



DFS MEASUREMENT REPORT

FCC PART 15.407

FCC ID: H8N-RG8000W

APPLICANT: ASKEY COMPUTER CORP

Application Type: Certification

Product: Gateway

Model No.: QB-GW-TAC

Brand Name: ASKEY

FCC Classification: Unlicensed National Information Infrastructure (UNII)

FCC Rule Part(s): Part 15.407

KDB 905462 D02v01r02, KDB 905462 D04v01

Type of Device:

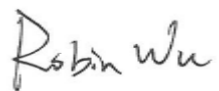
☒ Master Device

☐ Client Device (No radar detection)

☐ Client Device with radar detection

Test Date: December 15 ~ 28, 2015

Reviewed By

: 
(Robin Wu)

Approved By

: 
(Marlin Chen)



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 D02v01r02. Test results reported herein relate only to the item(s) tested.

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

Revision History

Report No.	Version	Description	Issue Date
1512RSU00308	Rev. 01	Initial report	02-22-2016

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§2.1033 General Information

Applicant:	ASKEY COMPUTER CORP
Applicant Address:	10F, No.119, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23585, TAIWAN, R.O.C.
Manufacturer:	ASKEY COMPUTER CORP
Manufacturer Address:	10F, No.119, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23585, TAIWAN, R.O.C.
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
Model No.:	QB-GW-TAC
FCC ID:	H8N-RG8000W
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	Gateway
Model No.	QB-GW-TAC
Radio Type	Intentional Transceiver
Operation Mode	Master Device
Frequency Range	<u>2.4GHz:</u> For 802.11b/g/n-HT20: 2412 ~ 2462 MHz For 802.11n-HT40: 2422 ~ 2452 MHz <u>5GHz:</u> 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
Minimum E.I.R.P Output Power (DFS Band)	802.11a: 27.61dBm 802.11n-HT20: 27.76dBm 802.11n-HT40: 28.98dBm 802.11ac-VHT20: 27.79dBm 802.11ac-VHT40: 29.23dBm 802.11ac-VHT80: 29.05dBm
Maximum E.I.R.P Output Power (DFS Band)	802.11a: 29.30dBm 802.11n-HT20: 29.47dBm 802.11n-HT40: 29.38dBm 802.11ac-VHT20: 29.50dBm 802.11ac-VHT40: 29.49dBm 802.11ac-VHT80: 29.42dBm

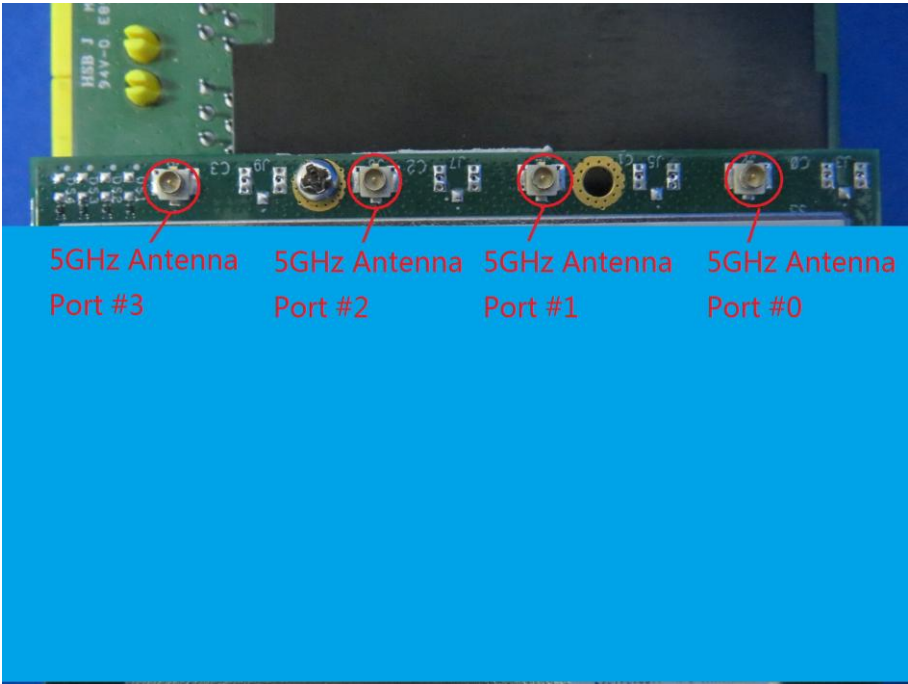
Type of Modulation	802.11a/n/ac: OFDM;
Power-on cycle	Requires 113.4 seconds to complete its power-on cycle.
Uniform Spreading	For the 5250-5350MHz, 5470-5725 MHz bands, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among 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	Ant 2	Ant 3	
PCB Antenna	5150 ~ 5250	4	4.84	5.12	4.34	5.41	10.96
	5250 ~ 5350	4	4.74	5.02	4.39	5.41	10.92
	5470 ~ 5725	4	4.53	5.14	4.51	4.98	10.81
	5725 ~ 5850	4	4.28	5.14	3.48	5.11	10.55

- The EUT supports Cyclic Delay Diversity (CDD) technology at 802.11a mode, and that CDD signal is correlated.
 - The EUT supports Beam Forming technology at 802.11n/ac mode, and that Beam Forming signal is correlated.
- (1) *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 $G_1, G_2, \dots, G_N$ dBi transmit signals are correlated, then
 - Directional gain = $10 \cdot \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{\text{ANT}}]$ 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 = $10 \cdot \log[(10^{4.84/20} + 10^{5.12/20} + 10^{4.34/20} + 10^{5.41/20})^2 / 4] = 10.96\text{dBi}$

2.3. Description of Antenna RF Port

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

2.4. DFS Band Working Frequencies

802.11a/n-HT20

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

802.11ac-VHT20

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

802.11n-HT40

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

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

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

2.5. Test Mode

Test Mode	Mode 1: Make the EUT communicate with PC at DFS channel
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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 v01r02 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 v01r02 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 $\geq$ 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	Roundup $\left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	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 v01r02 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.

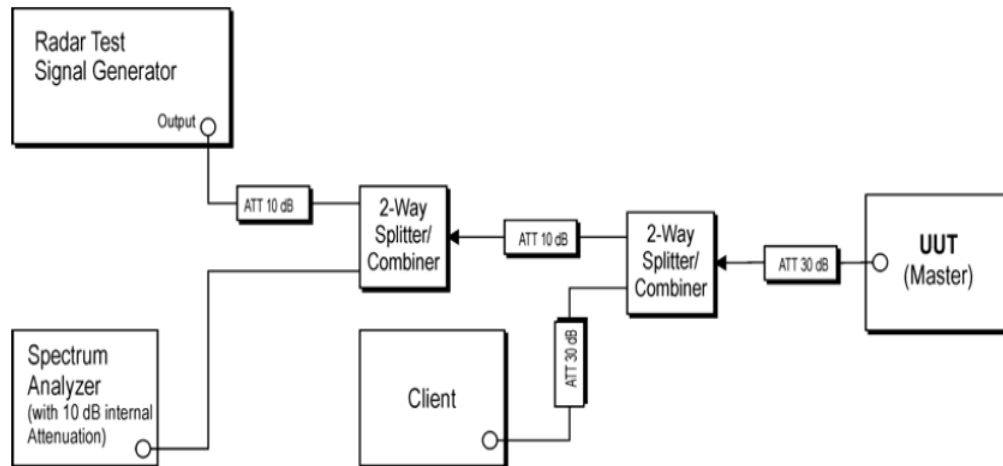


Figure 3-1: Conducted Test Setup where UUT is a Master and Radar Test Waveforms are injected into the Masters

4. TEST EQUIPMENT CALIBRATION DATE

Dynamic Frequency Selection (DFS) – TR3

Instrument	Manufacturer	Type No.	Serial No.	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	2016/04/23
ESG Vector Signal Generator	Agilent	E4438C	MRTSUE06026	2016/12/08
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06023	2016/11/07

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: ASKEY COMPUTER CORP
FCC ID: H8N-RG8000W
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.

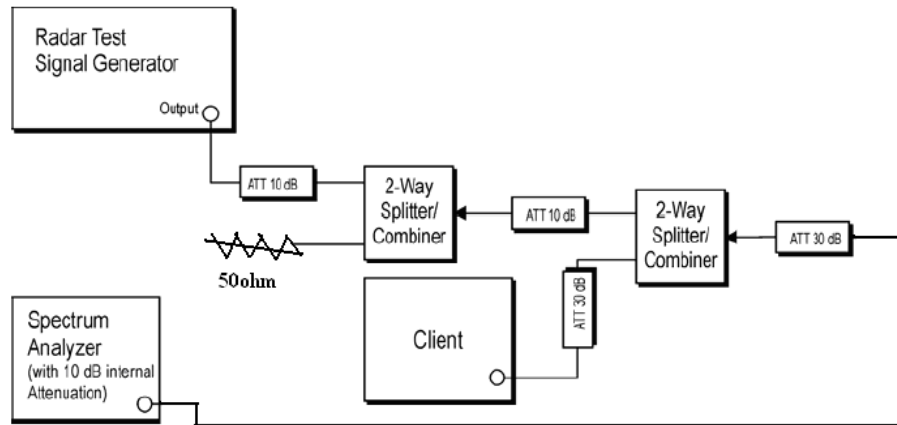


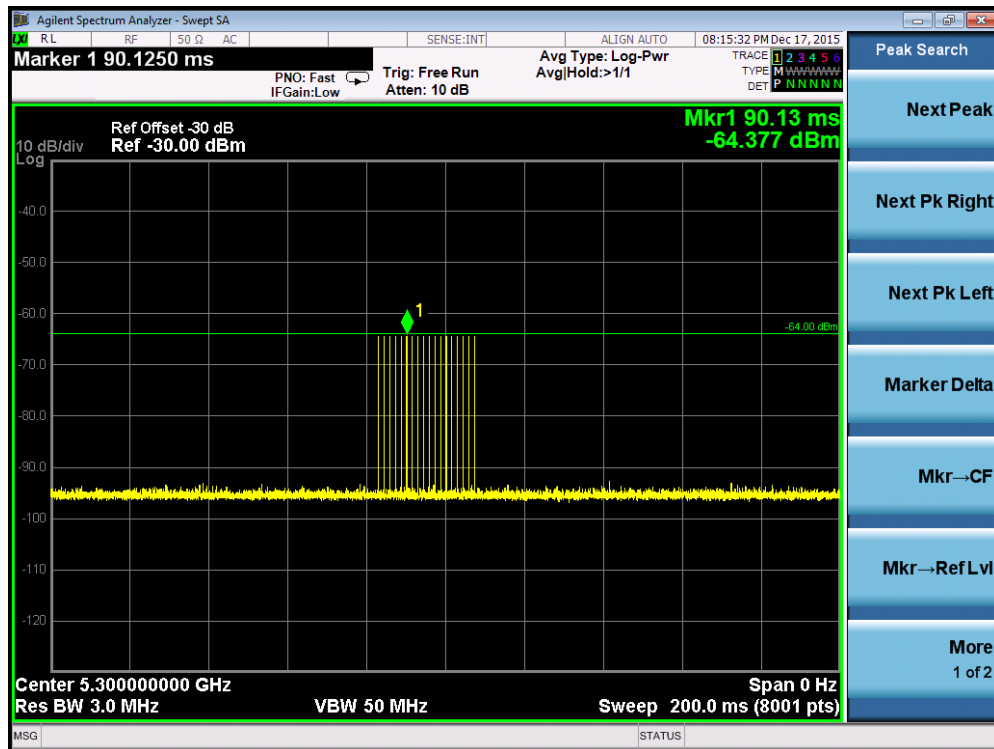
Figure 3-2: Conducted Test Setup

5.2.2. Calibration Procedure

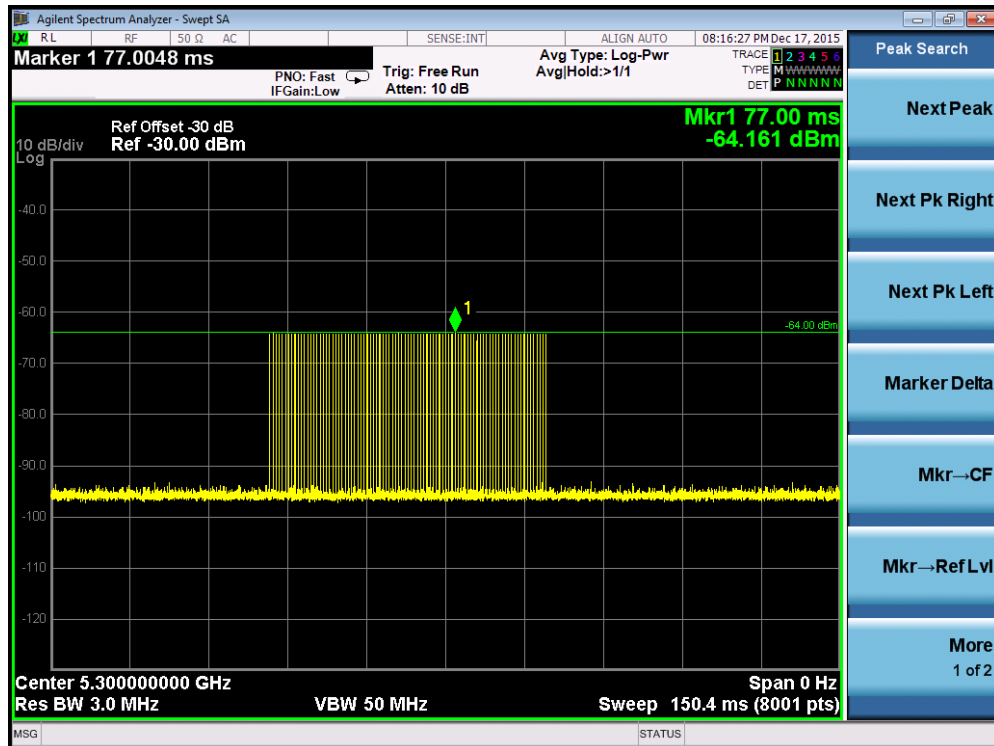
The Interference Radar Detection Threshold Level is $(-64\text{dBm}) + (0) [\text{dBi}] + 1 \text{ dB} = -63 \text{ dBm}$ that had been taken into account the output power range and antenna gain. The above equipment setup was used to calibrate the conducted Radar Waveform. A vector signal generator was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

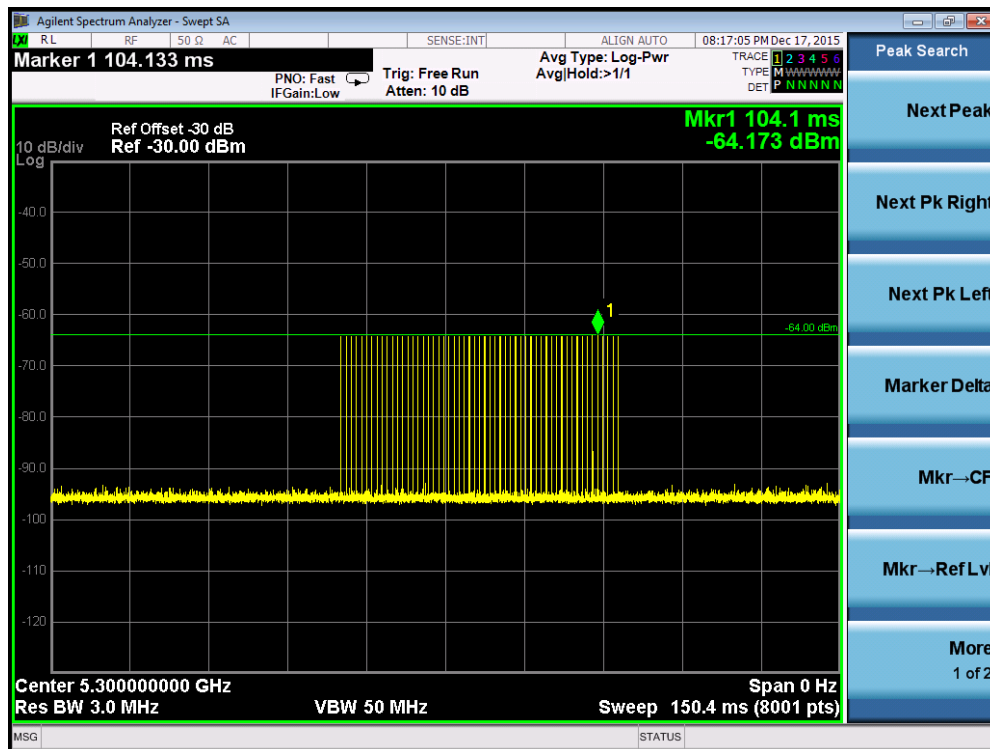


Radar #1(Test A) DFS detection threshold level and the burst of pulses on the Channel frequency



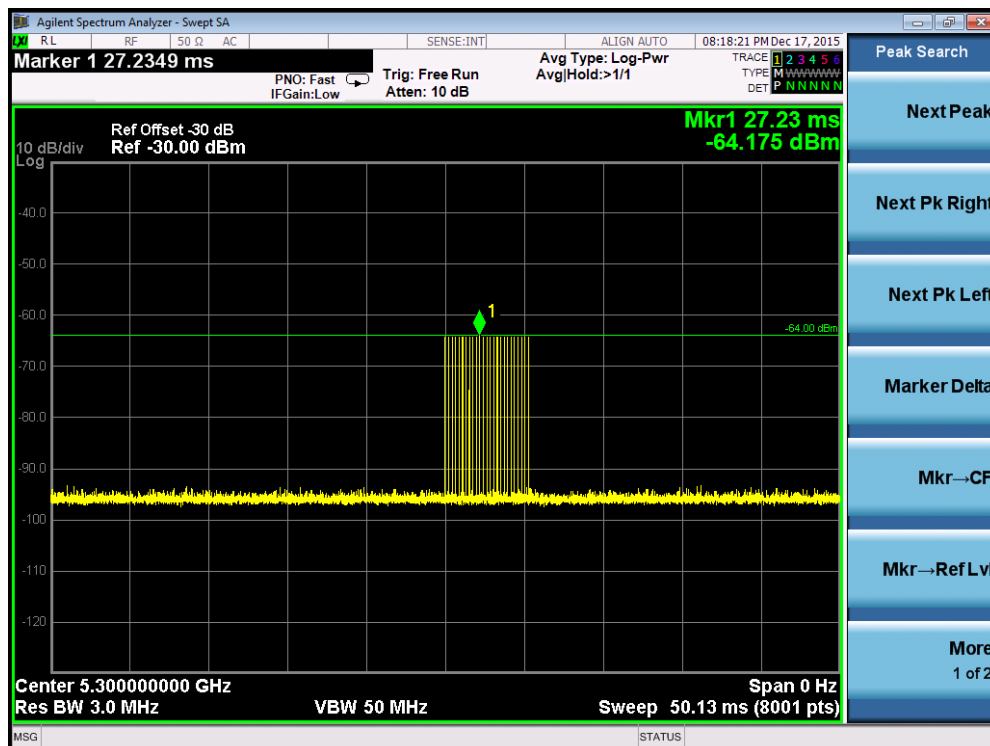
PRI = 598us and the number of pulses = 89

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

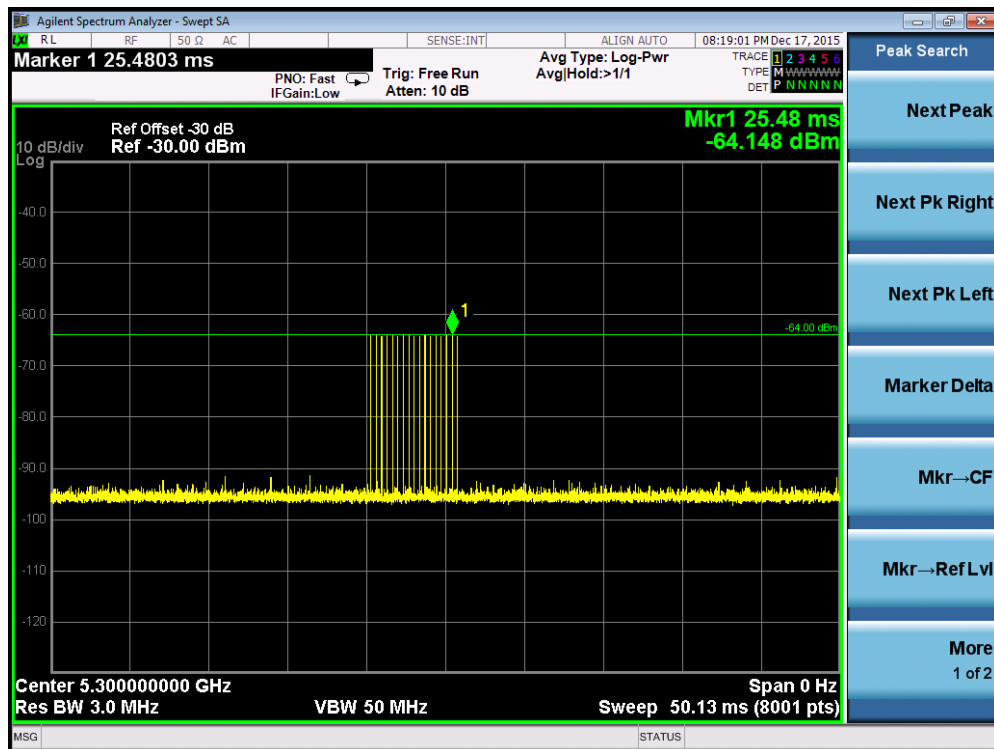


PRI = 967us and the number of pulses = 55

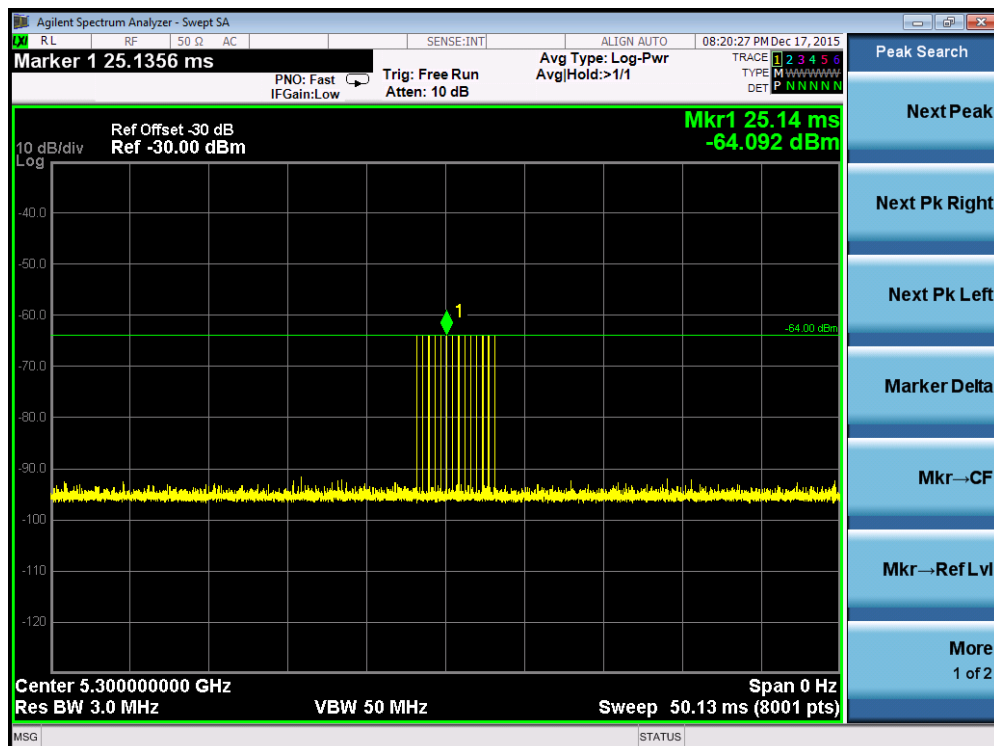
Radar #2 DFS detection threshold level and the burst of pulses on the Channel frequency



