DFS MEASUREMENT REPORT

FCC PART 15 Subpart E WLAN 802.11a/n/ac/ax

FCC ID:	Q9DAPIN0514515
APPLICANT:	Hewlett Packard Enterprise Company
Application Type:	Class III Permissive Change
Product:	ACCESS POINT
Model No.:	APIN0514, APIN0515
Brand Name:	aruba a Hewlett Packard Enterprise company , Hewlett Packard Enterprise
FCC Classification:	Unlicensed National Information Infrastructure (UNII)
FCC Rule Part(s):	Part 15.407 Section (h)(2) KDB 905462 D02v02, KDB 905462 D04v01
Type of Device:	Master Device
Test Date:	December 03 ~ 14, 2018

Reviewed By: Paddy Chen
(Paddy Chen)

Approved By: Chenz Ker
(Chenz Ker)

Testing Laboratory
3261

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
1807TW0111-U9	Rev. 01	Initial Report	12-14-2018	Valid

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§2.1033 General Information

Applicant:	Hewlett Packard Enterprise Company
Applicant Address:	6280 America Center Drive, San Jose, CA 95002
Manufacturer:	Hewlett Packard Enterprise Company
Manufacturer Address:	6280 America Center Drive, San Jose, CA 95002
Test Site:	MRT Technology (Taiwan) Co., Ltd
Test Site Address:	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)
FCC Registration No.:	291082
Test Device Serial No.:	APIN0514 (S/N: CNGBKD000Q)

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 and 291082) test facility with the site description report on file and is designated by the FCC as an Accredited Test Firm.**
- **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 Canada, Taiwan, EU and TELEC Rules.**

TAF certificate here

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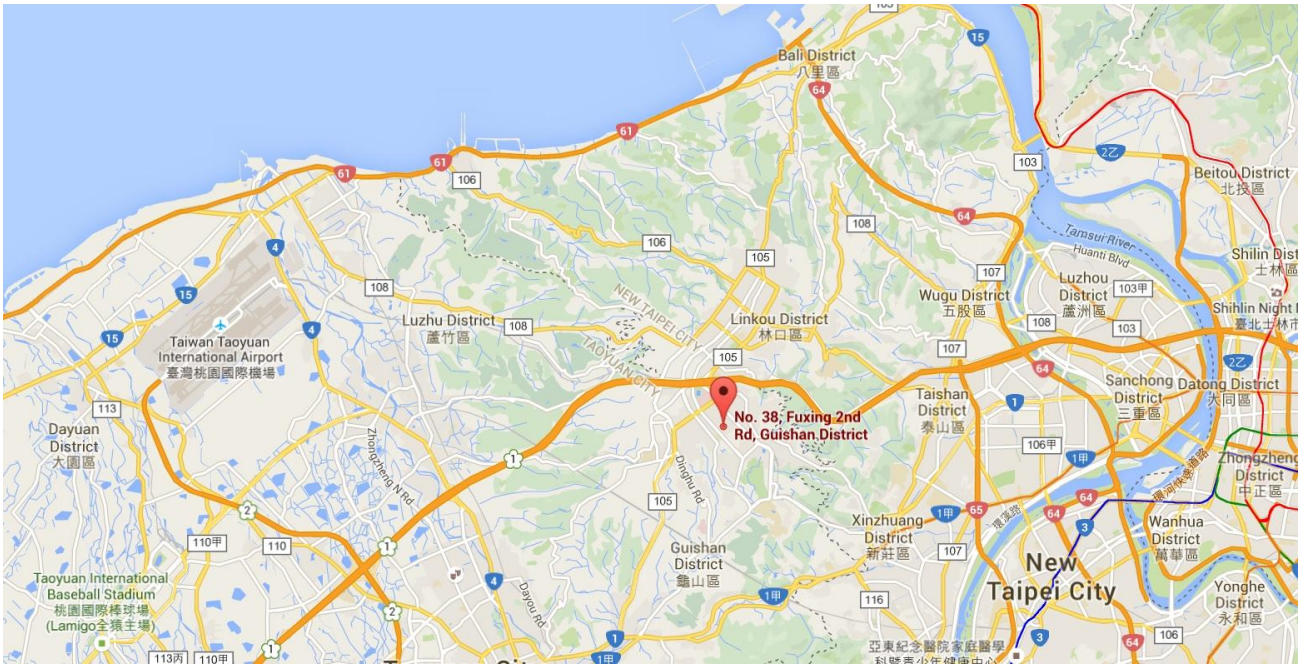
1. INTRODUCTION

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	ACCESS POINT
Model No.	APIN0514, APIN0515
Brand Name:	aruba a Hewlett Packard Enterprise company , Hewlett Packard Enterprise
Wi-Fi Specification:	802.11a/b/g/n/ac/ax
Bluetooth Specification:	v4.2 single mode
ZigBee Specification:	802.15.4
Software Version:	ArubaOS_70xx_8.4.0.0_67318
Power Type:	0 ~ 50 °C
Operating Environment:	AC Adapter or POE input
Operating Environment:	Indoor Use

Note: The difference between models is that EUT use different antenna and appearance, APIN0514 use some external antennas, APIN0515 use internal antenna, other hardware and software are the same.

2.2. Product Specification Subjective to this Report

Frequency Range	For 802.11a/n-HT20/ac-VHT20/ax-HE20: 5260~5320MHz, 5500~5720MHz For 802.11n-HT40/ac-VHT40/ax-HE40: 5270~5310MHz, 5510~5710MHz For 802.11ac-VHT80/ax-HE80: 5290MHz, 5530MHz, 5610 MHz, 5690 MHz For 802.11ac-VHT160/ax-HE160: 5250MHz, 5570MHz
Type of Modulation	802.11a/n/ac: OFDM 802.11ax:OFDMA
Power-on cycle	Requires 94.2 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.

2.3. Description of Available Antennas

Model No.: APIN0514

Antenna No.	Directionality	Frequency Band (GHz)	Model No.	Max Peak Gain (dBi)	BF Gain (dBi)	CDD Directional Gain (dBi)	
						For Power	For PSD
Wi-Fi External Antenna List (2.4GHz 2*2 MIMO, 5GHz 4*4 MIMO)							
1	Omni	2.4	AP-ANT-40	**4.0**	3.01	4.0	7.01
		5		5.0	6.02	5.0	11.02
2	Omni	2.4	AP-ANT-19	3.0	3.01	3.0	6.01
		5		**6.0**	6.02	6.0	12.02
3	Omni	2.4	AP-ANT-1W	3.8	3.01	3.8	6.81
		5		5.8	6.02	5.8	11.82
4	Omni	2.4	AP-ANT-13B	2.3	3.01	2.3	5.31
		5		4.0	6.02	4.0	10.02
5 (Note 4)	Omni	2.4	AP-ANT-20W	**2.0**	3.01	2.0	5.01
		5		**2.0**	6.02	2.0	8.02
6 (Note 3)	Directional	2.4	AP-ANT-45	4.5	0.00	4.5	4.50
		5		5.5	3.01	5.5	8.51
7 (Note 3)	Directional	2.4	AP-ANT-48	**8.5**	0.00	8.5	8.5
		5		**8.5**	3.01	8.5	11.51
Bluetooth & ZigBee Internal Antenna							
PCB		2.4		4.9			

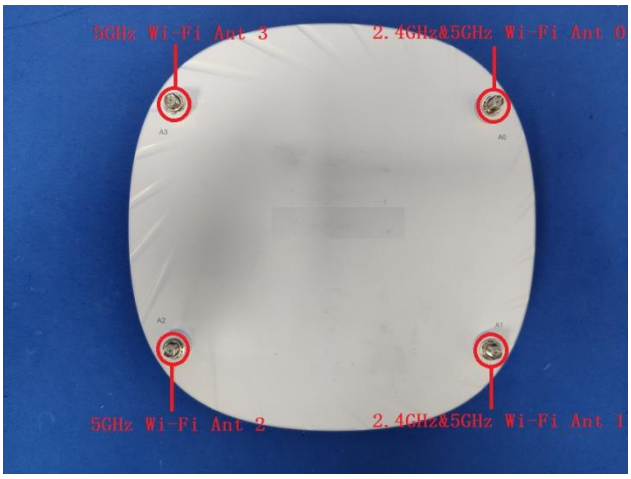
Model No.: APIN0515

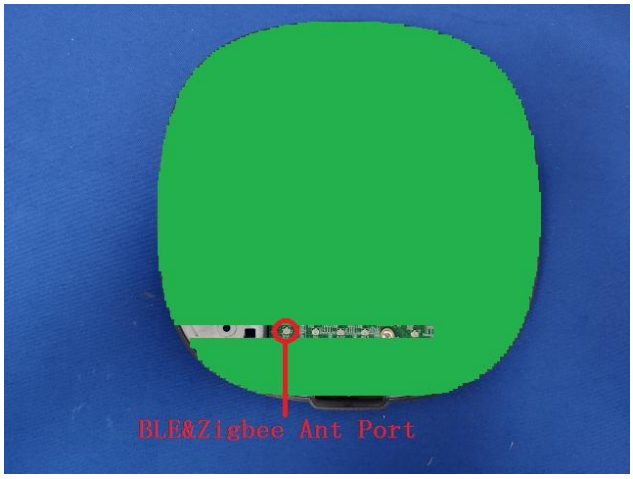
Directionality	Frequency Band (GHz)	Max Peak Gain (dBi)	BF Gain (dBi)	CDD Directional Gain (dBi)	
				For Power	For PSD
Wi-Fi Internal Antenna List (2.4GHz 2*2 MIMO, 5GHz 4*4 MIMO)					
Omni	2.4	3.77	3.01	3.77	6.78
Omni	5	4.55	5.97	4.55	10.52
Bluetooth & ZigBee Internal Antenna					
PCB	2.4	3.5			

Note:

1. 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} + 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 $N_{ANT} \leq 4$;
2. The EUT also supports Beam Forming mode, and the Beam Forming support 802.11n/ac/ax, not include 802.11a/b/g. Directional gain = G_{ANT} + BF Gain, BF Gain was declared by the applicant.
3. Two antennas have Cross-Polarized design, the detail see the antenna specification.
4. We selected the model APIN0514 that has lowest antenna gain to perform the DFS testing.

2.4. Description of Antenna RF Port

<table>
<tr><td colspan="7">Antenna RF Port</td></tr>
<tr><td>--</td><td colspan="2">2.4GHz RF Port</td><td colspan="4">5GHz RF Port</td></tr>
<tr><td>Software Control Port</td><td>Ant 0</td><td>Ant 1</td><td>Ant 0</td><td>Ant 1</td><td>Ant 2</td><td>Ant 3</td></tr>
<tr><td colspan="7">APIN0514</td></tr>
<tr><td colspan="7"> 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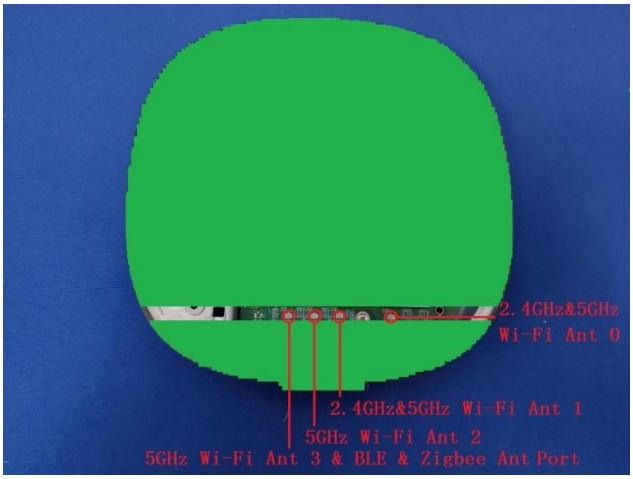
<tr><td colspan="7">APIN0515</td></tr>
<tr><td colspan="7"> 
</td></tr>
</table>

2.5. Operating Frequency and Channel List

802.11a/n-HT20/ac-VHT20/ax-HE20

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/ax-HE40

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

802.11ac-VHT80/ax-HE80

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

802.11ac-VHT160/ax-HE160

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

2.6. Test Channel for this Report

Test Mode	Test Channel	Test Frequency
802.11ax-HE20	100	5500 MHz
802.11ax-HE40	102	5510 MHz
802.11ax-HE80	106	5530 MHz
802.11ax-HE160	50	5250 MHz
802.11ax-HE160	114	5570 MHz

2.7. Test Mode

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

3. DFS DETECTION THRESHOLDS AND RADAR TEST WAVEFORMS

3.1. Applicability

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

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

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

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

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

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

3.2. DFS Devices Requirements

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

(a) The Master Device will use DFS in order to detect Radar Waveforms with received signal strength above the DFS Detection Threshold in the 5250 ~ 5350 MHz and 5470 ~ 5725 MHz bands. DFS is not required in the 5150 ~ 5250 MHz or 5725 ~ 5825 MHz bands.

(b) Before initiating a network on a Channel, the Master Device will perform a Channel Availability Check for a specified time duration (Channel Availability Check Time) to ensure that there is no radar system operating on the Channel, using DFS described under subsection a) above.

(c) The Master Device initiates a U-NII network by transmitting control signals that will enable other U-NII devices to Associate with the Master Device.

(d) During normal operation, the Master Device will monitor the Channel (In-Service Monitoring) to ensure that there is no radar system operating on the Channel, using DFS described under a).

(e) If the Master Device has detected a Radar Waveform during In-Service Monitoring as described under d), the Operating Channel of the U-NII network is no longer an Available Channel. The Master Device will instruct all associated Client Device(s) to stop transmitting on this Channel within the Channel Move Time. The transmissions during the Channel Move Time will be limited to the Channel Closing Transmission Time.

(f) Once the Master Device has detected a Radar Waveform it will not utilize the Channel for the duration of the Non-Occupancy Period.

(g) If the Master Device delegates the In-Service Monitoring to a Client Device, then the combination will be tested to the requirements described under d) through f) above.

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

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

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

Table 3-3: DFS Response Requirements

3.3. DFS Detection Threshold Values

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

Maximum Transmit Power	**Value** **(See Notes 1, 2, and 3)**
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. **Note 2:** Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. **Note3:** EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

Table 3-4: Detection Thresholds for Master Devices and Client Devices with Radar Detection

3.4. Parameters of DFS Test Signals

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 3-6	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{\text{PRI}_{\text{usec}}}\right)\right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Table 3-5: Parameters for Short Pulse Radar Waveforms

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

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

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

Long Pulse Radar Test Waveform

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

Table 3-7: Parameters for Long Pulse Radar Waveforms

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

Frequency Hopping Radar Test Waveform

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

Table 3-8: Parameters for Frequency Hopping Radar Waveforms

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

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

3.5. Conducted Test Setup

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

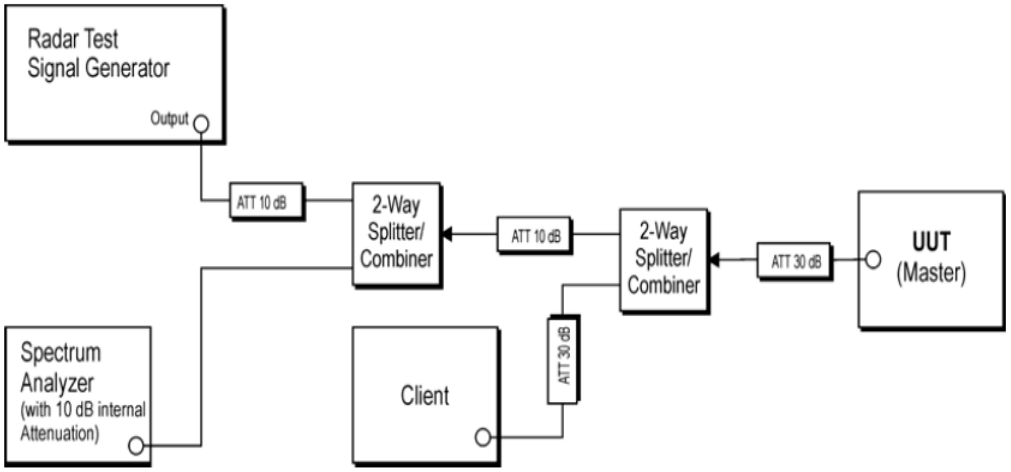


Figure 3-1: Conducted Test Setup where UUT is a Master and Radar Test Waveforms are injected into the Masters

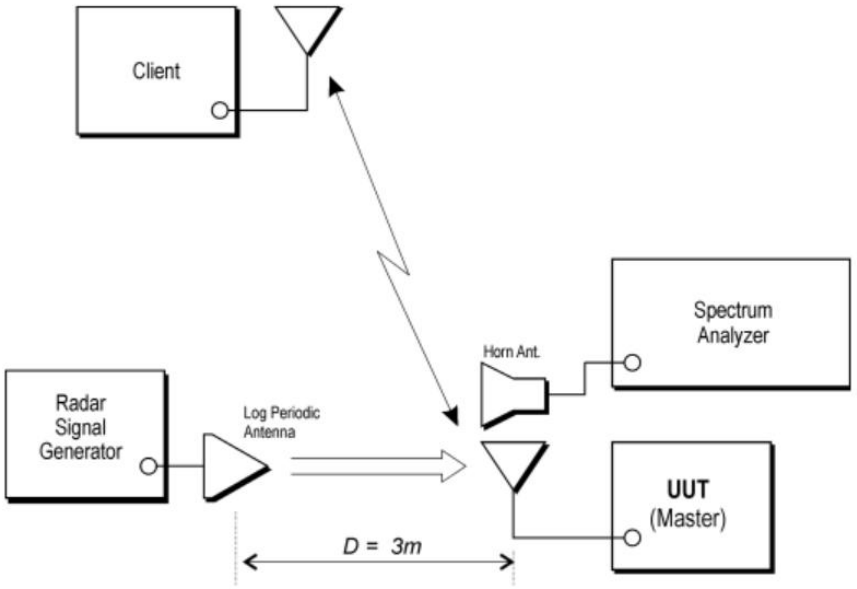


Figure 3-2: Radiated Test Setup where UUT is a Master mode and Radar Test Waveforms are injected into the UUT

4. TEST EQUIPMENT CALIBRATION DATE

Dynamic Frequency Selection (DFS) - AC1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9010B	MRTSUE06452	1 year	2019/07/20
ESG Vector Signal Generator	Agilent	N5182B	MRTSUE06026	1 year	2019/04/23
Temperature/Humidity Meter	TEN BILLION	TTH-B3UP	MRTTWA00032	1 year	2019/05/21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTTWA00003	1 year	2019/04/24

Client Information

Instrument	Manufacturer	Type No.
Access Point	Aruba Networks, Inc	APIN0514

Note: This access point was configured as client mode.

Software	Version	Manufacturer	Function
Pulse Building(N7607B)	V3.0.0	Keysight	Radar Signal Generation Software
DFS Tool	V6.7	Keysight	DFS Test Software

5. TEST RESULT

5.1. Summary

Company Name: **Hewlett Packard Enterprise Company**

FCC ID: **Q9DAPIN0514515**

Parameter	Limit	Test Result	Reference
UNII Detection Bandwidth Measurement	Refer Table 3-3	Pass	Section 5.4
Initial Channel Availability Check Time	Refer Table 3-3	Pass	Section 5.5
Radar Burst at the Beginning of the Channel Availability Check Time	Refer Table 3-3	Pass	Section 5.6
Radar Burst at the End of the Channel Availability Check Time	Refer Table 3-3	Pass	Section 5.7
In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time	Refer Table 3-3	Pass	Section 5.8
Non-Occupancy Period	Refer Table 3-3	Pass	Section 5.8
Statistical Performance Check	Refer Table 3-3	Pass	Section 5.9

Note 1: Item “Statistical Performance Check” was tested by radiated test method and any other items were tested by conducted test method.

Note 2: We used the worse case level -64dBm as DFS detection thresholds for all DFS testing.

5.2. Radar Waveform Calibration

5.2.1. Calibration Setup

The conducted test setup was used for this calibration testing. Figure 3-2 shows the typical test setup.

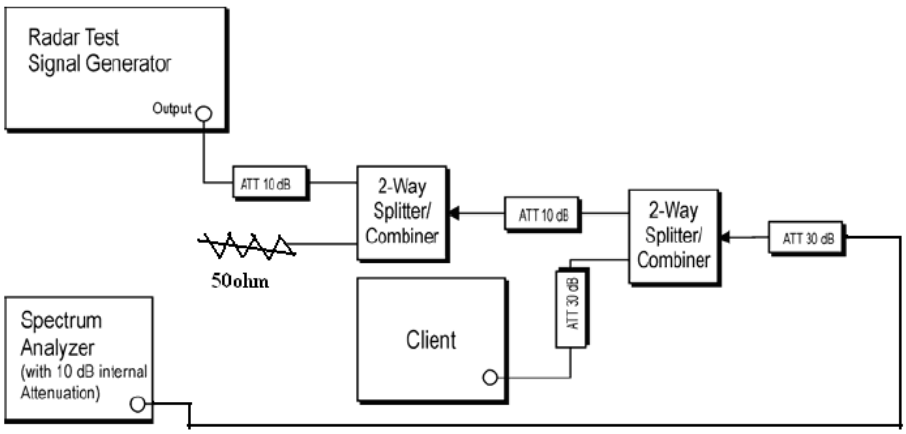


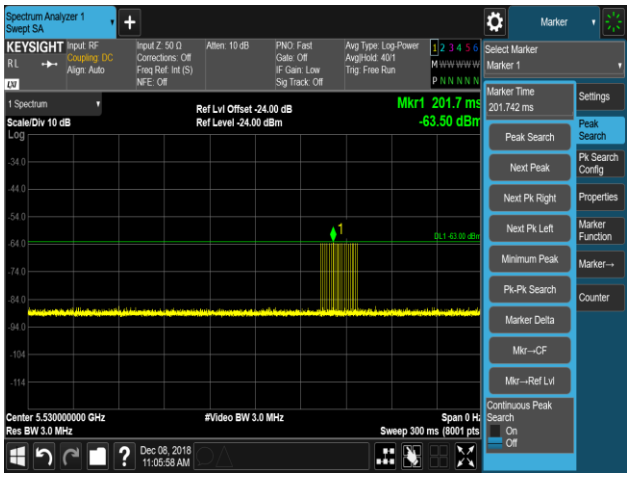
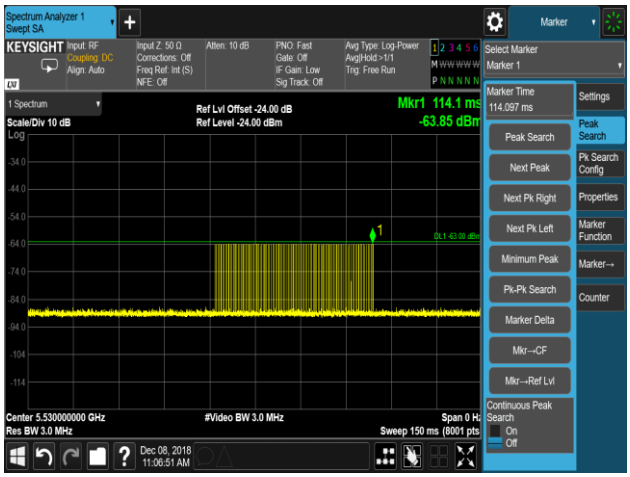
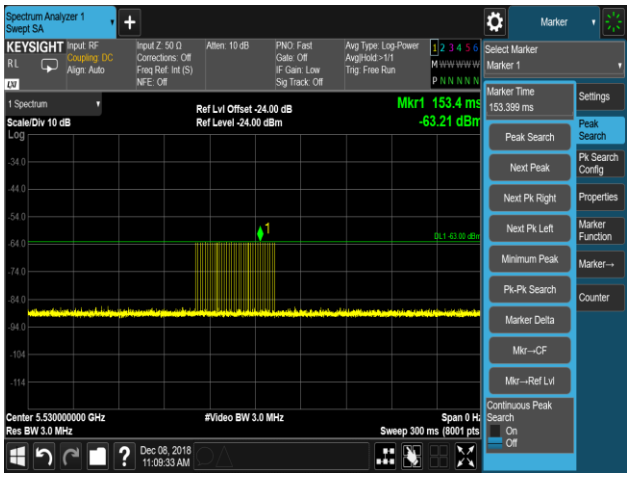
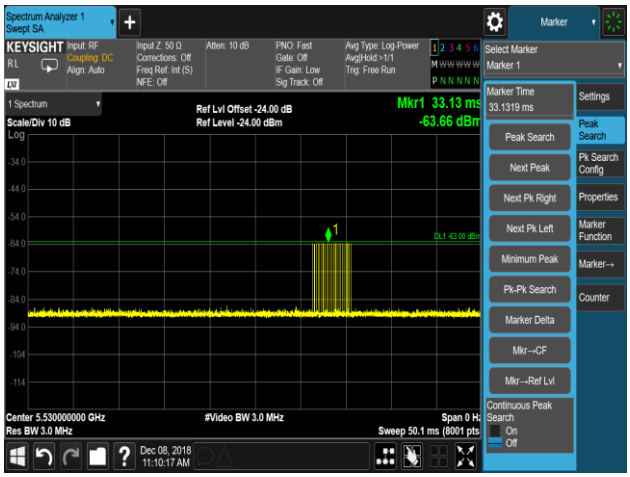
Figure 3-2: Conducted Test Setup

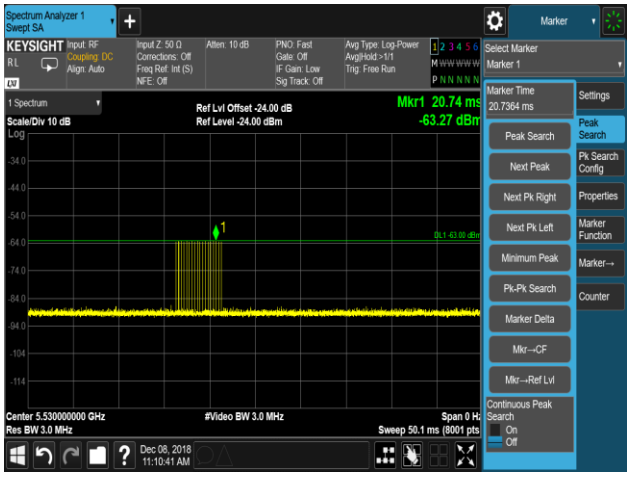
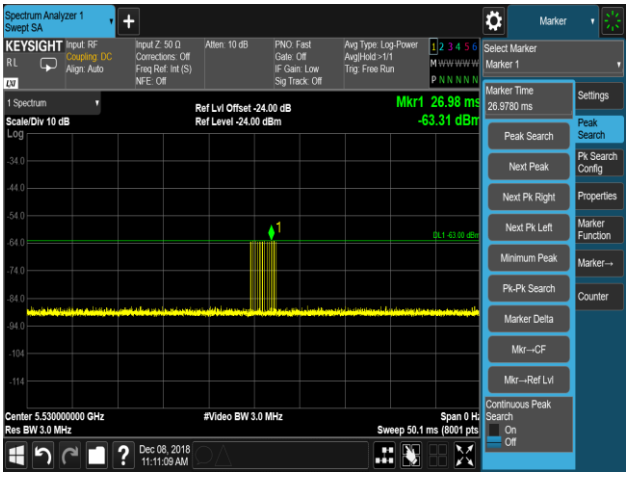
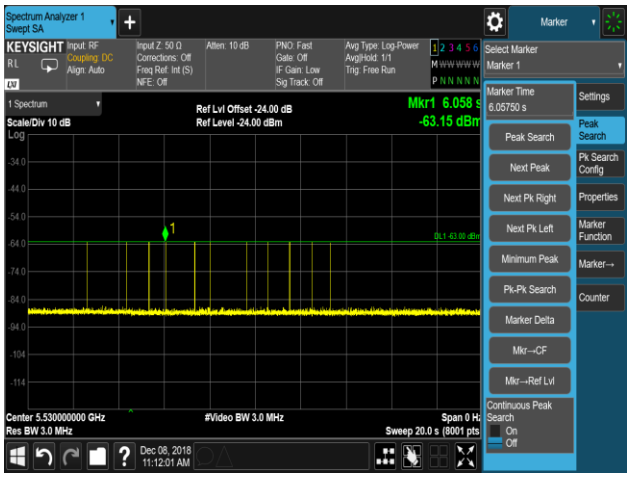
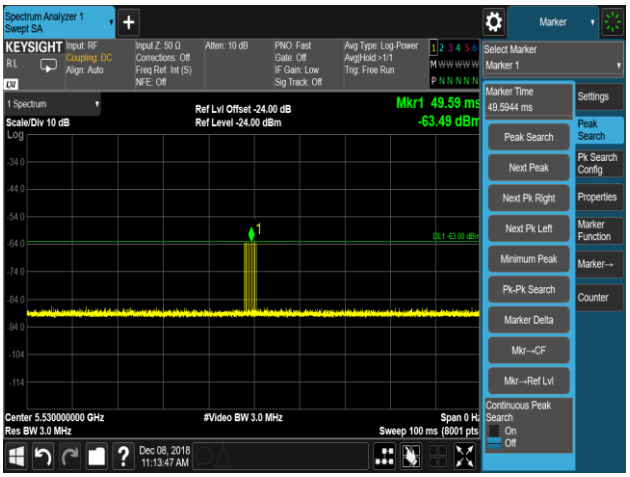
5.2.2. Calibration Procedure

The Interference Radar Detection Threshold Level is (-64dBm) + (0) [dBi] + 1 dB= -63 dBm that had been taken into account the output power range and antenna gain. The above equipment setup was used to calibrate the conducted Radar Waveform. A vector signal generator was utilized to establish the test signal level for each radar type. During this process there were replace 50ohm terminal form Master and Client device and no transmissions by either the Master or Client Device. The spectrum analyzer was switched to the zero span (Time Domain) at the frequency of the Radar Waveform generator. Peak detection was used. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to at least 3MHz. The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was (-64dBm) + (0) [dBi] + 1 dB= -63dBm. Capture the spectrum analyzer plots on short pulse radar types, long pulse radar type and hopping radar waveform.

