DFS MEASUREMENT REPORT

FCC PART 15.407 Section (h)(2)

FCC ID:	2AD6M-X30
APPLICANT:	P2 Mobile Technologies Limited
Application Type:	Certification
Product:	X33 Tri-5GHz MeshRanger, X32 Dual 5GHz MeshRanger, X32e Dual 5GHz MeshRanger
Model No.:	X33, X32, X32e
Brand Name:	P2 Wireless
FCC Classification:	Unlicensed National Information Infrastructure (UNII)
FCC Rule Part(s):	Part 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:	March 04 ~ April 20, 2017

Reviewed By : Robin Wu
(Robin Wu)

Approved By : Marlin Chen
(Marlin Chen)

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

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.

Revision History

Report No.	Version	Description	Issue Date	Note
1612RSU01207	Rev. 01	Initial Report	05-10-2017	Valid

CONTENTS

§2.1033 General Information

Applicant:	P2 Mobile Technologies Limited
Applicant Address:	Unit 708, 7/F, Bio-Informatics Centre, No. 2 Science Park West Avenue, Hong Kong Science Park, Shatin, New Territories, Hong Kong
Manufacturer:	P2 Mobile Technologies Limited
Manufacturer Address:	Unit 708, 7/F, Bio-Informatics Centre, No. 2 Science Park West Avenue, Hong Kong Science Park, Shatin, New Territories, Hong Kong
Test Site:	MRT Technology (Suzhou) Co., Ltd
Test Site Address:	D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China
MRT FCC Registration No.:	809388
FCC Rule Part(s):	Part 15.247
FCC ID:	2AD6M-X30
Test Device Serial No.:	N/A ☐ Production ☒ Pre-Production ☐ Engineering
FCC Classification:	Unlicensed National Information Infrastructure (UNII)

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. 809388) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules.**
- **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-4179, G-814, C-4664, T-2206) 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 and Radio testing for FCC, Industry Canada, EU and TELEC Rules.**

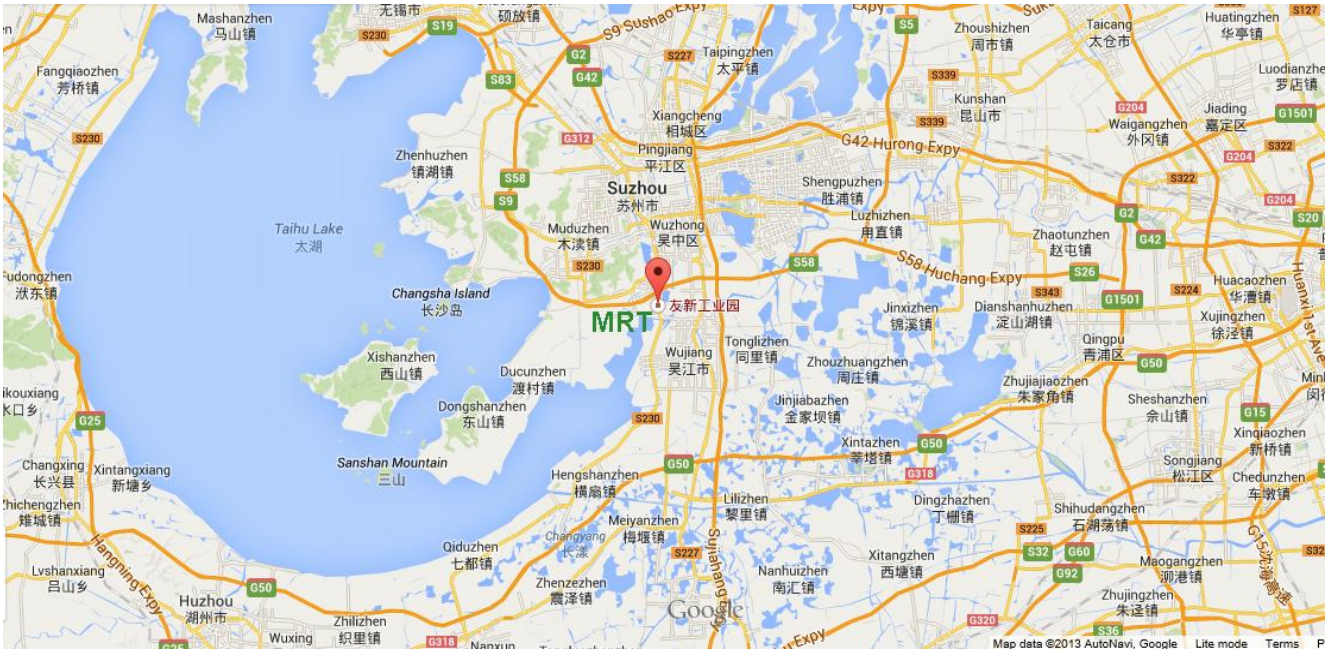
1. INTRODUCTION

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, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2009 on September 30, 2013.



2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	X33 Tri-5GHz MeshRanger, X32 Dual 5GHz MeshRanger, X32e Dual 5GHz MeshRanger
Model No.	X33, X32, X32e
Operation Mode	Master Device
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: 5180~5320MHz, 5500~5700MHz, 5745~5825MHz For 802.11ac-VHT20: 5180~5320MHz, 5500~5720MHz, 5745~5825MHz For 802.11n-HT40: 5190~5310MHz, 5510~5670MHz, 5755~5795MHz For 802.11ac-VHT40: 5190~5310MHz, 5510~5710MHz, 5755~5795MHz For 802.11ac-VHT80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5690MHz, 5775MHz For 802.11ac-VHT80+80: 5210 MHz + 5290 MHz, 5210 MHz + 5530 MHz, 5210 MHz + 5610 MHz, 5210 MHz + 5690 MHz, 5210 MHz + 5775 MHz, 5290 MHz + 5530 MHz, 5290 MHz + 5610 MHz, 5290 MHz + 5690 MHz, 5290 MHz + 5775 MHz, 5530 MHz + 5610 MHz, 5530 MHz + 5690 MHz, 5530 MHz + 5775 MHz, 5610 MHz + 5690 MHz, 5610 MHz + 5775 MHz, 5690 MHz + 5775 MHz For 802.11ac-VHT160: 5250MHz, 5570MHz
Type of Modulation	802.11a/n/ac: OFDM
Power-on cycle	Requires 144.5 seconds to complete its power-on cycle for radio A Requires 144.6 seconds to complete its power-on cycle for radio B Requires 144.9 seconds to complete its power-on cycle for radio C
Uniform Spreading	For the 5250-5350MHz, 5470-5725 MHz bands, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a random algorithm.

2.2. Description of Available Antennas

Antenna Type	Frequency Band (MHz)	Tx Paths	Per Chain Max Antenna Gain (dBi)		Directional Gain (dBi)
			Ant 0	Ant 1	
The Antenna of Radio A					
Panel Antenna	5150 ~ 5250	2	22.20	22.20	25.21
	5250 ~ 5350	2	22.20	22.20	25.21
	5470 ~ 5725	2	22.20	22.20	25.21
	5725 ~ 5850	2	21.80	21.80	24.81
The Antenna of Radio B					
Panel Antenna	5150 ~ 5250	2	20.00	20.00	23.01
	5250 ~ 5350	2	20.00	20.00	23.01
	5470 ~ 5725	2	20.00	20.00	23.01
	5725 ~ 5850	2	20.00	20.00	23.01
The Antenna of Radio C					
Dipole Antenna	2412 ~ 2462	2	4.50	4.50	7.51
	5150 ~ 5250	2	7.00	7.00	10.01
	5250 ~ 5350	2	7.00	7.00	10.01
	5470 ~ 5725	2	7.00	7.00	10.01
	5725 ~ 5850	2	7.00	7.00	10.01

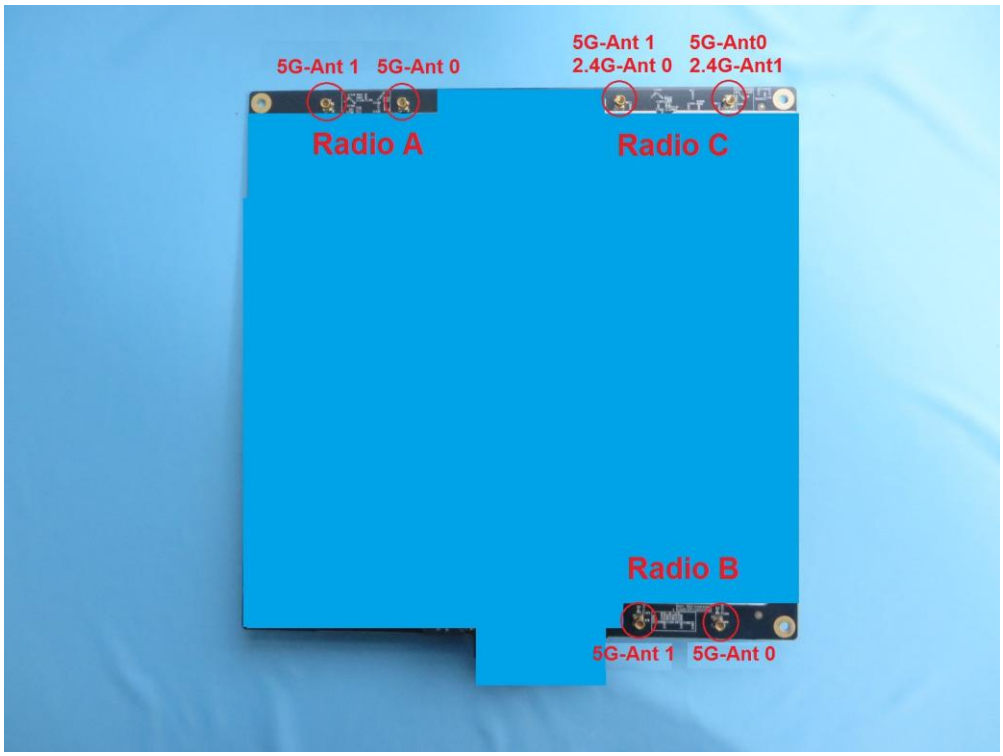
1. The EUT supports Cyclic Delay Diversity (CDD) technology at 802.11a mode, and that CDD signal is correlated.
   For CDD transmissions, directional gain is calculated as follows, NANT = 2, NSS = 1.
   Three antennas have the same gain, GANT, Directional gain = GANT + Array Gain, where Array Gain is as follows.
   - For power spectral density (PSD) measurements on all devices,
     Array Gain = 10 log (N_{ANT}/ N_{SS}) dB = 3.01;
   - For power measurements on IEEE 802.11 devices,
     Array Gain = 0 dB for $N_{ANT} \leq 4$;
2. The EUT supports Beam Forming technology at 802.11n/ac mode, and that Beam Forming signal is correlated.
   Correlated signals include, but are not limited to, signals transmitted in any of the following modes:
   - 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 = $10*\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/N_{ANT}]$ 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.]

For example: 5150 ~ 5250MHz Directional Gain = $10*\log[(10^{22.20/20} + 10^{22.20/20})^2/2] = 25.21$dBi

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 Working Frequencies

802.11a/n-HT20 Center Working Frequency of Each Channel

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 MH z
132	5660 MHz	136	5680 MHz	140	5700 MHz

802.11ac-VHT20 Center Working Frequency of Each Channel

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 Center Working Frequency of Each Channel

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	--	--	--	--

802.11ac-VHT40 Center Working Frequency of Each Channel

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	5710MHz	--	--

802.11ac-VHT80 Center Working Frequency of Each Channel

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

802.11ac-VHT80+80 Center Working Frequency of Each Channel

Channel	Frequency	Channel	Frequency
58 + 106	5290 MHz + 5530 MHz	58 + 122	5290 MHz + 5610 MHz
58 + 138	5290 MHz + 5690 MHz	58 + 155	5290 MHz + 5775 MHz
106 + 122	5530 MHz + 5610 MHz	106 + 138	5530 MHz + 5690 MHz
106 + 155	5530 MHz + 5775 MHz	122 + 138	5610 MHz + 5690 MHz
122 + 155	5610 MHz + 5775 MHz	138+ 155	5690 MHz + 5775 MHz
138+ 155	5690 MHz + 5775 MHz	--	--

802.11ac-VHT160 Center Working Frequency of Each Channel

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

2.5. Test Mode

Test Mode	Mode 1: Make the EUT communicate with PC at DFS channel

3. DFS DETECTION THRESHOLDS AND RADAR TEST WAVEFORMS

3.1. Applicability

The following table from FCC KDB 905462 D02 UNII 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 UNII 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	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{\text{PRI}_{\text{usec}}}\right)\right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Table 3-5: Parameters for Short Pulse Radar Waveforms

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

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

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

Long Pulse Radar Test Waveform

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

Table 3-7: Parameters for Long Pulse Radar Waveforms

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

Frequency Hopping Radar Test Waveform

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

Table 3-8: Parameters for Frequency Hopping Radar Waveforms

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

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

3.5. Conducted Test Setup

The FCC KDB 905462 D02 UNII 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.

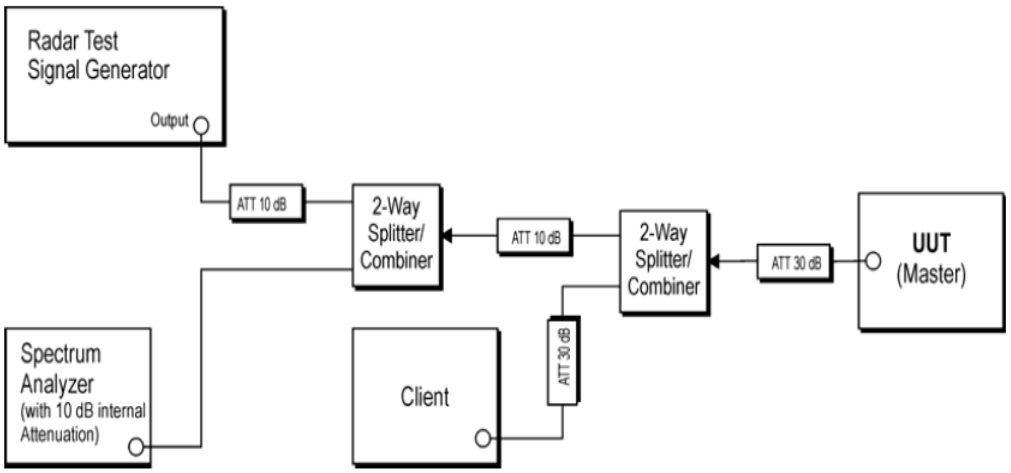


Figure 3-1: Conducted Test Setup where UUT is a Master and Radar Test Waveforms are injected into the Masters

4. TEST EQUIPMENT CALIBRATION DATE

Dynamic Frequency Selection (DFS) – TR3

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2018/05/08
ESG Vector Signal Generator	Agilent	E4438C	MRTSUE06026	1 year	2017/12/09
Temperature/Humidity Meter	Yuhuaze	HTC-2	MRTSUE06180	1 year	2017/11/20
Combiner	WOKEN	0120N02208001D	MRTSUE06200	1 year	N/A
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06023	1 year	2017/11/07

Client Information

Instrument	Manufacturer	Type No.
Wireless Network Adapter	Intel	7260HMW
WW WI-FI AP 4X4 OD ext. antenna	Nokia Solutions and Networks	WO4A-AC400

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

Company Name: **P2 Mobile Technologies Limited**

FCC ID: **2AD6M-X30**

FCC Classification: **Unlicensed National Information Infrastructure (UNII)**

Parameter	Limit	Test Result	Reference
UNII 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.

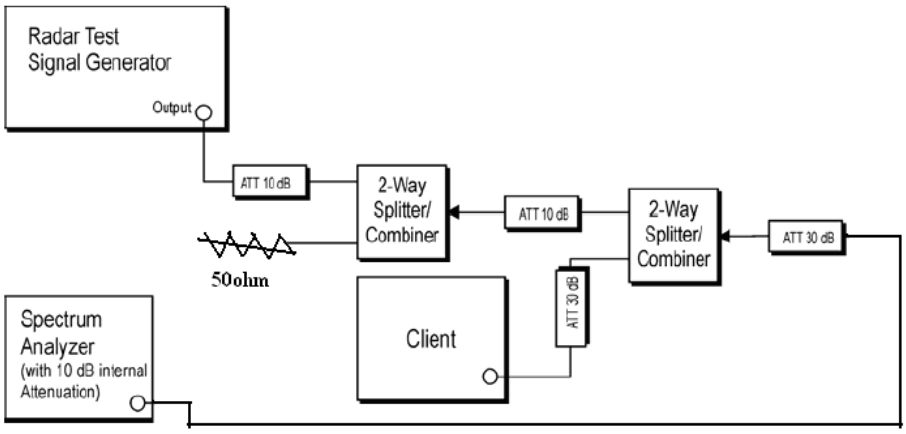


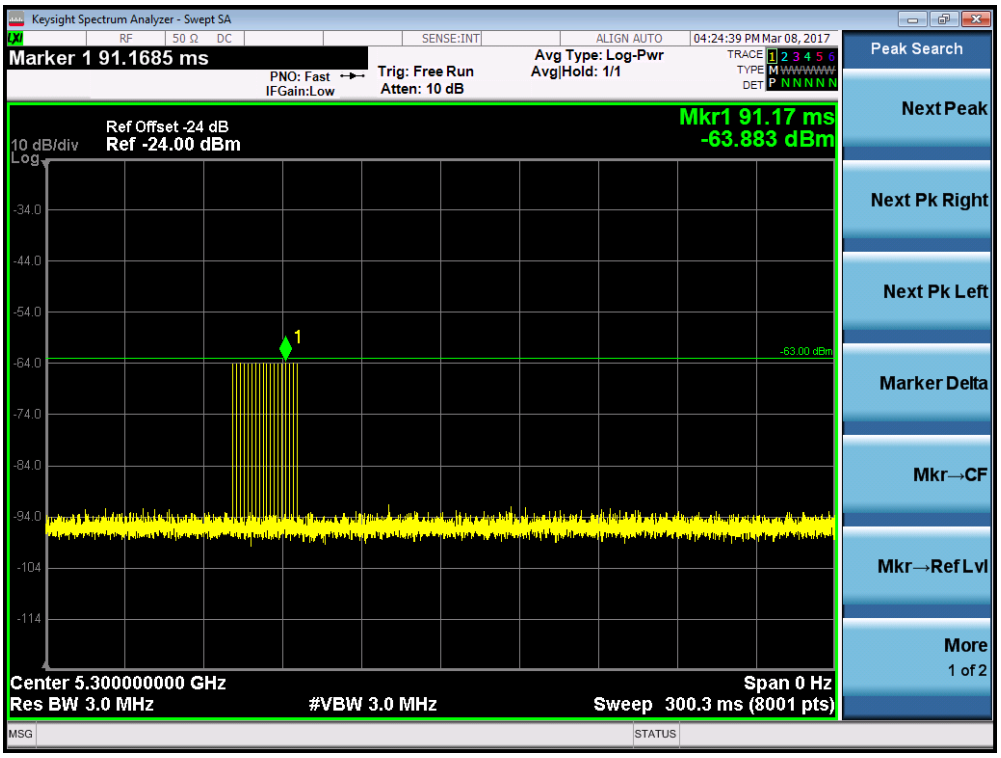
Figure 3-2: Conducted Test Setup

5.2.2. Calibration Procedure

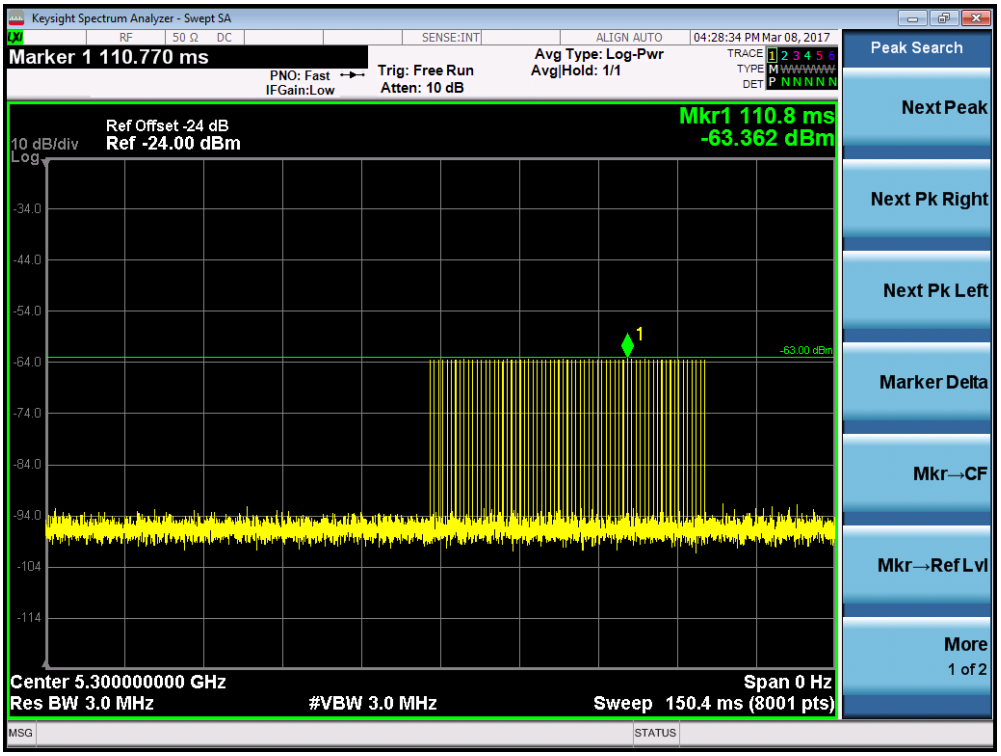
The Interference Radar Detection Threshold Level is (-64dBm) + (0) [dBi] + 1 dB= -63 dBm that had been taken into account the output power range and antenna gain. The above equipment setup was used to calibrate the conducted Radar Waveform. A vector signal generator was utilized to establish the test 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

Radar #0 DFS detection threshold level and the burst of pulses on the Channel frequency

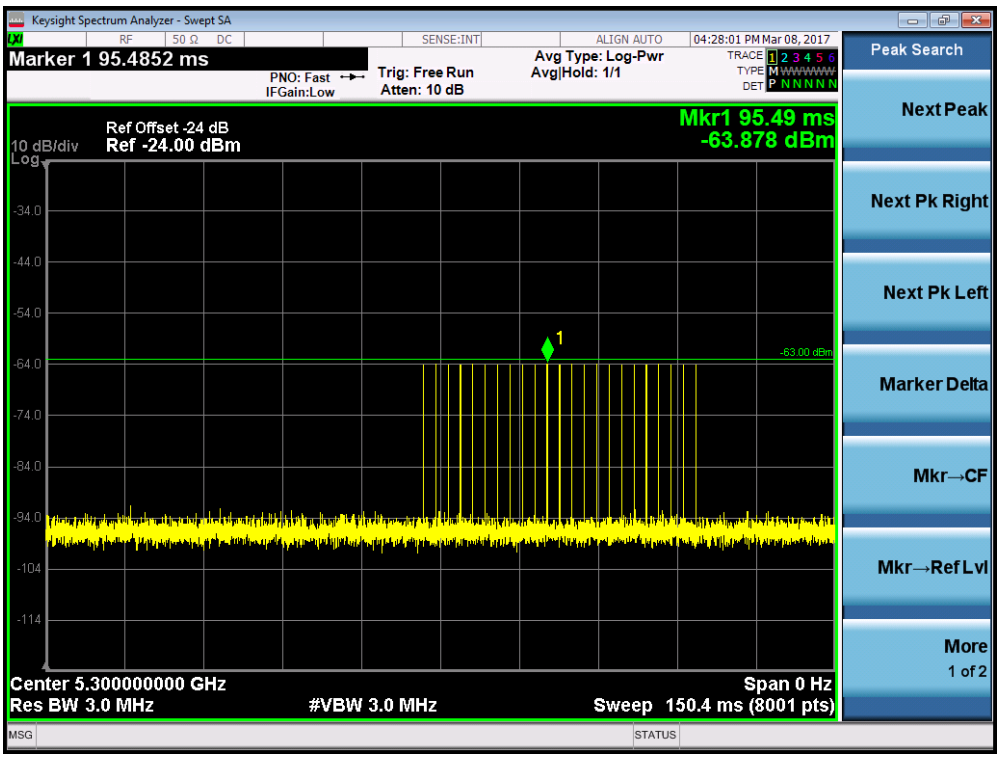


Radar #1(Test A) DFS detection threshold level and the burst of pulses on the Channel frequency



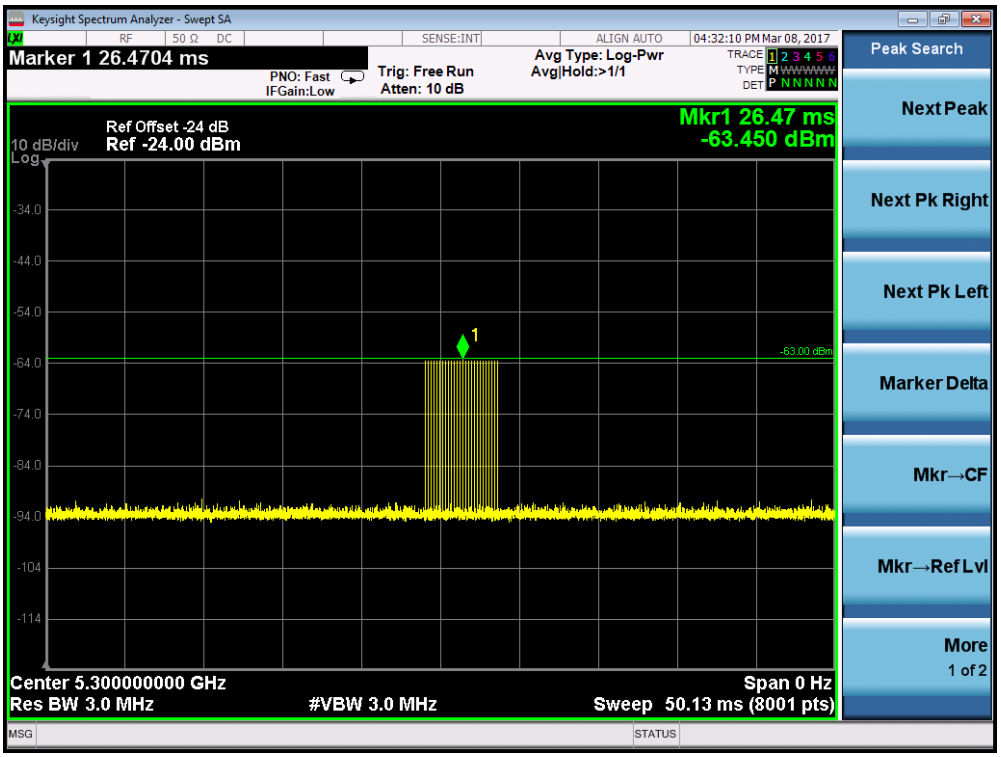
PRI = 818us and the number of pulses = 65

Radar #1(Test B) DFS detection threshold level and the burst of pulses on the Channel frequency

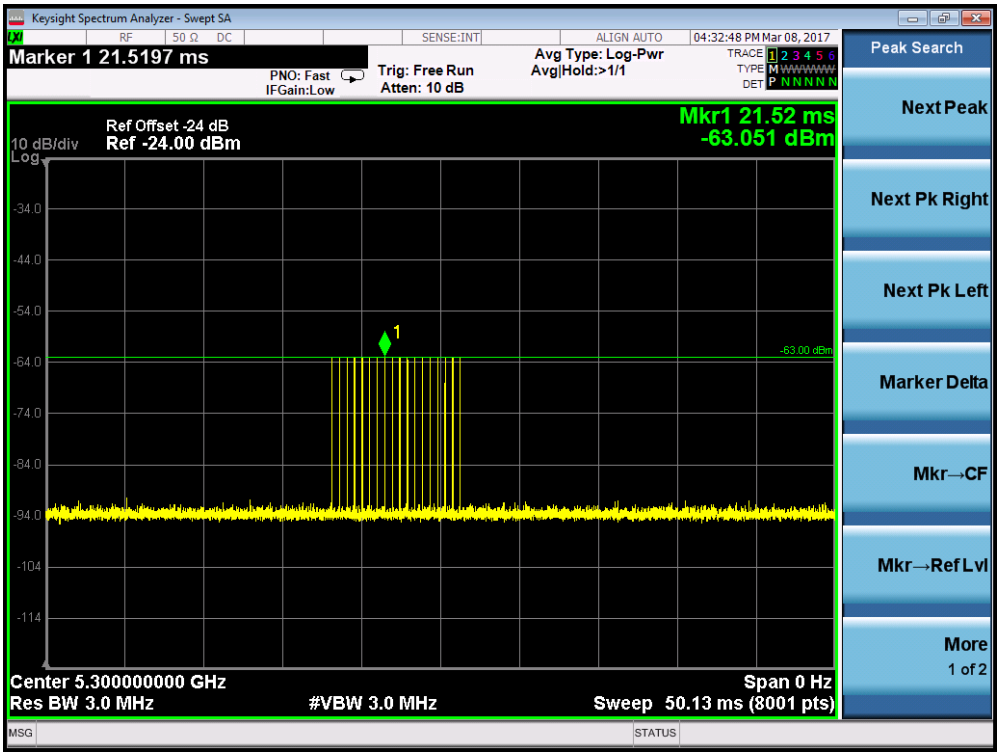


PRI = 2.371ms and the number of pulses = 28

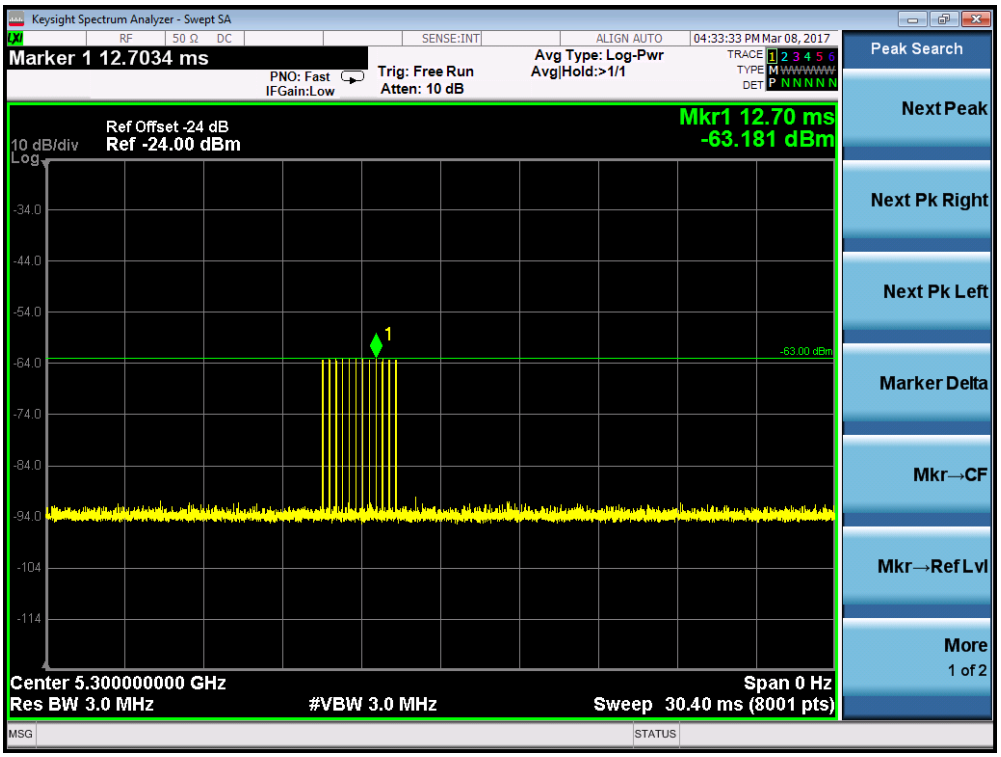
Radar #2 DFS detection threshold level and the burst of pulses on the Channel frequency



