

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

***FCC Part 15 Subpart E (UNII)***

***Meru Networks Incorporated***  
***Model(s): OAP180***

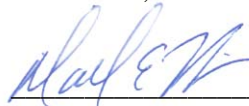
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**TABLE OF CONTENTS**

<b>COVER PAGE</b> .....	<b>1</b>
<b>TABLE OF CONTENTS</b> .....	<b>2</b>
<b>LIST OF FIGURES AND TABLES</b> .....	<b>3</b>
<b>SCOPE</b> .....	<b>5</b>
<b>OBJECTIVE</b> .....	<b>5</b>
<b>STATEMENT OF COMPLIANCE</b> .....	<b>5</b>
<b>DEVIATIONS FROM THE STANDARD</b> .....	<b>5</b>
<b>EQUIPMENT UNDER TEST (EUT) DETAILS</b> .....	<b>6</b>
GENERAL.....	6
ENCLOSURE.....	6
MODIFICATIONS .....	6
SUPPORT EQUIPMENT .....	7
EUT INTERFACE PORTS .....	7
EUT OPERATION .....	8
<b>TEST RESULTS</b> .....	<b>9</b>
TEST RESULTS SUMMARY – FCC PART 15, MASTER DEVICE .....	9
MEASUREMENT UNCERTAINTIES.....	10
<b>DFS TEST METHODS</b> .....	<b>11</b>
RADIATED TEST METHOD .....	11
CONDUCTED TEST METHOD .....	13
<b>DFS MEASUREMENT INSTRUMENTATION</b> .....	<b>14</b>
RADAR GENERATION SYSTEM.....	14
CHANNEL MONITORING SYSTEM.....	15
<b>DFS MEASUREMENT METHODS</b> .....	<b>16</b>
DFS RADAR DETECTION BANDWIDTH .....	16
DFS – CHANNEL CLOSING TRANSMISSION TIME AND CHANNEL MOVE TIME .....	16
DFS CHANNEL AVAILABILITY CHECK TIME .....	17
UNIFORM LOADING.....	17
TRANSMIT POWER CONTROL (TPC).....	17
<b>SAMPLE CALCULATIONS</b> .....	<b>18</b>
DETECTION PROBABILITY / SUCCESS RATE.....	18
THRESHOLD LEVEL .....	18
<b>APPENDIX A TEST EQUIPMENT CALIBRATION DATA</b> .....	<b>19</b>
<b>APPENDIX B TEST DATA TABLES FOR RADAR DETECTION PROBABILITY</b> .....	<b>20</b>
<b>APPENDIX C TEST DATA TABLES AND PLOTS FOR CHANNEL CLOSING</b> .....	<b>66</b>
FCC PART 15 SUBPART E DATA .....	66
<b>APPENDIX D TEST DATA – CHANNEL AVAILABILITY CHECK</b> .....	<b>71</b>
<b>APPENDIX E TEST DATA – UNIFORM LOADING</b> .....	<b>73</b>

<b>APPENDIX F ANTENNA SPEC .....</b>	<b>76</b>
<b>APPENDIX G TEST CONFIGURATION PHOTOGRAPHS .....</b>	<b>78</b>

### *LIST OF FIGURES AND TABLES*

Table 1 FCC Part 15 Subpart E Client Device Test Result Summary .....	9
Table 2 - Summary of All Results .....	20
Table 3 - FCC Short Pulse Radar (Type 1) Test Results .....	20
Table 4 - FCC Short Pulse Radar (Type 2) Test Results .....	21
Table 5 - FCC Short Pulse Radar (Type 3) Test Results .....	22
Table 6 - FCC Short Pulse Radar (Type 4) Test Results .....	23
Table 7 - FCC frequency hopping radar (Type 6) Test Results.....	24
Table 8 - Long Sequence Waveform Summary .....	53
Table 9 - Long Sequence Waveform Trial#1 (Detected).....	53
Table 10 - Long Sequence Waveform Trial#2 (** NOT Detected **) .....	54
Table 11 - Long Sequence Waveform Trial#3 (Detected).....	54
Table 12 - Long Sequence Waveform Trial#4 (Detected).....	54
Table 13 - Long Sequence Waveform Trial#5 (Detected).....	55
Table 14 - Long Sequence Waveform Trial#6 (Detected).....	55
Table 15 - Long Sequence Waveform Trial#7 (Detected).....	55
Table 16 - Long Sequence Waveform Trial#8 (Detected).....	56
Table 17 - Long Sequence Waveform Trial#9 (Detected).....	56
Table 18 - Long Sequence Waveform Trial#10 (Detected).....	56
Table 19 - Long Sequence Waveform Trial#11 (** NOT Detected**) .....	57
Table 20 - Long Sequence Waveform Trial#12 (Detected).....	57
Table 21 - Long Sequence Waveform Trial#13 (Detected).....	57
Table 22 - Long Sequence Waveform Trial#14 (Detected).....	58
Table 23 - Long Sequence Waveform Trial#15 (Detected).....	58
Table 24 - Long Sequence Waveform Trial#16 (Detected).....	59
Table 25 - Long Sequence Waveform Trial#17 (Detected).....	59
Table 26 - Long Sequence Waveform Trial#18 (Detected).....	59
Table 27 - Long Sequence Waveform Trial#19 (Detected).....	60
Table 28 - Long Sequence Waveform Trial#20 (Detected).....	60
Table 29 - Long Sequence Waveform Trial#21 (Detected).....	61
Table 30 - Long Sequence Waveform Trial#22 (Detected).....	61
Table 31 - Long Sequence Waveform Trial#23 (Detected).....	62
Table 32 - Long Sequence Waveform Trial#24 (Detected).....	62
Table 33 - Long Sequence Waveform Trial#25 (Detected).....	63
Table 34 - Long Sequence Waveform Trial#26 (Detected).....	63
Table 35 - Long Sequence Waveform Trial#27 (**NOT Detected**) .....	64
Table 36 - Long Sequence Waveform Trial#28 (Detected).....	64
Table 37 - Long Sequence Waveform Trial#29 (Detected).....	65
Table 38 - Long Sequence Waveform Trial#30 (Detected).....	65
Table 39 FCC Part 15 Subpart E Channel Closing Test Results .....	66
Figure 1 Test Configuration for radiated Measurement Method.....	11
Figure 2 Test Configuration for Conducted Measurement Method .....	13
Figure 3 Thirty minute non-occupancy observation.....	66
Figure 4 Channel Close and Move, short pulse .....	67

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Figure 5 Channel Close and Move 600ms window, short pulse .....	68
Figure 6 Channel Close and Move, long pulse .....	69
Figure 7 Channel Close and Move 600ms window, long pulse .....	70
Figure 8 Plot of EUT Start-Up After CAC .....	71
Figure 9 Plot of type 1 radar during the first 6 seconds of the CAC .....	72
Figure 10 Plot of Type 1 Radar during the last 6 seconds of the CAC .....	72
Figure 11 Expected Loading For a 15 Channel System (1,000 Trials) .....	74
Figure 12 Expected Loading For a 15 Channel System (10,000 Trials) .....	75
Figure 13, Master DFS Test Setup.....	78

## **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 Meru Networks Incorporated model OAP180 in accordance with these standards.

- Test data has been taken pursuant to the relevant requirements of the following standard(s).
- FCC Part 15 Subpart E Unlicensed National Information Infrastructure (U-NII) 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 Meru Networks Incorporated model OAP180 and therefore apply only to the tested sample. The sample was selected and prepared by Chippy Nasim of Meru Networks Incorporated.

## **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 Meru Networks Incorporated model OAP180 complied with the DFS requirements of:

FCC Part 15.407(h)

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 Meru Networks Incorporated model OAP180 is a Dual Radio WLAN Access Point.

The sample was received on October 29, 2007 and tested on October 29, 2007. The EUT consisted of the following component(s):

Manufacturer	Model	Description	Serial Number
Meru Networks	OAP180	802.11 a/b/g WLAN Access Point	32007AP180000CE 604027E

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

**Operating Modes**

Master Device

**Antenna Gains / EIRP**

	5250 – 5350 MHz	5470 – 5725 MHz
Lowest Antenna Gain (dBi)	+8.0	+8.0
Highest Antenna Gain (dBi)	+13.5	+13.5
Output Power (dBm)	14.6	12.6

**Channel Protocol**

IP Based

**ENCLOSURE**

The EUT enclosure measures approximately 19.0 by 19.0 by 7.0 centimeters. It is primarily constructed of coated steel.

**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	2388	Laptop Computer	KM-6666D 0410	DoC
IBM	2628	Laptop Computer	78-AP198 00/11	DoC
Netgear	FS116	Network Switch	FS13144DB0935	DoC
3Com	PW130	Power Over Ethernet Supply	0514	N/A
Meru Networks	MC3000	Controller	1107MC3000102 7	Class A
<i>Acer</i>	<i>Travelmate 2420</i>	<i>Laptop Computer</i>	<i>LXTB2060506070 C9FSKS00</i>	<i>DoC PPD-AR5BMB5</i>

The italicized device was used as 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)
RJ45 on EUT	3Com POE	UTP-CAT5	Unshielded	3
RJ45 on Switch	3Com POE	UTP-CAT5	Unshielded	1
RJ45 on Switch	MC3000	UTP-CAT5	Unshielded	1
RJ45 on MC3000	IBM Laptop	UTP-CAT5	Unshielded	1

**EUT OPERATION**

The EUT was operating with software version 3.5. The software is secured to prevent the user from disabling the DFS function as follows:

Meru OAP180's aren't provided with a configuration option to Enable/Disable DFS operation. DFS operation is part of the basic wireless kernel of the OAP180. On initialization of the radios of the OAP180, DFS functionality is automatically initialized and starts functioning to detect RADAR and subsequent channel changes on detection of RADAR on the operating channel. Meru Controllers also don't allow changes to Country settings once configured for a particular country. This means Country settings are allowed to be set only the first time the Meru Controller is configured. Once configured, no further configurations are allowed for Country settings. Reset to defaults won't result in resetting this configuration. This will ensure that DFS Channels specified for a particular country cannot be changed by changing country information.

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 eight seconds after 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, MASTER DEVICE**

Description	Radar Type	Radar Frequency	Measured Value	Requirement	Test Data	Status
Channel Availability Check (CAC) Time	Type 1	5300	60.5s	≥ 60s	Appendix D	Complies
CAC Detection Threshold	Type 1	5300	-64	-64dBm	Appendix D	Complies
In-Service Monitoring Detection Threshold	Type 1 Type 2 Type 3 Type 4 Type 5 Type 6	5300	-64	-64dBm	Appendix C	Complies
Bandwidth Detection	Type 1	Varies	-64	80% of the 99% BW	28MHz	Complies
Channel closing transmission time	Type 1 Type 5	5300 5700	441 ms 0 ms	≤ 260ms	Appendix C	Complies
Channel move time	Type 1 Type 5	5300 5700	0.008 s 0 s	≤ 10s	Appendix C	Complies
Non-occupancy period	N/A	-	30	> 30 minutes	Appendix C	Complies
Uniform Loading		-	-	Uniform Loading	Refer to operational description	Complies
Transmit Power Control		TPC is not applicable, the EUT is less than 500mW EIRP				N/A

**Table 1 FCC Part 15 Subpart E Client Device Test Result Summary**

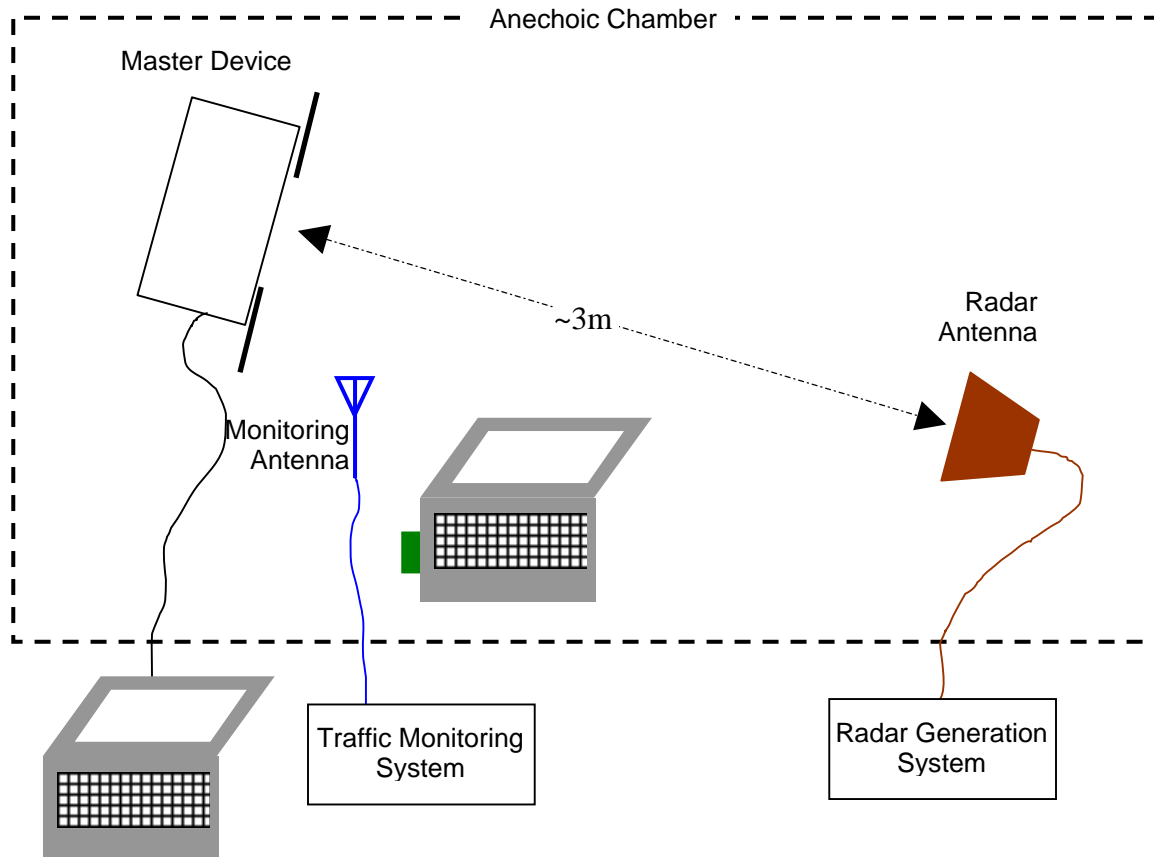
**MEASUREMENT UNCERTAINTIES**

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****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  $G$  (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:

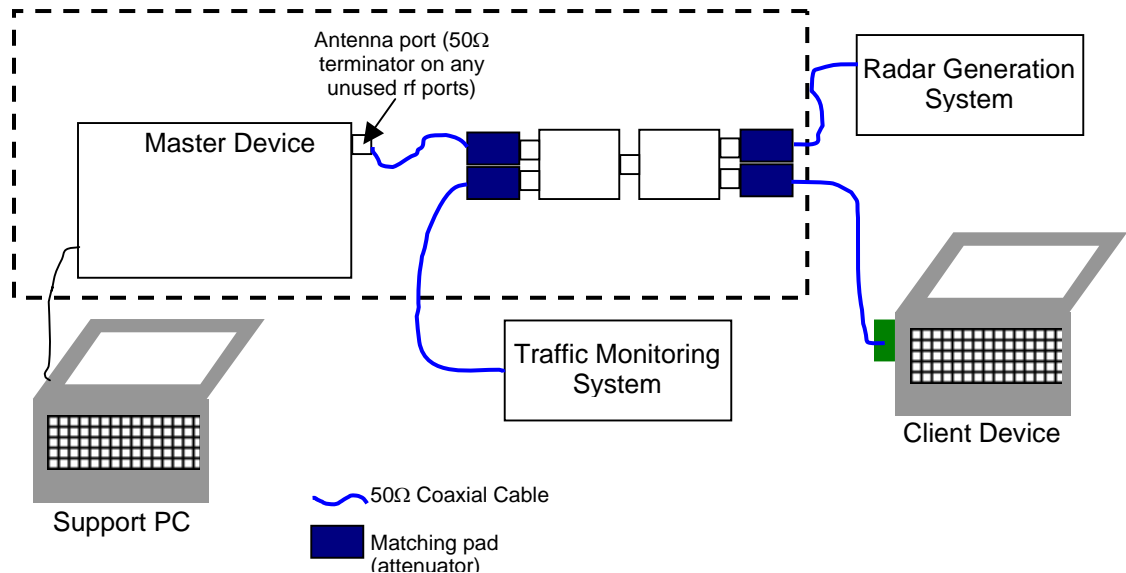
$$\text{Applied level (dBm)} = R - \text{GREF} + L$$

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 2 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 unmodulated 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 this way:

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.



*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)*

Not Applicable.

