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Report No.: 1808RSU024-U1
Report Version: V01
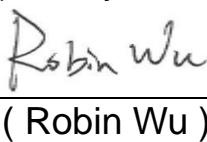Issue Date: 11-16-2018

DFS MEASUREMENT REPORT

FCC PART 15 Subpart E / RSS-247 Issue 2

FCC ID: 2ABLK-844E-2

IC: 4009A-844E2

APPLICANT: Calix Inc.

Application Type: Certification

Product: WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB

Model No.: 844E-2

Brand Name: Calix

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

☐ Client Device (No radar detection)

☐ Client Device with radar detection

Test Date: August 19 ~ November 16, 2018

Reviewed By: _(Sunny Sun)_

Approved By: _(Robin Wu)_

The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 905462 D02v02. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
1808RSU024-U1	Rev. 01	Initial Report	09-25-2018	Invalid
1808RSU024-U1	Rev. 02	Added Spot Data	11-16-2018	Valid

Note: Here is the same software version and RF circuit with "FCC ID: 2ABLK-844E-1", and spot the test items "Channel Loading, Detection Bandwidth, Channel Move Time and Channel Closing, Transmission Time & Radar Statistical Performance Check" with 802.11ac-VHT80 mode, the other test items are based on MRT report "1808RSU023-U1" to copy report.

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§2.1033 General Information

Applicant:	Calix Inc.
Applicant Address:	1035 N. McDowell Blvd Petaluma, CA94954 U.S.A
Manufacturer:	Calix Inc.
Manufacturer Address:	1035 N. McDowell Blvd Petaluma, CA94954 U.S.A
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:	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB
Model No.:	844E-2
Brand Name:	Calix
Wi-Fi Specification:	802.11a/b/g/n/ac
Frequency Range	**2.4GHz:** For 802.11b/g/n-HT20: 2412 ~ 2462 MHz For 802.11n-HT40: 2422 ~ 2452 MHz **5GHz:** For 802.11a/n-HT20/ac-VHT20:5180~5320MHz, 5500~5720MHz, 5745~5825MHz For 802.11n-HT40/ac-VHT40:5190~5310MHz, 5510~5710MHz, 5755~5795MHz For 802.11ac-VHT80:5210MHz, 5290MHz, 5530MHz, 5610MHz, 5690MHz, 5775MHz
Type of Modulation	802.11b: DSSS, 802.11a/g/n/ac: OFDM
Modulation Type	CCK, DQPSK, DBPSK for DSSS 16QAM, 64QAM, 256QAM, QPSK, BPSK for OFDM
Power-on cycle	Requires 160.0 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 (GHz)	T$_X$ Paths	Directional Gain (dBi)	
			Beam Forming	CDD
PCB Antenna	5.2	4	8.04	8.04
	5.3	4	7.78	7.78
	5.6	4	8.38	8.38
	5.8	4	8.70	8.70

Note:

1. The EUT working on Beam Forming technology with 802.11n/ac mode, and 802.11a working on CDD mode.

2. Correlated signals include, but are not limited to, signals transmitted in any of the following modes:

   - Any transmit Beam Forming mode, whether fixed or adaptive (e.g., phased array modes, closed loop MIMO modes, Transmitter Adaptive Antenna modes, Maximum Ratio Transmission (MRT) modes, and Statistical Eigen Beam Forming (EBF) modes).

3. Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, …, G_N dBi

   - transmit signals are correlated, then
   - Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + … + 10^{GN/20})^2/N_{ANT}]$ dBi [Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

2.3. Description of Antenna RF Port

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

2.4. DFS Band Carrier Frequencies Operation

802.11 a/n-HT20/ac-VHT20

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

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

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

2.5. 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 a 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	$\text{Roundup}\left\{ \dfrac{\left(\dfrac{1}{360}\right) \cdot}{\left(\dfrac{19 \cdot 10^6}{\text{PRI}_{usec}}\right)} \right\}$	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
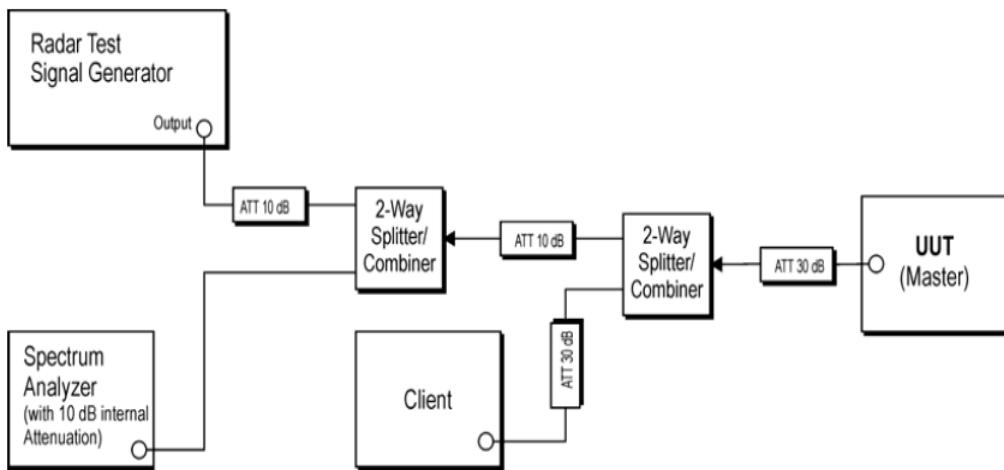
Table 3-8: Parameters for Frequency Hopping Radar Waveforms

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) - TR4

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2019/04/20
Spectrum Analyzer	Agilent	N9010B	MRTSUE06452	1 year	2019/07/20
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

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
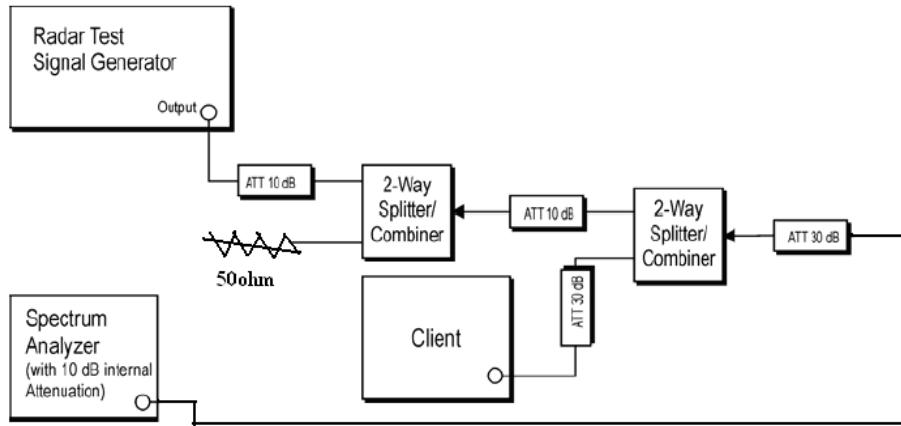
Product Name: **WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB**

FCC ID: **2ABLK-844E-2**

IC: **4009A-844E2**

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.
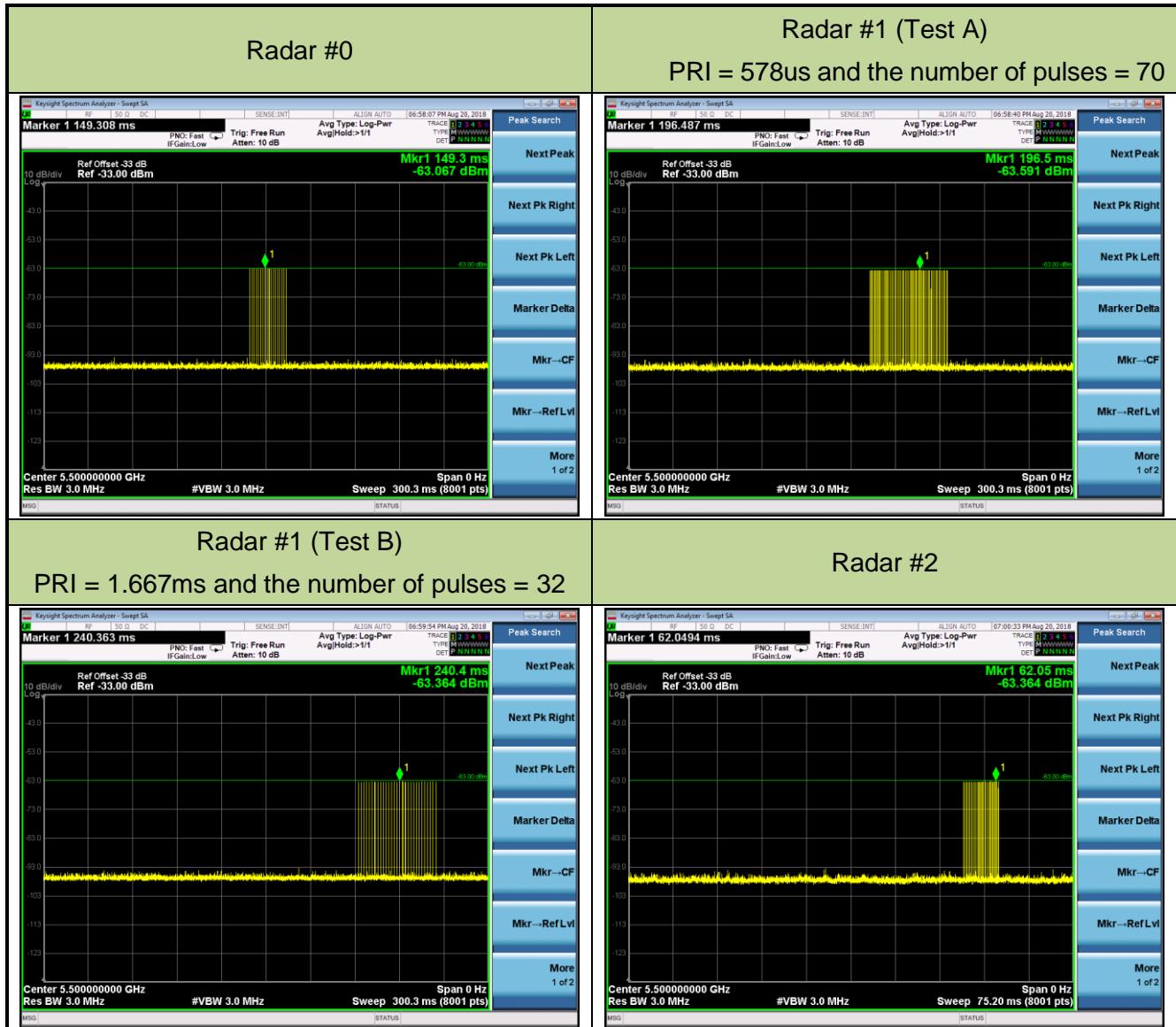
Figure 3-2: Conducted Test Setup
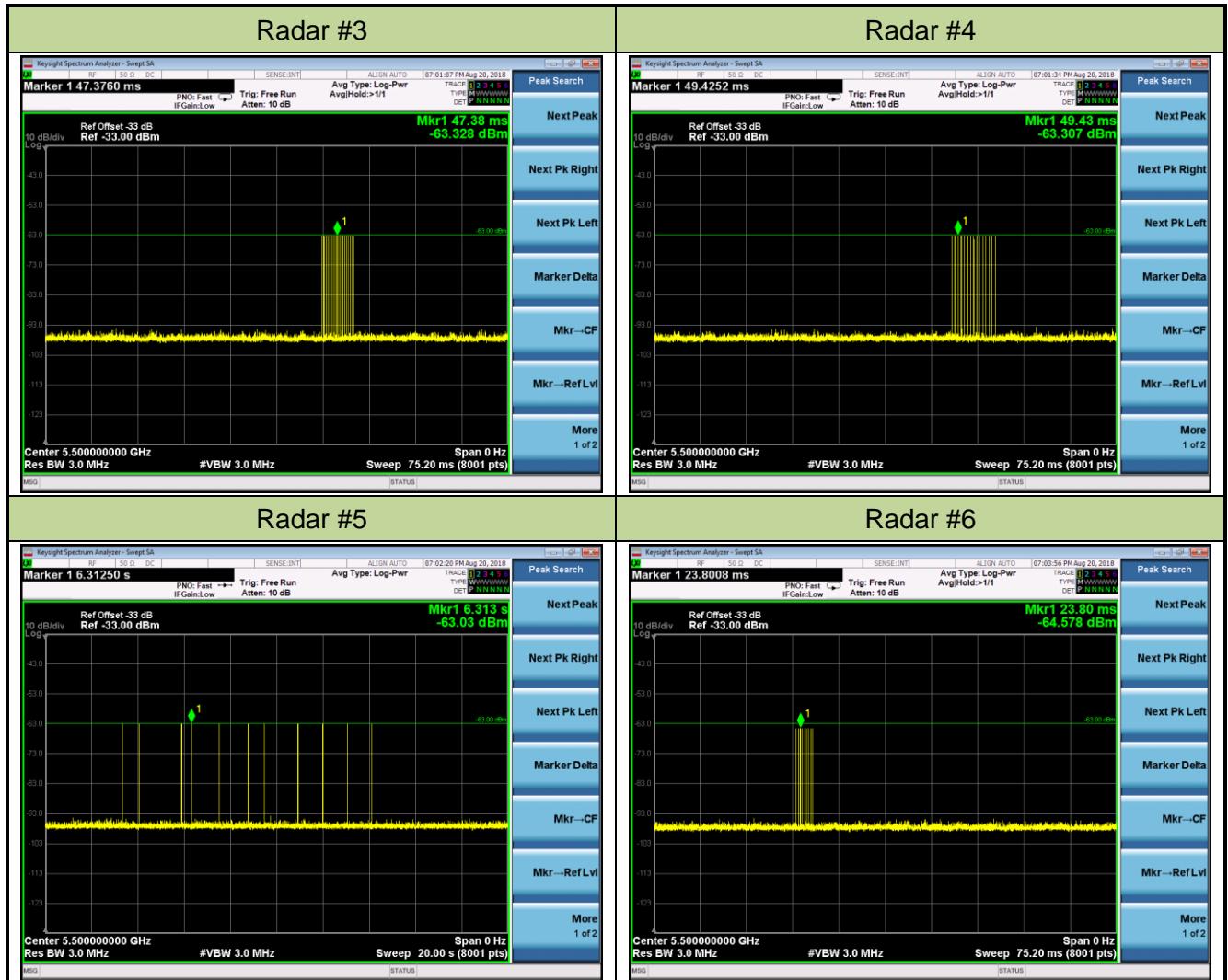
5.2.2. Calibration Procedure

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
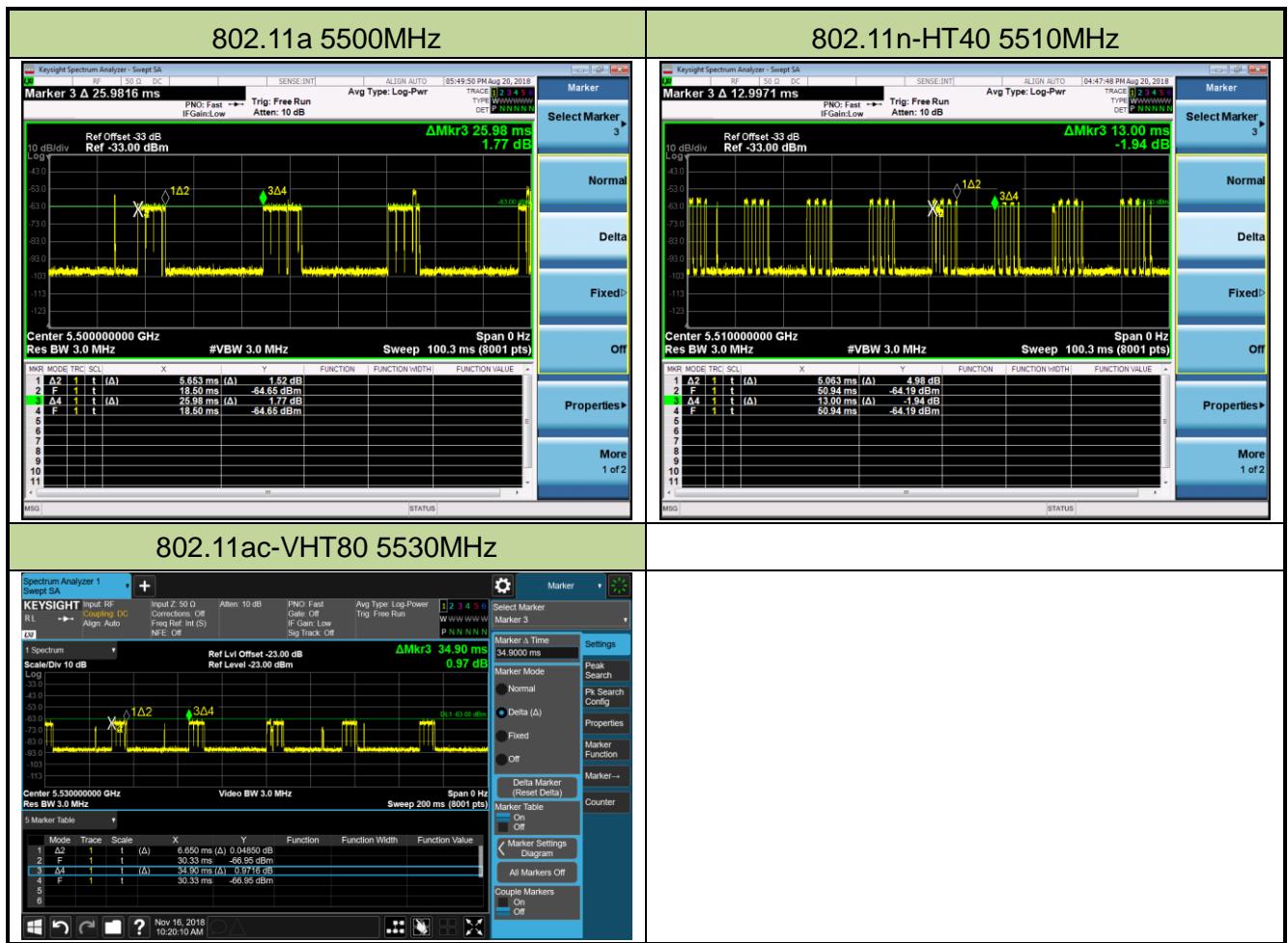
Product	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/08/20
Test Item	Radar Waveform Calibration		

Radar #0	Radar #1 (Test A) PRI = 578us and the number of pulses = 70

Radar #1 (Test B) PRI = 1.667ms and the number of pulses = 32	Radar #2

Radar #3	Radar #4

Radar #5	Radar #6

5.2.4. Channel Loading Test Result

Product	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/08/20 ~ 2018/11/16
Test Item	Channel Loading		

802.11a 5500MHz	802.11n-HT40 5510MHz

802.11ac-VHT80 5530MHz	

Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11a	5500 MHz	21.76%	≥ 17%	Pass
802.11n-HT40	5510 MHz	38.95%	≥ 17%	Pass
802.11ac-VHT80	5530 MHz	19.05%	≥ 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	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/08/27
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 16.82MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5309MHz - 5291MHz = 18MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 16.82MHz x 100% = 16.82MHz.

Product	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/08/27
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	0	0	0	0	0	0	0	0	0	0	0%
5492 FL	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 36.44MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5329MHz - 5292MHz = 37MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 36.444MHz x 100% = 36.44MHz.

Product	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/11/16
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 75.42MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5329MHz - 5251MHz = 78MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 75.42MHz x 100% = 75.42MHz.

5.4. Initial Channel Availability Check Time Measurement

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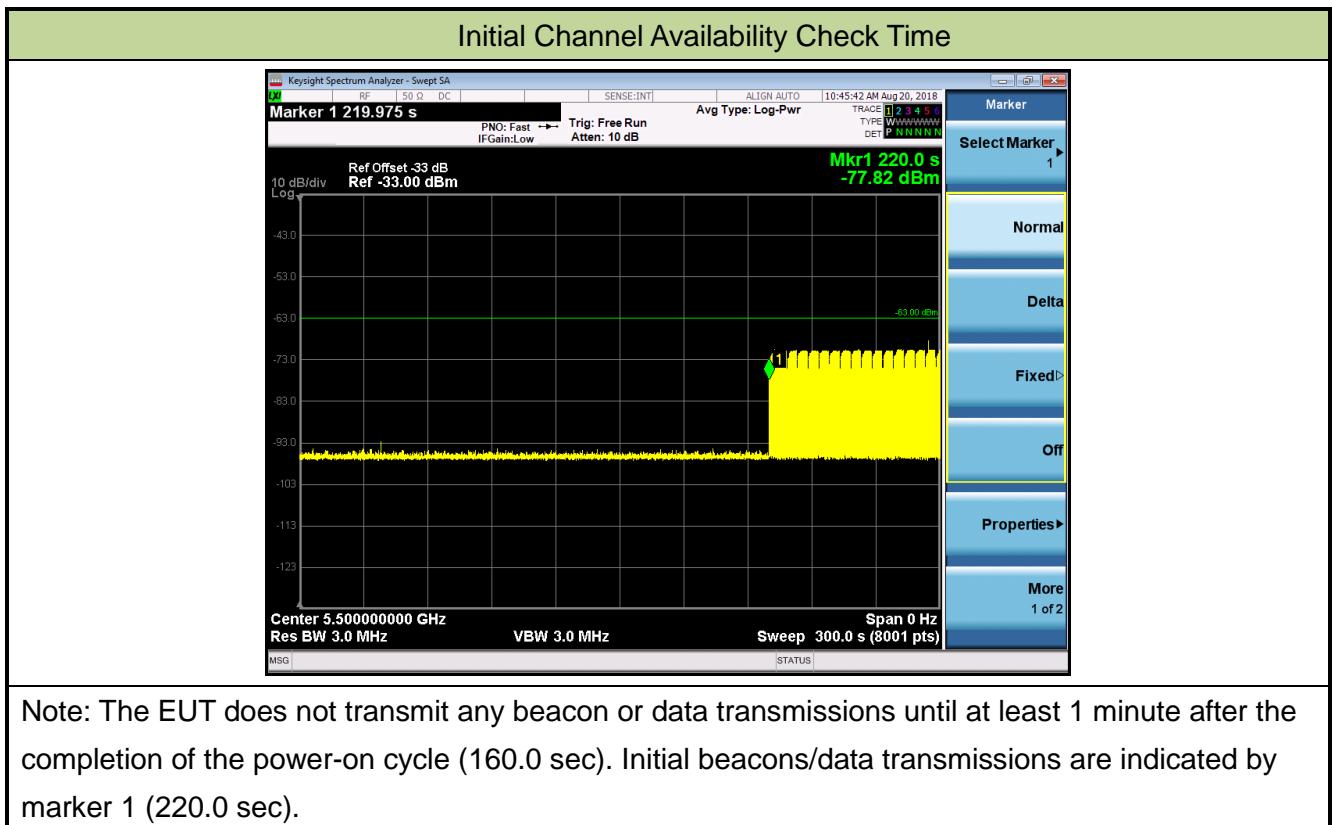
The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute on the intended operating frequency.

