



DFS MEASUREMENT REPORT

FCC PART 15.407(h) & IC RSS-247

FCC ID: 2AD8UFZCWI2A1
IC: 109D-FZCWI2A01
APPLICANT: Nokia Solutions and Networks

Application Type: Certification
Product: Wireless Access Point
Model No.: WI2A-AC200i
Brand Name: NOKIA
FCC Classification: Unlicensed National Information Infrastructure (UNII)
IC Rule(s): RSS-247 Issue 1
FCC Rule Part(s): Part 15.407(h)
KDB 905462 D02v01r02, KDB 905462 D04v01
Type of Device:
☒ Master Device
☐ Client Device (No radar detection)
☐ Client Device with radar detection
Test Date: June 08 ~ September 25, 2015

Reviewed By : Robin Wu
(Robin Wu)
Approved By : Marlin Chen
(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
1506RSU00617	Rev. 01	Initial report	11-10-2015

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§2.1033 General Information

Applicant:	Nokia Solutions and Networks
Applicant Address:	Karaportti 3, P.O. Box 226, FI-00045 Nokia Group, Finland
Manufacturer:	Nokia Solutions and Networks
Manufacturer Address:	Karaportti 3, P.O. Box 226, FI-00045 Nokia Group, Finland
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
MRT IC Registration No.:	11384A
Model No.:	WI2A-AC200i
FCC ID:	2AD8UFZCWI2A1
IC:	109D-FZCWI2A01
Test Device Serial No.:	N/A <input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> 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	Wireless Access Point
Model No.	WI2A-AC200i
Radio Type	Intentional Transceiver
Operation Mode	Master Device
Frequency Range	<p><u>2.4GHz:</u></p> <p>For 802.11b/g/n-HT20: 2412 ~ 2462 MHz</p> <p>For 802.11n-HT40: 2422 ~ 2452 MHz</p> <p><u>5GHz:</u></p> <p>For 802.11a/n-HT20: 5180~5320MHz, 5500~5700MHz, 5745~5825MHz</p> <p>For 802.11ac-VHT20: 5180~5320MHz, 5500~5720MHz, 5745~5825MHz</p> <p>For 802.11n-HT40: 5190~5310MHz, 5510~5670MHz, 5755~5795MHz</p> <p>For 802.11ac-VHT40: 5190~5310MHz, 5510~5710MHz, 5755~5795MHz</p> <p>For 802.11ac-VHT80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5690MHz, 5775MHz</p>
Maximum EIRP Output Power	<p>802.11a: 28.19dBm (5700MHz)</p> <p>802.11n-HT20: 27.99dBm (5260MHz)</p> <p>802.11n-HT40: 29.76dBm (5590MHz)</p> <p>802.11ac-VHT20: 28.15dBm (5720MHz)</p> <p>802.11ac-VHT40: 29.90dBm (5710MHz)</p> <p>802.11ac-VHT80: 29.95dBm (5290MHz)</p>
Type of Modulation	802.11a/n/ac: OFDM;
Power-on cycle	Requires 93.45 seconds to complete its power-on cycle.
Uniform Spreading (For DFS Frequency Band)	For the 5250-5350MHz, 5470-5725 MHz bands, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a random algorithm.

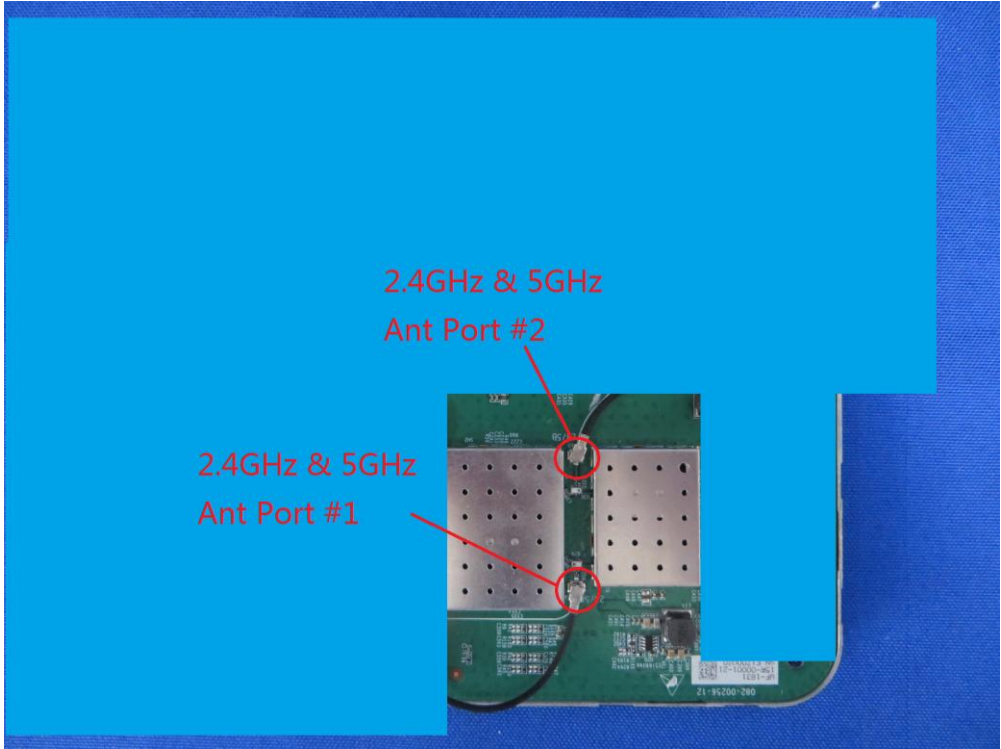
2.2. Description of Available Antennas

Antenna Type	Frequency Band (MHz)	Tx Paths	Per Chain Max Antenna Gain (dBi)		Beam Forming Directional Gain (dBi)	CDD Directional Gain (dBi)
			Ant 1	Ant 2		
PCB Antenna	2412 ~ 2462	2	3.23	2.38	5.83	5.83
	5150 ~ 5250	2	5.40	4.53	7.99	7.99
	5250 ~ 5350	2	5.50	4.81	8.17	8.17
	5470 ~ 5725	2	5.89	5.97	8.94	8.94
	5725 ~ 5850	2	6.00	5.86	8.94	8.94

- The EUT supports Cyclic Delay Diversity (CDD) technology for 802.11a/b/g mode, and CDD signals are correlated.
- The EUT supports Beam Forming technology for 802.11n/ac mode, and exclude 802.11b/g mode.
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 = $10 \cdot \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ 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: 5250 ~ 5350MHz Directional Gain = $10 \cdot \log[(10^{5.50/20} + 10^{4.81/20})^2 / 2] = 8.17$ dBi

2.3. Description of Antenna RF Port

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



2.4. DFS Band Carrier Frequencies Operation

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

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

802.11ac-VHT20 Center Working Frequency of Each Channel

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

802.11n-HT40 Center Working Frequency of Each Channel

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

802.11ac-VHT40 Center Working Frequency of Each Channel

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

802.11ac-VHT80 Center Working Frequency of Each Channel

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

Note: The device can't operate in 5600~5650 MHz band in Canada (The frequency of blue font).

2.5. Test Mode

Test Mode	Mode 1: Communication with Notebook
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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
<p>Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.</p> <p>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.</p> <p>Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.</p>	

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 v01r01 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.

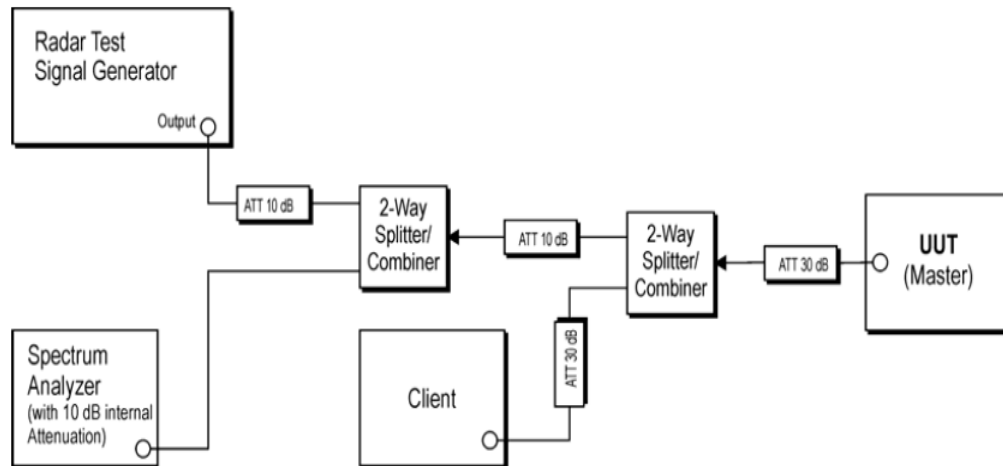


Figure 3-1: Conducted Test Setup where UUT is a Master and Radar Test Waveforms are injected into the Masters

4. TEST EQUIPMENT CALIBRATION DATE

Dynamic Frequency Selection (DFS)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2016/05/08
ESG Vector Signal Generator	Agilent	E4438C	MRTSUE06026	1 year	2015/12/09
Temperature/Humidity Meter	Ouleinuo	N/A	MRTSUE06112	1 year	2015/11/20

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: Nokia Solutions and Networks
FCC ID: 2AD8UFZCWI2A1
IC: 109D-FZCWI2A01

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.

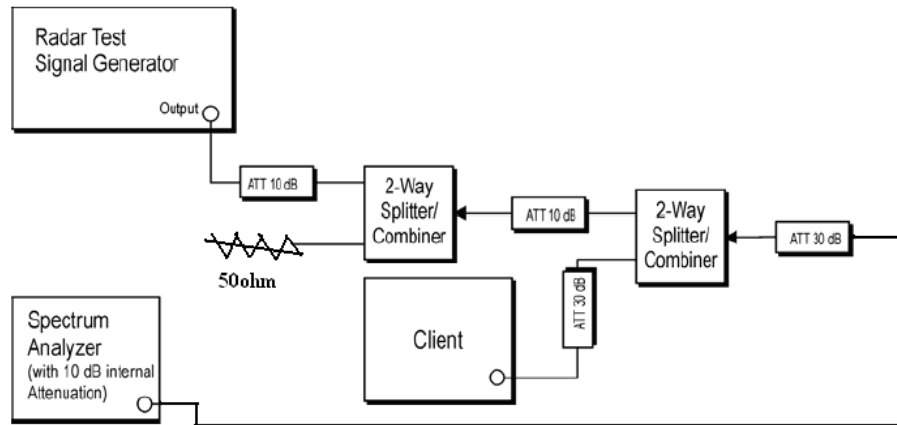


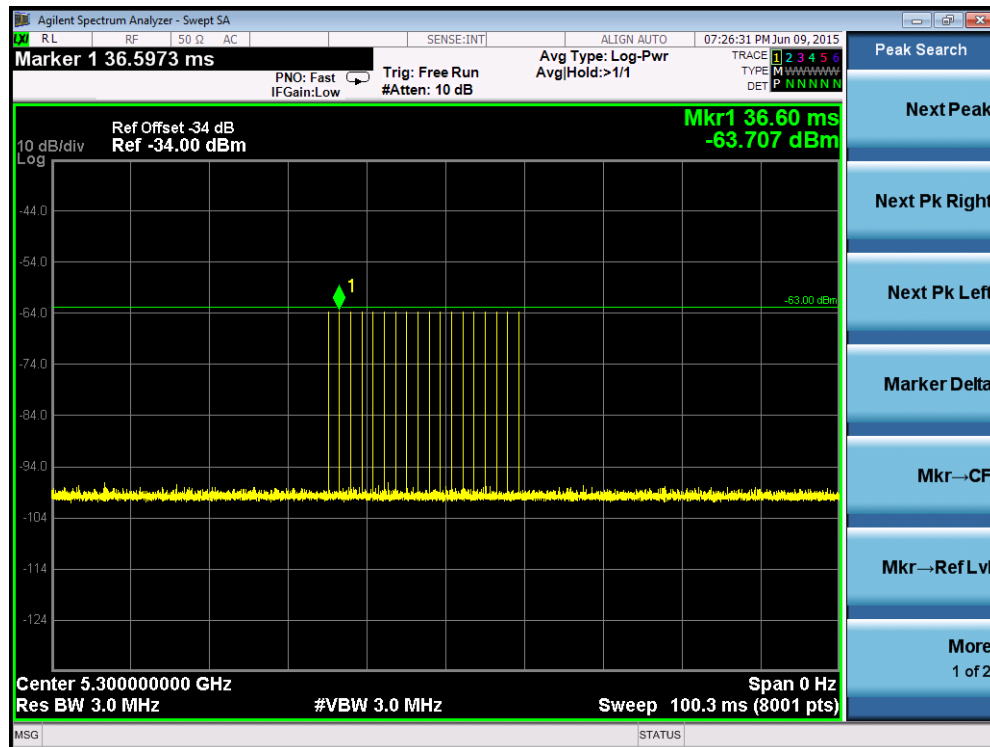
Figure 3-2: Conducted Test Setup

5.2.2. Calibration Procedure

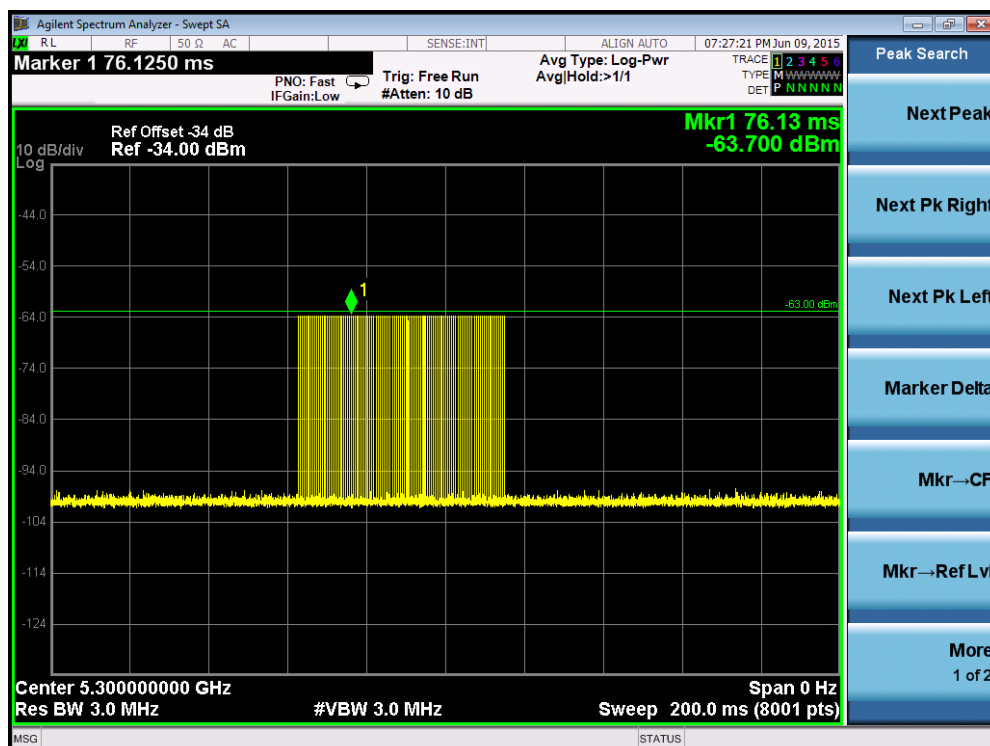
The Interference Radar Detection Threshold Level is $(-64\text{dBm}) + (0) [\text{dBi}] + 1 \text{ dB} = -63 \text{ dBm}$ that had been taken into account the output power range and antenna gain. The above equipment setup was used to calibrate the conducted Radar Waveform. A vector signal generator was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

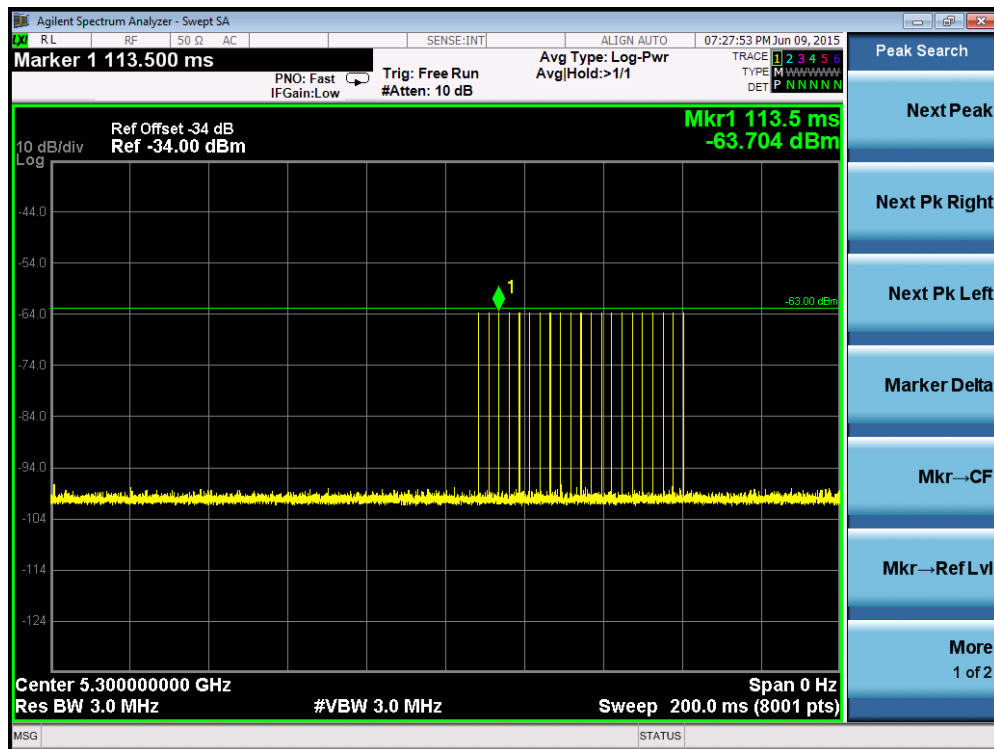


Radar #1(Test A) DFS detection threshold level and the burst of pulses on the Channel frequency



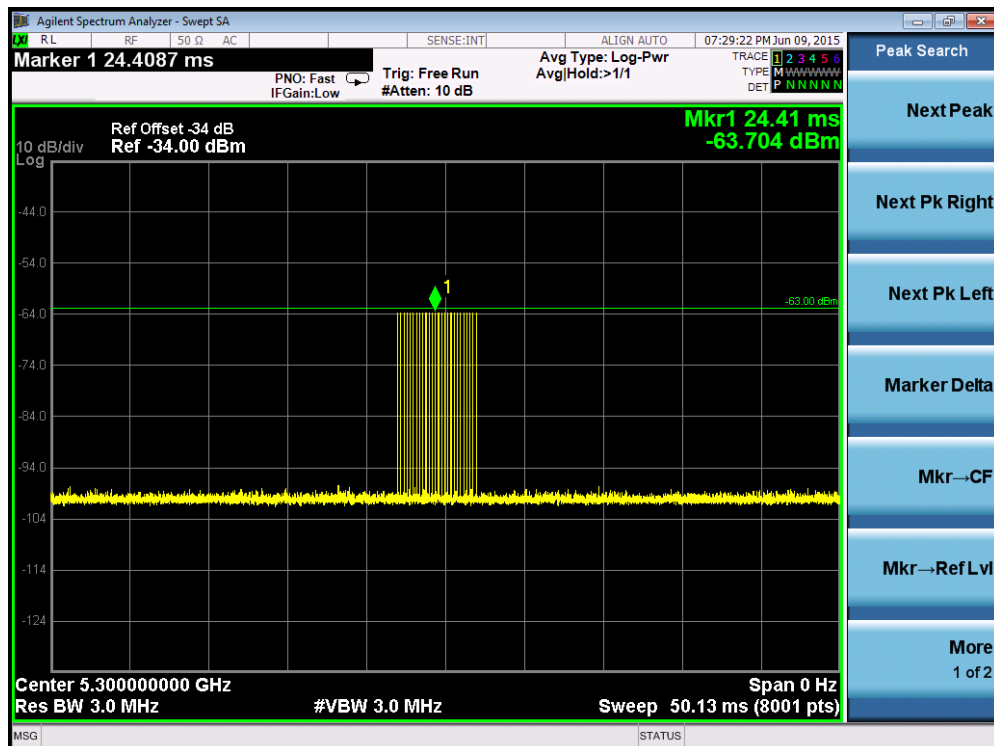
PRI = 518us and the number of pulses = 102

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

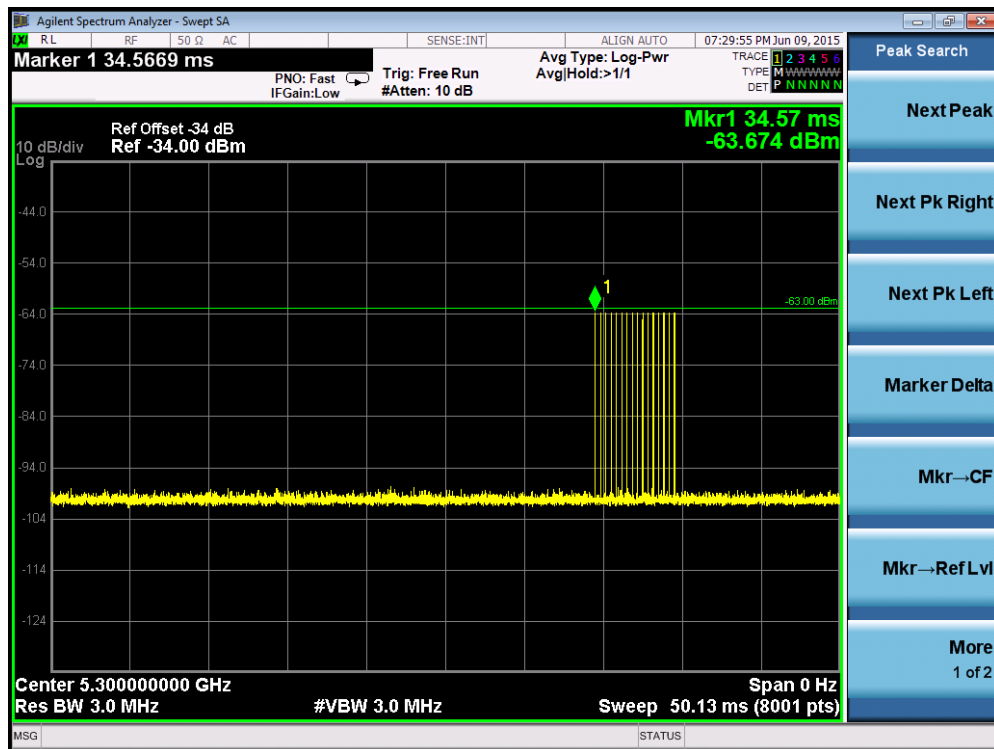


PRI = 2.579ms and the number of pulses = 21

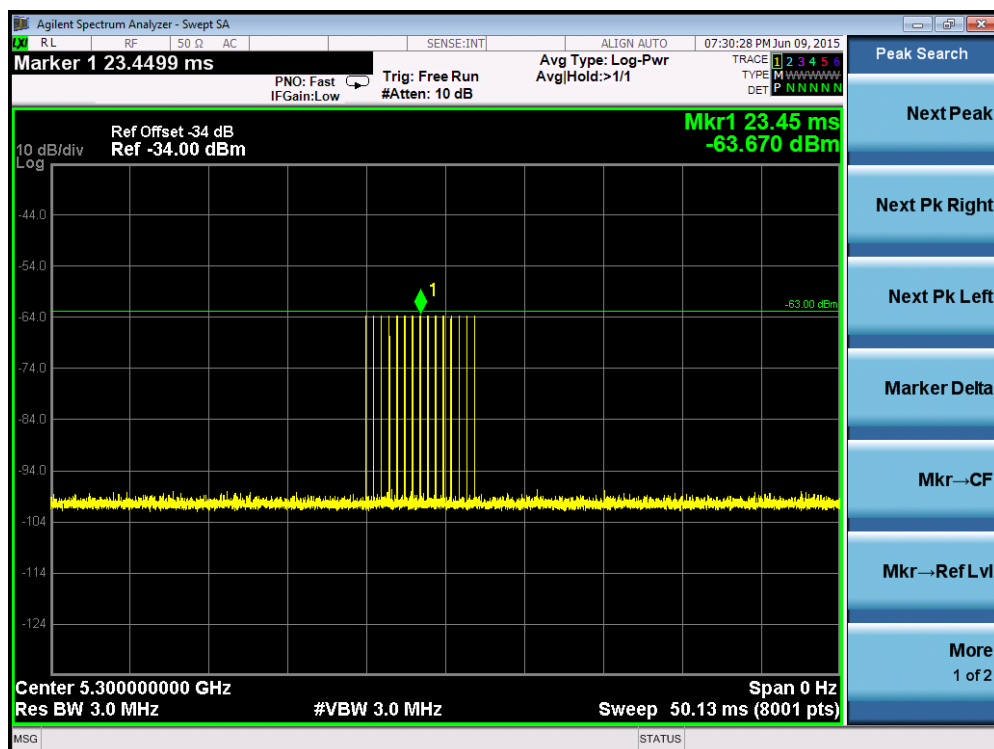
Radar #2 DFS detection threshold level and the burst of pulses on the Channel frequency