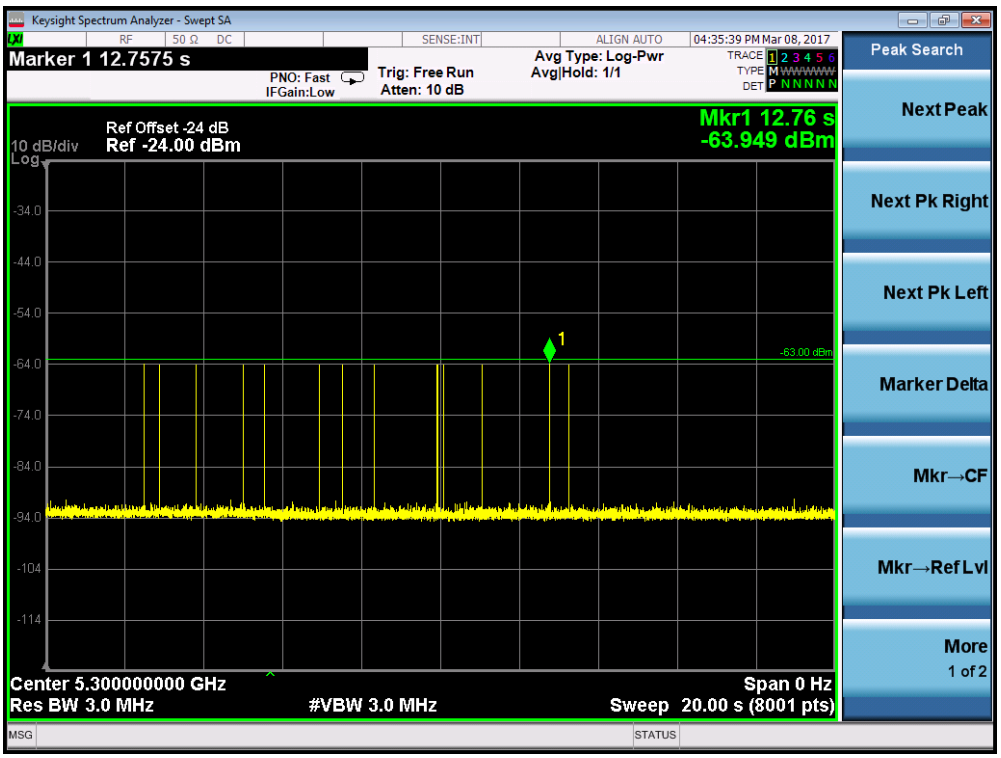
Radar #3 DFS detection threshold level and the burst of pulses on the Channel frequency



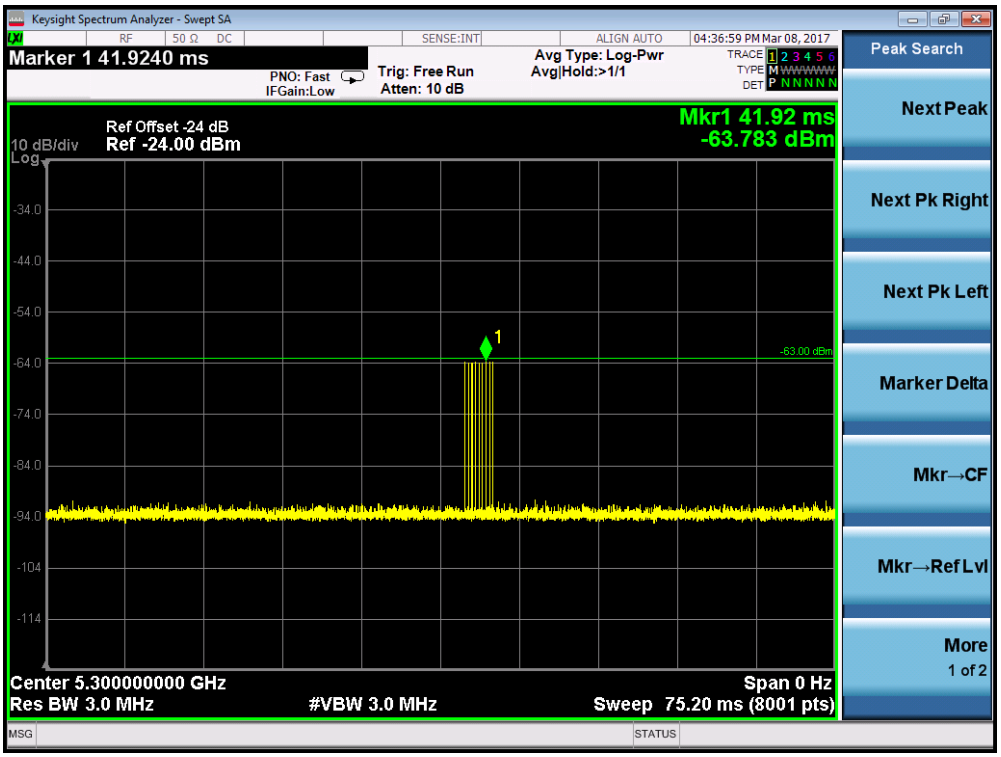
Radar #4 DFS detection threshold level and the burst of pulses on the Channel frequency



Radar #5 DFS detection threshold level and 12sec long burst on the Channel frequency

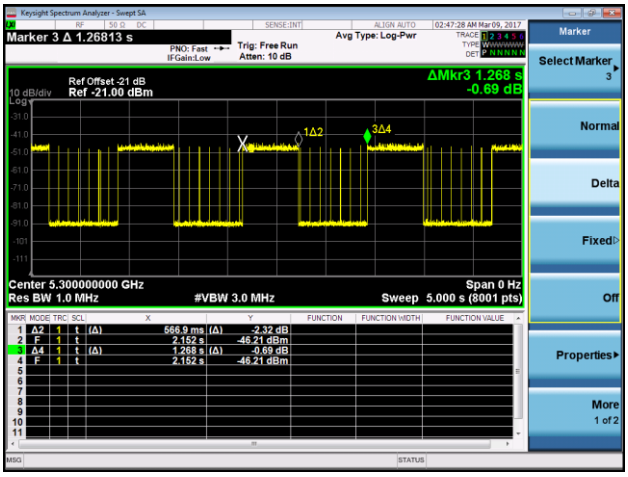
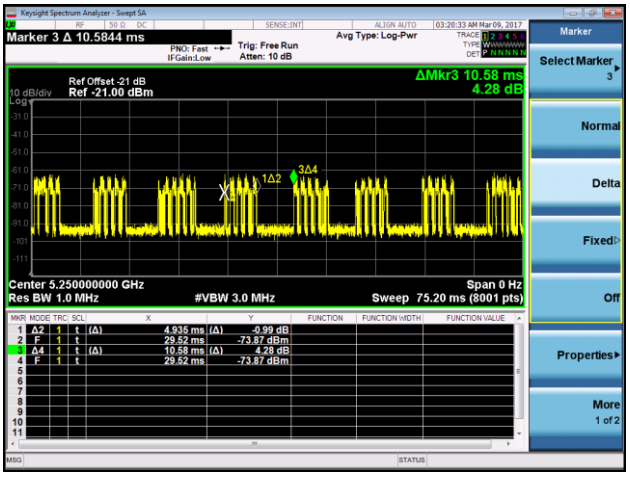
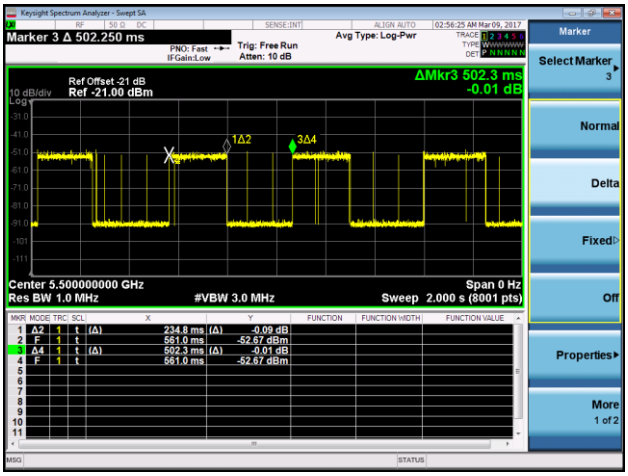
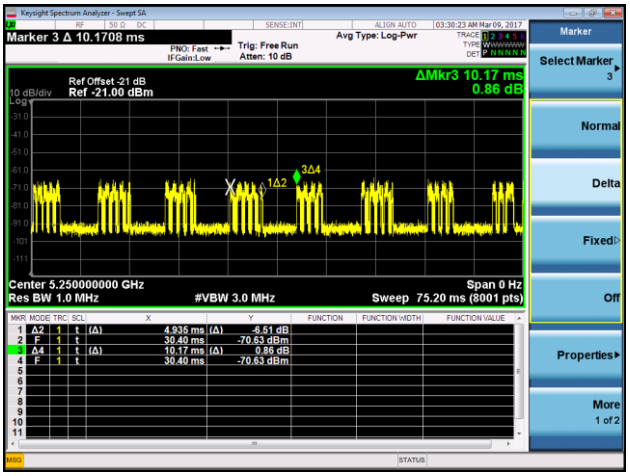


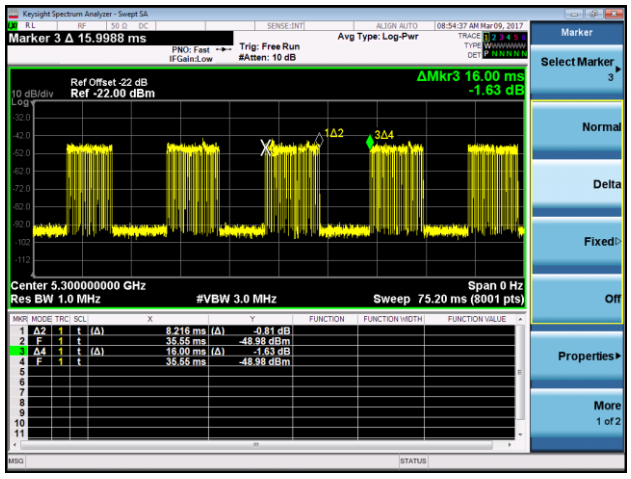
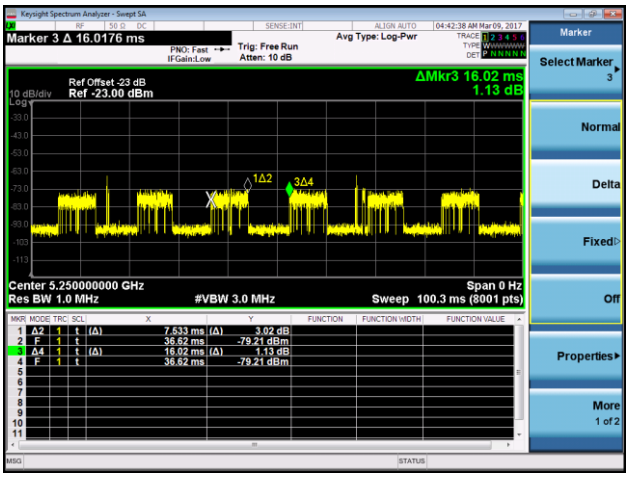
Radar #6 DFS detection threshold level and a single hop (9 pulses) on the Channel frequency within UNII detection bandwidth



5.3. Channel Loading Test Result

System testing was performed with the designated MPEG test file that streams full motion video from the device to the Client in full motion video mode using the media player with the V2.61 Codec package. 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).

<table>
<tr><th colspan="2">Channel Loading Plot for Radio A</th></tr>
<tr><th>802.11a-5300MHz</th><th>802.11ac-VHT160 5250MHz</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><th colspan="2">Channel Loading Plot for Radio B</th></tr>
<tr><th>802.11a-5300MHz</th><th>802.11ac-VHT160 5250MHz</th></tr>
<tr><td> 
</td><td> 
</td></tr>
</table>

Channel Loading Plot for Radio C	
802.11a-5300MHz	802.11ac-VHT160 5250MHz
	

Test Mode		Packet ratio	Requirement ratio	Test Result
Radio A	802.11a	44.71%	>17%	Pass
	802.11ac-VHT160MHz	46.64%	>17%	Pass
Radio B	802.11a	46.74%	>17%	Pass
	802.11ac-VHT160MHz	48.53%	>17%	Pass
Radio C	802.11a	51.35%	>17%	Pass
	802.11ac-VHT160MHz	47.02%	>17%	Pass

5.4. UNII Detection Bandwidth Measurement

5.4.1. Test Limit

Minimum 100% of the UNII 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.

5.4.2. 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.

5.4.3. Test Result

Radio A Test Result

EUT Frequency=5300MHz for 802.11a											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5290	0	0	0	0	0	0	0	0	0	0	0%
5291 FL	1	1	1	1	1	1	1	1	1	1	100%
5292	1	1	1	1	1	1	1	1	1	1	100%
5293	1	1	1	1	1	1	1	1	1	1	100%
5294	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5306	1	1	1	1	1	1	1	1	1	1	100%
5307	1	1	1	1	1	1	1	1	1	1	100%
5308	1	1	1	1	1	1	1	1	1	1	100%
5309 FH	1	1	1	1	1	1	1	1	1	1	100%
5310	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5309MHz - 5291MHz = 18MHz											
EUT 99% Bandwidth = 16.46MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 16.46MHz x 100% = 16.46MHz											
Test Result: Pass											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5300MHz. The 99% channel bandwidth is 16.46MHz.

EUT Frequency=5310MHz for 802.11n-HT40											
Radar Frequency	**DFS Detection Trials (1=Detection, 0= No Detection)**										
(MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5290	0	0	0	0	0	0	0	0	0	0	0%
5291 FL	1	1	1	1	1	1	1	1	1	1	100%
5292	1	1	1	1	1	1	1	1	1	1	100%
5293	1	1	1	1	1	1	1	1	1	1	100%
5294	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329 FH	1	1	1	1	1	1	1	1	1	1	100%
5330	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5329MHz - 5291MHz = 38MHz											
EUT 99% Bandwidth = 35.92MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 35.92MHz x 100% = 35.92MHz											
Test Result: Pass											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5310MHz. The 99% channel bandwidth is 35.92MHz.

EUT Frequency=5290MHz for 802.11ac-VHT160											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5250	0	0	0	0	0	0	0	0	0	0	0%
5251 FL	1	1	1	1	1	1	1	1	1	1	100%
5252	1	1	1	1	1	1	1	1	1	1	100%
5253	1	1	1	1	1	1	1	1	1	1	100%
5254	1	1	1	1	1	1	1	1	1	1	100%
5255	1	1	1	1	1	1	1	1	1	1	100%
5260	1	1	1	1	1	1	1	1	1	1	100%
5265	1	1	1	1	1	1	1	1	1	1	100%
5270	1	1	1	1	1	1	1	1	1	1	100%
5275	1	1	1	1	1	1	1	1	1	1	100%
5280	1	1	1	1	1	1	1	1	1	1	100%
5285	1	1	1	1	1	1	1	1	1	1	100%
5290	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329 FH	1	1	1	1	1	1	1	1	1	1	100%
5330	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5329MHz - 5251MHz = 78MHz											
EUT 99% Bandwidth = 75.62MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 75.62MHz x 100% = 75.62MHz											
Test Result: Pass											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5290MHz. The 99% channel bandwidth is 75.62MHz.

Radio B Test Result

EUT Frequency=5300MHz for 802.11a											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5290	0	0	0	0	0	0	0	0	0	0	0%
5291 FL	1	1	1	1	1	1	1	1	1	1	100%
5292	1	1	1	1	1	1	1	1	1	1	100%
5293	1	1	1	1	1	1	1	1	1	1	100%
5294	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5306	1	1	1	1	1	1	1	1	1	1	100%
5307	1	1	1	1	1	1	1	1	1	1	100%
5308	1	1	1	1	1	1	1	1	1	1	100%
5309 FH	1	1	1	1	1	1	1	1	1	1	100%
5310	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5309MHz - 5291MHz = 18MHz											
EUT 99% Bandwidth = 16.44MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 16.44MHz x 100% = 16.44MHz											
Test Result: Pass											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5300MHz. The 99% channel bandwidth is 16.44MHz.

EUT Frequency=5310MHz for 802.11n-HT40											
Radar Frequency	**DFS Detection Trials (1=Detection, 0= No Detection)**										
(MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5290	0	0	0	0	0	0	0	0	0	0	0%
5291 FL	1	1	1	1	1	1	1	1	1	1	100%
5292	1	1	1	1	1	1	1	1	1	1	100%
5293	1	1	1	1	1	1	1	1	1	1	100%
5294	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329 FH	1	1	1	1	1	1	1	1	1	1	100%
5330	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5329MHz - 5291MHz = 38MHz											
EUT 99% Bandwidth = 35.93MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 35.93MHz x 100% = 35.93MHz											
Test Result: Pass											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5310MHz. The 99% channel bandwidth is 35.93MHz.

EUT Frequency=5290MHz for 802.11ac-VHT160											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5250	0	0	0	0	0	0	0	0	0	0	0%
5251	1	1	1	1	1	1	1	1	1	1	100%
5252	1	1	1	1	1	1	1	1	1	1	100%
5253	1	1	1	1	1	1	1	1	1	1	100%
5254	1	1	1	1	1	1	1	1	1	1	100%
5255	1	1	1	1	1	1	1	1	1	1	100%
5260	1	1	1	1	1	1	1	1	1	1	100%
5265	1	1	1	1	1	1	1	1	1	1	100%
5270	1	1	1	1	1	1	1	1	1	1	100%
5275	1	1	1	1	1	1	1	1	1	1	100%
5280	1	1	1	1	1	1	1	1	1	1	100%
5285	1	1	1	1	1	1	1	1	1	1	100%
5290	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329 FH	1	1	1	1	1	1	1	1	1	1	100%
5330	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5329MHz - 5251MHz = 78MHz											
EUT 99% Bandwidth = 75.53MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 75.53MHz x 100% = 75.53MHz											
Test Result: Pass											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5290MHz. The 99% channel bandwidth is 75.53MHz.

Radio C Test Result

EUT Frequency=5300MHz for 802.11a											
Radar Frequency	**DFS Detection Trials (1=Detection, 0= No Detection)**										
(MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5290	0	0	0	0	0	0	0	0	0	0	0%
5291 FL	1	1	1	1	1	1	1	1	1	1	100%
5292	1	1	1	1	1	1	1	1	1	1	100%
5293	1	1	1	1	1	1	1	1	1	1	100%
5294	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5306	1	1	1	1	1	1	1	1	1	1	100%
5307	1	1	1	1	1	1	1	1	1	1	100%
5308	1	1	1	1	1	1	1	1	1	1	100%
5309 FH	1	1	1	1	1	1	1	1	1	1	100%
5310	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5309MHz - 5291MHz = 18MHz											
EUT 99% Bandwidth = 16.43MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 16.43MHz x 100% = 16.43MHz											
Test Result: Pass											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5300MHz. The 99% channel bandwidth is 16.43MHz.

EUT Frequency=5310MHz for 802.11n-HT40											
Radar Frequency	**DFS Detection Trials (1=Detection, 0= No Detection)**										
(MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5290	0	0	0	0	0	0	0	0	0	0	0%
5291 FL	1	1	1	1	1	1	1	1	1	1	100%
5292	1	1	1	1	1	1	1	1	1	1	100%
5293	1	1	1	1	1	1	1	1	1	1	100%
5294	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329 FH	1	1	1	1	1	1	1	1	1	1	100%
5330	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5329MHz - 5291MHz = 38MHz											
EUT 99% Bandwidth = 35.85MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 35.85MHz x 100% = 35.85MHz											
Test Result: Pass											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5310MHz. The 99% channel bandwidth is 35.85MHz.

EUT Frequency=5290MHz for 802.11ac-VHT160											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5250	0	0	0	0	0	0	0	0	0	0	0%
5251 FL	1	1	1	1	1	1	1	1	1	1	100%
5252	1	1	1	1	1	1	1	1	1	1	100%
5253	1	1	1	1	1	1	1	1	1	1	100%
5254	1	1	1	1	1	1	1	1	1	1	100%
5255	1	1	1	1	1	1	1	1	1	1	100%
5260	1	1	1	1	1	1	1	1	1	1	100%
5265	1	1	1	1	1	1	1	1	1	1	100%
5270	1	1	1	1	1	1	1	1	1	1	100%
5275	1	1	1	1	1	1	1	1	1	1	100%
5280	1	1	1	1	1	1	1	1	1	1	100%
5285	1	1	1	1	1	1	1	1	1	1	100%
5290	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329 FH	1	1	1	1	1	1	1	1	1	1	100%
5330	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5329MHz - 5251MHz = 78MHz											
EUT 99% Bandwidth = 76.04MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 76.04MHz x 100% = 76.04MHz											
Test Result: Pass											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5290MHz. The 99% channel bandwidth is 76.04MHz.

5.5. Initial Channel Availability Check Time Measurement

5.5.1. 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.

5.5.2. Test Procedure

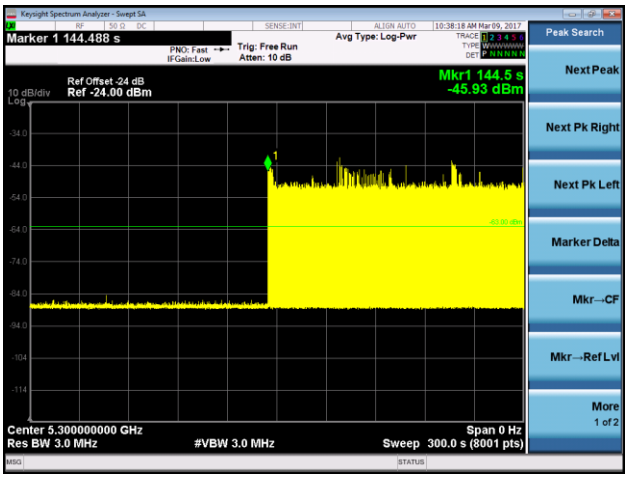
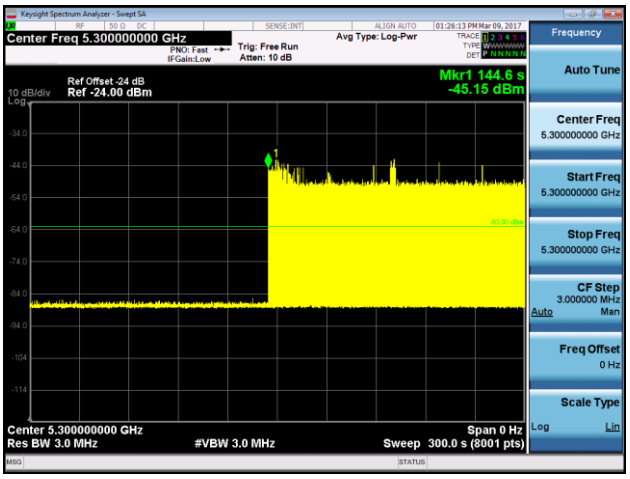
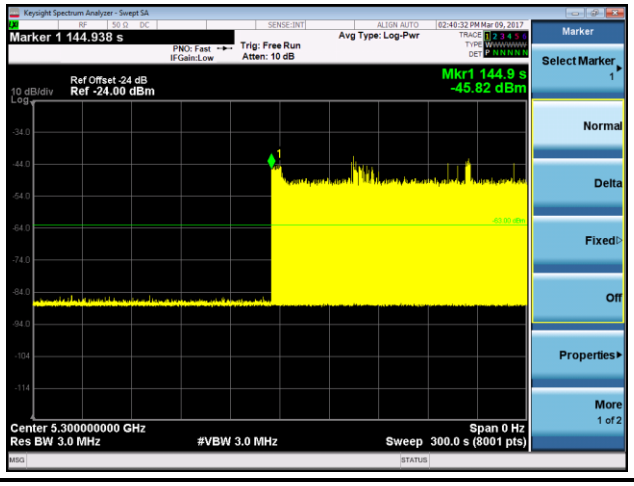
1. The U-NII devices will be powered on and be instructed to operate on the appropriate U-NII Channel that must incorporate DFS functions. At the same time the EUT is powered on, the spectrum analyzer will be set to zero span mode with a 3 MHz RBW and 3 MHz VBW on the Channel occupied by the radar (Chr) 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.

5.5.3. Test Result

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (84.5 sec). Initial beacons/data transmissions are indicated by marker 1 (144.5 sec). (For Radio A).

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (84.6 sec). Initial beacons/data transmissions are indicated by marker 1 (144.6 sec). (For Radio B)

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (84.9 sec). Initial beacons/data transmissions are indicated by marker 1 (144.9 sec). (For Radio C)

<table>
<tr><th colspan="2">Initial Channel Availability Check Time for 802.11a</th></tr>
<tr><th>Radio A</th><th>Radio B</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><th>Radio C</th><th></th></tr>
<tr><td> 
</td><td></td></tr>
</table>

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

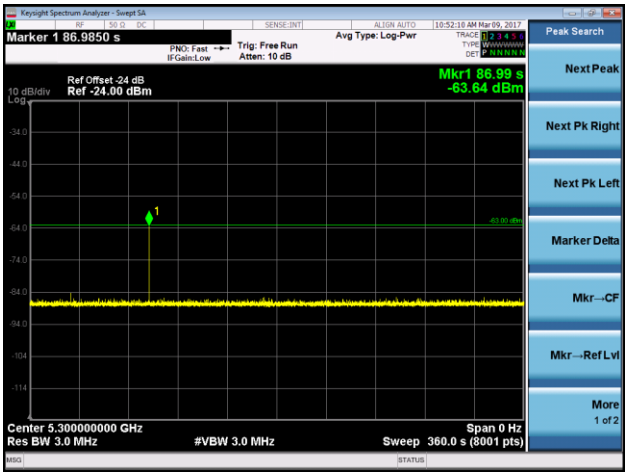
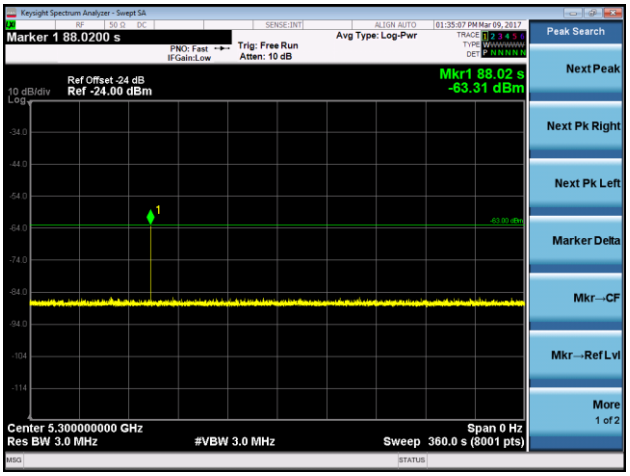
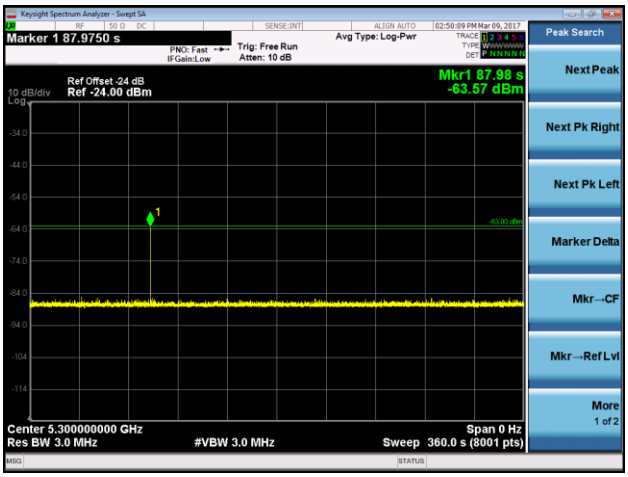
5.6.1. Test Limit

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.

5.6.2. 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 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 at 5300MHz (for 802.11a) 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 at 5300MHz (for 802.11a).

5.6.3. Test Result

Radar Burst at the Beginning of the Channel Availability Check Time for 802.11a	
Radio A	Radio B
	
Radio C	
	

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

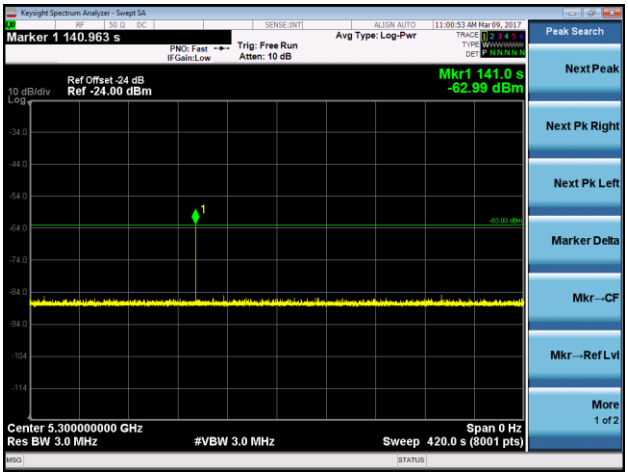
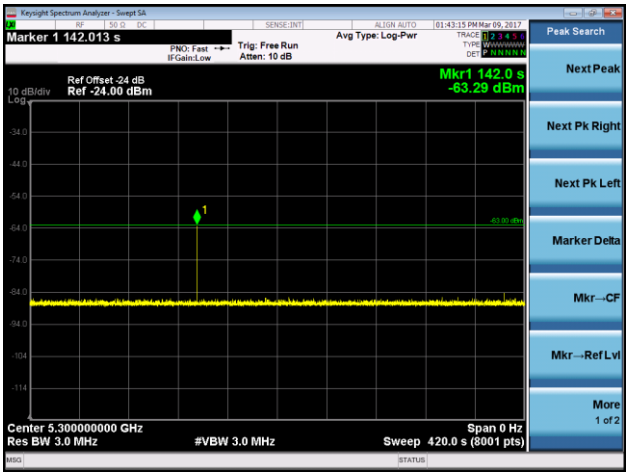
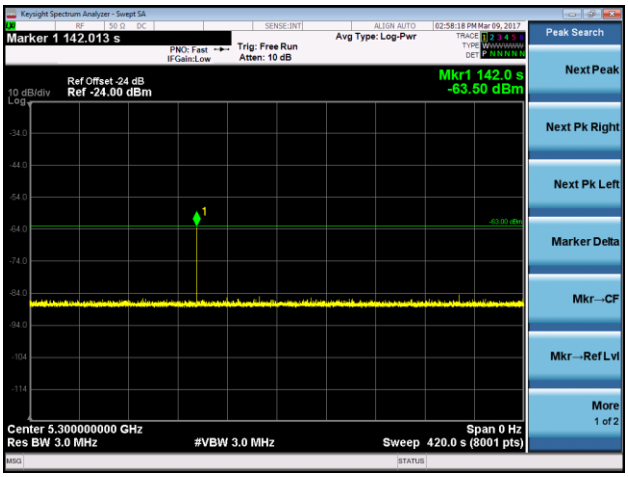
5.7.1. Test Limit

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.

5.7.2. 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 at 5300MHz (for 802.11a) 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 at 5300MHz (for 802.11a).