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	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/08/20
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 (160.0 sec). Initial beacons/data transmissions are indicated by marker 1 (220.0 sec).

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

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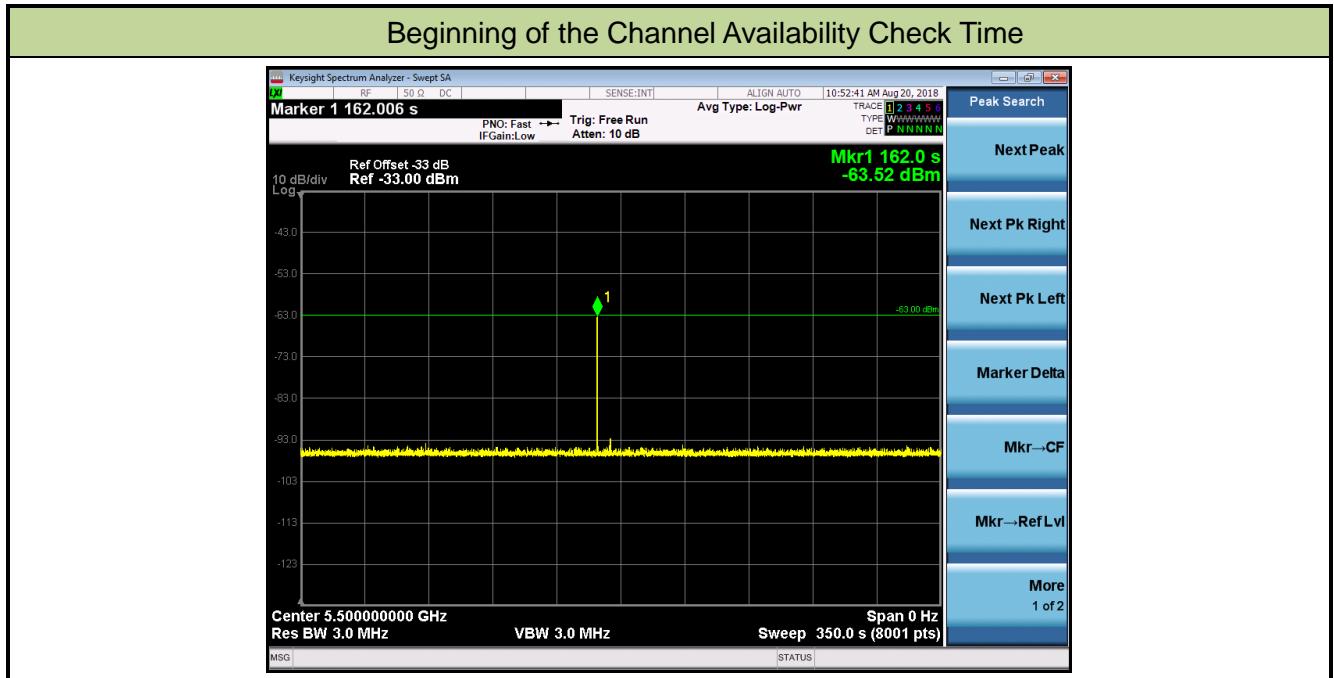
In beginning of the Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

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	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/08/20
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
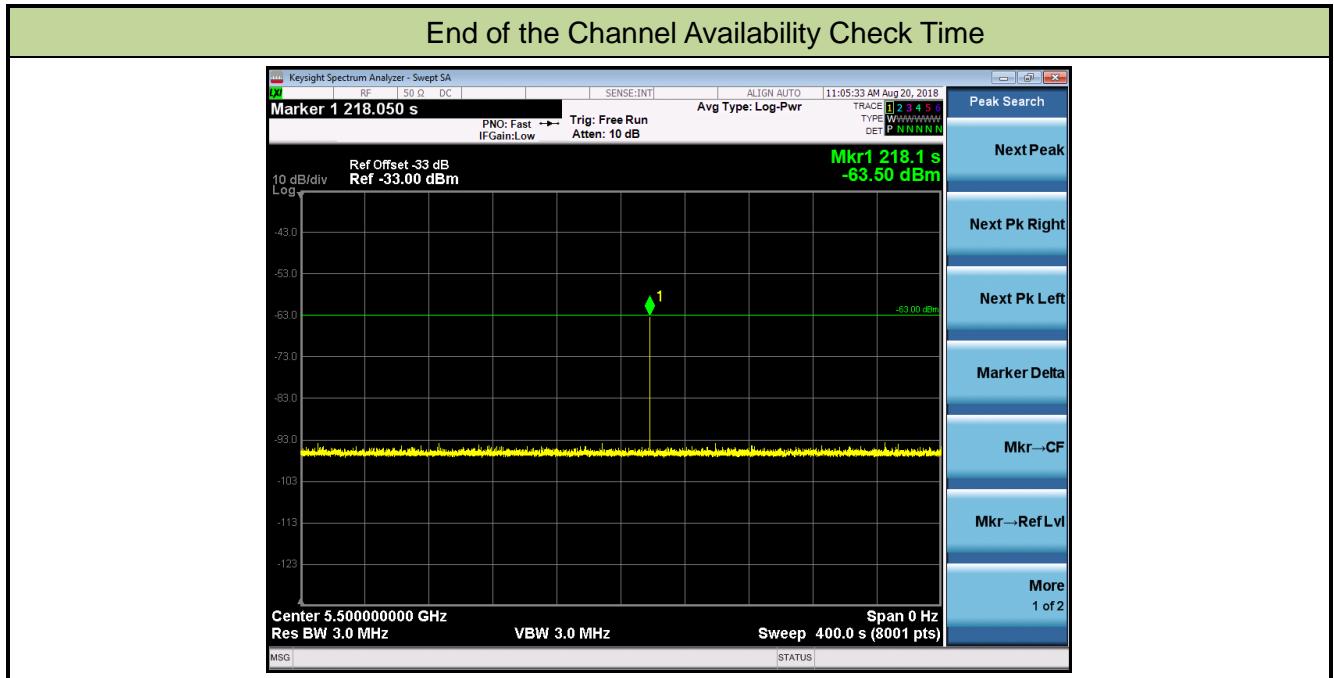
In the end of Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

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	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/08/20
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
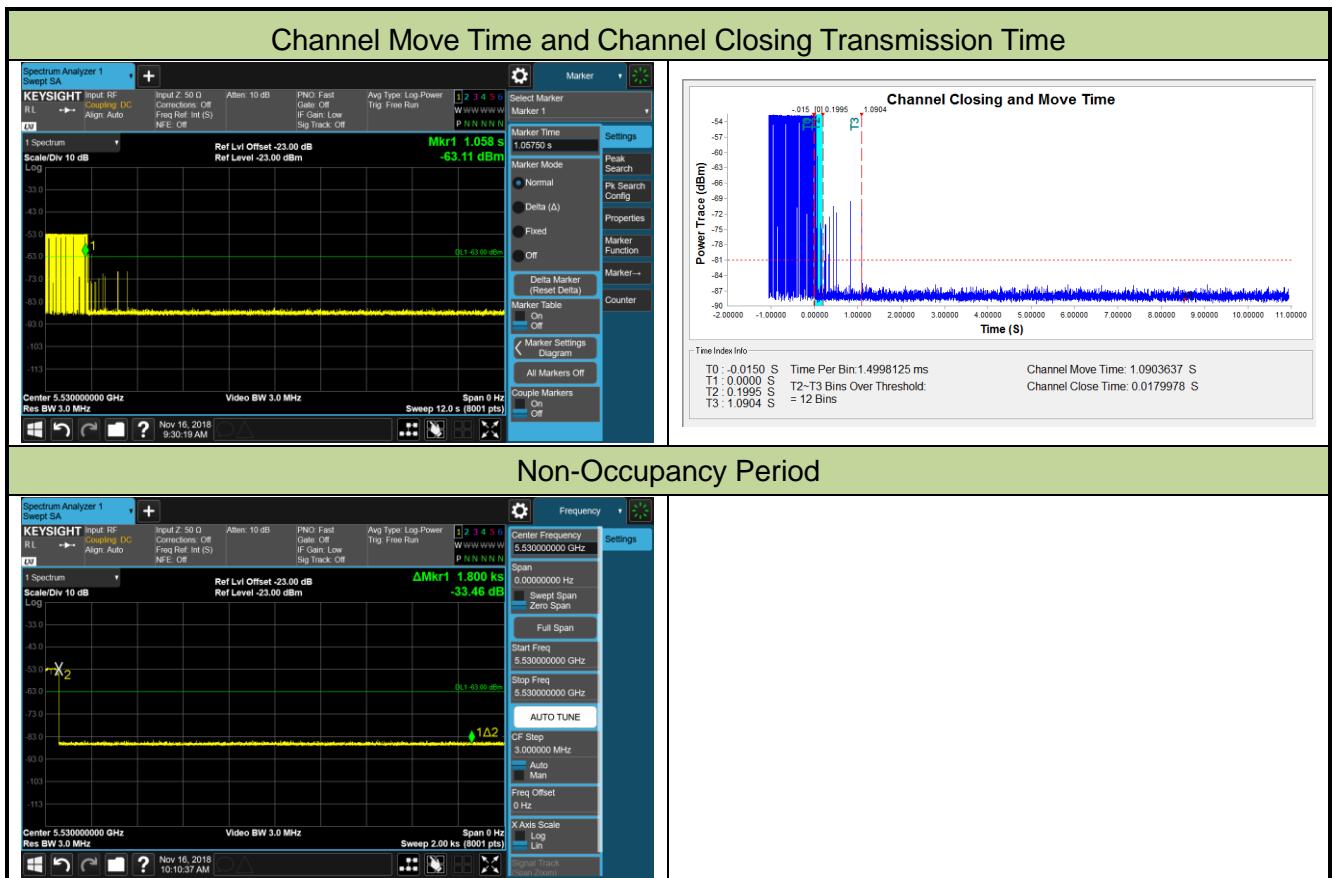
The EUT has In-Service Monitoring function to continuously monitor the radar signals. If the radar is detected, must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec. 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	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/11/16
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11ac-VHT80 mode – 5530MHz)		

Channel Move Time and Channel Closing Transmission Time
Non-Occupancy Period

Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	1.090s	<10s
Channel Closing Transmission Time (ms) (Note)	18.0ms	< 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	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/08/28
Test Item	Radar Statistical Performance Check (802.11a mode – 5500MHz)		

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	798	67	1
2	5491	1	858	62	1
3	5491	1	938	57	1
4	5491	1	738	72	1
5	5491	1	718	74	1
6	5491	1	598	89	1
7	5491	1	578	92	1
8	5491	1	838	63	1
9	5491	1	518	102	1
10	5491	1	638	83	1
11	5500	1	878	61	1
12	5500	1	818	65	1
13	5500	1	758	70	1
14	5500	1	778	68	1
15	5500	1	618	86	1
16	5500	1	1030	52	1
17	5500	1	776	69	1
18	5500	1	1665	32	1
19	5500	1	2419	22	1
20	5500	1	2906	19	1
21	5509	1	2047	26	1
22	5509	1	1410	38	1
23	5509	1	1006	53	1
24	5509	1	1182	45	1
25	5509	1	851	63	1
26	5509	1	2998	18	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5509	1	1747	31	1
28	5509	1	2229	24	1
29	5509	1	1060	50	1
30	5509	1	2730	20	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	2.4	205	26	1
2	5491	4.1	176	24	1
3	5491	4.5	212	25	1
4	5491	1.8	225	24	1
5	5491	5.0	163	29	1
6	5491	4.9	229	26	1
7	5491	2.6	225	25	1
8	5491	1.3	200	29	1
9	5491	3.9	166	28	1
10	5491	2.5	200	27	1
11	5500	4.5	225	29	1
12	5500	2.7	221	23	1
13	5500	1.4	172	27	1
14	5500	4.2	228	26	1
15	5500	4.3	210	25	1
16	5500	2.2	182	28	1
17	5500	2.1	218	25	1
18	5500	4.8	167	27	1
19	5500	1.5	209	23	1
20	5500	4.5	161	29	1
21	5509	1.2	159	26	1
22	5509	4.9	173	26	1
23	5509	3.6	228	29	1
24	5509	2.8	202	25	1
25	5509	2.3	188	27	1
26	5509	4.8	185	27	1
27	5509	1.7	228	29	1
28	5509	2.7	172	26	1
29	5509	3.6	194	23	1
30	5509	2.6	164	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	7.5	263	17	1
2	5491	8.7	309	17	1
3	5491	6.6	435	18	1
4	5491	9.0	325	18	1
5	5491	8.9	492	17	1
6	5491	6.2	300	18	1
7	5491	6.8	309	17	1
8	5491	9.0	447	17	1
9	5491	9.6	431	16	1
10	5491	6.2	321	16	1
11	5500	8.2	424	16	1
12	5500	6.5	475	16	1
13	5500	8.1	475	16	1
14	5500	7.4	484	16	1
15	5500	7.5	489	16	1
16	5500	7.4	342	16	1
17	5500	6.9	360	16	1
18	5500	8.7	409	18	1
19	5500	8.2	381	18	1
20	5500	9.3	289	16	1
21	5509	7.7	466	18	1
22	5509	9.8	258	18	1
23	5509	9.4	438	18	1
24	5509	8.5	424	16	1
25	5509	8.7	350	16	1
26	5509	8.4	393	17	1
27	5509	8.3	294	16	1
28	5509	6.2	415	16	1
29	5509	8.9	262	17	1
30	5509	7.7	349	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	13.5	281	16	1
2	5491	14.4	253	16	1
3	5491	14.6	354	16	1
4	5491	14.9	378	16	1
5	5491	16.4	358	16	1
6	5491	19.8	422	13	1
7	5491	18.4	393	12	1
8	5491	11.9	490	16	1
9	5491	14.6	289	12	1
10	5491	14.5	491	15	1
11	5500	14.5	299	16	1
12	5500	19.5	298	15	1
13	5500	11.2	275	16	1
14	5500	16.8	280	15	1
15	5500	17.1	419	13	1
16	5500	13.2	470	14	1
17	5500	16.1	261	14	1
18	5500	11.5	284	14	1
19	5500	19.5	280	12	1
20	5500	15.4	368	14	1
21	5509	13.4	256	13	1
22	5509	19.9	250	16	1
23	5509	13.5	458	14	1
24	5509	19.7	492	12	1
25	5509	19.3	300	16	1
26	5509	15.8	251	14	1
27	5509	15.8	329	12	1
28	5509	12.4	372	16	1
29	5509	18.3	282	12	1
30	5509	13.4	453	16	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	5494.6	1	16	5500.0	1
2	5498.2	1	17	5500.0	1
3	5497.8	1	18	5500.0	1
4	5493.0	1	19	5500.0	1
5	5495.0	1	20	5500.0	1
6	5494.2	1	21	5501.4	1
7	5496.6	1	22	5505.0	1
8	5493.4	1	23	5502.2	1
9	5498.6	1	24	5506.6	1
10	5495.8	1	25	5505.8	1
11	5500.0	1	26	5503.4	1
12	5500.0	1	27	5505.4	1
13	5500.0	1	28	5504.2	1
14	5500.0	1	29	5507.0	1
15	5500.0	1	30	5501.8	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

