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TEST REPORT

Covering the
DYNAMIC FREQUENCY SELECTION (DFS)
REQUIREMENTS
OF

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

Cambium Networks
Model(s): C058900P132A (FCC) / C050900P31A (IC)

COMPANY:	Cambium Networks 3800 Golf Road Suite #360 Rolling Meadows, IL, 60008
TEST SITE:	National Technical Systems - Silicon Valley 41039 Boyce Road Fremont, CA 94538
REPORT DATE:	November 27, 2013
FINAL TEST DATE:	October 14, 2013
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ACCREDITED
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REVISION HISTORY

Rev #	Date	Comments	Modified By
-	November 27, 2013	Initial release	-

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SCOPE

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

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

Tests were performed in accordance with these standards together with the current published versions of the basic standards referenced therein including FCC KDB 848637 and the appendix to FCC 06-96 MO&O as outlined in NTS Silicon Valley test procedures. The test results recorded herein are based on a single type test of the Cambium Networks model C058900P132A (FCC) / C050900P31A (IC) and therefore apply only to the tested sample. The sample was selected and prepared by Steve Payne of Cambium Networks.

OBJECTIVE

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

STATEMENT OF COMPLIANCE

The tested sample of the Cambium Networks model C058900P132A (FCC) / C050900P31A (IC) complied with the DFS requirements of FCC Part 15.407(h)(2) and RSS-210 Annex 9.3.

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

DEVIATIONS FROM THE STANDARD

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

TEST RESULTS

TEST RESULTS SUMMARY – FCC Part 15, MASTER DEVICE

Table 1 - FCC Part 15 Subpart E Master Device Test Result Summary						
Description	Radar Type	EUT Frequency	Measured Value	Requirement	Test Data	Status
Channel Availability Check (CAC) Time	Type 1	5550MHz	67s	≥ 60s	Appendix D	Pass
CAC Detection Threshold	Type 1	5550MHz	-64dBm (See note 2)	-64dBm (See note 2)	Appendix D	Pass
In-Service Monitoring Detection Threshold	Type 1 Type 2 Type 3 Type 4 Type 5 Type 6		-64 dBm (See note 2)	-64dBm (See note 2)	Appendix B	Pass
Bandwidth Detection	Type 1	Varies	-16/+17MHz	80% of the 99% BW	-	Pass
Channel closing transmission time	Type 1 Type 5	5550MHz	0ms 0ms	≤ 260ms	Appendix C	Pass
Channel move time	Type 1 Type 5	5550MHz	4ms 0ms	≤ 10s	Appendix C	Pass
Non-occupancy period	-	5550MHz	1800s	> 30 minutes	Appendix C	Pass
Uniform Loading		-	-	Uniform Loading	Refer to operational description	Pass

1) Tests were performed using the conducted test method.
2) The measured detection threshold is based on the master device having an antenna gain of 16 dBi. The measured detection threshold is based on testing the master device using the radiated test method when connected to an antenna with a nominal gain of 16 dBi. The limit is based on an eirp of more than 23 dBm.
3) The in-service monitoring detection threshold and detection probability measurements were made with the device operating in the 5500-5700 MHz band.

TEST RESULTS SUMMARY – FCC Part 15, CLIENT DEVICE

Table 2 - FCC Part 15 Subpart E Client Device Test Result Summary						
Description	Radar Type	EUT Frequency	Measured Value	Requirement	Test Data	Status
Channel closing transmission time	Type 1	5550MHz	0ms		Appendix C	Pass
Channel move time	Type 1	5550MHz	0ms		Appendix C	Pass
Non-occupancy period - associated	Type 1	5550MHz	1800s	> 30 minutes	Appendix C	Pass
Passive Scanning	N/A	N/A	Refer to manufacturer attestation			

1) Tests were performed using the conducted test method.
2) Channel availability check and detection threshold 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

EQUIPMENT UNDER TEST (EUT) DETAILS

GENERAL

The Cambium Networks model C058900P132A (FCC) / C050900P31A (IC) is an enhanced Point to Multipoint 802.11 frame based wireless radio capable of operation as both a master and client. The C058900P132A (FCC) / C050900P31A (IC) is part of a managed network professionally installed.

The sample was received on October 14, 2013 and tested on October 14, 2013. The EUT consisted of the following component(s):

Manufacturer	Model	Description	Serial Number
Cambium Networks	C058900P132A (FCC) / C050900P31A (ROW) (integrated)	802.11 Access Point FCC ID: Z8H89FT0005 / IC: 109W-0005	000456C02702
Cambium Networks	C058900P132A (FCC) / C050900P31A (ROW) (connectorized)	802.11 Access Point FCC ID: Z8H89FT0005/ IC: 109W-0005	000456C1CFAF

The EUT can be operated also as a station and was tested as such. The sample with connectors was modified from a standard integrated unit to permit conducted testing. It is not sold with antenna connections.

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

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

☒ Master Device 5250-5350 MHz

☒ Master Device 5470-5725 MHz (excluding 5600-5650 MHz)

☒ Client Device (no In Service Monitoring, no Ad-Hoc mode)

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

	5250 – 5350 MHz	5470 – 5725 MHz
Lowest Antenna Gain (dBi)	16	16
Highest Antenna Gain (dBi)	16	16
EIRP Output Power (dBm)	30	30

☒ Power can exceed 200mW eirp

Channel Protocol

☐ IP Based

☒ Frame Based

ENCLOSURE

The EUT enclosure measures approximately 8.5 by 22 by 3.5 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

Manufacturer	Model	Description	Serial Number	FCC ID
Cambium Networks	*C058900P112A*	*Station radio (conducted mode testing)*	*000456C00D8A*	*Z8H89FT0006*
Cambium Networks	*C050900P132A*	*Station radio (radiated mode testing)*	*000456C1CFAF*	*Z8H89FT0005*
Motorola	ML900	Laptop Computer	3433FQ0285	DoC
Motorola	ML910	Laptop Computer	3433JG0021	DoC

The italicized device was the client device.

EUT INTERFACE PORTS

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

Port	Connected To	Cable(s)		
		Description	Shielded or Unshielded	Length (m)
Ethernet (EUT)	POE Injector	CAT5	Unshielded	10
Ethernet (POE Injector)	Motorola Laptop 1	CAT5	Unshielded	1
Ethernet(Slave)	POE Injector	CAT5	Unshielded	10
Ethernet(POE Injector	Motorola Laptop 2	CAT5	Unshielded	1

EUT OPERATION

The EUT was operating with the following software. The software is secured by digital software signature, anti-cloning mechanism and hardware security bits so no software or user can change power, operating frequency or disable DFS function.

Master Device: 1.1.6 RC16

Client Device: 1.1.6 RC16

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

The start of the Channel Availability Check was 41 seconds after power was applied to the radio.

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

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

The data stream is frame based, and configured with 75/25 downlink/uplink traffic.

RADAR WAVEFORMS

Table 3 - EN 302 502 V1.2.1 Radar test Waveforms simulating fixed frequency radars

Radar test signal	Pulse width W [µs]	Pulse repetition frequency PRF [pps]	Pulses / burst	Detection probability
1 – Fixed	1	750	15	P_d > 60%
2 – Variable	1, 2, 5	200, 300, 500, 800, 1000	10	P_d > 60%
3 – Variable	10, 15	200, 300, 500, 800, 1000	15	P_d > 60%
4– Variable	1, 2, 5, 10, 15	1200, 1500, 1600	15	P_d > 60%
5– Variable	1, 2, 5, 10, 15	2300, 3000, 3500, 4000	25	P_d > 60%
6– Variable modulated (chirp ±2.5 MHz)	20, 30	2000, 3000, 4000	20	P_d > 60%

Table 4 - EN 302 502 V1.2.1 Radar test Waveforms simulating Frequency Hopping radars

Radar test signal	Pulse width [µs]	Pulse repetition frequency (pps)	Pulses per burst	Burst length [ms]	Bursts per Trial	Pulses per modulation (note 3)	Pulse modulation (note 1)	Detection probability Pd with 30% channel load
1	1	3000	3000	3	8	10	None	(see note 2)
2	20	4500	4500	2	2	15	Chirp	(see note 2)

Note 1: Modulation to be used for the radar test signal is a chirp modulation with a ±2.5 MHz frequency deviation.
Note 2: For ChS = 10MHz, Pd >60%; for ChS = 20MHz, Pd >70%
Note 3: For each of the trials, the burst interval will increase from 1.25 ms to 37.5ms in steps of 1.25ms for radar signal 1 and from 5ms to 150ms in steps of 5ms for radar signal 2.

Table 5 - EN 301 893 V1.7.1 Radar test Waveforms

Radar test signal	Pulse width [µs]		Pulse repetition frequency (pps)		Number of prfs	Pulses per Burst per prf
	Min	Max	Min	Max		
Reference	1	-	700	-	1	18
1	0.5	5	200	1000	1	10
2	0.5	15	200	1600	1	15
3	0.5	15	2300	4000	1	25
4, chirp modulated ±2.5 MHz	20	30	2000	4000	1	20
5	0.5	2	300	400	2 or 3	10
6	0.5	2	400	1200	2 or 3	15

The number of pulses per burst when evaluating the CAC and off-channel CAC is 18 for radar types 1,2,5 and 6.

Table 6 - KCC Notice No. 2010-48 Radar Waveforms				
Radar test signal	Pulse width W [µs]	Pulse repetition frequency PRF [pps]	Pulses / burst	Detection probability
1 – Fixed	1.0	700	18	60%
2 – Fixed	1.0	1800	10	60%
3 – Fixed	2.0	330	70	60%
Frequency Hopping	1.0	3000	See note	60%
The frequency hopping radar has 3 pulses per hop, 100 hops per burst and a hopping rate of 1kHz.				

Table 7 - FCC Short Pulse Radar Test Waveforms					
Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses / burst	Minimum Detection Percentage	Minimum Number of Trials
1	1	1428	18	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120

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

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

Table 10 - Japan Fixed Radar Parameters – W53 Band (5250-5350 MHz)				
Radar test signal	Pulse width W [µs]	Pulse repetition frequency PRF [pps]	Pulses / burst	Detection probability
Fixed Pulse 1	1.0	700	18	See note below
Fixed Pulse 2	2.5	260	18	
Device passes if it detects at least 15 of the first 20 trials or at least 11 times in the first 20 trials and at least 24 times in 40 trials.				

Table 11 - Japan Fixed and Variable Radar Parameters – W56 Band (5500-5700MHz)				
Radar test signal	Pulse width W [µs]	Pulse repetition frequency PRF [pps]	Pulses / burst	Detection probability
Fixed Pulse 1	0.5	720	18	See note below
Fixed Pulse 2	1.0	700	18	
Fixed Pulse 3	2.0	250	18	
Variable Pulse 4	1 - 5	4,347 – 6,667 Hz	23-29	
Variable Pulse 5	6 - 10	2,000 – 5,000 Hz	16-18	
Variable Pulse 6	11 - 20	2,000 – 5,000 Hz	12-16	
For each individual test signal type, the device passes if it detects at least 15 of the first 20 trials or at least 11 times in the first 20 trials and at least 24 times in 40 trials. In addition the mean of the probabilities needs to be at least 80%.				

Table 12 - Japan Chirped Radar Parameters – W56 Band (5500-5700MHz)					
Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Pulses / burst	Number of Bursts
Chirp	50-100	5-20	1000-2000	1-3	8-20
Device passes if it detects at least 18 of the first 20 trials or at least 15 times in the first 20 trials and at least 32 times in 40 trials.					

Table 13 - Japan Frequency Hopping Radar Parameters – W56 Band (5500-5700MHz)					
Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses / hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)
Hopping	1	333	9	0.333	300
Device passes if it detects at least 16 of the first 20 trials or at least 11 times in the first 20 trials and at least 28 times in 40 trials.					

DFS TEST METHODS

RADIATED TEST METHOD

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

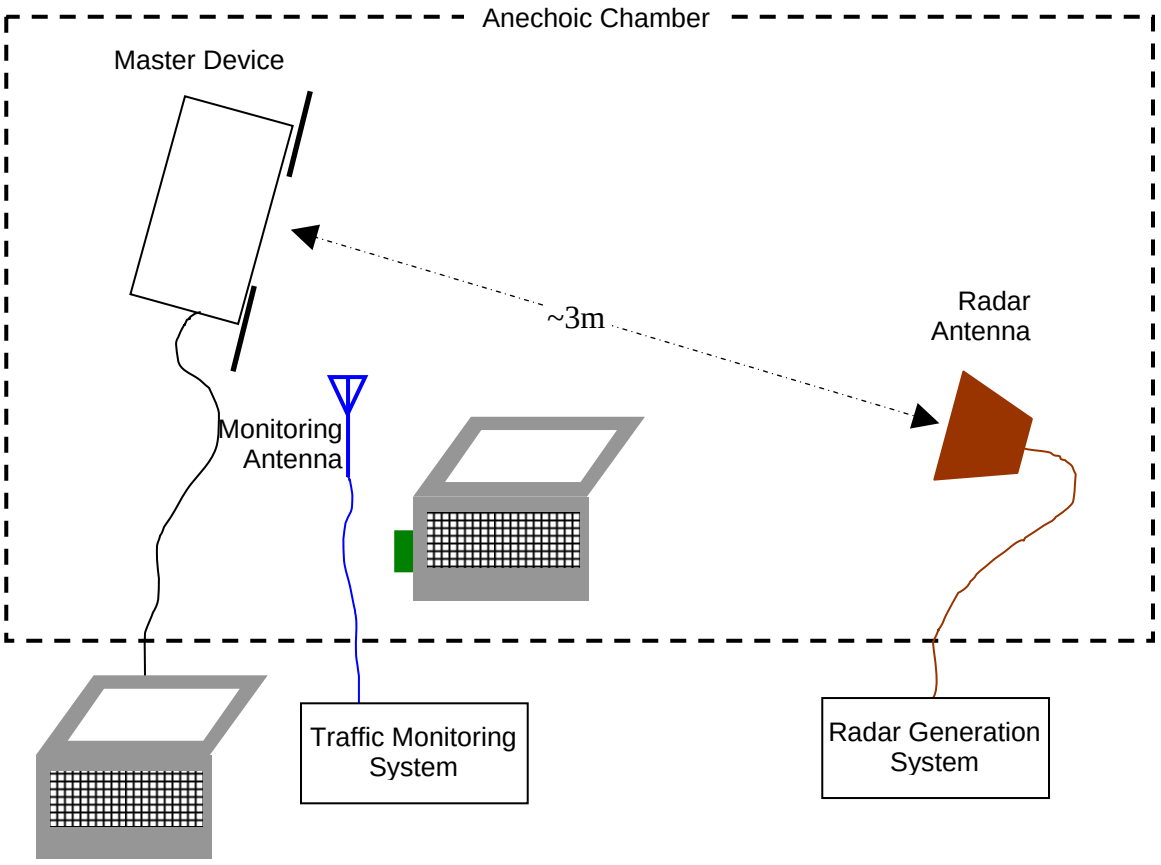

Figure 1 Test Configuration for radiated Measurement Method

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

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

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

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

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

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.