5.2.3. Cablibration Result

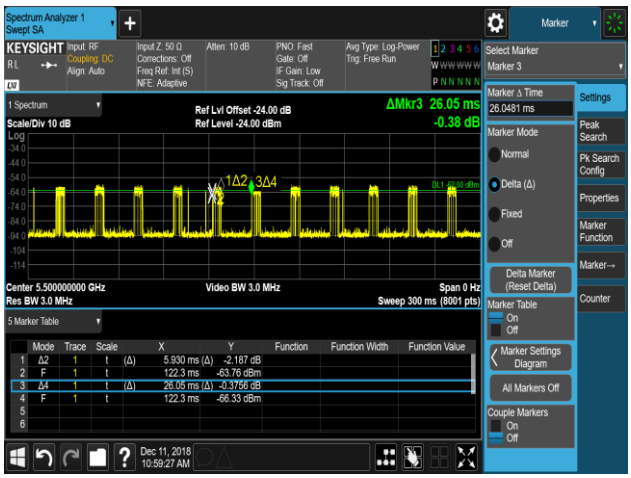
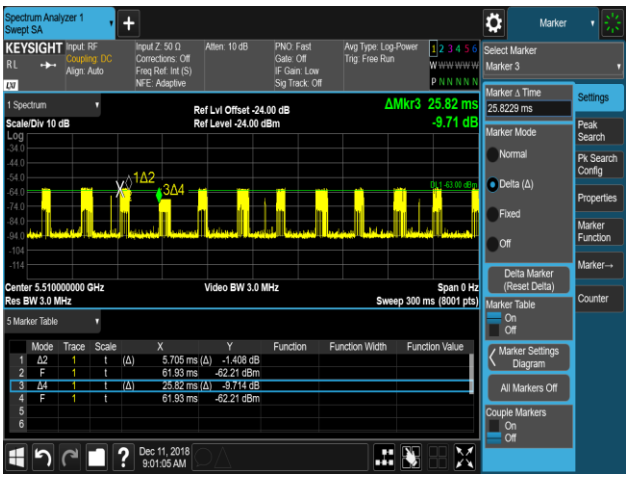
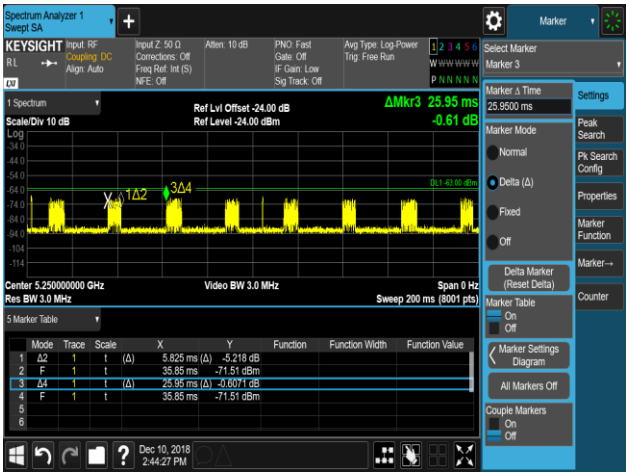
Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/08
Test Item	Radar Waveform Calibration		

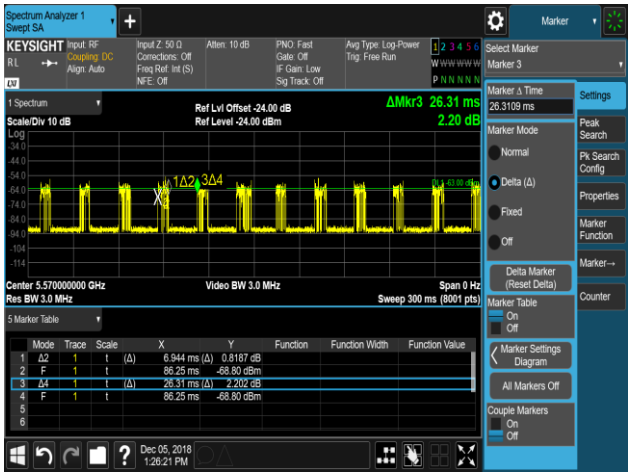
Radar #0	Radar #1 (Test A) PRI = 518us and the number of pulses = 102
	
Radar #1 (Test B) **PRI = 1.555ms and the number of pulses = 34**	**Radar #2**
	

Radar #3	Radar #4
	
Radar #5	**Radar #6**
	

5.2.4. Channel Loading Test Result

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	TR5	Test Date	2018/12/11
Test Item	Channel Loading		

802.11ax-HE20 (5500MHz)	802.11ax-HE40 (5510MHz)
	
802.11ax-HE80 (5530MHz)	**802.11ax-HE160 (5250MHz)**
	

802.11ax-HE160 (5570MHz)	
	

Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11ax-HE20	5500 MHz	22.76%	≥ 17%	Pass
802.11ax-HE40	5510 MHz	22.10%	≥ 17%	Pass
802.11ax-HE80	5530 MHz	24.24%	≥ 17%	Pass
802.11ax-HE160	5250 MHz	22.45%	≥ 17%	Pass
802.11ax-HE160	5570 MHz	26.39%	≥ 17%	Pass
Note: System testing was performed with the designated iperf test file. This file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. Packet ratio = Time On / (Time On + Off Time).				

5.3. 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: U-NII Detection Bandwidth = FH – FL
8. The U-NII Detection Bandwidth must be at least 100% of the EUT transmitter 99% power, otherwise, the EUT does not comply with DFS requirements.

5.3.3. Test Result

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/07
Test Item	Detection Bandwidth (802.11ax-HE20 mode - 5500MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5490.4 FL	1	1	1	1	1	1	1	1	1	1	100%
5490	1	1	1	1	1	1	1	1	1	1	100%
5491	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	1	1	1	1	1	1	1	1	1	1	100%
5509.6 FH	1	1	1	1	1	1	1	1	1	1	100%
5510	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5500MHz. The 99% channel bandwidth is 19.07MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5509.6MHz – 5490.4MHz = 19.20MHz

Note 3: NII Detection Bandwidth Min. Limit (MHz): 19.07MHz x 100% = 19.07MHz.

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/07
Test Item	Detection Bandwidth (802.11ax-HE40 mode – 5510MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 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%
5526	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	100%
5529 FH	1	1	1	1	1	1	1	1	1	1	100%
5530	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5510MHz. The 99% channel bandwidth is 37.56MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5529MHz - 5491MHz = 38MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 37.56MHz x 100% = 37.56MHz.

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/07
Test Item	Detection Bandwidth (802.11ax-HE80 mode – 5530MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%
5530	1	1	1	1	1	1	1	1	1	1	100%
5535	1	1	1	1	1	1	1	1	1	1	100%
5540	1	1	1	1	1	1	1	1	1	1	100%
5545	1	1	1	1	1	1	1	1	1	1	100%
5550	1	1	1	1	1	1	1	1	1	1	100%
5555	1	1	1	1	1	1	1	1	1	1	100%
5560	1	1	1	1	1	1	1	1	1	1	100%
5565	1	1	1	1	1	1	1	1	1	1	100%
5566	1	1	1	1	1	1	1	1	1	1	100%
5567	1	1	1	1	1	1	1	1	1	1	100%
5568	1	1	1	1	1	1	1	1	1	1	100%
5569 FH	1	1	1	1	1	1	1	1	1	1	100%
5570	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz. The 99% channel bandwidth is 77.03MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5569MHz - 5491MHz = 78MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 77.03MHz x 100% = 77.03MHz.

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/07
Test Item	Detection Bandwidth (802.11ax-HE160 mode – 5250MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5250 FL	1	1	1	1	1	1	1	1	1	1	100%
5255	1	1	1	1	1	1	1	1	1	1	100%
5260	1	1	1	1	1	1	1	1	1	1	100%
5265	1	1	1	1	1	1	1	1	1	1	100%
5270	1	1	1	1	1	1	1	1	1	1	100%
5275	1	1	1	1	1	1	1	1	1	1	100%
5280	1	1	1	1	1	1	1	1	1	1	100%
5285	1	1	1	1	1	1	1	1	1	1	100%
5290	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329 FH	1	1	1	1	1	1	1	1	1	1	100%
5330	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical channel bandwidths. Therefore, all DFS testing was done at 5250MHz. The 99% channel bandwidth fall within DFS band is 77.30MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5329MHz - 5250MHz = 79MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 77.30MHz x 100% = 77.30MHz.

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/07
Test Item	Detection Bandwidth (802.11ax-HE160 mode – 5570MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%
5530	1	1	1	1	1	1	1	1	1	1	100%
5535	1	1	1	1	1	1	1	1	1	1	100%
5540	1	1	1	1	1	1	1	1	1	1	100%
5545	1	1	1	1	1	1	1	1	1	1	100%
5550	1	1	1	1	1	1	1	1	1	1	100%
5555	1	1	1	1	1	1	1	1	1	1	100%
5560	1	1	1	1	1	1	1	1	1	1	100%
5565	1	1	1	1	1	1	1	1	1	1	100%
5570	1	1	1	1	1	1	1	1	1	1	100%
5575	1	1	1	1	1	1	1	1	1	1	100%
5580	1	1	1	1	1	1	1	1	1	1	100%
5585	1	1	1	1	1	1	1	1	1	1	100%
5590	1	1	1	1	1	1	1	1	1	1	100%
5595	1	1	1	1	1	1	1	1	1	1	100%
5600	1	1	1	1	1	1	1	1	1	1	100%
5600	1	1	1	1	1	1	1	1	1	1	100%
5610	1	1	1	1	1	1	1	1	1	1	100%
5615	1	1	1	1	1	1	1	1	1	1	100%
5620	1	1	1	1	1	1	1	1	1	1	100%

5625	1	1	1	1	1	1	1	1	1	1	100%
5630	1	1	1	1	1	1	1	1	1	1	100%
5635	1	1	1	1	1	1	1	1	1	1	100%
5640	1	1	1	1	1	1	1	1	1	1	100%
5645	1	1	1	1	1	1	1	1	1	1	100%
5646	1	1	1	1	1	1	1	1	1	1	100%
5647	1	1	1	1	1	1	1	1	1	1	100%
5648	1	1	1	1	1	1	1	1	1	1	100%
5649 FH	1	1	1	1	1	1	1	1	1	1	100%
5650	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5570MHz. The 99% channel bandwidth is 154.70MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL =5649MHz - 5491MHz = 158MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 154.70MHz x 100% = 154.70MHz.

5.4. Initial Channel Availability Check Time Measurement

5.4.1. Test Limit

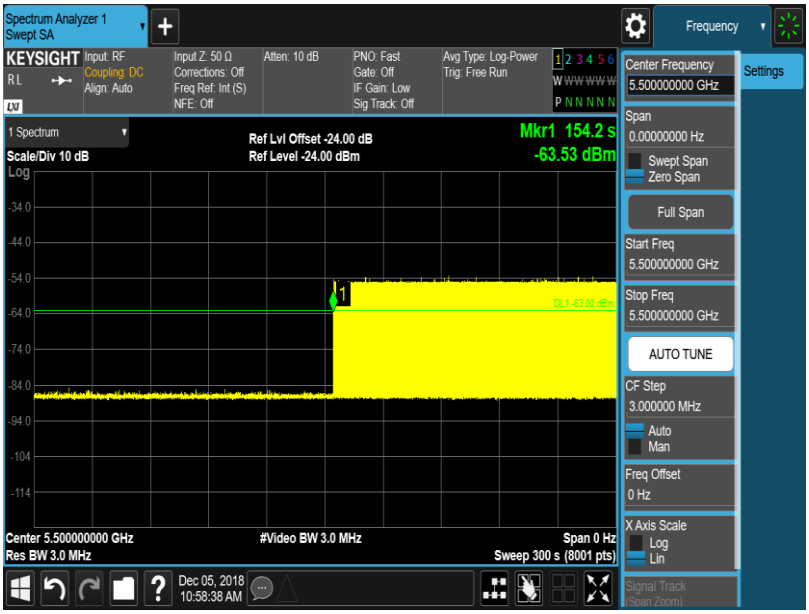
The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute on the intended operating frequency.

5.4.2. Test Procedure

1. The U-NII devices will be powered on and be instructed to operate on the appropriate U-NII Channel that must incorporate DFS functions. At the same time the EUT is powered on, the spectrum analyzer will be set to zero span mode with a 3 MHz RBW and 3 MHz VBW on the Channel occupied by the radar (Chr) with a 2.5 minute sweep time. The spectrum analyzer's sweep will be started at the same time power is applied to the U-NII device.
2. The EUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.
3. Confirm that the EUT initiates transmission on the channel. Measurement system showing its nominal noise floor is marker1.

5.4.3. Test Result

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/05
Test Item	Initial Channel Availability Check Time (802.11ax-HE20 mode - 5500MHz)		

Initial Channel Availability Check Time

Note: The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (94.2 sec). Initial beacons/data transmissions are indicated by marker 1 (154.2 sec).

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

5.5.1. Test Limit

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

5.5.2. Test Procedure

1. The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning of the Channel Availability Check Time.
2. The EUT is in completion power-up cycle (from T0 to T1). T1 denotes the instant when the EUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T1 and will end no sooner than T1 + 60 seconds. A single Burst of one of Short Pulse Radar Types 0-4 at DFS Detection Threshold + 1 dB will commence within a 6 second window starting at T1.
3. Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 2.5 minutes after the radar Burst has been generated. Verify that during the 2.5 minutes measurement window no EUT transmissions occurred.

5.5.3. Test Result

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/05
Test Item	Beginning of the Channel Availability Check Time (802.11ax-HE20 mode - 5500MHz)		

Beginning of the Channel Availability Check Time
Note: The trace was triggered meanwhile the device power up.

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

5.6.1. Test Limit

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

5.6.2. Test Procedure

1. The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning of the Channel Availability Check Time.
2. The EUT is powered on at T0. T1 denotes the instant when the EUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T1 and will end no sooner thanT1 + 60 seconds. A single Burst of one of Short Pulse Radar Types 0-4 at DFS Detection Threshold + 1 dB will commence within a 6 second window starting at T1+ 54 seconds.
3. Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 2.5 minutes after the radar Burst has been generated. Verify that during the 2.5 minutes measurement window no EUT transmissions occurred.

5.6.3. Test Result

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/05
Test Item	End of the Channel Availability Check Time (802.11ax-HE20 mode - 5500MHz)		

End of the Channel Availability Check Time
Note: The trace was triggered meanwhile the device power up.

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

5.7.1. Test Limit

The EUT has In-Service Monitoring function to continuously monitor the radar signals. If the radar is detected, must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec. The total duration of Channel Closing Transmission Time is 260ms, consisting of data signals and the aggregate of control signals, by a U-NII device during the Channel Move Time. The Non-Occupancy Period time is 30 minute during which a Channel will not be utilized after a Radar Waveform is detected on that Channel.

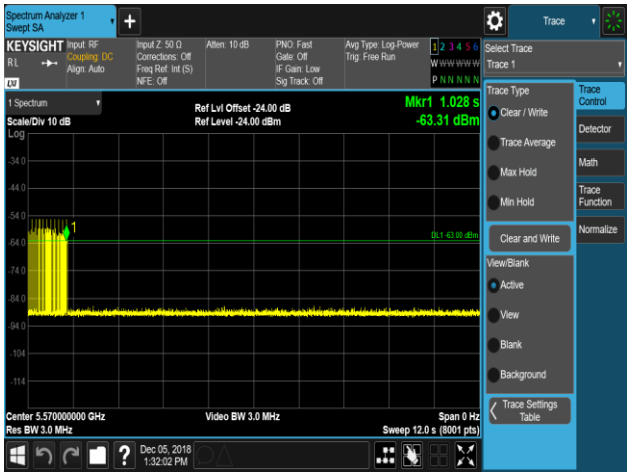
5.7.2. Test Procedure Used

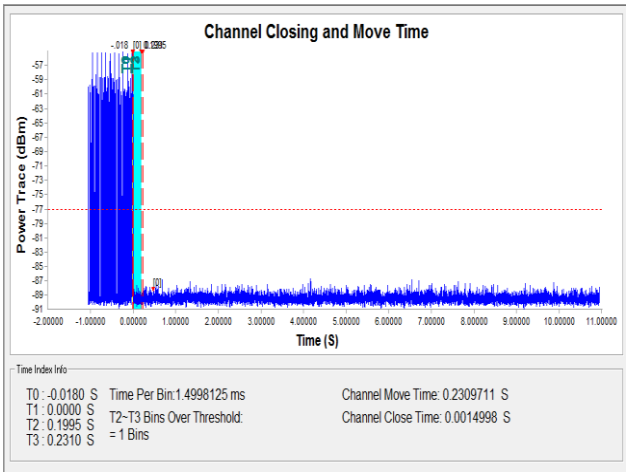
1. The test should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0.
2. When the radar burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device. A U-NII device operating as a Master Device will associate with the Client Device at Channel. Stream the MPEG test file from the Master Device to the Client Device on the selected Channel for the entire period of the test. At time T0 the Radar Waveform generator sends a Burst of pulses for each of the radar types at Detection Threshold + 1dB.
3. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the EUT during the observation time (Channel Move Time).
4. Measurement of the aggregate duration of the Channel Closing Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (1.5ms) = S (12 sec) / B (8000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is the sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C = N X Dwell; where C is the Closing Time, N is the number of spectrum analyzer sampling bins showing a U-NII transmission and Dwell is the dwell time per bin.
5. Measure the EUT for more than 30 minutes following the channel close/move time to verify that the EUT does not resume any transmissions on this Channel.

5.7.3. Test Result

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/05
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11ax-HE160 mode - 5570MHz)		

Channel Move Time and Channel Closing Transmission Time





Non-Occupancy Period

Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.231s	<10s
Channel Closing Transmission Time (ms) (Note)	1.5ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min
Note: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds period. The aggregate duration of control signals will not count quiet periods in between transmissions.		

5.8. Statistical Performance Check Measurement

5.8.1. Test Limit

The minimum percentage of successful detection requirements found in below table when a radar burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device (In- Service Monitoring).

Radar Type	Minimum Number of Trails	Detection Probability
0	30	Pd > 60%
1	30(15 of test A and 15 of test B)	Pd > 60%
2	30	Pd > 60%
3	30	Pd > 60%
4	30	Pd > 60%
Aggregate (Radar Types 1-4)	120	Pd > 80%
5	30	Pd > 80%
6	30	Pd > 70%

The percentage of successful detection is calculated by:
(Total Waveform Detections / Total Waveform Trails) * 100 = Probability of Detection Radar Waveform In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows: (Pd1 + Pd2 + Pd3 + Pd4) / 4.

5.8.2. Test Procedure

1. Stream the MPEG test file from the Master Device to the Client Device on the test Channel for the entire period of the test.
2. At time T0 the Radar Waveform generator sends the individual waveform for each of the Radar Types 1-6, at levels equal to the DFS Detection Threshold + 1dB, on the Operating Channel.
3. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 0 to ensure detection occurs.
4. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs.
5. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.
6. The Minimum number of trails, minimum percentage of successful detection and the average minimum percentage of successful detection are found in below table.

5.8.3. Test Result

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/09
Test Item	Radar Statistical Performance Check (802.11ax-HE20 – 5500MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5492.6	1	538	98	1
2	5500.0	1	758	70	1
3	5497.6	1	3066	18	1
4	5506.3	1	878	61	1
5	5491.8	1	518	102	1
6	5500.0	1	898	59	1
7	5506.9	1	698	76	0
8	5495.5	1	798	67	1
9	5508.8	1	778	68	1
10	5508.3	1	818	65	1
11	5490.4	1	598	89	1
12	5509.6	1	578	92	1
13	5507.2	1	558	95	1
14	5492.9	1	658	81	1
15	5494.0	1	678	78	1
16	5501.2	1	2722	20	1
17	5490.9	1	1687	32	1
18	5498.5	1	722	73	1
19	5496.3	1	2311	23	1
20	5504.7	1	1908	28	1
21	5493.2	1	1926	28	1
22	5502.8	1	702	76	1
23	5491.5	1	1915	28	0
24	5504.1	1	2226	24	1
25	5499.8	1	547	97	1
26	5493.8	1	2643	20	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5505.2	1	1116	48	1
28	5507.8	1	1307	41	1
29	5503.3	1	1057	50	1
30	5505.8	1	3063	18	1
Detection Percentage (%)					93.3%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5492.6	5.0	156	24	1
2	5500.0	1.6	169	28	1
3	5499.8	2.7	203	24	0
4	5504.1	1.9	199	26	1
5	5491.8	3.6	208	25	1
6	5506.9	2.3	199	25	1
7	5498.5	4.6	155	24	1
8	5508.3	2.4	170	26	1
9	5503.3	1.7	202	23	1
10	5492.9	3.6	214	25	1
11	5508.8	4.3	184	29	0
12	5507.2	2.3	171	24	1
13	5491.5	4.8	177	24	1
14	5504.7	1.7	181	28	1
15	5500.0	4.5	212	28	1
16	5490.4	3.6	222	26	1
17	5506.3	5.0	203	27	0
18	5497.6	3.1	228	28	1
19	5509.6	3.1	208	28	1
20	5501.2	1.9	159	27	1
21	5493.2	2.3	223	24	1
22	5505.2	1.9	152	25	0
23	5495.5	4.2	226	24	1
24	5493.8	2.9	170	26	1
25	5507.8	3.4	207	27	1
26	5490.9	4.2	230	29	1
27	5502.8	2.2	226	26	1
28	5496.3	4.0	190	28	1
29	5505.8	4.3	172	26	1
30	5494.0	3.8	213	26	1
Detection Percentage (%)					86.7%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5494.0	7.1	247	16	1
2	5490.9	8.8	388	16	1
3	5500.0	9.7	301	17	1
4	5492.9	8.7	367	16	1
5	5504.7	6.4	273	18	1
6	5490.4	6.8	453	17	0
7	5507.8	8.1	247	17	1
8	5504.1	9.2	422	16	1
9	5493.8	7.8	308	18	1
10	5506.9	7.6	385	18	1
11	5492.6	6.1	373	17	0
12	5509.6	7.8	411	18	1
13	5506.3	8.7	476	16	1
14	5507.2	7.7	405	18	1
15	5495.5	9.7	397	16	1
16	5500.0	6.7	480	18	1
17	5499.8	6.0	212	16	1
18	5493.2	6.8	407	18	1
19	5508.3	6.7	414	18	1
20	5491.5	7.5	470	16	1
21	5503.3	8.8	376	18	1
22	5501.2	7.4	373	17	1
23	5508.8	9.8	256	16	0
24	5505.8	7.7	254	18	1
25	5496.3	7.1	409	16	1
26	5505.2	7.1	463	17	0
27	5497.6	8.2	382	16	1
28	5491.8	8.9	240	18	1
29	5502.8	8.1	410	17	1
30	5498.5	8.9	313	17	1
Detection Percentage (%)					86.7%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5492.9	19.1	284	15	1
2	5502.8	12.0	313	12	1
3	5500.0	11.1	388	14	0
4	5508.8	14.5	258	14	1
5	5506.9	11.5	253	15	1
6	5509.6	18.3	235	16	1
7	5490.4	12.4	267	13	1
8	5499.8	14.4	417	13	1
9	5506.3	16.6	365	15	1
10	5492.6	19.0	238	15	0
11	5504.1	15.5	356	14	1
12	5501.2	11.1	261	14	1
13	5490.9	11.4	289	14	1
14	5507.2	20.0	291	14	1
15	5493.2	18.3	334	13	1
16	5495.5	12.0	413	13	0
17	5491.8	13.1	397	15	1
18	5508.3	13.8	236	12	1
19	5500.0	19.3	259	13	0
20	5493.8	19.9	321	13	1
21	5503.3	14.1	200	14	1
22	5491.5	19.5	486	12	1
23	5505.2	16.9	447	12	1
24	5504.7	17.9	364	16	0
25	5496.3	17.7	490	15	1
26	5498.5	19.5	468	13	1
27	5507.8	14.4	345	13	1
28	5497.6	15.2	248	15	1
29	5505.8	18.2	202	14	1
30	5494.0	14.5	473	16	1
Detection Percentage (%)					83.3%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (93.3%+86.7%+86.7%+83.3%)/4 = 87.5% (>80%)

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5497.7	1	16	5500.0	1
2	5493.7	1	17	5500.0	1
3	5494.5	1	18	5500.0	0
4	5492.5	1	19	5500.0	1
5	5498.1	1	20	5500.0	1
6	5497.3	0	21	5502.3	1
7	5492.9	1	22	5505.9	1
8	5495.3	1	23	5507.1	1
9	5494.1	1	24	5505.5	1
10	5496.1	1	25	5501.9	1
11	5500.0	1	26	5502.7	1
12	5500.0	1	27	5507.5	1
13	5500.0	1	28	5506.3	1
14	5500.0	1	29	5503.9	1
15	5500.0	1	30	5505.9	1
Detection Percentage (%)					93.3%

Type 5 Radar Waveform_1

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	392514	1	18	70	1440	0	0	392514	0	705881
2	412970	1	18	75	1976	0	0	806924	705882	1411763
3	959502	1	18	60	1236	0	0	1768402	1411764	2117645
4	529687	3	18	70	1129	1024	1505	2299325	2117646	2823527
5	770834	2	18	80	1114	1582	0	3073817	2823528	3529409
6	759570	3	18	85	1012	1560	1787	3836083	3529410	4235291
7	425111	3	18	80	1701	1069	1348	4265553	4235292	4941173
8	1059938	1	18	75	1797	0	0	5329609	4941174	5647055
9	490413	2	18	55	1860	1806	0	5821819	5647056	6352937
10	1064703	3	18	50	1341	1542	1373	6890188	6352938	7058819
11	339627	2	18	55	1963	1390	0	7234071	7058820	7764701
12	1030278	1	18	100	1563	0	0	8267702	7764702	8470583
13	467466	1	18	75	1205	0	0	8736731	8470584	9176465
14	865144	1	18	85	1286	0	0	9603080	9176466	9882347
15	309776	1	18	65	1150	0	0	9914142	9882348	10588229
16	1340769	3	18	95	1954	1460	1537	11256061	10588230	11294111
17	678480	2	18	60	1609	1799	0	11939492	11294112	11999993

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

Type 5 Radar Waveform_2

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	765955	1	8	50	1428	0	0	765955	0	857142
2	429125	1	8	100	1115	0	0	1196508	857143	1714285
3	976597	1	8	95	1725	0	0	2174220	1714286	2571428
4	984142	2	8	65	1736	1417	0	3160087	2571429	3428571
5	500648	2	8	90	1559	1732	0	3663888	3428572	4285714
6	1072312	2	8	65	1092	1534	0	4739491	4285715	5142857
7	554320	1	8	50	1175	0	0	5296437	5142858	6000000
8	1455567	3	8	65	1543	1908	1544	6753179	6000001	6857143
9	876615	3	8	50	1206	1873	1103	7634789	6857144	7714286
10	668472	2	8	100	1789	1660	0	8307443	7714287	8571429
11	400633	2	8	65	1060	1904	0	8711525	8571430	9428572
12	1122046	2	8	80	1956	1738	0	9836535	9428573	10285715
13	584065	3	8	65	1299	1961	1418	10424294	10285716	11142858
14	861544	1	8	80	1508	0	0	11290516	11142859	12000001

