FCC PART 15
TEST REPORT
No.I21Z60214-IOT04

for

Shenzhen Tinno Mobile Technology Corp.

4G MIFI

UM200AA

With

FCC ID: XD6UM200AA

Hardware Version: V1.0

Software Version: UM200AAV01.55.10

Issued Date: 2021-03-09

Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I21Z60214-IOT04	Rev.0	1st edition	2021-03-02
I21Z60214-IOT04	Rev.1	Update the information of the note in page 9	2021-03-09

CONTENTS

1. **TEST LATORATORY**

1.1. **Introduction & Accreditation**

1.2. **Testing Location**

Location 1:CTTL(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China100191

1.3. **Testing Environment**

Normal Temperature:
                                 15-35℃

Relative Humidity: 20-75%

1.4. **Project date**

Testing Start Date: 2021-01-26
Testing End Date: 2021-03-01

1.5. **Signature**

Xie Xiuzhen
(Prepared this test report)

Zheng Wei
(Reviewed this test report)

Hu Xiaoyu
(Approved this test report)

2. <u>CLIENT INFORMATION</u>

2.1. Applicant Information

Company Name:	Shenzhen Tinno Mobile Technology Corp.
Address:	4/F, H-3 Building,OCT Eastern Industrial Park. NO.1 XiangShan East Road, Nan Shan District,Shenzhen, P.R.China
City:	Shenzhen
Postal Code:	/
Country:	China
Telephone:	0755-86095550
Fax:	/

2.2. Manufacturer Information

Company Name:	Shenzhen Tinno Mobile Technology Corp.
Address:	4/F, H-3 Building,OCT Eastern Industrial Park. NO.1 XiangShan East Road, Nan Shan District,Shenzhen, P.R.China
City:	Shenzhen
Postal Code:	/
Country:	China
Telephone:	0755-86095550
Fax:	/

3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT(AE)

3.1. About EUT

Description	4G MIFI
Model name	4G MIFI
FCC ID	4G MIFI
WLAN Frequency Range	ISM Band:
	-5250MHz~5350MHz
	-5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Extreme vol. Limits	3.8V
Device Type (DFS)	Master
TPC mechanism	Not support
Antenna gain	-4.5dBi

3.2. Internal Identification of EUT used during the test

EUT ID*	S/N	HW Version	SW Version
EUT1	865770050002056	V1.0	UM200AAV01.55.10

*EUT ID: is used to identify the test sample in the lab internally.

3.3. General Description

The Equipment Under Test (EUT) is a model of 4G MIFI with integrated antenna. It consists of normal options: lithium battery, charger. Manual and specifications of the EUT were provided to fulfil the test.

4. REFERENCE DOCUMENTS

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

FCC Part15	FCC CFR 47, Part 15, Subpart E: 15.407 General technical requirements.	2018
KDB 905642 D02	UNII DFS Compliance Procedures New Rules v02	2016
KDB 905462 D03	UNII Clients Without Radar Detection New Rules v01r02	2016

5. LABORATORY ENVIRONMENT

Measurement is performed in shielding room.

6. SUMMARY OF TEST RESULTS

6.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15E	Verdict
Channel move time and channel closing transmission time	15.407 (h)(2)(iii)	**P**
Non-Occupancy Period	15.407 (h)(2) (iv)	**P**

Please refer to **ANNEX A** for detail.

Terms used in Verdict column

P	Pass, The EUT complies with the essential requirements in the standard.
NM	Not measured, The test was not measured by CTTL
NA	Not Applicable, The test was not applicable
F	Fail, The EUT does not comply with the essential requirements in the standard

6.2. Statements

CTTL has evaluated the test cases requested by the client/manufacturer as listed in section 6.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.1.

This report only deal with the UNII DFS functions among the features described in section 3, and The EUT met all requirements of the reference documents.

The end user is not available to get and modify the parameters of the detected Radar Waveforms in this product.

Test Conditions

T nom	Normal Temperature
T min	Low Temperature
T max	High Temperature
V nom	Normal Voltage
V min	Low Voltage

V max	High Voltage
H nom	Norm Humidity
A nom	Norm Air Pressure

For this report, all the test case listed above is tested under Normal Temperature and Normal Voltage, and also under norm humidity, the specific conditions as following:

Temperature	T nom	26°C
Voltage	V nom	3.85V(By battery)
Humidity	H nom	44%
Air Pressure	A nom	1010hPa

7. TEST EQUIPMENTS UTILIZED

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Date	Calibration Due Date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	1 year	2021-05-06
2	Vector Signal Generator	SMU200A	103752	Rohde & Schwarz	1 year	2021-05-05
3	Vector Signal Generator	SMW200A	103421	Rohde & Schwarz	1 year	2022-02-26
4	Vector Signal Analyzer	E4440A	MY46186042	Agilent	1 year	2022-02-26
5	Power Splitter	ZN2PD-9G-S+	/	Mini-Circuits	/	/
6	Attenuator	30dB	/	Rosenberger	/	/
7	Shielding Room	S81	/	ETS-Lindgren	/	/

Softenware	Version	Manufacturer	Build	Rev
Pulse Sequencer	V1.10	Rohde & Schwarz	7324	3462

Instrument	Manufacturer	Serial Number
PC	DELL	GPL87W1

ANNEX B: MEASUREMENT RESULTS

B.1. Measurement Method

B.1.1. Conducted Measurements

The below figure shows the DFS setup, where the EUT is a RLAN device operating in slave mode, without Radar Interference Detection function. This setup also contains a device operating in master mode. The radar test signals are injected into the master device. The EUT (slave device) is associated with the master device. WLAN traffic is generated by streaming the mpeg file from the master to the slave in full monitor video mode using the media player.

Note:

1) All Measurements are performed with the EUT's narrowest channel bandwidth.
2) The software of radar signal generator (R&S SMU200A) is completely designed based on KDB 905642 requirement.

B.1.2. Parameters of DFS test signal

1). Interference threshold values, master or client incorporation 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.	
Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

2). DFS requirement values

Parameter	Value
Channel Availability Check Time	60 seconds (see note 1)
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.
Non-Occupancy Period	30 minutes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

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 a Channel move (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 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

3).Radar test waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a	$\text{Roundup}\left\{ \left(\frac{1}{360}\right) \cdot \left[\left(\frac{19 \cdot 10^6}{PRI_{\mu sec}}\right)\right]\right\}$	60%	30
		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			
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

Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.

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

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

4).Measurement Uncertainty

Item	Measurement Uncertainty
Time	0.70 ms
Power	0.75 dBm

5). Operating Frequency and Channel List for this Report

802.11a/n-HT20/ac-VHT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
52	5260	108	5540	132	5660
56	5280	112	5560	136	5680
60	5300	116	5580	140	5700
64	5320	120	5600	144	5720
100	5500	124	5620	/	/
104	5520	128	5640	/	/

802.11n-HT40/ac-VHT40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
54	5270	118	5590
62	5310	126	5630
102	5510	134	5670
110	5550	142	5710

802.11ac-VHT80

Channel	Frequency(MHz)	Channel	Frequency(MHz)
58	5290	122	5610
106	5530	138	5690

Test Channels for this Report

Test Mode	Test Channel	Test Frequency
802.11ac-VHT20	100	5500 MHz
802.11ac-VHT40	102	5510 MHz
802.11ac-VHT80	58	5290 MHz
802.11ac-VHT80	106	5530 MHz

B.1.3. Radar Waveform Calibration

The Interference Radar Detection Threshold Level is (-64dBm) + (0) [dBi] + 1 dB= -63 dBm that had been taken into account the output power range and antenna gain. The above equipment setup was used to calibrate the conducted Radar Waveform. A vector signal generator was utilized to establish the test signal level for each radar type. During this process there were replace 50ohm terminal form Master and Client device and 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 at least 3MHz. The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was (-64dBm) + (0) [dBi] + 1 dB= -63dBm. Capture the spectrum analyzer plots on short pulse radar types, long pulse radar type and hopping radar waveform.

Radar #0

Radar #1(Test A)

Radar #1(Test B)

Radar #2

Radar #3

Radar #4

Radar #5

Radar #6

B.2. Channel Availability Check

Method of Measurement: See KDB 905462 7.8.2

The Initial *Channel Availability Check Time* tests that the UUT 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*. This test does not use any *Radar Waveforms* and only needs to be performed one time.

a) 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 UUT 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.

b) The UUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.

c) Confirm that the UUT initiates transmission on the channel

This measurement can be used to determine the length of the power-on cycle if it is not supplied by the manufacturer. If the spectrum analyzer sweep is started at the same time the UUT is powered on and the UUT does not begin transmissions until it has completed the cycle, the power-on time can be determined by comparing the two times.

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*.

a) The *Radar Waveform* generator and UUT are connected using the applicable test setup described in the sections on configuration for Conducted Tests (7.2) or Radiated Tests (7.3) and the power of the UUT is switched off.

b) The UUT is powered on at T0. T1 denotes the instant when the UUT 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.

c) A single *Burst* of one of the Short Pulse Radar Types 0-4 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.

d) Visual indication or measured results on the UUT of successful detection of the radar *Burst* will be recorded and reported. Observation of Chr for UUT emissions will continue for 2.5 minutes after the radar *Burst* has been generated.

e) Verify that during the 2.5 minute measurement window no UUT transmissions occurred on Chr. The *Channel Availability Check* results will be recorded.

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*.

a) The *Radar Waveform* generator and UUT are connected using the applicable test setup

described in the sections for Conducted Tests (7.2) or Radiated Tests (7.3) and the power of the UUT is switched off.

b) The UUT is powered on at T0. T1 denotes the instant when the UUT 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.

c) A single *Burst* of one of the Short Pulse Radar Types 0-4 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.

d) Visual indication or measured results on the UUT of successful detection of the radar *Burst* will be recorded and reported. Observation of Chr for UUT emissions will continue for 2.5 minutes after the radar *Burst* has been generated.

e) Verify that during the 2.5 minute measurement window no UUT transmissions occurred on Chr. The *Channel Availability Check* results will be recorded.

Measurement Limit:

Item	Limit
A. Initial Channel Availability Check Time	The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.
B. Tests with a radar burst at the beginning of the Channel Availability Check Time	Can detected.
C. Tests with radar burst at the end of the Channel Availability Check Time	Can Detected.

Measurement Results:

A.Initial Channel Availability Check Time

802.11ac-VHT80


```
RBW  3 MHz          Marker 1 [T1 ]
* VBW  10 MHz                -36.38 dBm
Ref -20 dBm        Att  5 dB    SWT  120 s        95.768631 s
```

Date: 1.MAR.2021 03:10:08

Note: The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (35.77 sec). Initial beacons/data transmissions are indicated by marker 1 (95.77 sec).

B.Tests with a radar burst at the beginning of the Channel Availability Check Time

802.11ac-VHT80


```
RBW  3 MHz          Delta 2 [T1 ]
* VBW  10 MHz                36.46 dB
Ref -20 dBm        Att  5 dB    SWT  120 s        2.500000 s
                                      Marker 1 [T1 ]
                                              -71.14 dBm
                                        35.768631 s
```

Date: 1.MAR.2021 03:16:43

Marker1: The completion of the power-on cycle

Marker2: Add a radar burst at the beginning of the Channel Availability Check Time

C.Tests with radar burst at the end of the Channel Availability Check Time
802.11ac-VHT80

Date: 1.MAR.2021 03:14:04

Marker1: The completion of the power-on cycle
Marker2: Add with radar burst at the end of the Channel Availability Check Time

B.3. Channel move time and channel closing transmission time
Method of Measurement: See KDB 905462 7.8.3

The steps below define the procedure to determine the above mentioned parameters when a radar *Burst* with a level equal to the *DFS Detection Threshold* + 1dB is generated on the *Operating Channel* of the U-NII device *(In- Service Monitoring).*

a) One frequency will be chosen from the *Operating Channels* of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices, the test frequency must contain control signals. This can be verified by disabling channel loading and monitoring the spectrum analyzer. If no control signals are detected, another frequency must be selected within the emission bandwidth where control signals are detected.

b) In case the UUT is a U-NII device operating as a *Client Device* (with or without DFS), a U-NII device operating as a *Master Device* will be used to allow the UUT (Client device) to *Associate* with the *Master Device.* 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). In both cases for conducted tests, the *Radar Waveform* generator will be connected to the *Master Device.* For radiated tests, the emissions of the *Radar Waveform* generator will be directed towards the *Master Device.* 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.

c) Stream the channel loading test file from the *Master Device* to the *Client Device* on the test *Channel* for the entire period of the test.

d) At time T0 the *Radar Waveform* generator sends a *Burst* of pulses for one of the Radar Type 0 at levels defined, 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.

e) 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.

f) 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.

g) In case the UUT is a U-NII device operating as a *Client Device* with *In-Service Monitoring*, perform steps a) to f).

Measurement Limit:

Test Items	Limit
Channel move time	10 s
Channel Closing Transmission Time	200 ms + 60 ms

Measurement Results:

802.11ac-VHT80 5290MHz

Date: 16.FEB.2021 21:42:48

The channel move time is as the figure. It shows the time of the radar and the client pulses. The figure shows that the client stops transmission within 10 seconds, and no transmissions occur after 10 seconds later of the radar burst signal.

Date: 1.MAR.2021 02:04:59

The closing transmission time is as the figure, and the result 176.71ms=Delta2+(Delta3-Delta4)*9.

Conclusion: PASS

802.11ac-VHT80 5530MHz

RBW 3 MHz
VBW 10 MHz
SWT 12 s
Marker 1 [T1]   -33.21 dBm   1.076923 s
Ref -20 dBm   Att 5 dB
Delta 2 [T1]   -38.58 dB   10.000000 s
Center 5.53 GHz   1.2 s/

Date: 16.FEB.2021 01:21:41

The channel move time is as the figure. It shows the time of the radar and the client pulses. The figure shows that the client stops transmission within 10 seconds, and no transmissions occur after 10 seconds later of the radar burst signal.

RBW 3 MHz
VBW 10 MHz
SWT 1.5 s
Delta 4 [T1]   -38.75 dB   562.500000 ms
Ref -20 dBm   Att 5 dB
Marker 1 [T1]   -34.06 dBm   287.861538 ms
Delta 2 [T1]   -37.75 dB   153.846154 ms
Delta 3 [T1]   -37.46 dB   337.692308 ms
Center 5.53 GHz   150 ms/

Date: 1.MAR.2021 02:48:18

The closing transmission time is as the figure, and the result 194.12ms=Delta2+(Delta4-Delta3)*9.

Conclusion: PASS

B.4. Non-Occupancy Period

Method of Measurement: See KDB 905462 7.8.3

The steps below define the procedure to determine the above mentioned parameters when a radar *Burst* with a level equal to the *DFS Detection Threshold* + 1dB is generated on the *Operating Channel* of the U-NII device *(In- Service Monitoring).*

a) One frequency will be chosen from the *Operating Channels* of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices, the test frequency must contain control signals. This can be verified by disabling channel loading and monitoring the spectrum analyzer. If no control signals are detected, another frequency must be selected within the emission bandwidth where control signals are detected.

b) In case the UUT is a U-NII device operating as a *Client Device* (with or without DFS), a U-NII device operating as a *Master Device* will be used to allow the UUT (Client device) to *Associate* with the *Master Device.* 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). In both cases for conducted tests, the *Radar Waveform* generator will be connected to the *Master Device.* For radiated tests, the emissions of the *Radar Waveform* generator will be directed towards the *Master Device.* 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.

c) Stream the channel loading test file from the *Master Device* to the *Client Device* on the test *Channel* for the entire period of the test.

d) At time T0 the *Radar Waveform* generator sends a *Burst* of pulses for one of the Radar Type 0 at levels defined, 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.

e) 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.

f) 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.

g) In case the UUT is a U-NII device operating as a *Client Device* with *In-Service Monitoring*, perform steps a) to f).