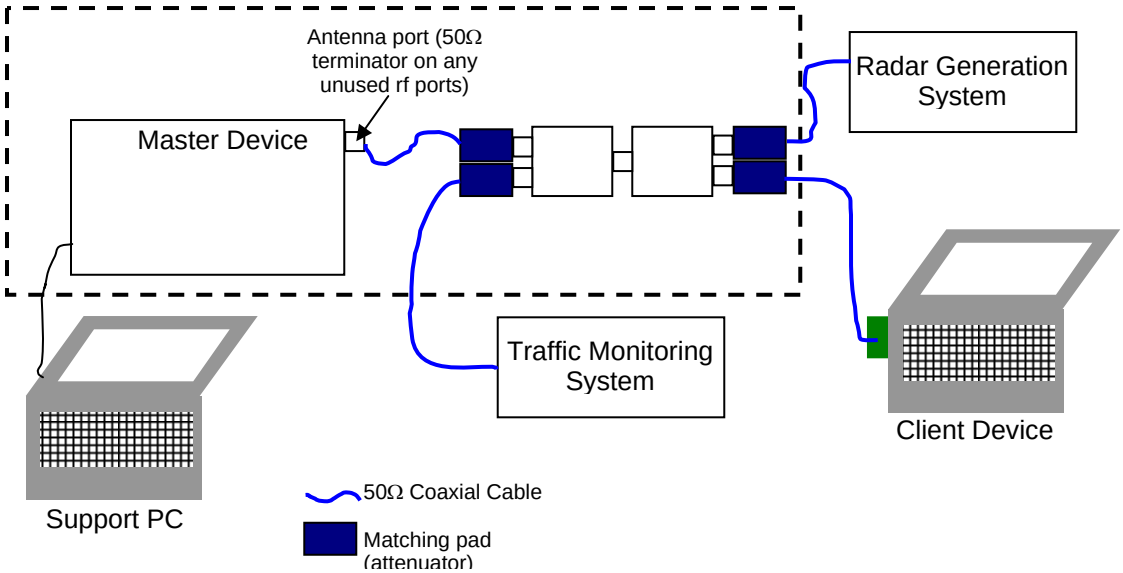

Figure 2 Test Configuration for Conducted Measurement Method

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, G_{RDD} (dBi):

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

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 NTS Silicon Valley custom software to produce the required waveforms, with the capability to produce both un-modulated and modulated (FM Chirp) pulses. Where there are multiple values for a specific radar parameter then the software selects a value at random and, for FCC tests, the software verifies that the resulting waveform is truly unique.

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

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

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

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

CHANNEL MONITORING SYSTEM

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

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

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

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

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

DFS MEASUREMENT METHODS

DFS RADAR DETECTION BANDWIDTH

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

DFS – CHANNEL CLOSING TRANSMISSION TIME AND CHANNEL MOVE TIME

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

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

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

ETSI[1] – 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 1000ms in the 5250-5350MHz, 5470-5725MHz bands and 260ms in the 5725-5850MHz band.

DFS – CHANNEL NON-OCCUPANCY AND VERIFICATION OF PASSIVE SCANNING

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

For devices with a client-mode that are being evaluated against FCC rules the manufacturer must supply an attestation letter stating that the client device does not employ any active scanning techniques (i.e. does not transmit in the DFS bands without authorization from a Master device).

[1] This measurement method is used for MIC Table No. 45.

DFS CHANNEL AVAILABILITY CHECK TIME

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

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

To evaluate the channel availability check, a single burst of each radar type is applied at random periods during the 60-second channel availability check and it is verified that the device does not use the channel by continuing to monitor the channel for a period of at least 60 seconds. The test is performed a total of four times for each radar type.

UNIFORM LOADING

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

Compliance with the channel loading requirement, where appropriate (i.e. when channel selection is not determined under control of the network), is demonstrated by power cycling the product multiple times and recording the channel selected for use. The distribution of channels is compared against a probabilistic channel selection to verify that the distribution falls within the expected random distribution (i.e. 1/n probability for each channel, given n channels) for the number of trials performed.

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

Manufacturer	Description	Model #	Asset #	Cal Due
Hewlett Packard	EMC Spectrum Analyzer, 9 kHz - 6.5 GHz	8595EM	780	7-Mar-14
Agilent Technologies	PSG Vector Signal Generator (250kHz - 20GHz)	E8267C	1877	05-Jun-14
Tektronix	500MHz, 2CH, 5GS/s Scope	TDS5052B	2118	22-Oct-13
EMCO	Antenna, Horn, 1-18 GHz	3115	786	19-Dec-13
EMCO	Antenna, Horn, 1-18 GHz	3117	1662	25-May-14

Appendix B Test Data Tables for Radar Detection Probability

Table 14 - Detection Bandwidth Measurements (Bandwidth: +17MHz /-16MHz)					
EUT Frequency	Radar Type	Radar Frequency	# Detected	# Not Detected	Success (%)
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5533.00 MHz	1	3	25
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5534.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5535.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5536.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5537.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5538.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5539.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5540.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5541.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5542.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5543.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5544.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5545.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5546.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5547.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5548.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5549.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5550.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5551.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5552.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5553.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5554.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5555.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5556.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5557.00 MHz	10	0	100

Table 14 - Detection Bandwidth Measurements (Bandwidth: +17MHz /-16MHz)					
EUT Frequency	Radar Type	Radar Frequency	# Detected	# Not Detected	Success (%)
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5558.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5559.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5560.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5561.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5562.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5563.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5564.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5565.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5566.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5567.00 MHz	10	0	100
5550.00 MHz	FCC Short Pulse Radar (Type 1)	5568.00 MHz	1	3	25

Table 15 - Summary of All Results - Conducted				
Waveform Name	Pd (%)	Pd Required (%)	Number of Trials	Status
FCC Short Pulse Radar (Type 1)	73.3 %	60.0 %	30	PASSED
FCC Short Pulse Radar (Type 2)	100.0 %	60.0 %	30	PASSED
FCC Short Pulse Radar (Type 3)	100.0 %	60.0 %	30	PASSED
FCC Short Pulse Radar (Type 4)	100.0 %	60.0 %	30	PASSED
Aggregate of above results	93.3 %	80.0 %	120	PASSED
Long Sequence	100.0 %	80.0 %	30	PASSED
FCC frequency hopping radar (Type 6)	100.0 %	70.0 %	34	PASSED

Table 16 - FCC Short Pulse Radar (Type 1) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	18	1.0	1428.0	Yes	5550.0MHz, -50.0dBm	Single burst (10/16/2013 09:25:05 AM)
2	18	1.0	1428.0	Yes	5545.0MHz, -50.0dBm	Single burst (10/16/2013 09:26:16 AM)
3	18	1.0	1428.0	Yes	5540.0MHz, -50.0dBm	Single burst (10/16/2013 09:28:06 AM)
4	18	1.0	1428.0	Yes	5560.0MHz, -50.0dBm	Single burst (10/16/2013 09:29:00 AM)
5	18	1.0	1428.0	Yes	5555.0MHz, -50.0dBm	Single burst (10/16/2013 09:30:25 AM)
6	18	1.0	1428.0	No	5550.0MHz, -50.0dBm	Single burst (10/16/2013 09:32:23 AM)
7	18	1.0	1428.0	Yes	5545.0MHz, -50.0dBm	Single burst (10/16/2013 09:32:54 AM)

Table 16 - FCC Short Pulse Radar (Type 1) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
8	18	1.0	1428.0	No	5540.0MHz, -50.0dBm	Single burst (10/16/2013 09:34:23 AM)
9	18	1.0	1428.0	Yes	5560.0MHz, -49.0dBm	Single burst (10/16/2013 09:35:06 AM)
10	18	1.0	1428.0	Yes	5555.0MHz, -49.0dBm	Single burst (10/16/2013 09:36:31 AM)
11	18	1.0	1428.0	Yes	5550.0MHz, -49.0dBm	Single burst (10/16/2013 09:38:02 AM)
12	18	1.0	1428.0	Yes	5545.0MHz, -49.0dBm	Single burst (10/16/2013 09:39:34 AM)
13	18	1.0	1428.0	Yes	5540.0MHz, -49.0dBm	Single burst (10/16/2013 09:41:21 AM)
14	18	1.0	1428.0	Yes	5560.0MHz, -49.0dBm	Single burst (10/16/2013 09:43:11 AM)
15	18	1.0	1428.0	Yes	5555.0MHz, -49.0dBm	Single burst (10/16/2013 09:45:01 AM)
16	18	1.0	1428.0	Yes	5550.0MHz, -49.0dBm	Single burst (10/16/2013 09:46:28 AM)
17	18	1.0	1428.0	Yes	5545.0MHz, -49.0dBm	Single burst (10/16/2013 09:47:52 AM)
18	18	1.0	1428.0	Yes	5540.0MHz, -49.0dBm	Single burst (10/16/2013 09:49:26 AM)
19	18	1.0	1428.0	No	5560.0MHz, -49.0dBm	Single burst (10/16/2013 09:50:46 AM)
20	18	1.0	1428.0	No	5555.0MHz, -49.0dBm	Single burst (10/16/2013 09:51:06 AM)
21	18	1.0	1428.0	No	5550.0MHz, -49.0dBm	Single burst (10/16/2013 09:51:36 AM)
22	18	1.0	1428.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 09:54:04 AM)
23	18	1.0	1428.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 09:55:43 AM)
24	18	1.0	1428.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 09:57:54 AM)
25	18	1.0	1428.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 09:59:37 AM)
26	18	1.0	1428.0	No	5550.0MHz, -48.0dBm	Single burst (10/16/2013 10:01:31 AM)
27	18	1.0	1428.0	No	5545.0MHz, -48.0dBm	Single burst (10/16/2013 10:01:57 AM)
28	18	1.0	1428.0	No	5540.0MHz, -48.0dBm	Single burst (10/16/2013 10:02:29 AM)
29	18	1.0	1428.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 10:02:56 AM)
30	18	1.0	1428.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 10:04:30 AM)

Table 17 - FCC Short Pulse Radar (Type 2) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	27	4.0	218.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 10:10:13 AM)
2	26	1.8	221.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 10:12:15 AM)
3	29	4.1	230.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 10:14:25 AM)
4	25	3.5	170.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 10:20:32 AM)
5	24	2.2	174.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 10:35:58 AM)
6	25	4.7	221.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 10:37:22 AM)
7	26	4.4	200.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 10:38:41 AM)
8	28	2.1	155.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 10:40:15 AM)
9	28	2.4	200.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 10:41:42 AM)
10	26	2.3	163.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 10:43:33 AM)
11	27	2.9	227.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 10:45:09 AM)
12	24	2.6	195.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 10:46:45 AM)
13	25	2.9	161.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 10:48:52 AM)
14	29	4.7	206.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 10:50:59 AM)
15	25	3.7	167.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 10:52:27 AM)
16	27	4.1	173.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 10:54:14 AM)
17	26	1.7	199.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 10:56:41 AM)
18	26	3.1	191.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 10:58:44 AM)
19	24	3.6	154.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 11:00:31 AM)
20	27	4.0	153.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 11:02:44 AM)
21	28	3.5	176.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 11:04:29 AM)
22	29	4.3	183.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 11:06:22 AM)
23	23	5.0	206.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 11:08:04 AM)
24	28	1.4	166.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 11:10:41 AM)
25	23	2.1	179.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 11:12:50 AM)
26	28	1.3	210.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 11:15:02 AM)

Table 17 - FCC Short Pulse Radar (Type 2) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
27	26	1.8	182.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 11:17:06 AM)
28	29	3.5	166.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 11:18:29 AM)
29	26	2.5	169.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 11:20:01 AM)
30	25	1.3	218.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 11:21:41 AM)

