



# FCC DFS TEST REPORT

**FCC ID** : Z8H89FT0016  
**Equipment** : 5GHz Force 300-16  
**Brand Name** : Cambium Networks  
**Model Name** : 5GHz Force 300-16  
**Applicant** : Cambium Networks Inc.  
3800 Golf Road, Suite 360 Rolling Meadows, IL  
60008, USA  
**Manufacturer** : Cambium Networks Inc.  
3800 Golf Road, Suite 360 Rolling Meadows, IL  
60008, USA  
**Standard** : 47 CFR FCC Part 15.407

The product was received on Oct. 11, 2018, and testing was started from Oct. 11, 2018 and completed on Oct. 16, 2018. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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



Approved by: Sam Chen

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**  
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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TEL : 886-3-656-9065  
FAX : 886-3-656-9085  
Report Template No.: CB Ver1.0



## Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.3	FCC KDB 905462 7.8.1	DFS: UNII Detection Bandwidth Measurement	PASS	-
3.4	FCC KDB 905462 7.8.2.1	DFS: Initial Channel Availability Check Time	PASS	-
3.4	FCC KDB 905462 7.8.2.2	DFS: Radar Burst at the Beginning of the Channel Availability Check Time	PASS	-
3.4	FCC KDB 905462 7.8.2.3	DFS: Radar Burst at the End of the Channel Availability Check Time	PASS	-
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Channel Move Time (CMT)	PASS	-
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Channel Closing Transmission Time (CCTT)	PASS	-
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Non-Occupancy Period (NOP)	PASS	-
3.6	FCC KDB 905462 7.8.4	DFS: Statistical Performance Check	PASS	-
3.1.4	FCC KDB 905462 8.1	User Access Restrictions	PASS	-
Note: From Sporton Project No.: 7O2407-05				

**Declaration of Conformity:**

The judgment of conformity in the report is based on the measurement results excluding the measurement uncertainty.

**Comments and Explanations:**

None

**Reviewed by: Sam Chen**

**Report Producer: Viola Huang**



# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

Specification Items	Description	
Frequency Range	5250 MHz – 5350 MHz 5470 MHz – 5725 MHz	
Product Type	2TX, 2RX	
Radio Type	Intentional Transceiver	
Power Type	From PoE	
Modulation	IEEE 802.11ac: see the below table	
Data Rate (Mbps)	IEEE 802.11ac: see the below table	
Channel Bandwidth	20/80 MHz operating channel bandwidth	
Operating Mode	<input checked="" type="checkbox"/> Master	
	<input type="checkbox"/> Client with radar detection	
	<input type="checkbox"/> Client without radar detection	
Communication Mode	<input type="checkbox"/> IP Based (Load Based)	<input checked="" type="checkbox"/> Frame Based
TPC Function	<input checked="" type="checkbox"/> With TPC	<input type="checkbox"/> Without TPC
Weather Band (5600~5650MHz)	<input checked="" type="checkbox"/> With 5600~5650MHz	<input type="checkbox"/> Without 5600~5650MHz
Power-on cycle	80MHz: Requires 58.696 seconds to complete its power-on cycle.	
Software / Firmware Version	4.1.2	
Note: EUT employ a TPC mechanism and TPC have the capability to operate at least 6 dB below highest RF output power.		

**TPC Power Result****Ant. 2:**

Mode	Min Power (dBm)	Max Power (dBm)	Min EIRP (dBm)	Max EIRP (dBm)
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-
5.25-5.35GHz	6.88	12.88	22.88	28.88
5.47-5.725GHz	7.84	13.84	23.84	29.84
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-
5.25-5.35GHz	4.80	10.80	20.80	26.80
5.47-5.725GHz	6.63	12.63	22.63	28.63

**Ant. 3:**

Mode	Min Power (dBm)	Max Power (dBm)	Min EIRP (dBm)	Max EIRP (dBm)
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-
5.25-5.35GHz	17.80	23.80	19.80	25.80
5.47-5.725GHz	17.94	23.94	19.94	25.94
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-
5.25-5.35GHz	16.07	22.07	18.07	24.07
5.47-5.725GHz	17.95	23.95	19.95	25.95

**Antenna & Band width**

Antenna	Two (TX)	
Band width Mode	20 MHz	80 MHz
IEEE 802.11ac	V	V

**IEEE 11ac Spec.**

Protocol	Number of Transmit Chains (NTX)	Data Rate / MCS
802.11ac (VHT20)	2	MCS 0-9/Nss1-2
802.11ac (VHT80)	2	MCS 0-9/Nss1-2

Note 1: IEEE Std. 802.11ac modulation consists of VHT20, VHT40, VHT80 and VHT160 (VHT: Very High Throughput). Then EUT support VHT20, VHT80.

Note 2: Modulation modes consist of below configuration: VHT20/VHT80: IEEE 802.11ac

**1.1.2 Antenna Information**

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
						2.4GHz	5GHz
1	1	Cambium	ePMP force 300-16	Printed Antenna	I-PEX	6	-
2	1	Cambium	ePMP force 300-16	Printed Antenna	custom	-	16
	2	Cambium	ePMP force 300-16	Printed Antenna	custom	-	16
3	1	Cambium	ePMP force 300-16	integral antenna	custom	-	2
	2	Cambium	ePMP force 300-16	integral antenna	custom	-	2

Note: The EUT has three antennas.

**For 2.4GHz function (1TX/1RX):**

Only Port 1 can be used as transmitting/receiving antenna.

**For 5GHz function (2TX/2RX):**

5GHz can equip Ant.2 or Ant.3.

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

**1.1.3 DFS Test Frequency**

Frequency Band	Channel No.	Frequency
5470~5725 MHz Band 3	110	5550 MHz

**1.1.4 Table for Class III Change**

This product is an extension of original one reported under Sporton project number: 7O2407-04

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Adding Band 2 and Band 3 (5250~5350 MHz, 5470~5725 MHz) in 20/80MHz.	All test items.



## 1.2 Accessories

N/A

## 1.3 Support Equipment

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	N/A
2	Notebook	DELL	E4300	N/A
3	Rx device	Cambium	F220	N/A
4	PoE	PHIHONG	PSA15M-300(AP)	N/A

## 1.4 Testing Applied Standards

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

- ♦ FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

## 1.5 Testing Location Information

Testing Location				
<input type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973		
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085		
Test Condition		Test Site No.	Test Engineer	Test Environment
DFS Site		DF01-CB	Gino Huang	26°C / 58%
				Oct. 11, 2018~ Oct. 16. 2018

Test site Designation No. TW0006 with FCC

Test site registered number IC 4086B with Industry Canada.



## 2 Test Configuration of EUT

### 2.1 Test Channel Frequencies Configuration

Test Channel Frequencies Configuration	
IEEE Std.	Test Channel Freq. (MHz)
802.11ac (VHT20)	5550 MHz
802.11ac (VHT80)	

### 2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	Dynamic Frequency Selection (DFS)
Test Condition	Conducted measurement at transmit chains The EUT shall be configured to operate at the highest transmitter output power setting. If more than one antenna assembly is intended for this power setting, the gain of the antenna assembly with the lowest gain shall be used.
Modulation Mode	802.11ac (VHT20), 802.11ac (VHT80)

Note 1: The Ant. 3 with the low gain and it was selected to test and record.

Note 2: The EUT was powered by PoE, and the PoE was for measurement only, would not be marketed.

PoE information as below:

Support Unit	Brand	Model
PoE	PHIHONG	PSA15M-300(AP)



### 3 Dynamic Frequency Selection (DFS) Test Result

#### 3.1 General DFS Information

##### 3.1.1 DFS Parameters

Table D.1: DFS requirement values	
Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds (Note 1).
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second periods. (Notes 1 and 2).
U-NII Detection Bandwidth	Minimum 100% of the 99% power bandwidth (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 Channel changes (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.	
Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.	

Table D.2: Interference threshold values	
Maximum Transmit Power	Value (see note)
EIRP $\geq$ 200 mW	-64 dBm
EIRP < 200 mW and PSD < 10dBm/MHz	-62 dBm
EIRP < 200 mW and PSD $\geq$ 10dBm/MHz	-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 662911D01.	

### 3.1.2 Applicability of DFS Requirements Prior to Use of a Channel

Requirement	DFS Operational mode		
	Master	Client without radar detection	Client with radar detection
<i>Non-Occupancy Period</i>	Yes	Not required	Yes
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Availability Check Time</i>	Yes	Not required	Not required
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

### 3.1.3 Applicability of DFS Requirements during Normal Operation

Requirement	DFS Operational mode		
	Master	Client without radar detection	Client with radar detection
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Closing Transmission Time</i>	Yes	Yes	Yes
<i>Channel Move Time</i>	Yes	Yes	Yes
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

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

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



### 3.1.4 User Access Restrictions

User Access Restrictions	
<input checked="" type="checkbox"/>	DFS controls (hardware or software) related to radar detection are NOT accessible to the user. Manufacturer statement confirming that information regarding the parameters of the detected Radar Waveforms is not available to the end user.

### 3.1.5 Channel Loading/Data Streaming

<input type="checkbox"/>	The data file (MPEG-4) has been transmitting in a streaming mode.
<input checked="" type="checkbox"/>	Software to ping the client is permitted to simulate data transfer with random ping intervals.
<input checked="" type="checkbox"/>	Minimum channel loading of approximately 17%.
<input type="checkbox"/>	Unicast protocol has been used.

## 3.2 Radar Test Waveform Calibration

### 3.2.1 Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Trials
0	1	1428	18	See Note 1	See Note 1
1A	1	15 unique PRI in KDB 905462 D02 Table 5a	$\text{Roundup}\left\{\left(\frac{1}{360}\right) \times \left(\frac{19 \times 10^6}{PRI}\right)\right\}$	60%	15
1B	1	15 unique PRI within 518-3066, Excluding 1A PRI		60%	15
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
<b>Note 1:</b> Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

A minimum of 30 unique waveforms are required for each of the short pulse radar types 1 through 4. If more than 30 waveforms are used for short pulse radar types 1 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. The aggregate is the average of the percentage of successful detections of short pulse radar types 1-4.

### 3.2.2 Long Pulse Radar Test Waveform

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

Each waveform is defined as follows:

- The transmission period for the Long Pulse Radar test signal is 12 seconds.
- There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst Count.
- Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each Burst within the 12 second sequence may have a different number of pulses.
- The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a Burst will have the same pulse width. Pulses in different Bursts may have different pulse widths.
- Each pulse has a linear FM chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a transmission period will have the same chirp width. The chirp is centered on the pulse. For example, with a radar frequency of 5300 MHz and a 20 MHz chirped signal, the chirp starts at 5290 MHz and



ends at 5310 MHz.

- ♦ If more than one pulse is present in a Burst, the time between the pulses will be between 1000 and 2000 microseconds, with the time being randomly chosen. If three pulses are present in a Burst, the time between the first and second pulses is chosen independently of the time between the second and third pulses.
- ♦ The 12 second transmission period is divided into even intervals. The number of intervals is equal to Burst Count. Each interval is of length  $(12,000,000 / \text{Burst Count})$  microseconds. Each interval contains one Burst. The start time for the Burst, relative to the beginning of the interval, is between 1 and  $[(12,000,000 / \text{Burst Count}) - (\text{Total Burst Length}) + (\text{One Random PRI Interval})]$  microseconds, with the start time being randomly chosen. The step interval for the start time is 1 microsecond. The start time for each Burst is chosen independently.

### 3.2.3 Frequency Hopping Radar Test Waveform

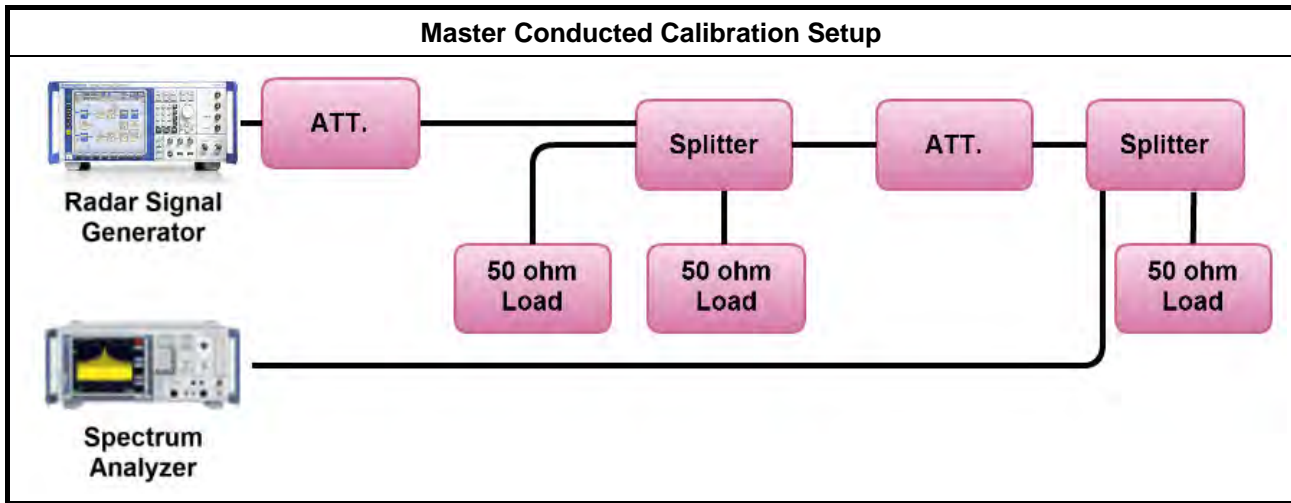
Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (ms)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	0.333	300	70%	30

The FCC Type 6 waveform uses a static waveform with 100 bursts in the instruments ARB. In addition, the RF list mode is operated with a list containing 100 frequencies from a randomly generated list and it had be ensured that at least one of the random frequencies falls into the UNII Detection Bandwidth of the DUT. Each burst from the waveform file initiates a trigger pulse at the beginning that switches the RF list from one item to the next one.

### 3.2.4 DFS Threshold Level

DFS Threshold Level	
DFS Threshold level: -61 dBm	<input checked="" type="checkbox"/> at the antenna connector
	<input type="checkbox"/> in front of the antenna
The Interference <b>Radar Detection Threshold Level</b> is is $-64 \text{ dBm} + 2 [\text{dBi}] + 1 \text{ dB} = -61 \text{ dBm}$ . That had been taken into account the output power range and antenna gain.	

