DYNAMIC FREQUENCY SELECTION

DFS Test Report

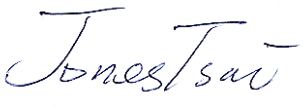
APPLICANT	:	**Texas Instruments Incorporated**
EQUIPMENT	:	**WiFi and Bluetooth Module**
BRAND NAME	:	**Texas Instruments**
MODEL NAME	:	**WL18MODGI**
FCC ID	:	**Z64-WL18DBMOD**
IC:	:	**451I-WL18DBMOD**
STANDARD	:	**FCC Part 15 Subpart E** **IC RSS-247 issue 1**
CLASSIFICATION	:	**(NII) Unlicensed National Information Infrastructure**

The product was received on Feb. 24, 2015 and completely tested on Jun. 12, 2015. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown to be compliant with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

The test report requested by Texas Instrument and Jorjin is not for certification purpose.

Reviewed by: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager

SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FZ520337	Rev. 01	Initial issue of report	Jul. 02, 2015

SUMMARY OF DYNAMIC FREQUENCY SELECTION TEST

UNII	Bandwidth and Channel	Description	Measured	Limit	Result
U-NII Band 2-A 5250-5350MHz	20MHz (CH60) 5300MHz	U-NII Detection Bandwidth	25 MHz	> 100% of the U-NII 99% transmission power bandwidth	Pass
	40MHz (CH62) 5310MHz	Channel Availability Check Time	> 60 sec	> 60sec	Pass
		U-NII Detection Bandwidth	40 MHz	> 100% of the U-NII 99% transmission power bandwidth	Pass
		Channel Move Time	0.6571 sec	< 10 sec	Pass
		Channel Closing Transmission Time	<200ms + 2.4 ms (aggregate)	< 200 ms + aggregate of 60 ms over remaining 10 s period	Pass
		Non-Occupancy Period Test	No transmission or Beacons occurred	> 30 minutes	Pass
U-NII Band 2-C 5470-5725MHz	20MHz (CH100) 5500MHz	U-NII Detection Bandwidth	26 MHz	> 100% of the U-NII 99% transmission power bandwidth	Pass
	40MHz (CH110) 5550MHz	Channel Availability Check Time	> 60 sec	> 60sec	Pass
		U-NII Detection Bandwidth	40 MHz	> 100% of the U-NII 99% transmission power bandwidth	Pass
		Channel Move Time	0.6007 sec	< 10 sec	Pass
		Channel Closing Transmission Time	<200ms + 1.8 ms (aggregate)	< 200 ms + aggregate of 60 ms over remaining 10 s period	Pass
		Non-Occupancy Period Test	No transmission or Beacons occurred	> 30 minutes	Pass

1 General Description

1.1 Applicant

Texas Instruments Incorporated
12500 TI Boulevard, M/S 8751, Dallas, TX 75243, USA

1.2 Manufacturer

Jorjin Technologies Inc
17F, No. 239, Sec. 1, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	WiFi and Bluetooth Module
Brand Name	Texas Instruments
Model Name	WL18MODGI
FCC ID	Z64-WL18DBMOD
IC	451I-WL18DBMOD
WL18XX MAC Firmware Version	8.9.0.0.31
WL18XX PHY Firmware Version Except Type 5	8.2.0.0.224
WL18XX PHY Firmware Version Type 5	8.2.0.5.224
Driver Version	R8.5
EUT supports Radios application	WLAN 11a/b/g/n HT20/HT40 Bluetooth 2.1 + EDR Bluetooth 3.0 + HS Bluetooth 4.0 + LE
EUT Stage	Production Unit

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
DFS Function	Master
Tx/Rx Channel Frequency Range	5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
EUT support WLAN function	**<5260 MHz ~ 5320 MHz>** 802.11a 802.11n HT20 802.11n HT40 **<5500 MHz ~ 5700 MHz >** 802.11a 802.11n HT20 802.11n HT40
Type of Modulation	OFDM (BPSK / QPSK / 16QAM / 64QAM)

1.5 Testing Site

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-3273456 / FAX: +886-3-3284978
Test Site No.	**Sporton Site No.**
	DFS02-HY

1.6 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart E
- FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v01r02
- FCC KDB 905462 D04 Operational Modes for DFS Testing New Rules v01
- IC RSS-247 issue 1

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

1.7 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	HW / FW Version	Power Cord
1.	Notebook	Lenovo	Edge E335	PPD-AR5B95	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2 Requirements and Parameters for DFS Test

2.1 Applicability of DFS Requirements

EUT is considered as a master device.

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required	Yes
Client Beacon Test	N/A	Yes	Yes

Additional requirements for devices with multiple bandwidth modes	Operational Mode	
	Master or Client With Radar Detection	**Client Without Radar Detection**
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note

Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

2.2 Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see notes 1, 2, and 3)
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. **Note 2:** Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. **Note 3:** EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

The radar *Detection Threshold*, lowest antenna gain is the parameter of Interference *radar DFS detection threshold*, The Interference *Detection Threshold* is the *(-62dBm) + (0)* [dBi]+ 1 dB= -61 dBm.

2.3 DFS Response requirement values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the 99% power bandwidth See Note 3.

Note 1: The instant that the *Channel Move Time* and the *Channel Closing Transmission Time* begins is as follows:

- For the Short pulse radar Test Signals this instant is the end of the *Burst*.
- For the Frequency Hopping radar Test Signal, this instant is the end of the last radar *Burst* generated.
- For the Long Pulse radar Test Signal this instant is the end of the 12 second period defining the radar transmission.

Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate *Channel* changes (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 1 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.

2.4 Short Pulse Radar Test Waveforms

As the EUT is a Client Device with no Radar Detection, only one type radar pulse is required for the testing. Radar Pulse type 0 was used in the evaluation of the Client device for the purpose of measuring the Channel Move Time and the Channel Closing Transmission Time.

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Trials
0	1	1428	18	60%	30
1	1	Test A Test B	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{\text{PRI}_{\mu\text{sec}}}\right)\right\}$	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

Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a
Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A

A minimum of 30 unique waveforms are required for each of the short pulse radar types 2 through 4. For short pulse radar type 1, the same waveform is used a minimum of 30 times. If more than 30 waveforms are used for short pulse radar types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms.

If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B.

The aggregate is the average of the percentage of successful detections of short pulse radar types 1-4.

2.5 Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per *Burst*	Number of *Bursts*	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1–3	8-20	80%	30

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse radar test signal. If more than 30 waveforms are used for the Long Pulse radar test signal, then each additional waveform must also be unique and not repeated from the previous waveforms. Each waveform is defined as follows:

(1) The transmission period for the Long Pulse Radar test signal is 12 seconds.

(2) There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst_Count.

(3) Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each Burst within the 12 second sequence may have a different number of pulses.

(4) The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a Burst will have the same pulse width. Pulses in different Bursts may have different pulse widths.

(5) Each pulse has a linear FM chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a Burst will have the same chirp width. Pulses in different Bursts may have different chirp widths. The chirp is centered on the pulse. For example, with a radar frequency of 5300 MHz and a 20 MHz chirped signal, the chirp starts at 5290 MHz and ends at 5310 MHz.

(6) If more than one pulse is present in a Burst, the time between the pulses will be between 1000 and 2000 microseconds, with the time being randomly chosen. If three pulses are present in a Burst, the time between the first and second pulses is chosen independently of the time between the second and third pulses.

(7) The 12 second transmission period is divided into even intervals. The number of intervals is equal to Burst_Count. Each interval is of length (12,000,000 / Burst_Count) microseconds. Each interval contains one Burst. The start time for the Burst, relative to the beginning of the interval, is between 1 and [(12,000,000 / Burst_Count) – (Total Burst Length) + (One Random PRI Interval)] microseconds, with the start time being randomly chosen. The step interval for the start time is 1 microsecond. The start time for each Burst is chosen independently.

A representative example of a Long Pulse radar test waveform:

(1) The total test signal length is 12 seconds.

(2) 8 Bursts are randomly generated for the Burst_Count.

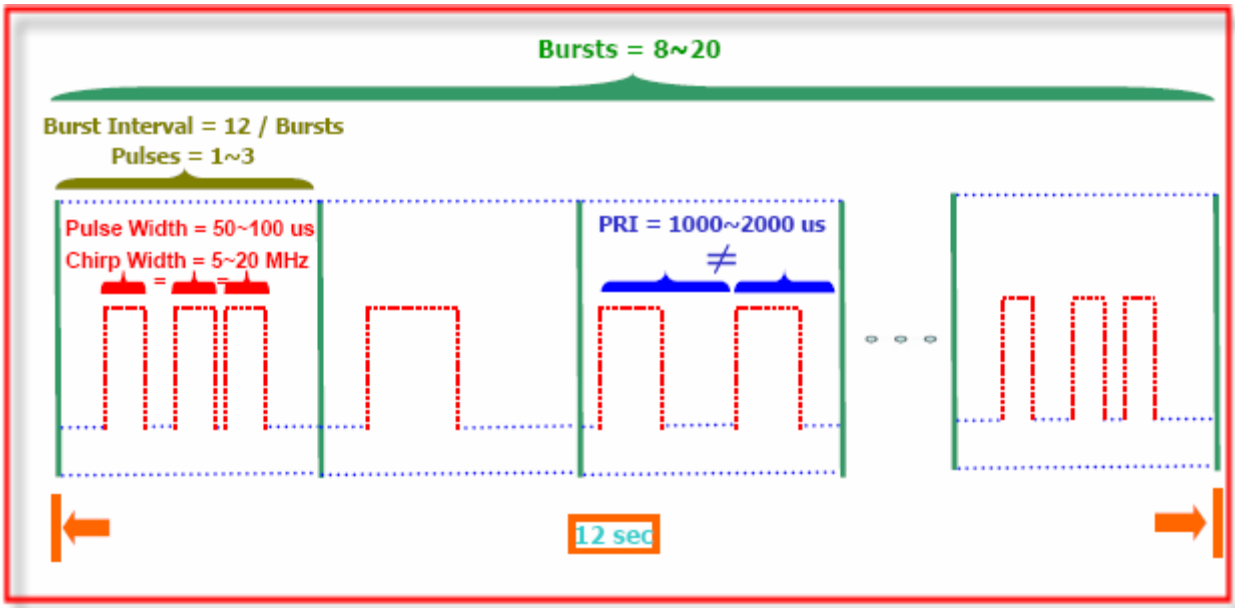
(3) Burst 1 has 2 randomly generated pulses.

(4) The pulse width (for both pulses) is randomly selected to be 75 microseconds.

(5) The PRI is randomly selected to be at 1213 microseconds.

(6) Bursts 2 through 8 are generated using steps 3 – 5.

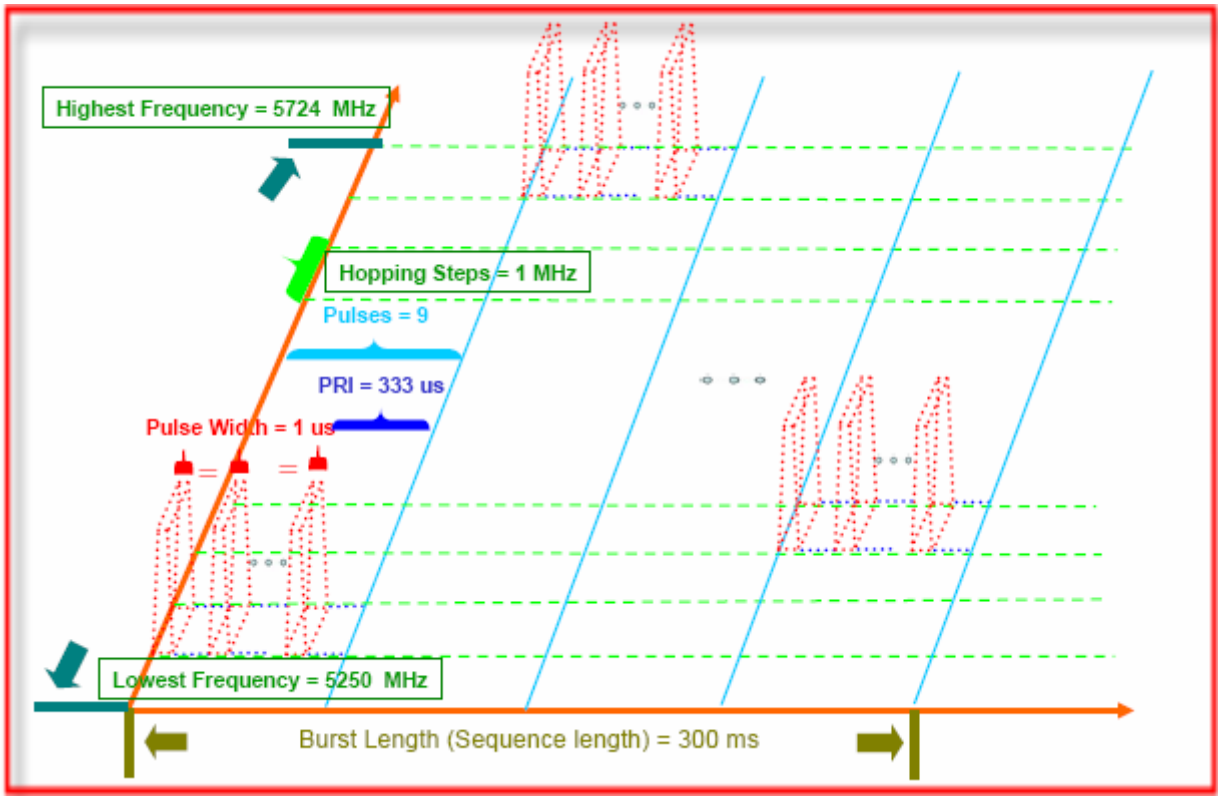
(7) Each Burst is contained in even intervals of 1,500,000 microseconds. The starting location for Pulse 1, Burst 1 is randomly generated (1 to 1,500,000 minus the total Burst 1 length + 1 random PRI interval) at the 325,001 microsecond step. Bursts 2 through 8 randomly fall in successive 1,500,000 microsecond intervals (i.e. Burst 2 falls in the 1,500,001 – 3,000,000 microsecond range).



2.6 Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	0.333	300	70%	30

For the Frequency Hopping Radar Type, the same Burst parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm:
The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250 – 5724 MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues until all 475 frequencies are chosen for the set. For selection of a random frequency, the frequencies remaining within the group are always treated as equally likely.



3 Calibration Setup and DFS Test Results

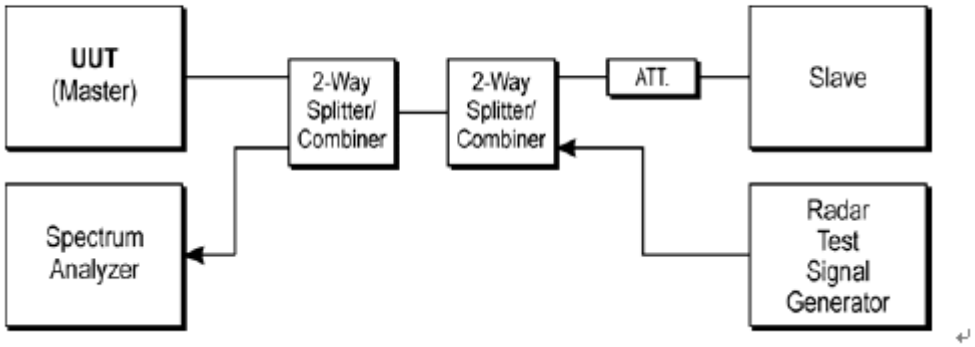
3.1 Calibration of Radar Waveform

3.1.1 Radar Waveform Calibration Procedure

The Interference Radar Detection Threshold Level is (-62) + (-4) [dBi] + 1dB = -65 dBm that had been taken into account the output power range and antenna gain. The following equipment setup was used to calibrate the radiated Radar Waveform. A vector signal generator was utilized to establish the test signal level for radar type 1~6. During this process there were no transmissions by either the Master or Client Device. The spectrum analyzer was switched to the zero span (Time Domain) at the frequency of the Radar Waveform generator. Peak detection was used. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to 3 MHz to measure the radar waveform. The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was (-62dBm) + (-4) [dBi]+ 1 dB= -65 dBm. Capture the spectrum analyzer plots on radar waveform.

3.1.2 Conducted Calibration Setup

Conducted Test Setup Diagram



3.1.3 Calibration Deviation

There is no deviation with the original standard.

3.1.4 Radar Waveform Calibration Result

<20MHz / 5300MHz>

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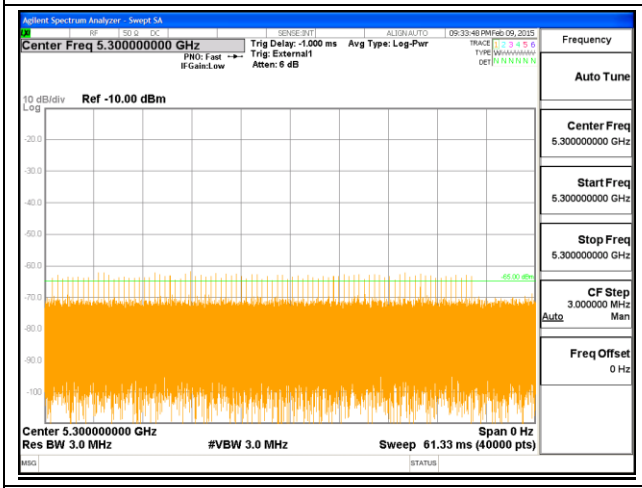	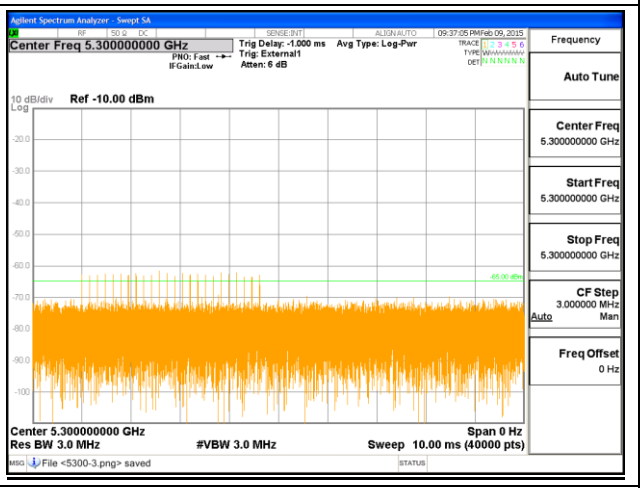
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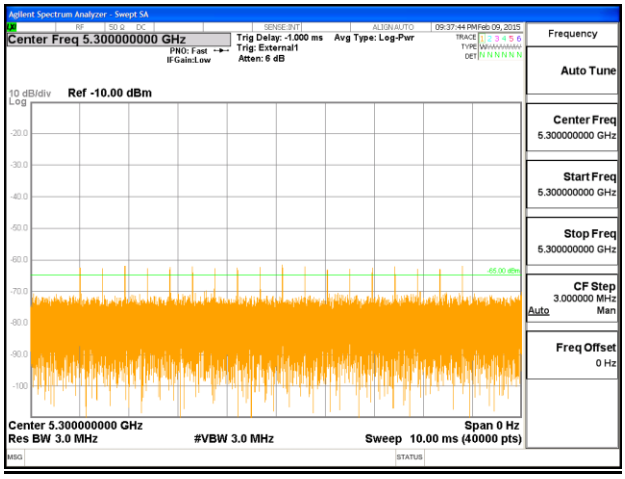	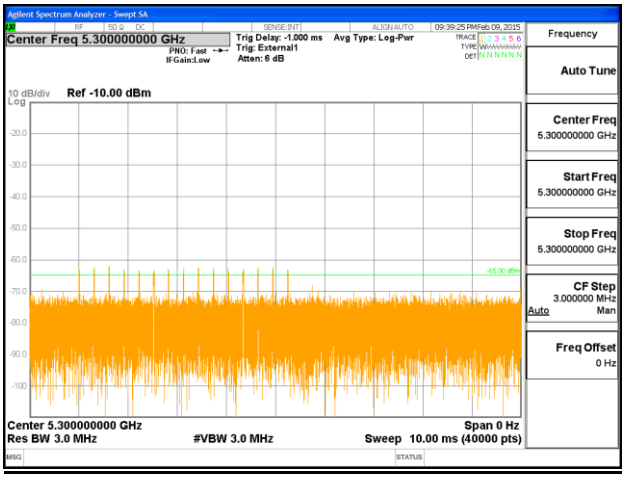
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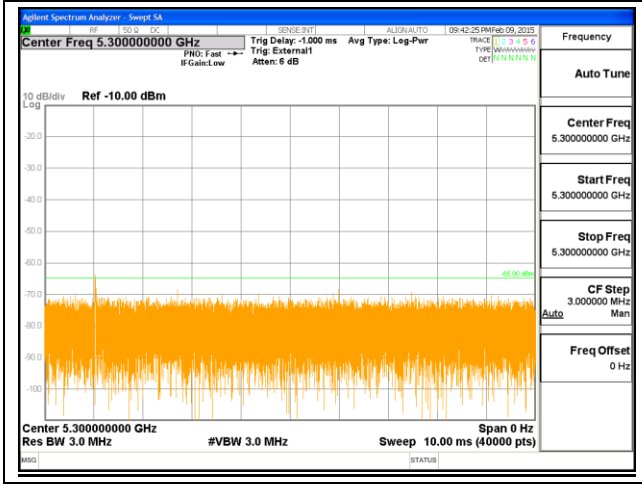	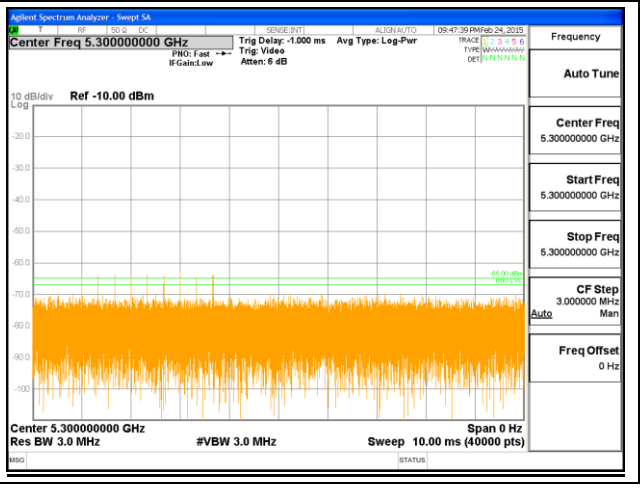

<40MHz / 5310MHz>

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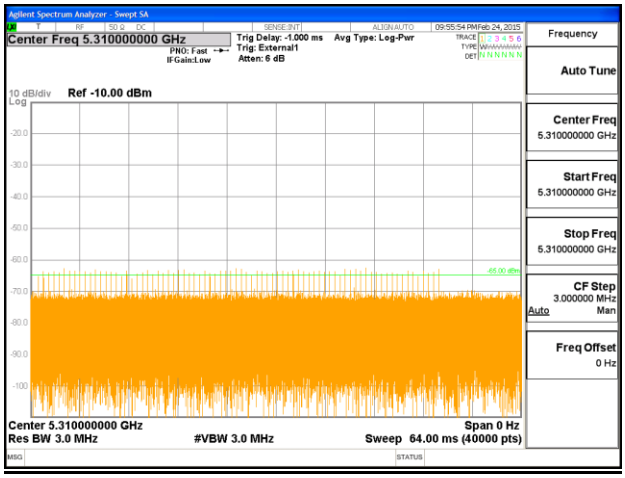	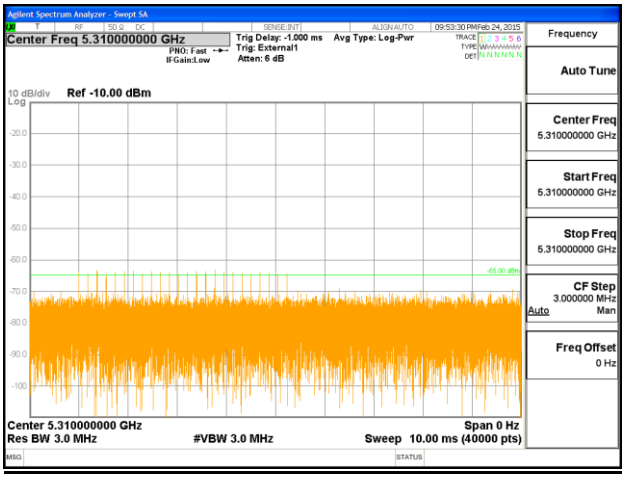
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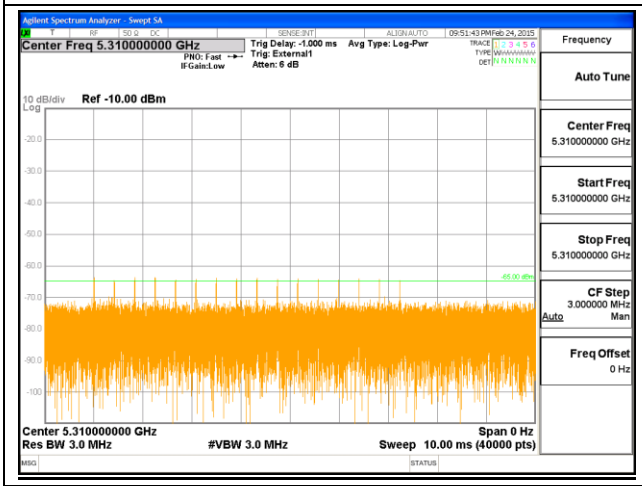	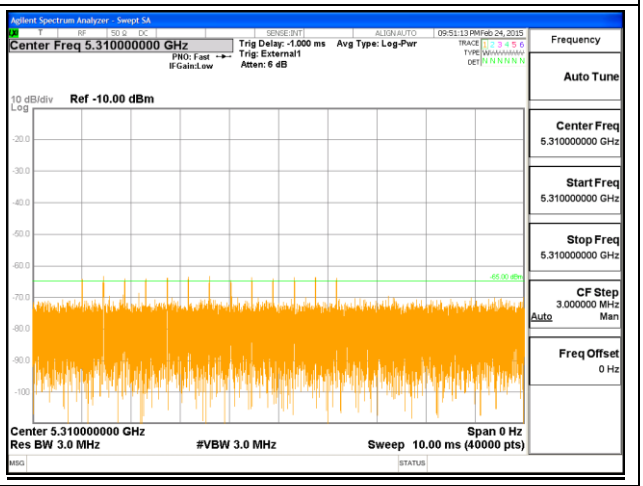
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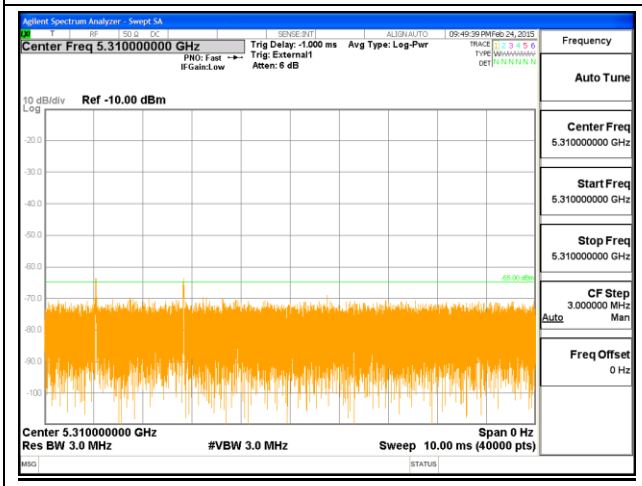	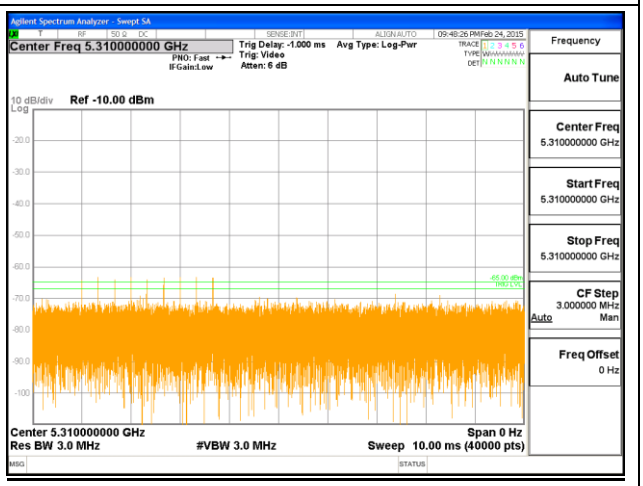