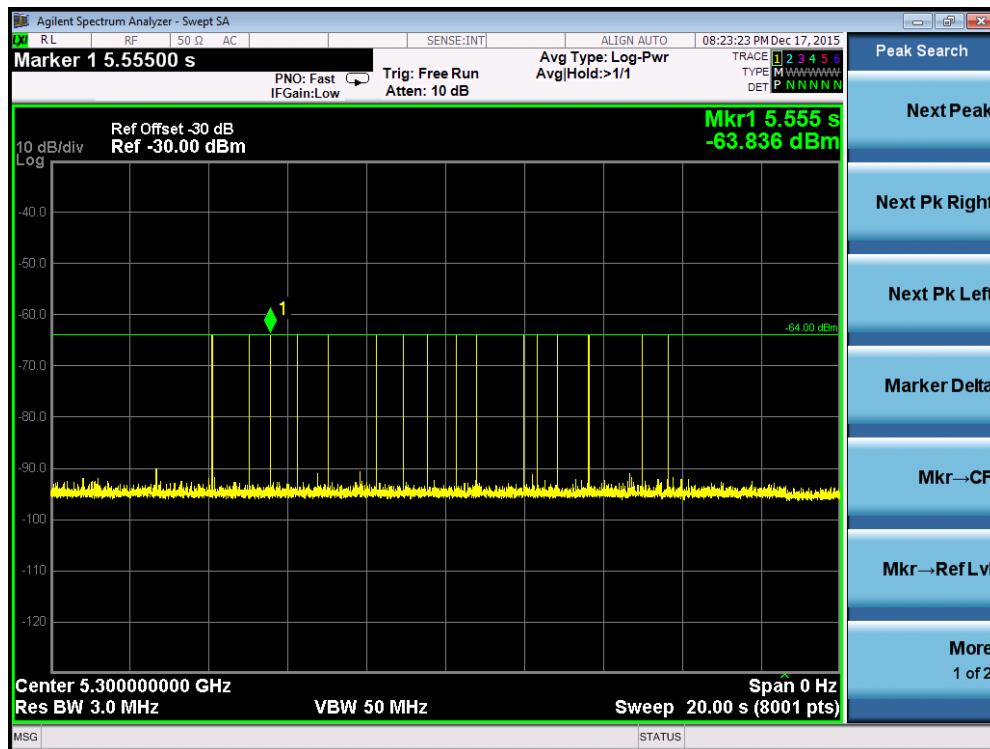
Radar #3 DFS detection threshold level and the burst of pulses on the Channel frequency



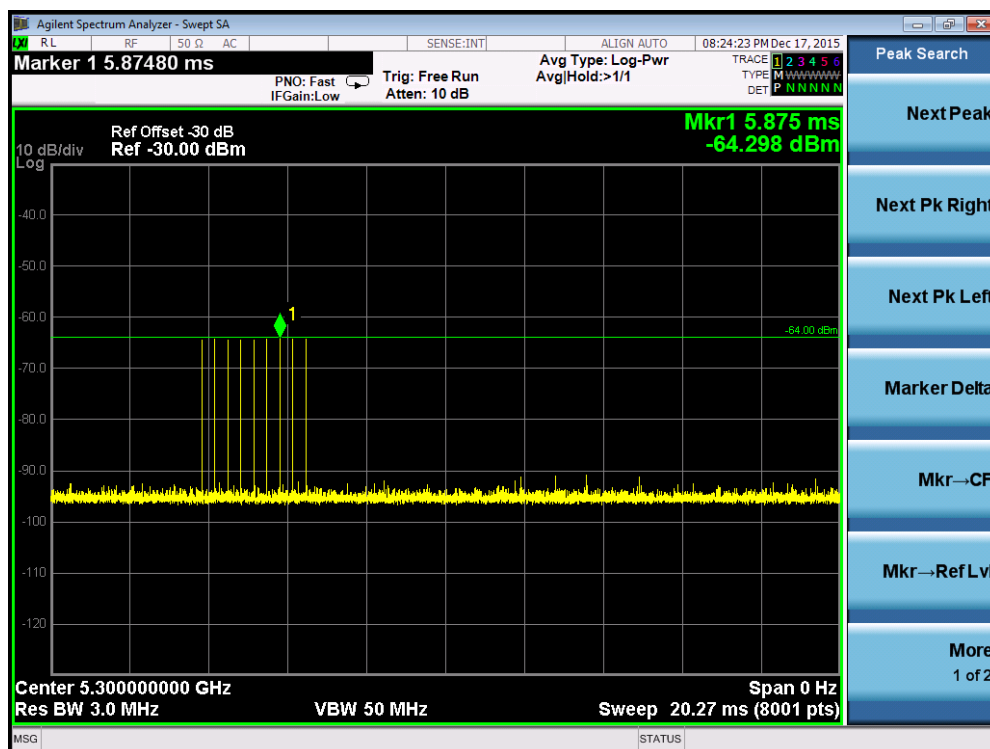
Radar #4 DFS detection threshold level and the burst of pulses on the Channel frequency



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



5.2.4. Test Setup Photo

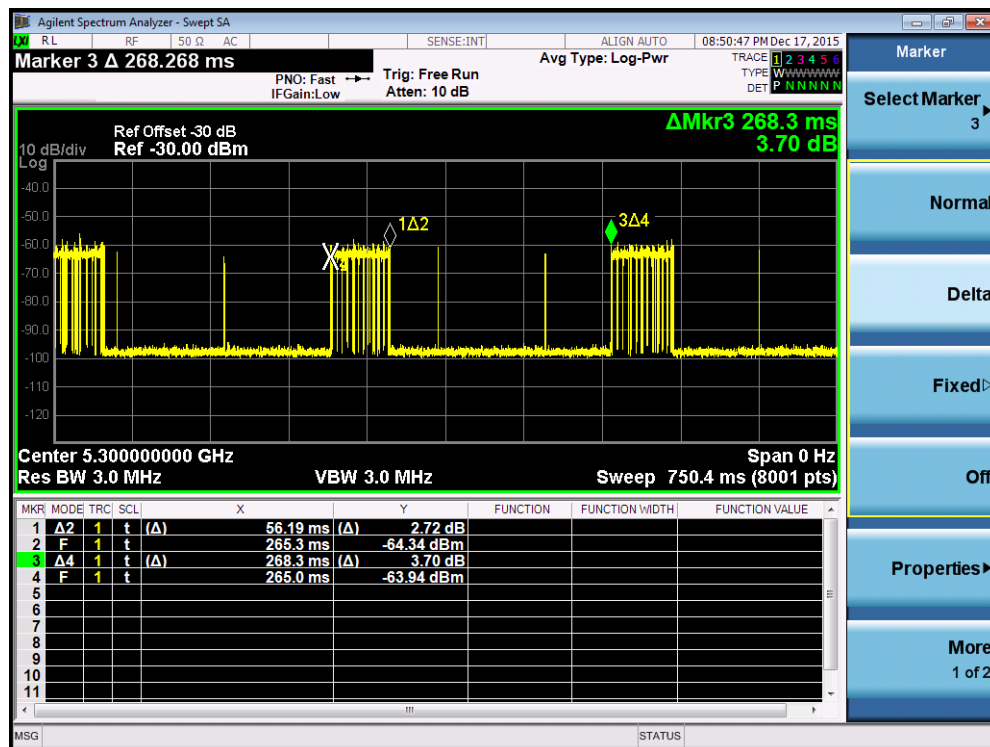
Description: Test Setup Photo



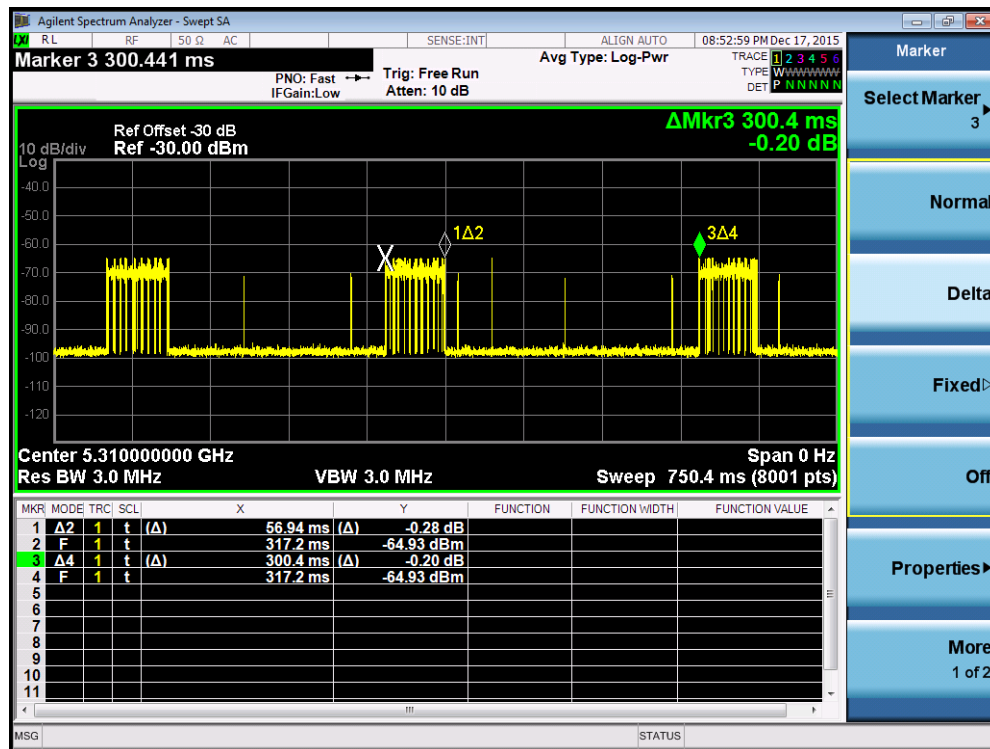
5.3. Channel Loading Test Result

System testing was performed with the designated MPEG test file that streams full motion video from the Wireless LAN Access Point 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).

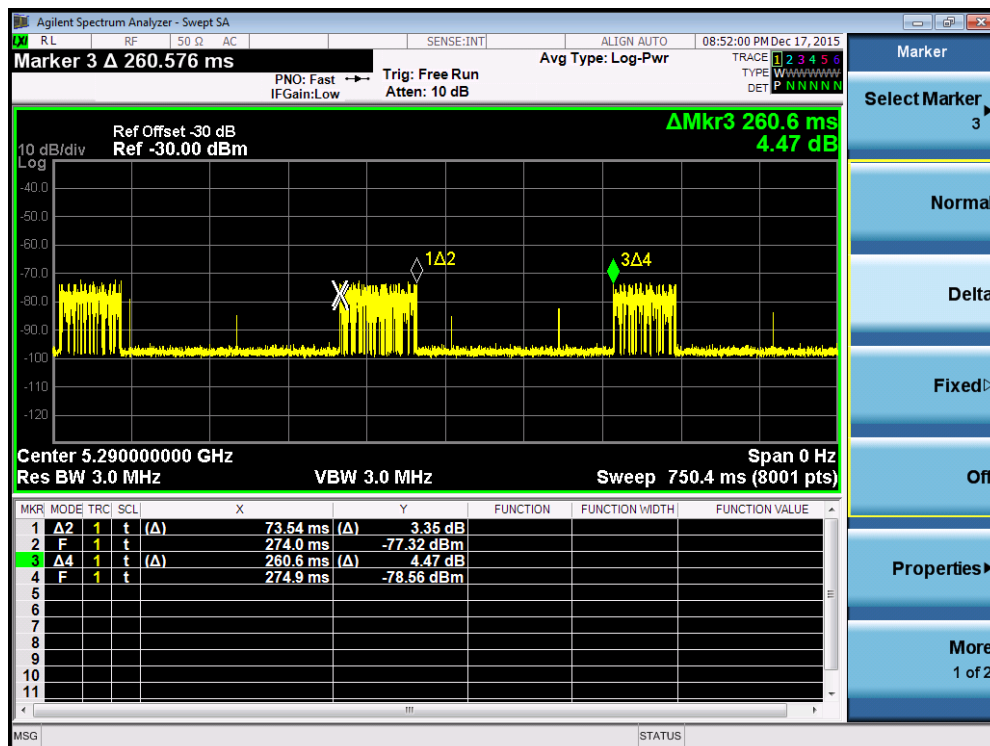
Channel Loading Plot - 802.11a-5300MHz



Channel Loading Plot - 802.11n-HT40 5310MHz



Channel Loading Plot - 802.11ac-VHT80 5290MHz



Test Mode	Packet ratio	Requirement ratio	Test Result
802.11a	20.94	>17%	Pass
802.11n-HT40MHz	18.95	>17%	Pass
802.11ac-VHT80MHz	28.99	>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: $\text{U-NII Detection Bandwidth} = \text{FH} - \text{FL}$
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

EUT Frequency=5300MHz for 802.11a											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
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%
5296	1	1	1	1	1	1	1	1	1	1	100%
5297	1	1	1	1	1	1	1	1	1	1	100%
5298	1	1	1	1	1	1	1	1	1	1	100%
5299	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5301	1	1	1	1	1	1	1	1	1	1	100%
5302	1	1	1	1	1	1	1	1	1	1	100%
5303	1	1	1	1	1	1	1	1	1	1	100%
5304	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 = 16.41MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 16.41MHz x 100% = 16.41MHz											
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 16.41MHz. (See the 99% BW section of the RF report for further measurement details).

EUT Frequency=5310MHz for 802.11n-HT40											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
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%
5296	1	1	1	1	1	1	1	1	1	1	100%
5297	1	1	1	1	1	1	1	1	1	1	100%
5298	1	1	1	1	1	1	1	1	1	1	100%
5299	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5301	1	1	1	1	1	1	1	1	1	1	100%
5302	1	1	1	1	1	1	1	1	1	1	100%
5303	1	1	1	1	1	1	1	1	1	1	100%
5304	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	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5311	1	1	1	1	1	1	1	1	1	1	100%
5312	1	1	1	1	1	1	1	1	1	1	100%
5313	1	1	1	1	1	1	1	1	1	1	100%
5314	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5316	1	1	1	1	1	1	1	1	1	1	100%
5317	1	1	1	1	1	1	1	1	1	1	100%
5318	1	1	1	1	1	1	1	1	1	1	100%
5319	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%

5321	1	1	1	1	1	1	1	1	1	1	100%
5322	1	1	1	1	1	1	1	1	1	1	100%
5323	1	1	1	1	1	1	1	1	1	1	100%
5324	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 = 35.82MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 35.82MHz x 100% = 35.82MHz											
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 35.82MHz. (See the 99% BW section of the RF report for further measurement details).

EUT Frequency=5290MHz for 802.11ac-VHT80											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
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%
5256	1	1	1	1	1	1	1	1	1	1	100%
5257	1	1	1	1	1	1	1	1	1	1	100%
5258	1	1	1	1	1	1	1	1	1	1	100%
5259	1	1	1	1	1	1	1	1	1	1	100%
5260	1	1	1	1	1	1	1	1	1	1	100%
5261	1	1	1	1	1	1	1	1	1	1	100%
5262	1	1	1	1	1	1	1	1	1	1	100%
5263	1	1	1	1	1	1	1	1	1	1	100%
5264	1	1	1	1	1	1	1	1	1	1	100%
5265	1	1	1	1	1	1	1	1	1	1	100%
5266	1	1	1	1	1	1	1	1	1	1	100%
5267	1	1	1	1	1	1	1	1	1	1	100%
5268	1	1	1	1	1	1	1	1	1	1	100%
5269	1	1	1	1	1	1	1	1	1	1	100%
5270	1	1	1	1	1	1	1	1	1	1	100%
5271	1	1	1	1	1	1	1	1	1	1	100%
5272	1	1	1	1	1	1	1	1	1	1	100%
5273	1	1	1	1	1	1	1	1	1	1	100%
5274	1	1	1	1	1	1	1	1	1	1	100%
5275	1	1	1	1	1	1	1	1	1	1	100%
5276	1	1	1	1	1	1	1	1	1	1	100%
5277	1	1	1	1	1	1	1	1	1	1	100%
5278	1	1	1	1	1	1	1	1	1	1	100%
5279	1	1	1	1	1	1	1	1	1	1	100%
5280	1	1	1	1	1	1	1	1	1	1	100%

5281	1	1	1	1	1	1	1	1	1	1	100%
5282	1	1	1	1	1	1	1	1	1	1	100%
5283	1	1	1	1	1	1	1	1	1	1	100%
5284	1	1	1	1	1	1	1	1	1	1	100%
5285	1	1	1	1	1	1	1	1	1	1	100%
5286	1	1	1	1	1	1	1	1	1	1	100%
5287	1	1	1	1	1	1	1	1	1	1	100%
5288	1	1	1	1	1	1	1	1	1	1	100%
5289	1	1	1	1	1	1	1	1	1	1	100%
5290	1	1	1	1	1	1	1	1	1	1	100%
5291	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%
5296	1	1	1	1	1	1	1	1	1	1	100%
5297	1	1	1	1	1	1	1	1	1	1	100%
5298	1	1	1	1	1	1	1	1	1	1	100%
5299	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5301	1	1	1	1	1	1	1	1	1	1	100%
5302	1	1	1	1	1	1	1	1	1	1	100%
5303	1	1	1	1	1	1	1	1	1	1	100%
5304	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	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5311	1	1	1	1	1	1	1	1	1	1	100%
5312	1	1	1	1	1	1	1	1	1	1	100%
5313	1	1	1	1	1	1	1	1	1	1	100%
5314	1	1	1	1	1	1	1	1	1	1	100%

5315	1	1	1	1	1	1	1	1	1	1	100%
5316	1	1	1	1	1	1	1	1	1	1	100%
5317	1	1	1	1	1	1	1	1	1	1	100%
5318	1	1	1	1	1	1	1	1	1	1	100%
5319	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5321	1	1	1	1	1	1	1	1	1	1	100%
5322	1	1	1	1	1	1	1	1	1	1	100%
5323	1	1	1	1	1	1	1	1	1	1	100%
5324	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 = 75.84MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 75.84MHz x 100% = 75.84MHz											
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 75.84MHz. (See the 99% BW section of the RF report for further measurement details).

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.

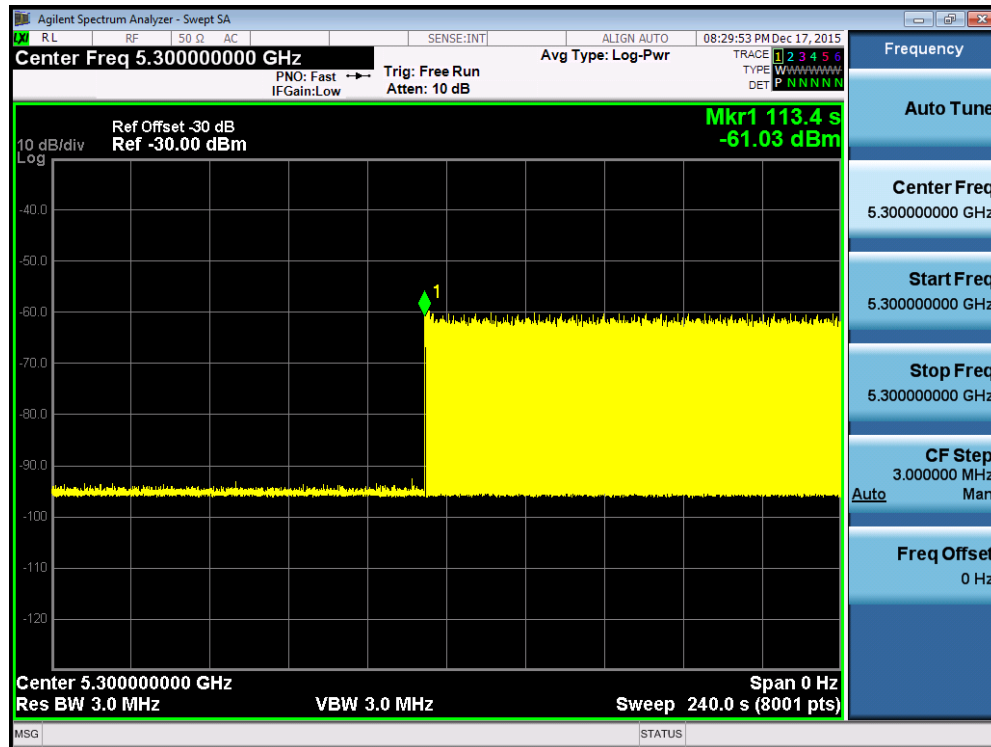
5.5.2. Test Procedure

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 (53.4 sec). Initial beacons/data transmissions are indicated by marker 1 (113.4 sec).

Initial Channel Availability Check Time for 802.11a



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

5.6.1. Test Limit

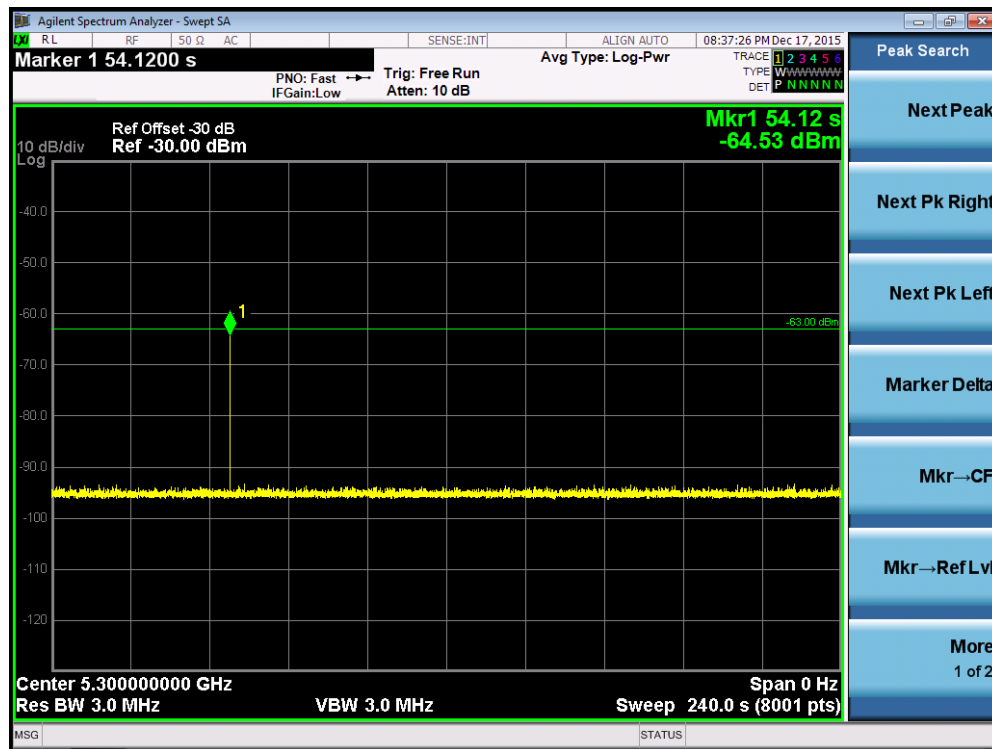
In beginning of the Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

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



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

5.7.1. Test Limit

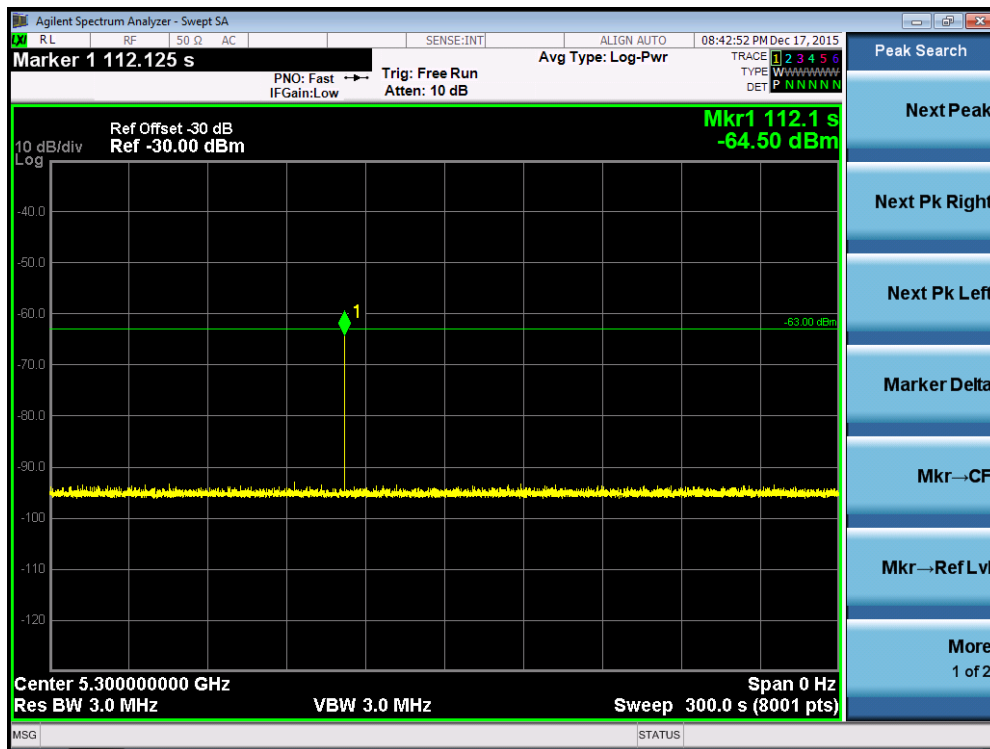
In the end of Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

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 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+ 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



