



DFS MEASUREMENT REPORT

FCC PART 15 Subpart E & IC RSS-247 WLAN 802.11b/g/n

FCC ID: 2AD8UFZCWI4A1
IC: 109D-FZCWI4A1
APPLICANT: Nokia Solutions and Networks, OY
Application Type: Certification
Product: Wireless Access Point
Model No.: WI4A-AC400i
Brand Name: NOKIA
FCC Classification: Unlicensed National Information Infrastructure (UNII)
FCC Rule Part(s): Part 15 Subpart E - 15.407 Section (h)(2)
KDB 905462 D02v02, KDB 905462 D04v01
Type of Device: ☒ Master Device
☐ Client Device (No radar detection)
☐ Client Device with radar detection
Test Date: July 02 ~ 08, 2018

Reviewed By:

Paddy Chen

(Paddy Chen)

Approved By:

Chenz Ker

(Chenz Ker)



The test results relate only to the samples tested.

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

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

Revision History

Report No.	Version	Description	Issue Date	Note
1807TW0102-U1	Rev. 01	Initial Report	10-18-2018	Valid

This report is supplemented to BV Original "RF160530E01A-3" Report adding "MESH mode" and related data

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§2.1033 General Information

Applicant:	Nokia Solutions and Networks, OY
Applicant Address:	2000 W. Lucent Lane, Naperville, Illinois, United States, 60563
Manufacturer:	Nokia Solutions and Networks, OY
Manufacturer Address:	2000 W. Lucent Lane, Naperville, Illinois, United States, 60563
Test Site:	MRT Technology (Taiwan) Co., Ltd
Test Site Address:	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)
MRT Registration No.:	153292
MRT IC Registration No.:	21723-1
FCC Rule Part(s):	Part 15 Subpart E - 15.407 Section (h)(2)
IC Rule(s):	RSS-247 Issue 2
Test Device Serial No.:	<input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> Engineering

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Fuxing Rd., Taoyuan, Taiwan (R.O.C)

- MRT facility is a FCC registered (Reg. No. 153292) test facility with the site description report on file and is designated by the FCC as an Accredited Test Film.
- MRT facility is an IC registered (MRT Reg. No. 21723-1) test laboratory with the site description on file at Industry Canada.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (TAF) under the American Association for Laboratory Accreditation Program (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC, Industry Taiwan, EU and TELEC Rules.

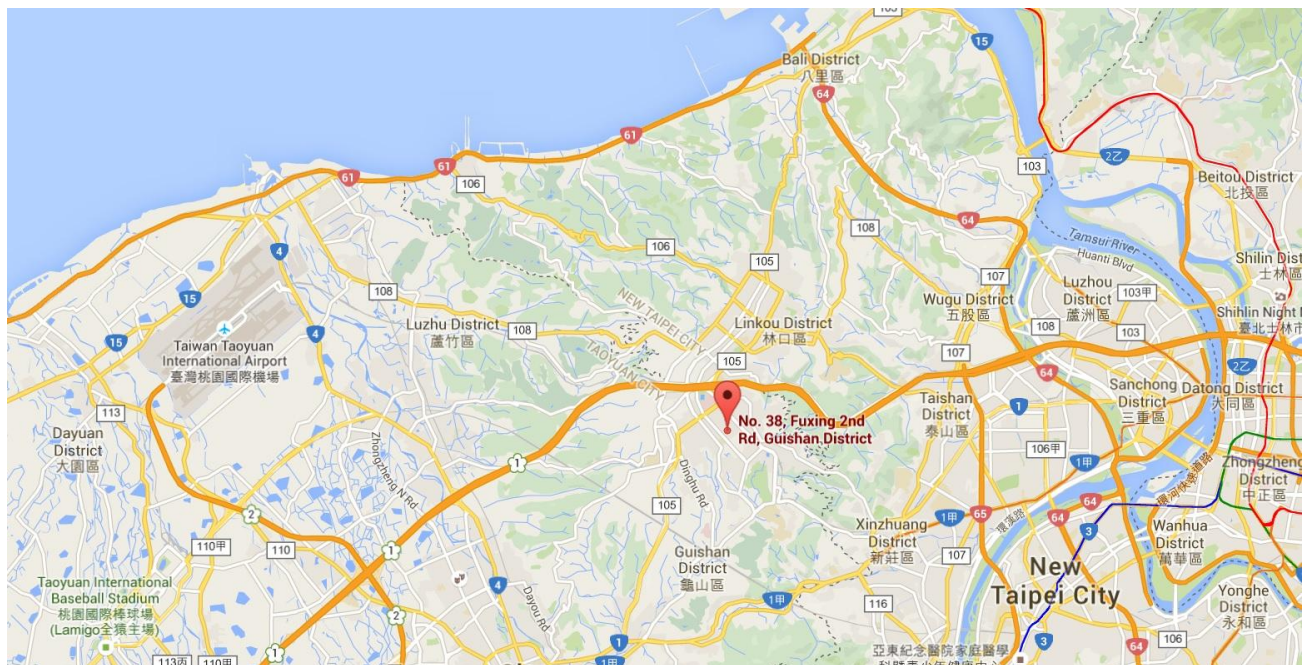
1. INTRODUCTION

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 Taoyuan City. These measurement tests were conducted at the MRT Technology (Taiwan) Co., Ltd. Facility located at No.38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan (R.O.C).



2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name:	Wireless Access Point
Model No.:	WI4A-AC400i
Brand Name:	NOKIA
Wi-Fi Specification:	802.11a/b/g/n/ac
Frequency Range	<p><u>2.4GHz:</u> For 802.11b/g/n-HT20: 2412 ~ 2462 MHz For 802.11n-HT40: 2422 ~ 2452 MHz</p> <p><u>5GHz:</u> For 802.11a/n-HT20/ac-VHT20:5180~5320MHz, 5500~5720MHz, 5745~5825MHz For 802.11n-HT40/ac-VHT40:5190~5310MHz, 5510~5710MHz, 5755~5795MHz For 802.11ac-VHT80:5210MHz, 5290MHz, 5530MHz, 5610MHz, 5690MHz, 5775MHz For 802.11ac-VHT80+80: 5210 MHz + 5290 MHz, 5210 MHz + 5530 MHz, 5210 MHz + 5610 MHz, 5210 MHz + 5690 MHz, 5210 MHz + 5775 MHz, 5290 MHz + 5530 MHz, 5290 MHz + 5610 MHz, 5290 MHz + 5690 MHz, 5290 MHz + 5775 MHz, 5530 MHz + 5610 MHz, 5530 MHz + 5690 MHz, 5530 MHz + 5775 MHz, 5610 MHz + 5690 MHz, 5610 MHz + 5775 MHz, 5690 MHz + 5775 MHz</p>
Type of Modulation	802.11b: DSSS, 802.11a/g/n/ac: OFDM
Modulation Type	CCK, DQPSK, DBPSK for DSSS 16QAM, 64QAM, 256QAM, QPSK, BPSK for OFDM
Power-on cycle	Requires 45.3 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 (MHz)	TX Paths	Per Chain Max Antenna Gain (dBi)				Beam Forming Directional Gain (dBi)	CDD Directional Gain(dBi)	
			Ant 1	Ant 2	Ant 3	Ant 4		For Power	For PSD
PIFA Antenna	5150	4	3.81	5.67	5.69	4.85	11.06	5.69	11.71
	5250	4	3.71	5.95	5.41	4.66	10.99	5.95	11.97
	5350	4	4.06	5.83	5.20	4.32	10.90	5.83	11.85
	5725	4	5.83	5.38	4.92	5.02	11.32	5.83	11.85
	5825	4	6.21	5.38	5.07	4.87	11.42	6.21	12.23

Note:

- The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated. For CDD transmissions, directional gain is calculated as follows, $N_{ANT} = 4$, $N_{SS} = 1$.
 - If all antennas have the same gain, G_{ANT} , Directional gain = $G_{ANT} + \text{Array Gain}$, where Array Gain is as follows.
 - For power spectral density (PSD) measurements on all devices, Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB = 6.02;
 - For power measurements on IEEE 802.11 devices, Array Gain = 0 dB for $N_{ANT} \leq 4$;
 - If antenna gains are not equal, the user may use either of the following methods to calculate directional gain, provided that each transmit antenna is driven by only one spatial stream:
 - Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

$$\bullet \text{ DirectionalGain} = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

$g_{j,k} = 10^{G_k/20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;

G_k is the gain in dBi of the kth antenna.

- The EUT also supports Beam Forming mode, and the Beam Forming support 802.11n/ac, not include 802.11a.

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

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

Unequal antenna gains, with equal transmit powers. For antenna gains given by $G_1, G_2, \dots, G_{NdBi}$.

- transmit signals are correlated, then
- Directional gain = $10 \cdot \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_{NANT}/20})^2 / N_{ANT}]$ dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

2.3. DFS Band Carrier Frequencies Operation

802.11 a/n-HT20/ac-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/ ac-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	--	--	--	--

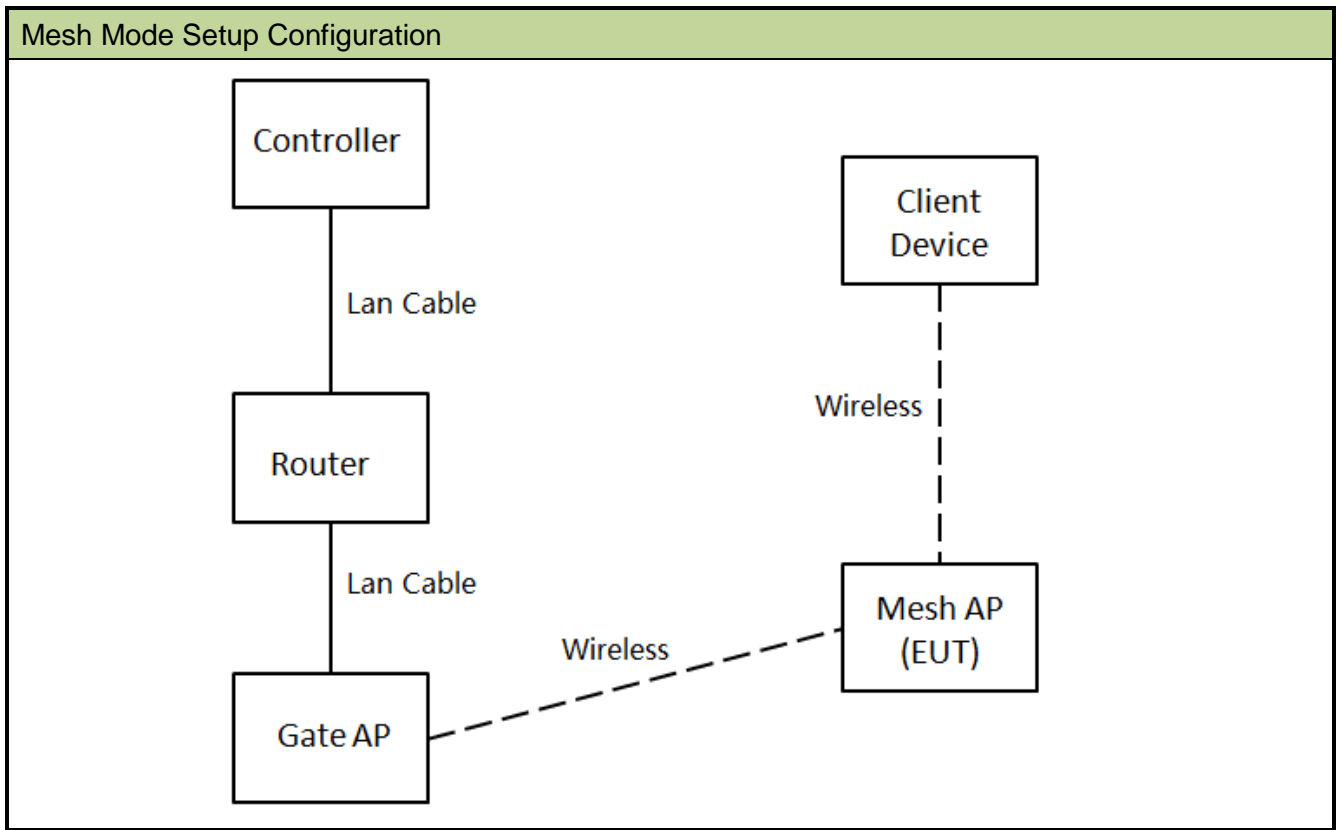
802.11ac-VHT80 Center Working Frequency of Each Channel

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

2.4. Test Mode

Test Mode	Mode 1: Communication with Notebook by MESH Mode
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2.5. Configuration of Mesh Mode



3. DFS DETECTION THRESHOLDS AND RADAR TEST WAVEFORMS

3.1. Applicability

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

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

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

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

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

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

3.2. DFS Devices Requirements

Per FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 the following are the requirements for Master Devices:

- (a) The Master Device will use DFS in order to detect Radar Waveforms with received signal strength above the DFS Detection Threshold in the 5250 ~ 5350 MHz and 5470 ~ 5725 MHz bands. DFS is not required in the 5150 ~ 5250 MHz or 5725 ~ 5825 MHz bands.
- (b) Before initiating a network on a Channel, the Master Device will perform a Channel Availability Check for a specified time duration (Channel Availability Check Time) to ensure that there is no radar system operating on the Channel, using DFS described under subsection a) above.
- (c) The Master Device initiates a U-NII network by transmitting control signals that will enable other U-NII devices to Associate with the Master Device.
- (d) During normal operation, the Master Device will monitor the Channel (In-Service Monitoring) to ensure that there is no radar system operating on the Channel, using DFS described under a).
- (e) If the Master Device has detected a Radar Waveform during In-Service Monitoring as described under d), the Operating Channel of the U-NII network is no longer an Available Channel. The Master Device will instruct all associated Client Device(s) to stop transmitting on this Channel within the Channel Move Time. The transmissions during the Channel Move Time will be limited to the Channel Closing Transmission Time.
- (f) Once the Master Device has detected a Radar Waveform it will not utilize the Channel for the duration of the Non-Occupancy Period.
- (g) If the Master Device delegates the In-Service Monitoring to a Client Device, then the combination will be tested to the requirements described under d) through f) above.

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

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.	

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

Table 3-3: DFS Response Requirements

3.3. DFS Detection Threshold Values

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

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP \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. Radiated Test Setup

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

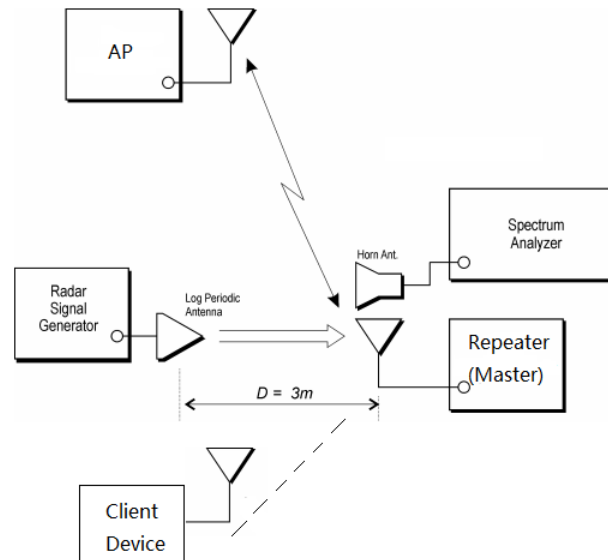


Figure 3-1: Radiated Test Setup where UUT is a Master and Radar Test Waveforms are injected into the Masters

4. TEST EQUIPMENT CALIBRATION DATE

Dynamic Frequency Selection (DFS) – TR3

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2019/07/10
MXG X-Series Microwave Analog Signal Generator	KEYSIGHT	N5183B	MRTTWA00013	1 year	2019/04/17
Temperature/Humidity Meter	TFA	35.1078.10.IT	MRTTWA00033	1 year	2019/06/08
Combiner	WOKEN	0120N02208001D	MRTTWA00040	1 year	N/A
Broadband Hornantenna	SCHWARZBECK	BBHA 9120D	MRTTWA00003	1 year	2019/04/05

Client Information

Instrument	Manufacturer	Type No.
Wireless Network Adapter	Intel	7260HMW
Wireless Access Point	Nokia	WI4A-AC400i

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, OY
FCC ID: 2AD8UFZCWI4A1
IC: 109D-FZCWI4A1

Parameter	Limit	Test Result	Reference
UNII Detection Bandwidth Measurement	Refer Table 3-3	Pass	Section 5.3
Statistical Performance Check	Refer Table 3-3	Pass	Section 5.4

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.

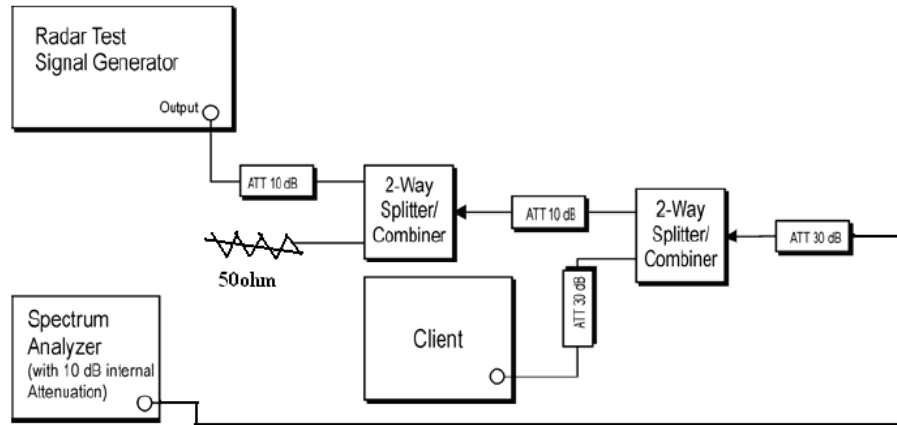


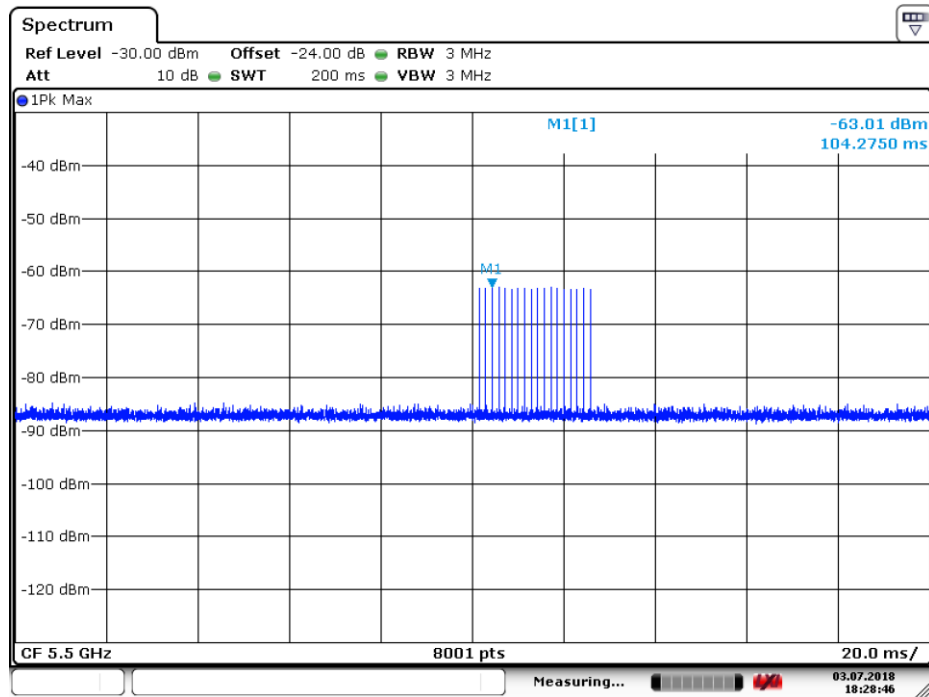
Figure 3-2: Conducted Test Setup

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.