## **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 Analyzer	8595EM	787	21-Dec-07
Tektronix	Oscilloscope	TDS 5104	1435	26-Apr-08
Agilent	PSG Vector Signal Generator	E8267C	1877	23-Nov-07

**Appendix B Test Data Tables for Radar Detection Probability****Table 2 - Summary of All Results**

Waveform Name	Success Rate	Number of Trials
FCC Short Pulse Radar (Type 1)	100.0 %	30
FCC Short Pulse Radar (Type 2)	96.7 %	30
FCC Short Pulse Radar (Type 3)	96.7 %	30
FCC Short Pulse Radar (Type 4)	96.7 %	30
FCC frequency hopping radar (Type 6)	94.8 %	58
Long Sequence	90.0 %	30

**Table 3 - FCC Short Pulse Radar (Type 1) 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	5260.0MHz, -55.0dBm	N/A
1	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
2	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
3	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
4	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
5	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
6	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
7	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
8	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
9	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
10	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
11	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
12	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
13	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
14	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
15	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
16	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
17	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
18	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
19	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
20	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
21	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
22	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
23	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
24	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
25	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
26	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
27	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
28	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A
29	18	1.0	1428.0	Yes	5260.0MHz, -55.0dBm	N/A

**Table 4 - 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	24	2.0	164.0	Yes	5300.0MHz, -55.0dBm	N/A
1	24	2.8	211.0	Yes	5300.0MHz, -55.0dBm	N/A
2	27	4.7	214.0	Yes	5300.0MHz, -55.0dBm	N/A
3	27	3.0	157.0	Yes	5300.0MHz, -55.0dBm	N/A
4	26	2.4	208.0	No	5300.0MHz, -55.0dBm	N/A
5	25	1.0	212.0	Yes	5300.0MHz, -55.0dBm	N/A
6	24	4.1	183.0	Yes	5300.0MHz, -55.0dBm	N/A
7	26	1.9	218.0	Yes	5300.0MHz, -55.0dBm	N/A
8	23	2.3	186.0	Yes	5300.0MHz, -55.0dBm	N/A
9	26	1.8	198.0	Yes	5300.0MHz, -55.0dBm	N/A
10	29	3.2	195.0	Yes	5300.0MHz, -55.0dBm	N/A
11	24	2.5	190.0	Yes	5300.0MHz, -55.0dBm	N/A
12	26	2.2	182.0	Yes	5300.0MHz, -55.0dBm	N/A
13	27	1.5	195.0	Yes	5300.0MHz, -55.0dBm	N/A
14	23	1.9	175.0	Yes	5300.0MHz, -55.0dBm	N/A
15	27	4.2	218.0	Yes	5300.0MHz, -55.0dBm	N/A
16	26	1.8	183.0	Yes	5300.0MHz, -55.0dBm	N/A
17	28	3.1	158.0	Yes	5300.0MHz, -55.0dBm	N/A
18	28	4.4	179.0	Yes	5300.0MHz, -55.0dBm	N/A
19	25	4.7	183.0	Yes	5300.0MHz, -55.0dBm	N/A
20	23	2.8	174.0	Yes	5300.0MHz, -55.0dBm	N/A
21	26	1.2	167.0	Yes	5300.0MHz, -55.0dBm	N/A
22	24	2.2	228.0	Yes	5300.0MHz, -55.0dBm	N/A
23	24	3.0	176.0	Yes	5300.0MHz, -55.0dBm	N/A
24	23	1.8	223.0	Yes	5300.0MHz, -55.0dBm	N/A
25	23	1.8	190.0	Yes	5300.0MHz, -55.0dBm	N/A
26	24	2.5	214.0	Yes	5300.0MHz, -55.0dBm	N/A
27	27	3.9	224.0	Yes	5300.0MHz, -55.0dBm	N/A
28	27	2.9	221.0	Yes	5300.0MHz, -55.0dBm	N/A
29	26	3.0	151.0	Yes	5300.0MHz, -55.0dBm	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	17	9.0	336.0	Yes	5300.0MHz, -55.0dBm	N/A
1	18	9.7	278.0	Yes	5300.0MHz, -55.0dBm	N/A
2	16	9.2	417.0	Yes	5300.0MHz, -55.0dBm	N/A
3	18	7.5	409.0	Yes	5300.0MHz, -55.0dBm	N/A
4	17	10.0	347.0	Yes	5300.0MHz, -55.0dBm	N/A
5	17	6.2	351.0	Yes	5300.0MHz, -55.0dBm	N/A
6	17	8.4	376.0	Yes	5300.0MHz, -55.0dBm	N/A
7	16	9.1	298.0	Yes	5300.0MHz, -55.0dBm	N/A
8	16	9.1	359.0	Yes	5300.0MHz, -55.0dBm	N/A
9	17	7.7	487.0	Yes	5300.0MHz, -55.0dBm	N/A
10	18	6.3	253.0	Yes	5300.0MHz, -55.0dBm	N/A
11	16	7.1	257.0	Yes	5300.0MHz, -55.0dBm	N/A
12	17	9.5	391.0	Yes	5300.0MHz, -55.0dBm	N/A
13	18	9.1	277.0	Yes	5300.0MHz, -55.0dBm	N/A
14	18	6.3	365.0	Yes	5300.0MHz, -55.0dBm	N/A
15	18	7.3	407.0	Yes	5300.0MHz, -55.0dBm	N/A
16	18	8.3	369.0	Yes	5300.0MHz, -55.0dBm	N/A
17	18	7.7	258.0	Yes	5300.0MHz, -55.0dBm	N/A
18	16	6.8	492.0	Yes	5300.0MHz, -55.0dBm	N/A
19	17	7.7	391.0	Yes	5300.0MHz, -55.0dBm	N/A
20	18	9.8	214.0	Yes	5300.0MHz, -55.0dBm	N/A
21	17	7.5	387.0	Yes	5300.0MHz, -55.0dBm	N/A
22	18	9.2	445.0	Yes	5300.0MHz, -55.0dBm	N/A
23	16	9.6	262.0	Yes	5300.0MHz, -55.0dBm	N/A
24	18	8.1	337.0	No	5300.0MHz, -55.0dBm	N/A
25	17	8.5	422.0	Yes	5300.0MHz, -55.0dBm	N/A
26	17	7.0	386.0	Yes	5300.0MHz, -55.0dBm	N/A
27	16	9.7	234.0	Yes	5300.0MHz, -55.0dBm	N/A
28	18	7.5	440.0	Yes	5300.0MHz, -55.0dBm	N/A
29	18	8.7	280.0	Yes	5300.0MHz, -55.0dBm	N/A

**Table 6 - 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	13	15.3	322.0	Yes	5300.0MHz, -55.0dBm	N/A
1	15	19.2	483.0	Yes	5300.0MHz, -55.0dBm	N/A
2	16	15.2	424.0	Yes	5300.0MHz, -55.0dBm	N/A
3	13	13.0	494.0	Yes	5300.0MHz, -55.0dBm	N/A
4	13	14.2	335.0	Yes	5300.0MHz, -55.0dBm	N/A
5	13	16.6	393.0	Yes	5300.0MHz, -55.0dBm	N/A
6	12	19.3	487.0	Yes	5300.0MHz, -55.0dBm	N/A
7	12	12.4	290.0	Yes	5300.0MHz, -55.0dBm	N/A
8	14	14.7	212.0	Yes	5300.0MHz, -55.0dBm	N/A
9	13	11.4	468.0	No	5300.0MHz, -55.0dBm	N/A
10	13	15.8	345.0	Yes	5300.0MHz, -55.0dBm	N/A
11	15	18.1	231.0	Yes	5300.0MHz, -55.0dBm	N/A
12	16	13.3	219.0	Yes	5300.0MHz, -55.0dBm	N/A
13	13	12.5	478.0	Yes	5300.0MHz, -55.0dBm	N/A
14	13	12.5	478.0	Yes	5300.0MHz, -55.0dBm	N/A
15	15	14.7	327.0	Yes	5300.0MHz, -55.0dBm	N/A
16	13	12.1	235.0	Yes	5300.0MHz, -55.0dBm	N/A
17	14	13.7	273.0	Yes	5300.0MHz, -55.0dBm	N/A
18	15	20.0	328.0	Yes	5300.0MHz, -55.0dBm	N/A
19	14	14.7	451.0	Yes	5300.0MHz, -55.0dBm	N/A
20	14	18.3	201.0	Yes	5300.0MHz, -55.0dBm	N/A
21	13	16.0	373.0	Yes	5300.0MHz, -55.0dBm	N/A
22	15	11.8	345.0	Yes	5300.0MHz, -55.0dBm	N/A
23	16	19.1	481.0	Yes	5300.0MHz, -55.0dBm	N/A
24	15	11.1	407.0	Yes	5300.0MHz, -55.0dBm	N/A
25	14	18.9	498.0	Yes	5300.0MHz, -55.0dBm	N/A
26	13	12.4	432.0	Yes	5300.0MHz, -55.0dBm	N/A
27	14	17.6	500.0	Yes	5300.0MHz, -55.0dBm	N/A
28	14	11.2	436.0	Yes	5300.0MHz, -55.0dBm	N/A
29	12	17.0	332.0	Yes	5300.0MHz, -55.0dBm	N/A

**Table 7 - FCC frequency hopping radar (Type 6) Test Results**

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
0	9	1.0	333.0	Yes	5286.0MHz, -55.0dBm	5431, 5418, 5723, 5469, 5512, 5371, 5705, 5369, 5413, 5659, 5391, 5562, 5453, 5427, 5336, 5532, 5479, 5602, 5276, 5517, 5669, 5307, 5283, 5482, 5365, 5322, 5407, 5419, 5323, 5389, 5611, 5335, 5345, 5575, 5341, 5576, 5412, 5679, 5614, 5374, 5463, 5559, 5339, 5703, 5720, 5711, 5635, 5673, 5269, 5552, 5306, 5704, 5523, 5416, 5490, 5675, 5458, 5515, 5597, 5494, 5526, 5516, 5442, 5466, 5662, 5414, 5621, 5385, 5596, 5445, 5454, 5695, 5344, 5502, 5519, 5266, 5377, 5522, 5381, 5327, 5626, 5709, 5505, 5527, 5521, 5699, 5710, 5547, 5484, 5302, 5497, 5271, 5446, 5584, 5665, 5296, 5667, 5388, 5557, 5424 (4 hits)
1	9	1.0	333.0	Yes	5287.0MHz, -55.0dBm	5341, 5426, 5266, 5292, 5502, 5422, 5337, 5330, 5582, 5333, 5707, 5571, 5702, 5377, 5559, 5700, 5396, 5254, 5641, 5574, 5584, 5402, 5512, 5576, 5498, 5362, 5704, 5290, 5323, 5631, 5262, 5591, 5536, 5491, 5693, 5363, 5509, 5472, 5711, 5577, 5606, 5527, 5277, 5671, 5294, 5423, 5690, 5405, 5501, 5418, 5399, 5520, 5532, 5451, 5635, 5618, 5600, 5715, 5570, 5500, 5519, 5445, 5264, 5639, 5408, 5583, 5393, 5565, 5650, 5378, 5533, 5322, 5622, 5669, 5302, 5549, 5569, 5360, 5682, 5469, 5608, 5456, 5699, 5352, 5561, 5471, 5496, 5626, 5251, 5283, 5427, 5270, 5485, 5315, 5529, 5287, 5288, 5562, 5414, 5429 (6 hits)



Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
2	9	1.0	333.0	Yes	5288.0MHz, -55.0dBm	5368, 5689, 5707, 5615, 5684, 5645, 5321, 5468, 5421, 5603, 5666, 5500, 5260, 5659, 5277, 5329, 5470, 5298, 5642, 5519, 5602, 5313, 5651, 5420, 5670, 5355, 5574, 5354, 5503, 5620, 5690, 5474, 5514, 5683, 5394, 5553, 5720, 5467, 5435, 5710, 5393, 5505, 5561, 5647, 5324, 5632, 5386, 5643, 5427, 5278, 5485, 5425, 5523, 5712, 5402, 5563, 5648, 5433, 5280, 5443, 5558, 5631, 5339, 5568, 5545, 5650, 5345, 5672, 5340, 5621, 5294, 5369, 5692, 5279, 5716, 5644, 5635, 5303, 5715, 5346, 5479, 5448, 5460, 5572, 5700, 5580, 5306, 5702, 5569, 5251, 5682, 5379, 5492, 5342, 5616, 5475, 5717, 5544, 5612, 5486 (5 hits)
3	9	1.0	333.0	Yes	5289.0MHz, -55.0dBm	5469, 5715, 5270, 5580, 5324, 5397, 5459, 5466, 5457, 5615, 5407, 5654, 5432, 5418, 5519, 5498, 5402, 5296, 5575, 5721, 5480, 5266, 5392, 5561, 5699, 5622, 5583, 5437, 5320, 5616, 5338, 5660, 5628, 5533, 5514, 5456, 5461, 5288, 5570, 5271, 5280, 5455, 5268, 5375, 5714, 5436, 5650, 5396, 5311, 5476, 5546, 5460, 5471, 5395, 5716, 5415, 5465, 5477, 5491, 5542, 5682, 5345, 5472, 5719, 5262, 5290, 5383, 5417, 5625, 5630, 5515, 5380, 5372, 5316, 5553, 5451, 5538, 5398, 5452, 5298, 5329, 5322, 5373, 5359, 5279, 5428, 5655, 5562, 5639, 5462, 5577, 5478, 5543, 5442, 5594, 5547, 5335, 5589, 5627, 5545 (5 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
4	9	1.0	333.0	Yes	5290.0MHz, -55.0dBm	5364, 5598, 5643, 5625, 5309, 5473, 5570, 5716, 5328, 5372, 5666, 5363, 5638, 5615, 5414, 5599, 5713, 5668, 5492, 5583, 5439, 5281, 5397, 5271, 5386, 5400, 5610, 5672, 5552, 5305, 5406, 5655, 5581, 5339, 5331, 5690, 5447, 5276, 5326, 5358, 5468, 5378, 5645, 5710, 5722, 5504, 5466, 5665, 5619, 5493, 5559, 5420, 5391, 5590, 5461, 5422, 5258, 5340, 5410, 5442, 5571, 5250, 5416, 5324, 5519, 5304, 5636, 5671, 5367, 5582, 5476, 5319, 5684, 5451, 5348, 5681, 5556, 5449, 5389, 5430, 5712, 5303, 5694, 5548, 5529, 5550, 5260, 5435, 5697, 5375, 5361, 5480, 5342, 5462, 5477, 5255, 5557, 5313, 5307, 5683 (6 hits)
5	9	1.0	333.0	Yes	5291.0MHz, -55.0dBm	5501, 5502, 5638, 5667, 5442, 5285, 5376, 5300, 5392, 5321, 5513, 5336, 5665, 5451, 5310, 5257, 5520, 5724, 5691, 5270, 5539, 5587, 5437, 5620, 5416, 5515, 5431, 5299, 5704, 5643, 5296, 5591, 5497, 5674, 5523, 5282, 5540, 5463, 5677, 5453, 5503, 5261, 5319, 5499, 5588, 5598, 5460, 5461, 5263, 5514, 5481, 5666, 5327, 5337, 5615, 5396, 5712, 5473, 5438, 5264, 5458, 5599, 5534, 5542, 5706, 5589, 5427, 5380, 5698, 5626, 5326, 5419, 5253, 5656, 5333, 5708, 5541, 5554, 5274, 5576, 5412, 5590, 5311, 5632, 5265, 5601, 5605, 5365, 5496, 5340, 5306, 5268, 5357, 5560, 5647, 5644, 5660, 5715, 5280, 5278 (6 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
6	9	1.0	333.0	Yes	5292.0MHz, -55.0dBm	5494, 5510, 5697, 5438, 5355, 5376, 5621, 5458, 5613, 5530, 5643, 5667, 5515, 5560, 5442, 5499, 5514, 5429, 5724, 5664, 5637, 5700, 5576, 5308, 5501, 5457, 5337, 5659, 5561, 5370, 5603, 5545, 5319, 5420, 5585, 5631, 5304, 5516, 5431, 5401, 5445, 5658, 5386, 5448, 5502, 5714, 5476, 5616, 5597, 5469, 5569, 5688, 5250, 5670, 5574, 5290, 5317, 5638, 5682, 5268, 5454, 5451, 5465, 5615, 5408, 5537, 5251, 5407, 5484, 5528, 5341, 5367, 5573, 5556, 5375, 5262, 5424, 5297, 5434, 5478, 5622, 5461, 5662, 5492, 5548, 5511, 5388, 5373, 5653, 5263, 5676, 5582, 5326, 5588, 5674, 5338, 5647, 5547, 5405, 5357 (4 hits)
7	9	1.0	333.0	Yes	5293.0MHz, -55.0dBm	5414, 5270, 5531, 5576, 5465, 5417, 5274, 5660, 5308, 5584, 5588, 5542, 5678, 5419, 5360, 5691, 5631, 5312, 5460, 5672, 5256, 5598, 5568, 5509, 5633, 5518, 5283, 5639, 5257, 5624, 5649, 5625, 5613, 5723, 5337, 5540, 5708, 5664, 5578, 5687, 5724, 5593, 5393, 5299, 5291, 5567, 5369, 5658, 5719, 5683, 5674, 5525, 5623, 5434, 5689, 5561, 5385, 5601, 5287, 5611, 5488, 5536, 5569, 5607, 5430, 5282, 5346, 5508, 5523, 5392, 5454, 5498, 5330, 5653, 5600, 5446, 5474, 5379, 5529, 5251, 5608, 5339, 5602, 5441, 5269, 5361, 5553, 5548, 5583, 5344, 5692, 5666, 5442, 5606, 5704, 5532, 5706, 5573, 5420, 5645 (5 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
8	9	1.0	333.0	Yes	5294.0MHz, -55.0dBm	5493, 5546, 5646, 5515, 5571, 5390, 5638, 5502, 5614, 5524, 5716, 5343, 5654, 5580, 5525, 5344, 5382, 5403, 5714, 5691, 5289, 5369, 5357, 5306, 5598, 5585, 5543, 5425, 5450, 5471, 5335, 5553, 5275, 5326, 5364, 5408, 5279, 5529, 5494, 5353, 5577, 5652, 5455, 5307, 5358, 5695, 5381, 5274, 5692, 5391, 5483, 5549, 5433, 5675, 5560, 5282, 5551, 5674, 5479, 5478, 5373, 5570, 5302, 5437, 5314, 5584, 5445, 5663, 5583, 5565, 5262, 5423, 5288, 5285, 5458, 5528, 5337, 5318, 5621, 5670, 5436, 5421, 5360, 5497, 5650, 5700, 5410, 5440, 5628, 5622, 5715, 5643, 5401, 5268, 5600, 5514, 5386, 5671, 5539, 5669 (6 hits)
9	9	1.0	333.0	Yes	5295.0MHz, -55.0dBm	5278, 5589, 5498, 5699, 5376, 5538, 5292, 5268, 5307, 5300, 5360, 5414, 5339, 5330, 5464, 5280, 5405, 5448, 5373, 5681, 5593, 5549, 5394, 5685, 5512, 5477, 5627, 5485, 5539, 5618, 5605, 5256, 5484, 5324, 5641, 5528, 5272, 5690, 5412, 5372, 5327, 5516, 5322, 5583, 5483, 5525, 5445, 5578, 5311, 5686, 5333, 5658, 5269, 5607, 5365, 5637, 5398, 5645, 5705, 5655, 5628, 5323, 5423, 5328, 5556, 5456, 5317, 5271, 5678, 5711, 5326, 5439, 5696, 5329, 5688, 5475, 5533, 5721, 5452, 5524, 5397, 5499, 5482, 5351, 5620, 5541, 5580, 5649, 5403, 5474, 5511, 5340, 5359, 5562, 5457, 5426, 5550, 5595, 5554, 5591 (4 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
10	9	1.0	333.0	Yes	5296.0MHz, -55.0dBm	5623, 5709, 5633, 5448, 5499, 5275, 5562, 5345, 5449, 5316, 5489, 5278, 5323, 5361, 5640, 5284, 5636, 5722, 5464, 5383, 5496, 5340, 5695, 5502, 5344, 5331, 5444, 5346, 5352, 5480, 5560, 5564, 5631, 5682, 5704, 5269, 5671, 5311, 5595, 5521, 5615, 5459, 5566, 5475, 5413, 5653, 5338, 5294, 5512, 5559, 5273, 5652, 5357, 5453, 5355, 5441, 5712, 5681, 5565, 5434, 5418, 5348, 5407, 5282, 5365, 5703, 5327, 5517, 5329, 5647, 5721, 5356, 5541, 5719, 5520, 5375, 5406, 5666, 5322, 5651, 5324, 5643, 5351, 5716, 5440, 5267, 5368, 5504, 5438, 5618, 5343, 5481, 5599, 5381, 5661, 5483, 5507, 5276, 5485, 5298 (3 hits)
11	9	1.0	333.0	Yes	5297.0MHz, -55.0dBm	5392, 5288, 5560, 5635, 5623, 5704, 5527, 5320, 5285, 5696, 5521, 5265, 5482, 5286, 5400, 5576, 5276, 5547, 5275, 5663, 5693, 5614, 5651, 5451, 5337, 5382, 5674, 5551, 5711, 5701, 5611, 5697, 5321, 5258, 5458, 5361, 5396, 5401, 5508, 5333, 5305, 5550, 5309, 5641, 5296, 5632, 5656, 5432, 5670, 5292, 5631, 5424, 5553, 5397, 5467, 5501, 5298, 5678, 5638, 5452, 5621, 5563, 5293, 5598, 5610, 5414, 5722, 5354, 5720, 5454, 5669, 5650, 5437, 5593, 5716, 5272, 5724, 5431, 5335, 5709, 5464, 5683, 5353, 5645, 5368, 5267, 5307, 5303, 5269, 5475, 5586, 5381, 5278, 5705, 5626, 5299, 5326, 5625, 5442, 5387 (11 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
12	9	1.0	333.0	Yes	5298.0MHz, -55.0dBm	5713, 5630, 5537, 5490, 5409, 5620, 5607, 5633, 5666, 5640, 5573, 5291, 5319, 5431, 5280, 5441, 5705, 5681, 5425, 5570, 5465, 5297, 5503, 5304, 5485, 5553, 5643, 5301, 5308, 5611, 5616, 5262, 5699, 5273, 5477, 5418, 5329, 5486, 5372, 5593, 5592, 5568, 5518, 5270, 5408, 5663, 5327, 5426, 5289, 5357, 5532, 5377, 5660, 5351, 5547, 5498, 5703, 5548, 5555, 5336, 5420, 5527, 5601, 5366, 5524, 5673, 5348, 5371, 5472, 5382, 5558, 5481, 5434, 5543, 5476, 5563, 5467, 5512, 5259, 5294, 5716, 5718, 5330, 5679, 5586, 5452, 5645, 5717, 5523, 5333, 5343, 5260, 5287, 5364, 5290, 5488, 5363, 5318, 5656, 5657 (9 hits)
13	9	1.0	333.0	Yes	5299.0MHz, -55.0dBm	5311, 5364, 5414, 5713, 5342, 5589, 5671, 5396, 5631, 5336, 5321, 5506, 5720, 5628, 5590, 5701, 5467, 5297, 5410, 5356, 5516, 5520, 5490, 5675, 5280, 5284, 5522, 5254, 5301, 5614, 5346, 5404, 5504, 5706, 5665, 5313, 5722, 5300, 5384, 5661, 5592, 5517, 5445, 5575, 5377, 5455, 5262, 5251, 5322, 5489, 5712, 5505, 5649, 5483, 5662, 5399, 5500, 5420, 5298, 5627, 5283, 5621, 5494, 5568, 5486, 5259, 5256, 5479, 5510, 5556, 5705, 5560, 5682, 5648, 5547, 5724, 5569, 5363, 5615, 5536, 5643, 5339, 5340, 5524, 5305, 5610, 5378, 5416, 5702, 5570, 5331, 5437, 5266, 5250, 5388, 5485, 5542, 5670, 5443, 5537 (7 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
14	9	1.0	333.0	Yes	5300.0MHz, -55.0dBm	5540, 5261, 5717, 5705, 5500, 5371, 5418, 5420, 5627, 5437, 5686, 5575, 5465, 5521, 5549, 5482, 5335, 5278, 5585, 5430, 5398, 5611, 5499, 5490, 5496, 5478, 5425, 5568, 5399, 5713, 5411, 5647, 5459, 5295, 5664, 5511, 5447, 5326, 5339, 5267, 5523, 5391, 5340, 5337, 5303, 5323, 5574, 5445, 5640, 5690, 5684, 5515, 5309, 5467, 5392, 5626, 5680, 5320, 5503, 5619, 5689, 5483, 5506, 5528, 5539, 5349, 5377, 5623, 5658, 5706, 5485, 5301, 5435, 5643, 5378, 5518, 5605, 5324, 5633, 5389, 5385, 5348, 5538, 5620, 5393, 5672, 5614, 5366, 5504, 5456, 5552, 5461, 5642, 5639, 5600, 5673, 5464, 5550, 5613, 5522 (4 hits)
15	9	1.0	333.0	Yes	5301.0MHz, -55.0dBm	5666, 5346, 5393, 5714, 5411, 5338, 5355, 5557, 5308, 5253, 5677, 5663, 5632, 5431, 5256, 5703, 5340, 5584, 5278, 5681, 5470, 5508, 5447, 5625, 5563, 5682, 5264, 5306, 5341, 5725, 5367, 5465, 5405, 5607, 5555, 5354, 5260, 5712, 5434, 5511, 5273, 5586, 5292, 5531, 5316, 5315, 5715, 5639, 5440, 5522, 5689, 5403, 5304, 5261, 5342, 5371, 5386, 5615, 5695, 5448, 5270, 5327, 5516, 5423, 5645, 5351, 5611, 5583, 5599, 5418, 5399, 5691, 5661, 5459, 5570, 5629, 5641, 5724, 5333, 5385, 5323, 5421, 5565, 5269, 5520, 5559, 5410, 5420, 5637, 5443, 5702, 5369, 5514, 5457, 5257, 5394, 5571, 5668, 5643, 5526 (4 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
16	9	1.0	333.0	Yes	5302.0MHz, -55.0dBm	5310, 5386, 5396, 5611, 5687, 5465, 5432, 5330, 5348, 5715, 5525, 5614, 5288, 5341, 5724, 5294, 5539, 5705, 5651, 5286, 5291, 5587, 5409, 5579, 5639, 5503, 5451, 5433, 5524, 5297, 5425, 5622, 5293, 5653, 5627, 5589, 5350, 5411, 5712, 5484, 5641, 5325, 5292, 5475, 5491, 5340, 5456, 5636, 5551, 5717, 5405, 5461, 5487, 5672, 5514, 5357, 5492, 5262, 5256, 5477, 5379, 5365, 5695, 5673, 5618, 5445, 5471, 5385, 5464, 5490, 5679, 5659, 5571, 5327, 5549, 5572, 5295, 5561, 5678, 5591, 5652, 5668, 5426, 5272, 5361, 5436, 5314, 5447, 5400, 5508, 5711, 5344, 5472, 5676, 5328, 5599, 5664, 5270, 5608, 5510 (10 hits)
17	9	1.0	333.0	Yes	5303.0MHz, -55.0dBm	5701, 5306, 5606, 5599, 5479, 5401, 5512, 5541, 5309, 5608, 5668, 5336, 5513, 5444, 5391, 5499, 5270, 5291, 5384, 5361, 5386, 5491, 5382, 5698, 5649, 5713, 5695, 5674, 5636, 5356, 5260, 5318, 5372, 5284, 5374, 5589, 5654, 5687, 5277, 5490, 5629, 5623, 5708, 5295, 5412, 5553, 5562, 5655, 5717, 5683, 5545, 5425, 5292, 5705, 5693, 5475, 5252, 5353, 5584, 5404, 5347, 5268, 5715, 5588, 5342, 5653, 5397, 5408, 5600, 5253, 5637, 5480, 5416, 5602, 5692, 5426, 5406, 5495, 5254, 5305, 5590, 5707, 5280, 5373, 5712, 5658, 5257, 5671, 5471, 5434, 5352, 5365, 5696, 5641, 5469, 5681, 5635, 5400, 5442, 5508 (6 hits)



Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
18	9	1.0	333.0	Yes	5304.0MHz, -55.0dBm	5591, 5360, 5654, 5341, 5704, 5487, 5617, 5462, 5371, 5514, 5625, 5536, 5659, 5297, 5445, 5289, 5525, 5499, 5604, 5661, 5696, 5522, 5520, 5303, 5294, 5266, 5568, 5543, 5430, 5378, 5678, 5570, 5666, 5315, 5353, 5693, 5388, 5558, 5644, 5393, 5305, 5402, 5524, 5337, 5435, 5658, 5612, 5448, 5649, 5521, 5275, 5384, 5256, 5310, 5634, 5564, 5590, 5571, 5509, 5504, 5491, 5370, 5449, 5362, 5589, 5676, 5466, 5662, 5603, 5637, 5490, 5573, 5611, 5314, 5477, 5479, 5576, 5459, 5492, 5361, 5355, 5532, 5396, 5268, 5635, 5709, 5374, 5630, 5606, 5594, 5723, 5443, 5596, 5405, 5335, 5697, 5478, 5677, 5438, 5507 (7 hits)
19	9	1.0	333.0	Yes	5305.0MHz, -55.0dBm	5385, 5272, 5352, 5705, 5467, 5256, 5711, 5297, 5356, 5536, 5305, 5508, 5451, 5461, 5531, 5521, 5506, 5289, 5570, 5392, 5546, 5491, 5315, 5449, 5358, 5319, 5629, 5381, 5264, 5280, 5275, 5596, 5403, 5592, 5667, 5501, 5481, 5473, 5314, 5527, 5477, 5474, 5581, 5254, 5616, 5545, 5257, 5670, 5398, 5633, 5263, 5601, 5585, 5555, 5654, 5429, 5271, 5607, 5250, 5698, 5680, 5417, 5345, 5447, 5318, 5580, 5681, 5497, 5265, 5374, 5690, 5676, 5560, 5308, 5524, 5450, 5687, 5347, 5252, 5719, 5679, 5683, 5383, 5658, 5391, 5568, 5251, 5306, 5602, 5410, 5486, 5485, 5364, 5366, 5652, 5593, 5503, 5693, 5334, 5373 (6 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
20	9	1.0	333.0	Yes	5306.0MHz, -55.0dBm	5412, 5514, 5314, 5494, 5304, 5331, 5297, 5377, 5317, 5293, 5557, 5632, 5713, 5555, 5392, 5554, 5548, 5365, 5427, 5440, 5488, 5528, 5315, 5378, 5437, 5584, 5609, 5386, 5431, 5411, 5640, 5693, 5421, 5641, 5446, 5508, 5471, 5573, 5311, 5503, 5598, 5348, 5690, 5510, 5434, 5360, 5300, 5486, 5310, 5656, 5426, 5515, 5361, 5539, 5438, 5350, 5604, 5267, 5320, 5370, 5622, 5329, 5650, 5576, 5552, 5251, 5495, 5328, 5456, 5671, 5606, 5435, 5352, 5608, 5497, 5707, 5658, 5458, 5484, 5280, 5672, 5541, 5282, 5502, 5590, 5443, 5254, 5467, 5593, 5269, 5333, 5607, 5454, 5342, 5635, 5681, 5673, 5368, 5305, 5527 (8 hits)
21	9	1.0	333.0	Yes	5307.0MHz, -55.0dBm	5350, 5321, 5298, 5722, 5352, 5671, 5377, 5430, 5293, 5487, 5344, 5496, 5302, 5657, 5583, 5309, 5313, 5378, 5307, 5383, 5459, 5297, 5429, 5658, 5586, 5260, 5549, 5622, 5274, 5597, 5500, 5717, 5608, 5266, 5552, 5289, 5448, 5724, 5492, 5476, 5651, 5278, 5311, 5299, 5536, 5538, 5273, 5694, 5503, 5534, 5545, 5348, 5617, 5334, 5318, 5367, 5677, 5661, 5703, 5667, 5653, 5363, 5668, 5362, 5619, 5541, 5465, 5467, 5637, 5502, 5420, 5497, 5640, 5281, 5591, 5327, 5678, 5507, 5252, 5569, 5721, 5434, 5272, 5357, 5358, 5265, 5682, 5316, 5372, 5290, 5462, 5376, 5435, 5287, 5447, 5489, 5320, 5368, 5384, 5611 (12 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
22	9	1.0	333.0	Yes	5308.0MHz, -55.0dBm	5399, 5366, 5338, 5612, 5599, 5698, 5521, 5469, 5513, 5647, 5531, 5683, 5653, 5588, 5385, 5584, 5476, 5563, 5547, 5305, 5605, 5310, 5430, 5581, 5342, 5444, 5411, 5714, 5315, 5311, 5432, 5576, 5693, 5372, 5270, 5620, 5574, 5347, 5435, 5585, 5450, 5627, 5625, 5536, 5642, 5530, 5271, 5373, 5682, 5362, 5307, 5500, 5324, 5289, 5340, 5654, 5619, 5473, 5649, 5498, 5392, 5443, 5578, 5666, 5474, 5557, 5327, 5297, 5673, 5645, 5439, 5332, 5483, 5499, 5263, 5358, 5253, 5395, 5389, 5528, 5646, 5341, 5390, 5562, 5609, 5594, 5278, 5393, 5346, 5380, 5715, 5566, 5281, 5330, 5470, 5348, 5527, 5555, 5515, 5490 (6 hits)
23	9	1.0	333.0	Yes	5309.0MHz, -55.0dBm	5667, 5446, 5288, 5376, 5345, 5712, 5431, 5477, 5442, 5586, 5623, 5579, 5626, 5686, 5459, 5409, 5396, 5672, 5429, 5467, 5598, 5530, 5291, 5410, 5696, 5256, 5612, 5353, 5275, 5495, 5610, 5284, 5713, 5375, 5659, 5471, 5273, 5486, 5560, 5526, 5369, 5343, 5433, 5253, 5416, 5358, 5596, 5561, 5462, 5602, 5721, 5650, 5423, 5518, 5283, 5367, 5274, 5624, 5576, 5519, 5568, 5469, 5676, 5258, 5709, 5452, 5522, 5439, 5424, 5566, 5632, 5542, 5532, 5456, 5627, 5391, 5601, 5527, 5374, 5548, 5408, 5339, 5661, 5312, 5325, 5508, 5305, 5482, 5399, 5578, 5594, 5590, 5682, 5671, 5468, 5385, 5591, 5595, 5337, 5441 (4 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
24	9	1.0	333.0	Yes	5310.0MHz, -55.0dBm	5527, 5451, 5635, 5450, 5618, 5378, 5716, 5360, 5339, 5476, 5300, 5423, 5593, 5632, 5569, 5564, 5291, 5363, 5333, 5550, 5562, 5678, 5424, 5439, 5545, 5704, 5610, 5352, 5313, 5398, 5703, 5579, 5308, 5269, 5641, 5690, 5456, 5693, 5326, 5261, 5597, 5383, 5513, 5692, 5626, 5685, 5615, 5337, 5687, 5399, 5377, 5457, 5465, 5486, 5628, 5290, 5613, 5443, 5469, 5691, 5640, 5695, 5647, 5436, 5497, 5553, 5485, 5496, 5376, 5605, 5395, 5688, 5445, 5351, 5638, 5676, 5312, 5394, 5663, 5332, 5396, 5492, 5658, 5410, 5338, 5622, 5334, 5284, 5345, 5296, 5354, 5594, 5375, 5329, 5368, 5415, 5567, 5575, 5642, 5725 (7 hits)
25	9	1.0	333.0	Yes	5311.0MHz, -55.0dBm	5342, 5550, 5529, 5360, 5646, 5370, 5658, 5697, 5557, 5412, 5586, 5520, 5590, 5595, 5623, 5429, 5572, 5311, 5310, 5526, 5567, 5660, 5346, 5503, 5305, 5571, 5628, 5698, 5401, 5499, 5287, 5463, 5659, 5326, 5476, 5440, 5317, 5452, 5507, 5542, 5470, 5323, 5588, 5385, 5563, 5407, 5289, 5422, 5382, 5525, 5668, 5424, 5417, 5505, 5354, 5664, 5645, 5682, 5648, 5384, 5369, 5466, 5584, 5696, 5713, 5509, 5582, 5676, 5675, 5335, 5699, 5485, 5705, 5340, 5265, 5721, 5494, 5616, 5312, 5568, 5642, 5685, 5655, 5455, 5379, 5363, 5453, 5432, 5504, 5404, 5610, 5274, 5536, 5361, 5405, 5522, 5293, 5636, 5373, 5573 (7 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
26	9	1.0	333.0	Yes	5312.0MHz, -55.0dBm	5365, 5717, 5294, 5707, 5572, 5607, 5354, 5516, 5561, 5619, 5276, 5725, 5351, 5591, 5644, 5480, 5502, 5309, 5377, 5395, 5492, 5484, 5621, 5320, 5398, 5449, 5575, 5494, 5408, 5405, 5283, 5273, 5698, 5581, 5709, 5710, 5510, 5520, 5361, 5555, 5424, 5378, 5317, 5417, 5428, 5602, 5713, 5663, 5603, 5542, 5420, 5413, 5716, 5568, 5479, 5720, 5348, 5695, 5693, 5650, 5391, 5483, 5431, 5253, 5667, 5299, 5614, 5344, 5337, 5327, 5544, 5476, 5485, 5364, 5305, 5441, 5489, 5706, 5367, 5359, 5406, 5640, 5501, 5508, 5577, 5280, 5304, 5251, 5467, 5490, 5425, 5319, 5595, 5389, 5335, 5297, 5703, 5341, 5584, 5680 (6 hits)
27	9	1.0	333.0	Yes	5313.0MHz, -55.0dBm	5340, 5642, 5285, 5331, 5274, 5377, 5430, 5628, 5415, 5392, 5252, 5444, 5708, 5601, 5610, 5491, 5515, 5615, 5638, 5620, 5451, 5574, 5566, 5351, 5526, 5504, 5321, 5644, 5626, 5337, 5652, 5600, 5457, 5678, 5500, 5611, 5494, 5401, 5366, 5344, 5631, 5281, 5683, 5553, 5525, 5613, 5411, 5349, 5334, 5396, 5603, 5667, 5654, 5306, 5468, 5498, 5540, 5647, 5718, 5280, 5314, 5397, 5602, 5702, 5719, 5585, 5350, 5580, 5393, 5311, 5686, 5282, 5484, 5330, 5687, 5293, 5260, 5617, 5489, 5717, 5576, 5371, 5263, 5323, 5645, 5288, 5440, 5511, 5270, 5469, 5301, 5291, 5635, 5548, 5541, 5286, 5251, 5294, 5419, 5533 (9 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
28	9	1.0	333.0	Yes	5314.0MHz, -55.0dBm	5370, 5388, 5707, 5369, 5668, 5559, 5667, 5337, 5350, 5541, 5704, 5562, 5324, 5490, 5375, 5523, 5512, 5453, 5348, 5545, 5501, 5355, 5581, 5340, 5514, 5561, 5662, 5701, 5696, 5261, 5602, 5658, 5567, 5435, 5511, 5356, 5499, 5260, 5406, 5465, 5568, 5264, 5441, 5698, 5265, 5360, 5614, 5383, 5458, 5693, 5288, 5293, 5343, 5408, 5705, 5312, 5477, 5570, 5699, 5519, 5433, 5290, 5446, 5457, 5692, 5717, 5394, 5438, 5395, 5493, 5351, 5538, 5276, 5655, 5421, 5381, 5389, 5321, 5556, 5675, 5382, 5574, 5674, 5644, 5475, 5660, 5371, 5639, 5526, 5522, 5689, 5597, 5320, 5621, 5683, 5487, 5460, 5358, 5588, 5423 (4 hits)
29	9	1.0	333.0	No	5286.0MHz, -55.0dBm	5444, 5549, 5449, 5720, 5459, 5433, 5637, 5518, 5721, 5539, 5336, 5288, 5472, 5426, 5466, 5259, 5395, 5486, 5533, 5550, 5678, 5568, 5442, 5519, 5513, 5423, 5349, 5694, 5293, 5308, 5651, 5431, 5273, 5479, 5429, 5494, 5274, 5351, 5458, 5378, 5346, 5582, 5583, 5530, 5317, 5581, 5554, 5710, 5648, 5700, 5455, 5509, 5334, 5601, 5303, 5416, 5359, 5387, 5350, 5529, 5343, 5360, 5670, 5446, 5323, 5620, 5689, 5713, 5482, 5345, 5662, 5639, 5331, 5512, 5545, 5483, 5420, 5562, 5445, 5555, 5528, 5635, 5508, 5711, 5447, 5576, 5352, 5439, 5609, 5330, 5443, 5407, 5547, 5532, 5339, 5380, 5324, 5511, 5391, 5579 (4 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
30	9	1.0	333.0	Yes	5287.0MHz, -55.0dBm	5561, 5323, 5714, 5586, 5660, 5666, 5255, 5503, 5724, 5471, 5610, 5559, 5364, 5709, 5534, 5438, 5269, 5684, 5407, 5617, 5443, 5641, 5656, 5487, 5394, 5560, 5388, 5698, 5667, 5574, 5690, 5465, 5355, 5584, 5413, 5581, 5415, 5542, 5701, 5691, 5719, 5453, 5651, 5477, 5429, 5683, 5580, 5311, 5285, 5412, 5283, 5573, 5464, 5548, 5479, 5426, 5371, 5720, 5639, 5252, 5359, 5535, 5713, 5710, 5723, 5686, 5287, 5354, 5675, 5322, 5553, 5366, 5502, 5288, 5361, 5615, 5256, 5563, 5514, 5635, 5498, 5272, 5607, 5318, 5295, 5655, 5381, 5648, 5375, 5480, 5571, 5489, 5485, 5473, 5341, 5637, 5588, 5314, 5490, 5476 (5 hits)
31	9	1.0	333.0	Yes	5288.0MHz, -55.0dBm	5317, 5269, 5539, 5288, 5682, 5716, 5530, 5399, 5720, 5400, 5375, 5444, 5309, 5603, 5613, 5587, 5669, 5405, 5706, 5653, 5658, 5529, 5540, 5657, 5351, 5421, 5695, 5265, 5290, 5382, 5341, 5552, 5298, 5489, 5634, 5709, 5523, 5417, 5585, 5254, 5715, 5336, 5374, 5645, 5263, 5250, 5457, 5614, 5575, 5262, 5445, 5689, 5438, 5662, 5532, 5594, 5407, 5378, 5610, 5352, 5672, 5638, 5642, 5654, 5396, 5493, 5323, 5665, 5548, 5639, 5360, 5345, 5383, 5577, 5424, 5308, 5534, 5656, 5670, 5429, 5660, 5484, 5295, 5362, 5327, 5477, 5270, 5694, 5261, 5708, 5320, 5479, 5501, 5674, 5260, 5285, 5608, 5268, 5432, 5251 (6 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
32	9	1.0	333.0	Yes	5289.0MHz, -55.0dBm	5640, 5397, 5493, 5367, 5697, 5452, 5329, 5665, 5608, 5455, 5293, 5286, 5435, 5255, 5258, 5406, 5382, 5318, 5504, 5656, 5446, 5437, 5635, 5271, 5667, 5393, 5500, 5371, 5387, 5256, 5252, 5341, 5648, 5365, 5540, 5415, 5373, 5580, 5432, 5722, 5355, 5612, 5474, 5260, 5288, 5308, 5261, 5689, 5359, 5418, 5491, 5489, 5682, 5535, 5350, 5376, 5362, 5522, 5378, 5289, 5267, 5503, 5598, 5554, 5547, 5280, 5480, 5546, 5464, 5553, 5685, 5605, 5282, 5579, 5361, 5713, 5385, 5349, 5323, 5700, 5277, 5445, 5516, 5421, 5621, 5266, 5544, 5531, 5513, 5443, 5600, 5391, 5369, 5558, 5646, 5543, 5298, 5698, 5317, 5425 (6 hits)
33	9	1.0	333.0	Yes	5290.0MHz, -55.0dBm	5567, 5427, 5573, 5569, 5265, 5502, 5476, 5327, 5440, 5551, 5282, 5326, 5408, 5562, 5389, 5276, 5450, 5523, 5286, 5359, 5527, 5367, 5661, 5291, 5460, 5419, 5703, 5495, 5615, 5633, 5656, 5550, 5529, 5700, 5394, 5519, 5457, 5602, 5307, 5491, 5300, 5631, 5445, 5455, 5330, 5612, 5686, 5509, 5305, 5565, 5607, 5325, 5650, 5418, 5258, 5522, 5503, 5337, 5688, 5689, 5344, 5269, 5465, 5366, 5560, 5660, 5706, 5452, 5492, 5406, 5311, 5292, 5338, 5674, 5511, 5331, 5429, 5424, 5667, 5257, 5274, 5281, 5672, 5709, 5544, 5339, 5316, 5645, 5507, 5255, 5289, 5629, 5453, 5621, 5412, 5378, 5398, 5358, 5639, 5363 (8 hits)



Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
34	9	1.0	333.0	Yes	5291.0MHz, -55.0dBm	5523, 5338, 5330, 5345, 5568, 5302, 5413, 5281, 5658, 5699, 5468, 5713, 5628, 5514, 5714, 5420, 5324, 5424, 5719, 5517, 5618, 5370, 5675, 5606, 5392, 5315, 5366, 5462, 5379, 5457, 5368, 5472, 5607, 5398, 5372, 5350, 5400, 5717, 5587, 5363, 5669, 5339, 5402, 5429, 5455, 5371, 5561, 5562, 5431, 5357, 5566, 5360, 5645, 5570, 5564, 5268, 5695, 5560, 5355, 5599, 5367, 5548, 5428, 5261, 5307, 5506, 5590, 5305, 5623, 5333, 5279, 5329, 5467, 5513, 5484, 5482, 5674, 5693, 5593, 5411, 5603, 5349, 5533, 5437, 5450, 5578, 5692, 5488, 5257, 5556, 5291, 5325, 5684, 5382, 5610, 5579, 5286, 5535, 5653, 5296 (6 hits)
35	9	1.0	333.0	Yes	5292.0MHz, -55.0dBm	5262, 5614, 5271, 5704, 5320, 5276, 5513, 5506, 5583, 5712, 5667, 5654, 5471, 5692, 5534, 5345, 5412, 5593, 5477, 5347, 5659, 5414, 5644, 5676, 5435, 5287, 5275, 5658, 5660, 5447, 5656, 5724, 5250, 5520, 5462, 5642, 5595, 5399, 5587, 5286, 5575, 5493, 5598, 5356, 5401, 5305, 5291, 5626, 5303, 5404, 5470, 5448, 5552, 5394, 5561, 5693, 5673, 5269, 5705, 5387, 5582, 5592, 5536, 5432, 5610, 5616, 5709, 5369, 5550, 5258, 5540, 5601, 5517, 5496, 5308, 5440, 5640, 5441, 5402, 5488, 5492, 5597, 5623, 5259, 5358, 5651, 5461, 5549, 5668, 5261, 5523, 5403, 5497, 5449, 5317, 5613, 5669, 5599, 5442, 5451 (6 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
36	9	1.0	333.0	Yes	5293.0MHz, -55.0dBm	5264, 5311, 5336, 5483, 5339, 5317, 5488, 5449, 5441, 5561, 5436, 5369, 5643, 5453, 5615, 5504, 5321, 5429, 5320, 5634, 5706, 5374, 5305, 5681, 5252, 5341, 5439, 5289, 5365, 5437, 5430, 5696, 5517, 5361, 5725, 5636, 5606, 5724, 5532, 5396, 5255, 5448, 5510, 5378, 5664, 5646, 5261, 5447, 5291, 5589, 5413, 5687, 5553, 5331, 5600, 5481, 5335, 5491, 5608, 5669, 5656, 5569, 5420, 5467, 5659, 5272, 5699, 5301, 5266, 5645, 5379, 5458, 5700, 5640, 5620, 5605, 5614, 5486, 5412, 5316, 5653, 5250, 5297, 5721, 5273, 5385, 5319, 5309, 5607, 5693, 5533, 5312, 5434, 5495, 5445, 5722, 5403, 5543, 5514, 5613 (8 hits)
37	9	1.0	333.0	Yes	5294.0MHz, -55.0dBm	5328, 5293, 5263, 5681, 5292, 5330, 5630, 5326, 5276, 5379, 5669, 5679, 5621, 5356, 5466, 5631, 5514, 5687, 5693, 5415, 5656, 5358, 5305, 5321, 5281, 5718, 5430, 5664, 5625, 5568, 5486, 5378, 5683, 5609, 5343, 5368, 5508, 5373, 5519, 5435, 5606, 5564, 5608, 5391, 5611, 5535, 5634, 5271, 5483, 5600, 5381, 5441, 5578, 5364, 5410, 5686, 5495, 5697, 5464, 5331, 5677, 5531, 5275, 5528, 5257, 5306, 5709, 5689, 5283, 5482, 5494, 5423, 5530, 5470, 5418, 5447, 5699, 5351, 5261, 5548, 5577, 5369, 5539, 5561, 5468, 5266, 5320, 5290, 5282, 5342, 5499, 5359, 5395, 5538, 5567, 5362, 5640, 5476, 5386, 5323 (5 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
38	9	1.0	333.0	Yes	5295.0MHz, -55.0dBm	5254, 5627, 5256, 5379, 5411, 5439, 5401, 5260, 5574, 5609, 5545, 5638, 5549, 5337, 5588, 5712, 5623, 5662, 5387, 5364, 5594, 5457, 5434, 5420, 5528, 5316, 5312, 5583, 5455, 5606, 5429, 5591, 5293, 5473, 5454, 5517, 5614, 5537, 5570, 5565, 5713, 5313, 5277, 5535, 5321, 5445, 5409, 5418, 5257, 5580, 5671, 5576, 5650, 5462, 5685, 5416, 5475, 5663, 5481, 5413, 5530, 5678, 5419, 5703, 5430, 5482, 5326, 5718, 5269, 5354, 5714, 5600, 5626, 5453, 5581, 5456, 5716, 5509, 5263, 5695, 5710, 5513, 5339, 5705, 5674, 5393, 5567, 5310, 5490, 5680, 5506, 5371, 5389, 5304, 5621, 5329, 5615, 5511, 5487, 5665 (5 hits)
39	9	1.0	333.0	Yes	5296.0MHz, -55.0dBm	5541, 5570, 5326, 5711, 5327, 5256, 5468, 5487, 5270, 5657, 5569, 5602, 5714, 5366, 5450, 5610, 5397, 5276, 5552, 5523, 5583, 5377, 5411, 5548, 5659, 5426, 5604, 5574, 5412, 5418, 5591, 5489, 5652, 5676, 5672, 5373, 5697, 5427, 5424, 5380, 5495, 5519, 5650, 5463, 5385, 5719, 5266, 5664, 5551, 5351, 5645, 5252, 5560, 5381, 5441, 5596, 5561, 5328, 5398, 5694, 5392, 5271, 5717, 5510, 5403, 5467, 5537, 5587, 5367, 5501, 5272, 5410, 5538, 5339, 5575, 5295, 5346, 5620, 5696, 5699, 5605, 5688, 5364, 5430, 5406, 5609, 5534, 5545, 5499, 5460, 5666, 5335, 5622, 5686, 5562, 5315, 5338, 5408, 5692, 5599 (1 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
40	9	1.0	333.0	Yes	5297.0MHz, -55.0dBm	5538, 5403, 5345, 5676, 5513, 5468, 5502, 5667, 5400, 5586, 5388, 5300, 5575, 5664, 5290, 5384, 5279, 5291, 5709, 5661, 5356, 5375, 5286, 5371, 5526, 5334, 5568, 5431, 5405, 5426, 5699, 5573, 5543, 5265, 5692, 5608, 5621, 5572, 5523, 5341, 5336, 5452, 5556, 5654, 5346, 5601, 5631, 5283, 5292, 5633, 5280, 5677, 5386, 5396, 5639, 5446, 5467, 5274, 5620, 5559, 5539, 5524, 5352, 5476, 5393, 5416, 5399, 5401, 5618, 5305, 5644, 5597, 5495, 5379, 5464, 5561, 5454, 5665, 5262, 5256, 5673, 5626, 5583, 5471, 5261, 5421, 5663, 5641, 5373, 5591, 5653, 5540, 5488, 5469, 5680, 5587, 5506, 5438, 5465, 5281 (6 hits)
41	9	1.0	333.0	Yes	5298.0MHz, -55.0dBm	5544, 5324, 5521, 5691, 5514, 5476, 5484, 5250, 5438, 5621, 5365, 5437, 5719, 5333, 5657, 5393, 5563, 5717, 5331, 5319, 5483, 5430, 5273, 5678, 5316, 5676, 5403, 5275, 5534, 5669, 5313, 5507, 5713, 5598, 5637, 5699, 5415, 5661, 5588, 5491, 5696, 5302, 5590, 5541, 5664, 5620, 5345, 5617, 5505, 5646, 5578, 5427, 5651, 5260, 5580, 5624, 5684, 5585, 5723, 5655, 5622, 5485, 5342, 5429, 5503, 5320, 5294, 5367, 5689, 5654, 5599, 5336, 5533, 5673, 5570, 5425, 5610, 5292, 5666, 5516, 5444, 5569, 5545, 5682, 5506, 5564, 5308, 5638, 5558, 5339, 5371, 5612, 5290, 5488, 5283, 5522, 5388, 5351, 5608, 5390 (6 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
42	9	1.0	333.0	Yes	5299.0MHz, -55.0dBm	5353, 5494, 5419, 5280, 5553, 5519, 5722, 5675, 5565, 5418, 5391, 5651, 5377, 5711, 5357, 5276, 5526, 5366, 5274, 5602, 5262, 5695, 5716, 5642, 5620, 5371, 5684, 5563, 5593, 5476, 5674, 5503, 5655, 5549, 5250, 5349, 5297, 5580, 5286, 5654, 5457, 5581, 5479, 5288, 5385, 5365, 5295, 5403, 5598, 5527, 5657, 5594, 5685, 5545, 5358, 5268, 5451, 5708, 5442, 5259, 5614, 5299, 5398, 5699, 5303, 5600, 5444, 5625, 5292, 5671, 5331, 5587, 5315, 5408, 5630, 5606, 5384, 5687, 5656, 5513, 5282, 5463, 5577, 5717, 5635, 5701, 5491, 5428, 5543, 5622, 5374, 5397, 5410, 5567, 5576, 5337, 5663, 5506, 5394, 5579 (7 hits)
43	9	1.0	333.0	Yes	5300.0MHz, -55.0dBm	5273, 5464, 5610, 5422, 5399, 5523, 5537, 5470, 5376, 5338, 5498, 5601, 5460, 5681, 5512, 5657, 5607, 5507, 5636, 5698, 5265, 5401, 5324, 5705, 5442, 5676, 5586, 5478, 5327, 5262, 5285, 5684, 5549, 5520, 5627, 5688, 5555, 5710, 5288, 5641, 5584, 5383, 5645, 5339, 5348, 5456, 5378, 5499, 5306, 5703, 5275, 5356, 5567, 5364, 5412, 5419, 5663, 5433, 5483, 5714, 5638, 5534, 5659, 5565, 5475, 5379, 5321, 5349, 5611, 5489, 5311, 5653, 5409, 5624, 5536, 5544, 5623, 5292, 5589, 5368, 5282, 5466, 5318, 5709, 5472, 5328, 5658, 5539, 5477, 5687, 5384, 5577, 5455, 5674, 5608, 5417, 5578, 5575, 5454, 5576 (4 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
44	9	1.0	333.0	Yes	5301.0MHz, -55.0dBm	5381, 5720, 5420, 5527, 5456, 5654, 5477, 5485, 5350, 5698, 5395, 5529, 5301, 5442, 5621, 5380, 5335, 5397, 5417, 5704, 5253, 5588, 5309, 5721, 5521, 5616, 5571, 5533, 5429, 5624, 5647, 5375, 5700, 5265, 5562, 5407, 5507, 5539, 5305, 5542, 5528, 5307, 5273, 5541, 5609, 5388, 5430, 5644, 5682, 5345, 5384, 5386, 5317, 5254, 5385, 5378, 5282, 5648, 5347, 5295, 5472, 5363, 5396, 5506, 5280, 5296, 5699, 5707, 5675, 5458, 5498, 5659, 5600, 5685, 5595, 5324, 5379, 5520, 5523, 5353, 5488, 5422, 5549, 5466, 5724, 5364, 5294, 5643, 5454, 5336, 5552, 5691, 5416, 5281, 5255, 5445, 5695, 5469, 5689, 5678 (7 hits)
45	9	1.0	333.0	Yes	5302.0MHz, -55.0dBm	5687, 5252, 5617, 5699, 5266, 5600, 5615, 5570, 5512, 5580, 5424, 5523, 5413, 5254, 5647, 5677, 5375, 5305, 5446, 5337, 5376, 5545, 5309, 5513, 5505, 5404, 5457, 5294, 5460, 5319, 5423, 5359, 5500, 5519, 5671, 5488, 5447, 5402, 5452, 5383, 5518, 5616, 5422, 5458, 5260, 5469, 5684, 5326, 5325, 5321, 5493, 5635, 5721, 5390, 5391, 5694, 5698, 5601, 5345, 5401, 5675, 5594, 5708, 5662, 5378, 5322, 5587, 5259, 5386, 5515, 5630, 5668, 5399, 5339, 5535, 5416, 5406, 5490, 5561, 5276, 5619, 5454, 5540, 5551, 5643, 5672, 5256, 5510, 5312, 5411, 5277, 5299, 5622, 5397, 5655, 5317, 5270, 5473, 5387, 5433 (5 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
46	9	1.0	333.0	Yes	5303.0MHz, -55.0dBm	5502, 5639, 5690, 5654, 5532, 5256, 5474, 5711, 5324, 5589, 5673, 5303, 5600, 5629, 5315, 5383, 5444, 5457, 5369, 5586, 5410, 5376, 5297, 5415, 5453, 5340, 5347, 5438, 5511, 5454, 5404, 5510, 5504, 5437, 5549, 5571, 5327, 5365, 5712, 5406, 5683, 5462, 5534, 5426, 5623, 5381, 5472, 5345, 5427, 5523, 5620, 5414, 5481, 5547, 5619, 5513, 5595, 5507, 5416, 5671, 5658, 5647, 5682, 5471, 5469, 5421, 5633, 5485, 5252, 5488, 5299, 5266, 5692, 5663, 5466, 5350, 5276, 5361, 5651, 5709, 5442, 5399, 5379, 5686, 5435, 5495, 5701, 5524, 5695, 5605, 5363, 5384, 5470, 5655, 5290, 5498, 5608, 5708, 5407, 5310 (5 hits)
47	9	1.0	333.0	Yes	5304.0MHz, -55.0dBm	5631, 5610, 5586, 5268, 5433, 5501, 5619, 5573, 5321, 5715, 5488, 5300, 5261, 5510, 5262, 5697, 5397, 5379, 5691, 5447, 5657, 5502, 5374, 5608, 5411, 5494, 5297, 5318, 5719, 5277, 5346, 5620, 5490, 5377, 5385, 5718, 5569, 5263, 5421, 5475, 5327, 5326, 5311, 5498, 5362, 5710, 5576, 5680, 5507, 5330, 5361, 5677, 5264, 5309, 5520, 5583, 5312, 5408, 5299, 5478, 5612, 5650, 5708, 5701, 5435, 5601, 5527, 5407, 5307, 5450, 5273, 5345, 5600, 5539, 5449, 5580, 5632, 5394, 5551, 5706, 5647, 5396, 5489, 5279, 5690, 5414, 5584, 5339, 5260, 5441, 5364, 5544, 5354, 5545, 5476, 5373, 5324, 5643, 5483, 5265 (7 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
48	9	1.0	333.0	Yes	5305.0MHz, -55.0dBm	5529, 5356, 5689, 5527, 5303, 5707, 5557, 5310, 5542, 5449, 5428, 5325, 5424, 5658, 5577, 5426, 5403, 5383, 5699, 5293, 5421, 5644, 5362, 5332, 5596, 5475, 5703, 5340, 5723, 5607, 5712, 5714, 5622, 5437, 5411, 5532, 5601, 5259, 5291, 5267, 5536, 5272, 5602, 5380, 5600, 5639, 5541, 5416, 5474, 5412, 5359, 5268, 5360, 5505, 5438, 5434, 5385, 5297, 5543, 5467, 5393, 5493, 5430, 5487, 5620, 5594, 5603, 5494, 5708, 5629, 5525, 5294, 5481, 5504, 5589, 5271, 5420, 5287, 5508, 5370, 5585, 5630, 5649, 5661, 5371, 5351, 5531, 5584, 5440, 5358, 5648, 5350, 5473, 5354, 5320, 5396, 5694, 5419, 5344, 5482 (7 hits)
49	9	1.0	333.0	Yes	5306.0MHz, -55.0dBm	5406, 5303, 5461, 5688, 5581, 5655, 5569, 5332, 5469, 5261, 5585, 5584, 5281, 5598, 5557, 5464, 5690, 5670, 5674, 5428, 5382, 5701, 5630, 5407, 5287, 5684, 5385, 5272, 5602, 5435, 5313, 5644, 5695, 5265, 5596, 5498, 5434, 5352, 5503, 5271, 5476, 5347, 5548, 5376, 5448, 5262, 5666, 5292, 5654, 5409, 5392, 5439, 5337, 5344, 5479, 5672, 5259, 5613, 5556, 5369, 5358, 5312, 5494, 5252, 5486, 5687, 5430, 5594, 5305, 5496, 5323, 5604, 5304, 5710, 5575, 5539, 5345, 5253, 5274, 5420, 5702, 5699, 5482, 5317, 5294, 5621, 5514, 5411, 5689, 5620, 5638, 5589, 5715, 5472, 5412, 5290, 5627, 5336, 5511, 5648 (9 hits)



Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
50	9	1.0	333.0	Yes	5307.0MHz, -55.0dBm	5715, 5438, 5538, 5337, 5511, 5261, 5533, 5268, 5705, 5588, 5442, 5320, 5369, 5319, 5631, 5553, 5652, 5389, 5574, 5457, 5396, 5560, 5520, 5446, 5506, 5601, 5289, 5430, 5636, 5286, 5693, 5394, 5596, 5507, 5645, 5300, 5529, 5398, 5720, 5419, 5675, 5492, 5581, 5685, 5584, 5488, 5461, 5464, 5629, 5697, 5638, 5352, 5423, 5561, 5609, 5598, 5361, 5322, 5635, 5460, 5298, 5384, 5375, 5518, 5496, 5349, 5456, 5302, 5449, 5255, 5323, 5649, 5270, 5495, 5688, 5432, 5619, 5612, 5265, 5565, 5388, 5403, 5385, 5689, 5437, 5585, 5260, 5641, 5370, 5426, 5326, 5498, 5436, 5332, 5571, 5299, 5647, 5327, 5259, 5418 (6 hits)
51	9	1.0	333.0	Yes	5308.0MHz, -55.0dBm	5502, 5700, 5450, 5506, 5529, 5587, 5596, 5595, 5484, 5440, 5301, 5273, 5645, 5252, 5714, 5636, 5571, 5487, 5637, 5376, 5305, 5441, 5564, 5324, 5556, 5523, 5345, 5624, 5406, 5290, 5622, 5351, 5706, 5688, 5683, 5334, 5473, 5704, 5294, 5639, 5257, 5696, 5328, 5514, 5390, 5430, 5319, 5503, 5343, 5490, 5474, 5288, 5545, 5684, 5498, 5570, 5292, 5585, 5675, 5678, 5260, 5493, 5599, 5687, 5483, 5680, 5332, 5356, 5548, 5673, 5439, 5276, 5399, 5256, 5522, 5659, 5458, 5298, 5669, 5411, 5338, 5646, 5507, 5499, 5311, 5695, 5371, 5504, 5482, 5267, 5455, 5360, 5354, 5590, 5562, 5386, 5674, 5712, 5392, 5363 (8 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
52	9	1.0	333.0	Yes	5309.0MHz, -55.0dBm	5268, 5343, 5477, 5668, 5683, 5475, 5483, 5283, 5711, 5295, 5690, 5500, 5277, 5332, 5357, 5457, 5610, 5710, 5569, 5703, 5681, 5505, 5498, 5621, 5386, 5403, 5365, 5503, 5598, 5573, 5264, 5379, 5385, 5659, 5434, 5518, 5482, 5376, 5639, 5444, 5327, 5481, 5539, 5590, 5560, 5715, 5426, 5497, 5544, 5358, 5391, 5455, 5547, 5611, 5568, 5289, 5675, 5263, 5559, 5334, 5290, 5700, 5608, 5297, 5664, 5271, 5446, 5592, 5461, 5660, 5550, 5661, 5421, 5252, 5486, 5519, 5437, 5567, 5438, 5707, 5473, 5557, 5647, 5620, 5646, 5491, 5304, 5390, 5396, 5326, 5273, 5435, 5614, 5580, 5469, 5261, 5272, 5337, 5645, 5702 (5 hits)
53	9	1.0	333.0	Yes	5310.0MHz, -55.0dBm	5302, 5469, 5340, 5607, 5669, 5491, 5470, 5356, 5387, 5680, 5373, 5529, 5403, 5549, 5602, 5640, 5349, 5467, 5633, 5658, 5429, 5357, 5715, 5504, 5685, 5686, 5406, 5250, 5297, 5398, 5431, 5369, 5533, 5652, 5331, 5604, 5374, 5285, 5528, 5271, 5317, 5531, 5267, 5668, 5354, 5457, 5315, 5501, 5557, 5571, 5253, 5693, 5449, 5725, 5441, 5313, 5410, 5511, 5376, 5585, 5256, 5547, 5689, 5392, 5720, 5333, 5437, 5258, 5298, 5517, 5414, 5352, 5388, 5454, 5289, 5286, 5450, 5303, 5318, 5709, 5335, 5451, 5461, 5670, 5713, 5456, 5385, 5645, 5380, 5341, 5563, 5338, 5364, 5593, 5606, 5390, 5334, 5566, 5637, 5717 (7 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
54	9	1.0	333.0	Yes	5311.0MHz, -55.0dBm	5330, 5671, 5267, 5336, 5590, 5363, 5593, 5301, 5707, 5271, 5289, 5629, 5251, 5438, 5559, 5476, 5463, 5329, 5408, 5450, 5420, 5507, 5385, 5557, 5466, 5501, 5674, 5521, 5310, 5588, 5325, 5446, 5437, 5564, 5624, 5359, 5413, 5694, 5473, 5357, 5458, 5591, 5506, 5318, 5512, 5451, 5701, 5625, 5278, 5684, 5633, 5510, 5558, 5441, 5307, 5724, 5430, 5583, 5355, 5496, 5444, 5560, 5358, 5277, 5280, 5279, 5429, 5412, 5555, 5477, 5465, 5255, 5643, 5562, 5315, 5528, 5377, 5415, 5364, 5628, 5380, 5697, 5440, 5478, 5503, 5581, 5270, 5454, 5417, 5395, 5566, 5616, 5604, 5567, 5576, 5659, 5620, 5699, 5282, 5435 (4 hits)
55	9	1.0	333.0	Yes	5312.0MHz, -55.0dBm	5711, 5396, 5403, 5511, 5648, 5501, 5363, 5621, 5479, 5677, 5710, 5468, 5311, 5410, 5578, 5723, 5297, 5321, 5516, 5417, 5568, 5574, 5704, 5538, 5406, 5509, 5341, 5457, 5498, 5654, 5547, 5505, 5673, 5487, 5541, 5664, 5486, 5475, 5523, 5683, 5330, 5616, 5437, 5651, 5613, 5564, 5478, 5524, 5490, 5540, 5714, 5684, 5682, 5611, 5473, 5376, 5337, 5642, 5571, 5701, 5318, 5602, 5362, 5303, 5590, 5485, 5607, 5562, 5641, 5395, 5520, 5570, 5533, 5366, 5542, 5620, 5325, 5430, 5694, 5557, 5551, 5431, 5536, 5447, 5261, 5368, 5624, 5649, 5412, 5344, 5567, 5579, 5267, 5355, 5650, 5705, 5636, 5327, 5314, 5411 (4 hits)

Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected?	Fr (MHz) and level (dBm)	Hop seq.
56	9	1.0	333.0	No	5313.0MHz, -55.0dBm	5355, 5479, 5650, 5553, 5702, 5636, 5294, 5603, 5717, 5637, 5389, 5639, 5615, 5712, 5369, 5640, 5590, 5283, 5344, 5401, 5429, 5370, 5572, 5460, 5428, 5365, 5672, 5263, 5713, 5589, 5561, 5565, 5653, 5624, 5610, 5534, 5497, 5362, 5438, 5556, 5466, 5510, 5379, 5684, 5493, 5381, 5670, 5494, 5660, 5630, 5400, 5622, 5308, 5595, 5641, 5336, 5413, 5317, 5364, 5351, 5396, 5303, 5465, 5544, 5483, 5345, 5489, 5527, 5384, 5473, 5543, 5417, 5710, 5540, 5278, 5284, 5557, 5523, 5277, 5353, 5424, 5306, 5643, 5716, 5487, 5397, 5372, 5334, 5338, 5690, 5699, 5612, 5505, 5281, 5504, 5721, 5606, 5439, 5296, 5347 (5 hits)
57	9	1.0	333.0	No	5314.0MHz, -55.0dBm	5444, 5659, 5269, 5542, 5267, 5584, 5419, 5686, 5604, 5508, 5611, 5668, 5465, 5356, 5402, 5555, 5456, 5289, 5420, 5447, 5254, 5251, 5681, 5478, 5586, 5454, 5404, 5471, 5648, 5570, 5371, 5331, 5566, 5583, 5706, 5396, 5451, 5692, 5615, 5593, 5547, 5313, 5316, 5300, 5605, 5459, 5691, 5457, 5443, 5470, 5657, 5285, 5274, 5601, 5563, 5695, 5712, 5525, 5260, 5305, 5481, 5266, 5370, 5722, 5311, 5252, 5594, 5517, 5715, 5264, 5546, 5367, 5714, 5424, 5658, 5558, 5497, 5675, 5440, 5461, 5341, 5713, 5426, 5650, 5355, 5388, 5670, 5315, 5521, 5357, 5550, 5467, 5364, 5361, 5676, 5699, 5484, 5504, 5487, 5291 (6 hits)

**Table 8 - Long Sequence Waveform Summary**

Long Sequence Trial	Result	Radar Frequency / Amplitude
Trial #1	Detected	5300.0MHz, -55.0dBm
Trial #2	NOT Detected	5300.0MHz, -55.0dBm
Trial #3	Detected	5300.0MHz, -55.0dBm
Trial #4	Detected	5300.0MHz, -55.0dBm
Trial #5	Detected	5300.0MHz, -55.0dBm
Trial #6	Detected	5300.0MHz, -55.0dBm
Trial #7	Detected	5300.0MHz, -55.0dBm
Trial #8	Detected	5300.0MHz, -55.0dBm
Trial #9	Detected	5300.0MHz, -55.0dBm
Trial #10	Detected	5300.0MHz, -55.0dBm
Trial #11	NOT Detected	5300.0MHz, -55.0dBm
Trial #12	Detected	5300.0MHz, -55.0dBm
Trial #13	Detected	5300.0MHz, -55.0dBm
Trial #14	Detected	5300.0MHz, -55.0dBm
Trial #15	Detected	5300.0MHz, -55.0dBm
Trial #16	Detected	5300.0MHz, -55.0dBm
Trial #17	Detected	5300.0MHz, -55.0dBm
Trial #18	Detected	5300.0MHz, -55.0dBm
Trial #19	Detected	5300.0MHz, -55.0dBm
Trial #20	Detected	5300.0MHz, -55.0dBm
Trial #21	Detected	5300.0MHz, -55.0dBm
Trial #22	Detected	5300.0MHz, -55.0dBm
Trial #23	Detected	5300.0MHz, -55.0dBm
Trial #24	Detected	5300.0MHz, -55.0dBm
Trial #25	Detected	5300.0MHz, -55.0dBm
Trial #26	Detected	5300.0MHz, -55.0dBm
Trial #27	NOT Detected	5300.0MHz, -55.0dBm
Trial #28	Detected	5300.0MHz, -55.0dBm
Trial #29	Detected	5300.0MHz, -55.0dBm
Trial #30	Detected	5300.0MHz, -55.0dBm

**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	59.0	7	1604.0	-	1.042615
1	3	59.1	12	1043.0	1367.0	2.118969
2	2	96.4	14	1687.0	-	2.417288
3	2	59.0	9	1016.0	-	4.223532
4	3	95.4	11	1053.0	1658.0	4.721109
5	2	62.6	14	1991.0	-	6.007628
6	3	55.4	12	1741.0	1044.0	6.598368
7	1	69.7	6	-	-	8.366711
8	2	93.8	15	1710.0	-	8.881988
9	2	65.1	11	1523.0	-	10.608952
10	2	60.9	8	1519.0	-	11.911508

**Table 10 - Long Sequence Waveform Trial#2 (\*\* NOT Detected \*\*)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	62.2	12	1509.0	-	0.144613
1	1	68.7	17	-	-	1.364137
2	3	68.5	15	1658.0	1758.0	3.726278
3	2	92.0	17	1421.0	-	4.033620
4	3	96.5	15	1592.0	1130.0	5.740906
5	2	71.5	19	1630.0	-	6.820936
6	3	76.1	19	1616.0	1771.0	8.323599
7	2	58.2	19	1626.0	-	9.574057
8	2	91.2	9	1506.0	-	10.945515

**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	96.0	12	1797.0	-	0.681496
1	2	80.9	10	1764.0	-	0.970300
2	2	60.0	17	1795.0	-	1.759194
3	1	52.4	18	-	-	2.923741
4	1	94.1	5	-	-	3.661960
5	3	87.2	13	1219.0	1684.0	4.878536
6	3	93.1	12	1440.0	1999.0	5.736597
7	3	92.3	17	1125.0	1105.0	6.264881
8	2	56.9	12	1371.0	-	7.257620
9	3	55.1	13	1183.0	1629.0	7.891621
10	2	74.6	16	1280.0	-	9.234863
11	2	58.2	6	1248.0	-	10.279666
12	1	62.2	18	-	-	10.966236
13	3	72.5	19	1625.0	1928.0	11.218486

**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	2	83.5	12	1082.0	-	0.025436
1	2	59.3	6	1244.0	-	1.079917
2	2	60.4	6	1248.0	-	2.177338
3	1	61.7	12	-	-	3.246345
4	2	97.8	6	1998.0	-	4.763971
5	1	91.8	14	-	-	5.440529
6	1	62.1	16	-	-	6.331904
7	1	67.0	11	-	-	7.799471
8	3	85.7	14	1260.0	1012.0	8.634674
9	2	71.7	17	1564.0	-	9.960037
10	3	99.0	13	1754.0	1464.0	10.101958
11	2	50.0	15	1263.0	-	11.213950

**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)
0	1	75.6	7	-	-	0.797471
1	2	83.7	15	1490.0	-	1.719202
2	1	87.9	8	-	-	1.963568
3	2	80.2	19	1918.0	-	2.965980
4	2	99.6	20	1533.0	-	3.777293
5	2	97.2	15	1065.0	-	5.071424
6	2	87.0	14	1051.0	-	5.741310
7	3	51.3	17	1456.0	1516.0	7.142772
8	3	86.3	14	1361.0	1410.0	7.532719
9	3	78.9	14	1526.0	1490.0	8.647741
10	3	68.0	14	1453.0	1613.0	9.943938
11	1	67.8	11	-	-	10.750924
12	2	94.3	19	1975.0	-	11.892968

**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	87.5	8	-	-	0.536460
1	2	81.8	10	1809.0	-	1.063814
2	2	98.3	10	1102.0	-	1.735234
3	2	80.2	17	1080.0	-	2.439376
4	2	56.0	19	1567.0	-	2.824015
5	2	50.5	15	1966.0	-	3.322679
6	3	69.9	17	1862.0	1640.0	4.192190
7	2	93.4	5	1179.0	-	4.558783
8	3	59.3	10	1640.0	1888.0	5.262935
9	2	58.8	6	1339.0	-	5.998335
10	2	60.0	12	1126.0	-	6.376026
11	3	61.4	13	1463.0	1283.0	6.984754
12	2	73.8	9	1977.0	-	8.177599
13	3	68.6	14	1898.0	1765.0	8.353466
14	1	70.0	8	-	-	8.966442
15	1	92.2	7	-	-	9.547695
16	2	92.6	14	1550.0	-	10.417205
17	2	53.5	14	1598.0	-	11.324968
18	2	92.0	14	1898.0	-	11.738530