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

5.8.1. Test Limit

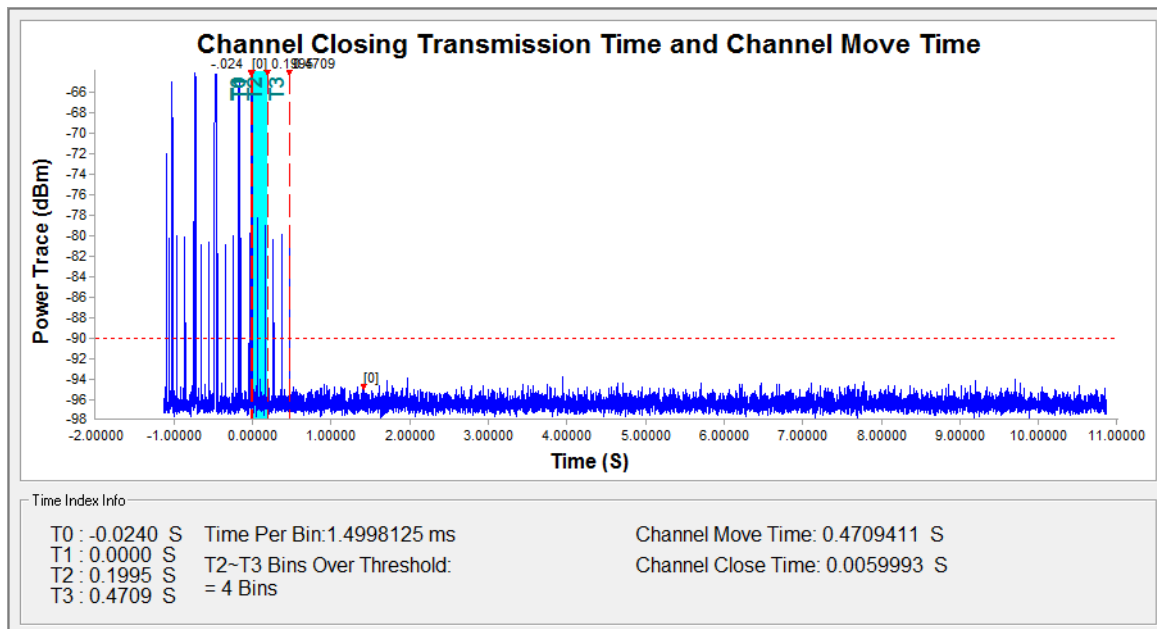
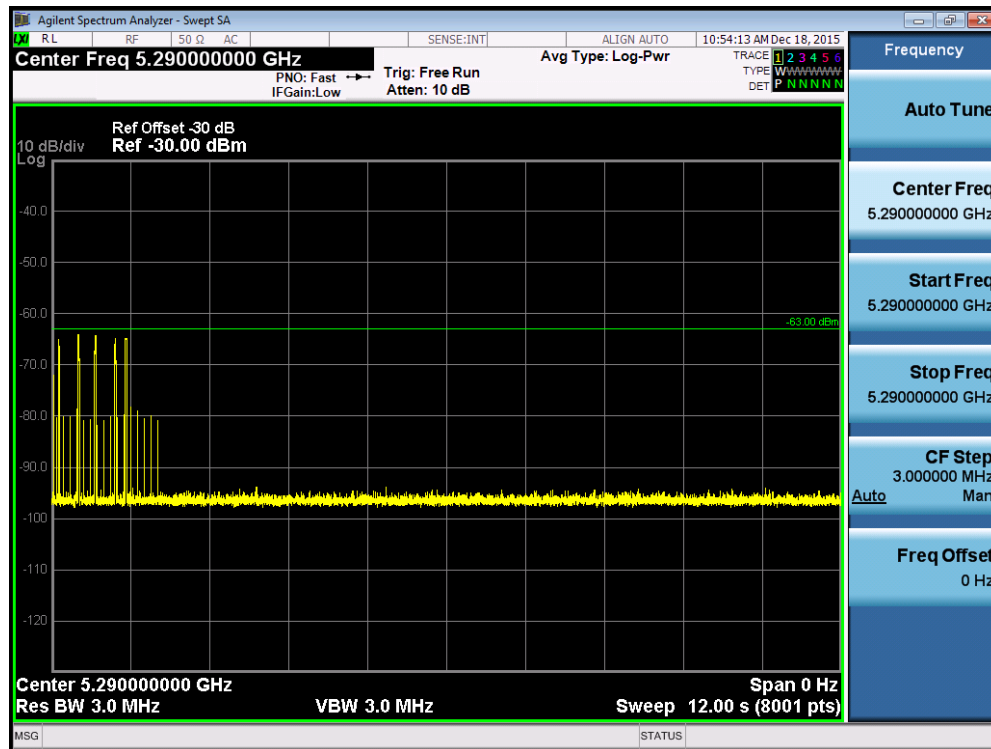
The EUT has In-Service Monitoring function to continuously monitor the radar signals. If the radar is detected, must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec.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

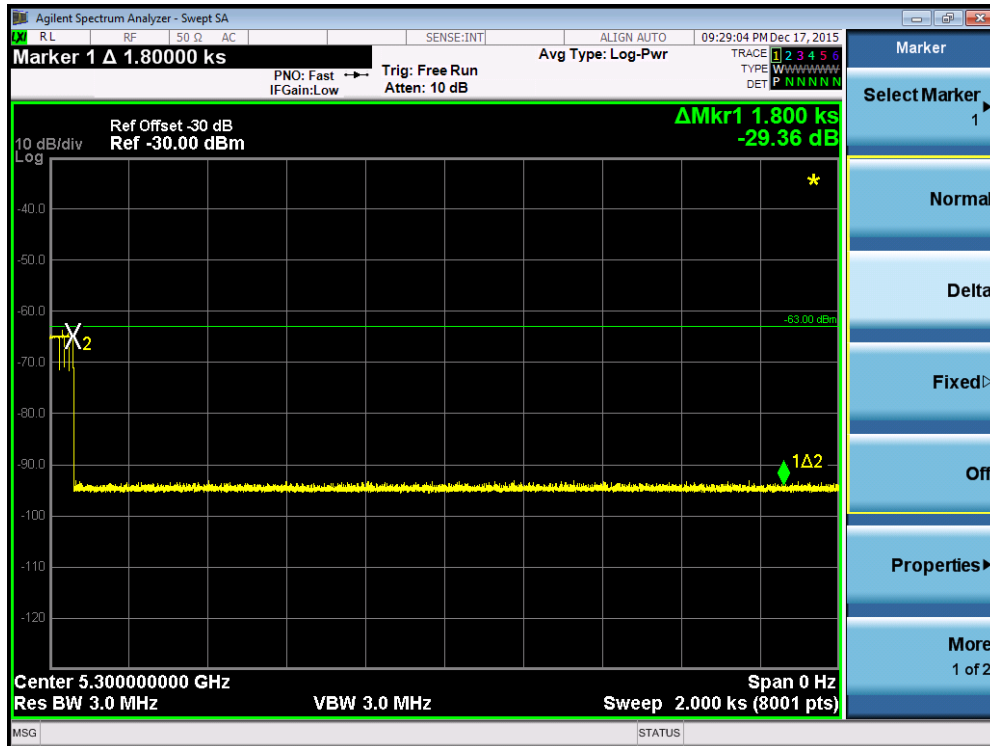
1. The test should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0.
2. When the radar burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device. A U-NII device operating as a Master Device will 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: $Dwell (1.5ms) = S (12 \text{ sec}) / B (8000)$; 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: $C (16.5 \text{ ms}) = N (11) \times Dwell (1.5 \text{ ms})$; 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-VHT80



Non-Occupancy Period for 802.11a



Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.471s	<10s
Channel Closing Transmission Time (ms) (Note)	6.000ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min

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

5.9. 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:

$(\text{Total Waveform Detections} / \text{Total Waveform Trails}) * 100 = \text{Probability of Detection Radar}$

Waveform In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows: $(Pd1 + Pd2 + Pd3 + Pd4) / 4$.

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

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	5291	1	658	81	1
2	5291	1	718	74	1
3	5291	1	578	92	1
4	5291	1	938	57	1
5	5291	1	538	99	1
6	5291	1	798	67	1
7	5291	1	878	61	1
8	5291	1	598	89	1
9	5291	1	898	59	1
10	5291	1	738	72	1
11	5291	1	3066	18	1
12	5291	1	558	95	1
13	5291	1	758	70	1
14	5291	1	858	62	1
15	5291	1	818	65	1
16	5291	1	1798	30	1
17	5291	1	1598	34	1
18	5291	1	3051	18	1
19	5291	1	2972	18	1
20	5291	1	1115	48	1
21	5291	1	1688	32	1
22	5291	1	1541	35	1
23	5291	1	2413	22	1
24	5291	1	2828	19	1
25	5291	1	925	58	1
26	5291	1	1398	38	1
27	5291	1	2564	21	1
28	5291	1	1285	42	1
29	5291	1	2944	18	1
30	5291	1	2874	19	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	3.4	167	25	1
2	5300	1.0	174	29	1
3	5300	1.7	160	25	1
4	5300	4.1	186	27	1
5	5300	2.1	198	28	1
6	5300	1.4	187	28	1
7	5300	3.5	166	29	1
8	5300	3.3	178	28	1
9	5300	3.2	201	29	1
10	5300	3.1	151	27	1
11	5300	2.3	152	25	1
12	5300	1.9	174	28	1
13	5300	1.6	154	26	1
14	5300	4.4	174	27	1
15	5300	1.9	195	28	1
16	5300	1.5	167	29	1
17	5300	1.2	209	23	1
18	5300	1.2	159	27	1
19	5300	1.6	176	26	1
20	5300	3.3	153	28	1
21	5300	1.6	209	23	1
22	5300	3.6	193	27	1
23	5300	4.1	181	25	1
24	5300	3.6	181	29	1
25	5300	4.3	152	23	1
26	5300	5.0	171	29	1
27	5300	4.4	197	25	1
28	5300	2.9	199	28	1
29	5300	2.3	211	28	1
30	5300	3.4	214	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	5309	7.8	408	18	1
2	5309	7.1	267	16	1
3	5309	8.3	424	17	1
4	5309	8.7	339	18	1
5	5309	8.9	449	16	1
6	5309	8.2	433	17	1
7	5309	7.1	436	17	1
8	5309	7.8	359	18	1
9	5309	6.9	418	18	1
10	5309	9.5	344	17	1
11	5309	9.1	341	17	1
12	5309	8.1	407	16	1
13	5309	7.1	336	16	1
14	5309	8.6	330	17	1
15	5309	7.1	349	16	1
16	5309	9.0	320	18	1
17	5309	6.3	254	17	1
18	5309	6.8	389	18	1
19	5309	7.0	350	16	1
20	5309	6.9	343	17	1
21	5309	9.8	293	18	1
22	5309	8.7	292	18	1
23	5309	8.8	324	17	1
24	5309	6.4	455	16	1
25	5309	9.5	331	18	1
26	5309	8.4	265	17	1
27	5309	8.4	393	17	1
28	5309	7.8	468	17	1
29	5309	7.8	284	16	1
30	5309	9.8	462	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	5309	11.2	375	16	1
2	5309	11.6	283	12	1
3	5309	12.0	334	12	1
4	5309	12.8	297	16	1
5	5309	14.1	284	12	1
6	5309	12.8	351	12	1
7	5309	12.9	378	15	1
8	5309	12.9	405	16	1
9	5309	14.7	388	15	1
10	5309	11.7	368	14	1
11	5309	12.4	483	14	1
12	5309	14.4	466	15	1
13	5309	13.3	342	16	1
14	5309	14.1	435	13	1
15	5309	14.0	500	13	1
16	5309	19.2	465	15	1
17	5309	19.5	418	15	1
18	5309	14.5	430	15	1
19	5309	15.3	431	14	1
20	5309	14.6	431	16	1
21	5309	16.8	329	13	1
22	5309	17.2	497	12	1
23	5309	17.8	276	14	1
24	5309	11.7	290	16	1
25	5309	12.9	309	13	1
26	5309	14.9	434	15	1
27	5309	14.4	315	14	1
28	5309	12.9	328	15	1
29	5309	11.4	297	16	1
30	5309	15.5	451	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	5293	1	16	5300	1
2	5293	1	17	5301	1
3	5294	1	18	5301	1
4	5294	1	19	5302	1
5	5295	1	20	5302	1
6	5295	1	21	5303	1
7	5296	1	22	5303	1
8	5296	1	23	5304	1
9	5297	1	24	5304	1
10	5297	1	25	5305	1
11	5298	1	26	5305	1
12	5298	1	27	5306	1
13	5299	1	28	5306	1
14	5299	1	29	5307	1
15	5300	1	30	5307	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

Waveform Num = 1
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	196208	1	11	65	1319	0	0	196208	0	1333332
2	1377137	3	6	75	1958	1966	1095	1574664	1333333	2666665
3	1530893	3	10	75	1590	1087	1481	3110576	2666666	3999998
4	1771654	2	12	65	1318	1642	0	4886388	3999999	5333331
5	755509	1	9	70	1460	0	0	5644857	5333332	6666664
6	1712286	1	9	55	1938	0	0	7358603	6666665	7999997
7	1359971	2	7	60	1397	1377	0	8720512	7999998	9333330
8	1198329	1	14	70	1984	0	0	9921615	9333331	10666663
9	1173989	1	8	70	1959	0	0	11097588	10666664	11999996

Total number of pulses in waveform = 15



Type 5 Radar Waveform_2

Waveform Num = 2
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	836657	3	8	60	1609	1535	1129	836657	0	923076
2	169298	3	13	70	1143	1827	1630	1010228	923077	1846153
3	1104822	3	12	65	1174	1060	1256	2119650	1846154	2769230
4	703766	3	12	60	1406	1776	1441	2826906	2769231	3692307
5	910690	2	13	95	1645	1284	0	3742219	3692308	4615384
6	1576406	2	12	55	1782	1940	0	5321554	4615385	5538461
7	985121	2	17	50	1376	1015	0	6310397	5538462	6461538
8	221423	3	11	65	1128	1404	1611	6534211	6461539	7384615
9	1469145	3	16	80	1730	1300	1385	8007499	7384616	8307692
10	1125306	2	7	50	1393	1354	0	9137220	8307693	9230769
11	132599	2	7	85	1748	1277	0	9272566	9230770	10153846
12	1053156	3	13	50	1128	1043	1904	10328747	10153847	11076923
13	1245249	3	11	55	1865	1863	1418	11578071	11076924	12000000

Total number of pulses in waveform = 34

Type 5 Radar Waveform_3

Waveform Num = 3
Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	456860	3	6	75	1282	1903	1924	456860	0	705881
2	518771	3	11	90	1362	1949	1241	980740	705882	1411763
3	1079111	1	8	75	1831	0	0	2064403	1411764	2117645
4	343807	3	5	60	1796	1407	1342	2410041	2117646	2823527
5	954580	3	14	90	1272	1913	1575	3369166	2823528	3529409
6	413627	3	10	85	1669	1784	1598	3787553	3529410	4235291
7	922355	2	16	60	1766	1802	0	4714959	4235292	4941173
8	760145	2	10	100	1915	1793	0	5478672	4941174	5647055
9	695264	3	7	75	1343	1387	1721	6177644	5647056	6352937
10	350506	1	5	60	1140	0	0	6532601	6352938	7058819
11	649210	2	11	85	1852	1340	0	7182951	7058820	7764701
12	1043239	1	9	85	1815	0	0	8229382	7764702	8470583
13	764111	3	12	100	1129	1437	1658	8995308	8470584	9176465
14	375755	2	5	70	1779	1619	0	9375287	9176466	9882347
15	531757	3	13	55	1210	1449	1789	9910442	9882348	10588229
16	1176294	1	6	80	1579	0	0	11091184	10588230	11294111
17	281238	1	9	100	1851	0	0	11374001	11294112	11999993

Total number of pulses in waveform = 37



Type 5 Radar Waveform_4

Waveform Num = 4
Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	440536	3	19	85	1154	1660	1157	440536	0	799999
2	964980	3	16	60	1369	1251	1492	1429487	800000	1599999
3	755800	3	11	55	1483	1782	1339	2189399	1600000	2399999
4	891818	1	17	50	1896	0	0	3085821	2400000	3199999
5	311045	2	9	65	1619	1551	0	3398762	3200000	3999999
6	1201244	1	10	50	1735	0	0	4603176	4000000	4799999
7	809526	2	12	70	1942	1075	0	5414437	4800000	5599999
8	962292	2	19	65	1760	1625	0	6379746	5600000	6399999
9	627254	3	18	75	1270	1525	1856	7010385	6400000	7199999
10	275275	3	9	55	1386	1531	1341	7290311	7200000	7999999
11	786758	2	9	55	1647	1982	0	8081327	8000000	8799999
12	783103	1	8	100	1485	0	0	8868059	8800000	9599999
13	1344058	3	8	80	1337	1585	1588	10213602	9600000	10399999
14	779035	1	9	95	1317	0	0	10997147	10400000	11199999
15	305941	1	9	75	1356	0	0	11304405	11200000	11999999

Total number of pulses in waveform = 31



Type 5 Radar Waveform_5

Waveform Num = 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	126713	1	5	50	1055	0	0	126713	0	599999
2	929570	2	10	95	1399	1180	0	1057338	600000	1199999
3	594203	2	15	100	1041	1364	0	1654120	1200000	1799999
4	414985	1	6	100	1643	0	0	2071510	1800000	2399999
5	481463	3	8	70	1087	1156	1900	2554616	2400000	2999999
6	716163	1	16	75	1702	0	0	3274922	3000000	3599999
7	705813	3	17	55	1509	1800	1996	3982437	3600000	4199999
8	713002	3	13	60	1881	1464	1977	4700744	4200000	4799999
9	329793	2	14	60	1441	1481	0	5035859	4800000	5399999
10	714589	2	19	55	1776	1510	0	5753370	5400000	5999999
11	556545	3	18	55	1214	1779	1401	6313201	6000000	6599999
12	420509	2	15	55	1791	1746	0	6738104	6600000	7199999
13	993318	2	19	75	1022	1432	0	7734959	7200000	7799999
14	597342	2	13	55	1109	1114	0	8334755	7800000	8399999
15	389379	2	13	55	1109	1114	0	8334755	7800000	8399999
16	851959	3	20	90	1477	1882	1859	8726357	8400000	8999999
17	114319	1	13	55	1324	0	0	9583534	9000000	9599999
18	976197	1	16	75	1733	0	0	9699177	9600000	10199999
19	419605	2	9	85	1749	1681	0	10677107	10200000	10799999
20	554429	1	16	50	1851	0	0	11100142	10800000	11399999
20	554429	2	11	85	1915	1755	0	11657422	11400000	11999999

Total number of pulses in waveform = 39

Type 5 Radar Waveform_6

Waveform Num = 6
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	408510	3	8	55	1191	1039	1798	408510	0	749999
2	856433	2	19	95	1635	1527	0	1268971	750000	1499999
3	884344	2	18	50	1643	1129	0	2156477	1500000	2249999
4	359567	1	20	50	1540	0	0	2518816	2250000	2999999
5	1157750	1	20	70	1038	0	0	3678106	3000000	3749999
6	86694	2	8	95	1745	1286	0	3765838	3750000	4499999
7	968678	3	10	70	1115	1371	1058	4737547	4500000	5249999
8	852869	2	8	85	1285	1559	0	5593960	5250000	5999999
9	545703	1	8	95	1336	0	0	6142507	6000000	6749999
10	1341929	2	11	100	1621	1562	0	7485772	6750000	7499999
11	384852	1	16	75	1698	0	0	7873807	7500000	8249999
12	669323	2	17	50	1638	1936	0	8544828	8250000	8999999
13	493615	3	19	85	1634	1038	1194	9042017	9000000	9749999
14	1390214	1	15	95	1622	0	0	10436097	9750000	10499999
15	250652	2	9	60	1949	1181	0	10688371	10500000	11249999
16	1276267	1	16	55	1892	0	0	11967768	11250000	11999999

Total number of pulses in waveform = 29

Type 5 Radar Waveform_7

Waveform Num = 7
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	687646	2	7	85	1168	1443	0	687646	0	1499999
2	2128596	1	15	90	1233	0	0	2818853	1500000	2999999
3	853500	2	9	95	1089	1323	0	3673586	3000000	4499999
4	1051615	3	6	95	1274	1185	1489	4727613	4500000	5999999
5	1394501	2	8	75	1068	1404	0	6126062	6000000	7499999
6	1806755	2	20	85	1861	1745	0	7935289	7500000	8999999
7	2532767	3	6	90	1670	1955	1124	10471662	9000000	10499999
8	463043	3	7	60	1762	1887	1017	10939454	10500000	11999999

Total number of pulses in waveform = 18



Type 5 Radar Waveform_8

Waveform Num = 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	506785	3	13	65	1093	1075	1399	506785	0	631578
2	154108	3	11	70	1906	1612	1439	664460	631579	1263157
3	1141997	1	15	75	1588	0	0	1811414	1263158	1894736
4	655962	2	14	50	1167	1097	0	2468964	1894737	2526315
5	240560	2	10	50	1762	1372	0	2711788	2526316	3157894
6	904070	3	15	60	1546	1114	1154	3618992	3157895	3789473
7	203232	1	8	50	1988	0	0	3826038	3789474	4421052
8	693314	2	16	95	1887	1061	0	4521340	4421053	5052631
9	1094500	3	14	55	1546	1942	1324	5618788	5052632	5684210
10	550679	3	17	65	1535	1322	1450	6174279	5684211	6315789
11	344196	1	5	85	1431	0	0	6522782	6315790	6947368
12	853836	3	9	95	1130	1044	1508	7378049	6947369	7578947
13	528761	3	17	75	1123	1312	1517	7910492	7578948	8210526
14	653438	3	12	80	1733	1107	1077	8567882	8210527	8842105
15	635778	3	5	95	1609	1598	1308	9207577	8842106	9473684
16	409468	1	18	85	1766	0	0	9621560	9473685	10105263
17	761266	2	12	60	1920	1735	0	10384592	10105264	10736842
18	950034	1	13	70	1981	0	0	11338281	10736843	11368421
19	451098	3	7	60	1548	1681	1680	11791360	11368422	12000000

Total number of pulses in waveform = 43

Type 5 Radar Waveform_9

Waveform Num = 9
Num of Bursts = 16
Burst Interval (us) = 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	628697	3	5	70	1524	1123	1738	628697	0	749999
2	468830	1	8	50	1400	0	0	1091912	750000	1499999
3	988009	2	6	80	1910	1163	0	2081321	1500000	2249999
4	824089	3	15	75	1210	1257	1384	2908483	2250000	2999999
5	176195	3	14	75	1755	1827	1126	3088529	3000000	3749999
6	1371817	1	20	50	1857	0	0	4465054	3750000	4499999
7	467610	3	9	70	1630	1122	1231	4934521	4500000	5249999
8	579425	1	10	50	1694	0	0	5517929	5250000	5999999
9	894493	2	14	100	1107	1143	0	6414116	6000000	6749999
10	436517	1	9	100	1597	0	0	6852883	6750000	7499999
11	1227161	2	6	55	1326	1705	0	8081641	7500000	8249999
12	895476	1	18	100	1425	0	0	8880148	8250000	8999999
13	599406	1	18	100	1123	0	0	9580979	9000000	9749999
14	238353	3	17	70	1957	1369	1119	9820455	9750000	10499999
15	890073	3	18	95	1689	1767	1709	10714973	10500000	11249999
16	1110628	2	11	95	1166	1174	0	11830766	11250000	11999999

Total number of pulses in waveform = 32

Type 5 Radar Waveform_10

Waveform Num = 10
Num of Bursts = 9
Burst Interval (us) = 1333333

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	256719	1	14	80	1537	0	0	256719	0	1333332
2	1209429	1	9	60	1291	0	0	1467685	1333333	2666665
3	2433419	1	6	75	1073	0	0	3902395	2666666	3999998
4	672797	1	20	55	1790	0	0	4576265	3999999	5333331
5	896310	1	10	65	1086	0	0	5474365	5333332	6666664
6	1750565	1	11	75	1765	0	0	7226016	6666665	7999997
7	1343296	1	5	65	1344	0	0	8571077	7999998	9333330
8	1055237	1	19	85	1532	0	0	9627658	9333331	10666663
9	1087684	1	12	60	1574	0	0	10716874	10666664	11999996

Total number of pulses in waveform = 9



Type 5 Radar Waveform_11

Waveform Num = 11
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	363749	2	7	50	1135	1347	0	363749	0	923076
2	710493	2	12	95	1701	1016	0	1076724	923077	1846153
3	1502585	1	5	55	1579	0	0	2582026	1846154	2769230
4	540482	2	17	70	1322	1099	0	3124087	2769231	3692307
5	942997	1	18	90	1664	0	0	4069505	3692308	4615384
6	550344	3	13	85	1015	1636	1483	4621513	4615385	5538461
7	960098	3	14	100	1682	1457	1130	5585745	5538462	6461538
8	1159451	2	8	60	1024	1046	0	6749465	6461539	7384615
9	1118595	1	11	75	1845	0	0	7870130	7384616	8307692
10	447937	3	13	85	1133	1185	1815	8319912	8307693	9230769
11	1000010	3	5	90	1285	1063	1493	9324055	9230770	10153846
12	982073	1	16	55	1494	0	0	10309969	10153847	11076923
13	1019649	2	7	60	1633	1370	0	11331112	11076924	12000000