<20MHz / 5500MHz>

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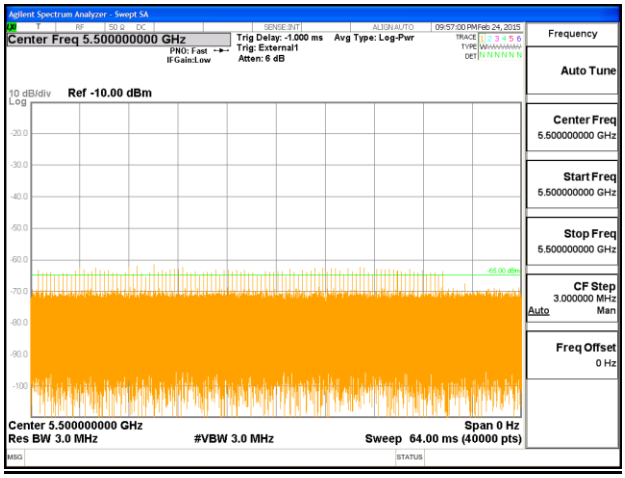	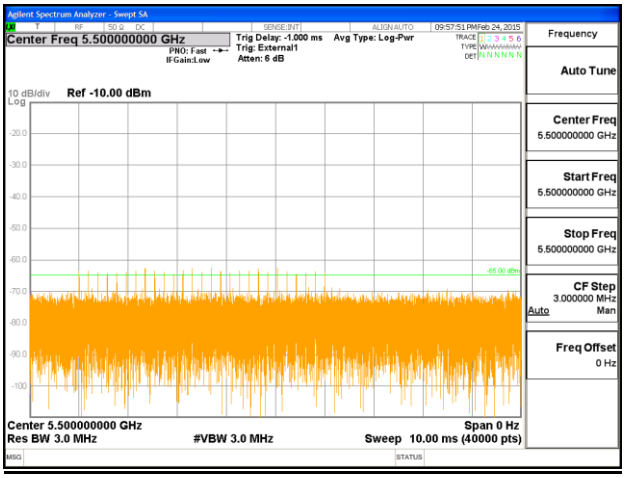
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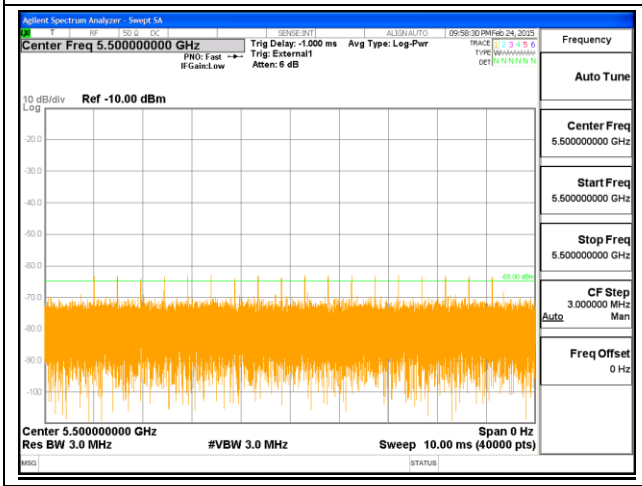	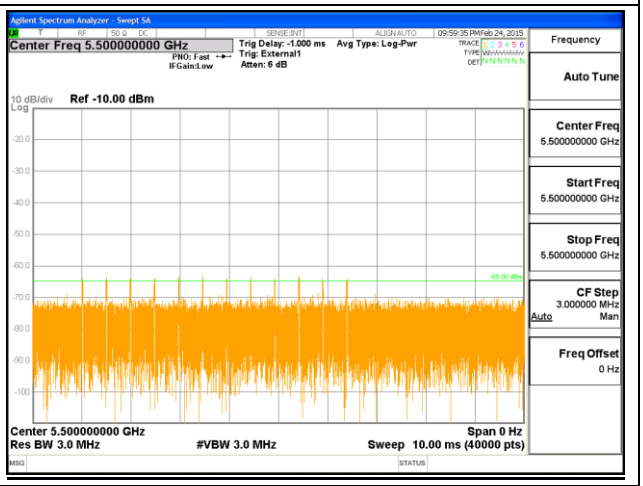
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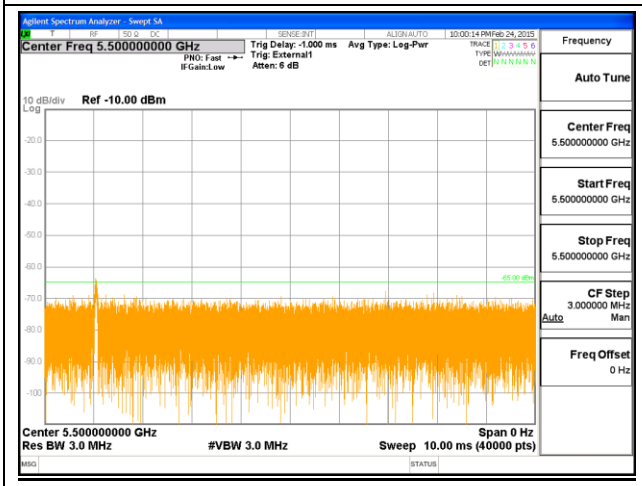	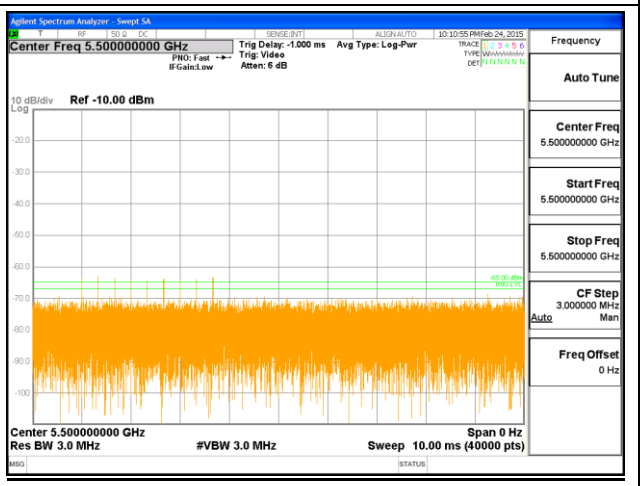

<40MHz / 5550MHz>

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	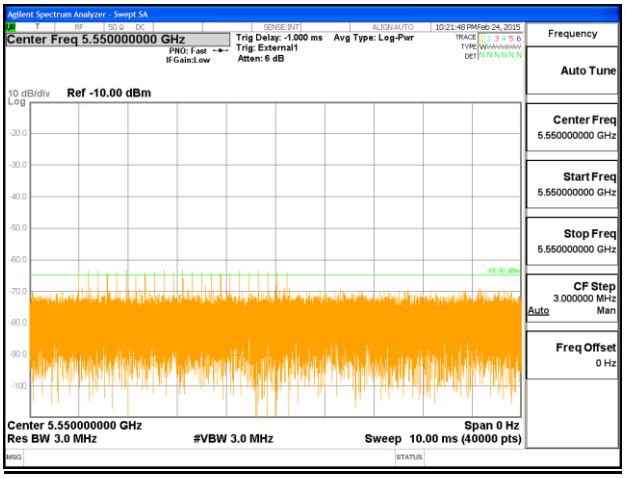
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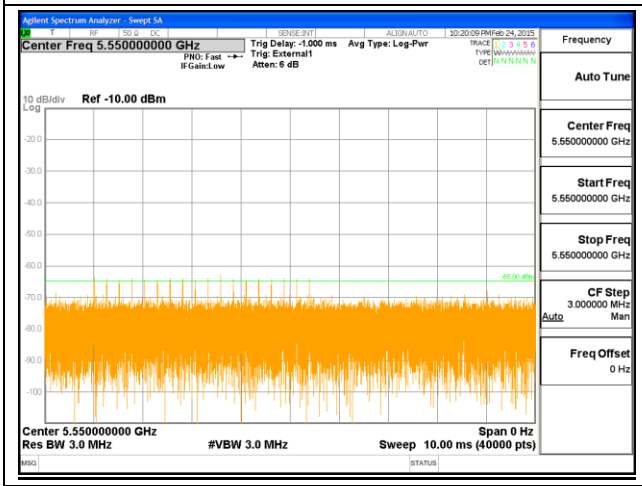	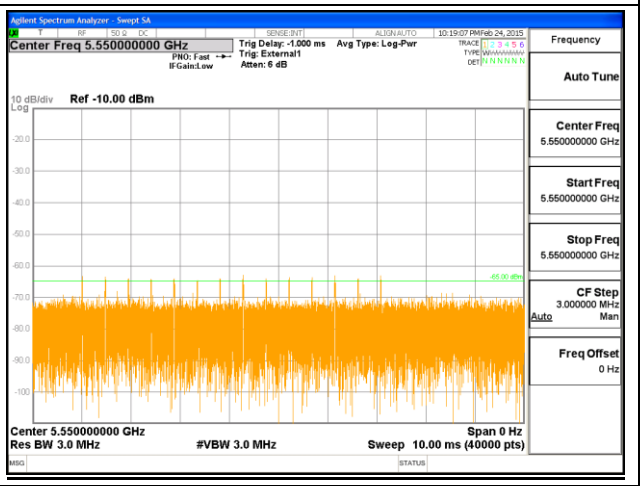
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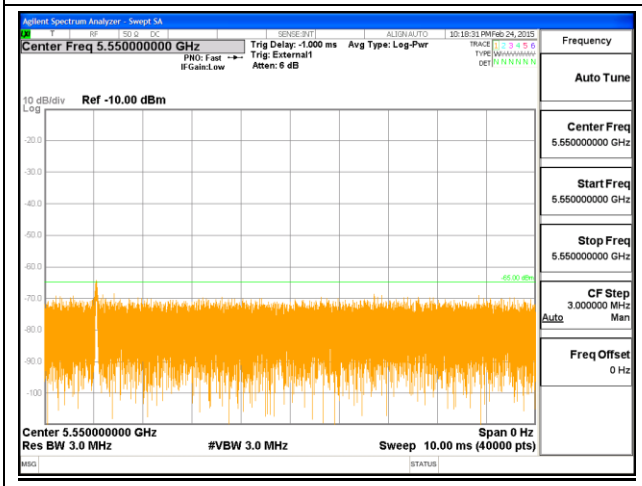
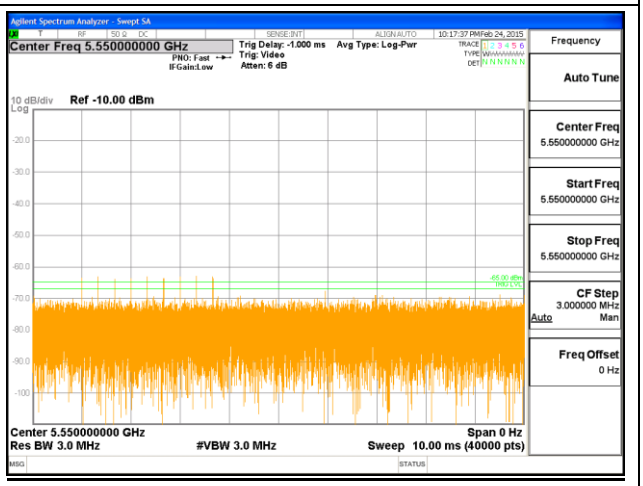
	

3.2 U-NII Detection Bandwidth (7.8.1)

3.2.1 Limit of U-NII Detection Bandwidth

The U-NII Detection Bandwidth shall contain minimum 80% of the 99% power bandwidth.

During the U-NII Detection Bandwidth detection test, radar type 1 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.

3.2.2 Test Procedures

(1) Adjust the equipment to produce a single burst of the Short Pulse Radar Type 0 at the center frequency of the UUT Operating Channel at the specified DFS Detection Threshold level.

(2) Set the EUT up as a standalone device (no associated Client or Master, as appropriate) and no traffic. Frame based systems will be set to a talk/listen ratio of 0%/100% during this test.

(3) Generate a single radar burst, and note the response of the UUT. Repeat for a minimum of 10 trials. The UUT must detect the Radar Waveform using the specified U-NII Detection Bandwidth criterion.

(4) Starting at the center frequency of the UUT operating Channel, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in Table 4. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as F_H) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies above FH is not required to demonstrate compliance.

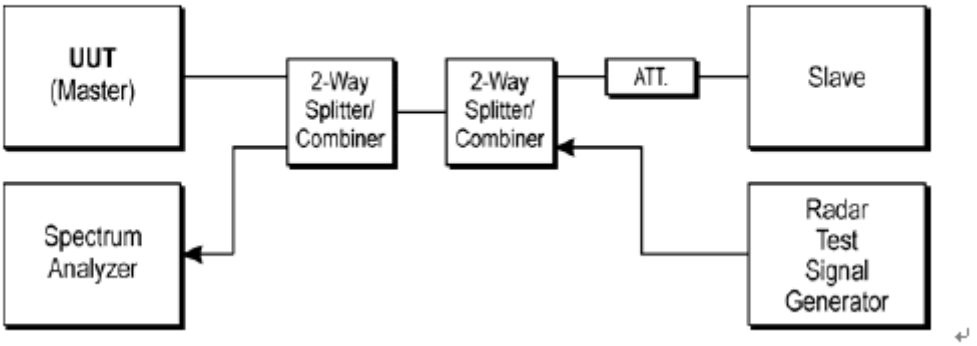
(5) Starting at the center frequency of the UUT operating Channel, decrease the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in Table 4. Repeat this measurement in 1MHz steps at frequencies 5 MHz above where the detection rate begins to fall. Record the lowest frequency (denote as F_L) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies below FL is not required to demonstrate compliance.

(6) The U-NII Detection Bandwidth is calculated as follows:
U-NII Detection Bandwidth = $F_H - F_L$

3.2.3 Test Setup

Conducted Test Setup Photo

Conducted Test Setup Diagram



3.2.4 Test Deviation

There is no deviation with the original standard.

3.2.5 Result of U-NII Detection Bandwidth

<20MHz / 5300MHz>

Frequency (MHz)	Fc	Trial Number (Detection = Y, No Detection = N)										Rate (%)	F_H/F_L
		1	2	3	4	5	6	7	8	9	10		
5286	-14	N	N	N	N	N	N	N	N	N	N	0%	
5287	-13	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	**F_L**
5288	-12	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5289	-11	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5290	-10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5291	-9	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5292	-8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5293	-7	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5294	-6	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5295	-5	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5300	0	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5305	+5	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5306	+6	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5307	+7	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5308	+8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5309	+9	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5310	+10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5311	+11	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5312	+12	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	**F_H**
5313	+13	N	N	Y	N	N	N	Y	N	N	N	20%	

Detection Bandwidth = $F_H - F_L$ =**5312** – **5287** = **25** MHz

EUT 99% Bandwidth = **17.941** MHz (Refer to channel 60)

<40MHz / 5310MHz>

Frequency (MHz)	Fc	Trial Number (Detection = V, No Detection = N)										Rate (%)	F_H/F_L
		1	2	3	4	5	6	7	8	9	10		
5289	-21	N	N	N	N	N	N	N	N	N	N	0%	
5290	-20	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	90%	F_L
5291	-19	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5292	-18	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5293	-17	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5294	-16	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5295	-15	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5300	-10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5305	-5	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5310	0	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5315	+5	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5320	+10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5325	+15	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5326	+16	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5327	+17	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5328	+18	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5329	+19	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5330	+20	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_H
5331	+21	Y	Y	N	N	N	N	N	N	N	Y	30%	

Detection Bandwidth = $F_H - F_L$ = **5330** – **5290** = **40** MHz

EUT 99% Bandwidth = **34.203** MHz (Refer to channel 62)

<20MHz / 5500MHz>

Frequency (MHz)	Fc	Trial Number (Detection = V, No Detection = N)										Rate (%)	F_H/F_L
		1	2	3	4	5	6	7	8	9	10		
5486	-14	N	N	N	N	N	N	N	N	N	N	0%	
5487	-13	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_L
5488	-12	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5489	-11	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5490	-10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5491	-9	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5492	-8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5493	-7	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5494	-6	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5495	-5	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5500	0	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5505	+5	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5506	+6	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5507	+7	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5508	+8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5509	+9	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5510	+10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5511	+11	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5512	+12	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5513	+13	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_H
5514	+14	N	N	N	N	N	N	N	N	N	N	0%	

Detection Bandwidth = $F_H - F_L$ = **5513** – **5487** = **26** MHz

EUT 99% Bandwidth = **17.687** MHz (Refer to channel 100)

<40MHz / 5550MHz>

Frequency (MHz)	Fc	Trial Number (Detection = V, No Detection = N)										Rate (%)	F_H/F_L
		1	2	3	4	5	6	7	8	9	10		
5429	-21	N	N	N	N	N	N	N	N	N	N	0%	
5430	-20	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_L
5431	-19	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5432	-18	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5433	-17	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5434	-16	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5435	-15	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5540	-10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5545	-5	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5550	0	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5555	+5	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5560	+10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5565	+15	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5566	+16	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5567	+17	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5568	+18	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5569	+19	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5570	+20	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_H
5571	+21	Y	N	Y	Y	Y	Y	N	N	Y	N	60%	

Detection Bandwidth = $F_H - F_L$ = **5530** – **5490** = **40** MHz

EUT 99% Bandwidth = **36.238** MHz (Refer to channel 102)

3.3 Channel Availability Check (7.8.2)

3.3.1 Limit of Channel Availability Check

The Initial Channel Availability Check Time tests that the EUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the U-NII device checks for radar waveforms for **one minute** on the test Channel.

3.3.2 Test Procedures

3.2.2.1 Initial Channel Availability Check Time

This test does not use any radar waveforms and only needs to be performed one time.

(1) The U-NII devices will be powered on and be instructed to operate on the appropriate U-NII Channel that must incorporate DFS functions. At the same time the EUT is powered on, the spectrum analyzer will be set to zero span mode with a 3 MHz RBW and 3 MHz VBW on the Channel occupied by the radar (Chr) with a 2.5 minute sweep time. The spectrum analyzer's sweep will be started at the same time power is applied to the U-NII device.
(2) The EUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.

3.2.2.2 Radar Burst at the Beginning of the Channel Availability Check Time

The steps below define the procedure to verify successful radar detection on the test Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning of the Channel Availability Check Time. This is illustrated in Figure 15.

(1) The Radar Waveform generator and UUT are connected using the applicable test setup and the power of the UUT is switched off.
(2) The UUT is powered on at T0. T1 denotes the instant when the EUT has completed its power-up sequence (Tpower_up). The Channel Availability Check Time commences on Chr at instant T1 and will end no sooner than T1 + Tch_avail_check.
(3) A single Burst of one of the Short Pulse Radar Types 1-4 will commence within a 6 second window starting at T1. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
(4) Visual indication or measured results on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of Chr for EUT emissions will continue for 2.5 minutes after the radar Burst has been generated.
(5) Verify that during the 2.5 minute measurement window no UUT transmissions occurred on Chr. The Channel Availability Check results will be recorded.

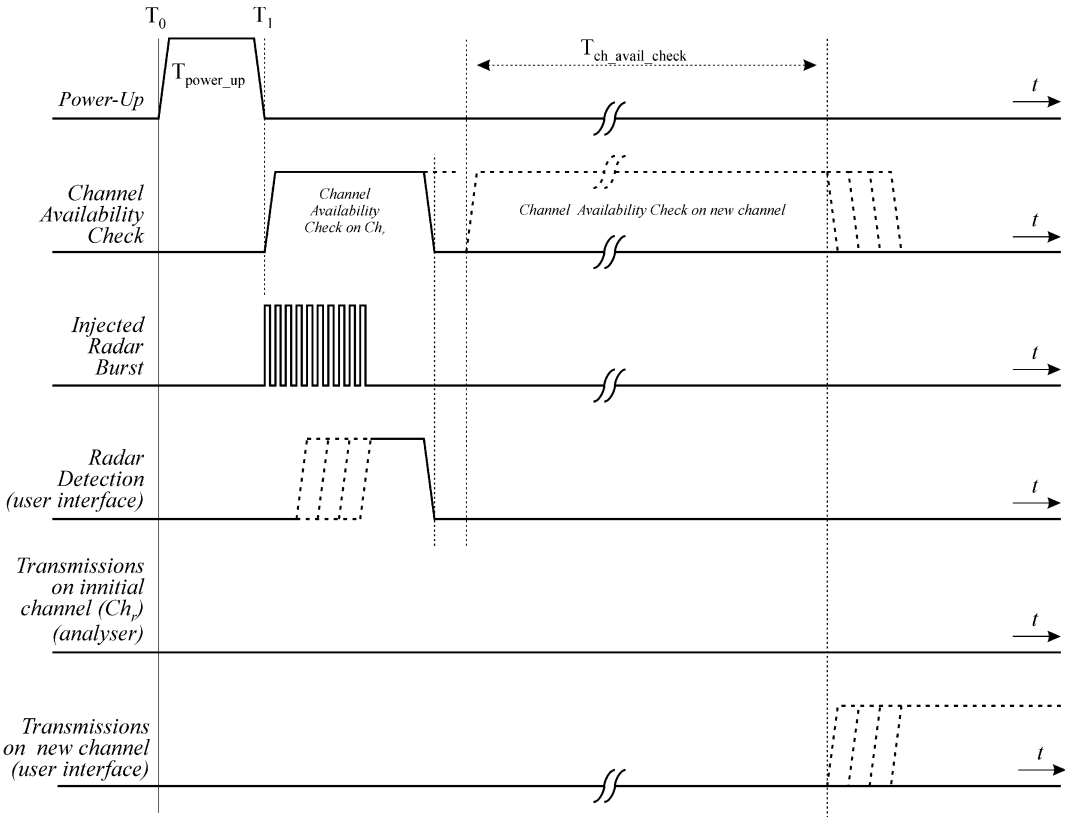


Figure 15: Example of timing for radar testing at the beginning of the Channel Availability Check Time

3.2.2.3 Radar Burst at the End of the Channel Availability Check Time

The steps below define the procedure to verify successful radar detection on the test Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1dB occurs at the end of the Channel Availability Check Time. This is illustrated in Figure 16.

(1) The Radar Waveform generator and UUT are connected using the applicable test setup and the power of the UUT is switched off.
(2) The UUT is powered on at T0. T1 denotes the instant when the EUT has completed its power-up sequence (Tpower_up). The Channel Availability Check Time commences on Chr at instant T1 and will end no sooner than T1 + Tch_avail_check.
(3) A single Burst of one of the Short Pulse Radar Types 1-4 will commence within a 6 second window starting at T1 + 54 seconds. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
(4) Visual indication or measured results on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of Chr for EUT emissions will continue for 2.5 minutes after the radar Burst has been generated.
(5) Verify that during the 2.5 minute measurement window no EUT transmissions occurred on Chr. The Channel Availability Check results will be recorded.