Table 18 - FCC Short Pulse Radar (Type 3) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	18	6.6	334.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 11:24:36 AM)
2	17	6.4	219.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 11:26:23 AM)
3	17	6.9	326.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 11:28:54 AM)
4	17	8.1	379.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 11:31:43 AM)
5	17	6.7	468.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 11:33:55 AM)
6	16	6.4	322.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 11:35:40 AM)
7	17	9.5	318.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 11:37:50 AM)
8	17	8.3	349.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 11:39:37 AM)
9	17	9.7	248.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 11:41:24 AM)
10	16	6.7	447.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 11:43:43 AM)
11	17	8.8	439.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 11:45:03 AM)
12	17	8.5	304.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 11:46:46 AM)
13	18	6.8	444.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 11:48:06 AM)
14	17	9.9	457.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 11:50:32 AM)
15	18	6.6	381.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 11:51:55 AM)
16	16	9.0	294.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 11:53:22 AM)
17	16	6.2	467.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 11:55:54 AM)
18	16	8.5	229.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 11:57:55 AM)
19	17	7.6	261.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 11:59:07 AM)
20	16	9.6	409.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 12:00:33 PM)

Table 18 - FCC Short Pulse Radar (Type 3) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
21	17	8.6	324.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 12:05:23 PM)
22	17	6.5	260.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 12:06:28 PM)
23	17	7.0	359.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 01:01:42 PM)
24	17	10.0	231.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 01:03:03 PM)
25	16	6.0	444.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 01:04:35 PM)
26	17	8.4	265.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 01:05:37 PM)
27	17	6.1	357.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 01:06:55 PM)
28	17	8.9	311.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 01:08:18 PM)
29	16	7.0	387.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 01:09:28 PM)
30	17	6.8	248.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 01:10:54 PM)

Table 19 - FCC Short Pulse Radar (Type 4) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	14	19.8	311.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 01:13:05 PM)
2	14	18.2	480.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 01:15:38 PM)
3	16	12.0	266.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 01:17:33 PM)
4	15	11.9	220.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 01:19:51 PM)
5	12	14.8	247.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 01:21:27 PM)
6	14	15.4	453.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 01:23:58 PM)
7	12	13.3	406.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 01:26:13 PM)
8	16	13.5	471.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 01:27:45 PM)
9	15	12.5	491.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 01:29:54 PM)
10	14	14.4	390.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 01:31:55 PM)
11	15	17.8	356.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 01:34:17 PM)
12	16	17.4	478.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 01:35:47 PM)
13	13	12.0	449.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 01:37:08 PM)
14	16	16.8	209.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 01:38:51 PM)

Table 19 - FCC Short Pulse Radar (Type 4) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
15	14	15.2	339.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 01:40:44 PM)
16	15	14.0	483.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 01:42:27 PM)
17	14	17.5	243.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 01:43:53 PM)
18	15	17.9	460.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 01:45:32 PM)
19	15	13.1	394.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 01:46:58 PM)
20	14	12.8	320.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 01:48:42 PM)
21	14	11.8	255.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 01:49:56 PM)
22	15	15.1	397.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 01:53:02 PM)
23	12	15.5	356.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 01:54:27 PM)
24	12	13.5	357.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 01:55:52 PM)
25	14	15.3	292.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 01:57:24 PM)
26	16	18.0	370.0	Yes	5550.0MHz, -48.0dBm	Single burst (10/16/2013 02:00:47 PM)
27	14	17.1	404.0	Yes	5545.0MHz, -48.0dBm	Single burst (10/16/2013 02:02:18 PM)
28	14	19.3	398.0	Yes	5540.0MHz, -48.0dBm	Single burst (10/16/2013 02:04:31 PM)
29	16	14.5	309.0	Yes	5560.0MHz, -48.0dBm	Single burst (10/16/2013 02:06:51 PM)
30	14	17.4	431.0	Yes	5555.0MHz, -48.0dBm	Single burst (10/16/2013 02:08:28 PM)

Table 20 - Long Sequence Waveform Summary - Conducted		
Long Sequence Trial	Result	Radar Frequency / Amplitude
Trial #1	Detected	5550.0MHz, -48.0dBm
Trial #2	Detected	5545.0MHz, -48.0dBm
Trial #3	Detected	5540.0MHz, -48.0dBm
Trial #4	Detected	5560.0MHz, -48.0dBm
Trial #5	Detected	5555.0MHz, -48.0dBm
Trial #6	Detected	5550.0MHz, -48.0dBm
Trial #7	Detected	5545.0MHz, -48.0dBm
Trial #8	Detected	5540.0MHz, -48.0dBm
Trial #9	Detected	5560.0MHz, -48.0dBm

Table 20 - Long Sequence Waveform Summary - Conducted		
Long Sequence Trial	Result	Radar Frequency / Amplitude
Trial #10	Detected	5555.0MHz, -48.0dBm
Trial #11	Detected	5550.0MHz, -48.0dBm
Trial #12	Detected	5545.0MHz, -48.0dBm
Trial #13	Detected	5540.0MHz, -48.0dBm
Trial #14	Detected	5560.0MHz, -48.0dBm
Trial #15	Detected	5555.0MHz, -48.0dBm
Trial #16	Detected	5550.0MHz, -48.0dBm
Trial #17	Detected	5545.0MHz, -48.0dBm
Trial #18	Detected	5540.0MHz, -48.0dBm
Trial #19	Detected	5560.0MHz, -48.0dBm
Trial #20	Detected	5555.0MHz, -48.0dBm
Trial #21	Detected	5550.0MHz, -48.0dBm
Trial #22	Detected	5545.0MHz, -48.0dBm
Trial #23	Detected	5540.0MHz, -48.0dBm
Trial #24	Detected	5560.0MHz, -48.0dBm
Trial #25	Detected	5555.0MHz, -48.0dBm
Trial #26	Detected	5550.0MHz, -48.0dBm
Trial #27	Detected	5545.0MHz, -48.0dBm
Trial #28	Detected	5540.0MHz, -48.0dBm
Trial #29	Detected	5560.0MHz, -48.0dBm
Trial #30	Detected	5555.0MHz, -48.0dBm

Table 21 - 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 (s)
1	3	96.5	9	1817.0	1006.0	0.471545
2	1	80.6	11	-	-	0.929138
3	1	81.7	8	-	-	1.956605
4	1	76.0	14	-	-	2.330245
5	2	79.2	14	1256.0	-	2.768882
6	1	87.0	15	-	-	3.595698
7	3	86.6	15	1459.0	1360.0	4.467069

Table 21 - 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 (s)
8	2	71.7	9	1762.0	-	4.900067
9	1	66.7	13	-	-	5.501788
10	2	63.2	11	1150.0	-	6.275444
11	3	84.8	11	1759.0	1642.0	6.998566
12	3	73.2	17	1174.0	1628.0	7.781849
13	1	82.9	7	-	-	8.505256
14	3	78.5	14	1968.0	1224.0	8.843274
15	2	91.0	9	1305.0	-	9.400707
16	2	90.7	10	1489.0	-	10.133620
17	2	90.1	9	1352.0	-	10.752290
18	2	78.4	20	1028.0	-	11.905182

Table 22 - 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 (s)
1	2	98.8	9	1626.0	-	0.626323
2	2	59.2	7	1644.0	-	0.919471
3	3	78.4	7	1744.0	1972.0	1.414719
4	2	91.1	17	1456.0	-	2.402093
5	2	83.5	17	1425.0	-	3.185095
6	3	55.7	15	1859.0	1059.0	4.014468
7	3	68.5	5	1151.0	1512.0	4.509343
8	2	70.1	10	1400.0	-	5.002466
9	1	95.9	14	-	-	5.802500
10	3	53.2	11	1915.0	1978.0	6.844659
11	2	72.2	19	1553.0	-	7.682202
12	1	68.9	19	-	-	8.411890
13	1	53.0	11	-	-	8.933702
14	2	52.1	12	1704.0	-	9.719005
15	2	60.5	18	1525.0	-	10.526651
16	3	61.5	12	1945.0	1352.0	11.223792
17	1	79.0	14	-	-	11.562896

Table 23 - 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 (s)
1	2	98.8	16	1304.0	-	0.058863
2	2	74.9	7	1180.0	-	0.738962
3	2	76.2	8	1436.0	-	1.490654
4	1	55.8	8	-	-	2.076218
5	3	67.0	8	1447.0	1700.0	2.974560
6	2	67.5	10	1802.0	-	3.526880
7	2	78.5	8	1227.0	-	4.076260
8	1	57.1	16	-	-	4.801724
9	1	75.3	13	-	-	5.401167
10	1	93.7	6	-	-	5.901332
11	2	84.4	7	1958.0	-	6.850328
12	1	61.9	13	-	-	7.434171
13	2	82.2	16	1551.0	-	7.681611
14	2	67.8	18	1790.0	-	8.365357

Table 23 - 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 (s)
15	1	63.8	11	-	-	9.417456
16	2	56.3	17	1113.0	-	9.533137
17	2	78.3	9	1369.0	-	10.484750
18	2	51.4	15	1661.0	-	10.847192
19	1	96.9	17	-	-	11.772420

Table 24 - 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 (s)
1	2	73.2	18	1545.0	-	0.239361
2	1	88.3	10	-	-	0.951047
3	1	80.8	12	-	-	1.990997
4	3	94.5	13	1962.0	1138.0	2.288525
5	2	61.0	8	1712.0	-	2.703925
6	1	90.5	18	-	-	3.371739
7	3	60.0	17	1776.0	1892.0	4.034113
8	1	88.7	8	-	-	4.880059
9	2	99.8	11	1033.0	-	5.898134
10	1	97.4	15	-	-	6.275579
11	1	74.2	20	-	-	7.315459
12	2	66.3	5	1566.0	-	7.840306
13	2	99.8	8	1169.0	-	8.028422
14	2	77.1	18	1686.0	-	8.811966
15	1	70.6	12	-	-	9.438603
16	2	66.9	17	1280.0	-	10.257683
17	3	79.9	9	1725.0	1190.0	10.863682
18	3	99.2	16	1855.0	1384.0	11.844871

Table 25 - Long Sequence Waveform Trial#5 (Detected)						
Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	3	51.7	17	1619.0	1164.0	0.429581
2	1	64.5	11	-	-	1.341231
3	2	52.3	8	1584.0	-	1.946453
4	2	83.7	15	1052.0	-	3.259624
5	1	58.9	12	-	-	3.474494
6	3	60.3	19	1238.0	1297.0	4.605008
7	3	95.2	7	1785.0	1316.0	5.575700
8	3	68.6	10	1524.0	1489.0	6.059361
9	1	93.2	12	-	-	7.425770
10	1	67.4	6	-	-	8.550655
11	1	56.1	15	-	-	8.805279
12	1	88.1	19	-	-	9.670560
13	2	86.7	15	1327.0	-	10.418544
14	2	61.8	6	1579.0	-	11.400203

Table 26 - 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 (s)
1	3	83.0	11	1042.0	1472.0	0.310345
2	2	79.1	16	1549.0	-	1.289315
3	2	72.2	13	1016.0	-	1.517321
4	2	58.1	18	1975.0	-	2.615472
5	1	80.7	5	-	-	3.303709
6	2	87.6	11	1242.0	-	3.982524
7	3	64.1	5	1065.0	1593.0	4.230863
8	3	83.4	18	1357.0	1565.0	4.945116
9	2	98.3	14	1449.0	-	5.436589
10	3	53.2	13	1096.0	1621.0	6.644660
11	2	79.9	11	1529.0	-	6.945591
12	2	77.5	7	1181.0	-	7.931498
13	1	96.7	10	-	-	8.393460
14	2	68.6	15	1438.0	-	8.802353
15	2	67.0	19	1425.0	-	9.717932
16	2	74.0	20	1309.0	-	10.363624
17	2	79.6	5	1427.0	-	10.946375
18	3	75.0	14	1245.0	1807.0	11.413010

Table 27 - 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 (s)
1	2	80.5	18	1417.0	-	0.515358
2	3	50.4	19	1842.0	1693.0	1.091885
3	2	68.9	19	1686.0	-	1.769090
4	1	59.2	16	-	-	2.138677
5	3	76.4	8	1118.0	1868.0	2.804762
6	2	98.6	9	1772.0	-	3.969320
7	2	91.3	9	1519.0	-	4.187766
8	1	93.6	7	-	-	4.784858
9	2	73.1	20	1046.0	-	5.707010
10	2	81.3	10	1317.0	-	6.188984
11	2	66.5	11	1223.0	-	6.930685
12	2	90.7	12	1058.0	-	7.396824
13	2	81.4	12	1171.0	-	8.130603
14	1	85.8	13	-	-	8.819949
15	2	71.3	11	1795.0	-	9.870239
16	3	54.6	14	1201.0	1437.0	10.437810
17	3	99.5	16	1253.0	1623.0	11.027522
18	2	93.7	9	1675.0	-	11.614538

Table 28 - 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 (s)
1	2	64.0	8	1985.0	-	0.465273
2	2	81.0	18	1748.0	-	1.141778
3	2	85.0	11	1903.0	-	1.828885
4	2	53.8	7	1492.0	-	3.185499
5	2	71.2	15	1303.0	-	3.477545

Table 28 - 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 (s)
6	3	94.9	8	1003.0	1678.0	4.275291
7	3	65.9	17	1674.0	1935.0	5.498451
8	2	62.9	6	1180.0	-	5.870321
9	1	71.9	12	-	-	6.441389
10	2	84.4	16	1137.0	-	7.362910
11	1	54.7	11	-	-	8.776804
12	2	62.2	18	1570.0	-	9.565726
13	1	78.8	11	-	-	10.068669
14	1	72.0	8	-	-	10.968915
15	3	66.3	15	1794.0	1239.0	11.443923