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

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	424511	2	10	65	1194	1970	0	424511	0	749999
2	1052221	2	10	55	1986	1943	0	1479896	750000	1499999
3	298885	1	10	75	1160	0	0	1782710	1500000	2249999
4	999699	1	10	60	1963	0	0	2783569	2250000	2999999
5	675118	2	10	100	1537	1676	0	3460650	3000000	3749999
6	525408	2	10	70	1040	1365	0	3989271	3750000	4499999
7	532307	1	10	50	1305	0	0	4523983	4500000	5249999
8	1379936	1	10	75	1639	0	0	5905224	5250000	5999999
9	429960	2	10	70	1406	1963	0	6336823	6000000	6749999
10	717408	3	10	90	1926	1918	1420	7057600	6750000	7499999
11	481642	1	10	50	1512	0	0	7544506	7500000	8249999
12	1139695	1	10	50	1837	0	0	8685713	8250000	8999999
13	821476	3	10	70	1783	1897	1772	9509026	9000000	9749999
14	887884	3	10	60	1862	1785	1292	10402362	9750000	10499999
15	453519	3	10	65	1133	1832	1381	10860820	10500000	11249999
16	980293	3	10	95	1631	1202	1742	11845459	11250000	11999999

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

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	11380	3	5	100	1885	1812	1239	11380	0	749999
2	1331472	2	5	100	1686	1026	0	1347788	750000	1499999
3	811940	2	5	60	1415	1647	0	2162440	1500000	2249999
4	594795	1	5	65	1397	0	0	2760297	2250000	2999999
5	715179	1	5	80	1977	0	0	3476873	3000000	3749999
6	757784	3	5	90	1324	1619	1870	4236634	3750000	4499999
7	986759	3	5	70	1008	1905	1814	5228206	4500000	5249999
8	201488	3	5	00	1290	1817	1870	5434421	5250000	5999999
9	930470	1	5	80	1932	0	0	6369868	6000000	6749999
10	469358	2	5	95	1165	1086	0	6841158	6750000	7499999
11	917964	1	5	90	1444	0	0	7761373	7500000	8249999
12	1109313	2	5	50	1527	1185	0	8872130	8250000	8999999
13	635936	1	5	95	1942	0	0	9510778	9000000	9749999
14	650976	3	5	70	1693	1991	1329	10163696	9750000	10499999
15	693468	2	5	70	1901	1121	0	10862177	10500000	11249999
16	553118	1	5	90	1782	0	0	11418317	11250000	11999999

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

Type 5 Radar Waveform_5

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	54246	3	19	65	1848	1080	1648	54246	0	631578
2	1190786	2	19	60	1762	1788	0	1249608	631579	1263157
3	44250	1	19	70	1481	0	0	1297408	1263158	1894736
4	1123490	3	19	70	1335	1842	1817	2422379	1894737	2526315
5	574255	2	19	55	1683	1549	0	3001628	2526316	3157894
6	605275	3	19	90	1368	1463	1978	3610135	3157895	3789473
7	312929	2	19	55	1898	1139	0	3927873	3789474	4421052
8	1066405	3	19	70	1303	1598	1190	4997315	4421053	5052631
9	190674	2	19	100	1906	1157	0	5192080	5052632	5684210
10	986012	1	19	75	1171	0	0	6181155	5684211	6315789
11	421046	3	19	50	1607	1534	1968	6603372	6315790	6947368
12	412853	1	19	75	1225	0	0	7021334	6947369	7578947
13	1140571	1	19	85	1466	0	0	8163130	7578948	8210526
14	295497	2	19	80	1562	1101	0	8460093	8210527	8842105
15	749184	2	19	80	1611	1143	0	9211940	8842106	9473684
16	628774	1	19	50	1175	0	0	9843468	9473685	10105263
17	285816	3	19	80	1016	1555	1277	10130459	10105264	10736842
18	775848	1	19	60	1747	0	0	10910155	10736843	11368421
19	687416	1	19	85	1522	0	0	11599318	11368422	12000000

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

Type 5 Radar Waveform_6

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	522742	1	17	90	1235	0	0	522742	0	923076
2	1164527	2	17	60	1077	1111	0	1688504	923077	1846153
3	354827	2	17	50	1218	1815	0	2045519	1846154	2769230
4	1582348	1	17	95	1415	0	0	3630900	2769231	3692307
5	610168	2	17	75	1353	1768	0	4242483	3692308	4615384
6	1172459	1	17	65	1918	0	0	5418063	4615385	5538461
7	463479	1	17	100	1370	0	0	5883460	5538462	6461538
8	1397775	2	17	95	1980	1613	0	7282605	6461539	7384615
9	609214	3	17	55	1435	1848	1751	7895412	7384616	8307692
10	846473	3	17	60	1948	1388	1714	8746919	8307693	9230769
11	731068	3	17	85	1341	1206	1323	9483037	9230770	10153846
12	827438	1	17	95	1620	0	0	10314345	10153847	11076923
13	1144996	1	17	90	1589	0	0	11460961	11076924	12000000

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

Type 5 Radar Waveform_7

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	573890	1	6	90	1492	0	0	573890	0	1199999
2	1724626	3	6	85	1928	1220	1340	2300008	1200000	2399999
3	766123	2	6	65	1386	1464	0	3070619	2400000	3599999
4	1284015	3	6	65	1897	1871	1402	4357484	3600000	4799999
5	538624	3	6	60	1052	1800	1985	4901278	4800000	5999999
6	1406757	1	6	70	1941	0	0	6312872	6000000	7199999
7	1928054	1	6	65	1427	0	0	8242867	7200000	8399999
8	745678	3	6	90	1388	1604	1074	8989972	8400000	9599999
9	1293360	1	6	50	1634	0	0	10287398	9600000	10799999
10	1417508	2	6	50	1841	1269	0	11706540	10800000	11999999

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

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	160549	2	12	70	1263	1167	0	160549	0	631578
2	505728	1	12	85	1213	0	0	668707	631579	1263157
3	912158	3	12	65	1185	1084	1019	1582078	1263158	1894736
4	899766	2	12	100	1748	1013	0	2485132	1894737	2526315
5	178711	3	12	100	1867	1209	1076	2666604	2526316	3157894
6	1050153	1	12	75	1738	0	0	3720909	3157895	3789473
7	681041	2	12	75	1459	1629	0	4403688	3789474	4421052
8	296101	3	12	55	1455	1898	1777	4702877	4421053	5052631
9	639545	3	12	70	1985	1776	1551	5347552	5052632	5684210
10	934637	3	12	50	1155	1696	1557	6287501	5684211	6315789
11	136616	2	12	90	1394	1787	0	6428525	6315790	6947368
12	745215	2	12	95	1186	1212	0	7176921	6947369	7578947
13	870729	3	12	85	1420	1291	1669	8050048	7578948	8210526
14	332690	1	12	95	1489	0	0	8387118	8210527	8842105
15	775191	3	12	50	1725	1886	1107	9163798	8842106	9473684
16	523430	2	12	80	1633	1911	0	9691946	9473685	10105263
17	799852	1	12	70	1343	0	0	10495342	10105264	10736842
18	732265	1	12	75	1122	0	0	11228950	10736843	11368421
19	387163	3	12	100	1857	1063	1412	11617235	11368422	12000000

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

Type 5 Radar Waveform_9

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us
1	547968	3	9	75	1381	1727	1276	547968	0	999999
2	721229	3	9	50	1807	1330	1887	1273581	1000000	1999999
3	1450749	2	9	50	1887	1455	0	2729354	2000000	2999999
4	740911	1	9	90	1599	0	0	3473607	3000000	3999999
5	850661	1	9	85	1660	0	0	4325867	4000000	4999999
6	1341579	2	9	80	1605	1889	0	5669106	5000000	5999999
7	926463	2	9	50	1230	1441	0	6599063	6000000	6999999
8	1261628	2	9	85	1209	1908	0	7863362	7000000	7999999
9	706998	1	9	95	1047	0	0	8573477	8000000	8999999
10	1012702	1	9	75	1439	0	0	9587226	9000000	9999999
11	935895	2	9	75	1177	1512	0	10524560	10000000	10999999
12	1411819	2	9	85	1958	1752	0	11939068	11000000	11999999

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

Type 5 Radar Waveform_10

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	40976	3	14	70	1407	1046	1187	40976	0	1333332
2	2259716	2	14	65	1369	1065	0	2304332	1333333	2666665
3	659238	2	14	80	1364	1468	0	2966004	2666666	3999998
4	2118412	2	14	75	1173	1970	0	5087248	3999999	5333331
5	1486446	3	14	50	1716	1107	1975	6576837	5333332	6666664
6	1225345	1	14	90	1714	0	0	7806980	6666665	7999997
7	911741	2	14	75	1255	1330	0	8720435	7999998	9333330
8	1717080	1	14	95	1002	0	0	10440100	9333331	10666663
9	986783	3	14	70	1908	1734	1566	11427885	10666664	11999996

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

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	626444	1	12	80	1001	0	0	626444	0	1199999
2	1432175	1	12	60	1627	0	0	2059620	1200000	2399999
3	982361	2	12	75	1993	1903	0	3043608	2400000	3599999
4	1024129	3	12	55	1278	1879	1482	4071633	3600000	4799999
5	1380950	3	12	50	1121	1655	1052	5457222	4800000	5999999
6	565593	3	12	80	1727	1074	1145	6026643	6000000	7199999
7	1903252	3	12	60	1963	1322	1854	7933841	7200000	8399999
8	658771	3	12	65	1080	1368	1078	8597751	8400000	9599999
9	1729877	2	12	80	1639	1410	0	10331154	9600000	10799999
10	475645	1	12	50	1614	0	0	10809848	10800000	11999999

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

Type 5 Radar Waveform_12

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	500289	1	5	80	1616	0	0	500289	0	923076
2	1047555	1	5	75	1118	0	0	1549460	923077	1846153
3	1131535	2	5	100	1644	1467	0	2682113	1846154	2769230
4	834209	3	5	80	1469	1239	1225	3519433	2769231	3692307
5	1069186	1	5	95	1816	0	0	4592552	3692308	4615384
6	541557	3	5	50	1458	1316	1609	5135925	4615385	5538461
7	626258	3	5	100	1379	1826	1575	5766566	5538462	6461538
8	973837	3	5	75	1115	1766	1874	6745183	6461539	7384615
9	1258050	3	5	85	1236	1141	1343	8007988	7384616	8307692
10	1172601	3	5	85	1407	1461	1953	9184309	8307693	9230769
11	96197	1	5	55	1970	0	0	9285327	9230770	10153846
12	1365447	2	5	85	1817	1206	0	10652744	10153847	11076923
13	1117913	2	5	60	1300	1175	0	11773680	11076924	12000000

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

Type 5 Radar Waveform_13

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	74380	3	10	80	1765	1364	1933	74380	0	1090908
2	2052028	1	10	70	1726	0	0	2131470	1090909	2181817
3	642729	2	10	50	1216	1211	0	2775925	2181818	3272726
4	1179917	2	10	75	1257	1865	0	3958269	3272727	4363635
5	453984	1	10	95	1359	0	0	4415375	4363636	5454544
6	1698413	3	10	65	1740	1813	1159	6115147	5454545	6545453
7	696990	1	10	55	1381	0	0	6816849	6545454	7636362
8	1785791	1	10	75	1819	0	0	8604021	7636363	8727271
9	937332	3	10	65	1224	1429	1284	9543172	8727272	9818180
10	1185396	3	10	70	1206	1276	1676	10732505	9818181	10909089
11	702073	3	10	70	1867	1093	1394	11438736	10909090	11999998

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

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	468229	2	17	55	1624	1938	0	468229	0	923076
2	763742	1	17	95	1804	0	0	1235533	923077	1846153
3	1395215	3	17	65	1946	1823	1374	2632552	1846154	2769230
4	741822	3	17	90	1313	1916	1569	3379517	2769231	3692307
5	411294	3	17	80	1935	1571	1354	3795609	3692308	4615384
6	894328	3	17	60	1182	1632	1320	4694797	4615385	5538461
7	903272	2	17	85	1766	1268	0	5602203	5538462	6461538
8	1067032	2	17	75	1926	1814	0	6672269	6461539	7384615
9	1288352	3	17	95	1621	1112	1061	7964361	7384616	8307692
10	577470	2	17	65	1372	1462	0	8545625	8307693	9230769
11	900540	1	17	60	1521	0	0	9448999	9230770	10153846
12	782077	2	17	100	1290	1374	0	10232597	10153847	11076923
13	983305	1	17	55	1482	0	0	11218566	11076924	12000000

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

Type 5 Radar Waveform_15

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	182190	3	14	55	1410	1376	1622	182190	0	1333332
2	1650877	3	14	90	1039	1850	1173	1837475	1333333	2666665
3	1786967	3	14	55	1786	1919	1356	3628504	2666666	3999998
4	762736	1	14	55	1747	0	0	4396301	3999999	5333331
5	1854307	3	14	100	1156	1946	1613	6252355	5333332	6666664
6	437506	2	14	90	1429	1896	0	6694576	6666665	7999997
7	1828218	1	14	95	1080	0	0	8526119	7999998	9333330
8	908118	2	14	60	1651	1564	0	9435317	9333331	10666663
9	2532676	2	14	65	1774	1708	0	11971208	10666664	11999996

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

Type 5 Radar Waveform_16

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	254280	2	19	80	1370	1118	0	254280	0	923076
2	801386	1	19	100	1956	0	0	1058154	923077	1846153
3	873358	3	19	80	1610	1291	1391	1933468	1846154	2769230
4	1123616	2	19	90	1998	1107	0	3061376	2769231	3692307
5	1107810	1	19	50	1810	0	0	4172291	3692308	4615384
6	563498	2	19	80	1865	1640	0	4737599	4615385	5538461
7	1383649	1	19	50	1362	0	0	6124753	5538462	6461538
8	578870	1	19	85	1505	0	0	6704985	6461539	7384615
9	798785	3	19	65	1690	1693	1388	7505275	7384616	8307692
10	1297004	2	19	75	1459	1148	0	8807050	8307693	9230769
11	1314765	2	19	70	1276	1998	0	10124422	9230770	10153846
12	122784	3	19	50	1990	1578	1951	10250480	10153847	11076923
13	1030388	3	19	100	1699	1072	1657	11286387	11076924	12000000

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

Type 5 Radar Waveform_17

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	382283	1	6	50	1401	0	0	382283	0	999999
2	927207	2	6	80	1444	1325	0	1310891	1000000	1999999
3	1186171	2	6	50	1261	1129	0	2499831	2000000	2999999
4	596423	3	6	65	1842	1138	1600	3098644	3000000	3999999
5	1700770	1	6	90	1594	0	0	4803994	4000000	4999999
6	384918	2	6	55	1137	1388	0	5190506	5000000	5999999
7	1318752	1	6	95	1469	0	0	6511783	6000000	6999999
8	778478	3	6	100	1728	1423	1735	7291730	7000000	7999999
9	888050	1	6	55	1045	0	0	8184666	8000000	8999999
10	1661387	2	6	95	1333	1120	0	9847098	9000000	9999999
11	284146	1	6	60	1942	0	0	10133697	10000000	10999999
12	1509386	1	6	50	1810	0	0	11645025	11000000	11999999

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

Type 5 Radar Waveform_18

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	692575	2	9	80	1508	1301	0	692575	0	923076
2	401060	2	9	80	1121	1870	0	1096444	923077	1846153
3	902346	2	9	70	1648	1814	0	2001781	1846154	2769230
4	1460860	3	9	70	1053	1564	1393	3466103	2769231	3692307
5	971333	1	9	70	1904	0	0	4441446	3692308	4615384
6	371118	1	9	80	1479	0	0	4814468	4615385	5538461
7	1208414	2	9	95	1725	1857	0	6024361	5538462	6461538
8	736189	2	9	75	1497	1878	0	6764132	6461539	7384615
9	1406245	3	9	70	1282	1005	1371	8173752	7384616	8307692
10	989943	1	9	55	1885	0	0	9167353	8307693	9230769
11	157091	3	9	100	1142	1358	1258	9326329	9230770	10153846
12	1245497	2	9	70	1777	1134	0	10575584	10153847	11076923
13	1269995	1	9	80	1180	0	0	11848490	11076924	12000000

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

Type 5 Radar Waveform_19

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	891743	3	8	95	1954	1801	1874	891743	0	1199999
2	1204002	1	8	100	1865	0	0	2101374	1200000	2399999
3	1308040	3	8	75	1274	1783	1843	3411279	2400000	3599999
4	977928	2	8	65	1249	1986	0	4394107	3600000	4799999
5	1489447	2	8	75	1058	1544	0	5886789	4800000	5999999
6	453519	2	8	90	1436	1894	0	6342910	6000000	7199999
7	1347065	2	8	50	1583	1296	0	7693305	7200000	8399999
8	720478	2	8	90	1146	1998	0	8416662	8400000	9599999
9	1734541	3	8	90	1577	1632	1205	10154347	9600000	10799999
10	1559146	1	8	80	1302	0	0	11717907	10800000	11999999

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

Type 5 Radar Waveform_20

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	827595	2	18	80	1385	1946	0	827595	0	1499999
2	1312109	1	18	65	1614	0	0	2143035	1500000	2999999
3	1521648	2	18	75	1260	1954	0	3666297	3000000	4499999
4	2044599	1	18	75	1341	0	0	5714110	4500000	5999999
5	1343642	3	18	80	1777	1441	1930	7059093	6000000	7499999
6	574833	2	18	70	1424	1620	0	7639074	7500000	8999999
7	2560170	3	18	70	1718	1561	1181	10202288	9000000	10499999
8	1578612	3	18	70	1915	1921	1060	11785360	10500000	11999999

Total number of pulses in waveform = 17

****

Type 5 Radar Waveform_21

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	869940	1	18	70	1200	0	0	869940	0	1199999
2	347942	2	18	80	1920	1807	0	1219082	1200000	2399999
3	1207054	1	18	65	1948	0	0	2429863	2400000	3599999
4	2123495	3	18	90	1381	1537	1041	4555306	3600000	4799999
5	579636	1	18	60	1659	0	0	5138901	4800000	5999999
6	1336863	2	18	70	1518	1063	0	6477423	6000000	7199999
7	1640777	3	18	100	1771	1594	1816	8120781	7200000	8399999
8	816466	3	18	95	1070	1596	1167	8942428	8400000	9599999
9	1389222	1	18	50	1570	0	0	10335483	9600000	10799999
10	1473200	3	18	50	1268	1948	1032	11810253	10800000	11999999

Total number of pulses in waveform = 20

****

Type 5 Radar Waveform_22

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	195837	2	10	100	1854	1956	0	195837	0	705881
2	905344	2	10	80	1000	1833	0	1104991	705882	1411763
3	849064	2	10	75	1312	1143	0	1956888	1411764	2117645
4	440722	3	10	90	1215	1283	1675	2400065	2117646	2823527
5	707569	2	10	90	1593	1773	0	3111807	2823528	3529409
6	493544	2	10	70	1394	1682	0	3608717	3529410	4235291
7	1228607	3	10	95	1542	1993	1294	4840400	4235292	4941173
8	560212	2	10	65	1095	1153	0	5405441	4941174	5647055
9	453392	1	10	85	1678	0	0	5861081	5647056	6352937
10	1081004	2	10	95	1686	1874	0	6943763	6352938	7058819
11	296484	1	10	85	1470	0	0	7243807	7058820	7764701
12	1045732	3	10	90	1274	1438	1219	8291009	7764702	8470583
13	804615	2	10	50	1079	1294	0	9099555	8470584	9176465
14	479475	3	10	65	1711	1631	1572	9581403	9176466	9882347
15	789222	1	10	70	1609	0	0	10375539	9882348	10588229
16	405791	3	10	70	1120	1199	1229	10782939	10588230	11294111
17	940885	3	10	90	1748	1301	1779	11727372	11294112	11999993

Total number of pulses in waveform = 37

****

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	156486	3	6	60	1333	1161	1043	156486	0	666666
2	1010737	1	6	70	1291	0	0	1170760	666667	1333333
3	415624	2	6	95	1198	1766	0	1587675	1333334	2000000
4	473426	2	6	70	1086	1876	0	2064065	2000001	2666667
5	755708	1	6	90	1129	0	0	2822735	2666668	3333334
6	584575	3	6	90	1888	1869	1491	3408439	3333335	4000001
7	1214353	1	6	100	1316	0	0	4628040	4000002	4666668
8	100756	3	6	60	1099	1546	1269	4730112	4666669	5333335
9	1150023	1	6	55	1759	0	0	5884049	5333336	6000002
10	719709	1	6	95	1495	0	0	6605517	6000003	6666669
11	585311	1	6	50	1181	0	0	7192323	6666670	7333336
12	704891	1	6	95	1507	0	0	7898395	7333337	8000003
13	754086	2	6	85	1687	1515	0	8653988	8000004	8666670
14	283882	2	6	60	1637	1915	0	8941072	8666671	9333337
15	475476	2	6	55	1155	1412	0	9420100	9333338	10000004
16	854154	2	6	50	1958	1391	0	10276821	10000005	10666671
17	763072	3	6	75	1029	1475	1642	11043242	10666672	11333338
18	328681	3	6	80	1086	1094	1223	11376069	11333339	12000005

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

Type 5 Radar Waveform_24

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	371146	3	12	90	1206	1363	1779	371146	0	666666
2	684457	1	12	70	1733	0	0	1059951	666667	1333333
3	729505	3	12	50	1827	1971	1304	1791189	1333334	2000000
4	805616	1	12	50	1216	0	0	2601907	2000001	2666667
5	453790	1	12	60	1033	0	0	3056913	2666668	3333334
6	669506	2	12	100	1513	1674	0	3727452	3333335	4000001
7	412754	2	12	100	1120	1055	0	4143393	4000002	4666668
8	939457	1	12	60	1890	0	0	5085025	4666669	5333335
9	876303	1	12	70	1663	0	0	5963218	5333336	6000002
10	694564	2	12	70	1825	1869	0	6659445	6000003	6666669
11	265211	1	12	70	1171	0	0	6928350	6666670	7333336
12	729892	1	12	80	1026	0	0	7659413	7333337	8000003
13	967173	1	12	70	1129	0	0	8627612	8000004	8666670
14	264154	3	12	100	1961	1198	1480	8892895	8666671	9333337
15	698048	2	12	90	1210	1015	0	9595582	9333338	10000004
16	620029	1	12	55	1102	0	0	10217836	10000005	10666671
17	1039982	3	12	100	1830	1096	1896	11258920	10666672	11333338
18	510210	1	12	95	1282	0	0	11773952	11333339	12000005

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

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	754011	3	19	50	1818	1051	1965	754011	0	923076
2	724118	1	19	55	1094	0	0	1482963	923077	1846153
3	717286	2	19	90	1157	1597	0	2201343	1846154	2769230
4	736837	1	19	95	1331	0	0	2940934	2769231	3692307
5	872021	2	19	75	1596	1908	0	3814286	3692308	4615384
6	1012359	1	19	75	1757	0	0	4830149	4615385	5538461
7	1378016	2	19	65	1581	1467	0	6209922	5538462	6461538
8	687217	1	19	75	1341	0	0	6900187	6461539	7384615
9	973250	1	19	100	1705	0	0	7874778	7384616	8307692
10	1160498	1	19	90	1669	0	0	9036981	8307693	9230769
11	326055	3	19	50	1219	1585	1453	9364705	9230770	10153846
12	1468787	2	19	60	1928	1236	0	10837749	10153847	11076923
13	672141	3	19	75	1279	1160	1399	11513054	11076924	12000000

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

Type 5 Radar Waveform_26

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	448074	1	17	95	1866	0	0	448074	0	923076
2	711454	1	17	55	1898	0	0	1161394	923077	1846153
3	1183974	1	17	55	1858	0	0	2347266	1846154	2769230
4	1160359	2	17	80	1767	1561	0	3509483	2769231	3692307
5	238937	3	17	95	1367	1843	1580	3751748	3692308	4615384
6	1296862	3	17	100	1132	1293	1555	5053400	4615385	5538461
7	1149754	3	17	50	1480	1915	1507	6207134	5538462	6461538
8	587107	1	17	65	1712	0	0	6799143	6461539	7384615
9	1320444	3	17	60	1048	1215	1336	8121299	7384616	8307692
10	783682	3	17	75	1341	1312	1184	8908580	8307693	9230769
11	1088881	3	17	85	1156	1200	1831	10001298	9230770	10153846
12	477944	2	17	75	1196	1814	0	10483429	10153847	11076923
13	1126350	2	17	95	1559	1462	0	11612789	11076924	12000000

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

Type 5 Radar Waveform_27

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	22555	1	5	50	1163	0	0	22555	0	666666
2	772615	1	5	80	1601	0	0	796333	666667	1333333
3	806033	3	5	100	1698	1086	1709	1603967	1333334	2000000
4	573679	3	5	95	1811	1051	1712	2182139	2000001	2666667
5	566345	3	5	80	1897	1897	1937	2753058	2666668	3333334
6	887127	1	5	95	1312	0	0	3645916	3333335	4000001
7	812152	1	5	50	1138	0	0	4459380	4000002	4666668
8	275770	3	5	55	1239	1800	1867	4736288	4666669	5333335
9	1219394	1	5	65	1532	0	0	5960588	5333336	6000002
10	591768	2	5	95	1989	1473	0	6553888	6000003	6666669
11	354817	3	5	100	1361	1960	1436	6912167	6666670	7333336
12	417524	3	5	95	1273	1864	1361	7334448	7333337	8000003
13	1259379	3	5	75	1504	1225	1930	8598325	8000004	8666670
14	602487	2	5	95	1788	1496	0	9205471	8666671	9333337
15	618798	3	5	60	1517	1637	1786	9827553	9333338	10000004
16	471051	3	5	60	1771	1870	1912	10303544	10000005	10666671
17	537013	3	5	90	1666	1316	1241	10846110	10666672	11333338
18	566362	2	5	55	1806	1511	0	11416695	11333339	12000005

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

Type 5 Radar Waveform_28

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	765955	1	8	50	1428	0	0	765955	0	857142
2	429125	1	8	100	1115	0	0	1196508	857143	1714285
3	976597	1	8	95	1725	0	0	2174220	1714286	2571428
4	984142	2	8	65	1736	1417	0	3160087	2571429	3428571
5	500648	2	8	90	1559	1732	0	3663888	3428572	4285714
6	1072312	2	8	65	1092	1534	0	4739491	4285715	5142857
7	554320	1	8	50	1175	0	0	5296437	5142858	6000000
8	1455567	3	8	65	1543	1908	1544	6753179	6000001	6857143
9	876615	3	8	50	1206	1873	1103	7634789	6857144	7714286
10	668472	2	8	100	1789	1660	0	8307443	7714287	8571429
11	400633	2	8	65	1060	1904	0	8711525	8571430	9428572
12	1122046	2	8	80	1956	1738	0	9836535	9428573	10285715
13	584065	3	8	65	1299	1961	1418	10424294	10285716	11142858
14	861544	1	8	80	1508	0	0	11290516	11142859	12000001

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

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	584710	2	14	90	1064	1452	0	584710	0	999999
2	1175732	3	14	65	1088	1012	1385	1762958	1000000	1999999
3	422175	1	14	75	1123	0	0	2188618	2000000	2999999
4	1749374	3	14	85	1976	1420	1703	3939115	3000000	3999999
5	469251	1	14	80	1385	0	0	4413465	4000000	4999999
6	1281789	3	14	60	1119	1189	1548	5696639	5000000	5999999
7	364285	3	14	55	1283	1813	1146	6064780	6000000	6999999
8	1855461	2	14	60	1521	1669	0	7924483	7000000	7999999
9	1012048	2	14	60	1936	1940	0	8939721	8000000	8999999
10	582322	3	14	50	1934	1355	1849	9525919	9000000	9999999
11	1261608	3	14	65	1576	1406	1070	10792665	10000000	10999999
12	727554	3	14	65	1590	1371	1722	11524271	11000000	11999999