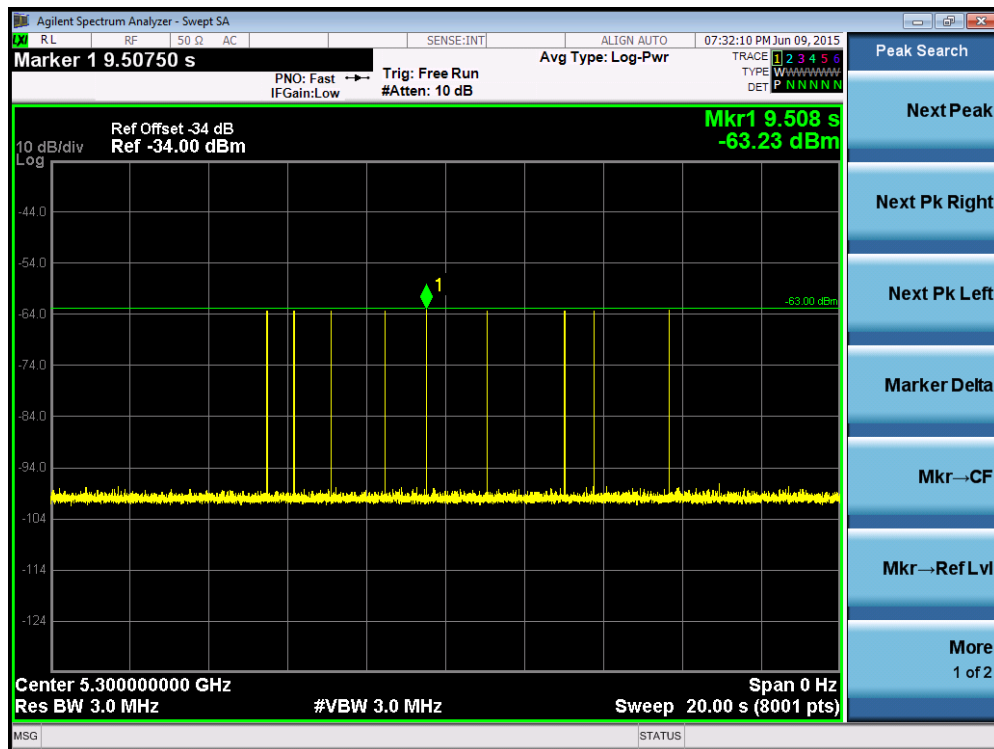
Radar #3 DFS detection threshold level and the burst of pulses on the Channel frequency



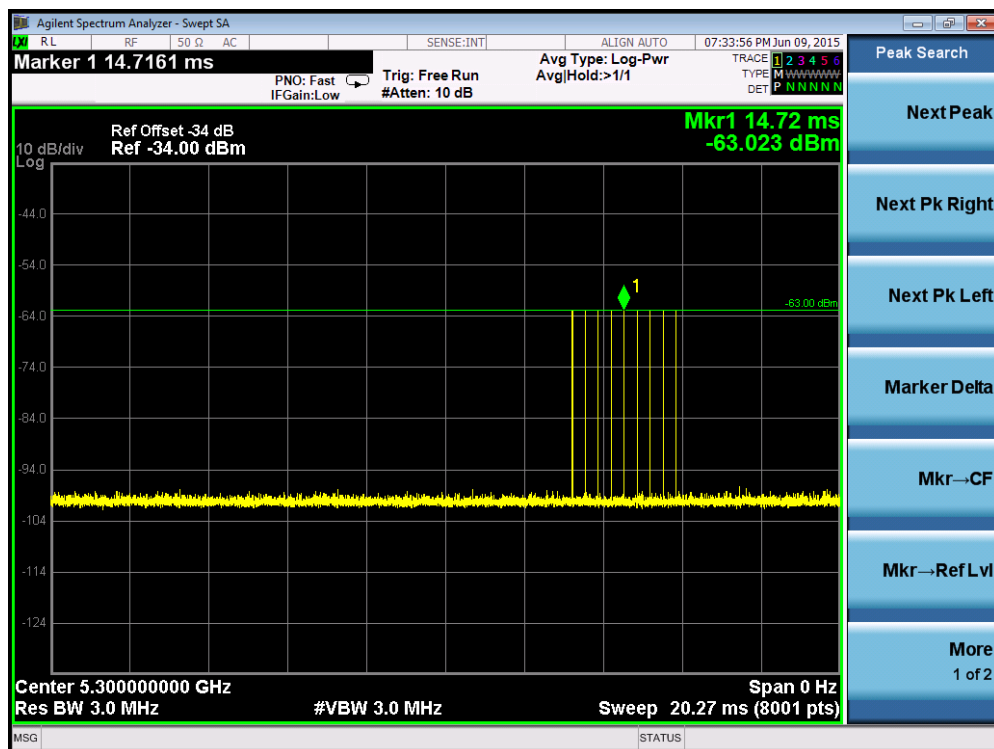
Radar #4 DFS detection threshold level and the burst of pulses on the Channel frequency



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



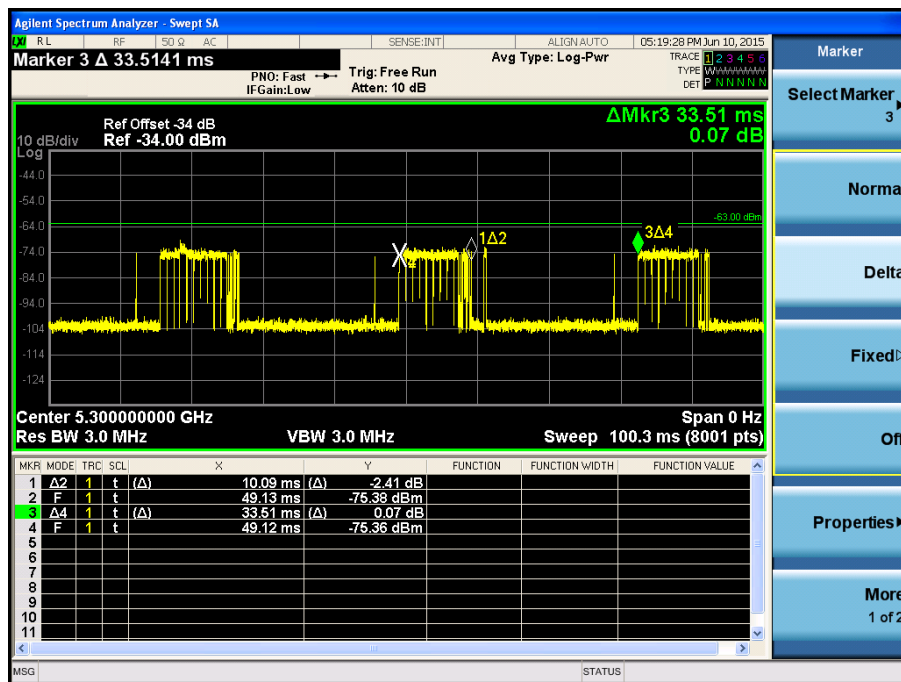
Radar #6 DFS detection threshold level and a single hop (9 pulses) on the Channel frequency within UNII detection bandwidth



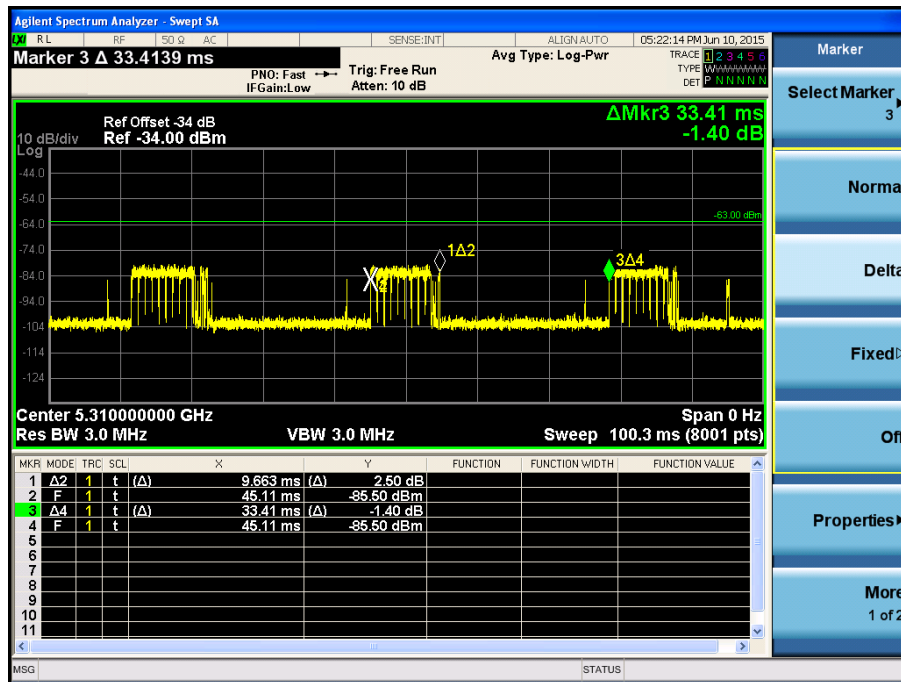
5.3. Channel Loading Test Result

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

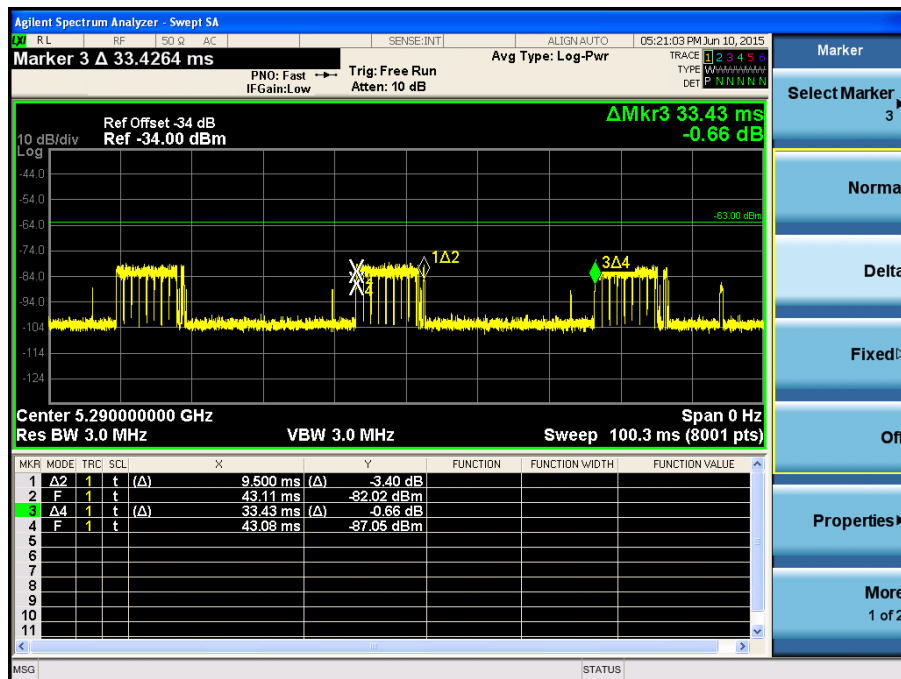
Channel Loading Plot - 802.11a 5300MHz



Channel Loading Plot - 802.11n-HT40 5310MHz



Channel Loading Plot - 802.11ac-VHT80 5290MHz



Test Mode	Packet ratio	Requirement ratio	Test Result
802.11a	30.11%	>17%	Pass
802.11n-40MHz	28.92%	>17%	Pass
802.11ac-80MHz	28.42%	>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 = 16.65MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 16.65MHz x 100% = 16.65MHz											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5300MHz. The 99% channel bandwidth is 16.65MHz. (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	0	0	0	0	0	0	0	0	0	0	0%
5292 FL	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 - 5292MHz = 37MHz											
EUT 99% Bandwidth = 36.40MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 36.40MHz x 100% = 36.40MHz											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5310MHz. The 99% channel bandwidth is 36.40MHz. (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 = 75.87MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 75.87MHz x 100% = 75.87MHz											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5290MHz. The 99% channel bandwidth is 75.87MHz. (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.

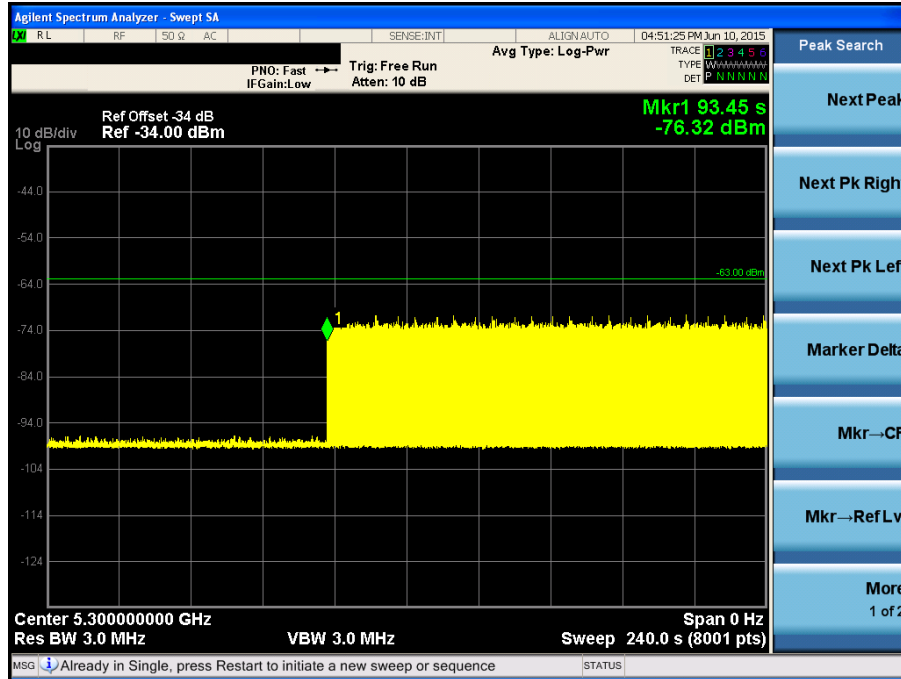
5.5.2. Test Procedure

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 (33.45 sec). Initial beacons/data transmissions are indicated by marker 1 (93.45 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

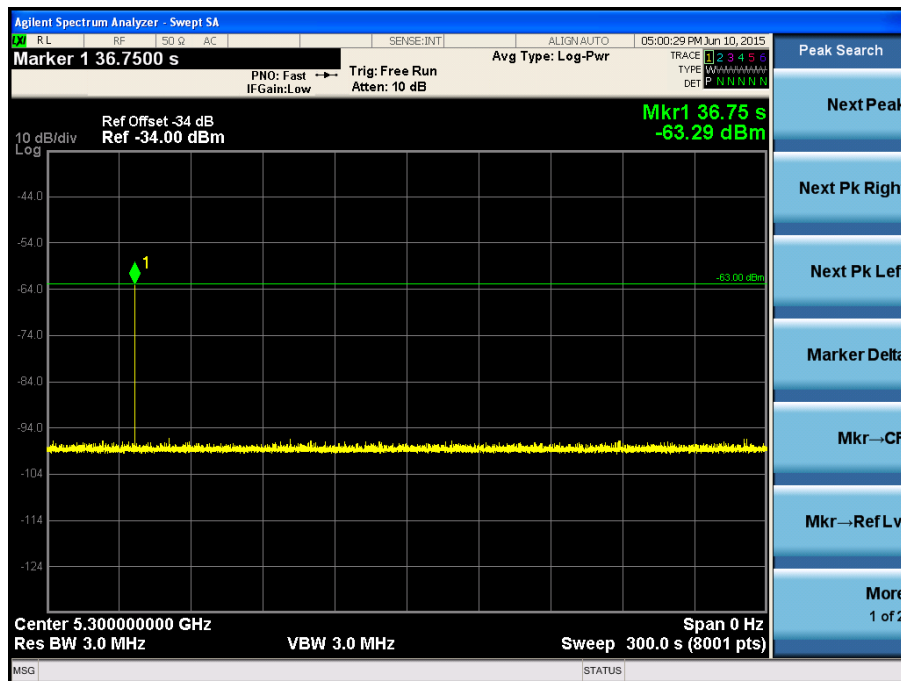
In beginning of the Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

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

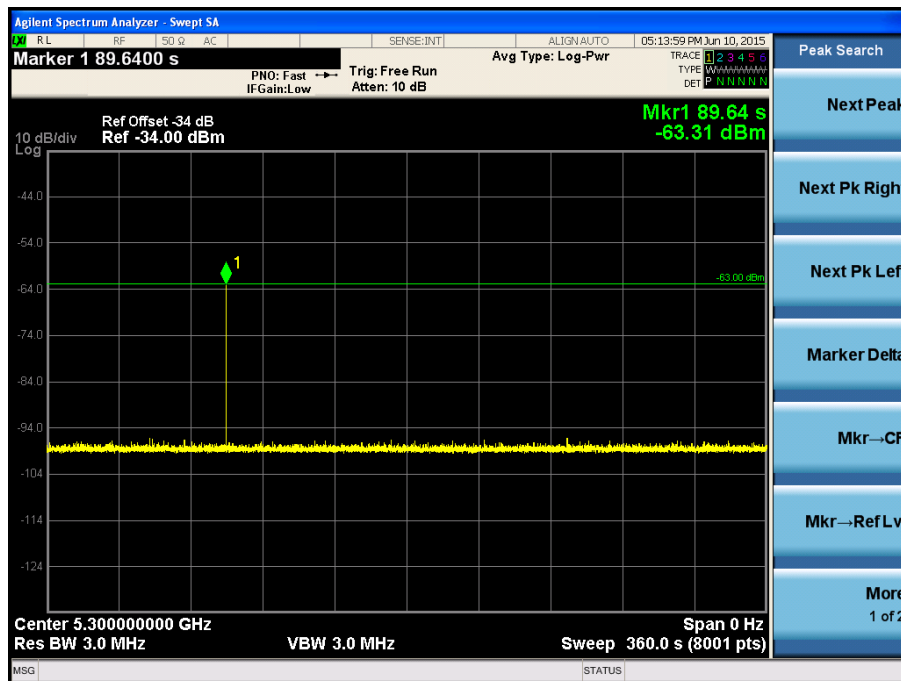
In the end of Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

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

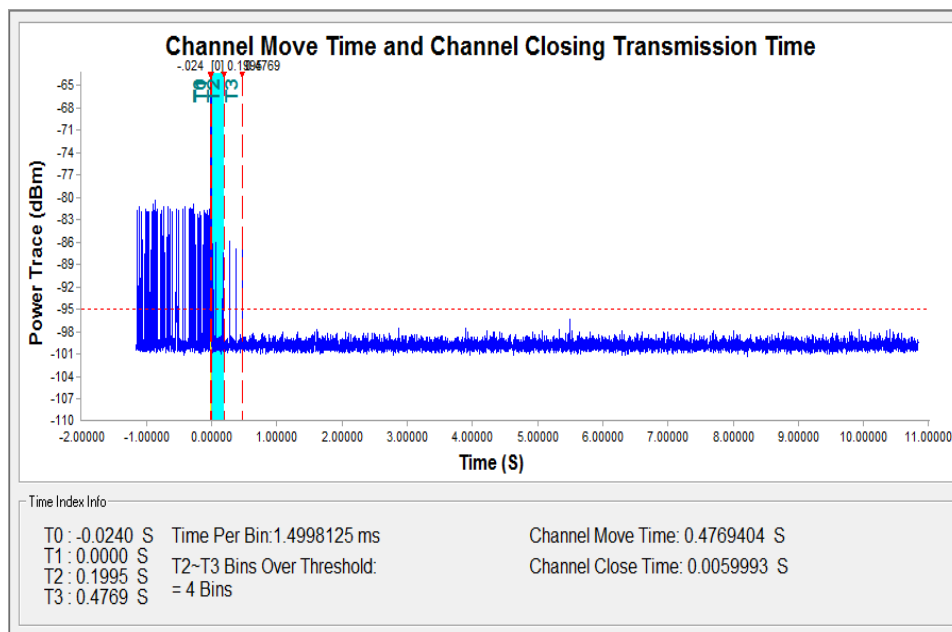
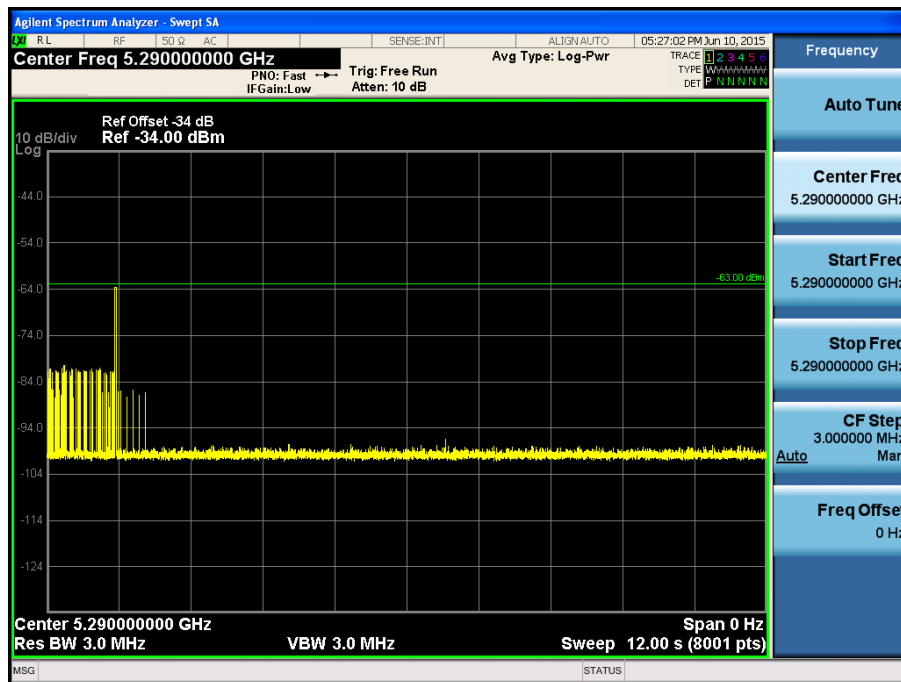
The EUT has In-Service Monitoring function to continuously monitor the radar signals. If the radar is detected, must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec.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

