

TEST REPORT
DYNAMIC FREQUENCY SELECTION REQUIREMENTS
OF

FCC Part 15 Subpart D (UNII)

Motorola, Inc.
Model(s): 54xxyyzzab

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SCOPE

The Federal Communications Commission publishes standards regarding ElectroMagnetic Compatibility and Radio spectrum Matters for radio-communications devices. Tests have been performed on the Motorola model 5400xxyyzzab in accordance with these standards.

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

- FCC Part 15 SubPart D 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 samples of the Motorola model 54xxyyzzab and therefore apply only to the tested samples. The samples were selected and prepared by Steve Payne of Motorola, Inc. The xx in the model number indicates encryption method and or Ethernet throughput limits. The yy in the model number varies depending on the application of the radio, SM for Subscriber Module, AP for Access Point and BH for Back Haul. The zz is either a C or HZ or blank (blank is for vertical polarization of the antenna, HZ is horizontal polarization and C stands for connectorized). The a is an alphabetical character relating to ROHS compliance. The b is also alphabetical relating to software revision. The hardware and therefore the RF characteristics of the different models are identical. The difference is in the software load.

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 are covered through a manufacturer statement or through observation of the device.

STATEMENT OF COMPLIANCE

The tested samples of Motorola models 5400AP and 5400SM 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 Motorola model 5400xyyzab is a high speed wireless communication product operating in the 5470-5725 MHz frequency band.

The samples were received on January 23, 2007 and tested on January 23, 24 and 25, 2007. The following EUT's were tested:

Manufacturer	Model	Description	Serial Number
Motorola, Inc.	5400AP	High speed wireless communication radio	0A003E5156F
Motorola, Inc.	5400SM		0A003E5152F7

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

Operating Modes

- ☒ Master Device, model 5400AP
- ☒ Client Device, Model 5400SM
- ☐ Client Device with In-Service Monitoring

Antenna Gains / EIRP

	5495 – 5705 MHz
Lowest Antenna Gain (dBi)	7
Highest Antenna Gain (dBi)	7
Output Power (dBm)	23
EIRP (dBm)	30

- ☒ Power can exceed 200mW EIRP

Channel Protocol

- ☐ IP Based
- ☒ Frame Based
- ☐ OTHER _____

ENCLOSURE

The EUT enclosure measures approximately 30 by 9 by 8 centimeters. It is primarily constructed of uncoated plastic.

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
Dell	Precision M20	Laptop PC	3HWBZ81
Dell	Precision M20	Laptop PC	7HM4R91

EUT INTERFACE PORTS

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

Port	Connected To	Cable(s)		
		Description	Shielded or Unshielded	Length(m)
5400SM Ethernet	Remote Laptop	Cat 5	Unshielded	4
5400AP Ethernet	Remote Laptop	Cat 5	Unshielded	4

EUT OPERATION

The EUT was operating with the following software.

Master Device: Version 8 Working

Client Device: Version 8 Working

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 occurred 21 seconds after power was applied.

During the in-service monitoring detection probability, channel move time and closing transmission time tests on the 5400AP, the system was configured with a "FCC" streaming video file from the AP (sourced by the PC connected to the AP device via an Ethernet interface) to the SM viewed on the PC connected to the SM. The talk/listen ratio was set to 45%/55%. The same setup was used for channel move and closing transmissions tests on the 5400SM.

During the detection bandwidth tests, the 5400AP was configured without traffic on the channel. The talk/listen ration was set to 0%/100%.

TEST RESULTS**TEST RESULTS SUMMARY – FCC Part 15, MASTER DEVICE – 5400AP**

Description	Radar Type	Radar Frequency	Measured Value	Requirement	Test Data	Status
Channel Availability Check (CAC) Time	Type 1	5580MHz	68s	$\geq 60s$	Appendix D	Passed
In-Service Monitoring Detection Threshold	Type 1 Type 2 Type 3 Type 4 Type 5 Type 6	5580MHz	-56 dBm	-56dBm (see note 2)	Appendix C	Passed
Channel closing transmission time	Type 1 Type 5	5580MHz 5580MHz	0ms 0ms	$\leq 260ms$	Appendix C	Passed
Channel move time	Type 1 Type 5	5580MHz 5580MHz	0s 0s	$\leq 10s$	Appendix C	Passed
Non-occupancy period	N/A	-	30 min	> 30 minutes	Appendix C	Passed

Table 1 FCC Part 15 Subpart E Client Device Test Result Summary**TEST RESULTS SUMMARY – FCC Part 15, CLIENT DEVICE – 5400SM**

Description	Radar Type	Radar Frequency	Measured Value	Requirement	Test Data	Status
Channel closing transmission time	Type 1	5580MHz	0ms	$\leq 260ms$	Appendix C	Passed
Channel move time	Type 1	5580MHz	0s	$\leq 10s$	Appendix C	Passed

Table 2 FCC Part 15 Subpart E Client Device Test Result Summary

Notes:

- 1) The radar was considered to be “detected” during in-service monitoring if the master device indicated detection more than 18 times out of 30 trials for each radar type(60%). The device detected each radar at least 18 times out of 30 trials. In addition, the aggregate number of detections for radar types 1-4 was at least 96 of 120 trials (80%).
- 2) Detection threshold is based on the master device having an antenna gain of 7 dBi. $(-64+7+1 = -56 \text{ dBm})$. If gains of 0 dBi or less are used then the required threshold increases to -62dBm (output EIRP drops below 23dBm).
- 3) Channel availability check, detection threshold and non-occupancy period are not applicable to client devices.

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.

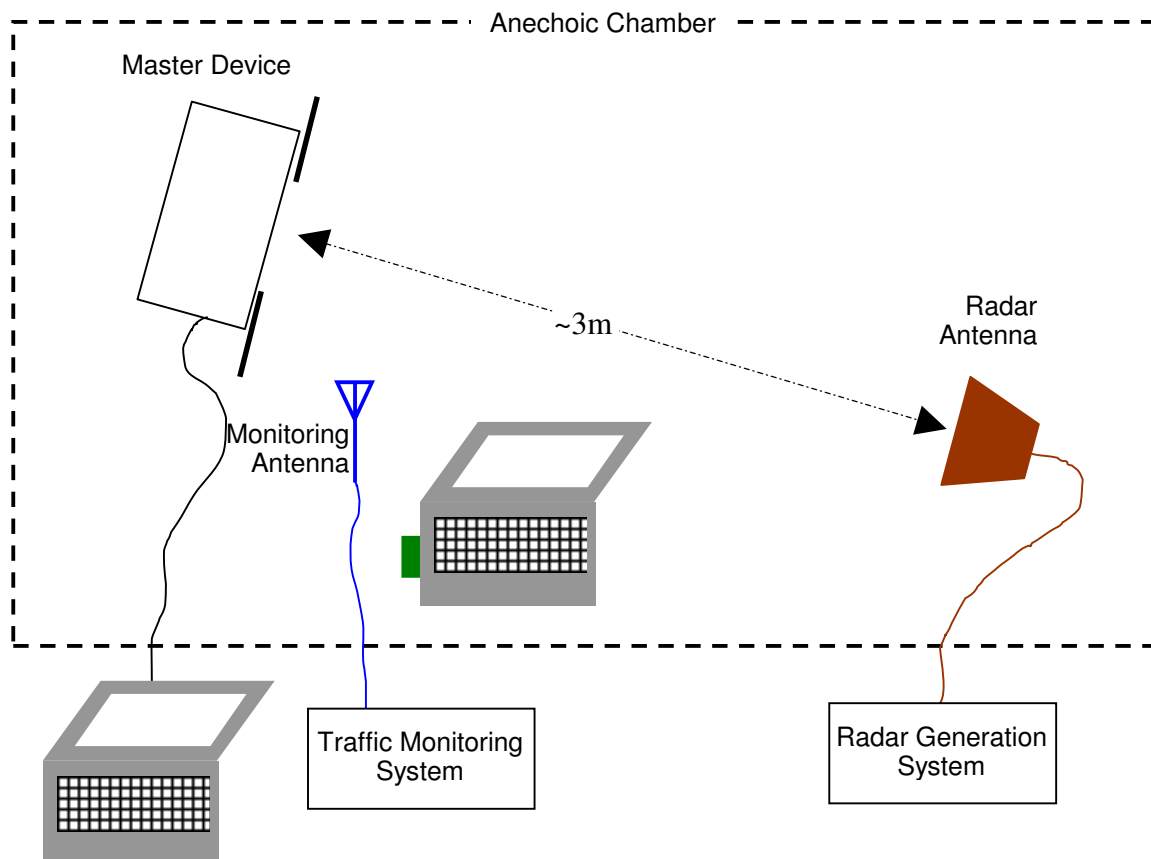


Figure 1 Test Configuration for radiated Measurement Method

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:

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

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

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

CONDUCTED TEST METHOD

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

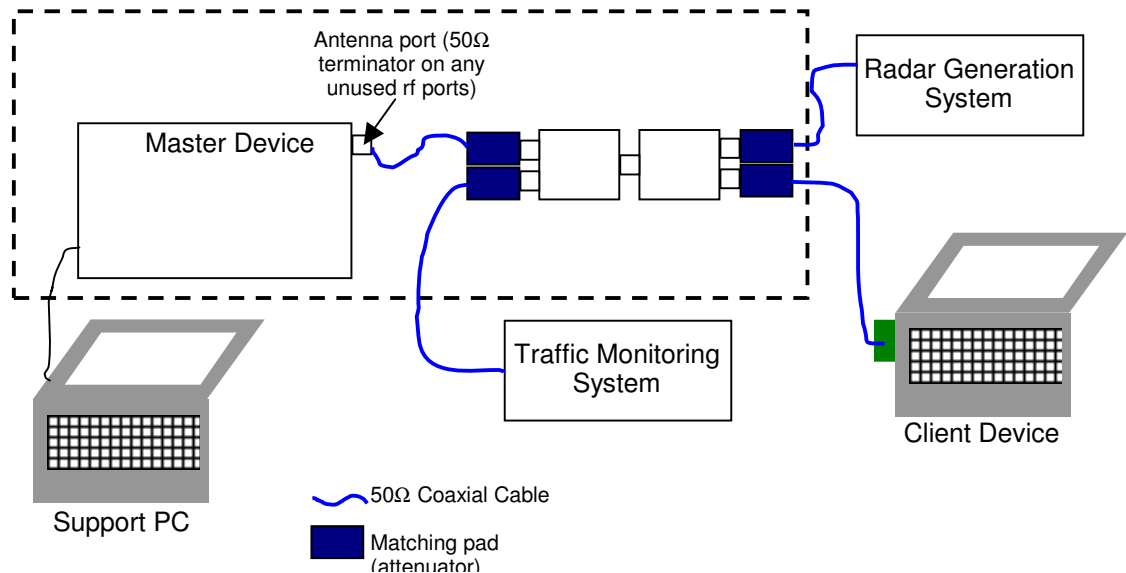


Figure 2 Test Configuration for Conducted Measurement Method

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 two ways:

FCC – the total time of all individual transmissions from the EUT that are observed starting 200ms at the end of the last radar pulse in the waveform. This value is required to be less than 60ms.

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

DFS CHANNEL AVAILABILITY CHECK TIME

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

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

UNIFORM LOADING

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

TRANSMIT POWER CONTROL (TPC)

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

SAMPLE CALCULATIONS

DETECTION PROBABILITY / SUCCESS RATE

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

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

THRESHOLD LEVEL

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

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

Appendix A Test Equipment Calibration Data

<u>Manufacturer</u>	<u>Description</u>	<u>Model #</u>	<u>Asset #</u>	<u>Cal Due</u>
Hewlett Packard	EMC Spectrum Analyzer, 9 kHz - 6.5 GHz	8595EM	787	21-Dec-07
Tektronix	1 GHz Oscilloscope	TDS5104	1435	10-Apr-07
Agilent	Vector Signal Generator (250kHz - 20GHz)	E8267C	1877	23-Nov-07

Appendix B Test Data Tables for Radar Detection Probability**Detection probability – 5400AP**

Waveform Name	Success Rate	Number of Trials
FCC Short Pulse Radar (Type 1)	100.0 %	30
FCC Short Pulse Radar (Type 2)	100.0 %	30
FCC Short Pulse Radar (Type 3)	100.0 %	30
FCC Short Pulse Radar (Type 4)	93.3 %	30
FCC frequency hopping radar (Type 6)	100.0 %	44
Long Sequence	96.7 %	30

Table 3 Summary of All Results

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
0	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
1	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
2	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
3	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
4	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
5	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
6	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
7	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
8	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
9	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
10	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
11	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
12	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
13	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
14	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
15	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
16	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
17	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
18	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
19	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
20	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
21	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
22	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
23	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
24	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
25	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
26	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
27	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
28	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
29	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A

Table 4 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	23	2.0	214.0	Yes	5580.0MHz, -56.0dBm	N/A
1	24	3.5	181.0	Yes	5580.0MHz, -56.0dBm	N/A
2	29	4.4	190.0	Yes	5580.0MHz, -56.0dBm	N/A
3	27	4.8	168.0	Yes	5580.0MHz, -56.0dBm	N/A
4	25	3.3	228.0	Yes	5580.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
5	27	3.3	208.0	Yes	5580.0MHz, -56.0dBm	N/A
6	26	1.9	162.0	Yes	5580.0MHz, -56.0dBm	N/A
7	24	1.6	223.0	Yes	5580.0MHz, -56.0dBm	N/A
8	28	3.0	181.0	Yes	5580.0MHz, -56.0dBm	N/A
9	26	3.8	195.0	Yes	5580.0MHz, -56.0dBm	N/A
10	25	3.9	159.0	Yes	5580.0MHz, -56.0dBm	N/A
11	29	4.9	190.0	Yes	5580.0MHz, -56.0dBm	N/A
12	25	4.2	224.0	Yes	5580.0MHz, -56.0dBm	N/A
13	28	2.2	171.0	Yes	5580.0MHz, -56.0dBm	N/A
14	29	1.3	188.0	Yes	5580.0MHz, -56.0dBm	N/A
15	27	4.9	194.0	Yes	5580.0MHz, -56.0dBm	N/A
16	26	3.7	215.0	Yes	5580.0MHz, -56.0dBm	N/A
17	26	4.4	174.0	Yes	5580.0MHz, -56.0dBm	N/A
18	23	4.7	154.0	Yes	5580.0MHz, -56.0dBm	N/A
19	28	4.0	150.0	Yes	5580.0MHz, -56.0dBm	N/A
20	29	3.2	211.0	Yes	5580.0MHz, -56.0dBm	N/A
21	24	3.4	164.0	Yes	5580.0MHz, -56.0dBm	N/A
22	25	2.3	221.0	Yes	5580.0MHz, -56.0dBm	N/A
23	27	2.5	155.0	Yes	5580.0MHz, -56.0dBm	N/A
24	25	4.3	182.0	Yes	5580.0MHz, -56.0dBm	N/A
25	27	1.7	209.0	Yes	5580.0MHz, -56.0dBm	N/A
26	26	1.8	167.0	Yes	5580.0MHz, -56.0dBm	N/A
27	26	3.7	178.0	Yes	5580.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
28	26	3.7	159.0	Yes	5580.0MHz, -56.0dBm	N/A
29	29	2.3	168.0	Yes	5580.0MHz, -56.0dBm	N/A

Table 5 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	17	7.7	324.0	Yes	5580.0MHz, -56.0dBm	N/A
1	18	6.8	308.0	Yes	5580.0MHz, -56.0dBm	N/A
2	17	7.4	231.0	Yes	5580.0MHz, -56.0dBm	N/A
3	16	7.8	245.0	Yes	5580.0MHz, -56.0dBm	N/A
4	18	7.5	340.0	Yes	5580.0MHz, -56.0dBm	N/A
5	16	7.4	215.0	Yes	5580.0MHz, -56.0dBm	N/A
6	17	7.5	461.0	Yes	5580.0MHz, -56.0dBm	N/A
7	18	8.5	388.0	Yes	5580.0MHz, -56.0dBm	N/A
8	18	8.4	428.0	Yes	5580.0MHz, -56.0dBm	N/A
9	16	6.5	260.0	Yes	5580.0MHz, -56.0dBm	N/A
10	18	7.2	425.0	Yes	5580.0MHz, -56.0dBm	N/A
11	17	8.0	429.0	Yes	5580.0MHz, -56.0dBm	N/A
12	18	6.6	431.0	Yes	5580.0MHz, -56.0dBm	N/A
13	17	8.4	445.0	Yes	5580.0MHz, -56.0dBm	N/A
14	17	7.5	460.0	Yes	5580.0MHz, -56.0dBm	N/A
15	16	8.9	278.0	Yes	5580.0MHz, -56.0dBm	N/A
16	16	6.7	311.0	Yes	5580.0MHz, -56.0dBm	N/A
17	17	6.1	297.0	Yes	5580.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
18	18	8.2	336.0	Yes	5580.0MHz, -56.0dBm	N/A
19	16	7.5	218.0	Yes	5580.0MHz, -56.0dBm	N/A
20	17	8.8	282.0	Yes	5580.0MHz, -56.0dBm	N/A
21	16	8.0	498.0	Yes	5580.0MHz, -56.0dBm	N/A
22	17	6.3	259.0	Yes	5580.0MHz, -56.0dBm	N/A
23	17	6.8	388.0	Yes	5580.0MHz, -56.0dBm	N/A
24	17	7.7	325.0	Yes	5580.0MHz, -56.0dBm	N/A
25	17	8.8	305.0	Yes	5580.0MHz, -56.0dBm	N/A
26	16	6.2	270.0	Yes	5580.0MHz, -56.0dBm	N/A
27	17	9.4	254.0	Yes	5580.0MHz, -56.0dBm	N/A
28	16	6.7	318.0	Yes	5580.0MHz, -56.0dBm	N/A
29	17	7.3	406.0	Yes	5580.0MHz, -56.0dBm	N/A