**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	1	59.9	17	-	-	1.008271
1	3	56.5	9	1803.0	1335.0	1.454690
2	1	56.9	18	-	-	2.655802
3	1	84.9	17	-	-	3.903816
4	2	84.2	18	1679.0	-	5.495334
5	1	73.6	6	-	-	6.276285
6	2	86.5	6	1516.0	-	8.018433
7	1	78.8	15	-	-	8.714958
8	2	66.4	6	1137.0	-	10.186525
9	1	83.2	6	-	-	11.217475

**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	3	79.9	7	1051.0	1876.0	0.360170
1	1	86.4	9	-	-	2.439187
2	1	52.8	15	-	-	3.073087
3	1	77.9	16	-	-	4.936184
4	2	61.5	19	1937.0	-	5.668656
5	3	61.5	11	1733.0	1276.0	7.788400
6	2	69.0	20	1538.0	-	8.601220
7	2	74.4	8	1320.0	-	10.469961
8	3	82.1	6	1350.0	1615.0	11.456001

**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	2	62.2	18	1819.0	-	0.945426
1	1	87.5	5	-	-	1.224455
2	1	76.1	9	-	-	2.184230
3	3	99.6	14	1212.0	1679.0	3.500815
4	2	59.0	12	1214.0	-	4.853074
5	2	94.5	17	1240.0	-	5.557554
6	2	76.0	12	1328.0	-	6.525535
7	2	77.3	12	1502.0	-	7.933304
8	3	99.8	12	1957.0	1889.0	8.889920
9	3	74.1	14	1267.0	1813.0	9.373139
10	2	64.3	18	1642.0	-	10.525107
11	2	86.8	12	1776.0	-	11.436427

**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	1	95.2	17	-	-	0.166522
1	2	85.0	7	1995.0	-	1.196466
2	3	95.6	13	1884.0	1962.0	2.162677
3	3	80.4	8	1109.0	1698.0	2.706985
4	2	82.2	11	1576.0	-	3.830898
5	1	70.8	13	-	-	4.481678
6	2	57.8	17	1778.0	-	5.541257
7	2	85.3	12	1626.0	-	5.758301
8	3	73.3	15	1914.0	1823.0	6.557050
9	1	70.0	19	-	-	7.475608
10	2	87.2	18	1692.0	-	8.240388
11	2	81.3	14	1635.0	-	8.982639
12	3	97.3	15	1298.0	1419.0	10.123399
13	2	67.6	8	1306.0	-	10.737620
14	3	64.7	11	1200.0	1605.0	11.931494



**Table 19 - Long Sequence Waveform Trial#11 (\*\* NOT Detected\*\*)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	92.5	17	1454.0	-	1.062809
1	1	78.7	13	-	-	1.621809
2	2	91.4	8	1711.0	-	2.855314
3	1	76.0	12	-	-	3.891395
4	3	71.0	6	1456.0	1340.0	5.787720
5	2	72.2	15	1500.0	-	6.328155
6	1	56.8	15	-	-	7.891078
7	2	82.6	15	1267.0	-	9.022030
8	2	71.8	7	1494.0	-	10.363803
9	1	80.8	6	-	-	11.811890

**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	2	54.9	11	1415.0	-	0.219382
1	2	92.7	8	1820.0	-	1.754886
2	2	70.8	11	1553.0	-	2.946549
3	2	88.1	13	1701.0	-	3.988856
4	3	72.4	13	1206.0	1449.0	5.400872
5	2	50.6	13	1199.0	-	5.957741
6	3	58.0	6	1914.0	1140.0	6.556588
7	2	60.2	18	1101.0	-	8.033203
8	2	97.2	9	1746.0	-	9.227857
9	2	56.1	12	1462.0	-	10.059196
10	2	87.6	19	1664.0	-	11.834770

**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	3	67.8	7	1019.0	1209.0	0.106471
1	2	67.6	9	1753.0	-	2.348415
2	3	93.3	6	1726.0	1989.0	4.484593
3	2	80.0	10	1064.0	-	5.239839
4	2	59.8	11	1506.0	-	7.329328
5	1	90.1	16	-	-	8.698910
6	2	96.7	13	1147.0	-	9.221793
7	2	50.5	16	1056.0	-	11.730678

**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	73.1	11	1402.0	-	0.331718
1	2	73.3	17	1118.0	-	1.440074
2	1	56.4	13	-	-	2.244701
3	3	79.4	13	1896.0	1309.0	2.792769
4	1	74.0	16	-	-	3.561985
5	2	97.2	10	1657.0	-	4.291974
6	3	88.9	10	1809.0	1197.0	4.836879
7	1	78.7	7	-	-	5.820052
8	1	93.6	12	-	-	6.260012
9	2	52.4	18	1903.0	-	7.084582
10	1	74.6	14	-	-	7.530155
11	3	95.3	14	1641.0	1336.0	8.605469
12	1	73.1	8	-	-	9.355042
13	3	65.1	9	1093.0	1731.0	9.828080
14	3	85.5	7	1635.0	1174.0	10.649023
15	1	59.9	20	-	-	11.487921

**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	3	68.2	17	1925.0	1085.0	0.532302
1	1	72.7	15	-	-	1.018399
2	2	78.8	16	1919.0	-	1.364472
3	2	52.9	16	1964.0	-	2.482324
4	3	73.4	12	1483.0	1272.0	3.164805
5	2	58.3	5	1524.0	-	3.687253
6	3	85.1	5	1392.0	1057.0	4.164313
7	1	81.3	10	-	-	4.954048
8	2	54.2	20	1563.0	-	5.599062
9	3	86.9	15	1754.0	1313.0	6.270121
10	3	82.5	12	1987.0	1442.0	6.937077
11	2	68.7	10	1333.0	-	7.587627
12	1	63.4	5	-	-	8.445170
13	2	82.6	12	1929.0	-	9.154805
14	3	79.8	7	1118.0	1031.0	9.944624
15	2	55.0	10	1839.0	-	10.479664
16	2	98.7	6	1754.0	-	11.094975
17	2	67.6	15	1751.0	-	11.488345

**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	1	96.0	8	-	-	0.509002
1	2	54.7	13	1708.0	-	1.773015
2	1	87.7	16	-	-	2.698178
3	3	76.4	13	1509.0	1891.0	3.104488
4	2	89.2	14	1732.0	-	4.602264
5	2	58.8	6	1228.0	-	5.233579
6	1	55.2	11	-	-	6.429061
7	1	52.7	11	-	-	6.932708
8	2	97.4	10	1065.0	-	7.984817
9	2	71.6	17	1625.0	-	8.641851
10	3	82.3	10	1843.0	1848.0	9.945454
11	2	91.7	18	1061.0	-	10.595936
12	1	55.0	5	-	-	11.809425

**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	60.8	5	1422.0	-	0.744905
1	1	57.5	11	-	-	1.490777
2	2	83.8	15	1853.0	-	1.914072
3	2	72.2	8	1664.0	-	2.862010
4	1	94.2	11	-	-	3.984365
5	2	81.1	11	1189.0	-	5.040783
6	1	87.2	5	-	-	6.308226
7	3	51.1	6	1069.0	1599.0	6.568859
8	3	54.4	9	1162.0	1845.0	8.167528
9	2	91.9	7	1847.0	-	8.330524
10	3	54.7	19	1324.0	1998.0	9.785212
11	2	62.1	14	1824.0	-	10.715382
12	1	54.1	16	-	-	11.718281

**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	2	54.1	14	1885.0	-	0.301542
1	2	63.1	15	1023.0	-	1.469747
2	2	50.2	15	1854.0	-	2.900609
3	2	52.4	8	1701.0	-	3.960941
4	2	87.5	16	1078.0	-	4.926109
5	2	84.9	5	1396.0	-	5.223778
6	2	90.4	13	1339.0	-	6.576923
7	2	83.1	14	1490.0	-	7.785934
8	1	86.7	11	-	-	8.424357
9	1	52.9	6	-	-	9.900979
10	3	94.0	7	1137.0	1996.0	10.465736
11	2	98.9	12	1177.0	-	11.721740

**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	1	98.5	8	-	-	0.696105
1	2	61.0	12	1757.0	-	1.483116
2	3	72.1	13	1251.0	1295.0	2.193934
3	1	91.9	17	-	-	2.934225
4	3	61.2	11	1512.0	1782.0	3.769269
5	2	96.5	16	1091.0	-	4.209721
6	3	95.7	8	1589.0	1838.0	4.906633
7	2	69.5	16	1815.0	-	5.793024
8	1	70.3	7	-	-	7.174718
9	3	63.2	10	1317.0	1097.0	7.468995
10	1	54.8	16	-	-	8.673036
11	2	82.3	14	1524.0	-	9.179921
12	2	54.1	16	1163.0	-	10.202299
13	2	59.6	10	1859.0	-	11.054315
14	1	61.3	12	-	-	11.621317

**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	2	77.4	5	1760.0	-	0.175256
1	3	85.5	15	1267.0	1703.0	1.385475
2	3	83.4	12	1032.0	1536.0	1.555816
3	3	77.2	7	1438.0	1593.0	2.495466
4	3	81.7	17	1894.0	1472.0	3.501708
5	1	65.3	9	-	-	4.267000
6	2	95.4	13	1790.0	-	5.006832
7	3	53.1	16	1283.0	1823.0	5.900512
8	2	50.7	18	1903.0	-	6.555737
9	3	81.5	9	1690.0	1008.0	7.055004
10	2	60.8	7	1970.0	-	8.240777
11	2	85.5	16	1222.0	-	8.804977
12	2	53.7	13	1688.0	-	9.019771
13	3	99.0	17	1396.0	1894.0	10.486935
14	3	85.0	11	1254.0	1314.0	10.597313
15	3	55.2	7	1159.0	1970.0	11.578399

**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	87.4	17	1049.0	-	0.865353
1	1	71.8	8	-	-	1.620480
2	2	50.1	10	1195.0	-	2.726723
3	2	61.9	9	1717.0	-	3.567430
4	2	96.0	9	1673.0	-	4.236167
5	2	73.8	5	1977.0	-	5.061948
6	2	94.8	9	1217.0	-	5.924778
7	1	64.3	6	-	-	6.515417
8	2	79.7	8	1364.0	-	8.003465
9	2	98.3	18	1333.0	-	8.712291
10	2	61.5	17	1040.0	-	9.332413
11	3	90.1	18	1983.0	1467.0	10.816506
12	1	83.0	15	-	-	11.461472

**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	58.3	20	-	-	0.023714
1	2	77.1	13	1538.0	-	0.996171
2	2	88.4	15	1913.0	-	1.761234
3	3	76.6	7	1256.0	1925.0	2.031461
4	1	76.0	18	-	-	3.007566
5	1	54.2	9	-	-	3.628441
6	1	97.1	8	-	-	3.980570
7	2	84.5	17	1502.0	-	4.730197
8	3	75.2	18	1198.0	1133.0	5.439570
9	2	71.3	14	1878.0	-	6.059387
10	2	93.9	11	1006.0	-	6.508298
11	1	99.0	11	-	-	7.194048
12	3	92.2	13	1834.0	1950.0	8.085941
13	2	55.3	6	1617.0	-	8.248560
14	2	67.2	7	1285.0	-	9.467880
15	3	64.4	12	1471.0	1563.0	9.502738
16	3	61.8	13	1610.0	1437.0	10.310154
17	1	86.6	17	-	-	11.165585
18	3	93.7	16	1913.0	1689.0	11.898791

**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	2	57.9	5	1585.0	-	0.640001
1	1	86.3	10	-	-	1.652170
2	1	79.8	13	-	-	2.551239
3	3	78.5	12	1766.0	1139.0	3.011890
4	3	83.7	13	1624.0	1151.0	4.243799
5	2	77.6	12	1533.0	-	4.589125
6	3	62.9	13	1691.0	1117.0	5.874504
7	3	95.2	12	1890.0	1190.0	6.169771
8	2	52.7	17	1925.0	-	6.959859
9	1	50.9	13	-	-	8.459246
10	2	51.5	13	1959.0	-	8.749311
11	3	59.8	7	1126.0	1540.0	9.858401
12	1	65.7	6	-	-	11.110705
13	1	80.6	14	-	-	11.970256

**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)
0	2	60.5	17	1608.0	-	0.036277
1	3	53.1	18	1715.0	1338.0	1.237187
2	2	62.0	15	1951.0	-	2.451404
3	2	58.3	11	1636.0	-	4.012589
4	2	70.4	11	1745.0	-	4.477949
5	3	67.3	19	1142.0	1366.0	5.472698
6	3	71.7	13	1589.0	1684.0	7.008854
7	2	99.4	11	1987.0	-	8.170876
8	1	77.9	16	-	-	9.329181
9	3	96.6	15	1452.0	1222.0	10.168405
10	3	95.8	8	1908.0	1981.0	11.833017

**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	2	97.4	9	1322.0	-	0.057643
1	2	52.1	8	1014.0	-	1.169416
2	1	67.1	17	-	-	1.749353
3	3	94.8	12	1776.0	1672.0	1.892362
4	3	76.7	11	1048.0	1174.0	2.667135
5	1	66.6	12	-	-	3.579852
6	2	72.3	13	1786.0	-	3.615483
7	2	99.0	13	1670.0	-	4.706558
8	2	78.2	19	1409.0	-	4.842866
9	2	72.4	7	1871.0	-	5.431707
10	1	96.6	12	-	-	6.049896
11	2	96.5	11	1206.0	-	6.810505
12	2	88.8	16	1621.0	-	7.484591
13	1	85.0	14	-	-	7.863421
14	3	79.3	7	1943.0	1679.0	8.679276
15	3	94.5	14	1893.0	1716.0	9.493413
16	2	73.3	12	1420.0	-	9.961501
17	2	75.1	20	1476.0	-	10.395846
18	3	86.1	8	1040.0	1725.0	10.893949
19	1	87.3	14	-	-	11.906555

**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	76.9	18	1984.0	-	0.548381
1	1	74.7	7	-	-	1.466213
2	1	84.0	18	-	-	1.968738
3	1	97.3	6	-	-	3.153363
4	2	65.6	6	1726.0	-	3.389784
5	1	55.6	16	-	-	4.539743
6	2	55.6	17	1329.0	-	4.977128
7	3	59.2	9	1026.0	1788.0	5.687027
8	2	92.9	9	1886.0	-	7.106804
9	2	70.7	7	1564.0	-	7.891461
10	1	88.0	13	-	-	8.694314
11	3	62.5	10	1847.0	1430.0	9.281110
12	2	87.0	20	1840.0	-	10.158172
13	2	59.8	20	1523.0	-	11.028758
14	1	91.3	12	-	-	11.591917

**Table 35 - Long Sequence Waveform Trial#27 (\*\*NOT Detected\*\*)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	56.2	15	1229.0	1659.0	0.196854
1	2	70.0	13	1890.0	-	1.350735
2	2	79.3	18	1022.0	-	1.842472
3	2	78.2	12	1323.0	-	2.676461
4	3	75.5	11	1153.0	1138.0	3.058805
5	3	92.0	8	1458.0	1156.0	4.136045
6	3	51.9	7	1268.0	1099.0	4.715941
7	2	55.4	10	1508.0	-	5.418893
8	3	65.4	16	1891.0	1560.0	6.660939
9	1	96.0	20	-	-	7.205836
10	3	81.3	11	1456.0	1429.0	8.073344
11	2	55.5	7	1006.0	-	8.961222
12	2	80.9	15	1814.0	-	9.561663
13	2	82.5	7	1359.0	-	10.085093
14	2	64.8	12	1595.0	-	10.993809
15	3	90.4	6	1906.0	1179.0	11.977182

**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	80.5	15	1431.0	-	0.481185
1	1	78.4	11	-	-	1.994597
2	2	83.5	8	1527.0	-	2.749936
3	2	72.9	16	1991.0	-	4.612242
4	1	69.6	16	-	-	4.994871
5	1	96.3	12	-	-	6.604688
6	3	74.3	19	1929.0	1674.0	8.227175
7	2	58.5	11	1358.0	-	9.352000
8	2	74.7	13	1766.0	-	10.414602
9	2	75.0	8	1681.0	-	10.972236



**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	2	70.1	6	1637.0	-	0.397610
1	3	95.0	5	1831.0	1688.0	0.764047
2	1	81.2	8	-	-	1.852364
3	2	92.3	13	1380.0	-	2.285320
4	2	95.4	17	1256.0	-	3.021822
5	1	54.8	13	-	-	3.660986
6	2	74.2	19	1487.0	-	4.117913
7	2	61.3	19	1340.0	-	4.949458
8	2	50.8	7	1592.0	-	5.754479
9	2	90.7	5	1385.0	-	6.402943
10	3	71.2	13	1791.0	1601.0	7.008277
11	2	90.8	20	1827.0	-	7.651991
12	2	70.0	10	1353.0	-	8.227401
13	2	69.4	9	1086.0	-	9.104094
14	2	98.2	16	1506.0	-	9.634614
15	2	58.3	10	1455.0	-	10.246433
16	2	74.4	15	1805.0	-	11.185531
17	3	87.9	15	1211.0	1186.0	11.677742

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

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	85.7	5	1314.0	-	0.198460
1	1	84.5	6	-	-	0.645154
2	3	69.0	8	1374.0	1396.0	1.290550
3	3	61.0	20	1283.0	1114.0	2.132014
4	1	63.2	12	-	-	2.564475
5	2	57.8	9	1767.0	-	3.178767
6	3	98.3	17	1448.0	1770.0	3.949072
7	2	80.6	18	1747.0	-	4.423798
8	1	56.2	18	-	-	5.603690
9	3	96.0	10	1503.0	1546.0	5.993643
10	2	99.5	16	1560.0	-	6.835787
11	1	60.6	15	-	-	7.087252
12	1	97.4	11	-	-	8.175845
13	2	86.1	8	1101.0	-	8.631281
14	2	76.6	10	1877.0	-	9.249094
15	2	86.6	17	1108.0	-	9.807394
16	2	83.9	10	1139.0	-	10.189825
17	3	99.6	7	1205.0	1541.0	11.235857
18	2	56.7	20	1188.0	-	11.534104

Appendix C Test Data Tables and Plots for Channel Closing

FCC PART 15 SUBPART E DATA

Waveform Type	Channel Closing Transmission Time <sup>1</sup>		Channel Move Time		Result
	Measured	Limit	Measured	Limit	
Radar Type 1	8.20ms	60 ms	441ms	10 s	Complies
Radar Type 5	0ms	60 ms	0ms	10 s	Complies

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.