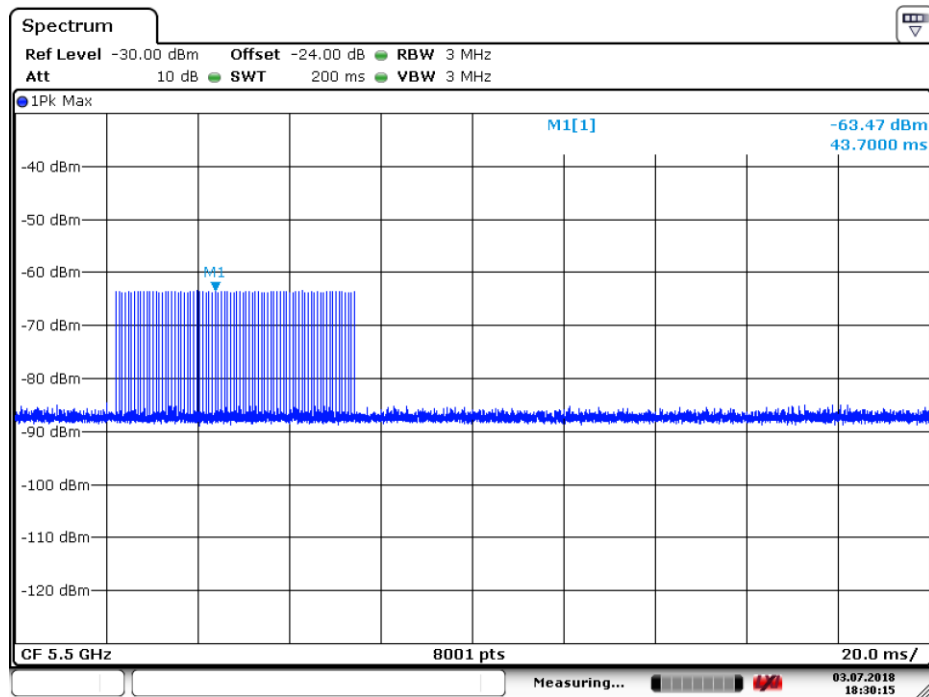
5.2.3. Cablibration Result

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



Date: 3 JUL 2018 18:28:47

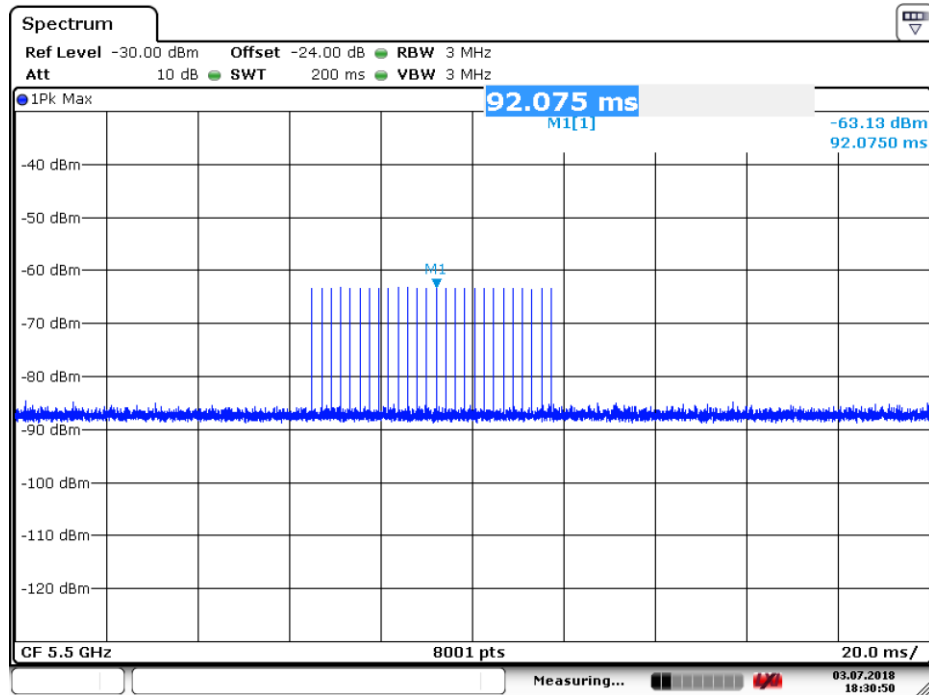
Radar #1(Test A) DFS detection threshold level and the burst of pulses on the Channel frequency



Date: 3 JUL 2018 18:30:15

PRI = 678us and the number of pulses = 78

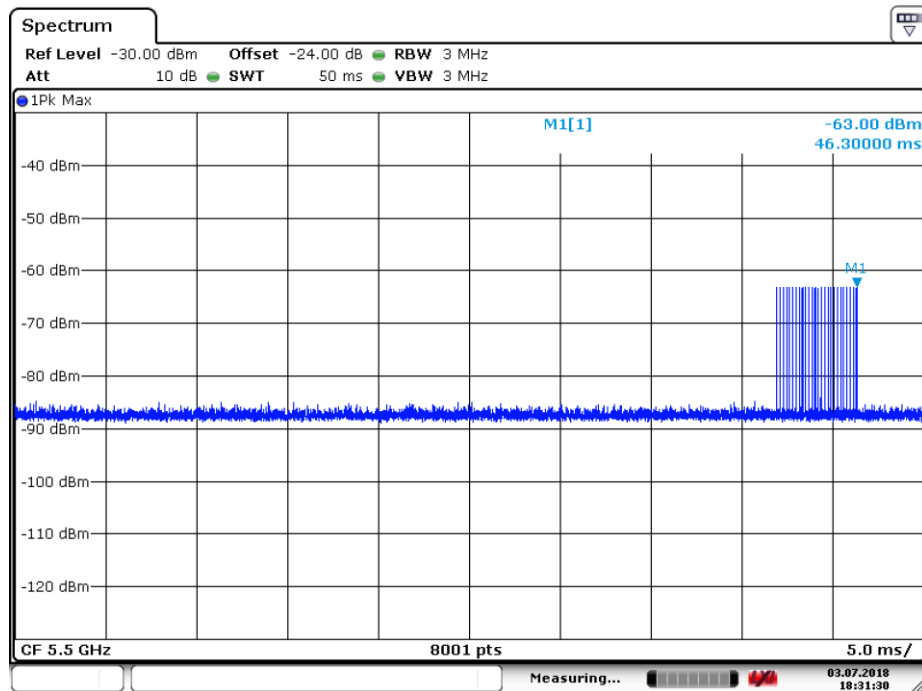
Radar #1(Test B) DFS detection threshold level and the burst of pulses on the Channel frequency



Date: 3.JUL.2018 18:30:51

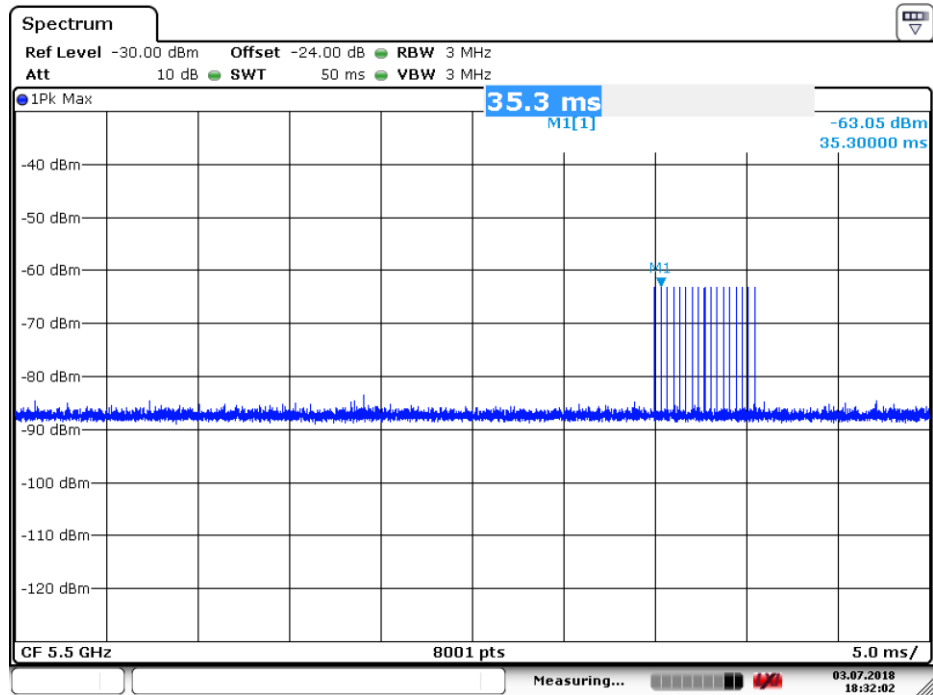
PRI = 2.091ms and the number of pulses = 26

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



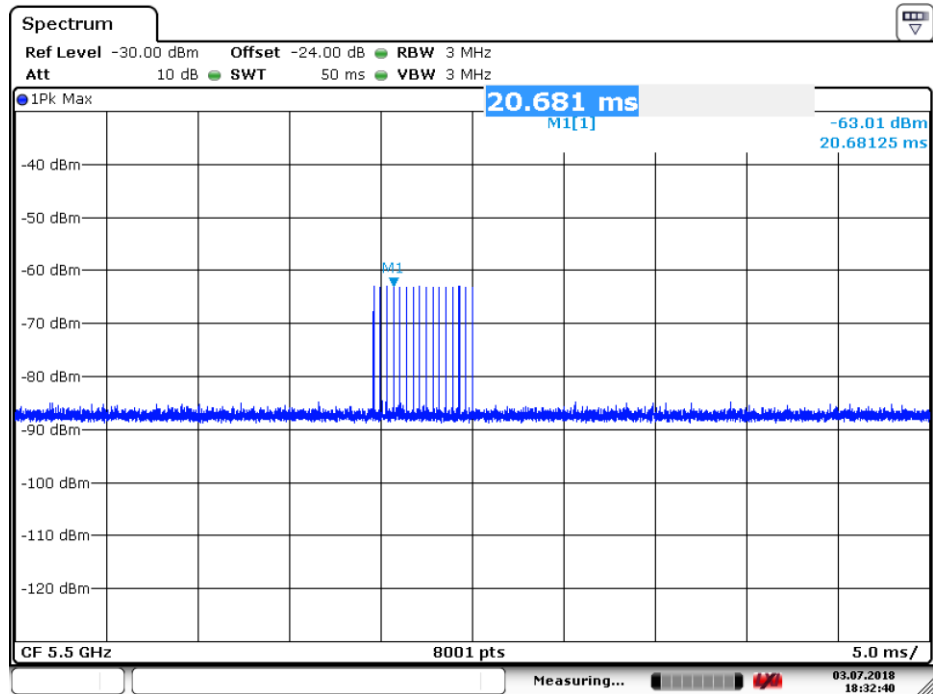
Date: 3.JUL.2018 18:31:30

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



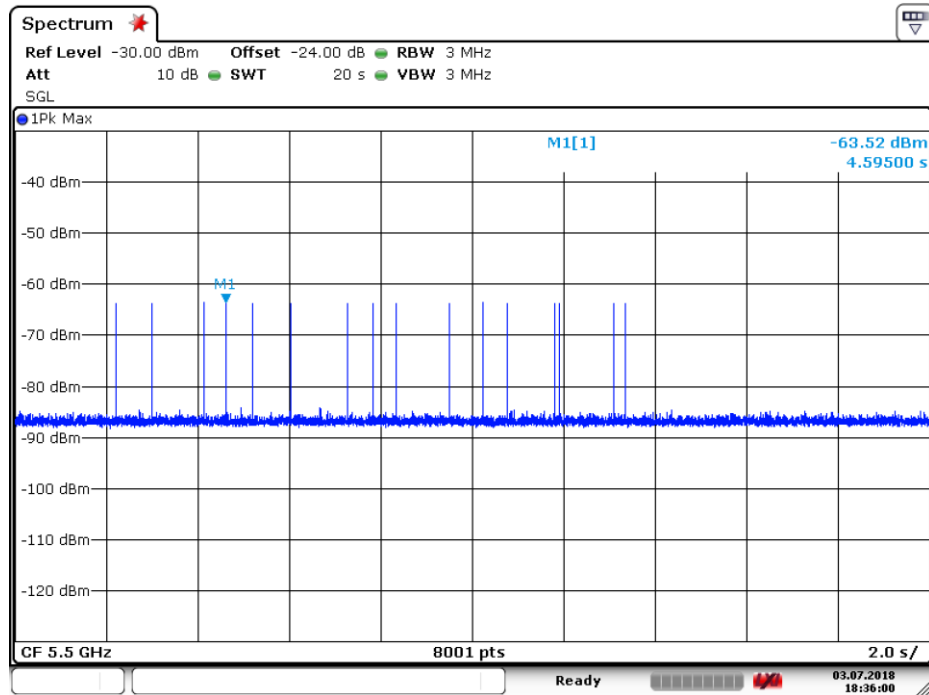
Date: 3 JUL 2018 18:32:03

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



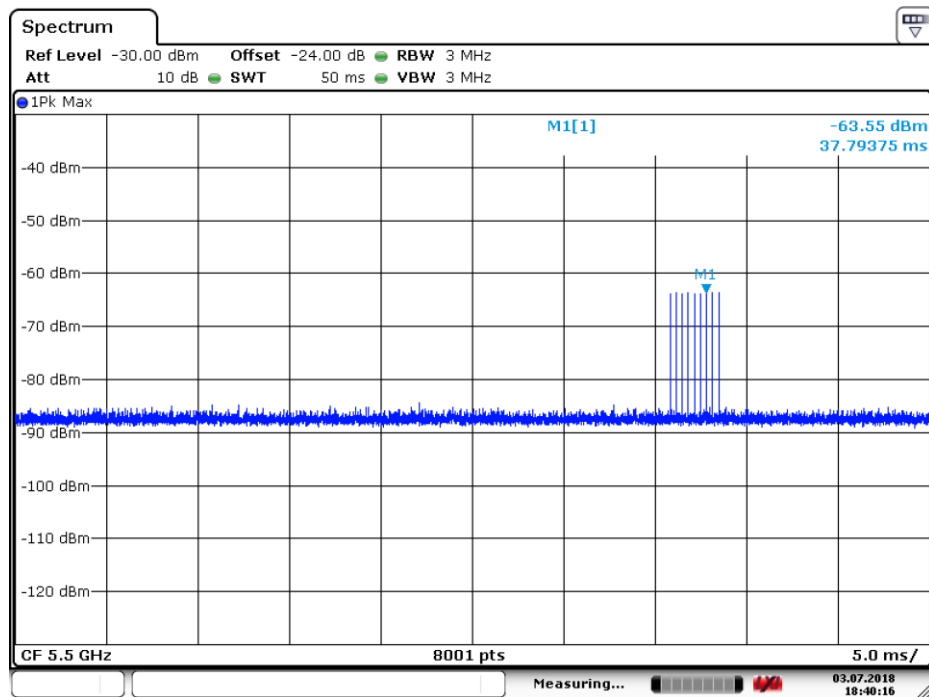
Date: 3 JUL 2018 18:32:40

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



Date: 3.JUL.2018 18:36:01

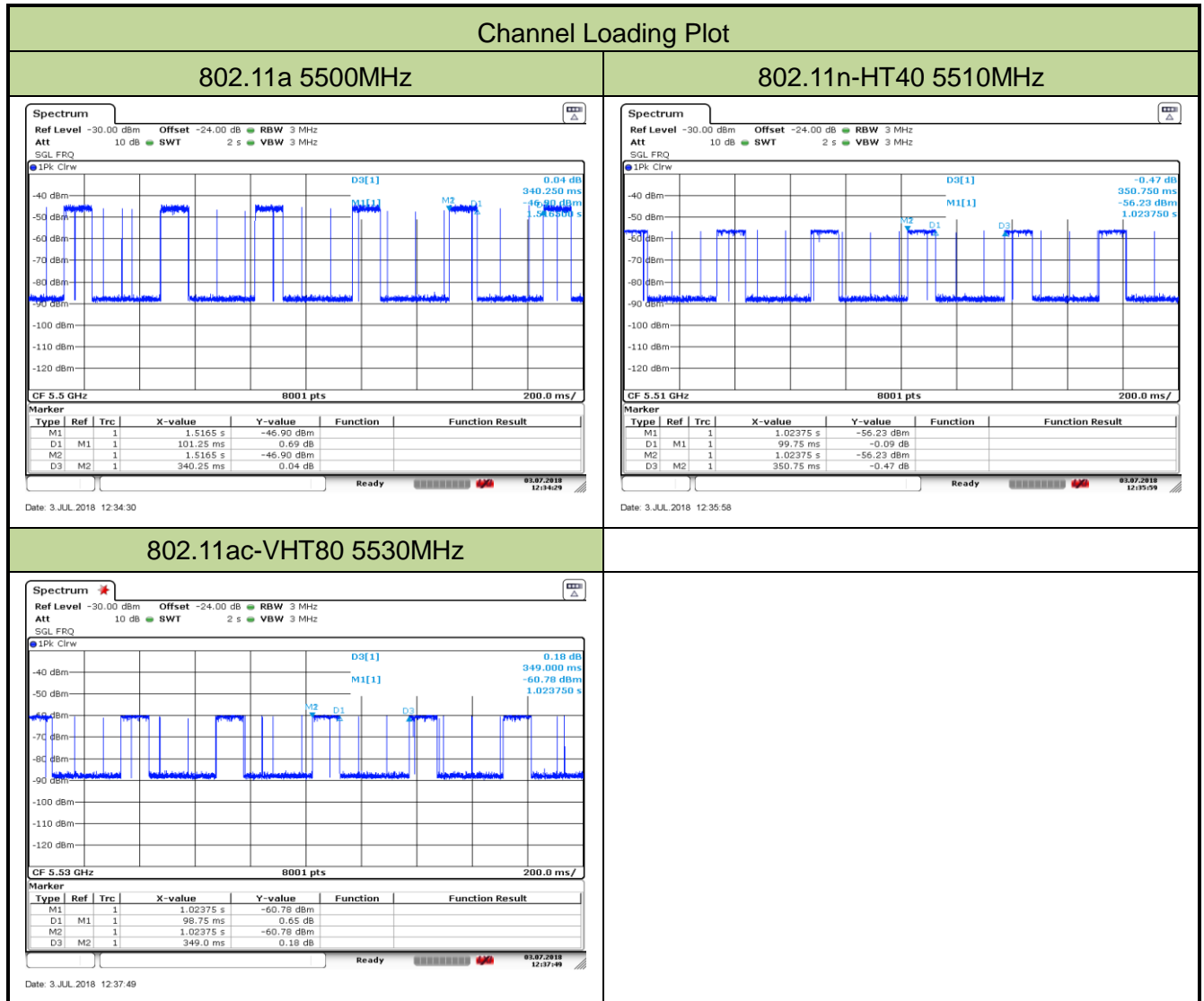
Radar #6 DFS detection threshold level and a single hop (9 pulses) on the Channel frequency within UNII detection bandwidth



Date: 3.JUL.2018 18:40:16

5.2.4.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).



Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11a	5500 MHz	29.76%	≥ 17%	Pass
802.11n-HT40	5510 MHz	28.44%	≥ 17%	Pass
802.11ac-VHT80	5530 MHz	28.30%	≥ 17%	Pass

5.3. UNII Detection Bandwidth Measurement

5.3.1. 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.

5.3.2. Test Procedure

1. Adjust the equipment to produce a single Burst of any one of the Short Pulse Radar Types 0-4 in Table 3-5 at the center frequency of the EUT Operating Channel at the specified DFS Detection Threshold level.
2. The generating equipment is configured as shown in the Conducted Test Setup above section 3.5.
3. The EUT is set up as a stand-alone device (no associated Client or Master, as appropriate) and no traffic. Frame based systems will be set to a talk/listen ratio reflecting the worst case (maximum) that is user configurable during this test.
4. Generate a single radar Burst, and note the response of the EUT. Repeat for a minimum of 10 trials. The EUT must detect the Radar Waveform using the specified U-NII Detection Bandwidth criterion shown in Table 3-5. In cases where the channel bandwidth may exceed past the DFS band edge on specific channels (i.e., 802.11ac or wideband frame based systems) select a channel that has the entire emission bandwidth within the DFS band. If this is not possible, test the detection BW to the DFS band edge.
5. Starting at the center frequency of the UUT operating Channel, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in Table 3-3. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as FH) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies above FH is not required to demonstrate compliance.
6. Starting at the center frequency of the EUT operating Channel, decrease the radar frequency in 1 MHz steps, repeating the above item 4 test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion. Record the lowest frequency (denote as FL) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies below FL is not required to demonstrate compliance.
7. The U-NII Detection Bandwidth is calculated as follows: $\text{U-NII Detection Bandwidth} = \text{FH} - \text{FL}$
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.

5.3.3. Test Result

EUT Frequency = 5500MHz 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	
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509 FH	1	1	1	1	1	1	1	1	1	1	100%
5510	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5509MHz - 5491MHz = 18MHz											
EUT 99% Bandwidth = 16.48MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 16.48MHz x 100% = 16.48MHz											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5500MHz. The 99% channel bandwidth is 16.48MHz. (See the 99% BW section of the RF report for further measurement details).

EUT Frequency = 5510MHz 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	
5490	0	0	0	0	0	0	0	0	0	0	0%
5491	0	0	0	0	0	0	0	0	0	0	0%
5492 FL	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%
5526	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	100%
5529 FH	1	1	1	1	1	1	1	1	1	1	100%
5530	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5529MHz - 5492MHz = 37MHz											
EUT 99% Bandwidth = 35.91MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 35.91MHz x 100% = 35.91MHz											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5510MHz. The 99% channel bandwidth is 35.91MHz. (See the 99% BW section of the RF report for further measurement details).

EUT Frequency = 5530MHz 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	
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%
5530	1	1	1	1	1	1	1	1	1	1	100%
5535	1	1	1	1	1	1	1	1	1	1	100%
5540	1	1	1	1	1	1	1	1	1	1	100%
5545	1	1	1	1	1	1	1	1	1	1	100%
5550	1	1	1	1	1	1	1	1	1	1	100%
5555	1	1	1	1	1	1	1	1	1	1	100%
5560	1	1	1	1	1	1	1	1	1	1	100%
5565	1	1	1	1	1	1	1	1	1	1	100%
5566	1	1	1	1	1	1	1	1	1	1	100%
5567	1	1	1	1	1	1	1	1	1	1	100%
5568	1	1	1	1	1	1	1	1	1	1	100%
5569 FH	1	1	1	1	1	1	1	1	1	1	100%
5570	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = FH - FL = 5569MHz - 5491MHz = 78MHz											
EUT 99% Bandwidth = 75.65MHz (see note)											
UNII Detection Bandwidth Min. Limit (MHz): 75.65MHz x 100% = 75.65MHz											

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz. The 99% channel bandwidth is 75.65MHz. (See the 99% BW section of the RF report for further measurement details).

5.4. Statistical Performance Check Measurement

5.4.1. 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: $(Pd1 + Pd2 + Pd3 + Pd4) / 4$.

5.4.2. 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.