### 3.2.5 Calibration Setup

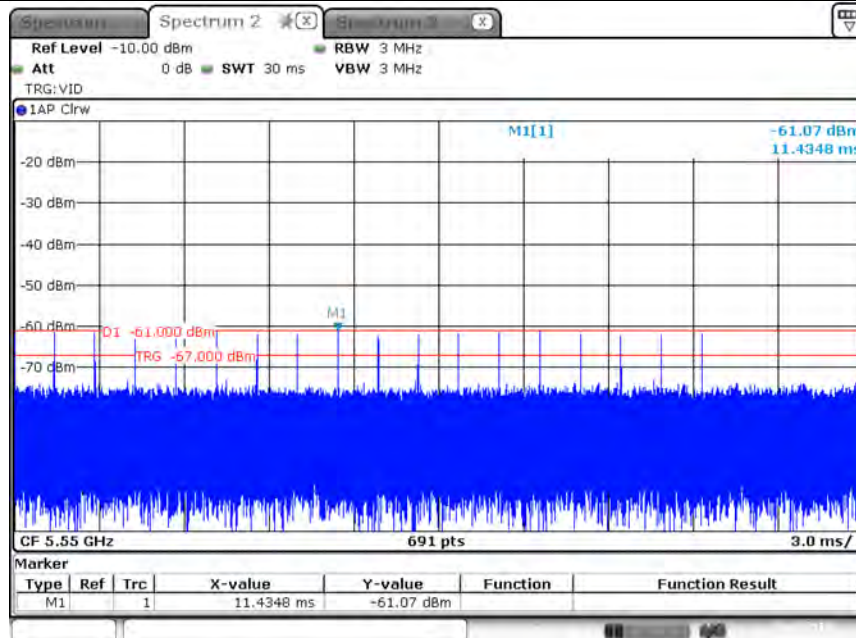




### 3.2.6 Radar Waveform calibration Plot

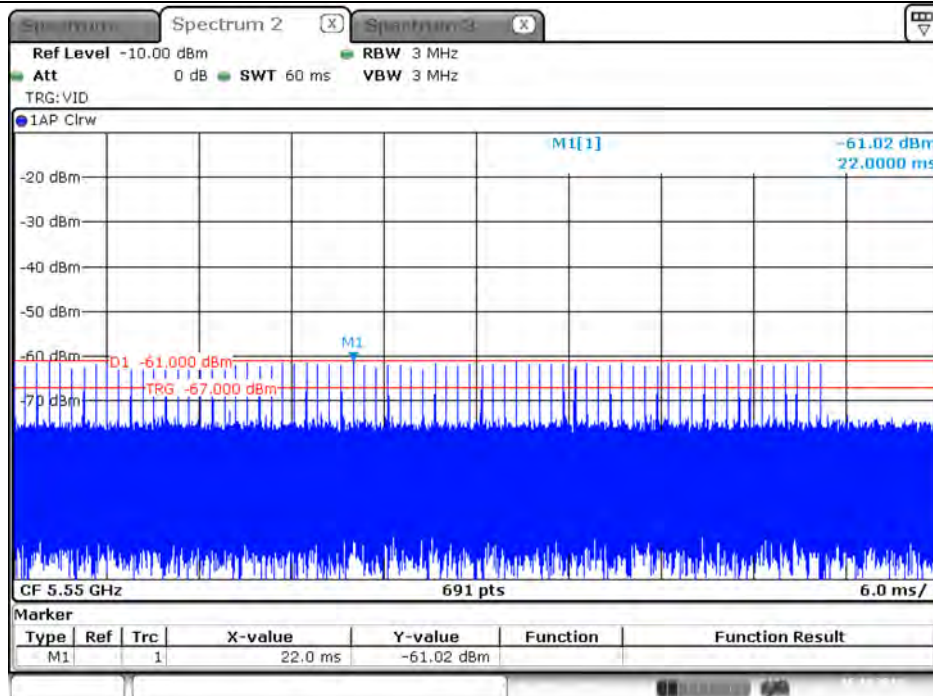
Test Frequency: 5550 MHz

Radar #0 DFS detection threshold level



Date: 16.OCT.2018 10:36:09

Radar #1 DFS detection threshold level

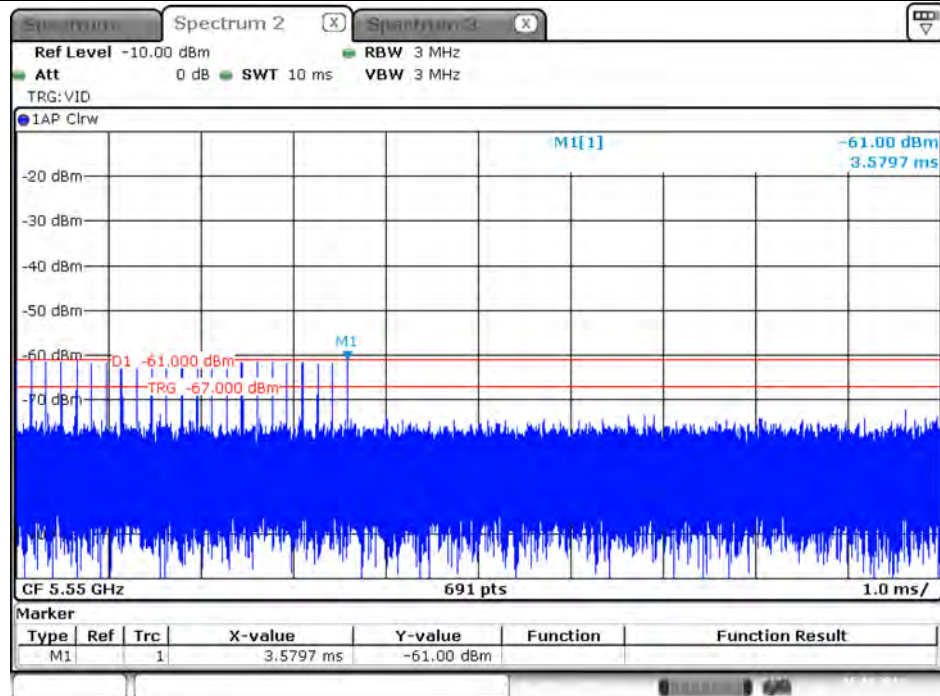


Date: 16.OCT.2018 10:36:46



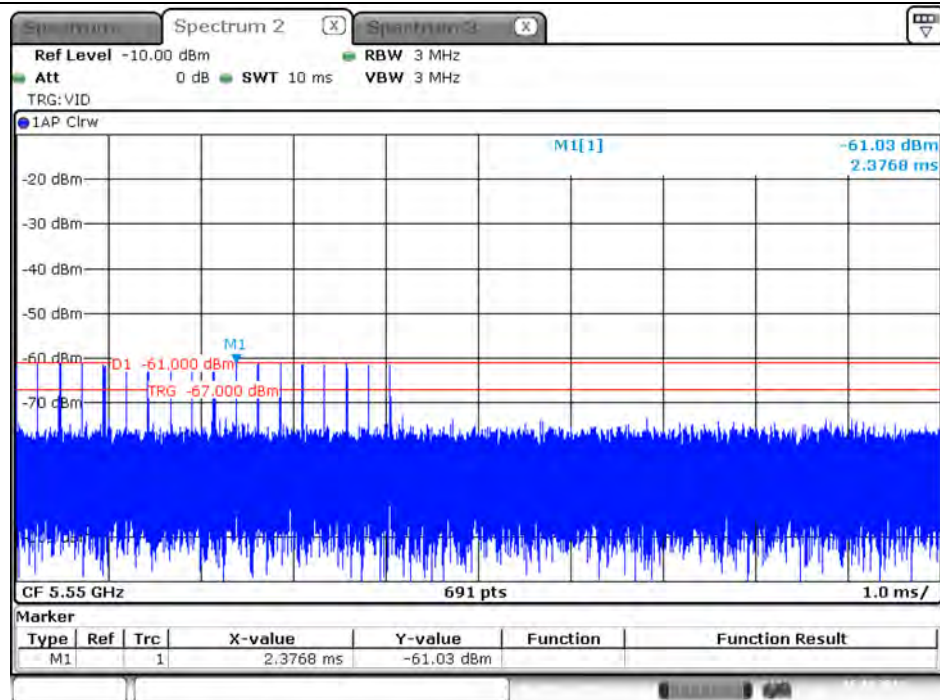


Radar #2 DFS detection threshold level

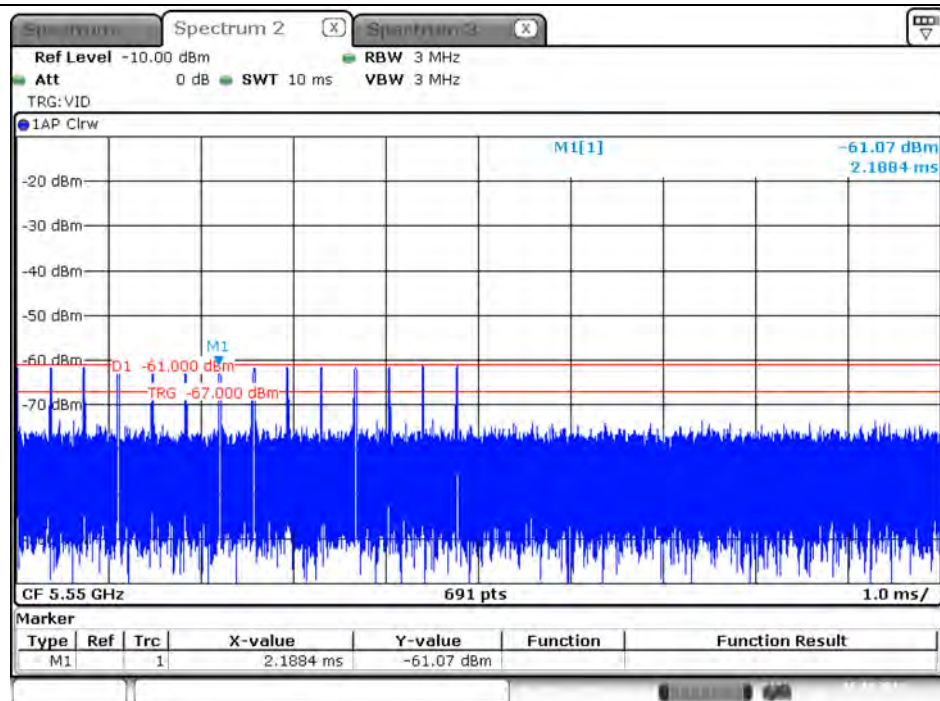


Date: 16.OCT.2018 10:37:56

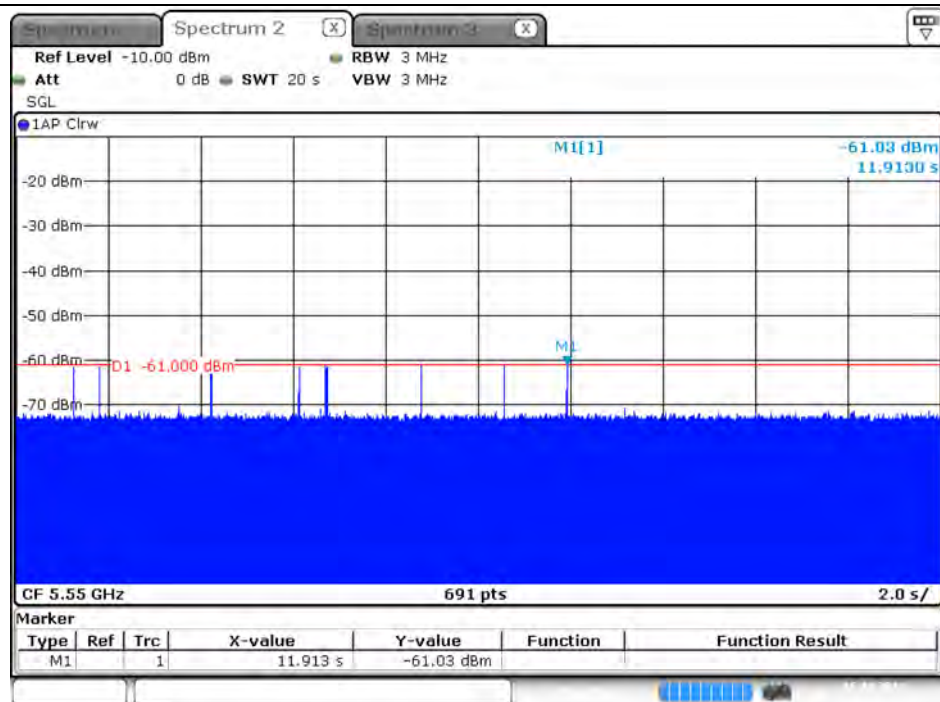
Radar #3 DFS detection threshold level



Date: 16.OCT.2018 10:39:20

**Radar #4 DFS detection threshold level**

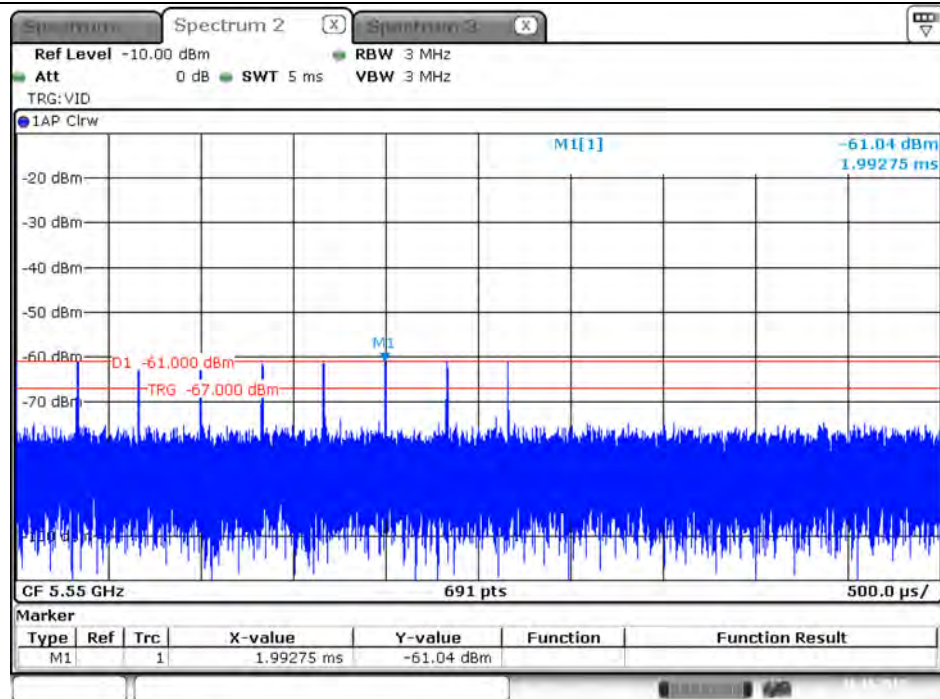
Date: 16.OCT.2018 10:40:11

**Radar #5 DFS detection threshold level**

Date: 16.OCT.2018 10:43:46



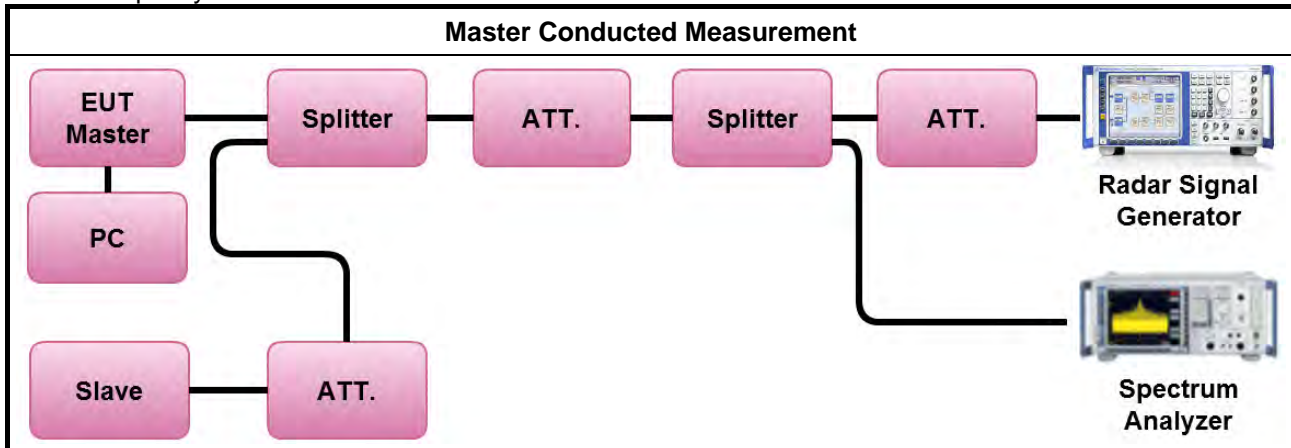
Radar #6 DFS detection threshold level



Date: 16.OCT.2018 10:46:17

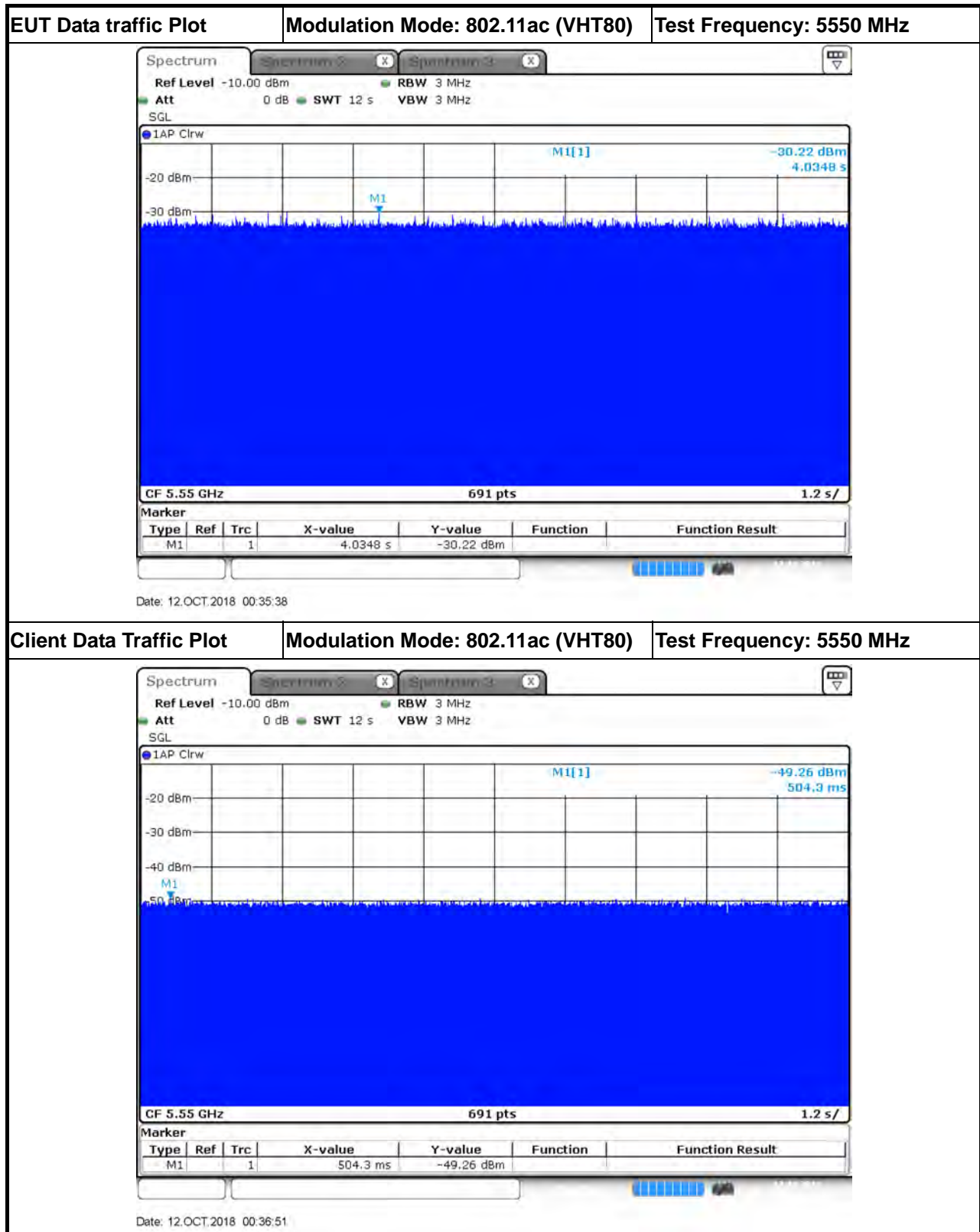
### 3.2.7 Test Setup

A spectrum analyzer is used as a monitor to verify that the EUT has vacated the Channel within the (Channel Closing Transmission Time and Channel Move Time, and does not transmit on a Channel during the Non-Occupancy Period after the detection and Channel move.

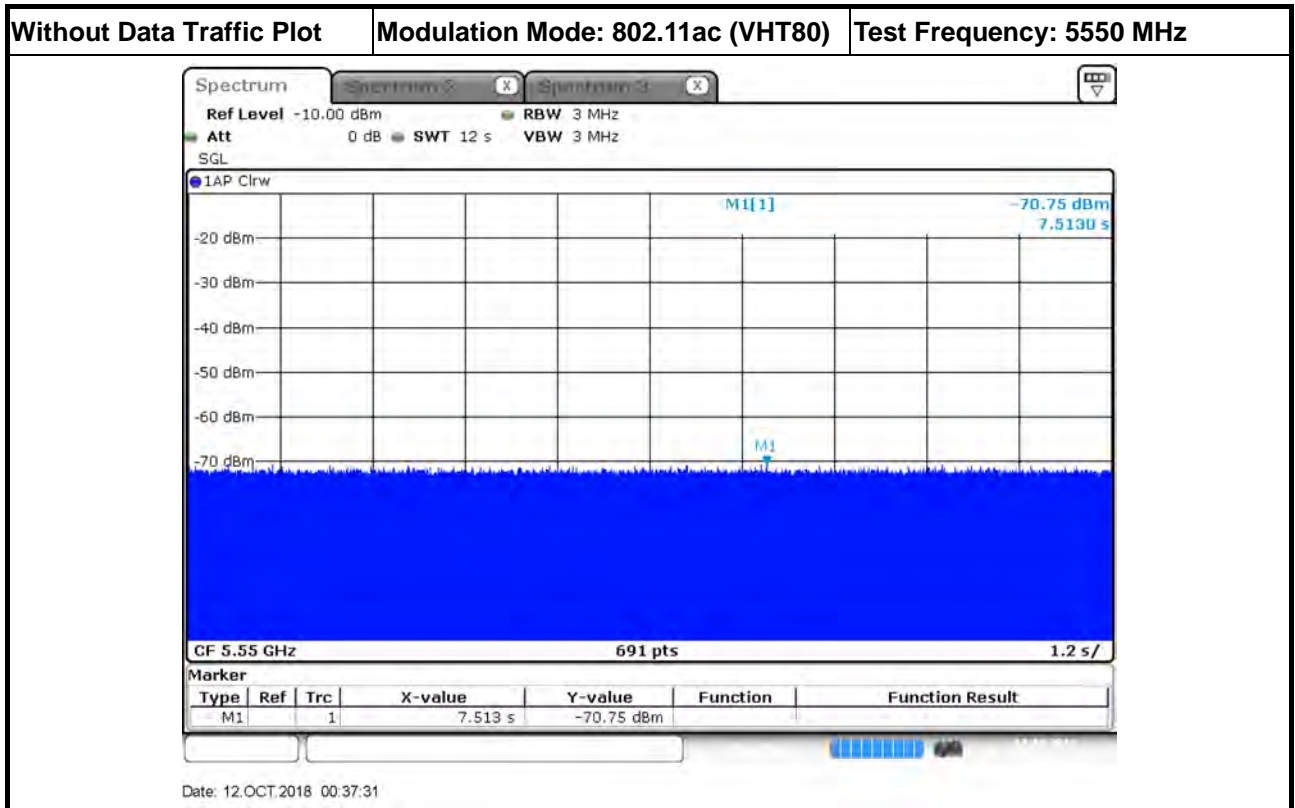




### 3.2.8 Data traffic Plot









### 3.3 UNII Detection Bandwidth

#### 3.3.1 UNII Detection Bandwidth Limit

Channel Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	UNII Detection Bandwidth Min. Limit (MHz)
20	16.931	17
80	75.832	76

UNII Detection Bandwidth is minimum 100% of the 99% power bandwidth. A single radar Burst is generated for a minimum of 10 trials, and the response of the UUT is noted. The UUT must detect the Radar Waveform 90% or more of the time.

#### 3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

#### 3.3.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	During the U-NII Detection Bandwidth detection test, radar type 0 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic. The EUT is set up as a standalone device (no associated Client and no traffic). The radar frequency is increased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The highest frequency at which detection is greater than or equal to 90% is denoted as $F_H$ . The radar frequency is decreased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The lowest frequency at which detection is greater than or equal to 90% is denoted as $F_L$ . UNII Detection Bandwidth = $F_H - F_L$ .



### 3.3.4 Test Result of UNII Detection Bandwidth

EUT Frequency=5550 MHz											
