DFS MEASUREMENT REPORT

FCC PART 15 Subpart E

FCC ID:	TE7AX6000
APPLICANT:	TP-Link Technologies Co., Ltd.
Application Type:	Certification
Product:	AX6000 MU-MIMO Wi-Fi Router
Model No.:	Archer AX6000
Brand Name:	tp-link
FCC Classification:	Unlicensed National Information Infrastructure (NII)
FCC Rule Part(s):	Part 15 Subpart E - 15.407 Section (h)(2) KDB 905462 D02v02, KDB 905462 D04v01
Type of Device:	Master Device
Test Date:	August 08 ~ October 15, 2018

Reviewed By: (Jame Yuan)

Approved By: (Robin Wu)

Revision History

Report No.	Version	Description	Issue Date	Note
1808RSU004-U5	Rev. 01	Initial Report	10-15-2018	Valid

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§2.1033 General Information

Applicant:	TP-Link Technologies Co., Ltd.
Applicant Address:	Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Manufacturer:	TP-Link Technologies Co., Ltd.
Manufacturer Address:	Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Test Site:	MRT Technology (Suzhou) Co., Ltd
Test Site Address:	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China
FCC Registration No.:	893164
IC Registration No.:	11384A-1
Test Device Serial No.:	N/A ☐ Production ☒ Pre-Production ☐ Engineering

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Tian'edang Rd., Suzhou, China.

- **MRT facility is a FCC registered (MRT Reg. No. 893164) test facility with the site description report on file and has met all the requirements specified in ANSI C63.4-2014.**
- **MRT facility is an IC registered (MRT Reg. No. 11384A-1) test laboratory with the site description on file at Industry Canada.**
- **MRT facility is a VCCI registered (R-20025, G-20034, C-20020, T-20020) test laboratory with the site description on file at VCCI Council.**
- **MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications, Radio and SAR testing.**

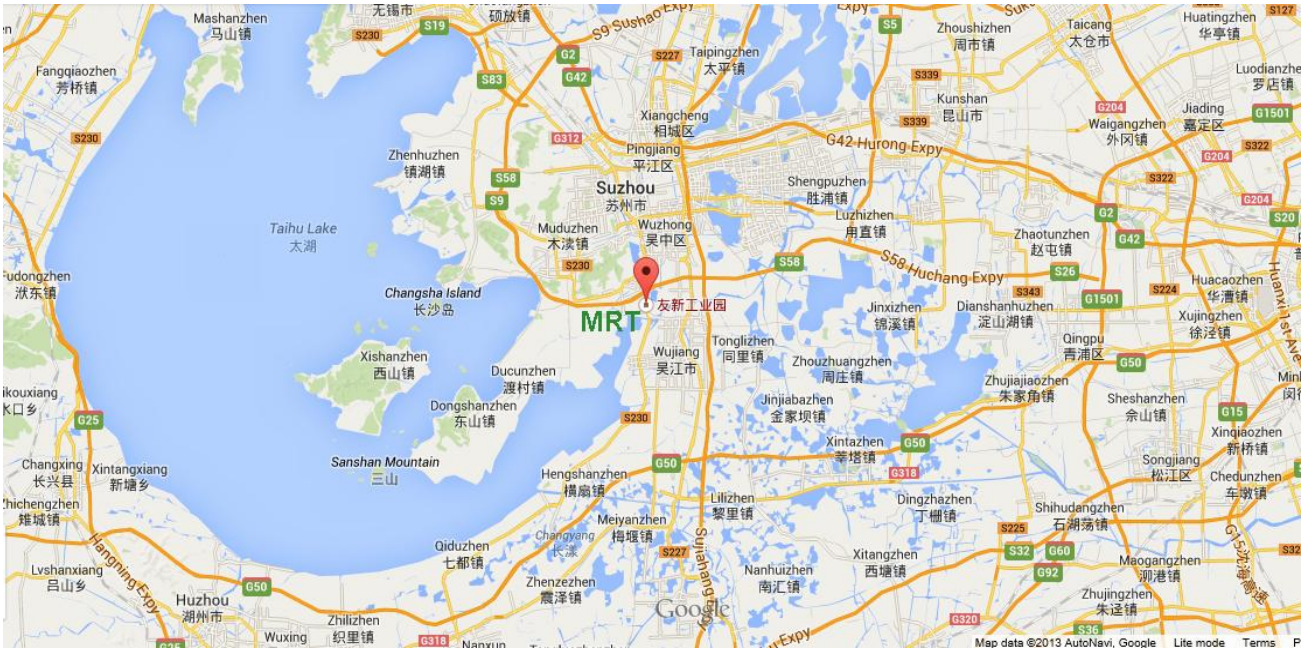
1. INTRODUCTION

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taihu Lake. These measurement tests were conducted at the MRT Technology (Suzhou) Co., Ltd. Facility located at D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The measurement facility compliant with the test site requirements specified in ANSI C63.4-2014.



2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name:	AX6000 MU-MIMO Wi-Fi Router
Model No.:	Archer AX6000
Brand Name:	tp-link
Wi-Fi Specification:	802.11a/b/g/n/ac/ax
Frequency Range	**2.4GHz:** For 802.11b/g/n-HT20/ac-VHT20/ax-HE20: 2412 ~ 2462 MHz For 802.11n-HT40/ac-VHT40/ax-HE40: 2422 ~ 2452 MHz **5GHz:** For 802.11a/n-HT20/ac-VHT20/ax-HE20: 5180~5320MHz, 5500~5720MHz, 5745~5825MHz For 802.11n-HT40/ac-VHT40/ax-HE40: 5190~5310MHz, 5510~5710MHz, 5755~5795MHz For 802.11ac-VHT80/ax-HE80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5690MHz, 5775MHz For 802.11ac-VHT160/ax-HE160: 5250MHz, 5570MHz
Type of Modulation	802.11b: DSSS, 802.11a/g/n/ac: OFDM, 802.11ax:OFDMA
Power-on cycle	Requires 37.1 seconds to complete its power-on cycle
Uniform Spreading (For DFS Frequency Band)	For the 5250-5350MHz, 5470-5725 MHz bands, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a random algorithm.

2.2. Description of Available Antennas

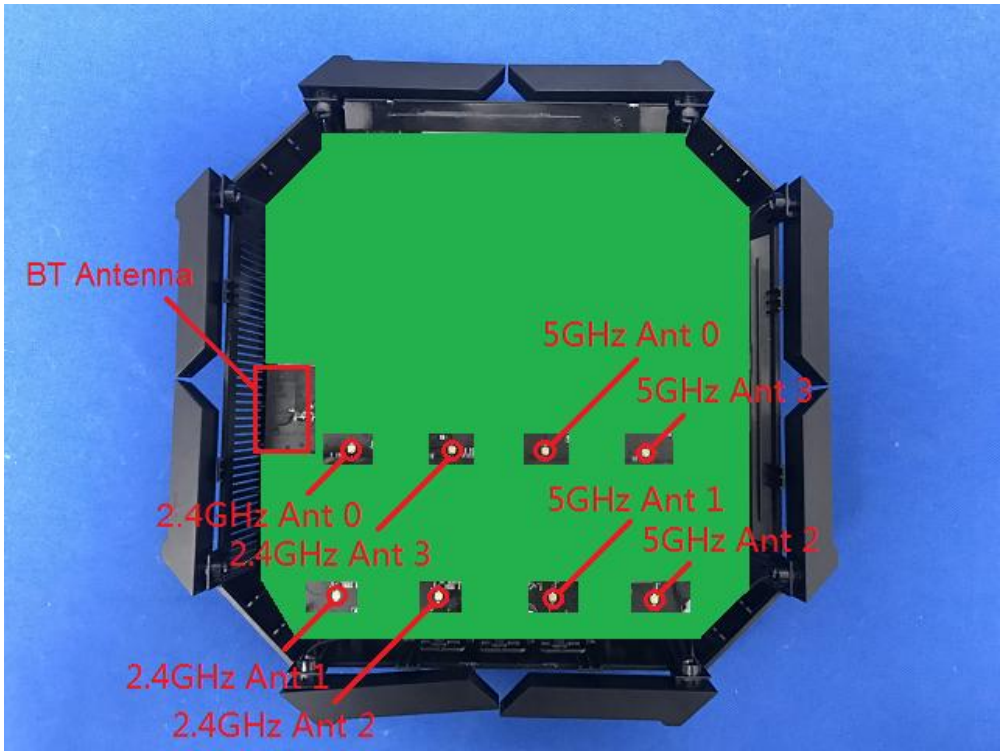
Antenna Type	Frequency Band (MHz)	TX Paths	Max Antenna Gain (dBi)	BF Directional Gain (dBi)	CDD Directional Gain (dBi)	
					For Power	For PSD
Wi-Fi External Antenna						
Dipole Antenna	2412 ~ 2462	4	1.16	7.18	1.16	7.18
	5150 ~ 5850	4	2.28	8.30	2.28	8.30
Bluetooth Internal Antenna						
PCB Antenna	2402 ~ 2480	1	4.05	--	--	--

Note:

1. The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.
   For CDD transmissions, directional gain is calculated as follows, $N_{ANT} = 4$, $N_{SS} = 1$.
   If all antennas have the same gain, G_{ANT}, Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.
   - For power spectral density (PSD) measurements on all devices,
     Array Gain = 10 log (N_{ANT}/ N_{SS}) dB = 6.02;
   - For power measurements on IEEE 802.11 devices,
     Array Gain = 0 dB for $N_{ANT} \leq 4$;
2. The EUT also supports Beam Forming mode, and the Beam Forming support 802.11ac/ax, not include 802.11a/b/g/n. BF Directional gain = G_{ANT} + 10 log (N_{ANT}).

2.3. Description of Antenna RF Port

Antenna RF Port									
Software Control Port	2.4GHz RF Port				5GHz RF Port				Bluetooth
	Ant 0	Ant 1	Ant 2	Ant 3	Ant 0	Ant 1	Ant 2	Ant 3	--



2.4. DFS Band Carrier Frequencies Operation

802.11 a/n-HT20/ac-VHT20/ax-HE20

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

802.11n-HT40/ac-VHT40/ax-HE40

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

802.11ac-VHT80/ax-HE80

Channel	Frequency	Channel	Frequency	Channel	Frequency
58	5290 MHz	106	5530 MHz	122	5610 MHz
138	5690 MHz	--	--	--	--

802.11ac-VHT160/ax-HE160

Channel	Frequency	Channel	Frequency	Channel	Frequency
50	5250 MHz	114	5570 MHz	--	--

2.5. Test Channel for this Report

Test Mode	Test Channel	Test Frequency
802.11a	100	5500 MHz
802.11n-HT40	102	5510 MHz
802.11ac-VHT80	106	5530 MHz
802.11ax-VHT160	50	5250 MHz
	114	5570 MHz

2.6. Test Mode

Test Mode	Mode 1: Communication with Notebook

3. DFS DETECTION THRESHOLDS AND RADAR TEST WAVEFORMS

3.1. Applicability

The following table from FCC KDB 905462 D02 NII DFS Compliance Procedures New Rules v02 lists the applicable requirements for the DFS testing.

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

Table 3-1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode	
	Master Device or Client With Radar Detection	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

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 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.		

Table 3-2: Applicability of DFS Requirements during normal operation

3.2. DFS Devices Requirements

Per FCC KDB 905462 D02 NII DFS Compliance Procedures New Rules v02 the following are

the requirements for Master Devices:

(a) The Master Device will use DFS in order to detect Radar Waveforms with received signal strength above the DFS Detection Threshold in the 5250 ~ 5350 MHz and 5470 ~ 5725 MHz bands. DFS is not required in the 5150 ~ 5250 MHz or 5725 ~ 5825 MHz bands.

(b) Before initiating a network on a Channel, the Master Device will perform a Channel Availability Check for specified time duration (Channel Availability Check Time) to ensure that there is no radar system operating on the Channel, using DFS described under subsection a) above.

(c) The Master Device initiates a U-NII network by transmitting control signals that will enable other U-NII devices to Associate with the Master Device.

(d) During normal operation, the Master Device will monitor the Channel (In-Service Monitoring) to ensure that there is no radar system operating on the Channel, using DFS described under a).

(e) If the Master Device has detected a Radar Waveform during In-Service Monitoring as described under d), the Operating Channel of the U-NII network is no longer an Available Channel. The Master Device will instruct all associated Client Device(s) to stop transmitting on this Channel within the Channel Move Time. The transmissions during the Channel Move Time will be limited to the Channel Closing Transmission Time.

(f) Once the Master Device has detected a Radar Waveform it will not utilize the Channel for the duration of the Non-Occupancy Period.

(g) If the Master Device delegates the In-Service Monitoring to a Client Device, then the combination will be tested to the requirements described under d) through f) above.

Channel Move Time and Channel Closing Transmission Time requirements are listed in the following table.

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

Table 3-3: DFS Response Requirements

3.3. DFS Detection Threshold Values

The DFS detection thresholds are defined for Master devices and Client Devices with In-service monitoring. These detection thresholds are listed in the following table.

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.	

Table 3-4: Detection Thresholds for Master Devices and Client Devices with Radar Detection

3.4. Parameters of DFS Test Signals

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Short Pulse 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 3-6	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{\text{PRI}_{\text{usec}}}\right)\right\}$	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.					

Table 3-5: Parameters for Short Pulse Radar Waveforms

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

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

Table 3-6: Pulse Repetition Intervals Values for Test A

Long Pulse Radar Test Waveform

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

Table 3-7: Parameters for Long Pulse Radar Waveforms

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse Radar Type waveforms. If more than 30 waveforms are used for the Long Pulse Radar Type waveforms, then each additional waveform must also be unique and not repeated from the previous waveforms.

Frequency Hopping Radar Test Waveform

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

Table 3-8: Parameters for Frequency Hopping Radar Waveforms

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

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

3.5. Conducted Test Setup

The FCC KDB 905462 D02 NII DFS Compliance Procedures New Rules v02 describes a radiated test setup and a conducted test setup. The conducted test setup was used for this testing. Figure 3-1 shows the typical test setup.

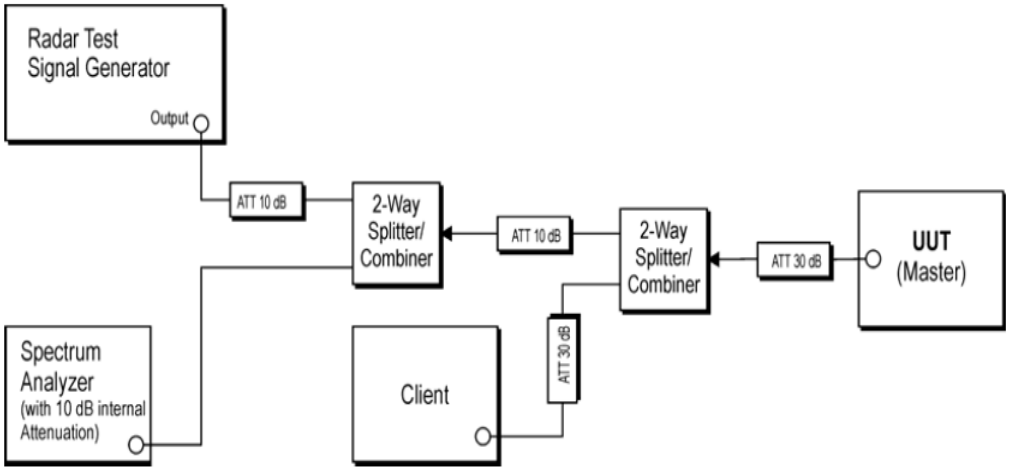


Figure 3-1: Conducted Test Setup where UUT is a Master and Radar Test Waveforms are injected into the Masters

4. TEST EQUIPMENT CALIBRATION DATE

Dynamic Frequency Selection (DFS) - SR4

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2019/04/20
Vector Signal Generator	Agilent	E4438C	MRTSUE06026	1 year	2018/12/08
Thermohygrometer	Testo	608-H1	MRTSUE06222	1 year	2018/11/21

Client Information

Instrument	Manufacturer	Type No.
Wireless Network Adapter	Intel	7260HMW
Access Point	TP-Link Technologies Co., Ltd.	Archer AX6000

Software	Version	Manufacturer	Function
Pulse Building	N/A	Agilent	Radar Signal Generation Software
DFS Tool	V 6.9.2	Agilent	DFS Test Software

5. TEST RESULT

5.1. Summary

Product Name: **AX6000 MU-MIMO Wi-Fi Router**

FCC ID: **TE7AX6000**

Parameter	Limit	Test Result	Reference
NII Detection Bandwidth Measurement	Refer Table 3-3	Pass	Section 5.4
Initial Channel Availability Check Time	Refer Table 3-3	Pass	Section 5.5
Radar Burst at the Beginning of the Channel Availability Check Time	Refer Table 3-3	Pass	Section 5.6
Radar Burst at the End of the Channel Availability Check Time	Refer Table 3-3	Pass	Section 5.7
In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time	Refer Table 3-3	Pass	Section 5.8
Non-Occupancy Period	Refer Table 3-3	Pass	Section 5.8
Statistical Performance Check	Refer Table 3-3	Pass	Section 5.9

5.2. Radar Waveform Calibration

5.2.1. Calibration Setup

The conducted test setup was used for this calibration testing. Figure 3-2 shows the typical test setup.

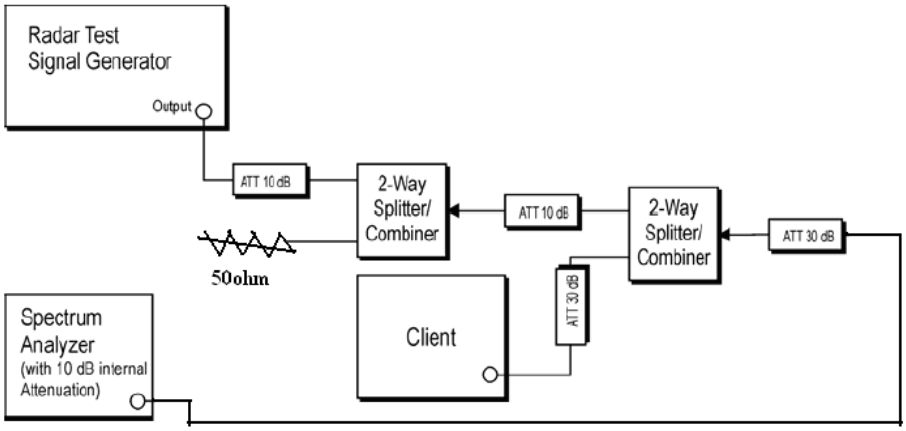


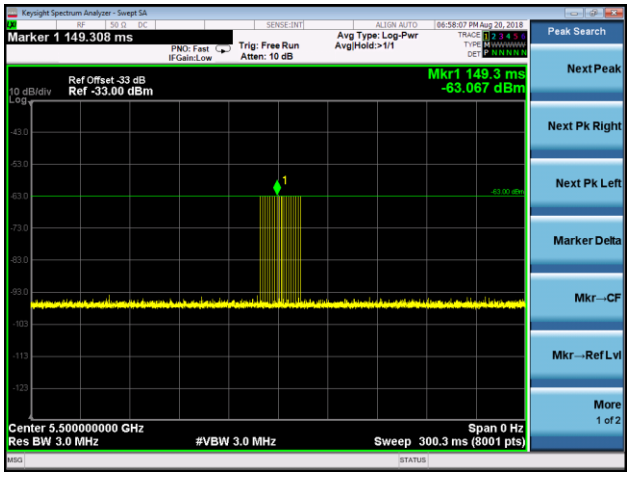
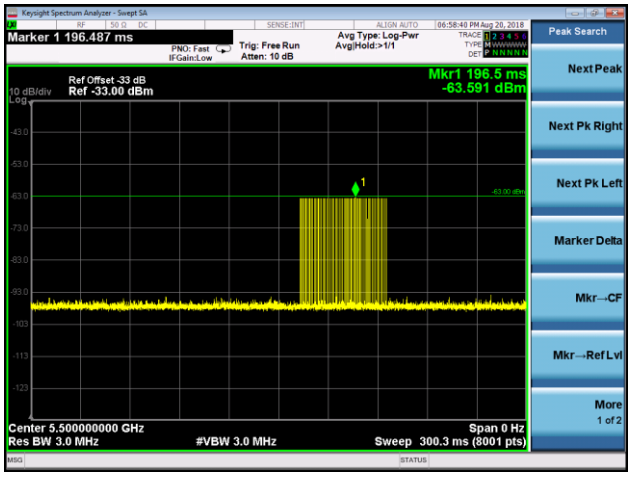
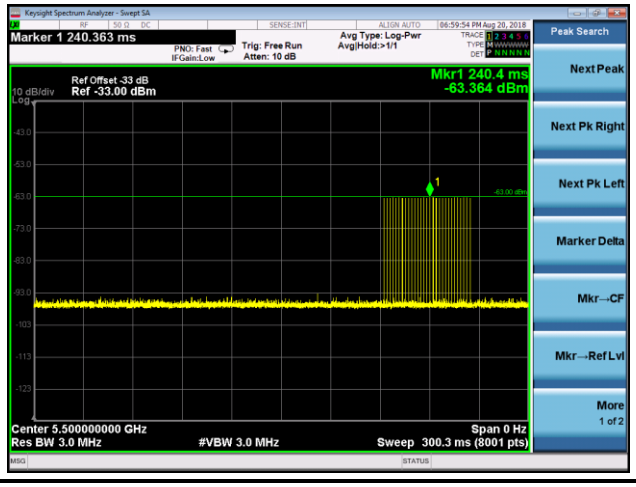
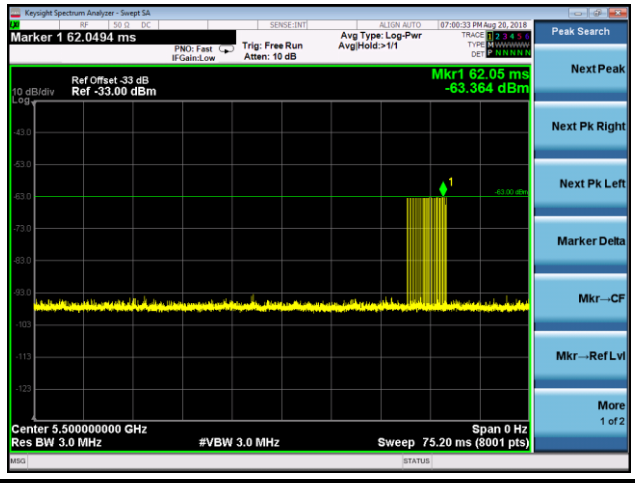
Figure 3-2: Conducted Test Setup