Table 6 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	15	15.4	486.0	No	5580.0MHz, -56.0dBm	N/A
1	13	13.0	414.0	Yes	5580.0MHz, -56.0dBm	N/A
2	15	18.4	347.0	Yes	5580.0MHz, -56.0dBm	N/A
3	14	15.3	276.0	Yes	5580.0MHz, -56.0dBm	N/A
4	13	19.9	274.0	Yes	5580.0MHz, -56.0dBm	N/A
5	14	15.6	380.0	Yes	5580.0MHz, -56.0dBm	N/A
6	15	19.7	467.0	Yes	5580.0MHz, -56.0dBm	N/A
7	12	14.3	258.0	Yes	5580.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
8	13	15.9	396.0	Yes	5580.0MHz, -56.0dBm	N/A
9	15	17.2	399.0	Yes	5580.0MHz, -56.0dBm	N/A
10	16	16.9	268.0	Yes	5580.0MHz, -56.0dBm	N/A
11	14	13.3	467.0	Yes	5580.0MHz, -56.0dBm	N/A
12	15	18.1	266.0	Yes	5580.0MHz, -56.0dBm	N/A
13	14	12.6	242.0	Yes	5580.0MHz, -56.0dBm	N/A
14	15	16.7	222.0	Yes	5580.0MHz, -56.0dBm	N/A
15	12	11.6	366.0	Yes	5580.0MHz, -56.0dBm	N/A
16	15	14.2	330.0	Yes	5580.0MHz, -56.0dBm	N/A
17	16	12.3	389.0	Yes	5580.0MHz, -56.0dBm	N/A
18	15	12.7	410.0	Yes	5580.0MHz, -56.0dBm	N/A
19	15	17.1	444.0	Yes	5580.0MHz, -56.0dBm	N/A
20	16	16.3	456.0	Yes	5580.0MHz, -56.0dBm	N/A
21	13	14.2	285.0	Yes	5580.0MHz, -56.0dBm	N/A
22	15	11.4	330.0	Yes	5580.0MHz, -56.0dBm	N/A
23	15	16.7	342.0	Yes	5580.0MHz, -56.0dBm	N/A
24	15	15.0	385.0	No	5580.0MHz, -56.0dBm	N/A
25	15	18.3	299.0	Yes	5580.0MHz, -56.0dBm	N/A
26	15	17.5	306.0	Yes	5580.0MHz, -56.0dBm	N/A
27	16	15.6	399.0	Yes	5580.0MHz, -56.0dBm	N/A
28	16	11.2	230.0	Yes	5580.0MHz, -56.0dBm	N/A
29	14	11.4	212.0	Yes	5580.0MHz, -56.0dBm	N/A