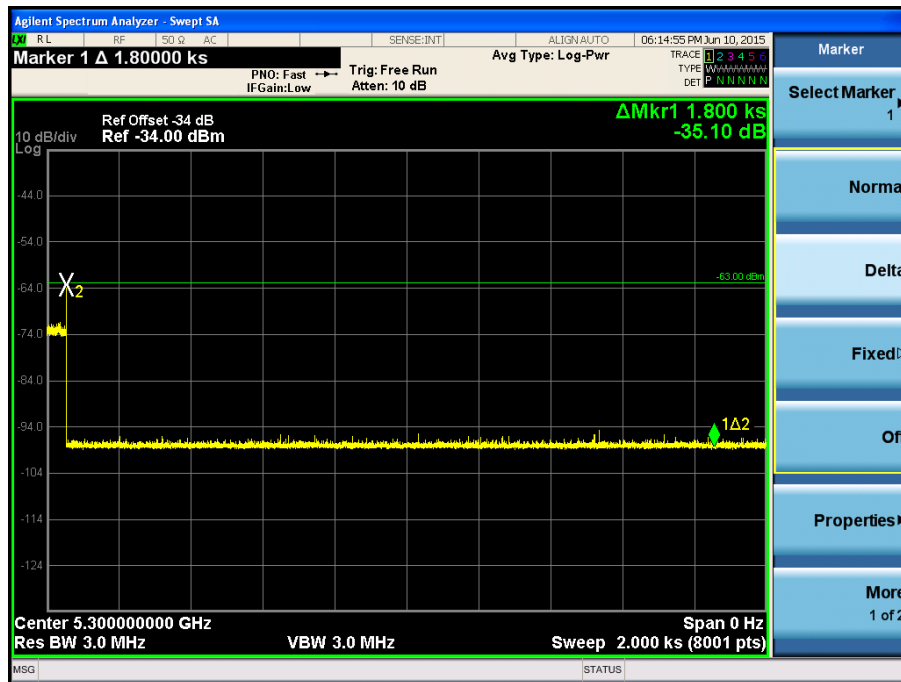
1. The test should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0.
2. When the radar burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device. A U-NII device operating as a Master Device will 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: $80MHz: C (5.999 \text{ ms}) = N (4) \times Dwell (1.5 \text{ ms})$; 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)	0.477s	<10s
Channel Closing Transmission Time (ms) (Note)	5.999ms	< 60ms
Non-Occupancy Period (min)	≥ 30 min	≥ 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 – 5300MHz

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	838	63	1
2	5291	1	3066	18	1
3	5291	1	858	62	1
4	5291	1	798	67	1
5	5291	1	558	95	1
6	5291	1	598	89	1
7	5291	1	678	78	1
8	5291	1	738	72	1
9	5291	1	698	76	1
10	5291	1	518	102	1
11	5291	1	578	92	1
12	5291	1	718	74	1
13	5291	1	938	57	1
14	5291	1	898	59	1
15	5291	1	538	99	1
16	5291	1	1950	28	1
17	5291	1	1809	30	1
18	5291	1	3015	18	1
19	5291	1	1379	39	1
20	5291	1	1156	46	1
21	5291	1	1788	30	1
22	5291	1	672	79	1
23	5291	1	1518	35	1
24	5291	1	2886	19	1
25	5291	1	563	94	1
26	5291	1	1053	51	1
27	5291	1	1538	35	1
28	5291	1	1720	31	1
29	5291	1	1889	28	1
30	5291	1	1351	40	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	5292	1.0	223	23	1
2	5292	2.7	184	26	1
3	5292	2.8	159	28	1
4	5292	2.0	221	28	1
5	5292	2.5	190	23	1
6	5292	2.3	214	23	1
7	5292	2.9	214	23	1
8	5292	3.7	193	23	1
9	5292	2.2	212	25	1
10	5292	1.5	227	28	1
11	5292	4.6	164	27	1
12	5292	2.6	176	25	1
13	5292	2.0	188	25	1
14	5292	3.7	216	25	1
15	5292	4.0	209	24	1
16	5292	3.7	177	28	1
17	5292	4.9	164	27	1
18	5292	1.4	175	24	1
19	5292	1.9	215	24	1
20	5292	2.7	200	28	1
21	5292	1.5	174	23	1
22	5292	1.2	199	27	1
23	5292	1.4	174	24	1
24	5292	3.3	220	29	1
25	5292	4.9	176	24	1
26	5292	1.6	175	25	1
27	5292	4.0	187	23	1
28	5292	4.0	220	23	1
29	5292	2.2	155	26	1
30	5292	3.2	176	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	5300	6.1	330	16	1
2	5300	9.3	360	18	1
3	5300	6.3	452	18	1
4	5300	7.4	255	18	1
5	5300	8.5	443	16	1
6	5300	8.0	487	16	1
7	5300	9.5	282	17	1
8	5300	8.4	342	16	1
9	5300	9.3	356	17	1
10	5300	9.0	273	17	1
11	5300	6.5	302	17	1
12	5300	7.9	385	16	1
13	5300	9.3	376	16	1
14	5300	8.0	497	16	1
15	5300	6.8	391	17	1
16	5300	6.0	494	16	1
17	5300	9.6	327	16	1
18	5300	9.1	473	18	1
19	5300	8.9	404	16	1
20	5300	6.5	444	16	1
21	5300	7.3	296	18	1
22	5300	8.6	416	16	1
23	5300	6.0	479	17	1
24	5300	6.2	492	17	1
25	5300	6.7	314	17	1
26	5300	6.8	378	18	1
27	5300	8.2	259	18	1
28	5300	8.2	318	18	1
29	5300	6.4	255	16	1
30	5300	9.9	287	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	5309	11.7	493	12	1
2	5309	18.9	278	15	1
3	5309	13.4	339	14	1
4	5309	13.4	443	12	1
5	5309	18.7	250	16	1
6	5309	19.1	292	16	1
7	5309	16.7	274	15	1
8	5309	18.9	256	16	1
9	5309	19.5	473	14	1
10	5309	12.1	372	15	1
11	5309	19.8	337	15	1
12	5309	19.9	262	14	1
13	5309	18.0	400	14	1
14	5309	17.6	303	15	1
15	5309	16.9	434	12	1
16	5309	19.2	484	15	1
17	5309	16.5	413	13	1
18	5309	18.6	420	15	1
19	5309	18.8	375	13	1
20	5309	14.2	402	13	1
21	5309	12.1	427	12	1
22	5309	16.9	473	16	1
23	5309	18.2	263	14	1
24	5309	16.3	419	14	1
25	5309	16.2	374	12	1
26	5309	14.0	338	15	1
27	5309	12.8	378	15	1
28	5309	14.4	485	15	1
29	5309	11.6	460	13	1
30	5309	18.6	396	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	990668	3	7	60	1190	1903	1189	990668	0	1333332
2	1208078	3	18	85	1666	1079	1909	2203028	1333333	2666665
3	1578160	2	7	55	1811	1426	0	3785842	2666666	3999998
4	1421634	3	17	75	1335	1999	1559	5210713	3999999	5333331
5	1316201	3	5	70	1600	1785	1517	6531807	5333332	6666664
6	669941	3	11	55	1861	1906	1762	7206650	6666665	7999997
7	1902560	1	20	100	1127	0	0	9114739	7999998	9333330
8	1021495	2	18	70	1045	1112	0	10137361	9333331	10666663
9	1379907	1	11	60	1518	0	0	11519425	10666664	11999996

Total number of pulses in waveform = 21

**Type 5 Radar Waveform_2**

Waveform Num = 2
Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	94570	3	7	55	1924	1965	1654	94570	0	1090908
2	1927980	2	16	80	1139	1908	0	2028093	1090909	2181817
3	884004	3	20	70	1755	1331	1663	2915144	2181818	3272726
4	460506	1	10	100	1540	0	0	3380399	3272727	4363635
5	1300456	2	16	90	1432	1835	0	4682395	4363636	5454544
6	1539542	1	13	65	1663	0	0	6225204	5454545	6545453
7	972544	3	8	75	1603	1079	1103	7199411	6545454	7636362
8	925350	2	15	60	1406	1285	0	8128546	7636363	8727271
9	1011256	1	5	75	1012	0	0	9142493	8727272	9818180
10	916892	1	15	80	1424	0	0	10060397	9818181	10909089
11	1200854	3	16	60	1583	1082	1072	11262675	10909090	11999998

Total number of pulses in waveform = 22

Type 5 Radar Waveform_3

Waveform Num = 3
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	536848	2	11	65	1867	1832	0	536848	0	1333332
2	1468230	2	10	60	1218	1600	0	2008777	1333333	2666665
3	1407880	1	9	75	1761	0	0	3419475	2666666	3999998
4	1307679	3	17	70	1524	1174	1617	4728915	3999999	5333331
5	866807	2	13	70	1862	1290	0	5600037	5333332	6666664
6	1403732	1	6	90	1283	0	0	7006921	6666665	7999997
7	1255959	2	6	75	1033	1502	0	8264163	7999998	9333330
8	1143701	3	11	100	1456	1645	1910	9410399	9333331	10666663
9	1969391	2	14	65	1274	1698	0	11384801	10666664	11999996

Total number of pulses in waveform = 18

Type 5 Radar Waveform_4

Waveform Num = 4
Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	716088	1	8	95	1737	0	0	716088	0	999999
2	929846	2	8	50	1649	1127	0	1647671	1000000	1999999
3	908919	1	15	75	1351	0	0	2559366	2000000	2999999
4	1145454	1	10	80	1756	0	0	3706171	3000000	3999999
5	690529	1	5	70	1349	0	0	4398456	4000000	4999999
6	633550	3	9	60	1046	1390	1681	5033355	5000000	5999999
7	975825	3	20	50	1773	1496	1077	6013297	6000000	6999999
8	1944342	2	10	55	1340	1798	0	7961985	7000000	7999999
9	226373	2	13	75	1997	1088	0	8191496	8000000	8999999
10	1045883	3	5	80	1215	1250	1126	9240464	9000000	9999999
11	1036300	2	14	95	1084	1265	0	10280355	10000000	10999999
12	1495361	3	9	55	1454	1976	1063	11778065	11000000	11999999

Total number of pulses in waveform = 24

**Type 5 Radar Waveform_5**

Waveform Num = 5
Num of Bursts = 13
Burst Interval (us)= 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	816394	3	11	95	1310	1293	1642	816394	0	923076
2	539786	3	8	85	1653	1261	1310	1360425	923077	1846153
3	1200119	1	15	100	1073	0	0	2564768	1846154	2769230
4	844150	1	18	50	1670	0	0	3409991	2769231	3692307
5	807490	1	10	90	1167	0	0	4219151	3692308	4615384
6	822375	3	7	70	1847	1961	1742	5042693	4615385	5538461
7	1097996	3	10	75	1185	1173	1736	6146239	5538462	6461538
8	528270	2	19	95	1551	1468	0	6678603	6461539	7384615
9	1239146	1	6	50	1079	0	0	7920768	7384616	8307692
10	1030948	1	13	95	1671	0	0	8952795	8307693	9230769
11	833042	3	12	70	1383	1704	1333	9787508	9230770	10153846
12	551219	2	7	100	1101	1950	0	10343147	10153847	11076923
13	1592772	3	8	80	1094	1597	1262	11938970	11076924	12000000

Total number of pulses in waveform = 27

Type 5 Radar Waveform_6

Waveform Num = 6
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	793056	3	17	65	1816	1758	1305	793056	0	1090908
2	417190	3	17	70	1727	1619	1502	1215125	1090909	2181817
3	1474183	3	8	80	1444	1172	1539	2694156	2181818	3272726
4	1444041	2	6	95	1966	1190	0	4142352	3272727	4363635
5	223422	2	8	65	1003	1661	0	4368930	4363636	5454544
6	1690617	3	9	55	1003	1327	1386	6062211	5454545	6545453
7	872216	3	10	70	1542	1125	1064	6938143	6545454	7636362
8	1339229	2	10	90	1251	1734	0	8281103	7636363	8727271
9	519974	1	18	70	1227	0	0	8804062	8727272	9818180
10	1034595	1	12	75	1340	0	0	9839884	9818181	10909089
11	2116403	1	20	85	1862	0	0	11957627	10909090	11999998

Total number of pulses in waveform = 24

Type 5 Radar Waveform_7

Waveform Num = 7
Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	90387	3	5	60	1545	1184	1242	90387	0	1090908
2	1950697	3	18	55	1140	1666	1815	2045055	1090909	2181817
3	827038	1	11	95	1705	0	0	2876714	2181818	3272726
4	741813	3	5	60	1150	1207	1220	3620232	3272727	4363635
5	757528	2	12	60	1808	1433	0	4381337	4363636	5454544
6	1341063	1	19	75	1793	0	0	5725641	5454545	6545453
7	1357986	2	7	80	1425	1353	0	7085420	6545454	7636362
8	1581938	2	17	100	1229	1051	0	8670136	7636363	8727271
9	157488	3	10	80	1008	1607	1470	8829904	8727272	9818180
10	1162909	1	13	50	1348	0	0	9996898	9818181	10909089
11	1761485	2	11	90	1970	1906	0	11759731	10909090	11999998

Total number of pulses in waveform = 23

**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	1185993	1	13	85	1486	0	0	1185993	0	1333332
2	705974	3	16	65	1796	1063	1148	1893453	1333333	2666665
3	1804173	2	12	50	1741	1802	0	3701633	2666666	3999998
4	1252506	1	13	100	1195	0	0	4957682	3999999	5333331
5	1049499	2	8	60	1950	1878	0	6008376	5333332	6666664
6	1596059	1	5	75	1557	0	0	7608263	6666665	7999997
7	551272	3	11	100	1020	1546	1172	8161092	7999998	9333330
8	2118934	2	16	60	1399	1439	0	10283764	9333331	10666663
9	1127940	3	17	80	1828	1306	1531	11414542	10666664	11999996

Total number of pulses in waveform = 18

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	223719	2	19	100	1830	1156	0	223719	0	1333332
2	1860464	3	15	50	1048	1109	1346	2087169	1333333	2666665
3	1005148	2	10	85	1784	1604	0	3095820	2666666	3999998
4	996031	2	18	80	1525	1932	0	4095239	3999999	5333331
5	2160258	1	18	70	1570	0	0	6258954	5333332	6666664
6	1373282	2	16	75	1895	1193	0	7633806	6666665	7999997
7	942598	1	18	95	1399	0	0	8579492	7999998	9333330
8	1459823	2	19	75	1389	1953	0	10040714	9333331	10666663
9	1026290	3	13	85	1788	1777	1379	11070346	10666664	11999996

Total number of pulses in waveform = 18

Type 5 Radar Waveform_10

Waveform Num = 10
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	62842	2	18	70	1686	1569	0	62842	0	1499999
2	2635011	3	8	60	1781	1731	1593	2701108	1500000	2999999
3	1460799	3	13	75	1817	1262	1894	4167012	3000000	4499999
4	1473806	3	10	85	1770	1080	1471	5645791	4500000	5999999
5	1337582	1	5	70	1822	0	0	6987694	6000000	7499999
6	1370709	3	11	100	1570	1835	1497	8360225	7500000	8999999
7	1256231	3	13	60	1092	1183	1010	9621358	9000000	10499999
8	2048372	3	14	80	1078	1782	1103	11673015	10500000	11999999

Total number of pulses in waveform = 21



Type 5 Radar Waveform_11

Waveform Num = 11
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	268554	1	16	85	1527	0	0	268554	0	1333332
2	1785040	1	18	90	1643	0	0	2055121	1333333	2666665
3	1007034	1	13	50	1079	0	0	3063798	2666666	3999998
4	1925744	1	15	90	1167	0	0	4990621	3999999	5333331
5	1481335	2	8	70	1559	1561	0	6473123	5333332	6666664
6	1151752	3	15	90	1680	1176	1460	7627995	6666665	7999997
7	1634690	1	13	55	1418	0	0	9267001	7999998	9333330
8	1198360	2	16	95	1220	1757	0	10466779	9333331	10666663
9	451385	3	12	75	1311	1823	1016	10921141	10666664	11999996

Total number of pulses in waveform = 15

Type 5 Radar Waveform_12

Waveform Num = 12
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	1032531	3	16	90	1132	1821	1142	1032531	0	1090908
2	908939	2	18	85	1507	1453	0	1945565	1090909	2181817
3	1033706	3	18	55	1748	1997	1238	2982231	2181818	3272726
4	960846	1	14	75	1738	0	0	3948060	3272727	4363635
5	906499	1	20	75	1511	0	0	4856297	4363636	5454544
6	1311030	2	13	85	1028	1536	0	6168838	5454545	6545453
7	478700	3	13	95	1762	1873	1415	6650102	6545454	7636362
8	1938343	1	10	100	1864	0	0	8593495	7636363	8727271
9	1199620	1	12	85	1972	0	0	9794979	8727272	9818180
10	546752	2	14	55	1696	1283	0	10343703	9818181	10909089
11	1617702	1	14	70	1704	0	0	11964384	10909090	11999998

Total number of pulses in waveform = 20

Type 5 Radar Waveform_13

Waveform Num = 13
Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	131756	2	20	95	1353	1721	0	131756	0	705881
2	1066493	1	5	70	1353	0	0	1201323	705882	1411763
3	452775	1	19	60	1929	0	0	1655451	1411764	2117645
4	982068	1	19	80	1464	0	0	2639448	2117646	2823527
5	365737	1	17	100	1176	0	0	3006649	2823528	3529409
6	649525	3	10	75	1545	1004	1880	3657350	3529410	4235291
7	584788	2	11	90	1436	1990	0	4246567	4235292	4941173
8	936236	1	20	60	1830	0	0	5186229	4941174	5647055
9	663560	3	18	50	1167	1344	1874	5851619	5647056	6352937
10	812739	2	11	55	1473	1550	0	6668743	6352938	7058819
11	1003730	1	10	100	1391	0	0	7675496	7058820	7764701
12	675175	2	9	65	1827	1465	0	8352062	7764702	8470583
13	549279	2	18	100	1359	1515	0	8904633	8470584	9176465
14	457772	3	9	75	1692	1679	1521	9365279	9176466	9882347
15	1080208	1	11	80	1961	0	0	10450379	9882348	10588229
16	440191	2	15	65	1692	1819	0	10892531	10588230	11294111
17	669303	1	14	70	1470	0	0	11565345	11294112	11999993

Total number of pulses in waveform = 29



Type 5 Radar Waveform_14

Waveform Num = 14
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	422702	2	8	50	1863	1286	0	422702	0	599999
2	591896	2	7	85	1935	1660	0	1017747	600000	1199999
3	749309	2	16	55	1243	1467	0	1770651	1200000	1799999
4	507857	1	17	90	1400	0	0	2281218	1800000	2399999
5	620942	2	19	70	1816	1262	0	2903560	2400000	2999999
6	290787	1	15	100	1557	0	0	3197425	3000000	3599999
7	705487	1	17	70	1879	0	0	3904469	3600000	4199999
8	507864	3	17	100	1811	1869	1253	4414212	4200000	4799999
9	730172	2	11	75	1338	1990	0	5149317	4800000	5399999
10	755161	3	19	65	1586	1193	1006	5907806	5400000	5999999
11	209061	3	16	70	1235	1465	1092	6120652	6000000	6599999
12	536955	1	8	50	1588	0	0	6661399	6600000	7199999
13	1130867	3	6	75	1396	1979	1315	7793854	7200000	7799999
14	5353	1	20	85	1396	0	0	7803897	7800000	8399999
15	936565	3	11	55	1030	1390	1893	8741858	8400000	8999999
16	367229	1	20	70	1116	0	0	9113400	9000000	9599999
17	659287	1	13	85	1585	0	0	9773803	9600000	10199999
18	459049	1	6	75	1844	0	0	10234437	10200000	10799999
19	645833	2	6	50	1705	1900	0	10882114	10800000	11399999
20	740575	2	11	100	1905	1957	0	11626294	11400000	11999999

Total number of pulses in waveform = 37

Type 5 Radar Waveform_15

Waveform Num = 15
Num of Bursts = 14
Burst Interval (us)= 857143

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	116203	2	18	95	1630	1377	0	116203	0	857142
2	924210	2	8	85	1320	1140	0	1043420	857143	1714285
3	1345779	2	9	85	1741	1726	0	2391659	1714286	2571428
4	719319	1	5	75	1806	0	0	3114445	2571429	3428571
5	1148463	2	10	75	1020	1662	0	4264714	3428572	4285714
6	826712	3	20	80	1094	1201	1447	5094108	4285715	5142857
7	686737	3	20	75	1751	1746	1090	5784587	5142858	6000000
8	964827	2	16	95	1603	1512	0	6754001	6000001	6857143
9	724590	3	6	85	1685	1801	1793	7481706	6857144	7714286
10	629181	2	15	50	1035	1797	0	8116166	7714287	8571429
11	1264601	1	11	90	1988	0	0	9383599	8571430	9428572
12	744439	3	20	80	1333	1993	1927	10130026	9428573	10285715
13	619046	3	7	80	1470	1962	1196	10754325	10285716	11142858
14	546156	3	6	65	1203	1112	1248	11305109	11142859	12000001

Total number of pulses in waveform = 32

Type 5 Radar Waveform_16

Waveform Num = 16
Num of Bursts = 9
Burst Interval (us)= 1333333

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	306443	3	8	95	1947	1907	1300	306443	0	1333332
2	1111459	1	20	100	1824	0	0	1423056	1333333	2666665
3	2371804	1	15	80	1494	0	0	3796684	2666666	3999998
4	1519323	2	12	100	1539	1726	0	5317501	3999999	5333331
5	989637	3	12	75	1076	1528	1211	6310403	5333332	6666664
6	909796	2	20	100	1273	1543	0	7224014	6666665	7999997
7	984814	1	12	95	1973	0	0	8211644	7999998	9333330
8	1589108	3	8	55	1266	1862	1128	9802725	9333331	10666663
9	1930766	1	13	60	1769	0	0	11737747	10666664	11999996