5.7.3. Test Result

Radar Burst at the End of the Channel Availability Check Time for 802.11a	
Radio A	Radio B
	
Radio C	
	

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

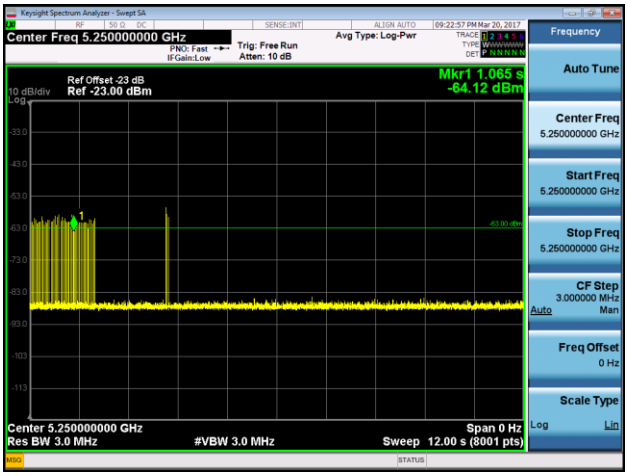
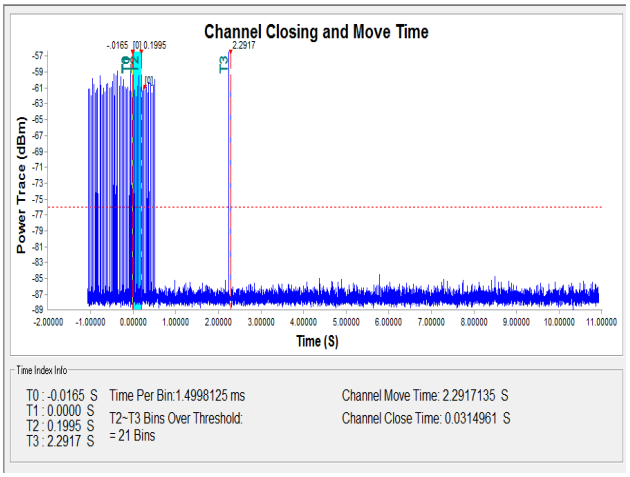
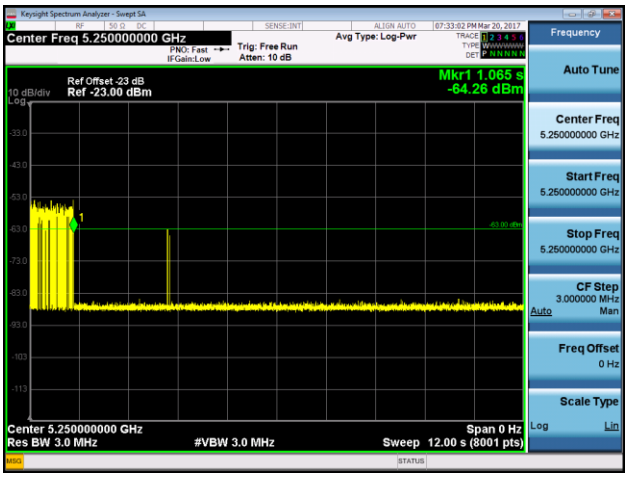
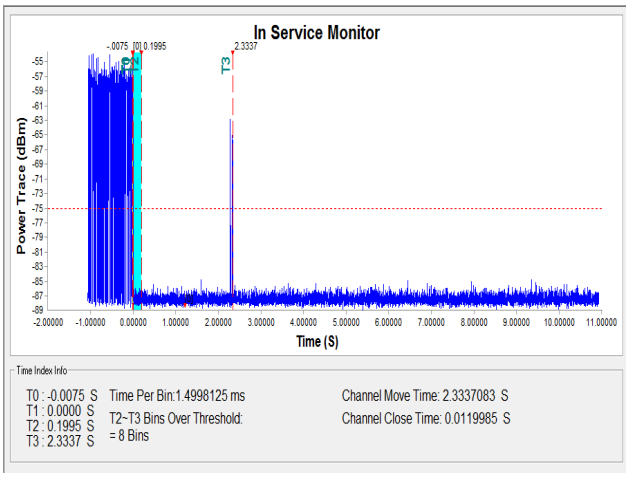
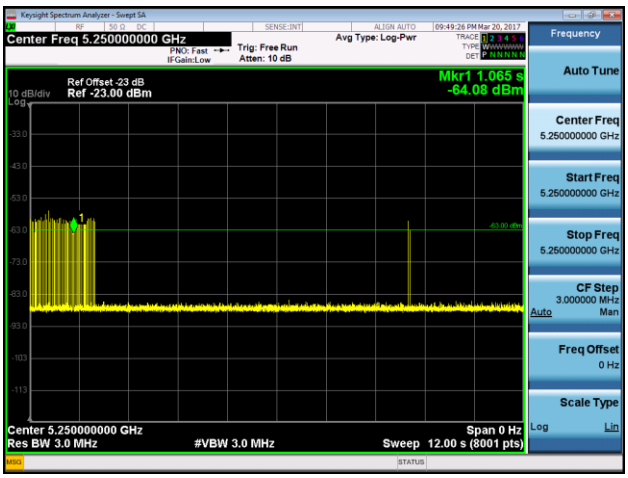
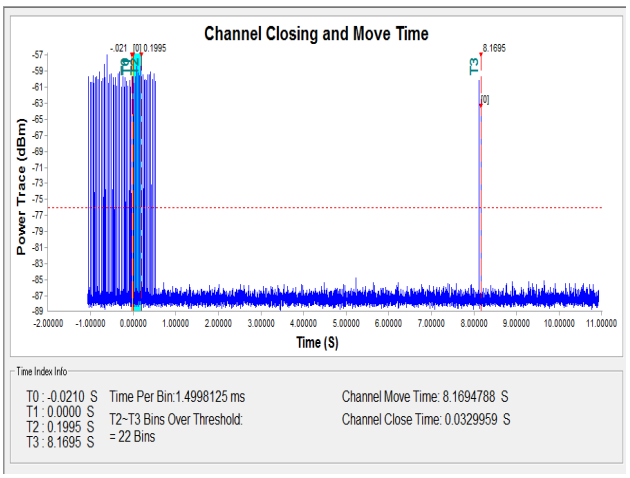
5.8.1. Test Limit

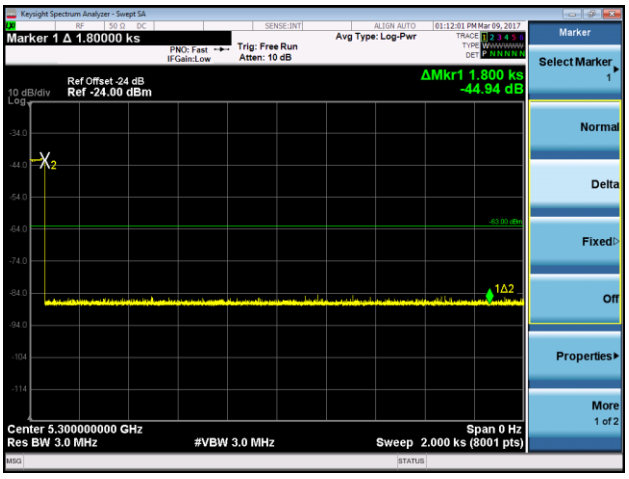
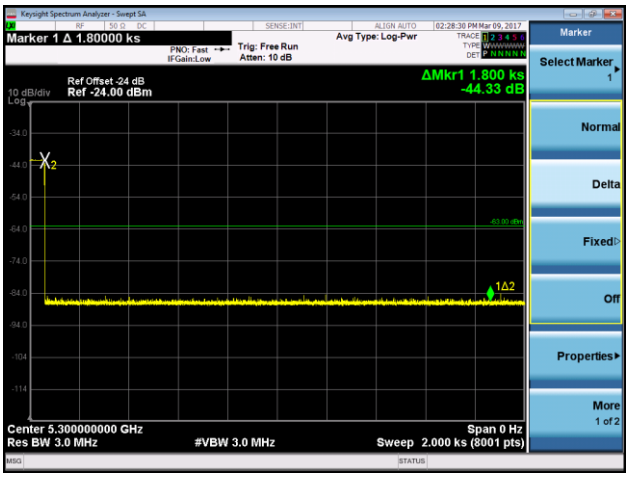
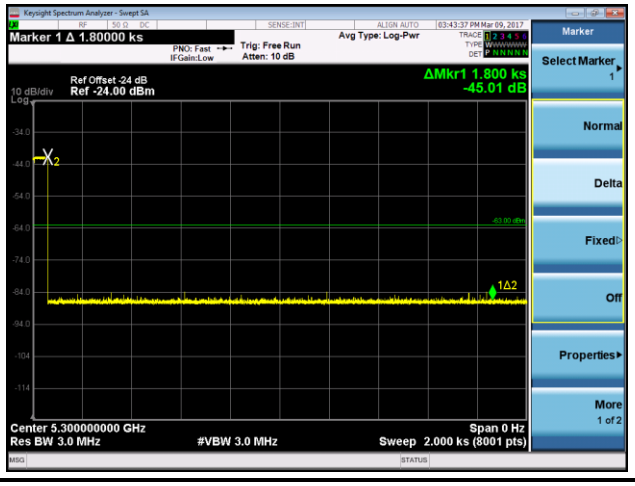
The EUT has In-Service Monitoring function to continuously monitor the radar signals. If the radar is detected, must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec. 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.

5.8.2. 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: 80MHz: C = N X Dwell (1.5 ms); 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.

5.8.3. Test Result

Channel Move Time and Channel Closing Transmission Time for 802.11ac-VHT160	
Radio A	
	
Radio B	
	
Radio C	
	

Non-Occupancy Period for 802.11a	
Radio A	Radio B
	
Radio C	
	

Parameter		Test Result	Limit
Radio A	Channel Move Time (s)	2.292s	<10s
	Channel Closing Transmission Time (ms) (Note)	31.5ms	< 60ms
	Non-Occupancy Period (min)	≥ 30min	≥ 30min
Radio B	Channel Move Time (s)	2.334s	<10s
	Channel Closing Transmission Time (ms) (Note)	12.00ms	< 60ms
	Non-Occupancy Period (min)	≥ 30min	≥ 30 min
Radio C	Channel Move Time (s)	8.169s	<10s
	Channel Closing Transmission Time (ms) (Note)	33.0ms	< 60ms
	Non-Occupancy Period (min)	≥ 30min	≥ 30min

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.

5.9. Statistical Performance Check Measurement

5.9.1. 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%

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.

5.9.2. 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.

5.9.3. Test Result

Radio A Statistical Performance Check for 802.11a

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5292	1	738	72	1
2	5292	1	758	70	1
3	5292	1	538	99	1
4	5292	1	718	74	1
5	5292	1	698	76	1
6	5292	1	618	86	1
7	5292	1	678	78	1
8	5292	1	918	58	1
9	5292	1	578	92	1
10	5292	1	3066	18	1
11	5292	1	558	95	1
12	5292	1	598	89	1
13	5292	1	778	68	1
14	5292	1	638	83	1
15	5292	1	658	81	1
16	5292	1	2336	23	1
17	5292	1	2396	23	1
18	5292	1	817	65	1
19	5292	1	760	70	1
20	5292	1	1606	33	1
21	5292	1	1786	30	1
22	5292	1	796	67	1
23	5292	1	739	72	1
24	5292	1	1716	31	1
25	5292	1	3046	18	1
26	5292	1	1310	41	1
27	5292	1	1315	41	1
28	5292	1	1136	47	1
29	5292	1	575	92	1
30	5292	1	1073	50	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	5300	2.0	198	29	1
2	5300	2.5	171	24	1
3	5300	4.2	219	28	1
4	5300	3.7	227	25	1
5	5300	1.0	224	29	1
6	5300	2.3	170	26	1
7	5300	2.9	228	28	1
8	5300	3.9	158	28	1
9	5300	1.3	195	24	1
10	5300	1.5	154	24	1
11	5300	4.0	159	24	1
12	5300	2.8	155	29	1
13	5300	2.8	190	25	1
14	5300	2.4	212	28	1
15	5300	2.9	210	25	1
16	5300	3.9	200	29	1
17	5300	1.4	160	27	1
18	5300	4.9	180	29	1
19	5300	2.8	204	26	1
20	5300	4.3	177	25	1
21	5300	3.9	180	27	1
22	5300	4.0	222	25	1
23	5300	1.2	209	28	1
24	5300	2.2	226	28	1
25	5300	2.3	217	23	1
26	5300	2.3	166	23	1
27	5300	3.9	182	24	1
28	5300	4.5	165	23	1
29	5300	3.3	210	27	1
30	5300	1.9	194	24	1
Detection Percentage (%)					100%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5308	6.1	273	16	1
2	5308	9.2	398	17	1
3	5308	10.0	339	17	1
4	5308	6.3	496	16	1
5	5308	9.1	323	18	1
6	5308	9.7	321	16	1
7	5308	8.2	356	18	1
8	5308	8.5	500	18	1
9	5308	7.6	494	17	1
10	5308	9.2	465	17	1
11	5308	6.3	284	16	1
12	5308	9.7	495	17	1
13	5308	9.0	464	17	1
14	5308	9.5	478	18	1
15	5308	6.8	259	16	1
16	5308	7.1	381	18	1
17	5308	9.7	316	16	1
18	5308	8.3	485	16	1
19	5308	10.0	312	17	1
20	5308	6.9	348	18	1
21	5308	9.1	255	17	1
22	5308	9.5	430	17	1
23	5308	6.3	453	17	1
24	5308	8.8	290	16	1
25	5308	9.4	328	18	1
26	5308	9.2	274	17	1
27	5308	8.6	344	17	1
28	5308	6.5	346	18	1
29	5308	8.6	293	16	1
30	5308	6.8	347	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	5300	15.1	464	16	1
2	5300	18.1	356	13	1
3	5300	15.1	435	14	1
4	5300	16.1	477	15	1
5	5300	19.7	397	14	1
6	5300	12.6	421	16	1
7	5300	12.9	488	13	1
8	5300	14.3	337	12	1
9	5300	17.5	330	16	1
10	5300	12.5	470	15	1
11	5300	18.4	477	16	1
12	5300	13.2	377	12	1
13	5300	12.8	253	13	1
14	5300	15.8	395	15	1
15	5300	11.4	388	12	1
16	5300	19.7	378	13	1
17	5300	18.9	329	14	1
18	5300	19.8	496	16	1
19	5300	16.7	275	13	1
20	5300	14.5	316	14	1
21	5300	19.8	264	13	1
22	5300	11.2	457	14	1
23	5300	12.8	356	16	1
24	5300	12.9	465	12	1
25	5300	18.6	499	15	1
26	5300	16.1	499	12	1
27	5300	19.9	330	12	1
28	5300	19.5	464	15	1
29	5300	12.9	381	15	1
30	5300	18.9	427	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	5299.6	1	16	5300.0	1
2	5295.2	1	17	5300.0	1
3	5296.0	1	18	5300.0	1
4	5297.6	1	19	5300.0	1
5	5299.2	1	20	5300.0	1
6	5294.4	1	21	5300.4	1
7	5295.6	1	22	5304.8	1
8	5296.8	1	23	5304.0	1
9	5298.8	1	24	5302.4	1
10	5294.0	1	25	5300.8	1
11	5300.0	1	26	5305.6	1
12	5300.0	1	27	5304.4	1
13	5300.0	1	28	5303.2	1
14	5300.0	1	29	5301.2	1
15	5300.0	1	30	5306.0	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

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	343160	2	19	65	1198	1715	0	343160	0	923076
2	1044589	3	19	70	1586	1474	1205	1390662	923077	1846153
3	954422	1	19	65	1444	0	0	2349349	1846154	2769230
4	1299650	1	19	50	1093	0	0	3650443	2769231	3692307
5	491320	2	19	100	1000	1418	0	4142856	3692308	4615384
6	674393	1	19	90	1147	0	0	4819667	4615385	5538461
7	1428605	3	19	55	1524	1634	1546	6249419	5538462	6461538
8	944694	1	19	70	1373	0	0	7198817	6461539	7384615
9	883304	3	19	65	1688	1778	1957	8083494	7384616	8307692
10	614806	1	19	75	1969	0	0	8703723	8307693	9230769
11	1069088	2	19	50	1932	1766	0	9774780	9230770	10153846
12	483389	3	19	55	1989	1064	1155	10261867	10153847	11076923
13	912270	3	19	75	1429	1890	1805	11178345	11076924	12000000

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

Type 5 Radar Waveform_2

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	1055001	3	8	65	1487	1989	1127	1055001	0	1090908
2	349672	1	8	50	1217	0	0	1409276	1090909	2181817
3	1610668	1	8	60	1181	0	0	3021161	2181818	3272726
4	901362	3	8	75	1257	1497	1332	3923704	3272727	4363635
5	615082	1	8	85	1813	0	0	4542872	4363636	5454544
6	1041207	2	8	95	1593	1822	0	5585892	5454545	6545453
7	1883189	3	8	95	1427	1467	1106	7472496	6545454	7636362
8	617157	3	8	100	1035	1321	1324	8093653	7636363	8727271
9	982443	3	8	70	1883	1162	1714	9079776	8727272	9818180
10	951572	2	8	85	1186	1845	0	10036107	9818181	10909089
11	1868972	1	8	75	1004	0	0	11908110	10909090	11999998

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

Type 5 Radar Waveform_3

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	929330	3	10	75	1001	1621	1581	929330	0	999999
2	295709	1	10	60	1269	0	0	1229242	1000000	1999999
3	1090736	2	10	80	1352	1263	0	2321247	2000000	2999999
4	1535456	2	10	70	1131	1149	0	3859318	3000000	3999999
5	158776	2	10	50	1906	1441	0	4020374	4000000	4999999
6	1773835	2	10	55	1056	1230	0	5797556	5000000	5999999
7	535808	1	10	75	1164	0	0	6335650	6000000	6999999
8	737123	1	10	95	1386	0	0	7073937	7000000	7999999
9	1574160	2	10	90	1011	1657	0	8649483	8000000	8999999
10	878950	1	10	50	1245	0	0	9531101	9000000	9999999
11	1231317	1	10	50	1306	0	0	10763663	10000000	10999999
12	1081628	1	10	85	1815	0	0	11846597	11000000	11999999

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

Type 5 Radar Waveform_4

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	446180	3	14	85	1459	1189	1239	446180	0	1499999
2	1637970	3	14	100	1534	1127	1744	2088037	1500000	2999999
3	2161420	3	14	100	1070	1166	1747	4253862	3000000	4499999
4	426541	3	14	85	1911	1452	1781	4684386	4500000	5999999
5	2048164	2	14	70	1192	1506	0	6737694	6000000	7499999
6	851193	3	14	85	1056	1137	1295	7591585	7500000	8999999
7	2702501	3	14	85	1159	1695	1334	10297574	9000000	10499999
8	1609447	2	14	100	1354	1730	0	11911209	10500000	11999999

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

Type 5 Radar Waveform_5

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	368012	1	18	75	1774	0	0	368012	0	631578
2	338283	3	18	50	1770	1689	1385	708069	631579	1263157
3	932208	3	18	65	1124	1554	1558	1645121	1263158	1894736
4	498857	2	18	50	1600	1002	0	2148214	1894737	2526315
5	744374	1	18	70	1560	0	0	2895190	2526316	3157894
6	886895	1	18	80	1999	0	0	3783645	3157895	3789473
7	132748	1	18	65	1184	0	0	3918392	3789474	4421052
8	822239	3	18	85	1897	1293	1923	4741815	4421053	5052631
9	442190	2	18	65	1861	1268	0	5189118	5052632	5684210
10	518029	2	18	75	1683	1709	0	5710276	5684211	6315789
11	1002011	3	18	75	1098	1416	1938	6715679	6315790	6947368
12	360162	3	18	80	1920	1334	1100	7080293	6947369	7578947
13	1005130	2	18	70	1672	1805	0	8089777	7578948	8210526
14	726213	3	18	70	1177	1131	1184	8819467	8210527	8842105
15	222637	3	18	65	1477	1528	1164	9045596	8842106	9473684
16	659831	1	18	50	1708	0	0	9709596	9473685	10105263
17	989000	1	18	90	1428	0	0	10700304	10105264	10736842
18	642784	3	18	100	1629	1394	1040	11344516	10736843	11368421
19	462484	2	18	70	1375	1341	0	11811063	11368422	12000000

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

Type 5 Radar Waveform_6

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	499211	1	6	60	1265	0	0	499211	0	631578
2	631381	2	6	60	1945	1837	0	1131857	631579	1263157
3	489127	3	6	55	1082	1551	1140	1624766	1263158	1894736
4	748582	1	6	50	1455	0	0	2377121	1894737	2526315
5	329150	1	6	90	1012	0	0	2707726	2526316	3157894
6	723240	1	6	60	1757	0	0	3431978	3157895	3789473
7	816462	3	6	50	1114	1897	1659	4250197	3789474	4421052
8	444717	2	6	65	1015	1258	0	4699584	4421053	5052631
9	549707	2	6	75	1947	1945	0	5251564	5052632	5684210
10	822725	1	6	80	1646	0	0	6078181	5684211	6315789
11	626815	1	6	65	1804	0	0	6706642	6315790	6947368
12	390375	2	6	90	1934	1311	0	7098821	6947369	7578947
13	731594	1	6	85	1409	0	0	7833660	7578948	8210526
14	519231	3	6	90	1717	1507	1076	8354300	8210527	8842105
15	594037	1	6	65	1578	0	0	8952637	8842106	9473684
16	925355	2	6	95	1100	1294	0	9879570	9473685	10105263
17	584905	2	6	70	1980	1466	0	10466869	10105264	10736842
18	387475	3	6	70	1824	1273	1017	10857790	10736843	11368421
19	1124862	2	6	80	1491	1788	0	11986766	11368422	12000000

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

Type 5 Radar Waveform_7

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	512882	3	9	85	1834	1932	1606	512882	0	599999
2	118261	3	9	50	1675	1851	1079	636515	600000	1199999
3	1134125	1	9	95	1841	0	0	1775245	1200000	1799999
4	564963	3	9	90	1531	1791	1486	2342049	1800000	2399999
5	84031	1	9	95	1210	0	0	2430888	2400000	2999999
6	1052331	2	9	95	1463	1629	0	3484429	3000000	3599999
7	146359	1	9	60	1111	0	0	3633880	3600000	4199999
8	797524	3	9	65	1669	1691	1650	4432515	4200000	4799999
9	545403	1	9	55	1328	0	0	4982928	4800000	5399999
10	869976	1	9	55	1985	0	0	5854232	5400000	5999999
11	243915	1	9	85	1356	0	0	6100132	6000000	6599999
12	875518	1	9	55	1195	0	0	6977006	6600000	7199999
13	471601	1	9	60	1066	0	0	7449802	7200000	7799999
14	613024	1	9	50	1910	0	0	8063892	7800000	8399999
15	853282	3	9	95	1911	1872	1330	8919084	8400000	8999999
16	454543	3	9	75	1327	1672	1596	9378740	9000000	9599999
17	224466	1	9	55	1146	0	0	9607801	9600000	10199999
18	623884	1	9	65	1867	0	0	10232831	10200000	10799999
19	1137335	1	9	100	1029	0	0	11372033	10800000	11399999
20	587547	1	9	85	1042	0	0	11960609	11400000	11999999

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

Type 5 Radar Waveform_8

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	37447	3	12	80	1337	1036	1311	37447	0	631578
2	928787	1	12	85	1602	0	0	969918	631579	1263157
3	691048	3	12	55	1243	1978	1262	1662568	1263158	1894736
4	520667	3	12	90	1317	1548	1236	2187718	1894737	2526315
5	701892	2	12	85	1800	1819	0	2893711	2526316	3157894
6	397256	1	12	85	1257	0	0	3294586	3157895	3789473
7	546038	3	12	50	1623	1446	1225	3841881	3789474	4421052
8	1030940	1	12	85	1297	0	0	4877115	4421053	5052631
9	756021	1	12	50	1538	0	0	5634433	5052632	5684210
10	499290	3	12	85	1952	1605	1243	6135261	5684211	6315789
11	674751	2	12	50	1166	1953	0	6814812	6315790	6947368
12	490946	2	12	100	1399	1535	0	7308877	6947369	7578947
13	821299	2	12	70	1232	1298	0	8133110	7578948	8210526
14	350116	3	12	60	1411	1647	1552	8485756	8210527	8842105
15	871846	2	12	85	1063	1008	0	9362212	8842106	9473684
16	418104	2	12	55	1512	1537	0	9782387	9473685	10105263
17	563212	1	7	55	1240	0	0	10348648	10105264	10736842
18	482566	3	15	80	1382	1194	1028	10832454	10736843	11368421
19	748563	2	17	90	1508	1171	0	11584621	11368422	12000000

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

Type 5 Radar Waveform_9

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	705722	2	17	75	1712	1347	0	705722	0	857142
2	821524	3	17	50	1766	1526	1143	1530305	857143	1714285
3	874713	3	17	75	1937	1929	1753	2409453	1714286	2571428
4	725111	1	17	90	1752	0	0	3140183	2571429	3428571
5	901033	3	17	75	1767	1627	1847	4042968	3428572	4285714
6	868629	3	17	95	1581	1900	1695	4916838	4285715	5142857
7	615964	1	17	65	1089	0	0	5537978	5142858	6000000
8	739778	3	17	60	1478	1636	1952	6278845	6000001	6857143
9	928383	1	17	55	1503	0	0	7212294	6857144	7714286
10	968946	1	17	65	1782	0	0	8182743	7714287	8571429
11	471362	2	17	70	1991	1791	0	8655887	8571430	9428572
12	931629	3	17	95	1985	1490	1327	9591298	9428573	10285715
13	1539497	1	17	95	1915	0	0	11135597	10285716	11142858
14	591656	1	17	80	1261	0	0	11729168	11142859	12000001

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

Type 5 Radar Waveform_10

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	656448	2	5	70	1305	1962	0	656448	0	666666
2	547343	3	5	85	1900	1786	1071	1207058	666667	1333333
3	486495	2	5	100	1122	1591	0	1698310	1333334	2000000
4	792892	3	5	100	1360	1184	1726	2493915	2000001	2666667
5	744787	3	5	100	1228	1360	1909	3242972	2666668	3333334
6	684298	3	5	65	1951	1132	1089	3931767	3333335	4000001
7	479585	3	5	90	1234	1854	1772	4415524	4000002	4666668
8	763258	2	5	55	1029	1295	0	5183642	4666669	5333335
9	761376	1	5	90	1214	0	0	5947342	5333336	6000002
10	454983	1	5	50	1765	0	0	6403539	6000003	6666669
11	813596	2	5	50	1727	1407	0	7218900	6666670	7333336
12	561940	3	5	95	1208	1730	1438	7783974	7333337	8000003
13	238926	1	5	75	1808	0	0	8027276	8000004	8666670
14	1147484	3	5	75	1430	1207	1332	9176568	8666671	9333337
15	188798	2	5	50	1715	1419	0	9369335	9333338	10000004
16	718042	3	5	70	1367	1213	1793	10090511	10000005	10666671
17	591033	2	5	55	1841	1349	0	10685917	10666672	11333338
18	704127	2	5	100	1291	1810	0	11393234	11333339	12000005

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

Type 5 Radar Waveform_11

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	1009964	1	19	55	1729	0	0	1009964	0	1199999
2	1071357	2	19	80	1998	1912	0	2083050	1200000	2399999
3	422616	3	19	75	1995	1261	1552	2509576	2400000	3599999
4	2102414	1	19	90	1304	0	0	4616798	3600000	4799999
5	477881	1	19	90	1346	0	0	5095983	4800000	5999999
6	1967449	1	19	85	1826	0	0	7064778	6000000	7199999
7	685286	3	19	80	1290	1975	1482	7751890	7200000	8399999
8	1540143	2	19	95	1829	1049	0	9296780	8400000	9599999
9	371209	2	19	70	1704	1915	0	9670867	9600000	10799999
10	1224694	3	19	95	1159	1735	1417	10899180	10800000	11999999

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

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	460603	2	8	70	1773	1234	0	460603	0	599999
2	644887	3	8	80	1439	1583	1056	1108497	600000	1199999
3	163468	1	8	75	1393	0	0	1276043	1200000	1799999
4	530483	1	8	60	1917	0	0	1807919	1800000	2399999
5	1074597	3	8	100	1316	1695	1427	2884433	2400000	2999999
6	148162	2	8	70	1273	1247	0	3037033	3000000	3599999
7	1149343	2	8	70	1145	1514	0	4188896	3600000	4199999
8	162027	1	8	60	1832	0	0	4353582	4200000	4799999
9	521305	3	8	70	1085	1853	1054	4876719	4800000	5399999
10	543531	1	8	100	1570	0	0	5424242	5400000	5999999
11	1140281	1	8	90	1991	0	0	6566093	6000000	6599999
12	80666	1	8	85	1559	0	0	6648750	6600000	7199999
13	797594	2	8	85	1287	1136	0	7447903	7200000	7799999
14	914321	3	8	80	1676	1621	1892	8364647	7800000	8399999
15	216502	2	8	70	1034	1772	0	8586338	8400000	8999999
16	675883	2	8	75	1709	1968	0	9265027	9000000	9599999
17	467222	3	8	90	1652	1411	1670	9735926	9600000	10199999
18	1029251	3	8	100	1223	1047	1520	10769910	10200000	10799999
19	273407	1	8	85	1054	0	0	11047107	10800000	11399999
20	366171	3	8	55	1043	1290	1436	11414332	11400000	11999999

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

Type 5 Radar Waveform_13

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	910064	3	10	90	1976	1614	1356	910064	0	1090908
2	455990	1	10	55	1386	0	0	1371000	1090909	2181817
3	1863320	3	10	60	1874	1479	1830	3235706	2181818	3272726
4	684594	3	10	70	1321	1184	1635	3925483	3272727	4363635
5	1385825	2	10	95	1839	1920	0	5315448	4363636	5454544
6	1003522	2	10	65	1421	1872	0	6322729	5454545	6545453
7	645668	3	10	85	1891	1354	1550	6971690	6545454	7636362
8	732664	1	10	75	1669	0	0	7709149	7636363	8727271
9	1469513	3	10	75	1958	1547	1549	9180331	8727272	9818180
10	1547316	2	10	75	1375	1298	0	10732701	9818181	10909089
11	836977	1	10	50	1730	0	0	11572351	10909090	11999998

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

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	389098	1	14	70	1359	0	0	389098	0	705881
2	893048	2	14	65	1223	1758	0	1283505	705882	1411763
3	661416	1	14	85	1372	0	0	1947902	1411764	2117645
4	693770	3	14	80	1747	1257	1677	2643044	2117646	2823527
5	220622	3	14	75	1355	1796	1536	2868347	2823528	3529409
6	1238603	2	14	65	1548	1093	0	4111637	3529410	4235291
7	162624	1	14	70	1050	0	0	4276902	4235292	4941173
8	1240699	2	14	55	1795	1276	0	5518651	4941174	5647055
9	328176	2	14	60	1661	1294	0	5849898	5647056	6352937
10	672157	2	14	80	1468	1320	0	6525010	6352938	7058819
11	816155	2	14	55	1018	1530	0	7343953	7058820	7764701
12	771768	2	14	50	1716	1864	0	8118269	7764702	8470583
13	916841	3	14	80	1641	1289	1005	9038690	8470584	9176465
14	766856	3	14	80	1234	1302	1398	9809481	9176466	9882347
15	381673	3	14	55	1460	1855	1113	10195088	9882348	10588229
16	503686	3	14	95	1530	1549	1630	10703202	10588230	11294111
17	1129533	3	14	90	1643	1534	1269	11837444	11294112	11999993