Channel Bandwidth (MHz)	20										
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5540	0	0	0	0	0	0	0	0	0	0	0
5541 (FL)	1	0	1	1	1	1	1	1	1	1	90
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
5550	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 (FH)	1	1	1	1	1	0	1	1	1	1	90
5559	0	0	0	0	0	0	0	0	0	0	0
5560	0	0	0	0	0	0	0	0	0	0	0
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5558MHz-5541MHz)=											17
UNII Detection Bandwidth Min. Limit (MHz) =											17
<b>Test Result</b>											<b>Complied</b>





EUT Frequency=5550 MHz											
Channel Bandwidth (MHz)	80										
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5511	0	0	0	0	0	0	0	0	0	0	0
5512 (FL)	1	1	1	1	1	1	1	1	0	1	90
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
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
5520	1	1	1	1	1	1	1	1	1	1	100
5525	1	1	1	1	1	1	1	1	1	1	100
5530	1	1	1	1	1	1	1	1	1	1	100
5535	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	100
5550	1	1	1	1	1	1	1	1	1	1	100
5555	1	1	1	1	1	1	1	1	1	1	100
5560	1	1	1	1	1	1	1	1	1	1	100
5565	1	1	1	1	1	1	1	1	1	1	100
5570	1	1	1	1	1	1	1	1	1	1	100
5575	1	1	1	1	1	1	1	1	1	1	100
5580	1	1	1	1	1	1	1	1	1	1	100
5585	1	1	1	1	1	1	1	1	1	1	100
5586	1	1	1	1	1	1	1	1	1	1	100
5587	1	1	1	1	1	1	1	1	1	1	100
5588 (FH)	1	1	1	1	1	0	1	1	1	1	90
5589	0	0	0	0	0	0	0	0	0	0	0
5590	0	0	0	0	0	0	0	0	0	0	0
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5588MHz-5412MHz)=											76
UNII Detection Bandwidth Min. Limit (MHz) =											76
<b>Test Result</b>											<b>Complied</b>



### 3.4 Channel Availability Check (CAC)

#### 3.4.1 Channel Availability Check Limit

Channel Availability Check Limit	
<input checked="" type="checkbox"/>	The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute (60 sec) on the intended operating frequency.

#### 3.4.2 Measuring Instruments

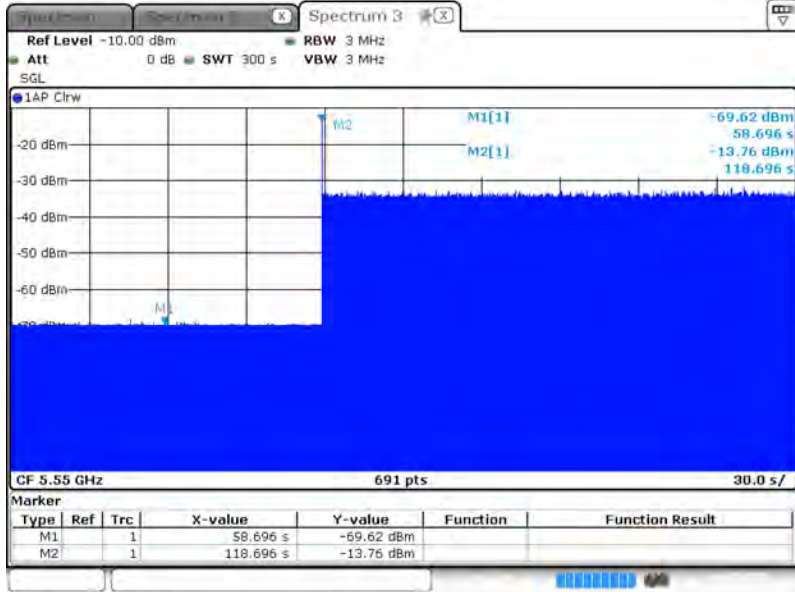
Refer a test equipment and calibration data table in this test report.

#### 3.4.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	For Initial Channel Availability Check Time. The EUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the UNII device checks for Radar Waveforms for one minute on the test Channel. This test does not use any Radar Waveforms.
<input checked="" type="checkbox"/>	For Radar Burst at the Beginning of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the Beginning of the Channel Availability Check Time.
<input checked="" type="checkbox"/>	For Radar Burst at the End of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the End of the Channel Availability Check Time.