Measurement Limit:

Test Items	Limit
Non-Occupancy Period	> 1800 s

Measurement Results:

802.11ac-VHT80 5290MHz

Associate the master and client, transmit specified stream between the master and client; monitor the analyzer on the operating frequency to make sure no beacons have been transmitted for 1800 seconds.

Date: 16.FEB.2021 22:22:42

The figure above shows that the client does not transmit any emission within 1800 seconds after getting the order of "stop transmits" from the DFS master (access point).

802.11ac-VHT80 5530MHz

Associate the master and client, transmit specified stream between the master and client; monitor the analyzer on the operating frequency to make sure no beacons have been transmitted for 1800 seconds.

Date: 16.FEB.2021 02:04:21

The figure above shows that the client does not transmit any emission within 1800 seconds after getting the order of "stop transmits" from the DFS master (access point).

B.5. DFS detection bandwidth

Method of Measurement: See KDB 905462 7.8.1

Set up the generating equipmen, or equivalent. Set up the DFS timing monitoring equipment. Set up the overall system for either radiated or conducted coupling to the UUT.

Adjust the equipment to produce a single *Burst* of any one of the Short Pulse Radar Types 0 – 4 at the center frequency of the UUT *Operating Channel* at the specified *DFS Detection Threshold* level found.

Set the UUT 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 reflecting the worst case (maximum) that is user configurable during this test.

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* within the DFS band using the specified *U-NII Detection Bandwidth* criterion. In cases where the channel bandwidth may exceed past the DFS band edge on specific channels (i.e., 802.11ac or wideband frame based systems) select a channel that has the entire emission bandwidth within the DFS band. If this is not possible, test the detection BW to the DFS band edge.

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. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as FH) 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.

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. Repeat this measurement in 1MHz steps at frequencies 5 MHz above where the detection rate begins to fall. Record the lowest frequency (denote as FL) 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.

The *U-NII Detection Bandwidth* is calculated as follows:

U-NII Detection Bandwidth = FH – FL

The *U-NII Detection Bandwidth* must meet the *U-NII Detection Bandwidth* criterion specified. Otherwise, the UUT does not comply with DFS requirements. This is essential to ensure that the UUT is capable of detecting *Radar Waveforms* across the same frequency spectrum that contains the significant energy from the system. In the case that the *U-NII Detection Bandwidth* is greater than or equal to the 99 percent power bandwidth for the measured FH and FL, the test can be truncated and the *U-NII Detection Bandwidth* can be reported as the measured FH and FL.

Measurement Limit:

Test Items	Limit
DFS detection bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth.

Measurement Results:

Test channel：802.11ac-VHT20 5500MHz											
Radar Frequency (MHz)	**DFS Detection trials (1 Detection; 0 No Detection)**										**Detection Rate (%)**
5490	0	0	0	0	0	0	0	0	0	0	0%
5490.5	0	1	0	0	1	1	0	1	0	0	40%
5491-F$_l$	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5496	1	1	1	1	1	1	1	1	1	1	100%
5497	1	1	1	1	1	1	1	1	1	1	100%
5498	1	1	1	1	1	1	1	1	1	1	100%
5499	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5501	1	1	1	1	1	1	1	1	1	1	100%
5502	1	1	1	1	1	1	1	1	1	1	100%
5503	1	1	1	1	1	1	1	1	1	1	100%
5504	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509-F$_h$	1	1	1	1	1	1	1	1	1	1	100%
5509.5	0	0	0	1	0	1	1	0	0	0	30%
5510	0	1	0	0	0	0	0	0	0	0	10%
Detection Bandwidth=F$_h$-F$_l$=5509-5491=18MHz											
the limit=EUT 99% bandwithx100% =17.11MHz											

The test result: Pass

Test channel：802.11ac-VHT40 5510MHz										
Radar Frequency (MHz)	**DFS Detection trials (1 Detection; 0 No Detection)**									**Detection Rate (%)**
5490	0	0	0	0	0	0	1	0	0	0	10%
5491-F$_l$	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5496	1	1	1	1	1	1	1	1	1	1	100%
5497	1	1	1	1	1	1	1	1	1	1	100%
5498	1	1	1	1	1	1	1	1	1	1	100%
5499	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5501	1	1	1	1	1	1	1	1	1	1	100%
5502	1	1	1	1	1	1	1	1	1	1	100%
5503	1	1	1	1	1	1	1	1	1	1	100%
5504	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5511	1	1	1	1	1	1	1	1	1	1	100%
5512	1	1	1	1	1	1	1	1	1	1	100%

5513	1	1	1	1	1	1	1	1	1	1	100%
5514	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	100%
5516	1	1	1	1	1	1	1	1	1	1	100%
5517	1	1	1	1	1	1	1	1	1	1	100%
5518	1	1	1	1	1	1	1	1	1	1	100%
5519	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%
5521	1	1	1	1	1	1	1	1	1	1	100%
5522	1	1	1	1	1	1	1	1	1	1	100%
5523	1	1	1	1	1	1	1	1	1	1	100%
5524	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%
5526	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	100%
5529-F_h	1	1	1	1	1	1	1	1	1	1	100%
5530	0	0	0	0	0	0	0	0	0	0	0%

Detection Bandwidth=F_h-F_l=5529-5491=38MHz

the limit=EUT 99% bandwithx100% =36.98MHz

The test result: Pass

Test channel：802.11ac-VHT80 5530MHz											
Radar Frequency (MHz)	DFS Detection trials (1 Detection; 0 No Detection)										Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5491-F$_l$	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5496	1	1	1	1	1	1	1	1	1	1	100%
5497	1	1	1	1	1	1	1	1	1	1	100%
5498	1	1	1	1	1	1	1	1	1	1	100%
5499	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5501	1	1	1	1	1	1	1	1	1	1	100%
5502	1	1	1	1	1	1	1	1	1	1	100%
5503	1	1	1	1	1	1	1	1	1	1	100%
5504	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5511	1	1	1	1	1	1	1	1	1	1	100%
5512	1	1	1	1	1	1	1	1	1	1	100%
5513	1	1	1	1	1	1	1	1	1	1	100%
5514	1	1	1	1	1	1	1	1	1	1	100%

5515	1	1	1	1	1	1	1	1	1	1	100%
5516	1	1	1	1	1	1	1	1	1	1	100%
5517	1	1	1	1	1	1	1	1	1	1	100%
5518	1	1	1	1	1	1	1	1	1	1	100%
5519	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%
5521	1	1	1	1	1	1	1	1	1	1	100%
5522	1	1	1	1	1	1	1	1	1	1	100%
5523	1	1	1	1	1	1	1	1	1	1	100%
5524	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%
5526	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	100%
5529	1	1	1	1	1	1	1	1	1	1	100%
5530	1	1	1	1	1	1	1	1	1	1	100%
5531	1	1	1	1	1	1	1	1	1	1	100%
5532	1	1	1	1	1	1	1	1	1	1	100%
5533	1	1	1	1	1	1	1	1	1	1	100%
5534	1	1	1	1	1	1	1	1	1	1	100%
5535	1	1	1	1	1	1	1	1	1	1	100%
5536	1	1	1	1	1	1	1	1	1	1	100%
5537	1	1	1	1	1	1	1	1	1	1	100%
5538	1	1	1	1	1	1	1	1	1	1	100%
5539	1	1	1	1	1	1	1	1	1	1	100%
5540	1	1	1	1	1	1	1	1	1	1	100%
5541	1	1	1	1	1	1	1	1	1	1	100%
5542	1	1	1	1	1	1	1	1	1	1	100%

5543	1	1	1	1	1	1	1	1	1	1	100%
5544	1	1	1	1	1	1	1	1	1	1	100%
5545	1	1	1	1	1	1	1	1	1	1	100%
5546	1	1	1	1	1	1	1	1	1	1	100%
5547	1	1	1	1	1	1	1	1	1	1	100%
5548	1	1	1	1	1	1	1	1	1	1	100%
5549	1	1	1	1	1	1	1	1	1	1	100%
5550	1	1	1	1	1	1	1	1	1	1	100%
5551	1	1	1	1	1	1	1	1	1	1	100%
5552	1	1	1	1	1	1	1	1	1	1	100%
5553	1	1	1	1	1	1	1	1	1	1	100%
5554	1	1	1	1	1	1	1	1	1	1	100%
5555	1	1	1	1	1	1	1	1	1	1	100%
5556	1	1	1	1	1	1	1	1	1	1	100%
5557	1	1	1	1	1	1	1	1	1	1	100%
5558	1	1	1	1	1	1	1	1	1	1	100%
5559	1	1	1	1	1	1	1	1	1	1	100%
5560	1	1	1	1	1	1	1	1	1	1	100%
5561	1	1	1	1	1	1	1	1	1	1	100%
5562	1	1	1	1	1	1	1	1	1	1	100%
5563	1	1	1	1	1	1	1	1	1	1	100%
5564	1	1	1	1	1	1	1	1	1	1	100%
5565	1	1	1	1	1	1	1	1	1	1	100%
5566	1	1	1	1	1	1	1	1	1	1	100%
5567	1	1	1	1	1	1	1	1	1	1	100%
5568	1	1	1	1	1	1	1	1	1	1	100%
5569-F_h	1	1	1	1	1	1	1	1	1	1	100%
5570	0	0	0	0	0	0	0	0	0	0	0%

Detection Bandwidth=Fh-Fl=5569-5491=78MHz
the limit=EUT 99% bandwithx100%=75.21MHz
The test result: Pass

B.6. Statistical Performance Check

Method of Measurement: See KDB 905462 7.8.4

1. Stream the MPEG test file from the Master Device to the Client Device on the test Channel for

the entire period of the test.

2. At time T0 the Radar Waveform generator sends the individual waveform for each of the Radar

Types 1-6, at levels equal to the DFS Detection Threshold + 1dB, on the Operating Channel.

3. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for

duration greater than 10 seconds for Short Pulse Radar Types 0 to ensure detection occurs.

4. Observe the transmissions of the EUT 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.

5. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to

reset the device between trial runs.

6. The Minimum number of trails, minimum percentage of successful detection and the average

minimum percentage of successful detection are found in below table.

Measurement Limit:

Radr Type	Number of Trails	Detection Probability
1	30	＞60%
2	30	＞60%
3	30	＞60%
4	30	＞60%
Aggregate (Radar Types 1-4)	120	＞80%
5	30	＞80%
6	30	＞70%

Measurement Results:

802.11ac-VHT20 5500MHz

Radar Type 1 - Radar Statistical Performance

RADAR TYPE 1				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
1	5490.4	89	1	267	1
2	5491.1	87	1	261	1
3	5491.6	76	1	228	1
4	5492.4	67	1	201	1
5	5493.1	86	1	258	1
6	5493.8	97	1	291	1
7	5494.3	80	1	240	1
8	5494.9	95	1	285	0
9	5495.4	70	1	210	1
10	5495.8	62	1	186	1
11	5496.5	73	1	219	1
12	5497.4	62	1	186	1
13	5498	90	1	270	1
14	5498.5	83	1	249	1
15	5499.3	89	1	267	1
16	5500	70	1	210	1
17	5501.4	67	1	201	1
18	5501.9	60	1	180	1
19	5502.3	73	1	219	0
20	5503.1	71	1	213	1
21	5503.7	64	1	192	1
22	5504.2	65	1	195	1
23	5504.6	77	1	231	1
24	5505.3	70	1	210	1
25	5506.1	71	1	213	1
26	5506.8	68	1	204	1
27	5507.3	78	1	234	1
28	5508.1	70	1	210	0
29	5508.9	81	1	243	1
30	5509.6	82	1	246	1
Detection Percentage (%)					90.0%

Radar Type 2 - Radar Statistical Performance

RADAR TYPE 2					Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
1	5490.4	24	1.4	152	1
2	5491.1	26	3.5	230	1
3	5491.6	29	1.3	163	1
4	5492.4	28	3.8	224	1
5	5493.1	23	2.3	206	1
6	5493.8	27	3.1	156	0
7	5494.3	25	1.3	204	1
8	5494.9	29	1	216	1
9	5495.4	27	1	223	1
10	5495.8	28	2.5	226	1
11	5496.5	24	2.1	223	1
12	5497.4	24	3.4	177	1
13	5498	24	4.9	196	1
14	5498.5	27	4	165	0
15	5499.3	27	4.2	213	1
16	5500.	27	2.6	153	1
17	5501.4	27	5	167	1
18	5501.9	29	3.2	183	1
19	5502.3	25	3.3	194	1
20	5503.1	24	1.9	218	1
21	5503.7	28	4.3	184	1
22	5504.2	28	4.4	165	1
23	5504.6	23	4.1	187	1
24	5505.3	23	1.2	161	1
25	5506.1	28	2.5	228	1
26	5506.8	28	3.4	230	1
27	5507.3	28	2.4	194	1
28	5508.1	27	1.9	194	1
29	5508.9	25	4.6	161	1
30	5509.6	26	2.2	208	1
Detection Percentage (%)					93.3%

Radar Type 3 - Radar Statistical Performance

RADAR TYPE 3					Rohde & Schwarz
					K350 Pulse Sequencer DFS
Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	5490.4	18	9.7	487	1
2	5491.1	16	8.4	280	1
3	5491.6	16	8.4	384	1
4	5492.4	16	10	474	1
5	5493.1	17	9.1	483	1
6	5493.8	16	6.7	498	1
7	5494.3	17	8.8	236	1
8	5494.9	17	9.2	292	1
9	5495.4	18	8.7	367	0
10	5495.8	16	7.2	416	1
11	5496.5	17	9.3	238	1
12	5497.4	18	8.1	496	1
13	5498	16	6.8	364	1
14	5498.5	16	7.6	400	0
15	5499.3	17	8.4	497	1
16	5500	18	9.4	201	1
17	5501.4	17	9.1	491	1
18	5501.9	17	8.7	275	1
19	5502.3	17	9.2	470	1
20	5503.1	17	9.8	224	0
21	5503.7	17	8.7	345	1
22	5504.2	18	9.3	401	1
23	5504.6	17	9.5	309	1
24	5505.3	17	9.1	295	1
25	5506.1	17	9.7	227	1
26	5506.8	17	8.3	492	0
27	5507.3	17	8.9	460	1
28	5508.1	16	9.4	335	1
29	5508.9	16	6.6	343	1
30	5509.6	17	6	482	1
Detection Percentage (%)					86.7%

Radar Type 4 - Radar Statistical Performance

RADAR TYPE 4					Rohde & Schwarz
					K350 Pulse Sequencer DFS
Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
1	5490.4	15	17.3	212	1
2	5491.1	13	17.5	293	1
3	5491.6	13	12.1	214	1
4	5492.4	15	15.4	253	0
5	5493.1	14	14.5	334	1
6	5493.8	14	13	312	1
7	5494.3	14	19.3	403	1
8	5494.9	15	13.6	443	1
9	5495.4	13	13.3	336	1
10	5495.8	15	16.7	319	1
11	5496.5	15	12.2	461	0
12	5497.4	13	17.8	457	1
13	5498	14	15.4	379	1
14	5498.5	13	14.3	411	1
15	5499.3	14	16.8	500	1
16	5500	12	19.1	381	1
17	5501.4	12	19.9	265	1
18	5501.9	13	19.5	241	1
19	5502.3	14	18.1	295	1
20	5503.1	13	14	219	1
21	5503.7	15	12.8	271	1
22	5504.2	16	12.2	259	0
23	5504.6	14	16.4	381	1
24	5505.3	12	15.8	497	1
25	5506.1	12	12	345	1
26	5506.8	16	16.5	265	1
27	5507.3	15	13.6	444	1
28	5508.1	12	16.1	487	1
29	5508.9	12	19.6	385	1
30	5509.6	13	15.8	390	1
Detection Percentage (%)					93.3%

Note: In addition an average minimum percentage of successful detection across all four Short pulse

radar test waveforms is as follows: $\frac{p1+p2+p3+p4}{4}$=(90.0%+93.3%+86.7%+93.3%)/4=90.8%(>80%).