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

Type 5 Radar Waveform_15

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	253704	3	18	95	1830	1160	1321	253704	0	799999
2	1060172	1	18	65	1162	0	0	1318187	800000	1599999
3	410527	1	18	70	1694	0	0	1729876	1600000	2399999
4	1367699	1	18	70	1989	0	0	3099269	2400000	3199999
5	209597	2	18	90	1180	1729	0	3310855	3200000	3999999
6	1482056	1	18	95	1483	0	0	4795820	4000000	4799999
7	796108	1	18	85	1401	0	0	5593411	4800000	5599999
8	727418	1	18	50	1899	0	0	6322230	5600000	6399999
9	90519	2	18	60	1046	1062	0	6414648	6400000	7199999
10	1217182	3	18	65	1274	1036	1001	7633938	7200000	7999999
11	725544	1	18	70	1898	0	0	8362793	8000000	8799999
12	747923	2	18	95	1044	1776	0	9112614	8800000	9599999
13	788235	1	18	80	1322	0	0	9903669	9600000	10399999
14	518344	1	18	60	1080	0	0	10423335	10400000	11199999
15	966683	2	18	70	1141	1823	0	11391098	11200000	11999999

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

Type 5 Radar Waveform_16

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	996388	2	6	85	1936	1779	0	996388	0	1090908
2	364922	2	6	55	1274	1444	0	1365025	1090909	2181817
3	1675552	1	6	70	1732	0	0	3043295	2181818	3272726
4	420433	2	6	95	1926	1907	0	3465460	3272727	4363635
5	1131905	3	6	100	1663	1549	1557	4601198	4363636	5454544
6	963035	1	6	60	1527	0	0	5569002	5454545	6545453
7	1504413	2	6	70	1522	1564	0	7074942	6545454	7636362
8	952771	1	6	80	1142	0	0	8030799	7636363	8727271
9	1767845	3	6	80	1539	1514	1952	9799786	8727272	9818180
10	511065	2	6	90	1294	1347	0	10315856	9818181	10909089
11	1146621	2	6	55	1145	1875	0	11465118	10909090	11999998

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

Type 5 Radar Waveform_17

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	346941	3	9	60	1052	1051	1286	346941	0	599999
2	772629	2	9	75	1313	1572	0	1122959	600000	1199999
3	590203	1	9	65	1854	0	0	1716047	1200000	1799999
4	413389	2	9	50	1596	1630	0	2131290	1800000	2399999
5	599409	3	9	100	1192	1641	1988	2733925	2400000	2999999
6	670595	3	9	65	1708	1599	1665	3409341	3000000	3599999
7	575638	2	9	60	1179	1946	0	3989951	3600000	4199999
8	493560	3	9	100	1913	1282	1914	4486636	4200000	4799999
9	646436	1	9	60	1734	0	0	5138181	4800000	5399999
10	756360	3	9	80	1427	1626	1965	5896275	5400000	5999999
11	535223	2	9	65	1270	1077	0	6436516	6000000	6599999
12	302728	3	9	60	1150	1416	1160	6741591	6600000	7199999
13	867908	1	9	85	1266	0	0	7613225	7200000	7799999
14	304718	1	9	60	1857	0	0	7919209	7800000	8399999
15	884119	3	9	75	1127	1457	1056	8805185	8400000	8999999
16	352281	3	9	100	1529	1901	1345	9161106	9000000	9599999
17	650612	3	9	65	1642	1801	1739	9816493	9600000	10199999
18	772832	1	9	65	1466	0	0	10594507	10200000	10799999
19	401150	1	9	75	1160	0	0	10997123	10800000	11399999
20	435750	2	9	75	1977	1193	0	11434033	11400000	11999999

Total number of pulses in waveform = 43

Type 5 Radar Waveform_18

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	338577	2	12	85	1835	1164	0	338577	0	1333332
2	1099886	3	12	65	1810	1095	1271	1441462	1333333	2666665
3	2504151	1	12	75	1548	0	0	3949789	2666666	3999998
4	329190	3	12	50	1410	1038	1960	4280527	3999999	5333331
5	1951210	1	12	85	1760	0	0	6236145	5333332	6666664
6	911387	1	12	50	1666	0	0	7149292	6666665	7999997
7	1959226	2	12	70	1793	1058	0	9110184	7999998	9333330
8	440424	2	12	70	1988	1690	0	9553459	9333331	10666663
9	2369521	1	12	60	1400	0	0	11926658	10666664	11999996

Total number of pulses in waveform = 16

Type 5 Radar Waveform_19

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	293906	2	17	85	1412	1763	0	293906	0	631578
2	601319	1	17	90	1242	0	0	898400	631579	1263157
3	835939	2	17	85	1171	1088	0	1735581	1263158	1894736
4	677328	1	17	55	1261	0	0	2415168	1894737	2526315
5	340034	2	17	50	1460	1604	0	2756463	2526316	3157894
6	517352	3	17	85	1100	1977	1745	3276879	3157895	3789473
7	634278	3	17	95	1697	1685	1940	3915979	3789474	4421052
8	550432	1	17	50	1730	0	0	4471733	4421053	5052631
9	756131	1	17	95	1265	0	0	5229594	5052632	5684210
10	707184	3	17	55	1750	1853	1144	5938043	5684211	6315789
11	514238	2	17	80	1118	1422	0	6457028	6315790	6947368
12	506744	2	17	95	1733	1846	0	6966312	6947369	7578947
13	1172338	1	17	60	1220	0	0	8142229	7578948	8210526
14	464477	1	17	95	1270	0	0	8607926	8210527	8842105
15	681064	1	17	95	1478	0	0	9290260	8842106	9473684
16	303883	1	17	90	1583	0	0	9595621	9473685	10105263
17	1108310	3	17	95	1534	1019	1897	10705514	10105264	10736842
18	617333	2	17	55	1237	1300	0	11327297	10736843	11368421
19	498279	3	17	50	1732	1761	1102	11828113	11368422	12000000

Total number of pulses in waveform = 35

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	541096	2	5	100	1253	1447	0	541096	0	999999
2	986501	1	5	50	1860	0	0	1530297	1000000	1999999
3	1203876	3	5	75	1366	1041	1023	2736033	2000000	2999999
4	422104	2	5	55	1427	1438	0	3161567	3000000	3999999
5	1434952	1	5	50	1227	0	0	4599384	4000000	4999999
6	501555	2	5	85	1286	1586	0	5102166	5000000	5999999
7	1169762	2	5	70	1473	1089	0	6274800	6000000	6999999
8	748281	1	5	90	1210	0	0	7025643	7000000	7999999
9	1088353	3	5	70	1111	1688	1251	8115206	8000000	8999999
10	1161801	2	5	50	1998	1740	0	9281057	9000000	9999999
11	1412326	2	5	85	1429	1167	0	10697121	10000000	10999999
12	764862	2	5	95	1240	1135	0	11464579	11000000	11999999

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

Type 5 Radar Waveform_21

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	179552	1	19	70	1565	0	0	179552	0	1499999
2	2178372	2	19	70	1548	1959	0	2359489	1500000	2999999
3	2115312	1	19	85	1687	0	0	4478308	3000000	4499999
4	1139315	2	19	100	1789	1245	0	5619310	4500000	5999999
5	1760709	1	19	60	1054	0	0	7383053	6000000	7499999
6	542219	1	19	100	1250	0	0	7926326	7500000	8999999
7	1758311	3	19	95	1430	1931	1863	9685887	9000000	10499999
8	1758743	2	19	50	1762	1816	0	11449854	10500000	11999999

Total number of pulses in waveform = 13
****

Type 5 Radar Waveform_22

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	1050212	2	8	50	1328	1908	0	1050212	0	1333332
2	989873	2	8	50	1489	1522	0	2043321	1333333	2666665
3	1066817	3	8	75	1107	1594	1408	3113149	2666666	3999998
4	2054573	3	8	80	1363	1403	1823	5171831	3999999	5333331
5	1235693	3	8	65	1391	1875	1554	6412113	5333332	6666664
6	896352	1	8	100	1637	0	0	7313285	6666665	7999997
7	1818840	3	8	80	1528	1408	1873	9133762	7999998	9333330
8	395653	3	8	80	1461	1537	1765	9534224	9333331	10666663
9	2156969	2	8	100	1660	1789	0	11695956	10666664	11999996

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

Type 5 Radar Waveform_23

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	180687	1	10	100	1811	0	0	180687	0	666666
2	803265	3	10	80	1087	1070	1356	985763	666667	1333333
3	742121	1	10	55	1414	0	0	1731397	1333334	2000000
4	778071	1	10	50	1893	0	0	2510882	2000001	2666667
5	606818	3	10	85	1805	1650	1110	3119593	2666668	3333334
6	400096	1	10	60	1576	0	0	3524254	3333335	4000001
7	769719	1	10	50	1694	0	0	4295549	4000002	4666668
8	766531	1	10	50	1094	0	0	5063774	4666669	5333335
9	360445	3	10	65	1712	1497	1242	5425313	5333336	6000002
10	1078255	3	10	60	1875	1483	1168	6508019	6000003	6666669
11	632232	2	10	55	1594	1240	0	7144777	6666670	7333336
12	622562	3	10	55	1602	1041	1214	7770173	7333337	8000003
13	455486	1	10	70	1705	0	0	8229516	8000004	8666670
14	913950	3	10	55	1286	1814	1170	9145171	8666671	9333337
15	526221	3	10	80	1739	1191	1148	9675662	9333338	10000004
16	617386	1	10	50	1679	0	0	10297126	10000005	10666671
17	813699	3	10	65	1839	1952	1441	11112504	10666672	11333338
18	361355	1	10	75	1923	0	0	11479091	11333339	12000005

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

Type 5 Radar Waveform_24

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	229992	1	14	50	1653	0	0	229992	0	999999
2	829345	1	14	55	1436	0	0	1060990	1000000	1999999
3	1135178	2	14	55	1693	1283	0	2197604	2000000	2999999
4	1688010	3	14	95	1095	1790	1907	3888590	3000000	3999999
5	769659	1	14	80	1024	0	0	4663041	4000000	4999999
6	676767	1	14	95	1924	0	0	5340832	5000000	5999999
7	1369028	3	14	95	1862	1342	1640	6711784	6000000	6999999
8	1233749	1	14	65	1295	0	0	7950377	7000000	7999999
9	131470	2	14	50	1108	1856	0	8083142	8000000	8999999
10	1552450	1	14	95	1217	0	0	9638556	9000000	9999999
11	1228045	1	14	55	1087	0	0	10867818	10000000	10999999
12	973860	1	14	75	1636	0	0	11842765	11000000	11999999

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

Type 5 Radar Waveform_25

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	734439	3	18	50	1703	1666	1244	734439	0	923076
2	881563	1	18	50	1197	0	0	1620615	923077	1846153
3	341130	1	18	80	1561	0	0	1962942	1846154	2769230
4	1287501	2	18	75	1842	1026	0	3252004	2769231	3692307
5	863256	3	18	85	1020	1967	1651	4118128	3692308	4615384
6	835377	1	18	95	1632	0	0	4958143	4615385	5538461
7	1118527	1	18	75	1549	0	0	6078302	5538462	6461538
8	513364	3	18	65	1859	1757	1801	6593215	6461539	7384615
9	1169079	2	18	80	1638	1496	0	7767711	7384616	8307692
10	624731	2	18	80	1261	1176	0	8395576	8307693	9230769
11	1390974	1	18	50	1797	0	0	9788987	9230770	10153846
12	1035569	1	18	90	1391	0	0	10826353	10153847	11076923
13	892811	2	18	50	1948	1879	0	11720555	11076924	12000000

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

Type 5 Radar Waveform_26

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	220159	1	6	95	1280	0	0	220159	0	999999
2	867568	1	6	100	1051	0	0	1089007	1000000	1999999
3	1582702	2	6	100	1540	1995	0	2672760	2000000	2999999
4	490495	2	6	80	1826	1213	0	3166790	3000000	3999999
5	1381011	2	6	80	1494	1542	0	4550840	4000000	4999999
6	1309556	3	6	65	1959	1142	1153	5863432	5000000	5999999
7	244037	1	6	55	1838	0	0	6111723	6000000	6999999
8	1814115	3	6	80	1289	1510	1716	7927676	7000000	7999999
9	191940	2	6	55	1505	1671	0	8124131	8000000	8999999
10	1532673	1	6	65	1278	0	0	9659980	9000000	9999999
11	1093797	1	6	50	1799	0	0	10755055	10000000	10999999
12	914427	3	6	90	1655	1948	1113	11671281	11000000	11999999

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

Type 5 Radar Waveform_27

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	259763	3	9	85	1810	1024	1573	259763	0	923076
2	1374951	1	9	80	1377	0	0	1639121	923077	1846153
3	675516	3	9	100	1618	1110	1531	2316014	1846154	2769230
4	1369178	1	9	80	1855	0	0	3689451	2769231	3692307
5	65967	3	9	70	1332	1545	1245	3757273	3692308	4615384
6	1505057	1	9	55	1761	0	0	5266452	4615385	5538461
7	1162089	1	9	70	1719	0	0	6430302	5538462	6461538
8	273035	3	9	100	1719	1684	1869	6705056	6461539	7384615
9	739950	2	9	70	1105	1331	0	7450278	7384616	8307692
10	863975	2	9	55	1066	1629	0	8316689	8307693	9230769
11	1777951	1	9	85	1370	0	0	10097335	9230770	10153846
12	724941	3	9	90	1263	1706	1342	10823646	10153847	11076923
13	945933	1	9	60	1170	0	0	11773890	11076924	12000000

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

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	589119	3	12	55	1007	1066	1162	589119	0	1199999
2	925272	2	12	75	1200	1979	0	1517626	1200000	2399999
3	987322	3	12	100	1517	1947	1483	2508127	2400000	3599999
4	1423193	2	12	60	1233	1416	0	3936267	3600000	4799999
5	1494911	3	12	100	1832	1924	1225	5433827	4800000	5999999
6	871747	1	12	100	1827	0	0	6310555	6000000	7199999
7	1641810	1	12	50	1526	0	0	7954192	7200000	8399999
8	779164	2	12	85	1235	1299	0	8734882	8400000	9599999
9	1129827	1	12	95	1975	0	0	9867243	9600000	10799999
10	1042891	3	12	50	1542	1626	1369	10912109	10800000	11999999

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

Type 5 Radar Waveform_29

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	21072	3	17	100	1968	1609	1708	21072	0	666666
2	918098	1	17	65	1717	0	0	944455	666667	1333333
3	911512	1	17	50	1828	0	0	1857684	1333334	2000000
4	230633	2	17	55	1278	1853	0	2090145	2000001	2666667
5	1238879	1	17	90	1112	0	0	3332155	2666668	3333334
6	107747	1	17	100	1626	0	0	3441014	3333335	4000001
7	1047845	1	17	50	1889	0	0	4490485	4000002	4666668
8	239659	2	17	80	1411	1358	0	4732033	4666669	5333335
9	670342	1	17	90	1503	0	0	5405144	5333336	6000002
10	1250034	2	17	80	1146	1241	0	6656681	6000003	6666669
11	419248	2	17	65	1877	1436	0	7078316	6666670	7333336
12	363204	3	17	100	1021	1726	1957	7444833	7333337	8000003
13	925146	1	17	85	1982	0	0	8374683	8000004	8666670
14	361754	1	17	100	1098	0	0	8738419	8666671	9333337
15	1047752	3	17	80	1538	1358	1454	9787269	9333338	10000004
16	849946	3	17	80	1715	1313	1692	10641565	10000005	10666671
17	405207	1	17	75	1217	0	0	11051492	10666672	11333338
18	332831	2	17	60	1630	1001	0	11385540	11333339	12000005

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

Type 5 Radar Waveform_30

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	1420256	1	5	85	1350	0	0	1420256	0	1499999
2	1202096	3	5	80	1735	1392	1976	2623702	1500000	2999999
3	1843404	1	5	95	1010	0	0	4472209	3000000	4499999
4	191992	2	5	95	1008	1585	0	4665211	4500000	5999999
5	2471613	3	5	100	1218	1523	1464	7139417	6000000	7499999
6	883381	2	5	90	1363	1335	0	8027003	7500000	8999999
7	2391660	3	5	75	1326	1014	1977	10421361	9000000	10499999
8	774997	2	5	75	1898	1878	0	11200675	10500000	11999999

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	5292	1	16	5292	1
2	5292	1	17	5292	1
3	5292	1	18	5292	1
4	5292	1	19	5292	1
5	5292	1	20	5292	1
6	5292	1	21	5292	1
7	5292	1	22	5292	1
8	5292	1	23	5292	1
9	5292	1	24	5292	1
10	5292	1	25	5292	1
11	5292	1	26	5292	1
12	5292	1	27	5292	1
13	5292	1	28	5292	1
14	5292	1	29	5292	1
15	5292	1	30	5292	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5288	6	2	5330	6
5	5315	15	5	5336	15
9	5326	27	12	5331	36
12	5290	36	21	5307	63
14	5307	42	32	5302	96
32	5319	96	33	5283	99
36	5279	108	47	5299	141
49	5320	147	51	5295	153
66	5329	198	70	5320	210
73	5310	219	94	5328	282
87	5282	261	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5303	12	8	5290	24
14	5279	42	14	5297	42
16	5319	48	62	5323	186
22	5300	66	65	5327	195
24	5295	72	74	5299	222
30	5282	90	84	5291	252
39	5334	117	87	5279	261
46	5294	138	97	5287	291
48	5327	144	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5291	18	6	5296	18
23	5288	69	17	5294	51
25	5316	75	22	5289	66
29	5280	87	29	5324	87
50	5286	150	35	5284	105
73	5335	219	62	5287	186
82	5304	246	66	5283	198
84	5330	252	69	5278	207
93	5311	279	91	5306	273
--	--	--	96	5325	288
--	--	--	99	5288	297

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5285	42	1	5288	3
17	5301	51	8	5289	24
19	5325	57	51	5305	153
25	5315	75	55	5328	165
30	5338	90	63	5316	189
31	5332	93	71	5320	213
44	5306	132	84	5331	252
46	5300	138	90	5333	270
50	5307	150	98	5329	294
52	5334	156	--	--	--
68	5282	204	--	--	--
78	5326	234	--	--	--
87	5278	261	--	--	--
97	5294	291	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5319	24	0	5311	0
14	5337	42	4	5300	12
21	5278	63	15	5288	45
24	5326	72	36	5301	108
25	5295	75	48	5314	144
26	5322	78	49	5313	147
36	5297	108	50	5312	150
45	5291	135	55	5317	165
57	5284	171	57	5307	171
59	5286	177	67	5289	201
70	5327	210	71	5303	213
78	5318	234	74	5291	222
80	5333	240	--	--	--
89	5298	267	--	--	--
93	5293	279	--	--	--
8	5319	24	--	--	--

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
0	5321	0	10	5338	30
8	5284	24	16	5311	48
17	5291	51	19	5318	57
23	5307	69	28	5280	84
29	5290	87	34	5328	102
30	5315	90	44	5278	132
40	5337	120	54	5299	162
43	5325	129	55	5306	165
51	5282	153	62	5303	186
77	5289	231	67	5293	201
--	--	--	92	5326	276
--	--	--	96	5320	288

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5299	18	0	5287	0
7	5335	21	11	5300	33
9	5301	27	26	5323	78
15	5293	45	40	5329	120
16	5323	48	61	5305	183
26	5338	78	64	5337	192
27	5327	81	79	5280	237
38	5278	114	92	5301	276
42	5334	126	--	--	--
51	5324	153	--	--	--
56	5321	168	--	--	--
59	5291	177	--	--	--
61	5317	183	--	--	--
67	5310	201	--	--	--
78	5287	234	--	--	--
96	5307	288	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5306	18	2	5309	6
29	5328	87	10	5291	30
31	5338	93	29	5320	87
33	5289	99	34	5279	102
35	5318	105	50	5326	150
43	5332	129	60	5301	180
47	5280	141	68	5302	204
49	5319	147	79	5324	237
54	5299	162	80	5338	240
67	5308	201	85	5333	255
70	5307	210	86	5290	258
90	5294	270	87	5314	261
95	5326	285	89	5313	267

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5281	6	0	5330	0
6	5319	18	4	5336	12
10	5288	30	13	5316	39
11	5283	33	24	5304	72
12	5287	36	36	5295	108
18	5317	54	38	5301	114
21	5323	63	46	5309	138
22	5335	66	49	5280	147
31	5302	93	56	5314	168
32	5327	96	68	5338	204
33	5326	99	81	5286	243
39	5290	117	92	5284	276
40	5307	120	94	5289	282
57	5286	171	96	5315	288
58	5297	174	98	5292	294
59	5296	177	--	--	--
90	5313	270	--	--	--
91	5299	273	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5313	3	1	5291	3
4	5330	12	8	5320	24
7	5292	21	18	5322	54
26	5282	78	29	5332	87
45	5287	135	31	5316	93
69	5336	207	38	5292	114
82	5315	246	40	5336	120
92	5280	276	45	5283	135
93	5326	279	69	5287	207
99	5288	297	73	5329	219
--	--	--	88	5289	264
--	--	--	96	5296	288

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5325	0	0	5299	0
19	5286	57	5	5297	15
21	5287	63	9	5329	27
42	5337	126	15	5319	45
46	5279	138	28	5298	84
52	5302	156	39	5304	117
54	5313	162	42	5323	126
86	5319	258	57	5296	171
96	5330	288	65	5285	195
--	--	--	74	5289	222

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5279	15	0	5294	0
12	5285	36	5	5283	15
21	5297	63	6	5317	18
33	5312	99	7	5329	21
36	5287	108	11	5315	33
41	5286	123	12	5289	36
62	5278	186	15	5308	45
70	5304	210	18	5285	54
73	5295	219	20	5310	60
77	5315	231	36	5322	108
80	5309	240	41	5301	123
87	5318	261	51	5284	153
89	5301	267	56	5326	168
94	5313	282	57	5311	171
95	5294	285	61	5305	183
--	--	--	63	5306	189
--	--	--	92	5332	276
--	--	--	97	5313	291

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5306	3	0	5309	0
9	5303	27	11	5300	33
11	5295	33	12	5299	36
14	5293	42	28	5287	84
15	5284	45	30	5332	90
16	5279	48	35	5289	105
17	5315	51	39	5302	117
18	5283	54	43	5336	129
20	5331	60	44	5291	132
25	5313	75	63	5284	189
27	5307	81	64	5338	192
29	5334	87	65	5334	195
44	5289	132	70	5280	210
52	5299	156	80	5322	240
56	5337	168	90	5314	270
57	5285	171	92	5324	276
72	5333	216	--	--	--
75	5281	225	--	--	--
82	5328	246	--	--	--
86	5319	258	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5284	24	5	5322	15
10	5311	30	17	5315	51
14	5316	42	24	5321	72
18	5322	54	38	5289	114
19	5324	57	39	5290	117
21	5306	63	56	5298	168
27	5296	81	59	5295	177
30	5318	90	74	5324	222
33	5301	99	75	5297	225
36	5334	108	77	5309	231
38	5286	114	89	5280	267
52	5308	156	--	--	--
53	5326	159	--	--	--
54	5315	162	--	--	--
62	5310	186	--	--	--
80	5287	240	--	--	--
82	5309	246	--	--	--
84	5280	252	--	--	--
87	5336	261	--	--	--
90	5328	270	--	--	--
96	5283	288	--	--	--
97	5337	291	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5334	12	19	5296	57
11	5279	33	23	5297	69
14	5295	42	24	5309	72
18	5303	54	26	5312	78
20	5292	60	37	5280	111
29	5323	87	40	5283	120
33	5317	99	42	5338	126
36	5322	108	45	5333	135
44	5329	132	46	5282	138
53	5294	159	47	5279	141
66	5311	198	49	5290	147
79	5310	237	50	5320	150
97	5312	291	63	5306	189
4	5334	12	68	5301	204
--	--	--	73	5281	219
--	--	--	78	5326	234
--	--	--	90	5315	270

Radio A Radar Statistical Performance for 802.11n-HT40

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5292	1	838	63	1
2	5292	1	898	59	1
3	5292	1	518	102	1
4	5292	1	938	57	1
5	5292	1	818	65	1
6	5292	1	618	86	1
7	5292	1	538	99	1
8	5292	1	858	62	1
9	5292	1	758	70	1
10	5292	1	798	67	1
11	5292	1	718	74	1
12	5292	1	578	92	1
13	5292	1	738	72	1
14	5292	1	598	89	1
15	5292	1	3066	18	1
16	5292	1	1668	32	1
17	5292	1	2709	20	1
18	5292	1	650	82	1
19	5292	1	2763	20	1
20	5292	1	2184	25	1
21	5292	1	1743	31	1
22	5292	1	1788	30	1
23	5292	1	2057	26	1
24	5292	1	3028	18	1
25	5292	1	1385	39	1
26	5292	1	558	95	1
27	5292	1	2700	20	1
28	5292	1	2647	20	1
29	5292	1	3005	18	1
30	5292	1	1879	29	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	5310	3.3	158	28	1
2	5310	1.2	198	23	1
3	5310	4.9	196	28	1
4	5310	4.2	176	28	1
5	5310	1.4	219	24	1
6	5310	2.3	170	26	1
7	5310	1.7	203	23	1
8	5310	1.4	184	23	1
9	5310	4.8	152	23	1
10	5310	2.8	195	27	1
11	5310	3.1	221	26	1
12	5310	3.5	161	23	1
13	5310	3.8	176	25	1
14	5310	3.3	154	28	1
15	5310	3.1	227	26	1
16	5310	2.6	179	26	1
17	5310	4.3	183	27	1
18	5310	4.7	172	23	1
19	5310	2.2	230	24	1
20	5310	4.2	172	24	1
21	5310	3.8	161	24	1
22	5310	4.0	200	23	1
23	5310	3.5	177	23	1
24	5310	4.2	178	25	1
25	5310	2.4	219	27	1
26	5310	3.1	165	27	1
27	5310	3.1	151	26	1
28	5310	4.3	153	24	1
29	5310	4.3	201	24	1
30	5310	3.2	179	23	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	5328	10.0	273	16	1
2	5328	6.6	332	18	1
3	5328	8.1	380	18	1
4	5328	6.1	252	17	1
5	5328	6.1	406	16	1
6	5328	7.7	426	18	1
7	5328	8.2	288	18	1
8	5328	7.6	369	16	1
9	5328	7.7	360	17	1
10	5328	7.3	264	16	1
11	5328	9.8	356	17	1
12	5328	6.1	451	17	1
13	5328	6.6	455	17	1
14	5328	9.7	478	18	1
15	5328	9.0	393	18	1
16	5328	9.5	498	17	1
17	5328	8.4	445	18	1
18	5328	8.1	462	18	1
19	5328	7.5	330	17	1
20	5328	8.1	446	17	1
21	5328	7.5	482	16	1
22	5328	6.0	314	16	1
23	5328	9.5	401	16	1
24	5328	10.0	392	17	1
25	5328	9.9	343	16	1
26	5328	9.7	267	18	1
27	5328	7.2	261	16	1
28	5328	10.0	252	17	1
29	5328	6.2	332	16	1
30	5328	7.2	423	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	5328	18.1	428	16	1
2	5328	17.6	452	16	1
3	5328	13.7	259	14	1
4	5328	11.6	334	13	1
5	5328	17.8	486	14	1
6	5328	15.9	404	13	1
7	5328	12.4	279	12	1
8	5328	19.5	364	15	1
9	5328	13.5	384	16	1
10	5328	18.8	325	12	1
11	5328	15.5	404	16	1
12	5328	17.9	257	14	1
13	5328	14.0	351	16	1
14	5328	12.1	496	14	1
15	5328	13.0	499	15	1
16	5328	19.7	255	14	1
17	5328	14.6	445	16	1
18	5328	18.9	365	14	1
19	5328	18.0	412	15	1
20	5328	13.4	309	12	1
21	5328	17.0	282	12	1
22	5328	15.2	313	13	1
23	5328	13.5	271	12	1
24	5328	16.7	464	16	1
25	5328	16.6	361	13	1
26	5328	18.4	450	14	1
27	5328	19.0	497	12	1
28	5328	14.2	432	16	1
29	5328	15.7	500	15	1
30	5328	18.6	479	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	5299.6	1	16	5310.0	1
2	5295.2	1	17	5310.0	1
3	5296.0	1	18	5310.0	1
4	5297.6	1	19	5310.0	1
5	5299.2	1	20	5310.0	1
6	5294.4	1	21	5320.4	1
7	5295.6	1	22	5324.8	1
8	5296.8	1	23	5324.0	1
9	5298.8	1	24	5322.4	1
10	5294.0	1	25	5320.8	1
11	5310.0	1	26	5325.6	1
12	5310.0	1	27	5324.4	1
13	5310.0	1	28	5323.2	1
14	5310.0	1	29	5321.2	1
15	5310.0	1	30	5326.0	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	481798	1	19	100	1204	0	0	481798	0	999999
2	1375842	1	19	85	1514	0	0	1858844	1000000	1999999
3	865683	3	19	65	1003	1818	1007	2726041	2000000	2999999
4	631387	1	19	75	1206	0	0	3361256	3000000	3999999
5	672539	2	19	75	1362	1066	0	4035001	4000000	4999999
6	1890318	1	19	95	1358	0	0	5927747	5000000	5999999
7	381108	3	19	90	1737	1782	1182	6310213	6000000	6999999
8	946868	1	19	75	1049	0	0	7261782	7000000	7999999
9	981135	1	19	55	1709	0	0	8243966	8000000	8999999
10	819153	2	19	75	1160	1323	0	9064828	9000000	9999999
11	1378564	1	19	95	1337	0	0	10445875	10000000	10999999
12	702753	2	19	60	1150	1292	0	11149965	11000000	11999999

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

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	62504	2	8	55	1027	1286	0	62504	0	631578
2	641064	2	8	90	1729	1377	0	705881	631579	1263157
3	676885	1	8	95	1734	0	0	1385872	1263158	1894736
4	803924	1	8	55	1359	0	0	2191530	1894737	2526315
5	617922	3	8	100	1254	1230	1267	2810811	2526316	3157894
6	543430	2	8	55	1825	1294	0	3357992	3157895	3789473
7	620522	3	8	60	1851	1197	1038	3981633	3789474	4421052
8	714144	3	8	55	1360	1955	1224	4699863	4421053	5052631
9	419173	1	8	50	1102	0	0	5123575	5052632	5684210
10	760283	1	8	60	1825	0	0	5884960	5684211	6315789
11	554956	2	8	65	1465	1165	0	6441741	6315790	6947368
12	1063581	1	8	90	1936	0	0	7507952	6947369	7578947
13	560288	3	8	85	1002	1155	1992	8070176	7578948	8210526
14	325880	3	8	75	1486	1098	1542	8400205	8210527	8842105
15	440834	3	8	100	1387	1925	1279	8845165	8842106	9473684
16	1218306	2	8	95	1861	1115	0	10068062	9473685	10105263
17	37025	1	8	65	1312	0	0	10108063	10105264	10736842
18	1034278	3	8	90	1347	1793	1057	11143653	10736843	11368421
19	517168	1	8	100	1474	0	0	11665018	11368422	12000000