### 3.4.4 Test Result of Initial Channel Availability Check Time

Modulation Mode	Freq.	Radar Test Signal
802.11ac (VHT80)	5550 MHz	N/A
<p>The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (58.696 sec). The initial CAC time of the EUT is indicated by marker 1 (58.696 sec). Initial beacons/data transmissions are indicated by marker 2 (118.696 sec).</p>		
 <p>The screenshot shows a spectrum analyzer interface with a blue signal trace. Two markers are present: M1 at 58.696 s and -69.62 dBm, and M2 at 118.696 s and -13.76 dBm. The interface includes a grid, a frequency scale, and a time scale. The date and time at the bottom are 11.OCT.2018 23:53:31.</p>		
<b>Test Result</b>		<b>Complied</b>



### 3.4.5 Test Result of Radar Burst at the Beginning of the Channel Availability Check Time

Modulation Mode	Freq. (MHz)	Radar Type Signal
802.11ac (VHT80)	5550 MHz	0

Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 240.435 seconds after the radar Burst has been generated. Verify that during the 300 seconds measurement window no EUT transmissions occurred.

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	58.696 s	-67.15 dBm		
M2		1	118.696 s	-66.88 dBm		
M3		1	59.565 s	-24.21 dBm		

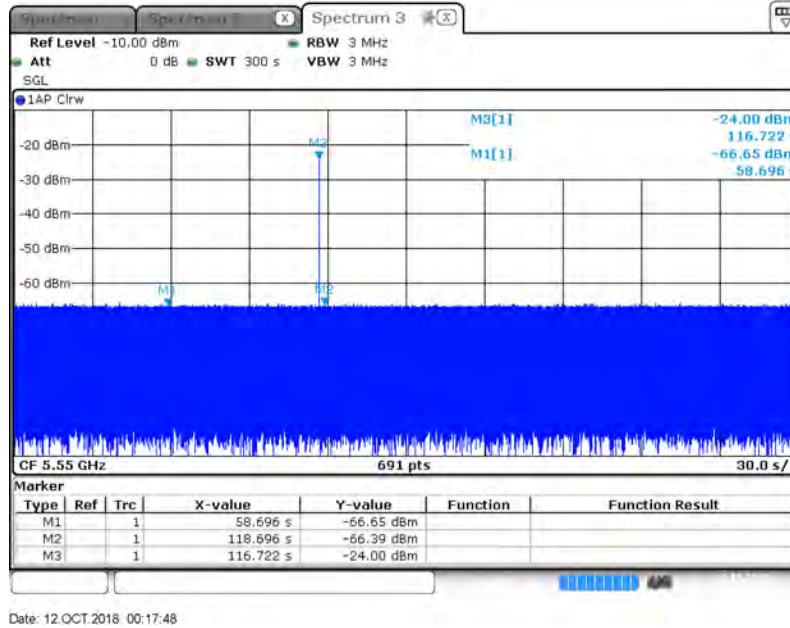
Date: 12.OCT.2018 00:03:24

<b>Test Result</b>	<b>Complied</b>
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**3.4.6 Test Result of Radar Burst at the End of the Channel Availability Check Time**

Modulation Mode	Freq. (MHz)	Radar Type Signal
802.11ac (VHT80)	5550 MHz	0

Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 183.278 seconds after the radar Burst has been generated. Verify that during the 300 seconds measurement window no EUT transmissions occurred.

**Test Result****Complied**

### 3.5 In-service Monitoring

#### 3.5.1 In-service Monitoring Limit

In-service Monitoring Limit	
Channel Move Time	10 sec
Channel Closing Transmission Time	200 ms + an aggregate of 60 ms over remaining 10 sec periods.
Non-occupancy period	Minimum 30 minutes

#### 3.5.2 Measuring Instruments

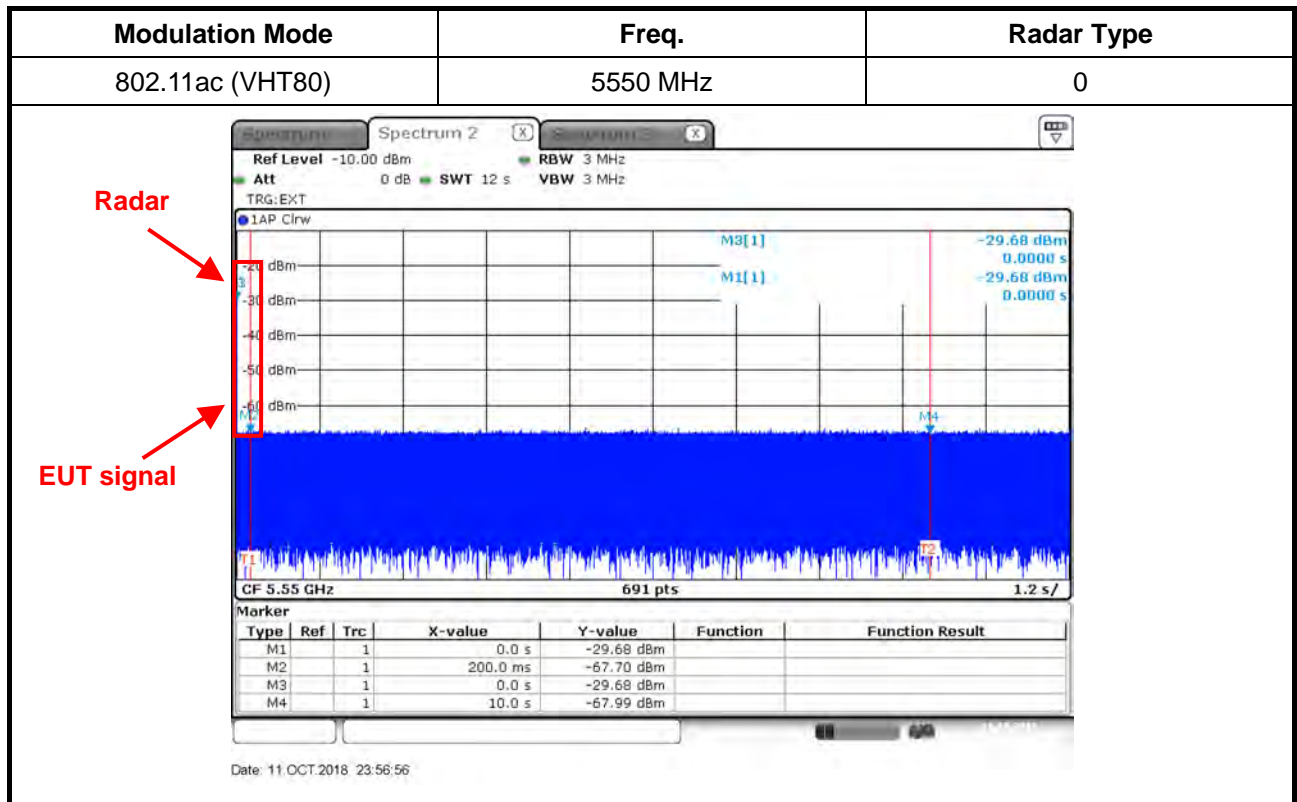
Refer a test equipment and calibration data table in this test report.

#### 3.5.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	Verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time. Client Device will associate with the EUT. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Channel Move Time). Compare the Channel Move Time and Channel Closing Transmission Time limits.
<input checked="" type="checkbox"/>	Verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time. One 12 sec plot needs to be reported for the Short Pulse Radar Types 0. And zoom-in a 60 ms plot verified channel closing time for the aggregate transmission time starting from 200ms after the end of the radar signal to the completion of the channel move.
<input checked="" type="checkbox"/>	Verified during In-Service Monitoring; Non-Occupancy Period. Client Device will associate with the EUT. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Non-Occupancy Period). Compare the Non-Occupancy Period limits.

**3.5.4 Test Result of Channel Move Time****Modulation Mode: 802.11ac (VHT80)**

Parameter	Test Result	Limit
	Type 0	
Test Channel (MHz)	5550 MHz	-
Channel Move Time (sec.)	0.000	< 10s

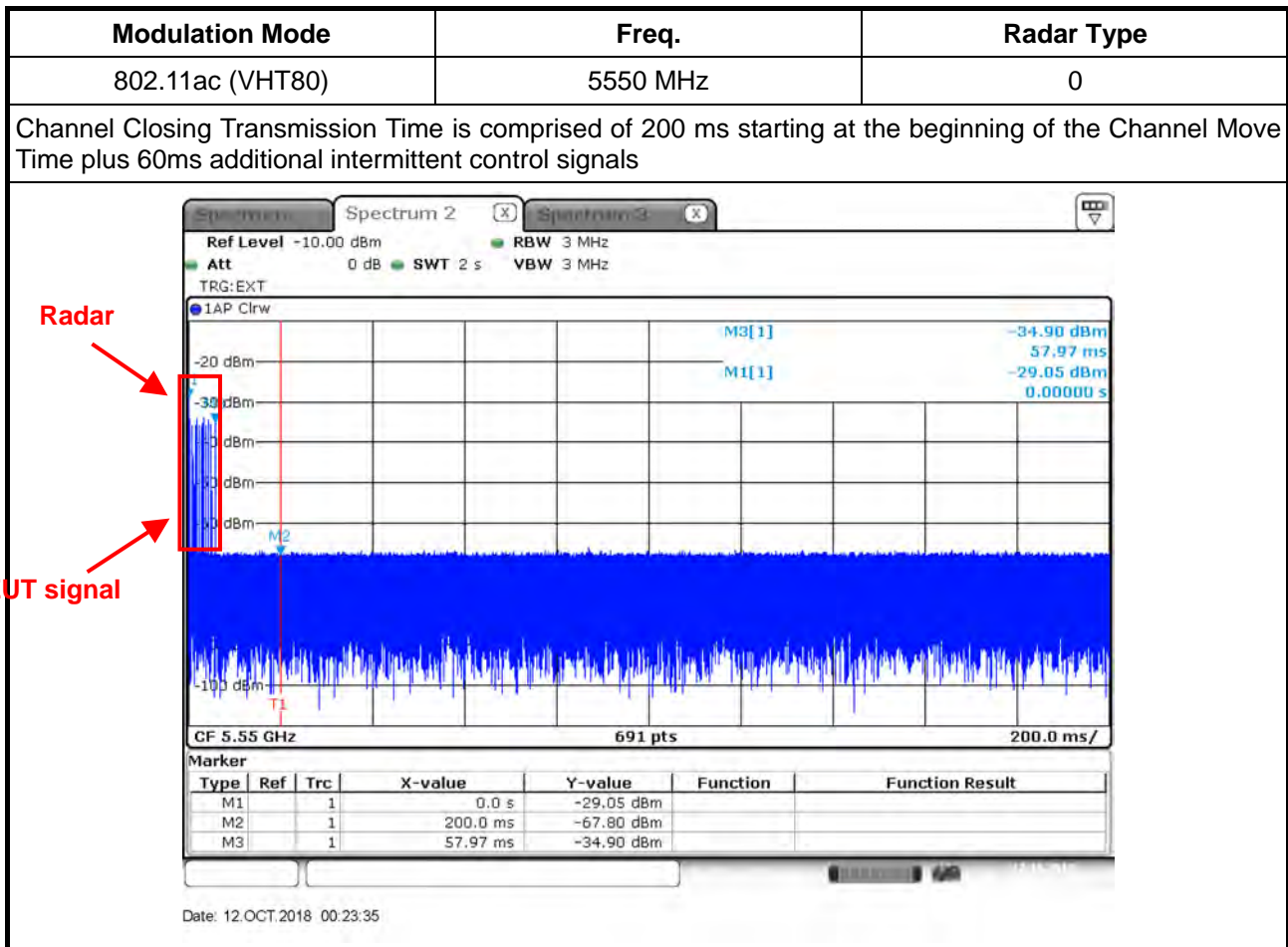




**3.5.5 Test Result of Channel Closing Transmission Time****Modulation Mode: 802.11ac (VHT80)**

Parameter	Test Result	Limit
	Type 0	
Test Channel (MHz)	5550 MHz	-
Channel Closing Transmission Time (ms) (Note)	0.000	< 60ms

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



Dwell is the dwell time per spectrum analyzer sampling bin.

S is the sweep time

B is the number of spectrum analyzer sampling bins

C is the intermittent control signals of Channel Closing Transmission Time

N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission

Dwell (2.899 ms)= S (2000 ms) / B (690)

C (0.000 ms) = N (0) X Dwell (2.899 ms)

**3.5.6 Test Result of Non-Occupancy Period****802.11ac (VHT80)**

Parameter	Test Result	Limit
	Type 0	
Test Channel (MHz)	5550 MHz	-
Non-Occupancy Period (min.)	$\geq 30$	$\geq 30$ min

**Modulation Mode**

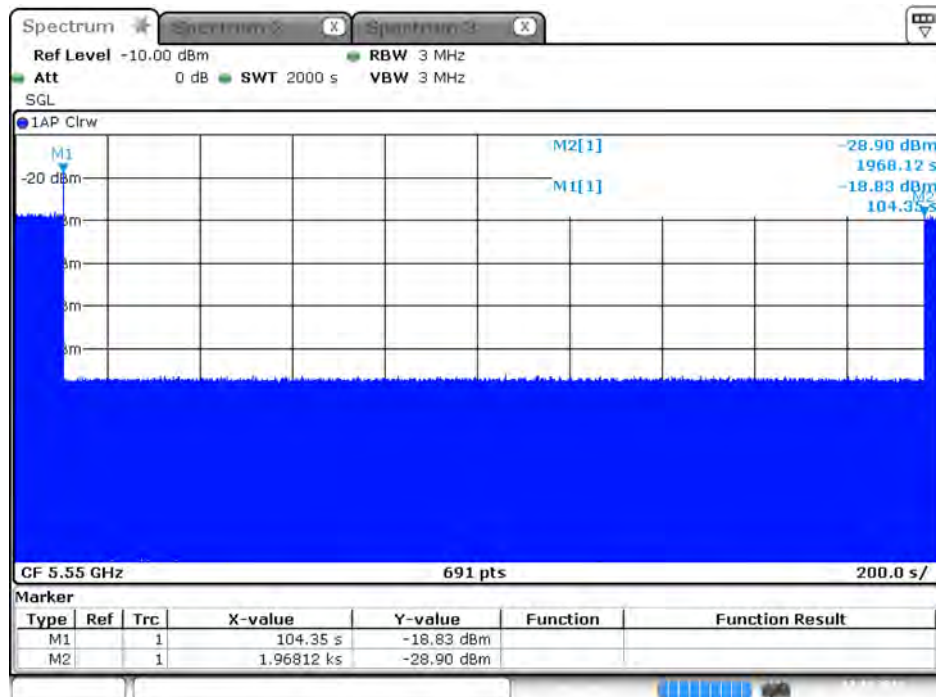
802.11ac (VHT80)

**Freq.**

5550 MHz

**Non-Occupancy Period**

During the 30 minutes observation time, UUT did not make any transmissions on a channel after a radar signal was detected on that channel by either the Channel Availability Check or the In-Service Monitoring.