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

Type 5 Radar Waveform_30

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	589385	1	9	85	1569	0	0	589385	0	705881
2	435793	3	9	75	1744	1843	1629	1026747	705882	1411763
3	1026373	1	9	65	1494	0	0	2058336	1411764	2117645
4	417385	3	9	75	1222	1101	1524	2477215	2117646	2823527
5	483619	2	9	80	1512	1273	0	2964681	2823528	3529409
6	1054254	3	9	65	1589	1252	1505	4021720	3529410	4235291
7	886916	1	9	80	1124	0	0	4912982	4235292	4941173
8	204464	2	9	95	1520	1856	0	5118570	4941174	5647055
9	886539	2	9	95	1524	1452	0	6008485	5647056	6352937
10	432877	3	9	100	1725	1533	1096	6444338	6352938	7058819
11	1134524	3	9	90	1857	1499	1180	7583216	7058820	7764701
12	237844	3	9	55	1455	1419	1587	7825596	7764702	8470583
13	761823	1	9	70	1422	0	0	8591880	8470584	9176465
14	755215	3	9	95	1618	1718	1070	9348517	9176466	9882347
15	704883	2	9	65	1800	1010	0	10057806	9882348	10588229
16	1107974	3	9	90	1588	1002	1579	11168590	10588230	11294111
17	518218	3	9	85	1109	1534	1001	11690977	11294112	11999993

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

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	5498.5	1	16	5493.2	1
2	5491.5	1	17	5499.8	1
3	5494.0	1	18	5504.7	1
4	5490.4	1	19	5492.9	1
5	5495.5	1	20	5506.3	1
6	5506.9	1	21	5493.8	1
7	5504.1	1	22	5503.3	1
8	5508.3	1	23	5496.3	1
9	5491.8	1	24	5505.2	1
10	5508.8	1	25	5502.8	1
11	5509.6	1	26	5500.0	1
12	5490.9	1	27	5507.2	1
13	5507.8	1	28	5497.6	1
14	5500.0	1	29	5505.8	1
15	5492.6	1	30	5501.2	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	5473	18	1	5477	3
9	5515	27	3	5525	9
10	5476	30	24	5478	72
15	5504	45	27	5487	81
22	5478	66	36	5500	108
31	5481	93	52	5483	156
42	5516	126	54	5494	162
53	5496	159	58	5528	174
56	5528	168	67	5520	201
62	5485	186	69	5472	207
65	5509	195	75	5516	225
77	5474	231	92	5522	276
79	5487	237	98	5495	294
94	5511	282	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5501	0	2	5516	6
9	5490	27	3	5482	9
12	5494	36	12	5473	36
25	5530	75	13	5528	39
48	5503	144	16	5490	48
54	5480	162	17	5526	51
68	5489	204	26	5485	78
82	5515	246	34	5476	102
96	5505	288	54	5487	162
--	--	--	59	5497	177
--	--	--	79	5521	237
--	--	--	80	5489	240
--	--	--	89	5507	267
--	--	--	99	5477	297

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5499	33	4	5482	12
13	5511	39	5	5492	15
23	5529	69	17	5483	51
29	5478	87	20	5528	60
35	5496	105	28	5513	84
38	5490	114	35	5470	105
39	5503	117	48	5480	144
49	5498	147	49	5497	147
55	5486	165	64	5496	192
61	5519	183	75	5517	225
73	5510	219	86	5527	258
79	5495	237	90	5510	270
--	--	--	92	5473	276
--	--	--	99	5503	297

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5474	15	4	5513	12
11	5484	33	8	5514	24
12	5519	36	10	5523	30
16	5512	48	16	5494	48
18	5520	54	24	5477	72
19	5514	57	29	5499	87
28	5509	84	33	5498	99
33	5478	99	37	5480	111
43	5475	129	44	5517	132
48	5529	144	70	5521	210
56	5493	168	74	5474	222
58	5516	174	87	5520	261
66	5470	198	--	--	--
70	5513	210	--	--	--
72	5476	216	--	--	--
77	5491	231	--	--	--
79	5502	237	--	--	--
87	5482	261	--	--	--
89	5500	267	--	--	--
99	5473	297	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5473	30	2	5486	6
24	5477	72	15	5512	45
33	5511	99	17	5492	51
38	5521	114	21	5474	63
56	5489	168	22	5510	66
59	5503	177	46	5503	138
63	5488	189	62	5505	186
64	5496	192	67	5518	201
71	5529	213	73	5527	219
80	5499	240	92	5500	276
84	5526	252	95	5513	285
91	5514	273	96	5521	288

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
16	5511	48	2	5483	6
18	5478	54	20	5494	60
37	5521	111	26	5477	78
40	5487	120	35	5517	105
49	5509	147	37	5493	111
56	5484	168	40	5473	120
58	5488	174	41	5528	123
61	5471	183	51	5510	153
62	5507	186	60	5511	180
69	5514	207	61	5513	183
76	5475	228	64	5514	192
79	5482	237	71	5507	213
84	5504	252	72	5524	216
88	5526	264	85	5479	255
92	5490	276	87	5478	261
96	5480	288	88	5522	264
--	--	--	91	5519	273
--	--	--	92	5470	276
--	--	--	95	5471	285

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5518	0	5	5498	15
3	5482	9	12	5493	36
28	5511	84	31	5476	93
31	5486	93	41	5523	123
52	5507	156	43	5508	129
57	5510	171	52	5477	156
58	5525	174	55	5503	165
62	5483	186	59	5516	177
63	5487	189	73	5491	219
64	5480	192	74	5475	222
65	5522	195	75	5504	225
73	5503	219	77	5479	231
76	5490	228	81	5488	243
78	5500	234	90	5529	270
--	--	--	92	5527	276

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5510	27	13	5519	39
24	5511	72	14	5521	42
25	5496	75	38	5498	114
36	5500	108	44	5485	132
47	5474	141	47	5520	141
54	5497	162	79	5509	237
58	5514	174	89	5503	267
59	5529	177	--	--	--
70	5521	210	--	--	--
75	5503	225	--	--	--
77	5502	231	--	--	--
81	5516	243	--	--	--
83	5498	249	--	--	--
88	5481	264	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5471	6	0	5481	0
7	5492	21	1	5499	3
35	5479	105	4	5526	12
37	5493	111	8	5523	24
50	5512	150	18	5494	54
51	5526	153	21	5472	63
55	5502	165	34	5520	102
58	5517	174	43	5525	129
78	5475	234	44	5482	132
91	5482	273	45	5484	135
94	5477	282	51	5491	153
--	--	--	71	5475	213
--	--	--	74	5476	222
--	--	--	91	5500	273
--	--	--	92	5509	276

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5486	12	11	5480	33
6	5529	18	16	5520	48
15	5479	45	26	5515	78
33	5526	99	37	5524	111
34	5496	102	45	5495	135
35	5525	105	55	5483	165
44	5499	132	62	5529	186
45	5488	135	64	5509	192
48	5475	144	66	5477	198
51	5504	153	81	5517	243
73	5490	219	83	5501	249
80	5489	240	85	5528	255
85	5528	255	--	--	--
92	5517	276	--	--	--
95	5510	285	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5523	6	12	5481	36
36	5520	108	31	5513	93
46	5528	138	34	5520	102
55	5527	165	43	5472	129
64	5492	192	52	5498	156
65	5473	195	53	5505	159
67	5482	201	54	5518	162
72	5486	216	56	5526	168
73	5513	219	62	5512	186
90	5484	270	67	5485	201
--	--	--	68	5493	204
--	--	--	76	5501	228
--	--	--	78	5519	234
--	--	--	79	5530	237
--	--	--	85	5516	255
--	--	--	88	5521	264
--	--	--	92	5495	276
--	--	--	94	5511	282
--	--	--	95	5492	285
--	--	--	99	5480	297

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5500	9	18	5504	54
6	5491	18	32	5508	96
31	5479	93	33	5488	99
41	5514	123	74	5509	222
43	5480	129	75	5490	225
51	5487	153	81	5480	243
69	5481	207	82	5496	246
70	5471	210	86	5485	258
73	5494	219	92	5500	276
76	5482	228	96	5518	288
89	5517	267	--	--	--
93	5508	279	--	--	--
95	5473	285	--	--	--
99	5492	297	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5513	18	36	5501	108
14	5504	42	51	5505	153
17	5508	51	58	5494	174
35	5499	105	59	5488	177
54	5470	162	65	5517	195
64	5489	192	73	5512	219
--	--	--	74	5498	222
--	--	--	84	5493	252
--	--	--	86	5511	258
--	--	--	95	5526	285
--	--	--	97	5490	291

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5501	42	24	5481	72
19	5485	57	28	5489	84
32	5513	96	29	5529	87
33	5482	99	31	5510	93
38	5470	114	38	5511	114
40	5505	120	46	5509	138
41	5500	123	65	5492	195
43	5509	129	80	5525	240
65	5499	195	83	5519	249
81	5528	243	93	5475	279
83	5492	249	97	5502	291
96	5476	288	--	--	--
97	5498	291	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
12	5478	36	22	5490	66
14	5481	42	36	5498	108
16	5513	48	42	5493	126
25	5521	75	47	5525	141
34	5486	102	48	5483	144
42	5529	126	49	5500	147
45	5484	135	50	5470	150
51	5523	153	52	5487	156
55	5518	165	53	5530	159
57	5482	171	56	5486	168
63	5493	189	59	5472	177
64	5512	192	60	5512	180
74	5487	222	62	5520	186
81	5472	243	65	5522	195
85	5494	255	68	5495	204
92	5508	276	71	5515	213
--	--	--	75	5524	225
--	--	--	79	5485	237
--	--	--	81	5494	243

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/10
Test Item	Radar Statistical Performance Check (802.11ax-HE40 mode – 5510MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5510.0	1	698	76	1
2	5497.1	1	758	70	1
3	5515.7	1	918	58	1
4	5505.2	1	578	92	1
5	5518.4	1	618	86	1
6	5491.0	1	878	61	1
7	5526.7	1	738	72	1
8	5504.7	1	538	99	1
9	5524.6	1	818	65	1
10	5509.4	1	898	59	1
11	5529.0	1	938	57	1
12	5519.8	1	838	63	1
13	5492.4	1	598	89	1
14	5503.7	1	858	62	1
15	5500.2	1	658	81	1
16	5498.5	1	2999	18	1
17	5528.3	1	730	73	1
18	5520.4	1	2510	22	1
19	5506.5	1	1197	45	1
20	5516.9	1	708	75	1
21	5493.5	1	710	75	1
22	5522.7	1	3055	18	1
23	5514.3	1	2304	23	1
24	5494.7	1	2754	20	1
25	5508.3	1	1472	36	1
26	5495.2	1	3036	18	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5512.5	1	673	79	1
28	5499.5	1	1242	43	1
29	5502.4	1	1519	35	1
30	5496.8	1	757	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	5496.8	3.3	226	29	1
2	5491.0	3.5	219	23	1
3	5522.7	1.9	223	28	0
4	5528.3	2.7	227	23	1
5	5495.2	3.7	176	26	1
6	5526.7	2.1	152	29	1
7	5499.5	4.6	226	25	1
8	5524.6	3.3	156	29	1
9	5492.4	3.4	157	25	1
10	5529.0	1.1	209	27	1
11	5500.2	1.1	153	23	1
12	5520.4	3.9	211	25	1
13	5497.1	2.5	219	27	1
14	5510.0	2.5	228	23	0
15	5516.9	1.7	185	24	1
16	5493.5	3.0	156	24	1
17	5503.7	4.0	183	28	1
18	5519.8	1.0	196	24	1
19	5494.7	5.0	190	26	1
20	5514.3	3.5	179	29	1
21	5502.4	1.7	212	25	1
22	5498.5	3.9	198	27	1
23	5515.7	4.3	163	26	1
24	5508.3	4.1	188	28	1
25	5518.4	2.2	162	28	1
26	5505.2	4.1	201	27	1
27	5509.4	3.0	206	23	1
28	5512.5	4.6	206	23	1
29	5504.7	1.2	224	29	1
30	5506.5	5.0	188	25	1
Detection Percentage (%)					93.3%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5495.2	9.3	343	18	1
2	5515.7	8.4	319	16	1
3	5510.0	7.2	469	18	1
4	5514.3	9.2	456	18	1
5	5496.8	9.2	280	17	1
6	5522.7	6.4	471	17	1
7	5500.2	9.3	440	17	1
8	5492.4	9.8	257	16	1
9	5512.5	6.7	404	17	1
10	5506.5	7.0	251	16	1
11	5497.1	7.1	408	16	0
12	5520.4	9.5	432	16	1
13	5508.3	9.1	367	16	1
14	5491.0	6.3	461	17	1
15	5528.3	7.8	474	17	1
16	5499.5	8.6	408	17	1
17	5509.4	9.9	359	16	1
18	5505.2	9.7	319	16	1
19	5493.5	7.0	363	18	1
20	5519.8	9.5	255	16	1
21	5498.5	8.1	494	18	1
22	5516.9	7.5	445	18	1
23	5494.7	6.7	335	18	1
24	5524.6	8.6	331	18	1
25	5504.7	7.4	411	18	1
26	5529.0	9.5	345	17	1
27	5502.4	6.6	367	16	0
28	5526.7	8.4	407	16	1
29	5518.4	6.0	354	16	1
30	5503.7	9.8	307	17	1
Detection Percentage (%)					93.3%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5510.0	18.8	478	16	1
2	5494.7	11.2	387	15	1
3	5509.4	18.5	353	14	1
4	5497.1	15.9	348	16	1
5	5508.3	16.4	386	13	1
6	5492.4	19.3	367	16	1
7	5518.4	16.3	448	13	1
8	5512.5	14.1	417	15	1
9	5506.5	18.0	497	15	1
10	5491.0	12.1	489	16	0
11	5504.7	15.4	401	12	1
12	5516.9	18.8	466	14	1
13	5496.8	13.2	277	14	1
14	5515.7	18.1	283	14	1
15	5499.5	20.0	383	14	1
16	5519.8	11.3	365	13	1
17	5498.5	19.9	297	12	1
18	5522.7	20.0	440	15	1
19	5493.5	11.1	468	12	1
20	5514.3	17.6	251	14	1
21	5505.2	12.1	476	13	1
22	5528.3	16.5	442	16	1
23	5495.2	19.9	335	13	1
24	5529.0	12.7	407	13	1
25	5503.7	16.9	447	16	1
26	5520.4	17.2	467	13	0
27	5500.2	16.1	472	14	1
28	5524.6	16.5	405	13	1
29	5526.7	15.8	272	12	1
30	5502.4	16.5	264	14	1
Detection Percentage (%)					93.3%

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%+93.3%+93.3%+93.3%)/4 = 95.0% (>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	5498.0	1	16	5510.0	1
2	5495.2	1	17	5510.0	1
3	5494.4	1	18	5510.0	1
4	5498.4	0	19	5510.0	1
5	5493.2	1	20	5510.0	1
6	5496.8	1	21	5525.6	0
7	5498.8	1	22	5526.8	1
8	5493.6	1	23	5524.8	1
9	5496.0	1	24	5523.2	1
10	5494.8	1	25	5526.4	1
11	5510.0	1	26	5522.0	1
12	5510.0	0	27	5524.0	1
13	5510.0	1	28	5521.6	1
14	5510.0	1	29	5521.2	1
15	5510.0	1	30	5525.2	1
Detection Percentage (%)					90%

Type 5 Radar Waveform_1

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	839483	2	17	65	1549	1375	0	839483	0	1333332
2	1710239	2	17	70	1402	1526	0	2552646	1333333	2666665
3	826078	2	17	50	1916	1131	0	3381652	2666666	3999998
4	1805380	3	17	60	1200	1225	1284	5190079	3999999	5333331
5	1218233	1	17	65	1246	0	0	6412021	5333332	6666664
6	1020950	3	17	70	1647	1720	1054	7434217	6666665	7999997
7	1692021	3	17	95	1369	1434	1822	9130659	7999998	9333330
8	652650	2	17	60	1020	1006	0	9787934	9333331	10666663
9	1422503	1	17	80	1176	0	0	11212463	10666664	11999996

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

Type 5 Radar Waveform_2

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	206772	1	10	85	1887	0	0	206772	0	705881
2	991006	2	10	60	1511	1659	0	1199665	705882	1411763
3	447260	1	10	90	1805	0	0	1650095	1411764	2117645
4	518445	2	10	55	1683	1516	0	2170345	2117646	2823527
5	872594	3	10	60	1177	1094	1036	3046138	2823528	3529409
6	1034083	2	10	75	1735	1225	0	4083528	3529410	4235291
7	334464	3	10	90	1606	1287	1953	4420952	4235292	4941173
8	897963	1	10	100	1766	0	0	5323761	4941174	5647055
9	705392	1	10	75	1002	0	0	6030919	5647056	6352937
10	620693	2	10	70	1459	1502	0	6652614	6352938	7058819
11	877383	1	10	100	1147	0	0	7532958	7058820	7764701
12	709681	1	10	90	1396	0	0	8243786	7764702	8470583
13	904229	1	10	50	1263	0	0	9149411	8470584	9176465
14	232093	2	10	95	1155	1803	0	9382767	9176466	9882347
15	1118099	2	10	70	1834	1749	0	10503824	9882348	10588229
16	246723	1	10	100	1668	0	0	10754130	10588230	11294111
17	1176559	3	10	65	1048	1456	1269	11932357	11294112	11999993

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

Type 5 Radar Waveform_3

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	439016	1	8	65	1359	0	0	439016	0	1090908
2	1112256	3	8	90	1018	1358	1372	1552631	1090909	2181817
3	1512229	2	8	65	1649	1100	0	3068608	2181818	3272726
4	793862	2	8	70	1332	1683	0	3865219	3272727	4363635
5	1419913	2	8	60	1185	1247	0	5288147	4363636	5454544
6	243647	2	8	65	1263	1656	0	5534226	5454545	6545453
7	1554555	2	8	55	1655	1727	0	7091700	6545454	7636362
8	754799	1	8	95	1997	0	0	7849881	7636363	8727271
9	1875446	3	8	100	1157	1586	1885	9727324	8727272	9818180
10	315368	3	8	95	1181	1791	1498	10047320	9818181	10909089
11	1089648	1	8	95	1080	0	0	11141438	10909090	11999998

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

Type 5 Radar Waveform_4

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	590	3	18	55	1924	1816	1110	590	0	666666
2	1243068	3	18	60	1690	1263	1596	1248508	666667	1333333
3	220684	3	18	50	1361	1480	1558	1473741	1333334	2000000
4	1148914	1	18	55	1112	0	0	2627054	2000001	2666667
5	665972	2	18	55	1620	1486	0	3294138	2666668	3333334
6	648663	2	18	60	1953	1136	0	3945907	3333335	4000001
7	189239	1	18	90	1219	0	0	4138235	4000002	4666668
8	1175397	3	18	95	1781	1613	1929	5314851	4666669	5333335
9	487704	2	18	80	1739	1096	0	5807878	5333336	6000002
10	228246	3	18	90	1009	1405	1300	6038959	6000003	6666669
11	1218875	2	18	50	1719	1919	0	7261548	6666670	7333336
12	575705	2	18	65	1625	1644	0	7840891	7333337	8000003
13	410466	3	18	80	1872	1632	2000	8254626	8000004	8666670
14	468017	2	18	75	1146	1421	0	8728147	8666671	9333337
15	615115	3	18	100	1143	1098	1934	9345829	9333338	10000004
16	1227695	3	18	65	1557	1102	1254	10577699	10000005	10666671
17	123085	2	18	90	1503	1268	0	10704697	10666672	11333338
18	1029211	2	18	80	1129	1883	0	11736679	11333339	12000005

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

Type 5 Radar Waveform_5

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	386912	2	5	85	1365	1906	0	386912	0	1333332
2	1311980	1	5	95	1184	0	0	1702163	1333333	2666665
3	1864375	1	5	60	1475	0	0	3567722	2666666	3999998
4	515030	3	5	70	1719	1013	1460	4084227	3999999	5333331
5	2319914	2	5	85	1939	1594	0	6408333	5333332	6666664
6	424659	1	5	50	1983	0	0	6836525	6666665	7999997
7	1763098	1	5	60	1525	0	0	8601606	7999998	9333330
8	1686218	3	5	100	1290	1870	1994	10289349	9333331	10666663
9	1077472	1	5	50	1732	0	0	11371975	10666664	11999996

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

Type 5 Radar Waveform_6

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	768490	2	14	50	1192	1676	0	768490	0	799999
2	638610	3	14	65	1702	1855	1685	1409968	800000	1599999
3	268933	2	14	85	1027	1849	0	1684143	1600000	2399999
4	1097462	2	14	90	1276	1892	0	2784481	2400000	3199999
5	795873	1	14	85	1209	0	0	3583522	3200000	3999999
6	647850	2	14	55	1681	1535	0	4232581	4000000	4799999
7	816815	2	14	65	1434	1464	0	5052612	4800000	5599999
8	1271500	3	14	60	1103	1658	1497	6327010	5600000	6399999
9	458581	2	14	60	1705	1810	0	6789849	6400000	7199999
10	1029866	2	14	65	1330	1136	0	7823230	7200000	7999999
11	243511	2	14	85	1811	1510	0	8069207	8000000	8799999
12	1444164	2	14	100	1320	1589	0	9516692	8800000	9599999
13	428297	1	14	70	1170	0	0	9947898	9600000	10399999
14	573718	1	14	65	1860	0	0	10522786	10400000	11199999
15	1208773	3	14	95	1765	1491	1485	11733419	11200000	11999999

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

Type 5 Radar Waveform_7

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	263678	1	19	55	1115	0	0	263678	0	1499999
2	1439632	1	19	60	1684	0	0	1704425	1500000	2999999
3	1876499	3	19	80	1234	1391	1298	3582608	3000000	4499999
4	2041144	3	19	70	1563	1686	1388	5627675	4500000	5999999
5	1520456	1	19	95	1123	0	0	7152768	6000000	7499999
6	1684488	3	19	60	1541	1206	1209	8838379	7500000	8999999
7	1543396	3	19	90	1147	1090	1514	10385731	9000000	10499999
8	1355901	1	19	90	1969	0	0	11745383	10500000	11999999

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

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	891798	1	6	65	1072	0	0	891798	0	1333332
2	754325	2	6	60	1648	1563	0	1647195	1333333	2666665
3	2068528	1	6	50	1749	0	0	3718934	2666666	3999998
4	721856	3	6	55	1308	1335	1474	4442539	3999999	5333331
5	1191055	1	6	90	1970	0	0	5637711	5333332	6666664
6	1628695	3	6	85	1828	1142	1702	7268376	6666665	7999997
7	1137740	1	6	100	1191	0	0	8410788	7999998	9333330
8	2244602	1	6	85	1126	0	0	10656581	9333331	10666663
9	864513	2	6	60	1979	1249	0	11522220	10666664	11999996

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

Type 5 Radar Waveform_9

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	575785	3	12	60	1460	1021	1670	575785	0	631578
2	497682	1	12	50	1773	0	0	1077618	631579	1263157
3	638072	1	12	60	1935	0	0	1717463	1263158	1894736
4	394136	3	12	90	1498	1136	1832	2113534	1894737	2526315
5	954214	3	12	65	1766	1650	1652	3072214	2526316	3157894
6	121325	3	12	70	1586	1092	1174	3198607	3157895	3789473
7	1099384	1	12	50	1571	0	0	4301843	3789474	4421052
8	356835	3	12	100	1535	1382	1645	4660249	4421053	5052631
9	897340	3	12	100	1678	1273	1831	5562151	5052632	5684210
10	618243	3	12	55	1549	1996	1718	6185176	5684211	6315789
11	406473	2	12	65	1890	1081	0	6596912	6315790	6947368
12	628920	3	12	65	1080	1129	1316	7228803	6947369	7578947
13	651010	3	12	55	1005	1746	1353	7883338	7578948	8210526
14	656763	3	12	65	1716	1988	1827	8544205	8210527	8842105
15	554274	1	12	50	1719	0	0	9104010	8842106	9473684
16	494129	3	12	75	1383	1148	1598	9599858	9473685	10105263
17	1109065	3	12	95	1877	1786	1901	10713052	10105264	10736842
18	465809	3	12	85	1328	1515	1276	11184425	10736843	11368421
19	322466	1	12	50	1107	0	0	11511010	11368422	12000000

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

Type 5 Radar Waveform_10

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	676351	3	9	100	1425	1868	1034	676351	0	923076
2	678601	3	9	90	1199	1146	1463	1359279	923077	1846153
3	847021	1	9	70	1269	0	0	2210108	1846154	2769230
4	1006336	2	9	65	1726	1811	0	3217713	2769231	3692307
5	681646	1	9	90	1836	0	0	3902896	3692308	4615384
6	1461380	2	9	70	1901	1587	0	5366112	4615385	5538461
7	698341	2	9	75	1438	1968	0	6067941	5538462	6461538
8	1172816	3	9	70	1908	1022	1888	7244163	6461539	7384615
9	596850	3	9	90	1215	1953	1102	7845831	7384616	8307692
10	876919	3	9	90	1222	1801	1766	8727020	8307693	9230769
11	649146	2	9	65	1556	1578	0	9380955	9230770	10153846
12	914823	3	9	100	1697	1912	1264	10298912	10153847	11076923
13	940878	3	9	55	1501	1983	1414	11244663	11076924	12000000

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

Type 5 Radar Waveform_11

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	294510	1	6	85	1675	0	0	294510	0	1090908
2	1723507	2	6	95	1151	1965	0	2019692	1090909	2181817
3	269296	1	6	85	1617	0	0	2292104	2181818	3272726
4	1906377	1	6	50	1117	0	0	4200098	3272727	4363635
5	905894	3	6	85	1120	1603	1305	5107109	4363636	5454544
6	669721	1	6	70	1205	0	0	5780858	5454545	6545453
7	1655105	1	6	60	1161	0	0	7437168	6545454	7636362
8	267067	2	6	75	1655	1831	0	7705396	7636363	8727271
9	1144489	1	6	80	1334	0	0	8853371	8727272	9818180
10	1484820	1	6	85	1409	0	0	10339525	9818181	10909089
11	958239	1	6	100	1810	0	0	11299173	10909090	11999998

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

Type 5 Radar Waveform_12

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	715272	2	14	80	1125	1881	0	715272	0	1090908
2	1119030	3	14	60	1048	1838	1484	1837308	1090909	2181817
3	669198	1	14	55	1744	0	0	2510876	2181818	3272726
4	1817095	1	14	65	1623	0	0	4329715	3272727	4363635
5	902707	1	14	85	1218	0	0	5234045	4363636	5454544
6	1196227	2	14	100	1987	1841	0	6431490	5454545	6545453
7	1136188	2	14	65	1558	1455	0	7571506	6545454	7636362
8	366831	1	14	70	1642	0	0	7941350	7636363	8727271
9	1745296	1	14	95	1663	0	0	9688288	8727272	9818180
10	624372	1	14	65	1091	0	0	10314323	9818181	10909089
11	1121766	1	14	60	1691	0	0	11437180	10909090	11999998

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

Type 5 Radar Waveform_13

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	793842	3	9	75	1999	1465	1168	793842	0	857142
2	783522	2	9	70	1029	1064	0	1581996	857143	1714285
3	534593	3	9	100	1837	1158	1403	2118682	1714286	2571428
4	833155	2	9	70	1765	1143	0	2956235	2571429	3428571
5	1045713	2	9	65	1306	1606	0	4004856	3428572	4285714
6	751021	1	9	50	1402	0	0	4758789	4285715	5142857
7	387500	1	9	95	1032	0	0	5147691	5142858	6000000
8	1693119	1	9	60	1733	0	0	6841842	6000001	6857143
9	832647	2	9	85	1579	1973	0	7676222	6857144	7714286
10	389133	2	9	65	1264	1598	0	8068907	7714287	8571429
11	1334690	3	9	70	1452	1757	1151	9406459	8571430	9428572
12	750496	2	9	70	1744	1837	0	10161315	9428573	10285715
13	894229	2	9	55	1951	1664	0	11059125	10285716	11142858
14	915064	1	9	55	1489	0	0	11977804	11142859	12000001

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

Type 5 Radar Waveform_14

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	949978	3	10	55	1196	1447	1748	949978	0	1090908
2	1197778	3	10	70	1907	1699	1405	2152147	1090909	2181817
3	781186	2	10	100	1755	1180	0	2938344	2181818	3272726
4	1014716	2	10	55	1341	1291	0	3955995	3272727	4363635
5	762632	1	10	90	1487	0	0	4721259	4363636	5454544
6	794027	3	10	85	1838	1784	1013	5516773	5454545	6545453
7	1242389	3	10	70	1701	1741	1314	6763797	6545454	7636362
8	1122820	2	10	90	1622	1550	0	7891373	7636363	8727271
9	1178696	1	10	55	1876	0	0	9073241	8727272	9818180
10	1255310	3	10	80	1090	1662	1909	10330427	9818181	10909089
11	1656649	1	10	85	1703	0	0	11991737	10909090	11999998