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5490.4	1	16	5500	1
2	5491.1	1	17	5501.4	1
3	5491.6	1	18	5501.9	1
4	5492.4	1	19	5502.3	1
5	5493.1	0	20	5503.1	1
6	5493.8	1	21	5503.7	1
7	5494.3	1	22	5504.2	0
8	5494.9	1	23	5504.6	1
9	5495.4	1	24	5505.3	1
10	5495.8	1	25	5506.1	1
11	5496.5	1	26	5506.8	1
12	5497.4	1	27	5507.3	1
13	5498	0	28	5508.1	1
14	5498.5	1	29	5508.9	1
15	5499.3	1	30	5509.6	1
Detection Percentage (%)					90.0%

Trial Number : 1						
Bursts in Trial: 9						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	80.1	13	1710		217.487
2	3	61.8	6	1365	1218	338.647
3	2	88.1	17	1772		1162.183
4	3	97.8	9	1821	1136	413.36
5	3	68.6	10	945	1778	228.967
6	2	59.6	12	1787		985.803
7	2	78.6	13	980		361.52
8	2	67.2	16	1190		67.817

| 9 | 3 | 97.4 | 11 | 1415 | 1596 | 897.133 |

Trial Number : 2

Bursts in Trial: 14

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	3	53.4	5	1832	1178	780.495
2	3	79.9	17	1474	986	231.517
3	3	95.9	15	1186	1819	769.304
4	2	77.7	14	1727		514.221
5	1	62.4	13			717.239
6	2	50.3	12	1564		55.316
7	1	79.3	8			743.243
8	2	60.3	6	1303		430.73
9	1	75.7	12			336.947
10	3	85	5	1442	1488	748.484
11	2	87.6	11	1571		334.111
12	2	95	14	1438		129.319
13	2	67.5	13	1624		720.886
14	1	57.4	15			369.343

Trial Number : 3

Bursts in Trial: 17

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	2	80.2	9	1558		446.992
2	2	64.1	17	1768		306.428
3	3	79.7	8	948	1040	152.605
4	1	81.4	10			164.423
5	2	69.5	5	1219		173.181
6	1	84.9	10			543.448
7	3	66	20	1774	1675	369.676
8	3	54.1	7	1740	1515	181.114
9	2	87.5	20	1331		243.641
10	2	50.5	19	1515		261.009
11	1	92.9	8			415.176
12	2	57.6	6	1926		504.824
13	2	75.9	6	1014		650.582

14	2	67.6	12	1471		533.959
15	2	54	17	1943		496.747
16	3	78.6	12	1511	1612	620.265
17	1	79.3	19			630.382

Trial Number : 4						
Bursts in Trial: 10						
Burst	**Number of Pulses**	**Pulse Width (μsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 Spacing (μsec)**	**Pulse 2-to-3 Spacing (μsec)**	**Start Location Within Interval (msec)**
1	2	65.9	5	1912		701.362
2	1	55.4	13			247.69
3	1	56.3	15			774.78
4	3	62.3	12	1094	1836	617.61
5	1	84.1	8			539.11
6	2	61.6	13	1788		618.61
7	1	52.9	18			146.41
8	2	55.3	15	1775		210.85
9	2	89.7	17	1840		625
10	2	90.5	7	1170		409.2

Trial Number : 5						
Bursts in Trial: 13						
Burst	**Number of Pulses**	**Pulse Width (μsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 Spacing (μsec)**	**Pulse 2-to-3 Spacing (μsec)**	**Start Location Within Interval (msec)**
1	1	93.7	20			704.439
2	3	85.1	12	1072	1805	633.953
3	1	60.9	18			623.486
4	1	50.3	14			417.239
5	1	63.1	20			302.432
6	2	78.2	9	1091		42.635
7	1	66.8	8			278.038
8	3	75.5	10	1415	1335	769.152
9	1	63.6	17			906.085
10	2	79.7	14	1213		284.368
11	2	71.1	17	1285		272.241
12	1	76.4	10			435.254
13	3	86.5	11	958	1182	745.777

Trial Number : 6

Bursts in Trial: 15

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	1	85.8	15			139.085
2	2	86.5	16	982		695.93
3	3	70	13	1346	968	338.22
4	3	83.1	10	1173	1773	564.73
5	3	88	9	1825	1115	357.94
6	3	73	20	1114	1513	49.25
7	1	50	14			296.57
8	1	84.2	6			663.8
9	2	50.7	5	1828		127.65
10	2	67.3	14	1448		417.4
11	2	68.4	18	1778		313.38
12	1	97.8	19			645.99
13	2	76.3	8	1506		766.9
14	2	81.3	17	1301		569.5
15	3	76	5	1267	1025	756.4

Trial Number : 7

Bursts in Trial: 15

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	58.2	7	1270	947	486.951
2	1	68.8	8			671
3	1	98.7	7			792.81
4	3	78.9	9	1324	1514	650.76
5	3	98.9	16	1784	1695	653.4
6	1	87.3	8			27.25
7	1	97.8	6			487.05
8	3	62.5	13	1650	1896	34.4
9	3	58.9	15	1300	1579	136.64
10	2	78.8	16	1098		704.82
11	2	83.7	19	1734		597.52
12	3	79.2	7	1699	1160	722.06
13	1	71.1	5			312.94
14	3	72.2	8	1774	1426	93.4

| 15 | 1 | 94.4 | 13 | | | 358.8 |

Trial Number : 8

Bursts in Trial: 20

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	1	81.3	13			289.551
2	3	74.8	16	1731	1483	82.437
3	2	51.4	8	1380		556.19
4	3	77.3	10	1371	1885	209.51
5	3	55.3	16	1823	1367	129.51
6	1	97.2	7			557.06
7	1	98.4	15			415.66
8	3	50.7	12	997	1253	393.39
9	1	51.4	10			386.63
10	3	66.2	9	1602	1267	395.26
11	1	67.2	11			527.59
12	2	90.7	11	1104		29.28
13	2	61.5	8	1773		592.41
14	3	92.8	12	1169	1537	340.44
15	2	61.5	12	1895		491.93
16	2	99.7	5	1608		433.92
17	3	62.7	12	1781	1204	281.85
18	3	70.1	6	1263	1877	83.7
19	2	72.8	12	1390		70.9
20	3	64.3	15	1713	1447	68.5

Trial Number : 9

Bursts in Trial: 19

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	1	55	7			325.148
2	1	62.1	12			432.111
3	3	75.7	18	1039	1359	227.222
4	2	75.7	8	1588		367.863
5	2	66.2	8	1114		230.044
6	3	66.1	5	1503	1897	272.075
7	1	95.8	18			505.626

8	1	66.3	20			449.307
9	1	70.3	9			320.828
10	2	87	6	1020		121.419
11	1	87.2	13			332.451
12	1	79.2	11			462.522
13	3	71.8	10	1623	1238	208.693
14	2	65.3	10	1365		84.904
15	2	50.9	12	1402		297.105
16	2	71.7	10	1562		439.366
17	1	57.2	9			247.637
18	2	70.3	13	1379		220.258
19	3	53.5	5	1496	1314	603.479

Trial Number : 10

Bursts in Trial: 10

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	3	77	11	1344	1025	1158.38
2	2	62.8	18	1645		513.09
3	2	77	18	1632		795.01
4	3	60.3	12	998	1805	446.91
5	2	75	10	1319		565.17
6	2	75.3	17	938		571.39
7	3	92.8	6	1610	1864	204.82
8	1	62.9	19			853.39
9	2	57.7	9	1037		1050.4
10	2	78.2	20	1133		1122.4

Trial Number : 11

Bursts in Trial: 9

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	2	83.4	20	1062		946.333
2	2	94.7	14	1374		37.487
3	1	66	7			238.713
4	3	90	12	1453	1153	227.89
5	3	85.2	20	1638	1547	184.707
6	2	57.1	18	1241		625.653

7	2	54	19	1846		298.43
8	3	95.2	8	1440	1097	1120.467
9	1	80.8	5			464.533

Trial Number : 12

Bursts in Trial: 9

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	98.8	11	1735		999.59
2	2	72.9	17	1238		824.807
3	2	85.7	10	929		793.193
4	2	64.3	8	1103		317.3
5	2	62.6	20	960		613.027
6	1	88.7	10			387.543
7	3	67.9	20	1203	1573	589.05
8	2	51.4	6	1593		519.757
9	2	94.7	12	1658		154.833

Trial Number : 13

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	1	85.5	13			297.285
2	2	71.3	6	1310		392.161
3	3	55.1	19	1678	1846	873.082
4	3	59.5	19	1632	1573	588.843
5	3	90.4	8	1103	1890	595.474
6	2	65.4	17	1727		763.865
7	1	95.6	5			309.015
8	2	68.2	19	1167		25.876
9	2	81.4	18	1370		722.387
10	1	68.1	12			27.828
11	2	62.9	14	1707		974.709

Trial Number : 14

Bursts in Trial: 9

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	58.4	17	975		1160.38
2	2	64.5	8	1406		90.307
3	3	53.2	6	1541	1461	326.833
4	3	78.7	14	1010	1361	125.88
5	1	79.6	9			959.977
6	1	78.3	11			983.573
7	2	57.8	14	1793		719.93
8	3	57.9	13	1312	1005	127.017
9	1	78.4	8			245.833

Trial Number : 15

Bursts in Trial: 16

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	58.8	11	947	1030	623.704
2	1	94.6	5			148.244
3	3	94.3	13	965	1706	201.67
4	1	62.4	15			703.67
5	2	63	18	1006		644.54
6	3	56.6	6	1737	1609	685.2
7	1	75.8	15			548.44
8	3	68.1	17	1300	1115	648.23
9	2	76.2	20	1195		389.19
10	3	95.9	20	1512	1865	523.1
11	2	61	15	1338		225.18
12	2	64.9	9	1443		39.85
13	2	80.9	18	1913		567.4
14	2	98.9	16	1354		666.9
15	2	74.4	9	1454		448.5
16	3	53.1	10	1395	1616	723.7

Trial Number : 16

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Start Location Within Interval (msec)

				(μsec)	(μsec)	
1	2	83.2	11	1890		621.666
2	2	65.6	14	1317		40.501
3	3	96	16	1587	1222	250.072
4	3	67	10	1034	1371	1029.183
5	2	58.2	8	1623		1067.064
6	1	90.3	20			415.655
7	2	52.6	6	1202		47.315
8	3	59.5	13	1508	1626	295.046
9	2	82.1	14	1468		336.267
10	3	85.6	19	923	1256	441.918
11	2	92.1	13	1443		84.609

Trial Number : 17

Bursts in Trial: 10

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	2	78.4	20	1422		287.3
2	2	87.8	10	986		225.07
3	2	70.4	12	980		953.41
4	3	51.4	9	1318	1781	4.64
5	1	94.5	11			355.84
6	2	76	8	1421		140.14
7	3	87.8	17	1044	1516	788
8	2	61.9	16	1481		288.66
9	3	89.7	15	1167	1845	505.3
10	2	56.2	15	1541		672.6

Trial Number : 18

Bursts in Trial: 16

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	1	96.9	13			623.756
2	1	53.8	6			211.671
3	2	63.9	11	1063		691.69
4	1	93.7	20			56.94
5	2	56.2	8	993		607.12

6	2	87.9	14	1207		347.62
7	2	79.5	6	1048		700.3
8	3	79.8	19	1822	1514	384.26
9	2	54.2	12	1778		660.03
10	2	79.1	8	1501		135.18
11	2	66.7	5	1629		538.17
12	2	94.2	11	1817		397.83
13	2	54	16	1566		74.08
14	2	95.2	11	1556		377.4
15	2	60	17	951		325
16	3	91.6	20	1555	1167	321.4

Trial Number : 19

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	66.3	10	1260		1059.07
2	3	66.8	9	1827	1924	898.041
3	1	67.2	11			441.292
4	3	90.3	14	1120	1840	577.603
5	2	81.3	20	1156		676.544
6	1	50.5	14			248.435
7	2	65.1	11	1251		1055.375
8	1	50	15			164.686
9	2	55.3	14	1174		664.127
10	2	83.2	20	1250		411.718
11	2	74.9	14	1831		631.409

Trial Number : 20

Bursts in Trial: 19

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	62.6	20	1837	1807	464.818
2	2	63	6	1692		533.951
3	2	50.3	11	1296		525.972
4	3	88.4	9	1501	1451	111.043
5	1	83.6	5			455.254
6	2	77.6	13	1666		307.665

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
7	1	90.4	18			107.636
8	2	63.8	14	1840		473.277
9	2	65	7	1931		543.598
10	3	68.2	15	1267	1912	16.789
11	1	56.8	14			128.241
12	2	58.7	14	1117		569.302
13	3	86.8	16	935	1194	388.163
14	1	92.9	18			219.964
15	2	76.1	13	1350		421.525
16	2	80.9	5	1282		282.656
17	2	57.2	9	1525		503.237
18	2	82.1	8	1545		232.558
19	1	57.6	14			76.779

Trial Number : 21

Bursts in Trial: 16

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	78.7	7	1854		378.223
2	3	51.7	7	1699	1756	623.38
3	2	56.3	6	1881		369.36
4	3	78.4	15	1536	1050	88.19
5	1	52.1	5			78.09
6	2	65.7	9	1485		643.01
7	3	61.1	6	1485	1883	389.13
8	2	64.7	5	1636		80.89
9	2	98.7	19	1099		242.88
10	1	68.9	14			40.37
11	2	51.9	9	1704		691
12	1	56.3	7			389.36
13	3	83.9	18	1075	1802	570
14	1	82.6	15			430.5
15	3	93.7	20	1660	1445	359.5
16	2	67.1	16	1862		19

Trial Number : 22

Bursts in Trial: 13

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Start Location Within Interval (msec)

				(µsec)	(µsec)	
1	3	52	13	1022	1867	760.734
2	2	57	5	1264		341.733
3	1	84.7	15			597.236
4	2	75.9	17	1918		11.339
5	1	74.5	13			734.712
6	3	87.5	7	1425	1487	394.205
7	1	84.5	13			252.468
8	2	71.1	6	1396		0.112
9	1	89	7			160.525
10	1	54.2	12			522.718
11	1	86.8	15			835.331
12	2	57.4	16	1250		248.454
13	2	97.6	15	1791		486.777

Trial Number : 23

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	1	89.6	15			660.872
2	2	72.1	18	1517		647.041
3	2	94.2	13	1014		792.662
4	2	61	8	1014		799.903
5	2	91.8	19	1023		963.454
6	2	80.9	9	1680		209.575
7	2	78.8	14	1522		873.535
8	2	96.9	14	998		1032.656
9	2	72.9	16	1031		11.267
10	2	89.7	17	995		717.418
11	2	79.2	20	1741		913.409