5.4.3. Test Result

Statistical Performance Check for 802.11a

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1	778	68	1
2	5491	1	818	65	1
3	5491	1	538	99	1
4	5491	1	518	102	1
5	5491	1	618	86	1
6	5491	1	678	78	1
7	5491	1	898	59	1
8	5491	1	578	92	1
9	5491	1	938	57	1
10	5491	1	878	61	1
11	5500	1	858	62	1
12	5500	1	638	83	1
13	5500	1	558	95	1
14	5500	1	758	70	1
15	5500	1	918	58	1
16	5500	1	1718	31	1
17	5500	1	2310	23	1
18	5500	1	847	63	1
19	5500	1	669	79	1
20	5500	1	1731	31	1
21	5509	1	3051	18	1
22	5509	1	2538	21	1
23	5509	1	526	101	1
24	5509	1	2979	18	1
25	5509	1	889	60	1
26	5509	1	1293	41	1
27	5509	1	2909	19	1
28	5509	1	2840	19	1
29	5509	1	2019	27	1
30	5509	1	941	57	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	3.2	158	27	1
2	5491	1.2	167	27	1
3	5491	2.1	189	25	1
4	5491	4.7	162	28	1
5	5491	1.3	188	27	1
6	5491	4.2	178	27	1
7	5491	1.6	216	24	1
8	5491	4.7	216	27	1
9	5491	3.3	192	27	1
10	5491	4.3	194	23	1
11	5500	4.1	152	24	1
12	5500	4.9	214	29	1
13	5500	4.7	170	29	1
14	5500	1.8	201	27	1
15	5500	2.7	194	29	1
16	5500	1.2	220	26	1
17	5500	1.1	191	23	1
18	5500	4.2	190	28	1
19	5500	3.8	179	25	1
20	5500	4.2	185	24	1
21	5509	3.9	222	25	1
22	5509	4.6	208	26	1
23	5509	3.0	229	25	1
24	5509	3.4	200	26	1
25	5509	1.9	201	24	1
26	5509	2.5	178	24	1
27	5509	2.2	210	23	1
28	5509	4.5	150	27	1
29	5509	4.3	200	27	1
30	5509	3.8	165	29	1
Detection Percentage (%)					100%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	9.5	301	16	1
2	5491	9.9	366	18	1
3	5491	9.8	337	18	1
4	5491	8.2	431	18	1
5	5491	8.0	354	18	1
6	5491	8.0	467	16	1
7	5491	8.2	371	17	1
8	5491	9.9	326	17	1
9	5491	7.3	480	16	1
10	5491	6.5	347	16	1
11	5500	9.8	450	18	1
12	5500	8.2	330	18	1
13	5500	9.0	431	17	1
14	5500	6.8	457	17	1
15	5500	6.1	394	18	1
16	5500	9.8	298	17	1
17	5500	7.8	282	16	1
18	5500	9.3	392	17	1
19	5500	10.0	463	17	1
20	5500	8.2	382	18	1
21	5509	6.6	415	17	1
22	5509	7.4	377	18	1
23	5509	7.4	358	17	1
24	5509	9.7	360	18	1
25	5509	9.2	355	18	1
26	5509	8.5	262	18	1
27	5509	6.5	321	16	1
28	5509	6.9	441	16	1
29	5509	7.1	252	18	1
30	5509	8.1	448	18	1
Detection Percentage (%)					100%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	11.7	368	12	1
2	5491	18.0	422	12	1
3	5491	18.2	424	16	1
4	5491	13.2	483	13	1
5	5491	19.0	420	14	1
6	5491	12.1	352	13	1
7	5491	15.7	397	15	1
8	5491	11.7	310	12	1
9	5491	13.7	440	14	1
10	5491	13.0	449	16	1
11	5500	11.7	260	15	1
12	5500	15.0	468	15	1
13	5500	13.2	293	13	1
14	5500	16.1	382	12	1
15	5500	16.8	379	14	1
16	5500	16.3	377	14	1
17	5500	14.0	500	13	1
18	5500	11.3	372	16	1
19	5500	11.9	415	13	1
20	5500	14.5	430	15	1
21	5509	11.8	348	16	1
22	5509	15.9	402	13	1
23	5509	11.9	409	12	1
24	5509	18.7	367	15	1
25	5509	13.8	426	15	1
26	5509	16.5	272	15	1
27	5509	18.0	263	14	1
28	5509	18.4	401	12	1
29	5509	15.5	473	15	1
30	5509	13.1	434	16	1
Detection Percentage (%)					100%

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

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



Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5496.8	1	16	5500.0	1
2	5496.0	1	17	5500.0	1
3	5499.2	1	18	5500.0	1
4	5495.2	1	19	5500.0	1
5	5494.0	1	20	5500.0	1
6	5499.6	1	21	5504.0	1
7	5497.6	1	22	5506.0	1
8	5494.4	1	23	5503.2	1
9	5498.8	1	24	5504.8	1
10	5495.6	1	25	5502.4	1
11	5500.0	1	26	5501.2	1
12	5500.0	1	27	5505.6	1
13	5500.0	1	28	5500.8	1
14	5500.0	1	29	5504.4	1
15	5500.0	1	30	5500.4	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

Num of Bursts = 19 Burst Interval (us) = 631579										
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	620247	3	12	55	1219	1356	1270	620247	0	631578
2	118512	1	12	55	1880	0	0	742604	631579	1263157
3	907426	3	12	95	1941	1853	1645	1651910	1263158	1894736
4	669658	2	12	80	1628	1684	0	2326907	1894737	2526315
5	805040	2	12	90	1553	1229	0	3135259	2526316	3157894
6	429236	1	12	70	1302	0	0	3567277	3157895	3789473
7	639668	2	12	55	1949	1571	0	4208247	3789474	4421052
8	534000	3	12	65	1470	1600	1170	4745767	4421053	5052631
9	657419	2	12	50	1259	1487	0	5407426	5052632	5684210
10	591143	3	12	65	1637	1088	1430	6001315	5684211	6315789
11	798002	2	12	70	1084	1620	0	6803472	6315790	6947368
12	486538	3	12	60	1096	1669	1750	7292714	6947369	7578947
13	773989	3	12	65	1351	1717	1482	8071218	7578948	8210526
14	342761	2	12	100	1751	1737	0	8418529	8210527	8842105
15	798385	3	12	80	1362	1567	1284	9220402	8842106	9473684
16	344317	3	12	70	1154	1503	1783	9568922	9473685	10105263
17	936322	3	12	90	1050	1769	1688	10509684	10105264	10736842
18	674423	3	12	100	1529	1086	1293	11188614	10736843	11368421
19	246955	1	12	85	1876	0	0	11438477	11368422	12000000
Total number of pulses in waveform = 45 *****										

**Type 5 Radar Waveform_2**

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	263512	3	10	70	1292	1043	1743	263512	0	1199999
2	1434855	3	10	90	1683	1150	1894	1702445	1200000	2399999
3	1569421	1	10	80	1177	0	0	3276593	2400000	3599999
4	1367831	2	10	85	1735	1368	0	4645601	3600000	4799999
5	424385	1	10	50	1061	0	0	5073089	4800000	5999999
6	1259623	2	10	70	1144	1655	0	6333773	6000000	7199999
7	920305	3	10	100	1248	1800	1846	7256877	7200000	8399999
8	1923436	1	10	95	1250	0	0	9185207	8400000	9599999
9	589318	1	10	60	1351	0	0	9775775	9600000	10799999
10	1033135	2	10	60	1424	1082	0	10810261	10800000	11999999

Total number of pulses in waveform = 19

Type 5 Radar Waveform_3

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	164571	2	18	70	1079	1598	0	164571	0	1199999
2	2131770	2	18	55	1984	1424	0	2299018	1200000	2399999
3	886354	3	18	70	1646	1577	1921	3188780	2400000	3599999
4	1015962	2	18	70	1910	1177	0	4209886	3600000	4799999
5	1756961	1	18	85	1707	0	0	5969934	4800000	5999999
6	1083710	3	18	65	1932	1332	1438	7055351	6000000	7199999
7	1055780	1	18	65	1311	0	0	8115833	7200000	8399999
8	436126	2	18	85	1695	1197	0	8553270	8400000	9599999
9	1785070	3	18	65	1008	1821	1437	10341232	9600000	10799999
10	1241229	2	18	90	1760	1419	0	11586727	10800000	11999999

Total number of pulses in waveform = 21

Type 5 Radar Waveform_4

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	164156	1	8	80	1141	0	0	164156	0	923076
2	881803	2	8	90	1736	1104	0	1047100	923077	1846153
3	1711603	1	8	75	1581	0	0	2761543	1846154	2769230
4	654329	2	8	90	1689	1839	0	3417453	2769231	3692307
5	1083492	2	8	65	1081	1034	0	4504473	3692308	4615384
6	752685	3	8	50	1078	1732	1599	5259273	4615385	5538461
7	448036	3	8	65	1098	1193	1210	5711718	5538462	6461538
8	1482804	2	8	65	1462	1851	0	7198023	6461539	7384615
9	547106	1	8	95	1687	0	0	7748442	7384616	8307692
10	1237927	2	8	85	1152	1211	0	8988056	8307693	9230769
11	344049	2	8	65	1155	1540	0	9334468	9230770	10153846
12	976134	1	8	60	1891	0	0	10313297	10153847	11076923
13	838594	1	8	55	1185	0	0	11153782	11076924	12000000

Total number of pulses in waveform = 23



Type 5 Radar Waveform_5

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	362438	1	5	90	1337	0	0	362438	0	999999
2	841966	3	5	55	1303	1455	1919	1205741	1000000	1999999
3	1010896	3	5	100	1746	1712	1709	2221314	2000000	2999999
4	1668864	2	5	65	1936	1990	0	3895345	3000000	3999999
5	596932	3	5	55	1079	1478	1044	4496203	4000000	4999999
6	1025946	2	5	80	1709	1173	0	5525750	5000000	5999999
7	1237887	2	5	65	1053	1595	0	6766519	6000000	6999999
8	955711	2	5	55	1732	1897	0	7724878	7000000	7999999
9	323545	2	5	75	1296	1976	0	8052052	8000000	8999999
10	1131564	1	5	75	1083	0	0	9186888	9000000	9999999
11	1286748	2	5	95	1152	1338	0	10474719	10000000	10999999
12	1085320	2	5	95	1976	1985	0	11562529	11000000	11999999

Total number of pulses in waveform = 25

Type 5 Radar Waveform_6

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	263005	1	19	80	1002	0	0	263005	0	705881
2	477385	2	19	85	1422	1318	0	741392	705882	1411763
3	825818	2	19	100	1817	1426	0	1569950	1411764	2117645
4	775398	2	19	55	1039	1137	0	2348591	2117646	2823527
5	503689	1	19	70	1984	0	0	2854456	2823528	3529409
6	1119741	3	19	55	1238	1663	1442	3976181	3529410	4235291
7	697059	2	19	75	1863	1873	0	4677583	4235292	4941173
8	715545	2	19	100	1770	1738	0	5396864	4941174	5647055
9	285061	2	19	95	1661	1729	0	5685433	5647056	6352937
10	692830	3	19	70	1010	1011	1592	6381653	6352938	7058819
11	920906	1	19	80	1406	0	0	7306172	7058820	7764701
12	491429	3	19	75	1443	1026	1359	7799007	7764702	8470583
13	1122542	1	19	90	1089	0	0	8925377	8470584	9176465
14	860573	2	19	100	1015	1874	0	9787039	9176466	9882347
15	117662	1	19	80	1172	0	0	9907590	9882348	10588229
16	1149850	3	19	75	1303	1304	1766	11058612	10588230	11294111
17	574595	1	19	90	1278	0	0	11637580	11294112	11999993

Total number of pulses in waveform = 32

Type 5 Radar Waveform_7

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	89024	3	14	65	1604	1763	1994	89024	0	749999
2	807463	2	14	50	1114	1597	0	901848	750000	1499999
3	961626	3	14	75	1587	1596	1838	1866185	1500000	2249999
4	1048011	3	14	95	1355	1261	1491	2919217	2250000	2999999
5	342972	2	14	85	1011	1602	0	3266296	3000000	3749999
6	582978	1	14	70	1356	0	0	3851887	3750000	4499999
7	1103692	3	14	100	1876	1029	1323	4956935	4500000	5249999
8	954289	3	14	95	1233	1800	1798	5915452	5250000	5999999
9	300245	3	14	55	1633	1609	1903	6220528	6000000	6749999
10	968495	2	14	75	1984	1437	0	7194168	6750000	7499999
11	315241	1	14	85	1787	0	0	7512830	7500000	8249999
12	1195036	3	14	55	1561	1733	1935	8709653	8250000	8999999
13	1026542	2	14	95	1071	1676	0	9741424	9000000	9749999
14	71855	3	14	75	1274	1386	1782	9816026	9750000	10499999
15	1266517	2	14	55	1960	1201	0	11086985	10500000	11249999
16	191948	2	14	60	1605	1587	0	11282094	11250000	11999999

Total number of pulses in waveform = 38



Type 5 Radar Waveform_8

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	508909	1	6	95	1804	0	0	508909	0	1333332
2	1312343	2	6	65	1209	1293	0	1823056	1333333	2666665
3	1720710	1	6	65	1264	0	0	3546268	2666666	3999998
4	1110478	1	6	70	1402	0	0	4658010	3999999	5333331
5	807168	2	6	90	1208	1839	0	5466580	5333332	6666664
6	1344500	3	6	90	1856	1421	1153	6814127	6666665	7999997
7	2211669	2	6	65	1796	1960	0	9030226	7999998	9333330
8	1367073	2	6	95	1333	1961	0	10401055	9333331	10666663
9	414863	3	6	50	1957	1760	1279	10819212	10666664	11999996

Total number of pulses in waveform = 17

Type 5 Radar Waveform_9

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	337398	3	17	95	1444	1851	1724	337398	0	666666
2	891246	3	17	60	1721	1069	1973	1233663	666667	1333333
3	261470	1	17	95	1531	0	0	1499896	1333334	2000000
4	745849	3	17	90	1328	1903	1262	2247276	2000001	2666667
5	646183	1	17	55	1110	0	0	2897952	2666668	3333334
6	743755	3	17	95	1773	1006	1382	3642817	3333335	4000001
7	735932	1	17	70	1935	0	0	4382910	4000002	4666668
8	362846	3	17	75	1568	1283	1315	4747691	4666669	5333335
9	1207792	3	17	60	1501	1626	1175	5959649	5333336	6000002
10	382099	3	17	65	1111	1133	1204	6346050	6000003	6666669
11	661118	1	17	75	1452	0	0	7010616	6666670	7333336
12	369001	2	17	95	1865	1150	0	7381069	7333337	8000003
13	1200286	3	17	75	1931	1550	1456	8584370	8000004	8666670
14	316995	3	17	100	1977	1060	1287	8906302	8666671	9333337
15	667291	1	17	55	1458	0	0	9577917	9333338	10000004
16	693881	3	17	75	1118	1845	1060	10273256	10000005	10666671
17	789624	3	17	65	1894	1934	1115	11066903	10666672	11333338
18	891127	1	17	80	1116	0	0	11962973	11333339	12000005

Total number of pulses in waveform = 41

Type 5 Radar Waveform_10

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	56565	2	9	85	1540	1624	0	56565	0	599999
2	1113216	3	9	55	1865	1906	1357	1172945	600000	1199999
3	488375	1	9	95	1707	0	0	1666448	1200000	1799999
4	359335	2	9	70	1876	1342	0	2027490	1800000	2399999
5	410856	2	9	60	1002	1350	0	2441564	2400000	2999999
6	903211	3	9	55	1287	1285	1768	3347127	3000000	3599999
7	266291	1	9	65	1011	0	0	3617758	3600000	4199999
8	993002	3	9	70	1125	1346	1617	4611771	4200000	4799999
9	637587	3	9	85	1140	1746	1141	5253446	4800000	5399999
10	737264	1	9	55	1981	0	0	5994737	5400000	5999999
11	26587	2	9	100	1291	1996	0	6023905	6000000	6599999
12	756676	3	9	95	1086	1657	1286	6783268	6600000	7199999
13	679963	3	9	75	1171	1053	1958	7367260	7200000	7799999
14	833542	1	9	60	1980	0	0	8204984	7800000	8399999
15	394095	1	9	90	1451	0	0	8601059	8400000	8999999
16	523383	2	9	100	1763	1405	0	9125893	9000000	9599999
17	719124	2	9	95	1236	1223	0	9848185	9600000	10199999
18	715985	3	9	75	1129	1481	1208	10566629	10200000	10799999
19	698297	3	9	95	1752	1180	1224	11268744	10800000	11399999
20	457501	3	9	60	1893	1613	1416	11730401	11400000	11999999

Total number of pulses in waveform = 44

**Type 5 Radar Waveform_11**

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	227983	1	6	95	1823	0	0	227983	0	857142
2	1450009	3	6	65	1132	1271	1121	1679815	857143	1714285
3	819589	3	6	75	1914	1228	1910	2502928	1714286	2571428
4	96625	3	6	65	1276	1705	1604	2604605	2571429	3428571
5	1121243	1	6	65	1148	0	0	3730433	3428572	4285714
6	1376292	3	6	85	1488	1232	1284	5107873	4285715	5142857
7	259627	2	6	85	1401	1708	0	5371504	5142858	6000000
8	992268	2	6	50	1419	1050	0	6366881	6000001	6857143
9	890092	2	6	75	1914	1699	0	7259442	6857144	7714286
10	1077912	1	6	95	1969	0	0	8340967	7714287	8571429
11	520903	1	6	75	1734	0	0	8863839	8571430	9428572
12	961952	3	6	100	1492	1217	1148	9827525	9428573	10285715
13	1011648	3	6	50	1262	1120	1107	10843030	10285716	11142858
14	358512	3	6	100	1772	1750	1312	11205031	11142859	12000001

Total number of pulses in waveform = 31

Type 5 Radar Waveform_12

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	1298536	2	10	85	1028	1053	0	1298536	0	1499999
2	525067	3	10	90	1761	1076	1016	1825684	1500000	2999999
3	1838578	2	10	85	1050	1080	0	3668115	3000000	4499999
4	1515432	2	10	95	1680	1029	0	5185677	4500000	5999999
5	2156561	3	10	55	1108	1083	1653	7344947	6000000	7499999
6	1097322	3	10	70	1749	1379	1431	8446113	7500000	8999999
7	1865746	2	10	90	1528	1062	0	10316418	9000000	10499999
8	1337919	1	10	50	1448	0	0	11656927	10500000	11999999

Total number of pulses in waveform = 18

Type 5 Radar Waveform_13

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	347870	3	19	80	1617	1893	1093	347870	0	999999
2	1276557	1	19	100	1230	0	0	1629030	1000000	1999999
3	587334	3	19	70	1545	1949	1155	2217594	2000000	2999999
4	936581	1	19	70	1403	0	0	3158824	3000000	3999999
5	1678233	3	19	100	1706	1122	1416	4838460	4000000	4999999
6	975865	3	19	65	1313	1994	1541	5818569	5000000	5999999
7	510820	1	19	100	1315	0	0	6334237	6000000	6999999
8	692747	2	19	60	1021	1642	0	7028299	7000000	7999999
9	1916677	3	19	55	1399	1552	1035	8947639	8000000	8999999
10	777374	2	19	85	1271	1888	0	9728999	9000000	9999999
11	1193422	1	19	75	1946	0	0	10925580	10000000	10999999
12	808805	3	19	50	1810	1191	1131	11736331	11000000	11999999

Total number of pulses in waveform = 26



Type 5 Radar Waveform_14

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	520966	2	8	80	1874	1340	0	520966	0	1499999
2	1656252	1	8	70	1096	0	0	2180432	1500000	2999999
3	1866156	1	8	100	1238	0	0	4047684	3000000	4499999
4	1904724	3	8	55	1737	1686	1507	5953646	4500000	5999999
5	493374	3	8	80	1277	1666	1576	6451950	6000000	7499999
6	1405944	3	8	50	1748	1225	1050	7862413	7500000	8999999
7	2270626	2	8	85	1265	1550	0	10137062	9000000	10499999
8	735124	1	8	90	1774	0	0	10875001	10500000	11999999

Total number of pulses in waveform = 16

Type 5 Radar Waveform_15

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	141650	3	17	60	1708	1786	1042	141650	0	599999
2	1031936	2	17	50	1051	1836	0	1178122	600000	1199999
3	525344	1	17	90	1196	0	0	1706353	1200000	1799999
4	290699	2	17	75	1570	1966	0	1998248	1800000	2399999
5	543110	2	17	60	1947	1311	0	2544894	2400000	2999999
6	672635	3	17	60	1316	1421	1631	3220787	3000000	3599999
7	629104	1	17	50	1295	0	0	3854259	3600000	4199999
8	723249	2	17	95	1450	1846	0	4578803	4200000	4799999
9	652540	1	17	90	1936	0	0	5234639	4800000	5399999
10	392173	2	17	75	1781	1234	0	5628748	5400000	5999999
11	788697	1	17	70	1274	0	0	6420460	6000000	6599999
12	181542	1	17	65	1621	0	0	6603276	6600000	7199999
13	688143	2	17	100	1253	1898	0	7293040	7200000	7799999
14	714040	2	17	90	1977	1258	0	8010231	7800000	8399999
15	909102	2	17	55	1930	1554	0	8922568	8400000	8999999
16	522863	1	17	90	1746	0	0	9448915	9000000	9599999
17	416963	1	17	50	1916	0	0	9867624	9600000	10199999
18	495045	3	17	50	1472	1554	1999	10364585	10200000	10799999
19	919832	2	17	60	1670	1464	0	11289442	10800000	11399999
20	616132	3	17	85	1778	1257	1462	11908708	11400000	11999999

Total number of pulses in waveform = 37

Type 5 Radar Waveform_16

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	650631	2	18	80	1785	1437	0	650631	0	799999
2	827426	2	18	90	1473	1128	0	1481279	800000	1599999
3	376075	1	18	55	1683	0	0	1859955	1600000	2399999
4	555239	1	18	50	1690	0	0	2416877	2400000	3199999
5	1334861	1	18	65	1703	0	0	3753428	3200000	3999999
6	496080	2	18	55	1502	1623	0	4251211	4000000	4799999
7	1177714	3	18	90	1149	1917	1598	5432050	4800000	5599999
8	569419	3	18	90	1175	1226	1066	6006133	5600000	6399999
9	1093962	2	18	60	1852	1545	0	7103562	6400000	7199999
10	544095	1	18	95	1945	0	0	7651054	7200000	7999999
11	967972	3	18	60	1702	1374	1570	8620971	8000000	8799999
12	330027	2	18	65	1207	1231	0	8955644	8800000	9599999
13	1251517	2	18	55	1419	1797	0	10209599	9600000	10399999
14	786328	1	18	75	1514	0	0	10999143	10400000	11199999
15	395708	1	18	85	1002	0	0	11396365	11200000	11999999

Total number of pulses in waveform = 27

**Type 5 Radar Waveform_17**

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	934163	1	5	95	1445	0	0	934163	0	1499999
2	816652	3	5	60	1348	1985	1089	1752260	1500000	2999999
3	2144862	2	5	50	1859	1852	0	3901544	3000000	4499999
4	1188211	2	5	70	1428	1511	0	5093466	4500000	5999999
5	973989	1	5	80	1196	0	0	6070394	6000000	7499999
6	2474279	1	5	100	1086	0	0	8545869	7500000	8999999
7	1513615	2	5	95	1912	1234	0	10060570	9000000	10499999
8	1205232	2	5	55	1466	1247	0	11268948	10500000	11999999

Total number of pulses in waveform = 14

Type 5 Radar Waveform_18

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	149409	2	12	55	1012	1744	0	149409	0	857142
2	1475971	3	12	50	1250	1356	1743	1628136	857143	1714285
3	534520	1	12	100	1392	0	0	2167005	1714286	2571428
4	648516	3	12	95	1862	1953	1409	2816913	2571429	3428571
5	1319618	2	12	55	1955	1628	0	4141755	3428572	4285714
6	897495	3	12	50	1290	1811	1596	5042833	4285715	5142857
7	880343	1	12	50	1723	0	0	5927873	5142858	6000000
8	612169	1	12	85	1702	0	0	6541765	6000001	6857143
9	958107	3	12	80	1619	1637	1368	7501574	6857144	7714286
10	544873	1	12	90	1244	0	0	8051071	7714287	8571429
11	552529	1	12	50	1860	0	0	8604844	8571430	9428572
12	926040	2	12	80	1843	1664	0	9532744	9428573	10285715
13	1385757	1	12	65	1482	0	0	10922008	10285716	11142858
14	521158	3	12	75	1787	1831	1435	11444648	11142859	12000001

Total number of pulses in waveform = 27

Type 5 Radar Waveform_19

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	325168	2	14	50	1491	1188	0	325168	0	705881
2	746690	2	14	85	1405	1869	0	1074537	705882	1411763
3	600754	3	14	85	1332	1863	1592	1678565	1411764	2117645
4	497794	1	14	100	1711	0	0	2181146	2117646	2823527
5	852873	2	14	70	1616	1277	0	3035730	2823528	3529409
6	814314	1	14	65	1046	0	0	3852937	3529410	4235291
7	840419	3	14	50	1399	1529	1807	4694402	4235292	4941173
8	415198	1	14	100	1387	0	0	5114335	4941174	5647055
9	555052	3	14	85	1166	1072	1386	5670774	5647056	6352937
10	771324	1	14	85	1791	0	0	6445722	6352938	7058819
11	1003229	2	14	75	1360	1045	0	7450742	7058820	7764701
12	792265	1	14	95	1063	0	0	8245412	7764702	8470583
13	645106	1	14	50	1835	0	0	8891581	8470584	9176465
14	581242	1	14	70	1077	0	0	9474658	9176466	9882347
15	869563	3	14	65	1908	1658	1894	10345298	9882348	10588229
16	785643	1	14	90	1437	0	0	11136401	10588230	11294111
17	361316	1	14	60	1257	0	0	11499154	11294112	11999993