Total number of pulses in waveform = 38

Type 5 Radar Waveform_3

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	572622	2	10	90	1384	1640	0	572622	0	599999
2	116740	3	10	80	1763	1580	1282	692386	600000	1199999
3	862589	1	10	90	1174	0	0	1559600	1200000	1799999
4	690692	3	10	55	1915	1845	1075	2251466	1800000	2399999
5	448675	1	10	65	1406	0	0	2704976	2400000	2999999
6	583533	3	10	100	1451	1679	1996	3289915	3000000	3599999
7	720829	2	10	80	1063	1697	0	4015870	3600000	4199999
8	538423	1	10	100	1792	0	0	4557053	4200000	4799999
9	432499	2	10	85	1446	1820	0	4991344	4800000	5399999
10	784076	3	10	90	1083	1587	1358	5778686	5400000	5999999
11	228728	3	10	65	1100	1301	1234	6011442	6000000	6599999
12	1023517	2	10	50	1917	1587	0	7038594	6600000	7199999
13	518916	3	10	55	1173	1563	1941	7561014	7200000	7799999
14	377380	3	10	80	1574	1891	1687	7943071	7800000	8399999
15	616777	1	10	75	1685	0	0	8565000	8400000	8999999
16	499818	3	10	95	1572	1436	1183	9066503	9000000	9599999
17	942509	1	10	75	1786	0	0	10013203	9600000	10199999
18	704355	1	10	50	1479	0	0	10719344	10200000	10799999
19	538540	1	10	85	1831	0	0	11259363	10800000	11399999
20	406540	1	10	75	1525	0	0	11667734	11400000	11999999

Total number of pulses in waveform = 40

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	272059	2	14	85	1505	1626	0	272059	0	599999
2	594704	1	14	75	1643	0	0	869894	600000	1199999
3	474098	2	14	75	1142	1883	0	1345635	1200000	1799999
4	840677	1	14	95	1032	0	0	2189337	1800000	2399999
5	565058	2	14	85	1846	1988	0	2755427	2400000	2999999
6	555098	1	14	85	1814	0	0	3314359	3000000	3599999
7	803413	1	14	60	1202	0	0	4119586	3600000	4199999
8	411961	2	14	95	1202	1125	0	4532749	4200000	4799999
9	444240	1	14	65	1435	0	0	4979316	4800000	5399999
10	861272	3	14	80	1514	1973	1231	5842023	5400000	5999999
11	159372	3	14	50	1855	1637	1742	6006113	6000000	6599999
12	944698	2	14	70	1823	1678	0	6956045	6600000	7199999
13	437057	1	14	50	1402	0	0	7396603	7200000	7799999
14	745530	2	14	100	1717	1058	0	8143535	7800000	8399999
15	528648	3	14	55	1026	1329	1545	8674958	8400000	8999999
16	345858	1	14	85	1632	0	0	9024716	9000000	9599999
17	1085203	2	14	50	1634	1991	0	10111551	9600000	10199999
18	566501	2	14	95	1990	1195	0	10681677	10200000	10799999
19	489321	3	14	95	1844	1348	1572	11174183	10800000	11399999
20	524954	2	14	100	1030	1714	0	11703901	11400000	11999999

Total number of pulses in waveform = 37

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	324473	1	18	90	1057	0	0	324473	0	599999
2	393774	3	18	60	1318	1639	1436	719304	600000	1199999
3	803960	1	18	70	1519	0	0	1527657	1200000	1799999
4	370805	2	18	100	1082	1995	0	1899981	1800000	2399999
5	812847	2	18	80	1201	1652	0	2715905	2400000	2999999
6	562206	1	18	55	1090	0	0	3280964	3000000	3599999
7	548270	1	18	85	1835	0	0	3830324	3600000	4199999
8	699968	2	18	60	1077	1333	0	4532127	4200000	4799999
9	839297	3	18	85	1355	1352	1323	5373834	4800000	5399999
10	367508	1	18	80	1131	0	0	5745372	5400000	5999999
11	576586	1	18	100	1944	0	0	6323089	6000000	6599999
12	673451	2	18	55	1730	1973	0	6998484	6600000	7199999
13	638745	3	18	85	1946	1378	1163	7640932	7200000	7799999
14	454468	2	18	60	1817	1775	0	8099887	7800000	8399999
15	600635	2	18	80	1606	1820	0	8704114	8400000	8999999
16	432083	3	18	60	1441	1546	1007	9139623	9000000	9599999
17	616005	3	18	90	1610	1332	1583	9759622	9600000	10199999
18	546585	3	18	55	1235	1321	1081	10310732	10200000	10799999
19	819212	2	18	65	1389	1397	0	11133581	10800000	11399999
20	496876	3	18	80	1927	1974	1142	11633243	11400000	11999999

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

Type 5 Radar Waveform_6

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	509172	2	6	75	1018	1389	0	509172	0	999999
2	806046	2	6	85	1018	1983	0	1317625	1000000	1999999
3	886934	1	6	65	1301	0	0	2207560	2000000	2999999
4	1288703	3	6	75	1877	1914	1567	3497564	3000000	3999999
5	763867	2	6	55	1871	1735	0	4266789	4000000	4999999
6	937800	1	6	95	1761	0	0	5208195	5000000	5999999
7	1692447	3	6	75	1307	1906	1367	6902403	6000000	6999999
8	286691	2	6	85	1632	1125	0	7193674	7000000	7999999
9	1625997	3	6	75	1525	1688	1154	8822428	8000000	8999999
10	568224	3	6	90	1089	1109	1353	9395019	9000000	9999999
11	1242173	3	6	75	1754	1553	1784	10640743	10000000	10999999
12	1108568	1	6	90	1819	0	0	11754402	11000000	11999999

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

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	469686	3	9	65	1761	1381	1742	469686	0	1090908
2	988218	3	9	85	1840	1324	1687	1462788	1090909	2181817
3	909780	2	9	80	1528	1304	0	2377419	2181818	3272726
4	961620	3	9	75	1130	1601	1350	3341871	3272727	4363635
5	1574453	3	9	60	1987	1491	1617	4920405	4363636	5454544
6	1133556	2	9	90	1934	1008	0	6059056	5454545	6545453
7	1231762	2	9	60	1675	1270	0	7293760	6545454	7636362
8	442226	1	9	75	1513	0	0	7738931	7636363	8727271
9	1712473	2	9	70	1630	1935	0	9452917	8727272	9818180
10	1222561	3	9	55	1721	1603	1715	10679043	9818181	10909089
11	734877	1	9	95	1530	0	0	11418959	10909090	11999998

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

Type 5 Radar Waveform_8

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	553617	3	12	65	1359	1940	1828	553617	0	1199999
2	1009836	1	12	70	1086	0	0	1568580	1200000	2399999
3	890006	2	12	50	1231	1886	0	2459672	2400000	3599999
4	1231410	2	12	95	1483	1983	0	3694199	3600000	4799999
5	2035902	3	12	70	1471	1968	1149	5733567	4800000	5999999
6	1295959	3	12	100	1414	1124	1284	7034114	6000000	7199999
7	444222	1	12	70	1846	0	0	7482158	7200000	8399999
8	1015324	2	12	100	1523	1953	0	8499328	8400000	9599999
9	1923056	2	12	95	1989	1383	0	10425860	9600000	10799999
10	491114	3	12	100	1971	1519	1403	10920346	10800000	11999999

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

Type 5 Radar Waveform_9

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	26772	2	17	50	1022	1313	0	26772	0	599999
2	1152507	2	17	100	1737	1817	0	1181614	600000	1199999
3	551178	1	17	70	1504	0	0	1736346	1200000	1799999
4	571802	3	17	85	1792	1862	1274	2309652	1800000	2399999
5	679118	2	17	75	1894	1599	0	2993698	2400000	2999999
6	73220	3	17	100	1920	1872	1497	3070411	3000000	3599999
7	786632	3	17	90	1184	1513	1074	3862332	3600000	4199999
8	811400	1	17	85	1727	0	0	4677503	4200000	4799999
9	662877	2	17	50	1266	1377	0	5342107	4800000	5399999
10	323852	2	17	70	1611	1415	0	5668602	5400000	5999999
11	703688	1	17	95	1726	0	0	6375316	6000000	6599999
12	522378	1	17	75	1491	0	0	6899420	6600000	7199999
13	582411	3	17	85	1426	1870	1387	7483322	7200000	7799999
14	410723	3	17	70	1175	1363	1252	7898728	7800000	8399999
15	560006	3	17	60	1942	1543	1085	8462524	8400000	8999999
16	1031380	1	17	60	1825	0	0	9498474	9000000	9599999
17	403263	2	17	80	1112	1341	0	9903562	9600000	10199999
18	695766	1	17	70	1404	0	0	10601781	10200000	10799999
19	505818	3	17	70	1596	1084	1006	11109003	10800000	11399999
20	779838	3	17	100	1180	1253	1045	11892527	11400000	11999999

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

Type 5 Radar Waveform_10

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	145532	1	5	55	1898	0	0	145532	0	857142
2	1441174	3	5	70	1748	1170	1811	1588604	857143	1714285
3	227362	3	5	55	1148	1994	1333	1820695	1714286	2571428
4	997477	1	5	80	1897	0	0	2822647	2571429	3428571
5	1194672	1	5	75	1453	0	0	4019216	3428572	4285714
6	324595	1	5	60	1467	0	0	4345264	4285715	5142857
7	1323026	2	5	100	1157	1996	0	5669757	5142858	6000000
8	388588	1	5	90	1922	0	0	6061498	6000001	6857143
9	977829	2	5	60	1088	1176	0	7041249	6857144	7714286
10	978862	3	5	100	1835	1031	1248	8022375	7714287	8571429
11	1396886	1	5	85	1281	0	0	9423375	8571430	9428572
12	103013	1	5	95	1816	0	0	9527669	9428573	10285715
13	1281926	2	5	55	1462	1226	0	10811411	10285716	11142858
14	680483	3	5	80	1927	1257	1619	11494582	11142859	12000001

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

Type 5 Radar Waveform_11

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	88632	2	19	75	1826	1714	0	88632	0	857142
2	1533354	2	19	100	1538	1992	0	1625526	857143	1714285
3	513448	2	19	85	1991	1358	0	2142504	1714286	2571428
4	832787	1	19	95	1752	0	0	2978640	2571429	3428571
5	873871	3	19	55	1113	1791	1117	3854263	3428572	4285714
6	1042228	3	19	65	1559	1420	1647	4900512	4285715	5142857
7	891968	3	19	70	1053	1841	1227	5797106	5142858	6000000
8	556123	1	19	95	1617	0	0	6357350	6000001	6857143
9	1200236	2	19	95	1015	1924	0	7559203	6857144	7714286
10	356867	1	19	50	1196	0	0	7919009	7714287	8571429
11	767686	3	19	70	1948	1115	1346	8687891	8571430	9428572
12	1560100	1	19	95	1001	0	0	10252400	9428573	10285715
13	521194	3	19	55	1868	1468	1704	10774595	10285716	11142858
14	449366	1	19	65	1680	0	0	11229001	11142859	12000001

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

Type 5 Radar Waveform_12

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	869036	1	8	50	1483	0	0	869036	0	999999
2	932270	3	8	85	1408	1919	1259	1802789	1000000	1999999
3	713484	3	8	90	1866	1107	1576	2520859	2000000	2999999
4	1240034	3	8	95	1856	1591	1570	3765442	3000000	3999999
5	541578	3	8	80	1233	1654	1853	4312037	4000000	4999999
6	1103122	2	8	75	1497	1382	0	5419899	5000000	5999999
7	973693	2	8	75	1679	1427	0	6396471	6000000	6999999
8	861742	2	8	65	1722	1031	0	7261319	7000000	7999999
9	1025803	1	8	75	1238	0	0	8289875	8000000	8999999
10	1378199	3	8	65	1208	1084	1377	9669312	9000000	9999999
11	977800	2	8	90	1762	1844	0	10650781	10000000	10999999
12	1169167	3	8	80	1519	1809	1921	11823554	11000000	11999999

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

Type 5 Radar Waveform_13

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	993756	1	10	95	1122	0	0	993756	0	999999
2	726173	3	10	80	1549	1267	1021	1721051	1000000	1999999
3	719359	2	10	65	1272	1123	0	2444247	2000000	2999999
4	778635	1	10	50	1649	0	0	3225277	3000000	3999999
5	1752444	3	10	75	1149	1100	1249	4979370	4000000	4999999
6	84976	3	10	90	1713	1015	1247	5067844	5000000	5999999
7	968876	1	10	70	1396	0	0	6040695	6000000	6999999
8	1485598	3	10	65	1511	1168	1900	7527689	7000000	7999999
9	1440682	2	10	70	1294	1116	0	8972950	8000000	8999999
10	234642	1	10	50	1598	0	0	9210002	9000000	9999999
11	1353070	2	10	95	1973	1052	0	10564670	10000000	10999999
12	584489	1	10	55	1030	0	0	11152184	11000000	11999999

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

Type 5 Radar Waveform_14

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	38168	2	14	95	1280	1096	0	38168	0	1499999
2	2449628	2	14	90	1117	1464	0	2490172	1500000	2999999
3	1137801	1	14	55	1212	0	0	3630554	3000000	4499999
4	1591080	2	14	95	1007	1170	0	5222846	4500000	5999999
5	901460	3	14	85	1005	1622	1658	6126483	6000000	7499999
6	2812834	2	14	95	1847	1070	0	8943602	7500000	8999999
7	1434409	2	14	50	1466	1377	0	10380928	9000000	10499999
8	1219823	3	14	60	1547	1964	1047	11603594	10500000	11999999

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

Type 5 Radar Waveform_15

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	494506	2	18	95	1139	1897	0	494506	0	666666
2	481242	1	18	60	1275	0	0	978784	666667	1333333
3	387627	2	18	80	1522	1366	0	1367686	1333334	2000000
4	862199	2	18	95	1443	1747	0	2232773	2000001	2666667
5	1084457	3	18	65	1553	1941	1071	3320420	2666668	3333334
6	359707	3	18	75	1433	1091	1807	3684692	3333335	4000001
7	842663	3	18	80	1252	1920	1279	4531686	4000002	4666668
8	247812	2	18	60	1424	1357	0	4783949	4666669	5333335
9	1069635	1	18	60	1214	0	0	5856365	5333336	6000002
10	192573	3	18	85	1275	1165	1219	6050152	6000003	6666669
11	1088717	3	18	100	1339	1805	1372	7142528	6666670	7333336
12	445439	3	18	95	1158	1203	1422	7592483	7333337	8000003
13	904141	2	18	100	1751	1102	0	8500407	8000004	8666670
14	809836	1	18	85	1848	0	0	9313096	8666671	9333337
15	80394	1	18	75	1848	0	0	9395338	9333338	10000004
16	935760	2	18	90	1362	1729	0	10332946	10000005	10666671
17	804965	3	18	90	1245	1670	1283	11141002	10666672	11333338
18	688118	3	18	55	1511	1595	1149	11833318	11333339	12000005

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

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	40151	1	6	100	1900	0	0	40151	0	666666
2	696842	3	6	90	1160	1708	1379	738893	666667	1333333
3	1041184	2	6	100	1393	1318	0	1784324	1333334	2000000
4	715259	2	6	65	1221	1794	0	2502294	2000001	2666667
5	185007	3	6	85	1167	1146	1494	2690316	2666668	3333334
6	853197	2	6	90	1136	1607	0	3547320	3333335	4000001
7	1078623	3	6	75	1038	1575	1271	4628686	4000002	4666668
8	415498	2	6	65	1089	1458	0	5048068	4666669	5333335
9	505851	3	6	85	1602	1237	1662	5556466	5333336	6000002
10	594892	2	6	50	1024	1144	0	6155859	6000003	6666669
11	878951	1	6	60	1972	0	0	7036978	6666670	7333336
12	464310	1	6	75	1936	0	0	7503260	7333337	8000003
13	1089870	3	6	70	1955	1713	1449	8595066	8000004	8666670
14	228335	2	6	50	1000	1690	0	8828518	8666671	9333337
15	917441	1	6	85	1111	0	0	9748649	9333338	10000004
16	295217	1	5	85	1912	0	0	10044977	10000005	10666671
17	821791	2	13	75	1656	1696	0	10868680	10666672	11333338
18	528033	3	11	80	1664	1744	1316	11400065	11333339	12000005

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

Type 5 Radar Waveform_17

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	902960	3	9	80	1731	1929	1799	902960	0	923076
2	90746	2	9	85	1326	1415	0	999165	923077	1846153
3	1399254	1	9	75	1257	0	0	2401160	1846154	2769230
4	702283	3	9	65	1530	1478	1932	3104700	2769231	3692307
5	859447	2	9	100	1472	1347	0	3969087	3692308	4615384
6	1222706	1	9	60	1800	0	0	5194612	4615385	5538461
7	1041185	1	9	65	1970	0	0	6237597	5538462	6461538
8	412889	3	9	50	1204	1515	1705	6652456	6461539	7384615
9	1305521	1	9	70	1220	0	0	7962401	7384616	8307692
10	463615	1	9	55	1197	0	0	8427236	8307693	9230769
11	1504120	3	9	95	1064	1776	1835	9932553	9230770	10153846
12	668911	2	9	70	1734	1839	0	10606139	10153847	11076923
13	1281423	1	9	50	1228	0	0	11891135	11076924	12000000

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

Type 5 Radar Waveform_18

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	182717	2	12	55	1959	1251	0	182717	0	749999
2	630675	1	12	100	1936	0	0	816602	750000	1499999
3	909046	3	12	60	1328	1003	1966	1727584	1500000	2249999
4	756092	1	12	70	1755	0	0	2487973	2250000	2999999
5	706967	3	12	95	1049	1589	1720	3196695	3000000	3749999
6	986233	1	12	55	1646	0	0	4187286	3750000	4499999
7	787062	3	12	100	1054	1619	1237	4975994	4500000	5249999
8	883110	1	12	65	1279	0	0	5863014	5250000	5999999
9	682435	2	12	70	1495	1835	0	6546728	6000000	6749999
10	663636	2	12	50	1984	1432	0	7213694	6750000	7499999
11	600526	1	12	50	1702	0	0	7817636	7500000	8249999
12	919754	1	12	90	1915	0	0	8739092	8250000	8999999
13	793179	1	12	55	1838	0	0	9534186	9000000	9749999
14	849698	1	12	60	1569	0	0	10385722	9750000	10499999
15	374362	3	12	80	1705	1410	1390	10761653	10500000	11249999
16	1112070	1	12	95	1191	0	0	11878228	11250000	11999999

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

Type 5 Radar Waveform_19

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	231690	3	17	65	1850	1469	1793	231690	0	1090908
2	929101	3	17	50	1763	1242	1751	1165903	1090909	2181817
3	1776924	2	17	95	1835	1486	0	2947583	2181818	3272726
4	773255	3	17	90	1726	1660	1014	3724159	3272727	4363635
5	1671141	1	17	95	1681	0	0	5399700	4363636	5454544
6	992985	2	17	65	1423	1430	0	6394366	5454545	6545453
7	336491	1	17	95	1259	0	0	6733710	6545454	7636362
8	1428709	1	17	90	1540	0	0	8163678	7636363	8727271
9	1649504	2	17	100	1339	1868	0	9814722	8727272	9818180
10	522663	2	17	50	1873	1882	0	10340592	9818181	10909089
11	1632497	1	17	90	1752	0	0	11976844	10909090	11999998

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

Type 5 Radar Waveform_20

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	854631	2	5	60	1761	1918	0	854631	0	1199999
2	1005923	1	5	95	1712	0	0	1864233	1200000	2399999
3	1148523	1	5	65	1322	0	0	3014468	2400000	3599999
4	742765	2	5	60	1982	1350	0	3758555	3600000	4799999
5	2222607	3	5	85	1505	1231	1010	5984494	4800000	5999999
6	248990	2	5	75	1018	1189	0	6237230	6000000	7199999
7	1237359	2	5	90	1987	1629	0	7476796	7200000	8399999
8	1711634	1	5	85	1300	0	0	9192046	8400000	9599999
9	1375760	2	5	85	1902	1587	0	10569106	9600000	10799999
10	761387	2	5	65	1069	1208	0	11333982	10800000	11999999

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

Type 5 Radar Waveform_21

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	809821	1	19	100	1770	0	0	809821	0	999999
2	381112	1	19	85	1036	0	0	1192703	1000000	1999999
3	821440	3	19	60	1815	1803	1920	2015179	2000000	2999999
4	1360094	1	19	90	1658	0	0	3380811	3000000	3999999
5	721836	3	19	70	1593	1462	1707	4104305	4000000	4999999
6	1010940	2	19	50	1460	1436	0	5120007	5000000	5999999
7	1261650	3	19	70	1242	1134	1267	6384553	6000000	6999999
8	1231814	2	19	65	1116	1900	0	7620010	7000000	7999999
9	1094277	3	19	60	1759	1009	1054	8717303	8000000	8999999
10	443772	3	19	55	1894	1500	1463	9164897	9000000	9999999
11	1278790	2	19	50	1824	1743	0	10448544	10000000	10999999
12	1085406	2	19	70	1232	1928	0	11537517	11000000	11999999

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

Type 5 Radar Waveform_22

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	858578	3	8	65	1958	1961	1941	858578	0	1199999
2	824526	1	8	55	1618	0	0	1688964	1200000	2399999
3	1112373	2	8	90	1950	1363	0	2802955	2400000	3599999
4	1383362	2	8	70	1833	1159	0	4189630	3600000	4799999
5	1099180	3	8	75	1932	1945	1766	5291802	4800000	5999999
6	1542483	1	8	85	1629	0	0	6839928	6000000	7199999
7	1097924	1	8	65	1827	0	0	7939481	7200000	8399999
8	1009669	2	8	70	1486	1278	0	8950977	8400000	9599999
9	1641217	1	8	95	1713	0	0	10594958	9600000	10799999
10	660187	2	8	50	1392	1609	0	11256858	10800000	11999999

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

Type 5 Radar Waveform_23

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	734439	3	10	50	1703	1666	1244	734439	0	923076
2	881563	1	10	50	1197	0	0	1620615	923077	1846153
3	341130	1	10	80	1561	0	0	1962942	1846154	2769230
4	1287501	2	10	75	1842	1026	0	3252004	2769231	3692307
5	863256	3	10	85	1020	1967	1651	4118128	3692308	4615384
6	835377	1	10	95	1632	0	0	4958143	4615385	5538461
7	1118527	1	10	75	1549	0	0	6078302	5538462	6461538
8	513364	3	10	65	1859	1757	1801	6593215	6461539	7384615
9	1169079	2	10	80	1638	1496	0	7767711	7384616	8307692
10	624731	2	10	80	1261	1176	0	8395576	8307693	9230769
11	1390974	1	10	50	1797	0	0	9788987	9230770	10153846
12	1035569	1	10	90	1391	0	0	10826353	10153847	11076923
13	892811	2	10	50	1948	1879	0	11720555	11076924	12000000

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

Type 5 Radar Waveform_24

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	294114	1	14	50	1911	0	0	294114	0	599999
2	728876	2	14	65	1433	1420	0	1024901	600000	1199999
3	315969	2	14	50	1314	1406	0	1343723	1200000	1799999
4	901144	2	14	80	1767	1038	0	2247587	1800000	2399999
5	736118	2	14	55	1319	1067	0	2986510	2400000	2999999
6	17452	3	14	75	1649	1359	1637	3006348	3000000	3599999
7	616029	3	14	60	1523	1011	1163	3627022	3600000	4199999
8	680515	3	14	65	1232	1491	1473	4311234	4200000	4799999
9	825160	1	14	60	1610	0	0	5140590	4800000	5399999
10	718215	2	14	95	1472	1038	0	5860415	5400000	5999999
11	689852	1	14	50	1016	0	0	6552777	6000000	6599999
12	633270	3	14	90	1258	1108	1340	7187063	6600000	7199999
13	575900	3	14	60	1051	1914	1441	7766669	7200000	7799999
14	233701	3	14	85	1686	1429	1946	8004776	7800000	8399999
15	507012	3	14	75	1006	1117	1490	8516849	8400000	8999999
16	1031400	3	14	85	1763	1681	1116	9551862	9000000	9599999
17	419894	1	14	65	1759	0	0	9976316	9600000	10199999
18	413028	2	14	50	1101	1097	0	10391103	10200000	10799999
19	544080	3	14	70	1991	1409	1328	10937381	10800000	11399999
20	1003190	3	14	95	1578	1334	1044	11945299	11400000	11999999

Total number of pulses in waveform = 46
****

Type 5 Radar Waveform_25

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	899791	1	18	50	1129	0	0	899791	0	999999
2	584918	1	18	60	1567	0	0	1485838	1000000	1999999
3	760736	2	18	85	1018	1848	0	2248141	2000000	2999999
4	1183678	1	18	70	1327	0	0	3434685	3000000	3999999
5	1368769	1	18	65	1940	0	0	4804781	4000000	4999999
6	593116	1	18	75	1985	0	0	5399837	5000000	5999999
7	1576225	1	18	50	1016	0	0	6978047	6000000	6999999
8	832721	3	18	50	1305	1501	1374	7811784	7000000	7999999
9	802883	1	18	60	1595	0	0	8618847	8000000	8999999
10	1093955	2	18	95	1447	1523	0	9714397	9000000	9999999
11	965651	1	18	100	1020	0	0	10683018	10000000	10999999
12	952879	3	18	60	1245	1941	1587	11636917	11000000	11999999

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

Type 5 Radar Waveform_26

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	1336780	3	6	100	1496	1294	1525	1336780	0	1499999
2	666552	3	6	85	1164	1320	1172	2007647	1500000	2999999
3	1135867	2	6	55	1270	1517	0	3147170	3000000	4499999
4	2133998	3	6	95	1752	1260	1680	5283955	4500000	5999999
5	1365947	3	6	75	1190	1651	1201	6654594	6000000	7499999
6	2079229	1	6	50	1614	0	0	8737865	7500000	8999999
7	1329340	2	6	75	1600	1075	0	10068819	9000000	10499999
8	1468336	1	6	90	1332	0	0	11539830	10500000	11999999

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

Type 5 Radar Waveform_27

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	520618	1	9	55	1118	0	0	520618	0	923076
2	428926	1	9	85	1477	0	0	950662	923077	1846153
3	1571114	3	9	65	1043	1138	1035	2523253	1846154	2769230
4	521512	2	9	85	1101	1475	0	3047981	2769231	3692307
5	1005714	2	9	100	1540	1948	0	4056271	3692308	4615384
6	1464147	1	9	65	1419	0	0	5523906	4615385	5538461
7	360573	1	9	55	1064	0	0	5885898	5538462	6461538
8	825413	3	9	95	1960	1369	1088	6712375	6461539	7384615
9	1214229	1	9	100	1627	0	0	7931021	7384616	8307692
10	647166	1	9	55	1515	0	0	8579814	8307693	9230769
11	1251470	1	9	90	1855	0	0	9832799	9230770	10153846
12	353264	2	9	55	1334	1463	0	10187918	10153847	11076923
13	1721683	1	9	60	1345	0	0	11912398	11076924	12000000

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

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	710956	1	12	75	1569	0	0	710956	0	1090908
2	411131	1	12	85	1894	0	0	1123656	1090909	2181817
3	1591123	1	12	90	1910	0	0	2716673	2181818	3272726
4	1289380	1	12	55	1856	0	0	4007963	3272727	4363635
5	662302	1	12	55	1098	0	0	4672121	4363636	5454544
6	1191291	3	12	75	1094	1698	1464	5864510	5454545	6545453
7	795859	1	12	95	1887	0	0	6664625	6545454	7636362
8	1582902	3	12	65	1150	1065	1507	8249414	7636363	8727271
9	1372592	2	12	95	1306	1248	0	9625728	8727272	9818180
10	983163	2	12	80	1937	1964	0	10611445	9818181	10909089
11	1272356	1	12	70	1186	0	0	11887702	10909090	11999998

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

Type 5 Radar Waveform_29

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	419982	3	17	50	1696	1583	1998	419982	0	923076
2	532463	1	17	50	1507	0	0	957722	923077	1846153
3	1045154	3	17	90	1567	1264	1816	2004383	1846154	2769230
4	1184334	1	17	75	1872	0	0	3193364	2769231	3692307
5	1099294	3	17	95	1248	1021	1890	4294530	3692308	4615384
6	836084	2	17	95	1868	1950	0	5134773	4615385	5538461
7	1131368	3	17	70	1894	1298	1108	6269959	5538462	6461538
8	1075691	3	17	80	1895	1120	1732	7349950	6461539	7384615
9	866685	1	17	55	1567	0	0	8221382	7384616	8307692
10	902999	3	17	80	1263	1407	1440	9125948	8307693	9230769
11	877068	1	17	95	1570	0	0	10007126	9230770	10153846
12	284103	3	17	70	1340	1515	1860	10292799	10153847	11076923
13	1450574	2	17	50	1084	1387	0	11748088	11076924	12000000

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

Type 5 Radar Waveform_30

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	227190	2	5	50	1551	1402	0	227190	0	599999
2	555197	3	5	95	1126	1062	1615	785340	600000	1199999
3	987639	3	5	50	1936	1202	1807	1776782	1200000	1799999
4	321851	3	5	60	1771	1851	1964	2103578	1800000	2399999
5	713789	2	5	55	1936	1281	0	2822953	2400000	2999999
6	383566	3	5	85	1202	1249	1381	3209736	3000000	3599999
7	706833	3	5	95	1189	1394	1184	3920401	3600000	4199999
8	675920	2	5	100	1690	1198	0	4600088	4200000	4799999
9	537716	3	5	75	1624	1941	1682	5140692	4800000	5399999
10	700840	3	5	65	1855	1451	1106	5846779	5400000	5999999
11	403024	1	5	80	1910	0	0	6254215	6000000	6599999
12	674847	2	5	80	1379	1881	0	6930972	6600000	7199999
13	347657	3	5	90	1825	1270	1583	7281889	7200000	7799999
14	925786	3	5	85	1094	1078	1622	8212353	7800000	8399999
15	688738	3	5	50	1861	1147	1879	8904885	8400000	8999999
16	598285	2	5	60	1656	1094	0	9508057	9000000	9599999
17	609649	1	5	95	1803	0	0	10120456	9600000	10199999
18	329488	3	5	90	1318	1331	1777	10451747	10200000	10799999
19	812022	1	5	80	1793	0	0	11268195	10800000	11399999
20	313922	1	5	55	1009	0	0	11583910	11400000	11999999

Total number of pulses in waveform = 47
****

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	5327	1	16	5327	1
2	5327	1	17	5327	1
3	5327	1	18	5327	1
4	5327	1	19	5327	1
5	5327	1	20	5327	1
6	5327	1	21	5327	1
7	5327	1	22	5327	1
8	5327	1	23	5327	1
9	5327	1	24	5327	1
10	5327	1	25	5327	1
11	5327	1	26	5327	1
12	5327	1	27	5327	1
13	5327	1	28	5327	1
14	5327	1	29	5327	1
15	5327	1	30	5327	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5312	39	8	5308	24
16	5345	48	10	5339	30
17	5328	51	22	5330	66
22	5356	66	39	5332	117
43	5314	129	69	5355	207
50	5332	150	70	5342	210
78	5327	234	71	5343	213
80	5306	240	98	5352	294
94	5358	282	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5312	3	1	5344	3
8	5318	24	25	5333	75
10	5325	30	29	5298	87
40	5330	120	33	5338	99
41	5341	123	44	5299	132
47	5354	141	55	5349	165
51	5305	153	66	5352	198
58	5353	174	70	5314	210
61	5338	183	72	5305	216
62	5349	186	97	5323	291
70	5327	210	--	--	--
82	5334	246	--	--	--
85	5340	255	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5340	9	1	5309	3
8	5352	24	3	5357	9
11	5314	33	5	5345	15
12	5324	36	21	5311	63
13	5350	39	34	5329	102
18	5310	54	38	5325	114
25	5337	75	49	5320	147
29	5306	87	51	5301	153
39	5319	117	59	5303	177
61	5356	183	86	5354	258
67	5343	201	90	5300	270
71	5321	213	--	--	--
86	5358	258	--	--	--
88	5317	264	--	--	--
91	5301	273	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5335	24	6	5311	18
29	5303	87	8	5313	24
30	5308	90	24	5317	72
39	5330	117	31	5353	93
49	5349	147	38	5343	114
50	5340	150	60	5329	180
53	5313	159	65	5358	195
64	5355	192	96	5332	288
74	5345	222	97	5342	291
91	5317	273	98	5350	294