Total number of pulses in waveform = 26

Type 5 Radar Waveform_12

Waveform Num = 12
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	10013	1	5	80	1739	0	0	10013	0	923076
2	1617491	1	10	75	1259	0	0	1629243	923077	1846153
3	595122	1	7	80	1379	0	0	2225624	1846154	2769230
4	646253	2	6	65	1589	1443	0	2873256	2769231	3692307
5	1470902	1	7	65	1462	0	0	4347190	3692308	4615384
6	755015	2	15	55	1921	1761	0	5103667	4615385	5538461
7	575881	3	5	65	1702	1115	1750	5683230	5538462	6461538
8	903467	1	17	80	1286	0	0	6591264	6461539	7384615
9	1614349	1	6	60	1938	0	0	8206899	7384616	8307692
10	790829	3	6	75	1145	1636	1567	8996666	8307693	9230769
11	853326	3	6	65	1729	1507	1658	9857340	9230770	10153846
12	828218	2	13	60	1636	1961	0	10690452	10153847	11076923
13	1098059	2	17	90	1853	1081	0	11792108	11076924	12000000

Total number of pulses in waveform = 23

Type 5 Radar Waveform_13

Waveform Num = 13
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	434577	2	8	100	1751	1540	0	434577	0	857142
2	932735	2	19	50	1556	1879	0	1370603	857143	1714285
3	748728	3	17	100	1195	1788	1771	2122766	1714286	2571428
4	1235476	2	6	90	1842	1594	0	3362996	2571429	3428571
5	656942	3	9	85	1787	1953	1143	4023374	3428572	4285714
6	1007745	1	11	90	1835	0	0	5036002	4285715	5142857
7	145829	3	7	55	1846	1320	1157	5183666	5142858	6000000
8	1607767	2	19	100	1112	1219	0	6795756	6000001	6857143
9	704554	2	8	100	1182	1038	0	7502641	6857144	7714286
10	1029508	1	18	100	1405	0	0	8534369	7714287	8571429
11	125048	2	15	90	1180	1244	0	8660822	8571430	9428572
12	1261475	2	13	55	1368	1863	0	9924721	9428573	10285715
13	910079	2	11	90	1774	1222	0	10838031	10285716	11142858
14	338443	1	8	80	1468	0	0	11179470	11142859	12000001

Total number of pulses in waveform = 28



Type 5 Radar Waveform_14

Waveform Num = 14
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	619467	2	19	80	1496	1443	0	619467	0	1090908
2	635613	2	10	80	1108	1073	0	1258019	1090909	2181817
3	1262434	3	17	80	1063	1664	1890	2522634	2181818	3272726
4	1554459	1	19	90	1046	0	0	4081710	3272727	4363635
5	436616	1	12	55	1707	0	0	4519372	4363636	5454544
6	1861788	3	9	75	1313	1431	1221	6382867	5454545	6545453
7	324755	2	8	50	1480	1913	0	6711587	6545454	7636362
8	1810557	1	7	60	1461	0	0	8525537	7636363	8727271
9	594209	3	13	65	1774	1164	1809	9121207	8727272	9818180
10	1559062	2	13	55	1612	1377	0	10685016	9818181	10909089
11	858987	1	13	70	1572	0	0	11546992	10909090	11999998

Total number of pulses in waveform = 21

Type 5 Radar Waveform_15

Waveform Num = 15
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	308102	1	20	80	1421	0	0	308102	0	705881
2	1026029	3	15	100	1564	1435	1563	1335552	705882	1411763
3	647524	3	7	55	1989	1226	1817	1987638	1411764	2117645
4	496161	2	5	75	1661	1109	0	2488831	2117646	2823527
5	377086	2	5	70	1788	1225	0	2868687	2823528	3529409
6	1357032	1	19	75	1922	0	0	4228732	3529410	4235291
7	462152	2	14	85	1259	1266	0	4682806	4235292	4941173
8	810701	1	8	85	1784	0	0	5496032	4941174	5647055
9	365604	2	14	80	1969	1825	0	5863420	5647056	6352937
10	730204	1	19	95	1362	0	0	6597408	6352938	7058819
11	490637	3	14	85	1405	1636	1978	7089407	7058820	7764701
12	709332	1	9	90	1321	0	0	7803758	7764702	8470583
13	892375	3	16	85	1053	1119	1997	8697454	8470584	9176465
14	563334	3	7	65	1187	1920	1549	9264957	9176466	9882347
15	754823	1	6	100	1761	0	0	10024436	9882348	10588229
16	672495	2	11	65	1137	1352	0	10698692	10588230	11294111
17	710892	1	8	85	1578	0	0	11412073	11294112	11999993

Total number of pulses in waveform = 32

Type 5 Radar Waveform_16

Waveform Num = 16
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	896516	2	13	100	1666	1909	0	896516	0	999999
2	163619	2	14	95	1363	1716	0	1063700	1000000	1999999
3	1739979	1	17	50	1849	0	0	2806758	2000000	2999999
4	1109227	2	13	60	1559	1207	0	3917834	3000000	3999999
5	355304	3	14	55	1576	1141	1034	4275904	4000000	4999999
6	1001711	3	5	75	1658	1776	1550	5281366	5000000	5999999
7	1139447	2	5	95	1520	1557	0	6425797	6000000	6999999
8	1083568	1	18	100	1920	0	0	7512442	7000000	7999999
9	1150818	3	14	85	1824	1835	1836	8665180	8000000	8999999
10	1059290	3	16	75	1867	1021	1138	9729965	9000000	9999999
11	632698	1	20	100	1287	0	0	10366689	10000000	10999999
12	1175484	2	8	95	1937	1808	0	11543460	11000000	11999999

Total number of pulses in waveform = 25

**Type 5 Radar Waveform_17**

Waveform Num = 17
Num of Bursts = 14
Burst Interval (us)= 857143

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	357230	3	11	55	1185	1496	1240	357230	0	857142
2	665484	2	7	55	1394	1908	0	1026635	857143	1714285
3	843128	1	19	100	1870	0	0	1873065	1714286	2571428
4	1439365	1	10	75	1605	0	0	3314300	2571429	3428571
5	276053	2	5	100	1052	1755	0	3591958	3428572	4285714
6	1437653	2	12	85	1989	1549	0	5032418	4285715	5142857
7	154563	2	11	60	1105	1323	0	5190519	5142858	6000000
8	1305129	3	16	95	1584	1461	1796	6498076	6000001	6857143
9	1053861	3	16	90	1725	1580	1879	7556778	6857144	7714286
10	239096	1	13	70	1463	0	0	7801058	7714287	8571429
11	913269	2	20	55	1668	1074	0	8715790	8571430	9428572
12	766457	2	19	85	1577	1958	0	9484989	9428573	10285715
13	895859	3	20	75	1827	1962	1175	10384383	10285716	11142858
14	1220828	1	20	80	1650	0	0	11610175	11142859	12000001

Total number of pulses in waveform = 28

Type 5 Radar Waveform_18

Waveform Num = 18
Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	423791	3	14	50	1503	1909	1591	423791	0	799999
2	1062468	3	13	75	1516	1619	1271	1491262	800000	1599999
3	237904	1	9	70	1518	0	0	1733572	1600000	2399999
4	1287698	1	20	65	1781	0	0	3022788	2400000	3199999
5	482659	3	17	100	1168	1405	1121	3507228	3200000	3999999
6	1139285	1	15	80	1078	0	0	4650207	4000000	4799999
7	333413	2	5	70	1900	1581	0	4984698	4800000	5599999
8	1221648	3	5	65	1582	1356	1317	6209827	5600000	6399999
9	438816	3	19	80	1225	1945	1563	6652898	6400000	7199999
10	645606	2	13	85	1393	1734	0	7303237	7200000	7999999
11	945206	2	9	100	1411	1154	0	8251570	8000000	8799999
12	1337547	3	15	95	1570	1541	1440	9591682	8800000	9599999
13	561022	2	14	95	1063	1268	0	10157255	9600000	10399999
14	590909	3	11	100	1495	1817	1901	10750495	10400000	11199999
15	645727	2	5	75	1019	1107	0	11401435	11200000	11999999

Total number of pulses in waveform = 34

Type 5 Radar Waveform_19

Waveform Num = 19
Num of Bursts = 8
Burst Interval (us)= 1500000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	316298	1	15	85	1056	0	0	316298	0	1499999
2	1281278	2	13	90	1648	1654	0	1598632	1500000	2999999
3	2882700	1	12	85	1590	0	0	4484634	3000000	4499999
4	172952	2	10	60	1196	1377	0	4659176	4500000	5999999
5	2212506	2	6	100	1034	1935	0	6874255	6000000	7499999
6	987076	2	8	50	1481	1217	0	7864300	7500000	8999999
7	1513193	3	11	70	1127	1286	1394	9380191	9000000	10499999
8	1121858	1	16	80	1753	0	0	10505856	10500000	11999999

Total number of pulses in waveform = 14



Type 5 Radar Waveform_20

Waveform Num = 20
Num of Bursts = 19
Burst Interval (us) = 631579

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	521504	1	9	90	1264	0	0	521504	0	631578
2	512803	2	6	85	1341	1778	0	1035571	631579	1263157
3	258162	3	19	55	1276	2000	1273	1296852	1263158	1894736
4	734628	1	9	80	1114	0	0	2036229	1894737	2526315
5	1117901	1	6	100	1865	0	0	3155244	2526316	3157894
6	64293	3	6	80	1667	1124	1943	3221402	3157895	3789473
7	727984	1	16	75	1700	0	0	3954120	3789474	4421052
8	478441	2	13	85	1690	1869	0	4434261	4421053	5052631
9	1081193	3	17	100	1836	1909	1347	5519013	5052632	5684210
10	542982	2	10	70	1730	1034	0	6067087	5684211	6315789
11	805496	3	19	65	1413	1423	1499	6875347	6315790	6947368
12	198196	1	6	60	1767	0	0	7077878	6947369	7578947
13	893673	2	18	60	1170	1558	0	7973318	7578948	8210526
14	394699	2	6	50	1499	1523	0	8370745	8210527	8842105
15	639021	1	8	100	1653	0	0	9012788	8842106	9473684
16	1054885	3	8	65	1116	1098	1799	10069326	9473685	10105263
17	239778	1	6	70	1583	0	0	10313117	10105264	10736842
18	512712	3	10	60	1220	1667	1206	10827412	10736843	11368421
19	1037620	1	14	95	1922	0	0	11869125	11368422	12000000

Total number of pulses in waveform = 36

Type 5 Radar Waveform_21

Waveform Num = 21
Num of Bursts = 13
Burst Interval (us) = 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	733562	1	17	70	1623	0	0	733562	0	923076
2	286544	3	19	50	1797	1388	1318	1021729	923077	1846153
3	1308289	3	5	70	1881	1516	1858	2334521	1846154	2769230
4	1065892	1	14	90	1823	0	0	3405668	2769231	3692307
5	549670	2	9	60	1518	1447	0	3957161	3692308	4615384
6	1339682	1	9	60	1093	0	0	5299808	4615385	5538461
7	573259	3	5	80	1591	1083	1378	5874160	5538462	6461538
8	843065	1	19	55	1705	0	0	6721277	6461539	7384615
9	1575988	3	17	75	1951	1636	1568	8298970	7384616	8307692
10	448431	2	12	65	1719	1925	0	8752556	8307693	9230769
11	635117	1	20	60	1604	0	0	9391317	9230770	10153846
12	1662289	2	10	65	1945	1681	0	11055210	10153847	11076923
13	839867	1	19	90	1130	0	0	11898703	11076924	12000000

Total number of pulses in waveform = 24

Type 5 Radar Waveform_22

Waveform Num = 22
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	612908	2	8	50	1273	1681	0	612908	0	799999
2	252623	1	12	50	1088	0	0	868485	800000	1599999
3	1097361	3	9	50	1519	1932	1371	1966934	1600000	2399999
4	538692	2	15	60	1396	1873	0	2510448	2400000	3199999
5	1120916	2	15	65	1284	1619	0	3634633	3200000	3999999
6	477958	2	13	70	1920	1879	0	4115494	4000000	4799999
7	1282133	1	11	80	1453	0	0	5401426	4800000	5599999
8	586899	3	15	80	1930	1625	1388	5989778	5600000	6399999
9	936583	1	12	55	1702	0	0	6931304	6400000	7199999
10	710886	1	20	55	1829	0	0	7643892	7200000	7999999
11	444958	2	12	80	1099	1239	0	8090679	8000000	8799999
12	1129655	3	9	100	1469	1411	1629	9222672	8800000	9599999
13	780781	1	17	55	1550	0	0	10007962	9600000	10399999
14	929494	2	5	50	1013	1379	0	10939006	10400000	11199999
15	481270	1	18	55	1961	0	0	11422668	11200000	11999999

Total number of pulses in waveform = 27



Type 5 Radar Waveform_23

Waveform Num = 23
Num of Bursts = 16
Burst Interval (us) = 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	152293	3	18	70	1384	1699	1169	152293	0	749999
2	1308448	3	14	55	1450	1764	1247	1464993	750000	1499999
3	155027	1	7	100	1412	0	0	1624481	1500000	2249999
4	1194045	2	20	80	1130	1282	0	2819938	2250000	2999999
5	292903	3	7	55	1569	1538	1658	3115253	3000000	3749999
6	983364	1	13	85	1450	0	0	4103382	3750000	4499999
7	872869	3	15	60	1771	1774	1181	4977701	4500000	5249999
8	933703	2	7	75	1614	1024	0	5916130	5250000	5999999
9	708212	3	6	95	1252	1528	1006	6626980	6000000	6749999
10	684417	3	11	85	1507	1498	1450	7315183	6750000	7499999
11	823409	2	13	55	1366	1944	0	8143047	7500000	8249999
12	783752	3	14	70	1165	1898	1815	8930109	8250000	8999999
13	280345	2	16	50	1380	1759	0	9215332	9000000	9749999
14	714164	2	20	65	1906	1039	0	9932635	9750000	10499999
15	856100	1	6	50	1886	0	0	10791680	10500000	11249999
16	656242	3	8	70	1003	1625	1415	11449808	11250000	11999999

Total number of pulses in waveform = 37

Type 5 Radar Waveform_24

Waveform Num = 24
Num of Bursts = 18
Burst Interval (us) = 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	335420	3	19	100	1712	1002	1465	335420	0	666666
2	589778	3	16	90	1237	1568	1645	929377	666667	1333333
3	1027494	2	7	100	1829	1725	0	1961321	1333334	2000000
4	100734	2	11	65	1087	1374	0	2065609	2000001	2666667
5	1100433	2	16	70	1363	1747	0	3168503	2666668	3333334
6	800582	1	16	50	1875	0	0	3972195	3333335	4000001
7	255746	1	8	85	1313	0	0	4229816	4000002	4666668
8	469324	3	6	80	1906	1693	1192	4700453	4666669	5333335
9	957942	2	5	55	1583	1429	0	5663186	5333336	6000002
10	595400	1	13	80	1200	0	0	6261598	6000003	6666669
11	492555	1	15	75	1244	0	0	6755353	6666670	7333336
12	1211232	2	6	75	1763	1749	0	7967829	7333337	8000003
13	465116	2	8	65	1179	1654	0	8436457	8000004	8666670
14	774017	2	14	100	1277	1292	0	9213307	8666671	9333337
15	731925	1	7	60	1509	0	0	9947801	9333338	10000004
16	341653	3	19	95	1096	1804	1691	10290963	10000005	10666671
17	828827	2	14	65	1102	1513	0	11124381	10666672	11333338
18	385396	1	10	90	1131	0	0	11512392	11333339	12000005

Total number of pulses in waveform = 34

Type 5 Radar Waveform_25

Waveform Num = 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	728239	2	8	50	1914	1739	0	728239	0	923076
2	1104738	1	13	70	1371	0	0	1836630	923077	1846153
3	772326	1	19	65	1097	0	0	2610327	1846154	2769230
4	988786	2	10	95	1817	1865	0	3600210	2769231	3692307
5	575021	2	10	90	1944	1382	0	4178913	3692308	4615384
6	664508	2	18	75	1675	1311	0	4846747	4615385	5538461
7	1398711	1	7	50	1905	0	0	6248444	5538462	6461538
8	966211	1	5	90	1696	0	0	7215560	6461539	7384615
9	905815	3	15	100	1184	1542	1282	8124071	7384616	8307692
10	725184	2	14	95	1963	1249	0	8853263	8307693	9230769
11	1165219	3	8	55	1611	1411	1167	10021694	9230770	10153846
12	327307	2	20	75	1553	1040	0	10353190	10153847	11076923
13	1112427	3	10	50	1333	1419	1802	11468210	11076924	12000000

Total number of pulses in waveform = 25



Type 5 Radar Waveform_26

Waveform Num = 26
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	106860	3	7	65	1157	1966	1614	106860	0	799999
2	887726	1	16	80	1518	0	0	999123	800000	1599999
3	1103320	3	17	100	1180	1113	1267	2103961	1600000	2399999
4	539249	3	16	80	1724	1145	1242	2646770	2400000	3199999
5	627519	3	14	95	1794	1435	1185	3278400	3200000	3999999
6	1505032	1	13	65	1829	0	0	4787846	4000000	4799999
7	734355	1	17	85	1803	0	0	5524030	4800000	5599999
8	342494	1	13	95	1184	0	0	5868327	5600000	6399999
9	1120450	2	17	70	1663	1686	0	6989961	6400000	7199999
10	399985	3	12	100	1198	1697	1727	7393295	7200000	7999999
11	957461	1	19	80	1280	0	0	8355378	8000000	8799999
12	1095213	1	18	100	1878	0	0	9451871	8800000	9599999
13	751758	2	11	95	1953	1091	0	10205507	9600000	10399999
14	832970	3	13	60	1891	1297	1452	11041521	10400000	11199999
15	525443	2	16	100	1276	1352	0	11571604	11200000	11999999

Total number of pulses in waveform = 30

Type 5 Radar Waveform_27

Waveform Num = 27
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	685719	1	6	75	1089	0	0	685719	0	749999
2	170756	3	10	90	1490	1298	1612	857564	750000	1499999
3	1135930	1	20	95	1238	0	0	1997894	1500000	2249999
4	360235	3	18	55	1522	1079	1400	2359367	2250000	2999999
5	684604	3	17	90	1869	1069	1396	3047972	3000000	3749999
6	1106992	3	9	100	1132	1738	1323	4159298	3750000	4499999
7	1006127	2	7	50	1635	1315	0	5169618	4500000	5249999
8	372968	1	8	90	1227	0	0	5545536	5250000	5999999
9	616527	2	20	100	1544	1575	0	6163290	6000000	6749999
10	1212767	3	14	90	1488	1279	1379	7379176	6750000	7499999
11	735357	2	14	85	1329	1369	0	8118679	7500000	8249999
12	453503	2	16	60	1266	1592	0	8574880	8250000	8999999
13	1166547	3	10	80	1999	1405	1342	9744285	9000000	9749999
14	89953	3	12	95	1383	1874	1879	9838984	9750000	10499999
15	1128953	2	19	65	1561	1325	0	10973073	10500000	11249999
16	846076	2	5	80	1423	1739	0	11822035	11250000	11999999

Total number of pulses in waveform = 36

Type 5 Radar Waveform_28

Waveform Num = 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	521648	2	19	90	1920	1518	0	521648	0	1199999
2	1835626	1	7	80	1858	0	0	2360712	1200000	2399999
3	878595	1	8	85	1219	0	0	3241165	2400000	3599999
4	1479890	3	13	70	1799	1898	1248	4722274	3600000	4799999
5	521722	2	16	75	1116	1410	0	5248941	4800000	5999999
6	1588040	2	10	65	1815	1704	0	6839507	6000000	7199999
7	431294	2	7	100	1385	1850	0	7274320	7200000	8399999
8	2269227	1	19	90	1113	0	0	9546782	8400000	9599999
9	266079	1	18	95	1902	0	0	9813974	9600000	10799999
10	1385972	1	17	60	1115	0	0	11201848	10800000	11999999

Total number of pulses in waveform = 16



Type 5 Radar Waveform_29

Waveform Num = 29
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	148866	3	17	65	1985	1932	1551	148866	0	599999
2	895198	3	10	70	1114	1294	1016	1049532	600000	1199999
3	363141	3	8	90	1002	1563	1481	1416097	1200000	1799999
4	822878	2	15	80	1958	1138	0	2243021	1800000	2399999
5	384133	3	6	50	1796	1743	1447	2630250	2400000	2999999
6	444423	2	9	70	1895	1825	0	3079659	3000000	3599999
7	902045	2	20	55	1480	1423	0	3985424	3600000	4199999
8	381949	3	9	85	1322	1549	1682	4370278	4200000	4799999
9	672321	1	11	55	1977	0	0	5047150	4800000	5399999
10	737713	3	6	100	1203	1014	1716	5786840	5400000	5999999
11	495724	2	10	55	1411	1961	0	6286497	6000000	6599999
12	666244	2	14	55	1807	1160	0	6956113	6600000	7199999
13	280005	2	7	65	1703	1550	0	7239085	7200000	7799999
14	702032	2	12	60	1176	1957	0	7944370	7800000	8399999
15	779662	1	18	80	1793	0	0	8727165	8400000	8999999
16	542773	1	13	75	1818	0	0	9271731	9000000	9599999
17	790527	3	12	55	1999	1742	1133	10064076	9600000	10199999
18	566140	1	12	50	1684	0	0	10635090	10200000	10799999
19	291624	1	18	80	1394	0	0	10928398	10800000	11399999
20	704585	2	7	85	1794	1787	0	11634377	11400000	11999999

Total number of pulses in waveform = 42

Type 5 Radar Waveform_30

Waveform Num = 30
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	312215	3	20	90	1963	1075	1947	312215	0	799999
2	932978	3	12	65	1258	1808	1955	1250178	800000	1599999
3	923891	1	13	100	1534	0	0	2179090	1600000	2399999
4	583254	1	11	55	1306	0	0	2763878	2400000	3199999
5	549936	2	19	60	1665	1073	0	3315120	3200000	3999999
6	1246163	3	13	85	1162	1740	1544	4564021	4000000	4799999
7	509908	3	19	60	1865	1435	1612	5078375	4800000	5599999
8	872755	2	9	90	1951	1970	0	5956042	5600000	6399999
9	812019	1	18	90	1108	0	0	6771982	6400000	7199999
10	872636	3	7	55	1832	1587	1120	7645726	7200000	7999999
11	695291	3	9	65	1205	1347	1511	8345556	8000000	8799999
12	727473	3	16	95	1737	1468	1564	9077092	8800000	9599999
13	751030	3	15	85	1354	1355	1502	9832891	9600000	10399999
14	802148	1	5	80	1406	0	0	10639250	10400000	11199999
15	1036282	2	6	90	1857	1376	0	11676938	11200000	11999999

Total number of pulses in waveform = 34

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	5291	1	16	5291	1
2	5291	1	17	5291	1
3	5291	1	18	5291	1
4	5291	1	19	5291	1
5	5291	1	20	5291	1
6	5291	1	21	5291	1
7	5291	1	22	5291	1
8	5291	1	23	5291	1
9	5291	1	24	5291	1
10	5291	1	25	5291	1
11	5291	1	26	5291	1
12	5291	1	27	5291	1
13	5291	1	28	5291	1
14	5291	1	29	5291	1
15	5291	1	30	5291	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	5302	6	4	5282	12
20	5281	60	18	5266	54
27	5311	81	25	5283	75
30	5303	90	38	5265	114
52	5301	156	41	5281	123
55	5266	165	42	5303	126
66	5306	198	54	5304	162
87	5314	261	57	5291	171
--	--	--	58	5272	174
--	--	--	63	5287	189
--	--	--	66	5297	198
--	--	--	74	5279	222
--	--	--	77	5292	231
--	--	--	79	5286	237
--	--	--	87	5274	261
--	--	--	90	5300	270
--	--	--	91	5289	273
--	--	--	95	5261	285

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5313	3	4	5291	12
4	5263	12	9	5282	27
24	5311	72	15	5305	45
25	5292	75	20	5309	60
26	5271	78	21	5308	63
41	5306	123	30	5313	90
45	5278	135	35	5304	105
51	5302	153	40	5311	120
53	5265	159	46	5278	138
54	5273	162	59	5319	177
55	5295	165	64	5263	192
63	5282	189	79	5314	237
76	5312	228	83	5274	249
79	5315	237	87	5268	261
81	5303	243	91	5318	273
91	5298	273	93	5281	279
99	5289	297	94	5294	282
--	--	--	95	5286	285

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5293	33	9	5314	27
18	5313	54	14	5269	42
29	5310	87	42	5286	126
51	5317	153	43	5304	129
56	5294	168	47	5275	141
63	5304	189	57	5313	171
64	5281	192	59	5309	177
70	5264	210	64	5308	192
72	5273	216	70	5307	210
79	5279	237	75	5306	225
86	5277	258	82	5287	246
89	5272	267	85	5317	255
94	5282	282	89	5316	267
98	5301	294	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5263	15	1	5302	3
9	5271	27	10	5284	30
11	5303	33	18	5311	54
20	5262	60	30	5304	90
34	5321	102	36	5292	108
37	5270	111	43	5275	129
55	5299	165	44	5315	132
60	5305	180	61	5305	183
62	5276	186	68	5272	204
66	5281	198	88	5269	264
69	5293	207	94	5271	282
72	5296	216	97	5314	291
75	5275	225	--	--	--
77	5300	231	--	--	--
90	5269	270	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5265	21	0	5281	0
8	5282	24	3	5292	9
13	5278	39	11	5295	33
15	5291	45	21	5275	63
18	5319	54	24	5276	72
29	5286	87	30	5278	90
37	5305	111	44	5314	132
56	5273	168	71	5308	213
58	5301	174	77	5307	231
62	5311	186	80	5318	240
65	5269	195	88	5320	264
67	5281	201	--	--	--
90	5307	270	--	--	--