Total number of pulses in waveform = 29



Type 5 Radar Waveform_20

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	980912	2	9	55	1291	1946	0	980912	0	1090908
2	205754	2	9	85	1673	1154	0	1189903	1090909	2181817
3	1656517	3	9	95	1744	1814	1365	2849247	2181818	3272726
4	488302	2	9	90	1980	1772	0	3342472	3272727	4363635
5	1456891	1	9	95	1210	0	0	4803115	4363636	5454544
6	1248391	2	9	55	1320	1690	0	6052716	5454545	6545453
7	1521369	3	9	55	1269	1721	1700	7577095	6545454	7636362
8	1014427	1	9	70	1446	0	0	8596212	7636363	8727271
9	191360	3	9	100	1422	1890	1052	8789018	8727272	9818180
10	1583644	1	9	75	1646	0	0	10377026	9818181	10909089
11	879043	3	9	90	1709	1836	1548	11257715	10909090	11999998

Total number of pulses in waveform = 23

Type 5 Radar Waveform_21

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	993353	1	10	50	1098	0	0	993353	0	1090908
2	99287	3	10	90	1039	1552	1777	1093738	1090909	2181817
3	2114859	1	10	50	1485	0	0	3212965	2181818	3272726
4	190307	3	10	75	1578	1285	1282	3404757	3272727	4363635
5	1003981	2	10	95	1516	1177	0	4412883	4363636	5454544
6	1086745	3	10	90	1806	1398	1490	5502321	5454545	6545453
7	1702714	2	10	65	1122	1788	0	7209729	6545454	7636362
8	593566	3	10	100	1911	1441	1481	7806205	7636363	8727271
9	1263205	3	10	80	1030	1931	1520	9074243	8727272	9818180
10	1284092	3	10	90	1344	1563	1218	10362816	9818181	10909089
11	669413	2	10	60	1809	1643	0	11036354	10909090	11999998

Total number of pulses in waveform = 26

Type 5 Radar Waveform_22

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

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

Total number of pulses in waveform = 29

**Type 5 Radar Waveform_23**

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	572590	2	12	75	1194	1314	0	572590	0	1333332
2	1744659	2	12	60	1006	1691	0	2319757	1333333	2666665
3	1573991	2	12	70	1771	1160	0	3896445	2666666	3999998
4	527090	2	12	95	1575	1199	0	4426466	3999999	5333331
5	1156641	1	12	95	1646	0	0	5585881	5333332	6666664
6	1964959	2	12	85	1032	1759	0	7552486	6666665	7999997
7	1486494	2	12	50	1507	1589	0	9041771	7999998	9333330
8	1549416	1	12	90	1163	0	0	10594283	9333331	10666663
9	340775	1	12	60	1233	0	0	10936221	10666664	11999996

Total number of pulses in waveform = 15

Type 5 Radar Waveform_24

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	847219	1	8	95	1669	0	0	847219	0	923076
2	117077	3	8	80	1022	1005	1015	965965	923077	1846153
3	1186343	3	8	50	1571	1080	1450	2155350	1846154	2769230
4	1447153	2	8	55	1514	1933	0	3606604	2769231	3692307
5	659419	3	8	55	1687	1597	1741	4269470	3692308	4615384
6	662781	1	8	70	1829	0	0	4937276	4615385	5538461
7	706871	3	8	70	1104	1067	1913	5645976	5538462	6461538
8	1702112	2	8	80	1435	1864	0	7352172	6461539	7384615
9	492250	1	8	85	1707	0	0	7847721	7384616	8307692
10	870422	2	8	65	1670	1317	0	8719850	8307693	9230769
11	879511	1	8	50	1812	0	0	9602348	9230770	10153846
12	1133515	1	8	70	1118	0	0	10737675	10153847	11076923
13	574919	1	8	100	1535	0	0	11313712	11076924	12000000

Total number of pulses in waveform = 24

Type 5 Radar Waveform_25

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	847219	1	14	95	1669	0	0	847219	0	923076
2	117077	3	14	80	1022	1005	1015	965965	923077	1846153
3	1186343	3	14	50	1571	1080	1450	2155350	1846154	2769230
4	1447153	2	14	55	1514	1933	0	3606604	2769231	3692307
5	659419	3	14	55	1687	1597	1741	4269470	3692308	4615384
6	662781	1	14	70	1829	0	0	4937276	4615385	5538461
7	706871	3	14	70	1104	1067	1913	5645976	5538462	6461538
8	1702112	2	14	80	1435	1864	0	7352172	6461539	7384615
9	492250	1	14	85	1707	0	0	7847721	7384616	8307692
10	870422	2	14	65	1670	1317	0	8719850	8307693	9230769
11	879511	1	14	50	1812	0	0	9602348	9230770	10153846
12	1133515	1	14	70	1118	0	0	10737675	10153847	11076923
13	574919	1	14	100	1535	0	0	11313712	11076924	12000000

Total number of pulses in waveform = 24

**Type 5 Radar Waveform_26**

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	237695	1	17	65	1793	0	0	237695	0	1499999
2	2483521	3	17	65	1163	1353	1355	2723009	1500000	2999999
3	1372745	2	17	70	1098	1647	0	4099625	3000000	4499999
4	1632060	1	17	90	1690	0	0	5734430	4500000	5999999
5	1419642	3	17	60	1825	1348	1057	7155762	6000000	7499999
6	949031	1	17	65	1855	0	0	8109023	7500000	8999999
7	1873389	2	17	95	1118	1766	0	9984267	9000000	10499999
8	1945099	1	17	75	1249	0	0	11932250	10500000	11999999

Total number of pulses in waveform = 14

Type 5 Radar Waveform_27

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	292344	2	6	90	1814	1506	0	292344	0	1090908
2	1612953	3	6	100	1809	1154	1800	1908617	1090909	2181817
3	853917	2	6	85	1498	1634	0	2767297	2181818	3272726
4	863598	2	6	80	1373	1501	0	3634027	3272727	4363635
5	1775612	2	6	65	1687	1237	0	5412513	4363636	5454544
6	105998	1	6	65	1488	0	0	5521435	5454545	6545453
7	1982412	3	6	100	1081	1721	1824	7505335	6545454	7636362
8	484812	1	6	100	1614	0	0	7994773	7636363	8727271
9	987992	3	6	100	1324	1942	1059	8984379	8727272	9818180
10	860852	3	6	55	1611	1910	1986	9849556	9818181	10909089
11	1777102	2	6	65	1766	1491	0	11632165	10909090	11999998

Total number of pulses in waveform = 24

Type 5 Radar Waveform_28

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	789364	1	18	100	1684	0	0	789364	0	1333332
2	1600585	2	18	95	1222	1034	0	2391633	1333333	2666665
3	1467068	3	18	95	1534	1094	1012	3860957	2666666	3999998
4	511684	1	18	85	1262	0	0	4376281	3999999	5333331
5	2262728	2	18	80	1173	1932	0	6640271	5333332	6666664
6	936932	1	18	75	1295	0	0	7580308	6666665	7999997
7	767409	3	18	90	1681	1064	1172	8349012	7999998	9333330
8	1810384	1	18	60	1349	0	0	10163313	9333331	10666663
9	815104	2	18	50	1658	1215	0	10979766	10666664	11999996

Total number of pulses in waveform = 16

**Type 5 Radar Waveform_29**

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	1237094	3	9	75	1861	1455	1277	1237094	0	1333332
2	1181743	3	9	95	1421	1119	1059	2423430	1333333	2666665
3	422667	3	9	85	1071	1703	1768	2849696	2666666	3999998
4	2345740	1	9	85	1145	0	0	5199978	3999999	5333331
5	428457	1	9	90	1211	0	0	5629580	5333332	6666664
6	1710094	1	9	70	1238	0	0	7340885	6666665	7999997
7	1676466	3	9	75	1200	1853	1084	9018589	7999998	9333330
8	703129	3	9	55	1241	1915	1163	9725855	9333331	10666663
9	1277534	1	9	80	1195	0	0	11007708	10666664	11999996

Total number of pulses in waveform = 19

Type 5 Radar Waveform_30

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	254346	3	19	60	1557	1273	1357	254346	0	749999
2	881541	3	19	85	1621	1904	1808	1140074	750000	1499999
3	464660	1	19	70	1592	0	0	1610067	1500000	2249999
4	979125	3	19	55	1495	1218	1806	2590784	2250000	2999999
5	1069620	1	19	85	1881	0	0	3664923	3000000	3749999
6	133937	2	19	70	1800	1508	0	3800741	3750000	4499999
7	856639	1	19	85	1431	0	0	4660688	4500000	5249999
8	1153633	1	19	95	1588	0	0	5815752	5250000	5999999
9	206755	3	19	95	1558	1845	1228	6024095	6000000	6749999
10	1282949	3	19	60	1900	1134	1476	7311675	6750000	7499999
11	703582	3	19	75	1906	1077	1081	8019767	7500000	8249999
12	787413	2	19	70	1732	1320	0	8811244	8250000	8999999
13	255148	3	19	90	1508	1162	1085	9069444	9000000	9749999
14	781485	2	19	65	1784	1292	0	9854684	9750000	10499999
15	1294843	2	19	60	1572	1632	0	11152603	10500000	11249999
16	329978	2	19	80	1137	1523	0	11485785	11250000	11999999

Total number of pulses in waveform = 35

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5491	1	16	5500	1
2	5491	1	17	5500	1
3	5491	1	18	5500	1
4	5491	1	19	5500	1
5	5491	1	20	5500	1
6	5491	1	21	5509	1
7	5491	1	22	5509	1
8	5491	1	23	5509	1
9	5491	1	24	5509	1
10	5491	1	25	5509	1
11	5500	1	26	5509	1
12	5500	1	27	5509	1
13	5500	1	28	5509	1
14	5500	1	29	5509	1
15	5500	1	30	5509	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5481	9	2	5509	6
11	5498	33	19	5500	57
22	5521	66	21	5466	63
24	5509	72	22	5477	66
27	5510	81	24	5472	72
53	5468	159	26	5496	78
56	5488	168	28	5487	84
66	5483	198	32	5482	96
74	5473	222	36	5467	108
93	5508	279	37	5474	111
--	--	--	50	5479	150
--	--	--	65	5515	195
--	--	--	66	5508	198
--	--	--	75	5462	225
--	--	--	98	5463	294

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5480	0	7	5495	21
4	5469	12	8	5473	24
19	5487	57	9	5503	27
22	5509	66	10	5481	30
29	5514	87	16	5508	48
32	5500	96	24	5470	72
33	5491	99	40	5482	120
40	5488	120	56	5497	168
50	5498	150	67	5520	201
52	5464	156	68	5498	204
55	5461	165	70	5480	210
70	5476	210	77	5509	231
82	5477	246	80	5499	240
85	5475	255	82	5478	246

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5492	6	11	5476	33
6	5518	18	19	5479	57
14	5520	42	22	5491	66
16	5494	48	41	5520	123
25	5475	75	42	5462	126
37	5499	111	44	5505	132
44	5481	132	50	5513	150
47	5497	141	56	5467	168
53	5471	159	64	5478	192
60	5491	180	66	5461	198
65	5511	195	76	5469	228
72	5490	216	--	--	--
76	5505	228	--	--	--
83	5479	249	--	--	--
84	5461	252	--	--	--
92	5488	276	--	--	--
98	5476	294	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5504	3	6	5496	18
3	5499	9	10	5469	30
4	5478	12	13	5507	39
16	5489	48	21	5490	63
30	5502	90	41	5515	123
36	5514	108	50	5509	150
41	5472	123	52	5521	156
43	5474	129	59	5504	177
57	5462	171	86	5484	258
61	5518	183	97	5518	291
62	5486	186	--	--	--
72	5508	216	--	--	--
91	5464	273	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5500	0	6	5464	18
4	5515	12	8	5479	24
6	5475	18	17	5504	51
10	5477	30	25	5492	75
23	5472	69	27	5478	81
25	5465	75	40	5467	120
26	5471	78	41	5503	123
28	5496	84	44	5486	132
37	5511	111	56	5518	168
39	5488	117	57	5491	171
53	5512	159	65	5499	195
66	5501	198	67	5497	201
72	5466	216	74	5513	222
89	5483	267	94	5461	282
93	5503	279	--	--	--
95	5473	285	--	--	--

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
8	5480	24	0	5499	0
24	5519	72	9	5492	27
30	5483	90	13	5479	39
36	5491	108	28	5491	84
48	5479	144	35	5481	105
49	5507	147	36	5472	108
60	5488	180	46	5524	138
65	5515	195	52	5527	156
71	5518	213	70	5471	210
87	5529	261	71	5525	213
95	5503	285	74	5506	222
99	5484	297	81	5526	243
--	--	--	84	5529	252
--	--	--	92	5517	276

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5529	42	7	5517	21
18	5505	54	24	5497	72
26	5495	78	43	5518	129
34	5504	102	51	5482	153
40	5522	120	52	5522	156
46	5500	138	57	5474	171
48	5503	144	62	5512	186
49	5499	147	66	5487	198
50	5476	150	68	5492	204
53	5519	159	69	5508	207
63	5478	189	71	5529	213
71	5497	213	80	5490	240
88	5508	264	87	5472	261
--	--	--	94	5481	282

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5486	0	13	5513	39
7	5508	21	17	5475	51
25	5516	75	24	5493	72
26	5498	78	26	5527	78
29	5501	87	67	5472	201
47	5513	141	68	5485	204
54	5481	162	77	5479	231
55	5526	165	81	5471	243
59	5485	177	86	5473	258
60	5476	180	88	5477	264
77	5471	231	89	5529	267
91	5490	273	90	5524	270
92	5519	276	93	5490	279
95	5489	285	--	--	--
98	5525	294	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5484	0	6	5487	18
19	5522	57	10	5505	30
35	5476	105	16	5504	48
37	5488	111	17	5508	51
45	5473	135	19	5473	57
47	5529	141	35	5513	105
61	5480	183	43	5495	129
81	5498	243	71	5478	213
90	5479	270	83	5476	249
94	5528	282	89	5481	267
95	5494	285	91	5527	273
99	5478	297	93	5521	279

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5528	30	0	5512	0
22	5482	66	7	5495	21
26	5519	78	13	5484	39
27	5490	81	21	5493	63
31	5505	93	32	5524	96
37	5501	111	44	5470	132
39	5504	117	53	5530	159
48	5483	144	57	5477	171
50	5506	150	63	5492	189
52	5488	156	74	5483	222
73	5471	219	75	5507	225
77	5510	231	83	5523	249
82	5527	246	90	5494	270
93	5478	279	95	5517	285

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5500	6	17	5508	51
14	5514	42	18	5500	54
15	5515	45	20	5519	60
19	5535	57	25	5509	75
29	5483	87	29	5489	87
38	5502	114	31	5495	93
46	5536	138	37	5497	111
52	5506	156	56	5487	168
56	5501	168	57	5493	171
84	5539	252	70	5502	210
97	5523	291	79	5521	237
98	5490	294	--	--	--
99	5518	297	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5504	9	23	5506	69
24	5530	72	35	5538	105
28	5509	84	43	5489	129
30	5490	90	70	5491	210
32	5525	96	77	5502	231
44	5533	132	83	5531	249
46	5480	138	89	5484	267
51	5511	153	96	5516	288
53	5500	159	--	--	--
63	5505	189	--	--	--
65	5493	195	--	--	--
66	5524	198	--	--	--
70	5512	210	--	--	--
84	5535	252	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5503	9	2	5503	6
6	5480	18	11	5536	33
8	5489	24	18	5479	54
12	5499	36	36	5531	108
16	5517	48	56	5508	168
17	5536	51	64	5495	192
31	5494	93	77	5502	231
35	5510	105	84	5483	252
47	5504	141	94	5517	282
52	5505	156	97	5494	291
59	5534	177	--	--	--
62	5521	186	--	--	--
66	5490	198	--	--	--
68	5519	204	--	--	--
74	5487	222	--	--	--
76	5484	228	--	--	--
89	5512	267	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5523	9	22	5505	66
8	5488	24	26	5507	78
25	5529	75	30	5503	90
40	5481	120	45	5511	135
52	5522	156	57	5519	171
89	5514	267	70	5535	210
92	5487	276	87	5498	261
--	--	--	88	5514	264
--	--	--	91	5515	273
--	--	--	99	5529	297

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5505	18	5	5519	15
9	5513	27	8	5488	24
11	5515	33	15	5496	45
15	5481	45	16	5498	48
17	5529	51	34	5500	102
20	5501	60	36	5530	108
21	5512	63	41	5484	123
23	5537	69	45	5480	135
27	5497	81	51	5520	153
37	5504	111	61	5535	183
40	5498	120	64	5528	192
43	5523	129	70	5525	210
47	5491	141	82	5502	246
54	5534	162	86	5485	258
57	5528	171	88	5509	264
59	5530	177	95	5487	285
68	5494	204	97	5481	291
89	5480	267	--	--	--
92	5535	276	--	--	--
95	5500	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	5492	1	778	68	1
2	5492	1	698	76	1
3	5492	1	538	99	1
4	5492	1	738	72	1
5	5500	1	518	102	1
6	5500	1	798	67	1
7	5500	1	598	89	1
8	5500	1	578	92	1
9	5508	1	618	86	1
10	5508	1	3066	18	1
11	5508	1	678	78	1
12	5508	1	718	74	1
13	5510	1	938	57	1
14	5510	1	758	70	1
15	5510	1	918	58	1
16	5510	1	2595	21	1
17	5510	1	2737	20	1
18	5510	1	2669	20	1
19	5512	1	1713	31	1
20	5512	1	1056	50	1
21	5512	1	881	60	1
22	5512	1	1599	34	1
23	5520	1	1204	44	1
24	5520	1	2067	26	1
25	5520	1	2543	21	1
26	5520	1	2236	24	1
27	5528	1	843	63	1
28	5528	1	1457	37	1
29	5528	1	2368	23	1
30	5528	1	754	70	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5492	5.0	163	29	1
2	5492	4.5	199	28	1
3	5492	3.3	227	29	1
4	5492	4.6	158	23	1
5	5500	2.5	200	26	1
6	5500	4.4	163	25	1
7	5500	3.0	185	26	1
8	5500	1.1	184	27	1
9	5508	4.4	225	24	1
10	5508	1.7	208	28	1
11	5508	4.1	184	29	1
12	5508	4.4	152	24	1
13	5510	3.3	209	26	1
14	5510	4.5	214	29	1
15	5510	1.2	228	27	1
16	5510	1.9	168	25	1
17	5510	4.7	191	27	1
18	5510	1.3	175	27	1
19	5512	4.0	158	26	1
20	5512	4.7	164	25	1
21	5512	3.5	152	29	1
22	5512	3.0	191	25	1
23	5520	3.6	186	23	1
24	5520	2.6	168	25	1
25	5520	2.5	166	28	1
26	5520	1.3	208	26	1
27	5528	2.8	159	26	1
28	5528	4.5	222	29	1
29	5528	1.2	219	25	1
30	5528	3.1	219	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	5492	6.3	480	18	1
2	5492	6.0	287	18	1
3	5492	6.8	307	18	1
4	5492	7.4	386	18	1
5	5500	9.9	430	18	1
6	5500	7.8	491	18	1
7	5500	7.2	457	18	1
8	5500	7.0	385	17	1
9	5508	6.2	425	18	1
10	5508	10.0	485	18	1
11	5508	9.8	403	16	1
12	5508	8.9	341	16	1
13	5510	9.6	260	16	1
14	5510	8.4	462	17	1
15	5510	6.6	364	18	1
16	5510	7.8	279	18	1
17	5510	9.4	444	18	1
18	5510	7.5	343	16	1
19	5512	10.0	316	17	1
20	5512	9.6	370	17	1
21	5512	6.0	327	18	1
22	5512	6.5	400	18	1
23	5520	9.5	443	17	1
24	5520	7.3	286	16	1
25	5520	6.0	467	17	1
26	5520	6.4	340	16	1
27	5528	9.3	313	17	1
28	5528	8.9	388	16	1
29	5528	9.1	285	17	1
30	5528	7.4	388	17	1
Detection Percentage (%)					100%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5492	13.1	456	12	1
2	5492	13.9	256	14	1
3	5492	16.2	474	14	1
4	5492	11.5	314	15	1
5	5500	19.7	484	15	1
6	5500	19.7	387	13	1
7	5500	19.5	378	13	1
8	5500	14.8	342	15	1
9	5508	11.0	357	12	1
10	5508	17.9	342	16	1
11	5508	12.6	380	16	1
12	5508	12.3	305	15	1
13	5510	14.3	326	13	1
14	5510	18.6	296	12	1
15	5510	11.4	331	16	1
16	5510	11.4	403	12	1
17	5510	11.3	430	14	1
18	5510	19.4	264	16	1
19	5512	14.3	429	14	1
20	5512	16.1	369	16	1
21	5512	18.6	293	13	1
22	5512	18.7	481	12	1
23	5520	20.0	455	16	1
24	5520	17.3	320	15	1
25	5520	15.8	434	14	1
26	5520	14.1	342	15	1
27	5528	12.3	280	14	1
28	5528	11.9	396	16	1
29	5528	13.3	433	15	1
30	5528	17.1	479	12	1
Detection Percentage (%)					100%

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

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



Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5496.8	1	16	5510.0	1
2	5499.2	1	17	5510.0	1
3	5496.0	1	18	5510.0	1
4	5497.6	1	19	5510.0	1
5	5495.2	1	20	5510.0	1
6	5494.4	1	21	5524.4	1
7	5495.6	1	22	5526.0	1
8	5494.0	1	23	5522.4	1
9	5499.6	1	24	5523.2	1
10	5498.8	1	25	5520.4	1
11	5510.0	1	26	5521.2	1
12	5510.0	1	27	5525.6	1
13	5510.0	1	28	5520.8	1
14	5510.0	1	29	5524.8	1
15	5510.0	1	30	5524.0	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	652720	2	12	60	1830	1251	0	652720	0	999999
2	727318	3	12	60	1304	1743	1812	1383119	1000000	1999999
3	673501	2	12	75	1122	1442	0	2061479	2000000	2999999
4	948964	1	12	75	1315	0	0	3013007	3000000	3999999
5	993183	3	12	85	1910	1300	1143	4007505	4000000	4999999
6	1735826	3	12	70	1808	1006	1136	5747684	5000000	5999999
7	1060391	1	12	85	1706	0	0	6812025	6000000	6999999
8	327624	3	12	65	1973	1718	1129	7141355	7000000	7999999
9	1468215	3	12	85	1747	1560	1673	8614390	8000000	8999999
10	942969	1	12	80	1890	0	0	9562339	9000000	9999999
11	1039135	1	12	100	1795	0	0	10603364	10000000	10999999
12	1001370	3	12	60	1873	1398	1448	11606529	11000000	11999999