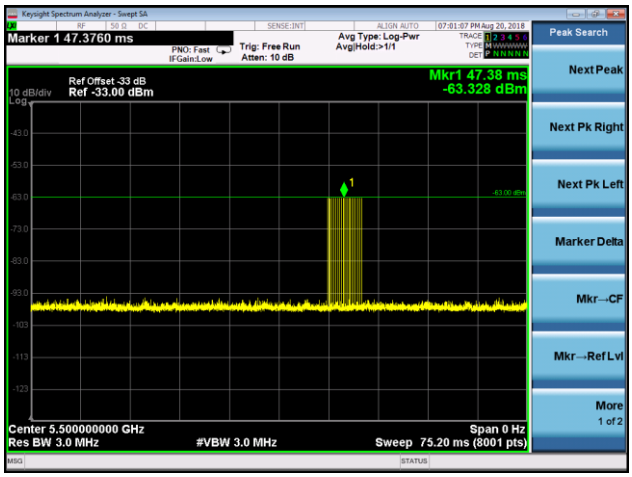
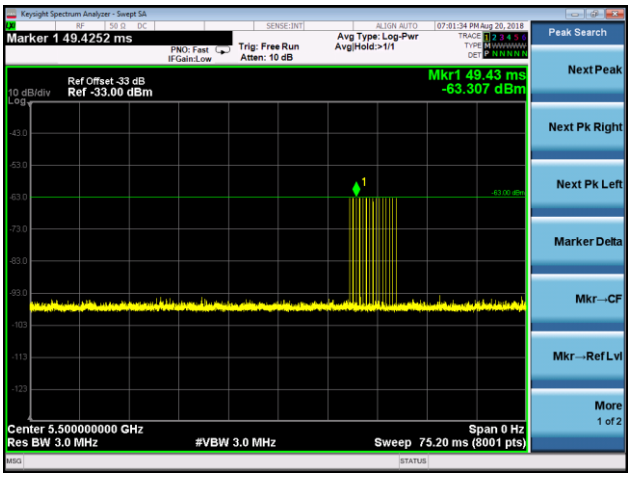
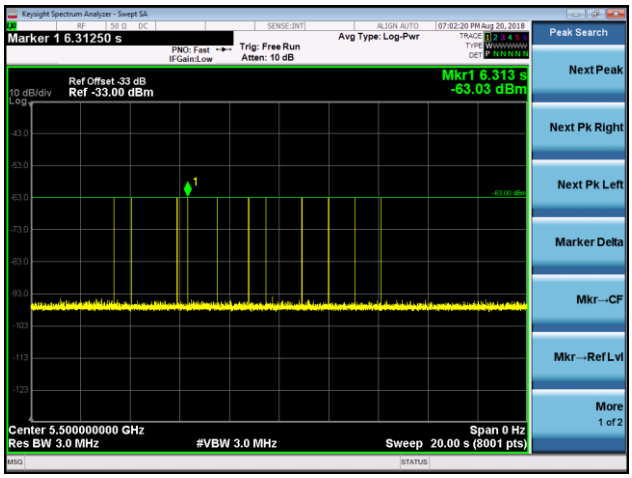
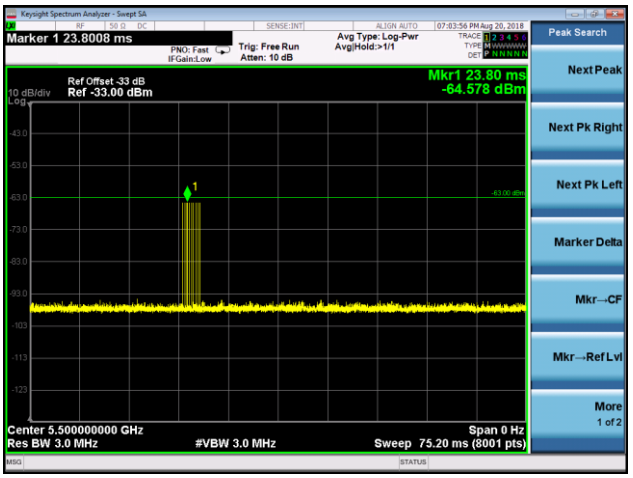
5.2.2. Calibration Procedure

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.

5.2.3. Cablibration Result

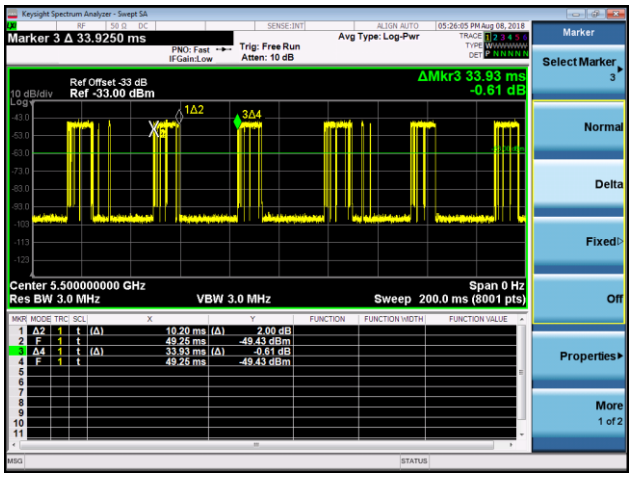
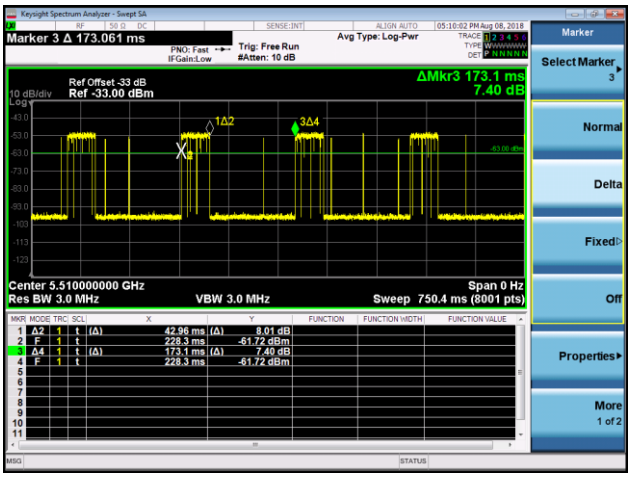
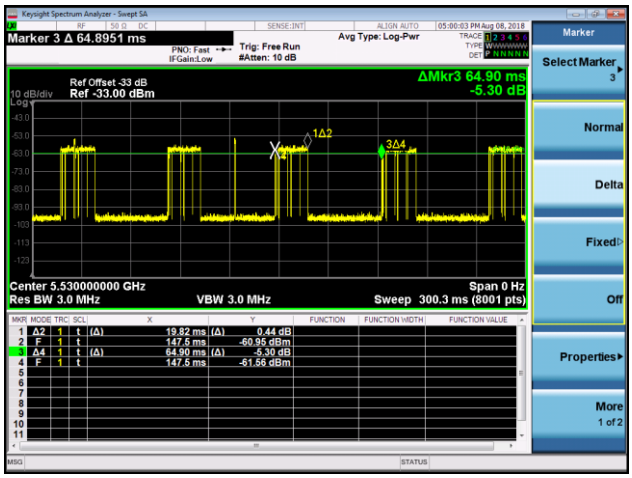
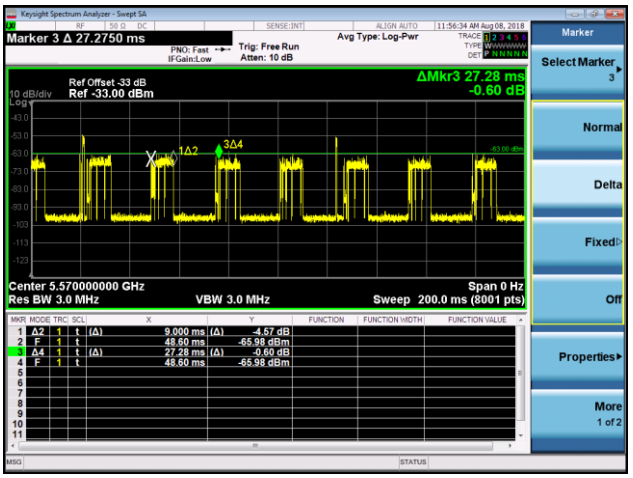
Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/20
Test Item	Radar Waveform Calibration		

Radar #0	Radar #1 (Test A) PRI = 858us and the number of pulses = 62
	
Radar #1 (Test B) PRI = 1.911ms and the number of pulses = 29	Radar #2
	

Radar #3	Radar #4
	
Radar #5	**Radar #6**
	

5.2.4. Channel Loading Test Result

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/08
Test Item	Channel Loading		

802.11a 5500MHz	802.11n-HT40 5510MHz
	
802.11ac-VHT80 5530MHz	**802.11ax-VHT160 5570MHz**
	

Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11a	5500 MHz	30.06%	≥ 17%	Pass
802.11n-HT40	5510 MHz	24.82%	≥ 17%	Pass
802.11ac-VHT80	5530 MHz	30.54%	≥ 17%	Pass
802.11ax-VHT160	5570 MHz	32.99%	≥ 17%	Pass
Note: System testing was performed with the designated iperf test file. This file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. Packet ratio = Time On / (Time On + Off Time).				

5.3. NII Detection Bandwidth Measurement

5.3.1. Test Limit

Minimum 100% of the NII 99% transmission power bandwidth. During the U-NII Detection Bandwidth detection test, each frequency step the minimum percentage of detection is 90 percent.

Measurements are performed with no data traffic.

5.3.2. Test Procedure

1. Adjust the equipment to produce a single Burst of any one of the Short Pulse Radar Types 0-4 in Table 3-5 at the center frequency of the EUT Operating Channel at the specified DFS Detection Threshold level.
2. The generating equipment is configured as shown in the Conducted Test Setup above section 3.5.
3. The EUT is set up as a stand-alone 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.
4. Generate a single radar Burst, and note the response of the EUT. Repeat for a minimum of 10 trials. The EUT must detect the Radar Waveform using the specified U-NII Detection Bandwidth criterion shown in Table 3-5. 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.
5. Starting at the center frequency of the UUT operating Channel, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in Table 3-3. 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.
6. Starting at the center frequency of the EUT operating Channel, decrease the radar frequency in 1 MHz steps, repeating the above item 4 test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion. 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.
7. The U-NII Detection Bandwidth is calculated as follows: U-NII Detection Bandwidth = FH – FL
8. The U-NII Detection Bandwidth must be at least 100% of the EUT transmitter 99% power, otherwise, the EUT does not comply with DFS requirements.

5.3.3. Test Result

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/24
Test Item	Detection Bandwidth (802.11a mode – 5500MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	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%
5500	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 FH	1	1	1	1	1	1	1	1	1	1	100%
5510	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5500MHz. The 99% channel bandwidth is 16.72MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5509MHz - 5491MHz = 18MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 16.72MHz x 100% = 16.72MHz.

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/24
Test Item	Detection Bandwidth (802.11n-HT40 mode – 5510MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	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%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5515	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%
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 FH	1	1	1	1	1	1	1	1	1	1	100%
5530	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5510MHz. The 99% channel bandwidth is 36.36MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5529MHz - 5491MHz = 38MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 36.36MHz x 100% = 36.36MHz.

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/25
Test Item	Detection Bandwidth (802.11ac-VHT80 mode – 5530MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	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%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5515	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%
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 FH	1	1	1	1	1	1	1	1	1	1	100%
5570	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz. The 99% channel bandwidth is 77.06MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5569MHz - 5491MHz = 78MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 77.06MHz x 100% = 77.06MHz.

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/25
Test Item	Detection Bandwidth (802.11ax-VHT160 mode - 5250MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5250 FL	1	1	1	1	1	1	1	1	1	1	100%
5255	1	1	1	1	1	1	1	1	1	1	100%
5260	1	1	1	1	1	1	1	1	1	1	100%
5265	1	1	1	1	1	1	1	1	1	1	100%
5270	1	1	1	1	1	1	1	1	1	1	100%
5275	1	1	1	1	1	1	1	1	1	1	100%
5280	1	1	1	1	1	1	1	1	1	1	100%
5285	1	1	1	1	1	1	1	1	1	1	100%
5290	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329 FH	1	1	1	1	1	1	1	1	1	1	100%
5330	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical channel bandwidths. Therefore, all DFS testing was done at 5250MHz. The 99% channel bandwidth fall within DFS band is 77.21MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5329MHz - 5250MHz = 79MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 77.21MHz x 100% = 77.21MHz.

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/25
Test Item	Detection Bandwidth (802.11ax-VHT160 mode – 5570MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	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%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5515	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%
5590	1	1	1	1	1	1	1	1	1	1	100%
5595	1	1	1	1	1	1	1	1	1	1	100%
5600	1	1	1	1	1	1	1	1	1	1	100%
5605	1	1	1	1	1	1	1	1	1	1	0%
5610	1	1	1	1	1	1	1	1	1	1	100%
5615	1	1	1	1	1	1	1	1	1	1	100%

5620	1	1	1	1	1	1	1	1	1	1	100%
5625	1	1	1	1	1	1	1	1	1	1	100%
5630	1	1	1	1	1	1	1	1	1	1	100%
5635	1	1	1	1	1	1	1	1	1	1	100%
5640	1	1	1	1	1	1	1	1	1	1	100%
5645	1	1	1	1	1	1	1	1	1	1	100%
5646	1	1	1	1	1	1	1	1	1	1	100%
5647	1	1	1	1	1	1	1	1	1	1	100%
5648	1	1	1	1	1	1	1	1	1	1	100%
5649 FH	1	1	1	1	1	1	1	1	1	1	100%
5650	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5570MHz. The 99% channel bandwidth is 154.10MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL =5649MHz - 5491MHz = 158MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 154.10MHz x 100% = 154.10MHz.

5.4. Initial Channel Availability Check Time Measurement

5.4.1. Test Limit

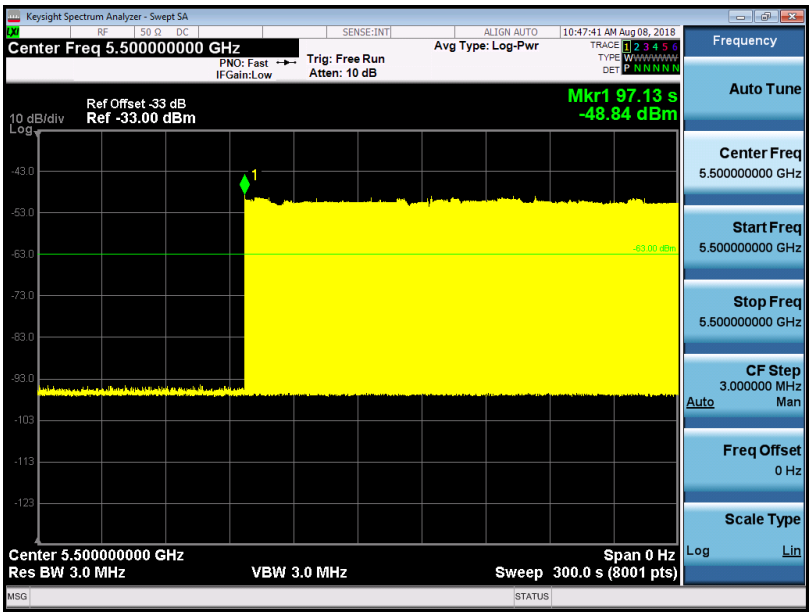
The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute on the intended operating frequency.

5.4.2. Test Procedure

1. The U-NII devices will be powered on and be instructed to operate on the appropriate U-NII Channel that must incorporate DFS functions. At the same time the EUT is powered on, the spectrum analyzer will be set to zero span mode with a 3 MHz RBW and 3 MHz VBW on the Channel occupied by the radar (Chr) with a 2.5 minute sweep time. The spectrum analyzer's sweep will be started at the same time power is applied to the U-NII device.
2. The EUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.
3. Confirm that the EUT initiates transmission on the channel. Measurement system showing its nominal noise floor is marker1.

5.4.3. Test Result

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/08
Test Item	Initial Channel Availability Check Time (802.11a mode – 5500MHz)		

Initial Channel Availability Check Time

Note: The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (37.1 sec). Initial beacons/data transmissions are indicated by marker 1 (97.1 sec).

5.5. Radar Burst at the Beginning of the Channel Availability Check Time Measurement

5.5.1. Test Limit

In beginning of the Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

5.5.2. Test Procedure

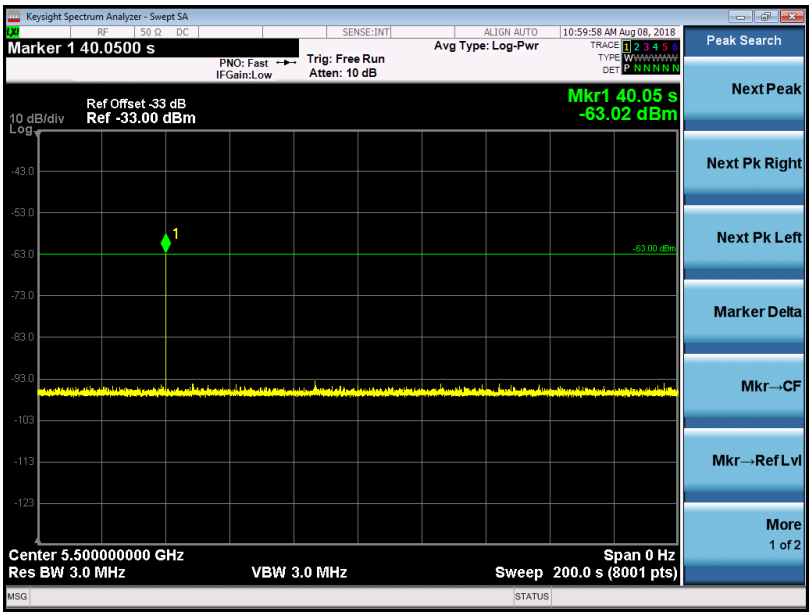
1. The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning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

2. The EUT is in completion power-up cycle (from T0 to T1). T1 denotes the instant when the EUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T1 and will end no sooner than T1 + 60 seconds. A single Burst of one of Short Pulse Radar Types 0-4 at DFS Detection Threshold + 1 dB will commence within a 6 second window starting at T1.

3. Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 2.5 minutes after the radar Burst has been generated. Verify that during the 2.5 minutes measurement window no EUT transmissions occurred.

5.5.3. Test Result

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/08
Test Item	Beginning of the Channel Availability Check Time (802.11a mode – 5500MHz)		

Beginning of the Channel Availability Check Time


5.6. Radar Burst at the End of the Channel Availability Check Time Measurement

5.6.1. Test Limit

In the end of Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

5.6.2. Test Procedure

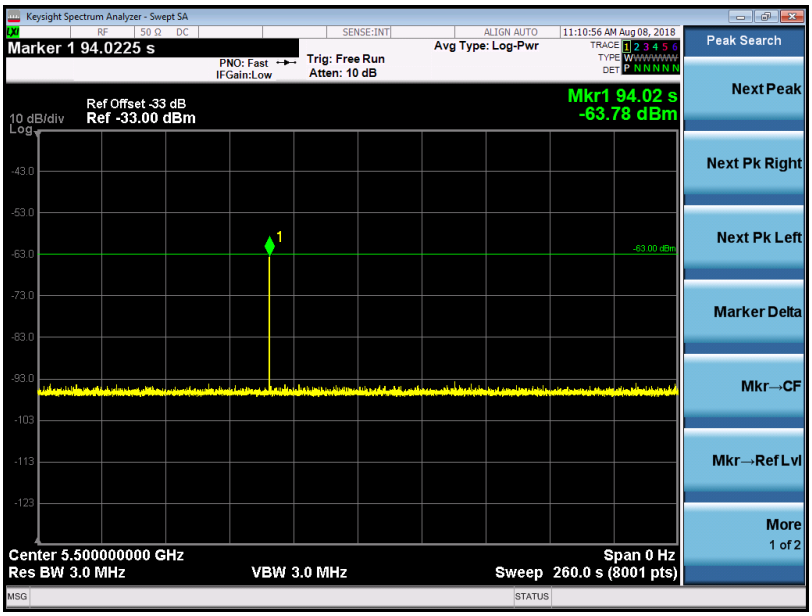
1. The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning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

2. The EUT is powered on at T0. T1 denotes the instant when the EUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T1 and will end no sooner thanT1 + 60 seconds. A single Burst of one of Short Pulse Radar Types 0-4 at DFS Detection Threshold + 1 dB will commence within a 6 second window starting at T1+ 54 seconds.

3. Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 2.5 minutes after the radar Burst has been generated. Verify that during the 2.5 minutes measurement window no EUT transmissions occurred.

5.6.3. Test Result

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/08
Test Item	End of the Channel Availability Check Time (802.11a mode – 5500MHz)		

End of the Channel Availability Check Time


5.7. In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period Measurement

5.7.1. Test Limit

The EUT has In-Service Monitoring function to continuously monitor the radar signals. If the radar is detected, must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec. The total duration of Channel Closing Transmission Time is 260ms, consisting of data signals and the aggregate of control signals, by a U-NII device during the Channel Move Time. The Non-Occupancy Period time is 30 minute during which a Channel will not be utilized after a Radar Waveform is detected on that Channel.

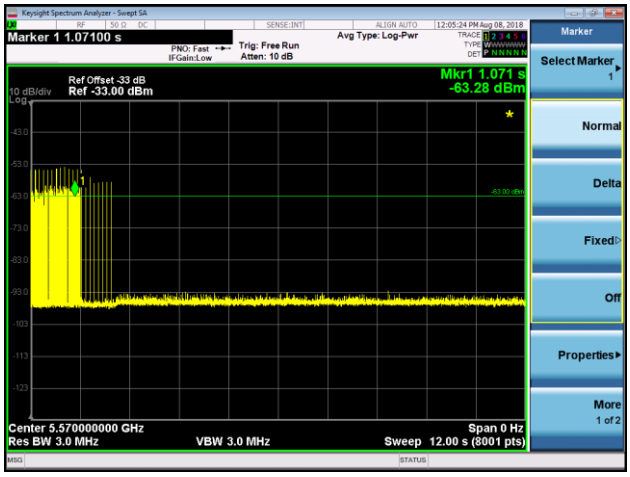
5.7.2. Test Procedure Used

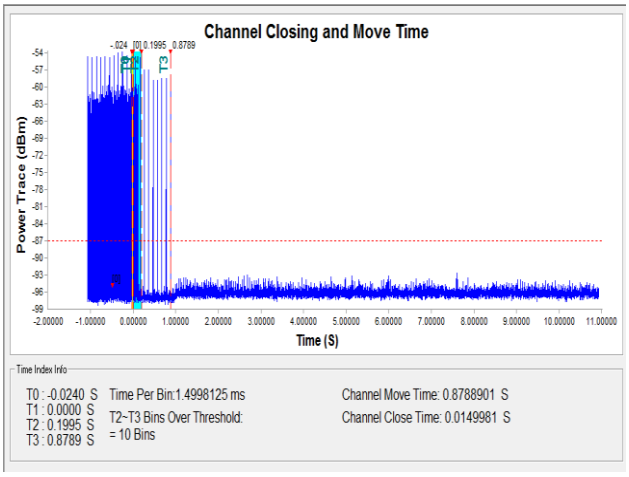
1. The test should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0.
2. When the radar burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device. A U-NII device operating as a Master Device will associate with the Client Device at Channel. Stream the MPEG test file from the Master Device to the Client Device on the selected Channel for the entire period of the test. At time T0 the Radar Waveform generator sends a Burst of pulses for each of the radar types at Detection Threshold + 1dB.
3. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the EUT during the observation time (Channel Move Time).
4. Measurement of the aggregate duration of the Channel Closing Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (1.5ms) = S (12 sec) / B (8000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is the sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C = N X Dwell; where C is the Closing Time, N is the number of spectrum analyzer sampling bins showing a U-NII transmission and Dwell is the dwell time per bin.
5. Measure the EUT for more than 30 minutes following the channel close/move time to verify that the EUT does not resume any transmissions on this Channel.