Trial Number : 24

Bursts in Trial: 8

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	87.1	7	1226		84.517
2	2	83.7	18	1006		20.88

3	2	53.8	6	1815		576.25
4	3	80.3	11	1101	1500	115.08
5	1	87.6	12			471.02
6	1	58.7	13			1306.14
7	1	55.5	18			1281.8
8	2	69.1	15	1436		1313.2

Trial Number : 25

Bursts in Trial: 8

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	79.1	15	1237	1055	1094.34
2	2	77.4	15	1330		1433.38
3	3	52.4	12	1219	1326	1271.67
4	1	60.1	12			348.32
5	3	90.6	10	1849	1766	1264.79
6	2	91.1	6	1341		123.64
7	1	96.9	15			1420.2
8	1	91.2	16			1243.8

Trial Number : 26

Bursts in Trial: 16

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	72	20	1752		79.692
2	3	57.9	15	1204	1779	300.16
3	2	54.4	17	1856		37.98
4	3	51.6	15	1303	1059	431.6
5	3	56.4	6	1104	1942	419.78
6	3	57.5	8	1408	1343	43.24
7	2	88.6	10	1431		740.48
8	2	84.2	11	1240		739.27
9	2	85.5	8	1188		3.45
10	2	90.7	10	1148		102.22
11	2	65.9	8	1543		292.69
12	2	52.8	17	1507		172.09
13	2	94.5	20	1109		301.49
14	2	63.1	5	1518		42.54

| 15 | 2 | 50.7 | 19 | 1769 | | 699.4 |
| 16 | 1 | 92.7 | 10 | | | 698.6 |

Trial Number : 27						
Bursts in Trial: 16						
Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	2	70.7	7	1826		538.284
2	3	94.8	6	1878	1646	524.1
3	3	87.9	18	1176	1795	449.64
4	1	88.7	6			337.95
5	3	59.1	20	1342	1177	551.83
6	1	75.8	8			50.08
7	1	93.9	19			516.95
8	3	95.5	7	1062	1129	539.01
9	3	75.4	12	1449	1447	676.17
10	2	65.5	11	1347		569.29
11	1	85.4	9			379.33
12	2	86.6	14	1856		312.21
13	1	70.6	14			675.31
14	3	63.9	17	1036	1279	502.9
15	1	82.7	6			705.6
16	1	59.9	5			436.7

Trial Number : 28						
Bursts in Trial: 16						
Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	2	69.9	6	1451		339.822
2	2	85.8	9	1801		80.818
3	3	63.9	16	1168	1580	407.4
4	3	72.2	20	1372	1006	178.34
5	3	76.2	5	1515	1454	584.13
6	2	64.5	8	1046		112.04
7	2	73.4	14	1817		152.13
8	1	56.1	13			502.9
9	1	82.5	11			728.29
10	3	65.7	10	1004	1693	489.84

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
11	1	52.6	5			626.8
12	1	92.7	10			738.42
13	3	89.7	17	1330	1281	432.79
14	2	58.4	20	1817		276.7
15	2	94.7	8	932		484
16	2	72.5	19	1926		147.8

Trial Number : 29						
Bursts in Trial: 17						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	50.3	19	999		234.819
2	3	98.9	15	1231	1578	181.161
3	1	91.2	10			233.995
4	2	87.5	16	984		582.753
5	2	53.1	6	1804		130.671
6	3	55.8	17	1013	1172	532.188
7	1	78.1	5			507.206
8	1	94.7	7			65.334
9	2	69.6	6	942		482.371
10	2	56.1	10	1523		120.149
11	1	81.3	16			405.026
12	2	93.6	11	1031		585.014
13	1	80.2	15			673.612
14	1	91.9	14			192.489
15	3	82.7	7	1071	1400	492.947
16	2	84.3	6	1913		122.065
17	2	99.5	18	1084		34.482

Trial Number : 30						
Bursts in Trial: 15						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	98	16	1099	1897	694.569
2	3	59.8	16	1162	1887	673.32
3	2	60.5	19	1045		137.89
4	1	83.1	12			551.38
5	2	51.6	19	1901		641.12

6	2	90.8	7	1353		559.81
7	3	54.5	20	1026	1052	548.42
8	2	57	6	1877		269.29
9	2	50	11	963		66.04
10	3	56	14	1020	1482	72.19
11	2	80.4	13	1287		568.38
12	1	72.8	17			441.83
13	3	52	11	1170	1452	428.8
14	2	100	17	1372		181.1
15	3	77.8	15	1111	1694	535.1

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5490.4	1	16	5500	1
2	5491.1	1	17	5501.4	1
3	5491.6	1	18	5501.9	0
4	5492.4	1	19	5502.3	1
5	5493.1	0	20	5503.1	1
6	5493.8	1	21	5503.7	1
7	5494.3	1	22	5504.2	1
8	5494.9	1	23	5504.6	1
9	5495.4	1	24	5505.3	1
10	5495.8	1	25	5506.1	1
11	5496.5	1	26	5506.8	1
12	5497.4	1	27	5507.3	1
13	5498	1	28	5508.1	1
14	5498.5	0	29	5508.9	1
15	5499.3	1	30	5509.6	1
Detection Percentage (%)					90.0%

Trial Number : 1			Trial Number : 2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
23	5494	69	37	5493	111
42	5500	126	40	5507	120
85	5509	255	64	5509	192
81	5501	243	70	5510	210
70	5510	210	77	5496	231
/	/	/	69	5508	207

Trial Number : 3			Trial Number : 4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5499	63	10	5499	30
25	5494	75	19	5495	57
39	5503	117	33	5502	99
46	5510	138	39	5506	117
55	5507	165	51	5497	153
/	/	/	49	5508	147
/	/	/	38	5510	114
/	/	/	60	5491	180

Trial Number : 5			Trial Number : 6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5503	21	30	5510	90
33	5509	99	33	5503	99
40	5503	120	40	5507	120
52	5501	156	46	5499	138
24	5498	72	51	5493	153
39	5500	117	57	5497	171
52	5499	156	29	5504	87
57	5505	171	/	/	/

Trial Number : 7			Trial Number : 8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
44	5498	132	41	5496	123
43	5496	129	36	5491	108
57	5501	171	29	5502	87
22	5502	66	26	5503	78
39	5507	117	51	5497	153
27	5503	81	57	5499	171
51	5509	153	79	5503	237

Trial Number : 9			Trial Number : 10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
40	5502	120	33	5503	99
33	5494	99	25	5501	75
27	5496	81	22	5502	66
39	5500	117	27	5498	81
40	5505	120	37	5499	111
49	5501	147	56	5490	168
69	5499	207	39	5507	117

Trial Number : 11			Trial Number : 12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
24	5495	72	44	5502	132
21	5499	63	47	5498	141
44	5496	132	50	5503	150
49	5500	147	39	5504	117
13	5507	39	69	5496	207
/	/	/	147	5497	441
/	/	/	33	5493	99
/	/	/	61	5507	183

Trial Number : 13			Trial Number : 14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
30	5502	90	43	5501	129
25	5501	75	20	5496	60
73	5506	219	42	5498	126
66	5498	198	69	5503	207
/	/	/	75	5507	225
/	/	/	77	5499	231

Trial Number : 15			Trial Number : 16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
50	5504	150	47	5499	141
88	5509	264	66	5505	198
67	5496	201	39	5503	117
40	5493	120	33	5508	99
66	5507	198	57	5498	171
/	/	/	87	5492	261

Trial Number : 17			Trial Number : 18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
39	5505	117	50	5493	150
50	5503	150	23	5505	69
47	5499	141	66	5501	198
69	5495	207	80	5504	240
/	/	/	50	5496	150
/	/	/	68	5498	204
/	/	/	33	5506	99
/	/	/	67	5497	201

Trial Number : 19			Trial Number : 20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
30	5497	90	29	5497	87
60	5492	180	33	5490	99
89	5501	267	24	5502	72
72	5503	216	68	5508	204
49	5499	147	45	5499	135
33	5496	99	67	5495	201
59	5491	177	/	/	/

Trial Number : 21			Trial Number : 22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
30	5509	90	27	5505	81
59	5505	177	39	5507	117
74	5499	222	66	5509	198
88	5497	264	54	5493	162
/	/	/	58	5491	174
/	/	/	69	5499	207

Trial Number : 23			Trial Number : 24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
33	5509	99	30	5504	90
37	5504	111	47	5508	141
76	5498	228	66	5499	198
59	5494	177	58	5495	174
/	/	/	75	5493	225

Trial Number : 25			Trial Number : 26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
29	5498	87	19	5508	57
20	5495	60	30	5496	90
30	5509	90	38	5495	114
49	5505	147	48	5497	144
/	/	/	49	5509	147
/	/	/	88	5504	264
/	/	/	67	5502	201

Trial Number : 27			Trial Number : 28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
29	5497	87	39	5403	117
20	5503	60	41	5408	123
40	5508	120	50	5497	150
57	5493	171	51	5493	153
/	/	/	54	5491	162
/	/	/	49	5507	147

Trial Number : 29			Trial Number : 30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
43	5503	129	59	5509	177
67	5506	201	54	5506	162
55	5492	165	33	5494	99
98	5499	294	70	5491	210
/	/	/	48	5503	144
/	/	/	40	5507	120

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Radar Type 1 - Radar Statistical Performance

RADAR TYPE 1				Rohde & Schwarz K350 Pulse Sequencer DFS	
Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	5491	89	1	267	1
2	5491.8	87	1	261	1
3	5493.5	76	1	228	1
4	5494.3	67	1	201	0
5	5495.5	86	1	258	1
6	5496.6	97	1	291	1
7	5497.8	80	1	240	1
8	5498.9	95	1	285	1
9	5499.5	70	1	210	1
10	5500.6	62	1	186	1
11	5501.4	73	1	219	0
12	5502.9	62	1	186	1
13	5504.4	90	1	270	1
14	5506.1	83	1	249	1
15	5507.5	89	1	267	1
16	5508.8	70	1	210	1
17	5509.6	67	1	201	1
18	5510.1	60	1	180	0
19	5511.3	73	1	219	1
20	5512.1	71	1	213	1
21	5513.4	64	1	192	1
22	5515.2	65	1	195	0
23	5516.8	77	1	231	1
24	5518.7	70	1	210	1
25	5520.9	71	1	213	1
26	5522.3	68	1	204	1
27	5524.1	78	1	234	1
28	5525.6	70	1	210	1
29	5527.4	81	1	243	1
30	5529	82	1	246	1
Detection Percentage (%)					86.7%

Radar Type 2 - Radar Statistical Performance

RADAR TYPE 2					Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	5491	27	3.3	208	1
2	5491.8	28	4.8	182	1
3	5493.5	27	3.4	211	1
4	5494.3	26	2.8	213	1
5	5495.5	25	1.6	210	1
6	5496.6	23	1.2	199	1
7	5497.8	25	3	226	0
8	5498.9	25	1.3	220	1
9	5499.5	29	4.6	152	1
10	5500.6	23	3.9	223	1
11	5501.4	28	2	196	1
12	5502.9	24	3.2	183	1
13	5504.4	28	1.2	199	0
14	5506.1	28	3.1	206	1
15	5507.5	24	4.1	172	1
16	5508.8	27	4.9	168	1
17	5509.6	28	1.1	214	1
18	5510.1	27	1.7	171	1
19	5511.3	24	3.3	225	0
20	5512.1	23	3.6	175	1
21	5513.4	29	3.8	197	1
22	5515.2	27	2.1	186	0
23	5516.8	26	1.9	229	1
24	5518.7	24	4.6	167	1
25	5520.9	25	1.6	206	1
26	5522.3	25	2.8	157	1
27	5524.1	26	5	195	1
28	5525.6	23	3.4	220	1
29	5527.4	25	2.8	222	1
30	5529	25	1.6	216	1
Detection Percentage (%)					86.7%

Radar Type 3 - Radar Statistical Performance

RADAR TYPE 3					Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	5491	18	7.5	371	1
2	5491.8	16	7.8	331	1
3	5493.5	17	9.3	413	1
4	5494.3	18	8.8	336	1
5	5495.5	17	7.9	200	1
6	5496.6	18	9.5	246	0
7	5497.8	17	7.6	415	1
8	5498.9	16	7.6	366	1
9	5499.5	18	7.6	362	1
10	5500.6	16	7.6	351	1
11	5501.4	17	8.5	299	1
12	5502.9	17	6.2	446	1
13	5504.4	18	7.1	390	1
14	5506.1	18	7	383	1
15	5507.5	18	7.5	403	1
16	5508.8	17	6.2	371	0
17	5509.6	17	7.1	315	1
18	5510.1	16	8.1	351	1
19	5511.3	17	8.3	276	1
20	5512.1	16	9.4	412	1
21	5513.4	18	9.4	410	1
22	5515.2	18	9.4	393	1
23	5516.8	18	6.3	345	1
24	5518.7	17	8.9	259	0
25	5520.9	16	9.5	257	1
26	5522.3	17	7.2	494	1
27	5524.1	17	8.6	417	1
28	5525.6	18	6.1	332	1
29	5527.4	16	7.5	252	1
30	5529	17	6.1	485	1
Detection Percentage (%)					90.0%

Radar Type 4 - Radar Statistical Performance

RADAR TYPE 4				Rohde & Schwarz
				K350 Pulse Sequencer DFS
Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
---	---	---	---	---	---
1	5491	13	16.6	248	1
2	5491.8	15	17.6	320	1
3	5493.5	13	13.3	300	1
4	5494.3	13	12.6	287	1
5	5495.5	14	14.3	338	1
6	5496.6	16	17.6	330	1
7	5497.8	15	16.9	312	1
8	5498.9	14	19.5	478	0
9	5499.5	13	14.9	448	1
10	5500.6	14	12.9	291	1
11	5501.4	13	14.7	385	1
12	5502.9	15	12.7	389	1
13	5504.4	13	13.5	409	0
14	5506.1	15	16.4	265	1
15	5507.5	14	16.7	415	1
16	5508.8	13	11.4	382	1
17	5509.6	13	17.2	250	1
18	5510.1	13	13.7	456	1
19	5511.3	13	13.2	357	1
20	5512.1	13	18.4	278	1
21	5513.4	14	14.7	369	1
22	5515.2	13	18.7	426	1
23	5516.8	13	18.3	341	1
24	5518.7	16	17.5	346	0
25	5520.9	15	19.9	278	1
26	5522.3	16	14	456	1
27	5524.1	12	18.1	353	1
28	5525.6	14	14.5	401	1
29	5527.4	14	17.6	431	1
30	5529	14	13.7	275	1
Detection Percentage (%)					90.0%

Note: In addition an average minimum percentage of successful detection across all four Short pulse

radar test waveforms is as follows: $\frac{p1+p2+p3+p4}{4}$=(86.7%+86.7%+90.0%+90.0%+)/4=88.4%(>80%).

