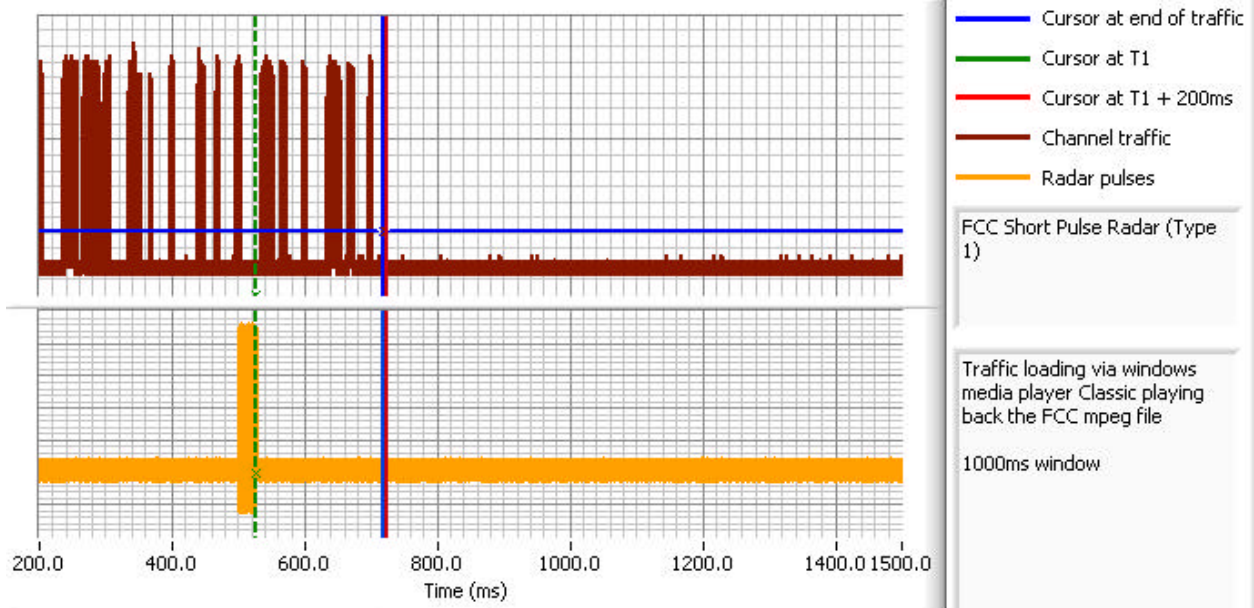
**Table 39 FCC Part 15 Subpart E Channel Closing Test Results**

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

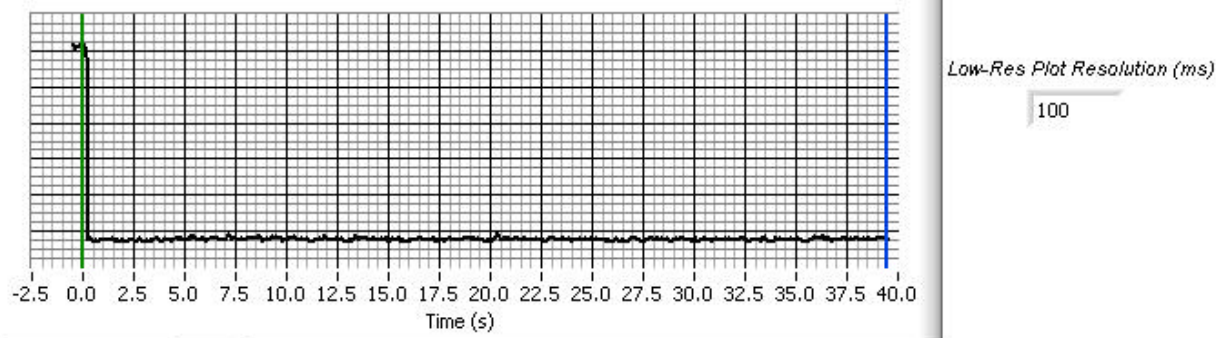
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<sup>1</sup> Channel closing time for FCC measurements is the aggregate transmission time starting from 200ms after the end of the radar signal to the completion of the channel move.