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

Burst   Off Time    #        Chirp    PW      Pulse 1    Pulse 2    Pulse 3    Start Loc    Start Burst     End Burst
#       (us)        Pulses   (MHz)    (us)    Pri(us)    Pri(us)    Pri(us)    (us)         Interval(us)    Interval(us)
        322269
1                   2        9        100     1245       1365       0          322269       0               1090908
        1074034
2                   3        9        60      1810       1841       1235       1398913      1090909         2181817
        1766381
3                   2        9        50      1161       1045       0          3170180      2181818         3272726
        986465
4                   1        9        95      1786       0          0          4158851      3272727         4363635
        1261013
5                   1        9        100     1509       0          0          5421650      4363636         5454544
        486169
6                   3        9        60      1703       1785       1598       5909328      5454545         6545453
        858538
7                   3        9        80      1875       1241       1625       6772952      6545454         7636362
        1095329
8                   3        9        70      1347       1780       1701       7873022      7636363         8727271
        1747390
9                   1        9        80      1114       0          0          9625240      8727272         9818180
        1178357
10                  2        9        90      1807       1515       0          10804711     9818181         10909089
        1127891
11                  1        9        85      1956       0          0          11935924     10909090        11999998
Total number of pulses in waveform = 22
*************************************************************************************
```

Type 5 Radar Waveform_2

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	616228	2	18	55	1292	1565	0	616228	0	631578
2	496379	3	18	100	1066	1839	1749	1115464	631579	1263157
3	617878	1	18	60	1557	0	0	1737996	1263158	1894736
4	609474	1	18	55	1196	0	0	2349027	1894737	2526315
5	562522	1	18	95	1515	0	0	2912745	2526316	3157894
6	575428	2	18	55	1053	1291	0	3489688	3157895	3789473
7	804896	3	18	50	1581	1023	1758	4296928	3789474	4421052
8	511331	2	18	80	1558	1132	0	4812621	4421053	5052631
9	275654	3	18	100	1761	1737	1052	5090965	5052632	5684210
10	988000	1	18	95	1233	0	0	6083515	5684211	6315789
11	262064	2	18	85	1942	1590	0	6346812	6315790	6947368
12	1108726	1	18	65	1070	0	0	7459070	6947369	7578947
13	444333	2	18	70	1053	1397	0	7904473	7578948	8210526
14	669631	1	18	60	1423	0	0	8576554	8210527	8842105
15	730382	2	18	85	1294	1258	0	9308359	8842106	9473684
16	198626	2	18	75	1259	1071	0	9509537	9473685	10105263
17	1095476	2	18	55	1970	1529	0	10607343	10105264	10736842
18	427979	1	18	50	1993	0	0	11038821	10736843	11368421
19	500156	3	18	50	1784	1057	1109	11540970	11368422	12000000

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

Type 5 Radar Waveform_3

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	254958	3	17	70	1189	1040	1936	254958	0	749999
2	1160147	2	17	70	1334	1715	0	1419270	750000	1499999
3	614857	2	17	70	1969	1939	0	2037176	1500000	2249999
4	232257	3	17	70	1682	1509	1753	2273341	2250000	2999999
5	1365130	2	17	85	1364	1894	0	3643415	3000000	3749999
6	174044	1	17	100	1278	0	0	3820717	3750000	4499999
7	1333532	3	17	100	1447	1699	1348	5155527	4500000	5249999
8	153551	3	17	60	1213	1789	1982	5313572	5250000	5999999
9	1024553	2	17	75	1376	1350	0	6343109	6000000	6749999
10	485866	1	17	90	1880	0	0	6831701	6750000	7499999
11	763221	1	17	100	1330	0	0	7596802	7500000	8249999
12	890375	1	17	100	1363	0	0	8488507	8250000	8999999
13	1189437	3	17	75	1787	1701	1100	9679307	9000000	9749999
14	761253	1	17	90	1503	0	0	10445148	9750000	10499999
15	385377	2	17	65	1804	1575	0	10832028	10500000	11249999
16	1153624	3	17	65	1614	1571	1551	11989031	11250000	11999999

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

Type 5 Radar Waveform_4

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	273428	1	5	95	1663	0	0	273428	0	599999
2	330629	2	5	50	1572	1350	0	605720	600000	1199999
3	677755	3	5	85	1062	1018	1960	1286397	1200000	1799999
4	869993	1	5	60	1942	0	0	2160430	1800000	2399999
5	580536	3	5	65	1809	1125	1353	2742908	2400000	2999999
6	589745	3	5	90	1683	1110	1888	3336940	3000000	3599999
7	580108	3	5	85	1158	1270	1203	3921729	3600000	4199999
8	682969	1	5	60	1528	0	0	4608329	4200000	4799999
9	358448	1	5	100	1340	0	0	4968305	4800000	5399999
10	539395	1	5	80	1092	0	0	5509040	5400000	5999999
11	755357	1	5	75	1076	0	0	6265489	6000000	6599999
12	654346	1	5	95	1909	0	0	6920911	6600000	7199999
13	625246	3	5	90	1533	1078	1984	7548066	7200000	7799999
14	385558	1	5	90	1846	0	0	7938219	7800000	8399999
15	490858	1	5	75	1425	0	0	8430923	8400000	8999999
16	753983	3	5	90	1732	1094	1035	9186331	9000000	9599999
17	430732	2	5	50	1489	1386	0	9620924	9600000	10199999
18	686137	1	5	55	1631	0	0	10309936	10200000	10799999
19	607052	2	5	60	1402	1666	0	10918619	10800000	11399999
20	523226	1	5	60	1720	0	0	11444913	11400000	11999999

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

Type 5 Radar Waveform_5

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	113457	3	10	70	1999	1306	1181	113457	0	1199999
2	1456140	3	10	50	1774	1627	1092	1574083	1200000	2399999
3	909274	3	10	50	1019	1481	1820	2487850	2400000	3599999
4	1633177	1	10	75	1260	0	0	4125347	3600000	4799999
5	987010	1	10	55	1675	0	0	5113617	4800000	5999999
6	937010	3	10	50	1221	1333	1327	6052302	6000000	7199999
7	1693754	3	10	50	1175	1796	1033	7749937	7200000	8399999
8	1638484	2	10	95	1255	1428	0	9392425	8400000	9599999
9	852788	1	10	70	1788	0	0	10247896	9600000	10799999
10	744080	1	10	65	1011	0	0	10993764	10800000	11999999

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

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	231138	1	8	55	1729	0	0	231138	0	1333332
2	2048873	3	8	55	1668	1898	1108	2281740	1333333	2666665
3	670282	2	8	95	1790	1665	0	2956696	2666666	3999998
4	1718086	3	8	75	1193	1476	1597	4678237	3999999	5333331
5	1109159	2	8	65	1221	1903	0	5791662	5333332	6666664
6	1697291	2	8	60	1823	1018	0	7492077	6666665	7999997
7	1295403	3	8	80	1742	1264	1245	8790321	7999998	9333330
8	775839	3	8	75	1426	1038	1246	9570411	9333331	10666663
9	1101944	2	8	60	1955	1797	0	10676065	10666664	11999996

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

Type 5 Radar Waveform_7

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	107920	2	14	100	1940	1021	0	107920	0	631578
2	630951	2	14	95	1937	1588	0	741832	631579	1263157
3	1146431	1	14	60	1140	0	0	1891788	1263158	1894736
4	60317	1	14	95	1582	0	0	1953245	1894737	2526315
5	762851	3	14	55	1776	1653	1231	2717678	2526316	3157894
6	1061141	2	14	100	1539	1600	0	3783479	3157895	3789473
7	29194	1	14	50	1185	0	0	3815812	3789474	4421052
8	1202573	2	14	95	1617	1959	0	5019570	4421053	5052631
9	78532	3	14	90	1127	1589	1949	5101678	5052632	5684210
10	837263	3	14	55	1946	1031	1238	5943606	5684211	6315789
11	537545	3	14	70	1110	1810	1647	6485366	6315790	6947368
12	935741	1	14	100	1249	0	0	7425674	6947369	7578947
13	247691	2	14	100	1955	1252	0	7674614	7578948	8210526
14	1092874	1	14	100	1208	0	0	8770695	8210527	8842105
15	109833	2	14	95	1091	1906	0	8881736	8842106	9473684
16	609802	2	14	95	1150	1968	0	9494535	9473685	10105263
17	1200396	2	14	55	1541	1376	0	10698049	10105264	10736842
18	565129	3	14	95	1764	1746	1596	11266095	10736843	11368421
19	685485	1	14	100	1999	0	0	11956686	11368422	12000000

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

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	422	1	6	80	1249	0	0	422	0	1090908
2	1219337	1	6	70	1937	0	0	1221008	1090909	2181817
3	1326815	2	6	55	1289	1626	0	2549760	2181818	3272726
4	727635	1	6	65	1580	0	0	3280310	3272727	4363635
5	1447194	1	6	60	1786	0	0	4729084	4363636	5454544
6	1685865	2	6	75	1905	1445	0	6416735	5454545	6545453
7	220509	2	6	55	1432	1265	0	6640594	6545454	7636362
8	1974486	2	6	60	1243	1725	0	8617777	7636363	8727271
9	1025178	3	6	90	1063	1826	1788	9645923	8727272	9818180
10	1154381	3	6	70	1938	1658	1999	10804981	9818181	10909089
11	509478	1	6	90	1349	0	0	11320054	10909090	11999998

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

Type 5 Radar Waveform_9

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	41173	3	19	85	1766	1845	1047	41173	0	749999
2	1053860	2	19	95	1546	1573	0	1099691	750000	1499999
3	573313	2	19	95	1067	1642	0	1676123	1500000	2249999
4	1137784	3	19	75	1559	1360	1376	2816616	2250000	2999999
5	578385	1	19	65	1146	0	0	3399296	3000000	3749999
6	943207	1	19	65	1697	0	0	4343649	3750000	4499999
7	804510	1	19	75	1883	0	0	5149856	4500000	5249999
8	113005	1	19	95	1554	0	0	5264744	5250000	5999999
9	1175847	2	19	75	1012	1196	0	6442145	6000000	6749999
10	942355	3	19	95	1019	1079	1604	7386708	6750000	7499999
11	535850	3	19	100	1999	1975	1234	7926260	7500000	8249999
12	895706	1	19	95	1044	0	0	8827174	8250000	8999999
13	686983	1	19	60	1571	0	0	9515201	9000000	9749999
14	320704	2	19	65	1235	1421	0	9837476	9750000	10499999
15	1271262	1	19	95	1390	0	0	11111394	10500000	11249999
16	518140	3	19	65	1197	1640	1206	11630924	11250000	11999999

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

Type 5 Radar Waveform_10

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	841778	2	12	100	1417	1226	0	841778	0	1090908
2	960057	2	12	100	1425	1129	0	1804478	1090909	2181817
3	588883	1	12	80	1014	0	0	2395915	2181818	3272726
4	1240234	1	12	85	1430	0	0	3637163	3272727	4363635
5	1462926	2	12	95	1870	1791	0	5101519	4363636	5454544
6	1352904	1	12	60	1728	0	0	6458084	5454545	6545453
7	278979	2	12	50	1169	1103	0	6738791	6545454	7636362
8	1878672	1	12	70	1824	0	0	8619735	7636363	8727271
9	498503	2	12	55	1991	1059	0	9120062	8727272	9818180
10	1602692	2	12	80	1599	1297	0	10725804	9818181	10909089
11	1240414	1	12	100	1066	0	0	11969114	10909090	11999998

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

Type 5 Radar Waveform_11

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)
	273470									
1		3	14	75	1472	1649	1612	273470	0	1499999
	1573194									
2		1	14	70	1404	0	0	1851397	1500000	2999999
	1745201									
3		2	14	75	1445	1683	0	3598002	3000000	4499999
	1678461									
4		3	14	50	1471	1298	1853	5279591	4500000	5999999
	947974									
5		1	14	50	1725	0	0	6232187	6000000	7499999
	2648315									
6		3	14	100	1167	1208	1879	8882227	7500000	8999999
	201249									
7		1	14	90	1442	0	0	9087730	9000000	10499999
	2519215									
8		2	14	75	1813	1554	0	11608387	10500000	11999999

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

Type 5 Radar Waveform_12

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)
	256778									
1		1	6	100	1456	0	0	256778	0	1499999
	1573754									
2		3	6	85	1548	1211	1803	1831988	1500000	2999999
	2024257									
3		2	6	60	1538	1234	0	3860807	3000000	4499999
	1910198									
4		3	6	85	1822	1546	1019	5773777	4500000	5999999
	1201783									
5		1	6	90	1151	0	0	6979947	6000000	7499999
	1331961									
6		3	6	85	1209	1010	1499	8313059	7500000	8999999
	2082916									
7		1	6	100	1316	0	0	10399693	9000000	10499999
	735302									
8		2	6	50	1916	1754	0	11136311	10500000	11999999

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

Type 5 Radar Waveform_13

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)
	335268									
1		2	8	55	1165	1474	0	335268	0	799999
	1211263									
2		3	8	55	1945	1673	1595	1549170	800000	1599999
	504559									
3		1	8	90	1204	0	0	2058942	1600000	2399999
	1088617									
4		1	8	80	1536	0	0	3148763	2400000	3199999
	386323									
5		2	8	65	1407	1080	0	3536622	3200000	3999999
	905171									
6		1	8	55	1843	0	0	4444280	4000000	4799999
	680026									
7		2	8	60	1496	1502	0	5126149	4800000	5599999
	873363									
8		2	8	70	1578	1424	0	6002510	5600000	6399999
	1158227									
9		2	8	50	1069	1342	0	7163739	6400000	7199999
	417972									
10		1	8	75	1880	0	0	7584122	7200000	7999999
	605290									
11		1	8	100	1453	0	0	8191292	8000000	8799999
	1197350									
12		3	8	85	1663	1988	1739	9390095	8800000	9599999
	483370									
13		2	8	65	1152	1871	0	9878855	9600000	10399999
	1257025									
14		1	8	100	1158	0	0	11138903	10400000	11199999
	642145									
15		3	8	50	1082	1115	1320	11782206	11200000	11999999

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

Type 5 Radar Waveform_14

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	716269	1	9	70	1220	0	0	716269	0	799999
2	220535	3	9	95	1115	1370	1187	938024	800000	1599999
3	1304208	2	9	85	1306	1240	0	2245904	1600000	2399999
4	598601	3	9	65	1454	1796	1516	2847051	2400000	3199999
5	575911	2	9	80	1682	1545	0	3427728	3200000	3999999
6	768456	1	9	85	1467	0	0	4199411	4000000	4799999
7	623214	3	9	75	1124	1811	1520	4824092	4800000	5599999
8	1223843	3	9	95	1245	1935	1504	6052390	5600000	6399999
9	1079759	3	9	65	1743	1567	1298	7136833	6400000	7199999
10	760273	1	9	100	1160	0	0	7901714	7200000	7999999
11	706668	3	9	100	1417	1722	1051	8609542	8000000	8799999
12	792613	1	9	100	1226	0	0	9406345	8800000	9599999
13	586118	3	9	65	1802	1155	1738	9993689	9600000	10399999
14	713705	2	9	95	1358	1429	0	10712089	10400000	11199999
15	925902	1	9	65	1031	0	0	11640778	11200000	11999999

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

Type 5 Radar Waveform_15

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	214856	1	10	90	1113	0	0	214856	0	857142
2	1144956	2	10	80	1479	1246	0	1360925	857143	1714285
3	539943	1	10	95	1822	0	0	1903593	1714286	2571428
4	1326536	1	10	80	1333	0	0	3231951	2571429	3428571
5	350264	1	10	95	1200	0	0	3583548	3428572	4285714
6	1430640	2	10	80	1527	1912	0	5015388	4285715	5142857
7	271343	2	10	65	1313	1325	0	5290170	5142858	6000000
8	1394882	1	10	90	1582	0	0	6687690	6000001	6857143
9	485942	3	10	60	1677	1024	1516	7175214	6857144	7714286
10	941995	3	10	50	1472	1524	1177	8121426	7714287	8571429
11	965767	3	10	55	1496	1056	1825	9091366	8571430	9428572
12	508451	3	10	95	1569	1481	1933	9604194	9428573	10285715
13	1004292	3	10	55	1497	1265	1446	10613469	10285716	11142858
14	995685	1	10	75	1949	0	0	11613362	11142859	12000001

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

Type 5 Radar Waveform_16

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	380175	2	17	75	1373	1794	0	380175	0	666666
2	659656	1	17	100	1435	0	0	1042998	666667	1333333
3	326685	1	17	55	1912	0	0	1371118	1333334	2000000
4	739904	3	17	100	1603	1144	1401	2112934	2000001	2666667
5	1190382	3	17	80	1266	1590	1319	3307464	2666668	3333334
6	184237	3	17	100	1087	1821	1353	3495876	3333335	4000001
7	1037287	1	17	70	1739	0	0	4537424	4000002	4666668
8	663693	2	17	85	1902	1982	0	5202856	4666669	5333335
9	337475	3	17	85	1504	1459	1404	5544215	5333336	6000002
10	771571	3	17	90	1507	1423	1150	6320153	6000003	6666669
11	731456	1	17	60	1042	0	0	7055689	6666670	7333336
12	402408	1	17	85	1379	0	0	7459139	7333337	8000003
13	868656	2	17	100	1180	1512	0	8329174	8000004	8666670
14	950953	3	17	95	1017	1690	1769	9282819	8666671	9333337
15	180384	1	17	70	1398	0	0	9467679	9333338	10000004
16	1112747	1	17	90	1975	0	0	10581824	10000005	10666671
17	532997	3	17	50	1471	1892	1164	11116796	10666672	11333338
18	345695	1	17	80	1329	0	0	11467018	11333339	12000005

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

Type 5 Radar Waveform_17

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	222381	1	19	75	1951	0	0	222381	0	857142
2	1412586	1	19	65	1382	0	0	1636918	857143	1714285
3	129169	3	19	85	1421	1166	1783	1767469	1714286	2571428
4	1382417	3	19	85	1561	1857	1446	3154256	2571429	3428571
5	1018288	2	19	95	1641	1216	0	4177408	3428572	4285714
6	952953	3	19	55	1069	1506	1159	5133218	4285715	5142857
7	663117	1	19	60	1829	0	0	5800069	5142858	6000000
8	599744	3	19	80	1767	1193	1507	6401642	6000001	6857143
9	881890	3	19	85	1608	1755	1629	7287999	6857144	7714286
10	439821	1	19	90	1806	0	0	7732812	7714287	8571429
11	1505900	2	19	55	1227	1258	0	9240518	8571430	9428572
12	664774	3	19	50	1831	1428	1713	9907777	9428573	10285715
13	1088444	1	19	100	1991	0	0	11001193	10285716	11142858
14	857193	2	19	100	1292	1339	0	11860377	11142859	12000001

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

Type 5 Radar Waveform_18

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	655760	3	5	90	1757	1476	1650	655760	0	799999
2	746999	1	5	60	1436	0	0	1407642	800000	1599999
3	955675	3	5	80	1836	1982	1661	2364753	1600000	2399999
4	534566	3	5	65	1758	1554	1992	2904798	2400000	3199999
5	680105	2	5	75	1336	1655	0	3590207	3200000	3999999
6	521588	3	5	70	1468	1250	1602	4114786	4000000	4799999
7	798043	2	5	75	1639	1915	0	4917149	4800000	5599999
8	1395045	3	5	70	1594	1692	1261	6315748	5600000	6399999
9	82313	1	5	55	1947	0	0	6402608	6400000	7199999
10	1056118	1	5	85	1862	0	0	7460673	7200000	7999999
11	757980	3	5	50	1054	1837	1178	8220515	8000000	8799999
12	1176693	1	5	55	1283	0	0	9401277	8800000	9599999
13	802881	1	5	50	1013	0	0	10205441	9600000	10399999
14	860651	3	5	50	1764	1465	1215	11067105	10400000	11199999
15	809926	1	5	90	1410	0	0	11881475	11200000	11999999

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

Type 5 Radar Waveform_19

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	590225	1	18	65	1835	0	0	590225	0	1199999
2	1610961	3	18	55	1517	1033	1030	2203021	1200000	2399999
3	793412	3	18	90	1360	1030	1767	3000013	2400000	3599999
4	1528373	3	18	100	1845	1297	1373	4532543	3600000	4799999
5	1426680	3	18	95	1489	1693	1007	5963738	4800000	5999999
6	241006	1	18	95	1231	0	0	6208933	6000000	7199999
7	2015980	2	18	70	1085	1782	0	8226144	7200000	8399999
8	644709	3	18	100	1110	1859	1042	8873720	8400000	9599999
9	1102419	1	18	70	1794	0	0	9980150	9600000	10799999
10	1054716	3	18	95	1534	1848	1050	11036660	10800000	11999999

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

Type 5 Radar Waveform_20

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	429432	3	12	85	1142	1241	1469	429432	0	1090908
2	701406	1	12	90	1518	0	0	1134690	1090909	2181817
3	1847442	3	12	100	1603	1509	1469	2983650	2181818	3272726
4	417565	3	12	60	1786	1751	1927	3405796	3272727	4363635
5	1187173	2	12	95	1605	1443	0	4598433	4363636	5454544
6	1259905	3	12	85	1589	1606	1258	5861386	5454545	6545453
7	691063	1	12	65	1859	0	0	6556902	6545454	7636362
8	1448829	3	12	60	1300	1839	1206	8007590	7636363	8727271
9	1069857	2	12	100	1555	1530	0	9081792	8727272	9818180
10	1055925	3	12	60	1752	1025	1966	10140802	9818181	10909089
11	1043074	2	12	90	1892	1652	0	11188619	10909090	11999998

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

Type 5 Radar Waveform_21

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	347406	1	19	60	1251	0	0	347406	0	749999
2	879243	3	19	60	1891	1829	1766	1227900	750000	1499999
3	1008319	1	19	75	1638	0	0	2241705	1500000	2249999
4	436073	3	19	95	1442	1158	1574	2679416	2250000	2999999
5	571908	1	19	95	1507	0	0	3255498	3000000	3749999
6	555305	3	19	75	1995	1989	1368	3812310	3750000	4499999
7	1280513	2	19	65	1264	1982	0	5098175	4500000	5249999
8	541873	1	19	55	1590	0	0	5643294	5250000	5999999
9	895089	2	19	50	1160	1870	0	6539973	6000000	6749999
10	749770	2	19	55	1248	1465	0	7292773	6750000	7499999
11	208159	1	19	65	1210	0	0	7503645	7500000	8249999
12	793189	1	19	85	1532	0	0	8298044	8250000	8999999
13	721662	2	19	60	1523	1669	0	9021238	9000000	9749999
14	1343977	2	19	50	1154	1819	0	10368407	9750000	10499999
15	476091	1	19	80	1983	0	0	10847471	10500000	11249999