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
0	5294	0	11	5263	33
2	5311	6	12	5268	36
7	5291	21	13	5264	39
13	5293	39	17	5286	51
22	5306	66	20	5297	60
27	5318	81	38	5295	114
29	5266	87	39	5289	117
34	5287	102	45	5265	135
44	5267	132	49	5273	147
59	5273	177	52	5261	156
60	5304	180	56	5304	168
73	5300	219	57	5282	171
88	5289	264	65	5277	195
--	--	--	74	5287	222
--	--	--	76	5300	228

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
22	5289	66	2	5272	6
38	5306	114	6	5295	18
44	5283	132	21	5284	63
47	5282	141	22	5290	66
49	5269	147	24	5312	72
50	5280	150	43	5263	129
53	5275	159	50	5309	150
60	5293	180	61	5276	183
66	5315	198	86	5314	258
67	5273	201	94	5271	282
73	5298	219	--	--	--
78	5265	234	--	--	--
81	5316	243	--	--	--
92	5263	276	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5316	0	8	5271	24
3	5304	9	12	5305	36
9	5297	27	15	5319	45
13	5269	39	38	5276	114
18	5296	54	63	5262	189
20	5303	60	68	5263	204
30	5265	90	89	5306	267
31	5291	93	90	5285	270
46	5266	138	97	5282	291
47	5279	141	--	--	--
49	5315	147	--	--	--
50	5287	150	--	--	--
60	5318	180	--	--	--
67	5314	201	--	--	--
74	5290	222			
94	5273	282	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5282	0	15	5301	45
2	5270	6	34	5299	102
8	5263	24	37	5297	111
10	5281	30	46	5303	138
13	5303	39	53	5316	159
20	5286	60	59	5279	177
29	5307	87	71	5292	213
35	5264	105	78	5296	234
59	5287	177	81	5273	243
64	5301	192	82	5287	246
66	5308	198	90	5306	270
71	5267	213	94	5310	282
73	5277	219	98	5317	294
77	5294	231	--	--	--
81	5292	243	--	--	--
85	5309	255	--	--	--
88	5302	264	--	--	--
89	5315	267	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5270	9	7	5306	21
6	5303	18	17	5279	51
7	5292	21	26	5295	78
23	5300	69	30	5290	90
44	5310	132	42	5299	126
50	5289	150	47	5265	141
54	5263	162	49	5311	147
57	5274	171	50	5305	150
61	5264	183	55	5320	165
68	5272	204	70	5312	210
72	5275	216	95	5276	285
74	5262	222	98	5264	294
81	5295	243	--	--	--
93	5304	279	--	--	--
94	5311	282	--	--	--
95	5305	285	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5296	15	4	5270	12
10	5307	30	19	5289	57
34	5314	102	25	5271	75
40	5317	120	35	5281	105
45	5311	135	54	5303	162
48	5289	144	58	5277	174
51	5316	153	60	5300	180
59	5266	177	67	5297	201
65	5300	195	70	5274	210
66	5315	198	71	5296	213
69	5264	207	90	5312	270
79	5274	237	92	5320	276
82	5320	246	95	5284	285
84	5271	252	--	--	--
90	5313	270	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
12	5297	36	13	5298	39
19	5299	57	14	5262	42
23	5275	69	25	5316	75
34	5318	102	32	5288	96
62	5295	186	47	5312	141
72	5293	216	56	5306	168
73	5307	219	60	5273	180
76	5265	228	64	5301	192
78	5266	234	66	5269	198
79	5308	237	95	5282	285
81	5277	243	--	--	--
84	5287	252	--	--	--
92	5262	276	--	--	--
97	5281	291	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5276	3	9	5295	27
2	5281	6	12	5287	36
4	5274	12	26	5320	78
23	5308	69	39	5303	117
28	5304	84	49	5315	147
33	5271	99	57	5302	171
35	5270	105	61	5321	183
45	5318	135	65	5317	195
47	5266	141	75	5294	225
48	5275	144	83	5285	249
54	5296	162	87	5289	261
61	5279	183	90	5281	270
66	5300	198	--	--	--
71	5261	213	--	--	--
73	5292	219	--	--	--
74	5298	222	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5287	39	9	5301	27
25	5295	75	30	5313	90
29	5309	87	40	5264	120
37	5288	111	47	5285	141
43	5292	129	50	5292	150
49	5304	147	60	5295	180
53	5312	159	65	5279	195
63	5269	189	72	5284	216
64	5303	192	73	5263	219
70	5265	210	80	5321	240
73	5268	219	82	5281	246
82	5308	246	87	5265	261
89	5279	267	90	5311	270
92	5320	276	94	5267	282
94	5319	282	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5291	15	12	5289	36
9	5292	27	16	5284	48
11	5272	33	19	5299	57
12	5313	36	22	5298	66
20	5280	60	30	5290	90
26	5281	78	33	5285	99
36	5295	108	35	5318	105
45	5264	135	36	5270	108
53	5304	159	41	5301	123
54	5314	162	46	5273	138
56	5302	168	47	5314	141
57	5284	171	66	5319	198
61	5321	183	74	5277	222
64	5279	192	81	5303	243
69	5308	207	84	5300	252
85	5303	255	89	5308	267
98	5278	294	91	5316	273
99	5290	297	--	--	--

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	5291	1	918	58	1
2	5291	1	698	76	1
3	5291	1	778	68	1
4	5291	1	678	78	1
5	5291	1	518	102	1
6	5291	1	938	57	1
7	5291	1	578	92	1
8	5291	1	638	83	1
9	5291	1	878	61	1
10	5291	1	718	74	1
11	5291	1	898	59	1
12	5291	1	538	99	1
13	5291	1	558	95	1
14	5291	1	658	81	1
15	5291	1	798	67	1
16	5291	1	581	91	1
17	5291	1	2066	26	1
18	5291	1	2673	20	1
19	5291	1	2355	23	1
20	5291	1	1278	42	1
21	5291	1	2021	27	1
22	5291	1	2815	19	1
23	5291	1	879	61	1
24	5291	1	976	55	1
25	5291	1	1739	31	1
26	5291	1	1545	35	1
27	5291	1	1549	35	1
28	5291	1	1526	35	1
29	5291	1	1661	32	1
30	5291	1	1925	28	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	3.5	150	29	1
2	5300	4.0	155	27	1
3	5300	5.0	170	29	1
4	5300	1.4	163	23	1
5	5300	1.2	182	25	1
6	5300	2.2	165	26	1
7	5300	2.4	158	25	1
8	5300	1.6	207	24	1
9	5300	3.6	183	27	1
10	5300	1.2	181	25	1
11	5300	2.7	179	28	1
12	5300	1.7	174	24	1
13	5300	2.0	187	26	1
14	5300	1.0	212	25	1
15	5300	4.0	179	27	1
16	5300	3.6	184	29	1
17	5300	1.1	190	23	1
18	5300	3.3	203	28	1
19	5300	2.2	214	29	1
20	5300	2.7	155	28	1
21	5300	4.4	226	23	1
22	5300	2.4	197	28	1
23	5300	1.0	200	25	1
24	5300	2.5	166	25	1
25	5300	2.7	163	24	1
26	5300	4.9	165	25	1
27	5300	4.7	213	29	1
28	5300	2.8	225	29	1
29	5300	2.2	204	23	1
30	5300	4.6	228	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	5309	8.9	347	17	1
2	5309	9.8	424	18	1
3	5309	9.9	454	18	1
4	5309	7.9	320	18	1
5	5309	6.4	459	16	1
6	5309	8.5	436	16	1
7	5309	8.0	434	16	1
8	5309	7.0	311	18	1
9	5309	6.5	473	17	1
10	5309	8.1	288	16	1
11	5309	10.0	421	16	1
12	5309	6.7	403	18	1
13	5309	6.0	323	18	1
14	5309	7.4	397	18	1
15	5309	7.3	360	16	1
16	5309	9.8	455	17	1
17	5309	8.0	266	17	1
18	5309	9.0	483	16	1
19	5309	8.4	278	17	1
20	5309	8.1	329	16	1
21	5309	7.5	254	18	1
22	5309	7.1	301	17	1
23	5309	7.9	476	17	1
24	5309	8.9	421	18	1
25	5309	7.4	429	17	1
26	5309	6.3	289	16	1
27	5309	8.4	468	16	1
28	5309	9.8	470	17	1
29	5309	6.0	500	18	1
30	5309	9.7	271	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	12.4	261	16	1
2	5328	15.1	331	16	1
3	5328	15.1	426	13	1
4	5328	19.3	409	13	1
5	5328	17.8	361	12	1
6	5328	13.4	291	13	1
7	5328	19.5	330	16	1
8	5328	15.5	370	15	1
9	5328	18.0	476	16	1
10	5328	19.9	408	16	1
11	5328	12.2	296	15	1
12	5328	14.0	456	16	1
13	5328	18.9	416	12	1
14	5328	18.3	277	13	1
15	5328	18.2	276	12	1
16	5328	11.9	402	12	1
17	5328	18.0	282	13	1
18	5328	15.0	252	14	1
19	5328	16.1	389	12	1
20	5328	13.6	430	14	1
21	5328	16.8	267	14	1
22	5328	19.1	308	16	1
23	5328	12.0	494	13	1
24	5328	19.7	354	12	1
25	5328	20.0	282	15	1
26	5328	15.5	322	16	1
27	5328	19.6	347	16	1
28	5328	11.8	275	14	1
29	5328	11.6	461	14	1
30	5328	12.7	355	15	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: $\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100\% + 100\% + 100\% + 100\%) / 4 = 100\% (>80\%)$

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	5295	1	16	5310	1
2	5296	1	17	5311	1
3	5297	1	18	5312	1
4	5298	1	19	5313	1
5	5299	1	20	5314	1
6	5300	1	21	5315	1
7	5301	1	22	5316	1
8	5302	1	23	5317	1
9	5303	1	24	5318	1
10	5304	1	25	5319	1
11	5305	1	26	5320	1
12	5306	1	27	5321	1
13	5307	1	28	5322	1
14	5308	1	29	5323	1
15	5309	1	30	5324	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

Waveform Num = 1
Num of Bursts = 17
Burst Interval (us) = 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	80856	3	16	90	1979	1324	1630	80856	0	705881
2	1247134	1	13	50	1952	0	0	1332923	705882	1411763
3	403752	3	7	65	1715	1856	1567	1738627	1411764	2117645
4	1034390	2	18	50	1702	1531	0	2778155	2117646	2823527
5	525087	1	10	95	1583	0	0	3306475	2823528	3529409
6	325936	3	6	95	1302	1006	1498	3633994	3529410	4235291
7	736074	1	12	85	1998	0	0	4373874	4235292	4941173
8	956839	3	13	65	1343	1783	1223	5332711	4941174	5647055
9	484275	3	19	95	1771	1779	1208	5821335	5647056	6352937
10	542794	1	19	90	1566	0	0	6368887	6352938	7058819
11	1323481	2	8	95	1921	1063	0	7693934	7058820	7764701
12	722156	1	12	50	1010	0	0	8419074	7764702	8470583
13	728672	3	14	70	1789	1234	1373	9148756	8470584	9176465
14	537468	3	7	75	1019	1610	1360	9690620	9176466	9882347
15	436321	1	17	100	1702	0	0	10130930	9882348	10588229
16	751035	1	14	75	1961	0	0	10883667	10588230	11294111
17	615933	3	15	75	1172	1647	1950	11501561	11294112	11999993

Total number of pulses in waveform = 35

**Type 5 Radar Waveform_2**

Waveform Num = 2
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	552365	3	7	50	1139	1661	1659	552365	0	1333332
2	1912207	2	16	75	1732	1959	0	2469031	1333333	2666665
3	381577	2	10	85	1277	1239	0	2854299	2666666	3999998
4	2180050	3	18	95	1514	1466	1526	5036865	3999999	5333331
5	1162856	1	10	90	1495	0	0	6204227	5333332	6666664
6	1334038	1	17	85	1606	0	0	7539760	6666665	7999997
7	760331	1	6	90	1072	0	0	8301697	7999998	9333330
8	2314286	1	18	65	1148	0	0	10617055	9333331	10666663
9	899355	3	15	65	1061	1043	1943	11517558	10666664	11999996

Total number of pulses in waveform = 17

Type 5 Radar Waveform_3

Waveform Num = 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	420185	3	17	60	1471	1493	1062	420185	0	1090908
2	1312831	2	10	100	1465	1882	0	1737042	1090909	2181817
3	906228	1	18	85	1932	0	0	2646617	2181818	3272726
4	1058445	1	9	95	1487	0	0	3706994	3272727	4363635
5	1640393	2	14	75	1145	1308	0	5348874	4363636	5454544
6	115715	2	9	70	1553	1993	0	5467042	5454545	6545453
7	2091206	1	16	95	1608	0	0	7561794	6545454	7636362
8	342846	3	14	50	1907	1264	1010	7906248	7636363	8727271
9	1187568	1	10	70	1503	0	0	9097997	8727272	9818180
10	851948	1	8	50	1375	0	0	9951448	9818181	10909089
11	1456267	2	20	55	1300	1755	0	11409090	10909090	11999998

Total number of pulses in waveform = 19

Type 5 Radar Waveform_4

Waveform Num = 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	137147	1	7	50	1142	0	0	137147	0	1499999
2	2271571	2	18	85	1554	1308	0	2409860	1500000	2999999
3	956557	1	10	90	1984	0	0	3369279	3000000	4499999
4	1992837	3	18	100	1841	1057	1350	5364100	4500000	5999999
5	847525	3	5	65	1980	1812	1385	6215873	6000000	7499999
6	1882450	2	11	80	1662	1462	0	8103500	7500000	8999999
7	1574753	3	15	55	1167	1222	1665	9681377	9000000	10499999
8	1618478	3	12	85	1440	1284	1652	11303909	10500000	11999999

Total number of pulses in waveform = 18



Type 5 Radar Waveform_5

Waveform Num = 5
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	649118	2	20	80	1915	1769	0	649118	0	666666
2	258688	3	10	55	1089	1845	1818	911490	666667	1333333
3	957993	3	9	90	1281	1146	1844	1874235	1333334	2000000
4	334699	3	7	90	1888	1669	1068	2213205	2000001	2666667
5	758666	1	7	60	1405	0	0	2976496	2666668	3333334
6	632957	3	8	85	1099	1683	1823	3610858	3333335	4000001
7	627485	3	16	100	1448	1580	0	4242948	4000002	4666668
8	783303	3	10	100	1733	1976	1811	5029279	4666669	5333335
9	355239	3	7	80	1833	1583	1070	5390038	5333336	6000002
10	1093434	2	18	70	1951	1306	0	6487958	6000003	6666669
11	317175	2	8	60	1107	1387	0	6808390	6666670	7333336
12	1043476	3	15	55	1348	1702	1536	7854360	7333337	8000003
13	362935	2	6	65	1755	1177	0	8221881	8000004	8666670
14	838690	3	7	85	1149	1636	1905	9063503	8666671	9333337
15	624662	3	17	55	1267	1086	1207	9692855	9333338	10000004
16	638928	1	12	60	1202	0	0	10335343	10000005	10666671
17	354664	2	13	80	1452	1462	0	10691209	10666672	11333338
18	940507	3	5	55	1590	1516	1849	11634630	11333339	12000005

Total number of pulses in waveform = 44

Type 5 Radar Waveform_6

Waveform Num = 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	797922	3	9	65	1236	1630	1848	797922	0	857142
2	672655	2	6	85	1754	1176	0	1475291	857143	1714285
3	765319	1	16	55	1378	0	0	2243540	1714286	2571428
4	1092880	1	6	75	1926	0	0	3337798	2571429	3428571
5	206819	1	8	60	1851	0	0	3546543	3428572	4285714
6	1337395	1	13	70	1409	0	0	4885789	4285715	5142857
7	870158	2	12	70	1729	1069	0	5757356	5142858	6000000
8	470266	3	8	65	1107	1429	1019	6230420	6000001	6857143
9	1447312	2	14	90	1796	1083	0	7681287	6857144	7714286
10	694915	2	19	80	1449	1530	0	8379081	7714287	8571429
11	504741	2	7	65	1366	1452	0	8896801	8571430	9428572
12	760897	2	20	90	1107	1254	0	9650516	9428573	10285715
13	1380020	3	12	95	1453	1246	1580	11032897	10285716	11142858
14	322477	3	14	85	1429	1189	1446	11359653	11142859	12000001

Total number of pulses in waveform = 28

Type 5 Radar Waveform_7

Waveform Num = 7
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	262023	2	6	90	1759	1127	0	262023	0	749999
2	996434	3	7	70	1186	1372	1913	1261343	750000	1499999
3	791373	1	17	75	1124	0	0	2057187	1500000	2249999
4	829771	1	18	55	1129	0	0	2888082	2250000	2999999
5	696867	1	18	70	1023	0	0	3586078	3000000	3749999
6	547560	2	17	70	1315	1057	0	4134661	3750000	4499999
7	554412	1	5	70	1370	0	0	4691445	4500000	5249999
8	857809	3	17	65	1537	1630	1896	5550624	5250000	5999999
9	850519	1	13	55	1797	0	0	6406206	6000000	6749999
10	1022279	3	17	65	1419	1394	1122	7430282	6750000	7499999
11	502389	3	17	80	1770	1395	1770	7936506	7500000	8249999
12	591324	1	6	70	1438	0	0	8532865	8250000	8999999
13	529600	3	15	55	1465	1978	1770	9063903	9000000	9749999
14	1311020	3	18	95	1659	1786	1233	10380136	9750000	10499999
15	446125	3	10	80	1905	1422	1523	10830939	10500000	11249999
16	418483	2	18	70	1521	1010	0	11254272	11250000	11999999

Total number of pulses in waveform = 33

**Type 5 Radar Waveform_8**

Waveform Num = 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	1644928	2	11	95	1280	1766	0	602502	0	1333332
2	840086	2	9	50	1132	1093	0	2250476	1333333	2666665
3	2042328	2	19	65	1684	1307	0	3092787	2666666	3999998
4	1067338	1	7	65	1281	0	0	5138106	3999999	5333331
5	1283609	2	12	50	1739	1554	0	6206725	5333332	6666664
6	624702	1	20	75	1034	0	0	7493627	6666665	7999997
7	2135180	3	13	60	1602	1903	1361	8119363	7999998	9333330
8	771378	1	13	55	1399	0	0	10259409	9333331	10666663
9		3	12	55	1486	1243	1111	11032186	10666664	11999996

Total number of pulses in waveform = 17

Type 5 Radar Waveform_9

Waveform Num = 9
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	926774	2	5	65	1163	1129	0	926774	0	1333332
2	1424769	3	13	90	1450	1624	1019	2353835	1333333	2666665
3	785103	2	17	75	1747	1633	0	3143031	2666666	3999998
4	1637903	2	20	50	1503	1357	0	4784314	3999999	5333331
5	1457482	2	11	70	1626	1385	0	6244656	5333332	6666664
6	645648	2	15	65	1927	1750	0	6893315	6666665	7999997
7	2209096	1	13	90	1952	0	0	9106088	7999998	9333330
8	1014758	3	10	95	1147	1307	1899	10122798	9333331	10666663
9	1713890	1	9	60	1233	0	0	11841041	10666664	11999996

Total number of pulses in waveform = 18

Type 5 Radar Waveform_10

Waveform Num = 10
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	677178	2	9	100	1606	1190	0	677178	0	749999
2	485216	1	16	50	1012	0	0	1165190	750000	1499999
3	833501	2	15	100	1221	1484	0	1999703	1500000	2249999
4	762889	3	18	60	1845	1782	1150	2765277	2250000	2999999
5	365687	2	6	95	1632	1932	0	3135741	3000000	3749999
6	717880	2	15	60	1542	1560	0	3857135	3750000	4499999
7	1010497	3	16	95	1783	1262	1139	4870734	4500000	5249999
8	766034	2	20	70	1999	1844	0	5640952	5250000	5999999
9	832939	2	10	80	1974	1007	0	6477734	6000000	6749999
10	942168	3	20	70	1323	1901	1999	7422883	6750000	7499999
11	97744	2	17	100	1314	1753	0	7525850	7500000	8249999
12	1106451	3	8	85	1475	1804	1657	8635368	8250000	8999999
13	847806	3	12	75	1044	1646	1298	9488110	9000000	9749999
14	437550	2	5	80	1120	1718	0	9929648	9750000	10499999
15	588749	1	15	75	1316	0	0	10521235	10500000	11249999
16	1052126	3	17	85	1571	1532	1860	11574677	11250000	11999999

Total number of pulses in waveform = 36



Type 5 Radar Waveform_11

Waveform Num = 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	385006	1	19	80	1124	0	0	385006	0	1199999
2	1362754	2	7	85	1437	1790	0	1748884	1200000	2399999
3	706157	3	18	85	1684	1657	1414	2458268	2400000	3599999
4	1332021	2	20	75	1237	1337	0	3795044	3600000	4799999
5	1353526	3	13	50	1382	1165	1767	5151144	4800000	5999999
6	1325451	1	20	65	1913	0	0	6480909	6000000	7199999
7	1278176	1	9	50	1732	0	0	7760998	7200000	8399999
8	1516413	2	14	100	1168	1855	0	9279143	8400000	9599999
9	522433	3	14	70	1746	1806	1212	9804599	9600000	10799999
10	2007233	3	6	90	1111	1369	1347	11816596	10800000	11999999

Total number of pulses in waveform = 21

Type 5 Radar Waveform_12

Waveform Num = 12
Num of Bursts = 17
Burst Interval (us) = 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	20563	1	7	70	1980	0	0	203563	0	705881
2	574625	2	5	85	1159	1077	0	780168	705882	1411763
3	1138025	2	12	55	1118	1285	0	1920429	1411764	2117645
4	494892	1	12	95	1328	0	0	2417704	2117646	2823527
5	741052	1	11	65	1993	0	0	3160084	2823528	3529409
6	482399	1	20	75	1581	0	0	3644476	3529410	4235291
7	955451	1	10	50	1278	0	0	4601508	4235292	4941173
8	670368	2	11	60	1968	1804	0	5273154	4941174	5647055
9	991752	3	15	90	1687	1195	1028	6268678	5647056	6352937
10	762950	3	18	50	1946	1451	1475	7035538	6352938	7058819
11	664363	1	5	50	1926	0	0	7704773	7058820	7764701
12	361945	2	11	60	1104	1178	0	8068644	7764702	8470583
13	493887	2	14	70	1916	1324	0	8564813	8470584	9176465
14	628324	1	5	65	1218	0	0	9196377	9176466	9882347
15	758522	1	17	75	1075	0	0	9956117	9882348	10588229
16	834396	1	7	90	1422	0	0	10791588	10588230	11294111
17	993105	3	16	85	1693	1171	1992	11786115	11294112	11999993

Total number of pulses in waveform = 28

Type 5 Radar Waveform_13

Waveform Num = 13
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	434900	1	12	55	1298	0	0	434900	0	631578
2	277368	3	19	55	1390	1280	1746	713566	631579	1263157
3	548048	1	15	85	1412	0	0	1266030	1263158	1894736
4	889510	3	17	50	1915	1048	1171	2156952	1894737	2526316
5	849911	1	15	85	1294	0	0	3010997	2526316	3157894
6	314861	3	9	85	1145	1499	1145	3327152	3157895	3789473
7	970132	1	12	80	1980	0	0	4301073	3789474	4421052
8	152322	1	17	90	1002	0	0	4455375	4421053	5052631
9	758245	3	18	55	1961	1373	1741	5214622	5052632	5684210
10	913861	2	7	55	1220	1707	0	6133558	5684211	6315789
11	695185	2	9	65	1898	1319	0	6831670	6315790	6947368
12	315120	3	17	70	1385	1881	1939	7150007	6947369	7578947
13	578829	3	13	75	1409	1351	1463	7734041	7578948	8210526
14	700620	3	8	75	1057	1440	1905	8438884	8210527	8842105
15	983208	2	11	85	1632	1418	0	9426494	8842106	9473684
16	495614	1	13	100	1967	0	0	9925158	9473685	10105263
17	247393	2	20	65	1444	1097	0	10174518	10105264	10736842
18	654457	2	9	60	1856	1620	0	10831516	10736843	11368421
19	1021160	3	8	60	1820	1909	1612	11856152	11368422	12000000