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5350	42	0	5350	0
44	5325	132	8	5308	24
63	5355	189	13	5302	39
67	5315	201	14	5331	42
77	5299	231	28	5356	84
81	5305	243	33	5348	99
87	5333	261	36	5343	108
88	5344	264	40	5326	120
89	5326	267	62	5305	186
95	5312	285	76	5328	228
99	5323	297	79	5327	237
--	--	--	87	5353	261
--	--	--	93	5341	279
--	--	--	94	5315	282
--	--	--	97	5335	291

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
16	5327	48	18	5321	54
17	5336	51	19	5354	57
51	5299	153	20	5356	60
67	5349	201	32	5312	96
76	5301	228	36	5358	108
79	5330	237	40	5333	120
85	5326	255	65	5345	195
97	5337	291	67	5320	201
--	--	--	73	5353	219
--	--	--	76	5304	228
--	--	--	87	5300	261
--	--	--	88	5298	264
--	--	--	93	5307	279
--	--	--	94	5310	282

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5341	9	2	5327	6
6	5311	18	6	5358	18
13	5339	39	11	5299	33
17	5338	51	12	5325	36
49	5299	147	14	5304	42
60	5344	180	25	5333	75
69	5327	207	29	5355	87
73	5318	219	30	5298	90
78	5309	234	39	5314	117
--	--	--	47	5342	141
--	--	--	64	5338	192
--	--	--	77	5340	231
--	--	--	82	5322	246
--	--	--	83	5308	249
--	--	--	85	5354	255

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5356	24	12	5355	36
12	5307	36	15	5314	45
15	5314	45	21	5357	63
19	5318	57	25	5310	75
39	5330	117	33	5344	99
50	5336	150	35	5309	105
63	5315	189	39	5329	117
66	5338	198	46	5340	138
69	5348	207	58	5303	174
79	5324	237	65	5319	195
87	5334	261	68	5325	204
--	--	--	88	5341	264
--	--	--	89	5327	267

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5349	0	14	5318	42
10	5318	30	20	5323	60
14	5336	42	23	5303	69
26	5341	78	27	5355	81
29	5348	87	44	5342	132
31	5357	93	59	5354	177
45	5331	135	66	5316	198
54	5310	162	68	5305	204
57	5355	171	69	5302	207
58	5337	174	82	5351	246
66	5334	198	84	5308	252
67	5325	201	--	--	--
72	5344	216	--	--	--
73	5315	219	--	--	--
79	5313	237	--	--	--
89	5319	267	--	--	--
99	5326	297	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5317	63	5	5331	15
22	5331	66	12	5328	36
40	5304	120	13	5348	39
50	5341	150	40	5320	120
51	5357	153	49	5354	147
52	5321	156	60	5357	180
53	5329	159	65	5342	195
58	5344	174	80	5349	240
62	5343	186	93	5340	279
71	5309	213	97	5310	291
85	5337	255	--	--	--
91	5348	273	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5312	18	8	5344	24
12	5351	36	21	5342	63
15	5340	45	24	5338	72
19	5346	57	26	5355	78
22	5298	66	54	5310	162
23	5321	69	57	5340	171
28	5309	84	62	5302	186
35	5352	105	77	5351	231
40	5342	120	79	5305	237
45	5324	135	81	5306	243
52	5341	156	83	5309	249
70	5322	210	85	5357	255
71	5313	213	87	5329	261
74	5327	222	94	5326	282
77	5302	231	95	5323	285
84	5317	252	--	--	--
91	5345	273	--	--	--
94	5343	282	--	--	--
98	5348	294	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5338	6	1	5300	3
6	5337	18	18	5340	54
12	5325	36	19	5358	57
30	5317	90	23	5334	69
31	5306	93	28	5298	84
36	5329	108	32	5347	96
48	5303	144	41	5331	123
53	5340	159	42	5301	126
62	5332	186	43	5320	129
64	5354	192	47	5319	141
67	5308	201	55	5348	165
83	5335	249	56	5337	168
89	5352	267	68	5338	204
90	5349	270	90	5330	270
93	5302	279	95	5353	285
95	5350	285	--	--	--
96	5301	288	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5301	33	4	5349	12
12	5315	36	12	5308	36
32	5333	96	29	5323	87
35	5303	105	42	5340	126
51	5336	153	46	5332	138
55	5318	165	47	5315	141
61	5346	183	52	5342	156
62	5326	186	53	5348	159
63	5349	189	56	5358	168
64	5316	192	59	5357	177
65	5298	195	69	5324	207
71	5337	213	70	5350	210
73	5325	219	74	5353	222
85	5352	255	--	--	--
91	5304	273	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5336	18	2	5354	6
7	5305	21	13	5355	39
8	5353	24	19	5313	57
11	5320	33	21	5356	63
16	5324	48	31	5337	93
17	5302	51	41	5312	123
26	5334	78	43	5306	129
30	5345	90	50	5311	150
33	5301	99	64	5320	192
56	5344	168	90	5336	270
61	5350	183	96	5350	288
65	5351	195	98	5351	294
70	5358	210	--	--	--
74	5303	222	--	--	--
75	5314	225	--	--	--
77	5325	231	--	--	--
78	5355	234	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5343	30	2	5344	6
25	5339	75	5	5352	15
44	5338	132	18	5315	54
45	5300	135	23	5320	69
47	5322	141	25	5349	75
62	5347	186	33	5333	99
68	5308	204	51	5319	153
82	5319	246	52	5328	156
83	5304	249	79	5299	237
92	5327	276	93	5347	279
93	5323	279	95	5358	285

Radio A Radar Statistical Performance for 802.11ac-VHT80

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5252	1	918	58	1
2	5252	1	518	102	1
3	5252	1	678	78	1
4	5252	1	818	65	1
5	5252	1	638	83	1
6	5252	1	658	81	1
7	5252	1	938	57	1
8	5252	1	618	86	1
9	5252	1	718	74	1
10	5252	1	778	68	1
11	5252	1	738	72	1
12	5252	1	798	67	1
13	5252	1	878	61	1
14	5252	1	538	99	1
15	5252	1	898	59	1
16	5252	1	2975	18	1
17	5252	1	630	84	1
18	5252	1	3049	18	1
19	5252	1	1604	33	1
20	5252	1	1936	28	1
21	5252	1	519	102	1
22	5252	1	1198	45	1
23	5252	1	1954	28	1
24	5252	1	1543	35	1
25	5252	1	2840	19	1
26	5252	1	2704	20	1
27	5252	1	856	62	1
28	5252	1	1687	32	1
29	5252	1	1302	41	1
30	5252	1	608	87	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	5270	3.1	218	29	1
2	5270	3.3	207	23	1
3	5270	1.3	197	26	1
4	5270	1.8	220	24	1
5	5270	3.1	158	28	1
6	5270	3.4	204	28	1
7	5270	1.5	155	29	1
8	5270	4.0	184	29	1
9	5270	1.8	163	29	1
10	5270	2.6	189	25	1
11	5270	2.5	226	23	1
12	5270	3.5	188	25	1
13	5270	3.2	161	29	1
14	5270	4.6	165	26	1
15	5270	1.9	182	26	1
16	5270	2.9	228	26	1
17	5270	4.5	183	23	1
18	5270	3.0	229	29	1
19	5270	3.2	154	26	1
20	5270	1.3	205	25	1
21	5270	4.1	214	25	1
22	5270	4.0	216	27	1
23	5270	2.3	229	26	1
24	5270	3.4	175	28	1
25	5270	4.3	215	28	1
26	5270	4.6	228	24	1
27	5270	2.4	180	28	1
28	5270	4.6	200	29	1
29	5270	3.7	221	24	1
30	5270	4.9	170	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	5290	9.0	334	18	1
2	5290	6.3	421	17	1
3	5290	7.5	326	16	1
4	5290	7.3	306	17	1
5	5290	8.2	321	17	1
6	5290	9.5	361	18	1
7	5290	7.4	263	17	1
8	5290	7.6	273	16	1
9	5290	6.3	461	16	1
10	5290	7.9	319	16	1
11	5290	9.8	479	16	1
12	5290	6.8	465	16	1
13	5290	9.2	485	16	1
14	5290	9.4	326	16	1
15	5290	9.2	294	17	1
16	5290	7.1	468	16	1
17	5290	9.0	403	16	1
18	5290	7.6	419	18	1
19	5290	8.6	264	16	1
20	5290	10.0	447	16	1
21	5290	8.6	429	18	1
22	5290	8.7	379	16	1
23	5290	8.5	368	18	1
24	5290	8.1	387	16	1
25	5290	8.4	335	17	1
26	5290	9.6	281	16	1
27	5290	7.4	301	16	1
28	5290	9.8	363	17	1
29	5290	7.2	318	16	1
30	5290	8.5	276	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	5328	12.6	374	16	1
2	5328	12.8	359	16	1
3	5328	14.9	265	12	1
4	5328	14.6	397	15	1
5	5328	18.1	320	14	1
6	5328	20.0	281	14	1
7	5328	16.7	430	13	1
8	5328	16.6	263	15	1
9	5328	19.4	250	15	1
10	5328	18.9	411	12	1
11	5328	11.3	391	13	1
12	5328	15.4	399	13	1
13	5328	11.9	366	12	1
14	5328	13.7	384	15	1
15	5328	19.9	462	15	1
16	5328	19.7	298	13	1
17	5328	11.0	455	15	1
18	5328	18.9	341	13	1
19	5328	12.5	418	16	1
20	5328	18.9	299	15	1
21	5328	12.4	488	12	1
22	5328	17.3	494	12	1
23	5328	15.5	421	14	1
24	5328	16.4	336	12	1
25	5328	13.2	332	16	1
26	5328	14.5	376	13	1
27	5328	16.0	397	13	1
28	5328	15.3	419	16	1
29	5328	15.5	445	15	1
30	5328	15.9	362	12	1
Detection Percentage (%)					100%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1 + P_d2 + P_d3 + P_d4}{4}$ = (100%+100%+100%+100%)/4 = 100% (>80%)

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5259.6	1	16	5290.0	1
2	5255.2	1	17	5290.0	1
3	5256.0	1	18	5290.0	1
4	5257.6	1	19	5290.0	1
5	5259.2	1	20	5290.0	1
6	5254.4	1	21	5320.4	1
7	5255.6	1	22	5324.8	1
8	5256.8	1	23	5324.0	1
9	5258.8	1	24	5322.4	1
10	5254.0	1	25	5320.8	1
11	5290.0	1	26	5325.6	1
12	5290.0	1	27	5324.4	1
13	5290.0	1	28	5323.2	1
14	5290.0	1	29	5321.2	1
15	5290.0	1	30	5326.0	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

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	316106	2	19	85	1930	1495	0	316106	0	749999
2	1069649	3	19	90	1381	1462	1925	1389180	750000	1499999
3	385592	3	19	85	1635	1301	1925	1779540	1500000	2249999
4	844939	2	19	95	1177	1484	0	2629340	2250000	2999999
5	1113478	2	19	90	1548	1574	0	3745479	3000000	3749999
6	523742	2	19	55	1790	1158	0	4272343	3750000	4499999
7	476347	1	19	85	1416	0	0	4751638	4500000	5249999
8	1064455	2	19	100	1597	1448	0	5817509	5250000	5999999
9	823124	3	19	80	1105	1460	1980	6643678	6000000	6749999
10	609316	1	19	65	1670	0	0	7257539	6750000	7499999
11	728677	1	19	60	1500	0	0	7987886	7500000	8249999
12	636164	1	19	60	1037	0	0	8625550	8250000	8999999
13	630356	2	19	75	1213	1050	0	9256943	9000000	9749999
14	984658	3	19	85	1699	1332	1163	10243864	9750000	10499999
15	881404	2	19	90	1693	1988	0	11129462	10500000	11249999
16	430486	3	19	50	1392	1064	1470	11563629	11250000	11999999

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

Type 5 Radar Waveform_2

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	5868	3	8	90	1214	1144	1585	5868	0	1090908
2	1546164	1	8	95	1627	0	0	1555975	1090909	2181817
3	716680	2	8	60	1711	1942	0	2274282	2181818	3272726
4	1941459	2	8	55	1000	1772	0	4219394	3272727	4363635
5	704877	1	8	90	1835	0	0	4927043	4363636	5454544
6	1172331	1	8	60	1126	0	0	6101209	5454545	6545453
7	1278451	3	8	60	1743	1120	1099	7380786	6545454	7636362
8	820251	1	8	65	1448	0	0	8204999	7636363	8727271
9	911751	1	8	65	1889	0	0	9118198	8727272	9818180
10	1454779	1	8	75	1117	0	0	10574866	9818181	10909089
11	1080885	1	8	90	1677	0	0	11656868	10909090	11999998

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

Type 5 Radar Waveform_3

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	249145	1	10	55	1413	0	0	249145	0	999999
2	1073714	1	10	85	1175	0	0	1324272	1000000	1999999
3	1405041	3	10	75	1768	1638	1140	2730488	2000000	2999999
4	543185	2	10	65	1984	1344	0	3278219	3000000	3999999
5	1222741	2	10	55	1965	1981	0	4504288	4000000	4999999
6	1401053	3	10	60	1896	1225	1531	5909287	5000000	5999999
7	195002	1	10	60	1065	0	0	6108941	6000000	6999999
8	1047556	1	10	95	1578	0	0	7157562	7000000	7999999
9	1072425	2	10	55	1121	1801	0	8231565	8000000	8999999
10	1072353	3	10	70	1697	1602	1620	9306840	9000000	9999999
11	1441719	1	10	70	1398	0	0	10753478	10000000	10999999
12	1228470	1	10	65	1623	0	0	11983346	11000000	11999999

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

Type 5 Radar Waveform_4

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	654336	2	14	75	1594	1218	0	654336	0	999999
2	1335326	1	14	80	1952	0	0	1992474	1000000	1999999
3	810090	2	14	50	1123	1619	0	2804516	2000000	2999999
4	932436	2	14	70	1514	1940	0	3739694	3000000	3999999
5	720639	1	14	85	1780	0	0	4463787	4000000	4999999
6	801340	2	14	65	1139	1090	0	5266907	5000000	5999999
7	980201	2	14	60	1613	1530	0	6249337	6000000	6999999
8	801832	3	14	80	1210	1671	1903	7054312	7000000	7999999
9	1803250	3	14	100	1098	1241	1547	8862346	8000000	8999999
10	284937	3	14	60	1889	1961	1430	9151169	9000000	9999999
11	1775810	1	14	75	1075	0	0	10932259	10000000	10999999
12	773695	2	14	50	1140	1495	0	11707029	11000000	11999999

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

Type 5 Radar Waveform_5

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	390523	2	18	80	1588	1537	0	390523	0	799999
2	1034167	1	18	90	1008	0	0	1427815	800000	1599999
3	612126	2	18	100	1684	1560	0	2040949	1600000	2399999
4	1143657	2	18	55	1053	1245	0	3187850	2400000	3199999
5	675780	1	18	60	1982	0	0	3865928	3200000	3999999
6	814906	3	18	100	1886	1106	1145	4682816	4000000	4799999
7	277699	2	18	95	1311	1594	0	4964652	4800000	5599999
8	1045292	3	18	75	1065	1630	1073	6012849	5600000	6399999
9	1172818	1	18	60	1898	0	0	7189435	6400000	7199999
10	189175	3	18	80	1156	1206	1549	7380508	7200000	7999999
11	1184310	2	18	80	1667	1507	0	8568729	8000000	8799999
12	650111	3	18	75	1578	1612	1255	9222014	8800000	9599999
13	999949	3	18	100	1653	1354	1442	10226408	9600000	10399999
14	804791	2	18	70	1811	1652	0	11035648	10400000	11199999
15	297131	1	18	80	1628	0	0	11336242	11200000	11999999

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

Type 5 Radar Waveform_6

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	371207	3	6	75	1404	1352	1447	371207	0	705881
2	706259	2	6	80	1519	1425	0	1081669	705882	1411763
3	911971	2	6	85	1747	1096	0	1996584	1411764	2117645
4	703419	3	6	90	1151	1824	1199	2702846	2117646	2823527
5	782895	3	6	90	1718	1484	1950	3489915	2823528	3529409
6	576543	3	6	90	1573	1418	1714	4071610	3529410	4235291
7	460876	2	6	75	1133	1177	0	4537191	4235292	4941173
8	793093	3	6	75	1362	1598	1719	5332594	4941174	5647055
9	365357	2	6	90	1811	1543	0	5702630	5647056	6352937
10	1053877	3	6	70	1815	1358	1523	6759861	6352938	7058819
11	728905	3	6	85	1942	1488	1416	7493462	7058820	7764701
12	728508	3	6	55	1069	1698	1062	8226816	7764702	8470583
13	701019	2	6	65	1192	1468	0	8931664	8470584	9176465
14	802468	1	6	70	1513	0	0	9736792	9176466	9882347
15	705330	3	6	65	1976	1527	1067	10443635	9882348	10588229
16	141749	3	6	80	1301	1005	1075	10589954	10588230	11294111
17	1160439	3	6	80	1119	1748	1322	11753774	11294112	11999993

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

Type 5 Radar Waveform_7

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	641161	3	9	80	1057	1043	1921	641161	0	666666
2	684948	1	9	65	1004	0	0	1330130	666667	1333333
3	352000	1	9	70	1026	0	0	1683134	1333334	2000000
4	870927	1	9	50	1303	0	0	2555087	2000001	2666667
5	601187	1	9	60	1622	0	0	3157577	2666668	3333334
6	364902	2	9	55	1184	1260	0	3524101	3333335	4000001
7	1027959	2	9	50	1660	1517	0	4554504	4000002	4666668
8	178097	2	9	75	1583	1317	0	4735778	4666669	5333335
9	755988	3	9	65	1771	1605	1062	5494666	5333336	6000002
10	911114	3	9	80	1874	1852	1975	6410218	6000003	6666669
11	506371	1	9	60	1047	0	0	6922290	6666670	7333336
12	443052	3	9	85	1042	1371	1082	7366389	7333337	8000003
13	1177788	1	9	60	1183	0	0	8547672	8000004	8666670
14	173186	3	9	85	1658	1356	1391	8722041	8666671	9333337
15	1146823	1	9	50	1367	0	0	9873269	9333338	10000004
16	289584	3	9	95	1811	1712	1621	10164220	10000005	10666671
17	1090833	3	9	95	1979	1145	1082	11260197	10666672	11333338
18	620799	3	9	55	1028	1462	1545	11885202	11333339	12000005

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

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	163914	2	12	90	1199	1934	0	163914	0	705881
2	1226881	1	12	50	1347	0	0	1393928	705882	1411763
3	343385	1	12	95	1351	0	0	1738660	1411764	2117645
4	591198	1	12	70	1948	0	0	2331209	2117646	2823527
5	537141	1	12	65	1034	0	0	2870298	2823528	3529409
6	949703	2	12	50	1388	1057	0	3821035	3529410	4235291
7	902280	1	12	100	1042	0	0	4725760	4235292	4941173
8	520851	1	12	95	1094	0	0	5247653	4941174	5647055
9	555042	3	12	85	1741	1874	1351	5803789	5647056	6352937
10	1007167	3	12	65	1708	1818	1790	6815922	6352938	7058819
11	408114	2	12	70	1483	1257	0	7229352	7058820	7764701
12	664580	3	12	70	1613	1545	1726	7896672	7764702	8470583
13	1004160	3	12	90	1267	1447	1227	8905716	8470584	9176465
14	971075	1	12	55	1388	0	0	9880732	9176466	9882347
15	373729	3	12	85	1233	1243	1505	10255849	9882348	10588229
16	511813	3	12	75	1750	1184	1275	10771643	10588230	11294111
17	979577	1	12	55	1147	0	0	11755429	11294112	11999993

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

Type 5 Radar Waveform_9

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	26103	3	17	65	1142	1999	1238	26103	0	999999
2	1606988	1	17	75	1592	0	0	1637470	1000000	1999999
3	759393	1	17	90	1833	0	0	2398455	2000000	2999999
4	1570991	2	17	90	1926	1356	0	3971279	3000000	3999999
5	356769	2	17	75	1170	1576	0	4331330	4000000	4999999
6	749753	3	17	90	1080	1835	1464	5083829	5000000	5999999
7	1784090	1	17	80	1660	0	0	6872298	6000000	6999999
8	473675	2	17	70	1285	1338	0	7347633	7000000	7999999
9	1193986	3	17	75	1092	1590	1441	8544242	8000000	8999999
10	824297	1	17	50	1432	0	0	9372662	9000000	9999999
11	640354	3	17	75	1862	1579	1338	10014448	10000000	10999999
12	1393814	1	17	100	1971	0	0	11413041	11000000	11999999

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

Type 5 Radar Waveform_10

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	433588	2	5	85	1076	1242	0	433588	0	705881
2	428643	3	5	70	1804	1593	1334	864549	705882	1411763
3	942321	3	5	80	1183	1137	1971	1811601	1411764	2117645
4	728898	3	5	80	1847	1556	1055	2544790	2117646	2823527
5	292408	3	5	50	1710	1596	1854	2841656	2823528	3529409
6	1022505	2	5	50	1504	1977	0	3869321	3529410	4235291
7	1041409	2	5	95	1630	1771	0	4914211	4235292	4941173
8	260347	2	5	55	1444	1716	0	5177959	4941174	5647055
9	1014392	2	5	90	1611	1789	0	6195511	5647056	6352937
10	557704	1	5	65	1107	0	0	6756615	6352938	7058819
11	630802	3	5	100	1643	1274	1636	7388524	7058820	7764701
12	650125	1	5	75	1356	0	0	8043202	7764702	8470583
13	1089599	2	5	60	1837	1390	0	9134157	8470584	9176465
14	424362	1	5	90	1540	0	0	9561746	9176466	9882347
15	489653	2	5	70	1557	1813	0	10052939	9882348	10588229
16	949604	3	5	65	1058	1890	1641	11005913	10588230	11294111
17	542914	1	5	70	1621	0	0	11553416	11294112	11999993

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

Type 5 Radar Waveform_11

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	755167	1	19	85	1187	0	0	755167	0	999999
2	760012	3	19	50	1796	1741	1773	1516366	1000000	1999999
3	643145	2	19	90	1919	1043	0	2164821	2000000	2999999
4	1370258	2	19	75	1523	1720	0	3538041	3000000	3999999
5	1362777	2	19	95	1717	1681	0	4904061	4000000	4999999
6	123439	1	19	100	1024	0	0	5030898	5000000	5999999
7	1339767	3	19	60	1636	1977	1672	6371689	6000000	6999999
8	899983	1	19	65	1617	0	0	7276957	7000000	7999999
9	936516	3	19	60	1299	1340	1278	8215090	8000000	8999999
10	1468687	1	19	70	1785	0	0	9687694	9000000	9999999
11	1188617	2	19	70	1158	1742	0	10878096	10000000	10999999
12	150502	3	19	65	1965	1302	1637	11031498	11000000	11999999

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

Type 5 Radar Waveform_12

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	316477	2	8	100	1246	1833	0	316477	0	666666
2	781497	2	8	50	1982	1179	0	1101053	666667	1333333
3	821709	3	8	95	1492	1755	1491	1925923	1333334	2000000
4	158201	1	8	50	1496	0	0	2088862	2000001	2666667
5	690235	3	8	85	1923	1856	1751	2780593	2666668	3333334
6	777977	1	8	70	1027	0	0	3564100	3333335	4000001
7	809666	2	8	100	1589	1180	0	4374793	4000002	4666668
8	644914	1	8	80	1740	0	0	5022476	4666669	5333335
9	563956	3	8	100	1042	1330	1389	5588172	5333336	6000002
10	687661	1	8	90	1486	0	0	6279594	6000003	6666669
11	704070	3	8	75	1349	1081	1872	6985150	6666670	7333336
12	436188	3	8	75	1270	1462	1118	7425640	7333337	8000003
13	1145023	1	8	70	1104	0	0	8574513	8000004	8666670
14	621612	1	8	60	1608	0	0	9197229	8666671	9333337
15	433904	3	8	50	1866	1326	1259	9632741	9333338	10000004
16	470471	1	8	80	1819	0	0	10107663	10000005	10666671
17	599385	2	8	55	1202	1312	0	10708867	10666672	11333338
18	865460	2	8	50	1290	1192	0	11576841	11333339	12000005

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

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	915849	1	10	65	1061	0	0	915849	0	923076
2	337736	2	10	55	1134	1135	0	1254646	923077	1846153
3	640683	2	10	85	1663	1623	0	1897598	1846154	2769230
4	1169236	3	10	75	1678	1775	1378	3070120	2769231	3692307
5	1306348	3	10	100	1016	1923	1763	4381299	3692308	4615384
6	846518	3	10	80	1120	1231	1532	5232519	4615385	5538461
7	860610	1	10	80	1919	0	0	6097012	5538462	6461538
8	859718	3	10	90	1619	2000	1193	6958649	6461539	7384615
9	611923	3	10	75	1346	1729	1081	7575384	7384616	8307692
10	1401114	1	10	70	1614	0	0	8980654	8307693	9230769
11	891363	3	10	65	1252	1184	1942	9873631	9230770	10153846
12	338507	1	10	95	1997	0	0	10216516	10153847	11076923
13	1573217	1	10	65	1599	0	0	11791730	11076924	12000000

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

Type 5 Radar Waveform_14

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	613146	2	14	80	1289	1991	0	613146	0	1333332
2	1789950	1	14	95	1599	0	0	2406376	1333333	2666665
3	1082549	1	14	70	1592	0	0	3490524	2666666	3999998
4	926360	1	14	65	1634	0	0	4418476	3999999	5333331
5	1228459	2	14	90	1614	1738	0	5648569	5333332	6666664
6	1986796	1	14	50	1482	0	0	7638717	6666665	7999997
7	1632035	2	14	100	1083	1883	0	9272234	7999998	9333330
8	383595	1	14	70	1039	0	0	9658795	9333331	10666663
9	2256207	2	14	50	1277	1939	0	11916041	10666664	11999996

Total number of pulses in waveform = 13
****

Type 5 Radar Waveform_15

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	58963	1	18	75	1494	0	0	58963	0	999999
2	1065317	2	18	70	1809	1444	0	1125774	1000000	1999999
3	1221899	1	18	80	1905	0	0	2350926	2000000	2999999
4	789103	3	18	80	1769	1522	1329	3141934	3000000	3999999
5	1759679	3	18	60	1341	1583	1120	4906233	4000000	4999999
6	644295	3	18	100	1939	1489	1873	5554572	5000000	5999999
7	514116	1	18	75	1850	0	0	6073989	6000000	6999999
8	961090	3	18	80	1251	1169	1731	7036929	7000000	7999999
9	975322	1	18	90	1200	0	0	8016402	8000000	8999999
10	1705511	3	18	55	1416	1671	1989	9723113	9000000	9999999
11	360937	2	18	60	1465	1549	0	10089126	10000000	10999999
12	1871944	3	18	100	1258	1039	1886	11964084	11000000	11999999

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

Type 5 Radar Waveform_16

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	954492	3	6	60	1047	1091	1275	954492	0	1333332
2	1478126	2	6	70	1793	1017	0	2436031	1333333	2666665
3	1165460	2	6	65	1133	1672	0	3604301	2666666	3999998
4	1522862	3	6	95	1747	1776	1446	5129968	3999999	5333331
5	1074572	1	6	50	1217	0	0	6209509	5333332	6666664
6	862212	3	6	50	1839	1450	1316	7072938	6666665	7999997
7	1151968	2	6	95	1334	1742	0	8229511	7999998	9333330
8	1136866	2	6	55	1449	1156	0	9369453	9333331	10666663
9	1750823	2	6	60	1973	1548	0	11122881	10666664	11999996

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

Type 5 Radar Waveform_17

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	625572	2	9	55	1580	1872	0	625572	0	631578
2	530274	3	9	100	1740	1993	1705	1159298	631579	1263157
3	164048	2	9	95	1385	1301	0	1328784	1263158	1894736
4	705641	2	9	100	1734	1321	0	2037111	1894737	2526315
5	1022296	2	9	60	1875	1400	0	3062462	2526316	3157894
6	421597	3	9	75	1692	1101	1668	3487334	3157895	3789473
7	475699	2	9	70	1409	1391	0	3967494	3789474	4421052
8	943526	3	9	95	1879	1857	1147	4913820	4421053	5052631
9	320000	3	9	85	1479	1455	1717	5238703	5052632	5684210
10	568048	2	9	90	1900	1044	0	5811402	5684211	6315789
11	729535	2	9	75	1046	1444	0	6543881	6315790	6947368
12	899384	2	9	70	1015	1230	0	7445755	6947369	7578947
13	362106	1	9	55	1318	0	0	7810106	7578948	8210526
14	428759	1	9	90	1107	0	0	8240183	8210527	8842105
15	1169460	2	9	55	1727	1645	0	9410750	8842106	9473684
16	562019	3	9	55	1981	1764	1784	9976141	9473685	10105263
17	650195	3	9	65	1434	1860	1686	10631865	10105264	10736842
18	221369	2	9	70	1429	1586	0	10858214	10736843	11368421
19	562456	3	9	95	1951	1992	1936	11423685	11368422	12000000

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

Type 5 Radar Waveform_18

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	418602	3	12	70	1993	1728	1647	418602	0	599999
2	470450	2	12	95	1387	1921	0	894420	600000	1199999
3	545812	1	12	60	1430	0	0	1443540	1200000	1799999
4	646067	2	12	65	1449	1173	0	2091037	1800000	2399999
5	804800	3	12	60	1440	1521	1350	2898459	2400000	2999999
6	496378	3	12	75	1088	1110	1546	3399148	3000000	3599999
7	457985	1	12	70	1732	0	0	3860877	3600000	4199999
8	482885	2	12	75	1469	1716	0	4345494	4200000	4799999
9	658421	3	12	75	1453	1782	1364	5007100	4800000	5399999
10	759387	3	12	50	1004	1942	1756	5771086	5400000	5999999
11	528238	2	12	55	1434	1598	0	6304026	6000000	6599999
12	606706	2	12	50	1745	1693	0	6913764	6600000	7199999
13	662469	2	12	70	1258	1466	0	7579671	7200000	7799999
14	256385	3	12	95	1391	1821	1686	7838780	7800000	8399999
15	901731	3	12	75	1960	1436	1187	8745409	8400000	8999999
16	811743	3	12	95	1564	1985	1023	9561735	9000000	9599999
17	520895	1	12	90	1003	0	0	10087202	9600000	10199999
18	337039	3	12	90	1046	1471	1512	10425244	10200000	10799999
19	846271	1	12	80	1348	0	0	11275544	10800000	11399999
20	376985	3	12	85	1674	1839	1412	11653877	11400000	11999999

Total number of pulses in waveform = 46
****

Type 5 Radar Waveform_19

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	455181	3	17	50	1852	1468	1656	455181	0	1090908
2	1545876	3	17	80	1062	1054	1550	2006033	1090909	2181817
3	875015	1	17	75	1025	0	0	2884714	2181818	3272726
4	1432142	3	17	90	1615	1576	1206	4317881	3272727	4363635
5	1129108	1	17	80	1979	0	0	5451386	4363636	5454544
6	524801	3	17	65	1318	1068	1673	5978166	5454545	6545453
7	1225396	2	17	75	1879	1332	0	7207621	6545454	7636362
8	1241132	3	17	95	1731	1786	1582	8451964	7636363	8727271
9	994949	1	17	55	1445	0	0	9452012	8727272	9818180
10	445303	1	17	90	1869	0	0	9898760	9818181	10909089
11	1971822	2	17	60	1527	1781	0	11872451	10909090	11999998