16	544224	3	19	90	1543	1635	1995	11393678	11250000	11999999

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

Type 5 Radar Waveform_22

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	790517	2	10	70	1590	1880	0	790517	0	923076
2	656146	2	10	95	1680	1939	0	1450133	923077	1846153
3	948758	1	10	85	1913	0	0	2402510	1846154	2769230
4	786438	2	10	95	1333	1863	0	3190861	2769231	3692307
5	1101055	2	10	100	1694	1851	0	4295112	3692308	4615384
6	404049	2	10	85	1217	1054	0	4702706	4615385	5538461
7	849427	3	10	100	1963	1885	1786	5554404	5538462	6461538
8	948856	3	10	55	1853	1746	1415	6508894	6461539	7384615
9	1491268	1	10	70	1034	0	0	8005176	7384616	8307692
10	991975	1	10	60	1373	0	0	8998185	8307693	9230769
11	318440	2	10	90	1874	1215	0	9317998	9230770	10153846
12	1338007	3	10	50	1134	1927	1864	10659094	10153847	11076923
13	498486	3	10	95	1424	1915	1634	11162505	11076924	12000000

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

Type 5 Radar Waveform_23

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	228754	2	17	60	1600	1677	0	228754	0	1333332
2	1962724	3	17	100	1440	1407	1605	2194755	1333333	2666665
3	691750	3	17	70	1324	1929	1330	2890957	2666666	3999998
4	1157459	2	17	90	1812	1756	0	4052999	3999999	5333331
5	1290838	1	17	75	1171	0	0	5347405	5333332	6666664
6	1989659	2	17	65	1212	1671	0	7338235	6666665	7999997
7	1076593	2	17	95	1264	1437	0	8417711	7999998	9333330
8	1050318	1	17	70	1111	0	0	9470730	9333331	10666663
9	1856864	2	17	75	1406	1913	0	11328705	10666664	11999996

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

Type 5 Radar Waveform_24

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	242200	2	6	95	1682	1491	0	242200	0	666666
2	562796	1	6	85	1727	0	0	808169	666667	1333333
3	1113583	2	6	90	1340	1384	0	1923479	1333334	2000000
4	416936	2	6	75	1955	1086	0	2343139	2000001	2666667
5	363366	1	6	55	1121	0	0	2709546	2666668	3333334
6	1004051	2	6	55	1672	1595	0	3714718	3333335	4000001
7	551077	2	6	60	1424	1975	0	4269062	4000002	4666668
8	969935	2	6	70	1092	1875	0	5242396	4666669	5333335
9	377436	1	6	60	1941	0	0	5622799	5333336	6000002
10	977108	3	6	100	1604	1671	1290	6601848	6000003	6666669
11	630482	3	6	50	1015	1303	1610	7236895	6666670	7333336
12	664320	2	6	75	1694	1587	0	7905143	7333337	8000003
13	307722	2	6	65	1381	1541	0	8216146	8000004	8666670
14	881752	1	6	75	1647	0	0	9100820	8666671	9333337
15	305322	2	6	60	1358	1455	0	9407789	9333338	10000004
16	907132	3	6	70	1095	1031	1895	10317734	10000005	10666671
17	527252	2	6	95	1532	1240	0	10849007	10666672	11333338
18	694002	2	6	65	1913	1558	0	11545781	11333339	12000005

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

Type 5 Radar Waveform_25

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	546232	2	8	60	1246	1040	0	546232	0	749999
2	925356	2	8	50	1816	1959	0	1473874	750000	1499999
3	64788	1	8	65	1186	0	0	1542437	1500000	2249999
4	952304	3	8	90	1966	1617	1990	2495927	2250000	2999999
5	677405	2	8	70	1605	1501	0	3178905	3000000	3749999
6	587073	3	8	60	1449	1256	1987	3769084	3750000	4499999
7	950600	1	8	60	1313	0	0	4724376	4500000	5249999
8	567307	1	8	90	1110	0	0	5292996	5250000	5999999
9	1374826	3	8	75	1539	1449	1709	6668932	6000000	6749999
10	240017	2	8	90	1714	1738	0	6913646	6750000	7499999
11	593471	3	8	60	1896	1785	1176	7510569	7500000	8249999
12	1198146	3	8	80	1925	1750	1678	8713572	8250000	8999999
13	834738	3	8	70	1049	1146	1991	9553663	9000000	9749999
14	195763	2	8	65	1147	1342	0	9753612	9750000	10499999
15	884944	3	8	95	1634	1401	1649	10641045	10500000	11249999
16	700650	3	8	85	1203	1121	1005	11346379	11250000	11999999

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

Type 5 Radar Waveform_26

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	475764	2	14	90	1315	1937	0	475764	0	705881
2	692930	1	14	70	1955	0	0	1171946	705882	1411763
3	929852	3	14	55	1882	1616	1057	2103753	1411764	2117645
4	695650	3	14	95	1087	1096	1892	2803958	2117646	2823527
5	288200	2	14	85	1675	1268	0	3096233	2823528	3529409
6	766576	1	14	50	1044	0	0	3865752	3529410	4235291
7	618679	3	14	95	1129	1550	1920	4485475	4235292	4941173
8	822400	1	14	85	1626	0	0	5312474	4941174	5647055
9	449865	3	14	90	1841	1295	1791	5763965	5647056	6352937
10	1225484	1	14	95	1613	0	0	6994376	6352938	7058819
11	712267	2	14	100	1021	1794	0	7708256	7058820	7764701
12	683589	2	14	100	1499	1979	0	8394660	7764702	8470583
13	685082	1	14	55	1209	0	0	9083220	8470584	9176465
14	578664	2	14	80	1470	1565	0	9663093	9176466	9882347
15	377744	3	14	75	1563	1653	1212	10043872	9882348	10588229
16	1000991	2	14	100	1054	1769	0	11049291	10588230	11294111
17	538847	3	14	55	1924	1548	1536	11590961	11294112	11999993

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

Type 5 Radar Waveform_27

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	488022	3	9	90	1501	1753	1041	488022	0	666666
2	258764	3	9	55	1577	1266	1340	751081	666667	1333333
3	1176159	2	9	85	1545	1272	0	1931423	1333334	2000000
4	79286	3	9	95	1534	1745	1047	2013526	2000001	2666667
5	862412	2	9	75	1901	1159	0	2880264	2666668	3333334
6	734499	2	9	50	1325	1567	0	3617823	3333335	4000001
7	411643	1	9	90	1309	0	0	4032358	4000002	4666668
8	1102730	1	9	50	1870	0	0	5136397	4666669	5333335
9	212445	3	9	95	1865	1413	1491	5350712	5333336	6000002
10	871605	1	9	80	1705	0	0	6227086	6000003	6666669
11	1102559	1	9	95	1961	0	0	7331350	6666670	7333336
12	163265	3	9	55	1738	1433	1456	7496576	7333337	8000003
13	1008321	3	9	50	1267	1211	1587	8509524	8000004	8666670
14	596332	2	9	50	1832	1987	0	9109921	8666671	9333337
15	826838	3	9	60	1587	1251	1159	9940578	9333338	10000004
16	117081	2	9	65	1907	1875	0	10061656	10000005	10666671
17	922076	1	9	80	1657	0	0	10987514	10666672	11333338
18	758174	1	9	55	1153	0	0	11747345	11333339	12000005

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

Type 5 Radar Waveform_28

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	279060	2	12	80	1780	1338	0	279060	0	705881
2	819359	1	12	60	1687	0	0	1101537	705882	1411763
3	757509	3	12	100	1336	1104	1602	1860733	1411764	2117645
4	824530	1	12	75	1517	0	0	2689305	2117646	2823527
5	414987	2	12	85	1138	1393	0	3105809	2823528	3529409
6	916610	3	12	70	1176	1765	1205	4024950	3529410	4235291
7	518708	2	12	70	1322	1891	0	4547804	4235292	4941173
8	1059684	1	12	70	1255	0	0	5610701	4941174	5647055
9	88508	2	12	65	1745	1287	0	5700464	5647056	6352937
10	1179292	2	12	60	1470	1650	0	6882788	6352938	7058819
11	630169	3	12	60	1158	1943	1175	7516077	7058820	7764701
12	445944	3	12	90	1112	1810	1196	7966297	7764702	8470583
13	861462	1	12	50	1229	0	0	8831877	8470584	9176465
14	430657	3	12	65	1235	1031	1517	9263763	9176466	9882347
15	799304	1	12	65	1957	0	0	10066850	9882348	10588229
16	855996	3	12	55	1207	1535	1493	10924803	10588230	11294111
17	1019407	3	12	50	1868	1807	1979	11948445	11294112	11999993

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

Type 5 Radar Waveform_29

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	42622	2	5	80	1643	1913	0	42622	0	799999
2	1459413	2	5	100	1808	1673	0	1505591	800000	1599999
3	505939	1	5	90	1849	0	0	2015011	1600000	2399999
4	1002248	1	5	75	1645	0	0	3019108	2400000	3199999
5	708320	2	5	50	1025	1717	0	3729073	3200000	3999999
6	838191	3	5	100	1055	1495	1597	4570006	4000000	4799999
7	702547	1	5	60	1689	0	0	5276700	4800000	5599999
8	327144	2	5	75	1365	1921	0	5605533	5600000	6399999
9	1088650	1	5	50	1600	0	0	6697469	6400000	7199999
10	563874	1	5	85	1327	0	0	7262943	7200000	7999999
11	1470308	3	5	70	1525	1332	1099	8734578	8000000	8799999
12	689191	1	5	70	1818	0	0	9427725	8800000	9599999
13	434194	3	5	55	1116	1230	1141	9863737	9600000	10399999
14	937366	3	5	75	1020	1708	1199	10804590	10400000	11199999
15	568869	3	5	95	1311	1035	1932	11377386	11200000	11999999

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

Type 5 Radar Waveform_30

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	265897	1	18	80	1562	0	0	265897	0	1333332
2	1424601	3	18	60	1243	1764	1612	1692060	1333333	2666665
3	1596571	2	18	85	1066	1104	0	3293250	2666666	3999998
4	1034611	1	18	85	1463	0	0	4330031	3999999	5333331
5	1659138	3	18	85	1222	1076	1043	5990632	5333332	6666664
6	1070353	1	18	70	1530	0	0	7064326	6666665	7999997
7	998014	3	18	70	1707	1971	1068	8063870	7999998	9333330
8	1921595	2	18	55	1947	1509	0	9990211	9333331	10666663
9	1653360	1	18	55	1626	0	0	11647027	10666664	11999996

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

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)
3	5503	9	0	5503	0
6	5504	18	7	5461	21
7	5511	21	15	5495	45
8	5467	24	16	5501	48
16	5498	48	20	5521	60
22	5502	66	21	5504	63
28	5483	84	22	5519	66
40	5486	120	32	5475	96
41	5487	123	34	5516	102
44	5497	132	37	5508	111
46	5521	138	42	5490	126
47	5495	141	46	5513	138
67	5465	201	47	5465	141
80	5505	240	53	5471	159
90	5499	270	61	5502	183
--	--	--	62	5498	186
--	--	--	75	5469	225
--	--	--	88	5517	264
--	--	--	91	5488	273
--	--	--	94	5474	282

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5478	9	30	5483	90
7	5492	21	34	5495	102
9	5462	27	60	5471	180
12	5493	36	90	5468	270
20	5510	60	94	5493	282
22	5468	66	--	--	--
28	5473	84	--	--	--
61	5464	183	--	--	--
72	5467	216	--	--	--
89	5477	267	--	--	--

| 94 | 5518 | 282 | -- | -- | -- |

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5503	24	7	5465	21
16	5478	48	13	5486	39
22	5480	66	24	5491	72
40	5476	120	30	5519	90
53	5468	159	37	5471	111
58	5470	174	40	5499	120
59	5518	177	43	5490	129
60	5477	180	58	5521	174
62	5501	186	59	5501	177
67	5502	201	70	5507	210
86	5483	258	75	5511	225
88	5521	264	77	5484	231
89	5500	267	78	5474	234
90	5498	270	83	5476	249
95	5516	285	87	5468	261

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5479	0	1	5501	3
17	5517	51	5	5508	15
21	5480	63	11	5509	33
23	5482	69	21	5473	63
27	5466	81	37	5499	111
32	5475	96	39	5475	117
42	5514	126	55	5464	165
50	5470	150	79	5521	237
58	5494	174	80	5516	240
59	5500	177	81	5497	243
61	5461	183	85	5465	255
68	5513	204	--	--	--
71	5497	213	--	--	--
77	5469	231	--	--	--
98	5518	294	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5477	15	4	5476	12
35	5487	105	12	5497	36
44	5516	132	32	5507	96
46	5500	138	34	5471	102
51	5463	153	42	5468	126
52	5494	156	43	5506	129
62	5520	186	44	5482	132
63	5462	189	49	5474	147
68	5497	204	69	5520	207
74	5509	222	70	5475	210
75	5518	225	92	5489	276
95	5491	285	94	5500	282

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
5	5490	15	0	5521	0
31	5486	93	2	5497	6
42	5507	126	5	5501	15
47	5508	141	6	5485	18
49	5520	147	7	5522	21
58	5503	174	23	5473	69
64	5478	192	28	5495	84
74	5479	222	31	5528	93
81	5510	243	48	5513	144
83	5529	249	50	5480	150
97	5475	291	51	5520	153
98	5472	294	60	5511	180
--	--	--	61	5516	183
--	--	--	64	5475	192
--	--	--	74	5529	222
--	--	--	75	5498	225
--	--	--	83	5470	249
--	--	--	86	5503	258
--	--	--	89	5502	267
--	--	--	96	5524	288
--	--	--	99	5508	297

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5492	9	1	5515	3
11	5470	33	19	5513	57
14	5495	42	20	5525	60
15	5502	45	30	5497	90
24	5512	72	32	5527	96
36	5483	108	37	5528	111
41	5501	123	41	5488	123
43	5472	129	48	5484	144
75	5499	225	49	5492	147

84	5504	252	62	5507	186
96	5494	288	64	5526	192
97	5493	291	70	5486	210
--	--	--	79	5501	237
--	--	--	80	5494	240
--	--	--	81	5512	243
--	--	--	90	5530	270

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5498	18	8	5474	24
11	5520	33	11	5488	33
30	5490	90	15	5522	45
34	5530	102	20	5481	60
45	5516	135	27	5499	81
61	5491	183	69	5530	207
64	5513	192	79	5510	237
65	5496	195	86	5496	258
71	5521	213	90	5490	270
--	--	--	94	5470	282
--	--	--	98	5504	294

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5478	0	2	5488	6
11	5498	33	4	5509	12
12	5491	36	11	5474	33
19	5509	57	15	5481	45
29	5504	87	22	5475	66
30	5490	90	30	5527	90
36	5521	108	65	5515	195
42	5510	126	69	5508	207
52	5494	156	83	5471	249
54	5500	162	92	5484	276
59	5511	177	--	--	--
62	5492	186	--	--	--
77	5484	231	--	--	--
81	5528	243	--	--	--
92	5522	276	--	--	--
95	5497	285	--	--	--
96	5487	288	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5490	0	7	5486	21
10	5500	30	12	5507	36
45	5529	135	16	5513	48
46	5498	138	26	5516	78
48	5474	144	32	5473	96
62	5497	186	37	5470	111
66	5524	198	40	5504	120
69	5511	207	42	5511	126
81	5485	243	57	5523	171
94	5476	282	65	5471	195
96	5475	288	66	5520	198
--	--	--	68	5510	204
--	--	--	69	5524	207
--	--	--	72	5478	216
--	--	--	80	5502	240
--	--	--	88	5492	264
--	--	--	98	5497	294

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5507	3	9	5494	27
2	5496	6	23	5520	69
9	5531	27	27	5484	81
10	5502	30	28	5496	84
37	5479	111	43	5498	129
41	5488	123	46	5508	138
42	5522	126	64	5483	192
43	5519	129	72	5528	216
50	5481	150	98	5514	294
52	5480	156	--	--	--
73	5524	219	--	--	--
80	5510	240	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5533	3	4	5502	12
12	5498	36	18	5496	54
19	5484	57	23	5537	69
29	5497	87	31	5493	93
31	5509	93	48	5485	144
35	5535	105	57	5520	171
37	5495	111	61	5513	183
42	5525	126	67	5525	201
43	5513	129	73	5483	219
44	5538	132	77	5482	231
50	5528	150	81	5539	243
61	5521	183	85	5519	255
67	5527	201	87	5510	261
73	5526	219	94	5523	282
74	5486	222	99	5518	297
83	5534	249	--	--	--
91	5517	273	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5492	9	0	5532	0
10	5520	30	6	5490	18
18	5505	54	15	5502	45
19	5493	57	20	5483	60
25	5522	75	23	5516	69
27	5497	81	54	5497	162
29	5536	87	56	5510	168
31	5538	93	66	5521	198
35	5525	105	74	5517	222
37	5535	111	82	5488	246
42	5529	126	90	5481	270
59	5491	177	98	5519	294
67	5496	201	--	--	--
90	5489	270	--	--	--
91	5499	273	--	--	--
93	5479	279	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5487	30	1	5504	3
15	5507	45	11	5514	33
18	5509	54	12	5531	36
33	5523	99	19	5506	57
44	5539	132	32	5528	96
53	5486	159	41	5496	123
57	5529	171	50	5539	150
71	5508	213	54	5530	162
73	5522	219	63	5524	189
88	5481	264	74	5483	222
94	5524	282	81	5509	243
96	5538	288	83	5480	249
--	--	--	85	5500	255

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5482	30	12	5537	36
17	5515	51	15	5526	45
21	5517	63	29	5483	87
23	5490	69	36	5482	108
24	5496	72	42	5491	126
28	5531	84	61	5529	183
38	5534	114	63	5518	189
58	5479	174	68	5506	204
72	5481	216	70	5505	210
75	5494	225	78	5514	234
80	5492	240	83	5520	249
89	5518	267	92	5522	276
92	5523	276	95	5481	285
--	--	--	97	5504	291
--	--	--	99	5492	297

Product	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/08/28
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	5492	1	598	89	1
2	5492	1	578	92	1
3	5492	1	538	99	1
4	5492	1	818	65	1
5	5500	1	618	86	1
6	5500	1	3066	18	1
7	5500	1	658	81	1
8	5500	1	878	61	1
9	5508	1	698	76	1
10	5508	1	758	70	1
11	5508	1	778	68	1
12	5508	1	918	58	1
13	5510	1	678	78	1
14	5510	1	898	59	1
15	5510	1	558	95	1
16	5510	1	2915	19	1
17	5510	1	3044	18	1
18	5510	1	1803	30	1
19	5512	1	579	92	1
20	5512	1	2407	22	1
21	5512	1	2725	20	1
22	5512	1	2188	25	1
23	5520	1	2637	21	1
24	5520	1	1117	48	1
25	5520	1	689	77	1
26	5520	1	2609	21	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5529	1	2464	22	1
28	5529	1	1061	50	1
29	5529	1	862	62	1
30	5529	1	1568	34	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	5492	4.6	195	24	1
2	5492	4.8	230	27	1
3	5492	2.3	158	29	1
4	5492	4.1	213	28	1
5	5500	2.0	221	29	1
6	5500	4.2	187	28	1
7	5500	3.6	171	29	1
8	5500	5.0	222	28	1
9	5508	3.2	152	23	1
10	5508	2.8	174	27	1
11	5508	2.9	206	26	1
12	5508	2.2	157	27	1
13	5510	3.0	226	28	1
14	5510	4.7	153	27	1
15	5510	1.0	189	28	1
16	5510	4.9	181	27	1
17	5510	2.2	223	25	1
18	5510	2.2	208	29	1
19	5512	2.6	203	29	1
20	5512	1.8	221	24	1
21	5512	3.2	217	25	1
22	5512	1.2	189	24	1
23	5520	3.8	222	27	1
24	5520	3.8	189	28	1
25	5520	1.9	219	29	1
26	5520	1.0	184	28	1
27	5529	2.3	200	25	1
28	5529	1.1	199	28	1
29	5529	2.5	188	27	1
30	5529	1.1	179	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	5492	6.1	304	16	1
2	5492	7.6	306	18	1
3	5492	6.2	382	18	1
4	5492	9.9	312	18	1
5	5500	7.7	402	16	1
6	5500	7.9	388	18	1
7	5500	9.4	336	18	1
8	5500	9.1	351	17	1
9	5508	8.2	321	17	1
10	5508	9.9	288	17	1
11	5508	7.7	459	16	1
12	5508	7.9	469	18	1
13	5510	6.6	406	18	1
14	5510	8.1	281	17	1
15	5510	6.0	424	18	1
16	5510	9.4	364	18	1
17	5510	6.2	400	17	1
18	5510	6.6	339	18	1
19	5512	9.3	338	16	1
20	5512	8.4	345	16	1
21	5512	6.3	396	16	1
22	5512	9.3	492	16	1
23	5520	6.3	435	16	1
24	5520	6.9	265	16	1
25	5520	7.1	394	16	1
26	5520	8.9	321	18	1
27	5529	7.2	396	18	1
28	5529	7.1	385	18	1
29	5529	7.8	370	16	1
30	5529	7.5	374	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	5492	12.3	411	15	1
2	5492	17.0	306	16	1
3	5492	15.0	487	12	1
4	5492	16.6	484	14	1
5	5500	15.6	296	12	1
6	5500	16.2	250	15	1
7	5500	11.1	377	14	1
8	5500	11.5	460	15	1
9	5508	18.1	258	12	1
10	5508	19.4	377	13	1
11	5508	15.8	459	14	1
12	5508	12.7	313	16	1
13	5510	19.0	489	14	1
14	5510	16.6	356	15	1
15	5510	15.4	442	15	1
16	5510	18.6	322	14	1
17	5510	17.1	383	15	1
18	5510	17.2	442	15	1
19	5512	13.3	476	13	1
20	5512	13.8	305	13	1
21	5512	19.2	315	15	1
22	5512	16.2	278	16	1
23	5520	16.8	426	13	1
24	5520	16.9	324	14	1
25	5520	11.6	320	16	1
26	5520	12.7	469	14	1
27	5529	15.3	283	16	1
28	5529	19.3	412	15	1
29	5529	11.5	450	15	1
30	5529	16.6	308	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	5495.6	1	16	5510.0	1
2	5494.0	1	17	5510.0	1
3	5499.2	1	18	5510.0	1
4	5495.2	1	19	5510.0	1
5	5499.6	1	20	5510.0	1
6	5498.8	1	21	5523.4	1
7	5496.8	1	22	5522.2	1
8	5494.4	1	23	5525.8	1
9	5497.6	1	24	5525.0	1
10	5496.0	1	25	5521.8	1
11	5510.0	1	26	5526.6	1
12	5510.0	1	27	5525.4	1
13	5510.0	1	28	5521.4	1
14	5510.0	1	29	5524.2	1
15	5510.0	1	30	5527.0	1
Detection Percentage (%)					5296.8

Type 5 Radar Waveform_1

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

Burst     Off Time    #          Chirp    PW      Pulse 1   Pulse 2   Pulse 3   Start Loc   Start Burst     End Burst
#         (us)        Pulses     (MHz)    (us)    Pri(us)   Pri(us)   Pri(us)   (us)        Interval(us)    Interval(us)
          298238
1                     3          9        80      1086      1669      1587      298238      0               1090908
          1800499
2                     2          9        65      1333      1628      0         2103079     1090909         2181817
          521341
3                     2          9        90      1503      1773      0         2627381     2181818         3272726
          1723049
4                     3          9        60      1720      1265      1374      4353706     3272727         4363635
          677901
5                     3          9        85      1249      1861      1596      5035966     4363636         5454544
          940805
6                     1          9        80      1235      0         0         5981477     5454545         6545453
          901310
7                     3          9        50      1986      1665      1900      6884022     6545454         7636362
          1140243
8                     3          9        75      1326      1367      1431      8029816     7636363         8727271
          1135379
9                     1          9        95      1936      0         0         9169319     8727272         9818180
          1521409
10                    3          9        60      1540      1651      1557      10692664    9818181         10909089
          667348
11                    1          9        95      1343      0         0         11364760    10909090        11999998
Total number of pulses in waveform = 25
*********************************************************************************
```