Table 29 - 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 (s)
1	2	89.5	15	1037.0	-	0.522783
2	2	92.7	15	1183.0	-	0.821818
3	3	99.7	13	1048.0	1283.0	1.452690
4	3	65.3	16	1242.0	1180.0	2.226719
5	2	63.7	18	1144.0	-	2.896743
6	2	57.1	15	1498.0	-	3.385440
7	1	67.3	12	-	-	3.920135
8	2	84.0	15	1930.0	-	4.655498
9	1	68.3	6	-	-	4.918358
10	2	76.3	10	1243.0	-	5.688116
11	3	82.1	10	1899.0	1677.0	6.223311
12	3	96.6	9	1075.0	1872.0	6.633489
13	2	81.2	11	1125.0	-	7.436737
14	2	76.0	8	1019.0	-	7.962437
15	1	77.6	14	-	-	8.739025
16	3	84.6	12	1184.0	1787.0	9.546352
17	3	95.5	14	1664.0	1173.0	9.914646
18	2	96.3	18	1799.0	-	10.263167
19	1	92.6	19	-	-	10.878911
20	1	97.5	17	-	-	11.513436

Table 30 - 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 (s)
1	1	70.9	7	-	-	0.066461
2	1	85.7	16	-	-	1.290536
3	2	91.1	7	1168.0	-	1.557961
4	2	54.3	7	1822.0	-	2.525556
5	3	84.6	5	1478.0	1378.0	3.680054
6	2	83.9	8	1779.0	-	4.327678
7	2	86.6	5	1339.0	-	4.882811
8	1	76.6	9	-	-	5.769866
9	3	80.9	10	1389.0	1421.0	6.017742
10	1	61.4	8	-	-	7.307630
11	3	68.7	20	1101.0	1129.0	7.827227
12	2	69.0	13	1972.0	-	8.816133

Table 30 - 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 (s)
13	2	87.2	14	1443.0	-	9.248910
14	3	57.9	15	1856.0	1988.0	9.990066
15	3	61.1	20	1209.0	1266.0	11.095502
16	2	84.5	18	1956.0	-	11.638582

Table 31 - 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 (s)
1	3	87.9	6	1241.0	1825.0	0.585965
2	2	53.2	10	1169.0	-	0.759116
3	2	55.3	10	1773.0	-	1.744644
4	2	75.2	8	1750.0	-	2.246819
5	2	84.1	12	1485.0	-	2.947067
6	2	78.4	8	1130.0	-	3.881427
7	2	50.5	11	1377.0	-	4.145677
8	2	90.3	13	1049.0	-	4.800883
9	2	79.4	16	1725.0	-	5.712877
10	2	80.9	20	1082.0	-	6.092430
11	2	86.4	14	1266.0	-	6.875050
12	2	50.8	17	1779.0	-	7.734190
13	1	95.7	16	-	-	8.072850
14	2	55.5	9	1605.0	-	8.907079
15	2	90.8	19	1058.0	-	9.415436
16	2	58.4	19	1251.0	-	10.145733
17	2	63.0	7	1457.0	-	11.035888
18	2	77.9	17	1049.0	-	11.430461

Table 32 - 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 (s)
1	2	91.6	19	1557.0	-	0.137312
2	3	61.1	10	1904.0	1839.0	1.125078
3	2	53.7	19	1170.0	-	2.658503
4	1	72.4	15	-	-	4.262489
5	1	69.6	15	-	-	5.205531
6	3	68.6	7	1191.0	1354.0	6.537801
7	1	63.9	19	-	-	7.338396
8	1	91.2	14	-	-	7.951821
9	2	75.2	6	1509.0	-	9.185638
10	1	62.8	6	-	-	10.087245
11	2	65.4	20	1776.0	-	11.383398

Table 33 - 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 (s)
1	2	87.6	17	1611.0	-	0.984755
2	1	58.6	15	-	-	1.735068
3	2	66.3	15	1569.0	-	3.255402
4	3	87.6	6	1439.0	1964.0	4.649390

Table 33 - 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 (s)
5	2	75.7	15	1027.0	-	5.823450
6	2	83.3	15	1845.0	-	6.763350
7	1	60.7	16	-	-	8.538404
8	2	84.6	12	1267.0	-	9.928537
9	2	81.1	12	1278.0	-	10.886824

Table 34 - 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 (s)
1	3	50.1	7	1483.0	1713.0	1.044041
2	2	53.9	20	1969.0	-	1.976680
3	2	99.5	8	1790.0	-	3.738253
4	3	73.7	15	1032.0	1088.0	4.591381
5	2	63.5	12	1617.0	-	6.441380
6	2	83.2	14	1262.0	-	7.663944
7	1	97.9	16	-	-	9.192576
8	3	98.5	16	1234.0	1287.0	11.465843

Table 35 - 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 (s)
1	2	54.6	10	1011.0	-	0.793642
2	2	79.0	7	1736.0	-	1.418022
3	1	97.4	9	-	-	2.480426
4	3	67.2	13	1311.0	1578.0	3.500545
5	2	93.6	5	1703.0	-	4.436442
6	1	88.9	19	-	-	4.977087
7	2	55.3	15	1897.0	-	6.276732
8	2	56.4	8	1677.0	-	7.034467
9	3	67.7	15	1507.0	1814.0	8.183605
10	1	67.6	15	-	-	8.932017
11	3	91.4	13	1868.0	1339.0	9.958707
12	3	67.1	13	1429.0	1003.0	10.588007
13	2	51.0	11	1927.0	-	11.880311

Table 36 - 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 (s)
1	2	87.0	15	1302.0	-	0.117963
2	1	54.5	7	-	-	1.190404
3	3	98.8	20	1425.0	1049.0	1.427510
4	3	53.1	9	1155.0	1899.0	2.498583
5	1	64.1	17	-	-	3.048273
6	1	83.1	16	-	-	3.789338
7	2	85.8	16	1445.0	-	4.484615
8	3	81.1	18	1002.0	1950.0	4.777309
9	2	85.6	5	1320.0	-	5.699335
10	2	71.5	19	1572.0	-	6.187386
11	3	63.2	10	1605.0	1956.0	6.930400

Table 36 - 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 (s)
12	2	77.4	12	1862.0	-	7.499932
13	2	69.7	14	1167.0	-	8.306180
14	3	88.7	17	1872.0	1433.0	8.708836
15	3	95.5	17	1108.0	1142.0	9.821872
16	1	63.9	16	-	-	10.448329
17	3	58.4	15	1507.0	1579.0	10.707435
18	3	93.1	14	1125.0	1983.0	11.653927

Table 37 - 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 (s)
1	3	84.8	15	1405.0	1097.0	0.204554
2	2	69.2	14	1015.0	-	1.940567
3	1	82.6	17	-	-	2.329223
4	2	75.7	19	1383.0	-	3.871646
5	1	84.8	18	-	-	5.048381
6	3	53.2	17	1969.0	1400.0	6.174795
7	1	85.9	6	-	-	7.151548
8	3	78.1	13	1852.0	1085.0	7.921376
9	2	70.1	14	1557.0	-	9.081314
10	1	63.1	15	-	-	10.776252
11	2	99.7	15	1853.0	-	11.822823

Table 38 - 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 (s)
1	2	92.7	6	1172.0	-	0.617200
2	1	78.7	11	-	-	0.775783
3	1	68.2	19	-	-	2.017508
4	3	93.0	9	1059.0	1875.0	2.299437
5	2	60.3	19	1662.0	-	3.258494
6	2	55.5	6	1818.0	-	3.850674
7	2	68.5	19	1409.0	-	4.942732
8	3	90.1	7	1410.0	1218.0	5.730956
9	2	62.3	10	1513.0	-	6.395328
10	1	78.8	8	-	-	7.290243
11	3	74.4	13	1022.0	1181.0	7.623162
12	1	55.4	16	-	-	8.918414
13	1	52.1	19	-	-	9.403424
14	3	74.2	17	1300.0	1836.0	10.356698
15	1	76.1	16	-	-	10.576125
16	2	63.4	6	1746.0	-	11.311291

Table 39 - 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 (s)
1	1	55.1	10	-	-	0.662842
2	2	95.5	7	1686.0	-	1.608265
3	1	65.9	18	-	-	3.071099

Table 39 - 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 (s)
4	3	74.1	17	1017.0	1748.0	4.996420
5	2	76.6	12	1202.0	-	6.017089
6	2	61.0	8	1985.0	-	6.975391
7	2	96.0	8	1660.0	-	8.502759
8	3	53.1	9	1974.0	1757.0	10.351710
9	3	62.3	12	1305.0	1351.0	11.515938

Table 40 - 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 (s)
1	3	61.8	8	1111.0	1562.0	0.192541
2	2	54.8	15	1479.0	-	1.259772
3	2	55.6	5	1208.0	-	1.439687
4	1	95.4	13	-	-	2.172059
5	1	59.6	11	-	-	2.591844
6	2	50.7	17	1828.0	-	3.456003
7	1	50.3	10	-	-	3.879250
8	1	61.6	15	-	-	4.746983
9	3	57.5	17	1263.0	1143.0	5.121831
10	2	84.9	5	1892.0	-	5.893144
11	2	60.8	7	1805.0	-	6.403783
12	2	65.6	17	1656.0	-	7.271852
13	3	83.6	6	1732.0	1674.0	7.812320
14	2	64.1	11	1277.0	-	8.613425
15	2	99.6	19	1954.0	-	9.455446
16	1	54.7	19	-	-	9.756060
17	3	73.9	19	1973.0	1942.0	10.474406
18	1	55.8	19	-	-	10.980903
19	2	81.3	14	1717.0	-	11.513384

Table 41 - 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 (s)
1	3	90.0	6	1298.0	1879.0	0.503557
2	2	61.6	13	1946.0	-	1.429641
3	2	69.8	13	1770.0	-	2.543997
4	2	57.2	16	1664.0	-	3.162654
5	1	75.2	15	-	-	4.195850
6	1	70.1	15	-	-	4.443365
7	1	53.2	12	-	-	5.482784
8	3	71.5	6	1123.0	1612.0	6.678122
9	1	80.9	16	-	-	7.342716
10	1	57.6	15	-	-	8.138121
11	2	70.4	6	1268.0	-	9.080490
12	3	84.5	9	1562.0	1705.0	9.714520
13	3	78.3	19	1837.0	1565.0	10.979363
14	2	76.8	8	1398.0	-	11.524607

Table 42 - 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 (s)
1	3	53.5	6	1477.0	1143.0	1.002387
2	2	81.4	5	1672.0	-	2.110914
3	3	76.7	13	1255.0	1243.0	3.923593
4	3	55.7	8	1733.0	1444.0	4.542199
5	2	92.6	19	1907.0	-	5.403220
6	3	62.3	18	1711.0	1463.0	7.126510
7	3	92.5	16	1313.0	1220.0	8.295078
8	2	94.3	14	1727.0	-	9.839222
9	1	97.3	18	-	-	10.686983

Table 43 - 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 (s)
1	2	79.3	12	1885.0	-	0.702572
2	2	92.8	17	1364.0	-	2.019349
3	1	50.5	17	-	-	2.204126
4	1	90.4	11	-	-	3.704655
5	1	78.6	18	-	-	5.248207
6	2	79.6	7	1540.0	-	6.387886
7	1	88.6	6	-	-	6.815122
8	3	78.6	15	1508.0	1089.0	7.700124
9	1	96.3	9	-	-	9.282543
10	3	71.9	7	1748.0	1505.0	10.337936
11	3	82.4	12	1094.0	1015.0	11.050183

Table 44 - 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 (s)
1	1	59.0	8	-	-	0.486112
2	3	98.2	15	1146.0	1410.0	1.342680
3	3	52.0	15	1279.0	1418.0	1.869001
4	2	59.4	15	1390.0	-	3.327206
5	2	77.8	17	1750.0	-	3.830174
6	3	81.7	16	1761.0	1983.0	4.832572
7	3	83.3	14	1312.0	1450.0	5.817684
8	1	80.7	12	-	-	6.398484
9	3	58.5	14	1212.0	1917.0	7.412136
10	2	99.6	14	1767.0	-	7.995754
11	3	98.4	12	1157.0	1980.0	8.928865
12	1	69.2	5	-	-	9.469572
13	2	63.1	16	1259.0	-	10.435875
14	1	55.5	8	-	-	11.313037

Table 45 - 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 (s)
1	3	63.1	14	1554.0	1921.0	0.382446
2	2	57.4	14	1867.0	-	1.092180
3	2	71.5	13	1554.0	-	2.104925
4	2	96.5	15	1753.0	-	2.200882
5	2	87.8	17	1856.0	-	3.194014
6	2	75.3	13	1757.0	-	4.162119
7	1	62.3	10	-	-	4.801728
8	2	50.2	10	1126.0	-	5.323322
9	2	71.4	9	1271.0	-	5.915566
10	3	78.3	20	1496.0	1398.0	6.832340
11	3	89.9	19	1250.0	1739.0	7.505107
12	2	54.2	13	1429.0	-	8.111432
13	2	84.3	7	1888.0	-	8.812765
14	2	96.3	19	1561.0	-	9.237082
15	1	79.7	10	-	-	10.165377
16	2	87.4	16	1548.0	-	10.755983
17	3	51.2	9	1176.0	1346.0	11.304640

Table 46 - 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 (s)
1	1	55.8	8	-	-	0.743556
2	1	86.7	7	-	-	1.998881
3	2	69.1	16	1551.0	-	2.864550
4	1	78.7	19	-	-	5.301104
5	1	61.7	11	-	-	6.037491
6	2	64.7	19	1054.0	-	7.456330
7	1	88.9	18	-	-	8.598316
8	2	79.8	6	1702.0	-	10.596749
9	2	88.3	8	1807.0	-	11.557550