Date: 12.OCT.2018 01:46:40



### 3.6 Statistical Performance Check

#### 3.6.1 Statistical Performance Check Limit

Radar Type	Minimum Percentage of Successful Detection (Pd)	Minimum Trials
1	60%	30
2	60%	30
3	60%	30
4	60%	30
Aggregate (Radar Types 1-4)	80%	120
5	80%	30
6	70%	30

The percentage of successful detection is calculated by:

$$\frac{\text{TotalWaveformDetections}}{\text{TotalWaveformTrails}} \times 100 = \text{Probability of Detection Radar Waveform}$$

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

$$\frac{Pd1 + Pd2 + Pd3 + Pd4}{4}$$

#### 3.6.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

#### 3.6.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> For Statistical Performance Check test. Demonstrating a minimum channel loading of approximately 17% or greater of the test. Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 1-4 and 6 to ensure detection occurs. Then Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.

**3.6.4 Test Result of Statistical Performance Check****Modulation Mode: 802.11ac (VHT20)****Type 1 Radar Statistical Performance**

<b>Trial #</b>	<b>Test Freq. (MHz)</b>	<b>Pulse Repetition Frequency Number</b>	<b>Pulse Repetition Frequency (Pulse Per Second)</b>	<b>PRI (us)</b>	<b>1=Detection 0=No Detection</b>
1	5558	1	1930.5	518	1
2	5556	23	326.2	3066	1
3	5555	19	1139.0	878	1
4	5552	12	1355.0	738	1
5	5550	4	1730.1	578	1
6	5551	8	1519.8	658	1
7	5547	15	1253.1	798	1
8	5552	6	1618.1	618	1
9	5550	14	1285.3	778	1
10	5546	3	1792.1	558	1
11	5552	13	1319.3	758	0
12	5545	9	1474.9	678	1
13	5546	7	1567.4	638	1
14	5549	17	1193.3	838	1
15	5551	10	1432.7	698	1
16	5552	-	1692.0	591	1
17	5544	-	328.1	3048	1
18	5541	-	373.4	2678	1
19	5547	-	574.4	1741	1
20	5553	-	1216.5	822	1
21	5546	-	801.3	1248	1
22	5554	-	488.5	2047	1
23	5555	-	956.0	1046	1
24	5541	-	517.6	1932	1
25	5541	-	1422.5	703	1
26	5547	-	542.0	1845	1
27	5542	-	741.3	1349	1
28	5551	-	881.8	1134	1
29	5541	-	427.4	2340	1
30	5551	-	628.9	1590	1
<b>Detection Percentage (%)</b>					<b>96.667</b>
<b>Limit</b>					<b>60%</b>
<b>Test Result</b>					<b>Complied</b>

**Type 2 Radar Statistical Performance**

<b>Trial #</b>	<b>Test Freq. (MHz)</b>	<b>Pulse Width (us)</b>	<b>PRI (us)</b>	<b>Pulses / Burst</b>	<b>1=Detection 0=No Detection</b>
1	5550	2.6	221	23	1
2	5549	4.6	198	27	1
3	5548	1.1	184	29	1
4	5552	4.8	203	24	1
5	5550	2.4	162	25	1
6	5558	3.4	204	28	1
7	5550	2.3	170	27	1
8	5544	3.5	184	23	1
9	5553	4.9	150	27	1
10	5552	4.6	211	29	1
11	5545	2.9	158	23	1
12	5558	2.6	226	27	1
13	5550	1.6	204	26	1
14	5545	3.9	181	25	1
15	5541	4.6	202	24	1
16	5543	4.1	194	27	1
17	5545	2.3	193	28	1
18	5553	3.9	173	29	1
19	5542	4.3	188	23	1
20	5556	1.5	215	26	1
21	5553	4.9	227	27	1
22	5546	1.1	199	23	0
23	5558	4.5	155	29	1
24	5550	4.0	190	27	1
25	5544	2.4	151	23	1
26	5551	2.5	180	28	1
27	5558	2.5	228	23	1
28	5556	2.5	203	25	1
29	5549	1.5	188	25	1
30	5551	1.9	217	24	1
Detection Percentage (%)					96.667
Limit					60%
<b>Test Result</b>					<b>Complied</b>

**Type 3 Radar Statistical Performance**

<b>Trial #</b>	<b>Test Freq. (MHz)</b>	<b>Pulse Width (us)</b>	<b>PRI (us)</b>	<b>Pulses / Burst</b>	<b>1=Detection ; 0=No Detection</b>
1	5544	8.0	205	16	1
2	5549	6.7	382	18	1
3	5542	8.6	418	16	1
4	5555	9.4	351	17	1
5	5543	7.4	383	18	1
6	5547	9.8	232	16	1
7	5549	9.1	377	17	1
8	5545	9.6	457	16	1
9	5546	8.0	471	18	1
10	5553	9.0	304	18	1
11	5552	8.0	316	17	1
12	5550	9.8	325	16	1
13	5542	8.0	409	17	1
14	5553	9.9	200	17	1
15	5551	8.8	458	16	0
16	5551	8.0	232	18	1
17	5542	8.3	250	16	1
18	5548	8.7	270	16	1
19	5553	7.7	350	17	1
20	5556	7.1	230	16	1
21	5556	7.3	416	18	1
22	5552	7.6	498	18	1
23	5541	7.3	286	17	1
24	5553	7.3	287	16	1
25	5549	7.5	462	17	1
26	5548	6.2	300	17	1
27	5547	6.4	323	18	1
28	5542	7.1	420	16	1
29	5554	7.2	395	18	1
30	5547	8.4	377	16	1
Detection Percentage (%)					96.667
Limit					60%
<b>Test Result</b>					<b>Complied</b>



**Type 4 Radar Statistical Performance**

<b>Trial #</b>	<b>Test Freq. (MHz)</b>	<b>Pulse Width (us)</b>	<b>PRI (us)</b>	<b>Pulses / Burst</b>	<b>1=Detection 0=No Detection</b>
1	5550	18.0	242	15	1
2	5549	19.9	279	12	1
3	5550	12.9	487	14	1
4	5545	15.0	452	13	1
5	5544	16.3	230	12	1
6	5548	19.8	238	13	1
7	5541	18.2	420	16	1
8	5548	16.3	452	15	1
9	5543	14.2	495	12	1
10	5550	17.8	228	16	1
11	5558	19.1	211	16	1
12	5542	18.4	283	15	1
13	5547	11.8	411	12	1
14	5551	14.2	284	13	1
15	5554	13.9	202	12	0
16	5556	17.8	340	14	1
17	5541	15.6	290	16	1
18	5556	14.6	250	16	1
19	5555	14.4	484	15	1
20	5547	18.9	387	13	1
21	5549	11.1	348	15	1
22	5558	13.8	291	16	1
23	5556	14.3	295	12	1
24	5546	12.5	300	12	1
25	5552	12.5	322	14	1
26	5547	12.5	383	13	1
27	5548	15.7	322	16	1
28	5546	19.8	469	13	1
29	5543	18.6	406	15	1
30	5550	15.9	238	14	1
Detection Percentage (%)					96.667
Limit					60%
<b>Test Result</b>					<b>Complied</b>

**Total Type 1~4 Radar Statistical Performance**

<b>Radar Type #</b>	<b>Detection Percentage (%)</b>
1	96.667
2	96.667
3	96.667
4	96.667
Aggregate (Radar Types 1-4)	96.667
Limit	80%
<b>Test Result</b>	<b>Complied</b>



**Type 5 Radar Statistical Performance**

Center Freq. (MHz)	Low Edge (MHz)	High Edge (MHz)	VSG Freq. (MHz)	Detection
Trial	Chirp	Offset		
1	5	2	5550	1
2	20	8	5550	0
3	7	2.8	5550	1
4	8	3.2	5550	1
5	9	3.6	5550	1
6	10	4	5550	1
7	11	4.4	5550	1
8	12	4.8	5550	1
9	13	5.2	5550	1
10	14	5.6	5550	1
11	15	6	5547	1
12	16	6.4	5547	1
13	17	6.8	5548	1
14	20	8	5549	1
15	19	7.6	5549	1
16	18	7.2	5548	1
17	17	6.8	5548	1
18	16	6.4	5547	1
19	15	6	5547	1
20	14	5.6	5547	1
21	13	5.2	5552	1
22	12	4.8	5553	1
23	11	4.4	5553	1
24	10	4	5554	1
25	9	3.6	5554	1
26	8	3.2	5554	1
27	18	7.2	5555	1
28	19	7.6	5551	1
29	20	8	5550	0
30	5	2	5550	0
Total				27
Detection Percentage (%)				90%
Limit				80%
<b>Test Result</b>				<b>Complied</b>



<b>Trial Number</b>			1			
<b>Number of Bursts in Trial</b>			8			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	62.1	5	-	-	1091
2	2	56	5	1729	-	133
3	2	91.3	5	1230	-	1057
4	3	50.7	5	1762	1616	1442
5	2	92.6	5	1723	-	544
6	2	87.3	5	1302	-	1089
7	2	59.5	5	1291	-	1374
8	2	52.2	5	1653	-	1237
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			2			
<b>Number of Bursts in Trial</b>			9			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	3	90	20	1007	1326	30
2	2	73.7	20	1785	-	979
3	1	78.1	20	-	-	683
4	2	92.4	20	1281	-	950
5	1	61.2	20	-	-	612
6	3	67.2	20	1525	1870	17
7	1	78.5	20	-	-	429
8	2	60.3	20	1931	-	936
9	3	92.9	20	1403	1476	548
Detection Check (1=Detection; 0=No Detection)						0



<b>Trial Number</b>			3			
<b>Number of Bursts in Trial</b>			10			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	3	63.4	7	1574	1607	801
2	1	98	7	-	-	966
3	1	58.7	7	-	-	185
4	1	88	7	-	-	1012
5	3	79.5	7	1562	1370	943
6	3	57.1	7	1900	1188	686
7	2	64.4	7	1090	-	599
8	1	78.7	7	-	-	1089
9	1	69.3	7	-	-	188
10	3	55.3	7	1375	1691	933
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			4			
<b>Number of Bursts in Trial</b>			11			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	74.3	8	1642	-	24
2	1	83.1	8	-	-	985
3	2	59.5	8	1680	-	988
4	2	59.8	8	1786	-	800
5	2	77.6	8	1617	-	339
6	2	79.9	8	1553	-	1040
7	1	56	8	-	-	544
8	3	71.4	8	1406	1927	452
9	1	97.4	8	-	-	204
10	2	98.3	8	1037	-	926
11	1	63.6	8	-	-	1052
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			5			
<b>Number of Bursts in Trial</b>			12			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	50	9	-	-	557
2	2	62.5	9	1731	-	567
3	2	55.4	9	1070	-	460
4	1	65.7	9	-	-	4
5	2	58	9	1512	-	64
6	2	60.9	9	1230	-	650
7	3	89.6	9	1598	1738	235
8	3	84.4	9	1271	1617	873
9	3	72.3	9	1498	1321	901
10	1	58.9	9	-	-	663
11	2	74.8	9	1584	-	919
12	1	71.8	9	-	-	375
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			6			
<b>Number of Bursts in Trial</b>			13			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	88.1	10	1257	-	846
2	1	58.7	10	-	-	725
3	2	97.1	10	1037	-	30
4	3	83.1	10	1029	1106	490
5	1	62.1	10	-	-	262
6	2	71.4	10	1058	-	283
7	2	86.3	10	1867	-	49
8	3	77.3	10	1418	1876	634
9	1	78.9	10	-	-	304
10	3	79.2	10	1055	1572	564
11	3	52	10	1582	1836	852
12	3	56.5	10	1195	1542	525
13	3	100	10	1638	1729	750
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			7			
<b>Number of Bursts in Trial</b>			14			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	92.7	11	1208	-	231
2	2	81.3	11	1144	-	804
3	2	60.4	11	1555	-	34
4	2	62.1	11	1320	-	427
5	1	50	11	-	-	577
6	3	65.9	11	1020	1365	3
7	2	73.8	11	1308	-	51
8	2	74.3	11	1143	-	360
9	1	62.9	11	-	-	394
10	2	74.8	11	1404	-	317
11	2	69.7	11	1309	-	532
12	2	69.8	11	1688	-	339
13	2	77.4	11	1857	-	381
14	1	55.1	11	-	-	426
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			8			
<b>Number of Bursts in Trial</b>			15			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	91.7	12	-	-	776
2	2	90	12	1196	-	187
3	3	92.3	12	1486	1853	448
4	2	66.8	12	1545	-	702
5	1	64	12	-	-	403
6	3	95.4	12	1123	1473	230
7	3	66.8	12	1867	1401	604
8	3	67.7	12	1472	1397	38
9	1	68.2	12	-	-	735
10	2	82.2	12	1297	-	610
11	1	92.1	12	-	-	618
12	2	57	12	1764	-	705
13	2	58.5	12	1310	-	22
14	3	85.5	12	1630	1447	641
15	2	82.2	12	1371	-	109
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			9			
<b>Number of Bursts in Trial</b>			16			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	74.4	13	1707	-	442
2	2	63.6	13	1725	-	280
3	2	71.3	13	1704	-	459
4	3	77.6	13	1063	1405	197
5	3	65.2	13	1731	1294	101
6	3	55.1	13	1109	1549	17
7	2	96.8	13	1034	-	131
8	3	80.8	13	1533	1051	365
9	1	60.4	13	-	-	222
10	2	61.8	13	1312	-	371
11	2	71.3	13	1657	-	33
12	2	98.1	13	1024	-	291
13	1	57.9	13	-	-	188
14	1	91.8	13	-	-	163
15	2	56.7	13	1259	-	426
16	2	89.7	13	1690	-	606
<b>Detection Check (1=Detection; 0=No Detection)</b>						1