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5491	1	16	5508.8	1
2	5491.8	1	17	5509.6	1
3	5493.5	1	18	5510.1	0
4	5494.3	1	19	5511.3	1
5	5495.5	1	20	5512.1	1
6	5496.6	0	21	5513.4	1
7	5497.8	1	22	5515.2	1
8	5498.9	1	23	5516.8	1
9	5499.5	1	24	5518.7	0
10	5500.6	1	25	5520.9	1
11	5501.4	0	26	5522.3	1
12	5502.9	1	27	5524.1	1
13	5504.4	1	28	5525.6	1
14	5506.1	1	29	5527.4	1
15	5507.5	1	30	5529	1
Detection Percentage (%)					86.7%

Trial Number : 1						
Bursts in Trial: 9						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	54	6	1176		1180.46
2	2	62.3	15	1246		112.317
3	3	66.4	16	1734	1157	1052.653
4	2	62.7	19	1849		1270.24
5	2	60.7	5	1542		976.617
6	3	82.8	16	1454	1779	496.093
7	2	65.5	13	1607		231.12
8	2	66	12	1204		36.337

9	2	71.7	13	1541		550.233

Trial Number : 2

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	2	85.2	12	1229		706.544
2	3	81.1	16	1000	1329	75.171
3	2	59	11	1036		91.012
4	3	75.5	13	1169	1123	475.713
5	1	69	8			452.964
6	2	86	18	1598		192.285
7	1	62.3	6			321.515
8	2	81.9	13	1778		795.126
9	1	66	15			593.007
10	2	87.3	7	1353		12.848
11	2	51.4	13	1810		447.509

Trial Number : 3

Bursts in Trial: 19

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	1	60.4	17			77.407
2	1	75.4	12			360.12
3	3	99	12	1393	1889	36.402
4	2	94.9	15	1442		163.193
5	2	66.8	6	1720		597.974
6	2	90.4	7	1709		579.655
7	2	84.4	10	1636		527.466
8	2	64.1	13	1134		184.987
9	2	99.4	14	1774		552.498
10	3	70.3	20	1096	1403	352.779
11	1	66.9	18			83.901
12	2	73.9	8	1241		71.872
13	2	78.1	5	1545		594.043
14	2	75.1	8	1477		609.974
15	2	72.5	5	1274		254.625
16	3	88.1	9	1569	1584	467.376

17	1	62.7	9			190.537
18	2	59.3	5	1313		230.758
19	3	69.5	20	1275	1285	0.079

Trial Number : 4

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	2	64.4	19	988		1041.37
2	1	88.7	14			1069.401
3	1	71.1	20			338.172
4	3	60.3	20	995	1608	1021.663
5	1	51	14			909.944
6	3	55.1	5	1935	1735	176.855
7	2	50.4	9	1745		259.545
8	2	98.4	8	1023		797.586
9	1	83.2	18			437.867
10	1	95.2	20			519.218
11	2	85.5	8	1098		6.609

Trial Number : 5

Bursts in Trial: 19

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	2	60.2	16	950		111.85
2	2	95.7	15	1319		452.941
3	3	88.6	6	1005	916	529.072
4	2	70.9	15	1763		496.763
5	2	52.6	15	1266		176.044
6	2	56	11	1195		313.735
7	1	61.3	17			52.886
8	2	81	9	1217		439.837
9	3	68.3	18	1843	1410	542.088
10	2	89.5	20	1520		252.329
11	1	52.4	14			417.381
12	3	51.8	7	996	980	138.382
13	1	51.2	8			5.693
14	3	68	7	1773	1853	394.114

15	3	88.6	8	1411	1215	552.795
16	2	79.1	13	921		186.236
17	2	99	18	1155		104.237
18	3	76.9	17	1191	1812	410.558
19	3	77.9	19	1185	1361	469.179

Trial Number : 6

Bursts in Trial: 8

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	3	93.8	11	1016	1348	167.474
2	1	77.3	8			1284.5
3	3	88.8	6	1237	917	134.02
4	2	87.5	17	1362		264.8
5	1	52	6			19.91
6	2	85.8	17	1746		927.95
7	2	94.8	5	1004		565.1
8	2	71.2	9	1864		367.7

Trial Number : 7

Bursts in Trial: 16

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	2	68.9	7	1591		24.545
2	2	59.1	6	1103		31.69
3	2	67.4	14	1818		225.25
4	3	71.5	12	1791	1641	16.06
5	3	77.1	9	1771	1729	340.92
6	2	94.2	17	1848		51.15
7	2	83.4	8	1270		351.47
8	2	96.4	17	1560		687.96
9	3	80.1	5	1557	1881	87.58
10	2	64.8	14	1227		224.23
11	3	82	17	1260	1123	395.12
12	1	56.9	18			103.08
13	1	55	6			16.14
14	2	91.5	5	1142		605.4
15	3	78.8	16	1351	1566	498.5

| 16 | 1 | 53.3 | 20 | | | 303.2 |

Trial Number : 8

Bursts in Trial: 20

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	1	53.5	14			182.174
2	2	70.2	8	1857		190.255
3	1	65.8	13			146.21
4	2	63.8	17	1423		328.1
5	1	76.7	13			489.1
6	1	78.9	13			439.16
7	2	78.8	12	1565		418.12
8	1	79.3	11			403.3
9	2	50.6	9	1876		56.36
10	2	81.1	14	1307		287.17
11	1	97.3	19			309.69
12	1	51	14			34.54
13	2	61.3	17	1734		214.43
14	2	67.2	15	1622		517.02
15	1	98.7	11			518
16	2	75.1	6	1390		561.26
17	2	53.3	10	1256		5.92
18	1	67.9	12			541.7
19	3	55.2	8	1684	1097	476.6
20	3	85.9	10	1278	1184	409.3

Trial Number : 9

Bursts in Trial: 19

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	1	81.8	14			262.425
2	1	88.5	20			415.881
3	3	82.5	16	1684	1129	271.792
4	2	70.8	9	1814		398.063
5	2	61.8	11	1027		214.544
6	1	77.9	12			411.165
7	2	53.4	5	975		94.766

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
8	3	58.2	6	1682	1896	521.467
9	1	90.3	14			439.628
10	2	77.4	17	1342		607.559
11	2	80.8	11	1898		615.671
12	1	91	16			399.182
13	2	78.5	14	1049		54.913
14	2	88.8	5	1828		188.104
15	2	50.5	20	1562		617.495
16	2	81.8	18	963		323.106
17	1	75.6	12			492.537
18	3	51.7	9	1008	1363	446.458
19	1	66.9	16			573.679

Trial Number : 10

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	1	63.2	19			894.087
2	1	90.4	10			985.091
3	3	68.9	8	1739	1604	943.892
4	2	88.2	18	1203		863.843
5	1	58.4	19			360.534
6	2	75.8	10	1442		350.945
7	3	51.8	19	1047	1447	406.705
8	2	79.9	9	1455		368.286
9	1	62.8	18			469.997
10	2	67.8	20	1924		861.318
11	2	91.9	8	1031		619.309

Trial Number : 11

Bursts in Trial: 17

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	83.8	13	1489		397.772
2	1	51.4	18			258.489
3	2	86.1	20	1613		579.585
4	1	81.8	8			518.293
5	2	84.5	5	1582		241.331

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
6	2	97.3	11	1277		437.938
7	1	85	10			201.096
8	3	58.5	17	1507	1199	335.674
9	2	79.2	10	1594		673.471
10	2	62.5	8	1792		253.839
11	2	59.7	5	1657		172.946
12	2	74.7	14	1488		204.194
13	2	77.7	9	1352		123.892
14	2	78.9	14	1575		441.189
15	3	88.4	19	1673	1441	33.697
16	1	55	10			25.065
17	3	85.5	10	1515	1244	97.382

Trial Number : 12						
Bursts in Trial: 15						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	82.6	11	1637		476.712
2	3	89.1	5	1275	1175	463.08
3	1	51	13			587.58
4	3	85.1	5	1818	1586	367.13
5	2	66	17	1188		351.62
6	1	59.1	6			742.45
7	2	63.4	14	1138		332.23
8	1	56.2	5			652.34
9	2	81.5	15	1893		144.49
10	2	90.3	6	910		30.29
11	3	55.3	13	1037	1146	428.59
12	3	87.3	16	1721	1254	520.94
13	3	55.2	18	1427	1795	117.39
14	3	59.1	12	1432	1826	662
15	2	80	11	1023		536.1

Trial Number : 13						
Bursts in Trial: 10						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	93.2	5	1707		504.454

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
2	2	97.2	17	1282		993.72
3	3	51.8	14	1377	1691	517.99
4	1	59.3	20			586.17
5	1	82.1	16			763.95
6	2	74.7	19	1684		537.81
7	1	100	9			635.42
8	2	93.1	7	1784		143.1
9	3	61.6	16	1066	972	173.48
10	2	85.7	12	1516		749.7

Trial Number : 14

Bursts in Trial: 14

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	1	70.3	16			289.969
2	1	75.2	8			37.796
3	2	84.3	14	997		716.084
4	3	57.2	12	1544	1267	465.761
5	1	70.7	8			124.169
6	1	63.5	14			379.136
7	2	62.5	14	1075		752.113
8	2	81.1	14	1906		630.99
9	2	61.9	12	1616		263.377
10	3	52.5	18	1393	1366	575.114
11	2	68.3	18	1420		591.061
12	3	88.4	20	929	1050	255.519
13	3	99.7	18	1151	1633	646.786
14	3	57	14	1571	1544	799.043

Trial Number : 15

Bursts in Trial: 13

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	3	50.3	18	1834	1018	571.916
2	2	87.6	7	1224		551.463
3	2	84.3	7	1626		137.696
4	3	93.8	13	1708	1030	83.229
5	2	83.7	9	1265		316.362

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
6	2	93.2	11	1354		822.005
7	1	67.5	16			421.578
8	1	76.8	14			131.102
9	3	85.5	16	1725	1384	321.045
10	1	83.2	13			405.108
11	3	92.7	11	1693	1791	766.761
12	2	81.1	7	1631		481.454
13	2	73.1	11	1386		360.377

Trial Number : 16						
Bursts in Trial: 15						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	69.8	10	1028	1299	623.509
2	3	56.5	17	1674	1900	415.22
3	3	89	7	951	1781	454.11
4	2	96.7	17	1101		474.77
5	2	77.5	10	1843		132.52
6	3	99	7	953	1869	237.97
7	2	80.6	6	1670		550.21
8	2	70.2	17	1778		534.7
9	1	72.5	13			27.86
10	1	83.1	7			188.91
11	3	73.7	6	1119	1233	411.64
12	3	54	15	1191	1185	137.24
13	2	83	15	1612		483.6
14	1	92.7	7			646.8
15	1	85.3	19			568.5

Trial Number : 17						
Bursts in Trial: 13						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	92.4	20	1833	1672	913.841
2	2	91.3	10	1233		550.083
3	1	78.5	13			605.566
4	3	63.9	19	939	1191	555.169
5	3	91	16	1342	1028	105.012

6	1	75.8	14			649.275
7	2	85.1	10	1667		264.068
8	2	94	6	967		94.312
9	2	66.5	5	1161		44.355
10	2	71.9	15	1129		810.678
11	2	73.8	19	1628		198.491
12	2	60.6	19	1934		635.654
13	2	88.1	17	1499		769.277

Trial Number : 18						
Bursts in Trial: 13						
Burst	**Number of Pulses**	**Pulse Width (µsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 Spacing (µsec)**	**Pulse 2-to-3 Spacing (µsec)**	**Start Location Within Interval (msec)**
1	2	64.5	14	1490		801.079
2	3	67.7	11	1811	1210	647.593
3	2	69.8	14	1015		385.886
4	3	52	7	1929	1017	354.109
5	2	90.6	18	1603		632.532
6	1	71.6	8			37.485
7	3	89.3	18	1499	1292	579.058
8	1	98.3	13			233.982
9	2	86.2	16	1398		649.045
10	3	79.1	16	1917	1552	733.198
11	1	85.4	19			102.441
12	2	77.6	8	1418		664.654
13	3	66	18	1825	1341	874.877

Trial Number : 19						
Bursts in Trial: 16						
Burst	**Number of Pulses**	**Pulse Width (µsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 Spacing (µsec)**	**Pulse 2-to-3 Spacing (µsec)**	**Start Location Within Interval (msec)**
1	2	54.9	9	1647		256.267
2	2	60.5	13	1523		125.042
3	3	79.8	17	1344	1417	500.9
4	2	63.8	8	1766		512.25
5	1	70.1	15			518.47
6	3	62.3	5	1295	990	259.81
7	2	62.2	17	1871		217.87

8	2	65.7	12	1245		243.12
9	1	68	13			551.37
10	3	72.7	6	1679	1337	619.98
11	2	50.5	18	1484		518.86
12	3	64.3	5	1613	1074	705.66
13	1	81.6	12			246.98
14	1	56.6	15			555.3
15	3	50.3	18	1794	1722	213.9
16	2	52.3	19	1141		707.1

Trial Number : 20

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	1	85.7	8			526.26
2	3	73.5	9	1010	1221	801.341
3	3	54.9	18	1398	1056	630.632
4	2	86.5	16	1589		512.413
5	3	88.2	15	1007	1585	519.814
6	2	61.3	8	1765		664.305
7	2	53.2	18	1777		1034.035
8	3	71.7	10	1008	1277	618.456
9	3	64.8	15	1512	1471	850.877
10	1	92.3	18			644.718
11	2	53.7	6	1511		637.309

Trial Number : 21

Bursts in Trial: 17

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	59.5	17	1730		335.797
2	3	95	13	1223	1393	410.018
3	3	54.2	12	1612	1074	554.505
4	2	97.1	12	1194		275.243
5	2	60.3	12	1894		354.081
6	2	51.6	9	1015		382.978
7	1	95	7			503.756
8	2	79.4	8	984		252.974

9	2	53	15	1121		687.371
10	2	58.8	9	1113		71.779
11	1	59.3	20			230.796
12	2	99.5	15	1461		66.834
13	2	94.2	11	1463		349.432
14	1	51.8	14			97.129
15	3	64.6	6	1103	1063	258.447
16	2	59	12	1433		282.365
17	2	99.7	13	1692		117.182

Trial Number : 22

Bursts in Trial: 9

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	3	64.2	17	1516	1236	1243.46
2	2	85.2	16	1789		200.337
3	2	94.6	18	1265		720.063
4	2	61	9	1705		255.48
5	1	83.7	13			557.817
6	2	50.2	20	1625		1200.373
7	2	52.7	18	1654		614.14
8	1	76.8	6			1212.167
9	2	99.8	9	1067		287.633

Trial Number : 23

Bursts in Trial: 18

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	1	64.2	16			612.494
2	3	91	7	1639	942	434.503
3	2	51.5	14	1500		630.027
4	2	98.1	10	1528		403.74
5	2	79.7	18	1691		293.813
6	2	69.7	8	1210		345.327
7	2	50.9	10	1538		432.45
8	3	50.2	12	1537	1882	393.323
9	3	59.1	11	1551	955	483.857
10	1	50.6	19			93.11

11	3	71.1	10	1371	1028	287.793
12	3	84.3	7	1155	1153	88.517
13	3	79.6	6	1644	1882	187.8
14	2	75.3	5	935		341.233
15	2	60.2	19	1628		0.467
16	2	73	16	1255		396
17	1	87.3	10			115.433
18	2	89.9	6	953		107.767

Trial Number : 24

Bursts in Trial: 16

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	84.1	12	1263		714.841
2	3	78.5	10	1412	1628	217.611
3	2	74.9	12	1636		102.01
4	3	93	19	1832	1767	108.45
5	3	81.4	7	1465	1176	501.96
6	3	68.9	11	1560	1771	180.27
7	3	85.5	8	1454	1598	357.93
8	1	94.4	19			662.19
9	1	84.4	18			19.2
10	3	55.8	19	1794	1075	512.01
11	3	76.7	7	1187	1826	576.66
12	3	70	20	1393	1270	643.41
13	3	61.4	11	1771	954	466.83
14	3	62.5	11	1555	1804	538.9
15	3	50.7	19	988	1448	490.6
16	2	68.2	13	1653		406.1