5.7.3. Test Result

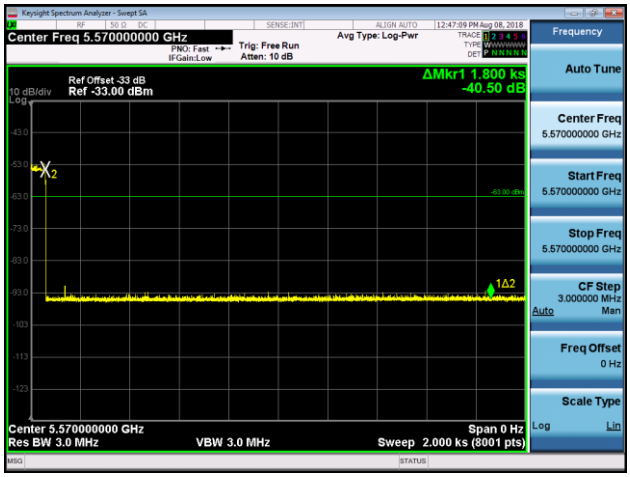
Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/08
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11ax-VHT160 mode – 5570MHz)		

Channel Move Time and Channel Closing Transmission Time





Non-Occupancy Period



Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.879s	<10s
Channel Closing Transmission Time (ms) (Note)	15.0ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min
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.		

5.8. Statistical Performance Check Measurement

5.8.1. Test Limit

The minimum percentage of successful detection requirements found in below table 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).

Radar Type	Minimum Number of Trails	Detection Probability
0	30	Pd > 60%
1	30(15 of test A and 15 of test B)	Pd > 60%
2	30	Pd > 60%
3	30	Pd > 60%
4	30	Pd > 60%
Aggregate (Radar Types 1-4)	120	Pd > 80%
5	30	Pd > 80%
6	30	Pd > 70%
Note: The percentage of successful detection is calculated by: (Total Waveform Detections / Total Waveform Trails) * 100 = 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: (Pd1 + Pd2 + Pd3 + Pd4) / 4.		

5.8.2. Test Procedure

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.

5.8.3. Test Result

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/25
Test Item	Radar Statistical Performance Check (802.11a mode – 5500MHz)		

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1	3066	18	1
2	5491	1	518	102	1
3	5491	1	678	78	1
4	5491	1	698	76	1
5	5491	1	938	57	1
6	5491	1	918	58	1
7	5491	1	618	86	1
8	5491	1	538	99	1
9	5491	1	638	83	1
10	5491	1	758	70	1
11	5500	1	578	92	1
12	5500	1	738	72	1
13	5500	1	658	81	1
14	5500	1	798	67	1
15	5500	1	558	95	1
16	5500	1	1516	35	1
17	5500	1	1633	33	1
18	5500	1	1886	28	1
19	5500	1	2187	25	1
20	5500	1	2150	25	1
21	5509	1	1896	28	1
22	5509	1	2061	26	1
23	5509	1	1088	49	1
24	5509	1	785	68	1
25	5509	1	2382	23	1
26	5509	1	2889	19	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5509	1	1698	32	1
28	5509	1	2169	25	1
29	5509	1	846	63	1
30	5509	1	2499	22	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	4.8	196	26	1
2	5491	4.6	220	29	1
3	5491	5.0	179	27	1
4	5491	4.0	190	29	1
5	5491	2.3	158	26	1
6	5491	2.2	227	23	1
7	5491	4.0	160	28	1
8	5491	1.2	210	23	1
9	5491	1.0	177	27	1
10	5491	4.9	155	24	1
11	5500	2.5	177	23	1
12	5500	2.3	201	24	1
13	5500	2.1	227	27	1
14	5500	4.4	166	24	1
15	5500	4.0	183	24	1
16	5500	4.3	181	24	1
17	5500	1.8	163	28	1
18	5500	1.4	152	26	1
19	5500	3.2	226	25	1
20	5500	5.0	182	24	1
21	5509	1.9	176	25	1
22	5509	1.2	192	24	1
23	5509	2.9	154	28	1
24	5509	2.8	208	27	1
25	5509	4.5	184	28	1
26	5509	1.7	187	23	1
27	5509	2.7	179	23	1
28	5509	1.9	196	26	1
29	5509	4.4	197	28	1
30	5509	1.1	167	24	1
Detection Percentage (%)					100%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	6.4	312	17	1
2	5491	6.3	294	18	1
3	5491	6.3	489	16	1
4	5491	7.1	458	17	1
5	5491	6.6	354	18	1
6	5491	9.1	369	18	1
7	5491	8.7	358	18	1
8	5491	8.2	448	18	1
9	5491	9.8	473	18	1
10	5491	6.6	372	18	1
11	5500	6.3	268	16	1
12	5500	8.6	475	17	1
13	5500	7.1	334	17	1
14	5500	9.5	320	16	1
15	5500	8.3	416	16	1
16	5500	9.8	419	18	1
17	5500	6.4	364	16	1
18	5500	8.1	346	16	1
19	5500	9.6	371	16	1
20	5500	10.0	258	16	1
21	5509	9.2	491	17	1
22	5509	8.4	332	18	1
23	5509	7.5	500	17	1
24	5509	9.9	432	16	1
25	5509	8.8	484	17	1
26	5509	6.3	253	18	1
27	5509	8.5	350	17	1
28	5509	8.0	295	16	1
29	5509	9.8	484	18	1
30	5509	10.0	351	17	1
Detection Percentage (%)					100%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	18.3	276	14	1
2	5491	15.6	461	15	1
3	5491	15.9	286	16	1
4	5491	18.6	282	12	1
5	5491	20.0	281	14	1
6	5491	12.7	385	13	1
7	5491	17.9	404	16	1
8	5491	15.8	419	12	1
9	5491	18.9	411	12	1
10	5491	19.9	428	15	1
11	5500	19.2	464	16	1
12	5500	17.3	471	13	1
13	5500	14.7	497	16	1
14	5500	11.7	264	15	1
15	5500	15.3	280	16	1
16	5500	13.3	315	15	1
17	5500	11.4	257	15	1
18	5500	15.6	358	13	1
19	5500	18.2	364	16	1
20	5500	16.0	312	16	1
21	5509	18.2	465	15	1
22	5509	16.5	293	15	1
23	5509	17.3	459	12	1
24	5509	19.3	328	16	1
25	5509	14.2	457	15	1
26	5509	17.7	383	12	1
27	5509	13.0	360	15	1
28	5509	12.9	333	16	1
29	5509	16.3	452	14	1
30	5509	15.0	263	13	1
Detection Percentage (%)					100%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (100%+100%+100%+100%)/4 = 100% (>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	5494.4	1	16	5500.0	1
2	5499.6	1	17	5500.0	1
3	5496.8	1	18	5500.0	1
4	5495.2	1	19	5500.0	1
5	5496.0	1	20	5500.0	1
6	5499.2	1	21	5504.8	1
7	5498.8	1	22	5504.0	1
8	5495.6	1	23	5500.4	1
9	5494.0	1	24	5505.6	1
10	5497.6	1	25	5506.0	1
11	5500.0	1	26	5500.8	1
12	5500.0	1	27	5503.2	1
13	5500.0	1	28	5504.4	1
14	5500.0	1	29	5501.2	1
15	5500.0	1	30	5502.4	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	32238	1	6	75	1315	0	0	32238	0	705881
2	677837	3	6	65	1187	1184	1213	711390	705882	1411763
3	900869	1	6	90	1253	0	0	1615843	1411764	2117645
4	739953	3	6	80	1029	1465	1694	2357049	2117646	2823527
5	490283	2	6	70	1901	1737	0	2851520	2823528	3529409
6	697332	2	6	95	1042	1337	0	3552490	3529410	4235291
7	770031	2	6	95	1211	1215	0	4324900	4235292	4941173
8	1064749	1	6	85	1146	0	0	5392075	4941174	5647055
9	925635	1	6	100	1756	0	0	6318856	5647056	6352937
10	443131	1	6	80	1104	0	0	6763743	6352938	7058819
11	742130	3	6	55	1950	1581	1221	7506977	7058820	7764701
12	438356	2	6	55	1965	1354	0	7950085	7764702	8470583
13	521498	3	6	75	1658	1889	1687	8474902	8470584	9176465
14	1130532	2	6	65	1185	1536	0	9610668	9176466	9882347
15	551220	3	6	60	1989	1852	1876	10164609	9882348	10588229
16	732661	3	6	70	1698	1576	1457	10902987	10588230	11294111
17	803070	1	6	95	1577	0	0	11710788	11294112	11999993

Total number of pulses in waveform = 34

Type 5 Radar Waveform_2

Num of Bursts = 18
Burst Interval (us)= 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	280962	3	19	65	1905	1696	1814	280962	0	666666
2	579189	2	19	75	1199	1892	0	865566	666667	1333333
3	1091401	3	19	65	1051	1781	1172	1960058	1333334	2000000
4	45181	3	19	60	1991	1037	1244	2009243	2000001	2666667
5	1291034	1	19	85	1891	0	0	3304549	2666668	3333334
6	184608	3	19	85	1265	1968	1937	3491048	3333335	4000001
7	1070832	2	19	90	1947	1512	0	4567050	4000002	4666668
8	618177	3	19	80	1817	1391	1616	5188686	4666669	5333335
9	346613	3	19	70	1591	1996	1090	5540123	5333336	6000002
10	993410	3	19	90	1539	1407	1401	6538210	6000003	6666669
11	330353	3	19	65	1159	1002	1810	6872910	6666670	7333336
12	534688	1	19	70	1781	0	0	7411569	7333337	8000003
13	853176	2	19	80	1254	1553	0	8266526	8000004	8666670
14	798132	2	19	75	1543	1148	0	9067465	8666671	9333337
15	608343	3	19	65	1831	1536	1057	9678499	9333338	10000004
16	408637	1	19	80	1444	0	0	10091560	10000005	10666671
17	1141432	3	19	65	1878	1929	1038	11234436	10666672	11333338
18	443388	1	19	70	1628	0	0	11682669	11333339	12000005

Total number of pulses in waveform = 42
****

Type 5 Radar Waveform_3

Num of Bursts = 19
Burst Interval (us)= 631579

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	136707	2	12	90	1730	1255	0	136707	0	631578
2	544967	2	12	60	1472	1644	0	684659	631579	1263157
3	1200997	1	12	70	1007	0	0	1888772	1263158	1894736
4	74526	1	12	50	1805	0	0	1964305	1894737	2526315
5	1036161	1	12	50	1041	0	0	3002271	2526316	3157894
6	188543	1	12	50	1526	0	0	3191855	3157895	3789473
7	1014595	2	12	85	1079	1989	0	4207976	3789474	4421052
8	501144	1	12	70	1517	0	0	4712188	4421053	5052631
9	495978	3	12	55	1159	1642	1339	5209683	5052632	5684210
10	707150	1	12	80	1575	0	0	5920973	5684211	6315789
11	580072	2	12	95	1754	1550	0	6502620	6315790	6947368
12	1060026	1	12	80	1751	0	0	7565950	6947369	7578947
13	54159	1	12	80	1780	0	0	7621860	7578948	8210526
14	1200874	2	12	70	1867	1934	0	8824514	8210527	8842105
15	514874	2	12	50	1513	1223	0	9343189	8842106	9473684
16	546004	3	12	75	1613	1028	1440	9891929	9473685	10105263
17	751145	1	12	50	1322	0	0	10647155	10105264	10736842
18	212637	2	12	55	1888	1449	0	10861114	10736843	11368421
19	695043	1	12	50	1853	0	0	11559494	11368422	12000000

Total number of pulses in waveform = 30
****

Type 5 Radar Waveform_4

Num of Bursts = 9
Burst Interval (us)= 1333333

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	617061	3	8	75	1638	1639	1559	617061	0	1333332
2	1303476	2	8	60	1316	1860	0	1925373	1333333	2666665
3	1164881	1	8	75	1329	0	0	3093430	2666666	3999998
4	2085292	2	8	50	1579	1026	0	5180051	3999999	5333331
5	1365501	2	8	70	1373	1394	0	6548157	5333332	6666664
6	172112	1	8	85	1341	0	0	6723036	6666665	7999997
7	1928888	3	8	50	1812	1980	1011	8653265	7999998	9333330
8	1557554	3	8	75	1806	1333	1505	10215622	9333331	10666663
9	541691	2	8	65	1584	1541	0	10761957	10666664	11999996

Total number of pulses in waveform = 19
****

Type 5 Radar Waveform_5

Num of Bursts = 16
Burst Interval (us)= 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	218215	2	10	65	1373	1913	0	218215	0	749999
2	616733	2	10	80	1650	1923	0	838234	750000	1499999
3	765658	2	10	65	1120	1276	0	1607465	1500000	2249999
4	1289159	3	10	95	1743	1930	1993	2899020	2250000	2999999
5	211718	1	10	75	1321	0	0	3116404	3000000	3749999
6	976234	1	10	55	1892	0	0	4093959	3750000	4499999
7	905016	1	10	65	1457	0	0	5000867	4500000	5249999
8	607016	1	10	70	1157	0	0	5609340	5250000	5999999
9	1111401	2	10	65	1047	1487	0	6721898	6000000	6749999
10	239699	3	10	95	1683	1563	1672	6964131	6750000	7499999
11	1193503	1	10	60	1482	0	0	8162552	7500000	8249999
12	353439	1	10	70	1932	0	0	8517473	8250000	8999999
13	1102884	2	10	65	1411	1474	0	9622289	9000000	9749999
14	154401	2	10	60	1799	1088	0	9779575	9750000	10499999
15	972920	2	10	50	1753	1002	0	10755382	10500000	11249999
16	834635	2	10	75	1494	1266	0	11592772	11250000	11999999

Total number of pulses in waveform = 28
****

Type 5 Radar Waveform_6

Num of Bursts = 9
Burst Interval (us)= 1333333

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	378130	2	18	75	1176	1481	0	378130	0	1333332
2	1568143	2	18	55	1884	1619	0	1948930	1333333	2666665
3	1277251	1	18	80	1815	0	0	3229684	2666666	3999998
4	1650080	2	18	95	1244	1471	0	4881579	3999999	5333331
5	718689	2	18	90	1924	1676	0	5602983	5333332	6666664
6	1306493	3	18	95	1544	1104	1918	6913076	6666665	7999997
7	2044137	3	18	100	1784	1686	1842	8961779	7999998	9333330
8	781224	1	18	85	1186	0	0	9748315	9333331	10666663
9	1538832	1	18	80	1584	0	0	11288333	10666664	11999996

Total number of pulses in waveform = 17
****

Type 5 Radar Waveform_7

Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	497005	2	17	100	1334	1739	0	497005	0	999999
2	745022	2	17	50	1832	1181	0	1245100	1000000	1999999
3	1390012	2	17	50	1279	1591	0	2638125	2000000	2999999
4	759133	3	17	60	1622	1183	1867	3400128	3000000	3999999
5	1561212	3	17	90	1181	1664	1021	4966012	4000000	4999999
6	254900	3	17	60	1597	1500	1567	5224778	5000000	5999999
7	973163	1	17	95	1099	0	0	6202605	6000000	6999999
8	1261945	2	17	75	1772	1881	0	7465649	7000000	7999999
9	1478363	1	17	70	1555	0	0	8947665	8000000	8999999
10	556660	3	17	80	1754	1940	1079	9505880	9000000	9999999
11	692269	3	17	55	1222	1559	1963	10202922	10000000	10999999
12	1170505	1	17	70	1347	0	0	11378171	11000000	11999999

Total number of pulses in waveform = 26
****

Type 5 Radar Waveform_8

Num of Bursts = 14
Burst Interval (us)= 857143

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	258906	2	9	100	1791	1368	0	258906	0	857142
2	810089	3	9	85	1828	1172	1523	1072154	857143	1714285
3	1164485	3	9	50	1365	1716	1241	2241162	1714286	2571428
4	438230	2	9	95	1349	1768	0	2683714	2571429	3428571
5	744724	2	9	85	1042	1312	0	3431555	3428572	4285714
6	1192594	2	9	75	1968	1254	0	4626503	4285715	5142857
7	927679	2	9	60	1229	1243	0	5557404	5142858	6000000
8	1275431	3	9	90	1304	1372	1415	6835307	6000001	6857143
9	136925	3	9	95	1114	1009	1610	6976323	6857144	7714286
10	1314747	3	9	60	1462	1484	1192	8294803	7714287	8571429
11	1064237	2	9	85	1760	1884	0	9363178	8571430	9428572
12	461473	1	9	55	1057	0	0	9828295	9428573	10285715
13	483478	2	9	100	1156	1824	0	10312830	10285716	11142858
14	1646254	1	9	50	1321	0	0	11962064	11142859	12000001

Total number of pulses in waveform = 31
****

Type 5 Radar Waveform_9

Num of Bursts = 20
Burst Interval (us)= 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	79059	3	5	85	1985	1155	1339	79059	0	599999
2	715202	2	5	65	1610	1603	0	798740	600000	1199999
3	876662	1	5	95	1853	0	0	1677615	1200000	1799999
4	429962	3	5	55	1124	1523	1995	2109430	1800000	2399999
5	859526	1	5	55	1468	0	0	2973598	2400000	2999999
6	575459	1	5	90	1709	0	0	3550525	3000000	3599999
7	507180	1	5	50	1956	0	0	4059414	3600000	4199999
8	370414	3	5	80	1874	1813	1895	4431784	4200000	4799999
9	799859	2	5	85	1287	1938	0	5237225	4800000	5399999
10	606729	1	5	75	1740	0	0	5847179	5400000	5999999
11	636413	3	5	100	1220	1065	1382	6485332	6000000	6599999
12	238199	2	5	55	1528	1100	0	6727198	6600000	7199999
13	909270	1	5	90	1808	0	0	7639096	7200000	7799999
14	722305	3	5	90	1647	1963	1285	8363209	7800000	8399999
15	490817	3	5	50	1296	1836	1514	8858921	8400000	8999999
16	450078	2	5	65	1121	1357	0	9313645	9000000	9599999
17	574138	1	5	70	1353	0	0	9890261	9600000	10199999
18	395579	1	5	60	1353	0	0	10287193	10200000	10799999
19	562801	3	5	100	1360	1981	1630	10851347	10800000	11399999
20	550398	3	5	80	1341	1101	1889	11406716	11400000	11999999

Total number of pulses in waveform = 40
****

Type 5 Radar Waveform_10

Num of Bursts = 14
Burst Interval (us)= 857143

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	842579	3	14	95	1309	1963	1068	842579	0	857142
2	257756	1	14	85	1282	0	0	1104675	857143	1714285
3	1417055	2	14	70	1130	1877	0	2523012	1714286	2571428
4	80831	1	14	55	1123	0	0	2606850	2571429	3428571
5	1307611	2	14	90	1531	1099	0	3915584	3428572	4285714
6	397528	3	14	90	1974	1735	1642	4315742	4285715	5142857
7	1543011	2	14	70	1080	1886	0	5864104	5142858	6000000
8	629872	1	14	55	1986	0	0	6496942	6000001	6857143
9	764185	3	14	90	1857	1416	1234	7263113	6857144	7714286
10	1282150	1	14	80	1482	0	0	8549770	7714287	8571429
11	619108	3	14	55	1328	1286	1517	9170360	8571430	9428572
12	674655	3	14	50	1940	1616	1610	9849146	9428573	10285715
13	1086524	2	14	65	1293	1526	0	10940836	10285716	11142858
14	585131	3	14	70	1251	1219	1868	11528786	11142859	12000001

Total number of pulses in waveform = 30
****

Type 5 Radar Waveform_11

Num of Bursts = 18
Burst Interval (us)= 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	12219	1	17	75	1181	0	0	12219	0	666666
2	776059	1	17	55	1460	0	0	789459	666667	1333333
3	848920	1	17	50	1571	0	0	1639839	1333334	2000000
4	773933	1	17	70	1661	0	0	2415343	2000001	2666667
5	356033	1	17	75	1262	0	0	2773037	2666668	3333334
6	1062717	3	17	85	1848	1951	1291	3837016	3333335	4000001
7	727077	2	17	55	1621	1250	0	4569183	4000002	4666668
8	723706	3	17	50	1100	1479	1040	5295760	4666669	5333335
9	481134	2	17	50	1882	1379	0	5780513	5333336	6000002
10	814934	3	17	80	1808	1653	1069	6598708	6000003	6666669
11	405340	2	17	70	1731	1329	0	7008578	6666670	7333336
12	519822	3	17	65	1287	1048	1066	7531460	7333337	8000003
13	592051	1	17	80	1417	0	0	8126912	8000004	8666670
14	1098500	2	17	85	1177	1375	0	9226829	8666671	9333337
15	442245	2	17	75	1090	1041	0	9671626	9333338	10000004
16	879496	3	17	55	1395	1018	1771	10553253	10000005	10666671
17	583844	1	17	70	1434	0	0	11141281	10666672	11333338
18	255932	3	17	55	1403	1782	1874	11398647	11333339	12000005