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

Type 5 Radar Waveform_15

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	698881	1	19	65	1622	0	0	698881	0	799999
2	157316	3	19	90	1741	1666	1656	857819	800000	1599999
3	1153836	2	19	100	1587	1763	0	2016718	1600000	2399999
4	785335	3	19	90	1104	1619	1101	2805403	2400000	3199999
5	1165752	3	19	55	1705	1928	1655	3974979	3200000	3999999
6	620479	2	19	60	1674	1135	0	4600746	4000000	4799999
7	277446	1	19	80	1943	0	0	4881001	4800000	5599999
8	795123	3	19	75	1308	1713	1144	5678067	5600000	6399999
9	1295511	3	19	95	1187	1238	1637	6977743	6400000	7199999
10	249034	3	19	85	1670	1222	1202	7230839	7200000	7999999
11	778191	1	19	70	1268	0	0	8013124	8000000	8799999
12	1361717	1	19	65	1744	0	0	9376109	8800000	9599999
13	894123	1	19	90	1863	0	0	10271976	9600000	10399999
14	894660	2	19	80	1545	1929	0	11168499	10400000	11199999
15	265918	2	19	80	1833	1254	0	11437891	11200000	11999999

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

Type 5 Radar Waveform_16

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	617061	3	18	75	1638	1639	1559	617061	0	1333332
2	1303476	2	18	60	1316	1860	0	1925373	1333333	2666665
3	1164881	1	18	75	1329	0	0	3093430	2666666	3999998
4	2085292	2	18	50	1579	1026	0	5180051	3999999	5333331
5	1365501	2	18	70	1373	1394	0	6548157	5333332	6666664
6	172112	1	18	85	1341	0	0	6723036	6666665	7999997
7	1928888	3	18	50	1812	1980	1011	8653265	7999998	9333330
8	1557554	3	18	75	1806	1333	1505	10215622	9333331	10666663
9	541691	2	18	65	1584	1541	0	10761957	10666664	11999996

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

Type 5 Radar Waveform_17

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	59930	2	5	95	1629	1475	0	59930	0	999999
2	1704391	2	5	55	1570	1090	0	1767425	1000000	1999999
3	368153	1	5	65	1299	0	0	2138238	2000000	2999999
4	1618835	3	5	100	1878	1100	1755	3758372	3000000	3999999
5	353936	1	5	55	1683	0	0	4117041	4000000	4999999
6	1493261	1	5	65	1298	0	0	5611985	5000000	5999999
7	431102	2	5	50	1401	1423	0	6044385	6000000	6999999
8	1762185	1	5	65	1275	0	0	7809394	7000000	7999999
9	682056	3	5	80	1638	1450	1566	8492725	8000000	8999999
10	1138564	1	5	65	1587	0	0	9635943	9000000	9999999
11	777732	3	5	55	1488	1849	1272	10415262	10000000	10999999
12	1127330	3	5	85	1992	1265	1052	11547201	11000000	11999999

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

Type 5 Radar Waveform_18

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	616500	2	12	55	1217	1835	0	616500	0	923076
2	834024	2	12	95	1293	1965	0	1453576	923077	1846153
3	772267	3	12	85	1314	1404	1126	2229101	1846154	2769230
4	1166461	3	12	90	1641	1605	1291	3399406	2769231	3692307
5	999959	2	12	85	1147	1860	0	4403902	3692308	4615384
6	790573	3	12	60	1171	1263	1511	5197482	4615385	5538461
7	537074	2	12	75	1376	1891	0	5738501	5538462	6461538
8	1581389	3	12	75	1386	1277	1679	7323157	6461539	7384615
9	94075	3	12	95	1619	1948	1625	7421574	7384616	8307692
10	1412896	1	12	70	1285	0	0	8839662	8307693	9230769
11	1008901	1	12	50	1215	0	0	9849848	9230770	10153846
12	776953	2	12	75	1226	1961	0	10628016	10153847	11076923
13	582061	1	12	80	1765	0	0	11213264	11076924	12000000

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

Type 5 Radar Waveform_19

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	36891	1	8	100	1819	0	0	36891	0	666666
2	842201	1	8	80	1408	0	0	880911	666667	1333333
3	972307	1	8	55	1562	0	0	1854626	1333334	2000000
4	207628	1	8	50	1083	0	0	2063816	2000001	2666667
5	1133723	1	8	60	1510	0	0	3198622	2666668	3333334
6	316011	3	8	80	1737	1429	1802	3516143	3333335	4000001
7	957691	1	8	90	1754	0	0	4478802	4000002	4666668
8	465395	3	8	75	1750	1919	1501	4945951	4666669	5333335
9	913214	3	8	80	1096	1175	1645	5864335	5333336	6000002
10	439713	2	8	70	1770	1206	0	6307964	6000003	6666669
11	420445	2	8	90	1175	1388	0	6731385	6666670	7333336
12	616518	3	8	70	1096	1603	1895	7350466	7333337	8000003
13	745407	1	8	70	1833	0	0	8100467	8000004	8666670
14	603822	1	8	55	1477	0	0	8706122	8666671	9333337
15	725454	2	8	100	1113	1441	0	9433053	9333338	10000004
16	1175486	2	8	60	1012	1277	0	10611093	10000005	10666671
17	551696	3	8	55	1397	1275	1337	11165078	10666672	11333338
18	177346	2	8	80	1338	1094	0	11346433	11333339	12000005

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

Type 5 Radar Waveform_20

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	314121	1	17	55	1851	0	0	314121	0	999999
2	790192	3	17	95	1169	1935	1560	1106164	1000000	1999999
3	1263881	2	17	100	1622	1380	0	2374709	2000000	2999999
4	909443	2	17	85	1123	1538	0	3287154	3000000	3999999
5	1211004	2	17	55	1377	1685	0	4500819	4000000	4999999
6	1071679	3	17	75	1766	1693	1334	5575560	5000000	5999999
7	1129829	1	17	50	1500	0	0	6710182	6000000	6999999
8	1075353	3	17	75	1783	1695	1921	7787035	7000000	7999999
9	934158	1	17	100	1312	0	0	8726592	8000000	8999999
10	818855	1	17	90	1652	0	0	9546759	9000000	9999999
11	1435375	3	17	60	1204	1893	1373	10983786	10000000	10999999
12	298866	3	17	70	1518	1260	1407	11287122	11000000	11999999

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

Type 5 Radar Waveform_21

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	305787	2	8	75	1310	1060	0	305787	0	749999
2	704995	1	8	60	1686	0	0	1013152	750000	1499999
3	912163	1	8	80	1624	0	0	1927001	1500000	2249999
4	809623	3	8	90	1494	1450	1425	2738248	2250000	2999999
5	426937	2	8	90	1244	1034	0	3169554	3000000	3749999
6	1196431	2	8	55	1009	1850	0	4368263	3750000	4499999
7	779436	2	8	75	1251	1375	0	5150558	4500000	5249999
8	532652	1	8	60	1675	0	0	5685836	5250000	5999999
9	414301	1	8	60	1953	0	0	6101812	6000000	6749999
10	1160564	2	8	50	1533	1316	0	7264329	6750000	7499999
11	408533	3	8	60	1806	1279	1824	7675711	7500000	8249999
12	752971	1	8	65	1125	0	0	8433591	8250000	8999999
13	915619	3	8	50	1947	1702	1776	9350335	9000000	9749999
14	684686	3	8	55	1298	1229	1259	10040446	9750000	10499999
15	909936	1	8	55	1356	0	0	10954168	10500000	11249999
16	1025648	2	8	95	1880	1196	0	11981172	11250000	11999999

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

Type 5 Radar Waveform_22

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	1295486	3	5	65	1181	1394	1383	1295486	0	1333332
2	1010911	1	5	65	1512	0	0	2310355	1333333	2666665
3	1550341	3	5	55	1577	1072	1503	3862208	2666666	3999998
4	203504	1	5	90	1244	0	0	4069864	3999999	5333331
5	2139923	3	5	60	1203	1468	1241	6211031	5333332	6666664
6	919482	3	5	85	1693	1212	1686	7134425	6666665	7999997
7	1346583	2	5	90	1839	1474	0	8485599	7999998	9333330
8	1854044	1	5	60	1425	0	0	10342956	9333331	10666663
9	425704	3	5	65	1683	1504	1648	10770085	10666664	11999996

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

Type 5 Radar Waveform_23

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	1106137	3	10	65	1278	1265	1595	1106137	0	1199999
2	983803	2	10	50	1225	1080	0	2094078	1200000	2399999
3	1341943	3	10	80	1655	1563	1355	3438326	2400000	3599999
4	295678	2	10	50	1128	1112	0	3738577	3600000	4799999
5	1536197	2	10	80	1024	1199	0	5277014	4800000	5999999
6	735463	1	10	55	1702	0	0	6014700	6000000	7199999
7	1279823	1	10	90	1423	0	0	7296225	7200000	8399999
8	1633916	3	10	100	1301	1763	1532	8931564	8400000	9599999
9	1754629	3	10	95	1873	1288	1302	10690789	9600000	10799999
10	180932	3	10	80	1235	1745	1602	10876184	10800000	11999999

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

Type 5 Radar Waveform_24

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	61694	2	14	80	1947	1296	0	61694	0	749999
2	1074944	2	14	85	1317	1063	0	1139881	750000	1499999
3	676454	3	14	95	1361	1745	1406	1818715	1500000	2249999
4	731119	1	14	65	1905	0	0	2554346	2250000	2999999
5	975153	3	14	75	1436	1376	1704	3531404	3000000	3749999
6	576281	2	14	80	1654	1304	0	4112201	3750000	4499999
7	657709	3	14	85	1153	1768	1080	4772868	4500000	5249999
8	855265	3	14	90	1944	1102	1021	5632134	5250000	5999999
9	1058031	3	14	75	1622	1866	1651	6694232	6000000	6749999
10	380294	2	14	55	1170	1338	0	7079665	6750000	7499999
11	553258	1	14	75	1575	0	0	7635431	7500000	8249999
12	798769	1	14	80	1702	0	0	8435775	8250000	8999999
13	1142119	1	14	75	1978	0	0	9579596	9000000	9749999
14	794475	2	14	75	1391	1806	0	10376049	9750000	10499999
15	811580	1	14	80	1905	0	0	11190826	10500000	11249999
16	227852	2	14	70	1108	1800	0	11420583	11250000	11999999

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

Type 5 Radar Waveform_25

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	628201	1	6	50	1012	0	0	628201	0	1090908
2	1017383	3	6	55	1298	1880	1294	1646596	1090909	2181817
3	771459	2	6	50	1995	1483	0	2422527	2181818	3272726
4	1459943	1	6	90	1590	0	0	3885948	3272727	4363635
5	539596	1	6	60	1583	0	0	4427134	4363636	5454544
6	1200772	3	6	100	1493	1080	1144	5629489	5454545	6545453
7	1369631	2	6	65	1553	1122	0	7002837	6545454	7636362
8	1609430	3	6	95	1922	1433	1607	8614942	7636363	8727271
9	928023	3	6	85	1498	1138	1000	9547927	8727272	9818180
10	770595	2	6	85	1442	1489	0	10322158	9818181	10909089
11	720120	2	6	80	1490	1037	0	11045209	10909090	11999998

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

Type 5 Radar Waveform_26

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	444278	3	17	50	1952	1495	1280	444278	0	1199999
2	965384	3	17	55	1015	1566	1340	1414389	1200000	2399999
3	2018890	3	17	75	1249	1154	1021	3437200	2400000	3599999
4	237511	2	17	90	1864	1153	0	3678135	3600000	4799999
5	1797541	3	17	75	1341	1605	1425	5478693	4800000	5999999
6	1108149	1	17	75	1485	0	0	6591213	6000000	7199999
7	1063619	1	17	60	1435	0	0	7656317	7200000	8399999
8	1172047	3	17	50	1534	1767	1166	8829799	8400000	9599999
9	919940	2	17	75	1226	1410	0	9754206	9600000	10799999
10	2024800	2	17	65	1882	1875	0	11781642	10800000	11999999

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

Type 5 Radar Waveform_27

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	621183	2	12	50	1164	1222	0	621183	0	705881
2	495681	2	12	70	1237	1641	0	1119250	705882	1411763
3	928591	3	12	100	1923	1337	1113	2050719	1411764	2117645
4	620522	2	12	50	1106	1543	0	2675614	2117646	2823527
5	639554	1	12	80	1679	0	0	3317817	2823528	3529409
6	861266	1	12	60	1161	0	0	4180762	3529410	4235291
7	227261	1	12	100	1136	0	0	4409184	4235292	4941173
8	543309	1	12	95	1847	0	0	4953629	4941174	5647055
9	732618	2	12	60	1770	1106	0	5688094	5647056	6352937
10	721595	3	12	90	1190	1441	1648	6412565	6352938	7058819
11	1252496	3	12	85	1217	1613	1186	7669340	7058820	7764701
12	117765	2	12	50	1926	1920	0	7791121	7764702	8470583
13	1361239	3	12	50	1194	1289	1769	9156206	8470584	9176465
14	368054	2	12	75	1329	1767	0	9528512	9176466	9882347
15	847406	3	12	85	1317	1820	1175	10379014	9882348	10588229
16	592698	3	12	50	1502	1483	1090	10976024	10588230	11294111
17	406353	2	12	95	1171	1441	0	11386452	11294112	11999993

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

Type 5 Radar Waveform_28

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	345804	1	18	55	1594	0	0	345804	0	1499999
2	1491021	1	18	65	1607	0	0	1838419	1500000	2999999
3	2424526	3	18	60	1771	1658	1060	4264552	3000000	4499999
4	1720181	3	18	50	1572	1582	1868	5989222	4500000	5999999
5	1156532	3	18	95	1961	1177	1606	7150776	6000000	7499999
6	1276681	3	18	95	1222	1967	1583	8432201	7500000	8999999
7	2050771	2	18	80	1760	1477	0	10487744	9000000	10499999
8	713982	2	18	85	1410	1734	0	11204963	10500000	11999999

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

Type 5 Radar Waveform_29

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	511535	3	19	100	1619	1487	1138	511535	0	599999
2	124497	2	19	95	1115	1807	0	640276	600000	1199999
3	994149	2	19	55	1191	1394	0	1637347	1200000	1799999
4	503537	2	19	95	1847	1750	0	2143469	1800000	2399999
5	593270	3	19	75	1273	1852	1003	2740336	2400000	2999999
6	655493	3	19	55	1143	1578	1865	3399957	3000000	3599999
7	746951	3	19	65	1077	1343	1186	4151494	3600000	4199999
8	577892	2	19	95	1377	1870	0	4732992	4200000	4799999
9	224391	1	19	75	1543	0	0	4960630	4800000	5399999
10	993216	2	19	100	1780	1770	0	5955389	5400000	5999999
11	421004	3	19	80	1073	1618	1071	6379943	6000000	6599999
12	398828	2	19	90	1535	1314	0	6782533	6600000	7199999
13	559620	1	19	90	1166	0	0	7345002	7200000	7799999
14	877481	2	19	70	1870	1089	0	8223649	7800000	8399999
15	381902	3	19	95	1171	1542	1149	8608510	8400000	8999999
16	587714	1	19	95	1005	0	0	9200086	9000000	9599999
17	583678	2	19	55	1673	1722	0	9784769	9600000	10199999
18	699249	2	19	55	1121	1500	0	10487413	10200000	10799999
19	702867	3	19	85	1774	1405	1054	11192901	10800000	11399999
20	594713	2	19	70	1161	1316	0	11791847	11400000	11999999

Total number of pulses in waveform = 44

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	383156	1	9	80	1133	0	0	383156	0	666666
2	457721	2	9	90	1880	1439	0	842010	666667	1333333
3	970836	3	9	65	1699	1641	1564	1816165	1333334	2000000
4	570230	3	9	80	1378	1390	1515	2391299	2000001	2666667
5	703853	1	9	95	1567	0	0	3099435	2666668	3333334
6	720566	1	9	100	1307	0	0	3821568	3333335	4000001
7	367111	3	9	85	1613	1480	1796	4189986	4000002	4666668
8	957414	3	9	55	1007	1896	1316	5152289	4666669	5333335
9	319144	2	9	90	1124	1705	0	5475652	5333336	6000002
10	1047332	2	9	80	1441	1447	0	6525813	6000003	6666669
11	249241	3	9	55	1511	1722	1389	6777942	6666670	7333336
12	740495	2	9	70	1180	1078	0	7523059	7333337	8000003
13	677300	2	9	85	1891	1739	0	8202617	8000004	8666670
14	1096861	1	9	65	1541	0	0	9303108	8666671	9333337
15	447346	2	9	85	1976	1734	0	9751995	9333338	10000004
16	564642	1	9	50	1756	0	0	10320347	10000005	10666671
17	797384	1	9	55	1535	0	0	11119487	10666672	11333338
18	605657	1	9	90	1008	0	0	11726679	11333339	12000005

Total number of pulses in waveform = 34

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5499.5	1	16	5522.7	1
2	5493.5	1	17	5495.2	1
3	5496.8	1	18	5514.3	1
4	5502.4	1	19	5528.3	1
5	5526.7	1	20	5519.8	1
6	5520.4	1	21	5510.0	1
7	5492.4	1	22	5491.0	1
8	5512.5	1	23	5524.6	1
9	5494.7	1	24	5509.4	1
10	5500.2	1	25	5506.5	1
11	5503.7	1	26	5518.4	1
12	5497.1	1	27	5508.3	1
13	5498.5	1	28	5529.0	1
14	5505.2	1	29	5516.9	1
15	5504.7	1	30	5515.7	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5517	0	16	5513	48
9	5470	27	21	5468	63
21	5485	63	27	5515	81
34	5494	102	34	5503	102
56	5484	168	42	5509	126
58	5513	174	47	5475	141
65	5462	195	52	5519	156
66	5461	198	54	5465	162
67	5497	201	64	5496	192
75	5478	225	70	5488	210
94	5475	282	87	5473	261
98	5474	294	88	5520	264

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5466	9	6	5464	18
6	5478	18	26	5496	78
7	5491	21	29	5472	87
25	5477	75	31	5489	93
29	5464	87	37	5485	111
37	5517	111	44	5512	132
41	5511	123	67	5477	201
51	5473	153	77	5470	231
70	5487	210	84	5516	252
71	5492	213	85	5499	255
72	5465	216	87	5480	261
80	5504	240	88	5518	264
81	5509	243	90	5493	270
86	5519	258	--	--	--
89	5497	267	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5530	0	25	5516	75
14	5509	42	33	5523	99
21	5513	63	38	5525	114
27	5512	81	46	5518	138
31	5529	93	60	5491	180
39	5507	117	67	5483	201
46	5481	138	99	5470	297
53	5515	159	--	--	--
57	5496	171	--	--	--
58	5495	174	--	--	--
76	5478	228	--	--	--
78	5493	234	--	--	--
88	5521	264	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5487	3	1	5496	3
17	5520	51	6	5514	18
30	5528	90	12	5474	36
43	5497	129	17	5512	51
51	5483	153	22	5487	66
55	5486	165	23	5497	69
65	5480	195	29	5482	87
68	5524	204	34	5492	102
70	5504	210	49	5504	147
81	5481	243	50	5502	150
93	5527	279	54	5489	162
--	--	--	56	5472	168
--	--	--	61	5522	183
--	--	--	67	5475	201
--	--	--	75	5495	225
--	--	--	87	5509	261
--	--	--	90	5528	270
--	--	--	99	5506	297

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5510	33	1	5517	3
16	5533	48	14	5511	42
39	5497	117	16	5491	48
41	5506	123	21	5537	63
62	5508	186	33	5486	99
71	5479	213	47	5490	141
84	5511	252	62	5492	186
85	5515	255	63	5483	189
93	5539	279	65	5480	195
98	5531	294	70	5515	210
--	--	--	72	5535	216
--	--	--	81	5524	243
--	--	--	86	5497	258
--	--	--	88	5528	264

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5534	12	0	5529	0
23	5506	69	4	5527	12
25	5508	75	8	5507	24
29	5496	87	20	5506	60
31	5490	93	23	5485	69
34	5497	102	29	5495	87
81	5488	243	35	5532	105
89	5483	267	53	5511	159
--	--	--	56	5486	168
--	--	--	64	5493	192
--	--	--	69	5496	207
--	--	--	75	5488	225
--	--	--	88	5497	264
--	--	--	94	5533	282
--	--	--	95	5538	285
--	--	--	97	5502	291
--	--	--	98	5480	294

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5495	12	6	5510	18
12	5488	36	7	5505	21
17	5485	51	8	5533	24
52	5484	156	9	5498	27
69	5529	207	14	5520	42
73	5498	219	17	5482	51
74	5496	222	20	5493	60
81	5518	243	34	5518	102
84	5501	252	35	5529	105
91	5527	273	41	5480	123
93	5502	279	48	5497	144
--	--	--	49	5506	147
--	--	--	67	5504	201
--	--	--	71	5538	213

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5539	39	13	5522	39
20	5530	60	19	5515	57
44	5538	132	24	5482	72
48	5512	144	25	5480	75
54	5518	162	27	5518	81
72	5521	216	31	5491	93
74	5488	222	32	5534	96
88	5511	264	39	5536	117
93	5532	279	49	5514	147
94	5537	282	53	5500	159
95	5489	285	72	5484	216
--	--	--	76	5539	228
--	--	--	78	5490	234

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5513	39	1	5537	3
16	5528	48	17	5493	51
26	5483	78	26	5540	78
51	5508	153	29	5529	87
54	5531	162	30	5499	90
69	5517	207	31	5535	93
70	5536	210	35	5525	105
74	5515	222	38	5507	114
88	5502	264	39	5524	117
93	5522	279	42	5536	126
13	5513	39	77	5482	231
16	5528	48	81	5480	243
--	--	--	85	5484	255
--	--	--	86	5496	258
--	--	--	99	5501	297

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5526	9	2	5528	6
23	5534	69	3	5522	9
24	5518	72	14	5540	42
30	5496	90	27	5518	81
36	5537	108	32	5490	96
38	5513	114	39	5523	117
40	5516	120	47	5509	141
41	5506	123	58	5529	174
48	5530	144	67	5492	201
59	5520	177	84	5485	252
60	5497	180	95	5516	285
65	5483	195	99	5504	297
66	5512	198	--	--	--
92	5524	276	--	--	--
98	5486	294	--	--	--
99	5489	297	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5492	0	4	5485	12
22	5495	66	5	5508	15
23	5507	69	13	5530	39
26	5483	78	19	5541	57
38	5521	114	38	5515	114
43	5491	129	43	5492	129
44	5537	132	47	5506	141
54	5516	162	53	5513	159
67	5539	201	61	5534	183
95	5520	285	66	5526	198

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
12	5546	36	9	5508	27
24	5522	72	28	5493	84
36	5544	108	32	5550	96
38	5500	114	36	5500	108
39	5541	117	40	5543	120
42	5526	126	44	5525	132
46	5534	138	49	5510	147
49	5512	147	50	5515	150
53	5524	159	57	5548	171
56	5548	168	61	5537	183
78	5550	234	81	5545	243
90	5530	270	85	5516	255
93	5493	279	94	5511	282
97	5523	291	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5536	6	0	5537	0
3	5540	9	22	5507	66
9	5545	27	33	5491	99
11	5512	33	37	5493	111
15	5500	45	40	5543	120
17	5504	51	53	5518	159
33	5492	99	66	5547	198
40	5509	120	68	5511	204
52	5510	156	69	5548	207
63	5514	189	74	5530	222
73	5517	219	75	5513	225
74	5524	222	79	5521	237
96	5523	288	92	5500	276
--	--	--	97	5509	291
--	--	--	98	5550	294

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5525	21	4	5505	12
9	5550	27	10	5546	30
12	5537	36	25	5559	75
26	5523	78	32	5514	96
56	5520	168	44	5539	132
61	5553	183	88	5524	264
82	5543	246	98	5534	294
85	5552	255	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5548	9	9	5537	27
34	5514	102	10	5541	30
40	5558	120	16	5517	48
59	5505	177	18	5535	54
67	5546	201	21	5524	63
68	5509	204	22	5540	66
80	5501	240	31	5530	93
83	5554	249	34	5534	102
85	5532	255	59	5526	177
97	5506	291	65	5528	195
--	--	--	69	5546	207
--	--	--	71	5556	213
--	--	--	74	5503	222
--	--	--	80	5551	240
--	--	--	85	5515	255
--	--	--	87	5513	261
--	--	--	90	5522	270
--	--	--	91	5509	273
--	--	--	99	5559	297

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/10
Test Item	Radar Statistical Performance Check (802.11ax-HE80 mode – 5530MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5563.6	1	638	83	1
2	5567.9	1	618	86	1
3	5500.0	1	578	92	1
4	5564.8	1	698	76	1
5	5494.2	1	838	63	1
6	5565.2	1	538	99	1
7	5506.5	1	858	62	1
8	5521.3	1	518	102	1
9	5545.7	1	818	65	1
10	5491.0	1	758	70	1
11	5562.3	1	718	74	1
12	5515.8	1	878	61	0
13	5557.9	1	658	81	1
14	5497.5	1	558	95	1
15	5536.3	1	778	68	1
16	5524.7	1	1919	28	1
17	5551.5	1	1963	27	1
18	5503.3	1	2950	18	1
19	5533.4	1	1038	51	1
20	5554.8	1	3025	18	1
21	5509.5	1	2629	21	1
22	5560.7	1	1313	41	1
23	5539.8	1	1586	34	1
24	5530.0	1	3037	18	1
25	5512.6	1	1463	37	1
26	5569.0	1	584	91	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5542.5	1	2686	20	1
28	5518.4	1	1466	37	1
29	5568.3	1	3065	18	1
30	5548.2	1	2940	18	1
Detection Percentage (%)					96.7%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5561.3	2.4	158	25	1
2	5501.4	2.6	185	26	1
3	5563.4	4.2	173	24	1
4	5510.1	1.6	198	24	1
5	5568.5	1.8	189	29	1
6	5492.5	4.8	190	23	1
7	5558.0	1.3	168	27	1
8	5569.0	4.0	219	24	1
9	5504.7	2.3	225	23	1
10	5543.5	4.8	174	24	1
11	5522.4	4.7	223	28	1
12	5495.6	4.2	184	29	1
13	5528.7	1.7	201	28	1
14	5555.5	2.0	156	24	1
15	5491.0	3.5	199	25	1
16	5552.5	1.0	211	24	1
17	5537.2	4.6	174	29	1
18	5507.2	4.3	210	23	1
19	5565.5	5.0	179	24	1
20	5540.6	4.4	230	24	1
21	5498.8	1.1	202	25	1
22	5567.2	3.3	219	26	1
23	5525.6	1.5	223	25	1
24	5546.2	1.3	162	29	1
25	5513.4	4.8	206	28	1
26	5531.4	2.3	207	23	1
27	5519.6	2.1	150	23	1
28	5534.6	4.2	213	26	1
29	5549.7	1.4	213	26	1
30	5516.2	3.6	173	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	5502.7	6.7	366	16	1
2	5493.6	9.6	280	16	1
3	5563.0	6.2	306	18	1
4	5511.1	7.5	288	17	1
5	5568.8	7.5	462	18	1
6	5505.6	7.1	301	16	1
7	5569.0	9.3	361	17	1
8	5562.3	7.4	269	16	1
9	5496.8	9.3	396	17	1
10	5553.4	9.2	392	18	1
11	5523.7	8.2	368	18	1
12	5514.7	9.8	349	18	1
13	5556.6	7.5	388	18	1
14	5532.9	9.0	382	16	1
15	5491.0	9.6	370	17	1
16	5550.4	8.0	379	18	1
17	5529.3	7.3	448	16	1
18	5541.9	6.6	432	16	1
19	5499.2	6.3	280	17	1
20	5547.6	9.8	426	18	1
21	5508.2	7.4	483	18	1
22	5559.9	6.8	490	16	1
23	5526.2	9.2	411	18	1
24	5565.7	6.3	481	17	1
25	5517.5	9.7	445	17	1
26	5535.2	8.1	389	17	1
27	5538.7	6.6	300	18	1
28	5544.5	9.1	290	18	1
29	5520.3	6.9	370	17	1
30	5567.3	8.7	374	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	5563.6	17.7	464	13	1
2	5567.9	19.5	373	14	1
3	5500.0	13.9	281	13	1
4	5564.8	11.7	315	16	1
5	5494.2	19.7	479	15	1
6	5565.2	12.7	305	14	1
7	5506.5	15.6	295	12	1
8	5521.3	14.1	298	15	1
9	5545.7	19.2	406	15	1
10	5491.0	11.5	335	15	1
11	5562.3	19.5	389	15	0
12	5515.8	14.5	280	14	1
13	5557.9	19.8	379	14	1
14	5497.5	13.9	284	13	0
15	5536.3	19.1	283	13	1
16	5524.7	16.9	360	16	1
17	5551.5	16.2	338	15	1
18	5503.3	16.1	264	14	1
19	5533.4	14.1	412	16	1
20	5554.8	12.6	252	14	1
21	5509.5	17.3	471	13	1
22	5560.7	19.2	256	13	1
23	5539.8	18.7	486	16	0
24	5530.0	19.4	325	16	1
25	5512.6	11.9	426	13	0
26	5569.0	18.9	465	13	1
27	5542.5	15.6	358	13	1
28	5518.4	16.8	474	14	1
29	5568.3	16.8	426	13	0
30	5548.2	14.8	319	15	1
Detection Percentage (%)					83.3%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (96.7%+100%+100%+83.3%)/4 = 95.0% (>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	5498.3	1	16	5530.0	1
2	5496.3	1	17	5530.0	1
3	5495.5	1	18	5530.0	1
4	5493.9	1	19	5530.0	1
5	5493.5	0	20	5530.0	1
6	5498.7	1	21	5564.5	1
7	5495.1	1	22	5565.3	1
8	5499.1	1	23	5563.7	1
9	5494.7	1	24	5560.9	1
10	5497.1	1	25	5566.1	1
11	5530.0	0	26	5566.5	1
12	5530.0	1	27	5561.3	1
13	5530.0	1	28	5564.9	1
14	5530.0	1	29	5562.9	1
15	5530.0	1	30	5561.7	1
Detection Percentage (%)					93.3%