Trial Number : 25

Bursts in Trial: 14

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	78.2	17	1755		545.171
2	3	70.1	17	1575	1025	832.247
3	1	99.8	11			188.204
4	2	59.3	15	1037		204.521

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
5	3	69	17	1809	1075	576.689
6	3	61.3	17	1560	1181	381.536
7	3	52.6	7	1028	1782	326.773
8	3	71.6	11	1235	1413	401.73
9	3	52.4	20	1336	1180	698.247
10	3	50.3	10	1802	1383	673.994
11	1	91.6	6			320.081
12	2	70.4	18	1165		452.959
13	1	66.5	20			439.786
14	2	69.7	11	1508		760.343

Trial Number : 26

Bursts in Trial: 19

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	80.2	14	1252		31.915
2	3	52.5	14	1768	997	8.505
3	1	70.8	15			228.352
4	2	58.8	7	1645		370.173
5	2	87.3	14	1223		136.714
6	1	87.1	5			591.235
7	3	74	18	967	1264	433.036
8	2	90.6	5	1303		261.087
9	2	92.3	12	1583		491.818
10	2	70.8	15	1576		433.839
11	3	81.8	6	1470	919	605.911
12	2	99.9	20	1464		378.982
13	3	50.8	11	1344	1680	19.523
14	2	99.1	17	1334		457.244
15	1	88.2	15			398.955
16	1	96.6	7			428.646
17	2	84.3	6	1421		89.637
18	2	83	7	1121		49.858
19	2	79.9	13	1450		278.579

Trial Number : 27

Bursts in Trial: 17

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Start Location Within Interval (msec)

				(μsec)	(μsec)	
1	1	98.4	12			343.443
2	2	56.9	11	1333		193.636
3	3	97.8	17	1033	1265	266.375
4	2	56.8	15	1474		67.213
5	2	89.3	5	1344		95.201
6	2	80.9	17	1765		636.658
7	3	56.7	5	1805	1722	577.956
8	2	86.1	14	1138		83.264
9	2	95.1	20	1240		358.541
10	2	88.7	16	1547		227.819
11	3	69.8	18	931	1340	63.866
12	1	99	11			241.674
13	3	66.8	20	1723	1753	118.262
14	3	82.7	18	1047	1797	87.359
15	2	72.2	5	1353		673.147
16	2	68	7	1333		419.665
17	3	95.9	11	1623	1243	25.582

Trial Number : 28

Bursts in Trial: 17

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	3	76.6	7	1347	1528	403.038
2	1	64.6	20			315.848
3	2	85.6	10	1132		265.905
4	1	59.4	8			444.873
5	3	80.4	11	1002	1415	131.301
6	2	57.7	7	1924		598.728
7	1	81.3	8			381.956
8	3	85.1	13	1887	1860	364.654
9	1	80.4	16			635.241
10	3	65	15	1761	1736	569.139
11	1	81	7			508.186
12	3	77.1	9	1213	998	614.064
13	3	65.5	10	1244	1610	149.022
14	1	86.5	7			206.039
15	3	82.6	15	1799	1414	577.647
16	3	66.5	8	1395	1118	336.965

| 17 | 3 | 98.2 | 8 | 1332 | 1217 | 243.882 |

Trial Number : 29

Bursts in Trial: 15

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	97.5	11	1784		573.159
2	2	78.3	13	923		157.908
3	2	71.7	16	1498		593.41
4	2	54.3	13	1510		313.16
5	2	87.7	12	1402		88.04
6	3	87.1	13	1349	1388	613.01
7	3	80.2	16	1688	1795	741.45
8	3	65	10	1783	1167	408.27
9	1	52	9			570.55
10	1	77.1	8			258.14
11	3	79.5	7	1430	1547	296.27
12	2	93.3	6	1650		279.72
13	2	62.8	19	1382		232.81
14	2	64	9	1246		215.7
15	2	97.4	16	1258		99.9

Trial Number : 30

Bursts in Trial: 19

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	1	75.6	19			544.727
2	3	89.9	11	1219	1631	532.561
3	1	63.6	6			541.902
4	1	77.1	17			442.263
5	3	59.4	10	1481	1337	345.354
6	2	52.3	5	1619		599.125
7	2	65.2	12	1161		570.916
8	2	64.5	15	1272		405.257
9	2	72.9	19	1893		131.838
10	2	58.9	8	1774		606.329
11	2	73.4	15	1151		14.081
12	2	64.6	5	950		602.592

13	2	55.6	9	1149		48.253
14	2	77.5	7	1649		175.574
15	2	74.4	17	1809		209.815
16	2	94.9	5	955		188.576
17	1	84.3	20			382.737
18	2	69.2	18	1918		432.458
19	2	83.1	14	1311		332.779

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5491	1	16	5508.8	1
2	5491.8	1	17	5509.6	1
3	5493.5	0	18	5510.1	1
4	5494.3	1	19	5511.3	1
5	5495.5	1	20	5512.1	1
6	5496.6	0	21	5513.4	1
7	5497.8	1	22	5515.2	1
8	5498.9	1	23	5516.8	1
9	5499.5	1	24	5518.7	1
10	5500.6	1	25	5520.9	1
11	5501.4	1	26	5522.3	0
12	5502.9	0	27	5524.1	1
13	5504.4	1	28	5525.6	1
14	5506.1	1	29	5527.4	1
15	5507.5	1	30	5529	1
Detection Percentage (%)					86.7%

Trial Number : 1			Trial Number : 2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
29	5491.3	87	45	5495.3	135
34	5492.7	102	49	5496.7	147
24	5493.1	72	58	5517.8	174
66	5494	198	33	5518	99
57	5495.9	171	53	5520	159
/	/	/	56	5522.3	168

Trial Number : 3			Trial Number : 4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
23	5498.9	69	44	5497.0	132
33	5497.0	99	29	5501	87
32	5510.7	96	49	5510.4	147
71	5514.4	213	56	5521.8	168
/	/	/	54	5498.9	162
/	/	/	72	5499	216

Trial Number : 5			Trial Number : 6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
31	5498.2	93	25	5510.8	75
35	5496	105	28	5513.4	84
56	5507.4	168	23	5533.5	69
68	5529.6	204	27	5496.1	81
/	/	/	13	5496.5	39
/	/	/	51	5497.5	153
/	/	/	57	5515.2	171
/	/	/	63	5514.9	189
/	/	/	33	5517.8	99

Trial Number : 7			Trial Number : 8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
42	5496.1	126	24	5500.9	72
35	5498.3	105	29	5511.1	87
43	5500.9	129	51	5517.9	153
69	5517.1	207	66	5519.2	198
/	/	/	67	5499.7	201
/	/	/	39	5511.6	117

Trial Number : 9			Trial Number : 10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
33	5499.9	99	39	5511.3	117
45	5502.4	135	36	5512.4	108
57	5506.9	171	33	5520.1	99
78	5508.4	234	55	5498.2	165
88	5510	264	81	5500.4	243
/	/	/	56	5512.7	168
/	/	/	78	5515.5	234

Trial Number : 11			Trial Number : 12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
37	5518.3	111	23	5499.9	69
43	5499.3	129	44	5499.7	132
51	5511.7	153	67	5503.9	201
52	5518.4	156	73	5514.2	219
70	5519	210	65	5514.9	195
/	/	/	45	5525.9	135
/	/	/	59	5519	177
/	/	/	77	5520.1	231

Trial Number : 13			Trial Number : 14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
43	5498.1	129	39	5497.1	117
35	5498.8	105	45	5597.9	135
49	5519.4	147	67	5513.4	201

51	5520.4	153	52	5522.4	156
71	5521	213	59	5523.5	177
/	/	/	57	5421.6	171
/	/	/	64	5527.1	192

Trial Number : 15			Trial Number : 16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5498.2	39	33	5493	99
25	5510.7	75	39	5495.5	117
57	5516.3	171	43	5509.3	129
64	5520.5	192	51	5515.2	153
/	/	/	75	5520.5	225

Trial Number : 17			Trial Number : 18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5510.2	33	19	5519	57
23	5516.2	69	27	5520	81
31	5523	93	57	5511.5	171
51	5523.8	153	67	5514.1	201
60	5527	180	33	5514.9	99
39	5509.8	117	49	5507.3	147

Trial Number : 19			Trial Number : 20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
19	5510	57	17	5520.9	51
33	5508	99	29	5521.1	87
29	5520	87	36	5513.9	108
51	5421	153	27	5518.4	81
39	5509	117	55	5517.2	165
59	5510.4	177	60	5529.3	180
37	5514.9	111	/	/	/

Trial Number : 21			Trial Number : 22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
19	5493	57	27	5510	81
33	5508	99	37	5505	111
39	5510	117	41	5508	123
45	5512	135	67	5497	201
60	5513	180	52	5522	156
21	5515	63	33	5505	99
56	5509	168	42	5504	126
59	5494	177	66	5499	198
61	5513	183	71	5422.3	213
67	5520	201	/	/	/
90	5521	270	/	/	/

Trial Number : 23			Trial Number : 24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
33	5507	99	35	5509	105
49	5509	147	21	5499	63
50	5503	150	77	5521	231
23	5511	69	80	5525.3	240
67	5519	201	36	5526	108
80	5513	240	39	5511	117
99	5527	297	/	/	/

Trial Number : 25			Trial Number : 26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
38	5520	114	31	5521	93
49	5513	147	43	5518	129
55	5510	165	58	5519	174
69	5499	207	63	5495	189
66	5503	198	75	5499	225
79	5522	237	33	5522	99
88	5519	264	67	5525	201
51	5526	153	49	5527	147
52	5521	156	/	/	/

Trial Number : 27			Trial Number : 28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
19	5510	57	33	5493	99
33	5495	99	39	5499	117
49	5499	147	40	5509	120
29	5511	87	55	5501	165
50	5513	150	58	5511	174
61	5518	183	67	5505.1	201
77	5522	231	70	5508.5	210
90	5520	270	89	5521.2	267
56	5526	168	88	5528.1	264
78	5527.9	234	/	/	/
83	5528.3	249	/	/	/

Trial Number : 29			Trial Number : 30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
53	5499	159	41	5493	123
88	5498.2	264	55	5510	165
70	5510.6	210	61	5511	183
66	5511.3	198	67	5493.7	201
69	5521	207	39	5499	117
39	5523	117	50	5502	150
57	5494	171	60	5507	180
66	5499.7	198	71	5508.2	213

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Radar Type 1 - Radar Statistical Performance

RADAR TYPE 1				Rohde & Schwarz K350 Pulse Sequencer DFS	
Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
1	5491	89	1	267	1
2	5492.7	87	1	261	1
3	5495.2	76	1	228	1
4	5497.3	67	1	201	1
5	5499.6	86	1	258	1
6	5502.2	97	1	291	1
7	5504.5	80	1	240	1
8	5506.8	95	1	285	1
9	5508.9	70	1	210	0
10	5510.6	62	1	186	1
11	5513.1	73	1	219	1
12	5515.4	62	1	186	1
13	5518.9	90	1	270	1
14	5521.7	83	1	249	1
15	5524	89	1	267	0
16	5527.5	70	1	210	1
17	5530.2	67	1	201	1
18	5532.7	60	1	180	1
19	5534.6	73	1	219	1
20	5537.7	71	1	213	1
21	5541.2	64	1	192	1
22	5545.4	65	1	195	0
23	5548.8	77	1	231	1
24	5553	70	1	210	1
25	5555.6	71	1	213	1
26	5558.1	68	1	204	1
27	5561.4	78	1	234	1
28	5563.2	70	1	210	1
29	5566.6	81	1	243	1
30	5569	82	1	246	1
Detection Percentage (%)					90.0%

Radar Type 2 - Radar Statistical Performance

Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
	RADAR TYPE 2				Rohde & Schwarz K350 Pulse Sequencer DFS
1	5491	28	4.6	228	1
2	5492.7	25	1.9	206	1
3	5495.2	29	4.9	162	1
4	5497.3	23	3.5	221	1
5	5499.6	26	3.7	160	1
6	5502.2	28	1.3	210	1
7	5504.5	25	4.9	160	0
8	5506.8	26	4.6	191	1
9	5508.9	25	4.6	179	1
10	5510.6	25	4.3	172	1
11	5513.1	26	3.9	223	1
12	5515.4	23	2.6	177	1
13	5518.9	23	1.4	221	1
14	5521.7	28	2.3	192	1
15	5524	26	1.9	206	1
16	5527.5	25	5	229	1
17	5530.2	28	3.3	180	1
18	5532.7	26	4.7	203	1
19	5534.6	28	3.8	225	1
20	5537.7	26	4.3	209	1
21	5541.2	26	2.3	186	1
22	5545.4	27	3.9	179	0
23	5548.8	29	4.1	152	1
24	5553	28	2.8	230	1
25	5555.6	27	2.8	173	1
26	5558.1	27	1.1	226	1
27	5561.4	26	3.1	200	1
28	5563.2	25	4.7	226	1
29	5566.6	26	3.8	153	1
30	5569	28	4.5	160	1
Detection Percentage (%)					93.3%

Radar Type 3 - Radar Statistical Performance

RADAR TYPE 3					Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
1	5491	18	8.6	396	1
2	5492.7	16	9.4	302	1
3	5495.2	16	8.6	300	1
4	5497.3	17	6.4	263	1
5	5499.6	17	6	405	1
6	5502.2	17	7.7	272	1
7	5504.5	18	7.3	382	1
8	5506.8	17	8.6	225	1
9	5508.9	16	7.6	337	1
10	5510.6	17	6.2	250	1
11	5513.1	16	9.1	397	1
12	5515.4	17	9.7	206	1
13	5518.9	17	7.2	322	0
14	5521.7	16	7.2	299	1
15	5524	16	8.9	467	1
16	5527.5	17	9.1	266	1
17	5530.2	16	6.3	210	1
18	5532.7	17	9.2	259	1
19	5534.6	17	8.4	388	1
20	5537.7	18	7.2	404	1
21	5541.2	17	8.4	334	1
22	5545.4	18	9.4	241	1
23	5548.8	17	7.3	379	0
24	5553	18	9.3	491	1
25	5555.6	17	9	260	1
26	5558.1	18	6.9	466	1
27	5561.4	16	7.8	326	1
28	5563.2	17	6.8	290	0
29	5566.6	16	8.3	410	1
30	5569	17	6.6	248	1
Detection Percentage (%)					90.0%

Radar Type 4 - Radar Statistical Performance

RADAR TYPE 4					Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Test Freq. (MHz)	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	5491	14	11	295	1
2	5492.7	13	17.7	254	1
3	5495.2	13	15.2	453	1
4	5497.3	15	19.1	382	1
5	5499.6	16	15.9	288	1
6	5502.2	13	19.3	496	1
7	5504.5	15	14.3	427	1
8	5506.8	14	16.8	204	1
9	5508.9	15	19.8	491	1
10	5510.6	13	19.4	340	1
11	5513.1	14	19	360	0
12	5515.4	14	16.9	331	1
13	5518.9	15	15.5	312	1
14	5521.7	12	16.1	309	1
15	5524	14	15.7	442	1
16	5527.5	15	17.8	399	1
17	5530.2	15	14.7	495	1
18	5532.7	15	14.9	346	1
19	5534.6	13	16.4	393	0
20	5537.7	12	11.5	478	1
21	5541.2	13	18.5	379	1
22	5545.4	12	15.4	331	1
23	5548.8	14	19.4	307	1
24	5553	16	16.9	380	0
25	5555.6	15	15.3	491	1
26	5558.1	12	19.3	465	1
27	5561.4	16	16.6	498	1
28	5563.2	14	14.9	226	1
29	5566.6	13	14.7	332	1
30	5569	15	12.4	500	1
Detection Percentage (%)					90.0%

Note: In addition an average minimum percentage of successful detection across all four Short pulse

radar test waveforms is as follows: $\frac{p1+p2+p3+p4}{4}$=(90.0%+93.3%+90.0%+90.0%+)/4=90.8%(>80%).