Table 7 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	9	1.0	333.0	Yes	5569.0MHz, -56.0dBm	5662, 5349, 5519, 5337, 5563, 5536, 5360, 5416, 5713, 5595, 5559, 5391, 5329, 5508, 5718, 5583, 5456, 5298, 5401, 5716, 5611, 5362, 5545, 5698, 5527, 5628, 5397, 5414, 5444, 5463, 5282, 5686, 5328, 5687, 5722, 5429, 5587, 5411, 5691, 5460, 5254, 5688, 5251, 5466, 5467, 5365, 5296, 5576, 5656, 5443, 5627, 5670, 5266, 5344, 5490, 5310, 5427, 5675, 5476, 5392, 5604, 5455, 5403, 5480, 5600, 5469, 5405, 5520, 5555, 5589, 5253, 5355, 5685, 5338, 5428, 5288, 5614, 5341, 5585, 5284, 5394, 5696, 5706, 5327, 5669, 5500, 5591, 5567, 5452, 5260, 5343, 5250, 5283, 5678, 5385, 5557, 5255, 5381, 5404, 5514 (5 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
1	9	1.0	333.0	Yes	5570.0MHz, -56.0dBm	5357, 5282, 5644, 5431, 5460, 5663, 5675, 5391, 5624, 5297, 5446, 5272, 5659, 5571, 5526, 5639, 5618, 5256, 5387, 5268, 5388, 5582, 5499, 5699, 5581, 5550, 5393, 5482, 5533, 5433, 5600, 5563, 5325, 5609, 5310, 5434, 5444, 5642, 5502, 5401, 5288, 5373, 5671, 5293, 5551, 5321, 5262, 5559, 5655, 5485, 5465, 5516, 5497, 5354, 5341, 5385, 5579, 5607, 5615, 5555, 5271, 5602, 5480, 5703, 5673, 5454, 5496, 5643, 5420, 5686, 5311, 5414, 5400, 5669, 5294, 5725, 5313, 5466, 5553, 5638, 5529, 5392, 5552, 5459, 5359, 5407, 5487, 5692, 5360, 5572, 5540, 5709, 5658, 5654, 5280, 5410, 5513, 5355, 5269, 5720 (5 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
2	9	1.0	333.0	Yes	5571.0MHz, -56.0dBm	5571, 5626, 5514, 5483, 5358, 5369, 5321, 5334, 5667, 5723, 5603, 5453, 5468, 5572, 5718, 5403, 5348, 5270, 5504, 5379, 5280, 5547, 5401, 5261, 5458, 5443, 5284, 5562, 5660, 5704, 5683, 5441, 5685, 5314, 5478, 5699, 5684, 5638, 5506, 5291, 5594, 5561, 5259, 5586, 5275, 5325, 5546, 5480, 5593, 5380, 5477, 5368, 5252, 5682, 5696, 5607, 5479, 5356, 5373, 5674, 5695, 5702, 5715, 5489, 5256, 5303, 5686, 5610, 5678, 5570, 5707, 5404, 5408, 5412, 5644, 5713, 5708, 5640, 5530, 5590, 5472, 5267, 5525, 5602, 5419, 5609, 5550, 5302, 5564, 5619, 5629, 5693, 5692, 5263, 5657, 5631, 5518, 5365, 5276, 5274 (5 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
3	9	1.0	333.0	Yes	5572.0MHz, -56.0dBm	5429, 5353, 5599, 5424, 5436, 5286, 5500, 5595, 5634, 5725, 5325, 5619, 5646, 5532, 5573, 5723, 5674, 5675, 5487, 5451, 5434, 5486, 5380, 5558, 5648, 5303, 5337, 5275, 5473, 5334, 5377, 5433, 5627, 5533, 5645, 5282, 5354, 5260, 5708, 5319, 5650, 5336, 5276, 5550, 5665, 5498, 5410, 5540, 5450, 5257, 5327, 5363, 5565, 5371, 5536, 5673, 5704, 5266, 5518, 5386, 5687, 5582, 5423, 5409, 5494, 5635, 5438, 5659, 5478, 5444, 5621, 5492, 5638, 5349, 5418, 5656, 5368, 5280, 5604, 5668, 5459, 5605, 5661, 5497, 5324, 5372, 5562, 5396, 5563, 5517, 5515, 5617, 5364, 5342, 5592, 5379, 5624, 5607, 5278, 5332 (2 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
4	9	1.0	333.0	Yes	5573.0MHz, -56.0dBm	5380, 5680, 5632, 5493, 5667, 5619, 5580, 5705, 5300, 5522, 5435, 5339, 5518, 5389, 5492, 5419, 5718, 5657, 5558, 5336, 5404, 5642, 5257, 5666, 5350, 5423, 5670, 5487, 5605, 5529, 5426, 5646, 5444, 5678, 5441, 5262, 5266, 5523, 5470, 5268, 5307, 5550, 5452, 5293, 5563, 5455, 5577, 5488, 5689, 5477, 5655, 5458, 5498, 5721, 5360, 5683, 5502, 5338, 5378, 5658, 5549, 5714, 5536, 5516, 5363, 5271, 5432, 5260, 5399, 5445, 5668, 5340, 5586, 5552, 5425, 5359, 5328, 5719, 5410, 5273, 5671, 5416, 5379, 5528, 5490, 5301, 5574, 5640, 5625, 5343, 5254, 5334, 5637, 5341, 5348, 5686, 5332, 5698, 5314, 5270 (4 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
5	9	1.0	333.0	Yes	5574.0MHz, -56.0dBm	5448, 5437, 5394, 5714, 5611, 5320, 5426, 5386, 5343, 5489, 5370, 5264, 5542, 5270, 5616, 5586, 5495, 5704, 5455, 5720, 5261, 5446, 5624, 5514, 5581, 5353, 5396, 5723, 5290, 5340, 5660, 5442, 5352, 5350, 5408, 5717, 5666, 5509, 5474, 5404, 5638, 5652, 5452, 5384, 5319, 5469, 5531, 5679, 5497, 5341, 5549, 5391, 5480, 5450, 5422, 5649, 5464, 5433, 5544, 5318, 5362, 5364, 5468, 5663, 5333, 5491, 5697, 5696, 5485, 5608, 5721, 5580, 5263, 5558, 5665, 5279, 5345, 5441, 5680, 5400, 5715, 5618, 5621, 5434, 5538, 5360, 5451, 5690, 5657, 5372, 5435, 5357, 5573, 5254, 5414, 5410, 5516, 5291, 5292, 5635 (4 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
6	9	1.0	333.0	Yes	5575.0MHz, -56.0dBm	5340, 5654, 5567, 5389, 5676, 5485, 5410, 5564, 5568, 5281, 5586, 5333, 5309, 5621, 5369, 5497, 5336, 5696, 5370, 5547, 5316, 5455, 5505, 5684, 5411, 5259, 5616, 5595, 5251, 5632, 5256, 5396, 5589, 5612, 5386, 5508, 5673, 5693, 5662, 5681, 5472, 5319, 5645, 5572, 5383, 5266, 5499, 5346, 5467, 5431, 5603, 5412, 5712, 5276, 5556, 5444, 5602, 5471, 5699, 5560, 5303, 5366, 5298, 5516, 5324, 5293, 5468, 5287, 5522, 5430, 5609, 5299, 5557, 5435, 5680, 5473, 5555, 5536, 5338, 5355, 5666, 5353, 5405, 5315, 5623, 5263, 5358, 5449, 5380, 5350, 5592, 5667, 5611, 5258, 5277, 5323, 5514, 5692, 5462, 5494 (3 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
7	9	1.0	333.0	Yes	5576.0MHz, -56.0dBm	5601, 5649, 5293, 5701, 5519, 5441, 5436, 5262, 5400, 5556, 5514, 5416, 5657, 5542, 5551, 5452, 5435, 5401, 5468, 5513, 5360, 5555, 5296, 5277, 5318, 5589, 5588, 5709, 5283, 5507, 5678, 5561, 5715, 5327, 5429, 5380, 5434, 5523, 5535, 5254, 5688, 5357, 5568, 5372, 5479, 5609, 5437, 5571, 5485, 5694, 5577, 5444, 5411, 5708, 5407, 5391, 5533, 5307, 5460, 5465, 5612, 5313, 5676, 5297, 5643, 5306, 5582, 5689, 5280, 5719, 5321, 5381, 5538, 5636, 5615, 5256, 5415, 5442, 5450, 5714, 5630, 5405, 5384, 5302, 5699, 5310, 5684, 5663, 5520, 5323, 5298, 5570, 5483, 5402, 5466, 5300, 5419, 5478, 5427, 5596 (6 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
8	9	1.0	333.0	Yes	5577.0MHz, -56.0dBm	5598, 5512, 5313, 5422, 5266, 5274, 5359, 5502, 5578, 5327, 5488, 5259, 5429, 5434, 5468, 5627, 5555, 5690, 5389, 5467, 5446, 5530, 5296, 5342, 5698, 5593, 5498, 5379, 5438, 5375, 5577, 5618, 5460, 5364, 5369, 5344, 5653, 5402, 5314, 5399, 5440, 5514, 5707, 5366, 5534, 5532, 5417, 5700, 5551, 5267, 5315, 5600, 5559, 5523, 5388, 5376, 5507, 5697, 5582, 5441, 5258, 5377, 5454, 5664, 5371, 5702, 5437, 5656, 5678, 5339, 5269, 5311, 5706, 5370, 5450, 5300, 5536, 5297, 5526, 5684, 5352, 5356, 5403, 5710, 5575, 5686, 5263, 5631, 5474, 5322, 5683, 5638, 5722, 5542, 5295, 5285, 5676, 5333, 5520, 5647 (4 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
9	9	1.0	333.0	Yes	5578.0MHz, -56.0dBm	5445, 5288, 5694, 5599, 5588, 5514, 5605, 5424, 5313, 5447, 5697, 5534, 5258, 5725, 5669, 5292, 5441, 5559, 5389, 5405, 5266, 5620, 5460, 5356, 5566, 5464, 5651, 5690, 5361, 5701, 5279, 5403, 5572, 5563, 5529, 5293, 5250, 5603, 5709, 5332, 5257, 5358, 5496, 5635, 5426, 5544, 5499, 5407, 5438, 5708, 5523, 5337, 5602, 5346, 5578, 5567, 5506, 5655, 5604, 5592, 5610, 5562, 5509, 5692, 5637, 5333, 5267, 5596, 5294, 5642, 5420, 5326, 5633, 5392, 5601, 5260, 5431, 5492, 5345, 5557, 5357, 5283, 5427, 5302, 5310, 5681, 5374, 5465, 5269, 5522, 5473, 5448, 5487, 5387, 5366, 5432, 5512, 5646, 5481, 5419 (3 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
10	9	1.0	333.0	Yes	5579.0MHz, -56.0dBm	5351, 5509, 5372, 5333, 5342, 5553, 5335, 5267, 5530, 5301, 5260, 5430, 5538, 5406, 5490, 5596, 5253, 5716, 5317, 5640, 5633, 5543, 5257, 5332, 5337, 5714, 5584, 5395, 5645, 5656, 5385, 5463, 5537, 5436, 5624, 5386, 5252, 5491, 5547, 5720, 5438, 5313, 5444, 5367, 5375, 5481, 5502, 5423, 5600, 5300, 5648, 5445, 5256, 5254, 5451, 5501, 5273, 5661, 5321, 5588, 5295, 5432, 5352, 5428, 5634, 5494, 5381, 5698, 5657, 5314, 5524, 5565, 5637, 5292, 5380, 5578, 5486, 5514, 5424, 5315, 5338, 5471, 5710, 5415, 5674, 5473, 5610, 5353, 5560, 5425, 5673, 5265, 5383, 5659, 5582, 5685, 5628, 5697, 5573, 5472 (5 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
11	9	1.0	333.0	Yes	5580.0MHz, -56.0dBm	5325, 5320, 5649, 5661, 5258, 5610, 5607, 5533, 5501, 5440, 5368, 5460, 5688, 5329, 5514, 5646, 5428, 5404, 5367, 5674, 5365, 5536, 5556, 5271, 5702, 5269, 5372, 5359, 5606, 5725, 5597, 5710, 5272, 5264, 5283, 5301, 5658, 5409, 5284, 5389, 5498, 5672, 5313, 5670, 5382, 5345, 5394, 5668, 5570, 5342, 5265, 5699, 5439, 5462, 5644, 5510, 5671, 5618, 5626, 5617, 5386, 5350, 5262, 5546, 5348, 5454, 5444, 5393, 5703, 5377, 5690, 5384, 5491, 5537, 5252, 5664, 5435, 5405, 5461, 5402, 5288, 5455, 5297, 5321, 5578, 5650, 5601, 5312, 5308, 5630, 5279, 5496, 5631, 5526, 5534, 5261, 5340, 5303, 5519, 5508 (2 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
12	9	1.0	333.0	Yes	5581.0MHz, -56.0dBm	5323, 5510, 5473, 5446, 5441, 5549, 5475, 5390, 5591, 5334, 5283, 5535, 5550, 5498, 5456, 5611, 5625, 5557, 5585, 5640, 5275, 5344, 5288, 5720, 5666, 5630, 5378, 5251, 5658, 5674, 5516, 5384, 5623, 5684, 5296, 5617, 5469, 5524, 5677, 5286, 5488, 5506, 5291, 5259, 5711, 5566, 5476, 5487, 5310, 5391, 5501, 5324, 5560, 5265, 5313, 5678, 5400, 5453, 5544, 5267, 5367, 5543, 5581, 5652, 5707, 5553, 5668, 5274, 5339, 5722, 5685, 5528, 5381, 5663, 5688, 5661, 5253, 5603, 5482, 5595, 5564, 5317, 5477, 5631, 5448, 5365, 5494, 5614, 5680, 5298, 5490, 5567, 5520, 5280, 5422, 5525, 5380, 5372, 5703, 5309 (2 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
13	9	1.0	333.0	Yes	5582.0MHz, -56.0dBm	5430, 5671, 5440, 5488, 5311, 5596, 5356, 5557, 5444, 5405, 5400, 5659, 5448, 5695, 5453, 5587, 5327, 5511, 5709, 5313, 5702, 5353, 5281, 5337, 5521, 5541, 5508, 5655, 5452, 5335, 5325, 5461, 5304, 5255, 5346, 5251, 5664, 5629, 5367, 5605, 5724, 5531, 5501, 5411, 5627, 5690, 5507, 5401, 5543, 5431, 5468, 5591, 5640, 5505, 5423, 5458, 5553, 5622, 5393, 5434, 5679, 5258, 5438, 5298, 5321, 5462, 5538, 5390, 5252, 5573, 5639, 5504, 5456, 5529, 5708, 5483, 5594, 5437, 5280, 5293, 5694, 5584, 5387, 5428, 5382, 5611, 5548, 5687, 5648, 5564, 5397, 5403, 5289, 5590, 5710, 5478, 5358, 5696, 5534, 5614 (4 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
14	9	1.0	333.0	Yes	5583.0MHz, -56.0dBm	5694, 5381, 5291, 5725, 5252, 5400, 5276, 5373, 5668, 5382, 5579, 5649, 5342, 5539, 5344, 5446, 5613, 5391, 5487, 5691, 5703, 5420, 5632, 5603, 5394, 5518, 5363, 5602, 5346, 5652, 5650, 5349, 5351, 5423, 5567, 5366, 5546, 5535, 5669, 5628, 5436, 5679, 5484, 5582, 5614, 5588, 5330, 5397, 5689, 5459, 5273, 5648, 5621, 5667, 5570, 5527, 5324, 5644, 5555, 5307, 5562, 5404, 5713, 5577, 5664, 5415, 5448, 5417, 5293, 5708, 5538, 5380, 5552, 5557, 5325, 5367, 5472, 5361, 5587, 5312, 5454, 5655, 5270, 5371, 5461, 5569, 5550, 5315, 5573, 5253, 5287, 5422, 5498, 5396, 5501, 5285, 5512, 5387, 5282, 5574 (9 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
15	9	1.0	333.0	Yes	5584.0MHz, -56.0dBm	5558, 5403, 5682, 5275, 5717, 5302, 5566, 5320, 5425, 5645, 5328, 5678, 5605, 5318, 5523, 5644, 5368, 5351, 5536, 5716, 5329, 5689, 5608, 5492, 5296, 5254, 5665, 5497, 5498, 5501, 5539, 5336, 5630, 5437, 5576, 5311, 5632, 5357, 5610, 5332, 5307, 5359, 5542, 5424, 5408, 5515, 5282, 5274, 5287, 5480, 5423, 5669, 5658, 5680, 5628, 5278, 5597, 5301, 5263, 5621, 5459, 5668, 5612, 5371, 5455, 5418, 5398, 5586, 5346, 5702, 5582, 5276, 5350, 5445, 5544, 5706, 5651, 5723, 5579, 5725, 5431, 5602, 5441, 5488, 5322, 5633, 5365, 5266, 5720, 5338, 5489, 5712, 5478, 5304, 5465, 5306, 5280, 5618, 5331, 5664 (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	5585.0MHz, -56.0dBm	5604, 5416, 5567, 5400, 5327, 5324, 5676, 5313, 5419, 5376, 5276, 5378, 5624, 5502, 5485, 5369, 5642, 5328, 5499, 5420, 5507, 5639, 5383, 5677, 5456, 5618, 5414, 5308, 5368, 5349, 5518, 5263, 5717, 5382, 5405, 5415, 5700, 5635, 5707, 5251, 5321, 5278, 5646, 5296, 5375, 5520, 5564, 5515, 5634, 5508, 5366, 5651, 5323, 5625, 5350, 5656, 5474, 5505, 5636, 5466, 5347, 5694, 5311, 5447, 5379, 5689, 5309, 5285, 5695, 5649, 5329, 5450, 5598, 5315, 5354, 5477, 5652, 5307, 5417, 5522, 5613, 5572, 5275, 5668, 5255, 5337, 5407, 5600, 5528, 5325, 5280, 5660, 5380, 5550, 5459, 5569, 5493, 5452, 5721, 5657 (2 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
17	9	1.0	333.0	Yes	5586.0MHz, -56.0dBm	5331, 5321, 5613, 5650, 5462, 5627, 5302, 5445, 5439, 5683, 5575, 5622, 5526, 5548, 5634, 5483, 5612, 5704, 5440, 5636, 5598, 5406, 5376, 5327, 5286, 5388, 5695, 5436, 5679, 5499, 5560, 5466, 5649, 5482, 5639, 5689, 5719, 5312, 5621, 5357, 5266, 5550, 5623, 5559, 5512, 5432, 5259, 5487, 5366, 5620, 5474, 5541, 5586, 5500, 5373, 5485, 5633, 5389, 5484, 5521, 5338, 5315, 5290, 5648, 5645, 5442, 5528, 5261, 5297, 5304, 5582, 5257, 5273, 5563, 5359, 5268, 5349, 5688, 5330, 5593, 5508, 5287, 5425, 5490, 5510, 5305, 5429, 5392, 5553, 5513, 5307, 5328, 5691, 5402, 5608, 5629, 5529, 5595, 5668, 5443 (3 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
18	9	1.0	333.0	Yes	5587.0MHz, -56.0dBm	5554, 5444, 5264, 5489, 5595, 5604, 5675, 5556, 5456, 5687, 5631, 5528, 5721, 5527, 5471, 5317, 5278, 5484, 5449, 5485, 5392, 5668, 5511, 5560, 5448, 5720, 5599, 5432, 5254, 5514, 5625, 5378, 5546, 5344, 5454, 5259, 5558, 5389, 5333, 5288, 5618, 5341, 5451, 5698, 5669, 5421, 5482, 5478, 5499, 5312, 5393, 5621, 5706, 5354, 5422, 5718, 5493, 5368, 5524, 5717, 5549, 5413, 5505, 5447, 5359, 5364, 5531, 5606, 5626, 5701, 5641, 5323, 5473, 5623, 5506, 5522, 5607, 5417, 5559, 5442, 5540, 5426, 5274, 5700, 5453, 5585, 5648, 5571, 5495, 5538, 5267, 5318, 5414, 5566, 5418, 5513, 5387, 5404, 5424, 5440 (2 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
19	9	1.0	333.0	Yes	5588.0MHz, -56.0dBm	5321, 5418, 5707, 5378, 5610, 5364, 5640, 5622, 5306, 5632, 5567, 5680, 5686, 5709, 5381, 5613, 5384, 5482, 5700, 5434, 5502, 5505, 5300, 5717, 5683, 5302, 5503, 5477, 5539, 5444, 5382, 5276, 5331, 5466, 5516, 5576, 5581, 5522, 5619, 5397, 5551, 5639, 5487, 5423, 5625, 5614, 5404, 5480, 5312, 5664, 5609, 5626, 5617, 5650, 5388, 5455, 5661, 5289, 5371, 5593, 5543, 5708, 5611, 5713, 5379, 5410, 5604, 5510, 5354, 5515, 5607, 5670, 5660, 5463, 5589, 5464, 5488, 5573, 5669, 5629, 5288, 5519, 5643, 5571, 5442, 5658, 5714, 5380, 5290, 5621, 5695, 5327, 5681, 5665, 5706, 5322, 5656, 5654, 5375, 5428 (5 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
20	9	1.0	333.0	Yes	5589.0MHz, -56.0dBm	5536, 5405, 5367, 5559, 5478, 5308, 5390, 5711, 5328, 5354, 5723, 5437, 5573, 5564, 5431, 5662, 5614, 5250, 5304, 5589, 5364, 5598, 5346, 5393, 5581, 5386, 5451, 5369, 5606, 5669, 5292, 5454, 5534, 5457, 5712, 5338, 5523, 5418, 5387, 5670, 5416, 5688, 5432, 5701, 5479, 5378, 5394, 5306, 5624, 5399, 5500, 5413, 5256, 5572, 5645, 5442, 5311, 5289, 5535, 5467, 5665, 5335, 5525, 5389, 5392, 5498, 5485, 5527, 5355, 5440, 5505, 5401, 5528, 5267, 5348, 5667, 5251, 5700, 5376, 5414, 5597, 5319, 5632, 5312, 5287, 5403, 5553, 5689, 5518, 5423, 5633, 5352, 5641, 5343, 5530, 5693, 5629, 5531, 5408, 5477 (4 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
21	9	1.0	333.0	Yes	5590.0MHz, -56.0dBm	5706, 5603, 5682, 5561, 5660, 5432, 5350, 5364, 5329, 5366, 5605, 5367, 5512, 5581, 5547, 5325, 5656, 5548, 5507, 5649, 5560, 5391, 5619, 5428, 5678, 5565, 5586, 5287, 5616, 5508, 5563, 5720, 5618, 5551, 5696, 5672, 5546, 5258, 5401, 5653, 5592, 5260, 5584, 5622, 5654, 5420, 5487, 5575, 5524, 5334, 5407, 5438, 5599, 5506, 5295, 5435, 5601, 5386, 5307, 5699, 5477, 5514, 5427, 5626, 5402, 5579, 5556, 5398, 5302, 5640, 5518, 5481, 5585, 5265, 5625, 5558, 5448, 5595, 5341, 5483, 5664, 5442, 5527, 5490, 5423, 5269, 5332, 5725, 5521, 5328, 5641, 5701, 5271, 5309, 5549, 5251, 5447, 5613, 5665, 5700 (6 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
22	9	1.0	333.0	Yes	5569.0MHz, -56.0dBm	5580, 5278, 5473, 5262, 5471, 5635, 5303, 5386, 5466, 5539, 5285, 5698, 5323, 5532, 5258, 5316, 5615, 5424, 5523, 5355, 5716, 5313, 5511, 5468, 5434, 5320, 5660, 5531, 5311, 5338, 5522, 5551, 5585, 5400, 5631, 5576, 5422, 5673, 5542, 5595, 5530, 5429, 5413, 5339, 5379, 5554, 5464, 5456, 5463, 5404, 5710, 5575, 5509, 5701, 5268, 5292, 5589, 5700, 5546, 5279, 5545, 5253, 5361, 5510, 5629, 5440, 5669, 5305, 5670, 5427, 5399, 5720, 5714, 5420, 5687, 5401, 5617, 5723, 5442, 5517, 5256, 5512, 5553, 5707, 5284, 5308, 5255, 5582, 5507, 5375, 5264, 5280, 5431, 5437, 5498, 5719, 5569, 5519, 5333, 5668 (7 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
23	9	1.0	333.0	Yes	5570.0MHz, -56.0dBm	5584, 5307, 5444, 5608, 5262, 5268, 5397, 5596, 5518, 5492, 5314, 5510, 5364, 5260, 5724, 5701, 5418, 5618, 5633, 5298, 5278, 5630, 5394, 5450, 5526, 5405, 5674, 5657, 5426, 5438, 5692, 5258, 5714, 5693, 5395, 5255, 5363, 5648, 5686, 5490, 5689, 5699, 5378, 5311, 5598, 5422, 5629, 5460, 5271, 5499, 5353, 5429, 5652, 5308, 5344, 5321, 5676, 5530, 5690, 5334, 5634, 5335, 5341, 5437, 5435, 5320, 5575, 5396, 5309, 5673, 5409, 5310, 5348, 5522, 5382, 5567, 5374, 5375, 5700, 5611, 5621, 5661, 5626, 5545, 5343, 5687, 5305, 5537, 5340, 5427, 5478, 5351, 5666, 5578, 5489, 5624, 5467, 5387, 5393, 5376 (3 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
24	9	1.0	333.0	Yes	5571.0MHz, -56.0dBm	5334, 5699, 5285, 5620, 5697, 5447, 5344, 5724, 5610, 5522, 5375, 5489, 5684, 5410, 5387, 5501, 5286, 5433, 5593, 5418, 5629, 5276, 5615, 5268, 5701, 5693, 5270, 5328, 5581, 5650, 5652, 5251, 5460, 5416, 5506, 5628, 5612, 5397, 5400, 5490, 5435, 5352, 5484, 5565, 5542, 5273, 5519, 5315, 5350, 5713, 5661, 5369, 5709, 5294, 5534, 5681, 5639, 5458, 5560, 5721, 5576, 5399, 5703, 5430, 5488, 5309, 5651, 5473, 5471, 5591, 5427, 5555, 5321, 5381, 5314, 5455, 5336, 5481, 5705, 5631, 5271, 5341, 5338, 5275, 5546, 5432, 5718, 5611, 5301, 5618, 5302, 5635, 5535, 5526, 5335, 5662, 5660, 5469, 5359, 5426 (2 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
25	9	1.0	333.0	Yes	5572.0MHz, -56.0dBm	5341, 5308, 5659, 5631, 5442, 5558, 5584, 5382, 5449, 5695, 5384, 5293, 5608, 5511, 5432, 5646, 5411, 5405, 5677, 5683, 5491, 5724, 5429, 5307, 5263, 5722, 5374, 5266, 5438, 5638, 5571, 5278, 5427, 5547, 5681, 5454, 5710, 5370, 5633, 5346, 5590, 5545, 5437, 5544, 5671, 5723, 5715, 5486, 5326, 5567, 5347, 5605, 5269, 5482, 5610, 5356, 5320, 5387, 5467, 5464, 5420, 5556, 5291, 5485, 5383, 5400, 5698, 5626, 5541, 5344, 5519, 5709, 5399, 5596, 5417, 5606, 5302, 5565, 5696, 5582, 5312, 5371, 5376, 5503, 5682, 5540, 5553, 5648, 5669, 5271, 5450, 5508, 5653, 5392, 5258, 5350, 5662, 5593, 5564, 5577 (5 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
26	9	1.0	333.0	Yes	5573.0MHz, -56.0dBm	5630, 5605, 5340, 5533, 5472, 5686, 5489, 5432, 5262, 5371, 5502, 5644, 5358, 5705, 5724, 5258, 5466, 5462, 5572, 5699, 5413, 5376, 5537, 5602, 5591, 5661, 5621, 5663, 5557, 5585, 5642, 5316, 5599, 5393, 5336, 5512, 5426, 5293, 5287, 5603, 5347, 5589, 5594, 5641, 5583, 5683, 5546, 5488, 5548, 5528, 5430, 5292, 5406, 5639, 5558, 5266, 5706, 5400, 5493, 5279, 5626, 5378, 5520, 5409, 5450, 5501, 5525, 5410, 5479, 5325, 5391, 5333, 5645, 5692, 5405, 5281, 5564, 5301, 5350, 5646, 5303, 5365, 5570, 5529, 5614, 5288, 5259, 5478, 5604, 5516, 5655, 5348, 5394, 5636, 5526, 5459, 5329, 5319, 5507, 5720 (5 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
27	9	1.0	333.0	Yes	5574.0MHz, -56.0dBm	5383, 5547, 5591, 5555, 5474, 5520, 5707, 5505, 5276, 5396, 5275, 5311, 5479, 5550, 5292, 5690, 5710, 5671, 5342, 5609, 5489, 5566, 5363, 5346, 5645, 5606, 5320, 5496, 5622, 5416, 5381, 5675, 5509, 5364, 5284, 5617, 5684, 5643, 5486, 5280, 5295, 5401, 5607, 5499, 5589, 5371, 5297, 5559, 5476, 5475, 5368, 5325, 5603, 5430, 5326, 5608, 5691, 5481, 5611, 5376, 5581, 5329, 5556, 5552, 5397, 5253, 5653, 5435, 5596, 5711, 5706, 5521, 5375, 5658, 5523, 5340, 5332, 5404, 5490, 5632, 5560, 5553, 5701, 5303, 5541, 5282, 5454, 5330, 5578, 5582, 5558, 5457, 5719, 5455, 5537, 5281, 5510, 5399, 5449, 5309 (4 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
28	9	1.0	333.0	Yes	5575.0MHz, -56.0dBm	5585, 5459, 5604, 5615, 5652, 5543, 5371, 5381, 5266, 5383, 5581, 5632, 5380, 5633, 5492, 5532, 5476, 5566, 5682, 5500, 5276, 5724, 5415, 5338, 5447, 5350, 5629, 5625, 5631, 5520, 5416, 5524, 5539, 5263, 5622, 5710, 5694, 5278, 5441, 5721, 5556, 5449, 5689, 5349, 5431, 5485, 5252, 5647, 5282, 5567, 5509, 5679, 5641, 5514, 5433, 5388, 5317, 5613, 5557, 5318, 5667, 5472, 5421, 5311, 5640, 5541, 5382, 5548, 5482, 5408, 5516, 5390, 5389, 5720, 5293, 5676, 5723, 5407, 5683, 5329, 5291, 5320, 5569, 5369, 5400, 5595, 5649, 5468, 5453, 5322, 5630, 5560, 5277, 5583, 5347, 5420, 5636, 5599, 5398, 5607 (4 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
29	9	1.0	333.0	Yes	5576.0MHz, -56.0dBm	5615, 5259, 5299, 5697, 5344, 5404, 5593, 5674, 5714, 5490, 5484, 5291, 5570, 5601, 5327, 5598, 5420, 5614, 5443, 5477, 5561, 5647, 5369, 5430, 5683, 5673, 5412, 5663, 5499, 5624, 5441, 5294, 5309, 5551, 5464, 5585, 5526, 5701, 5502, 5449, 5542, 5607, 5310, 5667, 5577, 5479, 5635, 5503, 5646, 5573, 5554, 5704, 5347, 5255, 5481, 5377, 5374, 5384, 5277, 5446, 5269, 5535, 5524, 5578, 5546, 5584, 5459, 5609, 5393, 5519, 5537, 5500, 5531, 5505, 5521, 5688, 5681, 5709, 5303, 5489, 5488, 5632, 5662, 5297, 5396, 5641, 5619, 5346, 5612, 5355, 5504, 5278, 5480, 5642, 5471, 5529, 5591, 5613, 5406, 5520 (6 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
30	9	1.0	333.0	Yes	5577.0MHz, -56.0dBm	5422, 5426, 5316, 5588, 5393, 5675, 5341, 5512, 5501, 5367, 5355, 5292, 5586, 5394, 5404, 5257, 5627, 5441, 5425, 5261, 5335, 5433, 5488, 5713, 5717, 5651, 5472, 5324, 5606, 5681, 5331, 5334, 5389, 5583, 5527, 5276, 5603, 5384, 5694, 5541, 5363, 5611, 5576, 5446, 5720, 5497, 5461, 5695, 5370, 5385, 5455, 5549, 5546, 5271, 5619, 5449, 5643, 5434, 5493, 5467, 5700, 5685, 5424, 5719, 5302, 5375, 5550, 5254, 5413, 5437, 5689, 5640, 5464, 5590, 5373, 5604, 5499, 5489, 5412, 5509, 5387, 5260, 5554, 5475, 5670, 5480, 5484, 5679, 5721, 5474, 5483, 5468, 5560, 5286, 5637, 5650, 5339, 5655, 5561, 5365 (5 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
31	9	1.0	333.0	Yes	5578.0MHz, -56.0dBm	5697, 5577, 5321, 5666, 5363, 5282, 5475, 5655, 5487, 5662, 5407, 5350, 5313, 5715, 5724, 5345, 5725, 5705, 5566, 5481, 5429, 5431, 5645, 5473, 5494, 5641, 5386, 5277, 5349, 5517, 5411, 5462, 5415, 5650, 5585, 5506, 5392, 5681, 5602, 5644, 5285, 5255, 5523, 5590, 5569, 5690, 5588, 5516, 5303, 5351, 5316, 5659, 5647, 5536, 5339, 5605, 5710, 5424, 5371, 5535, 5250, 5550, 5546, 5695, 5597, 5587, 5332, 5635, 5515, 5625, 5612, 5401, 5328, 5571, 5533, 5326, 5490, 5539, 5637, 5394, 5258, 5382, 5261, 5390, 5478, 5441, 5314, 5525, 5664, 5718, 5306, 5289, 5501, 5504, 5620, 5284, 5632, 5519, 5646, 5529 (7 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
32	9	1.0	333.0	Yes	5579.0MHz, -56.0dBm	5474, 5387, 5535, 5412, 5549, 5281, 5620, 5602, 5462, 5617, 5552, 5330, 5699, 5352, 5500, 5614, 5435, 5331, 5320, 5300, 5471, 5722, 5488, 5646, 5372, 5673, 5348, 5634, 5364, 5349, 5480, 5358, 5651, 5347, 5704, 5618, 5383, 5674, 5524, 5709, 5298, 5508, 5261, 5431, 5546, 5569, 5289, 5658, 5397, 5275, 5573, 5697, 5529, 5460, 5286, 5671, 5458, 5690, 5257, 5706, 5540, 5481, 5345, 5455, 5605, 5703, 5638, 5263, 5600, 5550, 5360, 5721, 5685, 5593, 5710, 5417, 5317, 5339, 5338, 5625, 5661, 5615, 5439, 5296, 5422, 5305, 5521, 5441, 5632, 5532, 5430, 5514, 5522, 5556, 5511, 5325, 5350, 5280, 5597, 5447 (2 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
33	9	1.0	333.0	Yes	5580.0MHz, -56.0dBm	5327, 5520, 5328, 5521, 5492, 5702, 5614, 5449, 5537, 5565, 5663, 5509, 5577, 5342, 5265, 5270, 5388, 5497, 5673, 5711, 5271, 5593, 5669, 5615, 5478, 5485, 5354, 5356, 5715, 5276, 5677, 5368, 5360, 5560, 5716, 5675, 5349, 5287, 5280, 5708, 5389, 5680, 5508, 5697, 5706, 5512, 5283, 5423, 5292, 5427, 5582, 5530, 5488, 5262, 5722, 5275, 5291, 5264, 5713, 5387, 5412, 5344, 5305, 5330, 5649, 5667, 5322, 5657, 5525, 5662, 5331, 5454, 5580, 5714, 5599, 5407, 5541, 5545, 5660, 5486, 5332, 5592, 5374, 5701, 5444, 5419, 5301, 5383, 5251, 5581, 5424, 5428, 5434, 5451, 5585, 5554, 5397, 5469, 5381, 5338 (5 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
34	9	1.0	333.0	Yes	5581.0MHz, -56.0dBm	5401, 5666, 5617, 5503, 5540, 5524, 5452, 5512, 5459, 5565, 5510, 5679, 5668, 5523, 5479, 5581, 5721, 5358, 5534, 5672, 5700, 5518, 5642, 5657, 5507, 5717, 5723, 5251, 5344, 5384, 5689, 5471, 5543, 5556, 5485, 5716, 5405, 5413, 5615, 5424, 5607, 5334, 5431, 5557, 5320, 5420, 5521, 5457, 5373, 5321, 5411, 5664, 5568, 5691, 5562, 5574, 5345, 5554, 5482, 5715, 5492, 5250, 5496, 5353, 5363, 5598, 5548, 5680, 5483, 5605, 5651, 5674, 5583, 5647, 5402, 5348, 5515, 5498, 5597, 5428, 5437, 5681, 5487, 5466, 5285, 5610, 5441, 5643, 5546, 5262, 5274, 5316, 5655, 5513, 5409, 5469, 5606, 5710, 5517, 5625 (3 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
35	9	1.0	333.0	Yes	5582.0MHz, -56.0dBm	5501, 5305, 5423, 5344, 5459, 5716, 5672, 5532, 5713, 5605, 5275, 5715, 5473, 5634, 5406, 5367, 5596, 5610, 5601, 5507, 5707, 5456, 5702, 5451, 5571, 5352, 5578, 5722, 5498, 5477, 5378, 5704, 5376, 5482, 5643, 5313, 5295, 5595, 5308, 5673, 5549, 5391, 5536, 5609, 5686, 5714, 5283, 5500, 5293, 5476, 5592, 5335, 5303, 5390, 5385, 5542, 5624, 5561, 5422, 5373, 5638, 5511, 5408, 5310, 5286, 5485, 5289, 5357, 5603, 5435, 5314, 5569, 5427, 5475, 5379, 5326, 5557, 5712, 5553, 5700, 5272, 5255, 5420, 5469, 5446, 5399, 5703, 5268, 5489, 5669, 5682, 5256, 5618, 5494, 5645, 5436, 5565, 5607, 5301, 5383 (3 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
36	9	1.0	333.0	Yes	5583.0MHz, -56.0dBm	5583, 5511, 5474, 5537, 5457, 5340, 5277, 5478, 5587, 5659, 5479, 5259, 5460, 5309, 5515, 5706, 5357, 5700, 5690, 5675, 5532, 5449, 5621, 5336, 5361, 5609, 5528, 5574, 5664, 5414, 5331, 5261, 5281, 5524, 5468, 5699, 5384, 5516, 5289, 5565, 5642, 5290, 5376, 5431, 5669, 5619, 5373, 5637, 5695, 5676, 5526, 5486, 5686, 5463, 5638, 5365, 5631, 5680, 5533, 5433, 5430, 5530, 5529, 5441, 5392, 5655, 5718, 5564, 5382, 5543, 5363, 5691, 5459, 5663, 5447, 5344, 5589, 5434, 5476, 5467, 5337, 5393, 5293, 5614, 5506, 5268, 5491, 5629, 5500, 5470, 5720, 5469, 5360, 5544, 5605, 5651, 5483, 5610, 5306, 5585 (5 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
37	9	1.0	333.0	Yes	5584.0MHz, -56.0dBm	5399, 5579, 5289, 5277, 5680, 5591, 5592, 5279, 5401, 5550, 5527, 5492, 5316, 5633, 5649, 5287, 5675, 5258, 5594, 5420, 5600, 5523, 5614, 5413, 5599, 5603, 5488, 5374, 5546, 5567, 5447, 5259, 5382, 5367, 5651, 5384, 5528, 5327, 5378, 5470, 5632, 5313, 5454, 5664, 5619, 5682, 5604, 5386, 5511, 5336, 5584, 5485, 5641, 5720, 5357, 5324, 5428, 5345, 5290, 5606, 5463, 5301, 5659, 5560, 5623, 5462, 5331, 5582, 5281, 5549, 5502, 5501, 5707, 5402, 5292, 5661, 5620, 5310, 5391, 5441, 5333, 5418, 5573, 5721, 5631, 5370, 5509, 5267, 5700, 5636, 5506, 5696, 5516, 5337, 5668, 5718, 5572, 5343, 5416, 5563 (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	5585.0MHz, -56.0dBm	5596, 5534, 5266, 5312, 5711, 5416, 5672, 5278, 5610, 5475, 5574, 5364, 5322, 5670, 5648, 5615, 5462, 5286, 5667, 5277, 5394, 5263, 5406, 5557, 5267, 5556, 5365, 5519, 5424, 5565, 5298, 5297, 5644, 5290, 5654, 5542, 5452, 5662, 5516, 5620, 5578, 5629, 5318, 5624, 5717, 5608, 5633, 5523, 5256, 5567, 5402, 5718, 5425, 5686, 5668, 5601, 5303, 5469, 5701, 5283, 5677, 5545, 5626, 5359, 5591, 5460, 5410, 5386, 5412, 5707, 5320, 5458, 5457, 5548, 5546, 5252, 5255, 5501, 5502, 5489, 5673, 5358, 5363, 5721, 5641, 5314, 5625, 5376, 5604, 5491, 5714, 5280, 5497, 5613, 5639, 5385, 5533, 5588, 5498, 5585 (4 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
39	9	1.0	333.0	Yes	5586.0MHz, -56.0dBm	5530, 5258, 5312, 5291, 5546, 5643, 5542, 5633, 5411, 5327, 5456, 5459, 5296, 5415, 5384, 5647, 5328, 5454, 5418, 5543, 5257, 5437, 5401, 5587, 5593, 5389, 5676, 5322, 5265, 5272, 5302, 5531, 5504, 5686, 5341, 5321, 5428, 5442, 5340, 5667, 5681, 5607, 5386, 5617, 5605, 5421, 5427, 5677, 5406, 5558, 5675, 5582, 5359, 5392, 5372, 5276, 5300, 5375, 5661, 5698, 5438, 5289, 5512, 5553, 5581, 5397, 5515, 5376, 5451, 5457, 5671, 5596, 5526, 5654, 5419, 5666, 5610, 5712, 5323, 5707, 5519, 5429, 5445, 5590, 5412, 5259, 5314, 5628, 5399, 5612, 5524, 5452, 5568, 5435, 5688, 5273, 5603, 5701, 5502, 5294 (4 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
40	9	1.0	333.0	Yes	5587.0MHz, -56.0dBm	5438, 5387, 5542, 5720, 5535, 5687, 5379, 5493, 5630, 5522, 5608, 5343, 5403, 5416, 5690, 5565, 5662, 5519, 5606, 5616, 5578, 5576, 5268, 5686, 5256, 5338, 5618, 5505, 5703, 5696, 5354, 5406, 5705, 5385, 5640, 5325, 5707, 5487, 5361, 5571, 5467, 5350, 5469, 5353, 5610, 5678, 5575, 5563, 5648, 5444, 5322, 5431, 5625, 5482, 5413, 5520, 5315, 5481, 5623, 5254, 5621, 5407, 5523, 5307, 5546, 5665, 5494, 5677, 5603, 5396, 5365, 5421, 5415, 5627, 5395, 5309, 5430, 5443, 5348, 5283, 5539, 5604, 5471, 5290, 5326, 5545, 5595, 5632, 5724, 5383, 5591, 5566, 5304, 5710, 5511, 5708, 5457, 5321, 5263, 5449 (4 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
41	9	1.0	333.0	Yes	5588.0MHz, -56.0dBm	5476, 5310, 5305, 5387, 5255, 5566, 5721, 5697, 5271, 5392, 5317, 5275, 5406, 5649, 5411, 5452, 5606, 5669, 5389, 5714, 5420, 5517, 5506, 5353, 5370, 5577, 5354, 5655, 5534, 5341, 5434, 5580, 5691, 5261, 5643, 5618, 5538, 5328, 5582, 5527, 5528, 5550, 5278, 5678, 5465, 5610, 5491, 5338, 5309, 5293, 5268, 5266, 5366, 5250, 5360, 5259, 5394, 5348, 5468, 5671, 5440, 5676, 5715, 5377, 5460, 5346, 5369, 5410, 5292, 5502, 5512, 5426, 5467, 5435, 5321, 5642, 5336, 5391, 5658, 5456, 5458, 5356, 5668, 5515, 5662, 5397, 5376, 5521, 5539, 5371, 5631, 5621, 5644, 5486, 5613, 5446, 5640, 5603, 5429, 5284 (3 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
42	9	1.0	333.0	Yes	5589.0MHz, -56.0dBm	5385, 5475, 5276, 5468, 5269, 5300, 5536, 5586, 5251, 5318, 5470, 5645, 5573, 5431, 5702, 5501, 5636, 5639, 5281, 5575, 5363, 5443, 5664, 5295, 5517, 5388, 5553, 5556, 5637, 5471, 5413, 5712, 5390, 5618, 5399, 5439, 5447, 5352, 5478, 5662, 5427, 5450, 5698, 5392, 5377, 5309, 5659, 5514, 5311, 5554, 5504, 5330, 5266, 5408, 5623, 5320, 5545, 5394, 5632, 5583, 5366, 5595, 5584, 5359, 5428, 5324, 5653, 5286, 5651, 5691, 5530, 5549, 5453, 5482, 5387, 5576, 5461, 5711, 5604, 5546, 5259, 5406, 5480, 5710, 5381, 5656, 5558, 5418, 5499, 5525, 5657, 5484, 5577, 5296, 5591, 5612, 5441, 5560, 5375, 5522 (7 hits)