Total number of pulses in waveform = 35
****

Type 5 Radar Waveform_12

Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	205221	2	6	90	1459	1399	0	205221	0	705881
2	829854	1	6	50	1190	0	0	1037933	705882	1411763
3	448966	1	6	80	1917	0	0	1488089	1411764	2117645
4	1021982	1	6	100	1744	0	0	2511988	2117646	2823527
5	877220	3	6	60	1402	1999	1149	3390952	2823528	3529409
6	660590	3	6	55	1644	1375	1521	4056092	3529410	4235291
7	659439	3	6	50	1380	1366	1013	4720071	4235292	4941173
8	258699	2	6	60	1203	1009	0	4982529	4941174	5647055
9	761684	3	6	90	1762	1979	1092	5746425	5647056	6352937
10	1122269	3	6	70	1100	1528	1804	6873527	6352938	7058819
11	668093	1	6	60	1025	0	0	7546052	7058820	7764701
12	562387	3	6	95	1989	1957	1995	8109464	7764702	8470583
13	655922	3	6	60	1275	1966	1669	8771327	8470584	9176465
14	968274	3	6	60	1407	1645	1972	9744511	9176466	9882347
15	557394	1	6	95	1106	0	0	10306929	9882348	10588229
16	407515	3	6	80	1760	1982	1530	10715550	10588230	11294111
17	1014625	2	6	70	1417	1614	0	11735447	11294112	11999993

Total number of pulses in waveform = 38
****

Type 5 Radar Waveform_13

Num of Bursts = 9
Burst Interval (us)= 1333333

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	872156	2	10	75	1949	1354	0	872156	0	1333332
2	605491	3	10	90	1225	1694	1003	1480950	1333333	2666665
3	1260813	1	10	80	1979	0	0	2745685	2666666	3999998
4	1278771	2	10	100	1197	1190	0	4026435	3999999	5333331
5	1305585	1	10	100	1192	0	0	5334407	5333332	6666664
6	1480821	1	10	90	1178	0	0	6816420	6666665	7999997
7	1616355	2	10	80	1171	1512	0	8433953	7999998	9333330
8	1628473	2	10	90	1644	1913	0	10065109	9333331	10666663
9	1021211	3	10	70	1624	1293	1321	11089877	10666664	11999996

Total number of pulses in waveform = 17
****

Type 5 Radar Waveform_14

Num of Bursts = 13
Burst Interval (us)= 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	457986	2	8	100	1480	1386	0	457986	0	923076
2	1205636	1	8	75	1476	0	0	1666488	923077	1846153
3	674975	2	8	90	1302	1072	0	2342939	1846154	2769230
4	917175	3	8	50	1182	1736	1516	3262488	2769231	3692307
5	443648	1	8	70	1005	0	0	3710570	3692308	4615384
6	1762754	2	8	100	1994	1239	0	5474329	4615385	5538461
7	464468	1	8	75	1865	0	0	5942030	5538462	6461538
8	1034338	3	8	70	1596	1301	1466	6978233	6461539	7384615
9	668783	1	8	50	1187	0	0	7651379	7384616	8307692
10	702323	2	8	70	1067	1119	0	8354889	8307693	9230769
11	961629	2	8	95	1475	1564	0	9318704	9230770	10153846
12	1066273	1	8	75	1593	0	0	10388016	10153847	11076923
13	1565830	1	8	100	1867	0	0	11955439	11076924	12000000

Total number of pulses in waveform = 22
****

Type 5 Radar Waveform_15

Num of Bursts = 18
Burst Interval (us)= 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	433330	3	5	70	1896	1187	1007	433330	0	666666
2	439666	3	5	55	1044	1546	1076	877086	666667	1333333
3	882046	1	5	100	1473	0	0	1762798	1333334	2000000
4	878682	2	5	65	1032	1708	0	2642953	2000001	2666667
5	358724	1	5	90	1431	0	0	3004417	2666668	3333334
6	691887	3	5	55	1472	1711	1051	3697735	3333335	4000001
7	593257	2	5	90	1989	1381	0	4295226	4000002	4666668
8	438011	3	5	60	1858	1181	1201	4736607	4666669	5333335
9	923662	3	5	55	1103	1789	1150	5664509	5333336	6000002
10	908986	1	5	80	1544	0	0	6577537	6000003	6666669
11	407484	3	5	100	1595	1908	1767	6986565	6666670	7333336
12	528289	2	5	55	1553	1228	0	7520124	7333337	8000003
13	1122191	1	5	55	1728	0	0	8645096	8000004	8666670
14	393037	2	5	100	1125	1917	0	9039861	8666671	9333337
15	641881	3	5	70	1904	1161	1962	9684784	9333338	10000004
16	358951	3	5	90	1642	1283	1658	10048762	10000005	10666671
17	752162	3	5	65	1283	1739	1461	10805507	10666672	11333338
18	963454	2	5	60	1053	1643	0	11773444	11333339	12000005

Total number of pulses in waveform = 41
****

Type 5 Radar Waveform_16

Num of Bursts = 20
Burst Interval (us)= 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	277465	3	18	65	1163	1997	1241	277465	0	599999
2	691151	2	18	75	1709	1875	0	973017	600000	1199999
3	733307	2	18	80	1646	1995	0	1709908	1200000	1799999
4	205088	3	18	50	1430	1186	1010	1918637	1800000	2399999
5	1035345	3	18	65	1626	1501	1176	2957608	2400000	2999999
6	483173	1	18	60	1311	0	0	3445084	3000000	3599999
7	237172	2	18	100	1065	1306	0	3683567	3600000	4199999
8	1093703	2	18	80	1441	1417	0	4779641	4200000	4799999
9	345930	1	18	55	1449	0	0	5128429	4800000	5399999
10	502517	3	18	50	1181	1887	1304	5632395	5400000	5999999
11	882009	1	18	95	1793	0	0	6518776	6000000	6599999
12	330917	3	18	80	1992	1073	1644	6851486	6600000	7199999
13	583959	3	18	60	1916	1495	1608	7440154	7200000	7799999
14	931095	2	18	100	1665	1821	0	8376268	7800000	8399999
15	396005	1	18	80	1745	0	0	8775759	8400000	8999999
16	350248	3	18	65	1392	1261	1345	9127752	9000000	9599999
17	673741	3	18	50	1742	1347	1246	9805491	9600000	10199999
18	397053	3	18	65	1679	1176	1651	10206879	10200000	10799999
19	1089394	2	18	100	1477	1458	0	11300779	10800000	11399999
20	680896	1	18	80	1189	0	0	11984610	11400000	11999999

Total number of pulses in waveform = 44
****

Type 5 Radar Waveform_17

Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	1055270	3	14	90	1967	1942	1718	1055270	0	1090908
2	728138	2	14	65	1404	1476	0	1789035	1090909	2181817
3	557140	2	14	55	1976	1929	0	2349055	2181818	3272726
4	1511000	1	14	50	1093	0	0	3863960	3272727	4363635
5	989449	3	14	85	1619	1525	1846	4854502	4363636	5454544
6	1652993	3	14	65	1436	1747	1229	6512485	5454545	6545453
7	733303	3	14	55	1683	1418	1286	7250200	6545454	7636362
8	703934	1	14	65	1925	0	0	7958521	7636363	8727271
9	1560805	2	14	50	1821	1096	0	9521251	8727272	9818180
10	508035	2	14	80	1701	1344	0	10032203	9818181	10909089
11	1162471	3	14	65	1105	1134	1693	11197719	10909090	11999998

Total number of pulses in waveform = 25
****

Type 5 Radar Waveform_18

Num of Bursts = 19
Burst Interval (us)= 631579

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	424308	1	12	75	1501	0	0	424308	0	631578
2	506362	2	12	60	1803	1322	0	932171	631579	1263157
3	895872	1	12	55	1403	0	0	1831168	1263158	1894736
4	115165	3	12	60	1948	1656	1733	1947736	1894737	2526315
5	899555	3	12	65	1730	1887	1865	2852628	2526316	3157894
6	348185	3	12	70	1130	1563	1018	3206295	3157895	3789473
7	744085	2	12	100	1945	1812	0	3954091	3789474	4421052
8	646405	1	12	75	1532	0	0	4604253	4421053	5052631
9	559554	2	12	95	1717	1927	0	5165339	5052632	5684210
10	1062288	3	12	65	1670	1532	1849	6231271	5684211	6315789
11	266430	3	12	65	1291	1621	1781	6502752	6315790	6947368
12	1057629	2	12	60	1534	1943	0	7565074	6947369	7578947
13	625267	1	12	55	1275	0	0	8193818	7578948	8210526
14	99233	3	12	60	1061	1265	1111	8294326	8210527	8842105
15	1155297	2	12	65	1101	1364	0	9453060	8842106	9473684
16	178636	2	12	85	1834	1198	0	9634161	9473685	10105263
17	594892	3	12	85	1795	1544	1401	10232085	10105264	10736842
18	1059454	2	12	100	1261	1607	0	11296279	10736843	11368421
19	143191	2	12	100	1377	1624	0	11442338	11368422	12000000

Total number of pulses in waveform = 41
****

Type 5 Radar Waveform_19

Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	466655	3	19	50	1701	1127	1556	466655	0	799999
2	853351	1	19	90	1747	0	0	1324390	800000	1599999
3	303321	1	19	90	1711	0	0	1629458	1600000	2399999
4	1139362	3	19	55	1464	1892	1544	2770531	2400000	3199999
5	1012328	1	19	60	1532	0	0	3787759	3200000	3999999
6	455494	3	19	80	1043	1568	1013	4244785	4000000	4799999
7	1132142	2	19	85	1419	1897	0	5380551	4800000	5599999
8	509599	3	19	95	1038	1356	1771	5893466	5600000	6399999
9	1210549	1	19	95	1508	0	0	7108180	6400000	7199999
10	203333	1	19	95	1425	0	0	7313021	7200000	7999999
11	1412551	1	19	100	1437	0	0	8726997	8000000	8799999
12	359095	3	19	60	1551	1160	1710	9087529	8800000	9599999
13	1186930	1	19	75	1715	0	0	10278880	9600000	10399999
14	893147	2	19	80	1025	1364	0	11173742	10400000	11199999
15	660854	3	19	65	1943	1879	1998	11836985	11200000	11999999

Total number of pulses in waveform = 29
****

Type 5 Radar Waveform_20

Num of Bursts = 19
Burst Interval (us)= 631579

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	448536	3	9	80	1445	1850	1586	448536	0	631578
2	572648	3	9	90	1021	1882	1771	1026065	631579	1263157
3	305392	2	9	75	1722	1409	0	1336131	1263158	1894736
4	756745	2	9	60	1753	1808	0	2096007	1894737	2526315
5	642198	3	9	70	1218	1666	1862	2741766	2526316	3157894
6	884424	2	9	85	1624	1085	0	3630936	3157895	3789473
7	264310	1	9	80	1735	0	0	3897955	3789474	4421052
8	753438	2	9	95	1531	1550	0	4653128	4421053	5052631
9	895363	2	9	100	1604	1682	0	5551572	5052632	5684210
10	720983	1	9	60	1668	0	0	6275841	5684211	6315789
11	268057	2	9	100	1712	1310	0	6545566	6315790	6947368
12	690384	1	9	55	1494	0	0	7238972	6947369	7578947
13	765860	3	9	80	1319	1119	1605	8006326	7578948	8210526
14	504872	1	9	50	1699	0	0	8515241	8210527	8842105
15	688618	2	9	100	1736	1958	0	9205558	8842106	9473684
16	793722	1	9	55	1224	0	0	10002974	9473685	10105263
17	670095	3	9	70	1927	1767	1815	10674293	10105264	10736842
18	190868	1	9	90	1104	0	0	10870670	10736843	11368421
19	617039	2	9	85	1274	1975	0	11488813	11368422	12000000

Total number of pulses in waveform = 37
****

Type 5 Radar Waveform_21

Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	71671	1	8	100	1586	0	0	71671	0	799999
2	1319026	1	8	60	1001	0	0	1392283	800000	1599999
3	543643	3	8	65	1515	1492	1484	1936927	1600000	2399999
4	1161866	3	8	75	1634	1773	1788	3103284	2400000	3199999
5	374812	3	8	55	1170	1191	1758	3483291	3200000	3999999
6	519146	1	8	65	1927	0	0	4006556	4000000	4799999
7	976562	2	8	85	1240	1800	0	4985045	4800000	5599999
8	1352957	3	8	70	1943	1211	1320	6341042	5600000	6399999
9	835207	1	8	65	1475	0	0	7180723	6400000	7199999
10	471076	3	8	65	1711	1244	1957	7653274	7200000	7999999
11	739616	2	8	60	1125	1709	0	8397802	8000000	8799999
12	644642	3	8	60	1829	1441	1152	9045278	8800000	9599999
13	1329208	1	8	70	1772	0	0	10378908	9600000	10399999
14	403728	1	8	55	1708	0	0	10784408	10400000	11199999
15	746208	3	8	75	1044	1289	1060	11532324	11200000	11999999

Total number of pulses in waveform = 31
****

Type 5 Radar Waveform_22

Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	505631	2	10	70	1338	1040	0	505631	0	1090908
2	1495892	2	10	80	1930	1655	0	2003901	1090909	2181817
3	1199847	2	10	60	1270	1356	0	3207333	2181818	3272726
4	500302	2	10	50	1057	1327	0	3710261	3272727	4363635
5	918600	3	10	75	1497	1286	1061	4631245	4363636	5454544
6	1461839	2	10	65	1896	1236	0	6096928	5454545	6545453
7	1239339	1	10	95	1259	0	0	7339399	6545454	7636362
8	538456	1	10	75	1957	0	0	7879114	7636363	8727271
9	1318112	2	10	70	1219	1611	0	9199183	8727272	9818180
10	1050233	2	10	95	1482	1368	0	10252246	9818181	10909089
11	1736961	2	10	90	1420	1674	0	11992057	10909090	11999998

Total number of pulses in waveform = 21
****

Type 5 Radar Waveform_23

Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	274962	1	19	90	1902	0	0	274962	0	705881
2	463967	2	19	55	1078	1166	0	740831	705882	1411763
3	1368438	3	19	95	1304	1548	1105	2111513	1411764	2117645
4	199428	1	19	90	1762	0	0	2314898	2117646	2823527
5	886913	3	19	90	1772	1920	1416	3203573	2823528	3529409
6	507819	1	19	100	1769	0	0	3716500	3529410	4235291
7	577223	3	19	65	1606	1040	1937	4295492	4235292	4941173
8	876485	3	19	60	1386	1593	1910	5176560	4941174	5647055
9	727018	2	19	80	1252	1811	0	5908467	5647056	6352937
10	1012806	3	19	55	1779	1472	1042	6924336	6352938	7058819
11	449963	3	19	70	1536	1418	1861	7378592	7058820	7764701
12	760586	2	19	55	1403	1432	0	8143993	7764702	8470583
13	649121	2	19	75	1370	1055	0	8795949	8470584	9176465
14	521384	1	19	75	1401	0	0	9319758	9176466	9882347
15	1240430	3	19	65	1494	1207	1008	10561589	9882348	10588229
16	88859	2	19	50	1098	1880	0	10654157	10588230	11294111
17	802781	3	19	100	1571	1226	1132	11459916	11294112	11999993

Total number of pulses in waveform = 38
****

Type 5 Radar Waveform_24

Num of Bursts = 20
Burst Interval (us)= 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	531162	1	6	50	1571	0	0	531162	0	599999
2	206956	1	6	55	1629	0	0	739689	600000	1199999
3	572523	1	6	65	1668	0	0	1313841	1200000	1799999
4	746604	2	6	80	1810	1004	0	2062113	1800000	2399999
5	591053	1	6	55	1508	0	0	2655980	2400000	2999999
6	611559	3	6	80	1298	1881	1855	3269047	3000000	3599999
7	397935	1	6	85	1572	0	0	3672016	3600000	4199999
8	602381	1	6	90	1486	0	0	4275969	4200000	4799999
9	847193	2	6	55	1663	1332	0	5124648	4800000	5399999
10	691844	1	6	90	1902	0	0	5819487	5400000	5999999
11	615201	2	6	55	1381	1568	0	6436590	6000000	6599999
12	641448	3	6	60	1162	1893	1632	7080987	6600000	7199999
13	411361	2	6	55	1269	1180	0	7497035	7200000	7799999
14	499654	2	6	85	1327	1017	0	7999138	7800000	8399999
15	904633	2	6	60	1403	1714	0	8906115	8400000	8999999
16	583159	1	6	90	1029	0	0	9492391	9000000	9599999
17	591192	3	6	75	1318	1260	1392	10084612	9600000	10199999
18	502716	1	6	55	1943	0	0	10591298	10200000	10799999
19	716133	2	6	55	1563	1274	0	11309374	10800000	11399999
20	596398	3	6	65	1175	1237	1441	11908609	11400000	11999999

Total number of pulses in waveform = 35
****

Type 5 Radar Waveform_25

Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	141651	3	5	90	1642	1365	1284	141651	0	705881
2	925980	2	5	50	1176	1994	0	1071922	705882	1411763
3	862699	3	5	70	1798	1230	1385	1937791	1411764	2117645
4	688515	2	5	70	1905	1773	0	2630719	2117646	2823527
5	400817	1	5	80	1569	0	0	3035214	2823528	3529409
6	499527	3	5	60	1822	1066	1775	3536310	3529410	4235291
7	944450	1	5	65	1310	0	0	4485423	4235292	4941173
8	1087196	3	5	85	1145	1034	1799	5573929	4941174	5647055
9	638244	2	5	95	1614	1507	0	6216151	5647056	6352937
10	194621	2	5	90	1289	1345	0	6413893	6352938	7058819
11	951871	1	5	80	1399	0	0	7368398	7058820	7764701
12	858813	3	5	100	1733	1464	1445	8228610	7764702	8470583
13	371621	2	5	80	1201	1980	0	8604873	8470584	9176465
14	917482	2	5	90	1837	1205	0	9525536	9176466	9882347
15	654254	2	5	65	1285	1773	0	10182832	9882348	10588229
16	997490	2	5	50	1061	1602	0	11183380	10588230	11294111
17	210743	2	5	85	1001	1203	0	11396786	11294112	11999993

Total number of pulses in waveform = 36
****

Type 5 Radar Waveform_26

Num of Bursts = 20
Burst Interval (us)= 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	277389	1	18	60	1230	0	0	277389	0	599999
2	698343	1	18	65	1674	0	0	976962	600000	1199999
3	557584	3	18	85	1509	1850	1080	1536220	1200000	1799999
4	504680	3	18	70	1024	1341	1295	2045339	1800000	2399999
5	866643	1	18	75	1814	0	0	2915642	2400000	2999999
6	367779	1	18	80	1908	0	0	3285235	3000000	3599999
7	507020	1	18	70	1768	0	0	3794163	3600000	4199999
8	515224	2	18	70	1185	1598	0	4311155	4200000	4799999
9	759449	1	18	100	1430	0	0	5073387	4800000	5399999
10	898190	3	18	80	1638	1588	1991	5973007	5400000	5999999
11	163610	3	18	55	1255	1708	1525	6141834	6000000	6599999
12	622282	2	18	80	1369	1754	0	6768604	6600000	7199999
13	648742	1	18	65	1974	0	0	7420469	7200000	7799999
14	917460	2	18	65	1911	1432	0	8339903	7800000	8399999
15	104485	2	18	60	1420	1284	0	8447731	8400000	8999999
16	572744	1	18	70	1772	0	0	9023179	9000000	9599999
17	830430	1	18	80	1926	0	0	9855381	9600000	10199999
18	686701	3	18	90	1294	1475	1067	10544008	10200000	10799999
19	646441	1	18	50	1217	0	0	11194285	10800000	11399999
20	542147	3	18	65	1269	1256	1355	11737649	11400000	11999999

Total number of pulses in waveform = 36
****

Type 5 Radar Waveform_27

Num of Bursts = 13
Burst Interval (us)= 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	678939	1	12	80	1227	0	0	678939	0	923076
2	622131	2	12	50	1973	1233	0	1302297	923077	1846153
3	589142	3	12	95	1226	1773	1770	1894645	1846154	2769230
4	1300092	3	12	55	1677	1779	1244	3199506	2769231	3692307
5	1028992	1	12	70	1971	0	0	4233198	3692308	4615384
6	609359	2	12	60	1365	1537	0	4844528	4615385	5538461
7	895973	2	12	75	1436	1164	0	5743403	5538462	6461538
8	1202342	3	12	100	1815	1079	1700	6948345	6461539	7384615
9	1046732	1	12	50	1011	0	0	7999671	7384616	8307692
10	365198	1	12	75	1118	0	0	8365880	8307693	9230769
11	968194	3	12	85	1348	1606	1678	9335192	9230770	10153846
12	1002361	1	12	50	1683	0	0	10342185	10153847	11076923
13	1426795	2	12	85	1057	1153	0	11770663	11076924	12000000

Total number of pulses in waveform = 25
****

Type 5 Radar Waveform_28

Num of Bursts = 13
Burst Interval (us)= 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	915682	3	9	100	1735	1652	1169	915682	0	923076
2	141096	3	9	90	1290	1956	1907	1061334	923077	1846153
3	1259917	1	9	65	1538	0	0	2326404	1846154	2769230
4	840896	1	9	100	1889	0	0	3168838	2769231	3692307
5	1098153	2	9	90	1278	1510	0	4268880	3692308	4615384
6	553769	1	9	65	1793	0	0	4825437	4615385	5538461
7	976597	2	9	90	1336	1949	0	5803827	5538462	6461538
8	1349942	3	9	75	1756	1237	1154	7157054	6461539	7384615
9	388802	2	9	65	1524	1966	0	7550003	7384616	8307692
10	1475037	1	9	85	1142	0	0	9028530	8307693	9230769
11	389406	2	9	50	1581	1179	0	9419078	9230770	10153846
12	937989	2	9	80	1607	1699	0	10359827	10153847	11076923
13	945573	3	9	75	1196	1852	1379	11308706	11076924	12000000

Total number of pulses in waveform = 26
****

Type 5 Radar Waveform_29

Num of Bursts = 10
Burst Interval (us)= 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	740330	1	17	70	1472	0	0	740330	0	1199999
2	1546859	1	17	60	1410	0	0	2288661	1200000	2399999
3	277898	2	17	85	1183	1755	0	2567969	2400000	3599999
4	1164722	2	17	55	1910	1816	0	3735629	3600000	4799999
5	1250808	2	17	65	1537	1513	0	4990163	4800000	5999999
6	2081205	1	17	70	1755	0	0	7074418	6000000	7199999
7	207776	3	17	100	1559	1420	1829	7283949	7200000	8399999
8	1999289	2	17	85	1434	1841	0	9288046	8400000	9599999
9	1009439	3	17	70	1115	1538	1304	10300760	9600000	10799999
10	672370	3	17	75	1127	1037	1264	10977087	10800000	11999999