Total number of pulses in waveform = 40



Type 5 Radar Waveform_14

Waveform Num = 14
Num of Bursts = 15
Burst Interval (us)= 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	595874	1	12	90	1766	0	0	595874	0	799999
2	821760	2	20	75	1427	1293	0	1419400	800000	1599999
3	794388	2	11	60	1303	1042	0	2216508	1600000	2399999
4	316193	3	19	100	1475	1842	1805	2535046	2400000	3199999
5	696590	3	15	65	1787	1949	1675	3236758	3200000	3999999
6	1467067	3	5	100	1541	1139	1299	4709236	4000000	4799999
7	748825	1	20	75	1350	0	0	5462040	4800000	5599999
8	199194	3	18	100	1027	1238	1078	5662584	5600000	6399999
9	860354	3	11	70	1191	1443	1184	6526281	6400000	7199999
10	1430089	2	12	90	1493	1206	0	7960188	7200000	7999999
11	183388	2	8	95	1656	1820	0	8146275	8000000	8799999
12	1135994	2	15	60	1477	1913	0	9285745	8800000	9599999
13	658940	3	10	90	1782	1596	1149	9948075	9600000	10399999
14	596560	3	19	65	1686	1901	1993	10549162	10400000	11199999
15	806729	1	19	55	1300	0	0	11361471	11200000	11999999

Total number of pulses in waveform = 34

Type 5 Radar Waveform_15

Waveform Num = 15
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	791750	3	9	75	1338	1174	1920	791750	0	923076
2	1014018	3	16	95	1570	1985	1780	1810200	923077	1846153
3	135903	2	7	75	1581	1089	0	1951438	1846154	2769230
4	854953	3	5	70	1572	1537	1887	2809061	2769231	3692307
5	1487703	1	14	95	1430	0	0	4301760	3692308	4615384
6	726568	1	11	50	1755	0	0	5029758	4615385	5538461
7	1203462	2	17	85	1275	1494	0	6234975	5538462	6461538
8	565521	2	15	55	1926	1894	0	6803265	6461539	7384615
9	615068	2	12	90	1486	1088	0	7422153	7384616	8307692
10	1235993	1	15	70	1495	0	0	8660720	8307693	9230769
11	814141	1	16	85	1063	0	0	9476356	9230770	10153846
12	988220	2	17	100	1625	1663	0	10465639	10153847	11076923
13	610422	1	16	90	1294	0	0	11079349	11076924	12000000

Total number of pulses in waveform = 24

Type 5 Radar Waveform_16

Waveform Num = 16
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	654814	3	10	50	1840	1611	1472	654814	0	1199999
2	1237024	3	11	80	1266	1019	1739	1896761	1200000	2399999
3	1676421	1	7	65	1747	0	0	3577206	2400000	3599999
4	713684	2	7	75	1097	1925	0	4292637	3600000	4799999
5	667434	1	5	50	1817	0	0	4963093	4800000	5999999
6	1422960	1	9	90	1289	0	0	6387870	6000000	7199999
7	1830250	2	16	90	1922	1811	0	8219409	7200000	8399999
8	562855	2	9	60	1506	1918	0	8785997	8400000	9599999
9	870666	2	19	80	1242	1420	0	9660087	9600000	10799999
10	1423339	2	17	55	1142	1935	0	11086088	10800000	11999999

Total number of pulses in waveform = 19



Type 5 Radar Waveform_17

Waveform Num = 17
Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	223198	1	9	60	1088	0	0	223198	0	1090908
2	1244560	2	9	90	1028	1879	0	1468846	1090909	2181817
3	736834	1	20	70	1349	0	0	2208587	2181818	3272726
4	2016141	3	8	75	1851	1628	1016	4226077	3272727	4363635
5	840013	2	20	55	1678	1376	0	5070585	4363636	5454544
6	910717	2	10	80	1537	1510	0	5984356	5454545	6545453
7	1474066	1	9	100	1261	0	0	7461469	6545454	7636362
8	634266	2	20	100	1248	1213	0	8096996	7636363	8727271
9	1700247	3	17	90	1003	1712	1518	9799704	8727272	9818180
10	699542	3	14	85	1108	1843	1851	10503479	9818181	10909089
11	1176124	2	19	85	1460	1556	0	11684405	10909090	11999998

Total number of pulses in waveform = 22

Type 5 Radar Waveform_18

Waveform Num = 18
Num of Bursts = 8
Burst Interval (us)= 1500000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	1438756	3	17	65	1393	1687	1091	1438756	0	1499999
2	1146327	1	19	95	1425	0	0	2589254	1500000	2999999
3	1630293	2	11	60	1363	1905	0	4220972	3000000	4499999
4	716346	2	18	70	1817	1038	0	4940586	4500000	5999999
5	1676008	1	7	60	1319	0	0	6619449	6000000	7499999
6	2148434	3	5	95	1845	1269	1226	8769202	7500000	8999999
7	908635	3	12	70	1291	1067	1980	9682177	9000000	10499999
8	2024079	2	5	100	1246	1299	0	11710594	10500000	11999999

Total number of pulses in waveform = 17

Type 5 Radar Waveform_19

Waveform Num = 19
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	157197	3	11	65	1271	1387	1109	157197	0	923076
2	942008	3	12	70	1718	1896	1354	1102972	923077	1846153
3	1613852	2	20	65	1519	1688	0	2721792	1846154	2769230
4	543098	3	14	90	1311	1331	1341	3268097	2769231	3692307
5	1017991	3	16	85	1295	1695	1621	4290071	3692308	4615384
6	580125	2	12	90	1159	1549	0	4874807	4615385	5538461
7	1194942	1	16	75	1824	0	0	6072457	5538462	6461538
8	459745	2	15	55	1824	1762	0	6534026	6461539	7384615
9	1202363	2	12	70	1010	1578	0	7739975	7384616	8307692
10	1154842	2	11	65	1713	1293	0	8897405	8307693	9230769
11	964595	1	14	50	1687	0	0	9865006	9230770	10153846
12	993737	1	20	95	1124	0	0	10860330	10153847	11076923
13	706004	2	8	70	1156	1980	0	11567458	11076924	12000000

Total number of pulses in waveform = 27



Type 5 Radar Waveform_20

Waveform Num = 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	281028	2	11	85	1064	1972	0	281028	0	599999
2	825078	3	9	75	1704	1192	1768	1109142	600000	1199999
3	151298	2	6	95	1266	1093	0	1265104	1200000	1799999
4	1114687	1	7	90	1726	0	0	2382150	1800000	2399999
5	170428	2	19	95	1950	1095	0	2554304	2400000	2999999
6	659149	2	16	70	1609	1652	0	3216498	3000000	3599999
7	402669	2	16	55	1679	1664	0	3622328	3600000	4199999
8	738733	2	15	90	1745	1588	0	4364404	4200000	4799999
9	544799	2	7	85	1223	1948	0	4912536	4800000	5399999
10	1050645	2	10	100	1357	1849	0	5966352	5400000	5999999
11	577208	3	16	100	1588	1365	1143	6546766	6000000	6599999
12	329667	3	15	55	1250	1129	1916	6880529	6600000	7199999
13	890422	2	20	85	1241	1062	0	7775246	7200000	7799999
14	481179	1	10	55	1933	0	0	8258728	7800000	8399999
15	317921	3	6	75	1273	1211	1842	8578582	8400000	8999999
16	733825	3	17	90	1949	1074	1645	9316733	9000000	9599999
17	671822	3	10	100	1625	1053	1999	9693223	9600000	10199999
18	410321	2	14	100	1982	1054	0	10408221	10200000	10799999
19	712639	3	9	70	1298	1868	1995	11123896	10800000	11399999
20	693876	3	10	55	1833	1909	1248	11822933	11400000	11999999

Total number of pulses in waveform = 46

Type 5 Radar Waveform_21

Waveform Num = 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	591457	1	20	50	1987	0	0	591457	0	1499999
2	1955884	2	15	60	1297	1793	0	2549328	1500000	2999999
3	847918	1	14	80	1580	0	0	3400336	3000000	4499999
4	1440721	3	20	90	1882	1626	1003	4842637	4500000	5999999
5	2380075	3	12	100	1353	1077	1612	7227223	6000000	7499999
6	1537579	3	16	80	1494	1623	1884	8768844	7500000	8999999
7	569039	2	10	75	1258	1263	0	9342884	9000000	10499999
8	1424806	3	9	60	1730	1533	1745	10770211	10500000	11999999

Total number of pulses in waveform = 18

Type 5 Radar Waveform_22

Waveform Num = 22
Num of Bursts = 11
Burst Interval (us) = 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	143788	2	20	70	1473	1770	0	143788	0	1090908
2	1856648	1	14	100	1130	0	0	2003679	1090909	2181817
3	326840	1	8	90	1302	0	0	2331449	2181818	3272726
4	1326968	2	11	85	1374	1047	0	3659719	3272727	4363635
5	1208261	2	14	70	1255	1936	0	4870401	4363636	5454544
6	977581	2	16	90	1765	1918	0	5851173	5454545	6545453
7	1140642	1	7	65	1979	0	0	6995498	6545454	7636362
8	809017	3	17	100	1274	1843	1295	7806494	7636363	8727271
9	1955698	3	6	85	1537	1292	1288	9766604	8727272	9818180
10	1085342	3	9	70	1796	1066	1638	10856063	9818181	10909089
11	884912	2	18	60	1417	1206	0	11745475	10909090	11999998

Total number of pulses in waveform = 22

**Type 5 Radar Waveform_23**

Waveform Num = 23
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	696786	1	16	95	1482	0	0	696786	0	1090908
2	1278960	2	7	85	1821	1884	0	1977228	1090909	2181817
3	484478	2	15	80	1207	1292	0	2465411	2181818	3272726
4	828781	1	19	70	1677	0	0	3296691	3272727	4363635
5	2135461	1	18	55	1315	0	0	5433829	4363636	5454544
6	593253	3	12	85	1392	1494	1391	6028397	5454545	6545453
7	1269543	1	9	75	1824	0	0	7302217	6545454	7636362
8	464498	2	12	80	1058	1163	0	7768539	7636363	8727271
9	1154949	3	12	50	1233	1358	1756	8925709	8727272	9818180
10	1223746	1	13	100	1814	0	0	10153802	9818181	10909089
11	1101031	2	18	75	1762	1596	0	11256647	10909090	11999998

Total number of pulses in waveform = 19

Type 5 Radar Waveform_24

Waveform Num = 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	59337	3	7	90	1689	1960	1041	59337	0	1090908
2	1669830	2	12	70	1168	1452	0	1733857	1090909	2181817
3	928634	3	17	95	1794	1365	1358	2665111	2181818	3272726
4	1481704	2	12	70	1637	1119	0	4151332	3272727	4363635
5	1294877	1	12	80	1860	0	0	5448965	4363636	5454544
6	680895	3	15	90	1402	1549	1407	6131720	5454545	6545453
7	996696	2	9	100	1897	1296	0	7132774	6545454	7636362
8	602618	3	7	65	1439	1637	1978	7738585	7636363	8727271
9	1774147	2	10	60	1430	1495	0	9517786	8727272	9818180
10	665102	2	5	65	1644	1552	0	10185813	9818181	10909089
11	1744657	2	8	95	1845	1129	0	11933666	10909090	11999998

Total number of pulses in waveform = 25

Type 5 Radar Waveform_25

Waveform Num = 25
Num of Bursts = 9
Burst Interval (us)= 1333333

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval(us)
1	995913	1	12	80	1324	0	0	995913	0	1333332
2	1502947	3	13	90	1227	1334	1770	2500184	1333333	2666665
3	179734	1	9	65	1432	0	0	2684249	2666666	3999998
4	2504735	3	16	75	1632	1071	1453	5190416	3999999	5333331
5	631238	3	18	100	1111	1409	1168	5825810	5333332	6666664
6	1076286	1	9	55	1106	0	0	6905784	6666665	7999997
7	1964203	3	5	50	1312	1528	1402	8871093	7999998	9333330
8	1309473	3	17	60	1551	1450	1031	10184808	9333331	10666663
9	690342	1	6	80	1730	0	0	10879182	10666664	11999996

Total number of pulses in waveform = 19



Type 5 Radar Waveform_26

Waveform Num = 26
Num of Bursts = 17
Burst Interval (us) = 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	384443	1	12	100	1486	0	0	384443	0	705881
2	568116	3	9	65	1473	1398	1679	954045	705882	1411763
3	1055487	3	15	50	1631	1677	1644	2014082	1411764	2117645
4	572322	2	11	60	1920	1958	0	2591356	2117646	2823527
5	786300	1	20	65	1424	0	0	3381534	2823528	3529409
6	779937	3	7	70	1898	1111	1756	4162895	3529410	4235291
7	515906	2	12	60	1240	1753	0	4683566	4235292	4941173
8	849619	2	17	90	1988	1744	0	5536378	4941174	5647055
9	168045	2	14	85	1395	1404	0	5708155	5647056	6352937
10	1209480	2	10	75	1148	1300	0	6920434	6352938	7058819
11	350279	2	17	55	1899	1404	0	7273161	7058820	7764701
12	523170	1	12	70	1116	0	0	7799634	7764702	8470583
13	1146775	2	10	60	1936	1671	0	8947525	8470584	9176465
14	903980	2	11	80	1196	1629	0	9855112	9176466	9882347
15	506032	3	20	60	1659	1967	1155	10363969	9882348	10588229
16	294888	2	18	80	1186	1735	0	10663638	10588230	11294111
17	1153168	1	6	90	1042	0	0	11819727	11294112	11999993

Total number of pulses in waveform = 34

Type 5 Radar Waveform_27

Waveform Num = 27
Num of Bursts = 19
Burst Interval (us) = 631579

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	67410	3	16	75	1665	1323	1018	67410	0	631578
2	782274	3	17	95	1395	1653	1035	853690	631579	1263157
3	973151	1	17	75	1698	0	0	1830924	1263158	1894736
4	411739	2	6	80	1389	1533	0	2244361	1894737	2526315
5	861211	1	5	55	1342	0	0	3108494	2526316	3157894
6	676222	1	16	75	1369	0	0	3786058	3157895	3789473
7	179761	1	20	55	1868	0	0	3967188	3789474	4421052
8	947756	3	6	95	1654	1018	1445	4916812	4421053	5052631
9	607017	1	16	70	1827	0	0	5527946	5052632	5684210
10	525057	1	20	55	1257	0	0	6054830	5684211	6315789
11	406449	2	20	85	1366	1016	0	6462536	6315790	6947368
12	974283	2	13	85	1662	1044	0	7439201	6947369	7578947
13	195806	3	20	100	1544	1265	1890	7637713	7578948	8210526
14	580981	3	20	65	1416	1587	1430	8223393	8210527	8842105
15	709395	1	18	90	1554	0	0	8937221	8842106	9473684
16	1131051	2	15	55	1926	1527	0	10069826	9473685	10105263
17	455544	1	11	85	2000	0	0	10528823	10105264	10736842
18	727541	1	8	100	1140	0	0	11258364	10736843	11368421
19	230297	1	14	85	1503	0	0	11489801	11368422	12000000

Total number of pulses in waveform = 33

Type 5 Radar Waveform_28

Waveform Num = 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	549649	2	18	90	1574	1402	0	549649	0	749999
2	616789	3	13	70	1799	1156	1067	1169414	750000	1499999
3	816590	3	12	60	1036	1500	1422	1990026	1500000	2249999
4	514493	1	14	65	1786	0	0	2508477	2250000	2999999
5	810404	2	14	90	1332	1847	0	3320667	3000000	3749999
6	751326	1	9	50	1852	0	0	4075172	3750000	4499999
7	553519	2	17	95	1620	1469	0	4630543	4500000	5249999
8	890495	3	16	60	1182	1762	1234	5524127	5250000	5999999
9	644580	3	19	65	1565	1066	1519	6172885	6000000	6749999
10	580155	1	5	65	1957	0	0	6757190	6750000	7499999
11	993037	1	12	50	1661	0	0	7752184	7500000	8249999
12	1043360	3	20	50	1366	1425	1094	8797205	8250000	8999999
13	445108	1	17	90	1956	0	0	9246198	9000000	9749999
14	729512	3	19	95	1650	1759	1290	9977666	9750000	10499999
15	998027	3	5	100	1287	1461	1900	10980392	10500000	11249999
16	877657	2	13	80	1000	1040	0	11862697	11250000	11999999

Total number of pulses in waveform = 34



Type 5 Radar Waveform_29

Waveform Num = 29
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	549525	1	12	75	1971	0	0	549525	0	705881
2	344226	3	9	55	1724	1726	1951	895722	705882	1411763
3	956048	1	15	95	1701	0	0	1857171	1411764	2117645
4	341899	3	20	65	1433	1440	1029	2200771	2117646	2823527
5	904692	1	5	90	1656	0	0	3109365	2823528	3529409
6	468422	1	15	60	1427	0	0	3579443	3529410	4235291
7	684988	1	6	55	1935	0	0	4265858	4235292	4941173
8	1218478	2	9	70	1972	1320	0	5486271	4941174	5647055
9	580077	1	13	90	1412	0	0	6069640	5647056	6352937
10	869783	1	13	75	1024	0	0	6940835	6352938	7058819
11	691961	1	12	60	1314	0	0	7633820	7058820	7764701
12	306381	3	20	85	1833	1749	1887	7941515	7764702	8470583
13	921666	2	15	90	1155	1204	0	8868950	8470584	9176465
14	452942	1	19	100	1821	0	0	9324251	9176466	9882347
15	1138794	2	10	95	1702	1476	0	10464866	9882348	10588229
16	820374	3	14	50	1084	1590	1085	11288418	10588230	11294111
17	47309	3	20	60	1435	1401	1368	11339486	11294112	11969993

Total number of pulses in waveform = 30

Type 5 Radar Waveform_30

Waveform Num = 30
Num of Bursts = 18
Burst Interval (us) = 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	487939	2	16	85	1961	1636	0	487939	0	666666
2	558754	1	16	95	1538	0	0	1050290	666667	1333333
3	781621	3	20	50	1113	1471	1157	1833449	1333334	2000000
4	216256	1	15	80	1670	0	0	2053446	2000001	2666667
5	931529	1	20	100	1369	0	0	2986645	2666668	3333334
6	630017	2	6	75	1723	1335	0	3618031	3333335	4000001
7	987879	2	12	75	1708	1421	0	4608968	4000002	4666668
8	275771	1	20	55	1900	0	0	4887868	4666669	5333335
9	469683	2	9	65	1905	1992	0	5359451	5333336	6000002
10	1066181	2	11	95	1159	1904	0	6429529	6000003	6666669
11	561958	2	9	85	1430	1252	0	6994550	6666670	7333336
12	805617	1	5	100	1273	0	0	7802849	7333337	8000003
13	506203	2	12	70	1828	1587	0	8310325	8000004	8666670
14	573482	2	14	60	1937	1426	0	8887222	8666671	9333337
15	699017	1	19	50	1871	0	0	9589602	9333338	10000004
16	691877	1	15	75	1577	0	0	10283350	10000005	10666671
17	1024386	3	19	60	1816	1586	1460	11309313	10666672	11333338
18	22683	3	13	85	1651	1345	1451	11336858	11333339	12000005

Total number of pulses in waveform = 32

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	5328	1	16	5328	1
2	5328	1	17	5328	1
3	5328	1	18	5328	1
4	5328	1	19	5328	1
5	5328	1	20	5328	1
6	5328	1	21	5328	1
7	5328	1	22	5328	1
8	5328	1	23	5328	1
9	5328	1	24	5328	1
10	5328	1	25	5328	1
11	5328	1	26	5328	1
12	5328	1	27	5328	1
13	5328	1	28	5328	1
14	5328	1	29	5328	1
15	5328	1	30	5328	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	5300	21	2	5303	6
11	5331	33	9	5335	27
16	5328	48	21	5301	63
22	5341	66	23	5339	69
26	5310	78	31	5346	93
29	5340	87	37	5341	111
31	5338	93	39	5312	117
43	5321	129	--	--	--
46	5327	138	--	--	--
53	5353	159	--	--	--
57	5354	171	--	--	--
67	5311	201	--	--	--
76	5333	228	--	--	--
83	5319	249	--	--	--
94	5315	282	--	--	--
96	5336	288	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5321	18	18	5299	54
15	5332	45	23	5303	69
18	5349	54	25	5313	75
19	5319	57	28	5332	84
20	5350	60	33	5356	99
24	5348	72	61	5335	183
25	5353	75	62	5320	186
43	5331	129	76	5321	228
46	5322	138	96	5343	288
71	5333	213	97	5357	291
78	5314	234	98	5306	294
88	5358	264	--	--	--
90	5341	270	--	--	--
96	5329	288	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5355	15	12	5303	36
17	5303	51	41	5354	123
19	5305	57	42	5352	126
28	5341	84	43	5344	129
32	5300	96	50	5357	150
41	5302	123	52	5339	156
46	5328	138	54	5346	162
70	5340	210	87	5309	261
77	5307	231	88	5304	264
79	5325	237	--	--	--
85	5337	255	--	--	--
98	5314	294	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5351	6	2	5328	6
6	5349	18	9	5338	27
9	5307	27	11	5318	33
10	5320	30	28	5300	84
14	5313	42	35	5325	105
19	5352	57	39	5314	117
22	5336	66	42	5309	126
37	5311	111	49	5346	147
44	5306	132	55	5307	165
48	5312	144	76	5319	228
66	5332	198	80	5308	240
68	5305	204	85	5306	255
71	5304	213	86	5334	258
79	5341	237	87	5330	261
82	5310	246	96	5326	288
84	5314	252	--	--	--
97	5353	291	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5314	12	0	5350	0
8	5350	24	9	5324	27
11	5298	33	14	5303	42
41	5330	123	18	5307	54
44	5318	132	30	5345	90
48	5334	144	36	5343	108
49	5304	147	57	5299	171
58	5341	174	61	5342	183
59	5315	177	62	5349	186
61	5320	183	64	5338	192
72	5351	216	66	5352	198
75	5347	225	68	5326	204
79	5325	237	89	5358	267
86	5336	258	93	5334	279
--	--	--	97	5313	291
--	--	--	99	5329	297

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5352	12	3	5314	9
15	5345	45	8	5301	24
24	5355	72	25	5353	75
44	5341	132	50	5338	150
59	5349	177	69	5311	207
60	5299	180	73	5324	219
63	5332	189	82	5306	246
64	5357	192	83	5341	249
65	5320	195	86	5349	258
73	5311	219	98	5304	294
84	5353	252	--	--	--
94	5321	282	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5335	21	6	5328	18
8	5307	24	8	5331	24
9	5300	27	17	5300	51
20	5309	60	18	5305	54
36	5350	108	24	5330	72
56	5325	168	30	5358	90
81	5346	243	35	5321	105
84	5314	252	56	5329	168
89	5347	267	61	5334	183
94	5338	282	69	5315	207
--	--	--	70	5327	210
--	--	--	71	5352	213
--	--	--	94	5312	282

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
15	5352	45	5	5299	15
19	5310	57	16	5346	48
24	5298	72	35	5342	105
36	5319	108	43	5307	129
40	5342	120	45	5323	135
52	5327	156	54	5308	162
56	5356	168	86	5357	258
66	5304	198	--	--	--
70	5317	210	--	--	--
71	5330	213	--	--	--
76	5353	228	--	--	--
79	5333	237	--	--	--
88	5325	264	--	--	--
92	5321	276	--	--	--
93	5311	279	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5347	6	2	5300	6
4	5346	12	16	5346	48
5	5317	15	20	5345	60
20	5311	60	63	5330	189
23	5300	69	70	5337	210
24	5342	72	71	5323	213
25	5351	75	76	5343	228
28	5324	84	--	--	--
35	5334	105	--	--	--
36	5310	108	--	--	--
37	5358	111	--	--	--
39	5340	117	--	--	--
67	5326	201	--	--	--
88	5305	264	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5353	12	3	5344	9
11	5299	33	10	5320	30
14	5352	42	18	5347	54
30	5350	90	19	5339	57
33	5333	99	20	5343	60
34	5310	102	31	5308	93
36	5325	108	37	5317	111
41	5308	123	43	5342	129
46	5339	138	62	5315	186
62	5331	186	63	5309	189
66	5307	198	66	5334	198
68	5348	204	74	5333	222
71	5302	213	82	5330	246
82	5343	246	83	5358	249
84	5344	252	97	5298	291
89	5341	267	--	--	--
91	5347	273	--	--	--
92	5354	276	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5351	6	2	5351	6
8	5324	24	17	5344	51
29	5356	87	24	5320	72
32	5308	96	33	5314	99
38	5310	114	42	5308	126
49	5343	147	56	5339	168
50	5331	150	66	5345	198
54	5313	162	67	5301	201
81	5334	243	70	5335	210
--	--	--	71	5332	213
--	--	--	75	5354	225
--	--	--	79	5340	237
--	--	--	84	5333	252
--	--	--	91	5316	273

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
16	5340	48	0	5316	0
17	5307	51	4	5323	12
20	5331	60	5	5319	15
31	5355	93	8	5342	24
33	5351	99	24	5304	72
64	5338	192	41	5357	123
67	5336	201	44	5358	132
68	5342	204	49	5312	147
69	5334	207	56	5314	168
75	5311	225	63	5340	189
84	5345	252	70	5303	210
93	5328	279	86	5343	258
96	5324	288	--	--	--
99	5302	297	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5340	12	0	5321	0
11	5335	33	9	5322	27
12	5326	36	11	5338	33
15	5333	45	16	5337	48
16	5303	48	17	5307	51
30	5338	90	25	5326	75
40	5346	120	29	5299	87
53	5336	159	42	5357	126
77	5314	231	51	5303	153
85	5349	255	55	5306	165
99	5322	297	61	5349	183
--	--	--	79	5311	237
--	--	--	82	5304	246
--	--	--	83	5309	249