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
43	9	1.0	333.0	Yes	5590.0MHz, -56.0dBm	5327, 5417, 5419, 5699, 5336, 5621, 5471, 5646, 5375, 5434, 5637, 5706, 5356, 5488, 5390, 5321, 5370, 5423, 5315, 5704, 5266, 5443, 5355, 5361, 5698, 5319, 5262, 5279, 5371, 5453, 5551, 5524, 5542, 5303, 5456, 5571, 5489, 5354, 5628, 5661, 5719, 5474, 5359, 5558, 5512, 5509, 5566, 5591, 5690, 5604, 5394, 5420, 5534, 5435, 5715, 5415, 5412, 5644, 5643, 5307, 5671, 5459, 5398, 5506, 5421, 5603, 5428, 5267, 5325, 5256, 5605, 5286, 5576, 5313, 5446, 5272, 5304, 5330, 5257, 5653, 5476, 5540, 5255, 5513, 5299, 5497, 5322, 5545, 5572, 5553, 5677, 5601, 5584, 5442, 5305, 5329, 5521, 5716, 5436, 5333 (4 hits)

Table 8 FCC frequency hopping radar (Type 6) Test Results

Long Sequence Trial	Result	Radar Frequency / Amplitude
Trial #1	Detected	5580.0MHz, -56.0dBm
Trial #2	Detected	5580.0MHz, -56.0dBm
Trial #3	Detected	5580.0MHz, -56.0dBm
Trial #4	Detected	5580.0MHz, -56.0dBm

Long Sequence Trial	Result	Radar Frequency / Amplitude
Trial #5	NOT Detected	5580.0MHz, -56.0dBm
Trial #6	Detected	5580.0MHz, -56.0dBm
Trial #7	Detected	5580.0MHz, -56.0dBm
Trial #8	Detected	5580.0MHz, -56.0dBm
Trial #9	Detected	5580.0MHz, -56.0dBm
Trial #10	Detected	5580.0MHz, -56.0dBm
Trial #11	Detected	5580.0MHz, -56.0dBm
Trial #12	Detected	5580.0MHz, -56.0dBm
Trial #13	Detected	5580.0MHz, -56.0dBm
Trial #14	Detected	5580.0MHz, -56.0dBm
Trial #15	Detected	5580.0MHz, -56.0dBm
Trial #16	Detected	5580.0MHz, -56.0dBm
Trial #17	Detected	5580.0MHz, -56.0dBm
Trial #18	Detected	5580.0MHz, -56.0dBm
Trial #19	Detected	5580.0MHz, -56.0dBm
Trial #20	Detected	5580.0MHz, -56.0dBm
Trial #21	Detected	5580.0MHz, -56.0dBm
Trial #22	Detected	5580.0MHz, -56.0dBm
Trial #23	Detected	5580.0MHz, -56.0dBm
Trial #24	Detected	5580.0MHz, -56.0dBm
Trial #25	Detected	5580.0MHz, -56.0dBm
Trial #26	Detected	5580.0MHz, -56.0dBm
Trial #27	Detected	5580.0MHz, -56.0dBm