# Elliott Timing Plots - Channel Closing



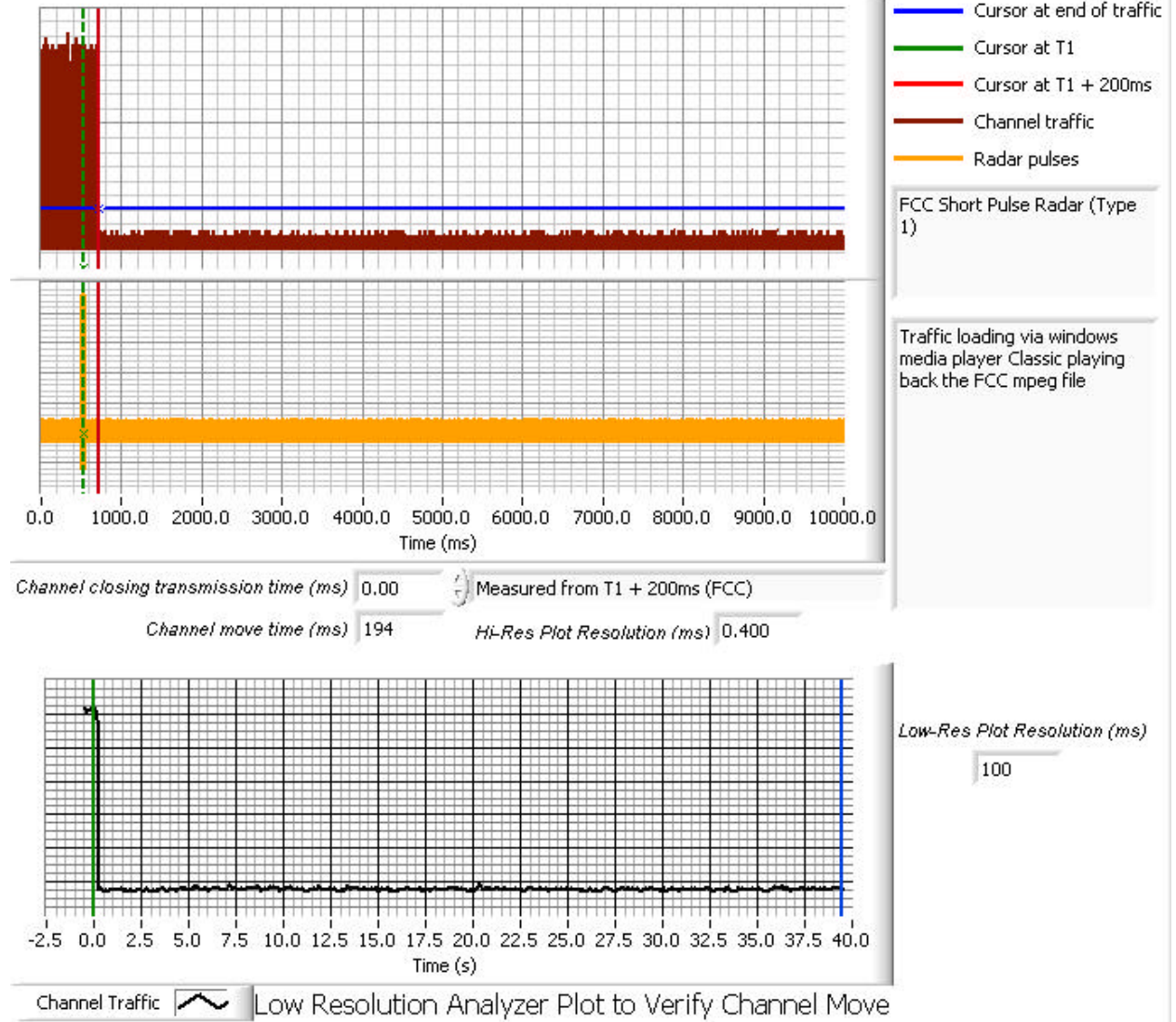
Channel closing transmission time (ms) 0.00 Measured from T1 + 200ms (FCC)  
Channel move time (ms) 194 HI-Res Plot Resolution (ms) 0.400