Table 47 - 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 (s)
1	2	72.1	16	1065.0	-	0.664934
2	2	87.9	14	1769.0	-	1.109476
3	2	74.1	7	1557.0	-	2.374314
4	2	80.5	9	1730.0	-	3.512683
5	1	75.6	13	-	-	4.269562
6	1	88.7	9	-	-	5.105737
7	2	63.9	16	1095.0	-	5.552867
8	1	53.7	10	-	-	6.819280
9	2	66.8	12	1738.0	-	7.958783
10	2	72.7	17	1594.0	-	8.915289
11	3	79.5	8	1968.0	1850.0	9.473262
12	2	66.1	16	1179.0	-	10.895128
13	2	81.7	10	1165.0	-	11.953079

Table 48 - 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 (s)
1	3	64.4	6	1421.0	1645.0	0.181603
2	1	74.6	17	-	-	1.229254
3	3	77.5	14	1481.0	1203.0	2.117479
4	2	59.7	19	1089.0	-	2.516379
5	3	85.6	18	1574.0	1859.0	3.326826
6	1	73.9	5	-	-	3.926295
7	3	98.9	7	1232.0	1206.0	4.859002
8	2	99.7	8	1748.0	-	5.330629
9	2	65.9	9	1300.0	-	6.208374
10	1	98.8	13	-	-	7.003976
11	1	77.8	19	-	-	7.702671
12	3	92.6	18	1530.0	1259.0	8.967321
13	2	90.7	19	1267.0	-	9.182584
14	1	80.0	19	-	-	10.460478
15	3	82.6	6	1589.0	1785.0	11.162015
16	2	59.6	18	1861.0	-	11.689603

Table 49 - 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 (s)
1	2	84.3	14	1235.0	-	0.135183
2	1	85.2	14	-	-	1.954520
3	2	69.7	18	1351.0	-	3.255220
4	2	73.0	17	1932.0	-	4.016671
5	2	68.1	14	1827.0	-	5.978754
6	2	84.7	6	1306.0	-	7.010450
7	3	64.0	16	1423.0	1352.0	8.155073
8	3	68.2	10	1821.0	1953.0	9.236771
9	1	70.9	20	-	-	10.367932
10	2	74.3	13	1916.0	-	11.707874

Table 50 - Long Sequence Waveform Trial#30 (Detected)						
Burst #	# Pulses	Pulse Width (us)	Chirp (MHz)	Interval 1 to 2 (us)	Interval 2 to 3 (us)	Start time (s)
1	2	64.1	17	1212.0	-	0.368379
2	2	64.9	16	1370.0	-	1.066163
3	1	51.0	5	-	-	2.248243
4	2	88.5	12	1176.0	-	3.379009
5	2	66.6	20	1959.0	-	4.823206
6	2	73.8	17	1207.0	-	5.705085
7	2	63.7	17	1818.0	-	6.242876
8	2	76.3	12	1964.0	-	7.196904
9	2	59.4	8	1121.0	-	8.631208
10	2	54.5	5	1877.0	-	9.144933
11	2	55.8	6	1614.0	-	10.129255
12	1	57.7	6	-	-	11.365752

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	9	1.0	333.0	Yes	5566.0MHz, -48.0dBm	Hop sequence: 5407, 5468, 5392, 5604, 5410, 5411, 5668, 5387, 5719, 5320, 5454, 5314, 5712, 5284, 5351, 5554, 5277, 5629, 5377, 5645, 5327, 5568, 5330, 5558, 5438, 5328, 5665, 5484, 5356, 5398, 5308, 5701, 5650, 5262, 5258, 5285, 5697, 5405, 5562, 5557, 5596, 5519, 5691, 5678, 5640, 5253, 5370, 5710, 5390, 5358, 5332, 5565, 5533, 5401, 5434, 5440, 5420, 5560, 5580, 5673, 5566, 5303, 5282, 5419, 5456, 5508, 5446, 5635, 5513, 5517, 5698, 5687, 5350, 5613, 5268, 5424, 5680, 5479, 5543, 5627, 5553, 5628, 5486, 5690, 5417, 5319, 5304, 5607, 5335, 5652, 5592, 5403, 5523, 5705, 5666, 5529, 5402, 5605, 5329, 5300 (9 hits) (10/16/2013 03:01:01 PM)
2	9	1.0	333.0	Yes	5567.0MHz, -48.0dBm	Hop sequence: 5703, 5468, 5457, 5717, 5618, 5314, 5466, 5699, 5529, 5315, 5374, 5399, 5426, 5336, 5390, 5389, 5569, 5572, 5501, 5520, 5487, 5676, 5724, 5295, 5536, 5274, 5296, 5330, 5619, 5297, 5378, 5320, 5517, 5596, 5442, 5267, 5510, 5633, 5524, 5711, 5531, 5307, 5254, 5519, 5304, 5599, 5490, 5456, 5498, 5360, 5513, 5525, 5343, 5333, 5261, 5277, 5600, 5657, 5276, 5635, 5628, 5695, 5615, 5631, 5503, 5359, 5363, 5269, 5512, 5726, 5655, 5485, 5294, 5523, 5623, 5319, 5347, 5481, 5462, 5716, 5709, 5313, 5725, 5548, 5436, 5630, 5541, 5342, 5539, 5460, 5690, 5474, 5422, 5257, 5450, 5391, 5334, 5281, 5555, 5679 (5 hits) (10/16/2013 03:02:10 PM)
3	9	1.0	333.0	Yes	5534.0MHz, -48.0dBm	Hop sequence: 5711, 5611, 5676, 5362, 5678, 5590, 5421, 5415, 5433, 5373, 5442, 5423, 5632, 5717, 5305, 5630, 5587, 5416, 5457, 5387, 5597, 5383, 5710, 5361, 5275, 5691, 5393, 5348, 5307, 5707, 5273, 5447, 5536, 5269, 5538, 5559, 5530, 5567, 5293, 5366, 5589, 5684, 5482, 5379, 5283, 5722, 5495, 5454,

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5652, 5301, 5705, 5580, 5491, 5432, 5392, 5493, 5332, 5679, 5327, 5329, 5325, 5512, 5346, 5333, 5599, 5353, 5619, 5660, 5526, 5540, 5712, 5656, 5446, 5358, 5699, 5655, 5532, 5615, 5381, 5405, 5458, 5687, 5523, 5720, 5494, 5342, 5382, 5569, 5693, 5686, 5334, 5341, 5364, 5603, 5462, 5251, 5260, 5723, 5428, 5565 (6 hits) (10/16/2013 03:03:08 PM)
4	9	1.0	333.0	Yes	5535.0MHz, -48.0dBm	Hop sequence: 5646, 5352, 5642, 5720, 5423, 5599, 5533, 5329, 5362, 5479, 5369, 5383, 5504, 5527, 5433, 5586, 5351, 5350, 5430, 5283, 5497, 5291, 5466, 5608, 5307, 5526, 5593, 5536, 5399, 5282, 5478, 5616, 5448, 5609, 5334, 5267, 5382, 5511, 5419, 5556, 5688, 5684, 5498, 5628, 5278, 5368, 5528, 5438, 5363, 5635, 5669, 5467, 5410, 5309, 5451, 5598, 5595, 5576, 5621, 5650, 5655, 5671, 5666, 5710, 5552, 5518, 5391, 5570, 5515, 5534, 5725, 5347, 5708, 5538, 5613, 5721, 5401, 5573, 5514, 5572, 5361, 5449, 5661, 5617, 5697, 5468, 5530, 5545, 5393, 5529, 5256, 5421, 5266, 5521, 5638, 5575, 5651, 5637, 5290, 5676 (6 hits) (10/16/2013 03:04:01 PM)
5	9	1.0	333.0	Yes	5536.0MHz, -48.0dBm	Hop sequence: 5489, 5383, 5370, 5297, 5588, 5521, 5439, 5619, 5314, 5640, 5658, 5324, 5500, 5530, 5328, 5423, 5641, 5575, 5407, 5473, 5598, 5574, 5662, 5295, 5251, 5445, 5633, 5305, 5618, 5317, 5282, 5710, 5516, 5453, 5664, 5288, 5579, 5469, 5555, 5470, 5512, 5391, 5446, 5440, 5493, 5359, 5587, 5283, 5323, 5501, 5373, 5725, 5549, 5534, 5472, 5595, 5525, 5482, 5358, 5475, 5701, 5553, 5591, 5339, 5436, 5435, 5384, 5569, 5492, 5603, 5421, 5476, 5466, 5626, 5277, 5349, 5564, 5502, 5597, 5397, 5601, 5659, 5551, 5702, 5607, 5443, 5629, 5409, 5682, 5434, 5460, 5427, 5604, 5614, 5329, 5479, 5265, 5252, 5429, 5361 (6 hits) (10/16/2013

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						03:05:34 PM)
6	9	1.0	333.0	Yes	5537.0MHz, -48.0dBm	Hop sequence: 5575, 5519, 5373, 5377, 5458, 5691, 5537, 5269, 5650, 5555, 5306, 5696, 5700, 5498, 5365, 5667, 5468, 5511, 5350, 5285, 5722, 5338, 5489, 5261, 5362, 5262, 5255, 5693, 5614, 5394, 5646, 5503, 5420, 5323, 5672, 5553, 5295, 5496, 5296, 5639, 5526, 5363, 5506, 5556, 5318, 5647, 5613, 5559, 5435, 5375, 5663, 5324, 5409, 5253, 5592, 5438, 5299, 5387, 5286, 5481, 5665, 5557, 5645, 5529, 5637, 5298, 5664, 5584, 5440, 5698, 5711, 5603, 5564, 5443, 5590, 5372, 5546, 5652, 5611, 5688, 5585, 5605, 5588, 5522, 5705, 5544, 5658, 5478, 5292, 5361, 5352, 5488, 5635, 5353, 5642, 5276, 5597, 5600, 5631, 5692 (9 hits) (10/16/2013 03:06:44 PM)
7	9	1.0	333.0	Yes	5538.0MHz, -48.0dBm	Hop sequence: 5655, 5418, 5450, 5422, 5637, 5376, 5332, 5569, 5653, 5595, 5334, 5700, 5558, 5453, 5649, 5295, 5663, 5495, 5646, 5289, 5465, 5550, 5367, 5462, 5553, 5506, 5618, 5537, 5645, 5470, 5665, 5726, 5575, 5481, 5366, 5634, 5704, 5304, 5447, 5692, 5662, 5518, 5363, 5350, 5559, 5628, 5352, 5398, 5498, 5657, 5328, 5678, 5287, 5346, 5280, 5403, 5354, 5362, 5397, 5703, 5305, 5467, 5667, 5309, 5265, 5601, 5268, 5596, 5478, 5647, 5532, 5433, 5251, 5501, 5325, 5340, 5388, 5285, 5503, 5451, 5526, 5286, 5338, 5577, 5616, 5719, 5358, 5686, 5567, 5549, 5522, 5624, 5284, 5381, 5614, 5502, 5319, 5530, 5524, 5262 (7 hits) (10/16/2013 03:08:19 PM)
8	9	1.0	333.0	Yes	5539.0MHz, -48.0dBm	Hop sequence: 5347, 5450, 5444, 5428, 5458, 5461, 5492, 5478, 5568, 5402, 5472, 5648, 5483, 5351, 5699, 5636, 5451, 5371, 5529, 5254, 5283, 5485, 5406, 5318, 5626, 5481, 5266, 5269, 5304, 5639, 5562, 5263, 5694, 5424, 5339, 5536, 5422, 5571, 5363, 5370, 5286, 5432, 5506, 5700, 5502, 5705, 5480, 5442,

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5487, 5683, 5674, 5365, 5655, 5382, 5414, 5696, 5417, 5334, 5490, 5601, 5594, 5456, 5615, 5716, 5608, 5612, 5423, 5427, 5258, 5505, 5468, 5633, 5625, 5498, 5687, 5563, 5398, 5650, 5303, 5603, 5537, 5405, 5404, 5576, 5710, 5549, 5669, 5664, 5661, 5656, 5358, 5721, 5670, 5319, 5572, 5367, 5709, 5580, 5409, 5675 (5 hits) (10/16/2013 03:09:29 PM)
9	9	1.0	333.0	Yes	5540.0MHz, -48.0dBm	Hop sequence: 5324, 5693, 5520, 5506, 5300, 5612, 5526, 5556, 5342, 5387, 5660, 5315, 5637, 5413, 5616, 5305, 5582, 5593, 5623, 5573, 5646, 5432, 5617, 5354, 5580, 5639, 5524, 5683, 5445, 5707, 5381, 5495, 5279, 5529, 5627, 5481, 5328, 5595, 5679, 5375, 5530, 5401, 5584, 5392, 5695, 5317, 5318, 5458, 5480, 5523, 5569, 5348, 5565, 5295, 5594, 5489, 5457, 5474, 5367, 5685, 5576, 5671, 5700, 5285, 5357, 5703, 5380, 5604, 5422, 5462, 5442, 5684, 5592, 5409, 5531, 5577, 5665, 5600, 5385, 5638, 5674, 5619, 5572, 5560, 5438, 5261, 5436, 5353, 5539, 5566, 5304, 5340, 5629, 5647, 5253, 5632, 5283, 5393, 5347, 5575 (5 hits) (10/16/2013 03:10:46 PM)
10	9	1.0	333.0	Yes	5541.0MHz, -48.0dBm	Hop sequence: 5595, 5531, 5666, 5696, 5414, 5336, 5467, 5268, 5535, 5513, 5382, 5603, 5295, 5556, 5266, 5363, 5638, 5404, 5345, 5445, 5717, 5510, 5303, 5688, 5343, 5619, 5299, 5521, 5553, 5710, 5647, 5376, 5406, 5651, 5532, 5483, 5460, 5315, 5578, 5485, 5627, 5408, 5311, 5678, 5600, 5372, 5421, 5394, 5484, 5297, 5546, 5277, 5626, 5503, 5492, 5709, 5529, 5514, 5508, 5665, 5342, 5607, 5477, 5542, 5641, 5573, 5305, 5351, 5458, 5440, 5320, 5415, 5525, 5366, 5388, 5455, 5412, 5682, 5708, 5517, 5551, 5462, 5275, 5482, 5684, 5509, 5586, 5582, 5615, 5279, 5612, 5501, 5282, 5591, 5496, 5402, 5577, 5427, 5450, 5285 (6 hits) (10/16/2013