<b>Trial Number</b>			10			
<b>Number of Bursts in Trial</b>			17			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	74.4	14	1107	-	462
2	1	87.6	14	-	-	653
3	2	61.7	14	1741	-	457
4	2	57.5	14	1566	-	388
5	2	66.1	14	1855	-	63
6	3	70.1	14	1044	1012	136
7	1	66.4	14	-	-	343
8	1	59.2	14	-	-	349
9	2	88.3	14	1240	-	362
10	1	64.7	14	-	-	221
11	2	73	14	1703	-	144
12	2	81.7	14	1450	-	671
13	3	70.1	14	1741	1278	320
14	1	63.6	14	-	-	196
15	1	58.7	14	-	-	413
16	2	65.9	14	1478	-	170
17	1	72.7	14	-	-	564
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			11			
<b>Number of Bursts in Trial</b>			18			
<b>Chirp Center Frequency</b>			5547			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	72.1	15	1193	-	130
2	3	76.3	15	1484	1390	114
3	1	86.1	15	-	-	14
4	1	73.2	15	-	-	604
5	1	81.2	15	-	-	548
6	2	99.5	15	1398	-	173
7	1	93.9	15	-	-	262
8	2	75.9	15	1921	-	38
9	3	79.2	15	1100	1429	84
10	3	77	15	1166	1799	610
11	1	91.8	15	-	-	339
12	3	56.8	15	1330	1556	580
13	2	83.1	15	1556	-	295
14	2	63	15	1552	-	156
15	1	65.7	15	-	-	439
16	1	64.5	15	-	-	188
17	1	88.5	15	-	-	419
18	1	60.6	15	-	-	205
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			12			
<b>Number of Bursts in Trial</b>			19			
<b>Chirp Center Frequency</b>			5547			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	90.5	16	1299	-	381
2	2	88.4	16	1418	-	327
3	2	53.7	16	1055	-	536
4	1	80.5	16	-	-	285
5	1	50.4	16	-	-	398
6	2	61.2	16	1749	-	439
7	2	78.8	16	1065	-	129
8	3	75	16	1748	1820	325
9	2	96.7	16	1254	-	440
10	3	76.3	16	1848	1106	397
11	1	73.3	16	-	-	232
12	2	92.4	16	1317	-	91
13	2	92.4	16	1854	-	256
14	3	64.4	16	1240	1634	582
15	2	67.3	16	1473	-	117
16	2	84.1	16	1795	-	202
17	1	80.9	16	-	-	135
18	1	74.6	16	-	-	396
19	2	97.6	16	1805	-	615
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			13			
<b>Number of Bursts in Trial</b>			20			
<b>Chirp Center Frequency</b>			5547			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	66.1	17	1417	-	388
2	2	86.7	17	1693	-	348
3	2	70.5	17	1263	-	215
4	2	78	17	1446	-	28
5	2	66	17	1185	-	585
6	2	80.6	17	1855	-	65
7	1	95.5	17	-	-	92
8	1	98.8	17	-	-	68
9	3	64.3	17	1641	1108	517
10	1	75.1	17	-	-	121
11	2	72.6	17	1499	-	448
12	1	60.3	17	-	-	567
13	2	54.9	17	1056	-	245
14	2	98.8	17	1023	-	584
15	2	60.9	17	1243	-	579
16	2	62.7	17	1226	-	464
17	1	80.1	17	-	-	89
18	2	70.9	17	1711	-	153
19	1	90.7	17	-	-	282
20	1	98.9	17	-	-	71
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			14			
<b>Number of Bursts in Trial</b>			8			
<b>Chirp Center Frequency</b>			5549			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	67.5	20	1542	-	947
2	3	83.6	20	1272	1696	124
3	2	93.2	20	1877	-	701
4	1	55.6	20	-	-	1123
5	3	84.2	20	1733	1619	756
6	3	69.1	20	1612	1071	1
7	2	66.9	20	1905	-	7
8	3	86.8	20	1697	1621	1082
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			15			
<b>Number of Bursts in Trial</b>			9			
<b>Chirp Center Frequency</b>			5549			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	62.2	19	1571	-	949
2	2	85	19	1669	-	189
3	2	64.5	19	1505	-	176
4	2	50.4	19	1325	-	538
5	2	66.1	19	1483	-	908
6	2	71.2	19	1110	-	1017
7	3	53.7	19	1445	1677	492
8	3	62.5	19	1596	1341	349
9	3	62	19	1929	1221	1105
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			16			
<b>Number of Bursts in Trial</b>			10			
<b>Chirp Center Frequency</b>			5549			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	80.5	18	1910	-	284
2	2	64.2	18	1661	-	751
3	2	90.1	18	1041	-	491
4	2	69.8	18	1495	-	107
5	1	73.1	18	-	-	490
6	3	77.2	18	1418	1145	1155
7	3	52.6	18	1732	1787	772
8	2	71.4	18	1562	-	121
9	2	89.8	18	1491	-	89
10	2	76.4	18	1355	-	615
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			17			
<b>Number of Bursts in Trial</b>			11			
<b>Chirp Center Frequency</b>			5548			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	51.2	17	1236	-	740
2	1	71.7	17	-	-	941
3	2	74.7	17	1164	-	370
4	2	50.9	17	1919	-	371
5	2	65.2	17	1206	-	1033
6	2	98	17	1182	-	346
7	2	58.7	17	1612	-	639
8	1	63.8	17	-	-	1056
9	3	86.3	17	1545	1065	205
10	1	94.4	17	-	-	753
11	3	88.5	17	1699	1319	58
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			18			
<b>Number of Bursts in Trial</b>			12			
<b>Chirp Center Frequency</b>			5547			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	88.7	16	1405	-	448
2	3	90.2	16	1544	1235	621
3	1	96.5	16	-	-	512
4	2	80.5	16	1090	-	321
5	2	63.7	16	1268	-	798
6	1	53.4	16	-	-	809
7	2	52.3	16	1043	-	301
8	3	54.7	16	1701	1104	796
9	3	75.6	16	1923	1729	669
10	2	59.2	16	1244	-	369
11	1	56.3	16	-	-	51
12	2	87.8	16	1608	-	733
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			19			
<b>Number of Bursts in Trial</b>			13			
<b>Chirp Center Frequency</b>			5547			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	68.2	15	1104	-	229
2	2	58.4	15	1627	-	488
3	3	74.7	15	1861	1015	137
4	2	58.2	15	1593	-	520
5	1	51.6	15	-	-	799
6	2	94.7	15	1469	-	43
7	2	70.7	15	1091	-	126
8	2	82.9	15	1472	-	607
9	3	62.7	15	1168	1453	527
10	2	63.1	15	1529	-	143
11	1	96.1	15	-	-	176
12	2	57	15	1457	-	882
13	3	95.6	15	1707	1501	214
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			20			
<b>Number of Bursts in Trial</b>			14			
<b>Chirp Center Frequency</b>			5547			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	95.7	14	-	-	117
2	1	93.1	14	-	-	720
3	1	55.8	14	-	-	297
4	1	76.7	14	-	-	284
5	2	68	14	1686	-	472
6	3	94.1	14	1796	1393	264
7	2	53.9	14	1293	-	525
8	1	99.3	14	-	-	155
9	2	73.3	14	1458	-	65
10	2	93.3	14	1196	-	451
11	3	55.8	14	1895	1034	243
12	1	66.4	14	-	-	228
13	2	65.6	14	1732	-	746
14	2	76.5	14	1187	-	522
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			21			
<b>Number of Bursts in Trial</b>			15			
<b>Chirp Center Frequency</b>			5552			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	85.1	13	-	-	565
2	2	72.5	13	1648	-	211
3	1	67.5	13	-	-	348
4	2	56.1	13	1360	-	156
5	1	71.1	13	-	-	718
6	2	93.1	13	1391	-	400
7	1	56.5	13	-	-	482
8	1	63.8	13	-	-	703
9	2	67.4	13	1727	-	780
10	1	52.3	13	-	-	102
11	3	62.4	13	1228	1715	304
12	2	53.3	13	1630	-	57
13	2	83.1	13	1205	-	768
14	2	93.7	13	1085	-	461
15	2	90.7	13	1297	-	746
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			22			
<b>Number of Bursts in Trial</b>			16			
<b>Chirp Center Frequency</b>			5553			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	98.8	12	1439	-	95
2	1	54.5	12	-	-	676
3	2	80.5	12	1360	-	8
4	2	55.9	12	1906	-	373
5	2	72.1	12	1623	-	254
6	2	84.4	12	1604	-	480
7	1	78.5	12	-	-	663
8	1	88	12	-	-	314
9	2	74.7	12	1157	-	596
10	2	97.1	12	1673	-	264
11	1	81.6	12	-	-	740
12	1	83.6	12	-	-	163
13	3	87.6	12	1757	1322	628
14	2	58.5	12	1372	-	132
15	3	91.8	12	1767	1183	106
16	2	58.8	12	1432	-	659
Detection Check (1=Detection; 0=No Detection)						1





<b>Trial Number</b>			23			
<b>Number of Bursts in Trial</b>			17			
<b>Chirp Center Frequency</b>			5553			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	96	11	-	-	284
2	2	92.5	11	1241	-	488
3	2	89.5	11	1347	-	76
4	2	74.8	11	1607	-	688
5	2	60.6	11	1523	-	28
6	2	71.5	11	1659	-	383
7	2	71.1	11	1454	-	182
8	1	98.7	11	-	-	20
9	2	85.1	11	1770	-	576
10	2	89.2	11	1086	-	410
11	2	60.7	11	1101	-	458
12	2	75.2	11	1719	-	348
13	2	75.7	11	1799	-	481
14	3	56.7	11	1132	1884	587
15	2	65	11	1885	-	480
16	2	64.6	11	1910	-	195
17	3	69.9	11	1410	1190	396
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			24			
<b>Number of Bursts in Trial</b>			18			
<b>Chirp Center Frequency</b>			5554			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	3	83.8	10	1290	1021	536
2	2	66.9	10	1112	-	44
3	3	91	10	1220	1504	611
4	2	86.1	10	1678	-	456
5	3	65.5	10	1928	1222	330
6	1	62.6	10	-	-	297
7	3	68.7	10	1505	1200	351
8	3	59.2	10	1452	1114	230
9	1	73.9	10	-	-	222
10	1	77.2	10	-	-	57
11	2	96.4	10	1357	-	399
12	2	99.9	10	1173	-	299
13	2	99.9	10	1520	-	464
14	1	86.7	10	-	-	294
15	1	92.6	10	-	-	653
16	1	77.1	10	-	-	550
17	2	81.1	10	1664	-	566
18	3	68.4	10	1536	1309	580
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			25			
<b>Number of Bursts in Trial</b>			19			
<b>Chirp Center Frequency</b>			5554			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	3	68.2	9	1723	1868	471
2	3	83.7	9	1711	1405	368
3	2	69.7	9	1781	-	425
4	1	59.7	9	-	-	440
5	2	96.7	9	1484	-	123
6	2	95.8	9	1319	-	261
7	3	71.3	9	1095	1354	332
8	3	53.2	9	1527	1427	427
9	2	69.5	9	1771	-	397
10	3	63.9	9	1075	1447	67
11	2	93.4	9	1783	-	174
12	2	77.3	9	1564	-	17
13	2	73.1	9	1294	-	216
14	1	77.4	9	-	-	292
15	3	57.2	9	1722	1886	619
16	2	68.7	9	1629	-	233
17	1	60.8	9	-	-	226
18	3	69.7	9	1128	1224	599
19	1	62.2	9	-	-	433
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			26			
<b>Number of Bursts in Trial</b>			20			
<b>Chirp Center Frequency</b>			5554			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	80.5	8	-	-	90
2	3	62.6	8	1406	1343	319
3	3	85.6	8	1190	1529	384
4	2	83.9	8	1208	-	567
5	2	92.4	8	1488	-	234
6	2	54	8	1529	-	535
7	3	81.3	8	1501	1812	325
8	1	98.5	8	-	-	532
9	1	85.8	8	-	-	272
10	2	84.7	8	1593	-	182
11	2	83.3	8	1705	-	134
12	2	79.8	8	1567	-	286
13	1	77.9	8	-	-	368
14	3	98.4	8	1510	1569	290
15	2	79.9	8	1588	-	231
16	3	78	8	1140	1353	353
17	3	55.2	8	1700	1327	53
18	3	71.9	8	1081	1224	44
19	1	62	8	-	-	298
20	3	70.5	8	1888	1442	529
<b>Detection Check (1=Detection; 0=No Detection)</b>						1

<b>Trial Number</b>			27			
<b>Number of Bursts in Trial</b>			8			
<b>Chirp Center Frequency</b>			5555			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	69.1	18	1076	-	1436
2	2	62.1	18	1688	-	22
3	2	94.8	18	1891	-	897
4	1	75.8	18	-	-	1186
5	2	65.4	18	1713	-	589
6	2	97.7	18	1292	-	614
7	3	98.1	18	1670	1711	506
8	2	85.4	18	1672	-	776
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			28			
<b>Number of Bursts in Trial</b>			9			
<b>Chirp Center Frequency</b>			5551			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	3	82	19	1233	1713	679
2	3	87.7	19	1554	1123	473
3	2	98.9	19	1518	-	869
4	1	55	19	-	-	719
5	1	93.6	19	-	-	902
6	2	58.7	19	1641	-	1243
7	2	88.7	19	1387	-	410
8	1	60.3	19	-	-	1154
9	1	97.7	19	-	-	512
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			29			
<b>Number of Bursts in Trial</b>			10			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	69.6	20	-	-	1131
2	1	74.5	20	-	-	290
3	1	60.9	20	-	-	895
4	1	74.6	20	-	-	202
5	2	99.3	20	1501	-	139
6	2	95.3	20	1065	-	854
7	2	91.9	20	1722	-	219
8	2	51	20	1285	-	57
9	2	87.7	20	1747	-	141
10	1	87.2	20	-	-	596
Detection Check (1=Detection; 0=No Detection)						0



<b>Trial Number</b>			30			
<b>Number of Bursts in Trial</b>			11			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	3	59.9	5	1901	1196	935
2	2	77.1	5	1590	-	1038
3	2	62.7	5	1227	-	690
4	1	77.1	5	-	-	547
5	3	99.8	5	1798	1790	551
6	2	61.5	5	1135	-	876
7	2	77.5	5	1583	-	448
8	2	57.3	5	1890	-	736
9	2	53.5	5	1757	-	362
10	1	66.6	5	-	-	836
11	3	80.7	5	1811	1289	410
<b>Detection Check (1=Detection; 0=No Detection)</b>						0

**Type 6 Radar Statistical Performance**

Trial #	Test Freq. (MHz)	Pulses / Hop	Pulse Width (us)	PRI (us)	1=Detection 0=No Detection
1	5550	9	1	333	1
2	5550	9	1	333	1
3	5550	9	1	333	1
4	5550	9	1	333	1
5	5550	9	1	333	1
6	5550	9	1	333	1
7	5550	9	1	333	1
8	5550	9	1	333	1
9	5550	9	1	333	1
10	5550	9	1	333	1
11	5550	9	1	333	1
12	5550	9	1	333	1
13	5550	9	1	333	1
14	5550	9	1	333	1
15	5550	9	1	333	1
16	5550	9	1	333	1
17	5550	9	1	333	1
18	5550	9	1	333	1
19	5550	9	1	333	1
20	5550	9	1	333	1
21	5550	9	1	333	1
22	5550	9	1	333	1
23	5550	9	1	333	1
24	5550	9	1	333	1
25	5550	9	1	333	1
26	5550	9	1	333	1
27	5550	9	1	333	1
28	5550	9	1	333	1
29	5550	9	1	333	1
30	5550	9	1	333	1
Detection Percentage (%)					100.000
Limit					70%
<b>Test Result</b>					<b>Complied</b>