Total number of pulses in waveform = 17

**Type 5 Radar Waveform_17**

Waveform Num = 17
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	697342	3	7	100	1656	1293	1975	697342	0	1199999
2	1615406	2	13	60	1084	1708	0	2317672	1200000	2399999
3	1053981	1	8	70	1444	0	0	3374445	2400000	3599999
4	847038	3	13	90	1115	1189	1578	4222927	3600000	4799999
5	1235306	2	10	55	1344	1987	0	5462115	4800000	5999999
6	1010975	1	18	90	1745	0	0	6476421	6000000	7199999
7	1871441	2	19	70	1168	1067	0	8349607	7200000	8399999
8	1111674	3	15	70	1542	1258	1830	9463516	8400000	9599999
9	849616	2	11	50	1567	1560	0	10317762	9600000	10799999
10	761063	1	14	60	1673	0	0	11081952	10800000	11999999

Total number of pulses in waveform = 20

Type 5 Radar Waveform_18

Waveform Num = 18
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	183101	1	7	60	1373	0	0	183101	0	999999
2	1618868	2	16	95	1687	1794	0	1803342	1000000	1999999
3	293970	3	10	90	1191	1925	1858	2100793	2000000	2999999
4	1642321	3	16	90	1973	1084	1186	3748088	3000000	3999999
5	521169	3	16	75	1483	1937	1040	4273500	4000000	4999999
6	1281708	1	10	100	1238	0	0	5559668	5000000	5999999
7	1214260	1	14	55	1733	0	0	6775166	6000000	6999999
8	620943	2	16	55	1960	1651	0	7397842	7000000	7999999
9	636453	3	16	100	1722	1313	1441	8037906	8000000	8999999
10	1681324	1	18	95	1035	0	0	9723706	9000000	9999999
11	721283	1	13	100	1521	0	0	10446024	10000000	10999999
12	1227638	1	5	60	1885	0	0	11675183	11000000	11999999

Total number of pulses in waveform = 22

Type 5 Radar Waveform_19

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	581243	3	16	85	1131	1770	1077	581243	0	631578
2	187116	3	6	95	1826	1867	1559	772337	631579	1263157
3	733150	2	18	65	1997	1399	0	1510739	1263158	1894736
4	862622	3	19	60	1494	1012	1615	2376757	1894737	2526315
5	634371	1	14	85	1058	0	0	3015249	2526316	3157894
6	186435	1	6	60	1555	0	0	3202742	3157895	3789473
7	982105	2	20	60	1915	1284	0	4186402	3789474	4421052
8	337131	3	6	90	1549	1390	1159	4526732	4421053	5052631
9	1140669	2	12	60	1482	1780	0	5671499	5052632	5684210
10	639561	1	7	70	1235	0	0	6314322	5684211	6315789
11	462646	1	8	90	1836	0	0	6778203	6315790	6947368
12	596473	1	9	90	1009	0	0	7376512	6947369	7578947
13	438917	3	17	95	1388	1341	1655	7816438	7578948	8210526
14	585877	2	8	70	1479	1688	0	8406699	8210527	8842105
15	523989	2	9	95	1246	1962	0	8933855	8842106	9473684
16	940511	1	16	80	1490	0	0	9877574	9473685	10105263
17	352264	1	7	65	1384	0	0	10231328	10105264	10736842
18	818718	1	19	85	1886	0	0	11051430	10736843	11368421
19	468871	1	7	50	1565	0	0	11522187	11368422	12000000

Total number of pulses in waveform = 34



Type 5 Radar Waveform_20

Waveform Num = 20
Num of Bursts = 12
Burst Interval (us) = 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	469979	3	12	70	1394	1758	1599	469979	0	999999
2	931350	1	7	100	1537	0	0	1406080	1000000	1999999
3	897535	3	15	85	1769	1400	1119	2305152	2000000	2999999
4	1007262	1	6	90	1309	0	0	3316702	3000000	3999999
5	1124916	1	7	65	1339	0	0	4442927	4000000	4999999
6	709604	2	13	70	1571	1723	0	5153870	5000000	5999999
7	1002209	2	13	85	1932	1744	0	6159373	6000000	6999999
8	1254010	1	20	55	1559	0	0	7417059	7000000	7999999
9	1331649	3	20	100	1630	1905	1978	8750267	8000000	8999999
10	852325	2	18	90	1369	1366	0	9608105	9000000	9999999
11	859225	2	6	60	1324	1686	0	10470065	10000000	10999999
12	1385565	2	17	80	1564	1324	0	11858640	11000000	11999999

Total number of pulses in waveform = 23

Type 5 Radar Waveform_21

Waveform Num = 21
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	348453	3	20	80	1561	1853	1030	348453	0	666666
2	716626	2	11	65	1707	1798	0	1069523	666667	1333333
3	279415	3	8	65	1349	1013	1903	1352443	1333334	2000000
4	897528	3	8	80	1354	1752	1747	2254236	2000001	2666667
5	713691	1	5	55	1996	0	0	2972780	2666668	3333334
6	762362	1	6	95	1086	0	0	3737138	3333335	4000001
7	494168	3	9	65	1464	1038	1229	4232392	4000002	4666668
8	594004	2	20	80	1707	1223	0	4830127	4666669	5333335
9	678484	2	12	75	1578	1058	0	5511541	5333336	6000002
10	1121804	2	17	70	1095	1145	0	6635981	6000003	6666669
11	521161	3	16	55	1622	1456	1233	7159382	6666670	7333336
12	500798	2	19	80	1521	1907	0	7664491	7333337	8000003
13	806711	3	17	85	1647	1513	1100	8474630	8000004	8666670
14	332359	3	14	75	1206	1016	1856	8811249	8666671	9333337
15	748358	2	6	85	1946	1003	0	9563685	9333338	10000004
16	456584	1	15	60	1875	0	0	10023218	10000005	10666671
17	649677	1	18	85	1850	0	0	10674770	10666672	11333338
18	833684	3	7	75	1168	1152	1446	11510304	11333339	12000005

Total number of pulses in waveform = 40

Type 5 Radar Waveform_22

Waveform Num = 22
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	570385	2	12	95	1943	1999	0	570385	0	631578
2	438566	2	6	85	1036	1803	0	1012893	631579	1263157
3	857800	3	12	55	1014	1460	1243	1873532	1263158	1894736
4	289860	1	5	50	1053	0	0	2167109	1894737	2526315
5	801652	2	13	75	1930	1801	0	2969814	2526316	3157894
6	448132	3	11	80	1930	1911	1430	3421677	3157895	3789473
7	748914	3	6	100	1562	1367	1806	4175862	3789474	4421052
8	338672	3	18	75	1514	1690	1367	4519269	4421053	5052631
9	705953	1	16	50	1350	0	0	5229793	5052632	5684210
10	718175	2	12	100	1279	1824	0	5949318	5684211	6315789
11	817071	2	20	90	1638	1465	0	6769492	6315790	6947368
12	282933	3	17	95	1112	1104	1994	7055528	6947369	7578947
13	566435	3	12	55	1296	1689	1142	7626173	7578948	8210526
14	1141167	3	13	70	1267	1928	1533	8771467	8210527	8842105
15	172263	2	8	60	1267	1123	0	8948458	8842106	9473684
16	856770	3	7	60	1532	1726	1053	9807618	9473685	10105263
17	882524	1	18	50	1570	0	0	10694453	10105264	10736842
18	637800	1	8	80	1185	0	0	11333823	10736843	11368421
19	661476	2	5	50	1746	1278	0	11996484	11368422	12000000

Total number of pulses in waveform = 42



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	987023	3	20	65	1857	1068	1570	917093	0	1090908
2	987023	1	15	100	1737	0	0	1908611	1090909	2181817
3	737872	1	16	100	1602	0	0	2648220	2181818	3272726
4	1438319	2	5	90	1867	1554	0	4088141	3272727	4363635
5	1264522	3	9	90	1850	1346	1527	5356084	4363636	5454544
6	1078873	1	15	55	1531	0	0	6439680	5454545	6545453
7	216954	3	12	60	1312	1123	1455	6658165	6545454	7636362
8	2049559	2	7	80	1114	1133	0	8711614	7636363	8727271
9	655787	2	9	80	1008	1171	0	9369648	8727272	9818180
10	1400821	3	8	80	1593	1260	1673	10772648	9818181	10909089
11	501909	3	9	70	1611	1002	1117	11279083	10909090	11999998

Total number of pulses in waveform = 24

Type 5 Radar Waveform_24

Waveform Num = 24
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	331014	1	14	55	1260	0	0	331014	0	631578
2	405592	2	5	70	1730	1680	0	737866	631579	1263157
3	841819	2	16	55	1125	1008	0	1583095	1263158	1894736
4	721049	3	8	95	1824	1680	1080	2306277	1894737	2526315
5	639126	2	9	60	1245	1625	0	2949987	2526316	3157894
6	573295	2	9	70	1100	1420	0	3526152	3157895	3789473
7	697540	2	20	50	1516	1674	0	4226212	3789474	4421052
8	254631	2	16	90	1339	1935	0	4484033	4421053	5052631
9	835177	3	19	95	1939	1739	1248	5322484	5052632	5684210
10	694741	2	16	60	1965	1371	0	6022151	5684211	6315789
11	695562	1	18	50	1613	0	0	6721049	6315790	6947368
12	468915	3	14	50	1688	1986	1155	7191577	6947369	7578947
13	725468	2	12	100	1469	1049	0	7921874	7578948	8210526
14	542548	1	14	55	1410	0	0	8466940	8210527	8842105
15	616529	3	14	85	1662	1782	1733	9084879	8842106	9473684
16	520925	2	11	90	1630	1134	0	9610981	9473685	10105263
17	1041153	2	8	80	1498	1535	0	10654898	10105264	10736842
18	401798	1	7	85	1316	0	0	11059729	10736843	11368421
19	693459	2	19	100	1722	1462	0	11754504	11368422	12000000

Total number of pulses in waveform = 38

Type 5 Radar Waveform_25

Waveform Num = 25
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	577410	3	9	85	1915	1299	1159	577410	0	799999
2	235777	1	17	65	1346	0	0	817560	800000	1599999
3	973698	2	12	80	1687	1587	0	1792604	1600000	2399999
4	1290376	2	20	85	1055	1744	0	3086254	2400000	3199999
5	211916	2	18	100	1178	1326	0	3300969	3200000	3999999
6	1093254	1	6	100	1689	0	0	4396727	4000000	4799999
7	657531	2	12	100	1674	1519	0	5055947	4800000	5599999
8	1054519	3	15	70	1349	1250	1236	6113659	5600000	6399999
9	951025	1	6	80	1349	0	0	7068519	6400000	7199999
10	541244	1	15	80	1135	0	0	7611112	7200000	7999999
11	395477	1	12	100	1738	0	0	8007724	8000000	8799999
12	1028769	2	8	55	1516	1385	0	9038231	8800000	9599999
13	1062766	3	6	95	1640	1178	1805	10103898	9600000	10399999
14	571568	3	16	50	1425	1219	1801	10680089	10400000	11199999
15	799375	1	14	70	1637	0	0	11483909	11200000	11999999

Total number of pulses in waveform = 28



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	843958	1	5	85	1653	0	0	843958	0	1090908
2	1203934	1	13	60	1020	0	0	2049550	1090909	2181817
3	318603	1	16	95	1432	0	0	2369173	2181818	3272726
4	1411760	2	11	50	1197	1908	0	3782365	3272727	4363635
5	772847	3	16	85	1542	1817	1788	4558317	4363636	5454544
6	1173914	1	15	95	1748	0	0	5737378	5454545	6545453
7	1427684	2	15	85	1666	1792	0	7166810	6545454	7636362
8	1097250	2	6	70	1064	1172	0	8267518	7636363	8727271
9	662027	2	13	65	1020	1783	0	8931781	8727272	9818180
10	1658981	2	13	75	1536	1234	0	10593565	9818181	10909089
11	370139	3	15	70	1349	1245	1207	10966474	10909090	11999998

Total number of pulses in waveform = 20

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	345272	1	10	65	1136	0	0	345272	0	749999
2	568692	1	19	80	1539	0	0	915100	750000	1499999
3	1292834	1	16	65	1474	0	0	2209473	1500000	2249999
4	682970	2	7	80	1573	1977	0	2893917	2250000	2999999
5	389016	2	7	100	1070	1372	0	3286483	3000000	3749999
6	504850	2	15	95	1343	1914	0	3793775	3750000	4499999
7	1328345	2	9	85	1581	1990	0	5125377	4500000	5249999
8	578163	1	13	65	1622	0	0	5707111	5250000	5999999
9	939327	1	14	90	1301	0	0	6648060	6000000	6749999
10	610481	1	20	65	1136	0	0	7259842	6750000	7499999
11	417321	3	15	100	1807	1534	1722	7678299	7500000	8249999
12	849384	3	5	60	1813	1976	1589	8532746	8250000	8999999
13	1049338	1	6	80	1112	0	0	9587462	9000000	9749999
14	605628	3	6	95	1946	1969	1188	10194202	9750000	10499999
15	478827	2	13	60	1508	1083	0	10678132	10500000	11249999
16	852408	3	18	75	1692	1584	1457	11533131	11250000	11999999

Total number of pulses in waveform = 29

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	53198	2	15	85	1036	1548	0	53198	0	705881
2	837436	2	15	75	1897	1372	0	893218	705882	1411763
3	993846	1	20	100	1759	0	0	1890333	1411764	2117645
4	733105	2	9	75	1063	1599	0	2625197	2117646	2823527
5	279013	2	19	50	1432	1207	0	2906872	2823528	3529409
6	1230752	2	15	75	1738	1354	0	4140263	3529410	4235291
7	786477	3	19	55	1635	1029	1115	4929832	4235292	4941173
8	360282	1	16	75	1496	0	0	5293893	4941174	5647055
9	510257	2	19	100	1881	1100	0	5805646	5647056	6352937
10	637183	2	9	100	1278	1081	0	6445810	6352938	7058819
11	1193307	1	18	95	1680	0	0	7641476	7058820	7764701
12	342699	2	12	50	1698	1350	0	7985855	7764702	8470583
13	795529	3	11	95	1085	1185	1690	8784432	8470584	9176465
14	539268	1	13	90	1899	0	0	9327660	9176466	9882347
15	1203814	1	14	95	1970	0	0	10533373	9882348	10588229
16	346860	1	11	100	1400	0	0	10882203	10588230	11294111
17	492637	1	13	90	1216	0	0	11376240	11294112	11999993

Total number of pulses in waveform = 29



Type 5 Radar Waveform_29

Waveform Num = 29
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	704535	2	10	100	1036	1194	0	704535	0	857142
2	233446	1	15	70	1245	0	0	940211	857143	1714285
3	1176580	2	6	90	1425	1222	0	2118036	1714286	2571428
4	1043723	1	6	50	1899	0	0	3164406	2571429	3428571
5	342820	3	7	70	1642	1415	1925	3509125	3428572	4285714
6	1374299	3	6	85	1058	1754	1700	4888406	4285715	5142857
7	518978	2	19	75	1869	1572	0	5411896	5142858	6000000
8	617921	1	5	50	1782	0	0	6033258	6000001	6857143
9	1026680	1	9	50	1378	0	0	7061720	6857144	7714286
10	1402156	1	19	55	1809	0	0	8465254	7714287	8571429
11	411884	1	8	80	1690	0	0	8878947	8571430	9428572
12	1395266	1	10	60	1413	0	0	10275903	9428573	10285715
13	165212	1	17	70	1704	0	0	10442528	10285716	11142858
14	1065113	3	17	75	1560	1800	1981	11509345	11142859	12000001

Total number of pulses in waveform = 23

Type 5 Radar Waveform_30

Waveform Num = 30
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	252239	3	14	50	1512	1610	1362	252239	0	631578
2	683371	1	14	85	1072	0	0	940094	631579	1263157
3	720270	2	14	85	1435	1138	0	1661436	1263158	1894736
4	748190	3	7	80	1909	1540	1334	2412199	1894737	2526315
5	613059	3	11	70	1077	1250	1367	3030041	2526316	3157894
6	158841	1	16	95	1961	0	0	3192576	3157895	3789473
7	740091	2	15	50	1895	1506	0	3934628	3789474	4421052
8	945428	1	12	85	1268	0	0	4883457	4421053	5052631
9	674308	2	13	65	1748	1682	0	5559033	5052632	5684210
10	286206	1	20	60	1219	0	0	5848669	5684211	6315789
11	520536	2	17	55	1422	1217	0	6370424	6315790	6947368
12	749042	3	15	80	1292	1821	1515	7122105	6947369	7578947
13	679963	2	6	70	1766	1479	0	7806696	7578948	8210526
14	557639	1	12	75	1034	0	0	8367580	8210527	8842105
15	685645	3	20	70	1791	1367	1373	9054259	8842106	9473684
16	482180	3	11	60	1074	1756	1047	9540970	9473685	10105263
17	885701	1	5	85	1102	0	0	10430548	10105264	10736842
18	431111	1	18	65	1534	0	0	10862761	10736843	11368421
19	894841	1	6	70	1192	0	0	11759136	11368422	12000000

Total number of pulses in waveform = 36

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	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)
11	5307	33	7	5283	21
29	5295	87	10	5320	30
33	5274	99	15	5297	45
39	5284	117	20	5269	60
43	5298	129	21	5291	63
45	5315	135	33	5265	99
46	5270	138	58	5296	174
68	5276	204	68	5305	204
72	5287	216	69	5276	207
79	5310	237	71	5321	213
80	5306	240	74	5318	222
84	5265	252	75	5295	225
90	5288	270	89	5306	267

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5309	15	2	5308	6
6	5273	18	8	5292	24
7	5281	21	16	5274	48
10	5288	30	17	5284	51
22	5305	66	24	5291	72
41	5310	123	30	5300	90
53	5275	159	42	5307	126
66	5285	198	47	5309	141
67	5271	201	55	5267	165
69	5294	207	61	5298	183
84	5321	252	80	5318	240
85	5276	255	82	5273	246
86	5308	258	83	5270	249
97	5318	291	93	5297	279
--	--	--	99	5302	297

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5289	0	4	5306	12
8	5262	24	6	5311	18
12	5269	36	10	5261	30
21	5321	63	18	5281	54
28	5270	84	23	5276	69
44	5284	132	25	5292	75
51	5296	153	46	5308	138
73	5314	219	49	5270	147
84	5305	252	80	5296	240
92	5271	276	85	5293	255
--	--	--	93	5275	279

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5315	0	12	5288	36
2	5267	6	21	5284	63
5	5307	15	26	5272	78
9	5282	27	27	5311	81
26	5286	78	29	5299	87
42	5266	126	43	5274	129
47	5317	141	50	5302	150
50	5310	150	55	5301	165
51	5265	153	58	5304	174
53	5295	159	62	5281	186
64	5287	192	69	5261	207
71	5271	213	71	5282	213
79	5306	237	79	5300	237
95	5297	285	80	5285	240
--	--	--	82	5271	246
--	--	--	97	5286	291

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5310	0	0	5271	0
9	5309	27	1	5292	3
10	5273	30	7	5311	21
26	5264	78	11	5275	33
48	5293	144	15	5313	45
54	5303	162	25	5309	75
63	5314	189	27	5265	81
74	5289	222	31	5266	93
77	5261	231	32	5308	96
99	5288	297	35	5287	105
--	--	--	38	5290	114
--	--	--	40	5293	120
--	--	--	62	5304	186
--	--	--	63	5288	189
--	--	--	67	5262	201
--	--	--	73	5272	219
--	--	--	92	5315	276
--	--	--	97	5289	291
--	--	--	99	5269	297

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
13	5304	39	5	5315	15
14	5267	42	15	5272	45
21	5287	63	16	5289	48
26	5285	78	41	5304	123
30	5270	90	52	5276	156
40	5266	120	55	5298	165
44	5286	132	60	5278	180
57	5297	171	65	5286	195
59	5280	177	66	5311	198
60	5289	180	72	5285	216
62	5314	186	80	5299	240
65	5302	195	98	5320	294
69	5320	207	--	--	--
79	5294	237	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5291	15	7	5307	21
13	5289	39	9	5313	27
33	5320	99	19	5287	57
36	5287	108	21	5274	63
55	5304	165	32	5290	96
82	5305	246	43	5295	129
87	5273	261	49	5292	147
97	5281	291	50	5303	150
99	5277	297	53	5291	159
--	--	--	56	5279	168
--	--	--	60	5275	180
--	--	--	64	5297	192
--	--	--	75	5264	225
--	--	--	89	5265	267
--	--	--	96	5269	288

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5261	33	12	5293	36
12	5271	36	13	5266	39
26	5319	78	18	5296	54
31	5314	93	22	5313	66
41	5262	123	30	5297	90
45	5308	135	32	5280	96
58	5290	174	40	5309	120
90	5296	270	51	5276	153
91	5267	273	67	5289	201
93	5263	279	73	5270	219
95	5281	285	78	5261	234
96	5264	288	85	5286	255
--	--	--	87	5319	261
--	--	--	89	5277	267
--	--	--	92	5300	276

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5294	21	6	5300	18
10	5293	30	15	5321	45
12	5263	36	39	5281	117
20	5288	60	42	5311	126
30	5272	90	43	5291	129
35	5305	105	44	5276	132
52	5313	156	56	5305	168
54	5278	162	57	5285	171
57	5320	171	62	5315	186
75	5283	225	70	5290	210
77	5268	231	72	5279	216
80	5285	240	73	5268	219
85	5301	255	88	5286	264
--	--	--	91	5296	273

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
25	5277	75	5	5299	15
26	5283	78	12	5319	36
27	5301	81	13	5317	39
28	5303	84	16	5274	48
32	5291	96	25	5300	75
39	5273	117	34	5261	102
40	5319	120	35	5316	105
43	5299	129	36	5263	108
47	5279	141	57	5294	171
55	5302	165	98	5262	294
63	5263	189	99	5270	297
68	5308	204	--	--	--
80	5282	240	--	--	--
93	5286	279	--	--	--
97	5272	291	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5299	21	1	5274	3
12	5318	36	2	5304	6
17	5293	51	4	5281	12
20	5269	60	8	5306	24
21	5265	63	12	5309	36
30	5261	90	23	5265	69
46	5305	138	30	5279	90
51	5267	153	34	5308	102
58	5312	174	39	5291	117
59	5315	177	59	5297	177
64	5306	192	65	5271	195
67	5316	201	74	5270	222
75	5313	225	77	5262	231
92	5272	276	82	5266	246
95	5289	285	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5271	12	2	5284	6
6	5265	18	24	5263	72
11	5292	33	27	5295	81
13	5288	39	30	5261	90
44	5314	132	36	5309	108
48	5310	144	41	5274	123
53	5264	159	47	5291	141
57	5289	171	49	5320	147
63	5261	189	80	5308	240
68	5280	204	82	5307	246
72	5317	216	93	5276	279
78	5281	234	--	--	--
86	5302	258	--	--	--
95	5285	285	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5288	0	9	5297	27
7	5265	21	19	5319	57
48	5271	144	20	5295	60
54	5307	162	23	5289	69
56	5291	168	24	5313	72
69	5306	207	25	5263	75
78	5315	234	42	5279	126
84	5310	252	47	5274	141
85	5305	255	52	5284	156
94	5264	282	57	5281	171
--	--	--	71	5316	213
--	--	--	74	5292	222
--	--	--	76	5269	228
--	--	--	81	5283	243
--	--	--	84	5308	252
--	--	--	90	5317	270