Total number of pulses in waveform = 20
****

Type 5 Radar Waveform_30

Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	722830	2	14	65	1558	1639	0	722830	0	799999
2	841971	2	14	80	1038	1137	0	1567998	800000	1599999
3	338757	2	14	80	1326	1364	0	1908930	1600000	2399999
4	797707	3	14	100	1305	1440	1494	2709327	2400000	3199999
5	574202	1	14	75	1588	0	0	3287768	3200000	3999999
6	1418507	1	14	100	1390	0	0	4707863	4000000	4799999
7	184523	3	14	95	1830	1748	1359	4893776	4800000	5599999
8	795414	1	14	60	1558	0	0	5694127	5600000	6399999
9	1117979	2	14	75	1575	1396	0	6813664	6400000	7199999
10	499742	1	14	85	1723	0	0	7316377	7200000	7999999
11	1314192	2	14	95	1098	1784	0	8632292	8000000	8799999
12	813331	1	14	60	1829	0	0	9448505	8800000	9599999
13	753822	2	14	100	1921	1984	0	10204156	9600000	10399999
14	740160	3	14	75	1022	1032	1421	10948221	10400000	11199999
15	388737	2	14	75	1811	1068	0	11340433	11200000	11999999

Total number of pulses in waveform = 28
****

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	5500	1
2	5491	1	17	5500	1
3	5491	1	18	5500	1
4	5491	1	19	5500	1
5	5491	1	20	5500	1
6	5491	1	21	5509	1
7	5491	1	22	5509	1
8	5491	1	23	5509	1
9	5491	1	24	5509	1
10	5491	1	25	5509	1
11	5500	1	26	5509	1
12	5500	1	27	5509	1
13	5500	1	28	5509	1
14	5500	1	29	5509	1
15	5500	1	30	5509	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
26	5479	78	8	5491	24
28	5484	84	15	5500	45
34	5515	102	17	5471	51
53	5502	159	18	5521	54
57	5494	171	22	5477	66
59	5518	177	23	5520	69
60	5516	180	40	5479	120
67	5488	201	48	5516	144
94	5465	282	60	5464	180
96	5498	288	64	5475	192
98	5496	294	65	5495	195
--	--	--	68	5499	204
--	--	--	86	5483	258

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5469	24	6	5469	18
9	5515	27	20	5490	60
10	5500	30	21	5497	63
18	5510	54	22	5479	66
19	5516	57	40	5505	120
26	5501	78	45	5466	135
27	5496	81	55	5463	165
31	5480	93	56	5470	168
56	5513	168	65	5501	195
58	5461	174	66	5464	198
72	5466	216	78	5518	234
83	5491	249	80	5481	240
--	--	--	84	5496	252
--	--	--	95	5511	285
--	--	--	97	5487	291

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
22	5504	66	2	5478	6
32	5512	96	5	5471	15
37	5468	111	15	5489	45
42	5511	126	22	5468	66
46	5480	138	23	5481	69
59	5467	177	33	5520	99
76	5505	228	45	5467	135
78	5518	234	54	5514	162
81	5465	243	80	5516	240
87	5508	261	85	5521	255
99	5464	297	98	5465	294

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5490	3	3	5480	9
4	5497	12	11	5464	33
9	5507	27	13	5489	39
12	5474	36	28	5492	84
16	5483	48	38	5479	114
24	5464	72	39	5505	117
30	5482	90	47	5502	141
33	5481	99	53	5484	159
50	5471	150	63	5472	189
53	5519	159	72	5508	216
56	5463	168	80	5498	240
83	5467	249	85	5481	255
--	--	--	90	5463	270
--	--	--	91	5486	273
--	--	--	92	5514	276
--	--	--	96	5517	288

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
16	5471	48	1	5492	3
24	5516	72	15	5486	45
27	5504	81	16	5472	48
33	5477	99	37	5491	111
40	5473	120	54	5503	162
44	5521	132	81	5506	243
57	5466	171	90	5488	270
70	5510	210	94	5484	282
78	5462	234	99	5515	297

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
2	5523	6	2	5512	6
7	5515	21	9	5506	27
12	5516	36	17	5489	51
14	5501	42	39	5529	117
25	5502	75	40	5474	120
33	5508	99	42	5471	126
53	5474	159	48	5527	144
65	5490	195	53	5497	159
66	5527	198	70	5530	210
73	5494	219	74	5481	222
77	5519	231	81	5522	243
84	5512	252	82	5515	246
86	5475	258	98	5470	294
97	5489	291	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5479	3	14	5485	42
3	5490	9	16	5497	48
29	5474	87	29	5479	87
36	5512	108	38	5528	114
39	5515	117	46	5510	138
48	5519	144	57	5488	171
50	5489	150	59	5475	177
57	5500	171	63	5512	189
66	5518	198	73	5529	219
81	5477	243	76	5472	228
82	5473	246	84	5486	252
84	5494	252	85	5518	255
90	5499	270	93	5503	279
92	5513	276	--	--	--
97	5470	291	--	--	--
99	5506	297	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5493	18	2	5523	6
17	5522	51	7	5470	21
19	5479	57	9	5491	27
20	5516	60	10	5512	30
21	5527	63	17	5493	51
28	5521	84	23	5505	69
31	5507	93	29	5522	87
33	5508	99	44	5504	132
36	5526	108	46	5472	138
48	5513	144	55	5501	165
50	5501	150	56	5483	168
53	5473	159	64	5529	192
61	5489	183	78	5478	234
73	5482	219	94	5519	282
85	5471	255	96	5495	288
--	--	--	99	5515	297

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5522	3	15	5482	45
7	5494	21	17	5497	51
10	5503	30	34	5527	102
15	5492	45	39	5476	117
27	5510	81	41	5525	123
29	5483	87	45	5475	135
37	5529	111	48	5511	144
44	5504	132	50	5519	150
54	5509	162	58	5518	174
57	5500	171	67	5496	201
65	5477	195	68	5488	204
68	5513	204	71	5522	213
71	5516	213	72	5515	216
80	5479	240	91	5489	273
--	--	--	94	5510	282

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5492	24	5	5318	15
34	5495	102	22	5290	66
42	5481	126	23	5284	69
45	5509	135	25	5324	75
54	5506	162	29	5325	87
55	5523	165	35	5307	105
68	5519	204	40	5319	120
77	5489	231	46	5305	138
91	5487	273	54	5271	162
95	5477	285	58	5277	174
97	5497	291	65	5316	195
98	5512	294	81	5309	243
99	5493	297	85	5280	255
--	--	--	92	5314	276
--	--	--	97	5276	291

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5509	3	0	5501	0
2	5532	6	15	5515	45
3	5535	9	22	5537	66
12	5498	36	30	5511	90
29	5505	87	33	5535	99
32	5530	96	34	5495	102
33	5488	99	36	5508	108
38	5518	114	46	5494	138
39	5520	117	54	5507	162
43	5525	129	57	5532	171
49	5502	147	83	5533	249
63	5499	189	89	5526	267
68	5529	204	--	--	--
97	5504	291	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
18	5507	54	4	5529	12
25	5535	75	14	5510	42
29	5539	87	30	5498	90
30	5510	90	45	5517	135
37	5521	111	55	5496	165
42	5526	126	65	5495	195
44	5482	132	71	5506	213
60	5530	180	72	5516	216
77	5503	231	75	5492	225
78	5489	234	81	5499	243
99	5500	297	87	5523	261
--	--	--	94	5502	282
--	--	--	95	5504	285

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5527	6	13	5524	39
3	5538	9	21	5485	63
16	5505	48	41	5509	123
20	5516	60	48	5506	144
24	5494	72	49	5535	147
32	5482	96	52	5479	156
49	5480	147	54	5500	162
69	5484	207	58	5511	174
75	5495	225	61	5491	183
80	5512	240	63	5516	189
--	--	--	65	5497	195
--	--	--	79	5518	237
--	--	--	87	5537	261
--	--	--	88	5504	264
--	--	--	89	5519	267
--	--	--	91	5499	273
--	--	--	93	5531	279
--	--	--	98	5520	294

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5512	42	10	5497	30
16	5502	48	17	5509	51
19	5484	57	20	5515	60
20	5491	60	37	5533	111
33	5523	99	51	5492	153
51	5536	153	52	5508	156
52	5521	156	58	5506	174
62	5526	186	65	5487	195
71	5505	213	69	5538	207
73	5496	219	72	5539	216
75	5495	225	74	5525	222
79	5479	237	81	5489	243
82	5504	246	--	--	--
86	5486	258	--	--	--
97	5522	291	--	--	--
98	5516	294	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5481	15	0	5520	0
6	5518	18	5	5503	15
9	5512	27	10	5507	30
10	5524	30	16	5491	48
11	5510	33	58	5500	174
30	5537	90	63	5482	189
32	5480	96	66	5539	198
34	5503	102	68	5480	204
37	5532	111	79	5493	237
51	5534	153	87	5483	261
56	5533	168	92	5509	276
70	5485	210	93	5512	279
74	5536	222	--	--	--
78	5517	234	--	--	--
81	5520	243	--	--	--
83	5507	249	--	--	--
84	5488	252	--	--	--
96	5530	288	--	--	--

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/26
Test Item	Radar Statistical Performance Check (802.11n-HT40 mode – 5510MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1	538	99	1
2	5491	1	658	81	1
3	5491	1	818	65	1
4	5491	1	838	63	1
5	5500	1	918	58	1
6	5500	1	638	83	1
7	5500	1	758	70	1
8	5500	1	698	76	1
9	5508	1	738	72	1
10	5508	1	598	89	1
11	5508	1	778	68	1
12	5508	1	938	57	1
13	5510	1	618	86	1
14	5510	1	798	67	1
15	5510	1	678	78	1
16	5510	1	2342	23	1
17	5510	1	1823	29	1
18	5510	1	2723	20	1
19	5512	1	1363	39	1
20	5512	1	2003	27	1
21	5512	1	1314	41	1
22	5512	1	2426	22	1
23	5520	1	1562	34	1
24	5520	1	1372	39	1
25	5520	1	2568	21	1
26	5520	1	1511	35	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5529	1	2237	24	1
28	5529	1	2135	25	1
29	5529	1	2978	18	1
30	5529	1	2113	25	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	4.9	171	26	1
2	5491	3.6	229	29	1
3	5491	1.4	151	26	1
4	5491	3.1	206	24	1
5	5500	4.9	190	28	1
6	5500	3.7	227	27	1
7	5500	1.5	185	27	1
8	5500	4.4	230	29	1
9	5508	4.1	207	24	1
10	5508	4.9	202	27	1
11	5508	2.9	163	23	1
12	5508	1.1	175	25	1
13	5510	2.1	171	27	1
14	5510	3.3	158	28	1
15	5510	2.2	176	29	1
16	5510	4.7	218	27	1
17	5510	1.6	226	26	1
18	5510	3.8	193	23	1
19	5512	3.1	178	27	1
20	5512	3.6	185	25	1
21	5512	3.4	163	29	1
22	5512	4.6	150	23	1
23	5520	1.3	205	27	1
24	5520	4.7	221	26	1
25	5520	3.2	167	24	1
26	5520	2.2	215	25	1
27	5529	3.7	161	26	1
28	5529	3.0	151	24	1
29	5529	4.7	170	29	1
30	5529	1.1	230	27	1
Detection Percentage (%)					100%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	6.4	490	16	1
2	5491	7.9	273	16	1
3	5491	8.3	439	18	1
4	5491	7.3	281	16	1
5	5500	9.0	427	18	1
6	5500	8.5	364	17	1
7	5500	8.1	342	16	1
8	5500	8.3	278	16	1
9	5508	9.7	414	17	1
10	5508	7.4	350	16	1
11	5508	8.6	308	18	1
12	5508	7.0	281	17	1
13	5510	6.9	438	18	1
14	5510	9.1	444	18	1
15	5510	6.8	317	16	1
16	5510	9.6	324	17	1
17	5510	8.2	349	18	1
18	5510	8.1	395	16	1
19	5512	9.0	447	16	1
20	5512	9.5	258	16	1
21	5512	9.0	357	17	1
22	5512	10.0	300	18	1
23	5520	8.2	387	16	1
24	5520	7.0	433	16	1
25	5520	6.7	330	16	1
26	5520	7.4	437	18	1
27	5529	7.8	331	18	1
28	5529	8.7	260	16	1
29	5529	7.4	258	18	1
30	5529	7.9	258	18	1
Detection Percentage (%)					100%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	15.2	394	12	1
2	5491	12.8	459	14	1
3	5491	15.9	458	13	1
4	5491	12.3	264	14	1
5	5500	14.4	356	14	1
6	5500	18.0	364	13	1
7	5500	18.0	448	12	1
8	5500	15.2	298	15	1
9	5508	14.8	489	15	1
10	5508	14.2	481	12	1
11	5508	18.8	426	15	1
12	5508	12.7	284	12	1
13	5510	19.0	324	13	1
14	5510	15.5	261	16	1
15	5510	15.2	283	13	1
16	5510	16.6	378	15	1
17	5510	17.5	284	14	1
18	5510	15.2	307	15	1
19	5512	13.4	375	15	1
20	5512	15.0	443	14	1
21	5512	11.5	478	14	1
22	5512	16.9	453	13	1
23	5520	12.3	254	14	1
24	5520	17.4	262	13	1
25	5520	16.9	396	16	1
26	5520	19.5	413	14	1
27	5529	18.5	366	14	1
28	5529	19.7	356	14	1
29	5529	14.7	335	13	1
30	5529	12.6	370	12	1
Detection Percentage (%)					100%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (100%+100%+100%+100%)/4 = 100% (>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	5498.8	1	16	5510.0	1
2	5494.0	1	17	5510.0	1
3	5494.8	1	18	5510.0	1
4	5494.4	1	19	5510.0	1
5	5495.6	1	20	5510.0	1
6	5499.2	1	21	5524.4	1
7	5499.6	1	22	5524.8	1
8	5496.0	1	23	5520.4	1
9	5495.2	1	24	5526.0	1
10	5497.6	1	25	5523.2	1
11	5510.0	1	26	5522.4	1
12	5510.0	1	27	5524.0	1
13	5510.0	1	28	5521.2	1
14	5510.0	1	29	5520.8	1
15	5510.0	1	30	5525.6	1
Detection Percentage (%)					5296.8

Type 5 Radar Waveform_1

Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	81254	3	17	75	1508	1266	1776	81254	0	999999
2	1016107	1	17	85	1724	0	0	1101911	1000000	1999999
3	1395312	2	17	85	1572	1006	0	2498947	2000000	2999999
4	1054138	3	17	55	1742	1246	1413	3555663	3000000	3999999
5	964264	1	17	100	1013	0	0	4524328	4000000	4999999
6	1006914	2	17	70	1712	1229	0	5532255	5000000	5999999
7	954235	3	17	60	1932	1888	1484	6489431	6000000	6999999
8	1165001	2	17	90	1938	1610	0	7659736	7000000	7999999
9	1257857	1	17	50	1925	0	0	8921141	8000000	8999999
10	304091	1	17	100	1828	0	0	9227157	9000000	9999999
11	1224810	1	17	90	1895	0	0	10453795	10000000	10999999
12	582332	3	17	90	1413	1900	1833	11038022	11000000	11999999

Total number of pulses in waveform = 23
****

Type 5 Radar Waveform_2

Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	14057	2	5	50	1697	1933	0	14057	0	1090908
2	1944822	3	5	70	1256	1308	1103	1962509	1090909	2181817
3	1047328	2	5	60	1425	1246	0	3013504	2181818	3272726
4	1000079	3	5	80	1458	1535	1605	4016254	3272727	4363635
5	838845	1	5	55	1662	0	0	4859697	4363636	5454544
6	1302708	3	5	80	1614	1066	1772	6164067	5454545	6545453
7	1181147	2	5	65	1364	1539	0	7349666	6545454	7636362
8	1089463	3	5	95	1662	1841	1627	8442032	7636363	8727271
9	845985	2	5	80	1259	1181	0	9293147	8727272	9818180
10	1608115	2	5	55	1834	1219	0	10903702	9818181	10909089
11	428803	2	5	85	1528	1592	0	11335558	10909090	11999998

Total number of pulses in waveform = 25
****

Type 5 Radar Waveform_3

Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	441742	3	12	100	1927	1736	1939	441742	0	705881
2	335774	1	12	70	1652	0	0	783118	705882	1411763
3	874208	3	12	95	1213	1439	1888	1658978	1411764	2117645
4	653396	3	12	65	1994	1545	1792	2316914	2117646	2823527
5	828352	1	12	55	1088	0	0	3150597	2823528	3529409
6	821405	1	12	100	1745	0	0	3973090	3529410	4235291
7	344323	1	12	100	1663	0	0	4319158	4235292	4941173
8	1062466	1	12	65	1174	0	0	5383287	4941174	5647055
9	491375	1	12	95	1647	0	0	5875836	5647056	6352937
10	570316	1	12	85	1389	0	0	6447799	6352938	7058819
11	972324	3	12	80	1227	1778	1477	7421512	7058820	7764701
12	539163	2	12	85	1549	1589	0	7965157	7764702	8470583
13	739751	3	12	95	1702	1617	1113	8708046	8470584	9176465
14	950615	1	12	50	1454	0	0	9663093	9176466	9882347
15	516803	1	12	70	1290	0	0	10181350	9882348	10588229
16	1065525	3	12	80	1189	1958	1116	11248165	10588230	11294111
17	46452	2	12	90	1462	1577	0	11298880	11294112	11999993

Total number of pulses in waveform = 31
****

Type 5 Radar Waveform_4

Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	1063752	2	6	85	1887	1716	0	1063752	0	1090908
2	904902	3	6	60	1731	1113	1373	1972257	1090909	2181817
3	292011	2	6	95	1201	1842	0	2268485	2181818	3272726
4	1934726	1	6	60	1466	0	0	4206254	3272727	4363635
5	1205920	2	6	90	1106	1639	0	5413640	4363636	5454544
6	141436	1	6	70	1385	0	0	5557821	5454545	6545453
7	1955682	1	6	75	1836	0	0	7514888	6545454	7636362
8	811066	3	6	70	1680	1510	1578	8327790	7636363	8727271
9	1082740	3	6	90	1744	1023	1735	9415298	8727272	9818180
10	1273097	3	6	85	1076	1608	1299	10692897	9818181	10909089
11	1112638	1	6	75	1971	0	0	11809518	10909090	11999998

Total number of pulses in waveform = 22
****

Type 5 Radar Waveform_5

Num of Bursts = 13
Burst Interval (us)= 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	488011	1	9	90	1119	0	0	488011	0	923076
2	516600	1	9	60	1079	0	0	1005730	923077	1846153
3	1393513	3	9	50	1020	1946	1587	2400322	1846154	2769230
4	1116455	1	9	60	1585	0	0	3521330	2769231	3692307
5	880018	3	9	65	1759	1688	1236	4402933	3692308	4615384
6	210044	1	9	70	1730	0	0	4617660	4615385	5538461
7	1228109	1	9	75	1504	0	0	5847499	5538462	6461538
8	1052330	2	9	75	1526	1695	0	6901333	6461539	7384615
9	729496	3	9	100	1410	1739	1629	7634050	7384616	8307692
10	1371919	2	9	90	1521	1185	0	9010747	8307693	9230769
11	940149	1	9	80	1786	0	0	9953602	9230770	10153846
12	504995	2	9	75	1311	1290	0	10460383	10153847	11076923
13	1381048	3	9	95	1695	1357	1858	11844032	11076924	12000000

Total number of pulses in waveform = 24
****

Type 5 Radar Waveform_6

Num of Bursts = 13
Burst Interval (us)= 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	255720	1	18	75	1945	0	0	255720	0	923076
2	1254769	1	18	90	1806	0	0	1512434	923077	1846153
3	1065625	3	18	50	1431	1136	1871	2579865	1846154	2769230
4	395759	2	18	90	1203	1929	0	2980062	2769231	3692307
5	866734	2	18	80	1322	1322	0	3849928	3692308	4615384
6	1670605	1	18	65	1524	0	0	5523177	4615385	5538461
7	474745	3	18	60	1245	1811	1993	5999446	5538462	6461538
8	1233857	3	18	65	1173	1026	1414	7238352	6461539	7384615
9	213396	2	18	60	1040	1501	0	7455361	7384616	8307692
10	1527711	2	18	70	1853	1484	0	8985613	8307693	9230769
11	1014491	1	18	70	1638	0	0	10003441	9230770	10153846
12	598400	2	18	65	1224	1520	0	10603479	10153847	11076923
13	1167981	2	18	90	1406	1766	0	11774204	11076924	12000000

Total number of pulses in waveform = 25
****

Type 5 Radar Waveform_7

Num of Bursts = 13
Burst Interval (us)= 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	33697	1	19	70	1419	0	0	33697	0	923076
2	1113808	3	19	85	1633	1329	1080	1148924	923077	1846153
3	1052177	3	19	90	1053	1616	1386	2205143	1846154	2769230
4	581773	2	19	85	1763	1791	0	2790971	2769231	3692307
5	1714742	3	19	65	1756	1710	1944	4509267	3692308	4615384
6	734324	1	19	95	1776	0	0	5249001	4615385	5538461
7	1091035	3	19	85	1887	1439	1144	6341812	5538462	6461538
8	823592	1	19	60	1399	0	0	7169874	6461539	7384615
9	598230	2	19	100	1347	1494	0	7769503	7384616	8307692
10	1154309	2	19	55	1853	1755	0	8926653	8307693	9230769
11	955845	2	19	65	1869	1621	0	9886106	9230770	10153846
12	728202	1	19	95	1389	0	0	10617798	10153847	11076923
13	740365	1	19	70	1143	0	0	11359552	11076924	12000000

Total number of pulses in waveform = 25
****

Type 5 Radar Waveform_8

Num of Bursts = 14
Burst Interval (us)= 857143

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	247715	2	10	60	1174	1316	0	247715	0	857142
2	1354601	1	10	85	1508	0	0	1604806	857143	1714285
3	629716	1	10	80	1397	0	0	2236030	1714286	2571428
4	780970	2	10	60	1956	1439	0	3018397	2571429	3428571
5	565110	2	10	80	1660	1001	0	3586902	3428572	4285714
6	815669	2	10	80	1246	1692	0	4405232	4285715	5142857
7	1357863	2	10	100	1824	1957	0	5766033	5142858	6000000
8	794234	1	10	65	1383	0	0	6564048	6000001	6857143
9	821603	3	10	95	1503	1981	1031	7387034	6857144	7714286
10	701754	1	10	65	1645	0	0	8093303	7714287	8571429
11	1105324	2	10	100	1202	1105	0	9200272	8571430	9428572
12	799676	1	10	90	1776	0	0	10002255	9428573	10285715
13	778656	1	10	55	1072	0	0	10782687	10285716	11142858
14	950248	3	10	65	1077	1677	1433	11734007	11142859	12000001