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5336	0	3	5317	9
7	5304	21	4	5311	12
10	5350	30	6	5320	18
17	5355	51	7	5351	21
20	5299	60	12	5352	36
23	5301	69	18	5301	54
26	5300	78	28	5330	84
44	5344	132	29	5347	87
46	5305	138	37	5328	111
47	5335	141	40	5350	120
49	5323	147	48	5339	144
50	5308	150	69	5354	207
55	5348	165	70	5334	210
59	5354	177	80	5306	240
66	5311	198	83	5322	249
88	5317	264	84	5331	252
90	5351	270	93	5319	279
95	5333	285	95	5348	285

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5321	30	8	5340	24
11	5302	33	21	5347	63
16	5307	48	29	5331	87
21	5323	63	30	5355	90
28	5306	84	33	5301	99
31	5304	93	54	5344	162
36	5326	108	60	5351	180
42	5333	126	66	5304	198
46	5312	138	67	5313	201
54	5322	162	95	5300	285
60	5356	180	--	--	--
79	5327	237	--	--	--
87	5348	261	--	--	--
96	5358	288	--	--	--

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	5253	1	698	76	1
2	5253	1	718	74	1
3	5253	1	798	67	1
4	5253	1	938	57	1
5	5253	1	518	102	1
6	5253	1	738	72	1
7	5253	1	898	59	1
8	5253	1	3066	18	1
9	5253	1	678	78	1
10	5253	1	918	58	1
11	5253	1	578	92	1
12	5253	1	598	89	1
13	5253	1	778	68	1
14	5253	1	618	86	1
15	5253	1	658	81	1
16	5253	1	2715	20	1
17	5253	1	751	71	1
18	5253	1	2648	20	1
19	5253	1	577	92	1
20	5253	1	2909	19	1
21	5253	1	2667	20	1
22	5253	1	2978	18	1
23	5253	1	2267	24	1
24	5253	1	1725	31	1
25	5253	1	2548	21	1
26	5253	1	2945	18	1
27	5253	1	2994	18	1
28	5253	1	2537	21	1
29	5253	1	1296	41	1
30	5253	1	895	59	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	3.8	152	25	1
2	5270	4.0	186	26	1
3	5270	4.0	175	27	1
4	5270	4.5	200	24	1
5	5270	2.8	162	27	1
6	5270	4.2	226	29	1
7	5270	4.1	188	25	1
8	5270	4.1	155	23	1
9	5270	1.6	167	27	1
10	5270	1.0	172	29	1
11	5270	3.5	184	24	1
12	5270	1.7	198	29	1
13	5270	4.7	188	23	1
14	5270	3.8	219	24	1
15	5270	4.9	175	26	1
16	5270	2.9	194	24	1
17	5270	2.5	227	28	1
18	5270	1.7	156	24	1
19	5270	4.2	214	28	1
20	5270	3.6	153	27	1
21	5270	1.3	203	29	1
22	5270	1.3	195	29	1
23	5270	1.9	225	28	1
24	5270	3.7	208	23	1
25	5270	4.5	150	27	1
26	5270	1.9	163	27	1
27	5270	4.8	187	24	1
28	5270	1.1	165	27	1
29	5270	2.9	172	27	1
30	5270	4.8	180	25	1
Detection Percentage (%)					100%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5289	6.7	467	16	1
2	5289	7.3	417	18	1
3	5289	8.6	297	16	1
4	5289	6.9	430	17	1
5	5289	6.0	271	16	1
6	5289	9.9	405	16	1
7	5289	9.5	254	16	1
8	5289	8.6	302	17	1
9	5289	8.9	495	16	1
10	5289	10.0	299	16	1
11	5289	9.8	271	18	1
12	5289	9.4	372	18	1
13	5289	9.4	365	18	1
14	5289	9.0	320	18	1
15	5289	7.6	391	17	1
16	5289	10.0	303	18	1
17	5289	8.5	451	17	1
18	5289	9.6	350	17	1
19	5289	6.1	460	18	1
20	5289	8.0	421	16	1
21	5289	9.8	496	16	1
22	5289	7.7	410	16	1
23	5289	8.2	376	18	1
24	5289	7.6	311	17	1
25	5289	9.1	396	16	1
26	5289	8.5	383	18	1
27	5289	8.1	296	16	1
28	5289	9.1	424	16	1
29	5289	8.8	393	17	1
30	5289	7.5	485	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	5310	16.0	253	12	1
2	5310	14.4	286	14	1
3	5310	13.6	446	15	1
4	5310	17.1	371	13	1
5	5310	15.9	256	15	1
6	5310	14.3	419	13	1
7	5310	11.0	315	12	1
8	5310	12.0	340	15	1
9	5310	18.3	373	13	1
10	5310	15.9	346	12	1
11	5310	15.7	471	14	1
12	5310	12.6	303	16	1
13	5310	17.4	349	14	1
14	5310	11.9	441	14	1
15	5310	15.6	490	16	1
16	5310	14.6	296	16	1
17	5310	15.1	449	13	1
18	5310	16.0	392	14	1
19	5310	11.4	277	16	1
20	5310	16.4	435	14	1
21	5310	13.0	491	16	1
22	5310	14.0	348	13	1
23	5310	12.1	498	15	1
24	5310	16.9	395	15	1
25	5310	17.6	298	15	1
26	5310	16.1	311	16	1
27	5310	11.1	452	14	1
28	5310	17.1	322	16	1
29	5310	17.9	426	13	1
30	5310	18.4	395	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: $\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100\% + 100\% + 100\% + 100\%) / 4 = 100\% (>80\%)$

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	5260	1	16	5292	1
2	5262	1	17	5294	1
3	5264	1	18	5296	1
4	5266	1	19	5298	1
5	5268	1	20	5300	1
6	5270	1	21	5302	1
7	5272	1	22	5304	1
8	5274	1	23	5306	1
9	5276	1	24	5308	1
10	5278	1	25	5310	1
11	5280	1	26	5312	1
12	5282	1	27	5314	1
13	5284	1	28	5316	1
14	5286	1	29	5318	1
15	5290	1	30	5320	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

Waveform Num = 1										
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	430880	3	15	90	1443	1554	1405	430880	0	631578
2	796091	1	19	80	1423	0	0	1231473	631579	1263157
3	525780	3	6	65	1037	1830	1750	1758676	1263158	1894736
4	204166	1	13	60	1818	0	0	1967459	1894737	2526315
5	1104950	1	6	50	1976	0	0	3074227	2526316	3157894
6	473116	3	17	70	1111	1684	1652	3549319	3157895	3789473
7	830255	1	6	50	1763	0	0	4384021	3789474	4421052
8	622613	1	13	80	1940	0	0	5008397	4421053	5052631
9	585474	2	10	80	1585	1928	0	5595811	5052632	5684210
10	231213	2	12	55	1091	1586	0	5830537	5684211	6315789
11	718512	2	13	85	1496	1100	0	6551726	6315790	6947368
12	419390	2	18	75	1336	1542	0	6973712	6947369	7578947
13	658210	3	10	65	1684	1183	1941	7634800	7578948	8210526
14	1008704	3	17	70	1225	1050	1424	8648312	8210527	8842105
15	545767	3	17	75	1930	1760	1642	9197778	8842106	9473684
16	598058	1	8	75	1774	0	0	9801168	9473685	10105263
17	807078	2	6	55	1860	1630	0	10610020	10105264	10736842
18	314604	2	15	85	1611	1232	0	10928114	10736843	11368421
19	548728	2	9	85	1061	1390	0	11479685	11368422	12000000
Total number of pulses in waveform = 38										

**Type 5 Radar Waveform_2**

Waveform Num = 2
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	464588	1	20	50	1409	0	0	464588	0	999999
2	536750	2	12	85	1174	1375	0	1002747	1000000	1999999
3	1117854	1	16	60	1065	0	0	2123150	2000000	2999999
4	1572271	2	14	75	1595	1680	0	3696486	3000000	3999999
5	1202036	1	12	60	1975	0	0	4901797	4000000	4999999
6	580456	1	11	60	1896	0	0	5484228	5000000	5999999
7	841932	3	8	85	1128	1912	1506	6328056	6000000	6999999
8	986553	3	18	85	1148	1790	1367	7319155	7000000	7999999
9	1554861	3	17	60	1030	1716	1437	8878321	8000000	8999999
10	215337	3	7	100	1616	1787	1554	9097841	9000000	9999999
11	920048	3	13	50	1694	1168	1630	10022846	10000000	10999999
12	1942523	1	14	100	1566	0	0	11969861	11000000	11999999

Total number of pulses in waveform = 24

Type 5 Radar Waveform_3

Waveform Num = 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	46004	3	5	70	1018	1211	1634	46004	0	999999
2	1889090	3	8	85	1115	1294	1329	1938957	1000000	1999999
3	863435	2	19	60	1323	1622	0	2806130	2000000	2999999
4	974360	1	15	50	1492	0	0	3783435	3000000	3999999
5	1017141	1	18	55	1625	0	0	4802068	4000000	4999999
6	704677	3	6	75	1106	1734	1086	5508370	5000000	5999999
7	670033	1	17	100	1048	0	0	6182329	6000000	6999999
8	1247549	2	11	60	1331	1296	0	7430926	7000000	7999999
9	709779	1	8	60	1198	0	0	8143332	8000000	8999999
10	1466982	2	19	65	1523	1114	0	9611512	9000000	9999999
11	1058500	1	8	65	1832	0	0	10672649	10000000	10999999
12	662681	3	15	100	1743	1292	1632	11337162	11000000	11999999

Total number of pulses in waveform = 23

Type 5 Radar Waveform_4

Waveform Num = 4
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	504640	2	13	50	1946	1912	0	504640	0	857142
2	824987	2	18	90	1714	1576	0	1333485	857143	1714285
3	850199	1	12	55	1894	0	0	2186974	1714286	2571428
4	1157266	3	9	80	1981	1381	1142	3346134	2571429	3428571
5	837576	2	16	60	1544	1548	0	4188214	3428572	4285714
6	737628	2	17	100	1776	1701	0	4928934	4285715	5142857
7	368364	1	20	85	1361	0	0	5300775	5142858	6000000
8	994687	2	6	95	1759	1596	0	6296823	6000001	6857143
9	908230	1	9	70	1968	0	0	7208408	6857144	7714286
10	1327554	3	7	95	1995	1988	1942	8537930	7714287	8571429
11	694097	1	20	100	1546	0	0	9237952	8571430	9428572
12	424380	1	13	50	1784	0	0	9863878	9428573	10285715
13	827543	3	14	95	1954	1494	1959	10493205	10285716	11142858
14	782213	2	14	60	1016	1001	0	11280825	11142859	12000001

Total number of pulses in waveform = 26

**Type 5 Radar Waveform_5**

Waveform Num = 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	362882	3	16	70	1230	1351	1199	362882	0	799999
2	582774	3	12	95	1344	1847	1512	949436	800000	1599999
3	823624	2	18	90	1953	1577	0	1777763	1600000	2399999
4	1122561	2	11	70	1509	1069	0	2903854	2400000	3199999
5	974650	2	7	100	1986	1046	0	3881082	3200000	3899999
6	703927	2	6	80	1046	1538	0	4588041	4000000	4799999
7	600182	2	13	60	1439	1386	0	5190807	4800000	5599999
8	1074904	1	17	50	1631	0	0	6268536	5600000	6399999
9	394845	2	12	85	1023	1045	0	6665012	6400000	7199999
10	1323604	1	18	90	1170	0	0	7990684	7200000	7999999
11	494372	1	15	75	1318	0	0	8486226	8000000	8799999
12	524074	2	11	70	1402	1488	0	9011618	8800000	9599999
13	1119415	2	20	60	1886	1008	0	10133923	9600000	10399999
14	763870	3	14	65	1432	1462	1912	10900687	10400000	11199999
15	1062419	1	12	55	1322	0	0	11967912	11200000	11999999

Total number of pulses in waveform = 29

Type 5 Radar Waveform_6

Waveform Num = 6
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	1143160	3	11	70	1094	1441	1502	1143160	0	1199999
2	543175	3	16	50	1241	1177	1583	1690372	1200000	2399999
3	1598964	3	13	60	1350	1141	1883	3293337	2400000	3599999
4	380757	2	16	70	1216	1029	0	3678468	3600000	4799999
5	1237108	3	19	80	1719	1924	1057	4917821	4800000	5999999
6	2082058	2	12	60	1456	1197	0	7004579	6000000	7199999
7	269793	3	7	65	1665	1583	1022	7277025	7200000	8399999
8	1262426	1	8	50	1615	0	0	8543721	8400000	9599999
9	2056470	1	13	50	1916	0	0	10601806	9600000	10799999
10	471071	1	15	70	1438	0	0	11074793	10800000	11999999

Total number of pulses in waveform = 22

Type 5 Radar Waveform_7

Waveform Num = 7
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	382195	1	19	100	1007	0	0	382195	0	1199999
2	1382432	2	6	60	1838	1708	0	1765634	1200000	2399999
3	1306908	3	8	85	1603	1878	1934	3075988	2400000	3599999
4	1120390	3	18	55	1777	1039	1712	4201793	3600000	4799999
5	1528281	1	18	90	1242	0	0	5734602	4800000	5999999
6	649592	2	13	75	1075	1782	0	6385436	6000000	7199999
7	1962471	3	20	50	1079	1401	1446	8350764	7200000	8399999
8	868738	2	9	65	1687	1293	0	9223428	8400000	9599999
9	487212	1	17	65	1881	0	0	9713620	9600000	10799999
10	1719980	2	5	70	1119	1264	0	11435481	10800000	11999999

Total number of pulses in waveform = 20



Type 5 Radar Waveform_8

Waveform Num = 8
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	98487	2	20	50	1360	1230	0	98487	0	749999
2	897653	3	16	80	1231	1557	1703	988730	750000	1499999
3	1071213	3	14	65	1487	1018	1950	2074434	1500000	2249999
4	838568	3	11	55	1391	1699	1292	2917457	2250000	2999999
5	672111	1	16	85	1627	0	0	3593950	3000000	3749999
6	812071	2	19	70	1356	1612	0	4407648	3750000	4499999
7	627508	3	13	50	1061	1171	1551	5038124	4500000	5249999
8	822036	3	19	65	1726	1913	1432	5863943	5250000	5999999
9	717363	1	19	50	1371	0	0	6586377	6000000	6749999
10	443240	3	6	90	1774	1385	1923	7030988	6750000	7499999
11	1141122	1	14	75	1131	0	0	8177192	7500000	8249999
12	578219	1	15	75	1356	0	0	8756542	8250000	8999999
13	275146	3	20	85	1630	1536	1491	9033044	9000000	9749999
14	1139117	3	7	75	1996	1410	1269	10176818	9750000	10499999
15	836827	2	6	55	1375	1364	0	11018320	10500000	11249999
16	333084	3	14	70	1560	1208	1343	11354143	11250000	11999999

Total number of pulses in waveform = 37

Type 5 Radar Waveform_9

Waveform Num = 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	45415	3	15	95	1193	1216	1090	45415	0	599999
2	578232	3	14	100	1622	1871	1625	627146	600000	1199999
3	577826	1	10	60	1764	0	0	1210090	1200000	1799999
4	749479	1	14	65	1586	0	0	1967712	1800000	2399999
5	664856	1	11	60	1710	0	0	2718777	2400000	2999999
6	388329	1	5	60	1997	0	0	3385343	3000000	3599999
7	719484	2	10	85	1134	1626	0	3775669	3600000	4199999
8	717996	3	20	100	1181	1608	1350	4497913	4200000	4799999
9	465332	2	14	50	1923	1989	0	5220048	4800000	5399999
10	449339	1	8	50	1290	0	0	5689292	5400000	5999999
11	539035	1	10	85	1427	0	0	6139921	6000000	6599999
12	962392	2	13	50	1285	1206	0	6680383	6600000	7199999
13	674540	2	14	85	1003	1173	0	7645286	7200000	7799999
14	548115	2	19	100	1101	1317	0	8321982	7800000	8399999
15	548115	3	17	70	1694	1350	1218	8872515	8400000	8999999
16	701113	2	11	55	1145	1559	0	9577890	9000000	9599999
17	490202	1	15	85	1893	0	0	10070796	9600000	10199999
18	170912	1	10	90	1920	0	0	10243601	10200000	10799999
19	909647	2	18	75	1152	1277	0	11155168	10800000	11399999
20	277684	1	10	70	1108	0	0	11435281	11400000	11999999

Total number of pulses in waveform = 35

Type 5 Radar Waveform_10

Waveform Num = 10
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	279648	3	7	65	1809	1155	1174	279648	0	749999
2	1158174	3	20	90	1857	1517	1883	1441960	750000	1499999
3	185512	3	18	80	1847	1251	1125	1632729	1500000	2249999
4	843233	1	6	60	1238	0	0	2480185	2250000	2999999
5	521635	1	13	95	1875	0	0	3003058	3000000	3749999
6	899238	1	8	85	1331	0	0	3904171	3750000	4499999
7	1306569	3	16	95	1846	1260	1462	5212071	4500000	5249999
8	561526	3	19	80	1406	1086	1775	5778165	5250000	5999999
9	511516	2	17	65	1347	1831	0	6293948	6000000	6749999
10	1127994	2	12	95	1427	1356	0	7425120	6750000	7499999
11	269313	3	16	70	1284	1306	1862	7697216	7500000	8249999
12	1116729	1	8	95	1120	0	0	8818397	8250000	8999999
13	319022	2	10	95	1777	1806	0	9138539	9000000	9749999
14	1288165	2	20	75	1663	1083	0	10430287	9750000	10499999
15	741094	2	15	95	1064	1545	0	11174127	10500000	11249999
16	547599	2	12	100	1911	1049	0	11724935	11250000	11999999

Total number of pulses in waveform = 34



Type 5 Radar Waveform_11

Waveform Num = 11
Num of Bursts = 19
Burst Interval (us) = 631579

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	386769	3	10	60	1184	1368	1632	386769	0	631578
2	448781	3	6	100	1426	1460	1412	839724	631579	1263157
3	1039323	2	20	70	1867	1672	0	1883345	1263158	1894736
4	316031	2	10	90	1329	1706	0	2202915	1894737	2526315
5	701718	2	11	65	1414	1873	0	2907668	2526316	3157894
6	809371	3	7	75	1068	1194	1664	3720326	3157895	3789473
7	730890	3	11	95	1208	1512	1053	3797332	3789474	4421052
8	1243334	2	20	55	1542	1991	0	5044439	4421053	5052631
9	557232	2	16	85	1718	1559	0	5605204	5052632	5684210
10	481616	2	20	50	1850	1378	0	6090097	5684211	6315789
11	233591	3	13	70	1678	1402	1833	6326916	6315790	6947368
12	641972	2	17	90	1196	1199	0	6973701	6947369	7578947
13	1160734	3	10	65	1042	1928	1429	8136830	7578948	8210526
14	663649	1	14	60	1345	0	0	8804878	8210527	8842105
15	71751	3	18	100	1888	1383	1844	8877974	8842106	9473684
16	834558	1	17	100	1244	0	0	9717647	9473685	10105263
17	418370	3	15	100	1149	1999	1546	10137261	10105264	10736842
18	685162	3	17	70	1068	1045	1305	10827117	10736843	11368421
19	691795	1	20	95	1058	0	0	11522330	11368422	12000000

Total number of pulses in waveform = 44

Type 5 Radar Waveform_12

Waveform Num = 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	271428	1	11	50	1252	0	0	271428	0	666666
2	614381	2	11	50	1354	1216	0	887061	666667	1333333
3	999592	2	6	55	1579	1941	0	1889223	1333334	2000000
4	180394	2	11	95	1735	1808	0	2073137	2000001	2666667
5	677402	1	8	50	1505	0	0	2754082	2666668	3333334
6	961632	1	17	60	1987	0	0	3717219	3333335	4000001
7	718682	2	19	85	1700	1102	0	4437888	4000002	4666668
8	466892	2	20	50	1801	1646	0	4907582	4666669	5333335
9	699842	2	20	55	1191	1863	0	5610871	5333336	6000002
10	562436	3	17	95	1325	1388	1938	6176361	6000003	6666669
11	876729	3	11	100	1324	1702	1632	7057741	6666670	7333336
12	676487	2	6	80	1682	1971	0	7738886	7333337	8000003
13	811905	3	14	60	1270	1974	1171	8554444	8000004	8666670
14	646721	2	8	100	1416	1409	0	9205580	8666671	9333337
15	449506	2	12	60	1502	1729	0	9657911	9333338	10000004
16	853416	1	7	85	1381	0	0	10514558	10000005	10666671
17	596949	3	15	100	1041	1405	1135	11112888	10666672	11333338
18	397530	1	10	70	1992	0	0	11513999	11333339	12000005

Total number of pulses in waveform = 35

Type 5 Radar Waveform_13

Waveform Num = 13
Num of Bursts = 20
Burst Interval (us) = 6000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	23865	1	11	95	1768	0	0	23865	0	599999
2	761517	3	14	95	1184	1871	1685	787150	6000000	1199999
3	411224	1	15	70	1737	0	0	1203114	12000000	1799999
4	857453	3	8	85	1663	1094	1786	2062304	18000000	2399999
5	722375	1	17	85	1908	0	0	2789222	24000000	2999999
6	538697	1	7	100	1633	0	0	3329827	30000000	3599999
7	419397	1	11	90	1891	0	0	3750857	36000000	4199999
8	844613	2	18	95	1935	1019	0	4597361	42000000	4799999
9	422746	1	13	65	1786	0	0	5023061	48000000	5399999
10	520778	3	18	85	1888	1682	1927	5545625	54000000	5999999
11	628971	1	12	85	1225	0	0	6180093	60000000	6599999
12	529809	3	18	65	1886	1934	1184	6711187	66000000	7199999
13	962064	1	5	100	1918	0	0	7678255	72000000	7799999
14	714454	2	20	80	1712	1017	0	8394627	78000000	8399999
15	70718	1	17	75	1710	0	0	8468074	84000000	8999999
16	882782	3	12	50	1580	1127	1586	9352566	90000000	9599999
17	280125	2	18	75	1198	1130	0	9636984	96000000	10199999
18	1060115	2	5	85	1521	1413	0	10699427	102000000	10799999
19	261471	1	11	70	1156	0	0	10963832	108000000	11399999
20	967589	1	11	65	1365	0	0	11932577	114000000	11999999

Total number of pulses in waveform = 34



Type 5 Radar Waveform_14

Waveform Num = 14
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	56540	2	11	65	1893	1972	0	56540	0	666666
2	1024809	3	13	55	1434	1318	1001	1085214	666667	1333333
3	252913	2	6	80	1002	1140	0	1341880	1333334	2000000
4	1102620	3	5	50	1802	1509	1990	2446642	2000001	2666667
5	631815	2	8	75	1634	1289	0	3083758	2666668	3333334
6	686343	2	17	95	1239	1855	0	3773024	3333335	4000001
7	478185	2	18	50	1234	1387	0	4254303	4000002	4666668
8	642074	3	15	60	1968	1088	1455	4898998	4666669	5333335
9	616944	1	7	100	1938	0	0	5520453	5333336	6000002
10	538424	1	19	95	1623	0	0	6060815	6000003	6666669
11	1006162	1	6	50	1999	0	0	7068600	6666670	7333336
12	638619	1	9	95	1149	0	0	7709218	7333337	8000003
13	550050	3	7	85	1716	1234	1657	8260417	8000004	8666670
14	885149	2	11	60	1879	1613	0	9150173	8666671	9333337
15	454393	1	16	100	1755	0	0	9608058	9333338	10000004
16	1036443	3	6	90	1722	1063	1753	10646256	10000005	10666671
17	261401	1	8	85	1600	0	0	10912195	10666672	11333338
18	490837	1	18	75	1364	0	0	11404632	11333339	12000005

Total number of pulses in waveform = 34

Type 5 Radar Waveform_15

Waveform Num = 15
Num of Bursts = 8
Burst Interval (us) = 1500000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	420945	3	18	50	1028	1725	1148	420945	0	1499999
2	2042608	3	14	75	1142	1449	1594	2467454	1500000	2999999
3	1169477	3	17	80	1276	1674	1095	3641116	3000000	4499999
4	860454	1	18	85	1295	0	0	4505615	4500000	5999999
5	1868822	1	13	50	1272	0	0	6375732	6000000	7499999
6	1375508	2	5	80	1876	1337	0	7752512	7500000	8999999
7	2157003	3	19	100	1172	1179	1318	9912728	9000000	10499999
8	1886237	1	13	90	1145	0	0	11802634	10500000	11999999