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5491	1	16	5527.5	0
2	5492.7	1	17	5530.2	1
3	5495.2	1	18	5532.7	1
4	5497.3	1	19	5534.6	1
5	5499.6	0	20	5537.7	1
6	5502.2	1	21	5541.2	1
7	5504.5	1	22	5545.4	1
8	5506.8	1	23	5548.8	1
9	5508.9	1	24	5553	1
10	5510.6	1	25	5555.6	1
11	5513.1	0	26	5558.1	1
12	5515.4	1	27	5561.4	1
13	5518.9	1	28	5563.2	1
14	5521.7	1	29	5566.6	1
15	5524	1	30	5569	1
Detection Percentage (%)					90.0%

Trial Number : 1						
Bursts in Trial: 16						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	87.6	14	1382		278.909
2	2	76.1	7	1643		83.3
3	3	96.3	14	1548	1408	592.45
4	1	66.6	5			18.35
5	2	61.2	18	1832		147.47
6	2	93.5	7	1531		349.62
7	2	86.3	14	1451		516.92
8	2	94.2	16	1624		501.77

9	2	91.1	15	1214		18.41
10	3	70.9	16	1272	1899	95.53
11	3	93.6	16	1209	1061	300.56
12	3	60.7	14	1387	1061	697.15
13	2	77.1	14	1141		614.2
14	2	76.5	13	1800		195.12
15	3	80.7	13	1653	1180	507.6
16	3	94.7	15	1704	1337	131.5

Trial Number : 2						
Bursts in Trial: 14						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	87.7	16	1273		187.273
2	2	53.4	13	1676		305.127
3	1	59.1	8			455.194
4	3	70.2	17	1297	1236	60.841
5	2	71	20	1514		174.729
6	1	50.6	20			28.356
7	2	71.1	16	1778		267.583
8	2	80.5	13	953		828.88
9	2	87.9	8	1622		297.187
10	2	64.1	10	1872		5.534
11	2	56.6	12	1737		334.601
12	2	87	9	1855		209.769
13	1	90.2	14			739.086
14	2	74.8	14	1587		65.143

Trial Number : 3						
Bursts in Trial: 19						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	69.4	17	1726		561.444
2	3	65.1	12	993	1612	125.689
3	1	85.7	14			68.722
4	2	77.7	9	1298		602.463

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
5	2	66.6	12	1509		385.834
6	3	83.1	11	1397	1373	147.485
7	1	76.7	19			15.506
8	2	99.3	16	968		151.087
9	3	64.3	8	1453	1312	486.578
10	1	83.9	9			409.069
11	2	97.1	20	1733		302.591
12	3	86.7	7	1594	1475	385.152
13	1	54.8	10			195.193
14	2	94.8	12	1340		53.324
15	3	91.3	9	1850	1454	6.265
16	2	54.1	13	1847		111.056
17	1	64.8	20			504.237
18	1	57.9	13			564.658
19	1	71.3	14			545.579

Trial Number : 4

Bursts in Trial: 17

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	56.1	14	1512		218.061
2	3	95.5	13	951	1160	31.722
3	1	65.8	14			670.365
4	2	86.3	15	1448		352.473
5	2	84.6	8	1254		94.331
6	2	94.5	14	1358		271.518
7	2	73.8	6	1812		172.836
8	1	87.9	14			394.084
9	3	79.2	6	1385	1624	0.621
10	2	74.2	14	1880		231.189
11	3	78.4	17	1817	1539	686.636
12	3	71.4	6	1394	1739	266.874
13	2	97.3	9	1754		189.832
14	3	89.6	7	1662	1079	246.889
15	1	83.5	9			174.647
16	2	63.6	17	1138		573.565
17	2	70.7	10	1098		252.382

Trial Number : 5

Bursts in Trial: 17

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	62.4	19	1773		130.392
2	2	79.3	12	1420		352.908
3	1	91.3	11			408.385
4	2	50	6	1303		653.433
5	3	83.7	18	1826	927	322.141
6	1	61.7	16			95.568
7	3	50	13	1414	1272	404.096
8	2	67.7	7	1342		363.994
9	2	57.8	18	1555		676.321
10	3	95	10	1348	1888	65.359
11	2	52.2	6	1825		6.526
12	1	94.5	5			588.324
13	3	71.1	11	1621	1062	326.422
14	1	83.2	6			213.499
15	1	60.2	14			598.347
16	3	85.8	19	1252	1873	450.365
17	1	95.6	17			253.382

Trial Number : 6

Bursts in Trial: 15

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	1	86.5	14			197.721
2	1	68.8	7			623.99
3	1	90.6	16			342.11
4	1	66.3	17			449.21
5	2	81.1	17	1855		87.52
6	3	98.2	20	907	1724	364.05
7	2	53.1	12	1912		221.54
8	2	66.4	17	1856		440.12
9	2	90.5	6	1707		572.32
10	2	79	15	1263		248.58
11	2	98.9	8	1633		229.33

12	1	50.9	18			182.36
13	3	62.5	6	1745	1628	89.39
14	1	64.8	10			322.7
15	1	54.4	14			406.7

Trial Number : 7

Bursts in Trial: 13

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	3	85.2	7	1668	1224	163.169
2	1	56	16			206.273
3	3	71.4	18	1547	1086	291.506
4	2	54.8	18	1885		674.159
5	2	57.9	7	1853		143.862
6	3	80.3	12	1720	1688	438.415
7	3	78.8	16	1764	1343	299.068
8	2	64.2	10	1499		710.472
9	2	94.2	6	1151		781.345
10	2	55.7	11	1155		131.688
11	1	95.7	7			821.831
12	1	61.4	20			862.554
13	2	87.1	10	1029		254.477

Trial Number : 8

Bursts in Trial: 16

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	2	54.7	18	1188		492.248
2	1	99	15			533.32
3	3	67.1	10	973	1463	635.23
4	3	55.5	9	1613	1562	523.21
5	2	68.9	18	1374		212.56
6	2	59.1	7	1173		706.98
7	2	87.4	20	1745		343.19
8	2	94.8	7	1840		643.3
9	1	80.5	5			0.84

10	1	55.9	13			643.45
11	2	65.8	7	1638		668.98
12	2	68.7	13	1802		384.59
13	1	53.4	14			223.07
14	2	55.1	14	1194		676.5
15	3	72.7	5	1010	1172	497.1
16	2	52	9	1402		5.6

Trial Number : 9						
Bursts in Trial: 17						
Burst	**Number of Pulses**	**Pulse Width (µsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 Spacing (µsec)**	**Pulse 2-to-3 Spacing (µsec)**	**Start Location Within Interval (msec)**
1	1	92.6	12			240.579
2	3	71.8	8	1604	1022	263.293
3	1	90.3	13			119.565
4	2	86.4	9	1660		689.273
5	1	83.5	17			370.821
6	2	55.6	15	1459		99.208
7	1	74.7	15			651.526
8	1	67.3	11			221.734
9	3	63	18	1127	1161	203.751
10	2	58.7	11	1745		529.779
11	3	95.4	6	1235	1194	466.176
12	3	65.4	9	1797	1551	416.154
13	2	90.1	13	1013		384.292
14	2	81.1	19	1259		174.369
15	2	59.4	12	1375		200.947
16	3	59	19	1883	971	594.465
17	2	99.7	17	903		656.782

Trial Number : 10						
Bursts in Trial: 12						
Burst	**Number of Pulses**	**Pulse Width (µsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 Spacing (µsec)**	**Pulse 2-to-3 Spacing (µsec)**	**Start Location Within Interval (msec)**
1	3	54.6	19	1041	1394	724.663
2	2	64.4	17	1256		235.55

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
3	1	74.3	17			230.84
4	2	63.4	17	1818		473.21
5	2	74.6	5	1370		167.31
6	1	58.8	11			90.15
7	2	55.1	5	1672		406.52
8	2	97.6	5	1861		97.37
9	2	98.2	13	1013		388.56
10	2	72.6	5	1742		246.26
11	3	80.6	10	1391	963	566.1
12	2	88.3	16	1639		926.3

Trial Number : 11

Bursts in Trial: 12

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	63.9	5	1128	1382	359.116
2	2	75.5	6	1755		765.51
3	1	83.1	11			115.18
4	2	53.3	8	1889		439.21
5	2	65.6	20	1016		159.35
6	1	77.1	9			446.09
7	3	59.4	19	1335	1796	640.68
8	2	60.5	9	1685		993.99
9	2	77.1	5	1357		319.99
10	2	63	15	1437		55.03
11	2	67.4	17	1447		490.5
12	2	58.4	12	1241		668.9

Trial Number : 12

Bursts in Trial: 12

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	89.2	9	1625	1388	450.475
2	3	75	6	1794	1696	800.85
3	3	65.8	8	1820	1872	549.87
4	1	83.9	8			715.3

5	2	72.6	9	1154		555.44
6	3	74.3	9	1136	1141	179.95
7	1	84	5			359.79
8	1	99.5	18			430.19
9	2	97.8	6	1275		992.28
10	2	58.5	7	1013		345.5
11	2	84.4	11	1283		625.7
12	2	74.7	14	1760		814.6

Trial Number : 13						
Bursts in Trial: 19						
Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	2	93.6	12	1705		412.234
2	2	64.7	16	1333		608.341
3	2	80.2	5	1572		175.272
4	2	54.5	12	1023		425.463
5	2	75.6	5	1082		165.354
6	2	91.6	12	1347		286.615
7	2	72.4	11	1779		381.416
8	2	85.2	7	1231		307.537
9	2	96.7	7	1634		310.118
10	2	59.9	7	1172		2.239
11	1	84.2	6			435.301
12	1	56.9	6			184.732
13	3	54.6	8	1852	1592	35.853
14	1	73.7	16			383.134
15	2	97.1	7	1139		455.415
16	1	87.4	8			411.486
17	1	76.9	13			424.237
18	2	69.4	6	1697		264.058
19	3	74.8	5	1089	1850	188.979

Trial Number : 14						
Bursts in Trial: 16						
Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Start Location Within Interval (msec)

				(µsec)	(µsec)	
1	3	70.9	13	1424	1303	539.118
2	2	61.6	6	1216		129.186
3	2	83.9	10	1525		183.02
4	3	86.8	15	1091	1563	721.26
5	3	71.8	18	1416	1698	520.85
6	3	50.7	11	1143	1313	476.79
7	3	59.4	19	1820	1410	705.38
8	1	82.9	6			441.65
9	2	96.1	15	1579		387.48
10	1	94.9	16			718.19
11	2	90.6	14	1112		631.69
12	2	90.3	12	941		718.4
13	1	82.8	15			228.92
14	1	69.1	17			99.31
15	1	63.1	9			4.3
16	2	55.2	13	1563		615.2

Trial Number : 15

Bursts in Trial: 14

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	51.6	10	1583	1173	254.288
2	1	59.7	15			243.617
3	3	81.3	16	1572	1318	46.864
4	2	57.1	19	1561		294.751
5	3	99.1	11	1345	952	281.909
6	1	71.7	6			585.436
7	2	75	14	1045		141.303
8	1	87	8			168.07
9	3	60.3	19	1666	1200	59.337
10	2	60.6	7	1257		397.214
11	2	79.8	13	1716		699.391
12	2	95.5	14	1601		353.669
13	2	64.4	10	1021		27.886
14	3	99.8	10	1704	1168	576.843

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
Trial Number : 16						
Bursts in Trial: 13						
1	1	86.1	17			514.798
2	2	55.3	9	1417		415.673
3	2	93.8	14	1244		889.716
4	2	79.6	12	1122		307.799
5	2	56.9	9	1518		718.642
6	2	94.8	7	1220		143.545
7	2	95.8	5	1524		211.518
8	1	84.2	18			620.682
9	2	58.8	16	1110		572.415
10	2	59.4	10	1488		438.548
11	2	68.6	20	960		22.051
12	3	66.6	10	1038	1088	389.254
13	2	82.9	18	1293		269.377

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
Trial Number : 17						
Bursts in Trial: 18						
1	2	90.8	12	1807		114.362
2	2	74	19	1443		89.365
3	2	89.2	15	1618		106.117
4	2	79.2	14	1810		273.78
5	1	50.8	7			253.873
6	2	79.2	16	1726		86.167
7	1	56.9	13			506.8
8	1	83.5	20			247.253
9	1	50.3	20			60.077
10	2	98.1	6	1720		629.69
11	3	50.3	10	1662	1220	248.763
12	3	70.6	5	1615	1604	400.027
13	1	75.7	15			86.57
14	3	66.1	12	1098	1555	451.913
15	1	76	7			6.787

16	1	91.2	11			650.5
17	2	68.8	17	1364		165.033
18	2	79.2	15	1194		516.767

| Trial Number : 18 | | | | | | |
| Bursts in Trial: 9 | | | | | | |
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	64.2	11	1528	1365	212.383
2	2	60.9	19	1009		613.487
3	3	97.3	7	1474	1617	6.583
4	1	95.7	8			486.14
5	2	90.4	19	1006		473.047
6	2	98.5	15	1601		814.653
7	2	74.8	5	1136		205.68
8	3	94.6	13	1843	942	880.667
9	2	55.9	7	1000		882.733

| Trial Number : 19 | | | | | | |
| Bursts in Trial: 14 | | | | | | |
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	1	87	15			10.956
2	2	99.9	8	919		73.399
3	2	88.6	8	1192		351.914
4	1	60.3	13			268.221
5	3	88.1	5	1145	912	778.239
6	2	70.8	20	1490		297.666
7	3	72.8	12	1142	1923	24.573
8	1	53.6	12			509.57
9	2	86.2	13	1345		634.007
10	2	55.8	20	1738		650.964
11	2	73.7	13	1310		115.531
12	3	51.7	5	1650	1284	632.329
13	1	65.7	17			81.486
14	1	88.4	18			679.243

Trial Number : 20

Bursts in Trial: 9

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	96.5	7	1693		1253.58
2	2	75.2	12	964		461.127
3	2	84	5	1547		1137.503
4	1	60	9			1202.38
5	2	59.8	19	1458		738.177
6	2	80.6	17	1234		538.023
7	1	65.2	13			451.03
8	3	75.8	12	1138	1590	1321.367
9	2	92.6	11	1891		618.733

Trial Number : 21

Bursts in Trial: 9

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	77.8	13	1280	1159	1199.74
2	3	94.1	14	1347	1396	820.857
3	3	88	17	1033	1096	664.663
4	3	56.2	14	1193	1803	1089.38
5	1	91.7	8			631.577
6	3	55.7	20	1054	1798	300.993
7	3	75.7	18	1225	1015	45.39
8	2	90	8	1568		525.377
9	1	91	13			366.733