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5264	3	0	5303	0
10	5273	30	10	5274	30
16	5302	48	18	5275	54
28	5310	84	19	5261	57
52	5274	156	26	5301	78
55	5293	165	31	5292	93
56	5307	168	42	5273	126
64	5269	192	43	5317	129
69	5276	207	48	5315	144
79	5262	237	62	5267	186
81	5314	243	66	5300	198
86	5282	258	68	5270	204
92	5316	276	70	5314	210
--	--	--	85	5284	255
--	--	--	94	5285	282

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5303	3	2	5275	6
7	5263	21	19	5297	57
8	5313	24	30	5295	90
27	5270	81	43	5307	129
38	5308	114	44	5286	132
41	5267	123	50	5292	150
49	5318	147	60	5274	180
66	5300	198	65	5271	195
68	5289	204	81	5309	243
71	5319	213	92	5262	276
74	5271	222	96	5264	288
80	5281	240	97	5263	291
86	5280	258	--	--	--
90	5284	270	--	--	--
95	5274	285	--	--	--

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	878	61	1
2	5291	1	758	70	1
3	5291	1	618	86	1
4	5291	1	918	58	1
5	5291	1	3066	18	1
6	5291	1	858	62	1
7	5291	1	778	68	1
8	5291	1	818	65	1
9	5291	1	738	72	1
10	5291	1	678	78	1
11	5291	1	698	76	1
12	5291	1	658	81	1
13	5291	1	558	95	1
14	5291	1	518	102	1
15	5291	1	538	99	1
16	5291	1	2640	20	1
17	5291	1	2654	20	1
18	5291	1	1314	41	1
19	5291	1	1336	40	1
20	5291	1	2594	21	1
21	5291	1	2548	21	1
22	5291	1	2042	26	1
23	5291	1	1600	33	1
24	5291	1	2730	20	1
25	5291	1	2599	21	1
26	5291	1	526	101	1
27	5291	1	2798	19	1
28	5291	1	2531	21	1
29	5291	1	1127	47	1
30	5291	1	1103	48	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	5292	1.4	150	27	1
2	5292	1.7	157	24	1
3	5292	2.5	210	27	1
4	5292	1.7	159	25	1
5	5292	5.0	204	26	1
6	5292	4.5	219	23	1
7	5292	2.2	179	24	1
8	5292	1.8	216	29	1
9	5292	4.4	211	26	1
10	5292	3.8	153	26	1
11	5292	1.4	190	27	1
12	5292	4.1	179	25	1
13	5292	2.2	166	25	1
14	5292	2.3	220	23	1
15	5292	1.5	158	27	1
16	5292	2.6	171	27	1
17	5292	3.0	162	28	1
18	5292	3.2	213	29	1
19	5292	3.2	191	29	1
20	5292	2.8	160	27	1
21	5292	1.1	156	27	1
22	5292	2.6	159	23	1
23	5292	4.4	208	29	1
24	5292	1.6	156	25	1
25	5292	4.1	168	28	1
26	5292	3.2	225	28	1
27	5292	4.9	203	26	1
28	5292	2.3	206	27	1
29	5292	1.0	203	27	1
30	5292	2.3	220	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	5310	8.2	398	17	1
2	5310	6.3	457	17	1
3	5310	9.0	349	16	1
4	5310	7.2	417	18	1
5	5310	8.8	448	17	1
6	5310	7.8	262	17	1
7	5310	9.1	350	18	1
8	5310	6.1	414	17	1
9	5310	7.2	384	17	1
10	5310	8.1	276	18	1
11	5310	6.7	281	16	1
12	5310	6.1	420	16	1
13	5310	9.6	274	16	1
14	5310	7.8	464	16	1
15	5310	9.4	448	18	1
16	5310	9.1	435	18	1
17	5310	9.0	476	16	1
18	5310	9.8	272	18	1
19	5310	9.2	440	16	1
20	5310	7.3	489	18	1
21	5310	8.6	362	17	1
22	5310	8.5	335	17	1
23	5310	6.5	449	16	1
24	5310	8.3	405	16	1
25	5310	9.7	277	17	1
26	5310	7.7	439	18	1
27	5310	8.7	474	16	1
28	5310	9.8	439	17	1
29	5310	9.2	359	18	1
30	5310	6.8	301	17	1
Detection Percentage (%)					100%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5328	13.9	351	12	1
2	5328	16.0	296	16	1
3	5328	16.0	393	14	1
4	5328	12.0	443	16	1
5	5328	11.3	311	16	1
6	5328	11.7	379	13	1
7	5328	16.8	293	15	1
8	5328	16.8	404	16	1
9	5328	11.0	371	15	1
10	5328	19.9	314	16	1
11	5328	14.4	350	13	1
12	5328	18.3	370	13	1
13	5328	18.7	448	15	1
14	5328	14.1	461	15	1
15	5328	19.2	386	15	1
16	5328	16.8	356	14	1
17	5328	11.2	319	15	1
18	5328	13.1	386	13	1
19	5328	18.6	267	12	1
20	5328	17.0	477	12	1
21	5328	11.1	331	13	1
22	5328	18.1	397	16	1
23	5328	18.3	358	16	1
24	5328	18.7	485	12	1
25	5328	17.3	397	13	1
26	5328	18.6	487	13	1
27	5328	20.0	415	12	1
28	5328	19.0	414	12	1
29	5328	16.0	295	15	1
30	5328	13.8	459	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	5295	1	17	5313	1
3	5296	1	18	5314	1
4	5296	1	19	5315	1
5	5297	1	20	5316	1
6	5297	1	21	5317	1
7	5298	1	22	5318	1
8	5299	1	23	5319	1
9	5300	1	24	5320	1
10	5301	1	25	5321	1
11	5302	1	26	5322	1
12	5303	1	27	5323	1
13	5304	1	28	5324	1
14	5305	1	29	5325	1
15	5306	1	30	5326	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

Waveform Num = 1										
Num of Bursts = 11										
Burst Interval (us)= 1090909										
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	356525	1	10	95	1001	0	0	356525	0	1090908
2	1546619	3	13	90	1508	1451	1481	1904145	1090909	2181817
3	912786	1	8	50	1540	0	0	2821371	2181818	3272726
4	1415010	1	18	70	1170	0	0	4237921	3272727	4363635
5	883408	2	13	85	1597	1271	0	5122499	4363636	5454544
6	735978	1	12	85	1236	0	0	5861345	5454545	6545453
7	1247811	1	16	60	1672	0	0	7110392	6545454	7636362
8	951240	2	15	70	1478	1166	0	8063304	7636363	8727271
9	1713348	1	14	55	1602	0	0	9779296	8727272	9818180
10	735784	2	11	75	1727	1054	0	10516682	9818181	10909089
11	927071	1	8	85	1280	0	0	11446534	10909090	11999998
Total number of pulses in waveform = 16										



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	906280	2	9	85	1785	1399	0	906280	0	999999
2	960542	1	15	80	1867	0	0	1869986	1000000	1999999
3	418609	1	15	65	1805	0	0	2290462	2000000	2999999
4	1460764	1	8	85	1567	0	0	3753031	3000000	3999999
5	720859	2	7	80	1205	1717	0	4475457	4000000	4999999
6	1098804	3	20	65	1770	1188	1945	5577183	5000000	5999999
7	1058671	1	12	55	1295	0	0	6640757	6000000	6999999
8	899508	1	19	65	1578	0	0	7541560	7000000	7999999
9	544274	1	5	55	1451	0	0	8087412	8000000	8999999
10	1263671	2	7	60	1196	1877	0	9352534	9000000	9999999
11	1588744	3	12	65	1381	1785	1613	10944351	10000000	10999999
12	61257	3	17	70	1778	1117	1865	11010387	11000000	11999999

Total number of pulses in waveform = 21

Type 5 Radar Waveform_3

Waveform Num = 3
Num of Bursts = 16
Burst Interval (us)= 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	77411	2	8	75	1200	1339	0	77411	0	749999
2	1400771	2	19	95	1147	1752	0	1480721	750000	1499999
3	754261	3	11	65	1555	1790	1964	2237881	1500000	2249999
4	539708	3	19	60	1566	1055	1829	2782898	2250000	2999999
5	712754	2	14	60	1813	1014	0	3500102	3000000	3749999
6	419740	2	5	65	1164	1873	0	3922669	3750000	4499999
7	1299156	3	7	70	1522	1600	1523	5224862	4500000	5249999
8	53106	3	12	55	1627	1525	1092	5282613	5250000	5999999
9	941552	3	6	75	1875	1327	1354	6226409	6000000	6749999
10	1209686	3	5	65	1854	1395	1702	7442651	6750000	7499999
11	487185	3	5	100	1956	1783	1271	7934767	7500000	8249999
12	912156	1	15	85	1352	0	0	8651955	8250000	8999999
13	188404	2	5	100	1682	1054	0	9041711	9000000	9749999
14	1013750	1	11	60	1582	0	0	10058397	9750000	10499999
15	828407	2	17	95	1304	1562	0	10888386	10500000	11249999
16	402244	3	16	65	1564	1321	1999	11293496	11250000	11999999

Total number of pulses in waveform = 38

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	965236	1	20	50	1659	0	0	965236	0	1499999
2	2014658	3	11	95	1441	1684	1622	2981553	1500000	2999999
3	697498	3	12	65	1337	1910	1758	3683798	3000000	4499999
4	1549556	3	18	60	1457	1462	1184	5238359	4500000	5999999
5	2138598	1	20	85	1996	0	0	7381060	6000000	7499999
6	1505336	2	12	95	1091	1177	0	8886392	7500000	8999999
7	1174476	2	5	65	1824	1929	0	10065136	9000000	10499999
8	1153293	1	11	70	1975	0	0	11222182	10500000	11999999

Total number of pulses in waveform = 16



Type 5 Radar Waveform_5

Waveform Num = 5
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	376345	3	14	95	1709	1712	1798	376345	0	857142
2	623145	1	10	75	1005	0	0	1004709	857143	1714285
3	1021787	3	19	80	1212	1878	1018	2027501	1714286	2571428
4	1339150	2	13	65	1178	1369	0	3370759	2571429	3428571
5	147213	3	19	55	1194	1512	1309	3520519	3428572	4285714
6	768737	3	9	65	1567	1496	1359	4293271	4285715	5142857
7	1254668	3	20	90	1574	1243	1378	5552361	5142858	6000000
8	1026898	3	8	75	1381	1499	1388	6583454	6000001	6857143
9	630381	3	11	55	1818	1038	1091	7218103	6857144	7714286
10	1013981	2	9	90	1726	1175	0	8235831	7714287	8571429
11	356115	1	12	70	1854	0	0	8594847	8571430	9428572
12	1576439	1	8	80	1707	0	0	10173140	9428573	10285715
13	539437	2	14	95	1205	1307	0	10714284	10285716	11142858
14	642537	2	15	55	1726	1880	0	11359333	11142859	12000001

Total number of pulses in waveform = 32

Type 5 Radar Waveform_6

Waveform Num = 6
Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	144952	2	16	85	1352	1635	0	144952	0	999999
2	1430151	3	6	100	1083	1876	1497	1578090	1000000	1999999
3	828351	3	17	100	1815	1233	1582	2410897	2000000	2999999
4	952138	1	6	55	1735	0	0	3367665	3000000	3999999
5	1614908	2	7	80	1667	1513	0	4984308	4000000	4999999
6	833271	1	13	85	1131	0	0	5820759	5000000	5999999
7	946245	3	16	80	1889	1379	1106	6768135	6000000	6999999
8	652713	3	20	75	1311	1404	1470	7425222	7000000	7999999
9	596385	2	5	55	1023	1837	0	8025792	8000000	8999999
10	1557797	2	6	80	1104	1851	0	9586449	9000000	9999999
11	643592	3	7	90	1902	1208	1639	10232996	10000000	10999999
12	1677738	3	14	95	1530	1248	1559	11915483	11000000	11999999

Total number of pulses in waveform = 28

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	796566	1	16	85	1569	0	0	796566	0	1199999
2	692685	1	16	80	1031	0	0	1490820	1200000	2399999
3	1511584	2	19	60	1254	1108	0	3003435	2400000	3599999
4	1218225	2	16	80	1440	1973	0	4224022	3600000	4799999
5	1140278	1	13	100	1175	0	0	5367713	4800000	5999999
6	1153566	3	12	95	1660	1463	1911	6522454	6000000	7199999
7	1666035	3	7	80	1441	1983	1075	8193523	7200000	8399999
8	658161	3	10	95	1838	1954	1246	8856183	8400000	9599999
9	808938	1	19	65	1839	0	0	9670159	9600000	10799999
10	2250050	2	20	60	1698	1173	0	11922048	10800000	11999999

Total number of pulses in waveform = 19



Type 5 Radar Waveform_8

Waveform Num = 8
Num of Bursts = 14
Burst Interval (us)= 857143

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	430783	3	15	70	1133	1480	1988	430783	0	857142
2	732461	3	16	60	1631	1500	1451	1167845	857143	1714285
3	845828	1	18	60	1892	0	0	1818255	1714286	2571428
4	832847	3	11	70	1599	1434	1887	2652994	2571429	3428571
5	1050689	2	10	95	1202	1508	0	3708603	3428572	4285714
6	675634	3	17	55	1557	1211	1789	4388947	4285715	5142857
7	1314895	3	13	60	1015	1075	1538	5706399	5142858	6000000
8	366024	2	13	55	1205	1918	0	6076051	6000001	6857143
9	1629119	3	9	85	1270	1158	1930	7708293	6857144	7714286
10	673863	2	15	75	1591	1212	0	8386514	7714287	8571429
11	357374	1	10	95	1487	0	0	8746691	8571430	9428572
12	958835	1	5	75	1986	0	0	9707013	9428573	10285715
13	945232	1	12	85	1906	0	0	10654231	10285716	11142858
14	697355	2	5	70	1783	1629	0	11353492	11142859	12000001

Total number of pulses in waveform = 30

Type 5 Radar Waveform_9

Waveform Num = 9
Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	999597	3	14	75	1567	1982	1135	999597	0	1090908
2	688387	2	18	90	1667	1482	0	1692668	1090909	2181817
3	1354356	3	8	80	1176	1711	1468	3050173	2181818	3272726
4	699989	3	10	50	1586	1900	1713	3754517	3272727	4363635
5	1296499	2	19	70	1548	1854	0	5058215	4363636	5454544
6	550466	2	10	85	1077	1789	0	5610083	5454545	6545453
7	1663735	1	6	50	1557	0	0	7276684	6545454	7636362
8	757220	2	7	65	1995	1594	0	8035461	7636363	8727271
9	1207133	3	5	85	1784	1093	1646	9246183	8727272	9818180
10	681093	3	10	60	1899	1787	1262	9931799	9818181	10909089
11	1180009	3	16	90	1181	1097	1917	11116756	10909090	11999998

Total number of pulses in waveform = 27

Type 5 Radar Waveform_10

Waveform Num = 10
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	853252	2	12	80	1697	1084	0	853252	0	999999
2	518507	1	20	55	1123	0	0	1374540	1000000	1999999
3	1537708	2	16	55	1341	1701	0	2913371	2000000	2999999
4	793269	2	7	80	1957	1958	0	3709682	3000000	3999999
5	295023	3	6	80	1209	1823	1119	4008620	4000000	4999999
6	1765961	2	13	50	1524	1668	0	5778732	5000000	5999999
7	987591	3	6	80	1919	1561	1249	6769515	6000000	6999999
8	1060563	1	8	80	1823	0	0	7834807	7000000	7999999
9	702950	3	8	75	1447	1300	1804	8539580	8000000	8999999
10	1184862	1	8	60	1006	0	0	9728993	9000000	9999999
11	1107256	2	13	90	1831	1510	0	10637255	10000000	10999999
12	502339	1	18	85	1713	0	0	11342935	11000000	11999999

Total number of pulses in waveform = 23



Type 5 Radar Waveform_11

Waveform Num = 11
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	18127	1	19	55	1729	0	0	18127	0	749999
2	1222263	2	18	80	1463	1498	0	1242119	750000	1499999
3	762205	1	8	70	1745	0	0	2007285	1500000	2249999
4	546437	3	8	75	1582	1675	1848	2555467	2250000	2999999
5	966735	1	13	90	1476	0	0	3527307	3000000	3749999
6	507751	3	16	75	1341	1813	1937	4036534	3750000	4499999
7	586680	1	19	85	1306	0	0	4628305	4500000	5249999
8	860744	2	11	95	1977	1921	0	5490355	5250000	5999999
9	634323	3	17	75	1000	1674	1951	6128576	6000000	6749999
10	880488	2	17	95	1407	1467	0	7013689	6750000	7499999
11	693484	1	7	50	1563	0	0	7710047	7500000	8249999
12	735466	3	16	80	1067	1215	1227	8447076	8250000	8999999
13	549448	2	5	70	1796	1880	0	9000033	9000000	9749999
14	963693	3	17	75	1249	1584	1577	9967402	9750000	10499999
15	622253	1	12	80	1302	0	0	10594065	10500000	11249999
16	935459	3	8	95	1038	1629	1954	11530826	11250000	11999999

Total number of pulses in waveform = 32

Type 5 Radar Waveform_12

Waveform Num = 12
Num of Bursts = 16
Burst Interval (us)= 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	180340	2	13	50	1566	1210	0	180340	0	749999
2	1271514	1	18	95	1519	0	0	1434630	750000	1499999
3	535194	1	16	60	1796	0	0	1971343	1500000	2249999
4	344840	3	20	80	1668	1154	1629	2317979	2250000	2999999
5	1051589	3	15	55	1093	1858	1642	3374019	3000000	3749999
6	970820	3	10	100	1201	1054	1806	4349432	3750000	4499999
7	772838	2	6	65	1770	1290	0	5126331	4500000	5249999
8	579663	3	9	55	1196	1999	1118	5709054	5250000	5999999
9	857630	1	20	60	1557	0	0	6570997	6000000	6749999
10	808904	2	18	55	1950	1707	0	7381458	6750000	7499999
11	144025	2	10	100	1153	1931	0	7529140	7500000	8249999
12	1370971	1	17	95	1144	0	0	8903195	8250000	8999999
13	483050	3	19	75	1424	1788	1525	9387389	9000000	9749999
14	775365	3	6	50	1623	1413	1048	10167491	9750000	10499999
15	368547	2	11	95	1228	1724	0	10538122	10500000	11249999
16	1020965	3	16	55	1641	1212	1279	11562039	11250000	11999999

Total number of pulses in waveform = 35

Type 5 Radar Waveform_13

Waveform Num = 13
Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	391649	2	10	85	1073	1961	0	391649	0	999999
2	1334336	2	19	90	1440	1167	0	1729019	1000000	1999999
3	619992	3	17	60	1087	1213	1497	2351618	2000000	2999999
4	657526	2	14	100	1634	1986	0	3012941	3000000	3999999
5	1605484	1	19	55	1940	0	0	4622045	4000000	4999999
6	492597	3	12	100	1387	1188	1762	5116582	5000000	5999999
7	1122559	1	19	90	1961	0	0	6243458	6000000	6999999
8	1712067	2	14	70	1547	1342	0	7957486	7000000	7999999
9	794003	1	8	70	1825	0	0	8754378	8000000	8999999
10	371364	3	13	70	1321	1689	1727	9127567	9000000	9999999
11	1405127	2	17	65	1261	1947	0	10537431	10000000	10999999
12	588240	2	10	95	1568	1200	0	11128879	11000000	11999999

Total number of pulses in waveform = 24



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	22706	3	10	85	1846	1350	1294	22706	0	1090908
2	1843952	2	8	80	1526	1061	0	1871148	1090909	2181817
3	314258	2	6	65	1507	1855	0	2187993	2181818	3272726
4	1187832	1	10	80	1503	0	0	3379187	3272727	4363635
5	1227144	2	15	60	1258	1326	0	4607834	4363636	5454544
6	1776740	1	15	85	1552	0	0	6387158	5454545	6545453
7	1035736	3	20	60	1720	1447	1404	7424446	6545454	7636362
8	783834	3	18	60	1170	1187	1975	8212851	7636363	8727271
9	765848	3	6	100	1392	1836	1395	8983031	8727272	9818180
10	874394	2	13	75	1296	1300	0	9862048	9818181	10909089
11	1355151	2	8	50	1212	1948	0	11219795	10909090	11999998

Total number of pulses in waveform = 24

Type 5 Radar Waveform_15

Waveform Num = 15
Num of Bursts = 20
Burst Interval (us) = 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	358839	3	10	85	1956	1140	1753	358839	0	599999
2	655252	2	13	70	1342	1330	0	1018940	600000	1199999
3	345440	2	12	95	1653	1329	0	1367052	1200000	1799999
4	789031	3	7	95	1898	1990	1489	2159085	1800000	2399999
5	682853	2	5	60	1008	1415	0	2847295	2400000	2999999
6	336404	3	13	100	1282	1364	1465	3186122	3000000	3599999
7	514818	3	7	90	1812	1415	1964	3705051	3600000	4199999
8	749200	1	18	80	1716	0	0	4459442	4200000	4799999
9	369723	2	8	60	1241	1547	0	4830881	4800000	5399999
10	674225	1	19	85	1402	0	0	5507894	5400000	5999999
11	1047481	1	14	90	1842	0	0	6556777	6000000	6599999
12	49283	2	12	95	1328	1422	0	6607902	6600000	7199999
13	765770	2	7	55	1445	1430	0	7376422	7200000	7799999
14	639013	3	9	55	1734	1928	1078	8018310	7800000	8399999
15	699211	2	16	50	1666	1923	0	8722261	8400000	8999999
16	424732	1	14	75	1040	0	0	9150582	9000000	9599999
17	516372	1	11	65	1321	0	0	9667994	9600000	10199999
18	561432	3	20	80	1616	1980	1847	10230747	10200000	10799999
19	1064572	2	6	95	1116	1374	0	11300562	10800000	11399999
20	682796	1	15	80	1739	0	0	11985848	11400000	11999999

Total number of pulses in waveform = 40

Type 5 Radar Waveform_16

Waveform Num = 16
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	269798	3	19	95	1357	1035	1451	269798	0	923076
2	1535386	1	8	60	1419	0	0	1809007	923077	1846153
3	676558	2	17	55	1404	1549	0	2466984	1846154	2769230
4	1058838	3	18	65	1801	1915	1310	3548775	2769231	3692307
5	590126	1	12	60	1429	0	0	4143927	3692308	4615384
6	1389788	1	20	65	1668	0	0	5535144	4615385	5538461
7	292460	3	7	55	1143	1930	1074	5829272	5538462	6461538
8	1024264	3	12	80	1777	1669	1499	6857683	6461539	7384615
9	679726	2	18	80	1534	1724	0	7542354	7384616	8307692
10	1436511	2	14	60	1500	1993	0	8982123	8307693	9230769
11	528266	1	19	75	1189	0	0	9513882	9230770	10153846
12	1052925	3	17	80	1086	1440	1589	10567976	10153847	11076923
13	1375437	1	16	85	1588	0	0	11947528	11076924	12000000