Long Sequence Trial	Result	Radar Frequency / Amplitude
Trial #28	Detected	5580.0MHz, -56.0dBm
Trial #29	Detected	5580.0MHz, -56.0dBm
Trial #30	Detected	5580.0MHz, -56.0dBm

Table 9 Long Sequence Waveform Summary

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	1	66.7	7	-	-	0.376034
1	2	63.6	15	1795.0	-	1.593717
2	2	83.1	16	1721.0	-	3.196549
3	2	50.7	6	1522.0	-	3.673726
4	3	82.6	19	1641.0	1634.0	5.227813
5	3	90.4	13	1611.0	1137.0	6.515688
6	3	57.7	13	1108.0	1020.0	6.760289
7	2	87.6	16	1213.0	-	7.720411
8	3	96.4	16	1853.0	1485.0	9.180715
9	2	89.8	18	1143.0	-	9.886542
10	2	95.9	6	1682.0	-	11.754721

Table 10 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	1	53.7	7	-	-	0.222504
1	3	69.6	9	1643.0	1686.0	0.792437
2	2	97.2	19	1217.0	-	2.158742
3	2	72.2	18	1912.0	-	2.587512
4	2	92.1	8	1701.0	-	3.712280
5	3	92.5	6	1777.0	1963.0	4.391548
6	2	94.0	14	1439.0	-	5.112335
7	2	77.9	16	1587.0	-	5.756105
8	2	98.0	14	1972.0	-	6.506232
9	1	57.6	9	-	-	7.056248
10	3	85.6	13	1736.0	1694.0	8.178437
11	2	85.0	20	1753.0	-	8.883854
12	2	87.7	15	1826.0	-	9.043152
13	3	92.2	12	1423.0	1313.0	10.383446
14	2	86.9	14	1973.0	-	10.643053
15	3	51.5	15	1683.0	1245.0	11.764277

Table 11 Long Sequence Waveform Trial#2 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	96.9	19	1618.0	-	0.776902
1	3	62.4	13	1242.0	1452.0	1.446348
2	2	77.2	17	1280.0	-	2.459222
3	2	55.6	11	1654.0	-	3.147552
4	3	70.7	15	1052.0	1627.0	4.835013
5	3	74.5	16	1041.0	1822.0	5.748554
6	3	70.1	5	1168.0	1412.0	6.759001
7	3	89.9	6	1913.0	1816.0	7.879156
8	2	86.9	12	1790.0	-	8.949112
9	1	85.0	20	-	-	9.688420
10	3	56.9	15	1378.0	1782.0	10.176195
11	3	98.6	18	1188.0	1550.0	11.445786

Table 12 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	1	55.3	12	-	-	0.057766
1	2	67.0	16	1507.0	-	0.778249
2	2	87.4	5	1338.0	-	1.389815
3	1	67.5	12	-	-	2.064396
4	3	78.3	13	1586.0	1535.0	3.126402
5	2	83.0	15	1651.0	-	3.455824
6	2	94.8	6	1018.0	-	4.176183
7	1	78.6	11	-	-	5.177119
8	2	82.6	12	1766.0	-	5.773752
9	1	76.4	11	-	-	6.658058
10	2	93.7	15	1062.0	-	6.852312
11	1	98.7	19	-	-	7.376023
12	2	87.5	15	1199.0	-	8.576031
13	2	85.1	13	1008.0	-	8.671216
14	1	67.3	11	-	-	9.619318
15	3	98.2	14	1138.0	1446.0	10.053934
16	1	80.2	12	-	-	11.146334
17	2	87.0	15	1121.0	-	11.722121

Table 13 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	1	83.5	15	-	-	0.282832
1	1	74.3	7	-	-	1.982688
2	3	68.7	8	1818.0	1926.0	2.623712
3	1	96.3	18	-	-	3.377512
4	1	50.6	7	-	-	4.054613
5	2	72.3	12	1204.0	-	5.695736
6	3	55.9	19	1445.0	1016.0	6.493232
7	2	76.7	10	1057.0	-	7.304327
8	3	73.5	8	1014.0	1321.0	8.054256
9	2	64.6	5	1761.0	-	9.333257
10	1	63.7	6	-	-	10.537629
11	2	86.5	14	1318.0	-	11.954238

Table 14 Long Sequence Waveform Trial#5 (NOT Detected **)**

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	1	95.8	7	-	-	0.004214
1	2	80.1	10	1143.0	-	1.099714
2	3	64.7	14	1773.0	1472.0	1.743906
3	3	65.8	16	1572.0	1527.0	2.311565
4	2	56.0	10	1769.0	-	3.125542
5	1	93.8	15	-	-	3.663866
6	2	62.2	20	1301.0	-	4.536727
7	3	66.1	12	1178.0	1466.0	4.747994
8	3	53.3	11	1214.0	1990.0	5.494249
9	2	87.0	8	1500.0	-	6.257412
10	2	87.4	10	1022.0	-	7.177562
11	1	98.6	8	-	-	7.353094
12	2	73.0	15	1650.0	-	8.080280
13	2	79.0	9	1360.0	-	9.023446
14	3	93.2	17	1321.0	1897.0	9.360338
15	1	61.0	9	-	-	10.256798
16	2	63.4	16	1202.0	-	11.142626
17	2	81.6	8	1244.0	-	11.421823

Table 15 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	96.4	17	-	-	0.066143
1	1	61.3	20	-	-	1.106673
2	2	99.0	5	1481.0	-	2.466631
3	3	89.7	9	1316.0	1391.0	3.268634
4	2	82.8	8	1420.0	-	4.125043
5	2	81.7	11	1020.0	-	5.306167
6	2	50.1	13	1983.0	-	6.985165
7	2	94.3	13	1915.0	-	7.053486
8	2	63.7	18	1137.0	-	8.331221
9	3	91.6	16	1243.0	1477.0	9.539506
10	3	86.1	10	1948.0	1472.0	10.179178
11	2	52.3	14	1597.0	-	11.477659

Table 16 Long Sequence Waveform Trial#7 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	68.2	15	1862.0	-	0.900035
1	2	94.0	5	1814.0	-	1.813348
2	2	70.4	10	1595.0	-	2.343526
3	3	52.5	17	1849.0	1331.0	3.468306
4	3	65.1	14	1721.0	1184.0	3.781195
5	2	77.0	17	1375.0	-	5.383537
6	2	92.0	11	1167.0	-	5.737376
7	1	91.6	14	-	-	6.476877
8	1	99.9	12	-	-	7.487411
9	2	65.0	19	1734.0	-	8.856207
10	1	89.2	9	-	-	9.714846
11	3	62.6	17	1549.0	1158.0	10.496414
12	1	70.8	5	-	-	11.451816

Table 17 Long Sequence Waveform Trial#8 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	94.0	18	1304.0	-	0.637203
1	3	86.8	8	1377.0	1587.0	1.288351
2	2	87.2	10	1190.0	-	2.233129
3	2	65.6	10	1471.0	-	3.183181
4	2	90.5	6	1526.0	-	3.543404
5	2	53.1	6	1742.0	-	4.301591
6	2	93.8	18	1632.0	-	4.800291
7	2	68.0	17	1981.0	-	5.959759
8	2	72.7	12	1417.0	-	6.924064
9	2	52.6	10	1024.0	-	7.966853
10	1	85.4	7	-	-	8.249133
11	3	98.5	10	1862.0	1187.0	9.493005
12	3	64.9	17	1824.0	1665.0	10.299063
13	1	88.6	11	-	-	10.809268
14	2	79.4	18	1077.0	-	11.907174

Table 18 Long Sequence Waveform Trial#9 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	1	78.4	18	-	-	0.838083
1	3	59.5	9	1816.0	1129.0	1.645942
2	1	98.3	12	-	-	2.790443
3	2	64.2	15	1551.0	-	4.261141
4	3	68.5	5	1610.0	1225.0	5.948644
5	3	57.3	14	1933.0	1654.0	7.788169
6	2	81.4	10	1997.0	-	8.228667
7	3	91.0	15	1205.0	1364.0	9.962112
8	1	84.2	11	-	-	11.998690

Table 19 Long Sequence Waveform Trial#10 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	86.2	8	1333.0	-	0.549384
1	3	61.2	7	1868.0	1525.0	0.980356
2	2	55.2	16	1389.0	-	1.910979
3	3	53.8	18	1155.0	1980.0	2.707847
4	2	50.1	10	1520.0	-	3.143897
5	2	58.2	18	1335.0	-	3.958283
6	2	87.4	8	1040.0	-	4.316474
7	2	68.4	12	1676.0	-	5.032224
8	2	70.9	5	1818.0	-	6.217094
9	2	86.8	5	1345.0	-	6.986205
10	2	51.0	14	1950.0	-	7.388458
11	1	59.0	10	-	-	8.017736
12	3	94.8	16	1067.0	1606.0	8.777083
13	1	87.9	19	-	-	9.557100
14	3	99.1	9	1424.0	1828.0	10.189412
15	2	75.1	13	1967.0	-	10.619189
16	1	74.5	11	-	-	11.614865

Table 20 Long Sequence Waveform Trial#11 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	54.6	10	1544.0	-	0.205180
1	3	59.6	8	1319.0	1236.0	2.075506
2	1	72.6	16	-	-	2.849276
3	2	92.9	6	1737.0	-	4.984993
4	1	89.2	7	-	-	6.146224
5	2	58.1	12	1103.0	-	6.758847
6	3	79.7	10	1110.0	1267.0	8.223048
7	1	62.5	7	-	-	9.618777
8	2	71.6	18	1032.0	-	10.778095

Table 21 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	1	59.1	16	-	-	0.639052
1	1	96.4	17	-	-	1.125899
2	2	86.9	18	1414.0	-	1.977509
3	2	88.1	16	1472.0	-	2.638885
4	1	53.0	6	-	-	2.853414
5	3	78.9	6	1011.0	1370.0	3.705402
6	1	73.7	16	-	-	4.448343
7	2	77.9	8	1401.0	-	4.682166
8	3	93.3	6	1057.0	1609.0	5.890352
9	2	75.0	18	1797.0	-	6.310987
10	1	71.7	9	-	-	7.178409
11	2	93.8	6	1014.0	-	7.888518
12	1	88.3	17	-	-	8.538742
13	3	82.0	16	1580.0	1217.0	8.869387
14	2	62.0	12	1676.0	-	9.863432
15	1	72.0	13	-	-	10.576335
16	2	54.1	13	1207.0	-	10.768443
17	1	68.4	12	-	-	11.521105

Table 22 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	63.4	10	1621.0	1943.0	0.486000
1	2	71.8	13	1767.0	-	0.950449
2	1	90.8	17	-	-	1.817954
3	1	51.5	13	-	-	1.980060
4	2	70.8	12	1164.0	-	3.089228
5	1	63.8	17	-	-	3.498267
6	3	72.9	18	1163.0	1920.0	4.190739
7	2	70.0	9	1841.0	-	4.645785
8	3	76.8	6	1896.0	1060.0	5.286038
9	2	64.4	17	1412.0	-	6.237069
10	3	77.6	12	1975.0	1571.0	6.416009
11	1	55.3	15	-	-	7.011302
12	1	90.3	18	-	-	7.788109
13	3	72.5	12	1258.0	1161.0	8.284787
14	3	97.1	8	1444.0	1356.0	9.389143
15	3	60.9	10	1659.0	1526.0	10.084583
16	3	50.9	10	1688.0	1650.0	10.673533
17	1	91.1	11	-	-	11.197775
18	1	77.8	8	-	-	11.686901

Table 23 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	68.2	20	1376.0	-	0.819531
1	1	91.9	16	-	-	1.293260
2	1	69.4	19	-	-	2.408532
3	2	94.3	17	1935.0	-	3.462553
4	3	67.0	11	1953.0	1898.0	4.138177
5	2	99.6	17	1790.0	-	5.558466
6	3	56.5	12	1679.0	1948.0	6.241956
7	2	50.8	9	1136.0	-	7.651208
8	2	93.9	7	1238.0	-	8.970039
9	2	72.7	14	1764.0	-	9.577038
10	3	58.9	14	1693.0	1082.0	10.438715
11	2	75.2	13	1317.0	-	11.245548

Table 24 Long Sequence Waveform Trial#15 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	59.1	5	1677.0	-	0.688782
1	3	71.8	17	1101.0	1445.0	1.482971
2	1	73.0	19	-	-	1.895173
3	2	92.1	20	1755.0	-	2.731454
4	2	65.7	19	1998.0	-	3.610349
5	3	98.0	18	1389.0	1519.0	4.804708
6	2	71.3	18	1692.0	-	5.265190
7	1	97.3	7	-	-	6.524476
8	3	50.2	5	1578.0	1029.0	7.325514
9	1	96.4	8	-	-	8.518689
10	3	57.7	17	1649.0	1790.0	9.277525
11	2	77.7	9	1058.0	-	9.748693
12	2	70.1	5	1859.0	-	10.434698
13	2	60.0	17	1182.0	-	11.580799

Table 25 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	92.1	10	-	-	0.362125
1	3	66.5	6	1056.0	1432.0	1.159282
2	1	55.3	6	-	-	1.592828
3	2	74.7	5	1038.0	-	2.251376
4	3	65.2	8	1949.0	1277.0	2.989590
5	2	70.4	17	1727.0	-	3.467377
6	2	80.3	12	1096.0	-	4.188359
7	2	60.0	19	1634.0	-	4.239524
8	2	62.4	10	1061.0	-	5.303040
9	3	73.5	17	1821.0	1068.0	5.977991
10	2	96.4	10	1620.0	-	6.406369
11	2	82.1	8	1882.0	-	6.943909
12	2	88.1	14	1043.0	-	7.491838
13	1	65.0	18	-	-	8.362938
14	2	56.8	16	1455.0	-	8.725893
15	2	80.8	9	1392.0	-	9.540323
16	1	65.5	8	-	-	9.876461
17	3	72.3	20	1156.0	1934.0	10.691704
18	2	64.9	19	1036.0	-	11.223815
19	3	54.4	6	1967.0	1691.0	11.974399

Table 26 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	89.9	10	1592.0	-	0.687182
1	3	53.1	16	1383.0	1894.0	1.107288
2	2	60.6	15	1379.0	-	1.835208
3	2	75.8	18	1768.0	-	2.334118
4	2	51.1	17	1182.0	-	3.331861
5	3	59.4	8	1335.0	1166.0	3.903782
6	2	50.1	6	1764.0	-	4.823952
7	2	53.5	11	1766.0	-	5.242689
8	2	87.6	7	1994.0	-	5.679545
9	1	91.1	9	-	-	6.875595
10	1	75.8	10	-	-	7.298679
11	2	77.6	19	1017.0	-	7.938942
12	3	73.4	18	1654.0	1530.0	8.993046
13	2	59.0	19	1974.0	-	9.357763
14	3	92.3	7	1648.0	1277.0	10.262004
15	2	86.5	13	1606.0	-	11.250339
16	2	53.9	11	1893.0	-	11.310152

Table 27 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	3	87.7	15	1040.0	1731.0	0.403106
1	1	79.4	18	-	-	1.786816
2	3	87.8	13	1284.0	1288.0	3.296814
3	3	71.4	20	1242.0	1691.0	4.324187
4	1	95.9	7	-	-	5.585791
5	2	80.0	18	1353.0	-	6.133488
6	1	72.1	13	-	-	8.264320
7	3	85.7	16	1552.0	1310.0	8.681045
8	2	74.0	9	1694.0	-	10.174907
9	3	97.6	14	1398.0	1187.0	11.191062

Table 28 Long Sequence Waveform Trial#19 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	60.7	5	1769.0	1555.0	0.423129
1	1	55.8	12	-	-	1.977080
2	1	67.1	9	-	-	3.396697
3	1	54.6	20	-	-	4.411943
4	2	64.5	14	1692.0	-	5.846071
5	2	71.6	14	1188.0	-	7.082847
6	3	68.8	10	1114.0	1666.0	8.377296
7	2	94.6	12	1278.0	-	8.975842
8	2	60.3	17	1381.0	-	9.659224
9	2	90.0	18	1791.0	-	11.469621

Table 29 Long Sequence Waveform Trial#20 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	88.3	6	1160.0	1084.0	0.661943
1	1	51.8	8	-	-	1.310505
2	3	57.4	17	1643.0	1915.0	2.226675
3	2	94.0	16	1611.0	-	3.250119
4	2	59.5	12	1036.0	-	4.307452
5	3	86.9	18	1916.0	1540.0	5.803461
6	2	88.1	10	1697.0	-	6.037164
7	2	54.7	13	1921.0	-	7.608470
8	2	96.0	19	1833.0	-	8.082068
9	2	67.9	11	1101.0	-	9.145585
10	1	91.6	7	-	-	10.195667
11	2	99.6	18	1812.0	-	11.589455