Trial Number : 22

Bursts in Trial: 10

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	3	75.6	9	1379	1892	848.152
2	3	60.8	16	1179	1611	174.81

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
3	2	71.9	14	1894		637.59
4	3	87.6	10	1644	1552	1187.14
5	3	62.7	9	1521	1333	1094.16
6	2	72.9	7	1643		324.41
7	3	59.3	11	1285	1351	1017.38
8	2	56.8	6	1522		1140.41
9	3	64.9	16	1276	1069	723.8
10	2	70	20	1186		521.9

Trial Number : 23						
Bursts in Trial: 9						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	1	81.4	11			593.815
2	3	70.5	13	1018	987	648.847
3	3	68.3	9	998	1781	42.863
4	2	70.7	14	1372		804.79
5	2	88.3	11	1433		60.547
6	2	61.7	19	1935		849.613
7	2	63.4	16	1168		1102.72
8	1	98.3	5			1326.667
9	3	96.7	7	1582	1012	361.033

Trial Number : 24						
Bursts in Trial: 15						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	77	17	1770		403.116
2	2	91.7	13	1182		158.399
3	2	89.9	12	1527		114.13
4	3	87.1	11	1454	1610	678.24
5	2	92.5	7	1644		354.67
6	3	64.7	7	983	1849	213.89
7	1	85.9	14			110.56
8	2	59.6	13	1903		486.02
9	1	76.6	12			406.65

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
10	1	65.6	19			221.8
11	3	63.1	14	1381	1358	27.01
12	2	95.7	17	985		747.99
13	2	70.6	15	1099		480.9
14	2	62.3	9	1868		274.8
15	2	81.2	11	1749		39.5

Trial Number : 25						
Bursts in Trial: 17						
Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	3	84.8	13	1716	1174	428.805
2	2	56.7	7	1029		344.618
3	2	58.8	20	1812		420.145
4	2	53.2	17	1504		585.573
5	3	80.4	5	1121	1357	146.731
6	2	92	17	1037		617.518
7	1	82.5	18			478.726
8	2	95.3	14	1265		0.314
9	2	58	11	1138		496.011
10	2	97	10	1098		207.259
11	3	67.9	14	1080	1167	509.796
12	1	72.7	14			352.824
13	2	55.3	15	1286		537.152
14	2	51.4	20	1130		289.679
15	1	53.5	20			253.647
16	2	93.2	13	1655		291.865
17	2	71.4	11	1689		43.282

Trial Number : 26						
Bursts in Trial: 19						
Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μsec)	Pulse 2-to-3 Spacing (μsec)	Start Location Within Interval (msec)
1	3	67.7	8	1761	1096	585.658
2	2	98.3	14	1573		472.691
3	2	60.2	14	1115		46.812

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
4	2	59.9	16	1666		471.483
5	2	65.2	18	1614		185.274
6	3	90.5	8	1787	1745	117.315
7	2	60.9	5	1620		55.766
8	3	87.5	5	1146	1039	598.057
9	2	60.1	6	1217		61.788
10	1	91.4	9			571.119
11	2	66.9	19	1868		302.681
12	1	68	13			110.592
13	2	55.7	20	1497		4.223
14	2	88.1	11	1028		53.734
15	3	90.3	9	1869	1488	228.735
16	2	82.9	20	1765		534.916
17	2	77.5	20	1907		233.737
18	1	90.3	18			124.058
19	2	96.6	20	1491		117.279

Trial Number : 27						
Bursts in Trial: 12						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	91	16	1400		957.787
2	3	74.1	12	1721	1675	127.9
3	1	100	18			315.8
4	2	63.2	11	1155		657.5
5	1	52.2	6			489.16
6	2	67.8	5	999		860.14
7	2	61.9	16	1760		655.31
8	1	59.6	9			980.27
9	2	52	11	1773		257.88
10	3	67.1	20	1213	1326	984.27
11	2	61.1	11	1714		662.5
12	2	97.2	12	1711		771.4

Trial Number : 28						
Bursts in Trial: 12						
Burst	Number of Pulses	Pulse Width	Chirp Width	Pulse 1-to-2	Pulse 2-to-3	Start Location Within Interval

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	73.1	19	1773		178.786
2	2	92.7	15	1802		188.67
3	1	68.8	9			817.27
4	2	66.7	15	1245		439.74
5	3	98.5	19	1621	1691	367.83
6	2	53.3	15	1134		917.12
7	1	85.7	7			688.15
8	3	83.1	12	1507	917	724.25
9	3	85.2	17	1088	1291	438.82
10	2	92.9	14	1820		929.42
11	2	60.9	11	1835		338.9
12	2	77.1	6	1321		419.3

Trial Number : 29

Bursts in Trial: 9

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	97.5	14	1765		151.911
2	3	87.2	14	1194	928	636.247
3	2	79.2	15	1555		1252.103
4	1	51.2	17			272.91
5	2	61	13	1557		283.347
6	1	74.7	16			633.233
7	2	90.6	9	1660		626.7
8	3	61.6	14	1501	1061	808.267
9	1	65.3	8			857.333

Trial Number : 30

Bursts in Trial: 16

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Location Within Interval (msec)
1	2	67.6	17	1884		40.144
2	2	81.8	6	1558		394.74
3	3	83.8	20	1752	1848	219.61

4	3	83.3	15	1396	1466	53.11
5	3	95	20	1797	1539	688.39
6	3	67.6	13	1711	1194	402.36
7	2	96.8	11	1701		65.95
8	2	97.4	7	1169		421.76
9	3	85.9	13	1764	1334	578.16
10	2	96	13	1540		341.77
11	1	63.4	19			6.68
12	2	76	16	1814		479.71
13	3	76.3	7	1413	1252	547.87
14	2	87.6	8	927		430.6
15	2	61.8	7	1891		516.6
16	3	79.1	11	1788	1869	515.7

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5491.0	1	16	5527.2	1
2	5493.0	1	17	5530.0	1
3	5495.1	1	18	5532.6	1
4	5497.5	1	19	5534.5	1
5	5499.4	1	20	5537.8	1
6	5502.2	1	21	5541.3	1
7	5504.3	1	22	5545.4	1
8	5506.4	0	23	5549.1	0
9	5508.7	1	24	5553.0	1
10	5510.6	1	25	5555.4	1
11	5513.0	1	26	5558.3	1
12	5515.8	1	27	5561.1	1
13	5518.9	1	28	5563.2	1
14	5521.6	0	29	5566.4	1
15	5524.1	1	30	5569.0	1

Detection Percentage (%)	90.0%

Trial Number : 1			Trial Number : 2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5499	27	19	5533	57
18	5505	54	23	5545	69
33	5527	99	31	5540	93
39	5531	117	33	5551	99
49	5549	147	49	5550	147
56	5570	168	58	5530	174
71	5561	213	56	5539	168
89	5569	267	50	5549	150
99	5560	297	71	5532	213
/	/	/	80	5563	240
/	/	/	90	5537	270

Trial Number : 3			Trial Number : 4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
55	5530	165	18	5533	54
59	5490	177	45	5531	135
33	5499	99	77	5550	231
19	5512	57	88	5561	264
60	5521	180	39	5594	117
61	5540	183	59	5599	177
67	5561	201	65	5521	195
52	5527	156	67	5531	201
57	5533	171	72	5539	216
59	5549	177	92	5521	276
89	5562	267	81	5540	243
90	5569	270	71	5551	213
49	5553	147	79	5567	237
39	5550	117	73	5569	219

Trial Number : 5			Trial Number : 6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
19	5521	57	21	5540	63
23	5599	69	29	5520	87
57	5594	171	44	5599	132
66	5531	198	39	5533	117
69	5527	207	57	5561	171
29	5538	87	60	5569	180
39	5540	117	61	5534	183
41	5549	123	52	5541	156
56	5551	168	76	5522	228
19	5543	57	75	5594	225
55	5566	165	81	5509	243
33	5569	99	53	5517	159
39	5529	117	/	/	/
60	5536	180	/	/	/

Trial Number : 7			Trial Number : 8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
29	5509	87	22	5511	66
38	5510	114	27	5509	81
19	5503	57	33	5523	99
39	5521	117	50	5533	150
41	5517	123	51	5540	153
50	5510	150	39	5567	117
57	5530	171	40	5521	120
59	5541	177	30	5533	90
60	5550	180	19	5529	57
70	5561	210	59	5531	177
66	5569	198	70	5519	210
40	5522	120	88	5526	264
51	5525	153	64	5532	192
58	5502	174	52	5522	156
67	5514	201	71	5499	213
/	/	/	77	5493	231
/	/	/	83	5507	249

Trial Number : 9			Trial Number : 10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
51	5504	153	31	5539	93
66	5493	198	33	5533	99
79	5499	237	40	5542	120
33	5506	99	50	5550	150
52	5510	156	56	5569	168
59	5517	177	70	5570	210
69	5520	207	61	5562	183
88	5529	264	67	5552	201
99	5533	297	77	5559	231
91	5541	273	73	5531	219
81	5524	243	71	5538	213
72	5509	216	79	5521	237
79	5498	237	88	5526	264
63	5540	189	42	5501	126

Trial Number : 11			Trial Number : 12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5508	63	17	5499	51
29	5509	87	22	5509	66
33	5499	99	33	5521	99
67	5498	201	40	5511	120
17	5521	51	51	5518	153
55	5529	165	59	5523	177
19	5533	57	66	5521	198
20	5538	60	70	5533	210
33	5540	99	80	5537	240
57	5551	171	54	5550	162
59	5559	177	55	5561	165
66	5563	198	59	5560	177
91	5567	273	67	5570	201
55	5670	165	/	/	/

Trial Number : 13			Trial Number : 14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
32	5530	96	7	5499	21
39	5539	117	13	5493	39
56	5540	168	18	5501	54
70	5541	210	22	5506	66
11	5521	33	26	5509	78
19	5527	57	30	5492	90
55	5529	165	39	5511	117
15	5511	45	41	5516	123
33	5519	99	49	5510	147
50	5539	150	50	5521	150
59	5544	177	52	5527	156
61	5550	183	56	5530	168
67	5509	201	67	5504	201
80	5501	240	70	5519	210
31	5511	93	78	5518	234
36	5517	108	80	5531	240
71	5528	213	92	5539	276
54	5520	162	93	5540	279
51	5523	153	96	5560	288
/	/	/	98	5569	294

Trial Number : 15			Trial Number : 16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5503	3	14	5521	42
9	5499	27	9	5520	27
11	5510	33	18	5499	54
15	5511	45	21	5498	63
20	5509	60	18	5521	54
24	5521	72	33	5540	99
29	5523	87	40	5531	120
33	5531	99	50	5549	150
39	5530	117	39	5550	117
49	5541	147	41	5560	123
55	5550	165	37	5562	111
61	5562	183	/	/	/

Trial Number : 17			Trial Number : 18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
33	5493	99	17	5492	51
19	5509	57	21	5509	63
55	5501	165	18	5503	54
29	5510	87	33	5511	99
36	5517	108	40	5515	120
45	5511	135	51	5520	153
40	5520	120	60	5523	180
21	5529	63	57	5527	171
50	5530	150	19	5523	57
52	5504	156	33	5531	99
57	5525	171	39	5533	117
59	5537	177	41	5540	123
60	5540	180	50	5549	150
51	5550	153	56	5550	168
66	5560	198	70	5528	210
42	5551	126	61	5535	183
57	5559	171	77	5562	231
62	5561	186	88	5570	264
71	5569	213	80	5559	240

Trial Number : 19			Trial Number : 20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
19	5530	57	9	5500	27
22	5531	66	13	5509	39
33	5549	99	15	5511	45
31	5510	93	20	5521	60
40	5516	120	23	5529	69
51	5520	153	27	5530	81
50	5525	150	33	5533	99
34	5560	102	39	5540	117
39	5533	117	41	5532	123
54	5539	162	46	5541	138
60	5540	180	52	5560	156
66	5550	198	59	5549	177
39	5555	117	60	5552	180
51	5567	153	67	5558	201
57	5536	171	77	5567	231

66	5523	198	80	5569	240

Trial Number : 21			Trial Number : 22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5511	6	4	5566	12
8	5519	24	9	5550	27
13	5521	39	11	5546	33
17	5529	51	16	5489	48
21	5534	63	20	5520	60
28	5537	84	26	5517	78
31	5542	93	29	5533	87
36	5529	108	33	5548	99
40	5553	120	39	5546	117
51	5517	153	45	5563	135
58	5509	174	55	5531	165
64	5511	192	59	5549	177
69	5526	207	64	5551	192
70	5531	210	69	5527	207

Trial Number : 23			Trial Number : 24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5502	21	2	5537	6
9	5512	27	5	5544	15
13	5519	39	9	5553	27
22	5528	66	14	5498	42
33	5524	99	18	5532	54
39	5526	117	22	5502	66
44	5509	132	25	5506	75
52	5533	156	29	5543	87
58	5518	174	32	5535	96
63	5518	189	36	5527	108
67	5499	201	45	5517	135
74	5503	222	54	5548	162
78	5497	234	59	5533	177
82	5518	246	64	5524	192
88	5510	264	68	5519	204
91	5530	273	77	5492	231

Trial Number : 25			Trial Number : 26		
Hopping	Frequency	Pulse Start (ms)	Hopping	Frequency	Pulse Start (ms)
4	5516	12	1	5511	3
9	5545	27	4	5533	12
11	5505	33	9	5493	27
16	5522	48	12	5543	36
19	5509	57	15	5547	45
22	5541	66	19	5550	57
26	5526	84	22	5503	66
31	5496	93	25	5527	75
49	5507	147	29	5509	87
44	5524	132	33	5527	99
51	5528	153	38	5532	114
56	5431	168	49	5556	147
62	5448	186	52	5560	156
64	5505	192	56	5515	178
67	5547	201	60	5517	180
72	5540	216	64	5529	192
77	5560	231	72	5537	216
82	5556	246	76	5562	228
86	5537	258	88	5535	264
89	5490	267	/	/	/
93	5521	279	/	/	/

Trial Number : 27			Trial Number : 28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5501	15	11	5512	33
9	5512	27	16	5529	48
13	5521	39	19	5496	57
19	5515	57	23	5498	69
23	5536	69	27	5521	87
27	5542	81	30	5536	90
34	5567	102	34	5492	102
39	5551	117	39	5528	117
45	5539	135	45	5553	135
49	5510	147	50	5524	150

53	5522	156	58	5545	174
58	5563	174	63	5532	189
64	5543	186	66	5544	198
67	5537	201	72	5559	216
71	5504	213	78	5531	234
75	5517	225	/	/	/
79	5546	237	/	/	/
/	/	/	/	/	/

Trial Number : 29			Trial Number : 30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
16	5506	48	2	5510	6
21	5514	63	5	5545	15
28	5542	84	8	5523	24
34	5507	102	13	5539	39
45	5523	135	19	5574	57
53	5539	159	25	5478	75
58	5547	174	29	5526	87
62	5556	186	33	5468	99
66	5550	198	38	5535	84
71	5539	223	42	5521	126
74	5529	222	49	5520	147
/	/	/	54	5541	162

ANNEX C: PHOTOGRAPHS OF THE TEST SET-UP

Layout of Conducted Test

ANNEX D: Accreditation Certificate

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 600118-0

Telecommunication Technology Labs, CAICT
Beijing
China

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:

Electromagnetic Compatibility & Telecommunications

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2020-09-29 through 2021-09-30
Effective Dates

For the National Voluntary Laboratory Accreditation Program

*** **END OF REPORT BODY** ***