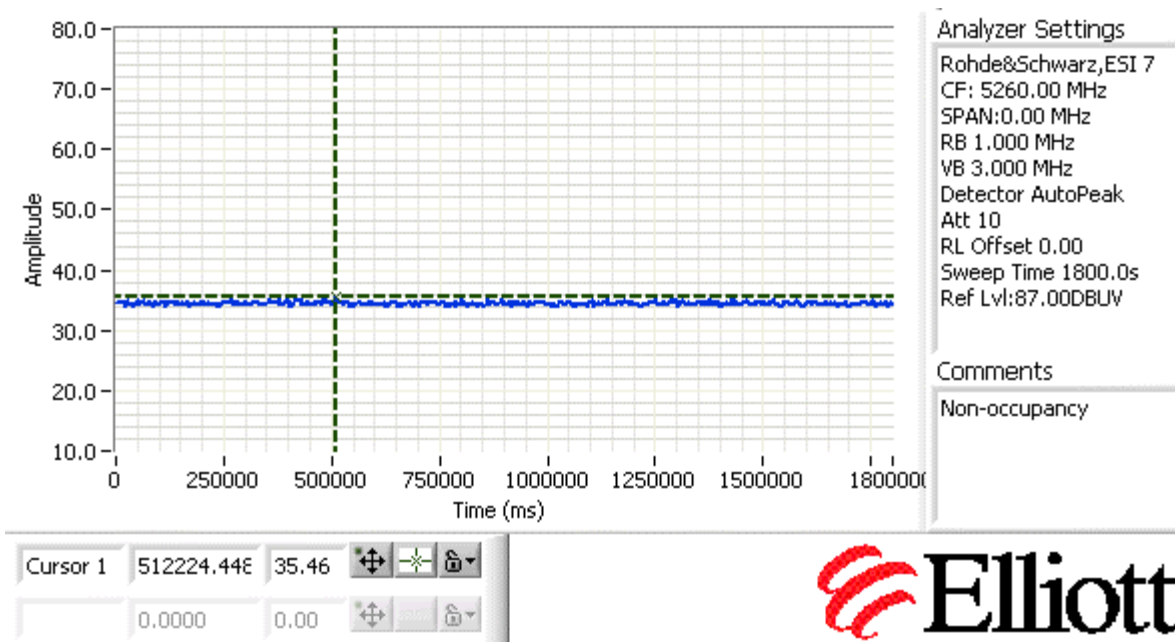


Figure 3 Thirty minute non-occupancy observation

<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

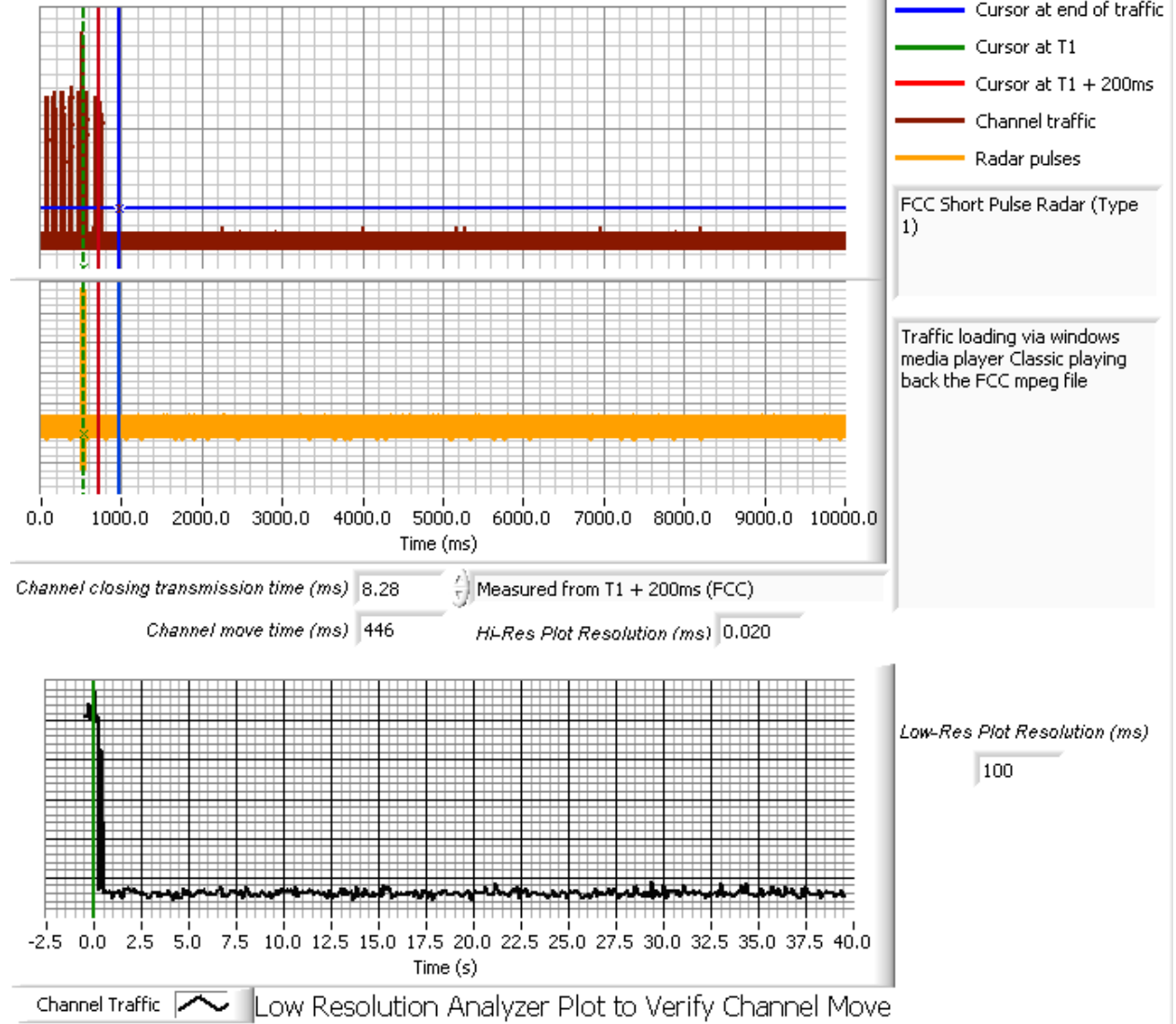


Figure 4 Channel Close and Move, short pulse

# Elliott Timing Plots - Channel Closing

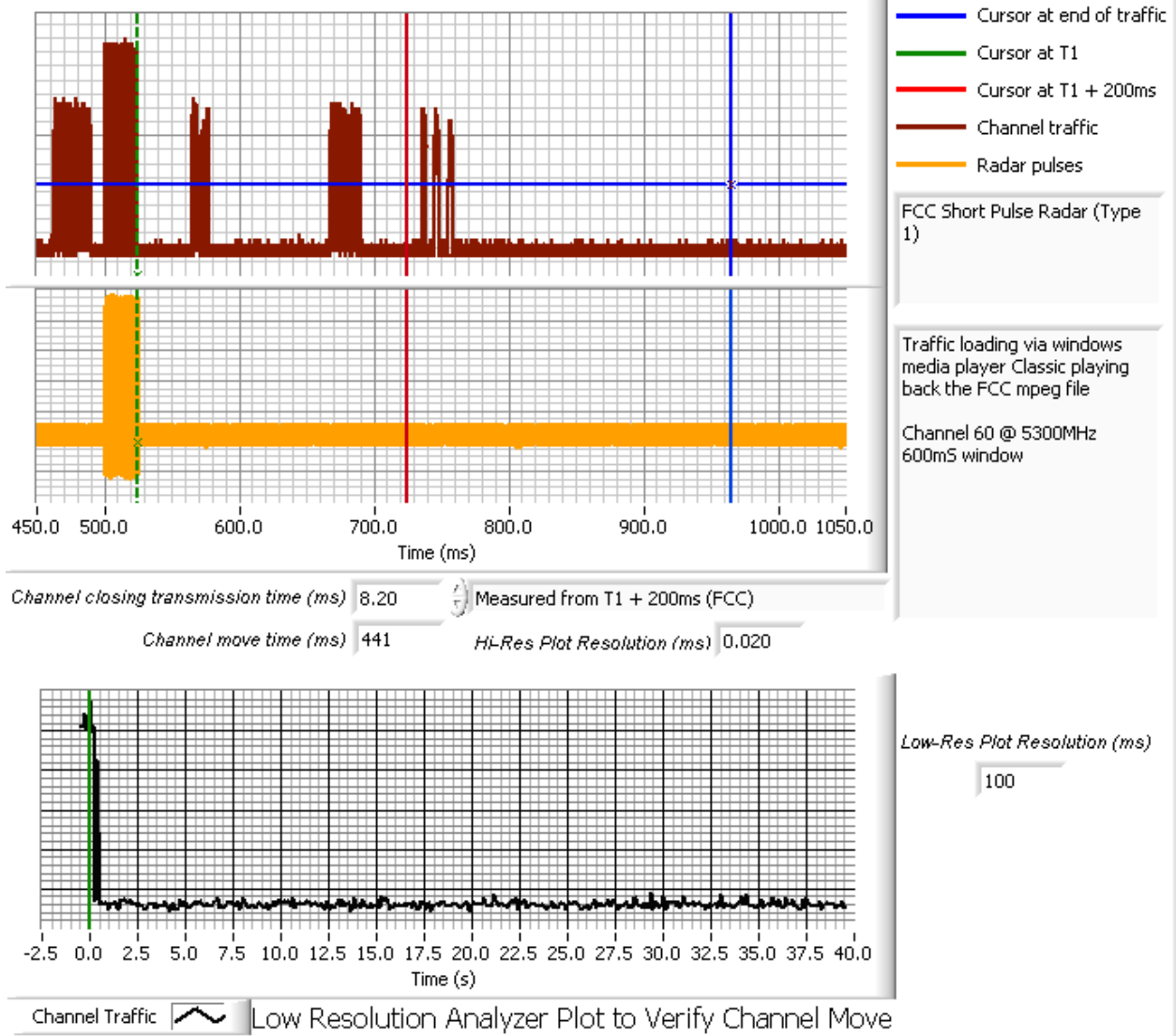


Figure 5 Channel Close and Move 600ms window, short pulse

# Elliott Timing Plots - Channel Closing

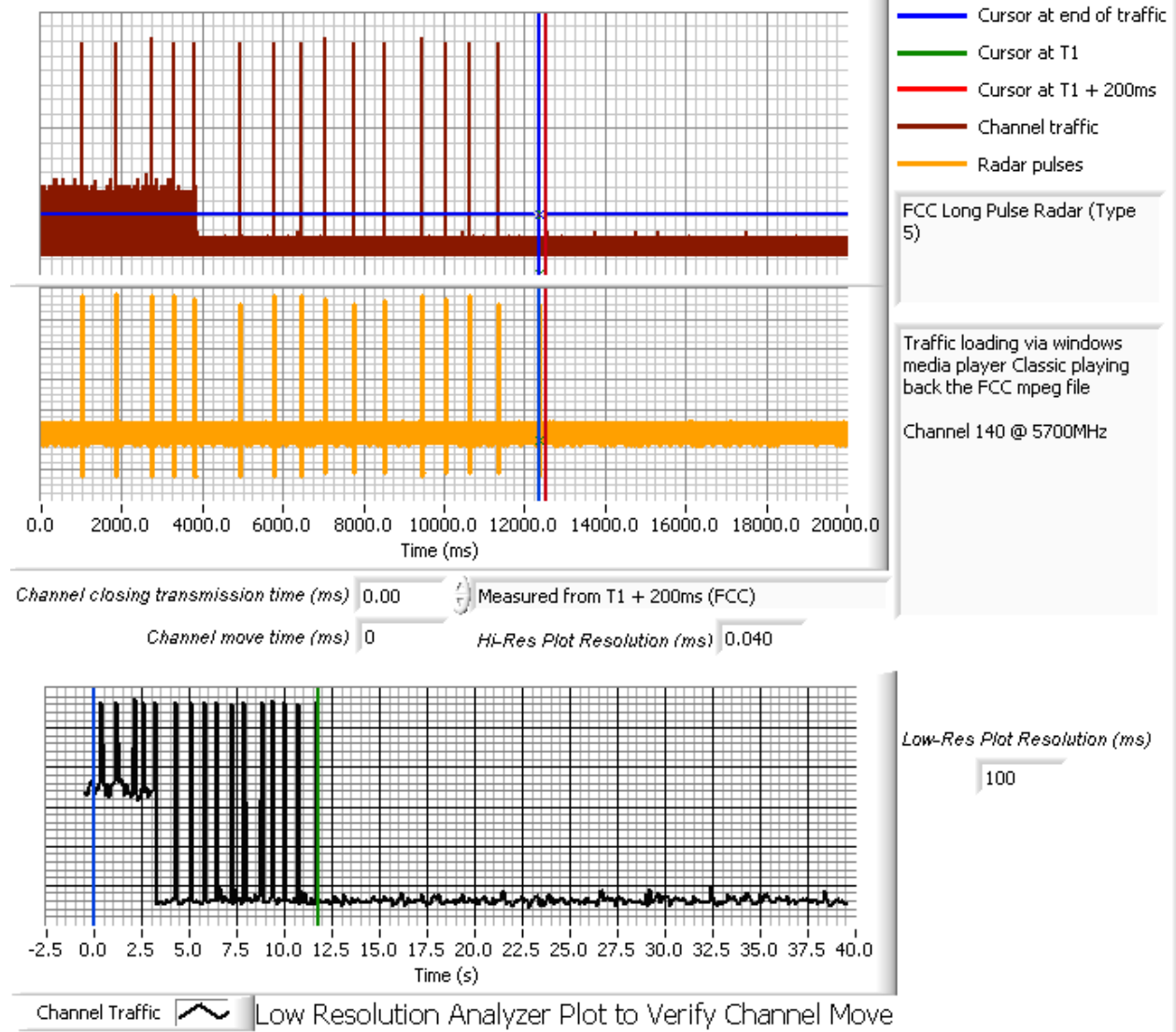


Figure 6 Channel Close and Move, long pulse

# Elliott Timing Plots - Channel Closing

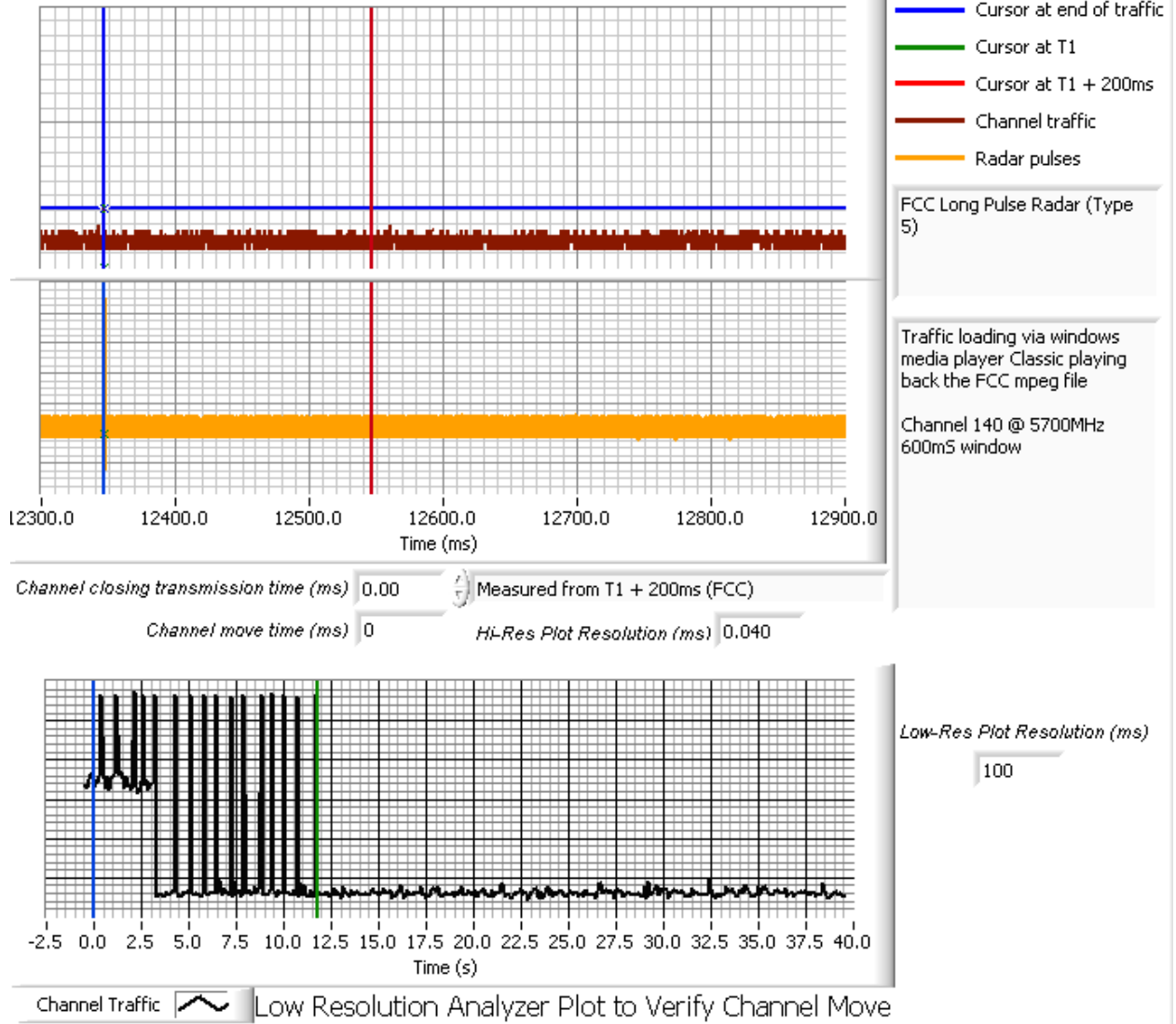


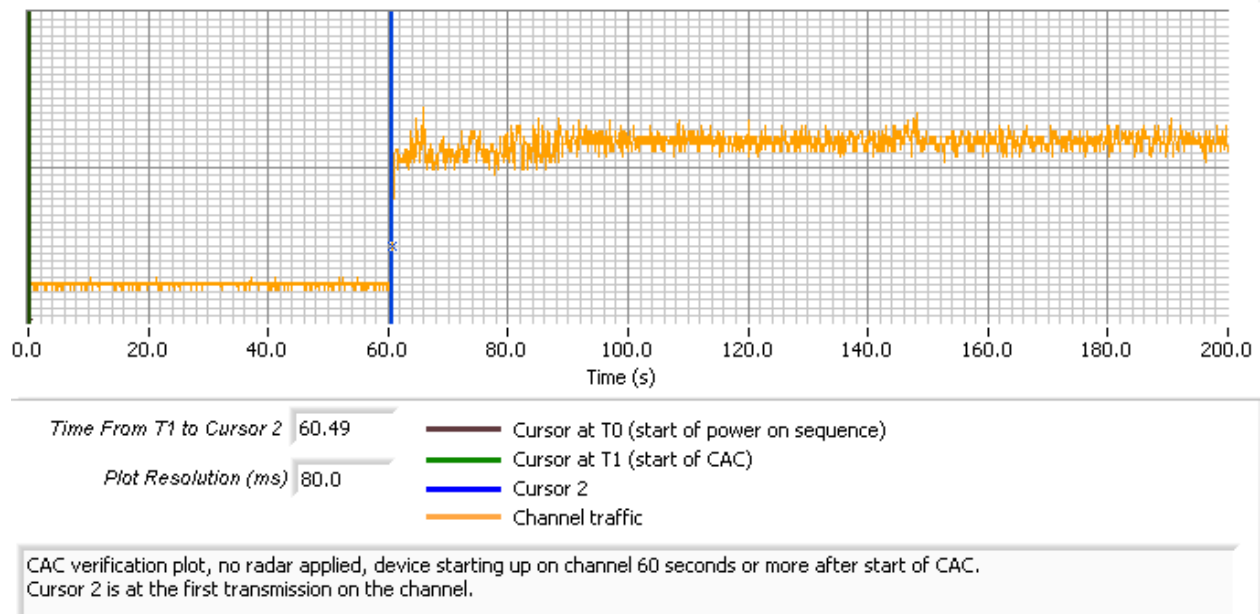
Figure 7 Channel Close and Move 600ms window, long pulse

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

The first plot shows the start of transmissions approximately 67s after the start of the CAC (no radar applied during the CAC).