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

Type 5 Radar Waveform_20

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	173747	2	5	85	1990	1280	0	173747	0	599999
2	732269	1	5	100	1574	0	0	909286	600000	1199999
3	774855	3	5	85	1830	1112	1300	1685715	1200000	1799999
4	331771	2	5	100	1977	1974	0	2021728	1800000	2399999
5	512118	3	5	70	1777	1732	2000	2537797	2400000	2999999
6	873471	1	5	85	1156	0	0	3416777	3000000	3599999
7	772854	1	5	80	1990	0	0	4190787	3600000	4199999
8	495966	1	5	55	1257	0	0	4688743	4200000	4799999
9	671645	2	5	95	1713	1901	0	5361645	4800000	5399999
10	484783	3	5	60	1621	1053	1221	5850042	5400000	5999999
11	217152	3	5	90	1021	1111	1586	6071089	6000000	6599999
12	953479	1	5	95	1169	0	0	7028286	6600000	7199999
13	544759	1	5	60	1940	0	0	7574214	7200000	7799999
14	422269	3	5	90	1950	1621	1358	7998423	7800000	8399999
15	634612	2	5	55	1923	1874	0	8637964	8400000	8999999
16	557507	3	5	50	1499	1140	1484	9199268	9000000	9599999
17	853866	1	5	75	1359	0	0	10057257	9600000	10199999
18	150152	1	5	55	1874	0	0	10208768	10200000	10799999
19	1076498	2	5	50	1022	1915	0	11287140	10800000	11399999
20	619416	1	5	90	1269	0	0	11909493	11400000	11999999

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

Type 5 Radar Waveform_21

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	325225	3	19	100	1069	1556	1297	325225	0	799999
2	1240863	1	19	80	1331	0	0	1570010	800000	1599999
3	468743	1	19	65	1500	0	0	2040084	1600000	2399999
4	466401	1	19	75	1279	0	0	2507985	2400000	3199999
5	719068	3	19	60	1394	1907	1645	3228332	3200000	3999999
6	1498018	3	19	80	1366	1617	1944	4731296	4000000	4799999
7	178604	2	19	75	1040	1333	0	4914827	4800000	5599999
8	935641	2	19	90	1421	1963	0	5852841	5600000	6399999
9	549627	3	19	65	1429	1154	1467	6405852	6400000	7199999
10	1386277	1	19	85	1957	0	0	7796179	7200000	7999999
11	323626	3	19	90	1492	1394	1206	8121762	8000000	8799999
12	958305	2	19	85	1510	1145	0	9084159	8800000	9599999
13	648513	1	19	95	1182	0	0	9735327	9600000	10399999
14	1405347	1	19	60	1475	0	0	11141856	10400000	11199999
15	225308	1	19	75	1264	0	0	11368639	11200000	11999999

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

Type 5 Radar Waveform_22

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	794822	1	8	50	1920	0	0	794822	0	1333332
2	703140	3	8	90	1671	1671	1067	1499882	1333333	2666665
3	1786997	3	8	60	1278	1648	1055	3291288	2666666	3999998
4	1031288	3	8	95	1736	1392	1027	4326557	3999999	5333331
5	1907582	2	8	55	1370	1301	0	6238294	5333332	6666664
6	1125459	3	8	50	1691	1426	1920	7366424	6666665	7999997
7	893290	3	8	50	1971	1598	1936	8264751	7999998	9333330
8	1982806	3	8	50	1152	1930	1115	10253062	9333331	10666663
9	529131	2	8	100	1534	1206	0	10786390	10666664	11999996

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

Type 5 Radar Waveform_23

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	14564	3	10	60	1668	1806	1351	14564	0	599999
2	1175549	2	10	80	1412	1676	0	1194938	600000	1199999
3	94480	2	10	95	1470	1959	0	1292506	1200000	1799999
4	879700	1	10	70	1907	0	0	2175635	1800000	2399999
5	558836	2	10	75	1222	1021	0	2736378	2400000	2999999
6	808641	1	10	100	1976	0	0	3547262	3000000	3599999
7	386918	1	10	50	1037	0	0	3936156	3600000	4199999
8	288860	3	10	100	1173	1147	1251	4226053	4200000	4799999
9	1104248	3	10	80	1634	1260	1993	5333872	4800000	5399999
10	66613	1	10	85	1901	0	0	5405372	5400000	5999999
11	645243	3	10	55	1083	1839	1217	6052516	6000000	6599999
12	778166	2	10	100	1132	1873	0	6834821	6600000	7199999
13	606342	1	10	55	1050	0	0	7444168	7200000	7799999
14	663431	3	10	75	1148	1878	1525	8108649	7800000	8399999
15	532103	2	10	80	1175	1910	0	8645303	8400000	8999999
16	404389	3	10	50	1216	1420	1857	9052777	9000000	9599999
17	863780	3	10	80	1843	1017	1687	9921050	9600000	10199999
18	683782	1	10	80	1339	0	0	10609379	10200000	10799999
19	478324	2	10	75	1713	1538	0	11089042	10800000	11399999
20	685682	3	10	100	1728	1552	1640	11777975	11400000	11999999

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

Type 5 Radar Waveform_24

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	306590	3	14	60	1679	1894	1467	306590	0	1090908
2	1079742	3	14	50	1893	1915	1990	1391372	1090909	2181817
3	1507946	1	14	50	1846	0	0	2905116	2181818	3272726
4	866964	3	14	60	1250	1639	1163	3773926	3272727	4363635
5	1422683	1	14	70	1636	0	0	5200661	4363636	5454544
6	683899	3	14	70	1208	1009	1076	5886196	5454545	6545453
7	1184106	1	14	90	1437	0	0	7073595	6545454	7636362
8	1233773	3	14	95	1571	1542	1365	8308805	7636363	8727271
9	1341192	3	14	60	1322	1282	1978	9654475	8727272	9818180
10	341089	1	14	50	1828	0	0	10000146	9818181	10909089
11	1933434	1	14	55	1259	0	0	11935408	10909090	11999998

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

Type 5 Radar Waveform_25

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	131119	1	18	100	1791	0	0	131119	0	599999
2	989672	3	18	95	1482	1428	1723	1122582	600000	1199999
3	107746	3	18	90	1941	1622	1746	1234961	1200000	1799999
4	1025501	2	18	65	1804	1915	0	2265771	1800000	2399999
5	431762	2	18	75	1379	1828	0	2701252	2400000	2999999
6	342200	3	18	95	1049	1213	1533	3046659	3000000	3599999
7	1057973	1	18	95	1345	0	0	4108427	3600000	4199999
8	191685	3	18	70	1152	1632	1848	4301457	4200000	4799999
9	519405	2	18	95	1253	1916	0	4825494	4800000	5399999
10	1139544	1	18	75	1826	0	0	5968207	5400000	5999999
11	130387	2	18	75	1355	1294	0	6100420	6000000	6599999
12	993948	3	18	70	1608	1541	1791	7097017	6600000	7199999
13	631816	2	18	55	1415	1448	0	7733773	7200000	7799999
14	250108	2	18	60	1159	1408	0	7986744	7800000	8399999
15	553472	3	18	100	1446	1957	1318	8542783	8400000	8999999
16	1010026	2	18	75	1537	1227	0	9557530	9000000	9599999
17	444472	3	18	50	1489	1737	1689	10004766	9600000	10199999
18	344968	2	18	75	1144	1793	0	10354649	10200000	10799999
19	566164	1	18	100	1461	0	0	10923750	10800000	11399999
20	486125	3	18	65	1158	1636	1387	11411336	11400000	11999999

Total number of pulses in waveform = 44

Type 5 Radar Waveform_26

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	536366	1	6	65	1196	0	0	536366	0	1499999
2	1609252	3	6	100	1900	1879	1944	2146814	1500000	2999999
3	1710189	3	6	60	1898	1724	1954	3862726	3000000	4499999
4	1842584	2	6	75	1537	1008	0	5710886	4500000	5999999
5	422654	3	6	70	1288	1433	1378	6136085	6000000	7499999
6	2155261	1	6	50	1444	0	0	8295445	7500000	8999999
7	1709744	2	6	50	1698	1895	0	10006633	9000000	10499999
8	1380239	3	6	80	1528	1587	1918	11390465	10500000	11999999

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

Type 5 Radar Waveform_27

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	436965	3	9	65	1426	1916	1108	436965	0	599999
2	681954	3	9	65	1744	1140	1467	1123369	600000	1199999
3	556628	2	9	95	1136	1630	0	1684348	1200000	1799999
4	216668	3	9	50	1947	1421	1653	1903782	1800000	2399999
5	746134	2	9	100	1752	1511	0	2654937	2400000	2999999
6	787257	1	9	75	1301	0	0	3445457	3000000	3599999
7	225860	2	9	90	1043	1300	0	3672618	3600000	4199999
8	835651	2	9	75	1987	1131	0	4510612	4200000	4799999
9	338064	1	9	85	1044	0	0	4851794	4800000	5399999
10	556777	1	9	95	1892	0	0	5409615	5400000	5999999
11	1043700	3	9	55	1185	1983	1629	6455207	6000000	6599999
12	333772	2	9	50	1424	1101	0	6793776	6600000	7199999
13	618096	3	9	50	1179	1699	1320	7414397	7200000	7799999
14	472053	1	9	75	1743	0	0	7890648	7800000	8399999
15	697726	3	9	70	1920	1801	1799	8590117	8400000	8999999
16	885396	3	9	95	1014	1327	1105	9481033	9000000	9599999
17	174442	1	9	90	1298	0	0	9658921	9600000	10199999
18	836117	2	9	95	1362	1699	0	10496336	10200000	10799999
19	742753	3	9	50	1794	1196	1500	11242150	10800000	11399999
20	184580	2	9	85	1858	1685	0	11431220	11400000	11999999

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

Type 5 Radar Waveform_28

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	10488	2	12	55	1237	1476	0	10488	0	749999
2	766945	2	12	55	1559	1551	0	780146	750000	1499999
3	836247	2	12	55	1668	1932	0	1619503	1500000	2249999
4	1176988	2	12	60	1925	1678	0	2800091	2250000	2999999
5	541171	1	12	80	1512	0	0	3344865	3000000	3749999
6	1020744	1	12	75	1765	0	0	4367121	3750000	4499999
7	759330	3	12	95	1235	1643	1156	5128216	4500000	5249999
8	138290	3	12	50	1595	1257	1548	5270540	5250000	5999999
9	1055820	3	12	95	1615	1975	1621	6330760	6000000	6749999
10	889405	3	12	80	1164	1376	1080	7225376	6750000	7499999
11	403023	3	12	100	1604	1724	1104	7632019	7500000	8249999
12	1105629	1	12	60	1414	0	0	8742080	8250000	8999999
13	544802	2	12	60	1324	1387	0	9288296	9000000	9749999
14	776608	1	12	55	1766	0	0	10067615	9750000	10499999
15	604696	2	12	90	1442	1329	0	10674077	10500000	11249999
16	845069	1	12	80	1114	0	0	11521917	11250000	11999999

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

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	15958	2	17	80	1880	1365	0	15958	0	749999
2	1116263	1	17	100	1237	0	0	1135466	750000	1499999
3	725223	1	17	65	1131	0	0	1861926	1500000	2249999
4	511841	2	17	80	1424	1692	0	2374898	2250000	2999999
5	1091381	2	17	95	1869	1010	0	3469395	3000000	3749999
6	1021674	2	17	95	1028	1604	0	4493948	3750000	4499999
7	665219	3	17	60	1572	1308	1255	5161799	4500000	5249999
8	361166	3	17	100	1282	1732	1132	5527100	5250000	5999999
9	746363	1	17	65	1565	0	0	6277609	6000000	6749999
10	789919	3	17	100	1401	1043	1948	7069093	6750000	7499999
11	1113563	2	17	90	1875	1515	0	8187048	7500000	8249999
12	706795	1	17	100	1739	0	0	8897233	8250000	8999999
13	191682	2	17	55	1772	1729	0	9090654	9000000	9749999
14	1230386	2	17	55	1504	1503	0	10324541	9750000	10499999
15	657717	3	17	70	1711	1260	1230	10985265	10500000	11249999
16	740602	3	17	60	1880	1963	1063	11730068	11250000	11999999

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

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	112559	1	5	55	1001	0	0	112559	0	1333332
2	1571788	1	5	95	1635	0	0	1685348	1333333	2666665
3	1994409	1	5	80	1741	0	0	3681392	2666666	3999998
4	596127	1	5	90	1109	0	0	4279260	3999999	5333331
5	1672430	1	5	100	1884	0	0	5952799	5333332	6666664
6	1999179	1	5	95	1917	0	0	7953862	6666665	7999997
7	281837	2	5	95	1089	1253	0	8237616	7999998	9333330
8	2068984	1	5	75	1776	0	0	10308942	9333331	10666663
9	961757	2	5	65	1910	1988	0	11272475	10666664	11999996

Total number of pulses in waveform = 11
****

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	5290	1	16	5290	1
2	5290	1	17	5290	1
3	5290	1	18	5290	1
4	5290	1	19	5290	1
5	5290	1	20	5290	1
6	5290	1	21	5290	1
7	5290	1	22	5290	1
8	5290	1	23	5290	1
9	5290	1	24	5290	1
10	5290	1	25	5290	1
11	5290	1	26	5290	1
12	5290	1	27	5290	1
13	5290	1	28	5290	1
14	5290	1	29	5290	1
15	5290	1	30	5290	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5339	21	2	5305	6
8	5353	24	9	5312	27
11	5330	33	24	5352	72
38	5337	114	30	5319	90
46	5304	138	37	5339	111
53	5312	159	41	5310	123
67	5308	201	47	5343	141
69	5350	207	53	5358	159
74	5332	222	72	5342	216
84	5316	252	75	5338	225
91	5324	273	77	5345	231
93	5311	279	84	5351	252
--	--	-	90	5328	270
--	--	-	99	5341	297

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5304	9	4	5352	12
19	5339	57	5	5332	15
23	5315	69	9	5310	27
34	5345	102	10	5319	30
61	5307	183	20	5323	60
80	5301	240	24	5322	72
84	5318	252	35	5342	105
92	5338	276	43	5299	129
96	5321	288	44	5305	132
--	--	-	52	5356	156
--	--	-	58	5336	174
--	--	-	59	5343	177
--	--	-	62	5328	186
--	--	-	82	5317	246

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5305	3	12	5304	36
7	5301	21	13	5315	39
8	5337	24	15	5303	45
15	5358	45	24	5353	72
17	5321	51	26	5300	78
28	5317	84	50	5333	150
58	5326	174	56	5339	168
60	5352	180	75	5347	225
62	5313	186	79	5327	237
67	5314	201	89	5301	267
80	5346	240	90	5320	270
86	5322	258	91	5313	273
93	5306	279	--	--	--
95	5348	285	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5333	9	3	5312	9
11	5299	33	7	5331	21
12	5320	36	19	5301	57
15	5354	45	41	5319	123
25	5321	75	50	5328	150
28	5332	84	52	5354	156
32	5343	96	55	5322	165
38	5303	114	69	5330	207
46	5347	138	72	5305	216
50	5312	150	75	5341	225
67	5311	201	84	5317	252
73	5339	219	90	5342	270
85	5313	255	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5358	21	1	5336	3
14	5316	42	3	5337	9
15	5323	45	16	5350	48
20	5303	60	17	5312	51
31	5338	93	36	5317	108
34	5327	102	45	5352	135
35	5328	105	57	5343	171
67	5344	201	62	5354	186
70	5350	210	73	5306	219
71	5313	213	76	5356	228
82	5307	246	83	5303	249
86	5324	258	95	5339	285
--	--	--	96	5308	288

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5330	15	3	5353	9
6	5323	18	7	5337	21
9	5343	27	9	5350	27
24	5335	72	12	5303	36
25	5331	75	13	5334	39
28	5324	84	15	5323	45
39	5307	117	21	5318	63
52	5326	156	22	5311	66
58	5314	174	23	5300	69
61	5337	183	27	5301	81
66	5322	198	37	5344	111
69	5316	207	42	5351	126
72	5327	216	45	5336	135
73	5308	219	52	5298	156
77	5342	231	72	5357	216
86	5341	258	95	5299	285
--	--	--	96	5312	288

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5303	24	16	5299	48
12	5313	36	24	5354	72
23	5326	69	27	5316	81
25	5301	75	29	5347	87
34	5319	102	42	5310	126
37	5306	111	44	5351	132
56	5350	168	45	5313	135
58	5334	174	47	5309	141
68	5308	204	48	5318	144
86	5341	258	55	5301	165
87	5331	261	63	5307	189
91	5312	273	67	5311	201
--	--	--	78	5321	234
--	--	--	79	5327	237
--	--	--	89	5330	267
--	--	--	90	5306	270
--	--	--	94	5319	282

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5309	18	6	5313	18
10	5325	30	9	5341	27
16	5303	48	11	5318	33
21	5302	63	15	5353	45
30	5324	90	18	5330	54
53	5306	159	21	5344	63
54	5298	162	23	5336	69
59	5328	177	26	5302	78
61	5344	183	36	5323	108
63	5301	189	37	5327	111
65	5340	195	39	5325	117
74	5308	222	41	5320	123
75	5310	225	47	5338	141
78	5323	234	57	5304	171
90	5327	270	65	5303	195
95	5314	285	81	5308	243
97	5341	291	85	5324	255
--	--	--	86	5329	258
--	--	--	90	5349	270
--	--	--	96	5332	288

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5337	30	0	5347	0
17	5322	51	4	5321	12
27	5352	81	5	5299	15
29	5344	87	20	5308	60
64	5314	192	21	5306	63
65	5346	195	38	5352	114
69	5327	207	77	5341	231
79	5321	237	90	5333	270
80	5299	240	--	--	--
82	5342	246	--	--	--
86	5316	258	--	--	--
89	5345	267	--	--	--
94	5340	282	--	--	--
95	5338	285	--	--	--
96	5326	288	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5308	3	2	5342	6
17	5323	51	11	5340	33
25	5311	75	12	5329	36
32	5307	96	34	5328	102
35	5324	105	35	5322	105
39	5343	117	37	5337	111
50	5331	150	46	5303	138
65	5315	195	52	5304	156
68	5319	204	61	5298	183
72	5334	216	65	5320	195
84	5339	252	72	5338	216
95	5348	285	75	5307	225
98	5304	294	78	5341	234
--	--	--	94	5346	282

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5311	30	17	5329	51
13	5315	39	19	5304	57
17	5332	51	22	5308	66
20	5339	60	37	5340	111
41	5346	123	39	5358	117
44	5306	132	40	5311	120
48	5352	144	46	5355	138
52	5342	156	47	5336	141
76	5298	228	55	5337	165
79	5340	237	61	5310	183
87	5301	261	65	5317	195
--	--	--	68	5325	204
--	--	--	73	5323	219
--	--	--	75	5298	225
--	--	--	76	5334	228
--	--	--	88	5335	264
--	--	--	90	5320	270
--	--	--	91	5342	273
--	--	--	94	5306	282
--	--	--	96	5321	288
--	--	--	97	5333	291
--	--	--	99	5328	297

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5343	18	8	5354	24
21	5309	63	12	5350	36
22	5354	66	20	5347	60
23	5345	69	24	5303	72
24	5313	72	25	5341	75
31	5350	93	26	5336	78
37	5331	111	28	5358	84
41	5299	123	48	5315	144
51	5333	153	67	5346	201
52	5357	156	71	5308	213
63	5339	189	78	5353	234
68	5335	204	91	5355	273
77	5316	231	--	--	--
88	5349	264	--	--	--
89	5337	267	--	--	--
91	5303	273	--	--	--
96	5327	288	--	--	--
98	5330	294	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5355	24	11	5313	33
11	5333	33	14	5300	42
14	5304	42	21	5298	63
16	5330	48	25	5304	75
17	5329	51	48	5310	144
51	5331	153	59	5328	177
56	5324	168	68	5331	204
64	5301	192	69	5344	207
72	5328	216	74	5355	222
83	5335	249	85	5320	255
93	5298	279	90	5326	270
96	5325	288	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5307	9	3	5326	9
9	5305	27	21	5320	63
12	5325	36	23	5334	69
14	5323	42	34	5353	102
17	5302	51	41	5351	123
27	5315	81	46	5301	138
31	5322	93	54	5325	162
39	5330	117	60	5328	180
62	5347	186	75	5352	225
63	5357	189	84	5354	252
65	5318	195	92	5345	276
76	5329	228	96	5302	288
99	5352	297	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5344	30	3	5312	9
13	5341	39	6	5338	18
16	5345	48	13	5315	39
17	5350	51	19	5302	57
25	5352	75	41	5337	123
31	5347	93	54	5339	162
44	5355	132	80	5319	240
56	5322	168	85	5304	255
66	5302	198	--	--	--
71	5334	213	--	--	--
76	5309	228	--	--	--
81	5338	243	--	--	--
92	5329	276	--	--	--
93	5310	279	--	--	--
94	5356	282	--	--	--
95	5354	285	--	--	--
97	5319	291	--	--	--

Radio A Radar Statistical Performance for 802.11ac-VHT160

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5252	1	838	63	1
2	5252	1	558	95	1
3	5252	1	658	81	1
4	5252	1	898	59	1
5	5252	1	938	57	1
6	5252	1	738	72	1
7	5252	1	858	62	1
8	5252	1	798	67	1
9	5252	1	678	78	1
10	5252	1	598	89	1
11	5252	1	718	74	1
12	5252	1	758	70	1
13	5252	1	878	61	1
14	5252	1	538	99	1
15	5252	1	638	83	1
16	5252	1	1889	28	1
17	5252	1	978	54	1
18	5252	1	2919	19	1
19	5252	1	1642	33	1
20	5252	1	2238	24	1
21	5252	1	803	66	1
22	5252	1	2348	23	1
23	5252	1	1099	49	1
24	5252	1	2630	21	1
25	5252	1	1000	53	1
26	5252	1	1856	29	1
27	5252	1	966	55	1
28	5252	1	1101	48	1
29	5252	1	1455	37	1
30	5252	1	1198	45	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	5270	1.3	190	24	1
2	5270	4.4	162	26	1
3	5270	3.4	215	24	1
4	5270	2.3	169	24	1
5	5270	3.4	204	25	1
6	5270	2.5	202	25	1
7	5270	3.0	171	29	1
8	5270	4.1	191	26	1
9	5270	3.2	215	26	1
10	5270	4.1	177	25	1
11	5270	5.0	197	25	1
12	5270	4.9	150	26	1
13	5270	3.5	220	24	1
14	5270	5.0	167	29	1
15	5270	4.5	176	27	1
16	5270	3.1	229	25	1
17	5270	2.4	216	28	1
18	5270	4.7	169	25	1
19	5270	4.2	168	28	1
20	5270	2.7	230	23	1
21	5270	4.8	212	26	1
22	5270	2.1	210	27	1
23	5270	4.0	221	23	1
24	5270	4.8	165	29	1
25	5270	4.7	222	28	1
26	5270	1.5	186	26	1
27	5270	4.0	202	27	1
28	5270	4.2	199	25	1
29	5270	1.6	217	28	1
30	5270	1.7	226	24	1
Detection Percentage (%)					100%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5290	6.7	500	17	1
2	5290	6.6	463	17	1
3	5290	7.3	461	18	1
4	5290	9.3	253	18	1
5	5290	9.6	399	16	1
6	5290	8.7	489	18	1
7	5290	6.1	253	17	1
8	5290	9.7	271	18	1
9	5290	6.0	295	16	1
10	5290	10.0	414	17	1
11	5290	7.3	277	17	1
12	5290	6.9	311	18	1
13	5290	7.8	451	16	1
14	5290	7.0	264	18	1
15	5290	8.0	384	17	1
16	5290	9.6	450	16	1
17	5290	6.6	315	18	1
18	5290	6.0	483	17	1
19	5290	9.0	308	17	1
20	5290	9.4	433	18	1
21	5290	6.5	494	18	1
22	5290	7.4	410	16	1
23	5290	7.1	368	16	1
24	5290	6.3	366	18	1
25	5290	8.2	428	16	1
26	5290	6.1	281	17	1
27	5290	9.1	440	18	1
28	5290	6.1	285	18	1
29	5290	6.5	408	16	1
30	5290	8.6	482	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	5309	13.6	338	13	1
2	5309	14.7	370	13	1
3	5309	18.9	372	12	1
4	5309	15.0	342	12	1
5	5309	18.2	384	14	1
6	5309	14.7	287	12	1
7	5309	18.7	300	16	1
8	5309	13.0	314	14	1
9	5309	18.7	480	13	1
10	5309	14.9	281	15	1
11	5309	17.3	378	12	1
12	5309	19.2	313	12	1
13	5309	13.3	500	16	1
14	5309	15.9	340	12	1
15	5309	19.7	488	16	1
16	5309	19.6	433	14	1
17	5309	15.8	484	15	1
18	5309	11.9	458	16	1
19	5309	14.1	342	14	1
20	5309	14.0	436	15	1
21	5309	14.4	272	16	1
22	5309	12.5	455	13	1
23	5309	13.6	288	12	1
24	5309	18.4	324	16	1
25	5309	14.3	413	13	1
26	5309	11.9	315	16	1
27	5309	11.4	261	15	1
28	5309	16.8	344	15	1
29	5309	11.0	439	15	1
30	5309	13.6	396	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	5259.6	1	16	5290.0	1
2	5255.2	1	17	5290.0	1
3	5256.0	1	18	5290.0	1
4	5257.6	1	19	5290.0	1
5	5259.2	1	20	5290.0	1
6	5254.4	1	21	5320.4	1
7	5255.6	1	22	5324.8	1
8	5256.8	1	23	5324.0	1
9	5258.8	1	24	5322.4	1
10	5254.0	1	25	5320.8	1
11	5290.0	1	26	5325.6	1
12	5290.0	1	27	5324.4	1
13	5290.0	1	28	5323.2	1
14	5290.0	1	29	5321.2	1
15	5290.0	1	30	5326.0	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

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	511643	1	19	55	1401	0	0	511643	0	1199999
2	1016962	3	19	100	1843	1725	1264	1530006	1200000	2399999
3	1801622	3	19	75	1631	1391	1732	3336460	2400000	3599999
4	532653	2	19	70	1079	1937	0	3873867	3600000	4799999
5	1724723	2	19	85	1636	1342	0	5601606	4800000	5999999
6	641388	2	19	100	1523	1234	0	6245972	6000000	7199999
7	1624398	3	19	80	1134	1930	1408	7873127	7200000	8399999
8	575170	3	19	70	1379	1014	1252	8452769	8400000	9599999
9	2115540	2	19	90	1604	1553	0	10571954	9600000	10799999
10	1291747	2	19	100	1735	1156	0	11866858	10800000	11999999

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

Type 5 Radar Waveform_2

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	871530	1	8	80	1302	0	0	871530	0	1499999
2	1977240	3	8	50	1713	1699	1772	2850072	1500000	2999999
3	1607183	1	8	80	1425	0	0	4462439	3000000	4499999
4	1145821	1	8	55	1190	0	0	5609685	4500000	5999999
5	1848831	3	8	50	1061	1261	1696	7459706	6000000	7499999
6	1454097	1	8	90	1167	0	0	8917821	7500000	8999999
7	1574208	3	8	55	1798	1113	1706	10493196	9000000	10499999
8	202689	3	8	75	1203	1069	1384	10700502	10500000	11999999

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

Type 5 Radar Waveform_3

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	106772	3	10	80	1199	1553	1394	106772	0	1090908
2	1558933	2	10	100	1082	1174	0	1669851	1090909	2181817
3	809912	1	10	90	1662	0	0	2482019	2181818	3272726
4	885991	2	10	55	1106	1764	0	3369672	3272727	4363635
5	1632836	2	10	90	1311	1602	0	5005378	4363636	5454544
6	1523397	3	10	65	1328	1398	1040	6531688	5454545	6545453
7	706324	1	10	85	1668	0	0	7241778	6545454	7636362
8	622784	3	10	75	1804	1741	1448	7866230	7636363	8727271
9	1092464	3	10	75	1996	1203	1263	8963687	8727272	9818180
10	1461250	2	10	75	1854	1627	0	10429399	9818181	10909089
11	688321	3	10	55	1900	1818	1377	11121201	10909090	11999998

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

Type 5 Radar Waveform_4

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	318462	1	14	55	1252	0	0	318462	0	705881
2	697756	3	14	65	1753	1616	1284	1017470	705882	1411763
3	549515	2	14	95	1441	1728	0	1571638	1411764	2117645
4	659543	2	14	80	1082	1590	0	2234350	2117646	2823527
5	1246275	1	14	55	1242	0	0	3483297	2823528	3529409
6	228242	2	14	70	1273	1089	0	3712781	3529410	4235291
7	1197594	3	14	100	1274	1477	1301	4912737	4235292	4941173
8	107398	1	14	85	1760	0	0	5024187	4941174	5647055
9	808446	2	14	100	1417	1894	0	5834393	5647056	6352937
10	1093764	1	14	80	1629	0	0	6931468	6352938	7058819
11	448691	1	14	75	1539	0	0	7381788	7058820	7764701
12	957498	2	14	85	1544	1110	0	8340825	7764702	8470583
13	249833	3	14	55	1520	1554	1756	8593312	8470584	9176465
14	971749	1	14	70	1457	0	0	9569891	9176466	9882347
15	614290	1	14	75	1628	0	0	10185638	9882348	10588229
16	502855	1	14	70	1792	0	0	10690121	10588230	11294111
17	1017073	3	14	85	1193	1235	1977	11708986	11294112	11999993

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

Type 5 Radar Waveform_5

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	201606	2	18	65	1870	1392	0	201606	0	1499999
2	2037684	2	18	85	1712	1715	0	2242552	1500000	2999999
3	914937	3	18	75	1488	1199	1476	3160916	3000000	4499999
4	2167710	3	18	75	1932	1461	1977	5332789	4500000	5999999
5	1114524	1	18	85	1833	0	0	6452683	6000000	7499999
6	2249907	1	18	60	1493	0	0	8704423	7500000	8999999
7	533276	2	18	65	1807	1191	0	9239192	9000000	10499999
8	1422260	2	18	70	1694	1682	0	10664450	10500000	11999999

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

Type 5 Radar Waveform_6

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	117680	1	6	95	1921	0	0	117680	0	857142
2	1002036	3	6	75	1936	1959	1835	1121637	857143	1714285
3	911482	3	6	50	1887	1812	1971	2038849	1714286	2571428
4	1198707	2	6	65	1045	1781	0	3243226	2571429	3428571
5	943870	2	6	95	1419	1932	0	4189922	3428572	4285714
6	613136	2	6	100	1966	1722	0	4806409	4285715	5142857
7	914791	3	6	90	1341	1643	1078	5724888	5142858	6000000
8	902121	1	6	80	1526	0	0	6631071	6000001	6857143
9	525864	2	6	100	1692	1697	0	7158461	6857144	7714286
10	871901	1	6	65	1063	0	0	8033751	7714287	8571429
11	1012261	1	6	85	1634	0	0	9047075	8571430	9428572
12	932380	3	6	65	1863	1775	1344	9981089	9428573	10285715
13	988838	3	6	55	1948	1473	1197	10974909	10285716	11142858
14	444572	2	6	70	1510	1618	0	11424099	11142859	12000001

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

Type 5 Radar Waveform_7

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

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

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

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	755018	2	12	60	1278	1802	0	755018	0	1333332
2	1850243	3	12	75	1072	1940	1964	2608341	1333333	2666665
3	943860	3	12	55	1440	1798	1317	3557177	2666666	3999998
4	1224718	3	12	65	1662	1150	1271	4786450	3999999	5333331
5	1087723	1	12	65	1363	0	0	5878256	5333332	6666664
6	2041650	3	12	100	1754	1823	1161	7921269	6666665	7999997
7	437656	3	12	70	1943	1784	1009	8363663	7999998	9333330
8	1241202	1	12	80	1374	0	0	9609601	9333331	10666663
9	1118313	1	12	90	1034	0	0	10729288	10666664	11999996