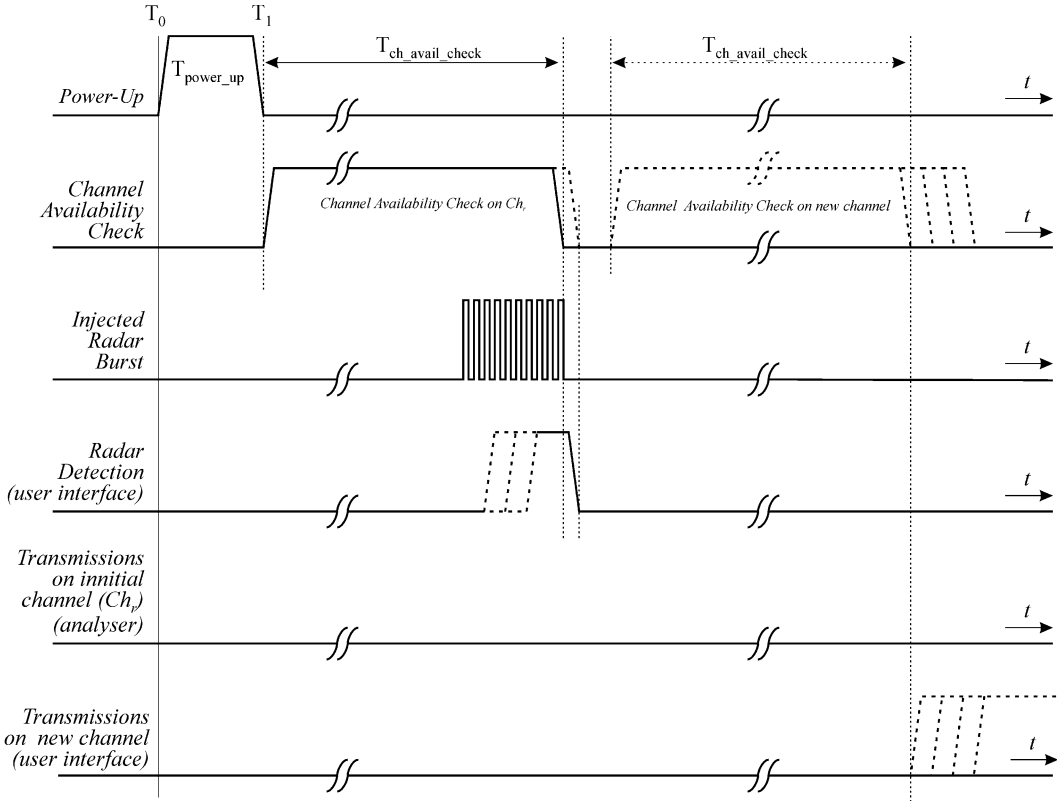
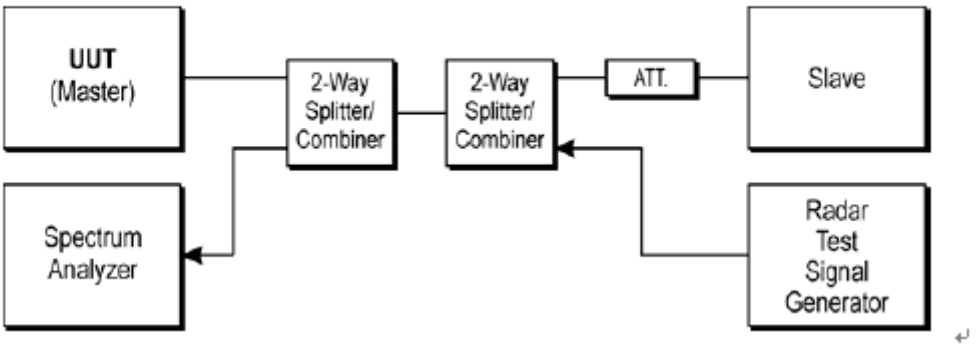


Figure 16: Example of timing for radar testing towards the end of the Channel Availability Check Time

3.3.3 Test Setup

Conducted Test Setup Photo

Conducted Test Setup Diagram

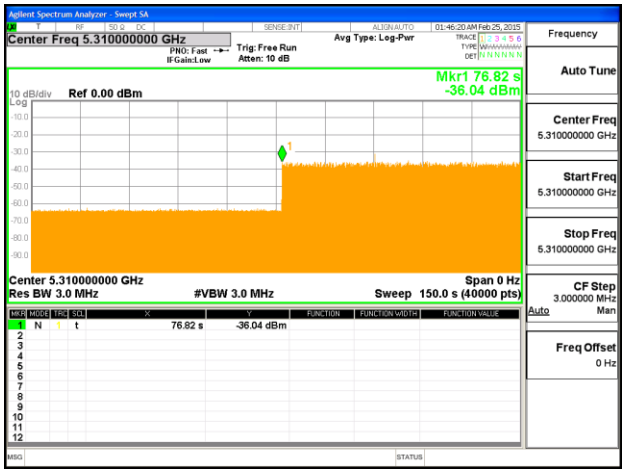
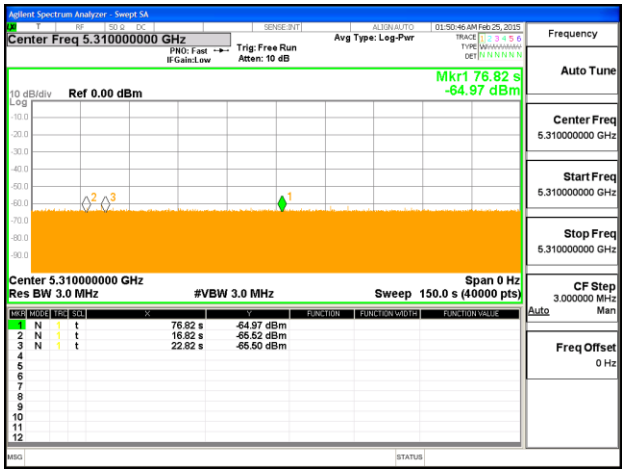
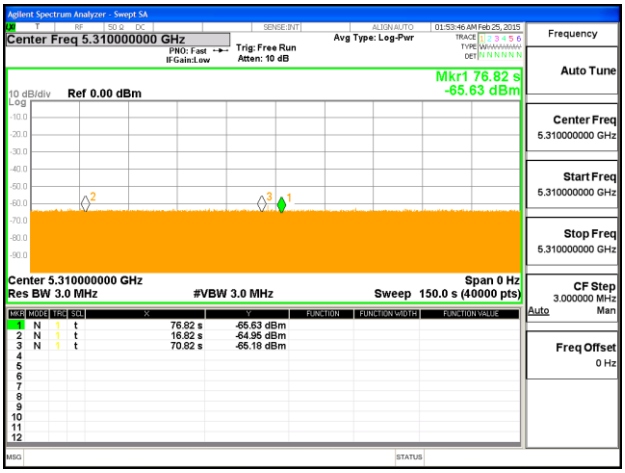


3.3.4 Test Deviation

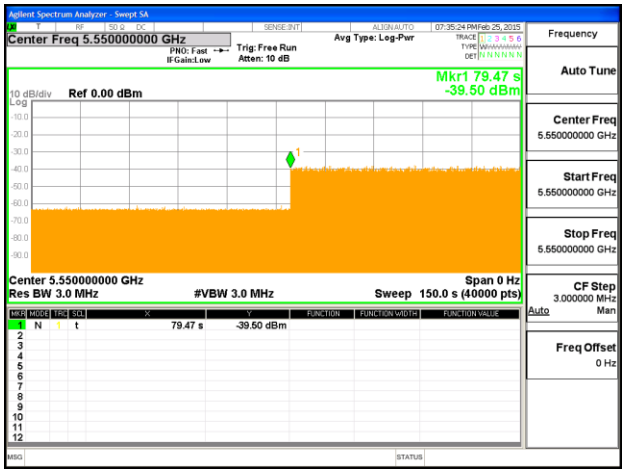
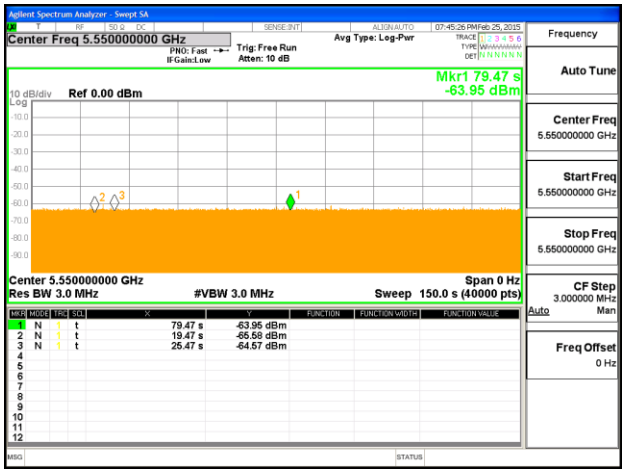
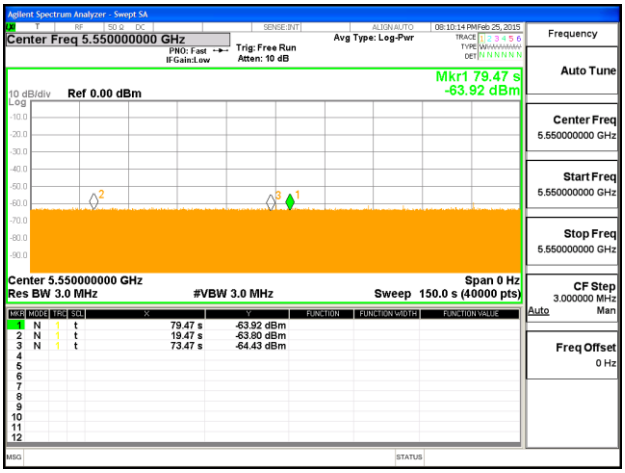
There is no deviation with the original standard.

3.3.5 Result of Channel Availability Check Time

<40MHz / 5310MHz>

EUT Power up and Initial Channel Availability Check Time	
	
Radar Burst at the Beginning of the Channel Availability Check Time	**Radar Burst at the End of the Channel Availability Check Time**
	

<40MHz / 5550MHz>

EUT Power up and Initial Channel Availability Check Time	
	
Radar Burst at the Beginning of the Channel Availability Check Time	**Radar Burst at the End of the Channel Availability Check Time**
	

3.4 In-Service Monitoring: Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period (7.8.3)

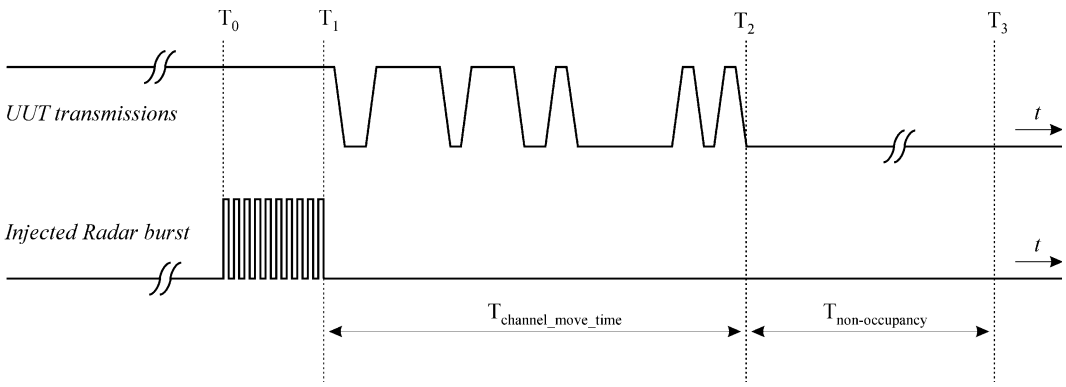
3.4.1 Limit of In-Service Monitoring

The EUT has In-Service Monitoring function to continuously monitor the radar signals, If radar is detected, it must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current Channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec. The total duration of Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate Channel changes (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Non-Occupancy Period time is 30 minute during which a Channel will not be utilized after a Radar Waveform is detected on that Channel.

3.4.2 Test Procedures

(1) One frequency will be chosen from the Operating Channels of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands.
(2) In case the UUT is a Master Device, a U-NII device operating as a Client Device will be used and it is assumed that the Client will associate with the UUT (Master). If the Master Device has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
(3) The data stream was generated by the iperf software command line with at least 17% activity ratio over 100ms period.
(4) At time T0 the Radar Waveform generator sends a Burst of pulses for one of the Short Pulse Radar Types 1-4 at DFS Detection Threshold levels on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
(5) Observe the transmissions of the UUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). Measure and record the Channel Move Time and Channel Closing Transmission Time if radar detection occurs.
(6) When operating as a Master Device, monitor the UUT for more than 30 minutes following instant T2 to verify that the UUT does not resume any transmissions on this Channel. Perform this test once and record the measurement result.

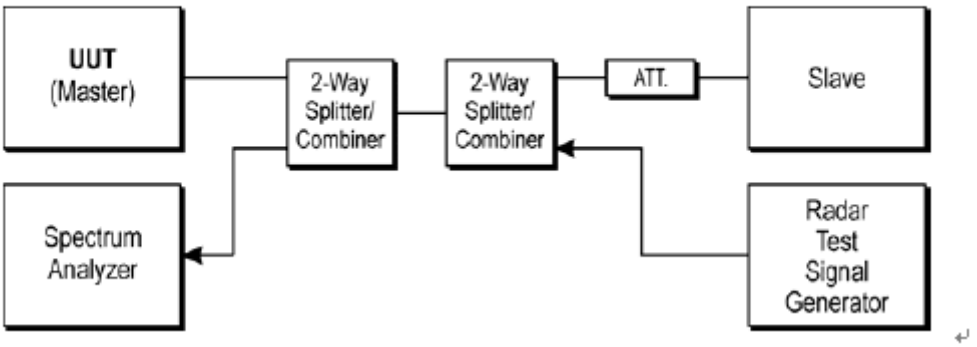


(7) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the EUT during the observation time (Channel Move Time). One 12 seconds plot is reported for the Short Pulse Radar Types 1. The plot for the Short Pulse Radar Types start at the end of the radar burst.
(8) Measurement of the aggregate duration of the Channel Closing Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms)= S (12000ms) / B (40000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is the sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3 ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.

3.4.3 Test Setup

Conducted Test Setup Photo

Conducted Test Setup Diagram



3.4.4 Test Deviation

There is no deviation with the original standard.

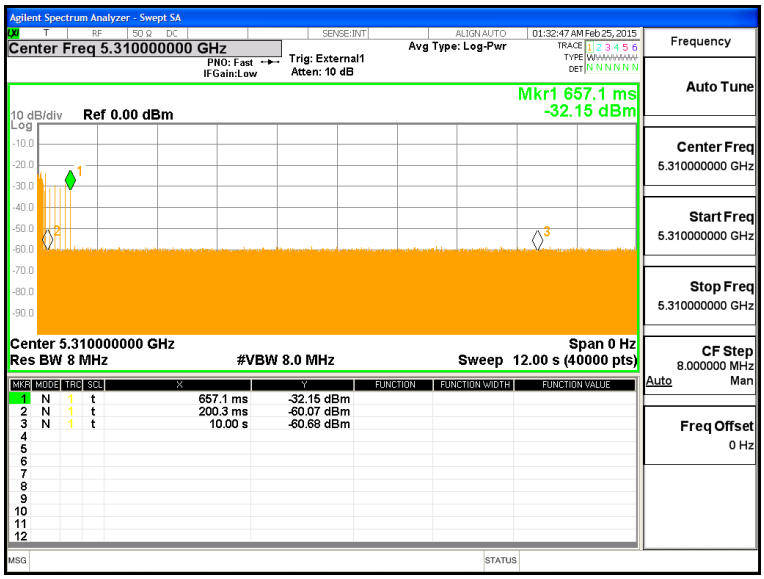
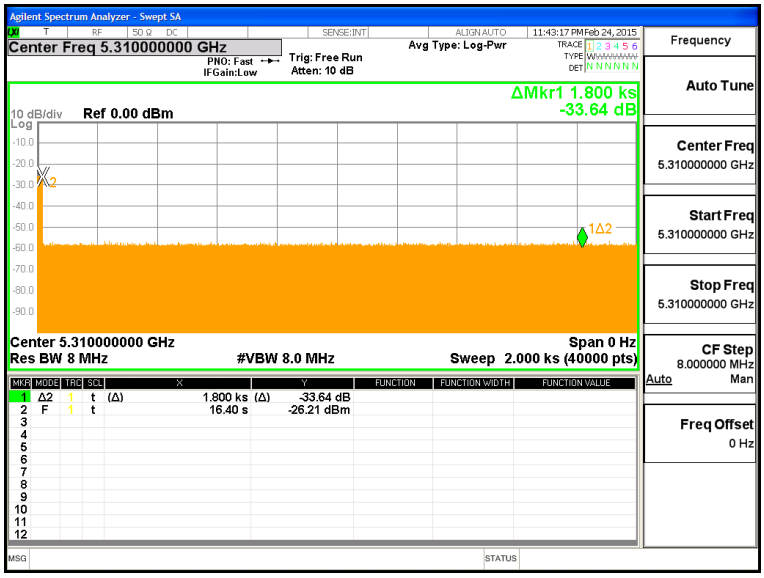
3.4.5 Result of Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Test

Test Mode :	Client without radar detection	Temperature :	27.3℃
Test Engineer :	Bill Kuo	Relative Humidity :	47%

BW / Channel	Test Item	Test Result	Limit	Pass/Fail
40MHz / 5310 MHz	Channel Move Time	0.6571 s	＜ 10s	Pass
	Channel Closing Transmission Time	200ms + 2.4 ms	＜ 260ms	Pass
	Non-Occupancy Period	≥ 30	≥ 30 min	Pass
40MHz / 5550 MHz	Channel Move Time	0.6007 s	＜ 10s	Pass
	Channel Closing Transmission Time	200ms + 1.8 ms	＜ 260ms	Pass
	Non-Occupancy Period	≥ 30	≥ 30 min	Pass

Note: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds period. The aggregate duration of control signals will not count quiet periods in between transmissions.

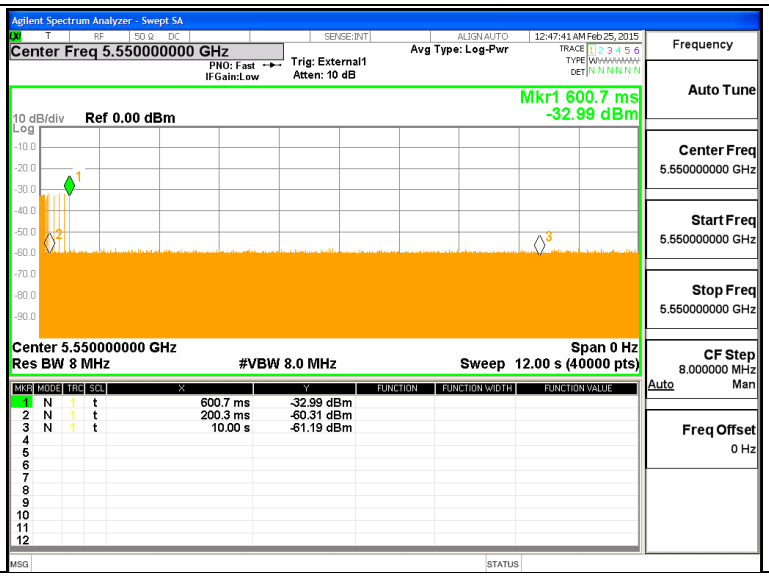
3.4.6 Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period Test Plots

<40MHz / 5310 MHz> In-Service Monitoring
Channel Move Time & **Channel Closing Transmission Time**

Non-Occupancy Period

Note: Dwell (0.3 ms)= Sweep Time (12000 ms) / Sweep Point Bins (40000) Channel Closing Transmission Time (200 + 2.4 ms) = 200 + Number (8) X Dwell (0.3 ms) < 260ms

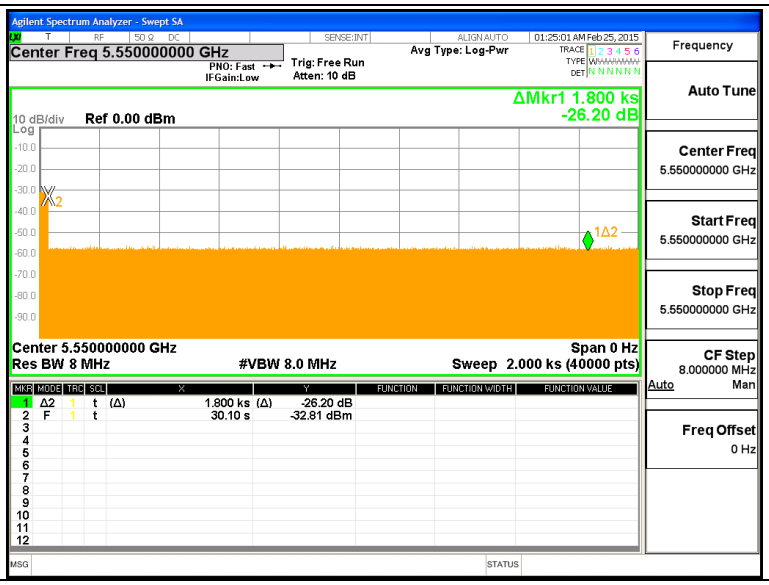
<40MHz / 5550 MHz> In-Service Monitoring

Channel Move Time &

Channel Closing Transmission Time



Non-Occupancy Period



Note:

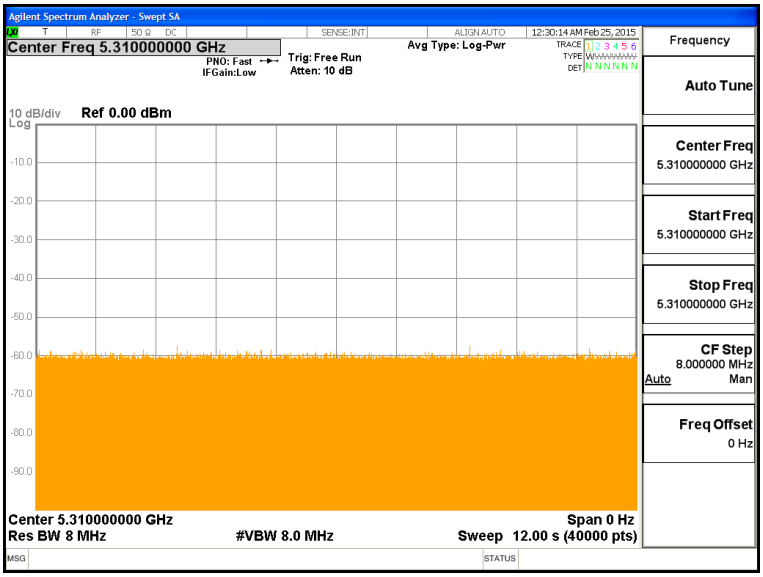
Dwell (0.3 ms)= Sweep Time (12000 ms) / Sweep Point Bins (40000)

Channel Closing Transmission Time (200 + 1.8 ms) = 200 + Number (6) X Dwell (0.3 ms) < 260ms

3.4.7 Data Traffic and Noise Floor Plots

EUT data traffic (Master)

Noise Floor (No transmission)



3.5 Statistical Performance Check (7.8.4)

3.5.1 Limit of Statistical Performance Check

Short Pulse Radar Test

Once the performance requirements check is complete, statistical data will be gathered, to determine the ability of the device to detect the radar test waveforms (Short Pulse Radar Types 1-4) found in **Table 5**. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trials. The percentage of successful detection is calculated by:

$$\frac{TotalWaveformDetections}{TotalWaveformTrials} \times 100$$ = Percentage of Successful Detection *Radar Waveform* N = P_dN

In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4}$$

The minimum number of trails, minimum percentage of successful detection and the aggregate minimum percentage of successful detection are found in **Table 5**.

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Minimum Percentage of Successful Detection	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

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. For Short Pulse Radar Type 1, the same waveform is used a minimum of 30 times. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms.

Radar Type	Number of Trials	Number of Successful Detections	Minimum Percentage of Successful Detection
1	35	29	82.9%
2	30	18	60%
3	30	27	90%
4	50	44	88%
Aggregate (82.9% + 60% + 90% + 88%)/4 = 80.2%			

Long Pulse Radar Test

Statistical data will be gathered to determine the ability of the device to detect the Long Pulse Radar Type 5 found in **Table 6**. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trials. The percentage of successful detection is calculated by:

$$\frac{TotalWaveformDetections}{TotalWaveformTrials} \times 100$$

Table 6 – Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per *Burst*	Number of *Bursts*	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse Radar Type waveforms. If more than 30 waveforms are used for the Long Pulse Radar Type waveforms, then each additional waveform must also be unique and not repeated from the previous waveforms.
Note: The center frequency for each of the 30 trials of the Bin 5 radar shall be randomly selected within 80% of the Occupied Bandwidth.

Frequency Hopping Radar Test

Statistical data will be gathered to determine the ability of the device to detect the Frequency Hopping radar test signal (radar type 6) found in **Table 7**. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs. The probability of successful detection is calculated by:

$$\frac{TotalWaveformDetections}{TotalWaveformTrials} \times 100$$

Table 7 – Frequency Hopping Radar Test Waveform

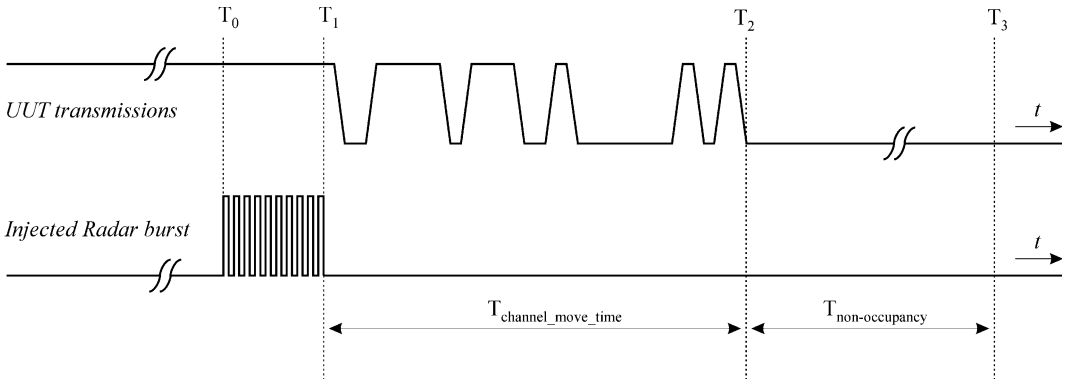
Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

For the Frequency Hopping Radar Type, the same *Burst* parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm:

The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250 – 5724 MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues until all 475 frequencies are chosen for the set. For selection of a random frequency, the frequencies remaining within the group are always treated as equally likely.

3.5.2 Test Procedures

(1) One frequency will be chosen from the Operating Channels of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands.
(2) In case the UUT is a Master Device, a U-NII device operating as a Client Device will be used and it is assumed that the Client will associate with the UUT (Master). If the Master Device has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
(3) The data stream was generated by the iperf software command line with at least 17% activity ratio over 100ms period.
(4) At time T0 the Radar Waveform generator sends a Burst of pulses for each of the Radar Types 1-6 at DFS Detection Threshold levels on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
(5) Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 1-4 and 6 to ensure detection occurs.
(6) Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs.



3.5.3 Test Setup

Radiated Test Setup Photo

3.5.4 Test Deviation

There is no deviation with the original standard.