Type 5 Radar Waveform_2

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	254066	1	5	50	1498	0	0	254066	0	631578
2	635278	1	5	65	1451	0	0	890842	631579	1263157
3	505629	2	5	75	1941	1919	0	1397922	1263158	1894736
4	766561	3	5	75	1001	1927	1496	2168343	1894737	2526315
5	469669	2	5	50	1118	1981	0	2642436	2526316	3157894
6	579046	2	5	90	1637	1946	0	3224581	3157895	3789473
7	917327	1	5	55	1181	0	0	4145491	3789474	4421052
8	588145	3	5	85	1761	1095	1148	4734817	4421053	5052631
9	877958	3	5	80	1080	1492	1957	5616779	5052632	5684210
10	117195	3	5	70	1808	1704	1451	5738503	5684211	6315789
11	1151469	3	5	100	1572	1728	1995	6894935	6315790	6947368
12	301926	1	5	90	1476	0	0	7202156	6947369	7578947
13	814620	2	5	50	1239	1901	0	8018252	7578948	8210526
14	647017	3	5	70	1651	1196	1595	8668409	8210527	8842105
15	659939	1	5	85	1174	0	0	9332790	8842106	9473684
16	675764	3	5	95	1907	1679	1141	10009728	9473685	10105263
17	538474	1	5	90	1784	0	0	10552929	10105264	10736842
18	563208	2	5	75	1970	1967	0	11117921	10736843	11368421
19	715980	1	5	80	1933	0	0	11837838	11368422	12000000