Total number of pulses in waveform = 24
****

Type 5 Radar Waveform_9

Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	91404	1	8	60	1407	0	0	91404	0	705881
2	1146950	2	8	80	1533	1867	0	1239761	705882	1411763
3	864968	2	8	50	1140	1312	0	2108129	1411764	2117645
4	171492	3	8	55	1627	1147	1980	2282073	2117646	2823527
5	543538	2	8	100	1315	1578	0	2830365	2823528	3529409
6	935016	3	8	50	1757	1453	1660	3768274	3529410	4235291
7	741805	3	8	60	1131	1191	1429	4514949	4235292	4941173
8	1111321	2	8	75	1958	1495	0	5630021	4941174	5647055
9	659222	3	8	100	1490	1314	1146	6292696	5647056	6352937
10	519432	1	8	100	1954	0	0	6816078	6352938	7058819
11	777796	2	8	85	1489	1839	0	7595828	7058820	7764701
12	325800	1	8	80	1826	0	0	7924956	7764702	8470583
13	555549	1	8	90	1578	0	0	8482331	8470584	9176465
14	1031013	3	8	65	1535	1458	1630	9514922	9176466	9882347
15	501542	1	8	70	1762	0	0	10021087	9882348	10588229
16	584763	3	8	90	1237	1658	1865	10607612	10588230	11294111
17	1341537	2	8	50	1011	1744	0	11953909	11294112	11999993

Total number of pulses in waveform = 35
****

Type 5 Radar Waveform_10

Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	755289	2	14	90	1676	1319	0	755289	0	799999
2	299291	2	14	80	1593	1859	0	1057575	800000	1599999
3	1221611	3	14	100	1629	1488	1104	2282638	1600000	2399999
4	399133	1	14	75	1130	0	0	2685992	2400000	3199999
5	583528	3	14	95	1495	1718	1681	3270650	3200000	3999999
6	1451479	2	14	50	1292	1411	0	4727023	4000000	4799999
7	849616	3	14	95	1412	1897	1294	5579342	4800000	5599999
8	261567	3	14	60	1778	1059	1340	5845512	5600000	6399999
9	918370	2	14	75	1893	1627	0	6768059	6400000	7199999
10	1114806	3	14	80	1158	1148	1311	7886385	7200000	7999999
11	121611	3	14	70	1655	1228	1678	8011613	8000000	8799999
12	837262	2	14	90	1224	1403	0	8853436	8800000	9599999
13	1076935	2	14	50	1536	1106	0	9932998	9600000	10399999
14	1214597	3	14	75	1990	1142	1495	11150237	10400000	11199999
15	369887	1	14	90	1409	0	0	11524751	11200000	11999999

Total number of pulses in waveform = 35
****

Type 5 Radar Waveform_11

Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	607499	3	5	60	1394	1825	1699	607499	0	799999
2	282334	3	5	50	1393	1174	1167	894751	800000	1599999
3	844116	2	5	70	1134	1863	0	1742601	1600000	2399999
4	1105420	2	5	55	1318	1502	0	2851018	2400000	3199999
5	403606	3	5	65	1924	1670	1984	3257444	3200000	3999999
6	1214438	2	5	65	1173	1036	0	4477460	4000000	4799999
7	641459	3	5	50	1989	1885	1555	5121128	4800000	5599999
8	791780	2	5	75	1146	1141	0	5918337	5600000	6399999
9	1112642	2	5	80	1501	1189	0	7033266	6400000	7199999
10	613965	1	5	80	1721	0	0	7649921	7200000	7999999
11	659587	2	5	80	1702	1092	0	8311229	8000000	8799999
12	854342	1	5	60	1714	0	0	9168365	8800000	9599999
13	708483	2	5	55	1282	1738	0	9878562	9600000	10399999
14	978368	1	5	80	1429	0	0	10859950	10400000	11199999
15	694653	3	5	65	1342	1878	1287	11556032	11200000	11999999

Total number of pulses in waveform = 32
****

Type 5 Radar Waveform_12

Num of Bursts = 10
Burst Interval (us)= 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	899531	2	12	90	1205	1172	0	899531	0	1199999
2	522101	1	12	100	1547	0	0	1424009	1200000	2399999
3	989105	3	12	80	1688	1728	1636	2414661	2400000	3599999
4	2208135	1	12	85	1165	0	0	4627848	3600000	4799999
5	927617	1	12	65	1275	0	0	5556630	4800000	5999999
6	1196522	3	12	65	1295	1784	1022	6754427	6000000	7199999
7	1384932	2	12	55	1722	1568	0	8143460	7200000	8399999
8	1240261	1	12	90	1589	0	0	9387011	8400000	9599999
9	1316903	1	12	95	1992	0	0	10705503	9600000	10799999
10	558930	1	12	100	1232	0	0	11266425	10800000	11999999

Total number of pulses in waveform = 16
****

Type 5 Radar Waveform_13

Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	403217	2	10	60	1314	1607	0	403217	0	999999
2	1455925	2	10	60	1438	1909	0	1862063	1000000	1999999
3	661064	3	10	80	1473	1693	1217	2526474	2000000	2999999
4	563623	2	10	55	1656	1491	0	3094480	3000000	3999999
5	1361086	1	10	95	1350	0	0	4458713	4000000	4999999
6	1139103	3	10	95	1487	1561	1007	5599166	5000000	5999999
7	425360	1	10	55	1175	0	0	6028581	6000000	6999999
8	1626973	3	10	65	1891	1005	1456	7656729	7000000	7999999
9	509786	2	10	65	1286	1262	0	8170867	8000000	8999999
10	1458151	2	10	70	1822	1528	0	9631566	9000000	9999999
11	1045858	3	10	60	1991	1920	1633	10680774	10000000	10999999
12	427155	3	10	50	1172	1112	1907	11113473	11000000	11999999

Total number of pulses in waveform = 27
****

Type 5 Radar Waveform_14

Num of Bursts = 16
Burst Interval (us)= 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	248798	1	6	60	1655	0	0	248798	0	749999
2	775440	1	6	65	1958	0	0	1025893	750000	1499999
3	1183673	3	6	95	1777	1476	1909	2211524	1500000	2249999
4	452436	3	6	95	1490	1082	1658	2669122	2250000	2999999
5	594830	3	6	50	1531	1570	1429	3268182	3000000	3749999
6	924036	3	6	50	1890	1597	1360	4196748	3750000	4499999
7	616254	3	6	90	1636	1396	1409	4817849	4500000	5249999
8	1071846	2	6	100	1891	1573	0	5894136	5250000	5999999
9	349592	3	6	55	1335	1111	1508	6247192	6000000	6749999
10	974117	1	6	65	1127	0	0	7225263	6750000	7499999
11	455145	3	6	85	1757	1293	1375	7681535	7500000	8249999
12	772345	3	6	75	1178	1231	1513	8458305	8250000	8999999
13	1106896	2	6	75	1763	1615	0	9569123	9000000	9749999
14	602630	3	6	90	1416	1700	1252	10175131	9750000	10499999
15	841051	1	6	85	1980	0	0	11020550	10500000	11249999
16	847729	3	6	95	1321	1149	1159	11870259	11250000	11999999

Total number of pulses in waveform = 38
****

Type 5 Radar Waveform_15

Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	537760	3	8	95	1546	1415	1036	537760	0	799999
2	287963	3	8	55	1124	1681	1796	829720	800000	1599999
3	916388	3	8	100	1504	1643	1421	1750709	1600000	2399999
4	1301466	2	8	70	1724	1590	0	3056743	2400000	3199999
5	722221	1	8	55	1422	0	0	3782278	3200000	3999999
6	486255	1	8	95	1609	0	0	4269955	4000000	4799999
7	736041	3	8	90	1425	1491	1106	5007605	4800000	5599999
8	665027	2	8	75	1940	1774	0	5676654	5600000	6399999
9	950973	3	8	70	1639	1089	1776	6631341	6400000	7199999
10	682433	3	8	85	1301	1707	1176	7318278	7200000	7999999
11	953509	3	8	65	1438	1211	1231	8275971	8000000	8799999
12	803584	3	8	70	1747	1115	1592	9083435	8800000	9599999
13	881439	2	8	50	1414	1104	0	9969328	9600000	10399999
14	1139467	3	8	60	1765	1217	1505	11111313	10400000	11199999
15	830804	2	8	55	1592	1831	0	11946604	11200000	11999999

Total number of pulses in waveform = 37
****

Type 5 Radar Waveform_16

Num of Bursts = 20
Burst Interval (us)= 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	574501	3	17	100	1827	1271	1819	574501	0	599999
2	507449	3	17	65	1754	1774	1766	1086867	600000	1199999
3	242421	1	17	100	1398	0	0	1334582	1200000	1799999
4	473277	3	17	55	1922	1028	1476	1809257	1800000	2399999
5	852635	1	17	85	1762	0	0	2666318	2400000	2999999
6	810659	3	17	70	1440	1345	1662	3478739	3000000	3599999
7	544318	2	17	90	1360	1216	0	4027504	3600000	4199999
8	596258	3	17	95	1283	1078	1607	4626338	4200000	4799999
9	434786	3	17	60	1251	1089	1146	5065092	4800000	5399999
10	798885	2	17	75	1882	1297	0	5867463	5400000	5999999
11	702970	1	17	70	1645	0	0	6573612	6000000	6599999
12	384041	1	17	80	1741	0	0	6959298	6600000	7199999
13	297986	1	17	60	1598	0	0	7259025	7200000	7799999
14	765292	2	17	80	1211	1403	0	8025915	7800000	8399999
15	876932	3	17	55	1053	1411	1619	8905461	8400000	8999999
16	388134	2	17	95	1820	1126	0	9297678	9000000	9599999
17	782017	3	17	70	1530	1158	1285	10082641	9600000	10199999
18	236709	3	17	85	1905	1065	1284	10323323	10200000	10799999
19	754608	2	17	90	1950	1310	0	11082185	10800000	11399999
20	389431	3	17	100	1570	1321	1196	11474876	11400000	11999999

Total number of pulses in waveform = 45
****

Type 5 Radar Waveform_17

Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	565270	3	18	70	1896	1037	1464	565270	0	999999
2	1329858	1	18	90	1595	0	0	1899525	1000000	1999999
3	559950	3	18	60	1633	1217	1504	2461070	2000000	2999999
4	807614	1	18	100	1967	0	0	3273038	3000000	3999999
5	867396	3	18	60	1122	1143	1293	4142401	4000000	4999999
6	960511	3	18	60	1273	1297	1830	5106470	5000000	5999999
7	1233572	2	18	85	1497	1051	0	6344442	6000000	6999999
8	1329337	1	18	60	1509	0	0	7676327	7000000	7999999
9	505625	3	18	90	1704	1462	1590	8183461	8000000	8999999
10	1062783	3	18	55	1652	1236	1969	9251000	9000000	9999999
11	1735265	1	18	65	1792	0	0	10991122	10000000	10999999
12	733516	3	18	70	1406	1403	1931	11726430	11000000	11999999

Total number of pulses in waveform = 27
****

Type 5 Radar Waveform_18

Num of Bursts = 8
Burst Interval (us)= 1500000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	491447	2	9	50	1831	1377	0	491447	0	1499999
2	1098302	2	9	55	1278	1229	0	1592957	1500000	2999999
3	2577861	3	9	95	1185	1340	1110	4173325	3000000	4499999
4	824425	3	9	90	1414	1627	1389	5001385	4500000	5999999
5	2353272	2	9	90	1972	1423	0	7359087	6000000	7499999
6	1459036	1	9	50	1246	0	0	8821518	7500000	8999999
7	900939	2	9	95	1668	1918	0	9723703	9000000	10499999
8	1163409	3	9	100	1784	1238	1903	10890698	10500000	11999999

Total number of pulses in waveform = 18
****

Type 5 Radar Waveform_19

Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	138544	1	19	55	1233	0	0	138544	0	999999
2	1250442	2	19	100	1739	1109	0	1390219	1000000	1999999
3	741103	2	19	50	1151	1846	0	2134170	2000000	2999999
4	1637638	3	19	55	1402	1745	1358	3774805	3000000	3999999
5	879476	1	19	90	1595	0	0	4658786	4000000	4999999
6	544034	3	19	95	1964	1925	1975	5204415	5000000	5999999
7	933949	3	19	70	1170	1584	1716	6144228	6000000	6999999
8	1406110	2	19	65	1602	1432	0	7554808	7000000	7999999
9	965292	1	19	50	1429	0	0	8523134	8000000	8999999
10	721762	2	19	65	1933	1873	0	9246325	9000000	9999999
11	845414	3	19	85	1956	1919	1138	10095545	10000000	10999999
12	1020987	2	19	100	1362	1615	0	11121545	11000000	11999999

Total number of pulses in waveform = 25
****

Type 5 Radar Waveform_20

Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	484299	3	14	80	1998	1444	1928	484299	0	705881
2	378018	3	14	85	1442	1262	1079	867687	705882	1411763
3	1222144	2	14	90	1147	1775	0	2093614	1411764	2117645
4	661395	2	14	70	1647	1014	0	2757931	2117646	2823527
5	431942	3	14	90	1589	1555	1059	3192534	2823528	3529409
6	656033	2	14	60	1317	1990	0	3852770	3529410	4235291
7	463266	2	14	80	1168	2000	0	4319343	4235292	4941173
8	1182066	2	14	60	1670	1363	0	5504577	4941174	5647055
9	224697	3	14	75	1899	1373	1056	5732307	5647056	6352937
10	1138636	1	14	85	1158	0	0	6875271	6352938	7058819
11	578317	3	14	65	1790	1487	1103	7454746	7058820	7764701
12	383366	3	14	55	1030	1500	1169	7842492	7764702	8470583
13	1162489	3	14	90	1588	1634	1911	9008680	8470584	9176465
14	569792	1	14	50	1356	0	0	9583605	9176466	9882347
15	746976	1	14	80	1387	0	0	10331937	9882348	10588229
16	734001	2	14	55	1801	1842	0	11067325	10588230	11294111
17	599927	2	14	50	1813	1160	0	11670895	11294112	11999993

Total number of pulses in waveform = 38
****

Type 5 Radar Waveform_21

Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	402308	3	9	80	1354	1490	1756	402308	0	1090908
2	946083	3	9	100	1479	1154	1959	1352991	1090909	2181817
3	1434382	3	9	70	1944	1349	1164	2791965	2181818	3272726
4	608216	1	9	55	1102	0	0	3404638	3272727	4363635
5	1067099	3	9	100	1561	1608	1813	4472839	4363636	5454544
6	1281548	3	9	50	1484	1556	1620	5759369	5454545	6545453
7	999340	3	9	70	1383	1407	1492	6763369	6545454	7636362
8	992116	3	9	65	1539	1862	1669	7759767	7636363	8727271
9	1306925	2	9	85	1399	1892	0	9071762	8727272	9818180
10	1014190	1	9	95	1110	0	0	10089243	9818181	10909089
11	1601118	1	9	85	1775	0	0	11691471	10909090	11999998

Total number of pulses in waveform = 26
****

Type 5 Radar Waveform_22

Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	678077	2	8	80	1616	1410	0	678077	0	1090908
2	865728	2	8	50	1723	1514	0	1546831	1090909	2181817
3	766004	3	8	50	1019	1686	1086	2316072	2181818	3272726
4	1577362	3	8	60	1744	1915	1513	3897225	3272727	4363635
5	1395606	1	8	85	1885	0	0	5298003	4363636	5454544
6	545274	1	8	75	1424	0	0	5845162	5454545	6545453
7	1224790	2	8	75	1004	1560	0	7071376	6545454	7636362
8	1014963	2	8	65	1941	1062	0	8088903	7636363	8727271
9	836386	1	8	80	1535	0	0	8928292	8727272	9818180
10	1373173	3	8	70	1602	1216	1602	10303000	9818181	10909089
11	1525062	3	8	85	1817	1342	1982	11832482	10909090	11999998

Total number of pulses in waveform = 23
****

Type 5 Radar Waveform_23

Num of Bursts = 20
Burst Interval (us)= 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	51451	2	19	100	1341	1464	0	51451	0	599999
2	660599	2	19	60	1175	1342	0	714855	600000	1199999
3	921498	1	19	90	1839	0	0	1638870	1200000	1799999
4	596429	3	19	85	1573	1592	1418	2237138	1800000	2399999
5	522513	1	19	65	1485	0	0	2764234	2400000	2999999
6	247639	2	19	85	1425	1172	0	3013358	3000000	3599999
7	886372	2	19	55	1059	1870	0	3902327	3600000	4199999
8	696565	1	19	90	1336	0	0	4601821	4200000	4799999
9	618021	2	19	60	1268	1033	0	5221178	4800000	5399999
10	673492	2	19	70	1348	1205	0	5896971	5400000	5999999
11	620401	2	19	60	1395	1940	0	6519925	6000000	6599999
12	600733	1	19	80	1570	0	0	7123993	6600000	7199999
13	258993	2	19	55	1174	1583	0	7384556	7200000	7799999
14	616263	3	19	70	1131	1262	1999	8003576	7800000	8399999
15	782368	3	19	70	1107	1000	1600	8790336	8400000	8999999
16	563010	3	19	65	1137	1922	1862	9357053	9000000	9599999
17	296283	2	19	100	1690	1439	0	9658257	9600000	10199999
18	909402	2	19	55	1219	1870	0	10570788	10200000	10799999
19	479813	3	19	50	1013	1889	1243	11053690	10800000	11399999
20	549135	2	19	75	1754	1521	0	11606970	11400000	11999999

Total number of pulses in waveform = 41
****

Type 5 Radar Waveform_24

Num of Bursts = 14
Burst Interval (us)= 857143

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	685839	1	5	85	1665	0	0	685839	0	857142
2	219243	2	5	60	1967	1844	0	906747	857143	1714285
3	1159739	2	5	60	1527	1255	0	2070297	1714286	2571428
4	888462	1	5	100	1866	0	0	2961541	2571429	3428571
5	1156101	1	5	65	1202	0	0	4119508	3428572	4285714
6	936220	3	5	60	1567	1613	1910	5056930	4285715	5142857
7	554403	3	5	85	1254	1265	1375	5616423	5142858	6000000
8	724639	3	5	90	1912	1439	1233	6344956	6000001	6857143
9	808810	1	5	65	1773	0	0	7158350	6857144	7714286
10	682632	1	5	75	1735	0	0	7842755	7714287	8571429
11	859278	1	5	85	1454	0	0	8703768	8571430	9428572
12	1116095	3	5	55	1879	1428	1469	9821317	9428573	10285715
13	1239650	2	5	55	1778	1932	0	11065743	10285716	11142858
14	803791	2	5	60	1993	1849	0	11873244	11142859	12000001

Total number of pulses in waveform = 26
****

Type 5 Radar Waveform_25

Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	813038	1	12	75	1903	0	0	813038	0	999999
2	1122901	1	12	100	1416	0	0	1937842	1000000	1999999
3	550570	2	12	100	1256	1326	0	2489828	2000000	2999999
4	1016934	3	12	70	1114	1577	1645	3509344	3000000	3999999
5	955136	2	12	60	1848	1223	0	4468816	4000000	4999999
6	957882	3	12	65	1336	1822	1363	5429769	5000000	5999999
7	1137180	1	12	65	1653	0	0	6571470	6000000	6999999
8	987814	1	12	65	1227	0	0	7560937	7000000	7999999
9	1217153	2	12	55	1973	1077	0	8779317	8000000	8999999
10	518281	2	12	95	1787	1333	0	9300648	9000000	9999999
11	1503090	1	12	50	1999	0	0	10806858	10000000	10999999
12	496701	3	12	50	1494	1340	1461	11305558	11000000	11999999

Total number of pulses in waveform = 22
****

Type 5 Radar Waveform_26

Num of Bursts = 14
Burst Interval (us)= 857143

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	518447	1	14	90	1464	0	0	518447	0	857142
2	859848	2	14	55	1693	1506	0	1379759	857143	1714285
3	1123668	1	14	70	1930	0	0	2506626	1714286	2571428
4	847202	1	14	60	1785	0	0	3355758	2571429	3428571
5	732584	3	14	75	1800	1503	1670	4090127	3428572	4285714
6	638768	1	14	50	1824	0	0	4733868	4285715	5142857
7	428170	2	14	50	1845	1334	0	5163862	5142858	6000000
8	899430	3	14	50	1865	1611	1561	6066471	6000001	6857143
9	1161095	2	14	85	1640	1603	0	7232603	6857144	7714286
10	1189125	2	14	80	1008	1631	0	8424971	7714287	8571429
11	222987	1	14	95	1085	0	0	8650597	8571430	9428572
12	1338337	1	14	55	1619	0	0	9990019	9428573	10285715
13	1005198	1	14	70	1664	0	0	10996836	10285716	11142858
14	586662	3	14	90	1573	1770	1353	11585162	11142859	12000001

Total number of pulses in waveform = 24
****

Type 5 Radar Waveform_27

Num of Bursts = 10
Burst Interval (us)= 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	883254	3	10	85	1915	1820	1044	883254	0	1199999
2	879515	3	10	100	1526	1404	1596	1767548	1200000	2399999
3	818919	2	10	90	1146	1683	0	2590993	2400000	3599999
4	1337970	1	10	50	1131	0	0	3931792	3600000	4799999
5	1735333	2	10	75	1036	1972	0	5668256	4800000	5999999
6	569218	1	10	55	1960	0	0	6240482	6000000	7199999
7	1037864	2	10	65	1018	1702	0	7280306	7200000	8399999
8	2124730	3	10	80	1119	1640	1400	9407756	8400000	9599999
9	527582	1	10	50	1589	0	0	9939497	9600000	10799999
10	1453395	2	10	60	1186	1148	0	11394481	10800000	11999999

Total number of pulses in waveform = 20
****

Type 5 Radar Waveform_28

Num of Bursts = 16
Burst Interval (us)= 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	529358	2	17	65	1993	1998	0	529358	0	749999
2	531255	3	17	95	1986	1271	1513	1064604	750000	1499999
3	500099	3	17	100	1012	1364	1522	1569473	1500000	2249999
4	1160781	1	17	65	1681	0	0	2734152	2250000	2999999
5	475148	3	17	70	1683	1131	1632	3210981	3000000	3749999
6	782075	3	17	80	1126	1638	1666	3997502	3750000	4499999
7	593209	3	17	75	1490	1155	1601	4595141	4500000	5249999
8	944041	2	17	50	1039	1960	0	5543428	5250000	5999999
9	671453	2	17	85	1026	1058	0	6217880	6000000	6749999
10	1045698	1	17	95	1798	0	0	7265662	6750000	7499999
11	810635	3	17	95	1534	1444	1977	8078095	7500000	8249999
12	881596	2	17	90	1624	1406	0	8964646	8250000	8999999
13	141961	2	17	65	1538	1398	0	9109637	9000000	9749999
14	1172680	2	17	90	1062	1412	0	10285253	9750000	10499999
15	347142	3	17	60	1639	1775	1736	10634869	10500000	11249999
16	1204146	2	17	90	1727	1351	0	11844165	11250000	11999999