3.5.5 Result of Statistical Performance Check

<20MHz / 5300MHz>

(Detection = Y, No Detection = N)						
Trial Number	**Type 1**	**Type 2**	**Type 3**	**Type 4**	**Type 5**	**Type 6**
1	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
2	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
3	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
4	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
5	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
6	**Y**	**Y**	**Y**	**Y**	**Y**	**N**
7	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
8	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
9	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
10	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
11	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
12	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
13	**N**	**Y**	**Y**	**Y**	**Y**	**Y**
14	**Y**	**Y**	**Y**	**Y**	**N**	**Y**
15	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
16	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
17	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
18	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
19	**Y**	**Y**	**N**	**Y**	**Y**	**Y**
20	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
21	**Y**	**N**	**Y**	**Y**	**Y**	**Y**
22	**Y**	**Y**	**Y**	**N**	**Y**	**Y**
23	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
24	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
25	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
26	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
27	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
28	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
29	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
30	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Trial of Detection	**29/30**	**29/30**	**29/30**	**29/30**	**29/30**	**29/30**
Probability (%)	**96.67%**	**96.67%**	**96.67%**	**96.67%**	**96.67%**	**96.67%**
Limit (%)	>= 60%	>= 60%	>= 60%	>= 60%	>= 80%	>= 70%
Average Probability of Radar Type 1~4 (%)			**96.67%** (>=80%)			

<40MHz / 5310MHz>

(Detection = Y, No Detection = N)						
Trial Number	**Type 1**	**Type 2**	**Type 3**	**Type 4**	**Type 5**	**Type 6**
1	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
2	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
3	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
4	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
5	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
6	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
7	**Y**	**Y**	**Y**	**N**	**Y**	**Y**
8	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
9	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
10	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
11	**Y**	**Y**	**Y**	**Y**	**Y**	**N**
12	**Y**	**Y**	**Y**	**N**	**Y**	**Y**
13	**N**	**Y**	**Y**	**Y**	**Y**	**Y**
14	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
15	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
16	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
17	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
18	**Y**	**N**	**Y**	**Y**	**Y**	**Y**
19	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
20	**Y**	**Y**	**Y**	**N**	**Y**	**Y**
21	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
22	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
23	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
24	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
25	**Y**	**Y**	**N**	**Y**	**Y**	**Y**
26	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
27	**Y**	**Y**	**Y**	**Y**	**N**	**Y**
28	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
29	**Y**	**Y**	**Y**	**N**	**Y**	**Y**
30	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Trial of Detection	**29/30**	**29/30**	**29/30**	**26/30**	**29/30**	**29/30**
Probability (%)	**96.67%**	**96.67%**	**96.67%**	**86.67%**	**96.67%**	**96.67%**
Limit (%)	>= 60%	>= 60%	>= 60%	>= 60%	>= 80%	>= 70%
Average Probability of Radar Type 1~4 (%)			**94.17%** (>=80%)			

<20MHz / 5500MHz>

(Detection = Y, No Detection = N)						
Trial Number	**Type 1**	**Type 2**	**Type 3**	**Type 4**	**Type 5**	**Type 6**
1	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
2	**Y**	**Y**	**Y**	**N**	**Y**	**Y**
3	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
4	**Y**	**Y**	**N**	**Y**	**Y**	**Y**
5	**N**	**Y**	**Y**	**N**	**Y**	**Y**
6	**Y**	**N**	**Y**	**Y**	**N**	**N**
7	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
8	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
9	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
10	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
11	**Y**	**Y**	**Y**	**Y**	**Y**	**N**
12	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
13	**Y**	**Y**	**Y**	**Y**	**N**	**Y**
14	**Y**	**Y**	**Y**	**N**	**Y**	**Y**
15	**N**	**Y**	**Y**	**Y**	**Y**	**Y**
16	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
17	**Y**	**Y**	**Y**	**Y**	**Y**	**N**
18	**Y**	**Y**	**Y**	**Y**	**N**	**Y**
19	**Y**	**Y**	**Y**	**N**	**Y**	**Y**
20	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
21	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
22	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
23	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
24	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
25	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
26	**Y**	**Y**	**Y**	**N**	**Y**	**N**
27	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
28	**Y**	**Y**	**Y**	**Y**	**N**	**Y**
29	**Y**	**Y**	**Y**	**N**	**Y**	**N**
30	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Trial of Detection	**28/30**	**29/30**	**29/30**	**24/30**	**27/30**	**25/30**
Probability (%)	**93.33%**	**96.67%**	**96.67%**	**80%**	**90.00%**	**83.33%**
Limit (%)	>= 60%	>= 60%	>= 60%	>= 60%	>= 80%	>= 70%
Average Probability of Radar Type 1~4 (%)			**91.67%** (>=80%)			

<40MHz / 5550MHz>

(Detection = Y, No Detection = N)						
Trial Number	**Type 1**	**Type 2**	**Type 3**	**Type 4**	**Type 5**	**Type 6**
1	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
2	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
3	**Y**	**Y**	**Y**	**Y**	**N**	**Y**
4	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
5	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
6	**Y**	**Y**	**Y**	**Y**	**N**	**Y**
7	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
8	**Y**	**Y**	**Y**	**N**	**Y**	**Y**
9	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
10	**Y**	**N**	**Y**	**Y**	**N**	**Y**
11	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
12	**Y**	**Y**	**Y**	**Y**	**Y**	**N**
13	**Y**	**Y**	**N**	**Y**	**Y**	**Y**
14	**Y**	**Y**	**Y**	**Y**	**N**	**Y**
15	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
16	**Y**	**Y**	**Y**	**N**	**Y**	**Y**
17	**N**	**Y**	**Y**	**Y**	**Y**	**Y**
18	**Y**	**Y**	**Y**	**Y**	**N**	**Y**
19	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
20	**Y**	**Y**	**Y**	**Y**	**Y**	**N**
21	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
22	**Y**	**Y**	**Y**	**N**	**Y**	**Y**
23	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
24	**N**	**Y**	**Y**	**Y**	**Y**	**Y**
25	**Y**	**N**	**Y**	**Y**	**Y**	**Y**
26	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
27	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
28	**Y**	**Y**	**N**	**Y**	**Y**	**Y**
29	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
30	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Trial of Detection	**28/30**	**28/30**	**28/30**	**27/30**	**25/30**	**28/30**
Probability (%)	**93.33%**	**93.33%**	**93.33%**	**90%**	**83.33%**	**93.33%**
Limit (%)	>= 60%	>= 60%	>= 60%	>= 60%	>= 80%	>= 70%
Average Probability of Radar Type 1~4 (%)			**92.5%** (>=80%)			

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Mar.13, 2014	Feb. 24, 2015 ~ Mar. 11, 2015	Mar. 12, 2015	DFS (DFS02-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Mar. 18 2015	Mar. 19, 2015 ~ Jun. 12, 2015	Mar. 17, 2016	DFS (DFS02-HY)
Signal Generator	Agilent	E4438C	MY49070755	250KHz~6GHz	Feb. 12, 2015	Feb. 24, 2015 ~ Jun. 12, 2015	Feb. 11, 2016	DFS (DFS02-HY)

Appendix A. Radar Parameters

<5300MHz>

Type 1 Trial #	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)	Detection (Yes / No)
1	12	1355.01	738	Yes
2	8	1519.76	658	Yes
3	15	1253.13	798	Yes
4	13	1319.26	758	Yes
5	19	1138.95	878	Yes
6	23	326.16	3066	Yes
7	4	1730.10	578	Yes
8	21	1089.32	918	Yes
9	1	1930.50	518	Yes
10	7	1567.40	638	Yes
11	16	1222.49	818	Yes
12	18	1165.50	858	Yes
13	22	1066.10	938	No
14	10	1432.66	698	Yes

15	3	1792.11	558	Yes
16			919	Yes
17			1654	Yes
18			1942	Yes
19			710	Yes
20			2216	Yes
21			1520	Yes
22			2954	Yes
23			649	Yes
24			2989	Yes
25			704	Yes
26			589	Yes
27			954	Yes
28			2767	Yes
29			1946	Yes
30			1623	Yes

<5300MHz>

Type2 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	25	3.30	213	Yes
2	27	2.70	223	Yes
3	29	3.60	164	Yes
4	24	2.60	150	Yes
5	24	1.60	199	Yes
6	28	1.10	159	Yes
7	29	3.90	181	Yes
8	23	2.20	162	Yes
9	27	3.30	192	Yes
10	28	4.50	202	Yes
11	28	3.00	177	Yes
12	26	1.90	175	Yes
13	24	1.20	175	Yes
14	23	4.80	228	Yes
15	25	3.80	169	Yes
16	28	2.60	214	Yes
17	23	4.20	152	Yes
18	27	3.60	171	Yes
19	26	1.10	206	Yes
20	24	4.00	155	Yes
21	27	4.30	228	No
22	26	2.50	200	Yes
23	29	1.60	208	Yes
24	29	2.50	226	Yes
25	29	2.90	209	Yes
26	23	2.20	210	Yes
27	26	4.90	208	Yes
28	23	2.60	205	Yes
29	23	2.80	166	Yes
30	25	4.90	206	Yes

<5300MHz>

Type3 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	16	8.20	427	Yes
2	18	7.40	472	Yes
3	16	9.30	309	Yes
4	18	6.60	441	Yes
5	17	7.80	387	Yes
6	16	8.10	390	Yes
7	18	7.90	498	Yes
8	17	9.70	291	Yes
9	16	9.30	335	Yes
10	18	6.70	392	Yes
11	17	9.90	315	Yes
12	16	9.50	393	Yes
13	17	9.70	489	Yes
14	16	8.90	256	Yes
15	17	6.60	259	Yes
16	17	6.20	252	Yes
17	17	8.00	425	Yes
18	16	9.10	306	Yes
19	17	8.60	363	No
20	16	8.00	337	Yes
21	16	8.70	317	Yes
22	16	9.00	476	Yes
23	16	9.90	378	Yes
24	16	8.50	485	Yes
25	17	8.30	417	Yes
26	16	8.70	411	Yes
27	18	6.50	308	Yes
28	16	7.40	261	Yes
29	17	8.50	304	Yes
30	18	8.10	343	Yes

<5300MHz>

Type4 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	16	17.00	467	Yes
2	15	18.10	433	Yes
3	12	20.00	391	Yes
4	15	16.90	350	Yes
5	12	15.30	392	Yes
6	16	15.10	372	Yes
7	13	17.40	397	Yes
8	15	19.90	302	Yes
9	15	19.80	337	Yes
10	16	19.20	443	Yes
11	12	19.60	263	Yes
12	13	18.50	284	Yes
13	15	19.70	330	Yes
14	13	13.50	278	Yes
15	12	19.10	274	Yes
16	12	17.80	439	Yes
17	16	18.70	438	Yes
18	14	12.40	299	Yes
19	14	11.40	482	Yes
20	14	14.60	416	Yes
21	12	13.60	460	Yes
22	12	17.60	391	No
23	15	14.80	367	Yes
24	15	20.00	469	Yes
25	16	19.10	483	Yes
26	16	12.60	382	Yes
27	13	16.90	325	Yes
28	14	16.10	499	Yes
29	12	12.30	497	Yes
30	12	13.60	363	Yes

<5300MHz>

Type 5

Trial Number:1	Frequency (MHz)	5298.6	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	65	12	1036	1093	88823
2	3	70	7	1526	1261	129977
3	3	65	15	1216	1443	272175
4	2	70	18	939		295262
5	3	100	11	1655	987	588572
6	1	60	8			564880
7	2	85	5	1166		400180
8	2	90	12	1796		149512
9	2	70	6	1547		97881
10	3	80	17	1919	964	359497
11	3	85	9	1793	1670	111196
12	3	75	12	1160	1656	307808
13	2	80	14	1038		129478
14	2	60	9	1345		530344
15	1	95	16			17899
16	1	65	12			196093
17	1	85	6			282141
18	3	75	18	1869	1864	463673
19	2	50	5	1305		460428
20	2	85	15	951		213553

Trial Number:2	Frequency (MHz)	5299.6	Number of Bursts in Trial:	12	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	75	12			146156
2	2	80	14	1210		48432
3	3	65	14	1778	1490	96043
4	3	80	9	1392	1312	93342
5	3	95	16	1064	1454	631210
6	3	65	20	1734	1177	859787
7	3	70	7	1875	1727	356558
8	2	50	12	1103		557613
9	3	85	15	1873	1384	273122
10	1	100	9			158033
11	1	55	19			795733
12	2	60	16	1113		404854
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Trial Number:3	Frequency (MHz)	5301.2	Number of Bursts in Trial:	8	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	80	5			503973
2	2	90	19	1885		227664
3	2	65	18	1489		1293091
4	1	100	8			735354
5	2	90	9	1454		1079510
6	3	90	16	1838	1064	1090217
7	1	85	15			413104
8	2	65	18	1513		1223934
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Trial Number:4	Frequency (MHz)	5300.9	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	18	1106	1386	654271
2	1	90	16			565258
3	3	60	6	1322	1721	482675
4	2	50	16	1714		656791
5	2	80	16	1081		417138
6	2	95	9	1438		300804
7	3	60	18	1852	1062	394710
8	2	70	14	1690		462994
9	3	80	7	1405	1084	118982
10	1	55	10			551715
11	2	85	7	1373		516484
12	2	100	10	1007		302258
13	1	90	6			544424
14	1	90	15			10597
15	2	95	19	1746		35521
16	3	100	9	1421	1131	323938
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Trial Number:5	Frequency (MHz)	5292.8	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	75	7			39348
2	2	55	17	1540		175549
3	3	95	18	980	1325	548670
4	2	65	13	1734		570146
5	2	95	5	1169		220033
6	3	70	8	1524	1060	158084
7	2	80	13	1331		372587
8	2	100	16	1823		485934
9	1	100	8			219908
10	2	55	13	1570		507362
11	1	80	8			517130
12	1	90	11			348891
13	2	80	15	1165		304884
14	1	75	18			479964
15	2	80	16	1459		473454
16	3	65	11	1568	1418	576974
17	2	55	10	1662		328232
18	2	55	10	1741		251173
19	3	55	7	1721	1228	285350
20	2	60	19	1387		86626

Trial Number:6	Frequency (MHz)	5307.4	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	75	7	1059		59580
2	3	85	15	1184	1783	453573
3	3	80	15	1119	1360	19207
4	3	65	10	1871	1260	56079
5	3	85	19	1597	1045	217633
6	2	100	5	1388		612446
7	1	80	15			393059
8	1	90	17			352051
9	3	80	14	1716	1915	506688
10	3	85	17	1123	1109	44743
11	1	55	20			683326
12	3	80	19	1088	1341	214925
13	2	90	19	1684		644727
14	2	70	19	1152		42606
15	2	90	15	1619		52333
16	3	95	20	1714	1382	490081
17	1	65	9			92258
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Trial Number:7	Frequency (MHz)	5300.2	Number of Bursts in Trial:	11	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	100	8			18918
2	2	65	6	1660		73439
3	2	75	13	1329		220308
4	3	70	12	1842	1233	765520
5	1	90	19			669122
6	1	95	13			945035
7	2	100	10	1614		224937
8	2	80	15	1603		317011
9	1	90	8			291724
10	1	85	7			505612
11	3	70	11	1374	1537	893649
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Trial Number:8	Frequency (MHz)	5302.3	Number of Bursts in Trial:	11	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	19	1583	1115	920482
2	2	80	15	1415		914372
3	1	55	14			839962
4	3	80	12	1508	1442	189194
5	3	85	10	1504	1208	556615
6	2	50	8	1751		151206
7	2	70	19	942		232940
8	1	60	15			182049
9	1	50	20			716987
10	3	70	5	1756	1829	1016136
11	3	70	14	1417	1257	721995
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Trial Number:9	Frequency (MHz)	5298.3	Number of Bursts in Trial:	8	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	100	13			687380
2	1	50	14			999814
3	2	80	5	1434		936710
4	1	70	7			719940
5	3	100	5	1865	1365	754264
6	1	65	20			958147
7	1	95	8			1275447
8	2	75	15	1291		754978
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Trial Number:10	Frequency (MHz)	5296.3	Number of Bursts in Trial:	14	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	65	12	1043		577117
2	2	95	7	954		316704
3	1	90	19			448300
4	3	60	15	1131	1776	78865
5	1	90	8			812204
6	2	75	12	1147		432397
7	3	55	15	1384	1076	236221
8	1	95	6			711320
9	3	100	10	1543	1635	729531
10	3	70	15	1857	1778	352212
11	2	60	18	1680		115311
12	2	85	5	1887		60
13	1	90	10			3287
14	3	80	6	1060	1202	160875
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Trial Number:11	Frequency (MHz)	5302.1	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	80	13	1849	950	354249
2	1	70	6			604823
3	1	75	16			314310
4	2	55	19	1914		121631
5	3	85	13	1624	1514	631940
6	3	50	5	1189	1838	722047
7	2	60	5	1316		324536
8	2	95	10	1829		701029
9	1	95	14			690745
10	3	95	20	919	1404	649272
11	1	70	17			473396
12	2	55	11	1297		361601
13	2	65	20	1308		376179
14	1	55	6			471906
15	3	95	10	1858	1359	289837
16	2	65	12	1934		625945
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Trial Number:12	Frequency (MHz)	5296.7	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	95	9			253266
2	1	100	10			1140419
3	2	90	13	1873		399912
4	3	65	20	1711	1708	748273
5	1	85	10			961226
6	1	85	11			647164
7	2	60	11	1628		1223534
8	2	90	14	1646		823784
9	1	100	17			941289
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Trial Number:13	Frequency (MHz)	5298.7	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	90	18	1264		273635
2	1	55	16			312310
3	3	85	7	1379	1286	774864
4	3	60	16	1013	1598	263882
5	2	90	7	1403		351284
6	1	65	5			394637
7	1	55	10			213492
8	3	80	19	1891	1578	139887
9	1	50	15			687543
10	3	80	6	1376	1413	197952
11	1	60	10			470499
12	3	70	6	1814	970	286784
13	3	65	5	1089	948	330658
14	3	70	10	1354	1288	189694
15	2	50	13	1213		736237
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Trial Number:14	Frequency (MHz)	5305.1	Number of Bursts in Trial:	12	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	70	20			607677
2	2	95	14	1248		453941
3	3	50	7	1632	1240	405529
4	2	85	18	1356		785203
5	1	100	20			751670
6	3	90	5	1744	1542	211917
7	2	55	7	1340		850480
8	3	80	10	953	1871	617133
9	2	100	11	1153		134594
10	3	90	16	953	1527	950410
11	1	95	8			758381
12	1	55	11			973958
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Trial Number:15	Frequency (MHz)	5294	Number of Bursts in Trial:	8	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	85	18	1707	945	336389
2	2	95	19	1278		1156162
3	1	65	11			927229
4	3	60	5	970	1208	627078
5	2	75	14	1790		1333636
6	1	65	9			388240
7	3	75	6	1656	1783	17475
8	2	65	5	1850		484014
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Trial Number:16	Frequency (MHz)	5306.9	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	70	5	1917	1113	380906
2	2	50	5	1097		662251
3	3	50	5	1607	1413	267060
4	3	75	5	1407	1400	617102
5	1	65	17			477351
6	1	100	17			423176
7	2	65	8	1327		444713
8	1	85	18			558380
9	3	95	9	1788	1748	498860
10	2	75	17	1463		429047
11	1	85	6			357960
12	3	60	19	1630	1496	660222
13	1	50	20			302561
14	3	50	18	1308	1300	497613
15	2	60	8	1414		410215
16	2	55	8	1294		96774
17	3	55	10	1561	1717	184441
18	1	70	16			289678
19						
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Trial Number:17	Frequency (MHz)	5298.2	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	9	1035	1116	218286
2	2	90	19	1065		483480
3	2	80	10	1398		412718
4	2	60	18	1528		145100
5	1	55	14			592133
6	1	60	19			324881
7	2	55	9	1213		546684
8	3	65	18	1654	1629	223465
9	3	100	9	950	1154	390600
10	2	50	12	1571		329071
11	1	95	14			144262
12	1	95	12			641941
13	1	90	10			71682
14	1	55	19			680317
15	3	70	18	1237	1902	68436
16	3	65	18	1786	1249	609181
17	3	85	8	1656	1515	415117
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Trial Number:18	Frequency (MHz)	5301.2	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	55	7	1067		50051
2	1	100	13			612471
3	1	80	14			496729
4	2	60	14	1327		408816
5	3	70	17	1798	1836	314521
6	2	65	12	1881		106285
7	2	100	6	1458		41860
8	3	55	8	1207	1307	43531
9	2	85	10	954		452467
10	3	70	6	1120	1113	247551
11	1	50	6			29095
12	3	60	7	1686	1409	228891
13	3	55	12	1414	1722	257379
14	2	90	15	938		181321
15	2	100	15	988		43137
16	2	100	13	1423		643852
17	1	90	7			212295
18	2	55	14	1751		333673
19						
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Trial Number:19	Frequency (MHz)	5299.2	Number of Bursts in Trial:	14	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	75	13			47566
2	2	75	17	1331		498586
3	1	90	7			525295
4	3	65	12	1862	1403	453637
5	1	85	7			205558
6	3	55	7	1137	1089	297580
7	1	100	7			350225
8	2	60	19	1735		713401
9	1	65	11			179180
10	1	55	7			651701
11	1	90	18			30959
12	1	85	11			385242
13	3	90	17	1717	1176	849214
14	3	80	10	1906	1707	521229
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Trial Number:20	Frequency (MHz)	5304.6	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	70	13			1148153
2	2	65	15	1172		1129077
3	2	80	10	968		91703
4	2	55	6	1799		537666
5	1	80	10			906670
6	2	100	9	1579		479224
7	2	50	5	1630		1237556
8	1	60	15			1067759
9	1	100	7			1211689
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Trial Number:21	Frequency (MHz)	5303.4	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	100	20	1753	1506	138778
2	2	90	12	941		211451
3	2	85	13	1898		61213
4	1	50	16			377917
5	2	85	11	948		263
6	2	60	5	1661		355146
7	3	95	5	1702	1025	541445
8	3	90	10	963	1237	479613
9	2	80	20	1187		73027
10	1	85	16			261173
11	2	60	20	1568		544084
12	1	100	8			531784
13	3	70	9	1326	1338	474682
14	2	95	6	1039		495074
15	2	75	10	1379		403085
16	2	80	9	1913		187037
17	2	100	20	1174		292817
18	3	65	16	1062	1646	237154
19	2	50	20	1127		80364
20						

Trial Number:22	Frequency (MHz)	5299.3	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	85	7	1039		368262
2	2	65	11	1282		141039
3	3	50	16	1383	1723	615959
4	1	95	12			598129
5	2	75	7	1343		207174
6	3	90	9	1078	1528	180511
7	2	55	15	1096		493639
8	2	90	11	1722		165001
9	1	60	12			639212
10	3	70	11	981	942	106297
11	3	70	15	1263	1867	349020
12	2	100	14	936		83155
13	3	70	18	1081	1645	157498
14	2	55	7	1771		632587
15	3	50	13	1519	1279	473034
16	3	75	15	1295	1705	388189
17	3	85	7	1443	1250	200575
18	1	75	10			513238
19						
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Trial Number:23	Frequency (MHz)	5293.5	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	85	19	1574		1133823
2	1	100	5			247675
3	2	65	17	1683		371437
4	2	70	16	1575		843599
5	2	80	20	1142		990855
6	3	70	15	1465	1177	211165
7	3	85	10	1541	1015	720295
8	3	55	11	1754	1791	948422
9	3	75	11	998	1272	699407
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Trial Number:24	Frequency (MHz)	5306.7	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	9	1529	1787	361394
2	3	65	9	1781	1554	491570
3	2	80	17	1553		509713
4	2	70	14	1271		183507
5	2	100	18	1012		620126
6	1	85	16			529563
7	2	80	20	1727		529757
8	1	80	9			401784
9	1	50	5			244637
10	3	50	15	1401	1190	521753
11	3	90	17	1209	1275	597676
12	2	70	19	1296		16208
13	2	85	14	1829		278310
14	3	50	18	1482	1836	320773
15	1	95	13			383061
16	1	100	8			58666
17	2	70	18	1219		92048
18	1	75	14			1349
19						
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Trial Number:25	Frequency (MHz)	5294.7	Number of Bursts in Trial:	8	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	100	10	1772		29986
2	2	65	9	1707		332108
3	2	65	13	974		1494691
4	1	90	9			708344
5	1	65	10			1073762
6	1	100	15			627506
7	1	80	13			1170627
8	1	55	9			213019
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Trial Number:26	Frequency (MHz)	5302.4	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	70	20	1717	938	675486
2	1	70	19			507622
3	1	55	14			472571
4	1	90	14			108459
5	2	55	7	1919		604842
6	2	85	18	1458		786412
7	2	50	9	1523		153054
8	3	80	6	1464	1530	416673
9	3	100	9	1785	1554	638358
10	1	100	20			480750
11	1	55	8			102710
12	2	70	8	1187		748971
13	1	55	13			519499
14	3	65	15	1504	1112	73312
15	1	85	18			478951
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Trial Number:27	Frequency (MHz)	5303.9	Number of Bursts in Trial:	11	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	65	9	1561	1105	38633
2	3	60	6	1881	1711	1054064
3	1	60	13			136694
4	1	80	19			734938
5	3	100	11	1281	1447	565129
6	2	85	9	1119		1059684
7	3	85	17	1495	1750	893774
8	1	85	8			170134
9	2	65	5	1586		352646
10	3	90	11	1852	1713	947599
11	2	100	8	1624		173456
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Trial Number:28	Frequency (MHz)	5296.6	Number of Bursts in Trial:	14	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	80	15	1269	963	14611
2	2	55	18	1793		59466
3	2	100	6	1771		411468
4	1	65	8			541251
5	3	95	19	982	1636	350435
6	2	70	8	1069		777382
7	3	95	14	1476	1578	52669
8	2	95	11	985		468896
9	3	75	14	986	1655	292660
10	2	65	14	1241		188450
11	2	80	7	1520		446453
12	3	85	10	1694	1038	354431
13	1	80	9			847151
14	1	80	12			160109
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Trial Number:29	Frequency (MHz)	5296.2	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	100	18			49200
2	1	80	16			270875
3	1	80	7			309391
4	3	85	8	1465	1268	315753
5	2	100	6	1299		692315
6	3	65	8	1617	1051	103507
7	3	75	19	1715	1700	375166
8	2	60	6	1047		501366
9	1	90	7			408975
10	1	85	6			56318
11	3	50	19	1241	1490	555407
12	1	70	19			593539
13	3	60	6	1284	1323	432265
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Trial Number:30	Frequency (MHz)	5298.3	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	55	6	1062		504939
2	1	75	19			606956
3	3	55	12	1507	1870	224358
4	3	100	8	1336	1275	451701
5	1	80	6			786520
6	3	55	15	1028	1217	3533
7	2	90	9	1715		383798
8	2	70	9	1764		93308
9	3	75	18	1270	1510	416120
10	2	95	14	1721		332434
11	3	80	12	1498	1076	483236
12	3	65	13	989	1516	380148
13	1	75	5			562090
14	2	55	6	1647		766714
15	3	75	9	1007	1000	559360
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<5310MHz>