Table 30 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	92.8	20	1580.0	-	0.309893
1	3	53.7	8	1089.0	1232.0	1.116225
2	2	76.9	6	1068.0	-	2.455105
3	2	84.1	8	1304.0	-	3.551180
4	1	61.8	18	-	-	4.270034
5	1	85.9	9	-	-	5.395592
6	2	76.4	15	1945.0	-	6.144920
7	1	85.4	12	-	-	6.664103
8	1	93.9	18	-	-	7.996535
9	2	71.3	9	1962.0	-	8.913529
10	1	67.7	13	-	-	9.487711
11	1	71.3	8	-	-	10.347894
12	2	57.2	6	1232.0	-	11.579018

Table 31 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	2	85.6	12	1670.0	-	0.620341
1	3	89.8	19	1389.0	1649.0	1.510371
2	2	92.8	14	1244.0	-	2.079791
3	2	54.8	12	1950.0	-	3.209621
4	2	83.8	20	1926.0	-	4.014171
5	2	80.3	6	1604.0	-	4.475256
6	3	82.5	9	1517.0	1066.0	5.225604
7	3	63.6	6	1988.0	1433.0	6.461278
8	3	54.7	12	1857.0	1746.0	7.253661
9	3	96.6	15	1973.0	1690.0	8.064757
10	1	90.6	6	-	-	8.856047
11	2	86.3	9	1068.0	-	10.017362
12	2	74.6	14	1226.0	-	10.621537
13	3	96.7	17	1305.0	1489.0	11.463583

Table 32 Long Sequence Waveform Trial#23 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	53.9	12	1183.0	1839.0	1.185076
1	1	89.0	6	-	-	1.935750
2	2	57.7	17	1453.0	-	3.330129
3	3	72.1	10	1671.0	1436.0	5.204558
4	3	54.2	10	1096.0	1055.0	6.518077
5	1	90.5	14	-	-	8.200124
6	1	93.6	5	-	-	9.569119
7	2	50.6	6	1079.0	-	11.525238

Table 33 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	81.1	18	1041.0	-	1.194511
1	2	69.6	15	1794.0	-	2.757522
2	2	68.9	15	1690.0	-	3.604000
3	2	79.0	13	1434.0	-	5.872156
4	2	85.8	8	1707.0	-	7.457981
5	3	67.9	14	1354.0	1300.0	8.636054
6	1	88.1	8	-	-	9.460916
7	2	86.5	17	1392.0	-	11.053878

Table 34 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	64.3	19	1238.0	-	0.581221
1	1	62.0	6	-	-	1.511550
2	3	55.0	9	1909.0	1041.0	1.990477
3	2	80.4	18	1344.0	-	3.178622
4	3	94.3	12	1775.0	1256.0	3.446386
5	2	71.6	8	1883.0	-	4.249587
6	2	57.5	10	1803.0	-	4.916075
7	2	70.2	12	1023.0	-	5.949922
8	1	57.5	11	-	-	7.026940
9	1	61.8	18	-	-	7.921163
10	2	80.2	17	1193.0	-	8.351231
11	2	59.3	5	1906.0	-	8.856159
12	3	70.6	19	1312.0	1777.0	10.030799
13	1	57.5	12	-	-	10.949075
14	1	66.6	8	-	-	11.927708

Table 35 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	73.7	20	1391.0	-	0.314896
1	3	79.6	16	1093.0	1780.0	0.842334
2	3	67.9	17	1053.0	1129.0	1.570408
3	2	93.6	14	1540.0	-	2.506442
4	2	81.5	19	1340.0	-	3.249384
5	2	89.9	11	1058.0	-	3.753222
6	3	62.2	17	1028.0	1156.0	4.321831
7	2	58.6	14	1341.0	-	5.536231
8	1	50.6	15	-	-	6.144061
9	3	68.7	16	1781.0	1407.0	6.463739
10	2	71.2	8	1050.0	-	7.237044
11	3	87.8	12	1690.0	1463.0	7.909606
12	3	65.5	16	1149.0	1177.0	8.699630
13	1	71.6	7	-	-	9.698734
14	2	51.5	20	1649.0	-	10.038139
15	2	87.8	12	1367.0	-	10.843763
16	2	70.9	13	1374.0	-	11.347102

Table 36 Long Sequence Waveform Trial#27 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	2	73.9	7	1495.0	-	0.020638
1	2	87.1	15	1689.0	-	1.160563
2	2	75.2	7	1682.0	-	1.305705
3	2	50.8	10	1047.0	-	2.205910
4	1	78.0	13	-	-	2.533971
5	3	70.3	7	1436.0	1006.0	3.067441
6	1	90.9	12	-	-	3.616213
7	2	61.4	8	1230.0	-	4.416724
8	2	77.4	15	1141.0	-	5.292472
9	1	77.1	14	-	-	5.467474
10	3	52.3	13	1992.0	1688.0	6.492357
11	2	69.5	8	1526.0	-	6.973755
12	3	84.0	10	1608.0	1428.0	7.767843
13	1	55.1	13	-	-	8.265969
14	2	64.9	14	1381.0	-	8.852621
15	2	50.4	9	1797.0	-	9.303673
16	3	57.9	17	1335.0	1890.0	9.907393
17	1	96.4	17	-	-	10.294937
18	2	59.2	14	1151.0	-	10.879688
19	1	69.7	17	-	-	11.973445

Table 37 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	63.7	13	1670.0	-	0.577909
1	3	82.0	12	1353.0	1452.0	1.223933
2	2	96.1	10	1644.0	-	2.534532
3	2	82.7	15	1258.0	-	4.005522
4	3	67.5	5	1135.0	1971.0	4.380984
5	1	67.2	19	-	-	6.006262
6	1	93.4	15	-	-	7.602306
7	1	78.6	16	-	-	8.412082
8	3	95.4	14	1688.0	1936.0	9.129714
9	3	81.2	12	1960.0	1218.0	10.299199
10	1	54.8	9	-	-	11.334773

Table 38 Long Sequence Waveform Trial#29 (Detected)

Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (us)
0	3	59.7	6	1448.0	1712.0	0.717260
1	1	85.8	13	-	-	1.373393
2	2	72.9	13	1117.0	-	1.514995
3	2	92.4	16	1087.0	-	2.927088
4	3	61.5	18	1918.0	1824.0	3.124072
5	2	70.9	9	1935.0	-	4.260597
6	2	50.2	5	1288.0	-	4.532215
7	1	74.9	12	-	-	5.801011
8	2	87.6	7	1244.0	-	6.500452
9	2	69.6	7	1800.0	-	6.810654
10	1	60.4	18	-	-	8.138479
11	2	77.8	18	1361.0	-	8.418658
12	2	65.9	7	1285.0	-	9.271813
13	2	98.8	17	1653.0	-	10.455002
14	1	84.1	20	-	-	10.889154
15	3	68.6	17	1612.0	1980.0	11.737559

Table 39 Long Sequence Waveform Trial#30 (Detected)

Bandwidth Detection Trials

Bandwidth determined to be 5569 to 5590 MHz based on center frequency of 5580 MHz.

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
0	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
1	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
2	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
3	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
4	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
5	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
6	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
7	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
8	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
9	18	1.0	1428.0	Yes	5580.0MHz, -56.0dBm	N/A
10	18	1.0	1428.0	Yes	5581.0MHz, -56.0dBm	N/A
11	18	1.0	1428.0	Yes	5581.0MHz, -56.0dBm	N/A
12	18	1.0	1428.0	Yes	5581.0MHz, -56.0dBm	N/A
13	18	1.0	1428.0	Yes	5581.0MHz, -56.0dBm	N/A
14	18	1.0	1428.0	Yes	5581.0MHz, -56.0dBm	N/A
15	18	1.0	1428.0	Yes	5581.0MHz, -56.0dBm	N/A
16	18	1.0	1428.0	Yes	5581.0MHz, -56.0dBm	N/A
17	18	1.0	1428.0	Yes	5581.0MHz, -56.0dBm	N/A
18	18	1.0	1428.0	Yes	5581.0MHz, -56.0dBm	N/A
19	18	1.0	1428.0	Yes	5581.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
20	18	1.0	1428.0	Yes	5582.0MHz, -56.0dBm	N/A
21	18	1.0	1428.0	Yes	5582.0MHz, -56.0dBm	N/A
22	18	1.0	1428.0	Yes	5582.0MHz, -56.0dBm	N/A
23	18	1.0	1428.0	Yes	5582.0MHz, -56.0dBm	N/A
24	18	1.0	1428.0	Yes	5582.0MHz, -56.0dBm	N/A
25	18	1.0	1428.0	Yes	5582.0MHz, -56.0dBm	N/A
26	18	1.0	1428.0	Yes	5582.0MHz, -56.0dBm	N/A
27	18	1.0	1428.0	Yes	5582.0MHz, -56.0dBm	N/A
28	18	1.0	1428.0	Yes	5582.0MHz, -56.0dBm	N/A
29	18	1.0	1428.0	Yes	5582.0MHz, -56.0dBm	N/A
30	18	1.0	1428.0	Yes	5583.0MHz, -56.0dBm	N/A
31	18	1.0	1428.0	Yes	5583.0MHz, -56.0dBm	N/A
32	18	1.0	1428.0	Yes	5583.0MHz, -56.0dBm	N/A
33	18	1.0	1428.0	Yes	5583.0MHz, -56.0dBm	N/A
34	18	1.0	1428.0	Yes	5583.0MHz, -56.0dBm	N/A
35	18	1.0	1428.0	Yes	5583.0MHz, -56.0dBm	N/A
36	18	1.0	1428.0	Yes	5583.0MHz, -56.0dBm	N/A
37	18	1.0	1428.0	Yes	5583.0MHz, -56.0dBm	N/A
38	18	1.0	1428.0	Yes	5583.0MHz, -56.0dBm	N/A
39	18	1.0	1428.0	Yes	5583.0MHz, -56.0dBm	N/A
40	18	1.0	1428.0	Yes	5584.0MHz, -56.0dBm	N/A
41	18	1.0	1428.0	Yes	5584.0MHz, -56.0dBm	N/A
42	18	1.0	1428.0	Yes	5584.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
43	18	1.0	1428.0	Yes	5584.0MHz, -56.0dBm	N/A
44	18	1.0	1428.0	Yes	5584.0MHz, -56.0dBm	N/A
45	18	1.0	1428.0	Yes	5584.0MHz, -56.0dBm	N/A
46	18	1.0	1428.0	Yes	5584.0MHz, -56.0dBm	N/A
47	18	1.0	1428.0	Yes	5584.0MHz, -56.0dBm	N/A
48	18	1.0	1428.0	Yes	5584.0MHz, -56.0dBm	N/A
49	18	1.0	1428.0	Yes	5584.0MHz, -56.0dBm	N/A
50	18	1.0	1428.0	Yes	5585.0MHz, -56.0dBm	N/A
51	18	1.0	1428.0	Yes	5585.0MHz, -56.0dBm	N/A
52	18	1.0	1428.0	Yes	5585.0MHz, -56.0dBm	N/A
53	18	1.0	1428.0	Yes	5585.0MHz, -56.0dBm	N/A
54	18	1.0	1428.0	Yes	5585.0MHz, -56.0dBm	N/A
55	18	1.0	1428.0	Yes	5585.0MHz, -56.0dBm	N/A
56	18	1.0	1428.0	Yes	5585.0MHz, -56.0dBm	N/A
57	18	1.0	1428.0	Yes	5585.0MHz, -56.0dBm	N/A
58	18	1.0	1428.0	Yes	5585.0MHz, -56.0dBm	N/A
59	18	1.0	1428.0	Yes	5585.0MHz, -56.0dBm	N/A
60	18	1.0	1428.0	Yes	5586.0MHz, -56.0dBm	N/A
61	18	1.0	1428.0	Yes	5586.0MHz, -56.0dBm	N/A
62	18	1.0	1428.0	Yes	5586.0MHz, -56.0dBm	N/A
63	18	1.0	1428.0	Yes	5586.0MHz, -56.0dBm	N/A
64	18	1.0	1428.0	Yes	5586.0MHz, -56.0dBm	N/A
65	18	1.0	1428.0	Yes	5586.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
66	18	1.0	1428.0	Yes	5586.0MHz, -56.0dBm	N/A
67	18	1.0	1428.0	Yes	5586.0MHz, -56.0dBm	N/A
68	18	1.0	1428.0	Yes	5586.0MHz, -56.0dBm	N/A
69	18	1.0	1428.0	Yes	5586.0MHz, -56.0dBm	N/A
70	18	1.0	1428.0	Yes	5587.0MHz, -56.0dBm	N/A
71	18	1.0	1428.0	Yes	5587.0MHz, -56.0dBm	N/A
72	18	1.0	1428.0	Yes	5587.0MHz, -56.0dBm	N/A
73	18	1.0	1428.0	Yes	5587.0MHz, -56.0dBm	N/A
74	18	1.0	1428.0	Yes	5587.0MHz, -56.0dBm	N/A
75	18	1.0	1428.0	Yes	5587.0MHz, -56.0dBm	N/A
76	18	1.0	1428.0	Yes	5587.0MHz, -56.0dBm	N/A
77	18	1.0	1428.0	Yes	5587.0MHz, -56.0dBm	N/A
78	18	1.0	1428.0	Yes	5587.0MHz, -56.0dBm	N/A
79	18	1.0	1428.0	Yes	5587.0MHz, -56.0dBm	N/A
80	18	1.0	1428.0	Yes	5588.0MHz, -56.0dBm	N/A
81	18	1.0	1428.0	Yes	5588.0MHz, -56.0dBm	N/A
82	18	1.0	1428.0	Yes	5588.0MHz, -56.0dBm	N/A
83	18	1.0	1428.0	Yes	5588.0MHz, -56.0dBm	N/A
84	18	1.0	1428.0	Yes	5588.0MHz, -56.0dBm	N/A
85	18	1.0	1428.0	Yes	5588.0MHz, -56.0dBm	N/A
86	18	1.0	1428.0	Yes	5588.0MHz, -56.0dBm	N/A
87	18	1.0	1428.0	Yes	5588.0MHz, -56.0dBm	N/A
88	18	1.0	1428.0	Yes	5588.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
89	18	1.0	1428.0	Yes	5588.0MHz, -56.0dBm	N/A
90	18	1.0	1428.0	Yes	5589.0MHz, -56.0dBm	N/A
91	18	1.0	1428.0	Yes	5589.0MHz, -56.0dBm	N/A
92	18	1.0	1428.0	Yes	5589.0MHz, -56.0dBm	N/A
93	18	1.0	1428.0	Yes	5589.0MHz, -56.0dBm	N/A
94	18	1.0	1428.0	Yes	5589.0MHz, -56.0dBm	N/A
95	18	1.0	1428.0	Yes	5589.0MHz, -56.0dBm	N/A
96	18	1.0	1428.0	Yes	5589.0MHz, -56.0dBm	N/A
97	18	1.0	1428.0	Yes	5589.0MHz, -56.0dBm	N/A
98	18	1.0	1428.0	Yes	5589.0MHz, -56.0dBm	N/A
99	18	1.0	1428.0	Yes	5589.0MHz, -56.0dBm	N/A
100	18	1.0	1428.0	Yes	5590.0MHz, -56.0dBm	N/A
101	18	1.0	1428.0	Yes	5590.0MHz, -56.0dBm	N/A
102	18	1.0	1428.0	Yes	5590.0MHz, -56.0dBm	N/A
103	18	1.0	1428.0	Yes	5590.0MHz, -56.0dBm	N/A
104	18	1.0	1428.0	Yes	5590.0MHz, -56.0dBm	N/A
105	18	1.0	1428.0	Yes	5590.0MHz, -56.0dBm	N/A
106	18	1.0	1428.0	Yes	5590.0MHz, -56.0dBm	N/A
107	18	1.0	1428.0	Yes	5590.0MHz, -56.0dBm	N/A
108	18	1.0	1428.0	Yes	5590.0MHz, -56.0dBm	N/A
109	18	1.0	1428.0	Yes	5590.0MHz, -56.0dBm	N/A
110	18	1.0	1428.0	No	5591.0MHz, -56.0dBm	N/A
111	18	1.0	1428.0	No	5591.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
112	18	1.0	1428.0	No	5591.0MHz, -56.0dBm	N/A
113	18	1.0	1428.0	No	5591.0MHz, -56.0dBm	N/A
114	18	1.0	1428.0	No	5591.0MHz, -56.0dBm	N/A
115	18	1.0	1428.0	No	5591.0MHz, -56.0dBm	N/A
116	18	1.0	1428.0	No	5591.0MHz, -56.0dBm	N/A
117	18	1.0	1428.0	No	5591.0MHz, -56.0dBm	N/A
118	18	1.0	1428.0	No	5591.0MHz, -56.0dBm	N/A
119	18	1.0	1428.0	No	5591.0MHz, -56.0dBm	N/A