Total number of pulses in waveform = 17

Type 5 Radar Waveform_16

Waveform Num = 16
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	217093	1	11	60	1783	0	0	217093	0	631578
2	709806	3	14	70	1832	1212	1812	928682	631579	1263157
3	368031	1	18	70	1642	0	0	1301569	1263158	1894736
4	996687	2	14	90	1825	1375	0	2298898	1894737	2526315
5	689108	3	13	95	1106	1474	1395	2992206	2526316	3157894
6	193687	3	20	60	1148	1774	1780	3189868	3157895	3789473
7	936890	2	13	95	1956	1404	0	4131460	3789474	4421052
8	740229	2	7	60	1123	1936	0	4875049	4421053	5052631
9	793379	3	9	50	1683	1333	1170	5671487	5052632	5684210
10	236326	2	9	70	1355	1637	0	5911999	5684211	6315789
11	796938	3	17	75	1380	1072	1902	6711929	6315790	6947368
12	834761	3	17	75	1896	1398	1118	7551044	6947369	7578947
13	409042	2	14	100	1100	1019	0	7964498	7578948	8210526
14	766071	1	20	50	1997	0	0	8732688	8210527	8842105
15	684481	1	7	90	1512	0	0	9419166	8842106	9473684
16	561480	1	14	70	1667	0	0	9982158	9473685	10105263
17	517347	3	6	50	1368	1173	1970	10501172	10105264	10736842
18	370295	2	18	80	1203	1889	0	10875978	10736843	11368421
19	699242	2	13	90	1346	1385	0	11578312	11368422	12000000

Total number of pulses in waveform = 40



Type 5 Radar Waveform_17

Waveform Num = 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	147636	3	14	65	1788	1365	1287	147636	0	599999
2	692109	1	12	55	1819	0	0	844185	600000	1199999
3	433430	3	13	60	1400	1312	1844	1279434	1200000	1799999
4	815135	2	15	85	1001	1645	0	2099125	1800000	2399999
5	700493	1	19	90	1795	0	0	2802264	2400000	2999999
6	401170	2	8	65	1108	1270	0	3205229	3000000	3599999
7	587143	2	15	80	1649	1942	0	3794760	3600000	4199999
8	980178	1	5	80	1886	0	0	4778519	4200000	4799999
9	55542	3	15	50	1674	1403	1646	4835947	4800000	5399999
10	485124	1	7	85	1389	0	0	5571291	5400000	5999999
11	696803	1	16	90	1555	0	0	6057804	6000000	6599999
12	896803	1	15	75	1199	0	0	6756162	6600000	7199999
13	452731	1	15	75	1783	0	0	7657181	7200000	7799999
14	648879	3	10	90	1316	1694	1685	8111695	7800000	8399999
15	730639	1	8	70	1315	0	0	8765269	8400000	8999999
16	391741	3	7	85	1268	1383	1724	9497223	9000000	9599999
17	844333	2	20	95	1846	1651	0	9893339	9600000	10199999
18	75155	1	19	50	1204	0	0	10741169	10200000	10799999
19	863310	1	20	80	1003	0	0	10817528	10800000	11399999
20		3	10	100	1039	1239	1219	11681841	11400000	11999999

Total number of pulses in waveform = 36

Type 5 Radar Waveform_18

Waveform Num = 18
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	156232	1	8	70	1053	0	0	156232	0	1199999
2	1768117	1	18	70	1870	0	0	1925402	1200000	2399999
3	1038868	1	5	100	1795	0	0	2966140	2400000	3599999
4	1412518	1	11	65	1284	0	0	4380453	3600000	4799999
5	931683	2	13	50	1436	1901	0	5313420	4800000	5999999
6	1361008	1	19	80	1979	0	0	6677765	6000000	7199999
7	1147488	3	19	75	1982	1700	1780	7827232	7200000	8399999
8	953702	1	9	100	1432	0	0	8786396	8400000	9599999
9	1562848	1	6	100	1292	0	0	10350676	9600000	10799999
10	1025930	1	13	60	1845	0	0	11377898	10800000	11999999

Total number of pulses in waveform = 13

Type 5 Radar Waveform_19

Waveform Num = 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	386415	3	14	90	1199	1082	1776	386415	0	1090908
2	1001030	2	8	90	1427	1669	0	1391502	1090909	2181817
3	858191	3	11	80	1995	1665	1566	2252789	2181818	3272726
4	1037583	1	14	85	1724	0	0	3295598	3272727	4363635
5	1692379	3	16	65	1308	1603	1865	4989701	4363636	5454544
6	913807	1	18	70	1797	0	0	5908284	5454545	6545453
7	914794	2	15	60	1426	1319	0	6824875	6545454	7636362
8	1622084	2	15	50	1499	1023	0	8449704	7636363	8727271
9	775558	1	5	100	1112	0	0	9227784	8727272	9818180
10	1201643	3	15	60	1361	1875	1449	10430539	9818181	10909089
11	1439468	1	10	100	1725	0	0	11874692	10909090	11999998

Total number of pulses in waveform = 22



Type 5 Radar Waveform_20

Waveform Num = 20
Num of Bursts = 19
Burst Interval (us) = 631579

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	485482	3	13	100	1859	1070	1787	485482	0	631578
2	158281	3	8	60	1934	1156	1168	648479	631579	1263157
3	1232826	3	6	75	1623	1566	1320	1885563	1263158	1894736
4	536875	1	14	60	1933	0	0	2426947	1894737	2526315
5	572843	3	16	100	1397	1999	1501	3001723	2526316	3157894
6	218556	2	9	100	1705	1113	0	3225176	3157895	3789473
7	1056982	3	19	90	1752	1287	1011	4284976	3789474	4421052
8	685243	3	8	65	1688	1654	1206	4974269	4421053	5052631
9	639313	3	12	85	1821	1818	1093	5618130	5052632	5684210
10	143003	1	17	75	1634	0	0	5765865	5684211	6315789
11	769154	1	12	90	1452	0	0	6536653	6315790	6947368
12	843700	3	15	90	1994	1831	1889	7381805	6947369	7578947
13	734410	1	16	70	1227	0	0	8121929	7578948	8210526
14	678729	2	14	80	1273	1195	0	8801885	8210527	8842105
15	640859	3	14	55	1813	1634	1327	9445212	8842106	9473684
16	475211	2	5	80	1598	1817	0	9925197	9473685	10105263
17	272447	1	20	55	1683	0	0	10201059	10105264	10736842
18	727903	1	12	80	1285	0	0	10930645	10736843	11368421
19	761681	2	6	70	1768	1944	0	11693611	11368422	12000000

Total number of pulses in waveform = 41

Type 5 Radar Waveform_21

Waveform Num = 21
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	203632	2	13	60	1783	1246	0	203632	0	705881
2	791294	2	13	70	1669	1042	0	997955	705882	1411763
3	950704	1	13	85	1829	0	0	1951370	1411764	2117645
4	790035	2	9	100	1251	1726	0	2743234	2117646	2823527
5	81829	2	7	95	1170	1223	0	2828040	2823528	3529409
6	1274786	1	10	80	1748	0	0	4105219	3529410	4235291
7	826053	2	7	50	1302	1122	0	4933020	4235292	4941173
8	108748	2	15	80	1144	1479	0	5044192	4941174	5647055
9	654231	3	17	65	1945	1810	1836	5701046	5647056	6352937
10	883218	3	17	55	1573	1268	1990	6589855	6352938	7058819
11	872672	3	14	95	1303	1532	1648	7467358	7058820	7764701
12	334466	3	19	70	1708	1650	1380	7806307	7764702	8470583
13	942799	1	8	55	1341	0	0	8753824	8470584	9176465
14	799246	2	16	100	1924	1255	0	9554411	9176466	9882347
15	784261	1	19	65	1401	0	0	10341851	9882348	10588229
16	668393	1	11	60	1293	0	0	11011645	10588230	11294111
17	348777	3	13	50	1070	1286	1023	11361715	11294112	11999993

Total number of pulses in waveform = 34

Type 5 Radar Waveform_22

Waveform Num = 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	368776	2	12	95	1449	1411	0	368776	0	999999
2	817078	2	9	85	1454	1496	0	1188714	1000000	1999999
3	1610953	2	6	90	1903	1283	0	2802617	2000000	2999999
4	1152061	3	11	55	1541	1995	1172	3957864	3000000	3999999
5	923593	3	5	85	1834	1602	1699	4886165	4000000	4999999
6	735075	3	17	60	1601	1152	1552	5626375	5000000	5999999
7	984094	1	16	75	1214	0	0	6614774	6000000	6999999
8	1183472	2	11	60	1374	1911	0	7799460	7000000	7999999
9	443518	1	7	55	1423	0	0	8246263	8000000	8999999
10	1412229	3	12	50	1222	1349	1095	9659915	9000000	9999999
11	417591	3	15	85	1630	1107	1441	10081172	10000000	10999999
12	1498272	2	5	100	1857	1379	0	11583622	11000000	11999999

Total number of pulses in waveform = 27



Type 5 Radar Waveform_23

Waveform Num = 23
Num of Bursts = 10
Burst Interval (us)= 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	318244	3	12	55	1654	1580	1263	318244	0	1199999
2	1004702	3	14	65	1202	1989	1187	1327443	1200000	2399999
3	1571722	1	18	100	1910	0	0	2903543	2400000	3599999
4	1454545	3	19	50	1479	1186	1262	4359998	3600000	4799999
5	1220312	1	11	60	1114	0	0	5584237	4800000	5999999
6	420519	1	13	80	1483	0	0	6005870	6000000	7199999
7	1720275	1	7	70	1774	0	0	7727628	7200000	8399999
8	1545287	1	16	60	1042	0	0	9274689	8400000	9599999
9	532485	3	18	95	1752	1858	1591	9808216	9600000	10799999
10	1576884	1	19	100	1028	0	0	11390301	10800000	11999999

Total number of pulses in waveform = 18

Type 5 Radar Waveform_24

Waveform Num = 24
Num of Bursts = 18
Burst Interval (us)= 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	642188	3	18	60	1898	1900	1719	642188	0	666666
2	565029	2	14	50	1927	1265	0	1212734	666667	1333333
3	229697	2	9	65	1412	1376	0	1445623	1333334	2000000
4	617846	1	16	65	1742	0	0	2066257	2000001	2666667
5	950133	1	7	75	1460	0	0	3018132	2666668	3333334
6	958917	2	18	90	1515	1588	0	3978509	3333335	4000001
7	426855	2	18	55	1864	1186	0	4408467	4000002	4666668
8	277510	1	15	70	1374	0	0	4689027	4666669	5333335
9	782894	1	7	60	1926	0	0	5473295	5333336	6000002
10	1046374	3	13	70	1479	1352	1080	6521595	6000003	6666669
11	759736	1	19	85	1238	0	0	7285242	6666670	7333336
12	174314	2	6	55	1716	1270	0	7460794	7333337	8000003
13	1173295	2	20	70	1174	1684	0	8637075	8000004	8666670
14	390870	1	8	55	1230	0	0	9030903	8666671	9333337
15	688438	2	6	80	1078	1651	0	9720471	9333338	10000004
16	425031	1	11	85	1357	0	0	10148231	10000005	10666671
17	1106954	2	15	60	1981	1715	0	11256542	10666672	11333338
18	305533	1	6	70	1866	0	0	11565771	11333339	12000005

Total number of pulses in waveform = 30

Type 5 Radar Waveform_25

Waveform Num = 25
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	860447	3	13	50	1457	1108	1988	860447	0	1090908
2	1050013	1	16	70	2000	0	0	1915013	1090909	2181817
3	949867	1	9	65	1054	0	0	2866880	2181818	3272726
4	1318342	1	10	70	1546	0	0	4186276	3272727	4363635
5	1156553	3	18	70	1794	1639	1152	5344375	4363636	5454544
6	971101	2	9	85	1695	1565	0	6320061	5454545	6545453
7	738309	3	9	50	1609	1575	1393	7061630	6545454	7636362
8	1279207	2	13	70	1202	1651	0	8345414	7636363	8727271
9	1174979	1	10	100	1758	0	0	9523246	8727272	9818180
10	1341302	2	17	55	1434	1345	0	10866306	9818181	10909089
11	1108881	1	11	75	1546	0	0	11977966	10909090	11999998

Total number of pulses in waveform = 20



Type 5 Radar Waveform_26

Waveform Num = 26
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	433525	3	6	80	1520	1021	1882	433525	0	1090908
2	907433	3	12	60	1517	1283	1902	1345381	1090909	2181817
3	947234	3	14	70	1095	1763	1630	2297317	2181818	3272726
4	1773716	2	15	50	1806	1356	0	4075521	3272727	4363635
5	351436	3	5	80	1303	1307	1937	4430119	4363636	5454544
6	1348945	3	13	60	1874	1704	1228	5783611	5454545	6545453
7	835035	1	20	55	1835	0	0	6623452	6545454	7636362
8	1575213	2	13	65	1584	1048	0	8200500	7636363	8727271
9	1482370	1	17	70	1117	0	0	9685502	8727272	9818180
10	306906	2	13	95	1300	1587	0	9993525	9818181	10909089
11	1135571	2	15	75	1859	1304	0	11131983	10909090	11999998

Total number of pulses in waveform = 25

Type 5 Radar Waveform_27

Waveform Num = 27
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	1281459	2	20	65	1414	1646	0	1281459	0	1333332
2	812955	2	13	55	1201	1343	0	2097474	1333333	2666665
3	1852176	1	10	100	1048	0	0	3952194	2666666	3999998
4	1248216	1	17	75	1186	0	0	5201458	3999999	5333331
5	646608	1	6	70	1528	0	0	5849252	5333332	6666664
6	2135284	2	19	55	1451	1639	0	7986064	6666665	7999997
7	824656	2	10	55	1873	1965	0	8813810	7999998	9333330
8	779346	3	18	55	1783	1173	1552	9596994	9333331	10666663
9	1832542	2	10	75	1216	1070	0	11434044	10666664	11999996

Total number of pulses in waveform = 16

Type 5 Radar Waveform_28

Waveform Num = 28
Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	555631	2	6	95	1560	1613	0	555631	0	705881
2	792754	1	11	100	1377	0	0	1351558	705882	1411763
3	90301	3	7	65	1001	1559	1196	1443236	1411764	2117645
4	1218336	1	5	60	1964	0	0	2665328	2117646	2823527
5	682542	1	10	50	1075	0	0	3349834	2823528	3529409
6	199360	1	10	75	1218	0	0	3550269	3529410	4235291
7	1267309	1	8	100	1012	0	0	4818796	4235292	4941173
8	646280	2	20	90	1954	1758	0	5466088	4941174	5647055
9	653378	1	8	80	1789	0	0	6133178	5647056	6352937
10	346873	1	18	100	1089	0	0	6481840	6352938	7058819
11	1110347	2	17	85	1876	1374	0	7593276	7058820	7764701
12	686418	2	18	75	1603	1182	0	8282944	7764702	8470583
13	289015	1	20	90	1080	0	0	8574744	8470584	9176465
14	1167981	1	14	100	1583	0	0	9743805	9176466	9882347
15	672522	1	10	90	1242	0	0	10417910	9882348	10588229
16	374308	2	9	55	1581	1820	0	10793460	10588230	11294111
17	1019573	2	12	80	1296	1151	0	11816434	11294112	11999993

Total number of pulses in waveform = 25



Type 5 Radar Waveform_29

Waveform Num = 29
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	576288	1	5	75	1030	0	0	576288	0	705881
2	690017	1	9	50	1536	0	0	1267335	705882	1411763
3	703772	2	18	80	1889	1702	0	1972643	1411764	2117645
4	377229	3	20	70	1405	1293	1974	2353463	2117646	2823527
5	953790	3	5	90	1849	1451	1355	3311925	2823528	3529409
6	400392	3	5	50	1171	1903	1301	3716972	3529410	4235291
7	1139615	1	5	95	1131	0	0	4860962	4235292	4941173
8	560316	2	11	55	1365	1173	0	5422409	4941174	5647055
9	239149	1	9	60	1957	0	0	5664096	5647056	6352937
10	1009690	2	18	95	1893	1763	0	6675743	6352938	7058819
11	449326	1	17	55	1574	0	0	7128725	7058820	7764701
12	704256	1	7	100	1860	0	0	7834555	7764702	8470583
13	903873	1	15	55	1676	0	0	8740288	8470584	9176465
14	956304	3	7	70	1609	1591	1981	9698268	9176466	9882347
15	584143	3	18	90	1277	1963	1544	10287592	9882348	10588229
16	730969	1	20	80	1411	0	0	11023345	10588230	11294111
17	808970	2	19	60	1197	1671	0	11833726	11294112	11999993

Total number of pulses in waveform = 31

Type 5 Radar Waveform_30

Waveform Num = 30
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	956927	1	5	95	1062	0	0	956927	0	999999
2	236681	1	13	85	1737	0	0	1194670	1000000	1999999
3	976739	2	7	65	1696	1470	0	2173146	2000000	2999999
4	1738604	3	9	95	1950	1161	1116	3914916	3000000	3999999
5	385516	1	8	85	1090	0	0	4304659	4000000	4999999
6	802833	1	14	70	1791	0	0	5108582	5000000	5999999
7	1161388	2	7	50	1903	1111	0	6271761	6000000	6999999
8	963840	1	13	75	1172	0	0	7238615	7000000	7999999
9	1685322	3	8	75	1972	1664	1653	8925109	8000000	8999999
10	376706	1	17	75	1972	0	0	9307104	9000000	9999999
11	1206198	1	12	70	1893	0	0	10515274	10000000	10999999
12	594984	3	19	85	1622	1293	1458	11112151	11000000	11999999

Total number of pulses in waveform = 20

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	5328	1	16	5328	1
2	5328	1	17	5328	1
3	5328	1	18	5328	1
4	5328	1	19	5328	1
5	5328	1	20	5328	1
6	5328	1	21	5328	1
7	5328	1	22	5328	1
8	5328	1	23	5328	1
9	5328	1	24	5328	1
10	5328	1	25	5328	1
11	5328	1	26	5328	1
12	5328	1	27	5328	1
13	5328	1	28	5328	1
14	5328	1	29	5328	1
15	5328	1	30	5328	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5328	33	6	5325	18
15	5340	45	11	5313	33
18	5309	54	15	5298	45
24	5302	72	23	5355	69
38	5318	114	27	5328	81
41	5337	123	29	5310	87
43	5300	129	30	5316	90
53	5341	159	47	5320	141
54	5299	162	49	5357	147
70	5355	210	58	5342	174
80	5339	240	71	5314	213
89	5329	267	86	5331	258
92	5331	276	92	5354	276
94	5306	282	96	5358	288
--	--	--	99	5332	297

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5327	24	4	5301	12
25	5313	75	7	5314	21
44	5303	132	19	5339	57
48	5356	144	23	5346	69
69	5308	207	37	5311	111
79	5338	237	38	5333	114
92	5318	276	43	5306	129
--	--	--	52	5321	156
--	--	--	61	5358	183
--	--	--	66	5318	198
--	--	--	67	5309	201
--	--	--	72	5349	216
--	--	--	76	5356	228
--	--	--	84	5325	252
--	--	--	95	5320	285

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5323	3	9	5309	27
5	5322	15	12	5342	36
21	5305	63	14	5325	42
39	5314	117	19	5302	57
54	5331	162	21	5348	63
55	5329	165	23	5330	69
66	5308	198	42	5346	126
67	5321	201	56	5334	168
71	5341	213	69	5313	207
83	5343	249	72	5321	216
89	5345	267	88	5357	264
93	5335	279	91	5345	273
96	5348	288	99	5324	297
98	5324	294	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5344	3	9	5329	27
16	5326	48	11	5317	33
20	5300	60	21	5339	63
23	5330	69	26	5349	78
40	5356	120	27	5321	81
44	5322	132	28	5303	84
53	5355	159	32	5305	96
70	5349	210	33	5315	99
71	5327	213	47	5306	141
73	5321	219	63	5335	189
76	5358	228	70	5298	210
87	5316	261	72	5348	216
91	5310	273	99	5334	297
95	5319	285	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5329	15	3	5349	9
8	5339	24	13	5348	39
11	5307	33	25	5302	75
12	5314	36	34	5304	102
28	5317	84	35	5352	105
49	5331	147	52	5345	156
57	5336	171	54	5357	162
68	5313	204	70	5321	210
85	5318	255	73	5340	219
--	--	--	87	5358	261
--	--	--	98	5303	294

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5313	0	18	5335	54
8	5349	24	20	5313	60
10	5298	30	27	5347	81
16	5318	48	35	5355	105
35	5346	105	39	5330	117
47	5354	141	47	5348	141
52	5307	156	58	5307	174
65	5304	195	60	5356	180
66	5338	198	77	5350	231
67	5300	201	82	5300	246
77	5314	231	87	5299	261
79	5330	237	95	5339	285
98	5324	294	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5321	15	0	5337	0
8	5325	24	14	5308	42
12	5305	36	21	5318	63
17	5327	51	27	5299	81
39	5332	117	40	5321	120
55	5331	165	44	5348	132
57	5353	171	59	5331	177
61	5335	183	71	5355	213
85	5338	255	77	5305	231
89	5303	267	84	5354	252
92	5343	276	88	5334	264
97	5309	291	90	5312	270

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5345	30	1	5314	3
12	5311	36	17	5336	51
18	5337	54	22	5345	66
32	5343	96	41	5326	123
34	5313	102	47	5302	141
39	5326	117	58	5307	174
42	5327	126	70	5350	210
50	5300	150	76	5353	228
51	5348	153	82	5301	246
55	5321	165	86	5356	258
59	5356	177	87	5331	261
64	5351	192	--	--	--
88	5333	264	--	--	--
89	5344	267	--	--	--
91	5332	273	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5311	9	21	5315	63
12	5342	36	28	5301	84
20	5317	60	30	5306	90
45	5345	135	38	5329	114
67	5304	201	40	5344	120
69	5358	207	51	5353	153
73	5315	219	55	5331	165
75	5340	225	56	5334	168
92	5319	276	66	5316	198
--	--	--	69	5299	207
--	--	--	91	5321	273
--	--	--	95	5309	285
--	--	--	96	5313	288

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5323	42	6	5316	18
15	5298	45	13	5314	39
19	5300	57	24	5310	72
22	5308	66	46	5349	138
37	5336	111	55	5337	165
41	5304	123	57	5336	171
45	5339	135	62	5358	186
50	5314	150	64	5318	192
52	5299	156	69	5317	207
54	5351	162	70	5325	210
55	5301	165	71	5342	213
63	5302	189	87	5306	261
66	5328	198	91	5329	273
80	5318	240	98	5333	294
85	5320	255	--	--	--
86	5312	258	--	--	--
88	5349	264	--	--	--
96	5307	288	--	--	--
98	5335	294	--	--	--
99	5329	297	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5335	42	1	5310	3
19	5344	57	16	5358	48
21	5333	63	30	5352	90
25	5306	75	33	5300	99
32	5343	96	36	5314	108
34	5338	102	48	5341	144
35	5307	105	49	5334	147
38	5358	114	50	5350	150
39	5319	117	57	5357	171
41	5357	123	59	5331	177
48	5321	144	71	5299	213
52	5302	156	74	5318	222
58	5325	174	82	5311	246
60	5340	180	83	5306	249
82	5334	246	90	5305	270
84	5299	252	93	5324	279
85	5349	255	97	5348	291
87	5314	261	99	5312	297
88	5328	264	--	--	--
91	5318	273	--	--	--
95	5312	285	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5354	0	35	5298	105
7	5331	21	40	5355	120
11	5347	33	47	5348	141
12	5316	36	61	5353	183
34	5337	102	74	5321	222
53	5328	159	81	5314	243
58	5355	174	88	5349	264
76	5304	228	90	5323	270
82	5301	246	--	--	--
84	5303	252	--	--	--
95	5336	285	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5334	9	12	5342	36
6	5311	18	18	5336	54
20	5347	60	20	5304	60
27	5304	81	23	5318	69
34	5356	102	60	5356	180
35	5324	105	66	5354	198
46	5301	138	68	5308	204
62	5328	186	70	5341	210
64	5329	192	71	5319	213
75	5333	225	74	5330	222
80	5319	240	76	5307	228
86	5309	258	83	5326	249
96	5344	288	92	5325	276
--	--	--	96	5349	288

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5346	6	4	5345	12
3	5313	9	9	5331	27
4	5332	12	17	5341	51
7	5326	21	21	5352	63
60	5322	180	37	5338	111
69	5318	207	54	5312	162
83	5343	249	56	5303	168
89	5342	267	60	5348	180
--	--	--	66	5329	198
--	--	--	68	5310	204
--	--	--	72	5327	216
--	--	--	76	5337	228
--	--	--	79	5346	237
--	--	--	82	5320	246
--	--	--	87	5314	261

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
25	5309	75	3	5304	9
26	5325	78	16	5299	48
38	5346	114	32	5302	96
42	5310	126	45	5307	135
96	5299	288	47	5343	141
98	5311	294	53	5346	159
--	--	--	55	5316	165
--	--	--	63	5349	189
--	--	--	64	5310	192
--	--	--	68	5301	204
--	--	--	75	5321	225
--	--	--	76	5334	228
--	--	--	82	5331	246
--	--	--	85	5330	255

6. CONCLUSION

The data collected relate only the item(s) tested and show that the **Wireless LAN Access Point**

FCC ID: H8N-RG8000W is in compliance with Part 15E of the FCC Rules.

The End