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

Type 5 Radar Waveform_3

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	997823	1	18	95	1315	0	0	997823	0	1499999
2	1666155	2	18	95	1248	1811	0	2665293	1500000	2999999
3	1043747	2	18	65	1990	1812	0	3712099	3000000	4499999
4	2070020	1	18	50	1060	0	0	5785921	4500000	5999999
5	979512	3	18	55	1828	1026	1709	6766493	6000000	7499999
6	1585392	2	18	80	1169	1547	0	8356448	7500000	8999999
7	1961575	2	18	90	1742	1699	0	10320739	9000000	10499999
8	319860	1	18	80	1984	0	0	10644040	10500000	11999999

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

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	118695	1	8	65	1889	0	0	118695	0	1090908
2	1111208	3	8	60	1910	1319	1407	1231792	1090909	2181817
3	1464191	1	8	75	1778	0	0	2700619	2181818	3272726
4	994771	2	8	50	1159	1071	0	3697168	3272727	4363635
5	1442958	1	8	65	1104	0	0	5142356	4363636	5454544
6	1353979	2	8	100	1420	1095	0	6497439	5454545	6545453
7	442633	2	8	95	1900	1289	0	6942587	6545454	7636362
8	1678399	2	8	60	1982	1387	0	8624175	7636363	8727271
9	626331	3	8	100	1325	1534	1807	9253875	8727272	9818180
10	1570452	2	8	85	1799	1565	0	10828993	9818181	10909089
11	624349	3	8	75	1349	1948	1047	11456706	10909090	11999998

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

Type 5 Radar Waveform_5

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	228407	2	19	85	1437	1208	0	228407	0	705881
2	749750	2	19	80	1420	1952	0	980802	705882	1411763
3	972682	2	19	100	1708	1351	0	1956856	1411764	2117645
4	368474	2	19	85	1436	1901	0	2328389	2117646	2823527
5	875401	1	19	85	1943	0	0	3207127	2823528	3529409
6	515306	1	19	85	1875	0	0	3724376	3529410	4235291
7	939319	2	19	65	1144	1453	0	4665570	4235292	4941173
8	660330	1	19	85	1393	0	0	5328497	4941174	5647055
9	327509	1	19	80	1757	0	0	5657399	5647056	6352937
10	1311076	1	19	65	1249	0	0	6970232	6352938	7058819
11	448325	1	19	50	1459	0	0	7419806	7058820	7764701
12	344163	1	19	80	1030	0	0	7765428	7764702	8470583
13	914891	3	19	85	1957	1804	1016	8681349	8470584	9176465
14	611354	1	19	80	1319	0	0	9297480	9176466	9882347
15	866907	1	19	70	1863	0	0	10165706	9882348	10588229
16	1105423	1	19	90	1106	0	0	11272992	10588230	11294111
17	522472	3	19	75	1988	1084	1922	11796570	11294112	11999993

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

Type 5 Radar Waveform_6

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	590225	1	17	65	1835	0	0	590225	0	1199999
2	1610961	3	17	55	1517	1033	1030	2203021	1200000	2399999
3	793412	3	17	90	1360	1030	1767	3000013	2400000	3599999
4	1528373	3	17	100	1845	1297	1373	4532543	3600000	4799999
5	1426680	3	17	95	1489	1693	1007	5963738	4800000	5999999
6	241006	1	17	95	1231	0	0	6208933	6000000	7199999
7	2015980	2	17	70	1085	1782	0	8226144	7200000	8399999
8	644709	3	17	100	1110	1859	1042	8873720	8400000	9599999
9	1102419	1	17	70	1794	0	0	9980150	9600000	10799999
10	1054716	3	17	95	1534	1848	1050	11036660	10800000	11999999

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

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	549439	2	12	65	1324	1519	0	549439	0	705881
2	309594	1	12	100	1122	0	0	861876	705882	1411763
3	1072731	1	12	60	1233	0	0	1935729	1411764	2117645
4	279067	2	12	75	1403	1675	0	2216029	2117646	2823527
5	1303451	2	12	75	1521	1501	0	3522558	2823528	3529409
6	371965	2	12	80	1504	1418	0	3897545	3529410	4235291
7	960342	2	12	100	1726	1671	0	4860809	4235292	4941173
8	108095	1	12	60	1484	0	0	4972301	4941174	5647055
9	881040	3	12	60	1272	1145	1932	5854825	5647056	6352937
10	1066628	1	12	70	1151	0	0	6925802	6352938	7058819
11	342545	3	12	70	1235	1359	1735	7269498	7058820	7764701
12	618111	3	12	75	1431	1641	1092	7891938	7764702	8470583
13	744811	2	12	60	1646	1637	0	8640913	8470584	9176465
14	713109	1	12	75	1588	0	0	9357305	9176466	9882347
15	774810	2	12	80	1256	1463	0	10133703	9882348	10588229
16	865011	1	12	65	1371	0	0	11001433	10588230	11294111
17	689033	2	12	95	1963	1004	0	11691837	11294112	11999993

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

Type 5 Radar Waveform_8

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	347408	3	6	60	1844	1729	1917	347408	0	1333332
2	1653404	1	6	85	1224	0	0	2006302	1333333	2666665
3	679776	1	6	85	1492	0	0	2687302	2666666	3999998
4	1552227	1	6	55	1406	0	0	4241021	3999999	5333331
5	1491825	2	6	55	1659	1003	0	5734252	5333332	6666664
6	1809257	2	6	70	1324	1009	0	7546171	6666665	7999997
7	1686865	1	6	70	1286	0	0	9235369	7999998	9333330
8	670108	3	6	100	1379	1619	1063	9906763	9333331	10666663
9	1534333	2	6	80	1294	1087	0	11445157	10666664	11999996

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

Type 5 Radar Waveform_9

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	258362	3	14	70	1065	1683	1381	258362	0	799999
2	857689	1	14	50	1998	0	0	1120180	800000	1599999
3	1138858	3	14	85	1852	1193	1989	2261036	1600000	2399999
4	491050	2	14	60	1106	1914	0	2757120	2400000	3199999
5	1123764	2	14	60	1320	1752	0	3883904	3200000	3999999
6	403913	1	14	65	1517	0	0	4290889	4000000	4799999
7	1109415	3	14	65	1296	1283	1951	5401821	4800000	5599999
8	334275	3	14	85	1493	1409	1493	5740626	5600000	6399999
9	1101349	1	14	80	1968	0	0	6846370	6400000	7199999
10	744397	2	14	55	1427	1299	0	7592735	7200000	7999999
11	853953	3	14	50	1317	1594	1089	8449414	8000000	8799999
12	835151	2	14	85	1309	1654	0	9288565	8800000	9599999
13	461226	2	14	75	1566	1318	0	9752754	9600000	10399999
14	1303957	2	14	95	1403	1769	0	11059595	10400000	11199999
15	794594	3	14	100	1370	1978	1751	11857361	11200000	11999999

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

Type 5 Radar Waveform_10

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	194400	3	10	70	1786	1540	1448	194400	0	1333332
2	2423662	3	10	60	1950	1215	1724	2622836	1333333	2666665
3	621890	3	10	100	1807	1615	1683	3249615	2666666	3999998
4	1203167	3	10	95	1409	1955	1532	4457887	3999999	5333331
5	1062287	3	10	70	1789	1338	1376	5525070	5333332	6666664
6	2368616	2	10	65	1280	1478	0	7898189	6666665	7999997
7	627141	1	10	75	1275	0	0	8528088	7999998	9333330
8	1234338	2	10	50	1238	1860	0	9763701	9333331	10666663
9	904879	2	10	50	1894	1659	0	10671678	10666664	11999996

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

Type 5 Radar Waveform_11

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	617223	1	18	70	1262	0	0	617223	0	631578
2	270470	2	18	50	1813	1171	0	888955	631579	1263157
3	489783	3	18	100	1313	1871	1090	1381722	1263158	1894736
4	899092	1	18	85	1784	0	0	2285088	1894737	2526315
5	434738	3	18	95	1277	1160	1427	2721610	2526316	3157894
6	511727	1	18	55	1127	0	0	3237201	3157895	3789473
7	772129	1	18	65	1390	0	0	4010457	3789474	4421052
8	614525	1	18	90	1731	0	0	4626372	4421053	5052631
9	558077	3	18	85	1692	1193	1874	5186180	5052632	5684210
10	650738	1	18	80	1889	0	0	5841677	5684211	6315789
11	918203	2	18	50	1741	1271	0	6761769	6315790	6947368
12	620288	1	18	85	1788	0	0	7385069	6947369	7578947
13	460622	1	18	70	1382	0	0	7847479	7578948	8210526
14	968641	1	18	50	1942	0	0	8817502	8210527	8842105
15	348638	3	18	90	1976	1356	1276	9168082	8842106	9473684
16	570387	1	18	55	1504	0	0	9743077	9473685	10105263
17	509247	2	18	70	1303	1162	0	10253828	10105264	10736842
18	528539	1	18	65	1743	0	0	10784832	10736843	11368421
19	593859	3	18	95	1691	1020	1415	11380434	11368422	12000000

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

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	20227	1	6	100	1799	0	0	20227	0	599999
2	672100	1	6	100	1418	0	0	694126	600000	1199999
3	513313	2	6	95	1785	1123	0	1208857	1200000	1799999
4	667347	1	6	55	1259	0	0	1879112	1800000	2399999
5	1030710	2	6	80	1104	1056	0	2911081	2400000	2999999
6	401025	3	6	100	1693	1692	1114	3314266	3000000	3599999
7	641243	2	6	75	1980	1149	0	3960008	3600000	4199999
8	644569	1	6	55	1176	0	0	4607706	4200000	4799999
9	424494	2	6	65	1478	1990	0	5033376	4800000	5399999
10	514928	3	6	60	1455	1917	1406	5551772	5400000	5999999
11	859830	3	6	60	1635	1622	1367	6416380	6000000	6599999
12	606203	3	6	70	1983	1098	1453	7027207	6600000	7199999
13	695649	2	6	50	1660	1062	0	7727390	7200000	7799999
14	457677	2	6	65	1724	1318	0	8187789	7800000	8399999
15	497856	3	6	85	1446	1368	1723	8688687	8400000	8999999
16	604418	1	6	50	1483	0	0	9297642	9000000	9599999
17	461860	1	6	70	1905	0	0	9760985	9600000	10199999
18	483011	3	6	90	1567	1395	1656	10245901	10200000	10799999
19	880323	3	6	70	1930	1273	1436	11130842	10800000	11399999
20	407617	3	6	100	1043	1703	1396	11543098	11400000	11999999

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

Type 5 Radar Waveform_13

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	429647	2	8	50	1563	1971	0	429647	0	705881
2	529314	1	8	60	1024	0	0	962495	705882	1411763
3	686460	2	8	75	1133	1004	0	1649979	1411764	2117645
4	595338	1	8	75	1455	0	0	2247454	2117646	2823527
5	978007	1	8	90	1311	0	0	3226916	2823528	3529409
6	331405	2	8	70	1852	1477	0	3559632	3529410	4235291
7	1337061	3	8	80	1071	1670	1776	4900022	4235292	4941173
8	714880	2	8	60	1375	1277	0	5619419	4941174	5647055
9	536559	2	8	85	1716	1701	0	6158630	5647056	6352937
10	655537	1	8	75	1684	0	0	6817584	6352938	7058819
11	261868	2	8	85	1078	1368	0	7081136	7058820	7764701
12	836544	2	8	75	1708	1038	0	7920126	7764702	8470583
13	1139874	3	8	70	1458	1162	1595	9062746	8470584	9176465
14	197687	3	8	85	1716	1066	1411	9264648	9176466	9882347
15	1307101	3	8	70	1036	1135	1926	10575942	9882348	10588229
16	600569	2	8	55	1628	1606	0	11180608	10588230	11294111
17	779536	1	8	90	1033	0	0	11963378	11294112	11999993

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

Type 5 Radar Waveform_14

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	576164	2	19	70	1834	1488	0	576164	0	705881
2	169137	3	19	75	1804	1977	1536	748623	705882	1411763
3	1046233	2	19	65	1652	1086	0	1800173	1411764	2117645
4	626408	1	19	85	1835	0	0	2429319	2117646	2823527
5	551955	2	19	100	1572	1229	0	2983109	2823528	3529409
6	1039382	1	19	75	1001	0	0	4025292	3529410	4235291
7	771520	3	19	50	1218	1681	1762	4797813	4235292	4941173
8	410696	3	19	75	1019	1455	1973	5213170	4941174	5647055
9	495465	3	19	75	1680	1710	1816	5713082	5647056	6352937
10	1138856	3	19	50	1355	1124	1809	6857144	6352938	7058819
11	315898	1	19	90	1301	0	0	7177330	7058820	7764701
12	1101273	3	19	85	1576	1415	1829	8279904	7764702	8470583
13	729769	3	19	85	1717	1222	1539	9014493	8470584	9176465
14	348500	2	19	80	1097	1038	0	9367471	9176466	9882347
15	764112	3	19	90	1715	1541	1077	10133718	9882348	10588229
16	665464	1	19	65	1026	0	0	10803515	10588230	11294111
17	692336	2	19	75	1575	1007	0	11496877	11294112	11999993

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

Type 5 Radar Waveform_15

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	1490876	3	9	75	1574	1479	1835	1490876	0	1499999
2	952046	2	9	55	1638	1136	0	2447810	1500000	2999999
3	991442	2	9	70	1986	1650	0	3442026	3000000	4499999
4	2114789	1	9	55	1951	0	0	5560451	4500000	5999999
5	1001152	1	9	95	1046	0	0	6563554	6000000	7499999
6	1708354	3	9	50	1619	1657	1555	8272954	7500000	8999999
7	939724	2	9	55	1553	1501	0	9217509	9000000	10499999
8	2674043	1	9	80	1401	0	0	11894606	10500000	11999999

Total number of pulses in waveform = 15
****

Type 5 Radar Waveform_16

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	28831	1	14	60	1034	0	0	28831	0	857142
2	1377815	2	14	70	1866	1564	0	1407680	857143	1714285
3	786620	2	14	100	1788	1172	0	2197730	1714286	2571428
4	782795	3	14	95	1316	1835	1709	2983485	2571429	3428571
5	1190773	3	14	60	1217	1476	1817	4179118	3428572	4285714
6	567602	1	14	80	1536	0	0	4751230	4285715	5142857
7	921596	3	14	65	1520	1149	1809	5674362	5142858	6000000
8	368586	2	14	95	1020	1241	0	6047426	6000001	6857143
9	1146621	2	14	55	1881	1708	0	7196308	6857144	7714286
10	847312	2	14	55	1277	1426	0	8047209	7714287	8571429
11	1149347	2	14	85	1298	1317	0	9199259	8571430	9428572
12	880244	3	14	65	1180	1660	1612	10082118	9428573	10285715
13	769896	3	14	50	1422	1211	1686	10856466	10285716	11142858
14	701226	3	14	95	1510	1634	1176	11562011	11142859	12000001

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

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	521640	2	5	100	1389	1240	0	521640	0	599999
2	227904	1	5	95	1132	0	0	752173	600000	1199999
3	466315	3	5	55	1453	1660	1100	1219620	1200000	1799999
4	1162660	1	5	60	1693	0	0	2386493	1800000	2399999
5	592710	1	5	55	1633	0	0	2980896	2400000	2999999
6	403593	2	5	55	1131	1123	0	3386122	3000000	3599999
7	367882	1	5	60	1148	0	0	3756258	3600000	4199999
8	743911	2	5	100	1778	1729	0	4501317	4200000	4799999
9	410007	3	5	95	1207	1641	1538	4914831	4800000	5399999
10	760691	2	5	60	1704	1210	0	5679908	5400000	5999999
11	759716	1	5	70	1217	0	0	6442538	6000000	6599999
12	162743	2	5	75	1466	1696	0	6606498	6600000	7199999
13	630868	2	5	55	1272	1873	0	7240528	7200000	7799999
14	636443	2	5	65	1761	1191	0	7880116	7800000	8399999
15	668659	1	5	50	1802	0	0	8551727	8400000	8999999
16	1038298	3	5	70	1512	1690	1947	9591827	9000000	9599999
17	236268	3	5	50	1391	1208	1487	9833244	9600000	10199999
18	372322	2	5	55	1663	1181	0	10209652	10200000	10799999
19	1110939	1	5	70	1582	0	0	11323435	10800000	11399999
20	484759	2	5	60	1808	1904	0	11809776	11400000	11999999

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

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	666143	2	17	60	1768	1368	0	666143	0	705881
2	37174	3	17	60	1155	1078	1070	706453	705882	1411763
3	1354655	3	17	95	1264	1417	1626	2064411	1411764	2117645
4	520288	2	17	90	1334	1273	0	2589006	2117646	2823527
5	261802	2	17	100	1360	1819	0	2853415	2823528	3529409
6	1294194	3	17	70	1232	1852	1868	4150788	3529410	4235291
7	118145	2	17	60	1153	1949	0	4273885	4235292	4941173
8	1205362	3	17	80	1029	1585	1735	5482349	4941174	5647055
9	179139	2	17	80	1257	1162	0	5665837	5647056	6352937
10	1361232	2	17	60	1460	1348	0	7029488	6352938	7058819
11	77861	2	17	60	1896	1990	0	7110157	7058820	7764701
12	717940	2	17	90	1501	1890	0	7831983	7764702	8470583
13	780726	2	17	100	1028	1726	0	8616100	8470584	9176465
14	661510	3	17	95	1137	1260	1899	9280364	9176466	9882347
15	825515	2	17	60	1329	1495	0	10110175	9882348	10588229
16	893827	3	17	75	1218	1538	1438	11006826	10588230	11294111
17	770006	1	17	60	1500	0	0	11781026	11294112	11999993

Total number of pulses in waveform = 39
****

Type 5 Radar Waveform_19

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	62612	2	10	95	1757	1338	0	62612	0	1499999
2	2135931	1	10	90	1014	0	0	2201638	1500000	2999999
3	2176748	1	10	100	1157	0	0	4379400	3000000	4499999
4	190324	2	10	75	1622	1373	0	4570881	4500000	5999999
5	2404976	3	10	85	1216	1049	1015	6978852	6000000	7499999
6	1220073	1	10	70	1574	0	0	8202205	7500000	8999999
7	2197751	1	10	50	1037	0	0	10401530	9000000	10499999
8	1001172	1	10	70	1106	0	0	11403739	10500000	11999999

Total number of pulses in waveform = 12
****

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	356408	3	12	60	1858	1071	1925	356408	0	631578
2	429819	3	12	90	1633	1344	1369	791081	631579	1263157
3	541878	2	12	95	1431	1407	0	1337305	1263158	1894736
4	798274	1	12	85	1344	0	0	2138417	1894737	2526315
5	701218	3	12	50	1649	1289	1681	2840979	2526316	3157894
6	603556	1	12	60	1311	0	0	3449154	3157895	3789473
7	712165	2	12	75	1272	1160	0	4162630	3789474	4421052
8	532330	3	12	60	1496	1969	1110	4697392	4421053	5052631
9	763799	3	12	55	1686	1404	1098	5465766	5052632	5684210
10	268352	2	12	75	1426	1389	0	5738306	5684211	6315789
11	659768	1	12	90	1536	0	0	6400889	6315790	6947368
12	747707	3	12	70	1041	1815	1058	7150132	6947369	7578947
13	458204	2	12	60	1941	1644	0	7612250	7578948	8210526
14	903092	3	12	60	1983	1269	1296	8518927	8210527	8842105
15	922640	1	12	85	1816	0	0	9446115	8842106	9473684
16	350733	2	12	55	1166	1248	0	9798664	9473685	10105263
17	845901	1	12	55	1884	0	0	10646979	10105264	10736842
18	491042	3	12	60	1742	1621	1171	11139905	10736843	11368421
19	369678	3	12	90	1677	1681	1451	11514117	11368422	12000000

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

Type 5 Radar Waveform_21

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	676334	2	14	55	1389	1586	0	676334	0	923076
2	245861	1	14	50	1152	0	0	925170	923077	1846153
3	1639421	3	14	100	1368	1269	1883	2565743	1846154	2769230
4	207571	3	14	60	1555	1557	1550	2777834	2769231	3692307
5	1788859	1	14	100	1885	0	0	4571355	3692308	4615384
6	894385	2	14	90	1084	1824	0	5467625	4615385	5538461
7	836990	1	14	90	1810	0	0	6307523	5538462	6461538
8	595592	3	14	80	1231	1547	1830	6904925	6461539	7384615
9	922906	2	14	90	1043	1646	0	7832439	7384616	8307692
10	605088	3	14	55	1191	1259	1849	8440216	8307693	9230769
11	1324637	3	14	70	1196	1852	1563	9769152	9230770	10153846
12	965543	2	14	95	1403	1958	0	10739306	10153847	11076923
13	882902	2	14	95	1816	1407	0	11625569	11076924	12000000

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

Type 5 Radar Waveform_22

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	866338	2	17	85	1613	1884	0	866338	0	999999
2	376573	3	17	60	1642	1545	1517	1246408	1000000	1999999
3	1734801	1	17	70	1860	0	0	2985913	2000000	2999999
4	405365	3	17	95	1206	1747	1982	3393138	3000000	3999999
5	621858	3	17	55	1201	1541	1322	4019931	4000000	4999999
6	1823934	2	17	55	1901	1789	0	5847929	5000000	5999999
7	994185	3	17	60	1073	1817	1009	6845804	6000000	6999999
8	667744	1	17	85	1529	0	0	7517447	7000000	7999999
9	1285243	3	17	90	1465	1504	1110	8804219	8000000	8999999
10	935942	1	17	65	1428	0	0	9744240	9000000	9999999
11	676593	1	17	65	1598	0	0	10422261	10000000	10999999
12	1204042	1	17	100	1513	0	0	11627901	11000000	11999999