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						03:11:50 PM)
11	9	1.0	333.0	Yes	5542.0MHz, -48.0dBm	Hop sequence: 5376, 5343, 5684, 5486, 5503, 5262, 5599, 5466, 5671, 5364, 5720, 5643, 5537, 5417, 5713, 5647, 5590, 5584, 5703, 5690, 5633, 5574, 5468, 5642, 5531, 5322, 5552, 5542, 5267, 5467, 5299, 5333, 5581, 5288, 5545, 5553, 5668, 5495, 5558, 5493, 5293, 5363, 5575, 5285, 5688, 5483, 5569, 5460, 5620, 5707, 5266, 5341, 5571, 5331, 5507, 5667, 5395, 5416, 5506, 5554, 5539, 5317, 5678, 5570, 5429, 5263, 5306, 5547, 5326, 5600, 5492, 5415, 5661, 5291, 5329, 5638, 5271, 5488, 5305, 5279, 5294, 5529, 5578, 5710, 5369, 5353, 5367, 5352, 5458, 5404, 5565, 5278, 5530, 5362, 5513, 5602, 5441, 5377, 5566, 5296 (11 hits) (10/16/2013 03:13:13 PM)
12	9	1.0	333.0	Yes	5543.0MHz, -48.0dBm	Hop sequence: 5365, 5629, 5294, 5260, 5557, 5563, 5461, 5466, 5343, 5319, 5592, 5355, 5302, 5465, 5256, 5642, 5288, 5334, 5585, 5291, 5504, 5548, 5649, 5418, 5635, 5303, 5262, 5544, 5610, 5607, 5441, 5625, 5691, 5438, 5480, 5452, 5449, 5406, 5699, 5678, 5457, 5453, 5411, 5295, 5359, 5559, 5422, 5726, 5255, 5338, 5400, 5419, 5331, 5712, 5433, 5554, 5658, 5306, 5412, 5539, 5614, 5437, 5354, 5618, 5481, 5652, 5495, 5401, 5670, 5479, 5700, 5522, 5640, 5683, 5462, 5668, 5442, 5713, 5505, 5581, 5274, 5534, 5266, 5519, 5448, 5434, 5650, 5391, 5512, 5537, 5304, 5268, 5402, 5567, 5258, 5292, 5632, 5286, 5317, 5459 (10 hits) (10/16/2013 03:14:37 PM)
13	9	1.0	333.0	Yes	5544.0MHz, -48.0dBm	Hop sequence: 5323, 5687, 5703, 5273, 5363, 5385, 5308, 5560, 5454, 5427, 5325, 5500, 5436, 5335, 5451, 5619, 5360, 5643, 5481, 5669, 5638, 5328, 5423, 5572, 5718, 5425, 5506, 5421, 5681, 5707, 5625, 5287, 5650, 5367, 5555, 5254, 5654, 5370, 5364, 5635, 5696, 5252, 5491, 5358, 5410, 5645, 5588, 5535,

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5487, 5301, 5664, 5523, 5313, 5285, 5644, 5570, 5388, 5470, 5483, 5314, 5608, 5627, 5289, 5709, 5567, 5433, 5606, 5679, 5607, 5701, 5265, 5711, 5566, 5475, 5595, 5458, 5271, 5611, 5438, 5504, 5623, 5269, 5575, 5691, 5580, 5721, 5414, 5552, 5689, 5680, 5717, 5473, 5697, 5294, 5562, 5310, 5540, 5356, 5432, 5561 (9 hits) (10/16/2013 03:15:45 PM)
14	9	1.0	333.0	Yes	5545.0MHz, -48.0dBm	Hop sequence: 5520, 5465, 5499, 5284, 5335, 5513, 5293, 5689, 5314, 5357, 5423, 5711, 5707, 5251, 5533, 5296, 5588, 5619, 5507, 5395, 5287, 5361, 5694, 5622, 5291, 5305, 5723, 5546, 5273, 5683, 5315, 5612, 5346, 5318, 5574, 5250, 5283, 5654, 5500, 5480, 5372, 5383, 5444, 5666, 5581, 5495, 5486, 5556, 5389, 5402, 5285, 5419, 5432, 5636, 5348, 5415, 5677, 5466, 5624, 5580, 5609, 5267, 5547, 5312, 5506, 5585, 5575, 5538, 5718, 5554, 5659, 5404, 5549, 5675, 5688, 5698, 5678, 5671, 5521, 5338, 5262, 5323, 5453, 5684, 5349, 5308, 5376, 5301, 5503, 5269, 5258, 5633, 5342, 5641, 5407, 5355, 5406, 5713, 5709, 5587 (6 hits) (10/16/2013 03:17:01 PM)
15	9	1.0	333.0	Yes	5546.0MHz, -48.0dBm	Hop sequence: 5338, 5451, 5607, 5578, 5475, 5586, 5508, 5312, 5504, 5478, 5305, 5341, 5506, 5265, 5721, 5267, 5690, 5378, 5606, 5272, 5395, 5520, 5484, 5611, 5318, 5301, 5413, 5468, 5360, 5660, 5432, 5293, 5557, 5658, 5651, 5259, 5363, 5544, 5455, 5703, 5516, 5545, 5361, 5313, 5674, 5648, 5705, 5420, 5254, 5698, 5564, 5299, 5277, 5555, 5270, 5533, 5298, 5362, 5665, 5359, 5480, 5329, 5706, 5284, 5392, 5673, 5628, 5302, 5397, 5693, 5357, 5700, 5574, 5509, 5613, 5429, 5531, 5471, 5320, 5404, 5333, 5644, 5262, 5486, 5707, 5597, 5280, 5339, 5663, 5526, 5581, 5365, 5334, 5285, 5713, 5517, 5615, 5261, 5635, 5472 (5 hits) (10/16/2013

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						03:18:10 PM)
16	9	1.0	333.0	Yes	5547.0MHz, -48.0dBm	Hop sequence: 5588, 5485, 5494, 5340, 5367, 5594, 5464, 5272, 5381, 5325, 5394, 5628, 5313, 5549, 5382, 5467, 5597, 5608, 5346, 5645, 5580, 5612, 5630, 5344, 5681, 5598, 5587, 5252, 5370, 5397, 5366, 5310, 5566, 5278, 5268, 5695, 5546, 5508, 5657, 5604, 5436, 5505, 5697, 5627, 5506, 5281, 5255, 5332, 5289, 5502, 5354, 5618, 5296, 5714, 5543, 5682, 5271, 5606, 5395, 5663, 5365, 5322, 5574, 5350, 5351, 5660, 5465, 5670, 5539, 5650, 5540, 5514, 5614, 5493, 5290, 5385, 5570, 5553, 5699, 5629, 5560, 5280, 5524, 5339, 5274, 5579, 5718, 5297, 5360, 5572, 5284, 5460, 5356, 5309, 5550, 5330, 5263, 5523, 5447, 5544 (10 hits) (10/16/2013 03:19:36 PM)
17	9	1.0	333.0	Yes	5548.0MHz, -48.0dBm	Hop sequence: 5594, 5463, 5534, 5547, 5571, 5318, 5300, 5333, 5467, 5639, 5392, 5306, 5447, 5253, 5687, 5490, 5263, 5648, 5494, 5289, 5573, 5438, 5377, 5652, 5489, 5304, 5351, 5685, 5279, 5405, 5666, 5294, 5321, 5326, 5724, 5342, 5487, 5359, 5672, 5640, 5315, 5582, 5339, 5317, 5271, 5596, 5436, 5722, 5406, 5365, 5559, 5440, 5554, 5363, 5448, 5690, 5581, 5380, 5553, 5593, 5659, 5614, 5716, 5252, 5409, 5575, 5404, 5420, 5619, 5497, 5264, 5522, 5369, 5442, 5285, 5679, 5422, 5598, 5668, 5421, 5413, 5544, 5378, 5622, 5433, 5425, 5266, 5375, 5397, 5439, 5531, 5493, 5589, 5414, 5675, 5274, 5721, 5653, 5650, 5572 (6 hits) (10/16/2013 03:21:04 PM)
18	9	1.0	333.0	Yes	5549.0MHz, -48.0dBm	Hop sequence: 5614, 5475, 5540, 5381, 5277, 5300, 5322, 5374, 5474, 5521, 5712, 5682, 5257, 5297, 5705, 5530, 5612, 5289, 5680, 5610, 5677, 5414, 5387, 5674, 5678, 5256, 5296, 5447, 5331, 5595, 5516, 5337, 5632, 5393, 5701, 5502, 5288, 5335, 5466, 5624, 5493, 5342, 5433, 5391, 5575, 5565, 5710, 5254,

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5646, 5683, 5523, 5603, 5633, 5268, 5365, 5627, 5436, 5362, 5366, 5669, 5439, 5653, 5503, 5611, 5255, 5607, 5642, 5302, 5301, 5522, 5353, 5383, 5287, 5348, 5422, 5321, 5587, 5347, 5281, 5698, 5550, 5562, 5517, 5662, 5388, 5482, 5601, 5638, 5528, 5413, 5594, 5315, 5377, 5665, 5681, 5545, 5333, 5394, 5314, 5266 (5 hits) (10/16/2013 03:22:27 PM)
19	9	1.0	333.0	Yes	5550.0MHz, -48.0dBm	Hop sequence: 5725, 5417, 5325, 5315, 5446, 5421, 5685, 5375, 5525, 5713, 5468, 5580, 5405, 5616, 5257, 5606, 5716, 5335, 5498, 5259, 5597, 5690, 5506, 5355, 5666, 5452, 5270, 5631, 5274, 5696, 5688, 5397, 5443, 5399, 5279, 5648, 5449, 5352, 5568, 5256, 5368, 5427, 5329, 5632, 5393, 5288, 5323, 5299, 5456, 5272, 5681, 5489, 5380, 5264, 5387, 5664, 5412, 5381, 5493, 5260, 5586, 5654, 5425, 5702, 5662, 5485, 5579, 5603, 5507, 5250, 5487, 5385, 5318, 5587, 5614, 5465, 5458, 5711, 5354, 5348, 5473, 5635, 5573, 5521, 5497, 5309, 5722, 5629, 5298, 5462, 5258, 5482, 5432, 5413, 5564, 5333, 5366, 5344, 5704, 5475 (1 hits) (10/16/2013 03:23:36 PM)
20	9	1.0	333.0	Yes	5551.0MHz, -48.0dBm	Hop sequence: 5675, 5399, 5625, 5341, 5405, 5317, 5544, 5468, 5643, 5552, 5389, 5460, 5316, 5269, 5361, 5583, 5695, 5673, 5438, 5697, 5705, 5423, 5396, 5311, 5706, 5644, 5576, 5478, 5258, 5420, 5353, 5664, 5549, 5628, 5480, 5407, 5426, 5275, 5629, 5464, 5292, 5588, 5575, 5278, 5267, 5409, 5483, 5655, 5602, 5271, 5680, 5333, 5262, 5349, 5553, 5363, 5537, 5323, 5725, 5443, 5274, 5495, 5609, 5442, 5686, 5452, 5434, 5327, 5590, 5669, 5369, 5342, 5499, 5512, 5351, 5524, 5531, 5467, 5696, 5505, 5291, 5711, 5500, 5479, 5677, 5376, 5605, 5445, 5599, 5551, 5508, 5525, 5330, 5722, 5320, 5435, 5600, 5640, 5550, 5485 (7 hits) (10/16/2013

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						03:26:19 PM)
21	9	1.0	333.0	Yes	5552.0MHz, -48.0dBm	Hop sequence: 5628, 5618, 5358, 5563, 5540, 5697, 5514, 5345, 5625, 5405, 5461, 5372, 5494, 5626, 5434, 5632, 5270, 5363, 5623, 5619, 5492, 5664, 5583, 5613, 5580, 5340, 5708, 5724, 5324, 5360, 5639, 5607, 5323, 5259, 5288, 5552, 5496, 5292, 5388, 5412, 5579, 5448, 5588, 5438, 5387, 5671, 5592, 5302, 5651, 5262, 5477, 5463, 5433, 5691, 5327, 5539, 5573, 5615, 5348, 5367, 5483, 5293, 5398, 5513, 5612, 5284, 5400, 5278, 5508, 5282, 5452, 5447, 5392, 5510, 5407, 5572, 5688, 5713, 5271, 5328, 5694, 5375, 5692, 5454, 5318, 5551, 5371, 5503, 5301, 5426, 5436, 5491, 5714, 5466, 5440, 5380, 5317, 5654, 5422, 5304 (5 hits) (10/16/2013 03:28:35 PM)
22	9	1.0	333.0	Yes	5553.0MHz, -48.0dBm	Hop sequence: 5511, 5472, 5708, 5406, 5584, 5444, 5252, 5638, 5386, 5560, 5596, 5369, 5316, 5325, 5583, 5706, 5398, 5285, 5468, 5318, 5295, 5457, 5565, 5618, 5404, 5476, 5658, 5694, 5298, 5413, 5319, 5344, 5471, 5614, 5725, 5679, 5440, 5710, 5619, 5563, 5552, 5569, 5414, 5419, 5621, 5311, 5339, 5550, 5337, 5586, 5660, 5390, 5702, 5529, 5524, 5578, 5271, 5301, 5362, 5370, 5353, 5689, 5684, 5522, 5716, 5607, 5293, 5609, 5392, 5637, 5519, 5279, 5553, 5397, 5354, 5250, 5570, 5665, 5680, 5545, 5486, 5323, 5704, 5501, 5407, 5572, 5643, 5500, 5260, 5551, 5595, 5473, 5712, 5682, 5308, 5367, 5538, 5258, 5310, 5661 (9 hits) (10/16/2013 03:30:20 PM)
23	9	1.0	333.0	Yes	5554.0MHz, -48.0dBm	Hop sequence: 5471, 5257, 5425, 5568, 5383, 5596, 5353, 5374, 5304, 5349, 5320, 5380, 5600, 5358, 5359, 5688, 5485, 5674, 5659, 5369, 5631, 5384, 5680, 5703, 5665, 5648, 5264, 5706, 5400, 5379, 5454, 5506, 5530, 5317, 5572, 5318, 5251, 5553, 5573, 5500, 5564, 5666, 5372, 5621, 5673, 5614, 5282, 5658,