Channel Traffic Low Resolution Analyzer Plot to Verify Channel Move

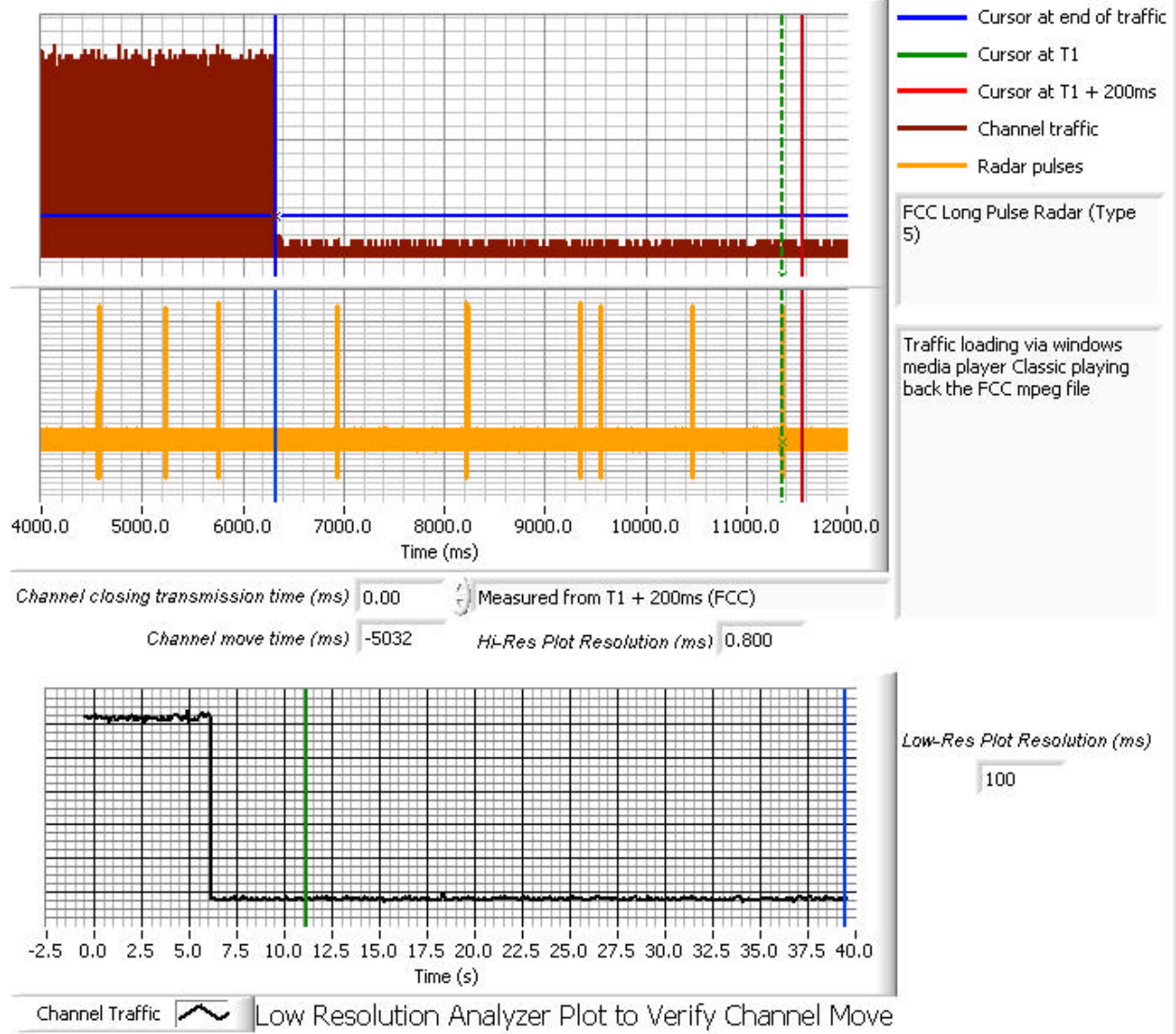
**Radar type 1 plot with a 1000ms window**