Table 40 FCC UNII Bandwidth Detection 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	5579.0MHz, -56.0dBm	N/A
1	18	1.0	1428.0	Yes	5579.0MHz, -56.0dBm	N/A
2	18	1.0	1428.0	Yes	5579.0MHz, -56.0dBm	N/A
3	18	1.0	1428.0	Yes	5579.0MHz, -56.0dBm	N/A
4	18	1.0	1428.0	Yes	5579.0MHz, -56.0dBm	N/A
5	18	1.0	1428.0	Yes	5579.0MHz, -56.0dBm	N/A
6	18	1.0	1428.0	Yes	5579.0MHz, -56.0dBm	N/A
7	18	1.0	1428.0	Yes	5579.0MHz, -56.0dBm	N/A
8	18	1.0	1428.0	Yes	5579.0MHz, -56.0dBm	N/A
9	18	1.0	1428.0	Yes	5579.0MHz, -56.0dBm	N/A
10	18	1.0	1428.0	Yes	5578.0MHz, -56.0dBm	N/A
11	18	1.0	1428.0	Yes	5578.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
12	18	1.0	1428.0	Yes	5578.0MHz, -56.0dBm	N/A
13	18	1.0	1428.0	Yes	5578.0MHz, -56.0dBm	N/A
14	18	1.0	1428.0	Yes	5578.0MHz, -56.0dBm	N/A
15	18	1.0	1428.0	Yes	5578.0MHz, -56.0dBm	N/A
16	18	1.0	1428.0	Yes	5578.0MHz, -56.0dBm	N/A
17	18	1.0	1428.0	Yes	5578.0MHz, -56.0dBm	N/A
18	18	1.0	1428.0	Yes	5578.0MHz, -56.0dBm	N/A
19	18	1.0	1428.0	Yes	5578.0MHz, -56.0dBm	N/A
20	18	1.0	1428.0	Yes	5577.0MHz, -56.0dBm	N/A
21	18	1.0	1428.0	Yes	5577.0MHz, -56.0dBm	N/A
22	18	1.0	1428.0	Yes	5577.0MHz, -56.0dBm	N/A
23	18	1.0	1428.0	Yes	5577.0MHz, -56.0dBm	N/A
24	18	1.0	1428.0	Yes	5577.0MHz, -56.0dBm	N/A
25	18	1.0	1428.0	Yes	5577.0MHz, -56.0dBm	N/A
26	18	1.0	1428.0	Yes	5577.0MHz, -56.0dBm	N/A
27	18	1.0	1428.0	Yes	5577.0MHz, -56.0dBm	N/A
28	18	1.0	1428.0	Yes	5577.0MHz, -56.0dBm	N/A
29	18	1.0	1428.0	Yes	5577.0MHz, -56.0dBm	N/A
30	18	1.0	1428.0	Yes	5576.0MHz, -56.0dBm	N/A
31	18	1.0	1428.0	Yes	5576.0MHz, -56.0dBm	N/A
32	18	1.0	1428.0	Yes	5576.0MHz, -56.0dBm	N/A
33	18	1.0	1428.0	Yes	5576.0MHz, -56.0dBm	N/A
34	18	1.0	1428.0	Yes	5576.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
35	18	1.0	1428.0	Yes	5576.0MHz, -56.0dBm	N/A
36	18	1.0	1428.0	Yes	5576.0MHz, -56.0dBm	N/A
37	18	1.0	1428.0	Yes	5576.0MHz, -56.0dBm	N/A
38	18	1.0	1428.0	Yes	5576.0MHz, -56.0dBm	N/A
39	18	1.0	1428.0	Yes	5576.0MHz, -56.0dBm	N/A
40	18	1.0	1428.0	Yes	5575.0MHz, -56.0dBm	N/A
41	18	1.0	1428.0	Yes	5575.0MHz, -56.0dBm	N/A
42	18	1.0	1428.0	Yes	5575.0MHz, -56.0dBm	N/A
43	18	1.0	1428.0	Yes	5575.0MHz, -56.0dBm	N/A
44	18	1.0	1428.0	Yes	5575.0MHz, -56.0dBm	N/A
45	18	1.0	1428.0	Yes	5575.0MHz, -56.0dBm	N/A
46	18	1.0	1428.0	Yes	5575.0MHz, -56.0dBm	N/A
47	18	1.0	1428.0	Yes	5575.0MHz, -56.0dBm	N/A
48	18	1.0	1428.0	Yes	5575.0MHz, -56.0dBm	N/A
49	18	1.0	1428.0	Yes	5575.0MHz, -56.0dBm	N/A
50	18	1.0	1428.0	Yes	5574.0MHz, -56.0dBm	N/A
51	18	1.0	1428.0	Yes	5574.0MHz, -56.0dBm	N/A
52	18	1.0	1428.0	Yes	5574.0MHz, -56.0dBm	N/A
53	18	1.0	1428.0	Yes	5574.0MHz, -56.0dBm	N/A
54	18	1.0	1428.0	Yes	5574.0MHz, -56.0dBm	N/A
55	18	1.0	1428.0	Yes	5574.0MHz, -56.0dBm	N/A
56	18	1.0	1428.0	Yes	5574.0MHz, -56.0dBm	N/A
57	18	1.0	1428.0	Yes	5574.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
58	18	1.0	1428.0	Yes	5574.0MHz, -56.0dBm	N/A
59	18	1.0	1428.0	Yes	5574.0MHz, -56.0dBm	N/A
60	18	1.0	1428.0	Yes	5573.0MHz, -56.0dBm	N/A
61	18	1.0	1428.0	Yes	5573.0MHz, -56.0dBm	N/A
62	18	1.0	1428.0	Yes	5573.0MHz, -56.0dBm	N/A
63	18	1.0	1428.0	Yes	5573.0MHz, -56.0dBm	N/A
64	18	1.0	1428.0	Yes	5573.0MHz, -56.0dBm	N/A
65	18	1.0	1428.0	Yes	5573.0MHz, -56.0dBm	N/A
66	18	1.0	1428.0	Yes	5573.0MHz, -56.0dBm	N/A
67	18	1.0	1428.0	Yes	5573.0MHz, -56.0dBm	N/A
68	18	1.0	1428.0	Yes	5573.0MHz, -56.0dBm	N/A
69	18	1.0	1428.0	Yes	5573.0MHz, -56.0dBm	N/A
70	18	1.0	1428.0	Yes	5572.0MHz, -56.0dBm	N/A
71	18	1.0	1428.0	Yes	5572.0MHz, -56.0dBm	N/A
72	18	1.0	1428.0	Yes	5572.0MHz, -56.0dBm	N/A
73	18	1.0	1428.0	Yes	5572.0MHz, -56.0dBm	N/A
74	18	1.0	1428.0	Yes	5572.0MHz, -56.0dBm	N/A
75	18	1.0	1428.0	Yes	5572.0MHz, -56.0dBm	N/A
76	18	1.0	1428.0	Yes	5572.0MHz, -56.0dBm	N/A
77	18	1.0	1428.0	Yes	5572.0MHz, -56.0dBm	N/A
78	18	1.0	1428.0	Yes	5572.0MHz, -56.0dBm	N/A
79	18	1.0	1428.0	Yes	5572.0MHz, -56.0dBm	N/A
80	18	1.0	1428.0	Yes	5571.0MHz, -56.0dBm	N/A

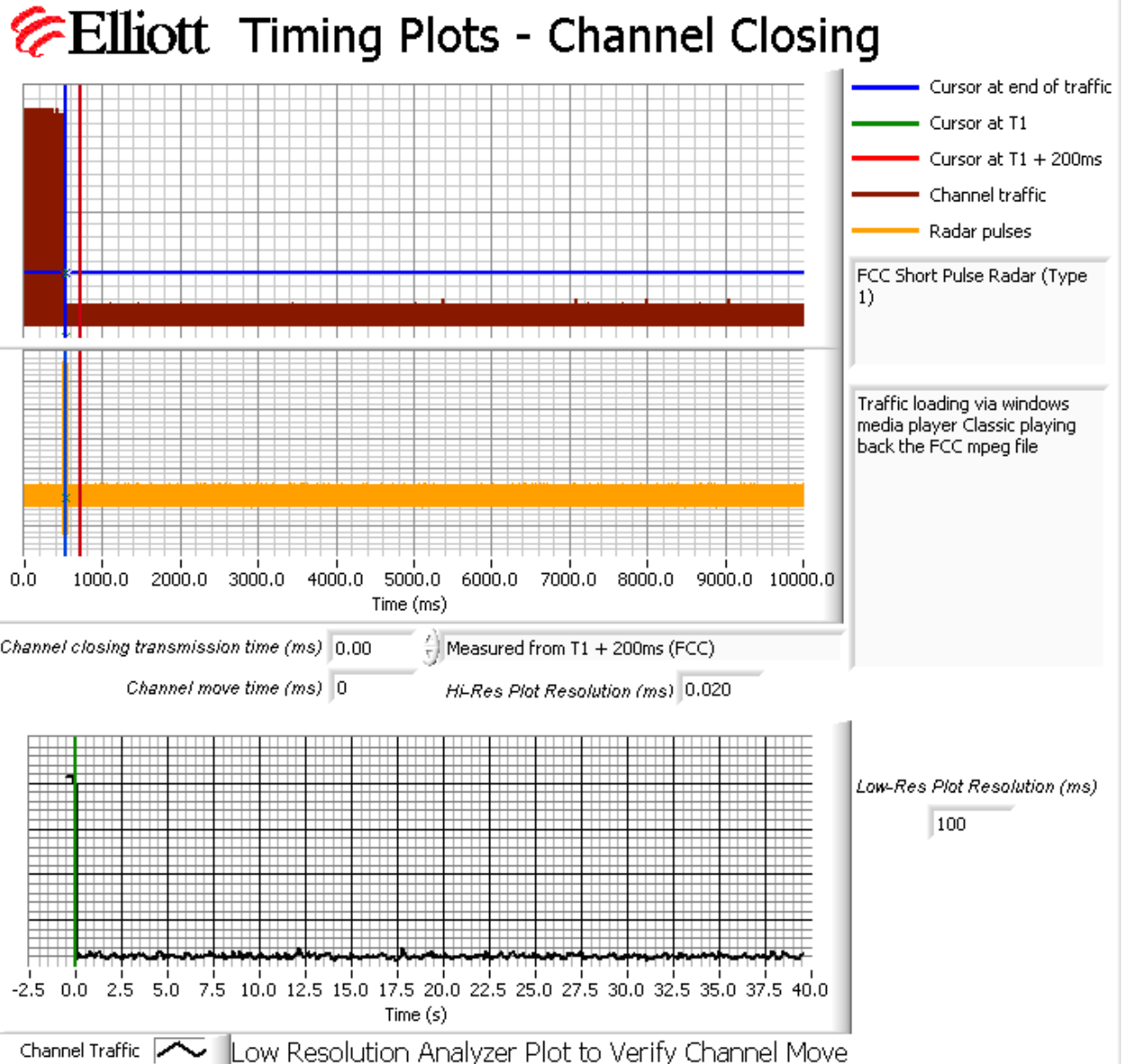
Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
81	18	1.0	1428.0	Yes	5571.0MHz, -56.0dBm	N/A
82	18	1.0	1428.0	Yes	5571.0MHz, -56.0dBm	N/A
83	18	1.0	1428.0	Yes	5571.0MHz, -56.0dBm	N/A
84	18	1.0	1428.0	Yes	5571.0MHz, -56.0dBm	N/A
85	18	1.0	1428.0	Yes	5571.0MHz, -56.0dBm	N/A
86	18	1.0	1428.0	Yes	5571.0MHz, -56.0dBm	N/A
87	18	1.0	1428.0	Yes	5571.0MHz, -56.0dBm	N/A
88	18	1.0	1428.0	Yes	5571.0MHz, -56.0dBm	N/A
89	18	1.0	1428.0	Yes	5571.0MHz, -56.0dBm	N/A
90	18	1.0	1428.0	Yes	5570.0MHz, -56.0dBm	N/A
91	18	1.0	1428.0	Yes	5570.0MHz, -56.0dBm	N/A
92	18	1.0	1428.0	Yes	5570.0MHz, -56.0dBm	N/A
93	18	1.0	1428.0	Yes	5570.0MHz, -56.0dBm	N/A
94	18	1.0	1428.0	Yes	5570.0MHz, -56.0dBm	N/A
95	18	1.0	1428.0	Yes	5570.0MHz, -56.0dBm	N/A
96	18	1.0	1428.0	Yes	5570.0MHz, -56.0dBm	N/A
97	18	1.0	1428.0	Yes	5570.0MHz, -56.0dBm	N/A
98	18	1.0	1428.0	Yes	5570.0MHz, -56.0dBm	N/A
99	18	1.0	1428.0	Yes	5570.0MHz, -56.0dBm	N/A
100	18	1.0	1428.0	Yes	5569.0MHz, -56.0dBm	N/A
101	18	1.0	1428.0	Yes	5569.0MHz, -56.0dBm	N/A
102	18	1.0	1428.0	Yes	5569.0MHz, -56.0dBm	N/A
103	18	1.0	1428.0	Yes	5569.0MHz, -56.0dBm	N/A

Trial #	Pulses/Burst	Pulse Width (us)	PRI (us)	Detected ?	Fr (MHz) and level (dBm)	Hop seq.
104	18	1.0	1428.0	Yes	5569.0MHz, -56.0dBm	N/A
105	18	1.0	1428.0	Yes	5569.0MHz, -56.0dBm	N/A
106	18	1.0	1428.0	Yes	5569.0MHz, -56.0dBm	N/A
107	18	1.0	1428.0	Yes	5569.0MHz, -56.0dBm	N/A
108	18	1.0	1428.0	Yes	5569.0MHz, -56.0dBm	N/A
109	18	1.0	1428.0	Yes	5569.0MHz, -56.0dBm	N/A
110	18	1.0	1428.0	No	5568.0MHz, -56.0dBm	N/A
111	18	1.0	1428.0	No	5568.0MHz, -56.0dBm	N/A
112	18	1.0	1428.0	Yes	5568.0MHz, -56.0dBm	N/A
113	18	1.0	1428.0	No	5568.0MHz, -56.0dBm	N/A
114	18	1.0	1428.0	No	5568.0MHz, -56.0dBm	N/A
115	18	1.0	1428.0	No	5568.0MHz, -56.0dBm	N/A
116	18	1.0	1428.0	No	5568.0MHz, -56.0dBm	N/A
117	18	1.0	1428.0	No	5568.0MHz, -56.0dBm	N/A
118	18	1.0	1428.0	No	5568.0MHz, -56.0dBm	N/A
119	18	1.0	1428.0	No	5568.0MHz, -56.0dBm	N/A

Table 41 FCC UNII Bandwidth Detection Short Pulse Radar (Type 1) Test Results

Appendix C Test Data Tables and Plots for Channel Closing**FCC PART 15 SUBPART E DATA – 5400AP**

Waveform Type	Channel Closing Transmission Time ¹		Channel Move Time		Result
	Measured	Limit	Measured	Limit	
Radar Type 1	0	60 ms	0	10s	Passed
Radar Type 5	0	60 ms	0	10s	Passed

Table 42 FCC Part 15 Subpart E Channel Closing Test Results – 5400AP**Figure 3 Channel closing timing with type 1 radar - 5400AP**