Total number of pulses in waveform = 26



Type 5 Radar Waveform_17

Waveform Num = 17
Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	574104	2	8	55	1094	1045	0	574104	0	999999
2	1234627	1	5	90	1207	0	0	1810870	1000000	1999999
3	785039	3	20	95	1415	1622	1041	2597116	2000000	2999999
4	1367556	2	16	75	1020	1861	0	3968750	3000000	3999999
5	373189	2	14	85	1332	1476	0	4344820	4000000	4999999
6	1397941	1	13	100	1707	0	0	5745569	5000000	5999999
7	320743	1	15	85	1843	0	0	6068019	6000000	6999999
8	1538262	1	9	75	1395	0	0	7608124	7000000	7999999
9	1162155	3	5	100	1867	1914	1345	8771674	8000000	8999999
10	612437	3	16	75	1734	1196	1161	9389237	9000000	9999999
11	1421813	3	6	80	1011	1806	1562	10815141	10000000	10999999
12	837141	2	16	70	1582	1571	0	11656661	11000000	11999999

Total number of pulses in waveform = 24

Type 5 Radar Waveform_18

Waveform Num = 18
Num of Bursts = 19
Burst Interval (us)= 631579

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	185604	1	7	80	1331	0	0	185604	0	631576
2	1014007	2	10	85	1297	1915	0	1200942	631579	1263157
3	348995	1	20	55	1777	0	0	1553149	1263158	1894736
4	644959	1	18	95	1676	0	0	2199885	1894737	2526315
5	667147	2	6	70	1139	1044	0	2868708	2526316	3157894
6	312844	1	8	80	1622	0	0	3183735	3157895	3789473
7	1130648	1	7	80	1987	0	0	4316005	3789474	4421052
8	480791	2	11	90	1348	1889	0	4798783	4421053	5052631
9	443501	1	11	55	1678	0	0	5245521	5052632	5684210
10	522301	1	10	80	1003	0	0	5769500	5684211	6315769
11	832131	2	10	70	1520	1855	0	6602634	6315790	6947368
12	456107	1	18	85	1633	0	0	7061916	6947369	7578947
13	777703	1	14	85	1714	0	0	7841252	7578948	8210526
14	831753	2	9	75	1504	1800	0	8674719	8210527	8842105
15	695705	1	9	50	1431	0	0	9373728	8842106	9473684
16	576897	3	13	65	1355	1965	1394	9954056	9473685	10105263
17	513043	2	11	50	1327	1528	0	10471813	10105264	10736842
18	847823	2	9	85	1274	1028	0	11322491	10736843	11368421
19	386231	2	10	90	1577	1451	0	11711024	11368422	12000000

Total number of pulses in waveform = 29

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	987276	1	8	50	1538	0	0	987276	0	1499999
2	1716896	1	17	85	1513	0	0	2705710	1500000	2999999
3	1548838	3	15	60	1218	1732	1273	4256061	3000000	4499999
4	1040485	1	14	50	1882	0	0	5300769	4500000	5999999
5	2151545	3	13	65	1922	1062	1713	7454196	6000000	7499999
6	446887	1	7	60	1870	0	0	7905780	7500000	8999999
7	2502436	1	20	60	1849	0	0	10410086	9000000	10499999
8	1139731	3	5	70	1282	1884	1976	11551666	10500000	11999999

Total number of pulses in waveform = 14



Type 5 Radar Waveform_20

Waveform Num = 20
Num of Bursts = 12
Burst Interval (us) = 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	329842	2	20	65	1055	1582	0	329842	0	999999
2	940584	3	9	75	1335	1035	1965	1273043	1000000	1999999
3	1313359	2	6	70	1384	1450	0	2590737	2000000	2999999
4	897631	1	5	65	1778	0	0	3491202	3000000	3999999
5	993590	1	6	55	1379	0	0	4486570	4000000	4999999
6	628435	2	8	95	1767	1956	0	5116384	5000000	5999999
7	1475597	2	12	95	1227	1414	0	6595704	6000000	6999999
8	569521	1	10	90	1660	0	0	7167866	7000000	7999999
9	1464277	2	14	55	1106	1016	0	8633803	8000000	8999999
10	1180656	3	6	65	1510	1313	1103	9816581	9000000	9999999
11	335294	2	19	55	1471	1705	0	10155801	10000000	10999999
12	1338647	3	15	85	1634	1977	1442	11497624	11000000	11999999

Total number of pulses in waveform = 24

Type 5 Radar Waveform_21

Waveform Num = 21
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	509760	3	19	55	1332	1240	1078	509760	0	631578
2	573566	1	11	85	1630	0	0	1086996	631579	1263157
3	182096	1	14	75	1904	0	0	1270722	1263158	1894736
4	906385	1	17	60	1561	0	0	2181011	1894737	2526315
5	652310	3	13	100	1351	1834	1720	2634682	2526316	3157694
6	318184	2	6	70	1110	1700	0	3157971	3157695	3789473
7	791962	1	10	90	1703	0	0	3952763	3789474	4421052
8	779301	1	10	55	1296	0	0	4733767	4421053	5052631
9	370787	2	9	50	1403	1079	0	5105850	5052632	5684210
10	587409	1	6	70	1002	0	0	5695741	5684211	6315789
11	1108967	3	20	70	1720	1518	1417	6605710	6315790	6947368
12	650720	3	11	85	1581	1809	1734	7461085	6947369	7578947
13	736256	3	16	65	1949	1806	1512	8204465	7578948	8210526
14	173307	2	13	65	1639	1226	0	8363039	8210527	8842105
15	507921	3	9	95	1047	1637	1824	8894027	8842106	9473684
16	1038922	3	12	80	1253	1752	1344	9937457	9473685	10105263
17	263774	3	8	85	1983	1561	1237	10205580	10105264	10736842
18	1110869	3	12	100	1527	1354	1137	11321230	10736843	11368421
19	623955	1	10	70	1643	0	0	11949203	11368422	12000000

Total number of pulses in waveform = 40

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	607592	3	8	50	1620	1570	1690	607592	0	999999
2	792540	2	18	95	1266	1074	0	1405012	1000000	1999999
3	1172912	1	8	85	1267	0	0	2580264	2000000	2999999
4	1009047	3	11	90	1775	1654	1421	3590578	3000000	3999999
5	765724	2	9	85	1598	1106	0	4361152	4000000	4999999
6	1628557	3	7	75	1618	1166	1200	5992413	5000000	5999999
7	137483	1	17	80	1809	0	0	6133880	6000000	6999999
8	1456733	1	10	70	1376	0	0	7592222	7000000	7999999
9	420904	2	16	55	1570	1091	0	8014502	8000000	8999999
10	1949298	3	11	50	1412	1476	2000	9966461	9000000	9999999
11	38746	2	11	100	1845	1503	0	10010095	10000000	10999999
12	1284995	2	17	90	1528	1482	0	11298438	11000000	11999999

Total number of pulses in waveform = 25



Type 5 Radar Waveform_23

Waveform Num = 23
Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	445248	1	11	100	1409	0	0	506651	0	705881
2	452622	2	18	60	1167	1076	0	953308	705882	1411763
3	551690	1	13	50	1295	0	0	1908173	1411764	2117645
4	618882	1	8	90	1796	0	0	2461158	2117646	2623527
5	760380	2	11	70	1701	1273	0	3081836	2623528	3529409
6	464505	2	14	75	1067	1022	0	3845190	3529410	4235291
7	836476	2	18	95	1142	1613	0	4311784	4235292	4941173
8	1050654	2	8	65	1331	1945	0	5151015	4941174	5647055
9	355427	3	18	85	1747	1105	1460	6204945	5647056	6352937
10	1107098	2	9	75	1929	1369	0	6564684	6352938	7058819
11	296862	1	8	55	1578	0	0	7675080	7058820	7764701
12	852958	3	12	60	1125	1761	1748	7973520	7764702	8470583
13	824086	2	17	50	1422	1116	0	8631112	8470584	9176465
14	564773	3	14	65	1997	1197	1226	9657736	9176466	9882347
15	1018944	2	7	80	1303	1746	0	10226929	9882348	10588229
16	266850	1	14	80	1329	0	0	11248922	10588230	11294111
17		3	20	85	1765	1207	1376	11517101	11294112	11999993

Total number of pulses in waveform = 33

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	143788	2	20	70	1473	1770	0	143788	0	1090908
2	1856648	1	14	100	1130	0	0	2003679	1090909	2181817
3	326640	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

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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	480613	1	7	55	1537	0	0	480613	0	923076
2	1161059	2	20	50	1446	1618	0	1643209	923077	1846153
3	529863	1	12	75	1263	0	0	2176136	1846154	2769230
4	836262	2	20	55	1668	1863	0	3013661	2769231	3692307
5	757275	3	12	100	1502	1593	1367	3774487	3692308	4615384
6	1653219	1	14	55	1642	0	0	5432168	4615385	5538461
7	462939	3	12	100	1285	1732	1233	5896749	5538462	6461538
8	767034	2	17	80	1444	1255	0	6668033	6461539	7384615
9	1614479	1	14	70	1152	0	0	8265211	7384616	8307692
10	72180	3	11	90	1084	1293	1301	8358543	8307693	9230789
11	1717419	2	17	100	1072	1385	0	10079640	9230770	10153846
12	674204	1	17	65	1959	0	0	10756301	10153847	11076923
13	749327	3	6	80	1600	1558	1689	11507587	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	192589	3	12	60	1870	1066	1716	192589	0	799999
2	764579	3	5	100	1398	1827	1967	961820	800000	1599999
3	1255198	3	20	75	1029	1522	1921	2222210	1600000	2399999
4	220671	3	10	50	1314	1132	1762	2447353	2400000	3199999
5	1338124	1	7	50	1221	0	0	3789685	3200000	3999999
6	820318	1	14	65	1667	0	0	4611224	4000000	4799999
7	675900	2	12	75	1552	1206	0	5288791	4800000	5599999
8	415831	3	6	60	1676	1664	1628	5707380	5600000	6399999
9	887171	3	15	65	1227	1066	1695	6599519	6400000	7199999
10	1376265	2	17	50	1934	1614	0	7979792	7200000	7999999
11	158680	2	16	60	1375	1898	0	8142020	8000000	8799999
12	1311987	3	6	50	1514	1166	1197	9457280	8800000	9599999
13	217877	3	20	50	1176	1538	1062	9679034	9600000	10399999
14	691619	3	20	80	1932	1990	1877	10574429	10400000	11199999
15	1209122	2	18	90	1180	1899	0	11789350	11200000	11999999

Total number of pulses in waveform = 37

Type 5 Radar Waveform_27

Waveform Num = 27
Num of Bursts = 18
Burst Interval (us)= 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	134766	3	11	75	1718	1726	1754	134766	0	666666
2	936862	1	11	85	1782	0	0	1076826	666667	1333333
3	682256	3	7	95	1310	1325	1573	1760864	1333334	2000000
4	833991	3	18	70	1384	1059	1563	2599063	2000001	2666667
5	158810	1	8	60	1994	0	0	2761879	2666668	3333334
6	1021308	3	9	85	1246	1948	1226	3785181	3333335	4000001
7	602932	1	10	65	1783	0	0	4392533	4000002	4666668
8	294827	3	7	65	1451	1467	1012	4689143	4666669	5333335
9	760871	3	13	90	1028	1905	1510	5453944	5333336	6000002
10	624774	1	5	95	1846	0	0	6083161	6000003	6666669
11	1001470	2	6	50	1944	1636	0	7086477	6666670	7333336
12	260085	2	8	75	1412	1681	0	7350142	7333337	8000003
13	1198363	1	18	70	1910	0	0	8551618	8000004	8666670
14	771536	2	8	55	1025	1485	0	9325064	8666671	9333337
15	519147	1	17	50	1749	0	0	9846721	9333338	10000004
16	734750	1	16	60	1261	0	0	10583220	10000005	10666671
17	452607	1	13	80	1029	0	0	11037088	10666672	11333338
18	919511	2	11	55	1744	1530	0	11957628	11333339	12000005

Total number of pulses in waveform = 34

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	1493	1	16	90	1806	0	0	1493	0	705881
2	739741	2	14	95	1488	1667	0	743040	705882	1411763
3	669711	3	7	75	1116	1101	1766	1415926	1411764	2117645
4	1388350	3	19	70	1880	1169	1072	2608279	2117646	2823527
5	328312	2	9	75	1736	1290	0	3140712	2823528	3529409
6	968153	1	9	65	1677	0	0	4111891	3529410	4235291
7	596750	2	14	95	1264	1680	0	4710316	4235292	4941173
8	247675	2	18	90	1518	1970	0	4960937	4941174	5647055
9	1294367	2	6	75	1594	1277	0	6258792	5647056	6352937
10	718990	2	14	50	1571	1704	0	6980653	6352938	7058819
11	121816	2	10	60	1934	1694	0	7105744	7058820	7764701
12	980153	2	14	60	1886	1595	0	8089525	7764702	8470583
13	429598	3	6	85	1232	1519	1178	8522604	8470584	9176465
14	1187723	2	6	55	1466	1455	0	9714256	9176466	9882347
15	392625	1	9	80	1945	0	0	10109802	9882348	10588229
16	858700	1	14	80	1652	0	0	10970447	10588230	11294111
17	448946	2	9	80	1038	1026	0	11421045	11294112	11999993

Total number of pulses in waveform = 33



Type 5 Radar Waveform_29

Waveform Num = 29
Num of Bursts = 13
Burst Interval (us)= 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	313603	3	11	90	1685	1322	1159	313603	0	923076
2	1403880	3	10	70	1212	1077	1699	1721649	923077	1846153
3	313711	1	19	55	1131	0	0	2039348	1846154	2769230
4	1495680	3	14	85	1987	1295	1168	3536159	2769231	3692307
5	940986	3	14	50	1614	1209	1096	4481595	3692308	4615384
6	259488	3	9	75	1884	1303	1418	4745002	4615385	5538461
7	1270814	1	20	80	1008	0	0	6020421	5538462	6461538
8	1358616	2	17	75	1447	1654	0	7380045	6461539	7384615
9	78092	1	5	90	1422	0	0	7461238	7384616	8307692
10	1312356	2	15	95	1441	1380	0	8775016	8307693	9230769
11	974698	1	20	80	1054	0	0	9752535	9230770	10153846
12	414949	1	5	50	1033	0	0	10168538	10153847	11076923
13	1489404	2	18	80	1376	1289	0	11658975	11076924	12000000

Total number of pulses in waveform = 26

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	197487	2	6	100	1183	1111	0	197487	0	799999
2	860579	3	10	70	1445	1447	1756	860360	800000	1599999
3	1478458	3	8	60	1902	1086	1372	2343466	1600000	2399999
4	778896	1	6	100	1299	0	0	3126722	2400000	3199999
5	368216	3	9	80	1166	1375	1987	3516239	3200000	3999999
6	652078	2	5	55	1584	1348	0	4172847	4000000	4799999
7	633087	3	10	100	1809	1717	1861	4808866	4800000	5599999
8	1339412	1	7	75	1291	0	0	6153665	5600000	6399999
9	497547	1	10	100	1533	0	0	6652503	6400000	7199999
10	593925	2	13	55	1757	1293	0	7247961	7200000	7999999
11	1497305	1	17	85	1954	0	0	8748316	8000000	8799999
12	554957	3	16	80	1324	1701	1073	9305227	8800000	9599999
13	521016	2	16	50	1022	1710	0	9830341	9600000	10399999
14	675432	2	18	100	1284	1406	0	10508505	10400000	11199999
15	789605	1	12	80	1733	0	0	11300800	11200000	11999999

Total number of pulses in waveform = 30

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)
2	5301	6	1	5298	3
36	5310	108	7	5354	21
39	5352	117	12	5322	36
44	5306	132	16	5327	48
51	5322	153	19	5316	57
54	5329	162	26	5350	78
77	5299	231	38	5318	114
97	5311	291	40	5325	120
98	5320	294	43	5331	129
--	--	--	44	5303	132
--	--	--	48	5313	144
--	--	--	50	5308	150
--	--	--	54	5309	162
--	--	--	55	5305	165
--	--	--	72	5335	216
--	--	--	80	5352	240
--	--	--	95	5328	285

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5339	24	37	5303	111
11	5345	33	42	5312	126
20	5326	60	45	5321	135
27	5320	81	62	5325	186
35	5308	105	64	5358	192
40	5357	120	66	5327	198
57	5298	171	84	5357	252
64	5348	192	86	5342	258
72	5307	216	92	5324	276
76	5310	228	96	5317	288
83	5340	249	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5356	24	16	5526	48
14	5334	42	18	5553	54
15	5307	45	30	5536	90
29	5308	87	40	5543	120
37	5338	111	42	5537	126
39	5324	117	44	5514	132
46	5305	138	45	5503	135
48	5314	144	48	5498	144
80	5310	240	54	5557	162
83	5350	249	58	5535	174
87	5354	261	62	5519	186
89	5318	267	64	5513	192
--	--	--	77	5534	231
--	--	--	81	5547	243
--	--	--	86	5554	258
--	--	--	92	5512	276
--	--	--	98	5551	294

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5322	42	7	5354	21
17	5348	51	27	5315	81
25	5320	75	36	5335	108
31	5307	93	38	5309	114
64	5339	192	39	5302	117
68	5343	204	41	5328	123
70	5304	210	57	5303	171
74	5355	222	67	5330	201
81	5340	243	77	5321	231
--	--	--	79	5334	237
--	--	--	85	5317	255
--	--	--	91	5355	273
--	--	--	93	5357	279

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5332	42	4	5331	12
18	5314	54	6	5304	18
25	5342	75	12	5354	36
45	5354	135	39	5303	117
49	5313	147	47	5355	141
64	5345	192	49	5315	147
71	5320	213	52	5320	156
78	5312	234	67	5336	201
86	5327	258	71	5345	213
--	--	--	77	5351	231
--	--	--	79	5343	237
--	--	--	93	5340	279

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5299	30	2	5335	6
14	5354	42	3	5330	9
15	5357	45	4	5300	12
16	5323	48	11	5352	33
17	5337	51	22	5342	66
18	5304	54	28	5327	84
24	5298	72	37	5345	111
25	5343	75	43	5354	129
30	5346	90	54	5315	162
31	5347	93	57	5308	171
45	5348	135	63	5336	189
47	5318	141	65	5306	195
75	5311	225	66	5340	198
83	5332	249	68	5323	204
89	5345	267	69	5303	207
91	5355	273	70	5328	210
--	--	--	81	5355	243
--	--	--	86	5311	258
--	--	--	87	5305	261
--	--	--	91	5349	273

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5313	33	13	5343	39
19	5307	57	25	5316	75
24	5298	72	27	5341	81
30	5333	90	44	5332	132
37	5349	111	48	5304	144
52	5321	156	53	5302	159
74	5332	222	61	5321	183
77	5312	231	66	5327	198
78	5320	234	71	5325	213
80	5301	240	72	5336	216
84	5340	252	80	5355	240
97	5327	291	96	5313	288

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5354	9	4	5302	12
7	5319	21	11	5313	33
10	5310	30	18	5321	54
24	5343	72	25	5309	75
28	5358	84	28	5326	84
42	5313	126	38	5352	114
43	5355	129	47	5357	141
49	5330	147	53	5334	159
50	5317	150	57	5340	171
66	5312	198	68	5353	204
69	5357	207	78	5330	234
79	5329	237	80	5328	240
--	--	--	82	5355	246
--	--	--	88	5351	264
--	--	--	89	5346	267
--	--	--	94	5304	282

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5318	24	6	5334	18
9	5349	27	8	5329	24
16	5307	48	9	5320	27
42	5357	126	25	5299	75
43	5327	129	33	5353	99
46	5329	138	59	5358	177
48	5302	144	67	5300	201
63	5315	189	71	5314	213
93	5356	279	88	5348	264

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5309	18	19	5325	57
12	5354	36	20	5302	60
16	5351	48	23	5320	69
17	5299	51	37	5357	111
23	5305	69	39	5344	117
28	5348	84	46	5347	138
38	5324	114	55	5345	165
41	5341	123	68	5306	204
42	5300	126	72	5304	216
53	5318	159	78	5326	234
55	5350	165	85	5301	255
58	5349	174	89	5316	267
62	5330	186	99	5352	297
63	5303	189	--	--	--
79	5358	237	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5352	12	1	5328	3
10	5309	30	3	5335	9
12	5332	36	9	5311	27
13	5299	39	10	5357	30
16	5356	48	24	5314	72
20	5298	60	29	5354	87
34	5344	102	31	5304	93
42	5348	126	38	5341	114
43	5305	129	42	5320	126
54	5328	162	49	5310	147
93	5307	279	56	5346	168
--	--	--	74	5340	222
--	--	--	87	5326	261
--	--	--	91	5315	273
--	--	--	92	5356	276
--	--	--	97	5327	291
--	--	--	99	5313	297

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5340	6	0	5310	0
16	5350	48	17	5358	51
23	5338	69	36	5330	108
36	5300	108	52	5321	156
44	5301	132	54	5306	162
51	5334	153	62	5329	186
55	5303	165	68	5357	204
67	5353	201	72	5346	216
70	5349	210	82	5333	246
85	5309	255	89	5354	267
88	5347	264	94	5317	282
90	5330	270	96	5336	288
92	5329	276	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5331	24	11	5342	33
36	5329	108	14	5322	42
37	5301	111	18	5328	54
44	5298	132	39	5339	117
67	5322	201	45	5357	135
73	5316	219	51	5299	153
74	5334	222	53	5317	159
80	5335	240	59	5300	177
83	5303	249	66	5302	198
87	5304	261	76	5358	228
94	5320	282	79	5332	237
96	5305	288	83	5330	249
--	--	--	91	5324	273
--	--	--	98	5335	294

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5343	27	18	5350	54
15	5348	45	22	5340	66
17	5319	51	37	5355	111
20	5298	60	47	5315	141
36	5344	108	91	5336	273
49	5312	147	--	--	--
61	5323	183	--	--	--
84	5306	252	--	--	--
87	5333	261	--	--	--
95	5308	285	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5304	0	1	5306	3
7	5314	21	3	5315	9
29	5342	87	6	5347	18
32	5299	96	37	5337	111
40	5332	120	47	5320	141
45	5301	135	50	5299	150
46	5353	138	53	5301	159
51	5308	153	54	5322	162
53	5327	159	65	5358	195
97	5334	291	66	5331	198
--	--	--	71	5321	213
--	--	--	94	5355	282