Total number of pulses in waveform = 37
****

Type 5 Radar Waveform_29

Num of Bursts = 18
Burst Interval (us)= 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	102016	3	18	50	1360	1363	1587	102016	0	666666
2	572554	3	18	60	1473	1848	1476	678880	666667	1333333
3	950404	1	18	80	1657	0	0	1634081	1333334	2000000
4	737443	1	18	70	1214	0	0	2373181	2000001	2666667
5	306514	1	18	75	1775	0	0	2680909	2666668	3333334
6	989916	2	18	55	1135	1994	0	3672600	3333335	4000001
7	871762	3	18	65	1829	1341	1060	4547491	4000002	4666668
8	712847	3	18	95	1145	1585	1818	5264568	4666669	5333335
9	461335	3	18	100	1288	1355	1222	5730451	5333336	6000002
10	408832	3	18	60	1764	1391	1285	6143148	6000003	6666669
11	961519	3	18	90	1606	1625	1118	7109107	6666670	7333336
12	284229	3	18	60	1426	1280	1866	7397685	7333337	8000003
13	1009260	1	18	85	1863	0	0	8411517	8000004	8666670
14	575407	1	18	55	1677	0	0	8988787	8666671	9333337
15	663721	1	18	75	1456	0	0	9654185	9333338	10000004
16	776526	3	18	85	1459	1063	1244	10432167	10000005	10666671
17	822413	3	18	50	1048	1312	1258	11258346	10666672	11333338
18	313202	2	18	80	1372	1487	0	11575166	11333339	12000005

Total number of pulses in waveform = 40
****

Type 5 Radar Waveform_30

Num of Bursts = 16
Burst Interval (us)= 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	338061	1	6	90	1676	0	0	338061	0	749999
2	988538	2	6	90	1617	1550	0	1328275	750000	1499999
3	609444	2	6	80	1368	1518	0	1940886	1500000	2249999
4	699919	3	6	85	1718	1453	1202	2643691	2250000	2999999
5	680502	2	6	70	1141	1997	0	3328566	3000000	3749999
6	743596	1	6	60	1114	0	0	4075300	3750000	4499999
7	917150	3	6	60	1214	1691	1427	4993564	4500000	5249999
8	427854	3	6	55	1946	1929	1235	5425750	5250000	5999999
9	629663	2	6	80	1850	1942	0	6060523	6000000	6749999
10	722055	3	6	95	1628	1554	1776	6786370	6750000	7499999
11	819795	2	6	50	1349	1547	0	7611123	7500000	8249999
12	1034903	2	6	60	1835	1733	0	8648922	8250000	8999999
13	611755	3	6	75	1910	1820	1212	9264245	9000000	9749999
14	1001037	3	6	70	1286	1766	1204	10270224	9750000	10499999
15	926332	2	6	80	1832	1212	0	11200812	10500000	11249999
16	319308	2	6	50	1304	1744	0	11523164	11250000	11999999

Total number of pulses in waveform = 36
****

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	5510	1
2	5491	1	17	5510	1
3	5491	1	18	5510	1
4	5491	1	19	5512	1
5	5500	1	20	5512	1
6	5500	1	21	5512	1
7	5500	1	22	5512	1
8	5500	1	23	5520	1
9	5508	1	24	5520	1
10	5508	1	25	5520	1
11	5508	1	26	5520	1
12	5508	1	27	5529	1
13	5510	1	28	5529	1
14	5510	1	29	5529	1
15	5510	1	30	5529	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5514	15	8	5488	24
7	5477	21	13	5478	39
13	5481	39	14	5502	42
14	5511	42	23	5482	69
15	5489	45	31	5470	93
34	5498	102	46	5466	138
43	5463	129	51	5498	153
51	5493	153	53	5497	159
52	5510	156	57	5463	171
56	5485	168	70	5489	210
69	5465	207	74	5506	222
77	5487	231	80	5519	240
78	5496	234	83	5462	249
80	5490	240	87	5500	261
99	5486	297	93	5501	279

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5500	0	15	5484	45
14	5467	42	16	5520	48
17	5496	51	19	5498	57
30	5494	90	26	5493	78
31	5517	93	40	5470	120
35	5522	105	44	5518	132
40	5508	120	69	5464	207
45	5482	135	70	5490	210
47	5463	141	73	5502	219
53	5470	159	88	5508	264
56	5465	168	--	--	--
61	5501	183	--	--	--
64	5498	192	--	--	--
79	5516	237	--	--	--
81	5476	243	--	--	--
86	5469	258	--	--	--
89	5503	267	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5513	3	12	5502	36
5	5506	15	16	5525	48
10	5525	30	30	5499	90
11	5527	33	39	5480	117
17	5503	51	52	5511	156
22	5521	66	57	5481	171
31	5490	93	60	5495	180
36	5507	108	86	5513	258
41	5517	123	97	5505	291
52	5493	156	--	--	--
59	5528	177	--	--	--
81	5515	243	--	--	--
90	5489	270	--	--	--
92	5494	276	--	--	--
95	5500	285	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5505	21	0	5489	0
12	5511	36	1	5510	3
14	5477	42	2	5508	6
16	5504	48	11	5494	33
17	5484	51	16	5526	48
20	5522	60	31	5476	93
33	5470	99	32	5478	96
43	5472	129	55	5492	165
53	5515	159	76	5523	228
62	5491	186	78	5474	234
92	5518	276	80	5495	240
96	5507	288	86	5501	258
--	--	--	88	5518	264
--	--	--	93	5524	279

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5533	3	5	5481	15
11	5534	33	7	5527	21
21	5501	63	19	5530	57
36	5484	108	21	5489	63
39	5502	117	23	5536	69
41	5536	123	32	5485	96
51	5526	153	40	5486	120
53	5538	159	84	5494	252
54	5529	162	87	5504	261
68	5485	204	--	--	--
71	5503	213	--	--	--
77	5528	231	--	--	--
80	5517	240	--	--	--
83	5481	249	--	--	--
85	5496	255	--	--	--
92	5531	276	--	--	--
98	5478	294	--	--	--

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5478	21	3	5482	9
9	5536	27	4	5538	12
23	5480	69	7	5489	21
29	5482	87	8	5520	24
32	5486	96	14	5526	42
35	5487	105	17	5506	51
43	5525	129	22	5511	66
74	5485	222	23	5492	69
79	5497	237	34	5481	102
83	5516	249	36	5504	108
89	5526	267	39	5534	117
--	--	--	53	5518	159
--	--	--	55	5500	165
--	--	--	64	5501	192
--	--	--	76	5484	228
--	--	--	81	5509	243
--	--	--	84	5490	252

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5529	3	5	5498	15
3	5481	9	16	5526	48
6	5480	18	27	5538	81
7	5536	21	34	5534	102
16	5540	48	37	5540	111
18	5502	54	43	5519	129
20	5524	60	46	5490	138
25	5487	75	47	5492	141
37	5503	111	67	5509	201
53	5484	159	76	5481	228
60	5520	180	96	5536	288
76	5539	228	--	--	--
93	5519	279	--	--	--
95	5522	285	--	--	--
97	5494	291	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5497	12	2	5503	6
14	5511	42	5	5530	15
19	5516	57	7	5521	21
22	5513	66	13	5512	39
26	5501	78	15	5517	45
27	5506	81	33	5492	99
40	5520	120	39	5515	117
50	5535	150	54	5520	162
53	5498	159	73	5505	219
67	5503	201	92	5528	276
82	5531	246	--	--	--
85	5538	255	--	--	--
86	5488	258	--	--	--
91	5529	273	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5531	27	18	5489	54
10	5496	30	48	5526	144
15	5539	45	59	5512	177
16	5520	48	69	5535	207
29	5506	87	78	5509	234
32	5505	96	81	5527	243
34	5525	102	85	5515	255
65	5529	195	90	5495	270
70	5533	210	--	--	--
77	5514	231	--	--	--
86	5498	258	--	--	--
87	5510	261	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
19	5497	57	5	5500	15
24	5521	72	15	5526	45
42	5516	126	24	5491	72
62	5502	186	43	5539	129
83	5486	249	55	5509	165
98	5515	294	62	5498	186
--	--	--	77	5492	231
--	--	--	84	5490	252
--	--	--	92	5494	276

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5527	39	1	5500	3
17	5488	51	7	5501	21
27	5526	81	21	5515	63
36	5523	108	36	5538	108
42	5502	126	44	5511	132
48	5519	144	45	5527	135
49	5490	147	46	5525	138
63	5506	189	62	5494	186
65	5509	195	73	5497	219
69	5482	207	90	5496	270
71	5495	213	--	--	--
84	5496	252	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5514	18	6	5501	18
18	5549	54	23	5544	69
22	5540	66	27	5499	81
24	5537	72	32	5490	96
29	5547	87	37	5503	111
40	5517	120	42	5531	126
45	5504	135	50	5550	150
50	5496	150	62	5495	186
54	5531	162	66	5546	198
68	5492	204	85	5498	255
82	5519	246	96	5525	288
--	--	--	97	5520	291

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5500	0	9	5528	27
7	5540	21	34	5548	102
10	5496	30	42	5523	126
14	5514	42	48	5519	144
19	5511	57	58	5543	174
22	5513	66	60	5536	180
27	5497	81	65	5509	195
39	5507	117	69	5490	207
66	5550	198	71	5522	213
73	5506	219	86	5500	258
96	5490	288	97	5506	291
98	5546	294	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
12	5510	36	3	5558	9
14	5517	42	11	5546	33
18	5539	54	44	5525	132
30	5503	90	52	5549	156
42	5523	126	64	5547	192
48	5551	144	65	5510	195
52	5520	156	67	5539	201
54	5535	162	79	5517	237
57	5544	171	80	5501	240
60	5516	180	88	5544	264
66	5524	198	89	5523	267
70	5545	210	98	5557	294
74	5515	222	99	5502	297
96	5508	288	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5505	24	13	5547	39
18	5528	54	18	5550	54
23	5544	69	26	5539	78
27	5518	81	31	5529	93
30	5553	90	37	5509	111
50	5532	150	44	5540	132
73	5512	219	67	5535	201
92	5509	276	73	5498	219
--	--	--	76	5520	228
--	--	--	81	5503	243
--	--	--	87	5541	261
--	--	--	88	5500	264
--	--	--	94	5526	282

Product	AX6000 MU-MIMO Wi-Fi Router	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR5	Test Date	2018/08/27
Test Item	Radar Statistical Performance Check (802.11ac-VHT80 mode – 5530MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1	718	74	1
2	5491	1	858	62	1
3	5500	1	898	59	1
4	5500	1	818	65	1
5	5509	1	538	99	1
6	5509	1	578	92	1
7	5510	1	658	81	1
8	5510	1	878	61	1
9	5511	1	738	72	1
10	5511	1	518	102	1
11	5520	1	918	58	1
12	5520	1	778	68	1
13	5529	1	698	76	1
14	5529	1	3066	18	1
15	5530	1	838	63	1
16	5530	1	968	55	1
17	5531	1	633	84	1
18	5531	1	846	63	1
19	5540	1	961	55	1
20	5540	1	861	62	1
21	5549	1	1001	53	1
22	5549	1	2852	19	1
23	5550	1	2094	26	1
24	5550	1	1252	43	1
25	5551	1	2876	19	1
26	5551	1	1806	30	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5560	1	2779	19	1
28	5560	1	2695	20	1
29	5569	1	619	86	1
30	5569	1	1221	44	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	3.8	178	23	1
2	5491	1.6	162	28	1
3	5500	2.8	203	29	1
4	5500	3.3	208	26	1
5	5509	4.6	185	27	1
6	5509	1.0	215	29	1
7	5510	2.7	228	28	1
8	5510	5.0	159	24	1
9	5511	2.9	184	24	1
10	5511	4.7	200	27	1
11	5520	4.1	207	24	1
12	5520	2.6	216	29	1
13	5529	1.7	215	24	1
14	5529	3.5	214	29	1
15	5530	3.0	156	23	1
16	5530	3.4	222	28	1
17	5531	2.3	177	23	1
18	5531	2.5	198	29	1
19	5540	3.7	155	25	1
20	5540	1.0	200	26	1
21	5549	2.8	206	27	1
22	5549	1.6	227	26	1
23	5550	2.3	168	25	1
24	5550	3.6	186	23	1
25	5551	2.0	184	27	1
26	5551	3.2	185	28	1
27	5560	3.1	178	29	1
28	5560	3.6	152	25	1
29	5569	4.5	226	27	1
30	5569	1.2	161	28	1
Detection Percentage (%)					100%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	6.9	411	17	1
2	5491	8.7	441	17	1
3	5500	8.0	345	16	1
4	5500	9.3	483	18	1
5	5509	8.1	361	18	1
6	5509	9.1	379	18	1
7	5510	8.4	448	17	1
8	5510	6.5	404	18	1
9	5511	6.1	337	17	1
10	5511	7.0	266	18	1
11	5520	7.6	292	18	1
12	5520	6.0	373	17	1
13	5529	8.4	499	17	1
14	5529	6.8	332	17	1
15	5530	7.9	387	17	1
16	5530	8.4	434	17	1
17	5531	6.1	433	18	1
18	5531	8.4	331	18	1
19	5540	6.6	404	18	1
20	5540	6.6	284	18	1
21	5549	9.4	373	18	1
22	5549	9.1	366	16	1
23	5550	8.5	357	17	1
24	5550	9.8	466	18	1
25	5551	6.0	419	18	1
26	5551	8.7	454	17	1
27	5560	7.2	411	18	1
28	5560	8.6	493	18	1
29	5569	9.0	263	18	1
30	5569	7.5	443	16	1
Detection Percentage (%)					100%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	14.0	399	14	1
2	5491	11.9	323	14	1
3	5500	12.0	387	12	1
4	5500	12.8	370	13	1
5	5509	12.9	279	13	1
6	5509	14.1	412	16	1
7	5510	18.4	402	13	1
8	5510	18.0	487	12	1
9	5511	14.0	436	13	1
10	5511	11.6	398	14	1
11	5520	13.9	273	14	1
12	5520	18.6	322	13	1
13	5529	13.0	449	14	1
14	5529	13.5	406	12	1
15	5530	16.1	412	16	1
16	5530	18.8	333	14	1
17	5531	15.8	360	15	1
18	5531	11.7	437	16	1
19	5540	12.6	352	14	1
20	5540	11.0	390	15	1
21	5549	13.1	391	14	1
22	5549	12.9	263	15	1
23	5550	13.8	412	14	1
24	5550	15.8	291	12	1
25	5551	17.9	268	13	1
26	5551	12.8	320	13	1
27	5560	14.0	273	14	1
28	5560	11.8	386	14	1
29	5569	11.7	292	15	1
30	5569	15.9	435	12	1
Detection Percentage (%)					100%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (100%+100%+100%+100%)/4 = 100% (>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	5499.6	1	16	5530.0	1
2	5496.8	1	17	5530.0	1
3	5494.4	1	18	5530.0	1
4	5495.6	1	19	5530.0	1
5	5497.6	1	20	5530.0	1
6	5494.0	1	21	5566.0	1
7	5499.2	1	22	5564.0	1
8	5495.2	1	23	5561.2	1
9	5498.8	1	24	5564.4	1
10	5496.0	1	25	5563.2	1
11	5530.0	1	26	5560.8	1
12	5530.0	1	27	5560.4	1
13	5530.0	1	28	5565.6	1
14	5530.0	1	29	5564.8	1
15	5530.0	1	30	5562.4	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	557402	1	19	95	1527	0	0	557402	0	1090908
2	1555402	2	19	75	1173	1856	0	2114331	1090909	2181817
3	1050515	3	19	75	1428	1403	1735	3167875	2181818	3272726
4	132738	1	19	95	1433	0	0	3305179	3272727	4363635
5	2038611	3	19	100	1792	1074	1187	5345223	4363636	5454544
6	663196	3	19	95	1025	1158	1386	6012472	5454545	6545453
7	806891	2	19	75	1235	1710	0	6822932	6545454	7636362
8	1389701	1	19	100	1018	0	0	8215578	7636363	8727271
9	817924	2	19	85	1074	1707	0	9034520	8727272	9818180
10	822832	1	19	90	1334	0	0	9860133	9818181	10909089
11	1440675	3	19	80	1420	1621	1499	11302142	10909090	11999998

Total number of pulses in waveform = 22

****

Type 5 Radar Waveform_2

Num of Bursts = 16
Burst Interval (us)= 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	35906	1	12	65	1925	0	0	35906	0	749999
2	1191766	1	12	80	1736	0	0	1229597	750000	1499999
3	289887	1	12	60	1529	0	0	1521220	1500000	2249999
4	1100141	1	12	75	1672	0	0	2622890	2250000	2999999
5	722061	2	12	90	1211	1116	0	3346623	3000000	3749999
6	1101827	3	12	90	1090	1651	1221	4450777	3750000	4499999
7	355194	3	12	90	1479	1375	1942	4809933	4500000	5249999
8	958200	2	12	85	1523	1818	0	5772929	5250000	5999999
9	339060	2	12	55	1589	1289	0	6115330	6000000	6749999
10	707408	3	12	90	1517	1326	1453	6825616	6750000	7499999
11	912560	1	12	90	1068	0	0	7742472	7500000	8249999
12	692750	2	12	90	1557	1092	0	8436290	8250000	8999999
13	650155	1	12	65	1126	0	0	9089094	9000000	9749999
14	1289416	3	12	50	1464	1407	1509	10379636	9750000	10499999
15	155399	2	12	55	1398	1135	0	10539415	10500000	11249999
16	1062855	1	12	95	1665	0	0	11604803	11250000	11999999

Total number of pulses in waveform = 29
****

Type 5 Radar Waveform_3

Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	811510	2	6	70	1971	1578	0	811510	0	1090908
2	760952	2	6	70	1648	1924	0	1576011	1090909	2181817
3	1514781	2	6	100	1405	1034	0	3094364	2181818	3272726
4	1182694	2	6	100	1502	1687	0	4279497	3272727	4363635
5	1126985	2	6	55	1989	1096	0	5409671	4363636	5454544
6	728726	3	6	100	1520	1980	1760	6141482	5454545	6545453
7	726919	1	6	65	1182	0	0	6873661	6545454	7636362
8	815212	3	6	50	1456	1224	1615	7690055	7636363	8727271
9	1075752	3	6	50	1341	1141	1209	8770102	8727272	9818180
10	1312384	1	6	95	1059	0	0	10086177	9818181	10909089
11	921394	2	6	60	1119	1285	0	11008630	10909090	11999998

Total number of pulses in waveform = 23
****

Type 5 Radar Waveform_4

Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	479514	1	9	75	1384	0	0	479514	0	799999
2	880118	3	9	90	1189	1593	1681	1361016	800000	1599999
3	763784	1	9	65	1343	0	0	2129263	1600000	2399999
4	568882	2	9	85	1403	1949	0	2699488	2400000	3199999
5	1216704	1	9	95	1220	0	0	3919544	3200000	3999999
6	684288	1	9	55	1753	0	0	4605052	4000000	4799999
7	737494	1	9	90	1484	0	0	5344299	4800000	5599999
8	455997	1	9	70	1020	0	0	5801780	5600000	6399999
9	1084706	2	9	55	1180	1431	0	6887506	6400000	7199999
10	446461	3	9	95	1223	1755	1152	7336578	7200000	7999999
11	981434	3	9	50	1625	1815	1742	8322142	8000000	8799999
12	737163	1	9	95	1648	0	0	9064487	8800000	9599999
13	1247304	1	9	90	1758	0	0	10313439	9600000	10399999
14	418831	3	9	50	1735	1240	1132	10734028	10400000	11199999
15	812399	1	9	100	1944	0	0	11550534	11200000	11999999

Total number of pulses in waveform = 25
****

Type 5 Radar Waveform_5

Num of Bursts = 20
Burst Interval (us)= 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	334989	3	14	60	1748	1480	1583	334989	0	599999
2	800600	1	14	100	1272	0	0	1140400	600000	1199999
3	156343	3	14	70	1589	1700	1445	1298015	1200000	1799999
4	590557	2	14	55	1876	1579	0	1893306	1800000	2399999
5	914385	1	14	85	1429	0	0	2811146	2400000	2999999
6	502747	3	14	65	1989	1158	1716	3315322	3000000	3599999
7	484826	2	14	75	1805	1341	0	3805011	3600000	4199999
8	986395	3	14	100	1804	1210	1508	4794552	4200000	4799999
9	117840	2	14	55	1993	1449	0	4916914	4800000	5399999
10	1016601	1	14	70	1189	0	0	5936957	5400000	5999999
11	643877	2	14	95	1386	1947	0	6582023	6000000	6599999
12	198789	1	14	85	1749	0	0	6784145	6600000	7199999
13	564719	3	14	70	1360	1298	1657	7350613	7200000	7799999
14	523509	3	14	80	1212	1296	1566	7878437	7800000	8399999
15	861570	2	14	60	1394	1157	0	8744081	8400000	8999999
16	468158	3	14	80	1758	1220	1798	9214790	9000000	9599999
17	512060	1	14	55	1349	0	0	9731626	9600000	10199999
18	769053	1	14	100	1214	0	0	10502028	10200000	10799999
19	879855	3	14	55	1778	1897	1753	11383097	10800000	11399999
20	285922	2	14	60	1403	1393	0	11674447	11400000	11999999

Total number of pulses in waveform = 42
****

Type 5 Radar Waveform_6

Num of Bursts = 13
Burst Interval (us)= 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	69169	2	5	60	1101	1545	0	69169	0	923076
2	1692338	3	5	60	1100	1861	1568	1764153	923077	1846153
3	581522	1	5	55	1375	0	0	2350204	1846154	2769230
4	466930	1	5	50	1390	0	0	2818509	2769231	3692307
5	1628583	2	5	60	1524	1421	0	4448482	3692308	4615384
6	514366	1	5	100	1699	0	0	4965793	4615385	5538461
7	661308	2	5	65	1935	1646	0	5628800	5538462	6461538
8	927033	2	5	100	1782	1769	0	6559414	6461539	7384615
9	1041894	1	5	75	1973	0	0	7604859	7384616	8307692
10	1006785	3	5	60	1150	1727	1104	8613617	8307693	9230769
11	710491	2	5	95	1987	1816	0	9328089	9230770	10153846
12	1659655	2	5	95	1937	1153	0	10991547	10153847	11076923
13	177541	2	5	60	1659	1767	0	11172178	11076924	12000000