Type 1 Trial #	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)	Detection (Yes / No)
1	12	1355.01	738	Yes
2	8	1519.76	658	Yes
3	15	1253.13	798	Yes
4	13	1319.26	758	Yes
5	19	1138.95	878	Yes
6	23	326.16	3066	Yes
7	4	1730.10	578	Yes
8	21	1089.32	918	Yes
9	1	1930.50	518	Yes
10	7	1567.40	638	Yes
11	16	1222.49	818	Yes
12	18	1165.50	858	Yes
13	22	1066.10	938	No
14	10	1432.66	698	Yes
15	3	1792.11	558	Yes
16			919	Yes
17			1654	Yes
18			1942	Yes
19			710	Yes
20			2216	Yes
21			1520	Yes
22			2954	Yes
23			649	Yes
24			2989	Yes
25			704	Yes
26			589	Yes
27			954	Yes
28			2767	Yes
29			1946	Yes
30			1623	Yes

<5310MHz>

Type2 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	25	3.30	213	Yes
2	27	2.70	223	Yes
3	29	3.60	164	Yes
4	24	2.60	150	Yes
5	24	1.60	199	Yes
6	28	1.10	159	Yes
7	29	3.90	181	Yes
8	23	4.90	162	Yes
9	27	2.60	192	Yes
10	28	1.90	202	Yes
11	28	1.20	177	Yes
12	26	4.80	175	Yes
13	27	2.70	223	Yes
14	29	3.60	164	Yes
15	24	2.60	150	Yes
16	28	2.60	214	Yes
17	23	4.20	152	Yes
18	27	3.60	171	No
19	26	2.60	206	Yes
20	24	1.60	150	Yes
21	23	2.20	210	Yes
22	26	4.90	208	Yes
23	23	2.60	205	Yes
24	23	2.80	166	Yes
25	29	2.90	209	Yes
26	23	2.20	210	Yes
27	26	4.90	208	Yes
28	23	2.60	205	Yes
29	23	2.80	166	Yes
30	25	4.90	206	Yes

<5310MHz>

Type3 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	16	8.20	427	Yes
2	16	8.70	411	Yes
3	18	6.50	308	Yes
4	16	7.40	261	Yes
5	17	7.80	387	Yes
6	16	8.10	390	Yes
7	18	7.90	498	Yes
8	17	9.70	291	Yes
9	16	9.30	335	Yes
10	18	6.70	392	Yes
11	17	9.90	315	Yes
12	16	9.50	393	Yes
13	17	9.70	489	Yes
14	16	8.90	256	Yes
15	17	6.60	259	Yes
16	16	9.30	335	Yes
17	18	6.70	392	Yes
18	17	9.90	315	Yes
19	16	9.50	393	Yes
20	16	8.20	427	Yes
21	18	7.40	472	Yes
22	16	9.30	309	Yes
23	16	9.90	378	Yes
24	16	8.50	485	Yes
25	17	8.30	417	No
26	16	8.70	411	Yes
27	18	6.50	308	Yes
28	16	7.40	261	Yes
29	17	8.50	304	Yes
30	18	8.10	343	Yes

<5310MHz>

Type4 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	5310	12	13.60	467
2	5310	12	17.60	433
3	5310	15	14.80	391
4	5310	15	16.90	350
5	5310	12	15.30	392
6	5310	16	15.10	372
7	5310	13	17.40	397
8	5310	15	19.90	302
9	5310	15	19.80	337
10	5310	16	19.20	443
11	5310	12	19.60	263
12	5310	16	15.10	284
13	5310	13	17.40	330
14	5310	15	19.90	278
15	5310	15	19.80	274
16	5310	16	19.20	439
17	5310	16	18.70	438
18	5310	14	16.10	299
19	5310	12	12.30	482
20	5310	12	13.60	416
21	5310	12	13.60	460
22	5310	12	17.60	391
23	5310	15	14.80	367
24	5310	15	20.00	469
25	5310	16	19.10	483
26	5310	16	12.60	382
27	5310	13	16.90	325
28	5310	14	16.10	499
29	5310	12	12.30	497
30	5310	12	13.60	363

<5310MHz>

Type 5

Trial Number:1	Frequency (MHz)	5303.6	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	65	19	1387	1448	87372
2	2	85	10	1534		44825
3	3	70	5	1561	1576	148280
4	2	80	7	986		4150
5	3	55	9	1388	1877	206530
6	1	95	14			332750
7	3	65	10	1074	1247	294488
8	1	100	11			57385
9	3	70	18	1686	1586	188762
10	3	100	10	1238	973	140053
11	1	65	9			164347
12	3	75	11	1474	1011	127822
13	3	75	19	1315	981	449341
14	1	75	9			225826
15	1	95	7			527016
16	1	55	7			154785
17	3	80	18	1546	1714	23190
18	2	70	7	1891		140694
19	2	100	16	1001		417107
20	3	85	6	1469	1700	210941

Trial Number:2	Frequency (MHz)	5317.9	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	65	10			159207
2	3	60	6	1024	1697	468964
3	1	95	15			187769
4	2	55	20	1470		458975
5	1	95	10			70061
6	2	85	13	1545		474933
7	3	70	13	1120	1805	1721
8	3	85	16	1704	1427	571840
9	3	55	14	1598	1536	551736
10	1	60	18			103170
11	2	50	10	1905		327668
12	3	95	18	958	1599	430201
13	2	85	10	1298		595586
14	3	70	20	1515	1614	115350
15	1	95	11			3215
16	2	95	5	1233		498491
17	2	55	20	1451		419349
18	3	100	15	1195	1705	207016
19	2	100	10	1590		149437
20	3	90	12	1847	1696	165543

Trial Number:3	Frequency (MHz)	5316.5	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	75	16	1017		154690
2	1	70	20			71725
3	3	100	13	1594	1082	30921
4	3	95	10	929	1290	49279
5	2	85	15	1301		140656
6	2	100	14	1041		4300
7	2	100	7	1274		200891
8	3	95	7	1637	1530	31101
9	3	55	13	1158	1391	596821
10	1	65	15			119710
11	2	80	19	971		220661
12	3	70	13	1295	1447	268917
13	1	100	11			375465
14	3	55	5	1921	1649	416165
15	1	50	10			145088
16	1	70	16			231743
17	1	50	17			649333
18	3	85	7	1048	1489	521798
19						
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Trial Number:4	Frequency (MHz)	5307.1	Number of Bursts in Trial:	8	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	85	5	1783	1880	741698
2	2	85	10	1190		724390
3	2	75	11	1042		105837
4	1	65	9			187637
5	3	55	19	1369	976	1263675
6	1	95	8			112363
7	1	65	17			1376893
8	3	100	6	947	1145	159405
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Trial Number:5	Frequency (MHz)	5300.5	Number of Bursts in Trial:	11	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	65	15			439016
2	3	90	16	928	1268	461722
3	2	65	15	1584		886790
4	2	70	15	1262		592492
5	2	60	19	1125		924511
6	2	65	17	1198		79681
7	2	55	5	1600		546246
8	1	95	13			213518
9	3	100	19	1057	1486	1000052
10	3	95	14	1086	1696	229139
11	1	95	12			232348
12						
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Trial Number:6	Frequency (MHz)	5305.4	Number of Bursts in Trial:	14	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	55	9			516485
2	1	80	10			363467
3	2	65	10	1374		126165
4	3	80	11	1590	1524	696163
5	1	55	9			107807
6	2	70	5	1155		305006
7	3	80	19	944	956	6531
8	3	50	8	1654	1510	642872
9	3	85	13	1876	1022	111780
10	3	95	8	1015	1627	223015
11	2	50	5	1375		746759
12	3	75	13	1846	1100	482448
13	3	85	13	1552	1470	768648
14	1	80	5			555334
15						
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Trial Number:7	Frequency (MHz)	5309	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	90	8	1655		143294
2	2	70	17	1294		186327
3	3	80	11	1389	1375	427191
4	2	55	13	1688		445175
5	3	65	10	1651	1577	87352
6	3	95	19	1496	992	87324
7	3	50	5	1847	1665	594758
8	1	95	19			311319
9	1	80	11			192911
10	3	80	13	1680	1527	454129
11	3	60	7	1394	1021	293831
12	1	70	6			147433
13	1	90	19			224039
14	1	80	6			537276
15	2	55	16	1036		517028
16	2	60	15	1177		271627
17	2	100	5	901		411938
18	3	70	17	1695	1123	468313
19	3	95	8	933	1152	417870
20	2	75	14	1923		294927

Trial Number:8	Frequency (MHz)	5303	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	70	12	983		99620
2	1	90	6			463317
3	2	95	18	1716		524402
4	1	50	14			101070
5	1	75	7			295211
6	3	75	14	1868	1005	228611
7	3	100	12	1537	1819	435281
8	1	85	12			577433
9	2	95	11	1287		201996
10	1	50	17			39596
11	2	60	8	1346		427628
12	1	60	8			466046
13	2	55	6	1252		88213
14	2	75	9	1014		158310
15	1	100	9			512574
16	1	80	7			305865
17	1	75	6			124209
18	1	60	18			30486
19						
20						

Trial Number:9	Frequency (MHz)	5306.8	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	60	20	1807		276925
2	2	65	17	1384		415843
3	2	100	18	1482		435488
4	1	75	20			640071
5	2	65	11	1730		709476
6	2	80	9	1455		859615
7	1	75	17			395898
8	2	70	7	1035		209305
9	3	50	6	1533	1756	916657
10	3	70	12	1143	1824	600471
11	3	85	10	1148	1349	220340
12	1	95	11			453769
13	3	60	19	1149	1051	436928
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Trial Number:10	Frequency (MHz)	5321.4	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	100	16	1044	1353	435129
2	1	60	6			177741
3	2	55	9	1651		76559
4	2	90	13	1159		59973
5	1	80	13			119967
6	1	95	15			44527
7	2	100	11	1792		258744
8	3	95	7	1416	1744	249716
9	2	90	12	1070		163643
10	2	55	11	1850		226783
11	1	65	12			312796
12	2	80	14	1422		171689
13	2	100	17	1900		51325
14	1	60	13			4286
15	1	80	14			149974
16	1	50	19			125381
17	3	75	13	1778	1832	382733
18	2	70	5	1217		221115
19	2	50	6	1601		285625
20						

Trial Number:11	Frequency (MHz)	5306.4	Number of Bursts in Trial:	12	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	17	1491	1896	833559
2	2	60	16	1537		803098
3	2	75	8	1921		284664
4	1	80	5			624353
5	2	75	18	1079		432999
6	1	90	6			172219
7	2	65	17	1641		747578
8	3	60	10	1044	1337	521442
9	3	65	13	1381	1452	916079
10	2	85	8	1228		950044
11	1	70	17			823358
12	3	95	20	1254	1127	91229
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Trial Number:12	Frequency (MHz)	5322.4	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	60	6			484598
2	2	70	7	1006		266245
3	2	70	18	1058		771089
4	1	65	13			589
5	2	55	17	1169		388717
6	1	90	11			572900
7	3	90	10	990	1227	747600
8	1	80	20			217587
9	2	75	8	1544		117566
10	3	55	13	1125	1836	550066
11	2	60	13	1747		566581
12	3	85	8	1258	1781	510892
13	3	55	11	1268	1238	7517
14	1	65	15			638872
15	2	60	16	1099		760388
16						
17						
18						
19						
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Trial Number:13	Frequency (MHz)	5321.8	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	55	16	1805		393819
2	2	90	12	980		712872
3	3	95	8	1743	945	192449
4	1	90	19			394797
5	2	55	17	1748		741076
6	3	85	17	1287	1828	1252428
7	3	80	6	1424	1778	678738
8	1	95	5			217338
9	3	95	19	1632	1201	898087
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Trial Number:14	Frequency (MHz)	5315.9	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	70	8	1491	1473	644980
2	2	50	19	1875		545653
3	2	50	6	1206		744304
4	3	100	12	901	1076	512937
5	2	85	15	1790		297127
6	1	65	10			382798
7	1	80	17			411083
8	3	100	5	1416	983	296212
9	3	100	7	1843	1315	441193
10	1	95	6			275344
11	3	60	12	1112	1335	521853
12	1	75	15			580406
13	1	100	17			713374
14	1	95	19			401893
15	3	85	19	1508	1196	336010
16	2	65	19	1534		694715
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Trial Number:15	Frequency (MHz)	5307.8	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	15	1276	1602	420974
2	2	80	9	1357		142665
3	1	60	8			168128
4	1	60	6			327993
5	2	85	14	1760		595622
6	3	90	7	1569	1315	341534
7	1	50	17			553171
8	3	50	19	1032	1364	567076
9	3	100	12	1286	913	425808
10	3	60	7	1425	1684	421150
11	2	75	7	1019		348396
12	1	95	6			424546
13	3	100	17	942	1598	278483
14	2	65	8	1174		331893
15	2	95	10	1430		298842
16	3	55	18	1848	1375	57431
17	3	90	18	1700	1004	513928
18	1	75	11			513972
19	3	90	20	1376	1090	596430
20						

Trial Number:16	Frequency (MHz)	5304.9	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	95	12	1152		13484
2	3	85	18	1219	1804	303359
3	3	65	5	1553	1923	159071
4	3	60	11	1825	1717	604558
5	1	70	17			586608
6	3	60	5	1140	1878	379895
7	2	50	15	1740		572748
8	3	85	11	1097	1162	512587
9	2	80	19	937		570289
10	3	70	14	994	1531	340974
11	3	95	11	1228	1806	502407
12	2	100	16	1235		255074
13	3	55	10	1539	1354	428874
14	2	75	9	1666		582262
15	2	55	5	1426		364059
16	2	65	16	1333		252591
17	1	65	19			196719
18	3	95	7	1825	1413	18462
19						
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Trial Number:17	Frequency (MHz)	5321.9	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	100	16			432413
2	2	90	16	1795		385681
3	3	95	9	1298	960	184181
4	1	60	14			113576
5	2	80	20	1222		102505
6	1	55	11			183447
7	3	85	10	1593	1788	137707
8	3	90	8	1535	1079	331652
9	2	95	9	1567		206292
10	3	50	7	1485	1347	232122
11	2	50	15	1005		336089
12	3	55	19	1743	1117	494717
13	1	75	12			408140
14	2	85	11	1694		477542
15	1	85	6			498972
16	2	55	5	1465		480547
17	1	85	11			356967
18	2	95	17	936		500549
19	2	100	18	971		49001
20	3	95	12	1342	1201	194020

Trial Number:18	Frequency (MHz)	5303.5	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	85	11	1176		515513
2	3	90	19	1665	1298	372690
3	2	100	17	1132		568694
4	2	60	13	1467		2669
5	1	55	19			17386
6	1	70	13			383258
7	3	80	18	1814	1875	292180
8	1	70	10			398724
9	3	95	14	1500	1822	355681
10	2	75	8	1584		470620
11	3	75	19	1513	1286	594054
12	2	95	18	1642		24974
13	2	85	13	1462		313016
14	1	70	16			328388
15	1	90	13			298787
16	3	95	7	1055	1698	337919
17	3	65	9	1221	1563	379565
18	2	75	6	1830		534885
19	2	100	13	962		479288
20						

Trial Number:19	Frequency (MHz)	5311.3	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	75	13	942		35363
2	2	95	17	1323		639764
3	1	70	9			632657
4	3	85	8	1631	1174	618450
5	2	60	14	1421		320334
6	1	95	5			430119
7	2	90	12	1493		463888
8	3	55	18	1603	1856	573039
9	1	50	14			61321
10	3	90	5	911	1797	50251
11	2	70	9	1389		18268
12	3	55	13	1518	1860	641022
13	1	90	18			407543
14	1	60	13			193786
15	2	90	11	1371		307237
16	3	100	13	1625	982	97444
17	2	90	16	1520		86083
18	1	80	7			381141
19						
20						

Trial Number:20	Frequency (MHz)	5321.7	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	70	19	1923		134761
2	1	95	16			403047
3	1	65	15			104403
4	2	50	5	1691		544518
5	1	65	15			1100086
6	1	55	17			275500
7	2	60	14	1569		135415
8	1	70	7			1276133
9	3	85	6	1086	1088	1140068
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Trial Number:21	Frequency (MHz)	5320.2	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	60	7			292381
2	3	100	11	1805	982	744790
3	3	75	20	1249	1925	129617
4	2	60	19	1162		735514
5	2	55	6	1492		567613
6	1	50	5			286242
7	1	55	5			405921
8	1	85	5			105343
9	3	55	13	1861	1503	55665
10	1	65	15			558115
11	1	90	9			627899
12	1	50	8			712844
13	1	85	8			673650
14						
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16						
17						
18						
19						
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Trial Number:22	Frequency (MHz)	5321	Number of Bursts in Trial:	10	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	6	1157	1734	909091
2	1	65	8			442074
3	2	70	8	1251		344395
4	3	80	15	1334	1890	673915
5	2	70	11	1095		849422
6	1	75	15			109034
7	3	65	8	950	1263	705687
8	2	100	10	1516		1128882
9	2	75	18	1492		1172290
10	2	100	20	1575		982337
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Trial Number:23	Frequency (MHz)	5312.9	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	100	12	1268	1600	1028625
2	2	100	10	1413		969559
3	1	90	6			1170834
4	2	70	16	1701		1004958
5	3	50	19	1472	1753	529427
6	1	50	12			870218
7	3	75	6	1336	1369	83052
8	3	60	17	1074	1326	1136213
9	1	70	14			1030949
10	1	75	8			1049977
11	2	90	18	1703		334684
12	2	100	11	914		280742
13	1	50	13			47853
14	3	70	13	1218	1365	114387
15	3	100	8	1721	1894	310211
16	2	60	8	1842		569488
17	3	85	17	1601	1880	469976
18						
19						
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Trial Number:24	Frequency (MHz)	5304.8	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	90	13			415389
2	2	95	9	1902		146269
3	3	65	8	1333	1549	189129
4	3	50	16	1827	1231	50584
5	3	65	20	1280	1930	208962
6	3	80	19	1744	1505	362075
7	3	85	17	1085	1465	316987
8	2	50	14	1765		502021
9	2	65	19	1766		123211
10	2	75	8	1899		32378
11	3	90	14	1347	1573	477225
12	3	100	17	1031	1239	459727
13	2	85	17	1064		495999
14	2	85	14	1506		66067
15	2	60	5	1304		616173
16	1	55	15			424068
17	1	100	18			518087
18	2	95	16	1606		95232
19	1	60	12			33375
20						

Trial Number:25	Frequency (MHz)	5306.7	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	60	13	941		78629
2	3	75	12	1661	1801	1210416
3	2	85	8	1761		307373
4	3	50	19	1559	1348	607780
5	1	75	13			505743
6	2	75	12	1923		1033037
7	2	90	20	981		512385
8	1	50	11			1174128
9	1	70	14			554928
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Trial Number:26	Frequency (MHz)	5314.2	Number of Bursts in Trial:	11	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	60	20	1307	1248	754206
2	1	50	9			130000
3	1	70	12			1058523
4	1	55	15			716006
5	3	50	19	1162	1066	834391
6	3	70	15	1421	1340	488573
7	1	75	11			482096
8	2	75	10	1225		998819
9	3	85	20	1500	1427	677118
10	2	75	17	1411		698428
11	3	65	16	1206	1097	911460
12						
13						
14						
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Trial Number:27	Frequency (MHz)	5315.1	Number of Bursts in Trial:	13	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	5	1407	1620	72731
2	3	95	19	959	1838	552061
3	1	55	9			668227
4	2	65	15	1133		676391
5	3	55	11	1517	1586	29341
6	3	60	8	1310	1411	24293
7	2	95	6	1288		21727
8	1	95	15			810458
9	3	60	16	1528	1381	747916
10	2	60	7	1873		863419
11	1	65	6			27910
12	1	80	15			119292
13	2	65	8	1208		222493
14						
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Trial Number:28	Frequency (MHz)	5301.5	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	14	1768	1001	754011
2	1	55	11			559886
3	2	90	20	1067		355189
4	1	95	8			171703
5	2	75	6	1521		121978
6	1	75	10			214764
7	2	65	17	1516		671460
8	1	75	15			438648
9	1	100	6			490162
10	1	90	5			729288
11	3	50	15	1169	1535	133935
12	2	60	8	1868		683902
13	3	75	17	1204	1085	436130
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Trial Number:29	Frequency (MHz)	5305.9	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	85	17	929	1771	277121
2	3	75	11	1209	1635	149291
3	1	95	18			587035
4	3	70	20	1668	1091	121930
5	2	55	12	1831		257609
6	1	50	8			443846
7	2	55	9	1305		551219
8	2	80	10	1478		334193
9	3	75	15	1856	988	336964
10	2	50	6	1897		101278
11	2	75	8	1749		107931
12	2	75	19	1367		575326
13	2	70	15	1510		388271
14	2	50	16	1528		136323
15	1	100	7			80429
16	1	55	17			493115
17	1	75	9			621486
18	2	60	15	1440		67323
19	3	65	8	1381	1349	465820
20						

Trial Number:30	Frequency (MHz)	5317	Number of Bursts in Trial:	12	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	80	9	1692	1159	97539
2	3	60	10	1276	1487	825072
3	3	55	19	1561	1753	667173
4	2	100	7	1582		440737
5	3	100	17	1354	1034	773307
6	2	75	11	946		533018
7	2	55	15	1634		562952
8	2	60	15	1210		493251
9	1	60	17			559795
10	2	100	19	1073		20159
11	1	95	11			787285
12	2	70	11	1196		632764
13						
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<5500MHz>

Type 1 Trial #	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)	Detection (Yes / No)
1	15	1253.13	798	Yes
2	13	1319.26	758	Yes
3	19	1138.95	878	No
4	23	326.16	3066	Yes
5	4	1730.10	578	Yes
6	21	1089.32	918	Yes
7	1	1930.50	518	Yes
8	7	1567.40	638	Yes
9	16	1222.49	818	Yes
10	18	1165.50	858	Yes
11	22	1066.10	938	Yes
12	10	1432.66	698	Yes
13	19	1138.95	878	Yes
14	21	1089.32	918	Yes
15	1	1930.50	518	Yes
16			589	Yes
17			954	Yes
18			1946	No
19			1623	Yes
20			1520	Yes
21			2954	Yes
22			649	Yes
23			2989	Yes
24			704	Yes
25			589	Yes
26			954	Yes
27			2767	Yes
28			1946	Yes
29			1623	Yes
30			704	Yes

<5500MHz>

Type2 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	26	1.90	175	Yes
2	24	1.20	175	Yes
3	29	3.60	164	Yes
4	24	2.60	150	Yes
5	24	1.60	199	Yes
6	28	1.10	159	No
7	29	3.90	181	Yes
8	23	2.20	162	Yes
9	27	3.30	192	Yes
10	28	4.50	202	Yes
11	28	3.00	177	Yes
12	26	1.90	175	Yes
13	24	1.20	175	Yes
14	23	4.80	228	Yes
15	26	4.90	208	Yes
16	23	2.60	205	Yes
17	23	2.80	166	Yes
18	27	3.60	171	Yes
19	25	3.30	206	Yes
20	28	1.10	159	Yes
21	29	3.90	181	Yes
22	23	2.20	162	Yes
23	27	3.30	192	Yes
24	29	2.50	226	Yes
25	29	2.90	209	Yes
26	23	2.20	210	Yes
27	26	4.90	208	Yes
28	23	2.60	205	Yes
29	23	2.80	166	Yes
30	25	4.90	206	Yes

<5500MHz>

Type3 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	16	8.20	427	Yes
2	18	7.40	472	Yes
3	16	9.30	309	Yes
4	18	6.60	441	No
5	17	7.80	387	Yes
6	16	8.10	390	Yes
7	18	7.90	498	Yes
8	16	8.90	256	Yes
9	17	6.60	259	Yes
10	17	6.20	252	Yes
11	17	9.90	315	Yes
12	16	9.50	393	Yes
13	17	9.70	489	Yes
14	16	8.90	256	Yes
15	17	6.60	259	Yes
16	17	6.20	252	Yes
17	17	8.00	425	Yes
18	16	9.10	306	Yes
19	17	8.60	363	Yes
20	16	8.20	427	Yes
21	18	7.40	472	Yes
22	16	9.30	309	Yes
23	16	9.90	378	Yes
24	16	7.40	261	Yes
25	17	8.50	304	Yes
26	18	8.10	343	Yes
27	18	6.50	308	Yes
28	16	7.40	261	Yes
29	17	8.50	304	Yes
30	18	8.10	343	Yes

<5500MHz>

Type4 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	16	17.00	467	Yes
2	15	18.10	433	No
3	12	20.00	391	Yes
4	15	16.90	350	Yes
5	12	15.30	392	No
6	16	15.10	372	Yes
7	13	17.40	397	Yes
8	15	19.90	302	Yes
9	15	19.80	337	Yes
10	16	19.20	443	Yes
11	12	19.60	263	Yes
12	12	15.30	392	Yes
13	16	15.10	372	Yes
14	15	18.10	433	No
15	15	20.00	469	Yes
16	16	19.10	483	Yes
17	16	12.60	382	Yes
18	14	12.40	299	Yes
19	14	11.40	482	No
20	14	14.60	416	Yes
21	12	13.60	460	Yes
22	12	17.60	391	Yes
23	15	14.80	367	Yes
24	15	20.00	469	Yes
25	16	19.10	483	Yes
26	16	12.60	382	No
27	13	16.90	325	Yes
28	14	16.10	499	Yes
29	12	12.30	497	No
30	12	13.60	363	Yes