Radar Statistical Performance for 802.11ac-VHT80

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5252	1	838	63	1
2	5252	1	938	57	1
3	5252	1	878	61	1
4	5252	1	578	92	1
5	5252	1	918	58	1
6	5252	1	718	74	1
7	5252	1	598	89	1
8	5252	1	898	59	1
9	5252	1	818	65	1
10	5252	1	638	83	1
11	5252	1	858	62	1
12	5252	1	738	72	1
13	5252	1	558	95	1
14	5252	1	618	86	1
15	5252	1	3066	18	1
16	5252	1	1452	37	1
17	5252	1	1851	29	1
18	5252	1	1297	41	1
19	5252	1	1947	28	1
20	5252	1	2074	26	1
21	5252	1	1927	28	1
22	5252	1	1073	50	1
23	5252	1	1749	31	1
24	5252	1	2651	20	1
25	5252	1	706	75	1
26	5252	1	2358	23	1
27	5252	1	957	56	1
28	5252	1	1299	41	1
29	5252	1	841	63	1
30	5252	1	2191	25	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5253	3.0	227	26	1
2	5253	4.8	225	23	1
3	5253	1.2	196	24	1
4	5253	3.0	156	27	1
5	5253	4.7	172	23	1
6	5253	1.2	167	23	1
7	5253	4.9	183	28	1
8	5253	4.1	224	28	1
9	5253	2.2	230	23	1
10	5253	2.7	217	29	1
11	5253	2.7	166	28	1
12	5253	1.4	180	28	1
13	5253	4.4	169	26	1
14	5253	1.2	208	26	1
15	5253	3.4	159	25	1
16	5253	3.8	208	24	1
17	5253	3.7	156	29	1
18	5253	4.2	160	24	1
19	5253	4.9	212	29	1
20	5253	4.5	212	23	1
21	5253	1.3	170	28	1
22	5253	4.2	212	23	1
23	5253	2.4	202	28	1
24	5253	1.6	199	24	1
25	5253	4.8	182	29	1
26	5253	2.4	211	29	1
27	5253	3.9	162	24	1
28	5253	1.8	223	27	1
29	5253	2.4	172	26	1
30	5253	1.9	213	27	1
Detection Percentage (%)					100%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5270	6.2	325	18	1
2	5270	7.3	441	18	1
3	5270	8.2	433	16	1
4	5270	7.5	425	17	1
5	5270	9.2	493	16	1
6	5270	6.1	494	18	1
7	5270	6.4	432	18	1
8	5270	8.8	474	16	1
9	5270	6.1	468	16	1
10	5270	6.7	284	16	1
11	5270	9.6	324	16	1
12	5270	8.4	429	18	1
13	5270	8.4	433	17	1
14	5270	8.9	430	17	1
15	5270	9.8	413	16	1
16	5270	10.0	289	17	1
17	5270	6.6	287	18	1
18	5270	7.4	392	18	1
19	5270	8.5	307	17	1
20	5270	6.0	312	17	1
21	5270	7.6	267	18	1
22	5270	9.1	271	17	1
23	5270	6.3	254	17	1
24	5270	8.1	484	17	1
25	5270	6.9	376	17	1
26	5270	7.0	440	18	1
27	5270	8.7	321	16	1
28	5270	6.6	254	18	1
29	5270	9.6	447	17	1
30	5270	8.7	283	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	5290	12.1	343	15	1
2	5290	17.9	300	12	1
3	5290	18.2	439	16	1
4	5290	15.5	319	16	1
5	5290	11.6	293	12	1
6	5290	15.4	452	15	1
7	5290	12.1	479	14	1
8	5290	18.3	385	13	1
9	5290	14.3	446	15	1
10	5290	19.4	326	14	1
11	5290	11.0	450	12	1
12	5290	12.5	273	13	1
13	5290	19.7	295	15	1
14	5290	16.0	378	15	1
15	5290	19.2	472	16	1
16	5290	17.7	495	15	1
17	5290	15.9	425	16	1
18	5290	19.8	463	13	1
19	5290	16.4	347	15	1
20	5290	14.0	264	15	1
21	5290	19.5	377	13	1
22	5290	12.7	320	14	1
23	5290	19.7	343	16	1
24	5290	15.4	331	14	1
25	5290	16.8	272	13	1
26	5290	13.7	389	15	1
27	5290	14.2	320	12	1
28	5290	16.3	384	12	1
29	5290	18.0	353	16	1
30	5290	15.7	397	13	1
Detection Percentage (%)					100%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test

waveforms is as follows: $\frac{P_d1 + P_d2 + P_d3 + P_d4}{4} = (100\% + 100\% + 100\% + 100\%) / 4 = 100\% (>80\%)$

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5256	1	16	5290	1
2	5258	1	17	5292	1
3	5260	1	18	5294	1
4	5262	1	19	5296	1
5	5264	1	20	5299	1
6	5266	1	21	5300	1
7	5268	1	22	5301	1
8	5270	1	23	5302	1
9	5272	1	24	5304	1
10	5274	1	25	5306	1
11	5276	1	26	5308	1
12	5278	1	27	5312	1
13	5280	1	28	5316	1
14	5282	1	29	5320	1
15	5284	1	30	5324	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

Waveform Num = 1
Num of Bursts = 13
Burst Interval (us) = 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	377023	2	17	80	1780	1179	0	377023	0	923076
2	844883	2	16	85	1302	1306	0	1224865	923077	1846153
3	1079616	2	12	85	1567	1776	0	2307089	1846154	2769230
4	996687	1	15	50	1208	0	0	3307119	2769231	3692307
5	445607	1	9	85	1972	0	0	3753934	3692308	4615384
6	1538271	1	10	60	1683	0	0	5294177	4615385	5538461
7	933349	3	11	85	1194	1604	1073	6229209	5538462	6461538
8	769918	3	14	100	1705	1615	1970	7002998	6461539	7384615
9	740960	3	5	55	1995	1373	1625	7749248	7384616	8307692
10	564018	2	12	70	1012	1626	0	8318259	8307693	9230769
11	1613769	2	8	55	1451	1739	0	9934666	9230770	10153846
12	743004	3	17	85	1639	1511	1816	10680860	10153847	11076923
13	408939	3	15	50	1112	1277	1269	11092765	11076924	12000000

Total number of pulses in waveform = 28



Type 5 Radar Waveform_2

Waveform Num = 2
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	364158	1	6	80	1640	0	0	364158	0	705881
2	662698	1	10	95	1792	0	0	1028496	705882	1411763
3	812412	3	16	80	1442	1911	1314	1842700	1411764	2117845
4	830637	2	14	55	1709	1565	0	2678004	2117846	2823527
5	318289	2	16	85	1516	1591	0	2999567	2823528	3529409
6	622463	3	20	85	1863	1421	1847	3625157	3529410	4235291
7	1009039	2	18	95	1427	1993	0	4639347	4235292	4941173
8	974101	2	16	50	1427	1826	0	5616868	4941174	5647055
9	539971	2	9	65	1789	1384	0	6180092	5647056	6352937
10	319433	3	9	100	1369	1250	1502	6462698	6352938	7058819
11	676445	1	10	75	1360	0	0	7163284	7058820	7764701
12	1276432	1	13	50	1008	0	0	8441076	7764702	8470583
13	679034	2	5	75	1793	1397	0	9121118	8470584	9176465
14	696308	2	16	100	1639	1808	0	9820616	9176466	9882347
15	483138	1	13	90	1278	0	0	10307001	9882348	10586229
16	911274	1	13	55	1236	0	0	11219553	10586230	11294111
17	361153	1	9	55	1743	0	0	11581942	11294112	11999993

Total number of pulses in waveform = 30

Type 5 Radar Waveform_3

Waveform Num = 3
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	18969	3	11	70	1591	1921	1345	18969	0	799999
2	871266	2	18	55	1033	1555	0	895112	800000	1599999
3	1313281	3	19	95	1196	1682	1277	2210981	1600000	2399999
4	441040	1	11	90	1905	0	0	2656176	2400000	3199999
5	1160751	2	13	85	1271	1277	0	3818832	3200000	3999999
6	217608	1	20	70	1620	0	0	4038988	4000000	4799999
7	1053277	2	12	50	1977	1681	0	5093885	4800000	5599999
8	1146895	2	17	75	1379	1015	0	6244638	5600000	6399999
9	426910	1	14	75	1168	0	0	6673942	6400000	7199999
10	659123	2	15	95	1338	1737	0	7334253	7200000	7999999
11	801825	2	16	85	1424	1503	0	8139153	8000000	8799999
12	981819	2	10	60	1031	1281	0	9123699	8800000	9599999
13	1181494	3	16	65	1006	1124	1948	10307705	9600000	10399999
14	595042	1	8	85	1272	0	0	10906825	10400000	11199999
15	720762	1	15	65	1432	0	0	11628859	11200000	11999999

Total number of pulses in waveform = 28

Type 5 Radar Waveform_4

Waveform Num = 4
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	561266	2	6	90	1494	1098	0	561266	0	666666
2	466669	2	9	60	1614	1025	0	1050727	666667	1333333
3	909344	2	8	55	1827	1207	0	1962710	1333334	2000000
4	479818	2	7	60	1296	1612	0	2445562	2000001	2666667
5	452250	2	15	55	1995	1347	0	2900720	2666668	3333334
6	477144	2	18	55	1209	1633	0	3381206	3333335	4000001
7	1113416	2	18	50	1810	1516	0	4497464	4000002	4666668
8	761015	2	20	80	1102	1781	0	5261805	4666669	5333335
9	598774	1	10	90	1391	0	0	5863462	5333336	6000002
10	305495	2	15	95	1999	1555	0	6170348	6000003	6666669
11	510406	3	13	80	1309	1272	1025	6684308	6666670	7333336
12	1028606	3	12	95	1706	1575	1198	7716520	7333337	8000003
13	626744	3	6	90	1717	1231	1984	8347743	8000004	8666670
14	818346	2	8	80	1904	1832	0	9171021	8666671	9333337
15	630678	1	13	60	1798	0	0	9805435	9333338	10000004
16	326131	3	19	85	1868	1458	1885	10133364	10000005	10666671
17	644419	3	14	60	1515	1424	1825	10782994	10666672	11333338
18	731760	2	6	95	1118	1745	0	11519518	11333339	12000005

Total number of pulses in waveform = 39



Type 5 Radar Waveform_5

Waveform Num = 5
Num of Bursts = 17
Burst Interval (us)= 705882

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	398927	1	13	95	1854	0	0	348113	0	705881
2	1291483	1	11	70	1853	0	0	746894	705882	1411763
3	483336	2	12	80	1909	1236	0	2040230	1411764	2117645
4	326341	3	5	85	1758	1282	1366	2526713	2117646	2823527
5	1231695	1	12	80	1955	0	0	2857460	2823528	3529409
6	663328	1	6	80	1414	0	0	4091110	3529410	4235291
7	792868	1	7	90	1924	0	0	4755852	4235292	4941173
8	127905	2	19	60	1337	1393	0	5550644	4941174	5647055
9	1001469	2	18	80	1084	1333	0	5681279	5647056	6352937
10	891273	3	15	95	1140	1036	1524	6685145	6352938	7058819
11	595559	2	18	95	1033	1129	0	7580118	7058820	7764701
12	521356	3	11	60	1161	1598	1651	8177839	7764702	8470583
13	759656	3	7	80	1903	1627	1369	8703605	8470584	9176465
14	708943	1	12	60	1045	0	0	9468160	9176466	9882347
15	958292	1	20	65	1354	0	0	10176148	9882348	10588229
16	826127	1	11	55	1180	0	0	11137794	10588230	11294111
17		3	5	80	1568	1667	1518	11965101	11294112	11999993

Total number of pulses in waveform = 31

Type 5 Radar Waveform_6

Waveform Num = 6
Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	39407	2	18	50	1634	1063	0	39407	0	999999
2	1245885	3	10	60	1727	1282	1268	1287989	1000000	1999999
3	1336093	2	14	100	1802	1579	0	2628359	2000000	2999999
4	972605	1	8	90	1907	0	0	3604345	3000000	3999999
5	1348695	2	13	55	1078	1662	0	4954947	4000000	4999999
6	120986	2	20	90	1908	1126	0	5078673	5000000	5999999
7	1532866	1	11	50	1193	0	0	6614573	6000000	6999999
8	1121267	3	14	75	1224	1677	1988	7737033	7000000	7999999
9	984487	2	6	85	1265	1168	0	8726409	8000000	8999999
10	595218	3	14	70	1458	1377	1120	9324060	9000000	9999999
11	1422736	2	14	100	1786	1582	0	10750751	10000000	10999999
12	829894	1	15	90	1568	0	0	11584013	11000000	11999999

Total number of pulses in waveform = 24

Type 5 Radar Waveform_7

Waveform Num = 7
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	610658	1	14	65	1360	0	0	610658	0	1333332
2	1312109	1	8	95	1804	0	0	1924127	1333333	2666665
3	1719002	1	10	65	1979	0	0	3644933	2666666	3999998
4	799098	3	19	75	1191	1842	1860	4446010	3999999	5333331
5	1312744	1	15	100	1640	0	0	5763647	5333332	6666664
6	1307395	1	17	95	1365	0	0	7072682	6666665	7999997
7	1699276	1	13	55	1153	0	0	8773323	7999998	9333330
8	1779471	1	10	100	1321	0	0	10553947	9333331	10666663
9	924252	2	5	75	1492	1025	0	11479520	10666664	11999996

Total number of pulses in waveform = 12

**Type 5 Radar Waveform_8**

Waveform Num = 8
Num of Bursts = 10
Burst Interval (us)= 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	1194673	1	15	60	1491	0	0	1194673	0	1199999
2	1084581	2	14	50	1537	1367	0	2280745	1200000	2399999
3	1145276	2	5	75	1867	1360	0	3428925	2400000	3599999
4	989964	1	5	65	1732	0	0	4422116	3600000	4799999
5	478582	3	17	90	1432	1481	1359	4902430	4800000	5999999
6	1404942	2	10	85	1593	1808	0	6311644	6000000	7199999
7	997778	3	20	95	1896	1727	1895	7312823	7200000	8399999
8	1871812	1	10	85	1233	0	0	9190153	8400000	9599999
9	1234674	1	19	50	1932	0	0	10426060	9600000	10799999
10	1308278	2	8	60	1166	1121	0	11736270	10800000	11999999

Total number of pulses in waveform = 18

Type 5 Radar Waveform_9

Waveform Num = 9
Num of Bursts = 8
Burst Interval (us)= 1500000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	780788	3	16	50	1462	1296	1887	780788	0	1499999
2	1618759	1	20	70	1710	0	0	2404192	1500000	2999999
3	1442210	3	15	60	1765	1682	1592	3848112	3000000	4499999
4	1063093	2	12	85	1997	1397	0	4916244	4500000	5999999
5	1263879	3	9	75	1416	1695	1094	6183517	6000000	7499999
6	1600107	2	7	60	1087	1640	0	7787829	7500000	8999999
7	1842724	2	7	65	1667	1878	0	9633280	9000000	10499999
8	1979301	2	18	100	1575	1942	0	11616126	10500000	11999999

Total number of pulses in waveform = 18

Type 5 Radar Waveform_10

Waveform Num = 10
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	809828	3	7	100	1273	1469	1362	809828	0	1199999
2	468322	2	20	50	1253	1266	0	1282254	1200000	2399999
3	1534242	1	5	60	1690	0	0	2819015	2400000	3599999
4	884376	2	9	50	1495	1368	0	3705081	3600000	4799999
5	1661170	3	20	85	1903	1369	1795	5369114	4800000	5999999
6	1256135	1	11	80	1462	0	0	6630316	6000000	7199999
7	1747080	1	7	50	1002	0	0	8378858	7200000	8399999
8	400838	3	16	100	1370	1982	1351	8780698	8400000	9599999
9	1354500	1	17	55	1018	0	0	10139901	9600000	10799999
10	1510501	3	11	65	1055	1912	1347	11651420	10800000	11999999

Total number of pulses in waveform = 20



Type 5 Radar Waveform_11

Waveform Num = 11
Num of Bursts = 18
Burst Interval (us) = 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	406406	2	16	65	1488	1302	0	406406	0	666666
2	292719	1	9	100	1623	0	0	701915	666667	1333333
3	1116666	3	18	75	1441	1487	1242	1820206	1333334	2000000
4	272111	3	14	100	1001	1967	1631	2096487	2000001	2666667
5	1135063	2	10	100	1157	1122	0	3236149	2666668	3333334
6	565163	3	8	95	1926	1896	1674	3803591	3333335	4000001
7	400487	1	20	50	1625	0	0	4209574	4000002	4666668
8	909649	1	20	90	1368	0	0	5121048	4666669	5333335
9	729613	3	6	55	1501	1375	1058	5852029	5333336	6000002
10	276285	1	8	80	1038	0	0	6132248	6000003	6666669
11	1030855	2	12	55	1921	1255	0	7164141	6666670	7333336
12	434734	2	15	60	1609	1093	0	7602051	7333337	8000003
13	619462	2	9	95	1898	1483	0	8224215	8000004	8666670
14	1062795	2	7	85	1271	1468	0	9290391	8666671	9333337
15	582343	2	7	85	1890	1374	0	9875473	9333338	10000004
16	313538	2	11	100	1865	1478	0	10192275	10000005	10666671
17	487317	1	11	95	1092	0	0	10682935	10666672	11333338
18	790612	3	9	65	1499	1597	1684	11474639	11333339	12000005

Total number of pulses in waveform = 36

Type 5 Radar Waveform_12

Waveform Num = 12

Num of Bursts = 20

Burst Interval (us) = 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	200076	3	12	75	1632	1094	1000	200076	0	599999
2	963225	2	15	70	1075	1240	0	1167027	600000	1199999
3	415663	3	16	70	1556	1377	1682	1585005	1200000	1799999
4	540048	2	7	65	1882	1337	0	2129668	1800000	2399999
5	457036	1	6	85	1877	0	0	2589923	2400000	2999999
6	599173	1	19	80	1896	0	0	3190973	3000000	3599999
7	443546	2	18	90	1933	1008	0	3636415	3600000	4199999
8	806143	3	6	75	1982	1570	1630	4447499	4200000	4799999
9	441114	3	7	90	1974	1829	1461	4893795	4800000	5399999
10	1034359	3	17	70	1497	1700	1082	5933418	5400000	5999999
11	109684	3	16	50	1619	1216	1705	6047381	6000000	6599999
12	977922	2	12	90	1712	1063	0	7029843	6600000	7199999
13	657281	3	9	100	1504	1692	1315	7689919	7200000	7799999
14	568618	2	5	95	1809	1960	0	8263048	7800000	8399999
15	718204	1	8	75	1241	0	0	8985021	8400000	8999999
16	598148	2	7	80	1148	1469	0	9584410	9000000	9599999
17	469174	2	14	65	1075	1504	0	10076201	9600000	10199999
18	222366	1	16	80	1747	0	0	10301146	10200000	10799999
19	599015	1	19	60	1531	0	0	10901908	10800000	11399999
20	731328	3	6	85	1444	1037	1285	11634767	11400000	11999999

Total number of pulses in waveform = 43

Type 5 Radar Waveform_13

Waveform Num = 13

Num of Bursts = 13

Burst Interval (us) = 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	196729	2	14	50	1299	1015	0	196729	0	923076
2	1287644	2	6	65	1510	1363	0	1486687	923077	1846153
3	836772	3	17	50	1541	1413	1408	2326332	1846154	2769230
4	1092634	1	7	65	1648	0	0	3423328	2769231	3692307
5	988762	2	5	90	1346	1434	0	4413738	3692308	4615384
6	514687	3	14	50	1221	1086	1365	4931205	4615385	5538461
7	862799	2	19	85	1074	1540	0	5797676	5538462	6461538
8	1245038	3	10	55	1590	1534	1552	7046328	6461539	7384615
9	1125351	3	16	100	1009	1317	1141	8176355	7384616	8307692
10	648937	3	13	85	1574	1725	1923	8828759	8307693	9230769
11	646368	2	13	70	1840	1696	0	9480349	9230770	10153846
12	1292487	1	11	95	1829	0	0	10776352	10153847	11076923
13	1195096	3	13	75	1677	1151	1069	11973277	11076924	12000000

Total number of pulses in waveform = 30



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	337502	2	5	80	1214	1679	0	502363	0	666666
2	931131	1	18	50	1369	0	0	842758	666667	1333333
3	467073	1	18	55	1514	0	0	1775258	1333334	2000000
4	737092	1	9	90	1327	0	0	2243845	2000001	2666667
5	859243	2	16	100	1932	1847	0	2982264	2666668	3333334
6	412636	2	10	60	1783	2000	0	3845296	3333335	4000001
7	789212	3	8	65	1911	1203	1276	4261705	4000002	4666668
8	732993	2	16	80	1056	1527	0	5055307	4666669	5333335
9	841426	3	12	70	1494	1619	1467	5790883	5333336	6000002
10	170190	2	5	100	1323	1845	0	6636889	6000003	6666669
11	829587	3	10	70	1009	1040	1488	6810247	6666670	7333336
12	543165	3	7	65	1321	1744	1525	7643371	7333337	8000003
13	685750	2	19	70	1036	1783	0	8191126	8000004	8666670
14	621474	3	13	65	1735	1121	1724	8879675	8666671	9333337
15	775900	1	13	50	1988	0	0	9505729	9333338	10000004
16	784686	3	7	60	1306	1122	1329	10283697	10000005	10666671
17	670108	1	10	100	1017	1727	1361	11072140	10666672	11333338
18	670108	1	19	90	1402	0	0	11746353	11333339	12000005

Total number of pulses in waveform = 38

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	743441	1	19	65	1189	0	0	743441	0	923076
2	898756	3	8	95	1582	1184	1780	1843366	923077	1846153
3	396297	2	6	55	1541	1622	0	2044189	1846154	2769230
4	1211920	2	17	60	1408	1247	0	3259272	2769231	3692307
5	597363	2	17	65	1297	1619	0	3859290	3692308	4615384
6	1328874	2	20	55	1169	1215	0	5191080	4615385	5538461
7	452192	3	17	75	1608	1970	1026	5645656	5538462	6461538
8	1025389	1	6	55	1774	0	0	6675649	6461539	7384615
9	1532109	1	14	85	1964	0	0	8209532	7384616	8307692
10	474406	1	13	60	1627	0	0	8685902	8307693	9230769
11	1369241	3	18	95	1720	1438	1090	10056770	9230770	10153846
12	366819	2	17	70	1304	1453	0	10427837	10153847	11076923
13	1478727	3	8	80	1567	1129	1249	11909321	11076924	12000000

Total number of pulses in waveform = 26

Type 5 Radar Waveform_16

Waveform Num = 16
Num of Bursts = 11
Burst Interval (us)= 1090909

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	729705	2	8	60	1101	1841	0	729705	0	1090908
2	852454	2	18	60	1672	1084	0	1585101	1090909	2181817
3	598616	2	9	85	1588	1681	0	2186473	2181818	3272726
4	2020468	2	12	75	1968	1364	0	4210210	3272727	4363635
5	1167255	1	15	55	1094	0	0	5380797	4363636	5454544
6	127376	3	6	85	1366	1839	1484	5509267	5454545	6545453
7	1839332	3	12	60	1278	1062	1002	7353268	6545454	7636362
8	737868	2	6	95	1718	1386	0	8094498	7636363	8727271
9	1083210	2	17	80	1162	1365	0	9180812	8727272	9818180
10	744327	3	6	75	1523	1682	1149	9927666	9818181	10909089
11	1142067	2	14	95	1520	1779	0	11074087	10909090	11999998