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

Type 5 Radar Waveform_23

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	180114	3	8	100	1237	1298	1137	180114	0	749999
2	578114	1	8	60	1684	0	0	761900	750000	1499999
3	1443602	3	8	70	1277	1940	1683	2207186	1500000	2249999
4	311627	2	8	85	1126	1729	0	2523713	2250000	2999999
5	527145	2	8	90	1351	1670	0	3053713	3000000	3749999
6	1424112	3	8	55	1388	1583	1641	4480846	3750000	4499999
7	679208	1	8	75	1067	0	0	5164666	4500000	5249999
8	282860	1	8	100	1719	0	0	5448593	5250000	5999999
9	871841	1	8	80	1288	0	0	6322153	6000000	6749999
10	801265	3	8	70	1419	1924	1688	7124706	6750000	7499999
11	488302	3	8	95	1414	1266	1492	7618039	7500000	8249999
12	986207	1	8	80	1048	0	0	8608418	8250000	8999999
13	477245	2	8	70	1208	1929	0	9086711	9000000	9749999
14	1289686	1	8	95	1210	0	0	10379534	9750000	10499999
15	683949	2	8	65	1488	1788	0	11064693	10500000	11249999
16	888447	3	8	65	1447	1745	1756	11956416	11250000	11999999

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

Type 5 Radar Waveform_24

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	566228	3	10	60	1760	1048	1815	566228	0	705881
2	690321	2	10	95	1574	1759	0	1261172	705882	1411763
3	229409	3	10	75	1102	1428	1391	1493914	1411764	2117645
4	978176	3	10	100	1320	1112	1644	2476011	2117646	2823527
5	1025637	3	10	100	1810	1966	1672	3505724	2823528	3529409
6	319190	3	10	70	1989	1600	1071	3830362	3529410	4235291
7	545889	3	10	55	1945	1700	1927	4380911	4235292	4941173
8	961134	1	10	80	1702	0	0	5347617	4941174	5647055
9	744687	1	10	70	1326	0	0	6094006	5647056	6352937
10	695644	2	10	100	1824	1839	0	6790976	6352938	7058819
11	930426	2	10	100	1061	1240	0	7725065	7058820	7764701
12	290938	1	10	90	1648	0	0	8018304	7764702	8470583
13	549901	3	10	55	1004	1842	1663	8569853	8470584	9176465
14	747425	1	10	80	1808	0	0	9321787	9176466	9882347
15	737852	1	10	65	1972	0	0	10061447	9882348	10588229
16	617029	1	10	55	1741	0	0	10680448	10588230	11294111
17	943473	1	10	80	1975	0	0	11625662	11294112	11999993

Total number of pulses in waveform = 34
****

Type 5 Radar Waveform_25

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	64003	3	18	75	1964	1019	1591	64003	0	666666
2	1183775	2	18	85	1825	1731	0	1252352	666667	1333333
3	107539	1	18	90	1800	0	0	1363447	1333334	2000000
4	1195324	1	18	85	1805	0	0	2560571	2000001	2666667
5	296710	1	18	55	1902	0	0	2859086	2666668	3333334
6	670968	3	18	65	1007	1226	1706	3531956	3333335	4000001
7	664123	1	18	65	1195	0	0	4200018	4000002	4666668
8	605349	3	18	65	1207	1777	1352	4806562	4666669	5333335
9	1045931	2	18	60	1355	1702	0	5856829	5333336	6000002
10	773699	1	18	60	1829	0	0	6633585	6000003	6666669
11	500994	3	18	80	1587	1300	1923	7136408	6666670	7333336
12	346805	2	18	75	1051	1187	0	7488023	7333337	8000003
13	840250	2	18	50	1806	1825	0	8330511	8000004	8666670
14	520763	2	18	90	1462	1687	0	8854905	8666671	9333337
15	733975	2	18	75	1801	1808	0	9592029	9333338	10000004
16	918848	1	18	100	1851	0	0	10514486	10000005	10666671
17	758569	1	18	55	1955	0	0	11274906	10666672	11333338
18	314947	1	18	65	1740	0	0	11591808	11333339	12000005

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

Type 5 Radar Waveform_26

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	849735	3	6	55	1606	1517	1325	849735	0	1199999
2	669750	3	6	90	1872	1110	1687	1523933	1200000	2399999
3	1422622	1	6	70	1329	0	0	2951224	2400000	3599999
4	807109	1	6	65	1768	0	0	3759662	3600000	4799999
5	1432428	1	6	60	1950	0	0	5193858	4800000	5999999
6	1514943	3	6	80	1635	1481	1472	6710751	6000000	7199999
7	1520563	3	6	85	1100	1914	1747	8235902	7200000	8399999
8	492049	1	6	100	1453	0	0	8732712	8400000	9599999
9	1750864	3	6	50	1663	1922	1380	10485029	9600000	10799999
10	1197540	1	6	60	1254	0	0	11687534	10800000	11999999

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

Type 5 Radar Waveform_27

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	187066	1	9	60	1448	0	0	187066	0	631578
2	955160	3	9	55	1898	1996	1892	1143674	631579	1263157
3	310799	2	9	95	1239	1673	0	1460259	1263158	1894736
4	976833	2	9	90	1855	1387	0	2440004	1894737	2526315
5	440576	2	9	90	1742	1167	0	2883822	2526316	3157894
6	733855	1	9	80	1462	0	0	3620586	3157895	3789473
7	414183	1	9	90	1395	0	0	4036231	3789474	4421052
8	823471	2	9	60	1672	1252	0	4861097	4421053	5052631
9	481394	3	9	100	1445	1523	1482	5345415	5052632	5684210
10	686839	2	9	75	1945	1647	0	6036704	5684211	6315789
11	473127	3	9	75	1256	1403	1093	6513423	6315790	6947368
12	530432	3	9	85	1438	1277	1276	7047607	6947369	7578947
13	620283	2	9	55	1324	1187	0	7671881	7578948	8210526
14	927445	3	9	70	1413	1813	1469	8601837	8210527	8842105
15	279946	3	9	60	1146	1792	1062	8886478	8842106	9473684
16	686507	1	9	65	1389	0	0	9576985	9473685	10105263
17	942738	3	9	50	1788	1300	1993	10521112	10105264	10736842
18	512730	1	9	95	1879	0	0	11038923	10736843	11368421
19	602989	2	9	70	1495	1956	0	11643791	11368422	12000000

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

Type 5 Radar Waveform_28

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	149998	1	19	75	1349	0	0	149998	0	1199999
2	1147126	2	19	60	1099	1213	0	1298473	1200000	2399999
3	1278172	3	19	100	1102	1531	1523	2578957	2400000	3599999
4	1809644	1	19	90	1602	0	0	4392757	3600000	4799999
5	537947	2	19	80	1231	1365	0	4932306	4800000	5999999
6	2228786	3	19	100	1512	1524	1000	7163688	6000000	7199999
7	785606	1	19	80	1165	0	0	7953330	7200000	8399999
8	842928	1	19	95	1253	0	0	8797423	8400000	9599999
9	1934376	1	19	60	1306	0	0	10733052	9600000	10799999
10	350624	1	19	65	1094	0	0	11084982	10800000	11999999

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

Type 5 Radar Waveform_29

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)
	536985									
1		3	12	75	1646	1572	1262	536985	0	749999
	475343									
2		3	12	95	1557	1933	1708	1016808	750000	1499999
	948518									
3		2	12	70	1044	1893	0	1970524	1500000	2249999
	830153									
4		1	12	80	1802	0	0	2803614	2250000	2999999
	398241									
5		1	12	75	1735	0	0	3203657	3000000	3749999
	1185526									
6		3	12	65	1859	1109	1996	4390918	3750000	4499999
	523953									
7		2	12	90	1714	1284	0	4919835	4500000	5249999
	1069309									
8		3	12	55	1258	1562	1867	5992142	5250000	5999999
	486784									
9		2	12	85	1332	1165	0	6483613	6000000	6749999
	878316									
10		3	12	100	1613	1364	1306	7364426	6750000	7499999
	383109									
11		2	12	100	1365	1699	0	7751818	7500000	8249999
	580427									
12		1	12	65	1819	0	0	8335309	8250000	8999999
	795345									
13		2	12	80	1528	1367	0	9132473	9000000	9749999
	1246434									
14		1	12	85	1076	0	0	10381802	9750000	10499999
	744021									
15		3	12	100	1456	1240	1146	11126899	10500000	11249999
	517465									
16		3	12	55	1137	1758	1474	11648206	11250000	11999999

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

Type 5 Radar Waveform_30

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)
	186758									
1		2	5	95	1879	1207	0	186758	0	1090908
	1945487									
2		1	5	90	1379	0	0	2135331	1090909	2181817
	392197									
3		1	5	50	1957	0	0	2528907	2181818	3272726
	1288467									
4		1	5	80	1567	0	0	3819331	3272727	4363635
	1533144									
5		1	5	80	1415	0	0	5354042	4363636	5454544
	335661									
6		1	5	50	1756	0	0	5691118	5454545	6545453
	1651832									
7		2	5	55	1096	1880	0	7344706	6545454	7636362
	431692									
8		3	5	65	1282	1305	1886	7779374	7636363	8727271
	1435824									
9		2	5	75	1422	1803	0	9219671	8727272	9818180
	826582									
10		3	5	55	1712	1159	1580	10049478	9818181	10909089
	1194171									
11		1	5	55	1595	0	0	11248100	10909090	11999998

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

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	5492	1	16	5510	1
2	5492	1	17	5510	1
3	5492	1	18	5510	1
4	5492	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)
4	5490	12	7	5515	21
6	5467	18	12	5474	36
22	5520	66	25	5505	75
35	5470	105	41	5477	123
44	5511	132	47	5481	141
45	5503	135	58	5479	174
61	5517	183	59	5513	177
62	5486	186	62	5470	186
64	5475	192	63	5463	189
65	5476	195	75	5512	225
66	5474	198	82	5518	246
84	5465	252	92	5488	276
93	5497	279	93	5520	279

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5513	0	11	5490	33
3	5466	9	45	5508	135
6	5497	18	59	5509	177
15	5522	45	60	5512	180
32	5470	96	62	5478	186
41	5500	123	71	5484	213
44	5473	132	85	5486	255
48	5493	144	89	5518	267
61	5516	183	99	5465	297
72	5515	216	--	--	--
81	5475	243	--	--	--
82	5494	246	--	--	--
86	5517	258	--	--	--
89	5488	267	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5515	9	5	5516	15
8	5512	24	12	5490	36
10	5497	30	19	5482	57
11	5525	33	34	5480	102
39	5518	117	36	5519	108
54	5513	162	40	5520	120
62	5491	186	45	5503	135
64	5517	192	58	5521	174
66	5471	198	59	5518	177
67	5523	201	62	5484	186
83	5526	249	78	5502	234
91	5474	273	88	5486	264
94	5510	282	97	5506	291

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5523	0	25	5502	75
22	5495	66	26	5517	78
34	5494	102	39	5525	117
37	5525	111	51	5478	153
46	5517	138	55	5527	165
58	5478	174	57	5482	171
68	5524	204	73	5524	219
70	5520	210	83	5470	249
79	5489	237	85	5479	255
90	5507	270	86	5487	258
97	5508	291	93	5528	279
--	--	--	96	5505	288
--	--	--	98	5486	294
--	--	--	99	5526	297

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5537	9	3	5517	9
10	5511	30	19	5486	57
21	5512	63	26	5509	78
23	5527	69	31	5515	93
26	5491	78	33	5521	99
37	5534	111	37	5532	111
42	5531	126	41	5495	123
45	5528	135	44	5508	132
47	5494	141	45	5487	135
50	5508	150	49	5529	147
53	5489	159	59	5498	177
66	5506	198	65	5500	195
78	5523	234	73	5501	219
--	--	--	82	5526	246
--	--	--	87	5506	261
--	--	--	90	5535	270
--	--	--	97	5512	291

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5497	15	3	5538	9
8	5513	24	23	5510	69
18	5506	54	29	5522	87
20	5489	60	39	5512	117
25	5537	75	51	5528	153
28	5484	84	62	5507	186
35	5511	105	64	5526	192
51	5491	153	65	5506	195
56	5512	168	91	5504	273
72	5535	216	95	5519	285
73	5531	219	98	5495	294
82	5528	246	--	--	--
85	5522	255	--	--	--

92	5482	276	--	--	--
97	5534	291	--	--	--
99	5498	297	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5523	15	17	5511	51
13	5493	39	26	5513	78
23	5522	69	28	5497	84
32	5515	96	32	5522	96
48	5513	144	36	5489	108
52	5504	156	51	5536	153
57	5498	171	52	5486	156
66	5530	198	54	5505	162
76	5489	228	55	5515	165
77	5481	231	79	5480	237
91	5520	273	83	5509	249
93	5512	279	85	5482	255
--	--	--	93	5528	279
--	--	--	94	5493	282
--	--	--	96	5520	288
--	--	--	98	5516	294

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5486	39	1	5506	3
29	5496	87	17	5504	51
33	5489	99	21	5486	63
42	5504	126	28	5515	84
52	5533	156	38	5531	114
57	5532	171	41	5499	123
59	5510	177	51	5538	153
64	5520	192	54	5539	162
79	5506	237	59	5527	177
81	5519	243	81	5490	243
--	--	--	82	5525	246
--	--	--	83	5513	249
--	--	--	87	5532	261
--	--	--	95	5523	285

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5499	39	0	5494	0
20	5490	60	2	5486	6
22	5496	66	5	5485	15
41	5535	123	15	5496	45
42	5480	126	20	5521	60
45	5540	135	29	5533	87
46	5530	138	31	5530	93
49	5503	147	32	5514	96
50	5512	150	39	5515	117
52	5484	156	60	5538	180
60	5513	180	74	5507	222
68	5501	204	--	--	--
69	5533	207	--	--	--
78	5505	234	--	--	--
79	5529	237	--	--	--
85	5489	255	--	--	--
90	5516	270	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5491	21	4	5498	12
8	5517	24	22	5516	66
27	5496	81	27	5500	81
52	5514	156	37	5533	111
57	5515	171	43	5491	129
79	5531	237	47	5514	141
99	5492	297	48	5541	144
--	--	--	59	5529	177
--	--	--	61	5524	183
--	--	--	62	5496	186
--	--	--	73	5537	219
--	--	--	77	5507	231
--	--	--	87	5526	261

--	--	--	98	5505	294

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5503	3	1	5499	3
11	5497	33	4	5513	12
32	5527	96	27	5483	81
34	5502	102	34	5514	102
42	5512	126	38	5535	114
49	5525	147	41	5486	123
65	5490	195	55	5541	165
87	5495	261	60	5517	180
88	5485	264	80	5506	240
89	5504	267	82	5516	246
97	5537	291	86	5542	258
98	5482	294	91	5494	273
99	5506	297	93	5520	279
--	--	--	96	5490	288

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5538	12	2	5506	6
5	5513	15	9	5542	27
13	5533	39	14	5549	42
14	5500	42	16	5539	48
19	5535	57	25	5493	75
27	5547	81	31	5494	93
46	5537	138	99	5538	297
56	5541	168	--	--	--
60	5544	180	--	--	--
66	5506	198	--	--	--
67	5522	201	--	--	--
69	5531	207	--	--	--
87	5505	261	--	--	--
89	5502	267	--	--	--
92	5517	276	--	--	--
93	5496	279	--	--	--

| 98 | 5514 | 294 | -- | -- | -- |

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5518	15	0	5533	0
14	5521	42	19	5524	57
15	5520	45	28	5495	84
17	5509	51	63	5537	189
27	5523	81	70	5532	210
30	5538	90	76	5547	228
32	5502	96	77	5536	231
49	5519	147	82	5542	246
60	5497	180	--	--	--
62	5539	186	--	--	--
63	5533	189	--	--	--
71	5490	213	--	--	--
77	5527	231	--	--	--
78	5526	234	--	--	--
79	5547	237	--	--	--
86	5532	258	--	--	--
90	5529	270	--	--	--
91	5513	273	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5538	21	9	5555	27
13	5532	39	14	5534	42
39	5535	117	16	5528	48
46	5502	138	20	5506	60
52	5518	156	40	5509	120
62	5516	186	43	5553	129
75	5506	225	44	5530	132
80	5524	240	45	5503	135
--	--	--	59	5541	177
--	--	--	70	5549	210
--	--	--	82	5547	246
--	--	--	84	5502	252

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5520	9	0	5548	0
7	5521	21	7	5551	21
13	5507	39	15	5524	45
15	5531	45	18	5498	54
21	5526	63	33	5502	99
22	5557	66	41	5522	123
24	5532	72	46	5523	138
37	5542	111	48	5517	144
39	5525	117	52	5558	156
46	5503	138	67	5504	201
61	5535	183	69	5543	207
70	5540	210	82	5515	246
71	5523	213	84	5514	252
74	5511	222	--	--	--
77	5498	231	--	--	--

Product	WiFi Concurrent 4 Port GE LAN VoIP Ethernet Gateway with USB	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/11/16
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	778	68	1
2	5491	1	798	67	1
3	5500	1	598	89	1
4	5500	1	838	63	1
5	5509	1	638	83	1
6	5509	1	818	65	1
7	5510	1	938	57	1
8	5510	1	718	74	1
9	5511	1	698	76	1
10	5511	1	538	99	1
11	5520	1	558	95	1
12	5520	1	578	92	1
13	5529	1	758	70	1
14	5529	1	3066	18	1
15	5530	1	738	72	1
16	5530	1	2964	18	1
17	5531	1	597	89	1
18	5531	1	2310	23	1
19	5540	1	1821	29	1
20	5540	1	1956	27	1
21	5549	1	771	69	1
22	5549	1	1997	27	1
23	5550	1	2852	19	1
24	5550	1	2000	27	1
25	5551	1	1904	28	1
26	5551	1	2783	19	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5560	1	3034	18	1
28	5560	1	2041	26	1
29	5569	1	792	67	1
30	5569	1	996	53	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	4.2	216	24	1
2	5491	4.5	215	29	1
3	5500	4.3	177	25	1
4	5500	4.9	151	26	1
5	5509	1.4	188	24	1
6	5509	4.6	227	26	1
7	5510	1.1	212	26	1
8	5510	3.8	192	28	1
9	5511	3.6	217	23	1
10	5511	3.6	159	27	1
11	5520	2.3	212	24	1
12	5520	4.2	176	26	1
13	5529	3.5	183	26	1
14	5529	2.7	191	23	1
15	5530	2.7	193	26	1
16	5530	4.4	228	23	1
17	5531	1.2	173	24	1
18	5531	4.6	203	28	1
19	5540	3.0	161	23	1
20	5540	1.1	200	29	1
21	5549	5.0	190	24	1
22	5549	3.5	154	26	1
23	5550	2.9	160	29	1
24	5550	5.0	184	25	1
25	5551	3.7	188	23	1
26	5551	1.9	223	28	1
27	5560	1.0	206	25	1
28	5560	2.7	195	25	1
29	5569	4.9	188	23	1
30	5569	2.9	183	25	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	7.0	393	18	1
2	5491	9.1	271	18	1
3	5500	7.5	474	17	1
4	5500	7.2	319	17	1
5	5509	6.3	289	17	1
6	5509	9.5	475	18	1
7	5510	7.5	492	16	1
8	5510	7.8	330	17	1
9	5511	7.8	486	17	1
10	5511	7.0	334	17	1
11	5520	8.5	320	17	1
12	5520	6.0	483	17	1
13	5529	8.1	468	18	1
14	5529	6.5	282	18	1
15	5530	6.2	402	17	1
16	5530	9.1	456	16	1
17	5531	8.1	358	16	1
18	5531	7.9	496	16	1
19	5540	8.1	285	18	1
20	5540	8.8	287	18	1
21	5549	8.6	357	18	1
22	5549	8.4	255	17	1
23	5550	8.1	396	18	1
24	5550	8.4	312	18	1
25	5551	9.7	457	18	1
26	5551	9.2	479	17	1
27	5560	9.3	439	18	1
28	5560	8.7	418	16	1
29	5569	6.4	401	16	1
30	5569	9.2	468	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	13.3	395	16	1
2	5491	14.3	446	16	1
3	5500	20.0	499	15	1
4	5500	16.5	285	12	1
5	5509	18.8	307	13	1
6	5509	11.1	426	14	1
7	5510	11.9	496	14	1
8	5510	12.6	435	12	1
9	5511	19.5	304	13	1
10	5511	12.9	475	15	1
11	5520	12.2	250	15	1
12	5520	13.7	481	15	1
13	5529	12.6	364	16	1
14	5529	13.5	474	16	1
15	5530	16.6	366	13	1
16	5530	11.0	312	12	1
17	5531	12.9	324	13	1
18	5531	13.4	364	13	1
19	5540	17.1	474	16	1
20	5540	12.5	405	13	1
21	5549	20.0	499	16	1
22	5549	12.2	275	13	1
23	5550	11.3	414	12	1
24	5550	19.6	318	16	1
25	5551	11.3	368	13	1
26	5551	11.3	404	12	1
27	5560	16.6	323	14	1
28	5560	13.8	316	14	1
29	5569	13.3	374	12	1
30	5569	15.1	388	14	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	5497.8	1	16	5530.0	1
2	5498.6	1	17	5530.0	1
3	5493.0	1	18	5530.0	1
4	5496.6	1	19	5530.0	1
5	5493.4	1	20	5530.0	1
6	5495.0	1	21	5565.4	1
7	5494.2	1	22	5563.4	1
8	5494.6	1	23	5567.0	1
9	5495.8	1	24	5566.6	1
10	5498.2	1	25	5565.8	1
11	5530.0	1	26	5564.2	1
12	5530.0	1	27	5562.2	1
13	5530.0	1	28	5561.4	1
14	5530.0	1	29	5561.8	1
15	5530.0	1	30	5565.0	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