<5500MHz>

Type 5

Trial Number:1	Frequency (MHz)	5495.3	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	16	1428	1261	95434
2	3	55	8	1587	1341	761224
3	3	85	15	923	1576	265439
4	2	85	8	1401		329682
5	1	80	11			591980
6	3	90	12	1388	994	28595
7	1	55	5			742187
8	2	70	16	1291		228807
9	1	75	11			793267
10	1	80	7			380026
11	1	80	14			685501
12	3	100	13	1689	902	103546
13	1	60	7			660392
14	3	60	18	1801	1397	404940
15	2	75	7	1363		579747
16						
17						
18						
19						
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Trial Number:2	Frequency (MHz)	5494.7	Number of Bursts in Trial:	10	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	75	20	1480	1468	411992
2	3	50	8	1335	1127	1370781
3	1	75	15			550607
4	2	65	19	1091		625593
5	2	55	15	1285		437717
6	1	55	20			1230268
7	1	65	13			1014032
8	1	100	14			668028
9	1	60	20			735510
10	1	80	15			752869
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Trial Number:3	Frequency (MHz)	5504	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	65	10			577769
2	2	80	11	1128		361142
3	3	95	13	1690	1209	365304
4	2	90	7	1523		561574
5	1	100	14			44607
6	2	50	13	1529		594889
7	3	55	14	1849	1141	377188
8	1	65	9			255710
9	2	80	14	1071		512277
10	1	70	8			314479
11	1	90	11			297280
12	2	95	6	918		74423
13	2	95	7	1737		96762
14	1	100	6			540618
15	1	50	14			132191
16	1	55	7			179972
17	3	60	20	1076	1889	418750
18	1	90	18			221026
19	3	85	20	980	1171	249642
20	3	80	17	1074	1130	539052

Trial Number:4	Frequency (MHz)	5499.6	Number of Bursts in Trial:	12	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	90	15	972		531181
2	2	55	18	1341		959117
3	2	55	12	1506		703932
4	3	75	14	1421	1298	228125
5	2	80	9	1102		493890
6	1	90	12			117235
7	3	70	20	1548	1849	485795
8	3	95	15	1675	1901	437598
9	3	50	6	1096	1606	36917
10	1	70	18			48972
11	1	65	20			240112
12	1	65	13			842655
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Trial Number:5	Frequency (MHz)	5497.6	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	100	10			932951
2	2	50	11	1257		840987
3	2	65	20	1425		1071304
4	1	80	18			72326
5	3	50	18	1444	1850	231855
6	2	65	9	1226		246946
7	1	70	8			1083884
8	1	90	9			471619
9	2	100	14	1865		1099418
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Trial Number:6	Frequency (MHz)	5503.2	Number of Bursts in Trial:	14	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	55	15	1441		410806
2	3	65	13	1911	1075	557042
3	1	80	8			216348
4	3	85	17	1047	1216	615979
5	2	80	9	1028		254436
6	1	70	18			568579
7	2	60	15	1908		37184
8	1	75	13			789896
9	3	100	12	1427	1853	578564
10	3	90	14	1392	1674	743477
11	3	95	7	1830	1860	236600
12	1	65	17			665390
13	1	95	18			633758
14	1	60	6			471154
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Trial Number:7	Frequency (MHz)	5492.4	Number of Bursts in Trial:	10	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	60	11	1128	1635	517637
2	1	70	13			1140476
3	2	70	17	1751		224677
4	1	65	7			126296
5	1	55	14			390666
6	1	75	18			674123
7	1	55	11			125220
8	1	85	16			1110615
9	1	100	5			699580
10	2	95	8	1468		970453
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Trial Number:8	Frequency (MHz)	5496.5	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	55	20			503818
2	2	90	20	1370		169764
3	3	70	14	1276	1314	611247
4	2	90	20	1033		416413
5	2	85	9	1856		215014
6	1	55	7			512320
7	1	80	14			343502
8	3	75	6	1811	1587	405171
9	3	60	15	1856	1698	343092
10	1	85	11			469891
11	1	65	11			510602
12	2	80	17	1666		387168
13	1	70	14			533674
14	3	100	6	1312	965	577341
15	3	70	19	1808	1481	378223
16	2	80	11	1609		315682
17	2	85	5	1717		131584
18	3	85	12	1048	1915	603573
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Trial Number:9	Frequency (MHz)	5501.2	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	75	18	1298	1717	533666
2	2	60	14	1830		444294
3	1	65	18			480014
4	1	100	10			245458
5	1	90	14			29466
6	3	50	8	1264	1639	41561
7	2	100	9	1342		505930
8	3	100	15	1022	978	535881
9	2	60	7	1674		204199
10	1	65	6			435183
11	2	90	17	1797		60811
12	1	95	9			638932
13	3	50	17	1278	1484	352809
14	2	100	9	1578		235294
15	2	80	7	1379		360437
16	2	70	14	1022		225999
17	3	85	10	1657	1640	209723
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Trial Number:10	Frequency (MHz)	5503.4	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	100	14	1336		113892
2	1	60	20			40780
3	1	50	14			55288
4	3	80	5	1838	1200	203312
5	3	55	12	1820	1381	661626
6	1	55	7			433532
7	1	100	19			564766
8	2	60	8	1061		241963
9	3	100	12	1249	1420	121743
10	2	65	14	989		162852
11	2	70	17	935		702339
12	1	50	9			275517
13	1	50	13			325602
14	1	65	8			580561
15	2	95	9	1682		87806
16	1	85	17			421574
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Trial Number:11	Frequency (MHz)	5494.9	Number of Bursts in Trial:	11	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	55	6	1475		979240
2	1	85	17			192219
3	1	60	17			518097
4	2	100	14	1838		809625
5	3	65	20	1097	1838	197453
6	3	75	19	1258	1913	976346
7	1	100	8			370786
8	3	65	5	1269	1429	935161
9	3	60	12	1498	1263	272140
10	1	65	14			456051
11	2	95	12	1373		647468
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Trial Number:12	Frequency (MHz)	5498.9	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	95	5			334556
2	2	50	20	1087		214437
3	2	65	8	1366		160907
4	2	75	11	1598		47290
5	1	80	10			422699
6	1	85	11			573516
7	2	70	9	1166		231899
8	1	90	15			309968
9	2	80	10	1406		597122
10	3	95	14	1152	1067	300575
11	1	80	5			494072
12	2	95	13	1181		232659
13	2	55	7	1370		168159
14	2	60	18	1238		134253
15	1	50	17			407434
16	3	70	6	1619	1652	414059
17	1	85	5			196182
18	3	60	15	1263	1883	20423
19						
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Trial Number:13	Frequency (MHz)	5504.1	Number of Bursts in Trial:	17	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	95	10	1834	959	173434
2	3	55	10	1486	1830	298088
3	1	65	13			110865
4	3	55	15	1583	1376	484981
5	3	90	5	1746	1831	21045
6	1	90	16			255514
7	1	85	20			4655
8	3	85	14	1527	1284	88718
9	3	70	19	1208	1366	245875
10	1	70	16			688656
11	3	100	7	1852	1855	650878
12	1	70	7			227102
13	1	95	17			318655
14	2	60	8	1728		29045
15	2	90	16	1185		447305
16	3	95	11	1576	1805	430966
17	1	75	16			671698
18						
19						
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Trial Number:14	Frequency (MHz)	5493	Number of Bursts in Trial:	8	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	55	16	1414	1036	1459146
2	1	95	11			344123
3	2	75	6	1656		1491637
4	2	75	8	1546		430376
5	1	95	19			1309092
6	1	65	7			469735
7	3	90	19	1878	1877	552787
8	2	80	7	1846		1015455
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Trial Number:15	Frequency (MHz)	5499.5	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	85	12	1332		12
2	1	50	17			474142
3	2	100	7	1198		216373
4	1	65	18			53392
5	2	90	16	1522		622730
6	1	100	9			206786
7	2	95	17	1882		68539
8	1	90	7			449329
9	3	80	9	930	1091	386432
10	2	75	11	1664		263233
11	2	80	13	1296		485659
12	1	80	16			245247
13	3	80	18	1730	1894	570435
14	3	85	17	1130	1236	561254
15	2	90	15	1186		377058
16	2	70	12	1432		432860
17	3	65	9	1266	1917	407642
18	3	60	20	947	1514	257596
19	1	70	19			139758
20						

Trial Number:16	Frequency (MHz)	5498.1	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	85	6			393016
2	2	80	19	1004		738429
3	3	95	14	1057	1700	523873
4	2	50	13	1753		185560
5	3	100	15	1377	1797	420050
6	1	80	15			518475
7	3	75	6	1483	1194	159289
8	2	55	14	1611		7687
9	2	55	12	1448		6818
10	3	100	8	1871	1481	256611
11	1	70	17			285741
12	2	65	20	1802		164614
13	3	90	17	1489	1554	193406
14	1	60	16			329728
15	1	95	12			480130
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Trial Number:17	Frequency (MHz)	5504.8	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	70	7			13176
2	3	90	5	986	1556	412062
3	2	70	5	1542		518583
4	2	85	5	1110		544644
5	3	60	19	1867	1580	538439
6	1	85	20			55378
7	3	60	13	1187	1488	619842
8	2	50	13	1227		154387
9	2	80	5	1530		558229
10	1	80	19			366747
11	3	50	18	1917	1172	320879
12	3	100	8	1171	1152	431129
13	3	90	19	1277	1256	700166
14	2	80	12	1478		56223
15	3	95	9	1088	1436	88323
16	3	90	13	1771	1091	665991
17	3	90	19	1653	1148	404324
18						
19						
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Trial Number:18	Frequency (MHz)	5494.4	Number of Bursts in Trial:	16	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	80	13			19493
2	2	100	5	1211		706531
3	2	60	13	1314		57223
4	3	95	10	1626	1866	346030
5	2	75	6	964		585495
6	2	90	20	910		738253
7	2	90	9	1132		77058
8	2	85	18	1295		317084
9	2	70	10	1281		539652
10	1	100	13			277397
11	2	60	5	1576		319737
12	3	75	12	1828	1579	725359
13	2	90	6	1194		675643
14	1	50	8			368219
15	1	90	6			238893
16	2	55	9	1340		89737
17						
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Trial Number:19	Frequency (MHz)	5497.9	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	100	7	1133	1122	485638
2	1	80	15			488417
3	3	90	12	1488	1670	108367
4	3	70	16	1095	973	302466
5	3	75	19	1521	1533	410355
6	1	55	15			32568
7	2	75	19	1501		409415
8	2	55	11	1504		430918
9	2	80	5	1368		429624
10	2	90	11	1506		234072
11	1	85	5			18512
12	2	85	15	1294		120820
13	3	60	12	996	1071	383115
14	3	90	15	1438	1666	91079
15	3	50	14	1755	1466	334735
16	3	70	14	1092	1623	182284
17	3	65	19	1251	1274	316998
18	3	60	18	1300	1748	445684
19	2	50	6	1198		101841
20	1	85	13			232487

Trial Number:20	Frequency (MHz)	5501.9	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	16	938	1427	231940
2	1	85	13			178570
3	1	75	13			353521
4	3	80	12	1410	1654	658105
5	2	75	13	1774		1042714
6	2	80	19	1426		927505
7	2	85	14	1229		590719
8	2	95	5	1036		149115
9	1	60	11			672418
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Trial Number:21	Frequency (MHz)	5506.8	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	50	6	1204		402318
2	3	75	16	1371	1377	134094
3	2	75	6	1319		631145
4	1	100	5			16918
5	2	55	10	1630		62315
6	1	60	7			538671
7	1	90	13			562654
8	1	70	9			57297
9	2	70	8	1477		314875
10	1	50	13			474918
11	3	80	17	1504	1387	672973
12	3	60	8	954	1721	573495
13	2	65	13	1515		479714
14	3	70	18	1551	1105	547087
15	1	85	15			306464
16	3	85	16	1278	1148	503608
17	3	60	17	1252	1439	202868
18						
19						
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Trial Number:22	Frequency (MHz)	5493.6	Number of Bursts in Trial:	12	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	100	11			338671
2	1	75	8			669078
3	2	80	11	1232		247800
4	3	75	20	968	1431	459520
5	1	100	10			54153
6	1	90	18			206292
7	3	50	9	1170	1096	634771
8	1	50	10			93642
9	2	50	7	1579		420537
10	2	85	15	1129		540324
11	1	100	19			91573
12	1	70	13			182708
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Trial Number:23	Frequency (MHz)	5506.2	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	65	12			543502
2	1	90	19			496415
3	3	65	14	1189	1261	491491
4	2	65	8	1392		251657
5	3	65	15	1226	1001	548473
6	1	95	10			77148
7	3	95	13	1687	1453	340472
8	2	60	14	1799		254553
9	1	85	20			50322
10	3	50	12	1171	1870	60348
11	1	95	15			49785
12	2	50	16	1569		597434
13	1	60	10			502842
14	1	75	9			126238
15	2	50	10	1862		230402
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Trial Number:24	Frequency (MHz)	5494.9	Number of Bursts in Trial:	12	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	90	10	1032		827658
2	1	95	9			873705
3	2	55	13	1502		314956
4	3	65	7	1707	1273	823838
5	3	75	9	1630	1284	974915
6	3	100	13	929	1283	67767
7	3	90	12	938	1073	802427
8	2	80	17	1687		438476
9	2	55	18	1107		251673
10	3	60	19	1568	962	68301
11	3	80	7	927	1510	56106
12	1	70	9			518884
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Trial Number:25	Frequency (MHz)	5497.1	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	100	7	1371	1747	450903
2	2	85	11	1655		661926
3	2	60	10	1078		153712
4	3	70	5	1290	995	746725
5	1	100	14			653351
6	1	80	8			70316
7	1	90	6			234062
8	1	80	20			578318
9	3	100	12	1263	905	146186
10	3	75	7	1448	1378	462742
11	2	100	9	1712		747337
12	3	80	7	1537	1065	325582
13	2	95	18	1446		741392
14	2	75	16	1604		456736
15	2	50	15	1812		785936
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Trial Number:26	Frequency (MHz)	5501.8	Number of Bursts in Trial:	14	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	80	13	1507	1116	453668
2	1	90	11			272692
3	3	60	5	1290	1415	439831
4	3	50	13	1513	1733	437141
5	3	90	18	1664	1608	364676
6	1	80	12			568016
7	2	70	16	1481		316859
8	3	80	13	1701	1207	585965
9	3	100	18	1220	1021	482473
10	1	85	10			16234
11	3	75	17	1635	1619	223192
12	2	55	14	1458		268418
13	2	75	14	1296		494791
14	1	75	10			27595
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Trial Number:27	Frequency (MHz)	5502.8	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	85	5	1314	1240	278507
2	3	75	7	1066	1027	475392
3	1	50	7			248462
4	3	90	8	1366	952	186755
5	3	70	6	1431	1367	219806
6	2	100	7	1502		683906
7	2	65	13	1245		629145
8	3	90	9	1807	1869	478834
9	2	60	12	1817		471124
10	2	75	11	1671		216522
11	2	50	10	1620		672280
12	3	50	5	1604	1927	266433
13	2	95	14	1697		31964
14	1	50	11			66609
15	2	70	19	1390		665141
16	3	50	18	1040	1199	580767
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19						
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Trial Number:28	Frequency (MHz)	5494.4	Number of Bursts in Trial:	12	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	65	12	955		840382
2	1	55	20			997680
3	2	75	5	1198		144422
4	1	100	9			696190
5	1	75	14			563321
6	3	95	11	1434	1449	365811
7	1	50	5			476735
8	1	65	11			21310
9	3	70	12	1597	1833	303015
10	1	55	15			907151
11	2	55	9	1268		486717
12	3	55	6	1086	1479	826638
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Trial Number:29	Frequency (MHz)	5506.5	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	85	18			1093203
2	1	55	8			1248070
3	2	85	6	1014		146203
4	2	70	11	1436		526307
5	1	60	7			1167872
6	3	70	19	1628	1016	312301
7	3	65	8	1506	1551	822499
8	3	55	13	1714	1572	346421
9	2	85	12	1096		628117
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Trial Number:30	Frequency (MHz)	5501.4	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	50	15	1765		323058
2	3	95	18	1483	1202	767269
3	2	65	10	1292		589697
4	2	100	9	1075		155524
5	3	55	11	1753	984	247118
6	3	75	14	1781	1362	26771
7	3	70	19	1420	1201	20342
8	1	100	12			839129
9	2	60	13	1248		502298
10	1	95	19			564553
11	3	85	6	1759	1053	383588
12	1	60	8			800559
13	1	75	10			807440
14	3	95	9	962	1206	839638
15	3	50	12	1211	1734	376080
16	1	60	20			273793
17	1	65	14			35436
18						
19						
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<5550MHz>

Type 1 Trial #	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)	Detection (Yes / No)
1	22	1066.10	938	Yes
2	10	1432.66	698	Yes
3	15	1253.13	798	Yes
4	13	1319.26	758	Yes
5	19	1138.95	878	Yes
6	21	1089.32	918	Yes
7	1	1930.50	518	Yes
8	7	1567.40	638	Yes
9	3	1792.11	558	Yes
10	13	1319.26	758	Yes
11	19	1138.95	878	Yes
12	9	1474.93	678	Yes
13	23	326.16	3066	Yes
14	12	1355.01	738	Yes
15	17	1193.32	838	Yes
16			1520	Yes
17			2954	Yes
18			954	Yes
19			2767	Yes
20			919	Yes
21			1654	No
22			1942	Yes
23			710	Yes
24			2216	Yes
25			1520	Yes
26			2954	Yes
27			649	Yes
28			2989	No
29			704	Yes
30			589	Yes

<5550MHz>

Type2 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	25	3.30	213	Yes
2	27	2.70	223	Yes
3	29	3.60	164	Yes
4	24	2.60	150	Yes
5	24	1.60	199	Yes
6	28	1.10	159	Yes
7	29	3.90	181	Yes
8	23	2.20	162	Yes
9	27	3.30	192	Yes
10	28	1.10	159	No
11	29	3.90	181	Yes
12	23	2.20	162	Yes
13	24	1.20	175	Yes
14	23	4.80	228	Yes
15	25	3.30	213	Yes
16	27	2.70	223	Yes
17	23	4.20	152	Yes
18	27	3.60	171	Yes
19	26	1.10	206	Yes
20	27	2.70	223	Yes
21	23	4.20	152	Yes
22	27	3.60	171	Yes
23	29	1.60	208	Yes
24	29	2.50	226	Yes
25	29	2.90	209	No
26	23	2.20	210	Yes
27	26	4.90	208	Yes
28	23	2.60	205	Yes
29	23	2.80	166	Yes
30	25	4.90	206	Yes

<5550MHz>

Type3 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	16	8.20	427	Yes
2	18	7.40	472	Yes
3	16	9.30	309	Yes
4	18	6.60	441	Yes
5	17	7.80	387	Yes
6	16	8.10	390	Yes
7	18	7.90	498	Yes
8	17	9.70	291	Yes
9	16	9.30	335	Yes
10	18	6.70	392	Yes
11	17	9.90	315	Yes
12	16	8.20	427	Yes
13	18	7.40	472	No
14	16	9.30	309	Yes
15	17	6.60	259	Yes
16	17	6.20	252	Yes
17	18	6.50	308	Yes
18	16	7.40	261	Yes
19	17	8.60	363	Yes
20	16	8.00	337	Yes
21	16	8.70	317	Yes
22	16	9.00	476	Yes
23	16	9.90	378	Yes
24	18	7.90	498	Yes
25	17	9.70	291	Yes
26	16	8.70	411	Yes
27	18	6.50	308	Yes
28	16	7.40	261	No
29	17	8.50	304	Yes
30	18	8.10	343	Yes

<5550MHz>

Type4 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	16	17.00	467	Yes
2	15	18.10	433	Yes
3	14	14.60	416	Yes
4	12	13.60	460	Yes
5	12	17.60	391	Yes
6	16	15.10	372	Yes
7	13	17.40	397	Yes
8	15	19.90	302	No
9	15	19.80	337	Yes
10	16	19.20	443	Yes
11	12	19.60	263	Yes
12	16	17.00	467	Yes
13	15	18.10	433	Yes
14	16	19.10	483	Yes
15	16	12.60	382	Yes
16	13	16.90	325	No
17	16	18.70	438	Yes
18	14	12.40	299	Yes
19	14	11.40	482	Yes
20	14	14.60	416	Yes
21	12	13.60	460	Yes
22	12	17.60	391	No
23	15	14.80	367	Yes
24	15	20.00	469	Yes
25	16	19.10	483	Yes
26	16	12.60	382	Yes
27	13	16.90	325	Yes
28	14	16.10	499	Yes
29	12	12.30	497	Yes
30	12	13.60	363	Yes

<5550MHz>

Type 5

Trial Number:1	Frequency (MHz)	5561.3	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	70	11	1176		132126
2	1	85	7			182444
3	2	60	14	1528		510298
4	1	55	17			878042
5	1	75	9			750487
6	2	75	13	944		292373
7	3	65	19	1599	1710	754319
8	1	50	9			994720
9	3	85	8	1623	1411	890869
10						
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Trial Number:2	Frequency (MHz)	5541.4	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	80	7			185604
2	2	85	10	1212		569363
3	1	55	20			289991
4	1	95	18			305148
5	2	70	6	1069		342392
6	1	80	8			25840
7	1	80	7			526531
8	2	90	11	1258		377730
9	1	55	11			192889
10	1	80	10			85289
11	2	70	10	1450		286844
12	1	85	18			114547
13	1	85	14			262304
14	2	75	9	1429		464192
15	1	50	9			531622
16	3	65	13	1290	1900	480371
17	2	50	11	1277		366549
18	2	85	9	1189		585648
19	2	90	10	1487		342602
20						

Trial Number:3	Frequency (MHz)	5538.7	Number of Bursts in Trial:	11	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	90	10	1274		701980
2	2	90	15	993		158260
3	3	95	18	1786	922	206594
4	1	65	9			878021
5	2	55	14	1547		270335
6	1	100	8			781528
7	2	50	12	1334		34778
8	2	55	8	1129		351841
9	1	95	7			718916
10	3	60	7	1520	1079	796277
11	1	95	7			152214
12						
13						
14						
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Trial Number:4	Frequency (MHz)	5543.5	Number of Bursts in Trial:	10	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	60	12	1543	1932	933948
2	3	85	18	1818	1123	923306
3	3	80	10	1151	1226	1000934
4	1	60	17			847755
5	1	95	17			189609
6	2	65	13	1157		224715
7	2	85	19	1477		360459
8	3	50	20	1023	1450	747585
9	1	75	20			108424
10	3	55	15	1809	1559	731609
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Trial Number:5	Frequency (MHz)	5551.1	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	55	15	1939		875032
2	1	50	7			791408
3	1	75	8			223864
4	1	55	11			346821
5	2	90	10	1686		708968
6	1	95	9			827345
7	2	50	12	1292		630340
8	3	50	7	1898	1322	671837
9	2	55	18	1832		677664
10	2	65	16	1643		244139
11	3	65	8	1246	974	804021
12	1	70	13			276180
13	3	70	13	1211	1536	677635
14						
15						
16						
17						
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19						
20						

Trial Number:6	Frequency (MHz)	5554.5	Number of Bursts in Trial:	8	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	70	5	1405	1104	167522
2	2	75	19	1298		116866
3	2	55	16	1455		74735
4	1	75	14			1177653
5	2	55	5	1199		747185
6	1	50	15			687331
7	2	50	14	1291		1187914
8	2	65	7	1934		1398194
9						
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Trial Number:7	Frequency (MHz)	5539.5	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	65	19	1622		485450
2	2	65	18	1903		30378
3	2	100	15	1284		434249
4	2	85	7	1516		592537
5	2	60	19	1455		320174
6	2	50	16	1721		49965
7	1	90	5			131373
8	1	75	14			646147
9	1	60	8			406489
10	3	55	16	1164	1900	475770
11	2	80	20	1639		460149
12	2	50	6	986		203751
13	3	55	16	1540	1858	197531
14	3	100	18	1646	1561	385187
15	1	100	5			117267
16	1	70	19			718381
17						
18						
19						
20						

Trial Number:8	Frequency (MHz)	5543.5	Number of Bursts in Trial:	11	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	80	16	1161	1267	1003956
2	3	80	9	1729	1437	396007
3	2	90	15	1269		896095
4	2	55	9	1279		999488
5	2	65	12	1678		624480
6	2	95	16	1348		423521
7	3	95	6	1116	1745	256019
8	1	50	12			403705
9	3	90	10	1513	1010	756877
10	1	95	16			838392
11	2	95	15	1055		1085546
12						
13						
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19						
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Trial Number:9	Frequency (MHz)	5548.9	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	50	10	1516		511267
2	1	50	18			72437
3	2	95	8	1160		570694
4	3	55	17	1482	1610	85411
5	3	50	16	1091	1652	286149
6	3	70	12	1639	1422	560686
7	3	55	7	1288	1923	281065
8	1	100	12			423099
9	3	60	16	1133	1802	296158
10	2	90	9	1138		553572
11	1	65	5			161113
12	1	55	18			186558
13	3	70	15	1123	968	87084
14	1	60	13			302810
15	1	90	17			72211
16	3	85	6	1512	1722	156362
17	2	80	20	1408		508490
18	1	100	17			292617
19						
20						

Trial Number:10	Frequency (MHz)	5559.3	Number of Bursts in Trial:	18	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	19	1810	1351	446857
2	2	60	19	1244		539919
3	3	85	17	1537	1664	23682
4	3	60	20	1430	1256	119754
5	3	65	19	1586	1114	565339
6	2	50	11	1771		4427
7	1	55	15			542189
8	2	90	17	1899		608685
9	3	95	16	1444	1259	4296
10	3	70	19	989	1520	627125
11	1	70	20			341232
12	1	100	8			97329
13	3	50	20	1812	1751	135
14	1	85	15			548789
15	2	85	19	1195		607918
16	1	55	13			412648
17	1	95	7			481219
18	3	80	9	1549	1047	335710
19						
20						