Total number of pulses in waveform = 26



Type 5 Radar Waveform_2

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	615014	1	18	75	1481	0	0	615014	0	799999
2	456195	3	18	50	1401	1078	1294	1072690	800000	1599999
3	1035349	3	18	50	1540	1732	1442	2111812	1600000	2399999
4	714005	2	18	85	1278	1035	0	2830531	2400000	3199999
5	626394	2	18	95	1848	1279	0	3459238	3200000	3999999
6	738366	2	18	50	1887	1796	0	4200731	4000000	4799999
7	619712	1	18	90	1754	0	0	4824126	4800000	5599999
8	1478042	2	18	65	1790	1012	0	6303922	5600000	6399999
9	748818	2	18	90	1866	1221	0	7055542	6400000	7199999
10	205254	1	18	90	1041	0	0	7263883	7200000	7999999
11	1375270	3	18	85	1355	1758	1011	8640194	8000000	8799999
12	644822	3	18	55	1527	1531	1644	9289140	8800000	9599999
13	986249	3	18	95	1992	1816	1811	10280091	9600000	10399999
14	309493	1	18	80	1291	0	0	10595203	10400000	11199999
15	860925	3	18	55	1488	1312	1113	11457419	11200000	11999999

Total number of pulses in waveform = 32

Type 5 Radar Waveform_3

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	447075	2	10	65	1107	1569	0	447075	0	599999
2	342118	3	10	95	1241	1922	1805	791969	600000	1199999
3	857052	2	10	100	1004	1687	0	1653889	1200000	1799999
4	311955	1	10	50	1420	0	0	1968435	1800000	2399999
5	608133	3	10	60	1384	1826	1223	2577988	2400000	2999999
6	512085	3	10	80	1054	1027	1287	3094506	3000000	3599999
7	799005	1	10	50	1329	0	0	3896879	3600000	4199999
8	873027	2	10	50	1498	1208	0	4771235	4200000	4799999
9	417829	1	10	95	1622	0	0	5191770	4800000	5399999
10	328433	1	10	50	1848	0	0	5521825	5400000	5999999
11	1044471	2	10	85	1941	1045	0	6568144	6000000	6599999
12	161547	3	10	55	1822	1371	1949	6732677	6600000	7199999
13	742799	1	10	60	1200	0	0	7480618	7200000	7799999
14	704863	1	10	50	1423	0	0	8186681	7800000	8399999
15	606423	2	10	95	1390	1514	0	8794527	8400000	8999999
16	378534	2	10	75	1001	1553	0	9175965	9000000	9599999
17	537213	1	10	90	1682	0	0	9715732	9600000	10199999
18	949336	3	10	50	1739	1432	1951	10666750	10200000	10799999
19	384859	2	10	90	1968	1269	0	11056731	10800000	11399999
20	862004	3	10	90	1193	1579	1913	11921972	11400000	11999999

Total number of pulses in waveform = 39

Type 5 Radar Waveform_4

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	384323	1	14	55	1026	0	0	384323	0	749999
2	379078	3	14	100	1291	2000	1008	764427	750000	1499999
3	1458923	2	14	100	1410	1212	0	2227649	1500000	2249999
4	610419	2	14	80	1773	1512	0	2840690	2250000	2999999
5	542744	1	14	95	1464	0	0	3386719	3000000	3749999
6	682516	2	14	55	1565	1435	0	4070699	3750000	4499999
7	522176	1	14	95	1883	0	0	4595875	4500000	5249999
8	990465	3	14	60	1633	1613	1319	5588223	5250000	5999999
9	637383	3	14	50	1918	1856	1864	6230171	6000000	6749999
10	672803	3	14	75	1510	1012	1405	6908612	6750000	7499999
11	884651	3	14	70	1634	1459	1673	7797190	7500000	8249999
12	479133	3	14	75	1854	1850	1657	8281089	8250000	8999999
13	1247086	3	14	100	1875	1614	1451	9533536	9000000	9749999
14	674944	3	14	75	1994	1792	1125	10213420	9750000	10499999
15	935523	2	14	75	1628	1226	0	11153854	10500000	11249999
16	118897	1	14	50	1563	0	0	11275605	11250000	11999999

Total number of pulses in waveform = 36



Type 5 Radar Waveform_5

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	237369	1	8	85	1317	0	0	237369	0	799999
2	756701	2	8	55	1915	1891	0	995387	800000	1599999
3	661558	1	8	80	1008	0	0	1660751	1600000	2399999
4	1192895	1	8	65	1525	0	0	2854654	2400000	3199999
5	645179	3	8	60	1107	1704	1632	3501358	3200000	3999999
6	843217	2	8	85	1474	1529	0	4349018	4000000	4799999
7	656924	3	8	80	1973	1187	1374	5008945	4800000	5599999
8	1052398	2	8	85	1043	1181	0	6065877	5600000	6399999
9	857779	2	8	100	1039	1155	0	6925880	6400000	7199999
10	1060162	3	8	75	1416	1997	1090	7988236	7200000	7999999
11	510943	3	8	65	1622	1407	1837	8503682	8000000	8799999
12	702106	3	8	100	1056	1972	1853	9210654	8800000	9599999
13	927397	1	8	75	1314	0	0	10142932	9600000	10399999
14	607095	3	8	65	1902	1492	1877	10751341	10400000	11199999
15	832375	1	8	55	1394	0	0	11588987	11200000	11999999

Total number of pulses in waveform = 31

Type 5 Radar Waveform_6

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	113246	1	6	85	1698	0	0	113246	0	631578
2	904735	3	6	55	1287	1672	1828	1019679	631579	1263157
3	520222	3	6	50	1757	1137	1377	1544688	1263158	1894736
4	351763	1	6	65	1138	0	0	1900722	1894737	2526315
5	910682	2	6	95	1523	1099	0	2812542	2526316	3157894
6	491788	1	6	70	1955	0	0	3306952	3157895	3789473
7	556641	1	6	95	1607	0	0	3865548	3789474	4421052
8	668204	2	6	50	1914	1391	0	4535359	4421053	5052631
9	845300	1	6	50	1052	0	0	5383964	5052632	5684210
10	426520	2	6	95	1890	1602	0	5811536	5684211	6315789
11	618814	3	6	75	1661	1288	1017	6433842	6315790	6947368
12	537703	1	6	50	1030	0	0	6975511	6947369	7578947
13	751939	3	6	95	1042	1629	1289	7728480	7578948	8210526
14	1081525	1	6	50	1166	0	0	8813965	8210527	8842105
15	341431	3	6	90	1163	1239	1288	9156562	8842106	9473684
16	880416	1	6	65	1335	0	0	10040668	9473685	10105263
17	611644	2	6	75	1467	1979	0	10653647	10105264	10736842
18	368469	1	6	70	1224	0	0	11025562	10736843	11368421
19	894016	1	6	70	1248	0	0	11920802	11368422	12000000

Total number of pulses in waveform = 33

Type 5 Radar Waveform_7

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	381687	1	9	75	1372	0	0	381687	0	631578
2	388141	3	9	55	1143	1393	1917	771200	631579	1263157
3	1018477	2	9	50	1844	1032	0	1794130	1263158	1894736
4	383604	3	9	95	1437	1777	1417	2180610	1894737	2526315
5	828505	2	9	95	1537	1202	0	3013746	2526316	3157894
6	617133	1	9	90	1209	0	0	3633618	3157895	3789473
7	235488	1	9	65	1303	0	0	3870315	3789474	4421052
8	831743	2	9	90	1887	1232	0	4703361	4421053	5052631
9	405321	3	9	90	1924	1278	1714	5111801	5052632	5684210
10	916965	1	9	95	1177	0	0	6033682	5684211	6315789
11	762075	2	9	60	1878	1463	0	6796938	6315790	6947368
12	607284	3	9	50	1343	1004	1205	7407563	6947369	7578947
13	247121	3	9	55	1350	1247	1744	7658236	7578948	8210526
14	583202	1	9	60	1763	0	0	8245779	8210527	8842105
15	935913	2	9	85	1877	1783	0	9183445	8842106	9473684
16	609260	1	9	50	1765	0	0	9796365	9473685	10105263
17	355964	2	9	65	1878	1287	0	10154094	10105264	10736842
18	1145713	3	9	90	1622	1276	1311	11302972	10736843	11368421
19	204737	3	9	80	1239	1594	1915	11511918	11368422	12000000

Total number of pulses in waveform = 39



Type 5 Radar Waveform_8

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	595333	3	5	60	1136	1582	1845	595333	0	631578
2	170110	3	5	100	1514	1674	1964	770006	631579	1263157
3	1018781	3	5	50	1575	1346	1695	1793939	1263158	1894736
4	364254	1	5	90	1964	0	0	2162809	1894737	2526315
5	570283	1	5	80	1396	0	0	2735056	2526316	3157894
6	994830	1	5	85	1302	0	0	3731282	3157895	3789473
7	233957	3	5	85	1045	1861	1246	3966541	3789474	4421052
8	555404	2	5	100	1068	1683	0	4526097	4421053	5052631
9	924507	1	5	75	1732	0	0	5453355	5052632	5684210
10	787481	3	5	80	1242	1067	1856	6242568	5684211	6315789
11	352768	1	5	100	1859	0	0	6599501	6315790	6947368
12	640360	2	5	60	1904	1431	0	7241720	6947369	7578947
13	788931	3	5	70	1484	1787	1992	8033986	7578948	8210526
14	729596	2	5	60	1489	1974	0	8768845	8210527	8842105
15	348908	2	5	70	1154	1279	0	9121216	8842106	9473684
16	763052	1	5	75	1624	0	0	9886701	9473685	10105263
17	330727	1	5	70	1543	0	0	10219052	10105264	10736842
18	759297	2	5	70	1100	1202	0	10979892	10736843	11368421
19	781801	1	5	65	1635	0	0	11763995	11368422	12000000

Total number of pulses in waveform = 36

Type 5 Radar Waveform_9

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	736152	3	19	50	1103	1335	1938	736152	0	1090908
2	1327569	2	19	80	1583	1675	0	2068097	1090909	2181817
3	801186	3	19	100	1881	1916	1647	2872541	2181818	3272726
4	1431703	1	19	95	1367	0	0	4309688	3272727	4363635
5	614530	1	19	70	1017	0	0	4925585	4363636	5454544
6	1166643	2	19	75	1345	1510	0	6093245	5454545	6545453
7	763820	2	19	70	1344	1791	0	6859920	6545454	7636362
8	1237137	3	19	80	1478	1378	1935	8100192	7636363	8727271
9	1040902	2	19	50	1579	1788	0	9145885	8727272	9818180
10	1744073	2	19	85	1096	1723	0	10893325	9818181	10909089
11	496703	3	19	80	1765	1548	1897	11392847	10909090	11999998

Total number of pulses in waveform = 24

Type 5 Radar Waveform_10

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	386965	2	17	85	1392	1742	0	386965	0	599999
2	266301	2	17	90	1077	1702	0	656400	6000000	1199999
3	591490	1	17	75	1920	0	0	1250669	12000000	1799999
4	819685	2	17	65	1341	1757	0	2072274	18000000	2399999
5	737802	1	17	95	1959	0	0	2813174	24000000	2999999
6	681841	1	17	80	1516	0	0	3496974	30000000	3599999
7	561333	3	17	90	1447	1158	1092	4059823	36000000	4199999
8	688196	1	17	100	1425	0	0	4751716	42000000	4799999
9	352958	3	17	75	1414	1206	1856	5106099	48000000	5399999
10	869226	2	17	90	1460	1795	0	5979801	54000000	5999999
11	567456	2	17	80	1831	1643	0	6550512	60000000	6599999
12	156548	3	17	95	1644	1820	1918	6710534	66000000	7199999
13	795378	2	17	55	1095	1260	0	7511294	72000000	7799999
14	534531	2	17	100	1484	1841	0	8048180	78000000	8399999
15	889658	2	17	70	1150	1906	0	8941163	84000000	8999999
16	123014	1	17	100	1660	0	0	9067233	90000000	9599999
17	913023	3	17	90	1560	1333	1467	9981816	96000000	10199999
18	629604	2	17	85	1627	1980	0	10615780	102000000	10799999
19	264435	1	17	60	1308	0	0	10883722	108000000	11399999
20	843506	2	17	85	1512	1245	0	11728536	114000000	11999999

Total number of pulses in waveform = 38



Type 5 Radar Waveform_11

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	26934	3	14	80	1672	1500	1589	26934	0	799999
2	870518	1	14	60	1802	0	0	902213	800000	1599999
3	1438621	3	14	80	1537	1311	1680	2342636	1600000	2399999
4	97977	3	14	75	1787	1217	1311	2445141	2400000	3199999
5	1173632	1	14	90	1707	0	0	3623088	3200000	3999999
6	1093261	3	14	60	1470	1762	1646	4718056	4000000	4799999
7	301176	3	14	75	1271	1954	1847	5024110	4800000	5599999
8	1093424	3	14	55	1407	1113	1471	6122606	5600000	6399999
9	441413	1	14	90	1525	0	0	6568010	6400000	7199999
10	1344753	3	14	80	1012	1125	1705	7914288	7200000	7999999
11	863414	2	14	75	1770	1287	0	8781544	8000000	8799999
12	781174	2	14	65	1189	1723	0	9565775	8800000	9599999
13	337398	3	14	90	1623	1823	1838	9906085	9600000	10399999
14	1185707	2	14	65	1317	1661	0	11097076	10400000	11199999
15	105421	3	14	90	1225	1926	1987	11205475	11200000	11999999

Total number of pulses in waveform = 36

Type 5 Radar Waveform_12

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	336838	3	9	55	1395	1279	1836	336838	0	1499999
2	1676167	3	9	65	1693	1005	1862	2017515	1500000	2999999
3	2098437	2	9	70	1697	1738	0	4120512	3000000	4499999
4	1395121	2	9	65	1990	1289	0	5519068	4500000	5999999
5	543004	1	9	95	1205	0	0	6065351	6000000	7499999
6	1491555	1	9	55	1408	0	0	7558111	7500000	8999999
7	1977648	3	9	50	1253	1169	1019	9537167	9000000	10499999
8	1300464	2	9	85	1218	1031	0	10841072	10500000	11999999

Total number of pulses in waveform = 17

Type 5 Radar Waveform_13

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	523710	1	10	100	1867	0	0	523710	0	631578
2	543210	3	10	70	1043	1279	1059	1068787	631579	1263157
3	416472	2	10	75	1004	1341	0	1488640	1263158	1894736
4	469745	2	10	90	1740	1759	0	1960730	1894737	2526315
5	842913	2	10	90	1093	1484	0	2807142	2526316	3157894
6	921522	2	10	100	1994	1035	0	3731241	3157895	3789473
7	323225	3	10	100	1186	1292	1512	4057495	3789474	4421052
8	444448	2	10	75	1106	1402	0	4505933	4421053	5052631
9	846192	1	10	50	1603	0	0	5354633	5052632	5684210
10	875524	2	10	75	1064	1519	0	6231760	5684211	6315789
11	414761	2	10	95	1544	1169	0	6649104	6315790	6947368
12	607808	3	10	50	1955	1884	1425	7259625	6947369	7578947
13	327101	1	10	50	1016	0	0	7691990	7578948	8210526
14	1157871	1	10	80	1877	0	0	8760877	8210527	8842105
15	225743	1	10	65	1405	0	0	8978497	8842106	9473684
16	949909	1	10	85	1567	0	0	9929811	9473685	10105263
17	391705	3	10	90	1266	1656	1303	10323083	10105264	10736842
18	512777	3	10	95	1627	1068	1892	10840085	10736843	11368421
19	636962	2	10	70	1618	1294	0	11481654	11368422	12000000

Total number of pulses in waveform = 37



Type 5 Radar Waveform_14

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	338728	2	12	75	1867	1024	0	338728	0	923076
2	611179	2	12	90	1016	1001	0	952798	923077	1846153
3	1074202	1	12	100	1373	0	0	2029017	1846154	2769230
4	888803	2	12	90	1231	1794	0	2919193	2769231	3692307
5	880408	3	12	90	1163	1583	1408	3802626	3692308	4615384
6	831969	1	12	70	1125	0	0	4638749	4615385	5538461
7	1665245	2	12	80	1923	1999	0	6305119	5538462	6461538
8	761416	2	12	70	1728	1048	0	7070457	6461539	7384615
9	441698	1	12	100	1827	0	0	7514931	7384616	8307692
10	1299489	2	12	90	1954	1405	0	8816247	8307693	9230769
11	977127	1	12	50	1614	0	0	9796733	9230770	10153846
12	939604	1	12	80	1393	0	0	10737951	10153847	11076923
13	1173273	2	12	95	1160	1035	0	11912617	11076924	12000000

Total number of pulses in waveform = 22

Type 5 Radar Waveform_15

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	556560	1	18	75	1043	0	0	556560	0	666666
2	702708	3	18	75	1811	1018	1407	1260311	666667	1333333
3	294306	2	18	80	1806	1214	0	1558853	1333334	2000000
4	562037	2	18	85	1421	1045	0	2123910	2000001	2666667
5	903158	2	18	75	1143	1465	0	3029534	2666668	3333334
6	542297	2	18	95	1606	1031	0	3574439	3333335	4000001
7	501461	2	18	70	1211	1560	0	4078537	4000002	4666668
8	857396	1	18	85	1202	0	0	4938704	4666669	5333335
9	395684	2	18	85	1780	1988	0	5335590	5333336	6000002
10	1035022	1	18	50	1042	0	0	6374380	6000003	6666669
11	414018	1	18	75	1057	0	0	6789440	6666670	7333336
12	812850	1	18	55	1033	0	0	7603347	7333337	8000003
13	990016	1	18	60	1478	0	0	8594396	8000004	8666670
14	108228	3	18	50	1428	1318	1305	8704102	8666671	9333337
15	863697	2	18	75	1544	1313	0	9571850	9333338	10000004
16	512186	2	18	55	1462	1703	0	10086893	10000005	10666671
17	869417	2	18	70	1375	1844	0	10959475	10666672	11333338
18	655988	1	18	90	1164	0	0	11618682	11333339	12000005

Total number of pulses in waveform = 31

Type 5 Radar Waveform_16

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	687396	1	5	60	1782	0	0	687396	0	1499999
2	1596992	3	5	75	1420	1905	1296	2286170	1500000	2999999
3	794260	3	5	85	1423	1114	1819	3085051	3000000	4499999
4	1641889	1	5	50	1759	0	0	4731296	4500000	5999999
5	2270868	2	5	90	1460	1543	0	7003923	6000000	7499999
6	542865	3	5	85	1746	1269	1612	7549791	7500000	8999999
7	2056013	3	5	90	1837	1994	1015	9610431	9000000	10499999
8	2119284	1	5	75	1198	0	0	11734561	10500000	11999999

Total number of pulses in waveform = 17



Type 5 Radar Waveform_17

Num of Bursts = 20

Burst Interval (us)= 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	77755	3	19	85	1334	1510	1557	77755	0	599999
2	980739	3	19	80	1633	1635	1440	1062895	600000	1199999
3	304789	3	19	55	1163	1483	1133	1372392	1200000	1799999
4	797192	3	19	80	1118	1634	1446	2173363	1800000	2399999
5	757927	1	19	65	1459	0	0	2935488	2400000	2999999
6	474202	3	19	90	1532	1246	1809	3411149	3000000	3599999
7	565015	1	19	85	1729	0	0	3980751	3600000	4199999
8	444884	3	19	75	1121	1972	1896	4427364	4200000	4799999
9	902308	1	19	60	1297	0	0	5334661	4800000	5399999
10	72017	3	19	55	1304	1249	1333	5407975	5400000	5999999
11	616870	1	19	70	1182	0	0	6028731	6000000	6599999
12	699633	3	19	90	1894	1329	1304	6729546	6600000	7199999
13	874223	3	19	90	1427	1411	1071	7608296	7200000	7799999
14	193654	3	19	60	1601	1809	1432	7805859	7800000	8399999
15	886707	2	19	70	1424	1490	0	8697408	8400000	8999999
16	341792	3	19	100	1891	1841	1571	9042114	9000000	9599999
17	856402	1	19	85	1099	0	0	9903819	9600000	10199999
18	476322	1	19	70	1216	0	0	10381240	10200000	10799999
19	706468	2	19	85	1116	1089	0	11088924	10800000	11399999
20	786677	1	19	65	1437	0	0	11877906	11400000	11999999

Total number of pulses in waveform = 44

Type 5 Radar Waveform_18

Num of Bursts = 16

Burst Interval (us)= 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	373785	2	6	90	1157	1546	0	378785	0	749999
2	982866	2	6	80	1989	1725	0	1364354	750000	1499999
3	141357	1	6	55	1019	0	0	1509425	1500000	2249999
4	1455572	3	6	50	1840	1410	1361	2966016	2250000	2999999
5	442050	2	6	55	1756	1223	0	3412677	3000000	3749999
6	421623	2	6	50	1833	1826	0	3837279	3750000	4499999
7	1091276	1	6	90	1294	0	0	4932214	4500000	5249999
8	350649	1	6	70	1352	0	0	5284157	5250000	5999999
9	911424	2	6	70	1864	1922	0	6196933	6000000	6749999
10	757878	2	6	80	2000	1862	0	6958597	6750000	7499999
11	1105486	1	6	90	1664	0	0	8067945	7500000	8249999
12	277227	3	6	60	1750	1778	1845	8346836	8250000	8999999
13	695126	1	6	85	1794	0	0	9047335	9000000	9749999
14	1000861	2	6	65	1786	1756	0	10049990	9750000	10499999
15	475651	3	6	55	1013	1658	1310	10529183	10500000	11249999
16	839997	2	6	50	1069	1317	0	11373161	11250000	11999999

Total number of pulses in waveform = 30

Type 5 Radar Waveform_19

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	163417	2	8	90	1186	1743	0	163417	0	1333332
2	1569841	3	8	50	1525	1914	1423	1736187	1333333	2666665
3	1346434	1	8	75	1582	0	0	3087483	2666666	3999998
4	2131108	3	8	85	1251	1548	1828	5220173	3999999	5333331
5	236609	2	8	65	1136	1228	0	5461409	5333332	6666664
6	2026478	1	8	100	1498	0	0	7490251	6666665	7999997
7	699811	2	8	60	1013	1373	0	8191560	7999998	9333330
8	1176386	1	8	50	1336	0	0	9370332	9333331	10666663
9	1454982	3	8	55	1535	1569	1335	10826650	10666664	11999996