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

Type 5 Radar Waveform_9

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	712607	2	17	60	1993	1811	0	712607	0	857142
2	824358	3	17	85	1349	1779	1188	1540769	857143	1714285
3	854464	2	17	100	1055	1753	0	2399549	1714286	2571428
4	1004530	3	17	55	1981	1753	1355	3406887	2571429	3428571
5	533310	1	17	70	1252	0	0	3945286	3428572	4285714
6	365114	2	17	85	1785	1057	0	4311652	4285715	5142857
7	1448484	3	17	50	1271	1593	1324	5762978	5142858	6000000
8	644418	2	17	50	1843	1052	0	6411584	6000001	6857143
9	1100455	2	17	80	1706	1105	0	7514934	6857144	7714286
10	299061	1	17	100	1353	0	0	7816806	7714287	8571429
11	1121333	1	17	80	1763	0	0	8939492	8571430	9428572
12	662165	2	17	80	1162	1516	0	9603420	9428573	10285715
13	988218	3	17	65	1035	1470	1997	10594316	10285716	11142858
14	962490	1	17	95	1353	0	0	11561308	11142859	12000001

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

Type 5 Radar Waveform_10

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	472656	2	5	95	1982	1953	0	472656	0	923076
2	706960	1	5	100	1809	0	0	1183551	923077	1846153
3	1271029	3	5	55	1335	1964	1580	2456389	1846154	2769230
4	604707	1	5	100	1534	0	0	3065975	2769231	3692307
5	1099000	3	5	55	1864	1745	1891	4166509	3692308	4615384
6	1199225	1	5	95	1374	0	0	5371234	4615385	5538461
7	253472	1	5	95	1004	0	0	5626080	5538462	6461538
8	1055059	1	5	70	1713	0	0	6682143	6461539	7384615
9	1194434	3	5	100	1381	1724	1732	7878290	7384616	8307692
10	722297	3	5	75	1852	1230	1267	8605424	8307693	9230769
11	1207076	2	5	60	1789	1274	0	9816849	9230770	10153846
12	732935	2	5	55	1427	1078	0	10552847	10153847	11076923
13	758714	2	5	90	1306	1353	0	11314066	11076924	12000000

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

Type 5 Radar Waveform_11

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	542808	2	19	80	1051	1632	0	542808	0	666666
2	573020	1	19	60	1483	0	0	1118511	666667	1333333
3	779590	2	19	80	1877	1772	0	1899584	1333334	2000000
4	147747	3	19	80	1666	1368	1550	2050980	2000001	2666667
5	1197152	2	19	100	1905	1924	0	3252716	2666668	3333334
6	198803	2	19	60	1739	1769	0	3455348	3333335	4000001
7	1113528	2	19	90	1421	1610	0	4572384	4000002	4666668
8	715053	2	19	60	1061	1116	0	5290468	4666669	5333335
9	122790	3	19	60	1800	1170	1850	5415435	5333336	6000002
10	1227155	1	19	95	1195	0	0	6647410	6000003	6666669
11	586131	2	19	90	1943	1579	0	7234736	6666670	7333336
12	286751	1	19	65	1788	0	0	7525009	7333337	8000003
13	660165	3	19	60	1221	1354	1016	8186962	8000004	8666670
14	1051243	2	19	75	1864	1468	0	9241796	8666671	9333337
15	488027	1	19	55	1556	0	0	9733155	9333338	10000004
16	740158	3	19	75	1979	1082	1956	10474869	10000005	10666671
17	818454	2	19	60	1765	1373	0	11298340	10666672	11333338
18	693536	3	19	85	1180	1733	1923	11995014	11333339	12000005

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

Type 5 Radar Waveform_12

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	536287	3	8	85	1502	1890	1650	536287	0	999999
2	584963	2	8	65	1545	1714	0	1126292	1000000	1999999
3	1122810	3	8	70	1142	1865	1725	2252361	2000000	2999999
4	1230883	3	8	100	1558	1044	1467	3487976	3000000	3999999
5	1343135	3	8	75	1512	1235	1550	4835180	4000000	4999999
6	797655	1	8	80	1130	0	0	5637132	5000000	5999999
7	949342	2	8	95	1841	1360	0	6587604	6000000	6999999
8	1340547	1	8	75	1355	0	0	7931352	7000000	7999999
9	542931	2	8	90	1578	1658	0	8475638	8000000	8999999
10	1201562	1	8	75	1844	0	0	9680436	9000000	9999999
11	950976	1	8	100	1061	0	0	10633256	10000000	10999999
12	756886	3	8	65	1482	1373	1053	11391203	11000000	11999999

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

Type 5 Radar Waveform_13

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	532675	3	10	60	1777	1934	1665	532675	0	666666
2	587810	2	10	70	1486	2000	0	1125861	666667	1333333
3	442656	2	10	70	1389	1179	0	1572003	1333334	2000000
4	986578	2	10	100	1045	1928	0	2561149	2000001	2666667
5	411698	1	10	95	1960	0	0	2975820	2666668	3333334
6	867577	1	10	60	1508	0	0	3845357	3333335	4000001
7	641533	3	10	90	1431	1662	1969	4488398	4000002	4666668
8	214853	1	10	60	1554	0	0	4708313	4666669	5333335
9	706517	2	10	70	1423	1606	0	5416384	5333336	6000002
10	702214	1	10	70	1599	0	0	6121627	6000003	6666669
11	759701	3	10	100	1733	1656	1348	6882927	6666670	7333336
12	498200	3	10	85	1565	1679	1031	7385864	7333337	8000003
13	1075456	1	10	55	1493	0	0	8465595	8000004	8666670
14	256303	1	10	80	1203	0	0	8723391	8666671	9333337
15	1140268	2	10	80	1909	1568	0	9864862	9333338	10000004
16	205046	3	10	50	1618	1355	1063	10073385	10000005	10666671
17	1026286	2	10	70	1318	1675	0	11103707	10666672	11333338
18	229031	1	10	100	1954	0	0	11335731	11333339	12000005

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

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	233142	3	14	65	1554	1077	1176	233142	0	749999
2	1242632	1	14	75	1022	0	0	1479581	750000	1499999
3	413108	3	14	85	1598	1730	1620	1893711	1500000	2249999
4	517953	3	14	100	1126	1581	1070	2416612	2250000	2999999
5	1269877	2	14	60	1478	1005	0	3690266	3000000	3749999
6	73779	2	14	85	1481	1713	0	3766528	3750000	4499999
7	1242506	2	14	70	1696	1843	0	5012228	4500000	5249999
8	598666	1	14	65	1599	0	0	5614433	5250000	5999999
9	1052769	1	14	90	1621	0	0	6668801	6000000	6749999
10	429143	1	14	85	1982	0	0	7099565	6750000	7499999
11	899002	2	14	85	1928	1862	0	8000549	7500000	8249999
12	849435	2	14	100	1969	1257	0	8853774	8250000	8999999
13	721109	2	14	65	1407	1418	0	9578109	9000000	9749999
14	577984	3	14	60	1689	1436	1005	10158918	9750000	10499999
15	444652	1	14	85	1856	0	0	10607700	10500000	11249999
16	1256326	1	14	75	1950	0	0	11865882	11250000	11999999

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

Type 5 Radar Waveform_15

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	461948	2	18	95	1615	1252	0	461948	0	599999
2	235810	2	18	95	1864	1958	0	700625	600000	1199999
3	606725	1	18	95	1855	0	0	1311172	1200000	1799999
4	946972	3	18	55	1225	1303	1657	2259999	1800000	2399999
5	264478	1	18	65	1320	0	0	2528662	2400000	2999999
6	860872	1	18	75	1636	0	0	3390854	3000000	3599999
7	227987	2	18	50	1974	1608	0	3620477	3600000	4199999
8	818487	3	18	100	1585	1657	1114	4442546	4200000	4799999
9	943640	2	18	70	1022	1698	0	5390542	4800000	5399999
10	342133	2	18	50	1414	1244	0	5735395	5400000	5999999
11	777759	1	18	85	1178	0	0	6515812	6000000	6599999
12	233941	2	18	50	1073	1818	0	6750931	6600000	7199999
13	651250	2	18	85	1629	1948	0	7405072	7200000	7799999
14	416832	1	18	70	1863	0	0	7825481	7800000	8399999
15	904670	2	18	90	1387	1244	0	8732014	8400000	8999999
16	588665	3	18	90	1240	1909	1266	9323310	9000000	9599999
17	379969	2	18	65	1264	1940	0	9707694	9600000	10199999
18	966458	3	18	50	1721	1650	1684	10677356	10200000	10799999
19	306294	3	18	100	1357	1824	1973	10988705	10800000	11399999
20	504145	2	18	80	1764	1734	0	11498004	11400000	11999999

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

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	558976	3	6	90	1206	1211	1882	558976	0	749999
2	928986	3	6	60	1386	1353	1222	1492261	750000	1499999
3	628474	2	6	95	1361	1131	0	2124696	1500000	2249999
4	248921	1	6	60	1956	0	0	2376109	2250000	2999999
5	933846	2	6	85	1176	1907	0	3311911	3000000	3749999
6	736014	3	6	50	1805	1364	1887	4051008	3750000	4499999
7	1081021	2	6	50	1335	1585	0	5137085	4500000	5249999
8	289620	2	6	60	1312	1117	0	5429625	5250000	5999999
9	585471	1	6	60	1665	0	0	6017525	6000000	6749999
10	1199137	1	6	60	1750	0	0	7218327	6750000	7499999
11	524156	1	6	90	1314	0	0	7744233	7500000	8249999
12	1035532	3	6	70	1040	1743	1121	8781079	8250000	8999999
13	503535	1	6	80	1190	0	0	9288518	9000000	9749999
14	462322	2	6	85	1998	1619	0	9752030	9750000	10499999
15	918446	1	6	50	1552	0	0	10674093	10500000	11249999
16	917059	1	6	80	1942	0	0	11592704	11250000	11999999

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

Type 5 Radar Waveform_17

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	593333	2	9	100	1817	1856	0	593333	0	923076
2	638682	3	9	75	1471	1796	1489	1235688	923077	1846153
3	1163128	1	9	85	1557	0	0	2403572	1846154	2769230
4	1181043	3	9	90	1815	1676	1870	3586172	2769231	3692307
5	903256	1	9	75	1893	0	0	4494789	3692308	4615384
6	333485	3	9	50	1078	1484	1392	4830167	4615385	5538461
7	1382529	1	9	95	1660	0	0	6216650	5538462	6461538
8	243807	2	9	85	1661	1968	0	6462117	6461539	7384615
9	1172437	3	9	75	1871	1944	1633	7638183	7384616	8307692
10	1131603	3	9	70	1466	1866	1055	8775234	8307693	9230769
11	1028392	2	9	75	1872	1255	0	9808013	9230770	10153846
12	880396	3	9	75	1744	1626	1933	10691536	10153847	11076923
13	491262	2	9	80	1829	1186	0	11188101	11076924	12000000

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

Type 5 Radar Waveform_18

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	191411	1	12	65	1609	0	0	191411	0	666666
2	807860	1	12	70	1924	0	0	1000880	666667	1333333
3	537110	3	12	65	1765	1001	1551	1539914	1333334	2000000
4	945383	1	12	65	1885	0	0	2489614	2000001	2666667
5	308913	2	12	50	1086	1368	0	2800412	2666668	3333334
6	1043566	3	12	80	1081	1816	1440	3846432	3333335	4000001
7	466168	1	12	60	1268	0	0	4316937	4000002	4666668
8	944486	3	12	90	1547	1399	1502	5262691	4666669	5333335
9	111957	2	12	100	1409	1688	0	5379096	5333336	6000002
10	1078328	3	12	90	1208	1139	1541	6460521	6000003	6666669
11	796960	2	12	75	1216	1037	0	7261369	6666670	7333336
12	649763	1	12	70	1688	0	0	7913385	7333337	8000003
13	312906	2	12	95	1495	1430	0	8227979	8000004	8666670
14	712587	3	12	90	1919	1654	1565	8943491	8666671	9333337
15	441811	1	12	70	1860	0	0	9390440	9333338	10000004
16	613942	1	12	90	1284	0	0	10006242	10000005	10666671
17	1064945	3	12	75	1856	1062	1617	11072471	10666672	11333338
18	747707	1	12	65	1527	0	0	11824713	11333339	12000005

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

Type 5 Radar Waveform_19

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	605138	3	17	95	1820	1209	1814	605138	0	705881
2	99175	2	17	100	1651	1858	0	709156	705882	1411763
3	1203534	1	17	65	1096	0	0	1916199	1411764	2117645
4	392749	1	17	50	1292	0	0	2310044	2117646	2823527
5	1146614	3	17	75	1541	1918	1629	3457950	2823528	3529409
6	361047	1	17	85	1091	0	0	3824085	3529410	4235291
7	914806	2	17	55	1315	1700	0	4739982	4235292	4941173
8	216416	1	17	55	1137	0	0	4959413	4941174	5647055
9	688301	3	17	55	1003	1823	1850	5648851	5647056	6352937
10	1336363	3	17	70	1858	1983	1260	6989890	6352938	7058819
11	210886	1	17	55	1189	0	0	7205877	7058820	7764701
12	1070498	1	17	60	1432	0	0	8277564	7764702	8470583
13	874978	2	17	90	1563	1379	0	9153974	8470584	9176465
14	64746	3	17	75	1052	1815	1830	9221662	9176466	9882347
15	997841	3	17	95	1056	1936	1631	10224200	9882348	10588229
16	634843	1	17	100	1830	0	0	10863666	10588230	11294111
17	630084	3	17	50	1942	1595	1467	11495580	11294112	11999993

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

Type 5 Radar Waveform_20

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	42758	2	5	60	1366	1390	0	42758	0	705881
2	1090076	1	5	80	1860	0	0	1135590	705882	1411763
3	688021	1	5	60	1360	0	0	1825471	1411764	2117645
4	928652	3	5	85	1379	1952	1568	2755483	2117646	2823527
5	747878	3	5	60	1682	1204	1897	3508260	2823528	3529409
6	584419	2	5	75	1635	1592	0	4097462	3529410	4235291
7	701419	2	5	50	1667	1690	0	4802108	4235292	4941173
8	481354	1	5	85	1010	0	0	5286819	4941174	5647055
9	591098	3	5	50	1798	1782	1888	5878927	5647056	6352937
10	979135	3	5	65	1495	1896	1745	6863530	6352938	7058819
11	588679	1	5	50	1298	0	0	7457345	7058820	7764701
12	444623	2	5	90	1157	1283	0	7903266	7764702	8470583
13	655154	1	5	70	1010	0	0	8560860	8470584	9176465
14	622996	1	5	65	1250	0	0	9184866	9176466	9882347
15	834057	1	5	60	1078	0	0	10020173	9882348	10588229
16	626152	2	5	70	1333	1862	0	10647403	10588230	11294111
17	647492	3	5	65	1545	1492	1772	11298090	11294112	11999993

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

Type 5 Radar Waveform_21

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	492544	1	19	50	1422	0	0	492544	0	799999
2	996332	2	19	65	1515	1553	0	1490298	800000	1599999
3	122297	1	19	80	1414	0	0	1615663	1600000	2399999
4	810687	3	19	100	1529	1877	1107	2427764	2400000	3199999
5	1288511	1	19	55	1078	0	0	3720788	3200000	3999999
6	1047286	3	19	90	1979	1224	1722	4769152	4000000	4799999
7	537084	3	19	95	1625	1877	1308	5311161	4800000	5599999
8	909380	1	19	55	1333	0	0	6225351	5600000	6399999
9	680361	1	19	75	1469	0	0	6907045	6400000	7199999
10	493671	3	19	90	1445	1952	1666	7402185	7200000	7999999
11	1182241	3	19	65	1944	1112	1521	8589489	8000000	8799999
12	488753	1	19	95	1707	0	0	9082819	8800000	9599999
13	729518	3	19	55	1601	1847	1957	9814044	9600000	10399999
14	879037	3	19	75	1445	1052	1682	10698486	10400000	11199999
15	885618	3	19	50	1909	1141	1791	11588283	11200000	11999999

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

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	52642	3	8	90	1113	1118	1961	52642	0	999999
2	1635080	2	8	65	1675	1916	0	1691914	1000000	1999999
3	1150745	3	8	65	1932	1861	1078	2846250	2000000	2999999
4	1068527	3	8	60	1698	1621	1936	3919648	3000000	3999999
5	771435	2	8	90	1728	1543	0	4696338	4000000	4999999
6	548131	2	8	90	1466	1740	0	5247740	5000000	5999999
7	1273301	1	8	90	1281	0	0	6524247	6000000	6999999
8	777618	2	8	100	1567	1339	0	7303146	7000000	7999999
9	983340	3	8	50	1039	1335	1950	8289392	8000000	8999999
10	1235927	2	8	60	1879	1156	0	9529643	9000000	9999999
11	543053	1	8	50	1782	0	0	10075731	10000000	10999999
12	1774676	1	8	50	1488	0	0	11852189	11000000	11999999

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

Type 5 Radar Waveform_23

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	760170	2	10	95	1532	1305	0	760170	0	999999
2	368851	2	10	95	1084	1477	0	1131858	1000000	1999999
3	1661925	2	10	80	1101	1069	0	2796344	2000000	2999999
4	1052753	1	10	100	1397	0	0	3851267	3000000	3999999
5	150698	3	10	55	1681	1687	1450	4003362	4000000	4999999
6	1285948	1	10	95	1772	0	0	5294128	5000000	5999999
7	1652503	2	10	90	1434	1597	0	6948403	6000000	6999999
8	313490	2	10	80	1205	1033	0	7264924	7000000	7999999
9	1212592	1	10	90	1027	0	0	8479754	8000000	8999999
10	1290830	1	10	65	1820	0	0	9771611	9000000	9999999
11	547739	2	10	90	1285	1905	0	10321170	10000000	10999999
12	1479495	3	10	50	1356	1939	1354	11803855	11000000	11999999

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

Type 5 Radar Waveform_24

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	803435	1	14	100	1334	0	0	803435	0	923076
2	477558	3	14	65	1089	1789	1096	1282327	923077	1846153
3	816264	2	14	75	1168	1692	0	2102565	1846154	2769230
4	899758	1	14	50	1583	0	0	3005183	2769231	3692307
5	1045074	1	14	60	1439	0	0	4051840	3692308	4615384
6	1105687	2	14	60	1281	1470	0	5158966	4615385	5538461
7	1235824	2	14	65	2000	1148	0	6397541	5538462	6461538
8	473827	2	14	80	1434	1557	0	6874516	6461539	7384615
9	871376	1	14	50	1536	0	0	7748883	7384616	8307692
10	1144293	2	14	100	1137	1104	0	8894712	8307693	9230769
11	979261	3	14	95	1697	1408	1156	9876214	9230770	10153846
12	809944	2	14	85	1456	1418	0	10690419	10153847	11076923
13	921231	1	14	60	1127	0	0	11614524	11076924	12000000

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

Type 5 Radar Waveform_25

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	421981	2	18	80	1187	1133	0	421981	0	599999
2	708377	3	18	55	1413	1231	1964	1132678	600000	1199999
3	383891	2	18	100	1002	1261	0	1521177	1200000	1799999
4	433435	3	18	70	1792	1782	1690	1956875	1800000	2399999
5	990484	3	18	55	1576	1880	1860	2952623	2400000	2999999
6	191902	2	18	95	1842	1092	0	3149841	3000000	3599999
7	766458	2	18	95	1938	1464	0	3919233	3600000	4199999
8	521116	1	18	55	1071	0	0	4443751	4200000	4799999
9	931365	1	18	100	1673	0	0	5376187	4800000	5399999
10	168294	3	18	95	1741	1707	1848	5546154	5400000	5999999
11	891647	3	18	65	1825	1977	1287	6443097	6000000	6599999
12	205712	1	18	80	1487	0	0	6653898	6600000	7199999
13	1115258	3	18	60	1063	1498	1761	7770643	7200000	7799999
14	605435	2	18	50	1522	1786	0	8380400	7800000	8399999
15	412830	3	18	80	1534	1321	1023	8796538	8400000	8999999
16	646360	3	18	65	1713	1126	1395	9446776	9000000	9599999
17	630134	1	18	90	1847	0	0	10081144	9600000	10199999
18	615784	1	18	95	1212	0	0	10698775	10200000	10799999
19	200174	2	18	95	1254	1133	0	10900161	10800000	11399999
20	824612	3	18	55	1026	1253	1873	11727160	11400000	11999999

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

Type 5 Radar Waveform_26

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	88933	2	6	85	1916	1169	0	88933	0	1499999
2	1898057	1	6	50	1195	0	0	1990075	1500000	2999999
3	2342635	2	6	95	1627	1683	0	4333905	3000000	4499999
4	1114197	2	6	95	1269	1992	0	5451412	4500000	5999999
5	888375	1	6	85	1649	0	0	6343048	6000000	7499999
6	1591929	1	6	75	1602	0	0	7936626	7500000	8999999
7	1177033	3	6	65	1623	1723	1060	9115261	9000000	10499999
8	2435974	1	6	65	1931	0	0	11555641	10500000	11999999

Total number of pulses in waveform = 13
****

Type 5 Radar Waveform_27

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	375467	2	9	75	1018	1541	0	375467	0	923076
2	847854	1	9	60	1240	0	0	1225880	923077	1846153
3	947664	2	9	90	1888	1298	0	2174784	1846154	2769230
4	1004261	3	9	50	1107	1156	1598	3182231	2769231	3692307
5	1296446	2	9	75	1177	1144	0	4482538	3692308	4615384
6	1037813	2	9	95	1358	1998	0	5522672	4615385	5538461
7	791638	2	9	95	1681	1516	0	6317666	5538462	6461538
8	245549	1	9	55	1045	0	0	6566412	6461539	7384615
9	1636954	3	9	90	1252	1508	1058	8204411	7384616	8307692
10	942997	2	9	50	1778	1463	0	9151226	8307693	9230769
11	823029	1	9	60	1210	0	0	9977496	9230770	10153846
12	1059524	3	9	65	1481	1762	1604	11038230	10153847	11076923
13	829648	2	9	85	1607	1999	0	11872725	11076924	12000000

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

Type 5 Radar Waveform_28

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	200784	1	12	50	1103	0	0	200784	0	631578
2	539100	3	12	55	1705	1122	1048	740987	631579	1263157
3	1124832	3	12	80	1714	1239	1585	1869694	1263158	1894736
4	85369	1	12	70	1872	0	0	1959601	1894737	2526315
5	602862	2	12	85	1453	1008	0	2564335	2526316	3157894
6	1043536	3	12	65	1158	1214	1350	3610332	3157895	3789473
7	282697	1	12	90	1474	0	0	3896751	3789474	4421052
8	573218	3	12	95	1373	1456	1720	4471443	4421053	5052631
9	812184	2	12	75	1226	1578	0	5288176	5052632	5684210
10	988805	3	12	80	1740	1717	1298	6279785	5684211	6315789
11	451339	3	12	85	1389	1900	1164	6735879	6315790	6947368
12	533351	1	12	65	1559	0	0	7273683	6947369	7578947
13	594893	3	12	80	1075	1696	1963	7870135	7578948	8210526
14	572715	3	12	55	1414	1963	1380	8447584	8210527	8842105
15	509738	1	12	70	1196	0	0	8962079	8842106	9473684
16	907825	1	12	75	1894	0	0	9871100	9473685	10105263
17	462573	3	12	50	1054	1901	1421	10335567	10105264	10736842
18	1006204	3	12	60	1864	1362	1431	11346147	10736843	11368421
19	45042	3	12	50	1863	1508	1877	11395846	11368422	12000000

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

Type 5 Radar Waveform_29

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	389409	2	17	55	1196	1314	0	389409	0	1333332
2	1677400	2	17	75	1480	1992	0	2069319	1333333	2666665
3	1705136	1	17	100	1397	0	0	3777927	2666666	3999998
4	524164	1	17	60	1634	0	0	4303488	3999999	5333331
5	1926262	1	17	85	1382	0	0	6231384	5333332	6666664
6	1301735	1	17	90	1144	0	0	7534501	6666665	7999997
7	1296062	2	17	85	1266	1154	0	8831707	7999998	9333330
8	545248	3	17	70	1936	1219	1083	9379375	9333331	10666663
9	2601036	2	17	65	1445	1481	0	11984649	10666664	11999996

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

Type 5 Radar Waveform_30

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	261807	2	5	55	1959	1573	0	261807	0	705881
2	900760	1	5	95	1935	0	0	1166099	705882	1411763
3	427760	3	5	90	1625	1106	1996	1595794	1411764	2117645
4	685015	3	5	75	1680	1785	1242	2285536	2117646	2823527
5	1088244	1	5	100	1781	0	0	3378487	2823528	3529409
6	183496	2	5	75	1082	1338	0	3563764	3529410	4235291
7	1276925	1	5	50	1548	0	0	4843109	4235292	4941173
8	134634	2	5	65	1259	1124	0	4979291	4941174	5647055
9	825278	1	5	100	1513	0	0	5806952	5647056	6352937
10	630692	2	5	75	1843	1831	0	6439157	6352938	7058819
11	1164563	3	5	95	1226	1248	1040	7607394	7058820	7764701
12	434377	1	5	75	1926	0	0	8045285	7764702	8470583
13	1080246	3	5	75	1604	1711	1611	9127457	8470584	9176465
14	522576	3	5	75	1273	1199	1724	9654959	9176466	9882347
15	405751	3	5	55	1167	1500	1187	10064906	9882348	10588229
16	665384	1	5	95	1753	0	0	10734144	10588230	11294111
17	741083	1	5	90	1842	0	0	11476980	11294112	11999993

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

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	5290	1	16	5290	1
2	5290	1	17	5290	1
3	5290	1	18	5290	1
4	5290	1	19	5290	1
5	5290	1	20	5290	1
6	5290	1	21	5290	1
7	5290	1	22	5290	1
8	5290	1	23	5290	1
9	5290	1	24	5290	1
10	5290	1	25	5290	1
11	5290	1	26	5290	1
12	5290	1	27	5290	1
13	5290	1	28	5290	1
14	5290	1	29	5290	1
15	5290	1	30	5290	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5310	0	1	5325	3
34	5344	102	18	5311	54
40	5327	120	20	5343	60
50	5349	150	21	5355	63
51	5332	153	30	5349	90
54	5341	162	33	5297	99
55	5309	165	39	5326	117
65	5318	195	45	5344	135
82	5336	246	59	5298	177
87	5312	261	60	5340	180
90	5345	270	77	5303	231
94	5299	282	83	5316	249
--	--	--	85	5320	255
--	--	--	89	5353	267

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5324	3	8	5328	24
5	5351	15	10	5346	30
6	5348	18	12	5299	36
9	5301	27	18	5318	54
11	5330	33	21	5310	63
15	5344	45	25	5315	75
17	5297	51	26	5326	78
40	5299	120	30	5342	90
62	5328	186	31	5341	93
65	5298	195	42	5343	126
85	5313	255	47	5323	141
92	5331	276	54	5317	162
93	5341	279	66	5329	198
95	5336	285	90	5313	270

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5327	21	3	5299	9
12	5350	36	7	5311	21
24	5357	72	8	5333	24
38	5344	114	24	5357	72
49	5299	147	25	5316	75
51	5313	153	29	5314	87
60	5342	180	30	5340	90
64	5300	192	35	5336	105
68	5314	204	44	5338	132
75	5329	225	50	5345	150
86	5315	258	69	5298	207
--	--	--	75	5328	225
--	--	--	76	5325	228
--	--	--	89	5355	267
--	--	--	94	5335	282

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5314	3	7	5351	21
3	5353	9	18	5324	54
8	5308	24	31	5319	93
25	5304	75	49	5347	147
35	5351	105	64	5312	192
40	5322	120	66	5308	198
42	5326	126	84	5346	252
43	5340	129	85	5332	255
53	5319	159	86	5315	258
57	5349	171	88	5331	264
63	5357	189	93	5333	279
90	5301	270	96	5299	288
92	5312	276	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
18	5304	54	8	5298	24
19	5324	57	14	5342	42
24	5299	72	16	5321	48
49	5326	147	17	5341	51
57	5348	171	18	5355	54
58	5327	174	33	5297	99
60	5309	180	45	5320	135
65	5318	195	47	5337	141
71	5305	213	56	5350	168
83	5323	249	79	5307	237
84	5334	252	87	5305	261
88	5343	264	95	5340	285
89	5332	267	--	--	--
91	5349	273	--	--	--
95	5322	285	--	--	--
97	5319	291	--	--	--

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5356	6	8	5303	24
13	5357	39	9	5334	27
15	5315	45	45	5302	135
22	5339	66	60	5318	180
35	5319	105	85	5310	255
37	5297	111	86	5327	258
41	5348	123	89	5325	267
46	5343	138	93	5308	279
53	5354	159	94	5304	282
60	5308	180	--	--	--
73	5305	219	--	--	--
74	5334	222	--	--	--
89	5345	267	--	--	--
2	5356	6	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5304	9	5	5334	15
6	5308	18	18	5320	54
9	5338	27	23	5302	69
16	5321	48	24	5308	72
23	5327	69	33	5332	99
25	5336	75	51	5342	153
31	5347	93	65	5349	195
46	5332	138	70	5343	210
70	5316	210	--	--	--
75	5312	225	--	--	--
80	5319	240	--	--	--
85	5339	255	--	--	--
86	5353	258	--	--	--
87	5346	261	--	--	--
99	5324	297	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5317	6	13	5300	39
18	5323	54	16	5312	48
34	5321	102	29	5337	87
37	5339	111	32	5303	96
46	5302	138	34	5343	102
50	5297	150	50	5314	150
51	5347	153	53	5306	159
68	5298	204	56	5322	168
70	5314	210	57	5302	171
88	5340	264	77	5324	231
91	5320	273	81	5320	243

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
25	5315	75	23	5333	69
32	5318	96	42	5345	126
35	5327	105	45	5320	135
42	5302	126	46	5337	138
44	5314	132	65	5319	195
48	5352	144	66	5321	198
49	5341	147	--	--	--
51	5346	153	--	--	--
82	5348	246	--	--	--
84	5320	252	--	--	--
99	5298	297	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
12	5333	36	3	5331	9
15	5335	45	27	5307	81
22	5357	66	33	5338	99
35	5312	105	37	5344	111
42	5349	126	44	5314	132
45	5350	135	46	5351	138
51	5344	153	62	5318	186
54	5328	162	80	5321	240
62	5316	186	--	--	--
63	5300	189	--	--	--
67	5318	201	--	--	--
80	5329	240	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5307	21	2	5334	6
10	5302	30	5	5310	15
20	5299	60	10	5303	30
41	5310	123	20	5318	60
42	5347	126	22	5350	66
43	5336	129	33	5301	99
58	5341	174	34	5357	102
68	5334	204	47	5321	141
76	5306	228	59	5298	177
82	5323	246	80	5311	240
88	5340	264	87	5346	261
99	5351	297	89	5307	267
--	--	--	99	5353	297

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5334	21	5	5354	15
8	5317	24	13	5318	39
20	5299	60	41	5347	123
25	5344	75	49	5348	147
33	5321	99	51	5319	153
39	5337	117	59	5335	177
45	5331	135	63	5326	189
48	5328	144	77	5298	231
53	5315	159	89	5331	267
54	5310	162	--	--	--
56	5351	168	--	--	--
68	5306	204	--	--	--
98	5357	294	--	--	--