**Modulation Mode: 802.11ac (VHT80)****Type 1 Radar Statistical Performance**

<b>Trial #</b>	<b>Test Freq. (MHz)</b>	<b>Pulse Repetition Frequency Number</b>	<b>Pulse Repetition Frequency (Pulse Per Second)</b>	<b>PRI (us)</b>	<b>1=Detection 0=No Detection</b>
1	5542	1	1930.5	518	1
2	5576	23	326.2	3066	1
3	5580	19	1139.0	878	1
4	5515	12	1355.0	738	1
5	5587	4	1730.1	578	1
6	5582	8	1519.8	658	1
7	5556	15	1253.1	798	1
8	5550	6	1618.1	618	1
9	5535	14	1285.3	778	1
10	5587	3	1792.1	558	0
11	5526	13	1319.3	758	1
12	5513	9	1474.9	678	1
13	5533	7	1567.4	638	1
14	5556	17	1193.3	838	1
15	5514	10	1432.7	698	1
16	5538	-	1692.0	591	1
17	5527	-	328.1	3048	1
18	5578	-	373.4	2678	1
19	5545	-	574.4	1741	1
20	5516	-	1216.5	822	1
21	5558	-	801.3	1248	1
22	5543	-	488.5	2047	1
23	5518	-	956.0	1046	0
24	5521	-	517.6	1932	1
25	5549	-	1422.5	703	1
26	5578	-	542.0	1845	1
27	5521	-	741.3	1349	1
28	5538	-	881.8	1134	1
29	5523	-	427.4	2340	1
30	5526	-	628.9	1590	1
<b>Detection Percentage (%)</b>					<b>93.333</b>
<b>Limit</b>					<b>60%</b>
<b>Test Result</b>					<b>Complied</b>



**Type 2 Radar Statistical Performance**

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5561	2.6	221	23	1
2	5529	4.6	198	27	1
3	5557	1.1	184	29	1
4	5513	4.8	203	24	1
5	5560	2.4	162	25	1
6	5513	3.4	204	28	1
7	5555	2.3	170	27	1
8	5585	3.5	184	23	1
9	5560	4.9	150	27	0
10	5558	4.6	211	29	1
11	5567	2.9	158	23	1
12	5548	2.6	226	27	1
13	5568	1.6	204	26	1
14	5517	3.9	181	25	1
15	5516	4.6	202	24	1
16	5537	4.1	194	27	1
17	5574	2.3	193	28	1
18	5555	3.9	173	29	1
19	5572	4.3	188	23	1
20	5529	1.5	215	26	1
21	5531	4.9	227	27	1
22	5548	1.1	199	23	1
23	5574	4.5	155	29	1
24	5519	4.0	190	27	0
25	5559	2.4	151	23	1
26	5583	2.5	180	28	1
27	5551	2.5	228	23	1
28	5537	2.5	203	25	1
29	5587	1.5	188	25	1
30	5532	1.9	217	24	1
Detection Percentage (%)					93.333
Limit					60%
<b>Test Result</b>					<b>Complied</b>

**Type 3 Radar Statistical Performance**

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5564	8.0	205	16	1
2	5570	6.7	382	18	1
3	5523	8.6	418	16	1
4	5556	9.4	351	17	1
5	5534	7.4	383	18	1
6	5527	9.8	232	16	1
7	5577	9.1	377	17	1
8	5574	9.6	457	16	1
9	5512	8.0	471	18	1
10	5557	9.0	304	18	1
11	5555	8.0	316	17	0
12	5575	9.8	325	16	1
13	5519	8.0	409	17	1
14	5533	9.9	200	17	1
15	5527	8.8	458	16	1
16	5539	8.0	232	18	1
17	5569	8.3	250	16	0
18	5525	8.7	270	16	1
19	5575	7.7	350	17	1
20	5529	7.1	230	16	1
21	5520	7.3	416	18	1
22	5567	7.6	498	18	1
23	5522	7.3	286	17	1
24	5517	7.3	287	16	0
25	5548	7.5	462	17	1
26	5549	6.2	300	17	1
27	5527	6.4	323	18	1
28	5534	7.1	420	16	1
29	5538	7.2	395	18	1
30	5552	8.4	377	16	1
Detection Percentage (%)					90.000
Limit					60%
<b>Test Result</b>					<b>Complied</b>

**Type 4 Radar Statistical Performance**

<b>Trial #</b>	<b>Test Freq. (MHz)</b>	<b>Pulse Width (us)</b>	<b>PRI (us)</b>	<b>Pulses / Burst</b>	<b>1=Detection 0=No Detection</b>
1	5561	18.0	242	15	1
2	5585	19.9	279	12	1
3	5566	12.9	487	14	0
4	5553	15.0	452	13	1
5	5570	16.3	230	12	1
6	5580	19.8	238	13	1
7	5575	18.2	420	16	1
8	5552	16.3	452	15	1
9	5521	14.2	495	12	1
10	5554	17.8	228	16	1
11	5545	19.1	211	16	1
12	5586	18.4	283	15	1
13	5538	11.8	411	12	1
14	5553	14.2	284	13	1
15	5586	13.9	202	12	1
16	5584	17.8	340	14	1
17	5562	15.6	290	16	1
18	5567	14.6	250	16	0
19	5546	14.4	484	15	1
20	5538	18.9	387	13	1
21	5517	11.1	348	15	1
22	5567	13.8	291	16	1
23	5538	14.3	295	12	0
24	5584	12.5	300	12	1
25	5513	12.5	322	14	1
26	5587	12.5	383	13	1
27	5584	15.7	322	16	1
28	5563	19.8	469	13	1
29	5512	18.6	406	15	1
30	5581	15.9	238	14	1
Detection Percentage (%)					90.000
Limit					60%
<b>Test Result</b>					<b>Complied</b>

**Total Type 1~4 Radar Statistical Performance**

<b>Radar Type #</b>	<b>Detection Percentage (%)</b>
1	93.333
2	93.333
3	90.000
4	90.000
Aggregate (Radar Types 1-4)	91.667
Limit	80%
<b>Test Result</b>	<b>Complied</b>

**Type 5 Radar Statistical Performance**

Center Freq. (MHz)	Low Edge (MHz)	High Edge (MHz)	VSG Freq. (MHz)	Detection
Trial	Chirp	Offset		
1	5	2	5550	1
2	20	8	5550	1
3	7	2.8	5550	1
4	8	3.2	5550	1
5	9	3.6	5550	1
6	10	4	5550	1
7	11	4.4	5550	1
8	12	4.8	5550	1
9	13	5.2	5550	1
10	14	5.6	5550	1
11	15	6	5518	1
12	16	6.4	5518	1
13	17	6.8	5519	1
14	20	8	5520	1
15	19	7.6	5520	1
16	18	7.2	5519	1
17	17	6.8	5519	1
18	16	6.4	5518	1
19	15	6	5518	0
20	14	5.6	5518	1
21	13	5.2	5582	1
22	12	4.8	5583	1
23	11	4.4	5583	1
24	10	4	5584	1
25	9	3.6	5584	1
26	8	3.2	5584	1
27	18	7.2	5585	1
28	19	7.6	5581	1
29	20	8	5580	1
30	5	2	5580	0
Total				28
Detection Percentage (%)				93%
Limit				80%
Test Result				Complied



<b>Trial Number</b>			1			
<b>Number of Bursts in Trial</b>			8			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	62.1	5	-	-	1091
2	2	56	5	1729	-	133
3	2	91.3	5	1230	-	1057
4	3	50.7	5	1762	1616	1442
5	2	92.6	5	1723	-	544
6	2	87.3	5	1302	-	1089
7	2	59.5	5	1291	-	1374
8	2	52.2	5	1653	-	1237
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			2			
<b>Number of Bursts in Trial</b>			9			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	3	90	20	1007	1326	30
2	2	73.7	20	1785	-	979
3	1	78.1	20	-	-	683
4	2	92.4	20	1281	-	950
5	1	61.2	20	-	-	612
6	3	67.2	20	1525	1870	17
7	1	78.5	20	-	-	429
8	2	60.3	20	1931	-	936
9	3	92.9	20	1403	1476	548
Detection Check (1=Detection; 0=No Detection)						1



Trial Number			3			
Number of Bursts in Trial			10			
Chirp Center Frequency			5550			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	63.4	7	1574	1607	801
2	1	98	7	-	-	966
3	1	58.7	7	-	-	185
4	1	88	7	-	-	1012
5	3	79.5	7	1562	1370	943
6	3	57.1	7	1900	1188	686
7	2	64.4	7	1090	-	599
8	1	78.7	7	-	-	1089
9	1	69.3	7	-	-	188
10	3	55.3	7	1375	1691	933
Detection Check (1=Detection; 0=No Detection)						1

Trial Number			4			
Number of Bursts in Trial			11			
Chirp Center Frequency			5550			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	74.3	8	1642	-	24
2	1	83.1	8	-	-	985
3	2	59.5	8	1680	-	988
4	2	59.8	8	1786	-	800
5	2	77.6	8	1617	-	339
6	2	79.9	8	1553	-	1040
7	1	56	8	-	-	544
8	3	71.4	8	1406	1927	452
9	1	97.4	8	-	-	204
10	2	98.3	8	1037	-	926
11	1	63.6	8	-	-	1052
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			5			
<b>Number of Bursts in Trial</b>			12			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	50	9	-	-	557
2	2	62.5	9	1731	-	567
3	2	55.4	9	1070	-	460
4	1	65.7	9	-	-	4
5	2	58	9	1512	-	64
6	2	60.9	9	1230	-	650
7	3	89.6	9	1598	1738	235
8	3	84.4	9	1271	1617	873
9	3	72.3	9	1498	1321	901
10	1	58.9	9	-	-	663
11	2	74.8	9	1584	-	919
12	1	71.8	9	-	-	375
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			6			
<b>Number of Bursts in Trial</b>			13			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	88.1	10	1257	-	846
2	1	58.7	10	-	-	725
3	2	97.1	10	1037	-	30
4	3	83.1	10	1029	1106	490
5	1	62.1	10	-	-	262
6	2	71.4	10	1058	-	283
7	2	86.3	10	1867	-	49
8	3	77.3	10	1418	1876	634
9	1	78.9	10	-	-	304
10	3	79.2	10	1055	1572	564
11	3	52	10	1582	1836	852
12	3	56.5	10	1195	1542	525
13	3	100	10	1638	1729	750
Detection Check (1=Detection; 0=No Detection)						1





<b>Trial Number</b>			7			
<b>Number of Bursts in Trial</b>			14			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	92.7	11	1208	-	231
2	2	81.3	11	1144	-	804
3	2	60.4	11	1555	-	34
4	2	62.1	11	1320	-	427
5	1	50	11	-	-	577
6	3	65.9	11	1020	1365	3
7	2	73.8	11	1308	-	51
8	2	74.3	11	1143	-	360
9	1	62.9	11	-	-	394
10	2	74.8	11	1404	-	317
11	2	69.7	11	1309	-	532
12	2	69.8	11	1688	-	339
13	2	77.4	11	1857	-	381
14	1	55.1	11	-	-	426
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			8			
<b>Number of Bursts in Trial</b>			15			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	91.7	12	-	-	776
2	2	90	12	1196	-	187
3	3	92.3	12	1486	1853	448
4	2	66.8	12	1545	-	702
5	1	64	12	-	-	403
6	3	95.4	12	1123	1473	230
7	3	66.8	12	1867	1401	604
8	3	67.7	12	1472	1397	38
9	1	68.2	12	-	-	735
10	2	82.2	12	1297	-	610
11	1	92.1	12	-	-	618
12	2	57	12	1764	-	705
13	2	58.5	12	1310	-	22
14	3	85.5	12	1630	1447	641
15	2	82.2	12	1371	-	109
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			9			
<b>Number of Bursts in Trial</b>			16			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	74.4	13	1707	-	442
2	2	63.6	13	1725	-	280
3	2	71.3	13	1704	-	459
4	3	77.6	13	1063	1405	197
5	3	65.2	13	1731	1294	101
6	3	55.1	13	1109	1549	17
7	2	96.8	13	1034	-	131
8	3	80.8	13	1533	1051	365
9	1	60.4	13	-	-	222
10	2	61.8	13	1312	-	371
11	2	71.3	13	1657	-	33
12	2	98.1	13	1024	-	291
13	1	57.9	13	-	-	188
14	1	91.8	13	-	-	163
15	2	56.7	13	1259	-	426
16	2	89.7	13	1690	-	606
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			10			
<b>Number of Bursts in Trial</b>			17			
<b>Chirp Center Frequency</b>			5550			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	74.4	14	1107	-	462
2	1	87.6	14	-	-	653
3	2	61.7	14	1741	-	457
4	2	57.5	14	1566	-	388
5	2	66.1	14	1855	-	63
6	3	70.1	14	1044	1012	136
7	1	66.4	14	-	-	343
8	1	59.2	14	-	-	349
9	2	88.3	14	1240	-	362
10	1	64.7	14	-	-	221
11	2	73	14	1703	-	144
12	2	81.7	14	1450	-	671
13	3	70.1	14	1741	1278	320
14	1	63.6	14	-	-	196
15	1	58.7	14	-	-	413
16	2	65.9	14	1478	-	170
17	1	72.7	14	-	-	564
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			11			
<b>Number of Bursts in Trial</b>			18			
<b>Chirp Center Frequency</b>			5518			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	72.1	15	1193	-	130
2	3	76.3	15	1484	1390	114
3	1	86.1	15	-	-	14
4	1	73.2	15	-	-	604
5	1	81.2	15	-	-	548
6	2	99.5	15	1398	-	173
7	1	93.9	15	-	-	262
8	2	75.9	15	1921	-	38
9	3	79.2	15	1100	1429	84
10	3	77	15	1166	1799	610
11	1	91.8	15	-	-	339
12	3	56.8	15	1330	1556	580
13	2	83.1	15	1556	-	295
14	2	63	15	1552	-	156
15	1	65.7	15	-	-	439
16	1	64.5	15	-	-	188
17	1	88.5	15	-	-	419
18	1	60.6	15	-	-	205
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			12			
<b>Number of Bursts in Trial</b>			19			
<b>Chirp Center Frequency</b>			5518			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	90.5	16	1299	-	381
2	2	88.4	16	1418	-	327
3	2	53.7	16	1055	-	536
4	1	80.5	16	-	-	285
5	1	50.4	16	-	-	398
6	2	61.2	16	1749	-	439
7	2	78.8	16	1065	-	129
8	3	75	16	1748	1820	325
9	2	96.7	16	1254	-	440
10	3	76.3	16	1848	1106	397
11	1	73.3	16	-	-	232
12	2	92.4	16	1317	-	91
13	2	92.4	16	1854	-	256
14	3	64.4	16	1240	1634	582
15	2	67.3	16	1473	-	117
16	2	84.1	16	1795	-	202
17	1	80.9	16	-	-	135
18	1	74.6	16	-	-	396
19	2	97.6	16	1805	-	615
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			13			
<b>Number of Bursts in Trial</b>			20			
<b>Chirp Center Frequency</b>			5519			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	66.1	17	1417	-	388
2	2	86.7	17	1693	-	348
3	2	70.5	17	1263	-	215
4	2	78	17	1446	-	28
5	2	66	17	1185	-	585
6	2	80.6	17	1855	-	65
7	1	95.5	17	-	-	92
8	1	98.8	17	-	-	68
9	3	64.3	17	1641	1108	517
10	1	75.1	17	-	-	121
11	2	72.6	17	1499	-	448
12	1	60.3	17	-	-	567
13	2	54.9	17	1056	-	245
14	2	98.8	17	1023	-	584
15	2	60.9	17	1243	-	579
16	2	62.7	17	1226	-	464
17	1	80.1	17	-	-	89
18	2	70.9	17	1711	-	153
19	1	90.7	17	-	-	282
20	1	98.9	17	-	-	71
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			14			
<b>Number of Bursts in Trial</b>			8			
<b>Chirp Center Frequency</b>			5520			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	67.5	20	1542	-	947
2	3	83.6	20	1272	1696	124
3	2	93.2	20	1877	-	701
4	1	55.6	20	-	-	1123
5	3	84.2	20	1733	1619	756
6	3	69.1	20	1612	1071	1
7	2	66.9	20	1905	-	7
8	3	86.8	20	1697	1621	1082
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			15			
<b>Number of Bursts in Trial</b>			9			
<b>Chirp Center Frequency</b>			5520			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	62.2	19	1571	-	949
2	2	85	19	1669	-	189
3	2	64.5	19	1505	-	176
4	2	50.4	19	1325	-	538
5	2	66.1	19	1483	-	908
6	2	71.2	19	1110	-	1017
7	3	53.7	19	1445	1677	492
8	3	62.5	19	1596	1341	349
9	3	62	19	1929	1221	1105
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			16			
<b>Number of Bursts in Trial</b>			10			
<b>Chirp Center Frequency</b>			5519			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	80.5	18	1910	-	284
2	2	64.2	18	1661	-	751
3	2	90.1	18	1041	-	491
4	2	69.8	18	1495	-	107
5	1	73.1	18	-	-	490
6	3	77.2	18	1418	1145	1155
7	3	52.6	18	1732	1787	772
8	2	71.4	18	1562	-	121
9	2	89.8	18	1491	-	89
10	2	76.4	18	1355	-	615
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			17			
<b>Number of Bursts in Trial</b>			11			
<b>Chirp Center Frequency</b>			5519			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	51.2	17	1236	-	740
2	1	71.7	17	-	-	941
3	2	74.7	17	1164	-	370
4	2	50.9	17	1919	-	371
5	2	65.2	17	1206	-	1033
6	2	98	17	1182	-	346
7	2	58.7	17	1612	-	639
8	1	63.8	17	-	-	1056
9	3	86.3	17	1545	1065	205
10	1	94.4	17	-	-	753
11	3	88.5	17	1699	1319	58
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			18			
<b>Number of Bursts in Trial</b>			12			
<b>Chirp Center Frequency</b>			5518			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	88.7	16	1405	-	448
2	3	90.2	16	1544	1235	621
3	1	96.5	16	-	-	512
4	2	80.5	16	1090	-	321
5	2	63.7	16	1268	-	798
6	1	53.4	16	-	-	809
7	2	52.3	16	1043	-	301
8	3	54.7	16	1701	1104	796
9	3	75.6	16	1923	1729	669
10	2	59.2	16	1244	-	369
11	1	56.3	16	-	-	51
12	2	87.8	16	1608	-	733
Detection Check (1=Detection; 0=No Detection)						1