Total number of pulses in waveform = 18



Type 5 Radar Waveform_20

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	907060	1	17	95	1028	0	0	907060	0	1333332
2	1183223	3	17	75	1221	1137	1189	2091311	1333333	2666665
3	1474612	1	17	85	1257	0	0	3569470	2666666	3999998
4	955053	2	17	95	1561	1052	0	4525780	3999999	5333331
5	1559253	3	17	70	1601	1420	1203	6087646	5333332	6666664
6	1298068	1	17	65	1002	0	0	7389938	6666665	7999997
7	1775944	1	17	95	1306	0	0	9166884	7999998	9333330
8	1041706	3	17	95	1775	1704	1377	10209896	9333331	10666663
9	929447	3	17	95	1721	1302	1331	11144199	10666664	11999996

Total number of pulses in waveform = 18

Type 5 Radar Waveform_21

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	224962	1	9	75	1568	0	0	224962	0	705881
2	1017732	2	9	65	1886	1222	0	1244262	705882	1411763
3	794106	1	9	70	1192	0	0	2041476	1411764	2117645
4	458824	3	9	100	1612	1034	1660	2501492	2117646	2823527
5	839890	1	9	65	1252	0	0	3345688	2823528	3529409
6	446437	3	9	65	1852	1244	1999	3793377	3529410	4235291
7	1003202	1	9	90	1508	0	0	4801674	4235292	4941173
8	216316	1	9	100	1008	0	0	5019498	4941174	5647055
9	701093	1	9	90	1876	0	0	5721599	5647056	6352937
10	827817	1	9	90	1736	0	0	6551292	6352938	7058819
11	736149	1	9	70	1730	0	0	7289177	7058820	7764701
12	801304	1	9	50	1021	0	0	8092211	7764702	8470583
13	407615	1	9	50	1653	0	0	8500847	8470584	9176465
14	870549	3	9	60	1230	1728	1310	9373049	9176466	9882347
15	781619	2	9	65	1985	1219	0	10158936	9882348	10588229
16	894528	3	9	65	1783	1052	1082	11056668	10588230	11294111
17	279439	1	9	95	1222	0	0	11340024	11294112	11999993

Total number of pulses in waveform = 27

Type 5 Radar Waveform_22

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	539168	1	5	100	1007	0	0	539168	0	923076
2	955786	1	5	80	1969	0	0	1495961	923077	1846153
3	763559	1	5	75	1843	0	0	2261489	1846154	2769230
4	1234268	2	5	95	1965	1819	0	3497600	2769231	3692307
5	213192	3	5	50	1662	1635	1993	3714576	3692308	4615384
6	957207	3	5	50	1176	1952	1270	4677073	4615385	5538461
7	1254192	2	5	95	1874	1722	0	5935663	5538462	6461538
8	714331	3	5	95	1644	1687	1092	6653590	6461539	7384615
9	1633745	1	5	60	1661	0	0	8291758	7384616	8307692
10	429370	3	5	75	1737	1277	1458	8722789	8307693	9230769
11	1415108	1	5	95	1227	0	0	10142369	9230770	10153846
12	492303	2	5	50	1008	1651	0	10635899	10153847	11076923
13	704851	2	5	70	1710	1701	0	11343409	11076924	12000000

Total number of pulses in waveform = 25



Type 5 Radar Waveform_23

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	169812	2	14	55	1368	1026	0	169812	0	749999
2	1198899	1	14	50	1696	0	0	1371105	750000	1499999
3	315039	1	14	70	1875	0	0	1687840	1500000	2249999
4	1235993	1	14	100	1547	0	0	2925708	2250000	2999999
5	381362	2	14	65	1509	1355	0	3308617	3000000	3749999
6	459670	3	14	100	1668	1946	1817	3771151	3750000	4499999
7	934032	1	14	90	1656	0	0	4710614	4500000	5249999
8	1155978	3	14	90	1439	1684	1201	5868248	5250000	5999999
9	602638	2	14	65	1379	1837	0	6475210	6000000	6749999
10	471700	2	14	100	1610	1698	0	6950126	6750000	7499999
11	944713	1	14	90	1937	0	0	7898147	7500000	8249999
12	764504	1	14	65	1603	0	0	8664588	8250000	8999999
13	702713	1	14	85	1863	0	0	9368904	9000000	9749999
14	823588	1	14	60	1242	0	0	10194355	9750000	10499999
15	908534	2	14	100	1955	1111	0	11104131	10500000	11249999
16	697786	3	14	90	1682	1907	1371	11804983	11250000	11999999

Total number of pulses in waveform = 27

Type 5 Radar Waveform_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	1102688	3	12	70	1801	1705	1941	1102688	0	1333332
2	1096031	1	12	65	1332	0	0	2204166	1333333	2666665
3	1645236	3	12	75	1510	1725	1192	3850734	2666666	3999998
4	865232	1	12	55	1177	0	0	4720393	3999999	5333331
5	673969	2	12	90	1782	1967	0	5395539	5333332	6666664
6	1962040	2	12	75	1979	1153	0	7361328	6666665	7999997
7	779200	3	12	50	1907	1995	1501	8143660	7999998	9333330
8	1807874	2	12	80	1438	1255	0	9956937	9333331	10666663
9	1238824	1	12	95	1423	0	0	11198454	10666664	11999996

Total number of pulses in waveform = 18

Type 5 Radar Waveform_25

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	95527	1	19	65	1740	0	0	95527	0	599999
2	960574	2	19	100	1712	1639	0	1057841	600000	1199999
3	460310	2	19	60	1046	1237	0	1521502	1200000	1799999
4	309442	2	19	90	1686	1088	0	1833227	1800000	2399999
5	955989	2	19	60	1432	1932	0	2791990	2400000	2999999
6	251963	1	19	85	1251	0	0	3047317	3000000	3599999
7	989332	3	19	50	1689	1919	1979	4037900	3600000	4199999
8	706440	1	19	55	1952	0	0	4749927	4200000	4799999
9	295763	1	19	85	1206	0	0	5047642	4800000	5399999
10	553639	1	19	70	1822	0	0	5602487	5400000	5999999
11	975489	2	19	85	1083	1642	0	6579798	6000000	6599999
12	234525	2	19	70	1905	1656	0	6817048	6600000	7199999
13	567238	2	19	80	1053	1920	0	7387847	7200000	7799999
14	608768	3	19	50	1400	1315	1702	7999588	7800000	8399999
15	662862	2	19	90	1277	1803	0	8666867	8400000	8999999
16	604836	3	19	65	1529	1597	1789	9274782	9000000	9599999
17	505132	2	19	85	1528	1396	0	9784829	9600000	10199999
18	662492	1	19	85	1440	0	0	10450245	10200000	10799999
19	380608	3	19	65	1659	1660	1367	10832293	10800000	11399999
20	1062656	3	19	90	1439	1288	1386	11899635	11400000	11999999

Total number of pulses in waveform = 39



Type 5 Radar Waveform_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	472143	2	17	55	1852	1198	0	472143	0	799999
2	467957	1	17	60	1420	0	0	943150	800000	1599999
3	1388850	2	17	50	1177	1956	0	2333420	1600000	2399999
4	500396	1	17	50	1877	0	0	2836949	2400000	3199999
5	915256	2	17	65	1297	1158	0	3754082	3200000	3999999
6	924986	2	17	60	1563	1045	0	4681523	4000000	4799999
7	753206	3	17	80	1486	1490	1758	5437337	4800000	5599999
8	726334	1	17	50	1105	0	0	6168405	5600000	6399999
9	717670	3	17	100	1331	1747	1362	6887180	6400000	7199999
10	952873	2	17	100	1030	1633	0	7844493	7200000	7999999
11	177728	3	17	65	1142	1803	1156	8024884	8000000	8799999
12	1269404	3	17	75	1953	1216	1197	9298389	8800000	9599999
13	302196	1	17	60	1124	0	0	9604951	9600000	10399999
14	881832	3	17	70	1742	1610	1484	10487907	10400000	11199999
15	1049888	2	17	90	1453	1062	0	11542631	11200000	11999999

Total number of pulses in waveform = 31

Type 5 Radar Waveform_27

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	115895	1	6	70	1454	0	0	115895	0	631578
2	1113093	1	6	85	1438	0	0	1230442	631579	1263157
3	547348	3	6	60	1725	1281	1108	1779228	1263158	1894736
4	266243	1	6	55	1804	0	0	2049585	1894737	2526315
5	656078	3	6	100	1277	1035	1358	2707467	2526316	3157894
6	510981	3	6	80	1899	1325	1088	3228118	3157895	3789473
7	721285	3	6	80	1331	1385	1150	3953715	3789474	4421052
8	623452	1	6	60	1867	0	0	4581033	4421053	5052631
9	799841	3	6	85	1669	1377	1910	5382741	5052632	5684210
10	508886	2	6	85	1370	1848	0	5896583	5684211	6315789
11	695950	1	6	65	1602	0	0	6595751	6315790	6947368
12	939507	1	6	50	1153	0	0	7536860	6947369	7578947
13	287135	3	6	55	1318	1594	1326	7825148	7578948	8210526
14	856474	2	6	65	1969	1349	0	8685860	8210527	8842105
15	322308	1	6	70	1449	1856	0	9011486	8842106	9473684
16	831453	2	6	65	1680	0	0	9846244	9473685	10105263
17	821897	2	6	65	1899	1045	0	10669761	10105264	10736842
18	573919	2	6	85	1112	1802	0	11246624	10736843	11368421
19	154654	3	6	80	1621	1542	1168	11404192	11368422	12000000

Total number of pulses in waveform = 38

Type 5 Radar Waveform_28

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	398153	3	18	90	1343	1959	1353	398153	0	631578
2	658081	3	18	50	1841	1412	1716	1060889	631579	1263157
3	711382	1	18	100	1652	0	0	1777240	1263158	1894736
4	425784	3	18	70	1919	1239	1800	2204676	1894737	2526315
5	591081	2	18	85	1258	1092	0	2800715	2526316	3157894
6	851439	2	18	50	1167	1816	0	3654504	3157895	3789473
7	651960	1	18	60	1615	0	0	4309447	3789474	4421052
8	270150	2	18	65	1241	1097	0	4581212	4421053	5052631
9	725810	2	18	60	1895	1153	0	5309360	5052632	5684210
10	525484	3	18	50	1120	1096	1096	5837892	5684211	6315789
11	1017368	2	18	100	1466	1752	0	6858572	6315790	6947368
12	669389	1	18	55	1700	0	0	7531179	6947369	7578947
13	56269	2	18	100	1500	1728	0	7589148	7578948	8210526
14	836100	3	18	100	1137	1455	1291	8428476	8210527	8842105
15	684654	3	18	75	1369	1599	1155	9117013	8842106	9473684
16	643401	3	18	85	1308	1631	1571	9764537	9473685	10105263
17	803278	2	18	70	1654	1303	0	10572325	10105264	10736842
18	439813	2	18	75	1224	1810	0	11015095	10736843	11368421
19	464289	1	18	55	1644	0	0	11482418	11368422	12000000

Total number of pulses in waveform = 41



Type 5 Radar Waveform_29

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	347817	3	8	70	1297	1588	1301	347817	0	999999
2	1387315	3	8	75	1924	1770	1389	1739318	1000000	1999999
3	420637	3	8	65	1120	1486	1380	2165038	2000000	2999999
4	1224656	1	8	70	1166	0	0	3393680	3000000	3999999
5	727048	3	8	90	1264	1372	1515	4121894	4000000	4999999
6	1168755	3	8	85	1784	1075	1944	5294800	5000000	5999999
7	713793	3	8	90	1506	1954	1724	6013396	6000000	6999999
8	1735499	2	8	100	1365	1963	0	7754079	7000000	7999999
9	510879	1	8	50	1506	0	0	8268286	8000000	8999999
10	930080	2	8	95	1298	1374	0	9199872	9000000	9999999
11	891882	3	8	75	1501	1652	1079	10094426	10000000	10999999
12	1597532	2	8	90	1891	1934	0	11696190	11000000	11999999

Total number of pulses in waveform = 29

Type 5 Radar Waveform_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	417801	2	10	55	1613	1402	0	417801	0	923076
2	503966	2	10	90	1790	1107	0	924782	923077	1846153
3	979322	3	10	70	1341	1254	1535	1907001	1846154	2769230
4	1185851	1	10	100	1865	0	0	3096982	2769231	3692307
5	826267	2	10	85	1246	1235	0	3925114	3692308	4615384
6	1133242	3	10	50	1153	1019	1755	5060837	4615385	5538461
7	1262202	3	10	50	1676	1297	1203	6326966	5538462	6461538
8	807902	3	10	90	1892	1956	1371	7139044	6461539	7384615
9	1024979	2	10	55	1142	1385	0	8169242	7384616	8307692
10	279189	1	10	85	1570	0	0	8450958	8307693	9230769
11	985992	1	10	55	1521	0	0	9438520	9230770	10153846
12	1145941	1	10	65	1414	0	0	10585982	10153847	11076923
13	648342	3	10	100	1887	1454	1176	11235738	11076924	12000000

Total number of pulses in waveform = 27

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5492	1	16	5510	1
2	5492	1	17	5510	1
3	5492	1	18	5510	1
4	5492	1	19	5512	1
5	5500	1	20	5512	1
6	5500	1	21	5512	1
7	5500	1	22	5512	1
8	5500	1	23	5520	1
9	5508	1	24	5520	1
10	5508	1	25	5520	1
11	5508	1	26	5520	1
12	5508	1	27	5528	1
13	5510	1	28	5528	1
14	5510	1	29	5528	1
15	5510	1	30	5528	1
Detection Percentage (%)					100%



Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5467	18	6	5463	18
7	5521	21	20	5505	60
21	5512	63	26	5517	78
27	5501	81	48	5484	144
36	5504	108	51	5516	153
37	5473	111	52	5509	156
39	5509	117	71	5475	213
42	5492	126	76	5514	228
57	5479	171	77	5519	231
62	5496	186	88	5483	264
67	5465	201	96	5464	288
71	5506	213	--	--	--
79	5488	237	--	--	--
83	5466	249	--	--	--
93	5500	279	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5497	0	0	5466	0
23	5481	69	1	5522	3
27	5483	81	5	5503	15
31	5511	93	8	5490	24
38	5474	114	16	5519	48
55	5482	165	24	5468	72
57	5487	171	35	5497	105
73	5501	219	36	5483	108
75	5498	225	46	5521	138
90	5484	270	54	5487	162
92	5477	276	56	5501	168
--	--	--	68	5492	204
--	--	--	75	5511	225

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5476	9	7	5512	21
7	5491	21	15	5503	45
12	5475	36	22	5480	66
23	5472	69	31	5483	93
29	5508	87	34	5470	102
43	5503	129	37	5524	111
56	5499	168	39	5504	117
64	5528	192	44	5473	132
69	5525	207	45	5507	135
86	5482	258	52	5520	156
94	5504	282	58	5482	174
96	5480	288	59	5514	177
97	5519	291	64	5479	192
--	--	--	74	5509	222
--	--	--	83	5497	249
--	--	--	84	5517	252

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5497	0	17	5528	51
1	5522	3	21	5492	63
2	5524	6	24	5509	72
29	5471	87	27	5515	81
30	5489	90	38	5526	114
42	5508	126	39	5510	117
44	5525	132	73	5506	219
45	5503	135	84	5473	252
48	5529	144	91	5508	273
60	5515	180	--	--	--
62	5500	186	--	--	--
69	5488	207	--	--	--
76	5519	228	--	--	--
83	5474	249	--	--	--
84	5480	252	--	--	--
94	5496	282	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5508	24	8	5503	24
9	5505	27	12	5525	36
21	5488	63	39	5520	117
27	5522	81	52	5493	156
30	5536	90	72	5480	216
31	5506	93	73	5523	219
45	5502	135	79	5489	237
52	5493	156	84	5516	252
53	5526	159	87	5527	261
81	5516	243	91	5491	273
89	5514	267	92	5492	276
95	5533	285	--	--	--
97	5517	291	--	--	--

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5534	0	8	5514	24
8	5521	24	11	5526	33
13	5515	39	16	5498	48
32	5530	96	26	5535	78
35	5498	105	28	5502	84
39	5488	117	31	5503	93
40	5481	120	43	5500	129
45	5531	135	47	5501	141
46	5512	138	66	5481	198
59	5490	177	67	5532	201
81	5486	243	68	5529	204
89	5479	267	69	5519	207
90	5491	270	80	5483	240
99	5493	297	82	5534	246
--	--	--	84	5482	252

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5519	15	1	5489	3
20	5502	60	9	5508	27
25	5515	75	10	5487	30
43	5509	129	25	5519	75
46	5494	138	35	5504	105
56	5487	168	47	5535	141
60	5532	180	63	5502	189
68	5528	204	69	5501	207
71	5534	213	70	5486	210
82	5507	246	82	5538	246
90	5533	270	83	5482	249
98	5514	294	86	5525	258
--	--	--	87	5534	261

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5490	0	19	5522	57
5	5513	15	26	5515	78
15	5496	45	27	5539	81
18	5514	54	31	5511	93
27	5504	81	32	5533	96
28	5530	84	33	5531	99
48	5509	144	45	5521	135
56	5492	168	47	5490	141
63	5498	189	51	5537	153
77	5529	231	58	5508	174
79	5485	237	59	5513	177
86	5527	258	68	5512	204
88	5510	264	72	5525	216
--	--	--	78	5530	234
--	--	--	81	5529	243
--	--	--	90	5497	270
--	--	--	97	5483	291
--	--	--	99	5520	297

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5502	12	3	5484	9
11	5503	33	5	5504	15
15	5510	45	6	5516	18
20	5537	60	11	5521	33
33	5520	99	30	5494	90
36	5488	108	32	5481	96
47	5536	141	36	5485	108
52	5531	156	46	5535	138
55	5540	165	63	5523	189
64	5506	192	69	5509	207
65	5530	195	87	5496	261
78	5499	234	90	5483	270
83	5489	249	92	5525	276
89	5487	267	97	5480	291

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5489	0	8	5508	24
33	5505	99	15	5502	45
37	5511	111	26	5497	78
38	5520	114	38	5542	114
44	5524	132	48	5541	144
49	5497	147	52	5498	156
71	5523	213	53	5506	159
78	5496	234	60	5491	180
85	5495	255	66	5510	198
89	5527	267	86	5499	258
94	5500	282	98	5485	294
98	5515	294	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5483	33	1	5524	3
20	5512	60	13	5540	39
23	5533	69	29	5517	87
39	5505	117	41	5528	123
85	5503	255	42	5536	126
90	5528	270	49	5518	147
--	--	--	56	5486	168
--	--	--	58	5496	174
--	--	--	60	5515	180
--	--	--	64	5502	192
--	--	--	68	5510	204
--	--	--	69	5503	207
--	--	--	81	5525	243
--	--	--	86	5485	258
--	--	--	89	5522	267
--	--	--	93	5490	279
--	--	--	97	5537	291
--	--	--	99	5483	297

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5495	15	22	5550	66
10	5546	30	26	5511	78
14	5507	42	28	5515	84
19	5498	57	30	5501	90
35	5506	105	45	5516	135
37	5532	111	46	5505	138
55	5523	165	47	5525	141
73	5493	219	54	5529	162
78	5537	234	55	5496	165
91	5549	273	67	5495	201
--	--	--	71	5523	213
--	--	--	72	5504	216
--	--	--	74	5500	222
--	--	--	76	5521	228
--	--	--	82	5498	246
--	--	--	83	5528	249
--	--	--	86	5492	258
--	--	--	93	5536	279

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5550	6	15	5505	45
4	5520	12	16	5502	48
10	5522	30	19	5493	57
19	5524	57	29	5500	87
27	5499	81	50	5519	150
28	5495	84	51	5507	153
32	5519	96	59	5508	177
42	5533	126	75	5524	225
43	5501	129	88	5540	264
45	5507	135	--	--	--
46	5521	138	--	--	--
70	5539	210	--	--	--
72	5537	216	--	--	--
82	5518	246	--	--	--
85	5490	255	--	--	--
95	5543	285	--	--	--
98	5527	294	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5545	33	4	5501	12
17	5517	51	15	5518	45
20	5542	60	35	5532	105
23	5558	69	56	5521	168
24	5511	72	85	5517	255
30	5519	90	86	5543	258
68	5524	204	--	--	--
86	5534	258	--	--	--
93	5499	279	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5528	3	7	5525	21
16	5512	48	19	5552	57
20	5513	60	27	5533	81
34	5506	102	35	5541	105
37	5505	111	40	5545	120
58	5553	174	57	5527	171
68	5556	204	64	5534	192
73	5537	219	69	5558	207
81	5517	243	73	5507	219
85	5500	255	78	5510	234
87	5498	261	80	5508	240
--	--	--	85	5506	255
--	--	--	89	5511	267
--	--	--	91	5518	273
--	--	--	93	5535	279
--	--	--	95	5509	285