Type 5 Radar Waveform_1

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	636450	2	17	75	1692	1677	0	636450	0	705881
2	754710	3	17	75	1553	1103	1474	1394529	705882	1411763
3	596764	2	17	75	1623	1949	0	1995423	1411764	2117645
4	741128	1	17	90	1123	0	0	2740123	2117646	2823527
5	285344	1	17	65	1886	0	0	3026590	2823528	3529409
6	1146692	3	17	70	1472	1171	1852	4175168	3529410	4235291
7	203735	1	17	95	1479	0	0	4383398	4235292	4941173
8	946870	3	17	50	1690	1233	1277	5331747	4941174	5647055
9	760568	1	17	55	1568	0	0	6096515	5647056	6352937
10	647223	1	17	100	1101	0	0	6745306	6352938	7058819
11	327783	2	17	80	1164	1971	0	7074190	7058820	7764701
12	1172755	1	17	75	1491	0	0	8250080	7764702	8470583
13	793439	2	17	50	1324	1316	0	9045010	8470584	9176465
14	322078	1	17	100	1922	0	0	9369728	9176466	9882347
15	1187494	1	17	50	1445	0	0	10559144	9882348	10588229
16	77078	2	17	95	1679	1743	0	10637667	10588230	11294111
17	1145794	3	17	100	1901	1006	1865	11786883	11294112	11999993

Total number of pulses in waveform = 30

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	368885	2	12	70	1156	1679	0	368885	0	799999
2	508056	1	12	75	1006	0	0	879776	800000	1599999
3	841076	1	12	50	1439	0	0	1721858	1600000	2399999
4	1133810	3	12	100	1524	1882	1937	2857107	2400000	3199999
5	781296	3	12	65	1111	1634	1696	3643746	3200000	3999999
6	949373	1	12	100	1640	0	0	4597560	4000000	4799999
7	839776	1	12	55	1641	0	0	5438976	4800000	5599999
8	430480	3	12	100	1100	1072	1106	5871097	5600000	6399999
9	703631	1	12	65	1148	0	0	6578006	6400000	7199999
10	1070632	2	12	75	1022	1405	0	7649786	7200000	7999999
11	1058749	2	12	80	1275	1617	0	8710962	8000000	8799999
12	529601	3	12	100	1687	1184	1652	9243455	8800000	9599999
13	605322	2	12	70	1122	1514	0	9853300	9600000	10399999
14	861731	3	12	50	1734	1843	1223	10717667	10400000	11199999
15	998195	2	12	65	1057	1003	0	11720662	11200000	11999999

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

Type 5 Radar Waveform_3

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	448313	2	10	65	1510	1882	0	448313	0	799999
2	872205	1	10	75	1346	0	0	1323910	800000	1599999
3	764751	1	10	80	1058	0	0	2090007	1600000	2399999
4	830344	1	10	80	1782	0	0	2921409	2400000	3199999
5	800085	2	10	85	1158	1633	0	3723276	3200000	3999999
6	604869	3	10	100	1845	1190	1510	4330936	4000000	4799999
7	696321	1	10	95	1032	0	0	5031802	4800000	5599999
8	774867	1	10	85	1126	0	0	5807701	5600000	6399999
9	1365240	1	10	95	1540	0	0	7174067	6400000	7199999
10	336876	2	10	85	1937	1301	0	7512483	7200000	7999999
11	626734	1	10	75	1334	0	0	8142455	8000000	8799999
12	1322420	3	10	50	1167	1911	1224	9466209	8800000	9599999
13	184691	3	10	85	1099	1724	1518	9655202	9600000	10399999
14	798793	3	10	75	1065	1360	1824	10458336	10400000	11199999
15	1230067	2	10	80	1795	1643	0	11692652	11200000	11999999

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

Type 5 Radar Waveform_4

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	780691	2	6	80	1549	1764	0	780691	0	857142
2	266700	1	6	100	1823	0	0	1050704	857143	1714285
3	1348498	2	6	60	1254	1027	0	2401025	1714286	2571428
4	456966	1	6	65	1036	0	0	2860272	2571429	3428571
5	1188978	1	6	55	1609	0	0	4050286	3428572	4285714
6	890243	2	6	50	1540	1104	0	4942138	4285715	5142857
7	399135	2	6	70	1788	1384	0	5343917	5142858	6000000
8	1122599	1	6	55	1697	0	0	6469688	6000001	6857143
9	589764	2	6	50	1955	1727	0	7061149	6857144	7714286
10	1220407	2	6	65	1152	1838	0	8285238	7714287	8571429
11	758842	1	6	70	1968	0	0	9047070	8571430	9428572
12	1077040	3	6	50	1168	1450	1157	10126078	9428573	10285715
13	177960	1	6	50	1888	0	0	10307813	10285716	11142858
14	1307033	2	6	55	1620	1667	0	11616734	11142859	12000001

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

Type 5 Radar Waveform_5

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	710835	1	5	100	1170	0	0	710835	0	923076
2	1070882	2	5	70	1185	1224	0	1782887	923077	1846153
3	510906	2	5	50	1975	1092	0	2296202	1846154	2769230
4	839534	3	5	65	1712	1750	1789	3138803	2769231	3692307
5	748360	3	5	70	1586	1997	1000	3892414	3692308	4615384
6	1092240	1	5	60	1258	0	0	4989237	4615385	5538461
7	1414239	1	5	70	1081	0	0	6404734	5538462	6461538
8	679078	2	5	65	1456	1568	0	7084893	6461539	7384615
9	1155987	1	5	85	1698	0	0	8243904	7384616	8307692
10	544464	1	5	90	1464	0	0	8790066	8307693	9230769
11	1035675	3	5	65	1736	1989	1639	9827205	9230770	10153846
12	546723	1	5	50	1592	0	0	10379292	10153847	11076923
13	1050422	3	5	95	1750	1126	1435	11431306	11076924	12000000

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

Type 5 Radar Waveform_6

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	254890	1	18	60	1284	0	0	254890	0	1199999
2	1466993	3	18	80	1132	1873	1264	1723167	1200000	2399999
3	806440	1	18	50	1387	0	0	2533876	2400000	3599999
4	1551336	1	18	50	1455	0	0	4086599	3600000	4799999
5	1565621	3	18	95	1094	1354	1903	5653675	4800000	5999999
6	1457032	2	18	65	1755	1244	0	7115058	6000000	7199999
7	210815	2	18	100	1031	1113	0	7328872	7200000	8399999
8	2174856	1	18	100	1918	0	0	9505872	8400000	9599999
9	194624	1	18	85	1809	0	0	9702414	9600000	10799999
10	1387415	2	18	50	1457	1619	0	11091638	10800000	11999999

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

Type 5 Radar Waveform_7

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	619260	2	9	100	1715	1300	0	619260	0	799999
2	712735	2	9	75	1613	1198	0	1335010	800000	1599999
3	693846	1	9	95	1857	0	0	2031667	1600000	2399999
4	535105	3	9	80	1851	1994	1330	2568629	2400000	3199999
5	1216416	1	9	95	1535	0	0	3790220	3200000	3999999
6	666849	1	9	85	1275	0	0	4458604	4000000	4799999
7	573415	3	9	90	1378	1633	1930	5033294	4800000	5599999
8	904378	1	9	75	1793	0	0	5942613	5600000	6399999
9	1082017	3	9	60	1000	1620	1158	7026423	6400000	7199999
10	487534	3	9	55	1391	1781	1993	7517735	7200000	7999999
11	630168	2	9	50	1262	1033	0	8153068	8000000	8799999
12	680917	1	9	90	1609	0	0	8836280	8800000	9599999
13	1062875	2	9	80	1756	1439	0	9900764	9600000	10399999
14	905282	1	9	55	1565	0	0	10809241	10400000	11199999
15	811398	2	9	50	1055	1350	0	11622204	11200000	11999999

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

Type 5 Radar Waveform_8

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	840631	3	19	65	1210	1136	1416	840631	0	999999
2	552758	2	19	95	1220	1009	0	1397151	1000000	1999999
3	1133233	1	19	50	1510	0	0	2532613	2000000	2999999
4	776413	2	19	50	1732	1893	0	3310536	3000000	3999999
5	726704	1	19	60	1750	0	0	4040865	4000000	4999999
6	1423632	2	19	85	1604	1235	0	5466247	5000000	5999999
7	656553	1	19	95	1061	0	0	6125639	6000000	6999999
8	1700168	3	19	60	1791	1847	1436	7826868	7000000	7999999
9	1052635	3	19	70	1536	1054	1793	8884577	8000000	8999999
10	381774	1	19	75	1883	0	0	9270734	9000000	9999999
11	1564249	3	19	90	1735	1423	1538	10836866	10000000	10999999
12	967491	2	19	95	1142	1026	0	11809053	11000000	11999999

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

Type 5 Radar Waveform_9

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us
1	598119	1	8	85	1882	0	0	598119	0	799999
2	919586	1	8	55	1779	0	0	1519587	800000	1599999
3	233887	2	8	60	1485	1834	0	1755253	1600000	2399999
4	1158497	2	8	70	1830	1055	0	2917069	2400000	3199999
5	891465	1	8	100	1108	0	0	3811419	3200000	3999999
6	575581	3	8	80	1376	1314	1979	4388108	4000000	4799999
7	598162	2	8	65	1583	1596	0	4990939	4800000	5599999
8	1225370	3	8	65	1874	1856	1942	6219488	5600000	6399999
9	954945	2	8	100	1881	1934	0	7180105	6400000	7199999
10	207415	1	8	85	1421	0	0	7391335	7200000	7999999
11	804344	2	8	85	1618	1126	0	8197100	8000000	8799999
12	1389950	2	8	90	1972	1951	0	9589794	8800000	9599999
13	428587	1	8	60	1735	0	0	10022304	9600000	10399999
14	869674	2	8	90	1748	1818	0	10893713	10400000	11199999
15	1030833	1	8	50	1244	0	0	11928112	11200000	11999999

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

Type 5 Radar Waveform_10

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	47121	2	14	60	1857	1167	0	47121	0	999999
2	1106490	3	14	50	1476	1506	1810	1156635	1000000	1999999
3	1265382	1	14	70	1723	0	0	2426809	2000000	2999999
4	590729	2	14	70	1203	1505	0	3019261	3000000	3999999
5	1361383	2	14	90	1597	1916	0	4383352	4000000	4999999
6	1126763	2	14	85	1862	1060	0	5513628	5000000	5999999
7	1337678	2	14	85	1019	1829	0	6854228	6000000	6999999
8	313344	2	14	65	1171	1444	0	7170420	7000000	7999999
9	1003068	3	14	55	1223	1777	1087	8176103	8000000	8999999
10	1508254	1	14	80	1651	0	0	9688444	9000000	9999999
11	1041742	2	14	65	1906	1603	0	10731837	10000000	10999999
12	601420	2	14	65	1290	1822	0	11336766	11000000	11999999

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

Type 5 Radar Waveform_11

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	211497	3	17	80	1160	1930	1361	211497	0	749999
2	694329	2	17	55	1973	1788	0	910277	750000	1499999
3	1175730	2	17	65	1655	1981	0	2089768	1500000	2249999
4	183833	3	17	75	1124	1866	1133	2277237	2250000	2999999
5	923739	2	17	75	1721	1374	0	3205099	3000000	3749999
6	966813	3	17	80	1743	1442	1045	4175007	3750000	4499999
7	912819	3	17	50	1632	1701	1796	5092056	4500000	5249999
8	567421	2	17	55	1142	1237	0	5664606	5250000	5999999
9	942832	3	17	60	1284	1043	1810	6609817	6000000	6749999
10	207707	2	17	100	1565	1627	0	6821661	6750000	7499999
11	852884	3	17	80	1336	1833	1795	7677737	7500000	8249999
12	837593	3	17	65	1756	1205	1852	8520294	8250000	8999999
13	969651	1	17	75	1353	0	0	9494758	9000000	9749999
14	472500	1	17	75	1340	0	0	9968611	9750000	10499999
15	599455	3	17	55	1902	1123	1467	10569406	10500000	11249999
16	1344887	1	17	80	1682	0	0	11918785	11250000	11999999

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

Type 5 Radar Waveform_12

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	621842	2	10	80	1257	1082	0	621842	0	1090908
2	1473099	2	10	85	1169	1051	0	2097280	1090909	2181817
3	1094730	3	10	70	1332	1082	1649	3194230	2181818	3272726
4	541012	3	10	95	1032	1545	1883	3739305	3272727	4363635
5	918775	2	10	55	1478	1905	0	4662540	4363636	5454544
6	1167481	1	10	85	1505	0	0	5833404	5454545	6545453
7	1758008	3	10	80	1292	1920	1919	7592917	6545454	7636362
8	779067	2	10	65	1794	1552	0	8377115	7636363	8727271
9	687622	2	10	70	1868	1230	0	9068083	8727272	9818180
10	1772967	2	10	75	1892	1486	0	10844148	9818181	10909089
11	655783	1	10	75	1733	0	0	11503309	10909090	11999998

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

Type 5 Radar Waveform_13

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	416447	2	12	95	1132	1135	0	416447	0	666666
2	476070	1	12	70	1225	0	0	894784	666667	1333333
3	962215	3	12	100	1013	1475	1219	1858224	1333334	2000000
4	247569	1	12	85	1111	0	0	2109500	2000001	2666667
5	1176982	3	12	70	1666	1575	1503	3287593	2666668	3333334
6	605707	2	12	65	1067	1341	0	3898044	3333335	4000001
7	660433	1	12	80	1293	0	0	4560885	4000002	4666668
8	588642	1	12	85	1365	0	0	5150820	4666669	5333335
9	494289	3	12	80	1846	1643	1029	5646474	5333336	6000002
10	912875	2	12	50	1555	1412	0	6563867	6000003	6666669
11	157321	1	12	85	1527	0	0	6724155	6666670	7333336
12	681130	3	12	65	1408	1140	1115	7406812	7333337	8000003
13	770008	1	12	50	1343	0	0	8180483	8000004	8666670
14	962321	1	12	75	1148	0	0	9144147	8666671	9333337
15	692012	3	12	65	1373	1825	1762	9837307	9333338	10000004
16	435549	1	12	65	1339	0	0	10277816	10000005	10666671
17	583003	2	12	100	1464	1392	0	10862158	10666672	11333338
18	974850	1	12	80	1755	0	0	11839864	11333339	12000005

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

Type 5 Radar Waveform_14

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	140888	1	14	80	1828	0	0	140888	0	599999
2	754569	3	14	70	1808	1388	1908	897285	600000	1199999
3	846496	2	14	95	1618	1807	0	1748885	1200000	1799999
4	324604	1	14	60	1502	0	0	2076914	1800000	2399999
5	668023	3	14	90	1338	1261	1022	2746439	2400000	2999999
6	538992	1	14	95	1435	0	0	3289052	3000000	3599999
7	325330	1	14	60	1495	0	0	3615817	3600000	4199999
8	1032605	3	14	90	1041	1340	1656	4649917	4200000	4799999
9	724232	1	14	85	1751	0	0	5378186	4800000	5399999
10	451579	2	14	75	1316	1042	0	5831516	5400000	5999999
11	366911	3	14	70	1151	1499	1343	6200785	6000000	6599999
12	890575	1	14	90	1899	0	0	7095353	6600000	7199999
13	204219	1	14	65	1125	0	0	7301471	7200000	7799999
14	939221	1	14	70	1160	0	0	8241817	7800000	8399999
15	362565	1	14	60	1898	0	0	8605542	8400000	8999999
16	967607	2	14	90	1397	1494	0	9575047	9000000	9599999
17	82717	1	14	55	1853	0	0	9660655	9600000	10199999
18	828553	2	14	80	1683	1489	0	10491061	10200000	10799999
19	350640	3	14	75	1394	1474	1047	10844873	10800000	11399999
20	616656	1	14	65	1352	0	0	11465444	11400000	11999999

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

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	486613	1	6	70	1576	0	0	486613	0	631578
2	530737	3	6	90	1536	1488	1186	1018926	631579	1263157
3	310334	1	6	100	1134	0	0	1333470	1263158	1894736
4	835987	2	6	95	1489	1642	0	2170591	1894737	2526315
5	366958	2	6	80	1836	1170	0	2540680	2526316	3157894
6	1184647	2	6	60	1055	1005	0	3728333	3157895	3789473
7	135934	1	6	50	1718	0	0	3866327	3789474	4421052
8	797466	1	6	100	1068	0	0	4665511	4421053	5052631
9	994739	1	6	80	1911	0	0	5661318	5052632	5684210
10	197212	2	6	85	1780	1097	0	5860441	5684211	6315789
11	980987	3	6	80	1394	1033	1509	6844305	6315790	6947368
12	533033	3	6	65	1913	1374	1617	7381274	6947369	7578947
13	796051	3	6	55	1833	1859	1479	8182229	7578948	8210526
14	76404	1	6	85	1867	0	0	8263804	8210527	8842105
15	609015	1	6	80	1903	0	0	8874686	8842106	9473684
16	868173	2	6	50	1300	1906	0	9744762	9473685	10105263
17	499201	2	6	75	1851	1593	0	10247169	10105264	10736842
18	1106462	3	6	90	1196	1751	1043	11357075	10736843	11368421
19	430400	2	6	100	1058	1363	0	11791465	11368422	12000000

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

Type 5 Radar Waveform_16

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	757230	3	19	50	1215	1450	1678	757230	0	857142
2	678469	2	19	80	1016	1425	0	1440042	857143	1714285
3	663134	3	19	80	1436	1027	1665	2105617	1714286	2571428
4	628184	1	19	90	1550	0	0	2737929	2571429	3428571
5	999121	2	19	60	1625	1086	0	3738600	3428572	4285714
6	701955	2	19	50	1506	1190	0	4443266	4285715	5142857
7	997676	2	19	70	1793	1461	0	5443638	5142858	6000000
8	762543	3	19	80	1088	1489	1904	6209435	6000001	6857143
9	974704	1	19	55	1630	0	0	7188620	6857144	7714286
10	965938	3	19	70	1333	1332	1385	8156188	7714287	8571429
11	956658	3	19	50	1988	1466	1007	9116896	8571430	9428572
12	954848	2	19	75	1932	1352	0	10076205	9428573	10285715
13	467398	2	19	55	1938	1481	0	10546887	10285716	11142858
14	1043757	3	19	55	1843	1782	1730	11594063	11142859	12000001

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

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	486898	2	18	55	1789	1889	0	486898	0	1499999
2	1821510	3	18	80	1970	1051	1093	2312086	1500000	2999999
3	1325630	1	18	90	1834	0	0	3641830	3000000	4499999
4	2007479	2	18	65	1801	1317	0	5651143	4500000	5999999
5	1144477	3	18	70	1758	1109	1779	6798738	6000000	7499999
6	902755	1	18	95	1921	0	0	7706139	7500000	8999999
7	1756140	3	18	75	1936	1959	1835	9464200	9000000	10499999
8	1599676	3	18	50	1887	1812	1971	11069606	10500000	11999999

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

Type 5 Radar Waveform_18

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	811144	3	5	100	1396	1993	1547	811144	0	1499999
2	1593721	2	5	60	1575	1725	0	2409801	1500000	2999999
3	977467	2	5	55	1850	1600	0	3390568	3000000	4499999
4	1926457	2	5	70	1004	1381	0	5320475	4500000	5999999
5	2088399	2	5	80	1984	1077	0	7411259	6000000	7499999
6	237542	3	5	60	1670	1431	1013	7651862	7500000	8999999
7	2231361	1	5	90	1707	0	0	9887337	9000000	10499999
8	625407	1	5	75	1670	0	0	10514451	10500000	11999999

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

Type 5 Radar Waveform_19

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	556743	3	8	75	1984	1508	1792	556743	0	999999
2	774967	3	8	80	1728	1754	1177	1336994	1000000	1999999
3	1181189	3	8	50	1395	1476	1658	2522842	2000000	2999999
4	1136309	2	8	55	1370	1689	0	3663680	3000000	3999999
5	374525	2	8	90	1766	1429	0	4041264	4000000	4999999
6	1085565	2	8	75	1230	1446	0	5130024	5000000	5999999
7	1294919	2	8	50	1711	1239	0	6427619	6000000	6999999
8	1090630	2	8	70	1870	1713	0	7521199	7000000	7999999
9	888585	2	8	60	1905	1241	0	8413367	8000000	8999999
10	602444	1	8	95	1925	0	0	9018957	9000000	9999999
11	1383575	3	8	55	1881	1241	1696	10404457	10000000	10999999
12	1541709	3	8	85	1165	1491	1699	11950984	11000000	11999999

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

Type 5 Radar Waveform_20

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	1799	3	9	50	1885	1849	1571	1799	0	999999
2	1146815	2	9	60	1728	1706	0	1153919	1000000	1999999
3	1197229	3	9	55	1629	1289	1424	2354582	2000000	2999999
4	827468	2	9	85	1176	1517	0	3186392	3000000	3999999
5	1372807	2	9	85	1617	1023	0	4561892	4000000	4999999
6	746258	2	9	60	1967	1770	0	5310790	5000000	5999999
7	1433637	1	9	70	1883	0	0	6748164	6000000	6999999
8	611035	2	9	60	1044	1072	0	7361082	7000000	7999999
9	1543724	2	9	60	1042	1964	0	8906922	8000000	8999999
10	682244	2	9	95	1791	1872	0	9592172	9000000	9999999
11	464704	3	9	70	1694	1518	1464	10060539	10000000	10999999
12	1291302	3	9	100	1988	1036	1772	11356517	11000000	11999999

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

Type 5 Radar Waveform_21

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	405253	3	10	65	1578	1581	1692	405253	0	923076
2	647508	2	10	100	1521	1310	0	1057612	923077	1846153
3	1092618	1	10	90	1783	0	0	2153061	1846154	2769230
4	622664	2	10	85	1005	1575	0	2777508	2769231	3692307
5	1003938	1	10	85	1598	0	0	3784026	3692308	4615384
6	1628399	3	10	95	1836	1552	1737	5414023	4615385	5538461
7	297892	2	10	85	1719	1828	0	5717040	5538462	6461538
8	1174600	2	10	100	1696	1545	0	6895187	6461539	7384615
9	1007711	1	10	50	1765	0	0	7906139	7384616	8307692
10	626908	1	10	90	1341	0	0	8534812	8307693	9230769
11	1483564	2	10	70	1616	1268	0	10019717	9230770	10153846
12	973999	2	10	80	1060	1653	0	10996600	10153847	11076923
13	524544	2	10	95	1102	1724	0	11523857	11076924	12000000

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

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	107567	1	8	90	1644	0	0	107567	0	749999
2	728086	2	8	85	1557	1844	0	837297	750000	1499999
3	975418	1	8	65	1352	0	0	1816116	1500000	2249999
4	883056	2	8	95	1938	1995	0	2700524	2250000	2999999
5	652054	2	8	70	1480	1431	0	3356511	3000000	3749999
6	702991	1	8	60	1415	0	0	4062413	3750000	4499999
7	746221	2	8	60	1300	1805	0	4810049	4500000	5249999
8	584189	2	8	50	1094	1629	0	5397343	5250000	5999999
9	1256344	2	8	80	1575	1273	0	6656410	6000000	6749999
10	506549	1	8	80	1655	0	0	7165807	6750000	7499999
11	989849	2	8	95	1188	1654	0	8157311	7500000	8249999
12	410694	1	8	60	1883	0	0	8570847	8250000	8999999
13	528635	2	8	100	1313	1269	0	9101365	9000000	9749999
14	982557	1	8	50	1764	0	0	10086504	9750000	10499999
15	869345	3	8	100	1462	1135	1915	10957613	10500000	11249999
16	813866	1	8	55	1077	0	0	11775991	11250000	11999999

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

Type 5 Radar Waveform_23

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	428063	3	12	60	1899	1382	1188	428063	0	631578
2	818368	2	12	60	1643	1476	0	1250900	631579	1263157
3	228335	3	12	95	1675	1445	1264	1482354	1263158	1894736
4	721462	2	12	70	1344	1703	0	2208200	1894737	2526315
5	839935	1	12	100	1911	0	0	3051182	2526316	3157894
6	673832	2	12	70	1862	1078	0	3726925	3157895	3789473
7	456378	2	12	50	1052	1901	0	4186243	3789474	4421052
8	332213	2	12	65	1267	1385	0	4521409	4421053	5052631
9	1063977	3	12	80	1716	1242	1360	5588038	5052632	5684210
10	576059	1	12	65	1727	0	0	6168415	5684211	6315789
11	467307	3	12	70	1196	1074	1793	6637449	6315790	6947368
12	731474	3	12	65	1239	1005	1630	7372986	6947369	7578947
13	456825	3	12	95	1636	1854	1037	7833685	7578948	8210526
14	489259	1	12	80	1786	0	0	8327471	8210527	8842105
15	564152	1	12	95	1632	0	0	8893409	8842106	9473684
16	940996	2	12	50	1001	1454	0	9836037	9473685	10105263
17	392832	2	12	50	1270	1926	0	10231324	10105264	10736842
18	925532	3	12	60	1709	1669	1676	11160052	10736843	11368421
19	800373	2	12	75	1671	1190	0	11965479	11368422	12000000

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

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	227829	1	19	50	1034	0	0	227829	0	1333332
2	2103465	1	19	50	1933	0	0	2332328	1333333	2666665
3	449152	2	19	50	1674	1256	0	2783413	2666666	3999998
4	1634057	1	19	50	1174	0	0	4420400	3999999	5333331
5	2236940	1	19	75	1209	0	0	6658514	5333332	6666664
6	272006	2	19	65	1838	1492	0	6931729	6666665	7999997
7	1185624	1	19	95	1041	0	0	8120683	7999998	9333330
8	1418185	2	19	55	1801	1857	0	9539909	9333331	10666663
9	1858707	3	19	60	1238	1838	1704	11402274	10666664	11999996

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

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	321531	3	6	70	1616	1216	1659	321531	0	599999
2	836840	2	6	100	1112	1895	0	1162862	600000	1199999
3	201187	1	6	70	1053	0	0	1367056	1200000	1799999
4	550488	1	6	85	1644	0	0	1918597	1800000	2399999
5	833679	2	6	70	1452	1609	0	2753920	2400000	2999999
6	496045	3	6	75	1947	1670	1654	3253026	3000000	3599999
7	723721	2	6	80	1508	1924	0	3982018	3600000	4199999
8	476849	2	6	50	1536	1310	0	4462299	4200000	4799999
9	507053	1	6	50	1668	0	0	4972198	4800000	5399999
10	763983	3	6	60	1310	1522	1769	5737849	5400000	5999999
11	429009	3	6	70	1421	1626	1712	6171459	6000000	6599999
12	643338	1	6	90	1072	0	0	6819556	6600000	7199999
13	604935	1	6	90	1600	0	0	7425563	7200000	7799999
14	748256	2	6	50	1670	1590	0	8175419	7800000	8399999
15	535008	1	6	85	1155	0	0	8713687	8400000	8999999
16	391771	2	6	80	1278	1387	0	9106613	9000000	9599999
17	627981	2	6	90	1606	1617	0	9737259	9600000	10199999
18	600409	3	6	95	1693	1359	1371	10340891	10200000	10799999
19	1030183	1	6	55	1013	0	0	11375497	10800000	11399999
20	452660	3	6	50	1678	1434	1803	11829170	11400000	11999999