# Elliott Timing Plots - Channel Closing



**Radar type 1 plot with a 10,000ms window**

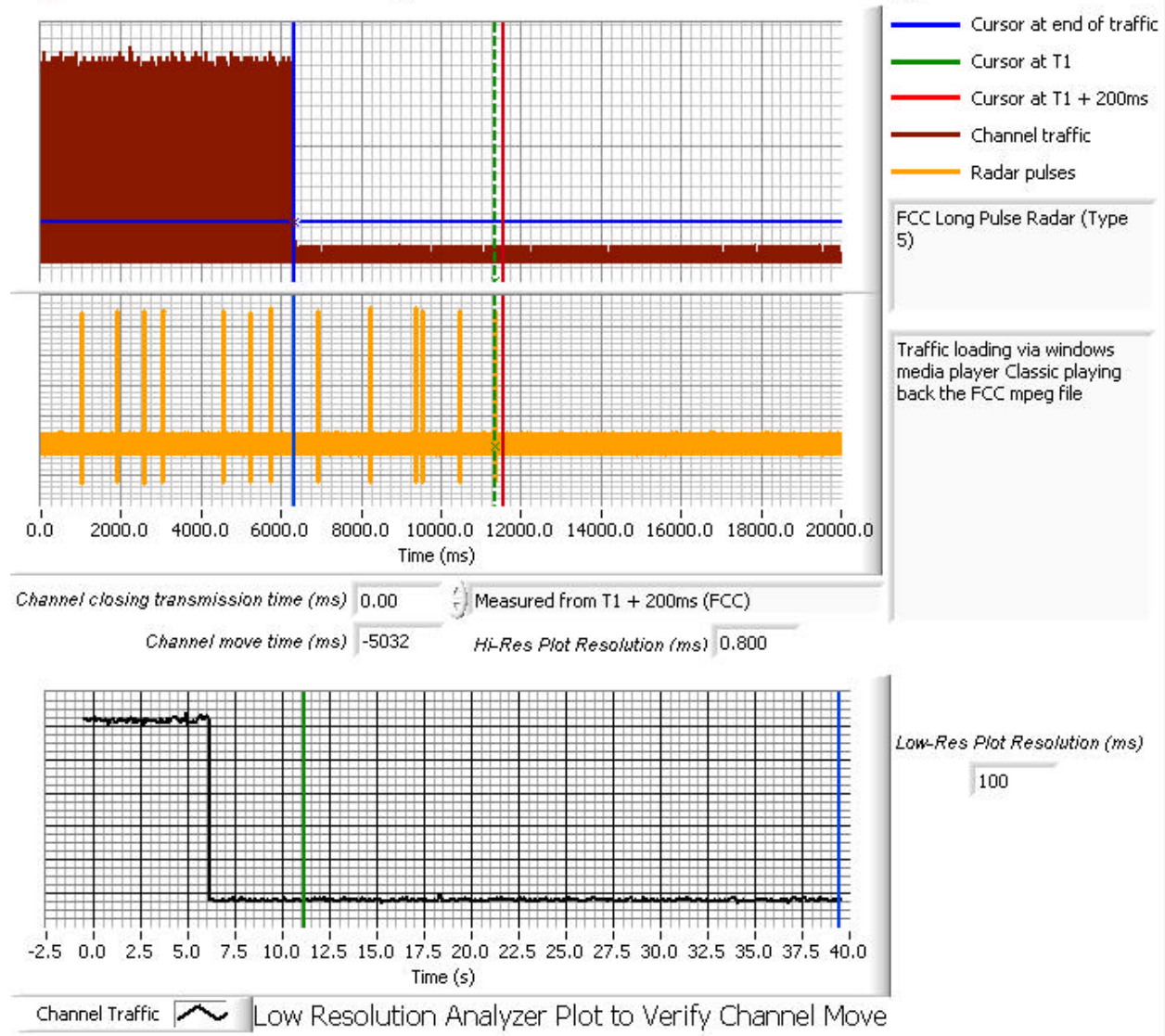
# Elliott Timing Plots - Channel Closing



**Radar type 5 plot with a 1000ms window**



# Elliott Timing Plots - Channel Closing



**Radar type 5 plot with a 20,000ms window**

### Appendix D Test Data – Channel Availability Check

The first plot is to show that the master did not emit beacon, control, or data signals on the test channel until the power-up sequence has been completed and the U-NII device checks for Radar Waveforms for one minute on the test channel. This test does not use any Radar Waveforms and per standard only needs to be performed one time.