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	5492	1	638	83	1
2	5492	1	698	76	1
3	5500	1	898	59	1
4	5500	1	558	95	1
5	5508	1	838	63	1
6	5508	1	878	61	1
7	5510	1	658	81	1
8	5510	1	778	68	1
9	5512	1	858	62	1
10	5512	1	598	89	1
11	5520	1	678	78	1
12	5520	1	618	86	1
13	5528	1	538	99	1
14	5528	1	798	67	1
15	5530	1	918	58	1
16	5530	1	814	65	1
17	5532	1	2008	27	1
18	5532	1	2314	23	1
19	5540	1	612	87	1
20	5540	1	1774	30	1
21	5548	1	855	62	1
22	5548	1	1282	42	1
23	5550	1	2912	19	1
24	5550	1	2166	25	1
25	5552	1	527	101	1
26	5552	1	1796	30	1
27	5560	1	1749	31	1
28	5560	1	1555	34	1
29	5568	1	1660	32	1
30	5568	1	2056	26	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5492	1.1	191	26	1
2	5492	3.7	193	23	1
3	5500	1.9	194	26	1
4	5500	1.2	204	29	1
5	5508	3.1	165	29	1
6	5508	4.1	225	26	1
7	5510	1.3	153	27	1
8	5510	3.3	164	23	1
9	5512	2.1	155	26	1
10	5512	3.3	169	23	1
11	5520	4.8	168	25	1
12	5520	4.1	203	23	1
13	5528	2.9	209	26	1
14	5528	2.2	230	29	1
15	5530	4.1	166	29	1
16	5530	4.7	180	25	1
17	5532	3.1	201	25	1
18	5532	1.9	181	29	1
19	5540	3.2	211	25	1
20	5540	2.8	188	28	1
21	5548	4.9	187	25	1
22	5548	3.6	157	26	1
23	5550	3.5	157	25	1
24	5550	3.1	171	23	1
25	5552	1.5	155	28	1
26	5552	3.4	195	23	1
27	5560	4.6	220	23	1
28	5560	2.1	189	27	1
29	5568	2.5	223	25	1
30	5568	3.5	153	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	5492	9.1	269	17	1
2	5492	8.1	424	18	1
3	5500	8.2	362	16	1
4	5500	6.5	430	18	1
5	5508	9.2	459	18	1
6	5508	8.2	269	16	1
7	5510	8.4	486	18	1
8	5510	8.6	283	16	1
9	5512	9.5	347	17	1
10	5512	8.9	330	18	1
11	5520	9.2	388	16	1
12	5520	8.8	309	18	1
13	5528	8.4	434	17	1
14	5528	6.8	284	17	1
15	5530	6.5	299	18	1
16	5530	6.4	288	17	1
17	5532	7.8	334	18	1
18	5532	9.0	422	16	1
19	5540	6.0	287	18	1
20	5540	7.8	274	18	1
21	5548	9.0	367	17	1
22	5548	8.1	261	18	1
23	5550	8.7	328	18	1
24	5550	7.6	485	18	1
25	5552	8.6	258	17	1
26	5552	6.7	406	16	1
27	5560	9.9	264	16	1
28	5560	6.5	365	18	1
29	5568	7.6	325	18	1
30	5568	9.6	327	16	1
Detection Percentage (%)					100%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5492	16.2	370	12	1
2	5492	19.1	401	15	1
3	5500	12.2	444	12	1
4	5500	18.8	268	15	1
5	5508	17.0	317	13	1
6	5508	11.1	479	15	1
7	5510	16.7	446	14	1
8	5510	18.5	464	12	1
9	5512	19.0	491	12	1
10	5512	14.3	317	12	1
11	5520	18.8	331	16	1
12	5520	15.0	383	12	1
13	5528	17.1	464	13	1
14	5528	12.7	339	16	1
15	5530	12.8	407	15	1
16	5530	12.5	287	15	1
17	5532	16.6	436	12	1
18	5532	19.9	473	13	1
19	5540	13.6	250	14	1
20	5540	19.7	402	14	1
21	5548	12.4	422	13	1
22	5548	17.2	488	14	1
23	5550	12.5	468	12	1
24	5550	19.0	456	15	1
25	5552	17.7	267	15	1
26	5552	19.8	496	16	1
27	5560	12.7	285	14	1
28	5560	13.6	334	15	1
29	5568	17.1	281	14	1
30	5568	11.2	423	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	5456.0	1	16	5530.0	1
2	5455.6	1	17	5530.0	1
3	5457.6	1	18	5530.0	1
4	5454.4	1	19	5530.0	1
5	5456.8	1	20	5530.0	1
6	5459.6	1	21	5564.4	1
7	5454.0	1	22	5563.2	1
8	5459.2	1	23	5562.4	1
9	5455.2	1	24	5566.0	1
10	5458.8	1	25	5560.4	1
11	5530.0	1	26	5560.8	1
12	5530.0	1	27	5565.6	1
13	5530.0	1	28	5561.2	1
14	5530.0	1	29	5564.8	1
15	5530.0	1	30	5564.0	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	70354	1	10	65	1071	0	0	70354	0	749999
2	919176	2	10	60	1738	1862	0	990601	750000	1499999
3	724708	3	10	85	1222	1106	1865	1718909	1500000	2249999
4	1054964	1	10	70	1704	0	0	2778066	2250000	2999999
5	241969	3	10	60	1268	1848	1756	3021739	3000000	3749999
6	875812	2	10	50	1971	1521	0	3902423	3750000	4499999
7	594620	3	10	70	1523	1270	1616	4500535	4500000	5249999
8	1364128	1	10	65	1553	0	0	5869072	5250000	5999999
9	314802	2	10	95	1278	1156	0	6185427	6000000	6749999
10	688813	3	10	100	1228	1852	1403	6876674	6750000	7499999
11	1081658	2	10	75	1514	1063	0	7962815	7500000	8249999
12	690378	3	10	85	1470	1714	1495	8655770	8250000	8999999
13	831596	2	10	55	1064	1597	0	9492045	9000000	9749999
14	442134	1	10	70	1587	0	0	9936840	9750000	10499999
15	598365	3	10	60	1213	1287	1489	10536792	10500000	11249999
16	741089	2	10	50	1187	1118	0	11281870	11250000	11999999

Total number of pulses in waveform = 34



Type 5 Radar Waveform_2

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	122728	3	9	65	1570	1648	1988	122728	0	666666
2	695719	1	9	65	1280	0	0	823653	666667	1333333
3	550986	3	9	100	1908	1664	1610	1375919	1333334	2000000
4	681686	1	9	90	1989	0	0	2062787	2000001	2666667
5	1106551	1	9	85	1490	0	0	3171327	2666668	3333334
6	605606	2	9	80	1202	1034	0	3778423	3333335	4000001
7	302366	2	9	55	1115	1901	0	4083025	4000002	4666668
8	991172	2	9	95	1944	1389	0	5077213	4666669	5333335
9	552306	2	9	100	1838	1221	0	5632852	5333336	6000002
10	661626	1	9	55	1446	0	0	6297537	6000003	6666669
11	381494	2	9	50	1922	1886	0	6680477	6666670	7333336
12	971263	3	9	75	1285	1302	1623	7655548	7333337	8000003
13	840785	2	9	70	1727	1587	0	8500543	8000004	8666670
14	338244	3	9	70	1207	1012	1751	8842101	8666671	9333337
15	580911	3	9	70	1413	1266	1943	9426982	9333338	10000004
16	1050728	1	9	75	1068	0	0	10482332	10000005	10666671
17	283152	1	9	50	1928	0	0	10766552	10666672	11333338
18	1007718	3	9	95	1523	1119	1773	11776198	11333339	12000005

Total number of pulses in waveform = 36

Type 5 Radar Waveform_3

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	254346	3	14	60	1557	1273	1357	254346	0	749999
2	881541	3	14	85	1621	1904	1808	1140074	750000	1499999
3	464660	1	14	70	1592	0	0	1610067	1500000	2249999
4	979125	3	14	55	1495	1218	1806	2590784	2250000	2999999
5	1069620	1	14	85	1881	0	0	3664923	3000000	3749999
6	133937	2	14	70	1800	1508	0	3800741	3750000	4499999
7	856639	1	14	85	1431	0	0	4660688	4500000	5249999
8	1153633	1	14	95	1588	0	0	5815752	5250000	5999999
9	206755	3	14	95	1558	1845	1228	6024095	6000000	6749999
10	1282949	3	14	60	1900	1134	1476	7311675	6750000	7499999
11	703582	3	14	75	1906	1077	1081	8019767	7500000	8249999
12	787413	2	14	70	1732	1320	0	8811244	8250000	8999999
13	255148	3	14	90	1508	1162	1085	9069444	9000000	9749999
14	781485	2	14	65	1784	1292	0	9854684	9750000	10499999
15	1294843	2	14	60	1572	1632	0	11152603	10500000	11249999
16	329978	2	14	80	1137	1523	0	11485785	11250000	11999999

Total number of pulses in waveform = 35

Type 5 Radar Waveform_4

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	2951	2	6	65	1426	1350	0	2951	0	749999
2	1037874	3	6	95	1880	1456	1168	1043601	750000	1499999
3	1105265	2	6	90	1876	1688	0	2153370	1500000	2249999
4	263350	3	6	95	1242	1499	1078	2420284	2250000	2999999
5	631630	1	6	50	1514	0	0	3055733	3000000	3749999
6	734498	3	6	50	1696	1020	1617	3791745	3750000	4499999
7	1294924	1	6	65	1633	0	0	5091002	4500000	5249999
8	220659	2	6	65	1784	1770	0	5313294	5250000	5999999
9	1324319	1	6	80	1524	0	0	6641167	6000000	6749999
10	718405	1	6	75	1130	0	0	7361096	6750000	7499999
11	196003	3	6	90	1293	1707	1876	7558229	7500000	8249999
12	1043467	2	6	90	1721	1935	0	8606572	8250000	8999999
13	620487	3	6	75	1638	1960	1947	9230715	9000000	9749999
14	789588	3	6	70	1842	1778	1762	10025848	9750000	10499999
15	700515	1	6	55	1789	0	0	10731745	10500000	11249999
16	773668	3	6	65	1791	1832	1644	11507202	11250000	11999999

Total number of pulses in waveform = 34



Type 5 Radar Waveform_5

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	412408	2	12	55	1803	1366	0	412408	0	705881
2	665695	1	12	95	1377	0	0	1081272	705882	1411763
3	396269	3	12	80	1052	1811	1727	1478918	1411764	2117645
4	1118528	2	12	90	1443	1575	0	2602036	2117646	2823527
5	334334	1	12	90	1149	0	0	2939388	2823528	3529409
6	687841	1	12	80	1413	0	0	3628378	3529410	4235291
7	691033	1	12	60	1289	0	0	4320824	4235292	4941173
8	730595	3	12	50	1877	1601	1323	5052708	4941174	5647055
9	1163257	2	12	70	1533	1711	0	6220766	5647056	6352937
10	517770	1	12	75	1275	0	0	6741780	6352938	7058819
11	585867	2	12	75	1596	1115	0	7328922	7058820	7764701
12	498726	1	12	95	1468	0	0	7830359	7764702	8470583
13	976456	2	12	85	1192	1674	0	8808283	8470584	9176465
14	1025383	1	12	50	1844	0	0	9836532	9176466	9882347
15	397012	2	12	60	1815	1413	0	10235388	9882348	10588229
16	418038	1	12	95	1033	0	0	10656654	10588230	11294111
17	695287	1	12	100	1396	0	0	11352974	11294112	11999993

Total number of pulses in waveform = 27

Type 5 Radar Waveform_6

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	506651	1	19	100	1409	0	0	506651	0	705881
2	445248	2	19	60	1167	1076	0	953308	705882	1411763
3	952622	1	19	50	1295	0	0	1908173	1411764	2117645
4	551690	1	19	90	1796	0	0	2461158	2117646	2823527
5	618882	2	19	70	1701	1273	0	3081836	2823528	3529409
6	760380	2	19	75	1067	1022	0	3845190	3529410	4235291
7	464505	2	19	95	1142	1613	0	4311784	4235292	4941173
8	836476	2	19	65	1331	1945	0	5151015	4941174	5647055
9	1050654	3	19	85	1747	1105	1460	6204945	5647056	6352937
10	355427	2	19	75	1929	1369	0	6564684	6352938	7058819
11	1107098	1	19	55	1578	0	0	7675080	7058820	7764701
12	296862	3	19	60	1125	1761	1748	7973520	7764702	8470583
13	852958	2	19	50	1422	1116	0	8831112	8470584	9176465
14	824086	3	19	85	1997	1197	1226	9657736	9176466	9882347
15	564773	2	19	80	1303	1746	0	10226929	9882348	10588229
16	1018944	1	19	80	1329	0	0	11248922	10588230	11294111
17	266850	3	19	85	1765	1207	1376	11517101	11294112	11999993

Total number of pulses in waveform = 33

Type 5 Radar Waveform_7

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	480613	1	5	55	1537	0	0	480613	0	923076
2	1161059	2	5	50	1446	1618	0	1643209	923077	1846153
3	529863	1	5	75	1263	0	0	2176136	1846154	2769230
4	836262	2	5	55	1668	1883	0	3013661	2769231	3692307
5	757275	3	5	100	1502	1593	1367	3774487	3692308	4615384
6	1653219	1	5	55	1642	0	0	5432168	4615385	5538461
7	462939	3	5	100	1285	1732	1233	5896749	5538462	6461538
8	767034	2	5	80	1444	1255	0	6668033	6461539	7384615
9	1614479	1	5	70	1152	0	0	8285211	7384616	8307692
10	72180	3	5	90	1084	1293	1301	8358543	8307693	9230769
11	1717419	2	5	100	1072	1385	0	10079640	9230770	10153846
12	674204	1	5	65	1959	0	0	10756301	10153847	11076923
13	749327	3	5	80	1600	1558	1689	11507587	11076924	12000000

Total number of pulses in waveform = 25



Type 5 Radar Waveform_8

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	501358	3	18	55	1625	1392	1092	501358	0	749999
2	938988	3	18	90	1819	1181	1667	1444455	750000	1499999
3	781346	2	18	75	1453	1232	0	2230468	1500000	2249999
4	305077	3	18	70	1177	1731	1340	2538230	2250000	2999999
5	503834	2	18	95	1654	1572	0	3046312	3000000	3749999
6	1310541	1	18	90	1316	0	0	4360079	3750000	4499999
7	742288	1	18	65	1406	0	0	5103683	4500000	5249999
8	173392	2	18	70	1954	1460	0	5278481	5250000	5999999
9	1456200	2	18	75	1261	1068	0	6738095	6000000	6749999
10	616894	1	18	70	1755	0	0	7357318	6750000	7499999
11	858273	2	18	65	1264	1079	0	8217346	7500000	8249999
12	191063	1	18	85	1339	0	0	8410752	8250000	8999999
13	936493	2	18	50	1157	1875	0	9348584	9000000	9749999
14	1134187	3	18	50	1080	1157	1840	10485803	9750000	10499999
15	483005	1	18	90	1482	0	0	10972885	10500000	11249999
16	283672	1	18	55	1761	0	0	11258039	11250000	11999999

Total number of pulses in waveform = 30

Type 5 Radar Waveform_9

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	20197	2	8	55	1171	1447	0	20197	0	705881
2	769562	3	8	50	1230	1052	1245	792377	705882	1411763
3	1209692	3	8	60	1385	1615	1793	2005596	1411764	2117645
4	132027	2	8	100	1920	1366	0	2142416	2117646	2823527
5	1373638	3	8	75	1452	1243	1356	3519340	2823528	3529409
6	327575	3	8	100	1474	1654	1006	3850966	3529410	4235291
7	1074300	1	8	75	1956	0	0	4929400	4235292	4941173
8	43932	1	8	70	1381	0	0	4975288	4941174	5647055
9	1073167	1	8	65	1978	0	0	6049836	5647056	6352937
10	315992	1	8	80	1034	0	0	6367806	6352938	7058819
11	1310659	2	8	65	1905	1997	0	7679499	7058820	7764701
12	547751	3	8	80	1209	1476	1645	8231152	7764702	8470583
13	667561	3	8	50	1839	1949	1454	8903043	8470584	9176465
14	505083	2	8	75	1627	1380	0	9413368	9176466	9882347
15	633626	3	8	50	1693	1798	1608	10050001	9882348	10588229
16	796919	3	8	80	1917	1422	1159	10852019	10588230	11294111
17	1106900	3	8	85	1858	1491	1845	11963417	11294112	11999993

Total number of pulses in waveform = 39

Type 5 Radar Waveform_10

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	979268	2	17	85	1459	1537	0	979268	0	1090908
2	665151	3	17	50	1377	1440	1600	1647415	1090909	2181817
3	1104598	1	17	50	1711	0	0	2756430	2181818	3272726
4	741328	2	17	80	1029	1985	0	3499469	3272727	4363635
5	1632891	3	17	80	1155	1561	1989	5135374	4363636	5454544
6	1023054	3	17	95	1081	1497	1855	6163133	5454545	6545453
7	1312729	2	17	85	1739	1020	0	7480295	6545454	7636362
8	718684	3	17	60	1655	1342	1057	8201738	7636363	8727271
9	1380925	2	17	60	1308	1208	0	9586717	8727272	9818180
10	607676	3	17	85	1143	1885	1095	10196909	9818181	10909089
11	1343765	2	17	85	1166	1529	0	11544797	10909090	11999998

Total number of pulses in waveform = 26

**Type 5 Radar Waveform_11**

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

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

Total number of pulses in waveform = 18

Type 5 Radar Waveform_12

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	566758	1	8	100	1062	0	0	566758	0	857142
2	527333	3	8	75	1713	1624	1290	1095153	857143	1714285
3	1012782	3	8	70	1721	1617	1821	2112562	1714286	2571428
4	669216	3	8	75	1608	1882	1052	2786937	2571429	3428571
5	656509	2	8	60	1930	1415	0	3447988	3428572	4285714
6	1332048	2	8	50	1445	1444	0	4783381	4285715	5142857
7	898420	3	8	95	1647	1386	1493	5684690	5142858	6000000
8	668484	2	8	85	1783	1246	0	6357700	6000001	6857143
9	579054	2	8	65	1705	1063	0	6939783	6857144	7714286
10	874441	2	8	90	1251	1886	0	7816992	7714287	8571429
11	1518893	1	8	90	1546	0	0	9339022	8571430	9428572
12	672785	1	8	70	1914	0	0	10013353	9428573	10285715
13	1069278	1	8	90	1415	0	0	11084545	10285716	11142858
14	278979	2	8	50	1660	1655	0	11364939	11142859	12000001

Total number of pulses in waveform = 28

Type 5 Radar Waveform_13

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	22275	1	19	80	1861	0	0	22275	0	631578
2	1160689	3	19	70	1833	1289	1087	1184825	631579	1263157
3	428259	3	19	90	1665	1376	1145	1617293	1263158	1894736
4	665621	3	19	70	1114	1064	1278	2287100	1894737	2526315
5	626319	1	19	65	1216	0	0	2916875	2526316	3157894
6	287107	2	19	85	1328	1736	0	3205198	3157895	3789473
7	781254	2	19	70	1853	1387	0	3989516	3789474	4421052
8	940536	2	19	60	1695	1188	0	4933292	4421053	5052631
9	707472	3	19	55	1181	1956	1702	5643647	5052632	5684210
10	498755	3	19	65	1347	1156	1070	6147241	5684211	6315789
11	754450	1	19	60	1715	0	0	6905264	6315790	6947368
12	366342	2	19	70	1632	1278	0	7273321	6947369	7578947
13	838501	3	19	90	1127	1752	1595	8114732	7578948	8210526
14	439557	3	19	50	1554	1714	1796	8558763	8210527	8842105
15	754383	1	19	75	1181	0	0	9318210	8842106	9473684
16	697497	3	19	80	1469	1888	1275	10016888	9473685	10105263
17	568088	3	19	90	1077	1391	1840	10582328	10105264	10736842
18	530034	3	19	70	1964	1791	1776	11116670	10736843	11368421
19	513989	1	19	70	1377	0	0	11636190	11368422	12000000

Total number of pulses in waveform = 43



Type 5 Radar Waveform_14

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	505819	3	9	55	1408	1470	1947	505819	0	705881
2	622100	1	9	55	1756	0	0	1132744	705882	1411763
3	330451	2	9	80	1523	1068	0	1464951	1411764	2117645
4	935175	1	9	55	1354	0	0	2402717	2117646	2823527
5	961458	2	9	60	1029	1328	0	3365529	2823528	3529409
6	761337	2	9	60	1708	1693	0	4129223	3529410	4235291
7	729391	2	9	50	1130	1115	0	4862015	4235292	4941173
8	115087	1	9	75	1860	0	0	4979347	4941174	5647055
9	978802	1	9	75	1897	0	0	5960009	5647056	6352937
10	808902	1	9	75	1105	0	0	6770808	6352938	7058819
11	824248	1	9	70	1889	0	0	7596161	7058820	7764701
12	854707	2	9	95	1451	1724	0	8452757	7764702	8470583
13	428796	2	9	90	1788	1513	0	8884728	8470584	9176465
14	713022	2	9	65	1656	1771	0	9601051	9176466	9882347
15	326088	1	9	75	1602	0	0	9930566	9882348	10588229
16	676517	3	9	95	1755	1279	1223	10608685	10588230	11294111
17	1124058	1	9	100	1500	0	0	11737000	11294112	11999993

Total number of pulses in waveform = 28

Type 5 Radar Waveform_15

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	357215	2	5	80	1855	1624	0	357215	0	631578
2	591109	3	5	55	1489	1763	1407	951803	631579	1263157
3	584641	3	5	70	1705	1840	1313	1541103	1263158	1894736
4	535784	3	5	75	1229	1565	1802	2081745	1894737	2526315
5	463854	2	5	100	1075	1725	0	2550195	2526316	3157894
6	1102952	1	5	95	1024	0	0	3655947	3157895	3789473
7	441810	3	5	95	1722	1074	1443	4098781	3789474	4421052
8	827868	2	5	90	1744	1364	0	4930888	4421053	5052631
9	737690	3	5	85	1280	1371	1822	5671686	5052632	5684210
10	134014	3	5	75	1442	1484	1752	5810173	5684211	6315789
11	643466	3	5	85	1325	1562	1641	6458317	6315790	6947368
12	880027	2	5	90	1676	1132	0	7342872	6947369	7578947
13	788414	2	5	50	1374	1105	0	8134094	7578948	8210526
14	682747	1	5	75	1300	0	0	8819320	8210527	8842105
15	401261	3	5	95	1021	1425	1700	9221881	8842106	9473684
16	283555	1	5	75	1486	0	0	9509582	9473685	10105263
17	1218852	1	5	70	1912	0	0	10729920	10105264	10736842
18	327387	1	5	100	1380	0	0	11059219	10736843	11368421
19	339661	1	5	90	1477	0	0	11400260	11368422	12000000

Total number of pulses in waveform = 40

Type 5 Radar Waveform_16

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	230591	2	12	95	1859	1017	0	230591	0	631578
2	622576	1	12	55	1550	0	0	856043	631579	1263157
3	812670	3	12	90	1085	1930	1654	1670263	1263158	1894736
4	493686	2	12	65	1511	1297	0	2168618	1894737	2526315
5	918998	1	12	70	1671	0	0	3090424	2526316	3157894
6	293448	1	12	95	1257	0	0	3385543	3157895	3789473
7	416918	2	12	100	1810	1918	0	3803718	3789474	4421052
8	765894	1	12	55	1090	0	0	4573340	4421053	5052631
9	723611	2	12	90	1505	1198	0	5298041	5052632	5684210
10	429377	2	12	80	1033	1688	0	5730121	5684211	6315789
11	1009174	3	12	55	1091	1137	1234	6742016	6315790	6947368
12	226103	3	12	70	1231	1309	1259	6971581	6947369	7578947
13	1148852	1	12	60	1389	0	0	8124232	7578948	8210526
14	647297	1	12	50	1133	0	0	8772918	8210527	8842105
15	430910	2	12	75	1268	1732	0	9204961	8842106	9473684
16	321856	3	12	70	1152	1730	1006	9529817	9473685	10105263
17	1066488	1	12	80	1943	0	0	10600193	10105264	10736842
18	254112	2	12	100	1544	1570	0	10856248	10736843	11368421
19	765778	1	12	65	1048	0	0	11625140	11368422	12000000

Total number of pulses in waveform = 34

**Type 5 Radar Waveform_17**Num of Bursts = 14
Burst Interval (us)= 857143

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	590934	3	18	50	1068	1568	1231	590934	0	857142
2	400619	1	18	95	1813	0	0	995420	857143	1714285
3	1180430	3	18	100	1697	1814	1846	2177663	1714286	2571428
4	706822	1	18	60	1851	0	0	2889842	2571429	3428571
5	655767	3	18	80	1909	1441	1932	3547460	3428572	4285714
6	774532	2	18	75	1050	1177	0	4327274	4285715	5142857
7	1193226	2	18	95	1013	1980	0	5522727	5142858	6000000
8	810936	1	18	60	1370	0	0	6336656	6000001	6857143
9	1325058	2	18	50	1405	1610	0	7663084	6857144	7714286
10	493636	1	18	80	1326	0	0	8159735	7714287	8571429
11	939570	2	18	100	1526	1160	0	9100631	8571430	9428572
12	530654	3	18	90	1308	1422	1891	9633971	9428573	10285715
13	1196512	2	18	55	1155	1785	0	10835104	10285716	11142858
14	1068093	3	18	75	1607	1716	1371	11906137	11142859	12000001