Trial Number:11	Frequency (MHz)	5553.2	Number of Bursts in Trial:	10	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	100	7	1772	1409	500933
2	3	100	18	1115	1360	103238
3	3	60	5	1881	1607	31983
4	1	65	13			65848
5	3	75	5	1167	1179	526216
6	3	90	10	1641	1250	66009
7	1	85	16			300140
8	2	90	14	1470		804132
9	3	80	9	1292	1510	394680
10	1	60	19			882726
11						
12						
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19						
20						

Trial Number:12	Frequency (MHz)	5554.6	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	80	12	1633		506574
2	3	70	13	1754	1237	303214
3	2	80	18	1819		142341
4	3	90	17	1862	1037	77497
5	1	50	15			347467
6	1	95	8			108705
7	1	50	6			187585
8	3	80	17	1107	1423	390819
9	3	65	17	1178	1869	582402
10	2	100	14	1404		344641
11	3	60	5	1613	1725	106881
12	3	80	17	1883	1562	406267
13	3	95	8	1832	1249	82517
14	3	65	8	1870	1258	94899
15	1	80	13			539058
16	2	85	17	1233		621650
17	2	85	10	1274		229952
18	3	85	9	1082	1067	394255
19	1	60	5			618946
20						

Trial Number:13	Frequency (MHz)	5551	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	85	10	1638		158763
2	1	80	9			404568
3	1	100	10			196996
4	1	75	10			117966
5	1	55	12			365465
6	1	95	8			87649
7	1	95	16			166778
8	1	95	5			246201
9	1	55	7			661922
10	1	70	9			228033
11	1	50	9			612424
12	2	70	12	1647		543710
13	1	95	5			560517
14	3	60	5	1627	1157	308380
15	3	75	18	1518	1686	702882
16	2	75	15	985		504185
17						
18						
19						
20						

Trial Number:14	Frequency (MHz)	5542.6	Number of Bursts in Trial:	9	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	60	11	1501		340871
2	3	60	16	1114	960	714322
3	3	90	6	1598	1602	757626
4	1	75	18			697928
5	1	95	5			246201
6	1	55	7			661922
7	1	70	9			228033
8	1	50	9			612424
9	2	70	12	1647		543710
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Trial Number:15	Frequency (MHz)	5555.9	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	8	1715	1161	366581
2	3	55	12	1294	1492	567414
3	1	65	15			215375
4	1	70	5			111076
5	3	95	16	1753	1189	145979
6	3	65	13	1602	1562	447784
7	2	70	10	1017		666895
8	1	70	17			413737
9	1	70	17			393403
10	3	50	9	1619	1490	32457
11	1	70	14			104302
12	3	70	9	1905	1750	283457
13	1	100	20			689712
14	2	65	16	1709		284620
15	2	90	20	1024		41400
16	1	65	5			638651
17						
18						
19						
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Trial Number:16	Frequency (MHz)	5539.2	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	70	5			314222
2	2	95	11	1082		633272
3	3	55	5	1743	1599	562310
4	1	80	10			568959
5	2	60	11	1501		340871
6	3	60	16	1114	960	714322
7	3	90	6	1598	1602	757626
8	1	75	18			697928
9	3	55	13	1939	1680	644304
10	1	80	7			124389
11	2	60	10	1182		491662
12	1	100	9			590865
13	3	95	20	1506	1824	354804
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Trial Number:17	Frequency (MHz)	5537.2	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	80	11	994		668
2	1	95	13			85462
3	1	75	17			1852
4	3	90	18	1869	1476	449018
5	1	75	10			292314
6	3	70	15	1483	1143	324955
7	1	95	10			247947
8	2	55	9	1870		624974
9	2	100	13	1295		350207
10	3	85	5	1750	1217	387271
11	1	100	19			178662
12	1	75	7			82312
13	1	85	7			483365
14	1	100	12			56417
15	1	90	20			455855
16	2	55	11	1661		528317
17	1	70	15			30875
18	1	50	12			3961
19	2	85	10	1611		287018
20						

Trial Number:18	Frequency (MHz)	5548.8	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	13	1158	1064	879017
2	2	65	19	1498		354411
3	1	95	8			551432
4	1	65	10			795638
5	2	55	20	1632		222242
6	1	90	10			998619
7	3	55	13	1867	1366	817938
8	3	60	20	1057	1751	833888
9	2	50	19	1076		940539
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Trial Number:19	Frequency (MHz)	5550.6	Number of Bursts in Trial:	12	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	65	16	1750		629781
2	3	100	11	1312	977	487051
3	3	50	17	1610	1075	839541
4	1	85	13			56927
5	1	95	7			526862
6	1	65	18			685932
7	2	85	5	1212		64545
8	1	95	11			393642
9	3	80	12	1240	1397	843227
10	3	95	18	1472	1364	369839
11	2	90	5	1822		537377
12	1	85	18			658856
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Trial Number:20	Frequency (MHz)	5548.2	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	60	10			897768
2	1	50	17			579427
3	3	80	14	1308	1008	719326
4	2	100	7	1268		401420
5	1	95	18			682207
6	1	60	12			84233
7	3	80	15	1565	1816	91554
8	1	60	17			235866
9	1	95	11			413140
10	3	60	17	1737	1545	273822
11	2	85	14	1682		841725
12	1	80	7			594268
13	3	90	15	1418	1867	39497
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Trial Number:21	Frequency (MHz)	5550.1	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	60	11	1511		480599
2	3	65	6	1838	1718	556076
3	3	50	7	1735	1209	698236
4	3	50	12	1332	1766	505495
5	3	50	15	1540	1489	424476
6	1	50	9			477331
7	1	80	6			371908
8	1	90	20			4173
9	1	75	18			479758
10	1	95	10			521883
11	2	50	5	1840		87705
12	2	100	12	1739		396415
13	2	55	20	1900		528609
14	1	70	12			469936
15	3	85	6	1427	1760	441551
16	2	70	7	1301		208407
17	1	65	5			617682
18						
19						
20						

Trial Number:22	Frequency (MHz)	5551.6	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	85	16			494411
2	2	60	20	1398		922496
3	2	50	19	1240		1142783
4	3	85	20	1574	1738	910803
5	3	85	20	982	1568	1164495
6	2	70	12	1033		266779
7	3	75	9	1798	1812	939619
8	2	100	8	953		205470
9	3	75	8	1325	1883	1266066
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Trial Number:23	Frequency (MHz)	5550.9	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	60	8			554722
2	3	70	12	1438	1225	296598
3	2	50	19	1810		236536
4	1	55	6			445068
5	3	55	8	1243	1588	236502
6	3	65	15	1233	1275	584755
7	1	50	19			207588
8	2	65	15	1170		437189
9	2	70	14	1154		212399
10	1	100	19			59632
11	3	75	16	1590	1606	641093
12	3	95	13	1129	1272	243830
13	3	55	11	1487	1451	467649
14	1	90	13			11879
15	3	75	9	1890	1189	154918
16	1	60	14			309464
17	2	65	7	1168		366378
18	3	60	6	1929	1357	350201
19						
20						

Trial Number:24	Frequency (MHz)	5550.7	Number of Bursts in Trial:	10	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	95	20	1227		377393
2	2	50	6	1768		252413
3	2	60	14	1635		431844
4	1	85	17			799073
5	1	55	17			88200
6	2	60	18	1267		533702
7	1	75	5			629113
8	3	80	19	938	1763	1025391
9	3	100	15	1362	1543	1035232
10	1	65	9			386434
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Trial Number:25	Frequency (MHz)	5554	Number of Bursts in Trial:	12	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	95	18	1225		625119
2	2	50	6	1475		110797
3	2	70	16	1775		609618
4	1	65	10			685127
5	3	55	20	1867	1584	281981
6	2	85	6	1297		336636
7	2	85	11	1483		300640
8	2	60	7	1035		805102
9	2	55	6	1666		337193
10	2	100	12	1471		833244
11	2	90	5	1741		872682
12	1	100	8			980336
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Trial Number:26	Frequency (MHz)	5540.7	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	95	18	1153		417155
2	3	65	10	1224	1194	72146
3	3	90	18	1641	1023	670876
4	3	95	9	1085	1065	126592
5	1	65	17			394319
6	3	65	8	1566	1203	471744
7	2	100	19	1069		469075
8	2	60	10	1767		229844
9	2	50	12	1623		629700
10	1	80	15			227157
11	2	65	10	1536		368928
12	1	75	6			419278
13	2	55	9	1683		630637
14	3	90	19	1770	1599	242145
15	3	90	7	1050	956	227544
16	1	70	6			353071
17	1	75	16			78242
18						
19						
20						

Trial Number:27	Frequency (MHz)	5536.8	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	50	19			547090
2	3	55	6	1416	1524	287790
3	2	95	6	1877		355066
4	3	85	17	1206	1183	121217
5	3	60	19	1757	977	154552
6	3	75	19	1861	1059	5781
7	1	65	17			196884
8	3	65	7	1165	1563	293859
9	3	100	14	1219	1467	59533
10	3	50	14	1058	1311	212178
11	1	75	7			258436
12	2	65	16	1683		101209
13	1	85	16			81344
14	2	55	19	1945		505380
15	3	55	17	1613	1308	91683
16	3	75	6	1457	1358	540821
17	1	60	9			167533
18	1	85	17			484324
19	3	55	7	1584	1902	74357
20	3	70	13	1476	1303	325662

Trial Number:28	Frequency (MHz)	5554.6	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	80	10	1421	1479	586747
2	1	65	8			683942
3	2	50	18	1815		678863
4	1	50	13			309410
5	1	95	15			619377
6	2	95	14	1463		563828
7	1	60	7			496359
8	2	100	9	1361		723311
9	2	95	9	1616		129137
10	3	75	20	1504	1765	539529
11	3	75	18	987	1760	225145
12	3	100	9	1364	1220	420719
13	1	65	6			813596
14						
15						
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17						
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Trial Number:29	Frequency (MHz)	5539.1	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	70	11			684809
2	2	90	9	1120		814108
3	3	70	11	1437	1689	150069
4	1	95	9			791329
5	2	50	17	1014		386350
6	1	55	11			123235
7	2	75	9	1901		838838
8	3	55	15	1015	1362	613077
9	1	100	16			9173
10	2	75	9	1560		618310
11	2	75	12	1264		446722
12	3	100	13	1343	1496	133438
13	1	80	18			900765
14						
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Trial Number:30	Frequency (MHz)	5541.1	Number of Bursts in Trial:	14	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	50	17			498262
2	3	50	5	1752	1914	683386
3	1	70	11			636640
4	2	75	15	1107		166704
5	2	50	5	1514		633052
6	1	65	11			801794
7	1	65	20			379292
8	2	75	8	940		679493
9	2	80	18	1859		648571
10	1	65	19			66850
11	2	50	17	1027		789590
12	1	95	18			598917
13	1	65	5			109606
14	2	75	14	1548		84888
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<5620MHz>

Type 1 Trial #	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)	Detection (Yes / No)
1	11	1392.8	718	Yes
2	16	1222.5	818	Yes
3	7	1567.4	638	Yes
4	6	1618.1	618	Yes
5	21	1089.3	918	Yes
6	22	1066.1	938	Yes
7	5	1672.2	598	Yes
8	5	1672.2	598	Yes
9	14	1285.3	778	Yes
10	10	1432.7	698	Yes
11	11	1392.8	718	Yes
12	16	1222.5	818	No
13	12	1355.0	738	Yes
14	19	1139.0	878	Yes
15	17	1193.3	838	Yes
16			2302	No
17			1406	Yes
18			1662	Yes
19			1533	No
20			2004	No
21			2696	Yes
22			2101	No
23			691	Yes
24			2086	Yes
25			2468	Yes
26			2584	Yes
27			486	Yes
28			1508	Yes
29			1208	Yes
30			1054	Yes

<5620MHz>

Type2 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	23	2.30	161	Yes
2	25	4.00	204	Yes
3	23	1.90	220	Yes
4	26	3.70	190	Yes
5	27	4.30	228	Yes
6	28	3.60	197	Yes
7	21	4.90	159	No
8	29	4.90	150	Yes
9	24	2.00	162	Yes
10	26	1.30	154	Yes
11	24	2.50	158	Yes
12	28	2.00	207	Yes
13	27	2.30	200	No
14	29	1.00	192	Yes
15	21	3.30	151	Yes
16	28	4.30	174	Yes
17	26	1.60	162	Yes
18	21	3.40	154	Yes
19	26	1.10	158	Yes
20	28	3.60	207	Yes
21	24	1.70	200	Yes
22	29	2.40	192	Yes
23	26	3.50	151	No
24	25	1.80	174	Yes
25	24	1.60	201	Yes
26	29	3.40	161	Yes
27	23	1.10	190	Yes
28	29	3.60	228	Yes
29	22	1.70	197	No
30	28	2.40	159	Yes

<5620MHz>

Type3 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	17	9.10	309	Yes
2	16	6.80	398	Yes
3	16	9.60	421	Yes
4	16	6.90	309	Yes
5	16	6.40	271	Yes
6	16	9.80	448	Yes
7	18	7.10	421	Yes
8	17	9.00	265	Yes
9	16	6.00	343	Yes
10	17	8.00	496	Yes
11	16	9.70	398	Yes
12	17	6.70	421	Yes
13	17	8.20	309	Yes
14	16	6.80	271	Yes
15	18	9.80	448	Yes
16	16	7.10	268	Yes
17	17	7.60	439	Yes
18	17	8.50	354	Yes
19	16	9.60	451	Yes
20	16	7.80	341	Yes
21	16	9.30	460	No
22	16	8.50	338	Yes
23	16	8.70	414	Yes
24	18	9.30	375	Yes
25	17	7.10	278	Yes
26	16	7.60	470	Yes
27	17	8.50	456	Yes
28	16	9.60	309	Yes
29	17	7.80	271	Yes
30	17	9.30	448	Yes

<5620MHz>

Type4 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	13	14.80	439	Yes
2	15	11.40	354	No
3	13	15.10	451	Yes
4	12	15.30	341	Yes
5	13	16.10	460	Yes
6	15	12.30	338	Yes
7	16	18.50	414	Yes
8	13	14.80	289	No
9	15	12.20	380	Yes
10	13	16.10	330	Yes
11	14	17.10	311	Yes
12	15	17.70	331	Yes
13	15	19.50	386	Yes
14	14	13.90	329	Yes
15	13	12.70	411	Yes
16	15	12.70	370	Yes
17	16	11.50	376	Yes
18	14	14.50	301	No
19	13	15.30	338	No
20	15	14.70	414	Yes
21	16	14.20	289	Yes
22	13	17.90	380	Yes
23	15	12.60	330	Yes
24	13	19.20	311	Yes
25	15	15.10	331	Yes
26	13	15.30	386	Yes
27	12	16.10	329	Yes
28	14	12.30	411	Yes
29	13	18.50	370	Yes
30	14	14.80	376	Yes

<5620MHz>

Type 5

Trial Number:1	Frequency (MHz)	5615.3	Number of Bursts in Trial:	11	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	70	10	1180	1072	633747
2	2	75	5	1307		636948
3	2	65	7	1013		756371
4	3	95	7	1377	979	1009177
5	3	50	19	1137	1434	322038
6	2	95	15	1777		913879
7	3	80	13	1187	1214	564362
8	2	100	17	983		79567
9	3	50	10	1281	1723	812333
10	1	90	18			1024533
11	3	55	9	994	1351	916100
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Trial Number:2	Frequency (MHz)	5620.5	Number of Bursts in Trial:	8	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	55	16	1700		1253795
2	1	60	8			23820
3	2	60	9	1461		889621
4	1	70	5			283393
5	2	55	18	1094		462006
6	1	95	8			818065
7	1	90	19			324280
8	3	90	16	1850	1423	646344
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Trial Number:3	Frequency (MHz)	5624	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	65	5			320418
2	3	60	7	1925	1225	606789
3	2	60	19	1730		237094
4	1	100	7			688299
5	2	85	20	1840		336956
6	2	90	16	1028		285309
7	3	90	10	1564	1501	219199
8	1	75	19			137748
9	3	60	11	1330	1882	612305
10	3	85	10	1109	1792	489840
11	2	80	6	1586		600165
12	1	75	7			766832
13	1	70	19			749106
14	1	85	9			59538
15	1	85	9			378428
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Trial Number:4	Frequency (MHz)	5623.1	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	100	6	1528	1651	13714
2	2	75	20	1652		896460
3	2	75	16	1349		665033
4	2	100	7	961		64007
5	3	85	10	1530	1066	438383
6	1	65	14			249254
7	3	95	10	906	943	508446
8	1	60	6			645090
9	2	50	9	1166		585260
10	3	70	11	1273	963	662885
11	2	80	20	1765		61437
12	1	95	6			247268
13	1	100	15			637453
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Trial Number:5	Frequency (MHz)	5622.4	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	20	1447	1322	677705
2	2	65	17	1707		694485
3	3	75	12	1277	1402	721308
4	2	100	10	1380		75155
5	3	95	19	1116	1206	539234
6	1	75	18			300726
7	3	80	12	1312	1711	696074
8	3	60	5	1326	1723	53859
9	1	80	11			175722
10	1	95	7			260590
11	1	50	5			117725
12	3	95	11	1233	1180	266440
13	2	70	7	1066		733419
14	2	50	7	1209		532662
15	3	60	18	1510	1234	111929
16	1	80	7			519100
17						
18						
19						
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Trial Number:6	Frequency (MHz)	5617	Number of Bursts in Trial:	8	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	70	18	1364	1794	1492713
2	3	100	5	1263	904	1314416
3	2	85	16	1399		78688
4	1	80	12			483862
5	2	75	6	1869		185575
6	3	90	18	1763	1479	116538
7	2	50	15	1679		991651
8	2	55	16	1045		611919
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Trial Number:7	Frequency (MHz)	5626.7	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	70	20	1430		187865
2	3	85	8	1173	1561	327882
3	2	55	19	1229		58411
4	2	95	13	1486		678742
5	2	75	6	1540		622021
6	2	90	12	1056		81993
7	1	80	16			633480
8	2	85	13	1809		94811
9	2	95	17	938		744387
10	2	80	14	945		97974
11	3	90	7	1749	1460	638393
12	3	65	7	975	1691	771038
13	2	70	16	1240		599007
14	3	85	11	1562	1500	109146
15	1	75	10			69408
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Trial Number:8	Frequency (MHz)	5625.8	Number of Bursts in Trial:	9	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	100	15	986		762169
2	1	85	14			220436
3	2	95	20	1264		1186445
4	1	65	12			87140
5	2	95	13	1449		637
6	2	75	19	1250		412
7	2	60	7	959		198661
8	3	70	9	1161	1532	143930
9	2	60	10	1058		196290
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Trial Number:9	Frequency (MHz)	5619.2	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	75	17	1412	1223	580567
2	3	70	20	1930	1392	858972
3	2	95	12	959		644485
4	3	100	16	1677	1325	417181
5	1	95	13			858193
6	3	90	14	1827	1210	814932
7	1	65	12			87140
8	2	95	13	1449		637
9	2	75	19	1250		412
10	2	60	7	959		198661
11	3	70	9	1161	1532	143930
12	2	60	10	1058		196290
13	1	80	5			370541
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Trial Number:10	Frequency (MHz)	5614.7	Number of Bursts in Trial:	11	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	65	6	1573	958	451421
2	2	65	5	1438		584879
3	1	65	19			629867
4	2	70	16	1772		581453
5	1	100	16			1038937
6	2	95	20	1293		1051111
7	2	60	12	1632		401862
8	1	85	14			642623
9	2	60	20	1649		1085094
10	2	90	18	1120		660620
11	2	65	15	1346		861503
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Trial Number:11	Frequency (MHz)	5621.7	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	65	13	1805		747849
2	3	50	8	1677	1294	428601
3	2	100	15	986		762169
4	1	85	14			220436
5	2	95	20	1264		1186445
6	2	60	12	1929		496448
7	1	60	15			1203475
8	1	75	8			1120782
9	3	60	13	1455	1558	998260
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Trial Number:12	Frequency (MHz)	5622.3	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	55	16	1122		350108
2	1	90	8			175145
3	3	55	14	1644	1320	332528
4	2	90	16	1837		551686
5	2	60	6	1907		291383
6	3	90	13	1498	973	228408
7	3	75	5	939	1664	212376
8	1	55	6			376842
9	2	100	10	1817		108919
10	3	90	18	1466	995	185960
11	3	75	16	1395	1244	528460
12	1	75	11			234598
13	3	100	12	1845	900	96889
14	2	70	8	949		136744
15	2	100	9	1559		258553
16	3	70	15	1814	1424	108685
17	1	70	17			124446
18	1	80	10			259878
19	1	50	8			374962
20	1	80	19			541152

Trial Number:13	Frequency (MHz)	5615.1	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	50	7	1658		893481
2	1	50	13			317839
3	3	65	5	1718	1538	137567
4	2	95	17	1738		1303637
5	1	90	11			1160098
6	3	65	16	1854	1250	712885
7	1	90	10			869844
8	1	55	12			311441
9	1	95	6			652001
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Trial Number:14	Frequency (MHz)	5614.6	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	65	10	1554	1496	601402
2	2	70	18	1090		108335
3	3	85	7	1425	1135	600049
4	2	80	7	1634		221388
5	2	70	10	1513		143363
6	1	60	19			417479
7	3	55	13	1265	988	108447
8	2	65	19	1251		473238
9	1	65	12			10335
10	3	80	11	1810	1562	813521
11	2	60	16	1406		703388
12	3	50	9	1150	1769	701235
13	3	95	19	1798	1123	345077
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Trial Number:15	Frequency (MHz)	5621.1	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	5	1194	1739	192201
2	3	55	10	1872	1909	12473
3	1	60	10			527297
4	3	55	11	1103	1390	495142
5	1	90	7			390691
6	2	50	14	1616		506529
7	2	50	18	1216		319295
8	2	50	11	1063		180317
9	2	60	9	1091		189032
10	2	80	19	1047		41938
11	3	100	7	1835	960	113837
12	3	95	19	1114	1193	400080
13	3	50	19	1537	1444	479037
14	3	95	16	1017	1878	603601
15	3	70	18	1129	1546	473694
16	3	60	8	1565	1899	264268
17	3	80	16	1767	957	436812
18	2	100	13	1068		463242
19	2	60	7	1740		505636
20						

Trial Number:16	Frequency (MHz)	5621.4	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	70	13	941	1864	519562
2	1	95	14			888988
3	1	75	17			595767
4	2	100	18	1272		449471
5	3	80	15	1593	1041	262346
6	2	55	13	1508		702690
7	1	80	19			69823
8	1	75	17			789980
9	3	60	12	1765	1561	584934
10	2	100	16	1715		261792
11	1	80	7			573481
12	3	80	9	941	1360	697098
13	1	75	5			153261
14						
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Trial Number:17	Frequency (MHz)	5621	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	80	17			415409
2	2	80	12	1912		192017
3	3	85	6	1298	1557	177949
4	2	80	9	1437		213200
5	3	95	17	1826	1720	363578
6	3	90	13	1361	969	706618
7	1	90	8			39255
8	2	100	8	919		105066
9	1	50	8			260706
10	1	90	13			614405
11	3	60	17	1169	1132	590234
12	1	95	15			533574
13	2	90	14	1251		206531
14	2	65	14	1517		294365
15	2	55	16	1847		324124
16	1	55	5			130270
17						
18						
19						
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Trial Number:18	Frequency (MHz)	5614.4	Number of Bursts in Trial:	13	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	14	1168	960	72655
2	3	55	13	1077	1358	180737
3	3	50	10	1745	1929	854441
4	3	75	5	1438	1372	722167
5	1	80	16			690119
6	3	75	16	1667	1309	622047
7	3	75	19	1227	1521	789896
8	2	85	9	1625		912653
9	3	85	18	1903	1508	369136
10	3	90	20	1045	1280	480781
11	3	80	12	1761	1788	904697
12	1	65	17			649843
13	1	55	5			851799
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Trial Number:19	Frequency (MHz)	5616.1	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	75	14	1889		101261
2	3	95	11	1623	1815	551839
3	3	100	20	1599	1307	590413
4	3	90	18	947	937	250748
5	2	75	13	1037		374649
6	2	80	7	1906		203329
7	2	95	18	1680		455793
8	1	55	13			150033
9	1	90	13			397512
10	3	95	15	1697	1792	511400
11	1	70	13			483183
12	1	85	18			728675
13	3	60	9	1866	994	548715
14	2	95	15	1106		192881
15	1	60	14			511546
16	1	70	19			57763
17						
18						
19						
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Trial Number:20	Frequency (MHz)	5613.2	Number of Bursts in Trial:	14	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	55	12	971		338532
2	3	75	5	1025	1733	539073
3	1	55	8			487349
4	3	60	18	1903	1679	521277
5	1	55	11			816359
6	3	60	18	954	984	771035
7	1	70	20			102582
8	3	75	11	1041	1002	483194
9	2	100	7	1816		249469
10	2	55	18	1040		673035
11	3	60	15	1216	1264	629406
12	2	90	14	1265		287776
13	2	90	10	1119		732189
14	1	55	20			77872
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Trial Number:21	Frequency (MHz)	5618.1	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	75	16			498646
2	2	95	8	1737		378811
3	1	60	5			668887
4	3	70	20	1928	1059	575358
5	1	65	16			71027
6	3	100	11	1662	1036	373395
7	1	80	8			300523
8	3	60	20	1072	1706	574392
9	2	70	6	1722		167513
10	3	90	16	1820	1079	314105
11	2	100	19	1869		633724
12	2	90	10	1029		83150
13	3	95	10	1135	1905	247466
14	3	60	9	1306	1766	483429
15	2	70	10	1109		58459
16	1	90	19			553646
17						
18						
19						
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Trial Number:22	Frequency (MHz)	5619	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	65	9	1068	990	12160
2	3	95	14	1450	1677	429865
3	2	60	13	1416		39887
4	1	60	7			505683
5	2	90	7	961		475550
6	1	75	20			270727
7	1	100	20			304742
8	3	55	16	1360	969	539573
9	2	85	18	1756		234087
10	1	90	5			405468
11	3	85	12	1887	1856	39730
12	1	100	5			285333
13	3	60	5	1666	1266	281909
14	2	85	6	1009		47029
15	1	70	9			542096
16	1	55	17			516976
17	3	80	15	989	1019	515023
18	3	100	17	1274	1207	368345
19	1	70	16			567118
20	2	60	20	1506		452760