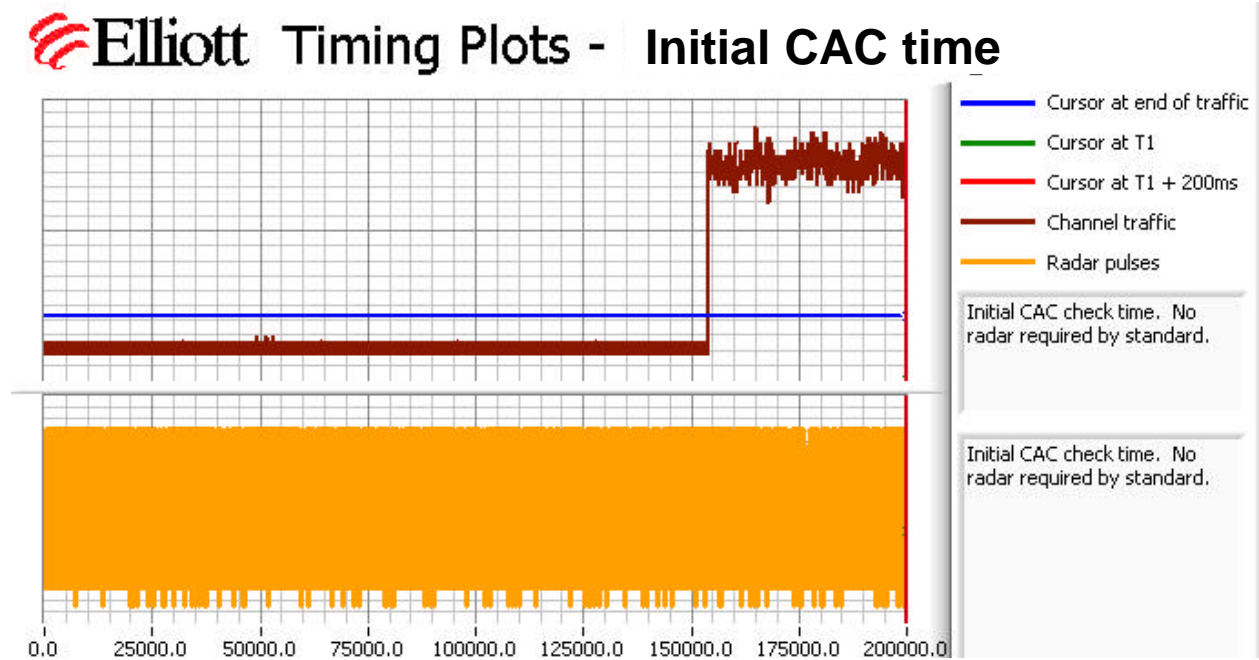
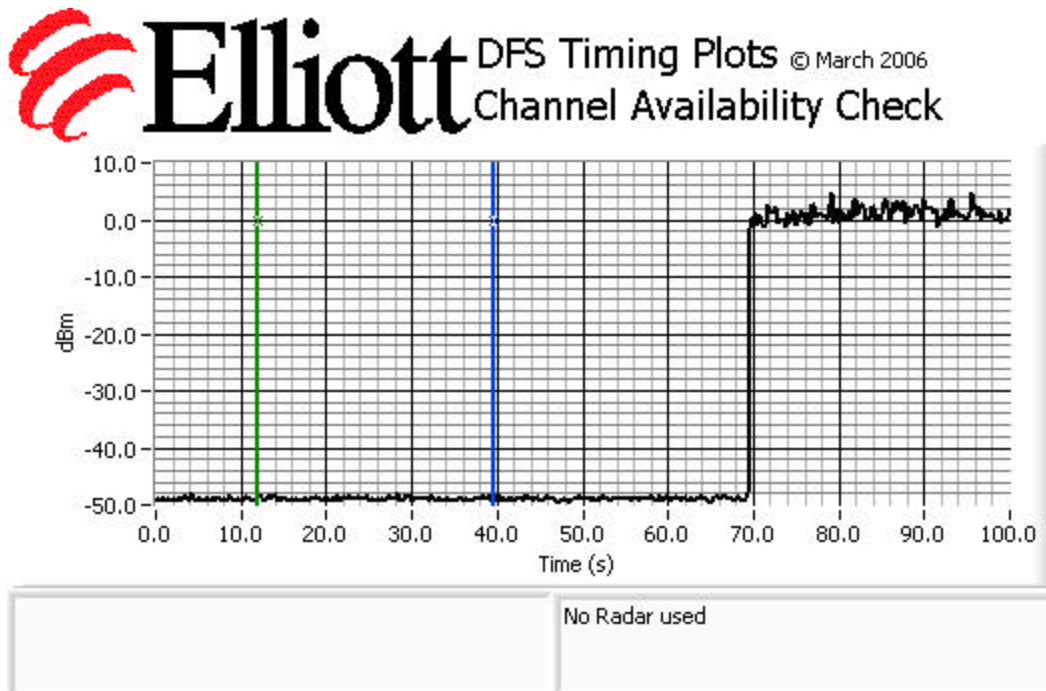


Figure 2 Plot of Initial CAC time (20,000ms window)

The following plot shows the start of transmissions approximately 69s after the start of the CAC (no radar applied during the CAC).