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

Burst    Off Time   #        Chirp   PW    Pulse 1   Pulse 2   Pulse 3   Start Loc   Start Burst    End Burst
#        (us)       Pulses   (MHz)   (us)  Pri(us)   Pri(us)   Pri(us)   (us)        Interval(us)   Interval(us)
         240740
1                   3        17      95    1175      1234      1401      240740      0              799999
         1311949
2                   1        17      75    1099      0         0         1556499     800000         1599999
         610140
3                   1        17      65    1262      0         0         2167738     1600000        2399999
         1014314
4                   2        17      90    1098      1825      0         3183314     2400000        3199999
         117882
5                   1        17      55    1072      0         0         3304119     3200000        3999999
         1141734
6                   1        17      50    1341      0         0         4446925     4000000        4799999
         425462
7                   3        17      55    1746      1711      1836      4873728     4800000        5599999
         1347624
8                   2        17      60    1036      1294      0         6226645     5600000        6399999
         736761
9                   3        17      55    1647      1783      1740      6965736     6400000        7199999
         816667
10                  2        17      65    1292      1784      0         7787573     7200000        7999999
         642883
11                  1        17      50    1486      0         0         8433532     8000000        8799999
         988535
12                  1        17      70    1332      0         0         9423553     8800000        9599999
         746969
13                  3        17      90    1836      1935      1937      10171854    9600000        10399999
         293367
14                  3        17      65    1268      1400      1313      10470929    10400000       11199999
         1119293
15                  3        17      65    1840      1339      1847      11594203    11200000       11999999
Total number of pulses in waveform = 30
*********************************************************************************
```

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	738583	2	19	90	1678	1141	0	738583	0	749999
2	401322	3	19	55	1065	1571	1807	1142724	750000	1499999
3	678402	1	19	70	1830	0	0	1825569	1500000	2249999
4	730482	3	19	65	1830	1213	1820	2557881	2250000	2999999
5	688409	2	19	95	1321	1568	0	3251153	3000000	3749999
6	664357	3	19	90	1582	1849	1681	3918399	3750000	4499999
7	785897	2	19	80	1848	1818	0	4709408	4500000	5249999
8	701890	2	19	85	1742	1967	0	5414964	5250000	5999999
9	1126287	3	19	55	1401	1565	1574	6544960	6000000	6749999
10	432671	2	19	65	1012	1535	0	6982171	6750000	7499999
11	1148706	2	19	70	1645	1559	0	8133424	7500000	8249999
12	525600	3	19	95	1019	1998	1214	8662228	8250000	8999999
13	645078	1	19	95	1764	0	0	9311537	9000000	9749999
14	605251	1	19	55	1263	0	0	9918552	9750000	10499999
15	1185192	2	19	100	1454	1987	0	11105007	10500000	11249999
16	216956	3	19	65	1996	1948	1041	11325404	11250000	11999999

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

Type 5 Radar Waveform_3

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	629758	1	5	95	1593	0	0	629758	0	749999
2	418287	3	5	90	1062	1806	1235	1049638	750000	1499999
3	575844	1	5	75	1949	0	0	1629585	1500000	2249999
4	1225029	2	5	50	1767	1445	0	2856563	2250000	2999999
5	431582	3	5	80	1001	1821	1819	3291357	3000000	3749999
6	701541	1	5	80	1882	0	0	3997539	3750000	4499999
7	909271	2	5	55	1429	1349	0	4908692	4500000	5249999
8	844630	1	5	65	1559	0	0	5756100	5250000	5999999
9	353567	3	5	50	1573	1568	1999	6111226	6000000	6749999
10	977592	1	5	95	1542	0	0	7093958	6750000	7499999
11	443535	3	5	50	1751	1868	1357	7539035	7500000	8249999
12	1282234	2	5	90	1834	1851	0	8826245	8250000	8999999
13	301267	2	5	75	1389	1179	0	9131197	9000000	9749999
14	1086195	1	5	55	1655	0	0	10219960	9750000	10499999
15	792656	2	5	70	1768	1037	0	11014271	10500000	11249999
16	254517	1	5	60	1596	0	0	11271593	11250000	11999999

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

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	1314911	2	14	50	1755	1464	0	1314911	0	1333332
2	593431	1	14	75	1920	0	0	1911561	1333333	2666665
3	1841141	2	14	100	1074	1899	0	3754622	2666666	3999998
4	1311620	1	14	95	1630	0	0	5069215	3999999	5333331
5	537599	3	14	70	1180	1425	1265	5608444	5333332	6666664
6	1982337	2	14	55	1724	1967	0	7594651	6666665	7999997
7	1347143	1	14	55	1262	0	0	8945485	7999998	9333330
8	1118854	3	14	70	1964	1896	1024	10065601	9333331	10666663
9	1255697	1	14	65	1977	0	0	11326182	10666664	11999996

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

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	293086	1	6	85	1063	0	0	293086	0	599999
2	603155	1	6	70	1248	0	0	897304	600000	1199999
3	513980	2	6	85	1833	1714	0	1412532	1200000	1799999
4	497590	1	6	50	1083	0	0	1913669	1800000	2399999
5	563821	2	6	90	1098	1613	0	2478573	2400000	2999999
6	831652	2	6	85	1425	1036	0	3312936	3000000	3599999
7	760403	3	6	90	1582	1459	1450	4075800	3600000	4199999
8	415198	1	6	70	1507	0	0	4495489	4200000	4799999
9	717146	2	6	50	1605	1175	0	5214142	4800000	5399999
10	190308	2	6	65	1781	1839	0	5407230	5400000	5999999
11	596247	1	6	55	1814	0	0	6007097	6000000	6599999
12	1018428	2	6	60	1180	1841	0	7027339	6600000	7199999
13	637985	3	6	95	1303	1084	1525	7668345	7200000	7799999
14	556907	2	6	75	1657	1656	0	8229164	7800000	8399999
15	577287	1	6	55	1823	0	0	8809764	8400000	8999999
16	783010	3	6	65	1727	1433	1737	9594597	9000000	9599999
17	105255	2	6	85	1510	1238	0	9704749	9600000	10199999
18	843417	1	6	100	1188	0	0	10550914	10200000	10799999
19	592660	3	6	95	1523	1498	1314	11144762	10800000	11399999
20	272737	3	6	75	1684	1613	1993	11421834	11400000	11999999

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

Type 5 Radar Waveform_6

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	243375	3	10	90	1907	1082	1660	243375	0	799999
2	910069	1	10	100	1583	0	0	1158093	800000	1599999
3	602362	2	10	90	1663	1650	0	1762038	1600000	2399999
4	917102	3	10	60	1122	1973	1003	2682453	2400000	3199999
5	1021565	2	10	90	1936	1908	0	3708116	3200000	3999999
6	421161	2	10	90	1013	1265	0	4133121	4000000	4799999
7	1291779	3	10	50	1452	1174	1139	5427178	4800000	5599999
8	309608	2	10	95	1300	1365	0	5740551	5600000	6399999
9	942970	2	10	65	1528	1806	0	6686186	6400000	7199999
10	631848	3	10	95	1165	1468	1523	7321368	7200000	7999999
11	1154279	3	10	85	1742	1278	1535	8479803	8000000	8799999
12	1094236	2	10	75	1804	1830	0	9578594	8800000	9599999
13	479797	1	10	85	1855	0	0	10062025	9600000	10399999
14	895140	3	10	95	1780	1098	1392	10959020	10400000	11199999
15	684606	2	10	60	1511	1276	0	11647896	11200000	11999999

Total number of pulses in waveform = 34
****

Type 5 Radar Waveform_7

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	100108	1	8	65	1093	0	0	100108	0	1090908
2	1468054	2	8	60	1570	1834	0	1569255	1090909	2181817
3	1582366	1	8	100	1775	0	0	3155025	2181818	3272726
4	806883	1	8	80	1185	0	0	3963683	3272727	4363635
5	1422240	2	8	65	1320	1958	0	5387108	4363636	5454544
6	469163	3	8	95	1919	1548	1888	5859549	5454545	6545453
7	1042763	3	8	50	1623	1436	1781	6907667	6545454	7636362
8	1737550	1	8	85	1492	0	0	8650057	7636363	8727271
9	1050761	3	8	75	1111	1841	1705	9702310	8727272	9818180
10	1050232	1	8	85	1082	0	0	10757199	9818181	10909089
11	561622	2	8	50	1450	1012	0	11319903	10909090	11999998

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

Type 5 Radar Waveform_8

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	376346	1	9	75	1108	0	0	376346	0	705881
2	583909	1	9	70	1282	0	0	961363	705882	1411763
3	950774	2	9	60	1844	1189	0	1913419	1411764	2117645
4	873706	2	9	70	1621	1796	0	2790158	2117646	2823527
5	621246	1	9	100	1472	0	0	3414821	2823528	3529409
6	361657	3	9	65	1193	1690	1750	3777950	3529410	4235291
7	524365	3	9	80	1853	1911	1805	4306948	4235292	4941173
8	996885	3	9	70	1521	1369	1599	5309402	4941174	5647055
9	915881	1	9	55	1621	0	0	6229772	5647056	6352937
10	400761	3	9	55	1311	1330	1470	6632154	6352938	7058819
11	805422	3	9	85	1315	1376	1971	7441687	7058820	7764701
12	905149	3	9	95	1765	1473	1412	8351498	7764702	8470583
13	402418	2	9	75	1959	1067	0	8758566	8470584	9176465
14	862778	2	9	85	1574	1252	0	9624370	9176466	9882347
15	560734	3	9	75	1983	1968	1539	10187930	9882348	10588229
16	699536	2	9	70	1860	1264	0	10892956	10588230	11294111
17	940285	3	9	90	1356	1175	1870	11836365	11294112	11999993

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

Type 5 Radar Waveform_9

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	36971	1	12	80	1128	0	0	36971	0	1090908
2	1603002	1	12	75	1485	0	0	1641101	1090909	2181817
3	753892	3	12	50	1526	1189	1382	2396478	2181818	3272726
4	899143	3	12	90	1477	1849	1682	3299718	3272727	4363635
5	2135694	2	12	60	1255	1975	0	5440420	4363636	5454544
6	474218	3	12	65	1883	1939	1928	5917868	5454545	6545453
7	1390524	3	12	90	1610	1913	1347	7314142	6545454	7636362
8	649759	2	12	75	1421	1214	0	7968771	7636363	8727271
9	980911	1	12	75	1088	0	0	8952317	8727272	9818180
10	1781784	3	12	65	1839	1224	1044	10735189	9818181	10909089
11	342512	1	12	50	1923	0	0	11081808	10909090	11999998

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

Type 5 Radar Waveform_10

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	335965	1	18	90	1852	0	0	335965	0	599999
2	633612	3	18	55	1042	1351	1079	971429	600000	1199999
3	342898	3	18	60	1174	1092	1506	1317799	1200000	1799999
4	934740	1	18	90	1218	0	0	2256311	1800000	2399999
5	318677	2	18	50	1923	1630	0	2576206	2400000	2999999
6	651437	2	18	75	1163	1316	0	3231196	3000000	3599999
7	943531	2	18	60	1696	1817	0	4177206	3600000	4199999
8	33028	2	18	100	1658	1927	0	4213747	4200000	4799999
9	1116952	3	18	75	1835	1067	1970	5334284	4800000	5399999
10	234980	3	18	55	1305	1095	1871	5574136	5400000	5999999
11	672556	1	18	60	1419	0	0	6250963	6000000	6599999
12	879806	2	18	50	1202	1539	0	7132188	6600000	7199999
13	312127	3	18	60	1547	1343	1834	7447056	7200000	7799999
14	747969	2	18	100	1655	1553	0	8199749	7800000	8399999
15	690333	1	18	90	1160	0	0	8893290	8400000	8999999
16	636029	3	18	60	1572	1223	1956	9530479	9000000	9599999
17	481592	1	18	80	1413	0	0	10016822	9600000	10199999
18	696454	1	18	95	1705	0	0	10714689	10200000	10799999
19	337092	3	18	75	1757	1344	1758	11053486	10800000	11399999
20	934677	2	18	50	1019	1630	0	11993022	11400000	11999999

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

Type 5 Radar Waveform_11

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	669089	3	18	70	1801	1938	1674	669089	0	705881
2	449976	3	18	70	1093	1944	1820	1124478	705882	1411763
3	795645	3	18	85	1809	1539	1873	1924980	1411764	2117645
4	821785	1	18	65	1947	0	0	2751986	2117646	2823527
5	423433	3	18	75	1655	1457	1492	3177366	2823528	3529409
6	629159	3	18	50	1672	1710	1140	3811129	3529410	4235291
7	918847	2	18	70	1278	1965	0	4734498	4235292	4941173
8	780524	3	18	55	1811	1168	1080	5518265	4941174	5647055
9	202606	3	18	60	1196	1918	1418	5724930	5647056	6352937
10	996244	3	18	95	1922	1523	1826	6725706	6352938	7058819
11	597740	3	18	85	1681	1158	1992	7328717	7058820	7764701
12	863270	2	18	60	1766	1438	0	8196818	7764702	8470583
13	522855	3	18	60	1251	1272	1605	8722877	8470584	9176465
14	592684	1	18	80	1440	0	0	9319689	9176466	9882347
15	1182418	1	18	75	1654	0	0	10503547	9882348	10588229
16	140172	1	18	100	1956	0	0	10645373	10588230	11294111
17	824179	2	18	65	1054	1523	0	11471508	11294112	11999993

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

Type 5 Radar Waveform_12

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	454072	3	14	55	1033	1131	1097	454072	0	749999
2	757633	1	14	55	1414	0	0	1214966	750000	1499999
3	927301	1	14	75	1987	0	0	2143681	1500000	2249999
4	606254	3	14	80	1890	1484	1464	2751922	2250000	2999999
5	890850	1	14	55	1468	0	0	3647610	3000000	3749999
6	784556	1	14	75	1551	0	0	4433634	3750000	4499999
7	454856	3	14	95	1342	1721	1416	4890041	4500000	5249999
8	603213	2	14	85	1587	1878	0	5497733	5250000	5999999
9	862375	2	14	65	1080	1341	0	6363573	6000000	6749999
10	518388	1	14	65	1543	0	0	6884382	6750000	7499999
11	830517	3	14	50	1210	1883	1128	7716442	7500000	8249999
12	1172189	1	14	90	1551	0	0	8892852	8250000	8999999
13	610172	1	14	55	1105	0	0	9504575	9000000	9749999
14	487917	1	14	85	1790	0	0	9993597	9750000	10499999
15	573442	3	14	75	1520	1028	1339	10568829	10500000	11249999
16	854400	1	14	60	1026	0	0	11427116	11250000	11999999

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

Type 5 Radar Waveform_13

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	32030	3	19	100	1504	1964	1810	32030	0	923076
2	1076265	3	19	80	1250	1508	1141	1113573	923077	1846153
3	1179182	2	19	60	1198	1956	0	2296654	1846154	2769230
4	895463	2	19	55	1878	1002	0	3195271	2769231	3692307
5	617419	1	19	95	1126	0	0	3815570	3692308	4615384
6	982617	3	19	95	1548	1895	1647	4799313	4615385	5538461
7	1239105	2	19	55	1646	1357	0	6043508	5538462	6461538
8	839687	3	19	60	1946	1348	1287	6886198	6461539	7384615
9	1302451	2	19	95	1364	1673	0	8193230	7384616	8307692
10	586505	1	19	75	1071	0	0	8782772	8307693	9230769
11	1287479	2	19	55	1472	1641	0	10071322	9230770	10153846
12	320041	3	19	90	1575	1396	1832	10394476	10153847	11076923
13	1382160	2	19	55	1466	1622	0	11781439	11076924	12000000

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

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	254600	3	10	85	1723	1764	1162	254600	0	749999
2	1009344	3	10	80	1401	1137	1638	1268593	750000	1499999
3	881705	3	10	90	1270	1648	1809	2154474	1500000	2249999
4	770970	3	10	85	1297	1811	1903	2930171	2250000	2999999
5	262805	2	10	100	1199	1324	0	3197987	3000000	3749999
6	873485	2	10	95	1064	1394	0	4073995	3750000	4499999
7	993765	3	10	95	1192	1341	1976	5070218	4500000	5249999
8	813378	2	10	55	1550	1294	0	5888105	5250000	5999999
9	343700	2	10	65	1194	1229	0	6234649	6000000	6749999
10	821891	3	10	85	1056	1121	1082	7058963	6750000	7499999
11	955717	3	10	75	1444	1267	1787	8017939	7500000	8249999
12	665211	1	10	65	1019	0	0	8687648	8250000	8999999
13	990369	1	10	95	1670	0	0	9679036	9000000	9749999
14	244342	2	10	85	1129	1403	0	9925048	9750000	10499999
15	602450	2	10	70	1327	1451	0	10530030	10500000	11249999
16	1275044	2	10	95	1345	1285	0	11807852	11250000	11999999

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

Type 5 Radar Waveform_15

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	768227	1	8	55	1840	0	0	768227	0	1499999
2	2166861	3	8	95	1976	1006	1498	2936928	1500000	2999999
3	1014397	3	8	80	1362	1057	1777	3955805	3000000	4499999
4	644361	3	8	95	1343	1735	1199	4604362	4500000	5999999
5	2480829	1	8	70	1665	0	0	7089468	6000000	7499999
6	1187787	3	8	100	1167	1871	1713	8278920	7500000	8999999
7	773271	2	8	75	1782	1321	0	9056942	9000000	10499999
8	2563416	3	8	50	1437	1467	1644	11623461	10500000	11999999

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

Type 5 Radar Waveform_16

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	126674	3	9	80	1119	1618	1097	126674	0	749999
2	1109570	1	9	85	1963	0	0	1240078	750000	1499999
3	979135	2	9	50	1975	1815	0	2221176	1500000	2249999
4	634301	3	9	75	1502	1437	1866	2859267	2250000	2999999
5	301572	2	9	90	1222	1099	0	3165644	3000000	3749999
6	1311260	1	9	75	1983	0	0	4479225	3750000	4499999
7	462201	3	9	85	1112	1471	1289	4943409	4500000	5249999
8	406266	1	9	90	1611	0	0	5353547	5250000	5999999
9	758223	1	9	95	1280	0	0	6113381	6000000	6749999
10	1172979	2	9	75	1680	1287	0	7287640	6750000	7499999
11	569980	2	9	75	1320	1346	0	7860587	7500000	8249999
12	1053864	2	9	60	1409	1290	0	8917117	8250000	8999999
13	478729	1	9	90	1974	0	0	9398545	9000000	9749999
14	878990	1	9	85	1955	0	0	10279509	9750000	10499999
15	831088	3	9	100	1433	1642	1567	11112552	10500000	11249999
16	295001	3	9	80	1885	1405	1993	11412195	11250000	11999999

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

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	301604	3	6	95	1750	1444	1469	301604	0	599999
2	426599	3	6	50	1426	1628	1584	732866	600000	1199999
3	560284	1	6	80	1968	0	0	1297788	1200000	1799999
4	768988	1	6	70	1416	0	0	2068744	1800000	2399999
5	632019	2	6	80	1003	1808	0	2702179	2400000	2999999
6	591803	2	6	85	1005	1201	0	3296793	3000000	3599999
7	841607	3	6	55	1949	1774	1949	4140606	3600000	4199999
8	163468	1	6	65	1707	0	0	4309746	4200000	4799999
9	900908	3	6	80	1141	1408	1159	5212361	4800000	5399999
10	660876	2	6	60	1621	1634	0	5876945	5400000	5999999
11	339224	3	6	70	1655	1988	1250	6219424	6000000	6599999
12	653525	1	6	60	1295	0	0	6877842	6600000	7199999
13	379247	3	6	80	1388	1502	1314	7258384	7200000	7799999
14	855035	1	6	60	1792	0	0	8117623	7800000	8399999
15	580394	2	6	60	1578	1477	0	8699809	8400000	8999999
16	380230	3	6	95	1613	1040	1688	9083094	9000000	9599999
17	581764	1	6	85	1124	0	0	9669199	9600000	10199999
18	893333	1	6	95	1430	0	0	10563656	10200000	10799999
19	346778	3	6	80	1290	1490	1078	10911864	10800000	11399999
20	801066	3	6	95	1175	1318	1456	11716788	11400000	11999999

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

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	489408	2	5	60	1965	1831	0	489408	0	631578
2	458600	2	5	65	1106	1476	0	951804	631579	1263157
3	912049	3	5	50	1222	1546	1918	1866435	1263158	1894736
4	93331	3	5	75	1307	1790	1245	1964452	1894737	2526315
5	987752	1	5	65	1589	0	0	2956546	2526316	3157894
6	297195	1	5	55	1718	0	0	3255330	3157895	3789473
7	1087885	1	5	80	1591	0	0	4344933	3789474	4421052
8	213842	1	5	95	1870	0	0	4560366	4421053	5052631
9	985100	3	5	55	1022	1369	1399	5547336	5052632	5684210
10	558805	1	5	60	1331	0	0	6109931	5684211	6315789
11	721001	3	5	75	1714	1497	1159	6832263	6315790	6947368
12	469324	3	5	50	1454	1991	1596	7305957	6947369	7578947
13	320897	3	5	70	1401	1590	1790	7631895	7578948	8210526
14	742958	3	5	50	1192	1016	1671	8379634	8210527	8842105
15	1001509	3	5	70	1630	1769	1036	9385022	8842106	9473684
16	337461	2	5	95	1618	1570	0	9726918	9473685	10105263
17	481008	1	5	80	1145	0	0	10211114	10105264	10736842
18	1045824	2	5	80	1744	1236	0	11258083	10736843	11368421
19	478232	1	5	70	1346	0	0	11739295	11368422	12000000

Total number of pulses in waveform = 39
****

Type 5 Radar Waveform_19

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	133989	1	12	85	1043	0	0	133989	0	749999
2	776976	1	12	95	1619	0	0	912008	750000	1499999
3	646806	1	12	75	1422	0	0	1560433	1500000	2249999
4	846133	2	12	55	1613	1337	0	2407988	2250000	2999999
5	881946	2	12	95	1731	1527	0	3292884	3000000	3749999
6	786315	2	12	85	1448	1004	0	4082457	3750000	4499999
7	492384	3	12	50	1299	1442	1540	4577293	4500000	5249999
8	1330071	2	12	65	1087	1920	0	5911645	5250000	5999999
9	312061	3	12	85	1310	1787	1562	6226713	6000000	6749999
10	1193768	3	12	60	1935	1395	1351	7425140	6750000	7499999
11	592963	2	12	100	1214	1302	0	8022784	7500000	8249999
12	319655	3	12	65	1138	1985	1170	8344955	8250000	8999999
13	804179	2	12	60	1334	1528	0	9153427	9000000	9749999
14	853719	3	12	100	1723	1746	1772	10010008	9750000	10499999
15	803223	3	12	75	1329	1363	1427	10818472	10500000	11249999
16	744275	3	12	90	1281	1553	1777	11566866	11250000	11999999

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

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	63277	1	17	90	1096	0	0	63277	0	999999
2	1665350	3	17	50	1511	1946	1543	1729723	1000000	1999999
3	1027760	1	17	50	1356	0	0	2762483	2000000	2999999
4	1189069	1	17	95	1685	0	0	3952908	3000000	3999999
5	916408	3	17	75	1017	1278	1678	4871001	4000000	4999999
6	1113062	1	17	60	1773	0	0	5988036	5000000	5999999
7	429163	2	17	90	1432	1991	0	6418972	6000000	6999999
8	1164572	3	17	85	1918	1768	1761	7586967	7000000	7999999
9	466369	2	17	75	1644	1514	0	8058783	8000000	8999999
10	1383208	1	17	100	1840	0	0	9445149	9000000	9999999
11	872478	2	17	60	1483	1515	0	10319467	10000000	10999999
12	1183823	1	17	100	1434	0	0	11506288	11000000	11999999

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

Type 5 Radar Waveform_21

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	470205	1	9	90	1492	0	0	470205	0	749999
2	741979	1	9	60	1132	0	0	1213676	750000	1499999
3	440003	3	9	90	1042	1375	1498	1654811	1500000	2249999
4	1291559	2	9	90	1117	1241	0	2950285	2250000	2999999
5	58151	3	9	75	1075	1884	1340	3010794	3000000	3749999
6	1466591	3	9	100	1286	1852	1695	4481684	3750000	4499999
7	261946	2	9	85	1760	1754	0	4748463	4500000	5249999
8	1057259	1	9	85	1230	0	0	5809236	5250000	5999999
9	218061	1	9	70	1785	0	0	6028527	6000000	6749999
10	1452937	1	9	95	1677	0	0	7483249	6750000	7499999
11	117615	3	9	75	1676	1661	1080	7602541	7500000	8249999
12	990944	3	9	85	1352	1610	1613	8597902	8250000	8999999
13	626311	3	9	85	1535	1203	1968	9228788	9000000	9749999
14	696805	2	9	50	1734	1162	0	9930299	9750000	10499999
15	1158445	2	9	50	1613	1064	0	11091640	10500000	11249999
16	775093	2	9	85	1642	1828	0	11869410	11250000	11999999

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

Type 5 Radar Waveform_22

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	261628	1	14	100	1373	0	0	261628	0	666666
2	1016327	3	14	55	1282	1096	1203	1279328	666667	1333333
3	641162	2	14	55	1004	1909	0	1924071	1333334	2000000
4	582388	1	14	85	1542	0	0	2509372	2000001	2666667
5	432269	1	14	80	1516	0	0	2943183	2666668	3333334
6	904115	3	14	100	1373	1152	1111	3848814	3333335	4000001
7	486261	3	14	80	1754	1855	1780	4338711	4000002	4666668
8	670627	1	14	90	1353	0	0	5014727	4666669	5333335
9	668516	3	14	85	1717	1922	1468	5684596	5333336	6000002
10	930352	3	14	95	1821	1285	1907	6620055	6000003	6666669
11	497318	2	14	100	1373	1796	0	7122386	6666670	7333336
12	848544	1	14	50	1390	0	0	7974099	7333337	8000003
13	277490	2	14	95	1507	1031	0	8252979	8000004	8666670
14	510576	3	14	55	1798	1505	1291	8766093	8666671	9333337
15	1218837	1	14	75	1440	0	0	9989524	9333338	10000004
16	282699	2	14	50	1526	1185	0	10273663	10000005	10666671
17	871471	1	14	60	1930	0	0	11147845	10666672	11333338
18	711102	3	14	65	1428	1132	1669	11860877	11333339	12000005

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

Type 5 Radar Waveform_23

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	596692	2	5	80	1752	1208	0	596692	0	749999
2	861200	3	5	80	1044	1809	1441	1460852	750000	1499999
3	111683	2	5	65	1348	1836	0	1576829	1500000	2249999
4	780797	1	5	75	1072	0	0	2360810	2250000	2999999
5	678269	1	5	90	1319	0	0	3040151	3000000	3749999
6	1452167	1	5	50	1733	0	0	4493637	3750000	4499999
7	130850	3	5	90	1645	1533	1445	4626220	4500000	5249999
8	1069882	1	5	80	1678	0	0	5700725	5250000	5999999
9	416135	1	5	90	1636	0	0	6118538	6000000	6749999
10	686956	2	5	55	1015	1737	0	6807130	6750000	7499999
11	1297930	3	5	90	1596	1768	1036	8107812	7500000	8249999
12	563560	3	5	75	1509	1130	1461	8675772	8250000	8999999
13	734656	3	5	80	1613	1422	1827	9414528	9000000	9749999
14	976149	1	5	80	1636	0	0	10395539	9750000	10499999
15	810355	1	5	50	1501	0	0	11207530	10500000	11249999
16	160278	2	5	80	1480	1640	0	11369309	11250000	11999999

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

Type 5 Radar Waveform_24

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	2807	1	6	65	1712	0	0	2807	0	1499999
2	2063275	3	6	90	1869	1746	1778	2067794	1500000	2999999
3	1193851	2	6	85	1892	1154	0	3267038	3000000	4499999
4	1524172	1	6	60	1867	0	0	4794256	4500000	5999999
5	1560172	2	6	100	1173	1482	0	6356295	6000000	7499999
6	1168992	1	6	55	1020	0	0	7527942	7500000	8999999
7	1869422	1	6	50	1994	0	0	9398384	9000000	10499999
8	1129687	3	6	80	1669	1599	1077	10530065	10500000	11999999

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

Type 5 Radar Waveform_25

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	41066	2	8	80	1842	1764	0	41066	0	1333332
2	1381936	1	8	95	1652	0	0	1426608	1333333	2666665
3	2018309	3	8	100	1913	1941	1148	3446569	2666666	3999998
4	592040	1	8	100	1840	0	0	4043611	3999999	5333331
5	1304322	1	8	95	1856	0	0	5349773	5333332	6666664
6	2614659	3	8	90	1234	1699	1644	7966288	6666665	7999997
7	456267	3	8	95	1969	1392	1432	8427132	7999998	9333330
8	1046769	3	8	85	1009	1759	1678	9478694	9333331	10666663
9	1295414	1	8	80	1095	0	0	10778554	10666664	11999996

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

Type 5 Radar Waveform_26

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	78737	1	12	55	1136	0	0	78737	0	666666
2	955527	3	12	55	1731	1022	1228	1035400	666667	1333333
3	831609	1	12	75	1761	0	0	1870990	1333334	2000000
4	305318	3	12	75	1317	1386	1523	2178069	2000001	2666667
5	670936	1	12	70	1208	0	0	2853231	2666668	3333334
6	1115979	3	12	55	1464	1368	1059	3970418	3333335	4000001
7	277797	3	12	85	1118	1558	1590	4252106	4000002	4666668
8	640024	2	12	100	1395	1652	0	4896396	4666669	5333335
9	820823	2	12	90	1836	1098	0	5720266	5333336	6000002
10	331399	2	12	100	1247	1877	0	6054599	6000003	6666669
11	797038	3	12	55	1772	1431	1911	6854761	6666670	7333336
12	839797	1	12	100	1421	0	0	7699672	7333337	8000003
13	841973	3	12	90	1038	1759	1288	8543066	8000004	8666670
14	535098	1	12	100	1306	0	0	9082249	8666671	9333337
15	798866	1	12	55	1118	0	0	9882421	9333338	10000004
16	626052	3	12	65	1083	1100	1024	10509591	10000005	10666671
17	313719	3	12	90	1349	1802	1737	10826517	10666672	11333338
18	889921	1	12	70	1019	0	0	11721326	11333339	12000005

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

Type 5 Radar Waveform_27

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	306832	1	17	55	1996	0	0	306832	0	857142
2	1277760	2	17	90	1437	1922	0	1586588	857143	1714285
3	218712	2	17	75	1040	1453	0	1808659	1714286	2571428
4	1407124	2	17	90	1872	1577	0	3218276	2571429	3428571
5	301275	1	17	50	1866	0	0	3523000	3428572	4285714
6	1111519	2	17	100	1744	1212	0	4636385	4285715	5142857
7	519088	2	17	80	1874	1646	0	5158429	5142858	6000000
8	1134259	3	17	100	1751	1965	1590	6296208	6000001	6857143
9	870593	3	17	60	1265	1707	1817	7172107	6857144	7714286
10	694743	2	17	80	1408	1524	0	7871639	7714287	8571429
11	1511739	1	17	100	1542	0	0	9386310	8571430	9428572
12	149922	3	17	60	1193	1271	1698	9537774	9428573	10285715
13	749774	2	17	65	1338	1180	0	10291710	10285716	11142858
14	1320413	3	17	70	1927	1560	1808	11614641	11142859	12000001

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

Type 5 Radar Waveform_28

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	1040717	3	19	60	1564	1910	1466	1040717	0	1090908
2	145456	1	19	85	1638	0	0	1191113	1090909	2181817
3	1923265	2	19	85	1150	1257	0	3116016	2181818	3272726
4	993318	1	19	75	1744	0	0	4111741	3272727	4363635
5	887703	3	19	75	1554	1485	1926	5001188	4363636	5454544
6	732001	2	19	90	1455	1754	0	5738154	5454545	6545453
7	849901	3	19	60	1356	1487	1128	6591264	6545454	7636362
8	1144848	3	19	55	1103	1562	1768	7740083	7636363	8727271
9	1546768	1	19	100	1654	0	0	9291284	8727272	9818180
10	1019116	1	19	80	1137	0	0	10312054	9818181	10909089
11	884743	3	19	50	1794	1786	1892	11197934	10909090	11999998

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

Type 5 Radar Waveform_29

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	280133	1	18	95	1199	0	0	280133	0	749999
2	534496	1	18	65	1257	0	0	815828	750000	1499999
3	685382	2	18	55	1440	1486	0	1502467	1500000	2249999
4	762867	3	18	100	1203	1422	1895	2268260	2250000	2999999
5	965831	1	18	100	1482	0	0	3238611	3000000	3749999
6	738649	3	18	70	1580	1300	1990	3978742	3750000	4499999
7	841559	2	18	90	1933	1664	0	4825171	4500000	5249999
8	558170	3	18	60	1583	1480	1562	5386938	5250000	5999999
9	1069114	1	18	50	1074	0	0	6460677	6000000	6749999
10	545745	3	18	85	1431	1076	1099	7007496	6750000	7499999
11	812945	1	18	85	1836	0	0	7824047	7500000	8249999
12	636469	3	18	95	1017	1450	1341	8462352	8250000	8999999
13	730626	1	18	90	1469	0	0	9196786	9000000	9749999
14	969623	3	18	90	1321	1842	1999	10167878	9750000	10499999
15	378191	1	18	85	1966	0	0	10551231	10500000	11249999
16	1062078	2	18	75	1183	1927	0	11615275	11250000	11999999

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

Type 5 Radar Waveform_30

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	230749	1	10	65	1947	0	0	230749	0	666666
2	569992	2	10	75	1315	1234	0	802688	666667	1333333
3	1129401	1	10	70	1214	0	0	1934638	1333334	2000000
4	301069	3	10	95	1338	1609	1558	2236921	2000001	2666667
5	443351	1	10	75	1159	0	0	2684777	2666668	3333334
6	794796	2	10	65	1799	1766	0	3480732	3333335	4000001
7	651908	3	10	55	1056	1839	1845	4136205	4000002	4666668
8	1040120	3	10	60	1580	1027	1309	5181065	4666669	5333335
9	249720	3	10	75	1272	1362	1630	5434701	5333336	6000002
10	578094	3	10	60	1737	1922	1907	6017059	6000003	6666669
11	1129038	2	10	90	1335	1230	0	7151663	6666670	7333336
12	753271	1	10	50	1696	0	0	7907499	7333337	8000003
13	457417	1	10	60	1828	0	0	8366612	8000004	8666670
14	538165	3	10	50	1884	1106	1541	8906605	8666671	9333337
15	518345	1	10	70	1052	0	0	9429481	9333338	10000004
16	987363	1	10	100	1718	0	0	10417896	10000005	10666671
17	493454	2	10	80	1608	1287	0	10913068	10666672	11333338
18	576025	2	10	60	1820	1805	0	11491988	11333339	12000005

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

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	5530	1
2	5491	1	17	5531	1
3	5500	1	18	5531	1
4	5500	1	19	5540	1
5	5509	1	20	5540	1
6	5509	1	21	5549	1
7	5510	1	22	5549	1
8	5510	1	23	5550	1
9	5511	1	24	5550	1
10	5511	1	25	5551	1
11	5520	1	26	5551	1
12	5520	1	27	5560	1
13	5529	1	28	5560	1
14	5529	1	29	5569	1
15	5530	1	30	5569	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5488	30	4	5468	12
14	5465	42	15	5516	45
19	5501	57	19	5488	57
23	5506	69	20	5465	60
31	5499	93	28	5470	84
39	5491	117	43	5494	129
52	5505	156	50	5518	150
58	5510	174	55	5475	165
64	5500	192	56	5520	168
74	5482	222	57	5482	171
81	5471	243	59	5493	177
88	5470	264	63	5478	189
94	5496	282	66	5508	198
--	--	--	74	5501	222
--	--	--	92	5517	276
--	--	--	98	5519	294

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5526	3	7	5481	21
30	5488	90	14	5495	42
40	5527	120	34	5510	102
51	5523	153	57	5484	171
86	5515	258	66	5503	198
87	5519	261	79	5529	237
90	5481	270	84	5519	252
93	5497	279	86	5525	258
95	5470	285	98	5489	294

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
12	5534	36	0	5520	0
13	5498	39	13	5498	39
26	5509	78	15	5484	45
31	5492	93	17	5526	51
37	5502	111	27	5536	81
48	5537	144	38	5504	114
50	5488	150	42	5489	126
53	5526	159	65	5486	195
54	5532	162	80	5487	240
58	5481	174	82	5483	246
72	5480	216	84	5517	252
73	5484	219	--	--	--
81	5535	243	--	--	--
89	5517	267	--	--	--
90	5485	270	--	--	--
92	5508	276	--	--	--
98	5519	294	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5490	63	13	5497	39
29	5520	87	18	5523	54
31	5517	93	37	5540	111
35	5489	105	47	5532	141
36	5504	108	65	5505	195
51	5529	153	71	5539	213
57	5485	171	72	5487	216
58	5503	174	73	5511	219
63	5487	189	78	5501	234
70	5526	210	80	5526	240
73	5533	219	84	5537	252
88	5506	264	87	5527	261
--	--	--	89	5488	267

--	--	--	90	5492	270
--	--	--	97	5524	291

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5533	0	11	5512	33
3	5517	9	27	5529	81
4	5518	12	41	5499	123
25	5516	75	44	5518	132
33	5507	99	46	5487	138
37	5521	111	49	5500	147
54	5505	162	50	5482	150
56	5526	168	55	5532	165
74	5494	222	58	5504	174
75	5498	225	63	5489	189
82	5488	246	73	5537	219
87	5525	261	78	5536	234
88	5502	264	79	5534	237
89	5520	267	80	5540	240

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5527	24	0	5516	0
11	5513	33	20	5541	60
12	5524	36	29	5545	87
14	5505	42	30	5539	90
19	5503	57	37	5500	111
25	5518	75	43	5534	129
27	5520	81	75	5536	225
29	5491	87	81	5512	243
36	5495	108	96	5531	288
46	5506	138	--	--	--
62	5512	186	--	--	--
76	5525	228	--	--	--
79	5548	237	--	--	--
87	5507	261	--	--	--
91	5537	273	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5540	27	6	5506	18
18	5505	54	8	5499	24
25	5532	75	9	5532	27
28	5558	84	16	5515	48
33	5557	99	23	5552	69
48	5542	144	24	5523	72
54	5519	162	62	5508	186
67	5550	201	67	5547	201
73	5507	219	88	5512	264
81	5559	243	89	5549	267
89	5533	267	93	5528	279
97	5530	291	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5515	9	14	5503	42
29	5506	87	20	5550	60
37	5519	111	21	5532	63
44	5549	132	25	5520	75
59	5544	177	26	5535	78
68	5547	204	35	5509	105
72	5524	216	41	5551	123
88	5559	264	42	5526	126
97	5553	291	62	5555	186
--	--	--	70	5559	210
--	--	--	84	5512	252
--	--	--	86	5506	258
--	--	--	94	5501	282
--	--	--	98	5543	294

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5528	3	1	5534	3
6	5504	18	3	5557	9
19	5549	57	9	5511	27
28	5556	84	22	5552	66
30	5506	90	23	5510	69
32	5541	96	34	5526	102
35	5510	105	36	5517	108
53	5508	159	40	5554	120
60	5519	180	41	5524	123
65	5526	195	43	5523	129
71	5516	213	45	5551	135
73	5551	219	64	5522	192
88	5530	264	71	5503	213
--	--	--	79	5521	237
--	--	--	82	5558	246
--	--	--	88	5520	264
--	--	--	91	5512	273

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5534	6	0	5541	0
3	5524	9	4	5543	12
8	5533	24	19	5534	57
26	5559	78	32	5525	96
32	5555	96	35	5560	105
36	5552	108	44	5556	132
38	5565	114	51	5520	153
41	5516	123	74	5530	222
43	5543	129	76	5532	228
46	5538	138	80	5540	240
54	5518	162	84	5564	252
68	5528	204	90	5562	270
70	5510	210	93	5558	279

71	5529	213	--	--	--
73	5557	219	--	--	--
76	5560	228	--	--	--
92	5546	276	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5572	0	6	5550	18
5	5525	15	23	5562	69
17	5537	51	25	5563	75
20	5521	60	28	5570	84
28	5541	84	37	5535	111
39	5560	117	39	5579	117
49	5546	147	41	5576	123
50	5531	150	49	5525	147
54	5571	162	54	5540	162
58	5564	174	56	5521	168
65	5578	195	79	5552	237
77	5579	231	89	5564	267
84	5568	252	--	--	--
85	5529	255	--	--	--
86	5577	258	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5571	15	1	5571	3
7	5578	21	6	5522	18
12	5562	36	13	5524	39
21	5560	63	14	5580	42
22	5556	66	17	5553	51
25	5531	75	19	5551	57
26	5533	78	27	5573	81
31	5561	93	33	5541	99
37	5545	111	37	5556	111
39	5554	117	45	5529	135
43	5576	129	50	5557	150
71	5575	213	64	5550	192
75	5552	225	69	5568	207
92	5569	276	--	--	--
93	5521	279	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5572	21	0	5532	0
8	5546	24	9	5565	27
11	5530	33	16	5542	48
26	5568	78	33	5569	99
40	5553	120	47	5537	141
49	5548	147	78	5552	234
58	5543	174	88	5573	264
59	5527	177	89	5531	267
64	5523	192	--	--	--
68	5575	204	--	--	--
70	5578	210	--	--	--
81	5576	243	--	--	--
95	5539	285	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5533	15	17	5531	51
13	5557	39	18	5548	54
17	5539	51	21	5576	63
24	5532	72	31	5583	93
28	5586	84	32	5582	96
32	5530	96	43	5549	129
65	5585	195	51	5547	153
72	5562	216	63	5543	189
74	5540	222	67	5561	201
87	5555	261	76	5532	228
89	5589	267	91	5533	273
92	5542	276	--	--	--
94	5560	282	--	--	--
95	5564	285	--	--	--
96	5567	288	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5581	9	5	5540	15
9	5545	27	6	5575	18
16	5557	48	8	5576	24
20	5583	60	12	5565	36
25	5594	75	13	5543	39
27	5565	81	14	5578	42
42	5587	126	24	5583	72
43	5575	129	26	5586	78
48	5579	144	34	5559	102
52	5591	156	35	5563	105
60	5559	180	42	5584	126
68	5593	204	48	5568	144
77	5561	231	58	5566	174
88	5585	264	61	5544	183
90	5584	270	71	5549	213
97	5566	291	78	5590	234
--	--	--	84	5552	252
--	--	--	87	5550	261

6. CONCLUSION

The data collected relate only the item(s) tested and show that the **WiFi Concurrent 4 Port GE LAN**

VoIP Ethernet Gateway with USB, FCC ID: 2ABLK-844E-2 is in compliance with FCC Rules &

ISED Rules.

The End

Appendix A – Test Setup Photograph

Refer to "1808RSU024-UT" file.

Appendix B – EUT Photograph

Refer to "1808RSU024-UE" file.