Trial Number:23	Frequency (MHz)	5618.1	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	85	14	1416		326080
2	3	60	17	1619	1286	238393
3	2	65	6	1892		386774
4	3	100	10	1536	1624	78458
5	3	100	15	1886	1287	527164
6	3	85	5	1228	1737	575524
7	1	60	13			468149
8	3	50	10	1070	1634	27435
9	2	95	19	1767		190680
10	1	50	16			101684
11	2	90	20	1256		499420
12	1	65	13			46617
13	2	70	18	1414		256797
14	3	70	16	1455	1435	490972
15	1	90	20			402499
16	3	50	20	1198	1123	83006
17	3	85	6	1829	1726	282604
18	1	60	12			348729
19	1	85	7			331723
20						

Trial Number:24	Frequency (MHz)	5615.4	Number of Bursts in Trial:	12	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	12	1637	1750	286500
2	1	90	20			607862
3	3	55	7	1743	1833	894977
4	1	80	18			978443
5	2	50	16	1701		742543
6	3	80	10	1518	1158	919913
7	3	100	11	1424	1289	966124
8	3	65	7	1445	1377	303802
9	2	50	7	1622		469090
10	2	55	5	1289		32924
11	3	90	8	1499	1752	80130
12	3	70	5	1366	1636	322004
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Trial Number:25	Frequency (MHz)	5621.2	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	95	12	1031		813922
2	1	95	5			735703
3	3	85	6	1043	1358	1086776
4	2	50	6	979		262999
5	1	75	19			102995
6	1	65	12			817973
7	2	50	8	1415		852230
8	1	60	15			297526
9	1	50	17			782333
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Trial Number:26	Frequency (MHz)	5622.9	Number of Bursts in Trial:	14	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	75	16			663165
2	3	60	16	1093	1405	462023
3	2	60	6	1690		46817
4	1	80	17			748954
5	1	60	13			391111
6	1	80	10			417805
7	1	85	8			464078
8	2	50	17	1637		519334
9	1	90	9			536772
10	2	70	19	1111		573899
11	2	60	15	1148		740049
12	2	60	12	1937		703179
13	2	60	10	1682		401233
14	2	100	7	1085		668469
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Trial Number:27	Frequency (MHz)	5615.1	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	75	10			542036
2	2	70	12	1366		580969
3	3	95	15	1829	992	35047
4	1	55	11			578576
5	3	55	14	1248	1628	615629
6	3	55	20	1801	1761	497573
7	3	55	8	1312	1487	101046
8	1	75	19			522946
9	1	100	16			444647
10	3	95	11	999	1456	9251
11	2	50	11	1383		488056
12	2	55	12	1343		273014
13	3	55	20	1798	1325	502295
14	1	100	19			611294
15	2	95	15	1611		643097
16	2	50	14	1655		656608
17	2	55	13	1405		500108
18	1	80	14			663750
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Trial Number:28	Frequency (MHz)	5626.2	Number of Bursts in Trial:	9	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	80	10	1843		350068
2	3	100	9	952	1831	450168
3	2	80	8	1298		375957
4	1	75	12			18083
5	2	90	18	1414		1123408
6	2	55	15	1602		432639
7	1	55	11			577487
8	1	50	8			903864
9	2	90	6	1479		701628
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Trial Number:29	Frequency (MHz)	5626.5	Number of Bursts in Trial:	11	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	75	12	1403	1118	338977
2	2	55	17	1589		23103
3	1	80	12			373965
4	2	75	13	1823		933087
5	3	70	9	1297	1369	509718
6	3	95	15	1259	1141	542931
7	2	70	18	1419		347451
8	2	65	15	1552		38030
9	3	100	16	1333	1631	336146
10	3	95	15	1893	1141	571525
11	2	95	19	1130		441914
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Trial Number:30	Frequency (MHz)	5621.9	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	85	14	1876	1418	643374
2	2	80	17	1582		575732
3	3	80	16	976	1035	129223
4	3	50	16	1083	1335	563593
5	3	65	9	1233	1346	232621
6	2	85	20	1190		67671
7	1	80	7			117157
8	2	95	14	1633		558713
9	1	70	11			475939
10	2	55	10	1635		247218
11	1	90	16			108465
12	1	100	10			265252
13	3	100	16	1616	1660	111525
14	1	55	10			219638
15	1	70	17			415896
16	1	90	13			201813
17	2	65	14	1230		164930
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<5630MHz>

Type 1 Trial #	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)	Detection (Yes / No)
1	17	1193.3	838	Yes
2	7	1567.4	638	Yes
3	6	1618.1	618	Yes
4	21	1089.3	918	No
5	22	1066.1	938	Yes
6	5	1672.2	598	Yes
7	14	1285.3	778	Yes
8	10	1432.7	698	Yes
9	11	1392.8	718	Yes
10	16	1222.5	818	Yes
11	12	1355.0	738	Yes
12	19	1139.0	878	Yes
13	15	1253.1	798	Yes
14	9	1474.9	678	Yes
15	1	1930.5	518	Yes
16			1381	Yes
17			1583	Yes
18			2794	No
19			2302	No
20			1406	Yes
21			1662	No
22			1533	Yes
23			2004	Yes
24			2696	Yes
25			2101	Yes
26			691	Yes
27			1275	Yes
28			1247	Yes
29			1559	Yes
30			1788	Yes

<5630MHz>

Type2 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	25	3.50	226	Yes
2	29	1.80	201	Yes
3	24	1.60	222	Yes
4	23	3.40	152	No
5	25	1.10	187	Yes
6	27	3.60	228	Yes
7	24	1.70	162	No
8	29	2.40	154	Yes
9	25	2.30	158	Yes
10	24	4.00	207	Yes
11	27	1.90	200	Yes
12	29	3.70	192	Yes
13	25	4.30	151	No
14	25	3.60	174	Yes
15	25	1.40	201	Yes
16	27	1.10	161	No
17	29	1.70	204	Yes
18	25	3.30	220	Yes
19	29	1.90	190	Yes
20	25	2.10	228	Yes
21	24	4.90	197	Yes
22	23	4.90	159	Yes
23	26	2.00	150	No
24	27	1.30	215	Yes
25	29	2.50	159	Yes
26	29	2.00	229	Yes
27	26	2.30	177	Yes
28	29	1.00	151	Yes
29	28	3.30	150	No
30	26	4.30	207	Yes

<5630MHz>

Type3 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	16	9.10	309	Yes
2	17	6.80	393	Yes
3	17	9.60	421	Yes
4	16	6.90	265	Yes
5	18	6.40	343	Yes
6	16	9.80	496	Yes
7	17	7.10	398	Yes
8	17	9.00	421	Yes
9	16	6.00	309	Yes
10	16	8.00	271	Yes
11	16	9.70	448	Yes
12	16	6.70	268	No
13	16	8.20	439	Yes
14	18	6.80	354	Yes
15	17	9.80	451	Yes
16	16	7.10	341	Yes
17	17	7.60	460	Yes
18	16	8.50	338	Yes
19	18	9.60	414	Yes
20	18	7.80	375	Yes
21	18	9.30	278	Yes
22	17	8.50	470	Yes
23	17	8.70	456	Yes
24	18	9.30	380	Yes
25	18	7.40	448	Yes
26	16	9.20	297	Yes
27	18	6.20	357	Yes
28	18	7.30	388	Yes
29	16	6.50	260	Yes
30	18	7.80	347	Yes

<5630MHz>

Type4 Trial #	Number Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	15	11.40	404	Yes
2	14	15.10	310	No
3	12	15.30	289	Yes
4	15	16.10	380	Yes
5	13	12.30	330	Yes
6	15	18.50	311	Yes
7	13	14.80	331	Yes
8	12	12.20	386	No
9	14	16.10	323	Yes
10	13	12.20	371	Yes
11	14	16.00	302	Yes
12	15	19.70	417	Yes
13	16	14.30	497	Yes
14	14	12.90	368	Yes
15	14	12.80	340	Yes
16	14	11.50	376	Yes
17	15	17.10	296	Yes
18	14	17.70	490	Yes
19	13	19.50	399	No
20	15	13.90	301	Yes
21	16	12.70	329	Yes
22	13	11.50	411	No
23	15	14.50	370	Yes
24	13	15.30	376	Yes
25	14	14.70	301	Yes
26	15	14.20	355	Yes
27	14	17.90	480	Yes
28	15	12.60	500	No
29	12	19.20	451	Yes
30	16	17.70	320	Yes

<5630MHz>

Type 5

Trial Number:1	Frequency (MHz)	5641.4	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	10	1541	1730	483566
2	1	50	13			229330
3	2	90	13	1446		490283
4	3	80	20	1535	1109	487619
5	3	70	7	1844	1764	618738
6	2	60	18	1264		479073
7	2	85	16	1880		320071
8	2	55	6	1382		318535
9	2	50	9	1448		169895
10	3	80	17	1138	939	232109
11	3	90	12	1569	1421	390814
12	2	75	9	1272		308842
13	1	70	16			534478
14	3	50	11	1470	1842	508537
15	3	65	7	1272	1419	220798
16	2	90	13	942		218090
17	2	55	14	1600		633489
18	1	85	19			489967
19						
20						

Trial Number:2	Frequency (MHz)	5641.6	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	80	5	1449		97110
2	1	100	9			630595
3	1	65	5			422873
4	2	85	7	1191		475959
5	1	65	18			119452
6	2	60	6	1712		631581
7	2	65	17	1653		272787
8	1	55	20			252409
9	3	85	8	1048	1282	724593
10	3	55	9	1231	1523	249760
11	2	50	20	1331		12603
12	3	95	16	1491	1247	342354
13	1	70	6			310565
14	3	60	8	1787	1108	69861
15	1	100	14			593221
16	3	100	17	1017	1382	348245
17						
18						
19						
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Trial Number:3	Frequency (MHz)	5619.9	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	95	19	952	1188	357704
2	3	90	18	1488	1555	242496
3	2	50	13	1072		461517
4	3	55	13	1097	973	45782
5	2	50	13	1472		358994
6	1	70	20			190267
7	2	80	20	1096		540134
8	1	80	11			469910
9	1	75	14			211949
10	2	50	11	1343		452553
11	1	60	11			119820
12	2	70	9	1263		371439
13	3	55	8	1541	1240	608920
14	2	90	10	1125		146085
15	3	60	5	1027	979	546014
16	1	65	20			74914
17	3	60	12	1849	1397	464879
18	3	55	18	1471	1680	25918
19	1	65	20			175133
20						

Trial Number:4	Frequency (MHz)	5617.2	Number of Bursts in Trial:	14	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	75	8	1031	1203	501112
2	1	70	13			350480
3	2	95	7	1770		527672
4	1	50	18			223428
5	3	65	16	1682	1662	618154
6	2	80	20	1592		680134
7	3	60	7	1795	1358	477689
8	2	50	16	1089		267677
9	3	95	10	1279	1019	418544
10	3	50	17	1321	1256	140470
11	3	65	16	1153	1041	789255
12	3	90	17	1455	1601	469819
13	1	60	5			281891
14	1	95	19			497566
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Trial Number:5	Frequency (MHz)	5625.7	Number of Bursts in Trial:	10	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	90	14			181495
2	1	70	16			102879
3	2	70	11	1487		255306
4	2	55	20	998		269015
5	1	100	13			476491
6	1	75	5			414854
7	1	55	14			426560
8	3	85	7	927	1475	522678
9	3	80	17	1621	989	51568
10	1	75	15			661034
11						
12						
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19						
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Trial Number:6	Frequency (MHz)	5641.4	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	90	16			466338
2	1	95	14			59460
3	2	100	6	1855		87491
4	3	55	13	1881	1115	126402
5	3	70	13	969	982	49285
6	2	100	5	914		31966
7	1	55	5			196641
8	1	80	5			521283
9	3	95	20	1123	1689	411172
10	3	65	20	1257	1621	353997
11	3	50	11	1535	1492	347048
12	1	70	6			83380
13	3	85	10	915	1393	320805
14	3	80	13	1349	1327	135240
15	2	70	18	1256		76188
16	3	75	6	1379	1363	408774
17	2	85	10	1688		559413
18	1	75	10			422708
19	2	65	7	1771		219963
20	3	60	7	1098	1400	475096

Trial Number:7	Frequency (MHz)	5638.4	Number of Bursts in Trial:	14	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	85	13	1381	1479	682484
2	2	65	5	1331		146092
3	1	85	16			462462
4	1	100	7			270318
5	2	90	12	1549		586202
6	2	80	11	1173		99507
7	2	55	18	1228		89839
8	1	70	16			635353
9	3	75	17	1451	1586	640280
10	3	75	17	1737	1221	475154
11	2	50	6	989		178184
12	2	75	6	1159		203054
13	3	70	9	1635	1326	576717
14	2	60	11	1053		213860
15						
16						
17						
18						
19						
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Trial Number:8	Frequency (MHz)	5640.1	Number of Bursts in Trial:	8	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	65	15			616230
2	2	95	7	1078		218319
3	2	50	10	1574		369828
4	3	90	7	1630	1735	359334
5	2	100	5	988		994014
6	2	70	18	1645		733324
7	2	50	12	1710		501660
8	2	85	12	1849		456176
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12						
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19						
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Trial Number:9	Frequency (MHz)	5627	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	75	8			284212
2	3	50	12	1484	1039	739365
3	2	75	16	1574		555790
4	1	85	17			253233
5	1	95	18			706723
6	1	85	8			717554
7	1	50	9			424352
8	3	55	5	1078	1929	776712
9	1	75	20			548569
10	3	100	14	1248	1420	243845
11	2	50	11	1084		745010
12	3	60	12	1496	1641	794138
13	3	65	20	1657	1609	309077
14	2	85	11	1114		268760
15	3	55	11	1156	1039	605372
16						
17						
18						
19						
20						

Trial Number:10	Frequency (MHz)	5618	Number of Bursts in Trial:	8	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	55	12	1462	1813	960746
2	3	95	5	1800	920	316798
3	1	85	13			1342490
4	2	85	7	978		1244220
5	3	85	6	1536	965	1110104
6	2	60	17	1006		1448153
7	1	100	5			107205
8	2	90	6	1098		680286
9						
10						
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12						
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Trial Number:11	Frequency (MHz)	5631.9	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	100	17			331883
2	1	65	11			419700
3	3	75	6	1398	1910	473858
4	2	90	7	1556		273691
5	1	80	20			142727
6	3	65	20	1045	1431	550440
7	1	65	8			293581
8	2	90	16	1892		70788
9	2	75	17	1242		98437
10	1	60	18			493719
11	3	75	16	1079	1607	656830
12	3	90	16	946	1152	460113
13	1	90	12			97860
14	3	85	15	1319	1444	363177
15	1	95	16			408201
16	3	90	15	1341	1754	487934
17	2	80	12	1474		429862
18						
19						
20						

Trial Number:12	Frequency (MHz)	5616.4	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	14	1312	1688	203013
2	2	50	20	1045		381964
3	3	95	16	1171	1718	310652
4	1	55	7			227632
5	2	85	7	1036		11689
6	1	80	8			95598
7	2	50	12	1896		220963
8	3	95	16	1567	1882	188211
9	3	85	16	1285	1777	56386
10	1	60	6			712808
11	1	65	12			44924
12	2	80	12	1137		315366
13	2	80	13	1173		481220
14	2	70	6	1532		159238
15	1	50	14			588292
16	1	50	18			216318
17						
18						
19						
20						

Trial Number:13	Frequency (MHz)	5633.2	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	55	19			140906
2	1	95	10			193169
3	2	90	13	957		414648
4	3	60	11	1851	1253	44831
5	1	90	5			95897
6	1	95	13			495994
7	2	60	15	1668		259889
8	1	85	19			460786
9	3	80	18	1010	1041	528753
10	2	60	7	1476		36846
11	3	70	9	1599	1591	153287
12	2	85	19	1770		72416
13	3	75	8	1031	1165	479905
14	3	75	13	1734	1337	474345
15	1	75	17			268748
16	3	65	11	1421	1309	401641
17	3	70	13	1592	952	502870
18	3	100	11	1138	915	427263
19	3	80	19	1420	1073	154178
20	2	55	16	1023		175896

Trial Number:14	Frequency (MHz)	5635.4	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	8	1640	1549	260168
2	2	65	19	946		547174
3	3	80	14	1548	1260	265282
4	1	70	5			684940
5	2	60	12	1119		251659
6	1	60	20			652962
7	1	75	20			674474
8	3	65	20	1154	1587	672641
9	1	100	8			217321
10	1	90	9			426312
11	2	80	17	1421		260597
12	2	95	19	1395		297774
13	2	85	8	1671		341264
14	2	90	10	1517		95176
15	1	60	13			165813
16	3	95	13	1437	1682	268071
17	3	70	8	940	1016	201538
18						
19						
20						

Trial Number:15	Frequency (MHz)	5644.1	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	50	12			76196
2	2	80	15	1700		339096
3	1	95	17			86183
4	1	95	10			280177
5	1	75	7			566515
6	3	60	11	1154	1399	75269
7	2	80	6	1222		618288
8	3	100	5	1416	1382	581877
9	3	100	17	1028	1692	153456
10	3	90	9	1102	1520	312625
11	3	65	14	1511	1490	76243
12	3	80	19	1622	1734	67485
13	1	65	20			296536
14	1	90	5			702
15	2	100	19	1670		74464
16	1	100	16			333329
17	1	55	17			25627
18	3	100	6	1491	1822	206472
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Trial Number:16	Frequency (MHz)	5632	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	14	1127	1809	530918
2	1	50	15			478661
3	2	65	5	1421		610643
4	1	100	8			393876
5	3	95	6	1606	1225	482276
6	3	50	8	1441	1872	346602
7	2	85	6	1915		481948
8	1	95	19			549344
9	2	55	12	1772		170597
10	3	85	16	1623	1375	203800
11	2	65	14	1128		132430
12	2	75	15	1162		336482
13	2	80	7	1409		486341
14	1	90	10			538990
15	3	50	11	1037	1238	204906
16	3	70	20	1669	1521	536192
17	3	80	17	1464	1686	641742
18	3	100	15	1445	1776	441046
19						
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Trial Number:17	Frequency (MHz)	5625.6	Number of Bursts in Trial:	9	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	13	978	1120	664122
2	1	80	12			267838
3	3	70	12	1821	1699	227619
4	2	65	10	1225		88095
5	2	80	15	1427		759548
6	3	55	16	1329	1728	1209546
7	3	80	17	1280	1082	98727
8	2	85	8	1417		76985
9	2	90	19	1203		1293862
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Trial Number:18	Frequency (MHz)	5639.8	Number of Bursts in Trial:	11	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	100	12			133323
2	2	50	5	1833		985586
3	3	70	18	995	1232	372233
4	2	50	20	1373		648132
5	3	75	8	1425	1321	161927
6	1	50	15			474476
7	2	55	10	1643		137154
8	3	95	20	1071	1577	1058315
9	3	50	15	1538	1561	561378
10	2	100	15	1613		754450
11	3	80	5	1030	1920	590045
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Trial Number:19	Frequency (MHz)	5619.5	Number of Bursts in Trial:	15	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	55	11	1306		561419
2	3	60	8	1156	1868	777685
3	3	90	12	1510	1054	386672
4	2	90	9	1597		710732
5	1	90	8			223415
6	2	55	9	1414		750391
7	2	80	5	1252		438766
8	1	95	13			744321
9	2	85	12	1338		22387
10	1	50	5			664583
11	3	85	20	1893	1710	416822
12	1	90	17			15499
13	1	75	14			595523
14	3	85	10	1822	1741	460333
15	2	70	6	1829		401678
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Trial Number:20	Frequency (MHz)	5620.2	Number of Bursts in Trial:	17	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	95	6	1710		15319
2	1	90	12			143444
3	2	65	16	1373		361434
4	2	75	9	1109		43699
5	3	50	7	1746	1852	156438
6	3	90	8	1060	1173	564493
7	2	65	16	1497		291928
8	3	80	20	1761	1485	225895
9	3	80	10	1678	1540	691388
10	3	100	6	1515	1686	118831
11	1	100	8			629358
12	2	70	13	1751		46926
13	3	85	16	1774	1482	254584
14	1	60	19			233694
15	1	75	15			476716
16	3	95	6	1415	1580	700010
17	3	75	10	1219	1705	87043
18						
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Trial Number:21	Frequency (MHz)	5639.6	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	60	12	1650		36446
2	2	75	6	1215		566301
3	3	75	16	1323	1282	43519
4	1	90	14			256617
5	2	70	11	1606		9364
6	2	70	6	972		470405
7	2	80	5	999		308813
8	1	100	20			63443
9	2	70	20	1438		559429
10	3	90	15	1445	1283	605529
11	3	70	7	1101	1787	197331
12	2	95	13	1506		111992
13	1	55	9			615672
14	1	100	11			37403
15	2	75	16	1750		133201
16	3	60	17	1529	1303	213014
17	2	75	15	1157		155737
18	3	70	7	1437	1257	298795
19	3	75	18	1595	1159	621209
20						

Trial Number:22	Frequency (MHz)	5629.9	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	100	18	1317		153195
2	2	90	15	935		6943
3	3	75	18	1828	1378	120846
4	2	100	14	1273		565667
5	1	50	15			30209
6	2	100	14	1170		219286
7	2	95	17	1521		328334
8	2	70	9	1713		211044
9	2	95	6	1493		635146
10	1	85	18			349825
11	1	50	15			607475
12	3	70	15	1315	1574	112064
13	1	95	19			138311
14	2	90	5	1266		650915
15	2	95	5	996		542144
16	3	50	6	1498	1572	568507
17	3	65	7	1241	1048	660898
18	1	75	5			457032
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Trial Number:23	Frequency (MHz)	5624.3	Number of Bursts in Trial:	18	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	90	7	1451	1766	356258
2	3	65	10	1442	1206	560421
3	3	75	13	1862	1706	328847
4	1	75	8			147603
5	2	100	18	1440		409521
6	2	60	7	1484		491687
7	2	100	13	1067		506987
8	2	50	19	956		233901
9	3	70	6	1284	1775	345398
10	1	100	12			597610
11	1	55	19			60979
12	2	75	10	1260		651359
13	3	80	5	1523	1554	485417
14	3	70	14	1582	1496	474975
15	1	70	6			6138
16	3	80	13	1123	1793	25269
17	2	85	5	1804		623756
18	3	95	12	1738	1174	165767
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Trial Number:24	Frequency (MHz)	5618.4	Number of Bursts in Trial:	10	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	90	6	1511		640341
2	3	100	20	942	1230	459861
3	1	90	11			503763
4	3	75	12	1274	1006	574919
5	3	75	10	1195	1387	166575
6	1	70	15			1034877
7	1	60	12			956029
8	3	50	16	1816	1276	540534
9	1	80	20			194021
10	2	55	7	1147		76079
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Trial Number:25	Frequency (MHz)	5635.1	Number of Bursts in Trial:	19	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	70	20	1743		570543
2	3	80	9	1838	948	197182
3	1	90	10			115776
4	1	75	18			147381
5	2	70	10	1059		413472
6	3	60	11	1104	1344	447878
7	3	65	11	1716	1604	500434
8	2	50	16	1743		57809
9	1	90	11			593646
10	1	70	8			56038
11	1	55	5			385357
12	1	60	17			464247
13	3	50	16	1761	1769	174453
14	1	70	20			107883
15	1	65	20			3523
16	3	55	17	1794	1928	215568
17	3	65	15	1046	1548	319108
18	1	95	17			84760
19	2	90	20	1415		105518
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Trial Number:26	Frequency (MHz)	5618	Number of Bursts in Trial:	9	Detection (Yes / No)	No
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	60	17	1504	994	1045104
2	1	50	9			984898
3	2	60	6	1547		495850
4	1	90	10			67010
5	1	60	18			1132081
6	2	60	15	1531		421684
7	1	85	14			270663
8	3	50	20	1205	1261	638790
9	3	70	8	1009	1900	1292904
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Trial Number:27	Frequency (MHz)	5630.4	Number of Bursts in Trial:	10	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	1	70	9			962936
2	2	50	8	1697		1017860
3	3	65	17	1025	1228	545884
4	2	80	16	1211		939707
5	1	70	10			398662
6	1	85	10			734782
7	2	60	7	1384		260760
8	2	70	16	1014		833578
9	1	80	20			494808
10	2	65	10	1699		251518
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Trial Number:28	Frequency (MHz)	5631.2	Number of Bursts in Trial:	8	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	2	75	5	1514		888096
2	3	90	16	1619	1610	235786
3	2	60	8	1464		655971
4	2	50	20	1565		953824
5	3	60	15	1135	1899	853499
6	1	90	19			169834
7	1	70	6			464690
8	1	100	14			459783
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Trial Number:29	Frequency (MHz)	5633.6	Number of Bursts in Trial:	20	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	50	6	1890	1436	410621
2	1	95	14			175145
3	1	75	10			126875
4	1	55	19			564243
5	2	55	7	1565		564430
6	2	60	5	1893		551030
7	1	90	8			124384
8	3	95	16	1686	1518	582841
9	2	80	17	1659		426885
10	3	90	9	919	1315	35039
11	2	50	16	1669		535064
12	2	65	19	1560		456548
13	3	80	15	1792	1552	228948
14	2	75	13	1071		55305
15	3	100	5	1043	998	11234
16	3	65	19	1492	1037	519583
17	2	90	7	1413		34207
18	2	80	13	1049		362823
19	1	55	8			187496
20	1	60	7			498330

Trial Number:30	Frequency (MHz)	5619.2	Number of Bursts in Trial:	16	Detection (Yes / No)	Yes
Burst	Number of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing(us)	Pulse 2-to-3 Spacing(us)	Starting Location Within Interval (us)
1	3	60	6	1751	1290	300820
2	1	95	7			334559
3	3	55	12	1936	1240	648134
4	1	65	5			634366
5	3	100	13	1517	1304	661659
6	2	80	12	1402		244411
7	3	55	14	1269	1927	337062
8	2	90	16	1200		368009
9	3	100	18	1386	1301	94318
10	2	75	13	1506		183541
11	1	90	15			454664
12	3	95	6	950	1477	620063
13	3	80	19	1633	989	726674
14	3	90	12	1043	941	75877
15	1	50	5			183932
16	1	95	7			86115
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Appendix B. Setup Photographs

Front View