Total number of pulses in waveform = 24
****

Type 5 Radar Waveform_7

Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	601661	2	18	80	1338	1904	0	601661	0	705881
2	697307	3	18	80	1743	1687	1392	1302210	705882	1411763
3	543647	1	18	65	1876	0	0	1850679	1411764	2117645
4	437616	1	18	50	1789	0	0	2290171	2117646	2823527
5	815408	2	18	60	1007	1150	0	3107368	2823528	3529409
6	1090175	1	18	65	1276	0	0	4199700	3529410	4235291
7	209246	2	18	65	1519	1670	0	4410222	4235292	4941173
8	884502	2	18	85	1853	1939	0	5297913	4941174	5647055
9	667932	1	18	80	1229	0	0	5969637	5647056	6352937
10	994263	3	18	75	1686	1410	1501	6965129	6352938	7058819
11	546503	2	18	55	1656	1648	0	7516229	7058820	7764701
12	398173	3	18	85	1108	1157	1395	7917706	7764702	8470583
13	885163	1	18	90	1414	0	0	8806529	8470584	9176465
14	599144	3	18	80	1555	1779	1403	9407087	9176466	9882347
15	993176	1	18	55	1443	0	0	10405000	9882348	10588229
16	324660	3	18	85	1720	1139	1508	10731103	10588230	11294111
17	881683	2	18	90	1784	1727	0	11617153	11294112	11999993

Total number of pulses in waveform = 33
****

Type 5 Radar Waveform_8

Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	703508	1	8	75	1850	0	0	703508	0	1090908
2	675353	3	8	75	1591	1447	1630	1380711	1090909	2181817
3	1134670	2	8	60	1524	1820	0	2520049	2181818	3272726
4	1113471	3	8	85	1360	1307	1734	3636864	3272727	4363635
5	1485791	3	8	90	1418	1336	1098	5127056	4363636	5454544
6	1055547	3	8	90	1119	1666	1118	6186455	5454545	6545453
7	458197	3	8	100	1148	1330	1438	6648555	6545454	7636362
8	1708309	2	8	60	1519	1205	0	8360780	7636363	8727271
9	915164	2	8	65	1494	1915	0	9278668	8727272	9818180
10	1457748	2	8	70	1068	1809	0	10739825	9818181	10909089
11	417503	2	8	80	1074	1882	0	11160205	10909090	11999998

Total number of pulses in waveform = 26
****

Type 5 Radar Waveform_9

Num of Bursts = 8
Burst Interval (us)= 1500000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	77927	1	17	100	1388	0	0	77927	0	1499999
2	1555242	1	17	85	1005	0	0	1634557	1500000	2999999
3	2031922	2	17	85	1745	1580	0	3667484	3000000	4499999
4	2325981	1	17	95	1254	0	0	5996790	4500000	5999999
5	397866	3	17	50	1926	1149	1962	6395910	6000000	7499999
6	1559865	2	17	60	1294	1466	0	7960812	7500000	8999999
7	1681090	2	17	65	1519	1171	0	9644662	9000000	10499999
8	939451	2	17	90	1009	1727	0	10586803	10500000	11999999

Total number of pulses in waveform = 14
****

Type 5 Radar Waveform_10

Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	530085	1	10	90	1758	0	0	530085	0	799999
2	462819	1	10	70	1697	0	0	994662	800000	1599999
3	1002068	1	10	95	1079	0	0	1998427	1600000	2399999
4	935427	1	10	100	1254	0	0	2934933	2400000	3199999
5	732185	2	10	55	1822	1900	0	3668372	3200000	3999999
6	796411	1	10	65	1101	0	0	4468505	4000000	4799999
7	383777	1	10	60	1036	0	0	4853383	4800000	5599999
8	1112956	1	10	60	1772	0	0	5967375	5600000	6399999
9	835644	3	10	80	1926	1376	1476	6804791	6400000	7199999
10	994489	2	10	50	1125	1875	0	7804058	7200000	7999999
11	980611	1	10	85	1644	0	0	8787669	8000000	8799999
12	194283	3	10	80	1047	1962	1499	8983596	8800000	9599999
13	1074503	2	10	65	1692	1407	0	10062607	9600000	10399999
14	604621	1	10	50	1092	0	0	10670327	10400000	11199999
15	670480	3	10	65	1059	1847	1701	11341899	11200000	11999999

Total number of pulses in waveform = 24
****

Type 5 Radar Waveform_11

Num of Bursts = 14
Burst Interval (us)= 857143

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	686260	2	14	75	1983	1622	0	686260	0	857142
2	855938	2	14	80	1297	1212	0	1545803	857143	1714285
3	952489	3	14	50	1061	1141	1730	2500801	1714286	2571428
4	499317	1	14	65	1553	0	0	3004050	2571429	3428571
5	1006942	2	14	70	1361	1157	0	4012545	3428572	4285714
6	451841	3	14	75	1932	1750	1372	4466904	4285715	5142857
7	920049	3	14	70	1589	1597	1181	5392007	5142858	6000000
8	1434405	1	14	55	1653	0	0	6830779	6000001	6857143
9	435036	2	14	95	1720	1310	0	7267468	6857144	7714286
10	782738	3	14	70	1513	1962	1305	8053236	7714287	8571429
11	1322999	1	14	70	1051	0	0	9381015	8571430	9428572
12	380227	1	14	70	1636	0	0	9762293	9428573	10285715
13	675040	2	14	75	1982	1310	0	10438969	10285716	11142858
14	1442012	2	14	80	1884	1572	0	11884273	11142859	12000001

Total number of pulses in waveform = 28
****

Type 5 Radar Waveform_12

Num of Bursts = 20
Burst Interval (us)= 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	408762	2	12	55	1216	1666	0	408762	0	599999
2	285294	3	12	55	1630	1083	1839	696938	600000	1199999
3	604093	2	12	55	1614	1853	0	1305583	1200000	1799999
4	849071	3	12	60	1616	1392	1792	2158121	1800000	2399999
5	782327	2	12	60	1101	1906	0	2945248	2400000	2999999
6	89804	2	12	55	1731	1666	0	3038059	3000000	3599999
7	1152724	3	12	70	1481	1931	1094	4194180	3600000	4199999
8	407054	1	12	85	1787	0	0	4605740	4200000	4799999
9	202335	2	12	100	1028	1080	0	4809862	4800000	5399999
10	1010185	3	12	65	1327	1194	1019	5822155	5400000	5999999
11	195192	3	12	50	1522	1366	1551	6020887	6000000	6599999
12	1045050	3	12	70	1287	1162	1448	7070376	6600000	7199999
13	599820	2	12	55	1421	1373	0	7674093	7200000	7799999
14	329630	2	12	65	1535	1923	0	8006517	7800000	8399999
15	767991	2	12	70	1006	1647	0	8777966	8400000	8999999
16	280923	2	12	85	1797	1529	0	9061542	9000000	9599999
17	657640	1	12	90	1420	0	0	9722508	9600000	10199999
18	1033977	1	12	65	1462	0	0	10757905	10200000	10799999
19	58554	2	12	55	1096	1091	0	10817921	10800000	11399999
20	1019049	2	12	50	1513	1661	0	11839157	11400000	11999999

Total number of pulses in waveform = 43
****

Type 5 Radar Waveform_13

Num of Bursts = 16
Burst Interval (us)= 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	537893	2	19	50	1837	1803	0	537893	0	749999
2	906573	1	19	60	1113	0	0	1448106	750000	1499999
3	441227	1	19	100	1508	0	0	1890446	1500000	2249999
4	1075333	3	19	55	1227	1975	1170	2967287	2250000	2999999
5	581197	2	19	75	1205	1590	0	3552856	3000000	3749999
6	785174	3	19	85	1951	1744	1493	4340825	3750000	4499999
7	509787	2	19	100	1213	1153	0	4855800	4500000	5249999
8	822199	3	19	100	1533	1614	1713	5680365	5250000	5999999
9	757470	3	19	95	1141	1288	1751	6442695	6000000	6749999
10	942697	2	19	65	1665	1454	0	7389572	6750000	7499999
11	506138	1	19	60	1684	0	0	7898829	7500000	8249999
12	1052048	1	19	75	1262	0	0	8952561	8250000	8999999
13	728257	3	19	85	1673	1621	1793	9682080	9000000	9749999
14	339114	2	19	65	1075	1264	0	10026281	9750000	10499999
15	626816	2	19	95	1151	1239	0	10655436	10500000	11249999
16	818587	2	19	80	1517	1738	0	11476413	11250000	11999999

Total number of pulses in waveform = 33
****

Type 5 Radar Waveform_14

Num of Bursts = 10
Burst Interval (us)= 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	898257	3	17	85	1191	1966	1553	898257	0	1199999
2	1331984	1	17	65	1589	0	0	2234951	1200000	2399999
3	525571	2	17	95	1507	1324	0	2762111	2400000	3599999
4	1700005	3	17	50	1753	1754	1395	4464947	3600000	4799999
5	1177564	2	17	60	1789	1741	0	5647413	4800000	5999999
6	1379143	1	17	60	1890	0	0	7030086	6000000	7199999
7	922492	2	17	60	1131	1751	0	7954468	7200000	8399999
8	466562	2	17	60	1315	1556	0	8423912	8400000	9599999
9	1350202	1	17	85	1788	0	0	9776985	9600000	10799999
10	1459959	1	17	80	1457	0	0	11238732	10800000	11999999

Total number of pulses in waveform = 18
****

Type 5 Radar Waveform_15

Num of Bursts = 20
Burst Interval (us)= 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	110593	2	9	65	1052	1193	0	110593	0	599999
2	792185	2	9	85	1442	1034	0	905023	600000	1199999
3	693047	2	9	70	1630	1037	0	1600546	1200000	1799999
4	410142	3	9	75	1520	1864	1583	2013355	1800000	2399999
5	848731	3	9	80	1861	1163	1282	2867053	2400000	2999999
6	517365	3	9	60	1431	1029	1765	3388724	3000000	3599999
7	638040	2	9	95	1328	1700	0	4030989	3600000	4199999
8	583992	3	9	70	1168	1963	1972	4618009	4200000	4799999
9	469883	2	9	95	1620	1499	0	5092995	4800000	5399999
10	684274	1	9	95	1937	0	0	5780388	5400000	5999999
11	516836	3	9	50	1206	1660	1563	6299161	6000000	6599999
12	407373	2	9	80	1095	1608	0	6710963	6600000	7199999
13	836789	1	9	55	1157	0	0	7550455	7200000	7799999
14	703847	2	9	80	1609	1878	0	8255459	7800000	8399999
15	522748	3	9	80	1556	1096	1301	8781694	8400000	8999999
16	226911	2	9	55	1293	1256	0	9012558	9000000	9599999
17	1047825	3	9	70	1779	1495	1086	10062932	9600000	10199999
18	541941	1	9	85	1120	0	0	10609233	10200000	10799999
19	243709	3	9	65	1746	1231	1722	10854062	10800000	11399999
20	743337	2	9	100	1135	1053	0	11602098	11400000	11999999

Total number of pulses in waveform = 45
****

Type 5 Radar Waveform_16

Num of Bursts = 9
Burst Interval (us)= 1333333

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	1215402	3	6	50	1590	1639	1984	1215402	0	1333332
2	994333	3	6	60	1909	1765	1681	2214948	1333333	2666665
3	1159390	3	6	95	1232	1819	1006	3379693	2666666	3999998
4	1240678	3	6	95	1324	1383	1598	4624428	3999999	5333331
5	1564213	1	6	60	1051	0	0	6192946	5333332	6666664
6	1109188	2	6	85	1661	1857	0	7303185	6666665	7999997
7	1357729	3	6	65	1405	1135	1986	8664432	7999998	9333330
8	680768	1	6	70	1593	0	0	9349726	9333331	10666663
9	1358786	2	6	65	1521	1245	0	10710105	10666664	11999996

Total number of pulses in waveform = 21
****

Type 5 Radar Waveform_17

Num of Bursts = 20
Burst Interval (us)= 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	547734	1	8	100	1947	0	0	547734	0	599999
2	562035	3	8	65	1739	1944	1629	1111716	600000	1199999
3	225557	3	8	55	1920	1932	1637	1342585	1200000	1799999
4	673263	2	8	85	1152	1763	0	2021337	1800000	2399999
5	684087	3	8	60	1152	1151	1917	2708339	2400000	2999999
6	353274	2	8	95	1733	1675	0	3065833	3000000	3599999
7	604555	3	8	95	1746	1075	1961	3673796	3600000	4199999
8	1101858	3	8	70	1755	1527	1485	4780436	4200000	4799999
9	468201	3	8	90	1217	1782	1358	5253404	4800000	5399999
10	214161	2	8	60	1025	1411	0	5471922	5400000	5999999
11	576821	1	8	85	1314	0	0	6051179	6000000	6599999
12	1127449	2	8	60	1928	1635	0	7179942	6600000	7199999
13	92302	1	8	85	1747	0	0	7275807	7200000	7799999
14	591889	1	8	70	1943	0	0	7869443	7800000	8399999
15	935478	2	8	60	1882	1419	0	8806864	8400000	8999999
16	600113	3	8	70	1784	1590	1907	9410278	9000000	9599999
17	768704	1	8	80	1453	0	0	10184263	9600000	10199999
18	327537	2	8	50	1553	1459	0	10513253	10200000	10799999
19	557904	3	8	80	1531	1055	1518	11074169	10800000	11399999
20	856430	1	8	75	1302	0	0	11934703	11400000	11999999

Total number of pulses in waveform = 42

Type 5 Radar Waveform_18

Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	687045	1	5	65	1974	0	0	687045	0	705881
2	157643	3	5	85	1914	1821	1550	846662	705882	1411763
3	803518	1	5	60	1825	0	0	1655465	1411764	2117645
4	990449	3	5	60	1265	1610	1398	2647739	2117646	2823527
5	538566	3	5	85	1758	1915	1699	3190578	2823528	3529409
6	988854	3	5	50	1201	1092	1457	4184804	3529410	4235291
7	356225	3	5	65	1892	1157	1910	4544779	4235292	4941173
8	662162	1	5	100	1371	0	0	5211900	4941174	5647055
9	952435	2	5	55	1162	1405	0	6165706	5647056	6352937
10	334723	3	5	100	1925	1940	1044	6502996	6352938	7058819
11	596173	2	5	70	1137	1252	0	7104078	7058820	7764701
12	884996	3	5	65	1018	1541	1281	7991463	7764702	8470583
13	1002498	3	5	65	1227	1252	1695	8997801	8470584	9176465
14	727993	2	5	90	1438	1890	0	9729968	9176466	9882347
15	812173	1	5	95	1866	0	0	10545469	9882348	10588229
16	469824	2	5	55	1357	1425	0	11017159	10588230	11294111
17	934325	1	5	60	1828	0	0	11954266	11294112	11999993

Total number of pulses in waveform = 37

Type 5 Radar Waveform_19

Num of Bursts = 18
Burst Interval (us)= 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	323245	1	10	80	1774	0	0	323245	0	666666
2	438485	1	10	55	1349	0	0	763504	666667	1333333
3	774786	2	10	95	1120	1654	0	1539639	1333334	2000000
4	968283	1	10	60	1683	0	0	2510696	2000001	2666667
5	489674	2	10	90	1024	1985	0	3002053	2666668	3333334
6	556301	1	10	55	1658	0	0	3561363	3333335	4000001
7	811810	1	10	95	1525	0	0	4374831	4000002	4666668
8	489400	1	10	65	1561	0	0	4865756	4666669	5333335
9	654501	3	10	80	1866	1201	1319	5521818	5333336	6000002
10	888475	2	10	50	1611	1042	0	6414679	6000003	6666669
11	769123	3	10	85	1651	1982	1012	7186455	6666670	7333336
12	269057	1	10	100	1906	0	0	7460157	7333337	8000003
13	714549	1	10	65	1248	0	0	8176612	8000004	8666670
14	644343	3	10	80	1688	1495	1532	8822203	8666671	9333337
15	797124	1	10	90	1885	0	0	9624042	9333338	10000004
16	587765	2	10	90	1610	1606	0	10213692	10000005	10666671
17	459435	1	10	70	1017	0	0	10676343	10666672	11333338
18	689219	1	10	85	1284	0	0	11366579	11333339	12000005

Total number of pulses in waveform = 28

Type 5 Radar Waveform_20

Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	106145	1	18	55	1831	0	0	106145	0	999999
2	1026231	1	18	75	1991	0	0	1134207	1000000	1999999
3	1243643	2	18	90	1076	1989	0	2379841	2000000	2999999
4	875110	3	18	95	1909	1283	1502	3258016	3000000	3999999
5	1351110	2	18	85	1453	2000	0	4613820	4000000	4999999
6	791148	1	18	75	1173	0	0	5408421	5000000	5999999
7	980228	2	18	90	1561	1344	0	6389822	6000000	6999999
8	1016812	1	18	70	1236	0	0	7409539	7000000	7999999
9	599475	1	18	60	1077	0	0	8010250	8000000	8999999
10	1795847	3	18	55	1838	1339	1930	9807174	9000000	9999999
11	321747	2	18	90	1305	1906	0	10134028	10000000	10999999
12	1673319	1	18	50	1349	0	0	11810558	11000000	11999999

Total number of pulses in waveform = 20
****

Type 5 Radar Waveform_21

Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	484598	1	5	60	1835	0	0	484598	0	799999
2	579812	2	5	70	1076	1018	0	1066245	800000	1599999
3	1302750	2	5	70	1128	1397	0	2371089	1600000	2399999
4	26975	1	5	65	1142	0	0	2400589	2400000	3199999
5	1186986	2	5	55	1224	1344	0	3588717	3200000	3999999
6	981615	1	5	90	1259	0	0	4572900	4000000	4799999
7	973441	3	5	90	1080	1317	1253	5547600	4800000	5599999
8	266337	1	5	80	1456	0	0	5817587	5600000	6399999
9	698523	2	5	75	1619	1152	0	6517566	6400000	7199999
10	1229729	3	5	55	1180	1891	1039	7750066	7200000	7999999
11	812405	2	5	60	1807	1474	0	8566581	8000000	8799999
12	741030	3	5	85	1343	1866	1407	9310892	8800000	9599999
13	292009	3	5	55	1323	1293	1591	9607517	9600000	10399999
14	1427148	1	5	65	1310	0	0	11038872	10400000	11199999
15	920206	2	5	60	1159	1102	0	11960388	11200000	11999999

Total number of pulses in waveform = 29
****

Type 5 Radar Waveform_22

Num of Bursts = 16
Burst Interval (us)= 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	37088	2	10	80	1135	1351	0	37088	0	749999
2	1201506	2	10	90	1992	1529	0	1241080	750000	1499999
3	509219	3	10	55	1849	1953	1775	1753820	1500000	2249999
4	883127	1	10	100	1537	0	0	2642524	2250000	2999999
5	399469	2	10	50	1341	1625	0	3043530	3000000	3749999
6	773220	2	10	65	1480	1975	0	3819716	3750000	4499999
7	1177424	3	10	95	1929	1861	1108	5000595	4500000	5249999
8	929998	3	10	60	1759	1795	1343	5935491	5250000	5999999
9	271506	3	10	65	1604	1231	1680	6211894	6000000	6749999
10	1001776	3	10	75	1753	1959	1791	7218185	6750000	7499999
11	948597	1	10	50	1293	0	0	8172285	7500000	8249999
12	350303	2	10	80	1328	1458	0	8523881	8250000	8999999
13	952925	2	10	55	1130	1855	0	9479592	9000000	9749999
14	562264	2	10	65	1605	1496	0	10044841	9750000	10499999
15	1035603	3	10	75	1399	1685	1989	11083545	10500000	11249999
16	709911	3	10	80	1727	1845	1642	11798529	11250000	11999999

Total number of pulses in waveform = 37
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Type 5 Radar Waveform_23

Num of Bursts = 10
Burst Interval (us)= 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	559761	2	17	90	1035	1411	0	559761	0	1199999
2	1260235	3	17	70	1710	1404	1819	1822442	1200000	2399999
3	835694	1	17	95	1199	0	0	2663069	2400000	3599999
4	1664308	3	17	50	1330	1639	1576	4328576	3600000	4799999
5	487664	2	17	95	1235	1593	0	4820785	4800000	5999999
6	1996304	2	17	100	1539	1171	0	6819917	6000000	7199999
7	1126898	2	17	70	1463	1941	0	7949525	7200000	8399999
8	729975	2	17	50	1283	1756	0	8682904	8400000	9599999
9	1463125	3	17	70	1278	1268	1085	10149068	9600000	10799999
10	1228336	1	17	60	1901	0	0	11381035	10800000	11999999

Total number of pulses in waveform = 21

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Type 5 Radar Waveform_24

Num of Bursts = 16
Burst Interval (us)= 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	53127	3	9	70	1491	1895	1721	53127	0	749999
2	1170277	3	9	80	1080	1043	1328	1228511	750000	1499999
3	843221	1	9	60	1457	0	0	2075183	1500000	2249999
4	668934	2	9	90	1223	1733	0	2745574	2250000	2999999
5	835029	1	9	70	1092	0	0	3583559	3000000	3749999
6	286021	2	9	80	1190	1917	0	3870672	3750000	4499999
7	669862	2	9	60	1043	1884	0	4543641	4500000	5249999
8	707803	2	9	80	1903	1833	0	5254371	5250000	5999999
9	777805	1	9	100	1911	0	0	6035912	6000000	6749999
10	969046	1	9	55	1406	0	0	7006869	6750000	7499999
11	1114205	3	9	95	1187	1812	1572	8122480	7500000	8249999
12	612592	1	9	50	1908	0	0	8739643	8250000	8999999
13	558721	2	9	55	1397	1317	0	9300272	9000000	9749999
14	802272	1	9	55	1044	0	0	10105258	9750000	10499999
15	1091318	1	9	100	1990	0	0	11197620	10500000	11249999
16	474999	3	9	55	1835	1573	1933	11674609	11250000	11999999

Total number of pulses in waveform = 29

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Type 5 Radar Waveform_25

Num of Bursts = 8
Burst Interval (us)= 1500000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	632924	3	12	85	1439	1464	1015	632924	0	1499999
2	1913710	1	12	65	1036	0	0	2550552	1500000	2999999
3	1341650	1	12	65	1557	0	0	3893238	3000000	4499999
4	663371	3	12	100	1373	1265	1743	4558166	4500000	5999999
5	2653914	2	12	90	1120	1893	0	7216461	6000000	7499999
6	938753	1	12	50	1960	0	0	8158227	7500000	8999999
7	2336577	2	12	95	1105	1562	0	10496764	9000000	10499999
8	534473	3	12	60	1321	1473	1460	11033904	10500000	11999999

Total number of pulses in waveform = 16

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