<b>Trial Number</b>			19			
<b>Number of Bursts in Trial</b>			13			
<b>Chirp Center Frequency</b>			5518			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	68.2	15	1104	-	229
2	2	58.4	15	1627	-	488
3	3	74.7	15	1861	1015	137
4	2	58.2	15	1593	-	520
5	1	51.6	15	-	-	799
6	2	94.7	15	1469	-	43
7	2	70.7	15	1091	-	126
8	2	82.9	15	1472	-	607
9	3	62.7	15	1168	1453	527
10	2	63.1	15	1529	-	143
11	1	96.1	15	-	-	176
12	2	57	15	1457	-	882
13	3	95.6	15	1707	1501	214
Detection Check (1=Detection; 0=No Detection)						0

<b>Trial Number</b>			20			
<b>Number of Bursts in Trial</b>			14			
<b>Chirp Center Frequency</b>			5518			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	95.7	14	-	-	117
2	1	93.1	14	-	-	720
3	1	55.8	14	-	-	297
4	1	76.7	14	-	-	284
5	2	68	14	1686	-	472
6	3	94.1	14	1796	1393	264
7	2	53.9	14	1293	-	525
8	1	99.3	14	-	-	155
9	2	73.3	14	1458	-	65
10	2	93.3	14	1196	-	451
11	3	55.8	14	1895	1034	243
12	1	66.4	14	-	-	228
13	2	65.6	14	1732	-	746
14	2	76.5	14	1187	-	522
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			21			
<b>Number of Bursts in Trial</b>			15			
<b>Chirp Center Frequency</b>			5582			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	85.1	13	-	-	565
2	2	72.5	13	1648	-	211
3	1	67.5	13	-	-	348
4	2	56.1	13	1360	-	156
5	1	71.1	13	-	-	718
6	2	93.1	13	1391	-	400
7	1	56.5	13	-	-	482
8	1	63.8	13	-	-	703
9	2	67.4	13	1727	-	780
10	1	52.3	13	-	-	102
11	3	62.4	13	1228	1715	304
12	2	53.3	13	1630	-	57
13	2	83.1	13	1205	-	768
14	2	93.7	13	1085	-	461
15	2	90.7	13	1297	-	746
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			22			
<b>Number of Bursts in Trial</b>			16			
<b>Chirp Center Frequency</b>			5583			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	98.8	12	1439	-	95
2	1	54.5	12	-	-	676
3	2	80.5	12	1360	-	8
4	2	55.9	12	1906	-	373
5	2	72.1	12	1623	-	254
6	2	84.4	12	1604	-	480
7	1	78.5	12	-	-	663
8	1	88	12	-	-	314
9	2	74.7	12	1157	-	596
10	2	97.1	12	1673	-	264
11	1	81.6	12	-	-	740
12	1	83.6	12	-	-	163
13	3	87.6	12	1757	1322	628
14	2	58.5	12	1372	-	132
15	3	91.8	12	1767	1183	106
16	2	58.8	12	1432	-	659
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			23			
<b>Number of Bursts in Trial</b>			17			
<b>Chirp Center Frequency</b>			5583			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	96	11	-	-	284
2	2	92.5	11	1241	-	488
3	2	89.5	11	1347	-	76
4	2	74.8	11	1607	-	688
5	2	60.6	11	1523	-	28
6	2	71.5	11	1659	-	383
7	2	71.1	11	1454	-	182
8	1	98.7	11	-	-	20
9	2	85.1	11	1770	-	576
10	2	89.2	11	1086	-	410
11	2	60.7	11	1101	-	458
12	2	75.2	11	1719	-	348
13	2	75.7	11	1799	-	481
14	3	56.7	11	1132	1884	587
15	2	65	11	1885	-	480
16	2	64.6	11	1910	-	195
17	3	69.9	11	1410	1190	396
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			24			
<b>Number of Bursts in Trial</b>			18			
<b>Chirp Center Frequency</b>			5584			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	3	83.8	10	1290	1021	536
2	2	66.9	10	1112	-	44
3	3	91	10	1220	1504	611
4	2	86.1	10	1678	-	456
5	3	65.5	10	1928	1222	330
6	1	62.6	10	-	-	297
7	3	68.7	10	1505	1200	351
8	3	59.2	10	1452	1114	230
9	1	73.9	10	-	-	222
10	1	77.2	10	-	-	57
11	2	96.4	10	1357	-	399
12	2	99.9	10	1173	-	299
13	2	99.9	10	1520	-	464
14	1	86.7	10	-	-	294
15	1	92.6	10	-	-	653
16	1	77.1	10	-	-	550
17	2	81.1	10	1664	-	566
18	3	68.4	10	1536	1309	580
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			25			
<b>Number of Bursts in Trial</b>			19			
<b>Chirp Center Frequency</b>			5584			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	3	68.2	9	1723	1868	471
2	3	83.7	9	1711	1405	368
3	2	69.7	9	1781	-	425
4	1	59.7	9	-	-	440
5	2	96.7	9	1484	-	123
6	2	95.8	9	1319	-	261
7	3	71.3	9	1095	1354	332
8	3	53.2	9	1527	1427	427
9	2	69.5	9	1771	-	397
10	3	63.9	9	1075	1447	67
11	2	93.4	9	1783	-	174
12	2	77.3	9	1564	-	17
13	2	73.1	9	1294	-	216
14	1	77.4	9	-	-	292
15	3	57.2	9	1722	1886	619
16	2	68.7	9	1629	-	233
17	1	60.8	9	-	-	226
18	3	69.7	9	1128	1224	599
19	1	62.2	9	-	-	433
<b>Detection Check (1=Detection; 0=No Detection)</b>						1



<b>Trial Number</b>			26			
<b>Number of Bursts in Trial</b>			20			
<b>Chirp Center Frequency</b>			5584			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	80.5	8	-	-	90
2	3	62.6	8	1406	1343	319
3	3	85.6	8	1190	1529	384
4	2	83.9	8	1208	-	567
5	2	92.4	8	1488	-	234
6	2	54	8	1529	-	535
7	3	81.3	8	1501	1812	325
8	1	98.5	8	-	-	532
9	1	85.8	8	-	-	272
10	2	84.7	8	1593	-	182
11	2	83.3	8	1705	-	134
12	2	79.8	8	1567	-	286
13	1	77.9	8	-	-	368
14	3	98.4	8	1510	1569	290
15	2	79.9	8	1588	-	231
16	3	78	8	1140	1353	353
17	3	55.2	8	1700	1327	53
18	3	71.9	8	1081	1224	44
19	1	62	8	-	-	298
20	3	70.5	8	1888	1442	529
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			27			
<b>Number of Bursts in Trial</b>			8			
<b>Chirp Center Frequency</b>			5585			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	2	69.1	18	1076	-	1436
2	2	62.1	18	1688	-	22
3	2	94.8	18	1891	-	897
4	1	75.8	18	-	-	1186
5	2	65.4	18	1713	-	589
6	2	97.7	18	1292	-	614
7	3	98.1	18	1670	1711	506
8	2	85.4	18	1672	-	776
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			28			
<b>Number of Bursts in Trial</b>			9			
<b>Chirp Center Frequency</b>			5581			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	3	82	19	1233	1713	679
2	3	87.7	19	1554	1123	473
3	2	98.9	19	1518	-	869
4	1	55	19	-	-	719
5	1	93.6	19	-	-	902
6	2	58.7	19	1641	-	1243
7	2	88.7	19	1387	-	410
8	1	60.3	19	-	-	1154
9	1	97.7	19	-	-	512
Detection Check (1=Detection; 0=No Detection)						1

<b>Trial Number</b>			29			
<b>Number of Bursts in Trial</b>			10			
<b>Chirp Center Frequency</b>			5580			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	1	69.6	20	-	-	1131
2	1	74.5	20	-	-	290
3	1	60.9	20	-	-	895
4	1	74.6	20	-	-	202
5	2	99.3	20	1501	-	139
6	2	95.3	20	1065	-	854
7	2	91.9	20	1722	-	219
8	2	51	20	1285	-	57
9	2	87.7	20	1747	-	141
10	1	87.2	20	-	-	596
Detection Check (1=Detection; 0=No Detection)						1



<b>Trial Number</b>			30			
<b>Number of Bursts in Trial</b>			11			
<b>Chirp Center Frequency</b>			5580			
<b>Burst</b>	<b>No. of Pulses</b>	<b>Pulse Width (us)</b>	<b>Chirp Width (MHz)</b>	<b>Pulse 1-to-2 Spacing (us)</b>	<b>Pulse 2-to-3 Spacing (us)</b>	<b>Starting Location Within Interval (ms)</b>
1	3	59.9	5	1901	1196	935
2	2	77.1	5	1590	-	1038
3	2	62.7	5	1227	-	690
4	1	77.1	5	-	-	547
5	3	99.8	5	1798	1790	551
6	2	61.5	5	1135	-	876
7	2	77.5	5	1583	-	448
8	2	57.3	5	1890	-	736
9	2	53.5	5	1757	-	362
10	1	66.6	5	-	-	836
11	3	80.7	5	1811	1289	410
<b>Detection Check (1=Detection; 0=No Detection)</b>						0



**Type 6 Radar Statistical Performance**

Trial #	Test Freq. (MHz)	Pulses / Hop	Pulse Width (us)	PRI (us)	1=Detection 0=No Detection
1	5550	9	1	333	1
2	5550	9	1	333	1
3	5550	9	1	333	1
4	5550	9	1	333	1
5	5550	9	1	333	1
6	5550	9	1	333	1
7	5550	9	1	333	1
8	5550	9	1	333	1
9	5550	9	1	333	1
10	5550	9	1	333	1
11	5550	9	1	333	1
12	5550	9	1	333	1
13	5550	9	1	333	1
14	5550	9	1	333	1
15	5550	9	1	333	1
16	5550	9	1	333	1
17	5550	9	1	333	1
18	5550	9	1	333	1
19	5550	9	1	333	1
20	5550	9	1	333	1
21	5550	9	1	333	1
22	5550	9	1	333	1
23	5550	9	1	333	1
24	5550	9	1	333	1
25	5550	9	1	333	1
26	5550	9	1	333	1
27	5550	9	1	333	1
28	5550	9	1	333	1
29	5550	9	1	333	1
30	5550	9	1	333	1
Detection Percentage (%)					100.000
Limit					70%
<b>Test Result</b>					<b>Complied</b>



## 4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101026	9kHz~40GHz	Sep. 28, 2018	Sep. 27, 2019	Conducted (DF01-CB)
Vector Signal generator	R&S	SMU200A	102782	100kHz-6GHz	Dec. 18, 2017	Dec. 17, 2018	Conducted (DF01-CB)
RF Power Divider	ANAREN	2 Way	DFS-01-DV-02	1GHz ~ 6GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (DF01-CB)
RF Power Divider	MTJ	2 Way	DFS-01-DV-03	1GHz ~ 6GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (DF01-CB)
RF Power Divider	ANAREN	4 Way	DFS-01-DV-01	1GHz ~ 6GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-53	1 GHz ~18 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-54	1 GHz ~18 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-56	1 GHz ~18 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-60	1 GHz ~18 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (DF01-CB)

Note: Calibration Interval of instruments listed above is one year.



## **5 Measurement Uncertainty**

<b>Test Items</b>	<b>Uncertainty</b>	<b>Remark</b>
Conducted Emission	1.7 dB	Confidence levels of 95%