¹ 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

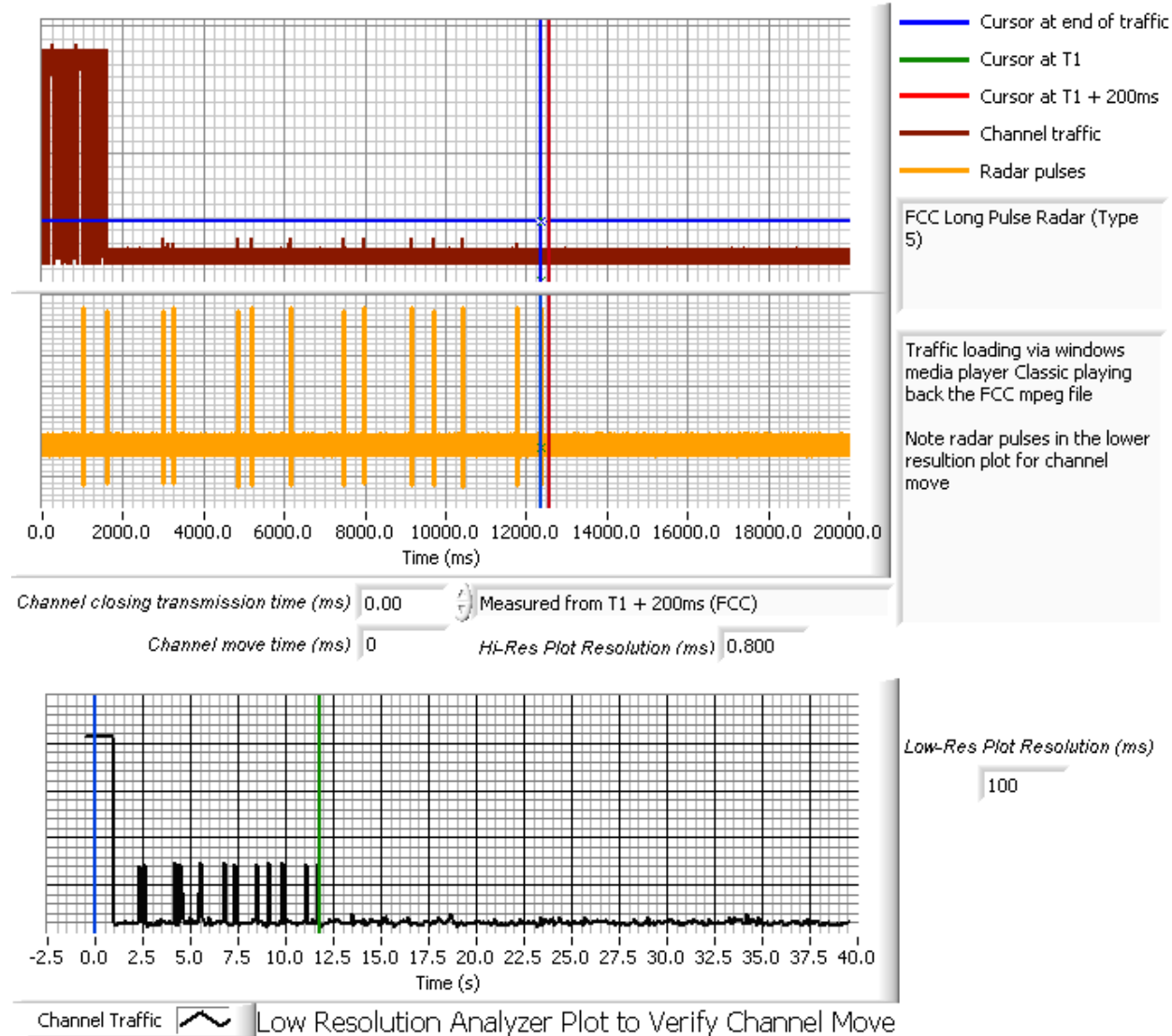
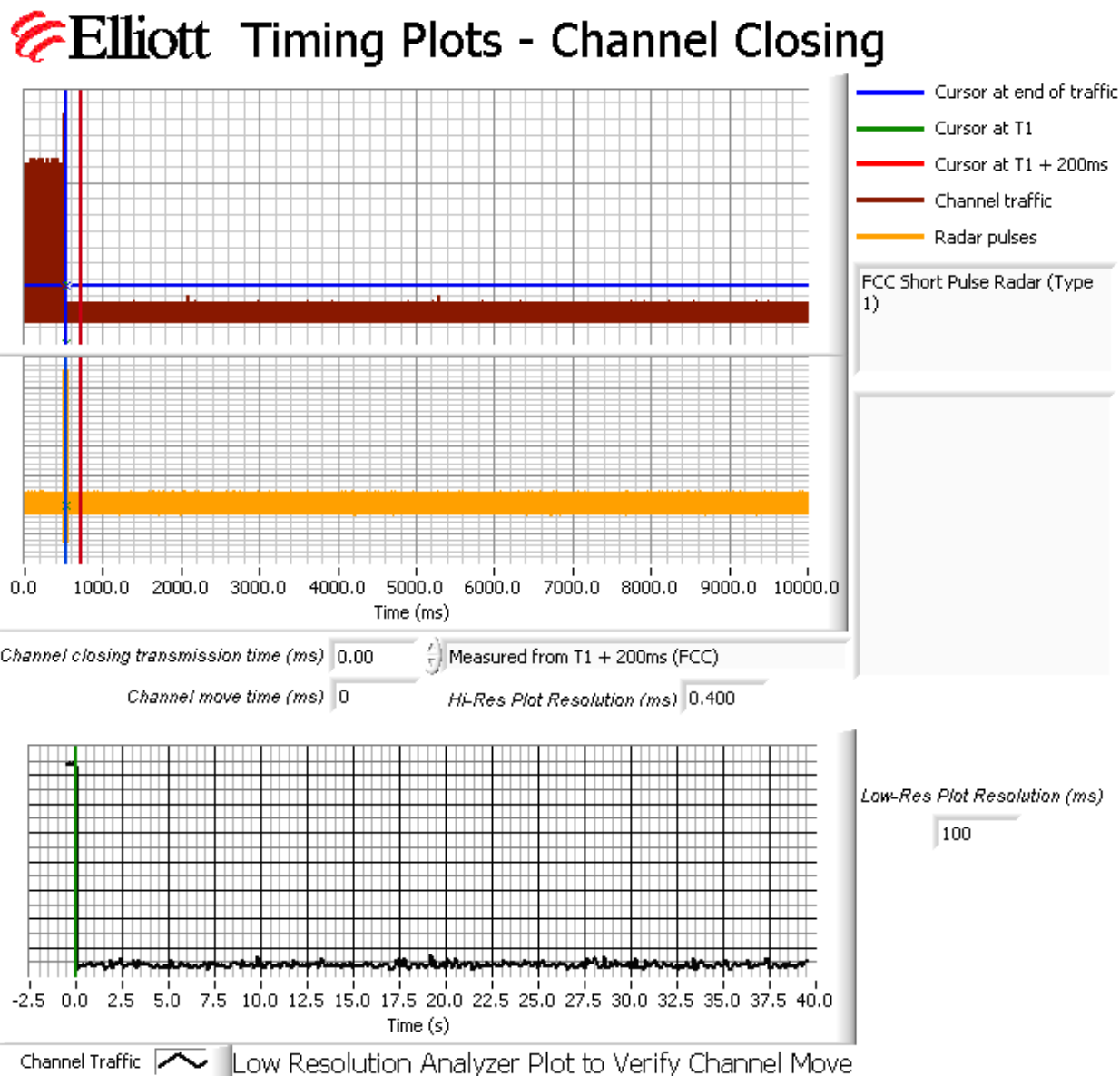


Figure 4 Channel closing timing with type 5 radar - 5400AP

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

FCC PART 15 SUBPART E DATA – 5400SM

Waveform Type	Channel Closing Transmission Time ¹		Channel Move Time		Result
	Measured	Limit	Measured	Limit	
Radar Type 1	0	60 ms	0	10s	Passed

Table 43 FCC Part 15 Subpart E Channel Closing Test Results – 5400SM**Figure 5 Channel closing timing with type 1 radar – 5400SM**

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

¹ 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.

Appendix D Test Data – Channel Availability Check

The first plot shows the start of transmissions approximately 68s after the start of the CAC (no radar applied during the CAC)

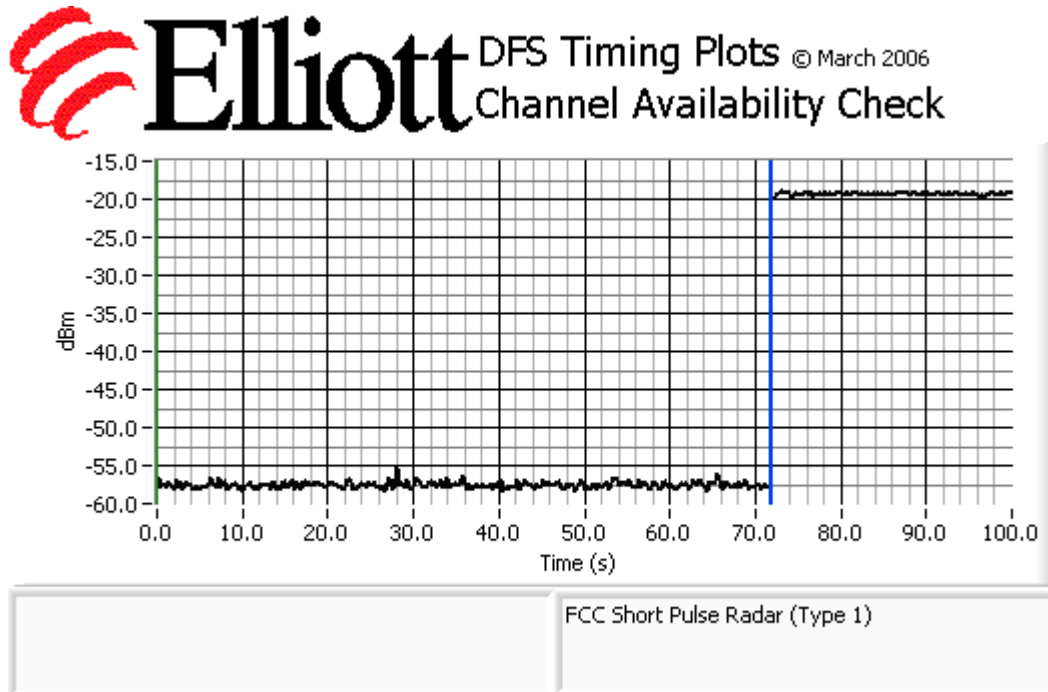


Figure 6 Plot of EUT Start-Up After CAC – 5400AP

The channel availability check (CAC) was made by applying radar type 1 during either the first 3 seconds or last 6 seconds of the CAC period.

The level of the radar signal applied was -57dBm which accounts for the 7 dBi antenna gain. Measurements were made at 5580 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 2.5 minutes 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.

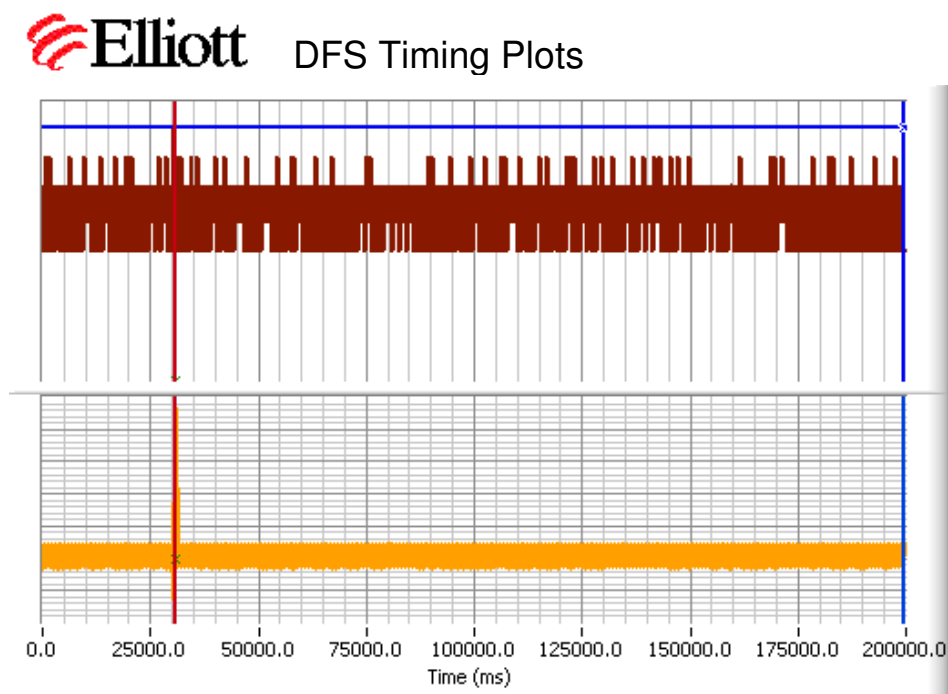
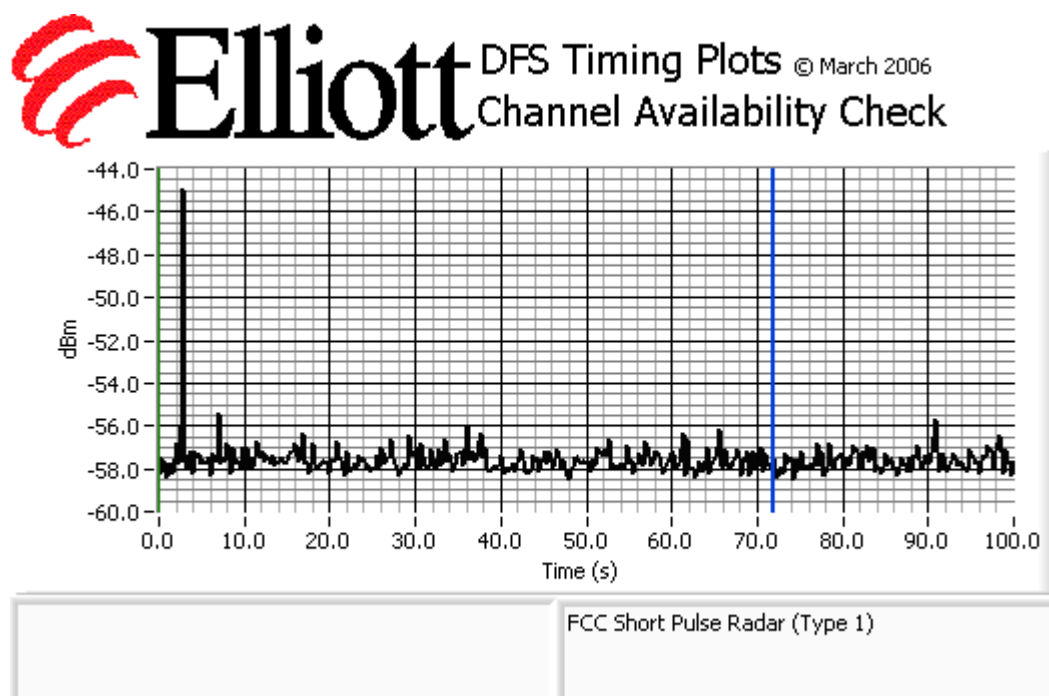
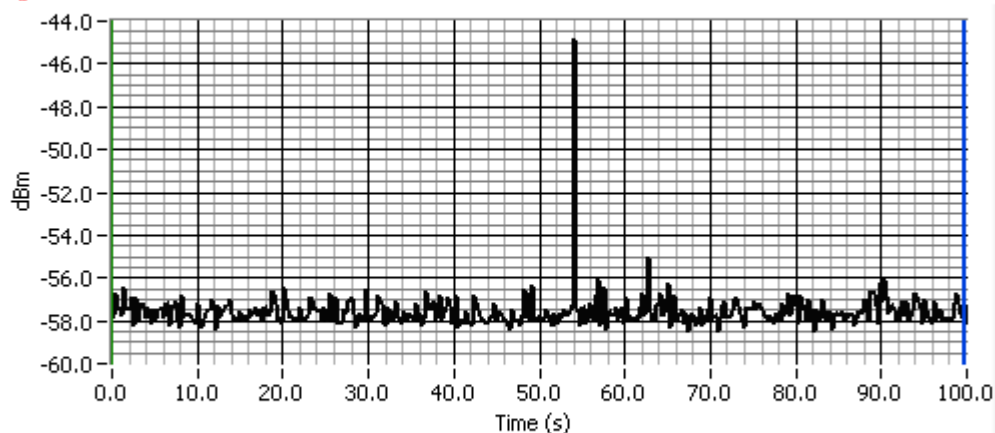


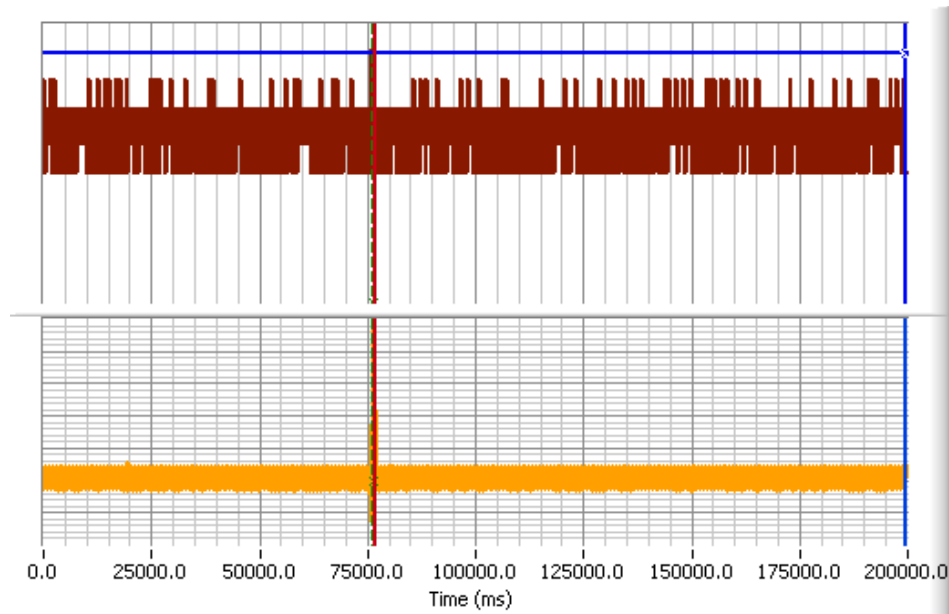
Figure 7 Plots of EUT transmissions with radar applied at start of CAC

Elliott DFS Timing Plots © March 2006 Channel Availability Check



FCC Short Pulse Radar (Type 1)

Elliott DFS Timing Plots



Appendix E Antenna Specification

The antenna in the EUT is a custom patch antenna soldered to the feed point of the radio. The manufacturer declared that the gain of this antenna is 7dBi based on comparison with a known antenna.

Appendix F Test Configuration Photographs