Total number of pulses in waveform = 24



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	147631	2	6	85	1071	1572	0	147631	0	599999
2	614806	2	12	100	1546	1166	0	765080	600000	1199999
3	951235	1	20	75	1350	0	0	1719027	1200000	1799999
4	125238	3	15	65	1028	1172	1720	1845615	1800000	2399999
5	737776	1	16	60	1293	0	0	2567311	2400000	2999999
6	763135	1	19	70	1107	0	0	3351739	3000000	3599999
7	432746	1	17	85	1118	0	0	3785592	3600000	4199999
8	754239	1	9	95	1614	0	0	4540949	4200000	4799999
9	298363	2	6	55	1779	1331	0	4840946	4800000	5399999
10	850885	2	19	60	1779	1073	0	5694941	5400000	5999999
11	664197	2	6	60	1141	1490	0	6361990	6000000	6599999
12	393586	2	9	100	1790	1053	0	6758207	6600000	7199999
13	637996	3	6	60	1991	1518	1544	7399046	7200000	7799999
14	967229	1	14	75	1010	0	0	8371328	7800000	8399999
15	70341	3	15	85	1629	1601	1254	8442679	8400000	8999999
16	886827	1	6	90	1424	0	0	9334190	9000000	9599999
17	699760	1	13	70	1221	0	0	10035374	9600000	10199999
18	267526	3	19	90	1154	1702	1408	10304123	10200000	10799999
19	974834	2	13	60	1725	1915	0	11283221	10800000	11399999
20	363951	2	15	100	1428	1569	0	11650812	11400000	11999999

Total number of pulses in waveform = 36

Type 5 Radar Waveform_18

Waveform Num = 18
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	577783	2	11	70	1012	1801	0	577783	0	1090908
2	1370719	1	18	80	1862	0	0	1951315	1090909	2181817
3	247871	3	20	85	1085	1656	1545	2201048	2181818	3272726
4	1782092	2	12	80	1212	1416	0	3987426	3272727	4363635
5	580299	1	10	55	1475	0	0	4570353	4363636	5454544
6	1676800	2	9	60	1428	1466	0	6248628	5454545	6545453
7	1118372	1	12	75	1684	0	0	7369894	6545454	7636362
8	603895	1	13	60	1266	0	0	7975473	7636363	8727271
9	1569985	3	8	50	1052	1756	1377	9546724	8727272	9818180
10	274133	2	7	75	1769	1628	0	9825042	9818181	10909089
11	1710601	1	7	75	1652	0	0	11539040	10909090	11999998

Total number of pulses in waveform = 19

Type 5 Radar Waveform_19

Waveform Num = 19
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	1133223	3	6	55	1410	1528	1519	1133223	0	1199999
2	168428	1	5	50	1385	0	0	1306108	1200000	2399999
3	1664617	3	20	75	1733	1301	1729	2972110	2400000	3599999
4	642207	3	20	60	1691	1064	1839	3619080	3600000	4799999
5	1921959	2	6	70	1747	1277	0	5545633	4800000	5999999
6	1175495	3	8	85	1993	1165	1454	6724152	6000000	7199999
7	1289512	3	9	90	1653	1803	1995	8018276	7200000	8399999
8	646134	1	9	90	1499	0	0	8669861	8400000	9599999
9	1872936	2	16	75	1509	1845	0	10544296	9600000	10799999
10	578607	1	8	95	1648	0	0	11126257	10800000	11999999

Total number of pulses in waveform = 22



Type 5 Radar Waveform_20

Waveform Num = 20
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	974374	2	8	85	1424	1621	0	974374	0	1499999
2	712099	3	14	90	1256	1219	1442	1689518	1500000	2999999
3	2206088	3	5	85	1901	1488	1095	3899523	3000000	4499999
4	1732590	3	6	95	1780	1692	1274	5636597	4500000	5999999
5	1472291	1	16	60	1478	0	0	7113634	6000000	7499999
6	1284334	1	17	60	1333	0	0	8399446	7500000	8999999
7	1130433	2	11	50	1556	1545	0	9531212	9000000	10499999
8	1626955	1	11	55	1593	0	0	11161268	10500000	11999999

Total number of pulses in waveform = 16

Type 5 Radar Waveform_21

Waveform Num = 21
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	729664	2	12	85	1143	1205	0	729664	0	857142
2	398125	3	16	85	1768	1212	1578	1130137	857143	1714285
3	965205	3	19	100	1600	1341	1122	2099900	1714286	2571428
4	1080885	2	5	60	1064	1388	0	3184848	2571429	3428571
5	917885	1	16	50	1178	0	0	4105185	3428572	4285714
6	249332	2	18	100	1943	1939	0	4355895	4285715	5142857
7	1138244	2	11	50	1524	1156	0	5497821	5142858	6000000
8	1260923	3	17	65	1970	1930	1646	6761424	6000001	6857143
9	911595	2	18	80	1222	1090	0	7678565	6857144	7714286
10	547578	3	17	75	1387	1469	1582	8228455	7714287	8571429
11	891697	1	15	100	1983	0	0	9124590	8571430	9428572
12	792147	2	17	50	1388	1761	0	9918720	9428573	10285715
13	1075463	3	19	60	1357	1133	1965	10997352	10285716	11142858
14	753195	1	12	55	1467	0	0	11755022	11142859	12000001

Total number of pulses in waveform = 30

Type 5 Radar Waveform_22

Waveform Num = 22
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	36236	1	8	90	1514	0	0	36236	0	631578
2	860456	3	5	75	1392	1943	1944	898208	631579	1263157
3	528469	1	6	95	1512	0	0	1431956	1263158	1894736
4	701101	1	18	95	1984	0	0	2134569	1894737	2526315
5	934606	3	12	85	1011	1236	1043	3071159	2526316	3157694
6	573199	2	20	80	1278	1558	0	3647648	3157695	3789473
7	328359	2	12	65	1286	1354	0	3978943	3789474	4421052
8	1024849	3	16	80	1131	1345	1129	5006332	4421053	5052631
9	178227	3	14	70	1300	1196	1617	5188164	5052632	5684210
10	563849	3	5	85	1566	1737	1741	5756326	5684211	6315789
11	1180005	1	15	75	1904	0	0	6941375	6315790	6947368
12	345755	3	20	55	1299	1092	1761	7289034	6947369	7578947
13	632057	1	14	85	1946	0	0	7925243	7578948	8210526
14	303413	1	12	65	1964	0	0	8230602	8210527	8842105
15	1037000	3	5	80	1559	1668	1906	9269566	8842106	9473684
16	587318	1	8	55	1852	0	0	9862017	9473685	10105263
17	469820	1	5	50	1347	0	0	10333699	10105264	10736842
18	651626	2	9	60	1177	1522	0	10966662	10736843	11368421
19	969108	2	17	55	1324	1275	0	11958469	11368422	12000000

Total number of pulses in waveform = 37

**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	477321	3	10	85	1322	1923	1884	477321	0	1199999
2	909928	2	20	75	1901	1686	0	1392378	1200000	2399999
3	1734293	3	20	80	1700	1876	1199	3130258	2400000	3599999
4	1438077	2	10	65	1094	1650	0	4573110	3600000	4799999
5	900541	2	16	65	1395	1219	0	5476395	4800000	5999999
6	1461516	1	11	100	1212	0	0	6940525	6000000	7199999
7	695758	3	17	55	1512	1223	1302	7637495	7200000	8399999
8	1744702	2	16	100	1328	1382	0	9386234	8400000	9599999
9	759312	2	5	65	1201	1112	0	10148256	9600000	10799999
10	1261718	2	8	85	1158	1981	0	11412287	10800000	11999999

Total number of pulses in waveform = 22

Type 5 Radar Waveform_24

Waveform Num = 24
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	607548	1	13	85	1243	0	0	607548	0	1333332
2	1503724	3	7	70	1204	1362	1120	2112515	1333333	2666665
3	566409	2	20	85	1194	1447	0	2682610	2666666	3999998
4	1568830	2	16	80	1876	1708	0	4254061	3999999	5333331
5	2229337	2	9	55	1595	1829	0	6487002	5333332	6666664
6	648766	3	16	90	1225	1995	1074	7139192	6666665	7999997
7	1522441	3	10	65	1255	1813	1959	8665927	7999998	9333330
8	1040647	2	20	100	1188	1578	0	9711601	9333331	10666663
9	2170382	3	7	60	1722	1327	1858	11884749	10666664	11999996

Total number of pulses in waveform = 21

Type 5 Radar Waveform_25

Waveform Num = 25
Num of Bursts = 12
Burst Interval (us)= 1000000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	802195	2	13	80	1452	1741	0	802195	0	999999
2	1165245	2	15	80	1913	1167	0	1970633	1000000	1999999
3	97341	1	18	55	1057	0	0	2071054	2000000	2999999
4	1009725	1	11	65	1559	0	0	3081836	3000000	3999999
5	1309680	2	10	95	1354	1101	0	4393075	4000000	4999999
6	801523	1	15	85	1568	0	0	5197053	5000000	5999999
7	1562438	3	10	85	1726	1877	1214	6761059	6000000	6999999
8	1024049	2	20	90	1727	1248	0	7789825	7000000	7999999
9	886312	2	8	90	1591	1115	0	8679212	8000000	8999999
10	1172458	3	15	70	1971	1875	1587	9854376	9000000	9999999
11	1094647	3	6	65	1466	1534	1050	10954456	10000000	10999999
12	197755	2	16	70	1036	1910	0	11156261	11000000	11999999

Total number of pulses in waveform = 24



Type 5 Radar Waveform_26

Waveform Num = 26
Num of Bursts = 14
Burst Interval (us)= 857143

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	59988	3	16	80	1140	1990	1932	59988	0	857142
2	1539833	2	19	50	1465	1033	0	1604883	857143	1714285
3	113903	1	16	90	1642	0	0	1721304	1714286	2571428
4	1587623	2	20	80	1741	1955	0	3310569	2571429	3428571
5	374045	2	7	65	1176	1123	0	3688310	3428572	4285714
6	852554	1	8	50	1260	0	0	4362039	4285715	5142857
7	1459767	1	11	85	1008	0	0	5215853	5142858	6000000
8	227504	2	5	65	1278	1555	0	6676628	6000001	6857143
9	1227167	1	16	75	1244	0	0	6906965	6857144	7714286
10	1206070	2	15	50	1239	1091	0	8135376	7714287	8571429
11	234762	2	17	70	1016	1002	0	9343776	8571430	9428572
12	887320	1	15	100	1338	0	0	9580556	9428573	10285715
13	1293822	3	13	95	1123	1371	1044	10469214	10285716	11142858
14		3	14	85	1763	1401	1423	11766574	11142859	12000001

Total number of pulses in waveform = 26

Type 5 Radar Waveform_27

Waveform Num = 27
Num of Bursts = 10
Burst Interval (us)= 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	1045591	3	9	90	1288	1135	1851	1045591	0	1199999
2	434982	2	6	90	1202	1501	0	1484827	1200000	2399999
3	1966336	3	15	85	1394	1301	1589	3453866	2400000	3599999
4	704653	3	12	85	1339	1880	1175	4162803	3600000	4799999
5	785021	1	12	100	1863	0	0	4952218	4800000	5999999
6	1342514	3	6	60	1859	1230	1145	6296595	6000000	7199999
7	1863872	2	6	85	1628	1101	0	8164701	7200000	8399999
8	1198519	1	11	75	1992	0	0	9365949	8400000	9599999
9	1353623	1	17	55	1158	0	0	10721564	9600000	10799999
10	273328	2	10	75	1773	1825	0	10996050	10800000	11999999

Total number of pulses in waveform = 21

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	612083	2	11	75	1923	1576	0	612083	0	705881
2	409324	2	20	100	1239	1900	0	1024906	705882	1411763
3	988378	1	9	85	1537	0	0	2016423	1411764	2117645
4	158618	2	16	60	1464	1802	0	2176576	2117646	2823527
5	1243044	1	16	60	1285	0	0	3422888	2823528	3529409
6	341332	1	18	100	1703	0	0	3765505	3529410	4235291
7	1153725	1	13	95	1542	0	0	4920933	4235292	4941173
8	275676	2	19	50	1135	1737	0	5198151	4941174	5647055
9	724811	1	7	90	1695	0	0	5925634	5647056	6352937
10	569920	3	16	60	1158	1344	1575	6497449	6352938	7058819
11	1015153	1	10	85	1675	0	0	7516679	7058820	7764701
12	363620	1	17	60	1826	0	0	7881974	7764702	8470583
13	1131738	2	15	100	1120	1149	0	9015538	8470584	9176485
14	187613	3	16	95	1703	1084	1294	9205420	9176486	9882347
15	1126712	2	15	60	1793	1110	0	10336213	9882348	10588229
16	689892	3	16	90	1017	1169	1142	11029008	10588230	11294111
17	629667	3	6	95	1260	1182	1943	11662023	11294112	11999993

Total number of pulses in waveform = 31



Type 5 Radar Waveform_29

Waveform Num = 29
Num of Bursts = 19
Burst Interval (us) = 631579

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	616228	2	17	55	1292	1565	0	616228	0	631578
2	496379	3	12	100	1066	1839	1749	1115464	631579	1263157
3	617878	1	18	60	1557	0	0	1737996	1263158	1894736
4	609474	1	6	55	1196	0	0	2349027	1894737	2526315
5	562522	1	18	95	1515	0	0	2912745	2526316	3157894
6	575428	2	20	55	1053	1291	0	3489688	3157895	3789473
7	804896	3	15	50	1581	1023	1758	4296928	3789474	4421052
8	511331	2	11	80	1558	1132	0	4812621	4421053	5052631
9	275654	3	8	100	1761	1737	1052	5090965	5052632	5684210
10	988000	1	20	95	1233	0	0	6083515	5684211	6315789
11	262064	2	8	85	1942	1590	0	6346812	6315790	6947368
12	1108726	1	11	65	1070	0	0	7459070	6947369	7578947
13	444333	2	8	1053	1397	0	0	7904473	7578948	8210526
14	669631	1	20	60	1423	0	0	8576554	8210527	8842105
15	730382	2	15	85	1294	1258	0	9308359	8842106	9473684
16	198626	2	17	75	1259	1071	0	9509537	9473685	10105263
17	1095476	2	17	55	1970	1529	0	10607343	10105264	10736842
18	427979	1	7	50	1993	0	0	11038821	10736843	11368421
19	500156	3	11	50	1784	1057	1109	11540970	11368422	12000000

Total number of pulses in waveform = 35

Type 5 Radar Waveform_30

Waveform Num = 30
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	329843	2	19	75	1691	1092	0	329843	0	923076
2	967251	2	13	90	1866	1384	0	1299877	923077	1846153
3	722497	2	17	90	1363	1570	0	2025624	1846154	2769230
4	1048555	1	7	100	1066	0	0	3077112	2769231	3692307
5	737575	2	8	100	1620	1789	0	3815753	3692308	4615384
6	1449317	3	12	60	1872	1850	1574	5268479	4615385	5538461
7	523222	2	15	100	1518	1573	0	5796797	5538462	6461538
8	705842	3	6	100	1862	1309	1144	6505730	6461539	7384615
9	1578191	1	7	80	1146	0	0	8088236	7384616	8307692
10	300200	3	10	50	1854	1022	1693	8389582	8307693	9230769
11	1068086	3	6	75	1009	1394	1869	9462237	9230770	10153846
12	790317	2	7	50	1617	1286	0	10256826	10153847	11076923
13	1625310	2	6	95	1690	1945	0	11885039	11076924	12000000

Total number of pulses in waveform = 28

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5325	1	16	5325	1
2	5325	1	17	5325	1
3	5325	1	18	5325	1
4	5325	1	19	5325	1
5	5325	1	20	5325	1
6	5325	1	21	5325	1
7	5325	1	22	5325	1
8	5325	1	23	5325	1
9	5325	1	24	5325	1
10	5325	1	25	5325	1
11	5325	1	26	5325	1
12	5325	1	27	5325	1
13	5325	1	28	5325	1
14	5325	1	29	5325	1
15	5325	1	30	5325	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5311	15	4	5328	12
12	5348	36	8	5325	24
17	5300	51	18	5301	54
33	5340	99	19	5304	57
38	5342	114	20	5340	60
53	5314	159	36	5309	108
55	5341	165	37	5333	111
64	5320	192	53	5313	159
98	5329	294	67	5344	201
--	--	--	69	5303	207
--	--	--	87	5329	261
--	--	--	90	5323	270
--	--	--	93	5342	279

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
20	5298	60	6	5357	18
28	5339	84	8	5346	24
32	5317	96	18	5348	54
37	5320	111	31	5323	93
38	5297	114	40	5336	120
59	5329	177	46	5315	138
66	5314	198	49	5334	147
71	5346	213	52	5338	156
74	5327	222	55	5314	165
84	5336	252	56	5355	168
93	5321	279	61	5308	183
--	--	--	73	5339	219
--	--	--	83	5328	249
--	--	--	88	5341	264
--	--	--	91	5311	273
--	--	--	95	5333	285
			99	5321	297

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5325	24	39	5307	117
15	5319	45	54	5350	162
19	5318	57	55	5335	165
23	5298	69	73	5326	219
24	5310	72	84	5330	252
26	5348	78	90	5329	270
28	5317	84	96	5334	288
30	5322	90	97	5343	291
41	5349	123	98	5345	294
51	5339	153	--	--	--
58	5356	174	--	--	--
60	5312	180	--	--	--
73	5345	219	--	--	--
87	5311	261	--	--	--
89	5303	267	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5334	9	0	5353	0
7	5349	21	6	5306	18
10	5333	30	8	5323	24
30	5355	90	19	5347	57
47	5318	141	30	5322	90
53	5335	159	36	5345	108
64	5330	192	48	5302	144
67	5350	201	55	5298	165
69	5344	207	60	5356	180
70	5331	210	67	5349	201
76	5354	228	70	5307	210
81	5306	243	81	5300	243
83	5356	249	94	5319	282
86	5351	258	--	--	--
87	5301	261	--	--	--
89	5329	267	--	--	--
95	5353	285	--	--	--
97	5343	291	--	--	--
98	5304	294	--	--	--
99	5307	297	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5298	15	4	5332	12
25	5346	75	9	5320	27
28	5356	84	32	5339	96
29	5341	87	38	5354	114
30	5355	90	52	5353	156
34	5306	102	53	5316	159
44	5345	132	55	5305	165
48	5328	144	64	5299	192
75	5307	225	75	5330	225
84	5343	252	76	5355	228
93	5340	279	85	5341	255
--	--	--	87	5298	261

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5302	39	3	5307	9
17	5336	51	10	5343	30
21	5334	63	16	5310	48
41	5348	123	31	5328	93
57	5301	171	42	5312	126
58	5312	174	45	5316	135
62	5344	186	46	5355	138
71	5333	213	50	5356	150
72	5323	216	52	5337	156
73	5332	219	60	5324	180
87	5356	261	74	5318	222
95	5297	285	75	5348	225
--	--	--	78	5346	234
--	--	--	80	5302	240
--	--	--	87	5342	261
--	--	--	96	5338	288
--	--	--	97	5298	291
--	--	--	98	5301	294

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5356	12	21	5345	63
8	5329	24	23	5356	69
14	5323	42	25	5353	75
18	5317	54	29	5338	87
36	5314	108	32	5334	96
38	5350	114	51	5304	153
58	5326	174	64	5333	192
72	5303	216	68	5331	204
74	5315	222	77	5308	231
76	5346	228	85	5299	255
82	5343	246	90	5341	270
95	5339	285	92	5342	276
--	--	--	96	5349	288

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5325	63	2	5334	6
24	5332	72	3	5336	9
34	5318	102	11	5326	33
37	5321	111	12	5354	36
45	5337	135	21	5325	63
47	5352	141	34	5330	102
51	5298	153	41	5319	123
59	5344	177	46	5333	138
61	5316	183	80	5311	240
63	5297	189	81	5355	243
66	5326	198	91	5318	273
68	5305	204	92	5341	276
74	5351	222	93	5297	279
76	5301	228	96	5305	288
84	5349	252	97	5346	291
91	5339	273	--	--	--
92	5347	276	--	--	--
93	5322	279	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5328	9	2	5356	6
4	5340	12	20	5298	60
11	5349	33	31	5353	93
12	5323	36	35	5342	105
25	5347	75	37	5346	111
36	5330	108	40	5306	120
41	5306	123	50	5324	150
49	5350	147	77	5314	231
50	5345	150	79	5330	237
74	5357	222	81	5301	243
--	--	--	83	5337	249
--	--	--	86	5352	258
--	--	--	87	5335	261
--	--	--	93	5297	279

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
12	5302	36	11	5325	33
21	5353	63	28	5319	84
22	5325	66	33	5347	99
33	5336	99	42	5308	126
38	5349	114	49	5305	147
42	5343	126	57	5338	171
45	5306	135	66	5302	198
47	5311	141	72	5306	216
53	5350	159	78	5300	234
55	5307	165	81	5345	243
59	5297	177	94	5328	282
62	5298	186	--	--	--
70	5320	210	--	--	--
74	5310	222	--	--	--
77	5347	231	--	--	--
85	5324	255	--	--	--
94	5319	282	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5318	9	3	5343	9
23	5303	69	13	5347	39
25	5325	75	14	5298	42
31	5300	93	23	5299	69
32	5305	96	27	5342	81
34	5313	102	30	5349	90
45	5330	135	31	5327	93
59	5323	177	38	5323	114
76	5342	228	56	5317	168
78	5347	234	87	5308	261
81	5304	243	94	5338	282
--	--	--	95	5334	285

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5323	15	5	5335	15
8	5316	24	12	5329	36
24	5338	72	21	5297	63
30	5329	90	24	5302	72
33	5357	99	25	5317	75
43	5340	129	27	5327	81
51	5327	153	36	5307	108
53	5311	159	40	5315	120
55	5302	165	42	5316	126
64	5322	192	67	5298	201
78	5313	234	71	5343	213
81	5335	243	73	5303	219
87	5351	261	77	5357	231
96	5345	288	95	5314	285

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5355	15	5	5305	15
32	5330	96	14	5316	42
35	5322	105	23	5319	69
52	5343	156	30	5329	90
53	5302	159	36	5327	108
55	5307	165	52	5339	156
69	5331	207	53	5310	159
75	5297	225	57	5347	171
84	5316	252	61	5336	183
92	5339	276	67	5301	201
--	--	--	68	5326	204
--	--	--	78	5320	234

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5308	3	0	5341	0
5	5338	15	11	5324	33
7	5337	21	13	5301	39
15	5318	45	16	5323	48
22	5357	66	18	5345	54
23	5303	69	25	5343	75
45	5305	135	26	5310	78
55	5334	165	36	5352	108
56	5355	168	39	5320	117
69	5310	207	63	5330	189
74	5302	222	82	5302	246
75	5348	225	93	5300	279
80	5322	240	97	5327	291
85	5313	255	--	--	--
99	5346	297	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5313	18	4	5357	12
10	5330	30	8	5299	24
13	5339	39	11	5318	33
15	5326	45	14	5323	42
16	5349	48	16	5328	48
27	5337	81	28	5314	84
33	5342	99	30	5332	90
35	5357	105	31	5302	93
47	5341	141	35	5313	105
62	5354	186	40	5345	120
66	5343	198	41	5304	123
75	5328	225	48	5352	144
80	5332	240	53	5315	159
90	5329	270	57	5334	171
93	5335	279	79	5349	237
--	--	--	80	5317	240
--	--	--	86	5338	258
--	--	--	91	5312	273
--	--	--	97	5308	291

6. CONCLUSION

The data collected relate only the item(s) tested and show that the **Wireless Access Point, Model No.: WI2A-AC200i, FCC ID: 2AD8UFZCWI2A1** is in compliance with Part 15E of the FCC Rules.

The End