## Timing Plots - Channel Availability Check



**Figure 8 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.

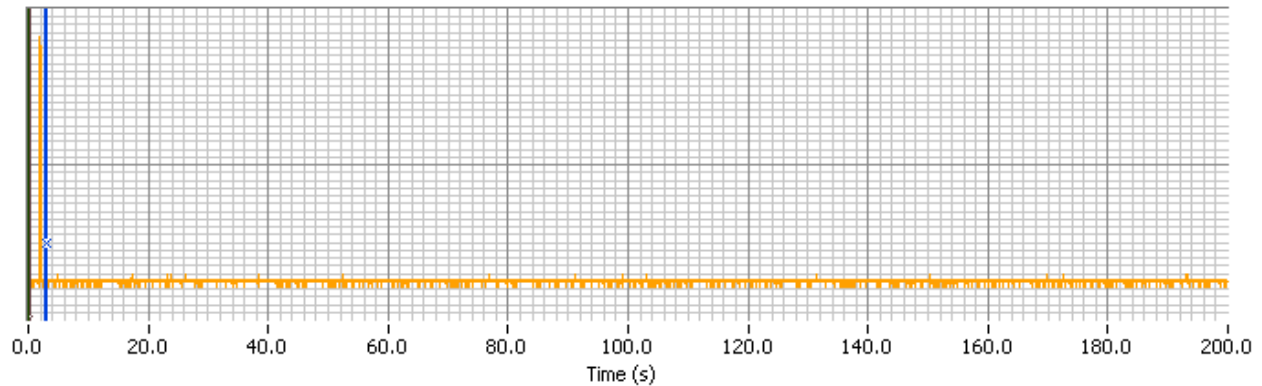
The level of the radar signal applied was -64dBm. Measurements were made on channel 60 (5300 MHz).

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.



# Timing Plots - Channel Availability Check



Time From T1 to Cursor 2 3.00  
Plot Resolution (ms) 80.0

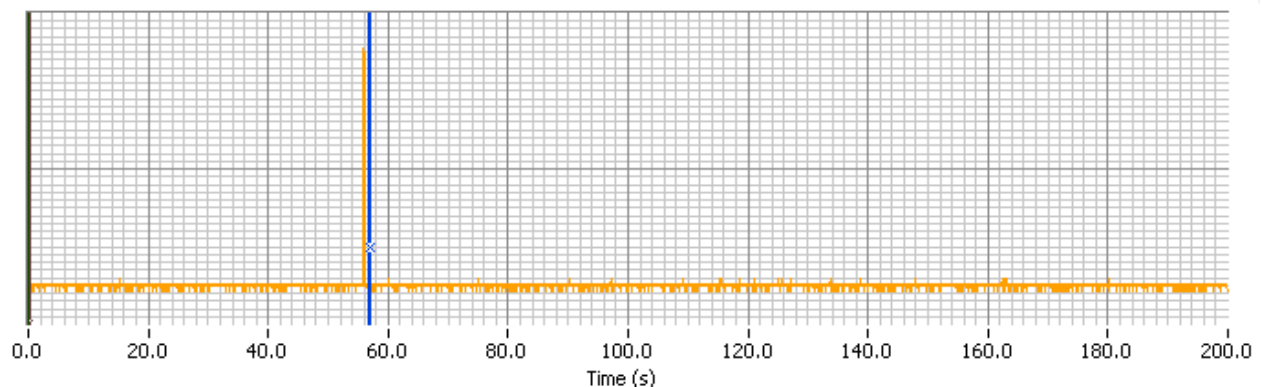
- Cursor at T0 (start of power on sequence)
- Cursor at T1 (start of CAC)
- Cursor 2
- Channel traffic

Radar details: FCC Short Pulse Radar (Type 1)  
Applied 3 seconds after start of CAC.  
Cursor 2 is on the radar signal, no transmissions on the channel from the EUT observed.

Figure 9 Plot of type 1 radar during the first 6 seconds of the CAC



# Timing Plots - Channel Availability Check



Time From T1 to Cursor 2 57.00  
Plot Resolution (ms) 80.0

- Cursor at T0 (start of power on sequence)
- Cursor at T1 (start of CAC)
- Cursor 2
- Channel traffic

Radar details: FCC Short Pulse Radar (Type 1)  
Applied 57 seconds after start of CAC.  
Cursor 2 is on the radar signal, no transmissions on the channel from the EUT observed.

Figure 10 Plot of Type 1 Radar during the last 6 seconds of the CAC



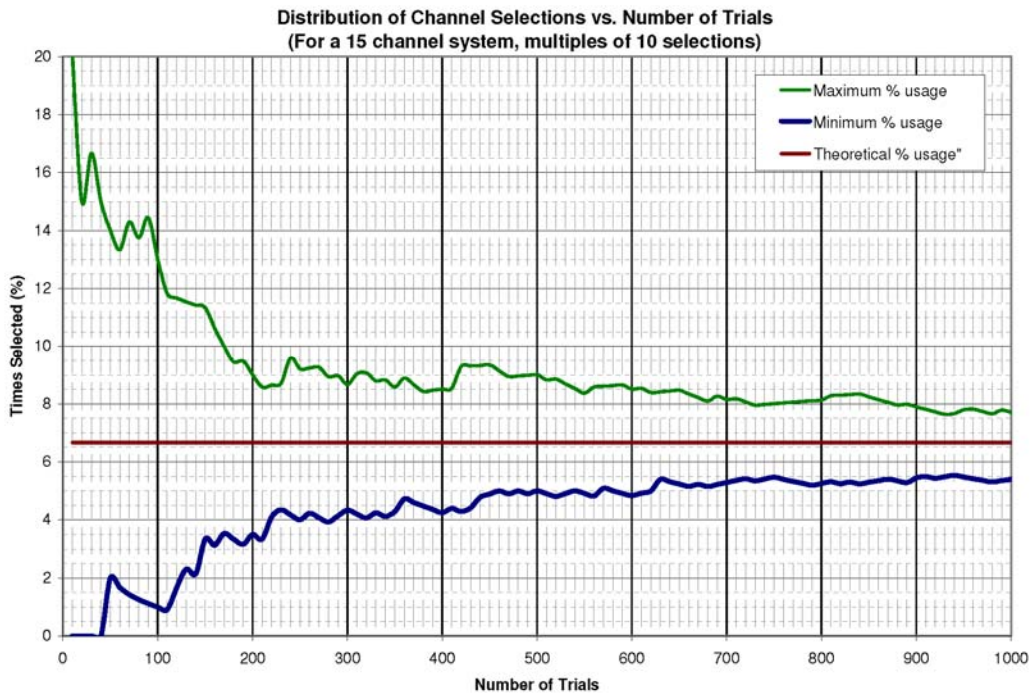
**Appendix E Test Data – Uniform Loading**

The master device was rebooted 50 times and the start-up channel recorded. The results are shown in the table below.

Number of Channels Available: 15  
Theoretical Loading (1/n): 6.67%

Channel (MHz)	Channel #	Times Selected	Loading
5260	52	2	4.0%
5280	56	4	8.0%
5300	60	5	10.0%
5320	64	3	6.0%
5500	100	5	10.0%
5520	104	3	6.0%
5540	108	6	12.0%
5560	112	2	4.0%
5580	116	2	4.0%
5600	120	3	6.0%
5620	124	3	6.0%
5640	128	1	2.0%
5660	132	4	8.0%
5680	136	5	10.0%
5700	140	2	4.0%
Number of Trials:		<u>50</u>	

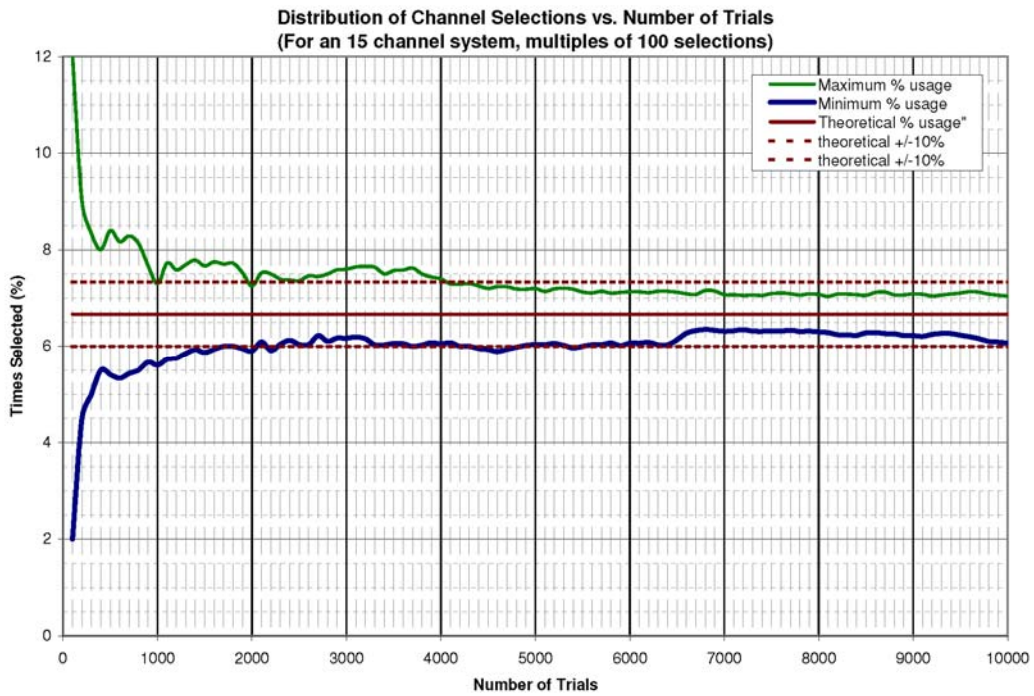
The graph on the next page shows an expected distribution of random channel selection for a number of trials. It was obtained using an Excel algorithm to determine the maximum and minimum number of times any channel was randomly selected. The algorithm determines this based on 100,000 trials for each set of multiple selections.



**Figure 11 Expected Loading For a 15 Channel System (1,000 Trials)**

For a trial size of 50, the expected distribution would be that each channel would be selected between 2% and 14% of the total number of trials. As the actual data of each channel being selected (between 0% and 12% of the time), falls within these bounds it is considered that the device is using a random channel selection algorithm that would produce loading within 10% of the theoretical loading (6.67%).

To obtain a reading within 10% of the theoretical loading on all channels could require somewhere in excess of 6000 trials. Refer to the graph below.



**Figure 12 Expected Loading For a 15 Channel System (10,000 Trials)**

Appendix F Antenna Spec

**ACC04-090380**

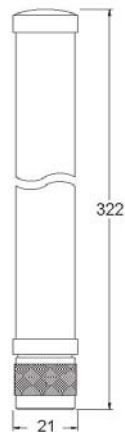
**Electrical Specification**

Frequency range	5470 MHz - 5875 MHz
Gain	8.0 dBi
VSWR	2.0 : 1 Max.
Polarization	Linear, vertical
HPBW / horizontal	360°
HPBW / vertical	12°
Downtilt	0°
Power handling	5W (cw)
Impedance	50 Ohms
Connector	N Plug

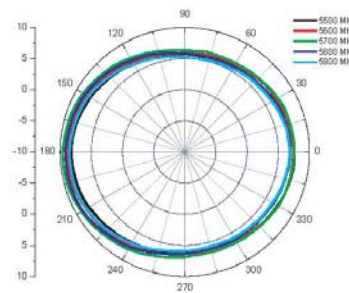


**Environmental & Mechanical Characteristics**

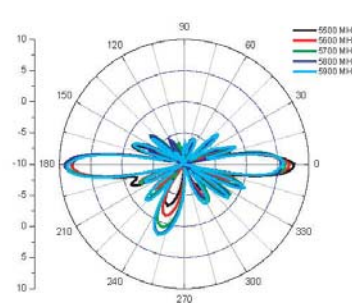
Temperature	- 40°C to +80°C
Humidity	95% @ 55° C
Radome color	Gray-white
Radome material	Fiber glass, UV resistant
Weight	110 g
Dimension	22 x 325 mm



H-plane Co-polarization Pattern



V-plane Co-polarization Pattern



# ACC04-202130

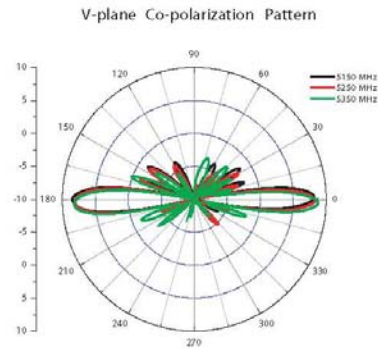
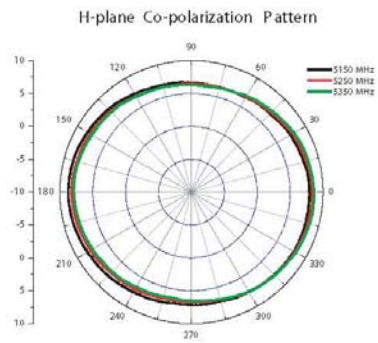
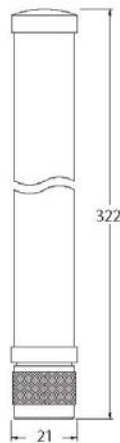
## Electrical Specification

Frequency range	5150 MHz - 5350 MHz
Gain	8.0 dBi
VSWR	2.0 : 1 Max.
Polarization	Linear, vertical
HPBW / horizontal	360°
HPBW / vertical	12°
Downtilt	0°
Power handling	5W (cw)
Impedance	50 Ohms
Connector	N Plug

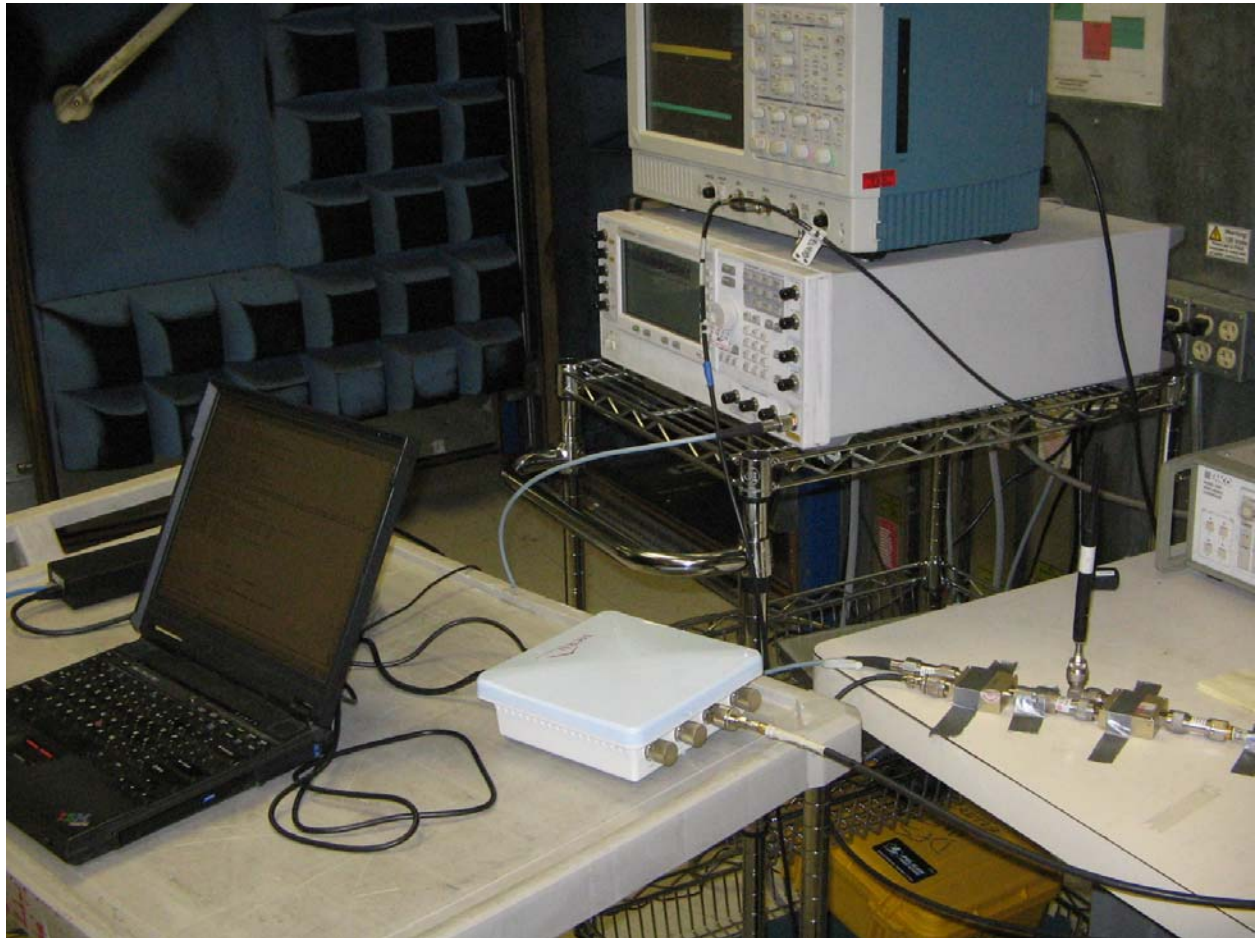


## Environmental & Mechanical Characteristics

Temperature	- 40°C to +80°C
Humidity	95% @ 55°C
Radome color	Gray-white
Radome material	Fiber glass, UV resistant
Weight	110 g
Dimension	22 x 325 mm



*Appendix G Test Configuration Photographs*



**Figure 13, Master DFS Test Setup**