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

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	1176641	1	5	95	1383	0	0	1176641	0	1499999
2	1783795	2	5	90	1791	1933	0	2961819	1500000	2999999
3	840492	2	5	85	1623	1904	0	3806035	3000000	4499999
4	1669885	3	5	65	1759	1952	1902	5479447	4500000	5999999
5	650282	1	5	60	1222	0	0	6135342	6000000	7499999
6	2753938	2	5	95	1397	1448	0	8890502	7500000	8999999
7	551228	3	5	80	1560	1211	1759	9444575	9000000	10499999
8	2402362	1	5	60	1955	0	0	11851467	10500000	11999999

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

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	507614	1	18	90	1609	0	0	507614	0	631578
2	503609	3	18	85	1534	1650	1487	1012832	631579	1263157
3	641106	3	18	80	1525	1708	1783	1658609	1263158	1894736
4	833581	1	18	75	1740	0	0	2497206	1894737	2526315
5	588075	1	18	100	1287	0	0	3087021	2526316	3157894
6	460105	2	18	85	1399	1246	0	3548413	3157895	3789473
7	461002	3	18	50	1994	1883	1325	4012060	3789474	4421052
8	1005561	1	18	60	1347	0	0	5022823	4421053	5052631
9	270304	3	18	90	1392	1301	1985	5294474	5052632	5684210
10	691789	3	18	60	1080	1431	1075	5990941	5684211	6315789
11	571845	3	18	75	1882	1818	1854	6566372	6315790	6947368
12	664217	1	18	90	1357	0	0	7236143	6947369	7578947
13	829069	1	18	85	1370	0	0	8066569	7578948	8210526
14	618864	2	18	85	1902	1167	0	8686803	8210527	8842105
15	588968	1	18	100	1820	0	0	9278840	8842106	9473684
16	208040	3	18	100	1980	1785	1925	9488700	9473685	10105263
17	641254	2	18	90	1143	1778	0	10135644	10105264	10736842
18	1069224	2	18	100	1352	1410	0	11207789	10736843	11368421
19	777657	2	18	95	1453	1282	0	11988208	11368422	12000000

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

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	799590	3	9	70	1835	1934	1959	799590	0	1333332
2	1684214	2	9	90	1651	1066	0	2489532	1333333	2666665
3	388390	3	9	95	1702	1513	1110	2880639	2666666	3999998
4	2055171	3	9	60	1192	1823	1649	4940135	3999999	5333331
5	1378432	3	9	55	1028	1172	1087	6323231	5333332	6666664
6	428758	1	9	50	1893	0	0	6755276	6666665	7999997
7	1430512	1	9	80	1953	0	0	8187681	7999998	9333330
8	2331037	3	9	85	1943	1792	1581	10520671	9333331	10666663
9	757306	3	9	75	1281	1305	1518	11283293	10666664	11999996

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

Type 5 Radar Waveform_29

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	89646	2	14	50	1232	1367	0	89646	0	599999
2	602703	2	14	95	1787	1179	0	694948	600000	1199999
3	785185	2	14	90	1664	1124	0	1483099	1200000	1799999
4	686396	2	14	70	1457	1221	0	2172283	1800000	2399999
5	348153	1	14	50	1796	0	0	2523114	2400000	2999999
6	1026208	2	14	85	1135	1039	0	3551118	3000000	3599999
7	152281	3	14	60	1394	1509	1155	3705573	3600000	4199999
8	545540	2	14	100	1439	1253	0	4255171	4200000	4799999
9	755793	2	14	75	1151	1120	0	5013656	4800000	5399999
10	613338	2	14	70	1143	1440	0	5629265	5400000	5999999
11	539081	3	14	55	1081	1210	1200	6170929	6000000	6599999
12	642498	1	14	95	1941	0	0	6816918	6600000	7199999
13	443433	1	14	65	1468	0	0	7262292	7200000	7799999
14	904643	1	14	55	1000	0	0	8168403	7800000	8399999
15	774278	3	14	60	1206	1980	1338	8943681	8400000	8999999
16	392874	1	14	100	1684	0	0	9341079	9000000	9599999
17	776345	2	14	75	1884	1333	0	10119108	9600000	10199999
18	474307	1	14	85	1769	0	0	10596632	10200000	10799999
19	762597	3	14	70	1406	1675	1425	11360998	10800000	11399999
20	404195	3	14	55	1681	1256	1785	11769699	11400000	11999999

Total number of pulses in waveform = 39

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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	394201	3	17	65	1066	1976	1487	394201	0	923076
2	798620	2	17	70	1546	1883	0	1197350	923077	1846153
3	954280	3	17	75	1319	1965	1217	2155059	1846154	2769230
4	1384497	1	17	80	1677	0	0	3544057	2769231	3692307
5	725078	1	17	65	1968	0	0	4270812	3692308	4615384
6	1143116	1	17	70	1680	0	0	5415896	4615385	5538461
7	983167	3	17	75	1906	1866	1911	6400743	5538462	6461538
8	663597	2	17	100	1558	1398	0	7070023	6461539	7384615
9	853393	1	17	50	1710	0	0	7926372	7384616	8307692
10	478718	1	17	55	1909	0	0	8406800	8307693	9230769
11	1450939	2	17	70	1345	1879	0	9859648	9230770	10153846
12	791559	3	17	85	1447	1182	1825	10654431	10153847	11076923
13	500064	3	17	95	1689	1129	1532	11158949	11076924	12000000

Total number of pulses in waveform = 26

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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	5561.3	1	16	5552.5	1
2	5501.4	1	17	5537.2	1
3	5563.4	1	18	5507.2	1
4	5510.1	1	19	5565.5	1
5	5568.5	1	20	5540.6	1
6	5492.5	1	21	5498.8	1
7	5558.0	1	22	5567.2	1
8	5569.0	1	23	5525.6	1
9	5504.7	1	24	5546.2	1
10	5543.5	1	25	5513.4	1
11	5522.4	1	26	5531.4	1
12	5495.6	1	27	5519.6	1
13	5528.7	1	28	5534.6	1
14	5555.5	1	29	5549.7	1
15	5491.0	1	30	5516.2	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5580	0	12	5488	36
15	5564	45	22	5476	66
16	5533	48	32	5517	96
17	5542	51	47	5518	141
19	5536	57	49	5480	147
21	5534	63	50	5513	150
22	5556	66	55	5474	165
31	5587	93	61	5484	183
42	5569	126	64	5506	192
63	5566	189	87	5499	261
66	5561	198	97	5469	291
71	5586	213	--	--	--
74	5532	222	--	--	--
84	5550	252	--	--	--
94	5547	282	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5530	9	8	5496	24
7	5590	21	16	5522	48
14	5579	42	25	5476	75
18	5533	54	41	5525	123
23	5581	69	70	5521	210
30	5543	90	77	5495	231
43	5552	129	83	5477	249
55	5534	165	--	--	--
70	5580	210	--	--	--
81	5571	243	--	--	--
90	5586	270	--	--	--
91	5547	273	--	--	--
92	5589	276	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5575	3	5	5515	15
9	5598	27	8	5493	24
19	5559	57	26	5524	78
28	5591	84	30	5512	90
34	5547	102	35	5489	105
37	5594	111	36	5505	108
38	5593	114	42	5529	126
42	5562	126	47	5480	141
46	5541	138	49	5472	147
73	5553	219	50	5495	150
80	5588	240	51	5527	153
--	--	--	60	5491	180
--	--	--	79	5470	237
--	--	--	96	5523	288

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5546	27	0	5540	0
13	5552	39	1	5543	3
21	5543	63	23	5579	69
23	5533	69	26	5547	78
25	5571	75	36	5557	108
26	5565	78	37	5570	111
38	5537	114	50	5527	150
55	5542	165	53	5567	159
58	5551	174	54	5537	162
64	5528	192	62	5552	186
69	5521	207	74	5544	222
75	5549	225	78	5541	234
80	5547	240	79	5580	237
87	5530	261	85	5562	255
92	5540	276	92	5522	276
97	5563	291	93	5530	279
Radar waveform #9			Radar waveform #10		

Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
15	5521	45	2	5544	6
30	5526	90	17	5524	51
32	5485	96	18	5519	54
34	5496	102	24	5557	72
35	5497	105	40	5520	120
40	5498	120	47	5533	141
62	5486	186	50	5551	150
68	5505	204	56	5525	168
70	5504	210	64	5561	192
79	5513	237	71	5529	213
90	5523	270	78	5539	234
98	5487	294	82	5522	246
--	--	--	85	5510	255
--	--	--	91	5518	273
--	--	--	97	5545	291

Radar waveform #11			**Radar waveform #12**		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
12	5549	36	0	5486	0
39	5548	117	2	5524	6
43	5501	129	6	5491	18
61	5493	183	12	5518	36
76	5526	228	13	5525	39
99	5511	297	15	5490	45
--	--	--	46	5477	138
--	--	--	66	5505	198
--	--	--	74	5514	222
--	--	--	91	5473	273
--	--	--	92	5508	276
--	--	--	96	5510	288

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5542	24	0	5542	0
16	5499	48	4	5540	12
17	5532	51	8	5578	24
24	5513	72	10	5553	30
31	5512	93	23	5528	69
32	5526	96	28	5545	84
41	5518	123	33	5525	99
46	5525	138	38	5529	114
55	5516	165	41	5532	123
62	5514	186	60	5574	180
66	5507	198	66	5534	198
75	5527	225	77	5550	231
79	5523	237	80	5555	240
82	5540	246	95	5573	285
--	--	--	97	5548	291

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5518	18	1	5549	3
8	5520	24	15	5532	45
18	5478	54	29	5536	87
20	5464	60	39	5527	117
39	5473	117	40	5520	120
42	5471	126	42	5575	126
58	5479	174	46	5559	138
64	5474	192	56	5528	168
75	5499	225	58	5580	174
89	5507	267	70	5569	210
92	5490	276	90	5523	270
96	5494	288	92	5537	276
--	--	--	95	5560	285

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5501	12	0	5533	0
9	5543	27	3	5542	9
10	5547	30	18	5491	54
19	5549	57	25	5515	75
23	5521	69	36	5509	108
33	5552	99	37	5511	111
37	5550	111	43	5505	129
46	5519	138	60	5504	180
53	5551	159	61	5494	183
74	5510	222	72	5512	216
75	5509	225	81	5534	243
76	5515	228	89	5543	267
99	5542	297	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5561	6	6	5563	18
5	5547	15	28	5540	84
14	5536	42	32	5543	96
29	5534	87	35	5565	105
42	5531	126	40	5547	120
46	5588	138	47	5552	141
50	5567	150	52	5525	156
82	5586	246	53	5562	159
87	5539	261	54	5560	162
91	5573	273	70	5556	210
--	--	--	91	5536	273

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5510	27	0	5569	0
10	5508	30	4	5575	12
17	5536	51	14	5573	42
21	5481	63	33	5554	99
25	5493	75	37	5563	111
28	5521	84	42	5591	126
34	5479	102	45	5545	135
36	5500	108	49	5540	147
51	5495	153	83	5555	249
79	5482	237	90	5597	270
80	5529	240	95	5562	285
81	5534	243	96	5558	288
90	5498	270	98	5544	294
92	5499	276	--	--	--
95	5524	285	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5538	18	12	5527	36
8	5506	24	14	5521	42
13	5526	39	23	5575	69
21	5497	63	24	5538	72
23	5533	69	25	5536	75
27	5490	81	32	5522	96
32	5550	96	33	5535	99
36	5512	108	35	5548	105
48	5507	144	45	5562	135
73	5503	219	49	5573	147
75	5549	225	53	5574	159
82	5496	246	58	5569	174
83	5509	249	62	5532	186
96	5499	288	68	5566	204
--	--	--	86	5559	258
--	--	--	96	5567	288

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5545	3	2	5517	6
11	5537	33	6	5515	18
16	5494	48	10	5501	30
25	5530	75	18	5547	54
34	5535	102	21	5521	63
39	5523	117	34	5556	102
46	5520	138	35	5508	105
49	5544	147	41	5502	123
62	5546	186	49	5552	147
70	5500	210	53	5534	159
72	5528	216	55	5529	165
92	5510	276	59	5513	177
95	5513	285	66	5560	198
--	--	--	81	5559	243
--	--	--	97	5527	291

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
34	5521	102	16	5562	48
50	5545	150	22	5568	66
70	5543	210	37	5536	111
84	5538	252	40	5566	120
86	5526	258	53	5544	159
--	--	--	58	5539	174
--	--	--	59	5542	177
--	--	--	62	5555	186
--	--	--	95	5569	285

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5536	63	7	5500	21
31	5562	93	11	5515	33
44	5555	132	14	5526	42
59	5527	177	20	5547	60
60	5561	180	25	5516	75
63	5530	189	50	5527	150
67	5546	201	61	5522	183
72	5576	216	66	5546	198
81	5554	243	77	5493	231
85	5522	255	80	5502	240
87	5573	261	99	5528	297
95	5545	285	--	--	--

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/10
Test Item	Radar Statistical Performance Check (802.11ax-HE160 mode - 5250MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5274.5	1	538	99	1
2	5310.3	1	698	76	1
3	5256.4	1	758	70	1
4	5271.2	1	678	78	1
5	5262.4	1	658	81	0
6	5253.3	1	778	68	1
7	5326.8	1	858	62	1
8	5277.5	1	818	65	1
9	5268.5	1	718	74	1
10	5329.0	1	918	58	1
11	5298.5	1	898	59	1
12	5250.0	1	878	61	1
13	5295.7	1	598	89	1
14	5313.5	1	3066	18	1
15	5280.2	1	938	57	1
16	5322.7	1	752	71	1
17	5259.3	1	1515	35	1
18	5304.6	1	1872	29	1
19	5290.0	1	1385	39	1
20	5283.7	1	522	102	1
21	5307.3	1	2211	24	1
22	5265.8	1	1727	31	1
23	5319.2	1	713	75	1
24	5301.4	1	2753	20	1
25	5321.3	1	1768	30	1
26	5286.9	1	738	72	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5316.4	1	2530	21	1
28	5289.5	1	1034	52	1
29	5328.2	1	2683	20	1
30	5292.2	1	2151	25	1
Detection Percentage (%)					96.7%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5257.4	4.2	200	24	1
2	5320.2	2.4	155	26	1
3	5251.6	1.5	150	25	1
4	5318.3	1.4	207	29	1
5	5263.5	4.2	212	23	1
6	5329.0	2.7	184	26	1
7	5266.7	1.3	214	28	1
8	5275.4	4.5	160	24	1
9	5254.5	2.5	205	23	1
10	5296.8	4.2	185	29	1
11	5315.7	1.0	152	28	1
12	5272.4	4.1	226	29	1
13	5312.4	2.1	230	28	1
14	5260.1	1.3	210	24	1
15	5309.4	1.2	160	25	1
16	5281.3	4.0	218	27	1
17	5323.5	2.7	220	23	1
18	5250.0	3.9	218	27	1
19	5300.2	1.1	217	24	1
20	5278.5	4.1	222	28	1
21	5306.3	1.5	219	26	1
22	5290.0	4.0	222	29	1
23	5269.3	2.9	202	23	1
24	5328.7	4.9	216	24	1
25	5297.4	1.0	165	25	1
26	5293.5	3.7	208	25	1
27	5327.4	2.1	209	23	1
28	5284.6	1.5	153	23	1
29	5303.4	2.6	212	23	1
30	5287.2	2.8	155	23	1
Detection Percentage (%)					100%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5299.2	6.3	283	16	1
2	5328.7	7.1	304	17	1
3	5258.2	6.1	369	18	1
4	5282.5	7.5	250	18	1
5	5270.2	9.4	364	16	0
6	5279.8	8.2	395	18	1
7	5323.5	8.4	361	18	1
8	5250.0	8.3	359	16	1
9	5288.4	9.8	274	16	1
10	5276.2	6.5	324	18	1
11	5327.4	9.1	390	16	1
12	5261.7	7.5	378	17	1
13	5329.0	6.2	401	17	0
14	5294.9	8.9	280	17	1
15	5290.0	6.2	447	17	1
16	5320.2	7.7	284	18	1
17	5252.4	8.0	495	16	0
18	5300.2	8.5	339	16	1
19	5264.9	7.4	362	17	1
20	5309.4	10.0	389	18	1
21	5303.4	8.9	465	17	1
22	5255.7	9.0	261	17	1
23	5312.4	8.5	454	17	1
24	5297.4	7.3	295	18	1
25	5318.3	7.2	287	16	1
26	5267.2	7.1	404	16	1
27	5306.3	9.3	308	16	1
28	5315.7	10.0	462	17	1
29	5273.7	7.9	373	17	1
30	5285.3	9.5	389	18	1
Detection Percentage (%)					90%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5274.5	18.8	331	16	1
2	5310.3	14.9	268	12	1
3	5256.4	12.8	310	12	1
4	5271.2	15.0	351	13	0
5	5262.4	19.5	429	15	1
6	5253.3	19.5	462	15	1
7	5326.8	13.9	279	14	1
8	5277.5	19.1	411	14	1
9	5268.5	15.3	309	13	1
10	5329.0	11.4	283	15	1
11	5298.5	15.6	405	14	1
12	5250.0	12.0	416	13	1
13	5295.7	13.8	430	15	1
14	5313.5	15.8	292	16	1
15	5280.2	11.3	288	13	1
16	5322.7	17.2	285	16	1
17	5259.3	19.0	444	16	1
18	5304.6	18.9	350	12	1
19	5290.0	17.9	287	15	1
20	5283.7	18.1	480	12	1
21	5307.3	11.3	478	14	1
22	5265.8	12.6	262	13	1
23	5319.2	12.0	460	12	1
24	5301.4	18.3	485	14	1
25	5321.3	13.6	318	15	1
26	5286.9	12.3	319	16	1
27	5316.4	17.7	309	16	1
28	5289.5	13.2	482	12	1
29	5328.2	20.0	355	12	1
30	5292.2	12.2	364	15	1
Detection Percentage (%)					96.7%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (96.7%+100%+90%+96.7%)/4 = 95.8% (>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	5255.6	1	16	5250.0	1
2	5253.6	1	17	5250.0	1
3	5256.8	1	18	5250.0	1
4	5254.8	1	19	5250.0	1
5	5252.4	1	20	5250.0	1
6	5257.2	1	21	5325.5	1
7	5253.2	1	22	5324.7	1
8	5252.0	1	23	5321.5	1
9	5257.6	1	24	5326.7	1
10	5254.0	1	25	5323.1	1
11	5250.0	1	26	5321.1	1
12	5250.0	1	27	5325.1	1
13	5250.0	1	28	5326.3	1
14	5250.0	1	29	5321.9	1
15	5250.0	1	30	5323.9	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1

Num of Burstz = 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	511651	2	14	100	1544	1938	0	511651	0	599999
2	181105	1	14	55	1648	0	0	696238	600000	1199999
3	1051850	3	14	65	1856	1639	1409	1749736	1200000	1799999
4	150865	2	14	85	1039	1329	0	1905505	1800000	2399999
5	950913	2	14	60	1704	1129	0	2858786	2400000	2999999
6	322865	2	14	55	1814	1104	0	3184484	3000000	3599999
7	605541	2	14	55	1247	1014	0	3792943	3600000	4199999
8	883750	1	14	85	1178	0	0	4678954	4200000	4799999
9	327231	2	14	100	1548	1986	0	5007363	4800000	5399999
10	552501	2	14	95	1983	1826	0	5563398	5400000	5999999
11	616422	3	14	95	1805	1459	1949	6183629	6000000	6599999
12	545960	1	14	50	1170	0	0	6734802	6600000	7199999
13	819041	2	14	100	1197	1888	0	7555013	7200000	7799999
14	737409	1	14	50	1651	0	0	8295507	7800000	8399999
15	515520	3	14	65	1057	1452	1281	8812678	8400000	8999999
16	354311	3	14	65	1455	1355	1086	9170779	9000000	9599999
17	1011531	2	14	60	1800	1200	0	10186206	9600000	10199999
18	471805	1	14	95	1230	0	0	10661011	10200000	10799999
19	354308	1	14	100	1997	0	0	11016549	10800000	11399999
20	869026	3	14	100	1961	1941	1088	11887572	11400000	11999999

Total number of pulses in waveform = 39

Type 5 Radar Waveform_2

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	1076222	1	9	85	1478	0	0	1076222	0	1333332
2	863900	2	9	65	1065	1013	0	1941600	1333333	2666665
3	836295	3	9	65	1231	1748	1939	2779973	2666666	3999998
4	1411733	3	9	55	1635	1066	1210	4196624	3999999	5333331
5	1778001	1	9	55	1879	0	0	5978536	5333332	6666664
6	1126328	2	9	100	1906	1431	0	7106743	6666665	7999997
7	1587929	3	9	85	1958	1086	1804	8698009	7999998	9333330
8	850075	1	9	95	1163	0	0	9552932	9333331	10666663
9	1129464	1	9	55	1054	0	0	10683559	10666664	11999996

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

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	481240	3	17	70	1114	1348	1756	481240	0	749999
2	961315	1	17	60	1659	0	0	1446773	750000	1499999
3	113786	3	17	50	1662	1002	1661	1562218	1500000	2249999
4	1362669	1	17	80	1930	0	0	2929212	2250000	2999999
5	274151	1	17	60	1181	0	0	3205293	3000000	3749999
6	973112	1	17	60	1459	0	0	4179586	3750000	4499999
7	530305	2	17	80	1045	1052	0	4711350	4500000	5249999
8	747738	3	17	95	1312	1292	1817	5461185	5250000	5999999
9	861155	2	17	80	1274	1131	0	6326761	6000000	6749999
10	489306	1	17	80	1560	0	0	6818472	6750000	7499999
11	840576	3	17	50	1225	1319	1559	7660608	7500000	8249999
12	1304905	1	17	60	1636	0	0	8969616	8250000	8999999
13	758624	3	17	60	1449	1967	1419	9729876	9000000	9749999
14	411011	3	17	55	1962	1789	1688	10145722	9750000	10499999
15	873699	1	17	55	1201	0	0	11024860	10500000	11249999
16	945863	1	17	80	1969	0	0	11971924	11250000	11999999

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

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	112651	1	12	100	1574	0	0	112651	0	749999
2	1296266	2	12	85	1742	1626	0	1410491	750000	1499999
3	316965	1	12	95	1636	0	0	1730824	1500000	2249999
4	715645	2	12	100	1895	1552	0	2448105	2250000	2999999
5	707922	2	12	60	1561	1623	0	3159474	3000000	3749999
6	841543	1	12	85	1914	0	0	4004201	3750000	4499999
7	549292	1	12	50	1522	0	0	4555407	4500000	5249999
8	843893	3	12	55	1254	1650	1816	5400822	5250000	5999999
9	909407	2	12	60	1960	1460	0	6314949	6000000	6749999
10	786340	3	12	60	1966	1207	1757	7104709	6750000	7499999
11	596499	2	12	65	1255	1447	0	7706138	7500000	8249999
12	604355	2	12	65	1298	1811	0	8313195	8250000	8999999
13	1117588	1	12	90	1245	0	0	9433892	9000000	9749999
14	508452	1	12	75	1372	0	0	9943589	9750000	10499999
15	610866	1	12	65	1748	0	0	10555827	10500000	11249999
16	1152763	2	12	75	1191	1831	0	11710338	11250000	11999999

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

Type 5 Radar Waveform_5

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	116166	2	6	75	1589	1262	0	116166	0	857142
2	1099783	3	6	100	1108	1149	1508	1218800	857143	1714285
3	1021903	2	6	65	1267	1945	0	2244468	1714286	2571428
4	856432	2	6	65	1681	1802	0	3104112	2571429	3428571
5	469343	1	6	95	1483	0	0	3576938	3428572	4285714
6	901796	1	6	55	1160	0	0	4480217	4285715	5142857
7	1324880	1	6	65	1378	0	0	5806257	5142858	6000000
8	425971	2	6	70	1220	1875	0	6233606	6000001	6857143
9	1335745	3	6	60	1181	1482	1357	7572446	6857144	7714286
10	424674	3	6	65	1356	1550	1682	8001140	7714287	8571429
11	1309096	2	6	75	1085	1853	0	9314824	8571430	9428572
12	243222	3	6	75	1539	1270	1664	9560984	9428573	10285715
13	1295871	2	6	50	1169	1874	0	10861328	10285716	11142858
14	1004678	3	6	65	1827	1857	1741	11869049	11142859	12000001

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

Type 5 Radar Waveform_6

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	765233	1	18	75	1461	0	0	765233	0	923076
2	899143	2	18	100	1693	1015	0	1665837	923077	1846153
3	838729	2	18	55	1446	1963	0	2507274	1846154	2769230
4	358207	2	18	90	1965	1848	0	2868890	2769231	3692307
5	1288689	1	18	90	1416	0	0	4161392	3692308	4615384
6	612421	2	18	50	1571	1355	0	4775229	4615385	5538461
7	894251	2	18	60	1906	1670	0	5672406	5538462	6461538
8	858096	1	18	55	1659	0	0	6534078	6461539	7384615
9	1558442	3	18	50	1714	1775	1553	8094179	7384616	8307692
10	422652	1	18	60	1746	0	0	8521873	8307693	9230769
11	1115557	3	18	90	1060	1690	1694	9639176	9230770	10153846
12	713103	2	18	50	1948	1658	0	10356723	10153847	11076923
13	1558334	2	18	55	1415	1486	0	11918663	11076924	12000000

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

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	6617	2	8	60	1127	1610	0	6617	0	631578
2	1221047	3	8	65	1671	1073	1211	1230401	631579	1263157
3	647552	3	8	60	1718	1502	1782	1881908	1263158	1894736
4	385485	2	8	65	1987	1932	0	2272395	1894737	2526315
5	701290	3	8	85	1487	1554	1237	2977604	2526316	3157894
6	186618	1	8	90	1345	0	0	3168500	3157895	3789473
7	1174063	1	8	95	1158	0	0	4343908	3789474	4421052
8	246932	3	8	60	1236	1212	1730	4591998	4421053	5052631
9	1065435	1	8	65	1176	0	0	5661611	5052632	5684210
10	451063	1	8	100	1546	0	0	6113850	5684211	6315789
11	818671	3	8	75	1596	1332	1213	6934067	6315790	6947368
12	507131	2	8	70	1619	1711	0	7445339	6947369	7578947
13	198199	3	8	85	1536	1751	1680	7646868	7578948	8210526
14	962139	2	8	65	1030	1983	0	8613974	8210527	8842105
15	561868	3	8	70	1125	1224	1221	9178855	8842106	9473684
16	748529	1	8	85	1889	0	0	9930954	9473685	10105263
17	603006	3	8	90	1830	1329	1997	10535849	10105264	10736842
18	611336	3	8	85	1643	1706	1989	11152341	10736843	11368421
19	652497	1	8	80	1031	0	0	11810176	11368422	12000000

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

Type 5 Radar Waveform_8

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	331515	1	5	90	1931	0	0	331515	0	799999
2	565390	2	5	55	1856	1103	0	898836	800000	1599999
3	1204363	3	5	100	1211	1004	1388	2106158	1600000	2399999
4	901455	2	5	65	1023	1067	0	3011216	2400000	3199999
5	910545	2	5	75	1723	1556	0	3923851	3200000	3999999
6	568545	1	5	70	1732	0	0	4495675	4000000	4799999
7	970064	3	5	80	1336	1225	1439	5467471	4800000	5599999
8	495376	2	5	100	1110	1571	0	5966847	5600000	6399999
9	644646	2	5	55	1231	1819	0	6614174	6400000	7199999
10	747003	1	5	95	1211	0	0	7364227	7200000	7999999
11	1060381	2	5	100	1128	1771	0	8425819	8000000	8799999
12	750743	3	5	85	1146	1605	1242	9179461	8800000	9599999
13	471973	3	5	50	1175	1535	1969	9655427	9600000	10399999
14	993440	3	5	50	1997	1135	1787	10653546	10400000	11199999
15	1019900	1	5	55	1718	0	0	11678365	11200000	11999999