**Figure 3 Plot of EUT Start-Up After CAC (69 seconds)**

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

The level of the radar signal applied was -60dBm. Measurements were made on channel 64 (5320 MHz) and also on channel 120 (5600 MHz).

The start of each plot is the same for each of the plots and is set to coincide with the start of the Channel Availability Check period.

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.

# Elliott Timing Plots - CAC time

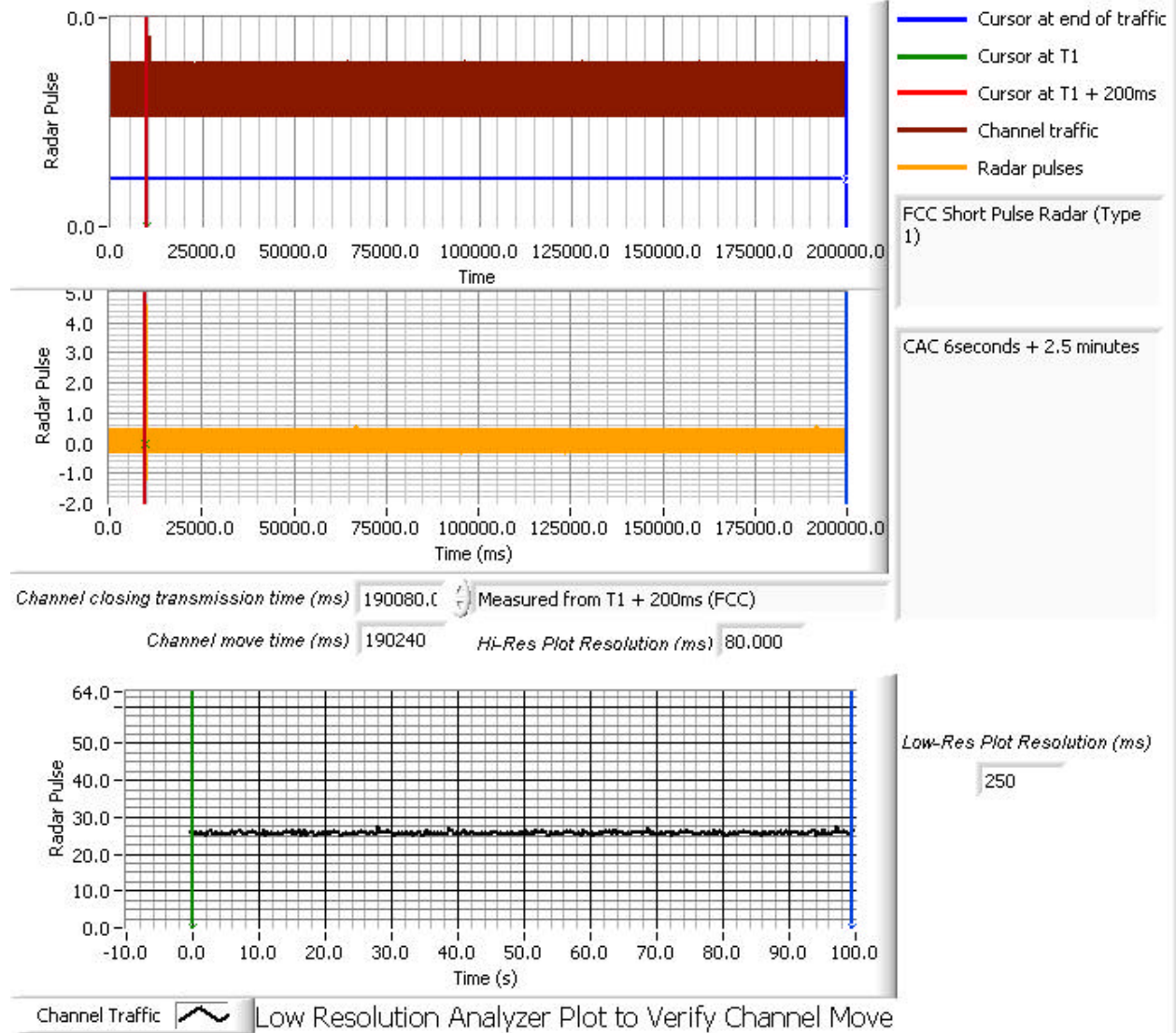


Figure 4 Plot of EUT Beginning of CAC (6 seconds)