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5554, 5336, 5684, 5392, 5517, 5464, 5585, 5526, 5266, 5580, 5542, 5415, 5656, 5610, 5307, 5268, 5509, 5267, 5337, 5440, 5642, 5643, 5416, 5653, 5519, 5612, 5435, 5534, 5315, 5330, 5560, 5578, 5515, 5707, 5326, 5502, 5424, 5499, 5591, 5441, 5652, 5533, 5555, 5269, 5490, 5373, 5473, 5343, 5288, 5721, 5561, 5447 (8 hits) (10/16/2013 03:31:29 PM)
24	9	1.0	333.0	Yes	5555.0MHz, -48.0dBm	Hop sequence: 5701, 5341, 5424, 5404, 5714, 5530, 5307, 5532, 5488, 5411, 5412, 5252, 5590, 5435, 5498, 5483, 5713, 5649, 5688, 5299, 5347, 5622, 5461, 5366, 5631, 5605, 5433, 5658, 5378, 5489, 5663, 5448, 5632, 5696, 5420, 5359, 5264, 5401, 5595, 5533, 5447, 5703, 5684, 5398, 5284, 5476, 5370, 5457, 5588, 5641, 5407, 5415, 5708, 5430, 5673, 5700, 5391, 5297, 5567, 5380, 5664, 5300, 5274, 5292, 5536, 5388, 5372, 5472, 5408, 5309, 5418, 5600, 5330, 5549, 5692, 5665, 5534, 5540, 5653, 5371, 5591, 5361, 5655, 5638, 5656, 5277, 5306, 5328, 5633, 5691, 5585, 5305, 5465, 5723, 5409, 5416, 5592, 5466, 5469, 5482 (5 hits) (10/16/2013 03:32:46 PM)
25	9	1.0	333.0	Yes	5556.0MHz, -48.0dBm	Hop sequence: 5619, 5678, 5327, 5594, 5255, 5580, 5302, 5475, 5461, 5410, 5591, 5620, 5415, 5542, 5323, 5433, 5610, 5587, 5680, 5251, 5458, 5318, 5465, 5504, 5688, 5520, 5250, 5311, 5421, 5319, 5687, 5662, 5297, 5649, 5575, 5682, 5593, 5347, 5567, 5448, 5303, 5399, 5539, 5274, 5375, 5623, 5308, 5550, 5544, 5493, 5284, 5469, 5695, 5407, 5703, 5490, 5584, 5648, 5571, 5367, 5681, 5576, 5553, 5434, 5470, 5480, 5351, 5355, 5700, 5726, 5548, 5601, 5701, 5724, 5381, 5368, 5296, 5509, 5551, 5253, 5555, 5596, 5709, 5657, 5719, 5408, 5423, 5332, 5426, 5713, 5706, 5528, 5365, 5425, 5263, 5494, 5438, 5699, 5653, 5692 (9 hits) (10/16/2013

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						03:33:56 PM)
26	9	1.0	333.0	Yes	5557.0MHz, -48.0dBm	Hop sequence: 5386, 5358, 5616, 5456, 5721, 5285, 5506, 5607, 5684, 5582, 5555, 5344, 5640, 5281, 5693, 5698, 5487, 5696, 5339, 5561, 5524, 5346, 5400, 5313, 5374, 5584, 5268, 5553, 5291, 5444, 5465, 5529, 5594, 5328, 5293, 5718, 5321, 5388, 5580, 5572, 5708, 5563, 5517, 5483, 5416, 5308, 5610, 5596, 5709, 5294, 5665, 5331, 5505, 5409, 5361, 5263, 5566, 5641, 5676, 5299, 5587, 5700, 5412, 5300, 5576, 5440, 5340, 5647, 5668, 5486, 5612, 5276, 5404, 5689, 5558, 5311, 5314, 5359, 5592, 5275, 5421, 5490, 5677, 5537, 5602, 5545, 5373, 5383, 5384, 5673, 5407, 5399, 5262, 5692, 5575, 5642, 5638, 5266, 5680, 5439 (8 hits) (10/16/2013 03:35:40 PM)
27	9	1.0	333.0	Yes	5558.0MHz, -48.0dBm	Hop sequence: 5665, 5625, 5264, 5623, 5652, 5669, 5413, 5638, 5645, 5589, 5318, 5419, 5458, 5567, 5407, 5649, 5664, 5507, 5375, 5675, 5307, 5495, 5374, 5500, 5252, 5572, 5490, 5308, 5605, 5622, 5661, 5560, 5610, 5503, 5288, 5570, 5637, 5523, 5449, 5679, 5421, 5528, 5590, 5497, 5659, 5502, 5414, 5707, 5271, 5715, 5475, 5692, 5631, 5404, 5555, 5345, 5660, 5314, 5485, 5433, 5549, 5724, 5524, 5708, 5280, 5334, 5683, 5721, 5548, 5381, 5310, 5347, 5389, 5259, 5529, 5672, 5481, 5580, 5332, 5344, 5537, 5525, 5635, 5494, 5279, 5579, 5515, 5286, 5311, 5329, 5320, 5720, 5714, 5628, 5273, 5296, 5462, 5647, 5430, 5482 (6 hits) (10/16/2013 03:37:04 PM)
28	9	1.0	333.0	Yes	5559.0MHz, -48.0dBm	Hop sequence: 5482, 5367, 5681, 5388, 5607, 5722, 5663, 5562, 5382, 5356, 5348, 5377, 5689, 5527, 5333, 5687, 5654, 5587, 5633, 5282, 5429, 5629, 5311, 5300, 5524, 5304, 5379, 5434, 5548, 5472, 5605, 5515, 5264, 5620, 5555, 5592, 5371, 5477, 5713, 5601, 5650, 5323, 5514, 5628, 5262, 5665, 5252, 5610,

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5720, 5574, 5513, 5440, 5275, 5349, 5579, 5539, 5704, 5583, 5479, 5603, 5615, 5543, 5449, 5619, 5688, 5504, 5405, 5277, 5597, 5492, 5676, 5508, 5572, 5363, 5270, 5672, 5273, 5445, 5612, 5384, 5420, 5339, 5271, 5578, 5528, 5423, 5460, 5573, 5581, 5389, 5352, 5386, 5366, 5518, 5284, 5317, 5326, 5640, 5452, 5447 (5 hits) (10/16/2013 03:38:42 PM)
29	9	1.0	333.0	Yes	5560.0MHz, -48.0dBm	Hop sequence: 5612, 5714, 5713, 5534, 5325, 5401, 5708, 5365, 5277, 5315, 5398, 5477, 5351, 5487, 5451, 5593, 5517, 5252, 5355, 5680, 5450, 5720, 5455, 5625, 5645, 5476, 5548, 5501, 5641, 5286, 5483, 5489, 5571, 5541, 5317, 5459, 5322, 5651, 5668, 5467, 5336, 5461, 5631, 5329, 5611, 5691, 5350, 5667, 5590, 5700, 5302, 5499, 5628, 5643, 5567, 5547, 5665, 5292, 5356, 5692, 5267, 5497, 5305, 5597, 5528, 5518, 5542, 5265, 5564, 5716, 5505, 5472, 5634, 5656, 5627, 5385, 5662, 5633, 5457, 5561, 5311, 5545, 5698, 5441, 5424, 5416, 5381, 5396, 5690, 5555, 5353, 5524, 5332, 5663, 5275, 5721, 5340, 5400, 5609, 5444 (10 hits) (10/16/2013 03:39:57 PM)
30	9	1.0	333.0	Yes	5561.0MHz, -48.0dBm	Hop sequence: 5400, 5598, 5360, 5435, 5715, 5675, 5325, 5701, 5607, 5350, 5392, 5259, 5574, 5599, 5534, 5653, 5253, 5385, 5442, 5533, 5532, 5402, 5559, 5280, 5612, 5268, 5704, 5331, 5394, 5345, 5317, 5338, 5469, 5686, 5444, 5464, 5544, 5582, 5423, 5265, 5324, 5388, 5369, 5376, 5426, 5303, 5595, 5420, 5545, 5340, 5272, 5425, 5706, 5588, 5439, 5494, 5716, 5507, 5456, 5375, 5260, 5672, 5468, 5294, 5337, 5624, 5447, 5722, 5621, 5352, 5333, 5266, 5322, 5690, 5681, 5527, 5584, 5603, 5594, 5518, 5657, 5332, 5664, 5713, 5503, 5608, 5267, 5365, 5577, 5616, 5264, 5271, 5318, 5257, 5311, 5542, 5557, 5600, 5547, 5644 (7 hits) (10/16/2013

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						03:41:35 PM)
31	9	1.0	333.0	Yes	5562.0MHz, -48.0dBm	Hop sequence: 5609, 5371, 5378, 5266, 5639, 5548, 5630, 5603, 5531, 5465, 5445, 5359, 5640, 5426, 5530, 5681, 5339, 5571, 5365, 5637, 5398, 5623, 5645, 5663, 5631, 5506, 5344, 5386, 5473, 5672, 5311, 5464, 5711, 5606, 5379, 5342, 5568, 5459, 5613, 5718, 5273, 5562, 5543, 5538, 5298, 5392, 5380, 5328, 5518, 5596, 5460, 5429, 5434, 5397, 5628, 5647, 5678, 5395, 5627, 5486, 5485, 5470, 5404, 5496, 5437, 5335, 5435, 5356, 5363, 5288, 5685, 5551, 5526, 5423, 5483, 5620, 5289, 5481, 5251, 5323, 5329, 5661, 5331, 5318, 5284, 5698, 5557, 5313, 5692, 5310, 5451, 5569, 5259, 5301, 5629, 5276, 5376, 5573, 5537, 5494 (7 hits) (10/16/2013 03:43:08 PM)
32	9	1.0	333.0	Yes	5563.0MHz, -48.0dBm	Hop sequence: 5321, 5714, 5456, 5638, 5333, 5502, 5555, 5253, 5256, 5329, 5670, 5345, 5664, 5488, 5689, 5589, 5578, 5683, 5320, 5340, 5393, 5579, 5403, 5500, 5640, 5370, 5416, 5477, 5324, 5667, 5284, 5446, 5576, 5277, 5415, 5344, 5348, 5509, 5533, 5482, 5657, 5656, 5703, 5275, 5462, 5468, 5260, 5434, 5294, 5698, 5675, 5725, 5448, 5561, 5443, 5649, 5597, 5313, 5648, 5622, 5405, 5490, 5435, 5478, 5491, 5717, 5566, 5457, 5716, 5701, 5330, 5279, 5257, 5531, 5369, 5259, 5386, 5439, 5452, 5316, 5662, 5289, 5375, 5251, 5479, 5606, 5702, 5587, 5466, 5582, 5512, 5401, 5524, 5343, 5406, 5560, 5287, 5559, 5418, 5262 (5 hits) (10/16/2013 03:44:38 PM)
33	9	1.0	333.0	Yes	5564.0MHz, -48.0dBm	Hop sequence: 5545, 5423, 5367, 5348, 5460, 5494, 5451, 5284, 5325, 5377, 5363, 5383, 5658, 5474, 5399, 5652, 5254, 5716, 5492, 5506, 5405, 5724, 5669, 5613, 5493, 5694, 5403, 5556, 5549, 5486, 5529, 5625, 5373, 5608, 5650, 5419, 5646, 5415, 5388, 5366, 5640, 5270, 5599, 5597, 5273, 5299, 5376, 5615,

Table 51 - FCC frequency hopping radar (Type 6) Results - Conducted						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
						5620, 5495, 5523, 5463, 5330, 5442, 5720, 5354, 5288, 5595, 5660, 5448, 5674, 5588, 5582, 5707, 5719, 5275, 5717, 5576, 5450, 5512, 5722, 5715, 5379, 5698, 5268, 5501, 5554, 5313, 5558, 5408, 5454, 5502, 5568, 5350, 5536, 5301, 5507, 5349, 5331, 5425, 5337, 5394, 5317, 5382, 5340, 5503, 5624, 5580, 5475, 5311 (6 hits) (10/16/2013 03:45:50 PM)
34	9	1.0	333.0	Yes	5565.0MHz, -48.0dBm	Hop sequence: 5547, 5508, 5479, 5507, 5340, 5623, 5391, 5403, 5251, 5660, 5633, 5487, 5667, 5363, 5450, 5398, 5642, 5678, 5532, 5488, 5364, 5658, 5722, 5540, 5639, 5316, 5725, 5418, 5334, 5554, 5268, 5530, 5481, 5666, 5285, 5449, 5326, 5568, 5543, 5563, 5458, 5482, 5369, 5274, 5312, 5702, 5679, 5647, 5284, 5527, 5629, 5710, 5484, 5495, 5446, 5539, 5359, 5558, 5331, 5700, 5407, 5704, 5656, 5512, 5580, 5470, 5501, 5389, 5262, 5320, 5348, 5383, 5708, 5526, 5662, 5582, 5521, 5358, 5341, 5518, 5536, 5535, 5275, 5557, 5663, 5352, 5393, 5264, 5551, 5649, 5646, 5476, 5441, 5576, 5435, 5288, 5378, 5701, 5719, 5670 (11 hits) (10/16/2013 03:46:59 PM)