Total number of pulses in waveform = 29

Type 5 Radar Waveform_18Num 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	504175	3	6	95	1914	1106	1333	504175	0	1199999
2	1512659	1	6	50	1644	0	0	2021187	1200000	2399999
3	567231	3	6	85	1447	1279	1243	2590062	2400000	3599999
4	1027209	2	6	90	1339	1739	0	3621240	3600000	4799999
5	1730583	3	6	90	1940	1099	1827	5354901	4800000	5999999
6	997286	3	6	85	1808	1127	1155	6357053	6000000	7199999
7	1084603	2	6	70	1680	1573	0	7445746	7200000	8399999
8	1510855	1	6	70	1781	0	0	8959854	8400000	9599999
9	1469646	1	6	60	1988	0	0	10431281	9600000	10799999
10	617912	3	6	75	1579	1213	1260	11051181	10800000	11999999

Total number of pulses in waveform = 22

Type 5 Radar Waveform_19Num 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	290556	2	17	100	1886	1002	0	290556	0	1090908
2	1508562	2	17	60	1844	1231	0	1802006	1090909	2181817
3	1194342	1	17	60	1285	0	0	2999423	2181818	3272726
4	776920	3	17	65	1502	1153	1756	3777628	3272727	4363635
5	1171603	1	17	80	1379	0	0	4953642	4363636	5454544
6	793828	1	17	75	1054	0	0	5748849	5454545	6545453
7	1156516	3	17	95	1764	1835	1496	6906419	6545454	7636362
8	1558937	1	17	60	1101	0	0	8470451	7636363	8727271
9	495562	1	17	65	1919	0	0	8967114	8727272	9818180
10	987990	2	17	65	1086	1818	0	9957023	9818181	10909089
11	1923925	2	17	50	1624	1863	0	11883852	10909090	11999998

Total number of pulses in waveform = 19



Type 5 Radar Waveform_20

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	454581	2	14	50	1817	1569	0	454581	0	923076
2	813092	1	14	60	1886	0	0	1271059	923077	1846153
3	880286	2	14	75	1355	1632	0	2153231	1846154	2769230
4	797675	1	14	50	1941	0	0	2953893	2769231	3692307
5	1226318	2	14	80	1184	1906	0	4182152	3692308	4615384
6	1087776	3	14	70	1825	1863	1410	5273018	4615385	5538461
7	1043110	1	14	65	1783	0	0	6321226	5538462	6461538
8	252532	3	14	75	1168	1218	1934	6575541	6461539	7384615
9	1563620	3	14	80	1265	1431	1592	8143481	7384616	8307692
10	534911	3	14	90	1793	1122	1760	8682680	8307693	9230769
11	689967	2	14	70	1111	1964	0	9377322	9230770	10153846
12	1076966	2	14	100	1197	1453	0	10457363	10153847	11076923
13	1150819	2	14	50	1169	1598	0	11610832	11076924	12000000

Total number of pulses in waveform = 27

Type 5 Radar Waveform_21

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	282439	3	9	50	1178	1583	1778	282439	0	705881
2	912944	2	9	55	1741	1636	0	1199922	705882	1411763
3	417277	2	9	65	1771	1473	0	1620576	1411764	2117645
4	1172732	3	9	50	1286	1557	1025	2796552	2117646	2823527
5	72142	2	9	75	1794	1883	0	2872562	2823528	3529409
6	864897	1	9	65	1463	0	0	3741136	3529410	4235291
7	1087424	3	9	95	1307	1497	1823	4830023	4235292	4941173
8	361052	3	9	65	1881	1390	1366	5195702	4941174	5647055
9	757232	1	9	50	1716	0	0	5957571	5647056	6352937
10	730137	3	9	80	1234	1455	1540	6689424	6352938	7058819
11	690632	3	9	75	1144	1295	1627	7384285	7058820	7764701
12	380642	3	9	55	1213	1104	1709	7768993	7764702	8470583
13	1297579	3	9	50	1630	1648	1512	9070598	8470584	9176465
14	704408	3	9	95	1345	1869	1815	9779796	9176466	9882347
15	612146	3	9	60	1578	1205	1008	10396971	9882348	10588229
16	732210	2	9	95	1599	1139	0	11132972	10588230	11294111
17	788969	1	9	80	1124	0	0	11924679	11294112	11999993

Total number of pulses in waveform = 41

Type 5 Radar Waveform_22

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	902333	2	12	50	1104	1357	0	902333	0	923076
2	536500	2	12	65	1766	1247	0	1441294	923077	1846153
3	1260837	2	12	65	1815	1425	0	2705144	1846154	2769230
4	244510	1	12	75	1062	0	0	2952894	2769231	3692307
5	1299604	3	12	55	1259	1549	1503	4253560	3692308	4615384
6	715911	1	12	100	1213	0	0	4973782	4615385	5538461
7	1007925	1	12	75	1915	0	0	5982920	5538462	6461538
8	809905	3	12	70	1066	1701	1765	6794740	6461539	7384615
9	627590	1	12	85	1309	0	0	7426862	7384616	8307692
10	948116	2	12	55	1485	1480	0	8376287	8307693	9230769
11	1515685	1	12	100	1336	0	0	9894937	9230770	10153846
12	584140	3	12	65	1390	1482	1228	10480413	10153847	11076923
13	1364578	2	12	55	1361	1308	0	11849091	11076924	12000000

Total number of pulses in waveform = 24



Type 5 Radar Waveform_23

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	542036	1	14	75	1445	0	0	542036	0	666666
2	704155	2	14	70	1436	1315	0	1247636	666667	1333333
3	117994	3	14	95	1924	1087	1736	1368381	1333334	2000000
4	1205449	1	14	55	1071	0	0	2578577	2000001	2666667
5	702649	3	14	55	1303	1683	1488	3282297	2666668	3333334
6	544137	3	14	55	1856	1816	1787	3830908	3333335	4000001
7	264681	3	14	55	1367	1542	1142	4101048	4000002	4666668
8	1084516	1	14	75	1256	0	0	5189615	4666669	5333335
9	587112	1	14	100	1507	0	0	5777983	5333336	6000002
10	229764	3	14	95	1094	1551	1725	6009254	6000003	6666669
11	1141102	2	14	50	1433	1927	0	7154726	6666670	7333336
12	448265	2	14	55	1398	1846	0	7606351	7333337	8000003
13	892704	3	14	55	1853	1380	1993	8502299	8000004	8666670
14	770440	1	14	100	1619	0	0	9277965	8666671	9333337
15	696851	2	14	95	1706	1396	0	9976435	9333338	10000004
16	677076	2	14	50	1705	1873	0	10656613	10000005	10666671
17	506589	2	14	55	1460	1759	0	11166780	10666672	11333338
18	827090	1	14	80	1549	0	0	11997089	11333339	12000005

Total number of pulses in waveform = 36

Type 5 Radar Waveform_24

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	297686	3	5	60	1590	1651	1919	297686	0	1499999
2	1209464	3	5	75	1390	1963	1160	1512310	1500000	2999999
3	2637489	2	5	55	1883	1549	0	4154312	3000000	4499999
4	1203665	2	5	80	1304	1011	0	5361409	4500000	5999999
5	1219797	1	5	85	1142	0	0	6583521	6000000	7499999
6	2351082	1	5	70	1338	0	0	8935745	7500000	8999999
7	824939	1	5	75	1463	0	0	9762022	9000000	10499999
8	1232480	1	5	70	1387	0	0	10995965	10500000	11999999

Total number of pulses in waveform = 14

Type 5 Radar Waveform_25

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	269916	1	19	70	1462	0	0	269916	0	666666
2	873325	2	19	50	1603	1716	0	1144703	666667	1333333
3	220783	3	19	75	1973	1646	1690	1368805	1333334	2000000
4	893691	2	19	95	1618	1736	0	2267805	2000001	2666667
5	639185	3	19	55	1890	1672	1713	2910344	2666668	3333334
6	466608	1	19	95	1319	0	0	3362227	3333335	4000001
7	668807	1	19	75	1932	0	0	4052353	4000002	4666668
8	733272	2	19	90	1956	1151	0	4787557	4666669	5333335
9	931500	2	19	70	1315	1524	0	5722164	5333336	6000002
10	299318	1	19	75	1833	0	0	6024321	6000003	6666669
11	1048633	3	19	95	1919	1073	1172	7074787	6666670	7333336
12	416127	3	19	55	1113	1701	1973	7495078	7333337	8000003
13	750252	2	19	95	1117	1386	0	8250117	8000004	8666670
14	638511	3	19	55	1354	1720	1625	8891131	8666671	9333337
15	876553	2	19	80	1205	1155	0	9772383	9333338	10000004
16	712112	1	19	55	1982	0	0	10486855	10000005	10666671
17	189467	1	19	95	1189	0	0	10678304	10666672	11333338
18	1084858	2	19	55	1707	1239	0	11764351	11333339	12000005

Total number of pulses in waveform = 35



Type 5 Radar Waveform_26

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	660481	2	18	95	1655	1540	0	660481	0	666666
2	161679	3	18	60	1141	1303	1412	825355	666667	1333333
3	815796	2	18	65	1482	1752	0	1645007	1333334	2000000
4	940878	2	18	55	1010	1202	0	2589119	2000001	2666667
5	522408	1	18	100	1021	0	0	3113739	2666668	3333334
6	261997	3	18	65	1352	1338	1806	3376757	3333335	4000001
7	801246	2	18	75	1774	1597	0	4182499	4000002	4666668
8	1029596	2	18	95	1194	1686	0	5215466	4666669	5333335
9	721338	3	18	100	1578	1700	1174	5939684	5333336	6000002
10	372321	1	18	75	1218	0	0	6316457	6000003	6666669
11	623082	3	18	95	1917	1214	1777	6940757	6666670	7333336
12	989306	2	18	90	1056	1494	0	7934971	7333337	8000003
13	558616	3	18	80	1426	1170	1902	8496137	8000004	8666670
14	320449	1	18	90	1713	0	0	8821084	8666671	9333337
15	523172	3	18	85	1899	1596	1843	9345969	9333338	10000004
16	1234896	3	18	75	1734	1673	1677	10586203	10000005	10666671
17	224700	2	18	100	1599	1628	0	10815987	10666672	11333338
18	864710	3	18	80	1785	1964	1916	11683924	11333339	12000005

Total number of pulses in waveform = 41

Type 5 Radar Waveform_27

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	786556	2	6	50	1805	1629	0	786556	0	857142
2	545431	3	6	100	1770	1347	1803	1335421	857143	1714285
3	762387	3	6	75	1531	1398	1713	2102728	1714286	2571428
4	792884	3	6	60	1834	1004	1659	2900254	2571429	3428571
5	780360	2	6	90	1742	1630	0	3685111	3428572	4285714
6	804836	1	6	55	1181	0	0	4493319	4285715	5142857
7	989852	1	6	50	1827	0	0	5484352	5142858	6000000
8	1200134	3	6	80	1222	1653	1836	6686313	6000001	6857143
9	890841	2	6	90	1043	1889	0	7561865	6857144	7714286
10	237197	1	6	75	1598	0	0	7821994	7714287	8571429
11	804952	1	6	70	1500	0	0	8628544	8571430	9428572
12	1637734	3	6	50	1817	1631	1433	10267778	9428573	10285715
13	847454	2	6	60	1502	1355	0	11120113	10285716	11142858
14	403004	1	6	55	1732	0	0	11525974	11142859	12000001

Total number of pulses in waveform = 28

Type 5 Radar Waveform_28

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	665511	1	17	60	1884	0	0	665511	0	1199999
2	1390207	3	17	55	1423	1576	1360	2057602	1200000	2399999
3	1081842	1	17	50	1208	0	0	3143803	2400000	3599999
4	1120697	2	17	85	1081	1681	0	4265708	3600000	4799999
5	1431570	2	17	95	1746	1715	0	5700040	4800000	5999999
6	638359	3	17	85	1850	1430	1902	6341860	6000000	7199999
7	1583897	2	17	60	1142	1926	0	7930939	7200000	8399999
8	1285759	2	17	75	1077	1323	0	9219766	8400000	9599999
9	1528715	3	17	55	1989	1828	1327	10750881	9600000	10799999
10	937919	1	17	95	1734	0	0	11693944	10800000	11999999

Total number of pulses in waveform = 20



Type 5 Radar Waveform_29

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	67757	1	8	95	1505	0	0	67757	0	799999
2	1014437	1	8	50	1250	0	0	1083699	800000	1599999
3	578907	3	8	90	1954	1358	1273	1663856	1600000	2399999
4	884311	1	8	60	1386	0	0	2552752	2400000	3199999
5	1377546	1	8	95	1516	0	0	3931684	3200000	3999999
6	561657	2	8	85	1121	1037	0	4494857	4000000	4799999
7	1002571	1	8	55	1018	0	0	5499586	4800000	5599999
8	476174	2	8	75	1575	1017	0	5976778	5600000	6399999
9	1187041	3	8	75	1327	1649	1293	7166411	6400000	7199999
10	418784	3	8	90	1521	1385	1446	7589464	7200000	7999999
11	1107608	1	8	85	1658	0	0	8701424	8000000	8799999
12	526717	3	8	100	1624	1986	1662	9229799	8800000	9599999
13	381474	2	8	65	1466	1591	0	9616545	9600000	10399999
14	1032114	1	8	50	1431	0	0	10651716	10400000	11199999
15	553367	2	8	80	1494	1060	0	11206514	11200000	11999999

Total number of pulses in waveform = 27

Type 5 Radar Waveform_30

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	389405	2	10	85	1732	1597	0	389405	0	666666
2	277753	3	10	60	1143	1796	1066	670487	666667	1333333
3	1296538	2	10	65	1042	1016	0	1971030	1333334	2000000
4	543073	3	10	90	1567	1930	1644	2516161	2000001	2666667
5	687401	2	10	75	1267	1693	0	3208703	2666668	3333334
6	626304	3	10	100	1412	1049	1748	3837967	3333335	4000001
7	634369	2	10	95	1863	1181	0	4476545	4000002	4666668
8	255254	1	10	75	1092	0	0	4734843	4666669	5333335
9	1081271	3	10	80	1260	1543	1284	5817206	5333336	6000002
10	516410	1	10	90	1282	0	0	6337703	6000003	6666669
11	958006	2	10	65	1951	1687	0	7296991	6666670	7333336
12	405129	1	10	65	1814	0	0	7705758	7333337	8000003
13	844611	1	10	70	1240	0	0	8552183	8000004	8666670
14	698852	1	10	90	1654	0	0	9252275	8666671	9333337
15	357929	2	10	75	1753	1187	0	9611858	9333338	10000004
16	1036645	3	10	90	1846	1521	1451	10651443	10000005	10666671
17	508834	3	10	85	1002	1016	1633	11165095	10666672	11333338
18	211088	3	10	100	1881	1507	1804	11379834	11333339	12000005

Total number of pulses in waveform = 38

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	5252	1	16	5290	1
2	5252	1	17	5292	1
3	5260	1	18	5292	1
4	5260	1	19	5300	1
5	5268	1	20	5300	1
6	5268	1	21	5308	1
7	5270	1	22	5308	1
8	5270	1	23	5310	1
9	5272	1	24	5310	1
10	5272	1	25	5312	1
11	5280	1	26	5312	1
12	5280	1	27	5320	1
13	5288	1	28	5320	1
14	5288	1	29	5328	1
15	5290	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)
3	5513	9	0	5473	0
7	5476	21	7	5474	21
14	5509	42	32	5502	96
20	5492	60	40	5492	120
27	5514	81	44	5512	132
51	5490	153	45	5505	135
57	5507	171	57	5509	171
71	5499	213	64	5462	192
73	5477	219	69	5485	207
82	5515	246	70	5472	210
89	5465	267	71	5493	213
--	--	--	91	5494	273

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
18	5497	54	3	5500	9
23	5478	69	5	5515	15
26	5494	78	13	5470	39
32	5501	96	20	5502	60
38	5513	114	22	5499	66
44	5493	132	30	5519	90
45	5526	135	39	5503	117
46	5483	138	43	5510	129
57	5488	171	56	5490	168
64	5506	192	57	5518	171
67	5472	201	58	5506	174
88	5471	264	74	5525	222
97	5505	291	91	5524	273
98	5519	294	92	5474	276
--	--	--	95	5475	285
--	--	--	99	5513	297

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5512	27	4	5522	12
16	5509	48	11	5480	33
23	5532	69	16	5497	48
24	5505	72	18	5482	54
30	5530	90	21	5505	63
35	5506	105	53	5485	159
36	5531	108	58	5483	174
38	5500	114	62	5481	186
48	5502	144	64	5488	192
56	5516	168	66	5521	198
67	5526	201	73	5526	219
73	5491	219	81	5532	243
84	5529	252	85	5511	255
92	5478	276	--	--	--
97	5489	291	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5507	0	0	5506	0
5	5532	15	5	5493	15
8	5498	24	14	5507	42
11	5510	33	34	5495	102
16	5521	48	41	5511	123
23	5531	69	42	5494	126
36	5530	108	56	5536	168
61	5497	183	64	5486	192
65	5486	195	68	5508	204
69	5506	207	78	5485	234
73	5502	219	91	5505	273
82	5501	246	93	5502	279
92	5514	276	--	--	--
94	5512	282	--	--	--
96	5513	288	--	--	--
97	5533	291	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5516	33	5	5517	15
33	5517	99	20	5537	60
51	5525	153	24	5526	72
52	5538	156	25	5484	75
53	5541	159	28	5488	84
55	5483	165	52	5496	156
64	5508	192	59	5523	177
74	5493	222	61	5490	183
80	5487	240	64	5512	192
84	5513	252	68	5491	204
85	5492	255	75	5534	225
87	5512	261	88	5539	264
96	5498	288	93	5501	279
--	--	--	98	5518	294

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5550	39	3	5501	9
17	5549	51	14	5525	42
18	5536	54	23	5543	69
37	5517	111	26	5514	78
60	5515	180	27	5534	81
67	5539	201	34	5536	102
69	5501	207	38	5511	114
74	5498	222	40	5505	120
75	5502	225	41	5517	123
77	5504	231	47	5498	141
82	5525	246	51	5541	153
90	5547	270	65	5540	195
--	--	--	80	5492	240

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5530	18	5	5527	15
8	5548	24	6	5549	18
14	5505	42	7	5552	21
40	5499	120	15	5505	45
42	5544	126	31	5553	93
43	5514	129	37	5540	111
52	5533	156	38	5531	114
60	5541	180	48	5521	144
62	5521	186	59	5542	177
69	5518	207	75	5524	225
78	5517	234	80	5543	240
82	5542	246	97	5555	291
84	5498	252	99	5526	297
85	5555	255	--	--	--
97	5556	291	--	--	--
99	5510	297	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5547	21	13	5528	39
19	5500	57	17	5540	51
21	5548	63	36	5534	108
22	5507	66	38	5522	114
29	5517	87	40	5521	120
55	5541	165	43	5526	129
70	5557	210	48	5500	144
78	5538	234	52	5518	156
82	5510	246	58	5556	174
85	5512	255	65	5516	195
96	5529	288	71	5511	213
99	5545	297	80	5520	240
--	--	--	91	5509	273
--	--	--	95	5555	285

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5549	6	3	5517	9
13	5541	39	9	5519	27
20	5511	60	11	5510	33
33	5506	99	23	5543	69
65	5559	195	42	5534	126
67	5519	201	55	5531	165
73	5551	219	71	5560	213
74	5508	222	76	5516	228
82	5548	246	77	5559	231
92	5522	276	81	5512	243
--	--	--	88	5506	264
--	--	--	90	5541	270
--	--	--	98	5542	294

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5556	0	5	5561	15
40	5535	120	40	5552	120
51	5555	153	41	5537	123
57	5522	171	48	5545	144
83	5558	249	54	5521	162
84	5519	252	57	5516	171
97	5515	291	63	5518	189
--	--	--	71	5533	213
--	--	--	84	5529	252
--	--	--	91	5558	273

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5535	3	7	5545	21
13	5528	39	33	5532	99
24	5550	72	39	5539	117
40	5553	120	44	5530	132
57	5519	171	45	5546	135
59	5521	177	48	5520	144
64	5534	192	52	5549	156
70	5575	210	66	5551	198
71	5556	213	90	5529	270
81	5570	243	91	5521	273
86	5549	258	96	5568	288
97	5573	291	97	5574	291
99	5546	297	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5556	3	1	5561	3
5	5548	15	2	5535	6
7	5531	21	17	5562	51
20	5535	60	24	5525	72
23	5561	69	25	5564	75
29	5572	87	33	5575	99
31	5557	93	42	5534	126
47	5529	141	43	5543	129
53	5522	159	47	5571	141
58	5527	174	52	5572	156
60	5536	180	53	5533	159
72	5567	216	55	5529	165
74	5569	222	58	5560	174
89	5579	267	65	5578	195
90	5563	270	74	5557	222
97	5521	291	--	--	--



Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5541	0	3	5576	9
6	5571	18	10	5563	30
8	5569	24	22	5529	66
16	5545	48	24	5564	72
20	5536	60	45	5578	135
25	5576	75	50	5524	150
34	5533	102	51	5532	153
40	5565	120	54	5582	162
47	5575	141	57	5569	171
49	5526	147	58	5527	174
51	5535	153	61	5561	183
52	5542	156	63	5550	189
58	5534	174	84	5522	252
64	5549	192	87	5526	261
80	5577	240	--	--	--
86	5554	258	--	--	--
95	5566	285	--	--	--
98	5558	294	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5534	12	2	5539	6
34	5531	102	13	5542	39
42	5575	126	22	5541	66
56	5586	168	33	5538	99
57	5573	171	43	5579	129
72	5552	216	74	5543	222
77	5554	231	80	5568	240
80	5540	240	87	5580	261
89	5588	267	--	--	--
90	5580	270	--	--	--
93	5587	279	--	--	--
99	5538	297	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5570	0	15	5595	45
27	5539	81	30	5568	90
39	5595	117	48	5591	144
40	5547	120	49	5574	147
54	5598	162	63	5538	189
55	5566	165	72	5539	216
59	5588	177	73	5551	219
69	5564	207	88	5564	264
82	5550	246	96	5565	288
99	5557	297	--	--	--

6. CONCLUSION

The data collected relate only the item(s) tested and show that the **Wireless Access Point FCC ID: 2AD8UFZCWI4A1, Model Number: WI4A-AC400i** is in compliance with Part 15E of the FCC Rules and IC Rules.

The End