Table 52 - Summary of All Results -Radiated				
Waveform Name	Pd (%)	Pd Required (%)	Number of Trials	Status
FCC Short Pulse Radar (Type 2)	93.3 %	60.0 %	30	PASSED
FCC Short Pulse Radar (Type 3)	96.7 %	60.0 %	30	PASSED
FCC Short Pulse Radar (Type 4)	86.7 %	60.0 %	30	PASSED
FCC Short Pulse Radar (Type 1)	90.0 %	60.0 %	10	PASSED
Aggregate of above results	91.7 %	80.0 %	100	PASSED
Long Sequence	100.0 %	80.0 %	1	PASSED
FCC frequency hopping radar (Type 6)	100.0 %	70.0 %	3	PASSED

Table 53 - FCC Short Pulse Radar (Type 2) Results -Radiated						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	24	1.5	153.0	Yes	5545.0MHz, 10.0dBm	Single burst (10/18/2013 09:51:41 AM)
2	28	1.5	175.0	Yes	5540.0MHz, 10.0dBm	Single burst (10/18/2013 09:52:59 AM)
3	28	3.4	177.0	No	5560.0MHz, 10.0dBm	Single burst (10/18/2013 09:56:58 AM)
4	24	1.9	178.0	Yes	5555.0MHz, 10.0dBm	Single burst (10/18/2013 09:57:33 AM)
5	28	4.7	208.0	Yes	5550.0MHz, 10.0dBm	Single burst (10/18/2013 09:59:19 AM)
6	27	4.5	226.0	Yes	5545.0MHz, 10.0dBm	Single burst (10/18/2013 10:01:23 AM)
7	25	2.8	220.0	Yes	5540.0MHz, 10.0dBm	Single burst (10/18/2013 10:03:22 AM)
8	28	2.9	182.0	No	5560.0MHz, 10.0dBm	Single burst (10/18/2013 10:05:38 AM)
9	24	2.0	194.0	Yes	5555.0MHz, 10.0dBm	Single burst (10/18/2013 10:06:01 AM)
10	23	3.7	185.0	Yes	5550.0MHz, 10.0dBm	Single burst (10/18/2013 10:07:19 AM)
11	24	2.9	182.0	Yes	5545.0MHz, 10.0dBm	Single burst (10/18/2013 10:08:26 AM)
12	27	1.6	221.0	Yes	5540.0MHz, 10.0dBm	Single burst (10/18/2013 10:09:48 AM)
13	28	4.3	203.0	Yes	5560.0MHz, 10.0dBm	Single burst (10/18/2013 10:12:17 AM)
14	24	3.1	208.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 10:16:35 AM)
15	25	2.4	186.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 10:17:23 AM)
16	28	4.3	188.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 10:20:41 AM)
17	24	2.4	161.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 10:22:20 AM)
18	27	2.1	219.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 10:23:35 AM)
19	26	2.9	155.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 10:25:00 AM)
20	23	3.9	162.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 10:26:30 AM)

Table 53 - FCC Short Pulse Radar (Type 2) Results -Radiated						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
21	24	2.2	153.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 10:28:06 AM)
22	25	2.4	173.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 10:29:44 AM)
23	24	3.2	224.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 10:31:41 AM)
24	28	3.4	176.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 10:33:04 AM)
25	25	4.6	190.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 10:34:45 AM)
26	27	3.2	169.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 10:36:33 AM)
27	24	4.5	192.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 10:37:40 AM)
28	23	3.9	171.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 10:38:35 AM)
29	29	1.2	152.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 10:39:52 AM)
30	24	4.2	168.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 10:41:02 AM)

Table 54 - FCC Short Pulse Radar (Type 3) Results -Radiated						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	17	8.6	298.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 10:45:32 AM)
2	16	9.0	331.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 10:47:18 AM)
3	17	8.9	440.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 10:48:45 AM)
4	16	6.6	384.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 10:50:45 AM)
5	17	7.6	229.0	No	5555.0MHz, -63.0dBm	Single burst (10/18/2013 10:52:31 AM)
6	17	6.2	423.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 10:52:58 AM)
7	18	8.9	328.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 10:54:39 AM)
8	17	6.0	316.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 10:56:41 AM)
9	16	8.4	383.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 10:58:06 AM)
10	16	8.0	272.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 10:59:45 AM)
11	16	6.5	417.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 11:01:01 AM)
12	16	8.7	250.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 11:02:22 AM)
13	16	6.1	344.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 11:04:17 AM)
14	18	6.2	311.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 11:05:56 AM)

Table 54 - FCC Short Pulse Radar (Type 3) Results -Radiated						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
15	16	6.3	303.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 11:07:28 AM)
16	18	8.4	288.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 11:08:52 AM)
17	16	6.9	435.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 11:10:15 AM)
18	17	7.8	271.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 11:11:34 AM)
19	17	8.4	230.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 11:12:57 AM)
20	17	7.2	344.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 11:14:50 AM)
21	17	9.8	436.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 11:32:24 AM)
22	17	9.5	202.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 11:35:42 AM)
23	18	9.1	256.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 11:38:13 AM)
24	18	6.0	309.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 11:47:23 AM)
25	17	9.1	380.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 11:48:46 AM)
26	18	9.2	481.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 11:49:54 AM)
27	16	7.8	392.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 11:51:51 AM)
28	17	7.2	478.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 11:53:32 AM)
29	17	6.2	208.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 11:54:47 AM)
30	18	8.6	474.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 11:56:13 AM)

Table 55 - FCC Short Pulse Radar (Type 4) Results -Radiated						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	15	12.2	346.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 01:00:34 PM)
2	13	19.8	405.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 01:05:50 PM)
3	13	19.7	413.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 01:07:19 PM)
4	13	16.8	417.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 01:08:35 PM)
5	13	13.0	241.0	No	5555.0MHz, -63.0dBm	Single burst (10/18/2013 01:09:40 PM)
6	14	14.7	260.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 01:09:58 PM)
7	13	15.4	438.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 01:11:18 PM)
8	15	12.1	343.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 01:12:40 PM)

Table 55 - FCC Short Pulse Radar (Type 4) Results -Radiated						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
9	15	13.3	394.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 01:14:15 PM)
10	14	11.8	213.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 01:15:26 PM)
11	12	16.2	245.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 01:16:49 PM)
12	16	15.8	446.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 01:19:40 PM)
13	14	12.4	350.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 01:20:57 PM)
14	12	19.7	218.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 01:22:06 PM)
15	12	13.5	493.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 01:23:24 PM)
16	14	16.9	327.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 01:24:35 PM)
17	13	17.0	390.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 01:26:10 PM)
18	16	17.7	250.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 01:27:25 PM)
19	14	12.6	387.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 01:29:00 PM)
20	15	13.2	475.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 01:30:08 PM)
21	15	12.9	457.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 01:31:30 PM)
22	13	19.3	281.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 01:32:46 PM)
23	13	18.0	446.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 01:34:05 PM)
24	16	12.8	215.0	No	5560.0MHz, -63.0dBm	Single burst (10/18/2013 01:35:31 PM)
25	14	14.8	274.0	No	5555.0MHz, -63.0dBm	Single burst (10/18/2013 01:35:46 PM)
26	14	18.2	254.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 01:36:06 PM)
27	13	19.2	433.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 01:37:26 PM)
28	12	12.3	344.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 01:38:38 PM)
29	16	14.9	353.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 01:40:53 PM)
30	13	19.7	297.0	No	5555.0MHz, -63.0dBm	Single burst (10/18/2013 01:42:25 PM)

Table 56 - FCC Short Pulse Radar (Type 1) Results -Radiated						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	18	1.0	1428.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 01:49:23 PM)
2	18	1.0	1428.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 01:50:30 PM)
3	18	1.0	1428.0	No	5540.0MHz, -63.0dBm	Single burst (10/18/2013 01:51:39 PM)
4	18	1.0	1428.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 01:51:55 PM)
5	18	1.0	1428.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 01:53:47 PM)
6	18	1.0	1428.0	Yes	5550.0MHz, -63.0dBm	Single burst (10/18/2013 01:55:30 PM)
7	18	1.0	1428.0	Yes	5545.0MHz, -63.0dBm	Single burst (10/18/2013 01:56:54 PM)
8	18	1.0	1428.0	Yes	5540.0MHz, -63.0dBm	Single burst (10/18/2013 01:58:10 PM)
9	18	1.0	1428.0	Yes	5560.0MHz, -63.0dBm	Single burst (10/18/2013 01:59:16 PM)
10	18	1.0	1428.0	Yes	5555.0MHz, -63.0dBm	Single burst (10/18/2013 02:00:40 PM)

Table 57 - Long Sequence Waveform Summary - Radiated		
Long Sequence Trial	Result	Radar Frequency / Amplitude
Trial #1	Detected	5550.0MHz, -63.0dBm

Table 58 - 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 (s)
1	3	63.4	19	1635.0	1928.0	0.095965
2	1	73.5	10	-	-	0.640217
3	2	66.7	10	1804.0	-	1.637550
4	2	59.7	16	1152.0	-	2.281377
5	2	55.7	12	1021.0	-	2.895439
6	1	72.8	8	-	-	3.328704
7	3	71.5	6	1540.0	1679.0	3.820219
8	1	51.5	11	-	-	4.545249
9	1	84.0	8	-	-	5.353433
10	2	52.5	13	1354.0	-	5.826750
11	3	86.8	20	1541.0	1182.0	6.446062
12	3	76.9	19	1990.0	1817.0	7.477516
13	1	91.6	11	-	-	8.202260
14	2	78.9	9	1218.0	-	8.804616
15	1	55.4	20	-	-	8.999666
16	3	89.4	11	1067.0	1085.0	9.579925
17	2	90.8	17	1116.0	-	10.670475
18	2	55.4	16	1620.0	-	10.929213
19	3	96.9	19	1509.0	1192.0	11.617352

Table 59 - FCC frequency hopping radar (Type 6) Results -Radiated						
Trial #	Pulses/ Burst	Pulse Width (us)	PRI (us)	Detected	Fr (MHz) and level (dBm)	Burst Information
1	9	1.0	333.0	Yes	5565.0MHz, -63.0dBm	Hop sequence: 5458, 5549, 5311, 5467, 5348, 5293, 5586, 5407, 5253, 5658, 5341, 5396, 5686, 5620, 5456, 5509, 5681, 5503, 5420, 5479, 5370, 5610, 5391, 5501, 5470, 5335, 5572, 5481, 5702, 5646, 5375, 5573, 5264, 5349, 5313, 5530, 5350, 5379, 5255, 5423, 5711, 5676, 5460, 5333, 5552, 5594, 5306, 5353, 5635, 5326, 5445, 5611, 5361, 5717, 5410, 5724, 5606, 5482, 5598, 5327, 5689, 5495, 5600, 5562, 5551, 5284, 5254, 5693, 5561, 5438, 5624, 5564, 5607, 5258, 5532, 5641, 5647, 5422, 5587, 5345, 5720, 5263, 5656, 5601, 5337, 5355, 5386, 5698, 5514, 5603, 5372, 5265, 5286, 5469, 5553, 5344, 5363, 5566, 5414, 5334 (8 hits) (10/18/2013 01:45:57 PM)
2	9	1.0	333.0	Yes	5566.0MHz, -63.0dBm	Hop sequence: 5652, 5591, 5682, 5468, 5493, 5305, 5436, 5481, 5553, 5506, 5256, 5318, 5721, 5534, 5566, 5662, 5651, 5384, 5722, 5406, 5584, 5536, 5666, 5523, 5725, 5300, 5571, 5309, 5328, 5473, 5443, 5498, 5419, 5713, 5403, 5589, 5606, 5429, 5301, 5334, 5379, 5704, 5487, 5315, 5700, 5440, 5294, 5270, 5400, 5639, 5673, 5576, 5479, 5458, 5298, 5685, 5465, 5595, 5716, 5638, 5349, 5417, 5585, 5703, 5707, 5660, 5341, 5290, 5390, 5340, 5557, 5539, 5494, 5437, 5342, 5277, 5330, 5261, 5272, 5723, 5280, 5710, 5482, 5304, 5414, 5477, 5647, 5258, 5467, 5692, 5478, 5561, 5483, 5430, 5554, 5368, 5612, 5644, 5663, 5530 (8 hits) (10/18/2013 01:47:13 PM)
3	9	1.0	333.0	Yes	5534.0MHz, -63.0dBm	Hop sequence: 5272, 5660, 5428, 5404, 5386, 5548, 5346, 5288, 5421, 5540, 5420, 5717, 5643, 5709, 5479, 5323, 5631, 5583, 5613, 5650, 5353, 5662, 5573, 5251, 5503, 5636, 5430, 5616, 5393, 5462, 5675, 5474, 5678, 5463, 5268, 5534, 5600, 5538, 5362, 5697, 5571, 5497, 5340, 5260, 5379, 5313, 5673, 5517, 5322, 5429, 5439, 5425, 5316,