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

Type 5 Radar Waveform_9

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	580692	1	19	50	1226	0	0	580692	0	631578
2	410663	1	19	100	1575	0	0	992581	631579	1263157
3	673932	3	19	100	1877	1505	1334	1668088	1263158	1894736
4	413003	2	19	100	1520	1680	0	2085807	1894737	2526315
5	1052768	3	19	100	1610	1763	1881	3141775	2526316	3157894
6	461860	3	19	95	1633	1932	1223	3608889	3157895	3789473
7	490446	1	19	65	1527	0	0	4104123	3789474	4421052
8	566382	2	19	75	1672	1802	0	4672032	4421053	5052631
9	466370	2	19	95	1754	1117	0	5141876	5052632	5684210
10	734322	1	19	60	1980	0	0	5879069	5684211	6315789
11	896111	2	19	65	1671	1737	0	6777160	6315790	6947368
12	219037	2	19	80	1560	1657	0	6999605	6947369	7578947
13	693386	2	19	70	1741	1848	0	7696208	7578948	8210526
14	685090	2	19	55	1637	1968	0	8384887	8210527	8842105
15	611286	1	19	80	1418	0	0	8999778	8842106	9473684
16	982301	2	19	50	1993	1397	0	9983497	9473685	10105263
17	203986	1	19	95	1540	0	0	10190873	10105264	10736842
18	837703	3	19	90	1298	1840	1977	11030116	10736843	11368421
19	388876	3	19	90	1656	1965	1571	11424107	11368422	12000000

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

Type 5 Radar Waveform_10

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	754834	3	10	55	1818	1953	1487	754834	0	999999
2	787751	1	10	80	1325	0	0	1547843	1000000	1999999
3	865985	2	10	50	1343	1302	0	2415153	2000000	2999999
4	1278626	3	10	65	1682	1431	1466	3696424	3000000	3999999
5	1182966	2	10	85	1744	1696	0	4883969	4000000	4999999
6	233420	1	10	95	1449	0	0	5120829	5000000	5999999
7	1757000	2	10	50	1834	1739	0	6879278	6000000	6999999
8	889513	2	10	90	1143	1771	0	7772364	7000000	7999999
9	425030	1	10	90	1799	0	0	8200308	8000000	8999999
10	1785170	1	10	55	1749	0	0	9987277	9000000	9999999
11	241933	3	10	90	1389	1574	1748	10230959	10000000	10999999
12	989000	1	10	85	1161	0	0	11224670	11000000	11999999

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

Type 5 Radar Waveform_11

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	202542	2	12	95	1531	1455	0	202542	0	666666
2	976741	2	12	55	1484	1927	0	1182269	666667	1333333
3	371307	3	12	85	1214	1813	1768	1556987	1333334	2000000
4	606050	1	12	90	1919	0	0	2167832	2000001	2666667
5	535072	3	12	90	1297	1738	1218	2704823	2666668	3333334
6	624439	2	12	50	1733	1298	0	3333515	3333335	4000001
7	953573	1	12	100	1283	0	0	4290119	4000002	4666668
8	893083	2	12	55	1313	1891	0	5184485	4666669	5333335
9	339552	2	12	75	1188	1472	0	5527241	5333336	6000002
10	982781	2	12	70	1758	1850	0	6512682	6000003	6666669
11	345349	2	12	95	1622	1780	0	6861639	6666670	7333336
12	621201	2	12	95	1288	1103	0	7486242	7333337	8000003
13	1091606	1	12	75	1300	0	0	8580239	8000004	8666670
14	447044	2	12	70	1188	1001	0	9028583	8666671	9333337
15	956503	3	12	70	1556	1173	1586	9987275	9333338	10000004
16	361946	2	12	100	1994	1077	0	10353536	10000005	10666671
17	421796	1	12	100	1056	0	0	10778403	10666672	11333338
18	821649	1	12	85	1874	0	0	11601108	11333339	12000005

Total number of pulses in waveform = 34

Type 5 Radar Waveform_12

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	662688	1	9	65	1455	0	0	662688	0	705881
2	208952	1	9	85	1814	0	0	873095	705882	1411763
3	651352	3	9	80	1994	1559	1208	1526261	1411764	2117645
4	1153778	3	9	55	1567	1560	1860	2684800	2117646	2823527
5	355966	2	9	95	1196	1215	0	3045753	2823528	3529409
6	799405	3	9	100	1998	1682	1683	3847569	3529410	4235291
7	943448	1	9	95	1315	0	0	4796380	4235292	4941173
8	296266	3	9	65	1144	1445	1537	5093961	4941174	5647055
9	1203346	2	9	65	1263	1503	0	6301433	5647056	6352937
10	487029	3	9	100	1319	1042	1061	6791228	6352938	7058819
11	509206	2	9	55	1957	1299	0	7303856	7058820	7764701
12	795524	3	9	65	1443	1696	1971	8102636	7764702	8470583
13	1045976	2	9	55	1019	1049	0	9153722	8470584	9176465
14	510875	2	9	70	1537	1964	0	9666665	9176466	9882347
15	833451	1	9	50	1191	0	0	10503617	9882348	10588229
16	354315	1	9	50	1158	0	0	10859123	10588230	11294111
17	1080717	3	9	65	1573	1218	1853	11940998	11294112	11999993

Total number of pulses in waveform = 36

Type 5 Radar Waveform_13

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	580666	2	6	90	1943	1987	0	580666	0	599999
2	207492	1	6	75	1825	0	0	792088	600000	1199999
3	523490	2	6	55	1538	1818	0	1317403	1200000	1799999
4	521132	2	6	75	1189	1006	0	1841891	1800000	2399999
5	954121	1	6	65	1812	0	0	2798207	2400000	2999999
6	217598	2	6	85	1338	1843	0	3017617	3000000	3599999
7	1105097	3	6	100	1229	1039	1201	4125895	3600000	4199999
8	103946	2	6	65	1345	1025	0	4233310	4200000	4799999
9	715546	2	6	65	1414	1036	0	4951226	4800000	5399999
10	652924	2	6	90	1990	1803	0	5606600	5400000	5999999
11	737902	2	6	85	1623	1292	0	6348295	6000000	6599999
12	258796	3	6	65	1434	1073	1471	6610006	6600000	7199999
13	1089256	1	6	95	1460	0	0	7703240	7200000	7799999
14	365057	3	6	65	1873	1944	1051	8069757	7800000	8399999
15	661288	1	6	65	1505	0	0	8735913	8400000	8999999
16	393455	3	6	100	1457	1645	1330	9130873	9000000	9599999
17	859582	2	6	65	1233	1770	0	9994887	9600000	10199999
18	271725	3	6	100	1519	1219	1767	10269615	10200000	10799999
19	626291	1	6	95	1152	0	0	10900411	10800000	11399999
20	856427	1	6	90	1252	0	0	11757990	11400000	11999999

Total number of pulses in waveform = 39

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	1019052	1	17	80	1195	0	0	1019052	0	1499999
2	1676259	3	17	80	1569	1405	1207	2696506	1500000	2999999
3	419686	1	17	100	1374	0	0	3120373	3000000	4499999
4	2269873	3	17	70	1857	1776	1144	5391620	4500000	5999999
5	866890	3	17	90	1109	1081	1850	6263287	6000000	7499999
6	2605065	1	17	90	1753	0	0	8872392	7500000	8999999
7	1192384	1	17	55	1620	0	0	10066529	9000000	10499999
8	1805465	1	17	75	1448	0	0	11873614	10500000	11999999

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

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	529313	1	19	50	1857	0	0	529313	0	631578
2	218873	2	19	100	1395	1721	0	750043	631579	1263157
3	1085203	1	19	85	1831	0	0	1838362	1263158	1894736
4	609858	3	19	90	1700	1911	1623	2450051	1894737	2526315
5	396991	2	19	70	1422	1229	0	2852276	2526316	3157894
6	343112	3	19	55	1320	1923	1147	3198039	3157895	3789473
7	743357	2	19	95	1702	1178	0	3945786	3789474	4421052
8	862132	3	19	95	1593	1990	1737	4810798	4421053	5052631
9	626069	3	19	60	1829	1715	1075	5442187	5052632	5684210
10	302419	1	19	85	1851	0	0	5749225	5684211	6315789
11	1146562	2	19	55	1617	1349	0	6897638	6315790	6947368
12	618325	2	19	65	1245	1888	0	7518929	6947369	7578947
13	229841	1	19	65	1397	0	0	7751903	7578948	8210526
14	835495	1	19	65	1748	0	0	8588795	8210527	8842105
15	548458	3	19	75	1469	1302	1406	9139001	8842106	9473684
16	463277	2	19	55	1358	1762	0	9606455	9473685	10105263
17	536466	3	19	70	1253	1180	1022	10146041	10105264	10736842
18	1139964	3	19	55	1683	1084	1039	11289460	10736843	11368421
19	397309	3	19	90	1578	1542	1800	11690575	11368422	12000000

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

Type 5 Radar Waveform_16

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	286173	2	14	70	1486	1546	0	286173	0	599999
2	596510	3	14	80	1336	1219	1165	885715	600000	1199999
3	904961	1	14	70	1902	0	0	1794396	1200000	1799999
4	468840	1	14	60	1688	0	0	2265138	1800000	2399999
5	270340	2	14	50	1527	1078	0	2537166	2400000	2999999
6	658421	2	14	75	1206	1187	0	3198192	3000000	3599999
7	700259	1	14	55	1559	0	0	3900844	3600000	4199999
8	443835	1	14	80	1925	0	0	4346238	4200000	4799999
9	963843	3	14	70	1183	1179	1589	5312006	4800000	5399999
10	280610	2	14	70	1802	1973	0	5596567	5400000	5999999
11	543140	1	14	80	1873	0	0	6143482	6000000	6599999
12	663309	2	14	60	1207	1621	0	6808664	6600000	7199999
13	821812	2	14	90	1804	1476	0	7633304	7200000	7799999
14	689765	3	14	80	1203	1304	1043	8326349	7800000	8399999
15	186763	2	14	80	1185	1399	0	8516662	8400000	8999999
16	588966	2	14	80	1315	1102	0	9108212	9000000	9599999
17	815816	1	14	75	1884	0	0	9926445	9600000	10199999
18	856929	3	14	50	1358	1016	1876	10785258	10200000	10799999
19	269957	1	14	85	1127	0	0	11059465	10800000	11399999
20	506462	1	14	60	1898	0	0	11567054	11400000	11999999

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

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	488256	3	5	95	1873	1380	1616	488256	0	857142
2	870971	3	5	60	1353	1618	1683	1364096	857143	1714285
3	441368	2	5	75	1983	1112	0	1810118	1714286	2571428
4	1597747	2	5	70	1965	1556	0	3410960	2571429	3428571
5	439979	1	5	90	1745	0	0	3854460	3428572	4285714
6	462919	3	5	50	1369	1249	1245	4319124	4285715	5142857
7	993826	1	5	100	1225	0	0	5316813	5142858	6000000
8	1223407	3	5	80	1385	1416	1854	6541445	6000001	6857143
9	604861	3	5	55	1925	1162	1586	7150961	6857144	7714286
10	565342	3	5	55	1375	1982	1923	7720976	7714287	8571429
11	1694257	2	5	70	1296	1349	0	9420513	8571430	9428572
12	94758	2	5	75	1236	1150	0	9517916	9428573	10285715
13	821431	2	5	55	1356	1373	0	10341733	10285716	11142858
14	1052750	3	5	80	1360	1179	1568	11397212	11142859	12000001

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

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	9613	2	18	80	1595	1002	0	9613	0	749999
2	760241	3	18	80	1487	1688	1245	772451	750000	1499999
3	1347448	2	18	100	1079	1669	0	2124319	1500000	2249999
4	567773	1	18	65	1864	0	0	2694840	2250000	2999999
5	630564	1	18	60	1528	0	0	3327268	3000000	3749999
6	791140	2	18	65	1640	1052	0	4119936	3750000	4499999
7	767735	3	18	100	1587	1699	1970	4890363	4500000	5249999
8	961065	1	18	90	1637	0	0	5856684	5250000	5999999
9	374554	2	18	60	1357	1111	0	6232875	6000000	6749999
10	1229387	2	18	55	1798	1321	0	7464730	6750000	7499999
11	79464	1	18	85	1172	0	0	7547313	7500000	8249999
12	1262414	1	18	70	1102	0	0	8810899	8250000	8999999
13	491777	3	18	50	1438	1497	1145	9303778	9000000	9749999
14	1153323	3	18	70	1506	1512	1501	10461181	9750000	10499999
15	529663	1	18	70	1165	0	0	10995363	10500000	11249999
16	711926	3	18	85	1088	1400	1684	11708454	11250000	11999999

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

Type 5 Radar Waveform_19

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	32890	1	8	80	1268	0	0	32890	0	857142
2	1444803	1	8	70	1065	0	0	1478961	857143	1714285
3	857754	2	8	75	1009	1949	0	2337780	1714286	2571428
4	875541	2	8	100	1052	1943	0	3216279	2571429	3428571
5	757389	1	8	95	1321	0	0	3976663	3428572	4285714
6	1107480	2	8	90	1176	1319	0	5085464	4285715	5142857
7	660773	1	8	85	1307	0	0	5748732	5142858	6000000
8	1045456	1	8	65	1016	0	0	6795495	6000001	6857143
9	804887	2	8	95	1116	1087	0	7601398	6857144	7714286
10	334598	2	8	50	1544	1861	0	7938199	7714287	8571429
11	716879	3	8	55	1487	1058	1458	8658483	8571430	9428572
12	1386268	1	8	55	1789	0	0	10048754	9428573	10285715
13	359287	1	8	60	1127	0	0	10409830	10285716	11142858
14	1281982	3	8	80	1326	1128	1669	11692939	11142859	12000001

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

Type 5 Radar Waveform_20

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	906930	3	10	50	1068	1419	1689	906930	0	1499999
2	1356784	2	10	70	1363	1516	0	2267890	1500000	2999999
3	1270372	2	10	80	1071	1876	0	3541141	3000000	4499999
4	2361835	1	10	95	1785	0	0	5905923	4500000	5999999
5	589091	3	10	70	1298	1152	1717	6496799	6000000	7499999
6	1489822	2	10	60	1613	1422	0	7990788	7500000	8999999
7	1149616	1	10	70	1681	0	0	9143439	9000000	10499999
8	2470223	1	10	60	1973	0	0	11615343	10500000	11999999

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

Type 5 Radar Waveform_21

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	664153	2	8	55	1435	1824	0	664153	0	799999
2	473358	2	8	85	1818	1464	0	1140770	800000	1599999
3	716257	2	8	60	1240	1159	0	1860309	1600000	2399999
4	647905	1	8	75	1521	0	0	2510613	2400000	3199999
5	1034027	3	8	50	1359	1050	1717	3546161	3200000	3999999
6	1015326	1	8	85	1494	0	0	4565613	4000000	4799999
7	509101	2	8	70	1087	1312	0	5076208	4800000	5599999
8	1193550	1	8	95	1531	0	0	6272157	5600000	6399999
9	836477	2	8	100	1407	1752	0	7110165	6400000	7199999
10	148512	2	8	50	1255	1762	0	7261836	7200000	7999999
11	763847	3	8	100	1512	1807	1368	8028700	8000000	8799999
12	1221395	3	8	95	1050	1549	1134	9254782	8800000	9599999
13	924372	2	8	65	1587	1196	0	10182887	9600000	10399999
14	734460	1	8	60	1108	0	0	10920130	10400000	11199999
15	639609	1	8	70	1522	0	0	11560847	11200000	11999999

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

Type 5 Radar Waveform_22

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	377511	1	10	70	1937	0	0	377511	0	599999
2	710330	3	10	75	1551	1575	1971	1089778	600000	1199999
3	108695	3	10	100	1017	1903	1125	1203570	1200000	1799999
4	1117421	1	10	65	1792	0	0	2325036	1800000	2399999
5	244350	3	10	100	1171	1001	1889	2571178	2400000	2999999
6	933796	2	10	55	1459	1337	0	3509035	3000000	3599999
7	567730	3	10	55	1784	1887	1005	4079561	3600000	4199999
8	488453	2	10	65	1056	1427	0	4572690	4200000	4799999
9	783867	1	10	90	1092	0	0	5359040	4800000	5399999
10	513202	1	10	85	1806	0	0	5873334	5400000	5999999
11	720035	2	10	65	1513	1846	0	6595175	6000000	6599999
12	474197	1	10	80	1453	0	0	7072731	6600000	7199999
13	296158	3	10	80	1238	1445	1692	7370342	7200000	7799999
14	834786	3	10	70	1918	1445	1385	8209503	7800000	8399999
15	451746	2	10	65	1822	1757	0	8665997	8400000	8999999
16	666246	2	10	75	1167	1447	0	9335822	9000000	9599999
17	556956	1	10	70	1354	0	0	9895392	9600000	10199999
18	566564	3	10	50	1844	1825	1273	10463310	10200000	10799999
19	505066	1	10	100	1837	0	0	10973318	10800000	11399999
20	628944	2	10	65	1869	1235	0	11604099	11400000	11999999

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

Type 5 Radar Waveform_23

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	417801	2	18	55	1613	1402	0	417801	0	923076
2	503966	2	18	90	1790	1107	0	924782	923077	1846153
3	979322	3	18	70	1341	1254	1535	1907001	1846154	2769230
4	1185851	1	18	100	1865	0	0	3096982	2769231	3692307
5	826267	2	18	85	1246	1235	0	3925114	3692308	4615384
6	1133242	3	18	50	1153	1019	1755	5060837	4615385	5538461
7	1262202	3	18	50	1676	1297	1203	6326966	5538462	6461538
8	807902	3	18	90	1892	1956	1371	7139044	6461539	7384615
9	1024979	2	18	55	1142	1385	0	8169242	7384616	8307692
10	279189	1	18	85	1570	0	0	8450958	8307693	9230769
11	985992	1	18	55	1521	0	0	9438520	9230770	10153846
12	1145941	1	18	65	1414	0	0	10585982	10153847	11076923
13	648342	3	18	100	1887	1454	1176	11235738	11076924	12000000

Total number of pulses in waveform = 27

Type 5 Radar Waveform_24

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	40212	3	5	85	1295	1852	1994	40212	0	599999
2	926571	2	5	55	1558	1654	0	971924	600000	1199999
3	795782	2	5	95	1454	1233	0	1770918	1200000	1799999
4	520993	3	5	75	1728	1348	1673	2294598	1800000	2399999
5	686825	3	5	100	1300	1899	1291	2986172	2400000	2999999
6	105281	3	5	80	1244	1083	1995	3095943	3000000	3599999
7	737725	2	5	75	1833	1893	0	3837990	3600000	4199999
8	447082	3	5	85	1628	1814	1098	4288798	4200000	4799999
9	1085139	3	5	100	1649	1202	1891	5378477	4800000	5399999
10	241955	3	5	85	1766	1022	1478	5625174	5400000	5999999
11	433082	1	5	75	1232	0	0	6062522	6000000	6599999
12	586601	2	5	90	1503	1942	0	6650355	6600000	7199999
13	992724	1	5	100	1080	0	0	7646524	7200000	7799999
14	568712	2	5	60	1275	1024	0	8216316	7800000	8399999
15	256997	2	5	75	1298	1897	0	8475612	8400000	8999999
16	1116685	2	5	60	1514	1407	0	9595492	9000000	9599999
17	327868	1	5	75	1632	0	0	9926281	9600000	10199999
18	729890	3	5	90	1590	1458	1321	10657803	10200000	10799999
19	499908	3	5	70	1587	1191	1258	11162080	10800000	11399999
20	474286	2	5	50	1518	1698	0	11640402	11400000	11999999

Total number of pulses in waveform = 46

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	277222	1	14	80	1384	0	0	277222	0	599999
2	564885	1	14	55	1122	0	0	843491	600000	1199999
3	463920	3	14	70	1974	1876	1428	1308533	1200000	1799999
4	892858	1	14	65	1404	0	0	2206669	1800000	2399999
5	641267	1	14	50	1459	0	0	2849340	2400000	2999999
6	465547	2	14	50	1560	1677	0	3316346	3000000	3599999
7	686640	3	14	65	1251	1118	1033	4006223	3600000	4199999
8	763804	3	14	85	1118	1183	1649	4773429	4200000	4799999
9	374384	3	14	90	1432	1119	1275	5151763	4800000	5399999
10	527456	3	14	100	1449	1110	1485	5683045	5400000	5999999
11	711976	2	14	60	1439	1189	0	6399065	6000000	6599999
12	582083	3	14	75	1825	1159	1748	6983776	6600000	7199999
13	520807	2	14	90	1966	1373	0	7509315	7200000	7799999
14	395430	1	14	90	1287	0	0	7908084	7800000	8399999
15	701334	2	14	60	1503	1562	0	8610705	8400000	8999999
16	679251	1	14	50	1233	0	0	9293021	9000000	9599999
17	825488	2	14	95	1705	1851	0	10119742	9600000	10199999
18	335516	1	14	90	1455	0	0	10458814	10200000	10799999
19	603358	2	14	75	1514	1260	0	11063627	10800000	11399999
20	568049	1	14	55	1275	0	0	11634450	11400000	11999999

Total number of pulses in waveform = 38

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	769101	2	19	95	1340	1133	0	769101	0	1499999
2	1057709	2	19	80	1189	1972	0	1829283	1500000	2999999
3	2087223	2	19	100	1310	1621	0	3919667	3000000	4499999
4	1760228	1	19	95	1704	0	0	5682826	4500000	5999999
5	1224498	2	19	70	1064	1417	0	6909028	6000000	7499999
6	1968895	2	19	100	1552	1947	0	8880404	7500000	8999999
7	1261055	1	19	70	1960	0	0	10144958	9000000	10499999
8	1150911	1	19	75	1986	0	0	11297829	10500000	11999999

Total number of pulses in waveform = 13
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Type 5 Radar Waveform_27

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	325670	1	9	85	1076	0	0	325670	0	799999
2	988381	1	9	65	1736	0	0	1315127	800000	1599999
3	1016547	2	9	80	1873	1539	0	2333410	1600000	2399999
4	754615	2	9	95	1322	1769	0	3091437	2400000	3199999
5	530858	3	9	100	1033	1318	1550	3625386	3200000	3999999
6	964429	3	9	80	1027	1497	1340	4593716	4000000	4799999
7	927000	2	9	80	1454	1273	0	5524580	4800000	5599999
8	78379	1	9	75	1350	0	0	5605686	5600000	6399999
9	1531744	3	9	95	1480	1586	1364	7138780	6400000	7199999
10	316982	3	9	90	1980	1974	1101	7460192	7200000	7999999
11	835962	1	9	100	1172	0	0	8301209	8000000	8799999
12	1200544	3	9	70	1909	1609	1680	9502925	8800000	9599999
13	267537	1	9	80	1272	0	0	9775660	9600000	10399999
14	1193811	2	9	80	1112	1921	0	10970743	10400000	11199999
15	850940	2	9	80	1349	1118	0	11824716	11200000	11999999

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

Type 5 Radar Waveform_28

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	296335	2	6	75	1114	1640	0	296335	0	1499999
2	2057767	3	6	55	1605	1830	1514	2356856	1500000	2999999
3	1400398	2	6	50	1930	1438	0	3762203	3000000	4499999
4	1614240	2	6	95	1230	1370	0	5379811	4500000	5999999
5	983741	2	6	55	1782	1496	0	6366152	6000000	7499999
6	1427823	1	6	90	1422	0	0	7797253	7500000	8999999
7	2025012	2	6	65	1675	1782	0	9823687	9000000	10499999
8	1529707	3	6	60	1277	1346	1615	11356851	10500000	11999999

Total number of pulses in waveform = 17
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Type 5 Radar Waveform_29

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

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

Total number of pulses in waveform = 27

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Type 5 Radar Waveform_30

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	225311	2	12	100	1900	1193	0	225311	0	599999
2	547536	1	12	60	1665	0	0	775940	600000	1199999
3	591544	1	12	60	1342	0	0	1369149	1200000	1799999
4	537936	2	12	55	1857	1123	0	1908427	1800000	2399999
5	741875	3	12	65	1493	1292	1814	2653282	2400000	2999999
6	854788	1	12	85	1267	0	0	3512669	3000000	3599999
7	650941	1	12	55	1415	0	0	4164877	3600000	4199999
8	466228	2	12	65	1794	1179	0	4632520	4200000	4799999
9	549363	1	12	80	1635	0	0	5184856	4800000	5399999
10	468309	1	12	85	1034	0	0	5654800	5400000	5999999
11	370614	3	12	90	1238	1026	1642	6026448	6000000	6599999
12	599836	2	12	65	1323	1090	0	6630190	6600000	7199999
13	664140	1	12	85	1387	0	0	7296743	7200000	7799999
14	929630	2	12	65	1399	1210	0	8227760	7800000	8399999
15	504236	1	12	90	1138	0	0	8734605	8400000	8999999
16	843672	3	12	70	1963	1628	1449	9579415	9000000	9599999
17	572146	1	12	60	1849	0	0	10156601	9600000	10199999
18	239035	3	12	100	1081	1394	1532	10397485	10200000	10799999
19	987978	3	12	50	1398	1965	1577	11389470	10800000	11399999
20	107078	2	12	90	1918	1346	0	11501488	11400000	11999999

Total number of pulses in waveform = 36

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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	5257.4	1	16	5281.3	1
2	5320.2	1	17	5323.5	1
3	5251.6	1	18	5250.0	1
4	5318.3	1	19	5300.2	1
5	5263.5	1	20	5278.5	1
6	5329.0	1	21	5306.3	1
7	5266.7	1	22	5290.0	1
8	5275.4	1	23	5269.3	1
9	5254.5	1	24	5328.7	1
10	5296.8	1	25	5297.4	1
11	5315.7	1	26	5293.5	1
12	5272.4	1	27	5327.4	1
13	5312.4	1	28	5284.6	1
14	5260.1	1	29	5303.4	1
15	5309.4	1	30	5287.2	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
31	5251	93	10	5264	30
33	5277	99	11	5267	33
46	5255	138	15	5274	45
47	5274	141	27	5263	81
50	5253	150	28	5250	84
52	5279	156	45	5271	135
62	5272	186	65	5255	195
68	5280	204	69	5276	207
91	5262	273	89	5253	267
92	5271	276	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5260	15	5	5272	15
17	5289	51	24	5268	72
20	5278	60	38	5275	114
43	5282	129	39	5288	117
49	5283	147	46	5255	138
53	5259	159	60	5281	180
74	5269	222	75	5270	225
76	5276	228	80	5253	240
80	5266	240	89	5279	267
82	5274	246	90	5282	270
91	5267	273	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5280	9	22	5270	66
7	5268	21	33	5298	99
8	5260	24	34	5263	102
14	5252	42	38	5299	114
25	5296	75	43	5291	129
37	5292	111	47	5261	141
69	5293	207	59	5297	177
77	5275	231	63	5273	189
92	5253	276	70	5265	210
97	5270	291	80	5255	240
99	5251	297	82	5285	246
--	--	--	83	5294	249
--	--	--	86	5272	258
--	--	--	89	5280	267
--	--	--	91	5250	273

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5278	3	1	5294	3
11	5259	33	5	5251	15
20	5290	60	9	5259	27
35	5282	105	18	5250	54
40	5275	120	19	5291	57
51	5254	153	27	5289	81
55	5269	165	33	5293	99
56	5255	168	41	5290	123
66	5298	198	46	5273	138
70	5274	210	48	5283	144
74	5297	222	53	5274	159
91	5260	273	70	5268	210
95	5299	285	88	5270	264
--	--	--	89	5286	267

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5273	15	5	5297	15
6	5286	18	28	5260	84
9	5276	27	40	5273	120
10	5281	30	46	5280	138
17	5267	51	58	5282	174
21	5288	63	78	5263	234
24	5271	72	80	5270	240
42	5283	126	85	5258	255
60	5292	180	89	5294	267
61	5259	183	92	5298	276
67	5278	201	94	5283	282
72	5297	216	--	--	--
74	5294	222	--	--	--
75	5277	225	--	--	--
76	5285	228	--	--	--
79	5280	237	--	--	--
81	5274	243	--	--	--
86	5272	258	--	--	--
98	5289	294	--	--	--

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5284	21	10	5262	30
9	5251	27	15	5283	45
14	5301	42	25	5301	75
15	5305	45	34	5291	102
16	5282	48	36	5265	108
44	5262	132	37	5297	111
46	5265	138	42	5302	126
47	5296	141	45	5258	135
51	5288	153	49	5280	147
54	5297	162	50	5273	150
62	5294	186	56	5259	168
79	5275	237	59	5287	177
83	5274	249	68	5294	204
90	5280	270	71	5292	213
93	5304	279	74	5281	222
94	5268	282	96	5256	288
98	5277	294	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5299	9	4	5308	12
11	5319	33	7	5286	21
21	5300	63	9	5301	27
27	5269	81	16	5278	48
49	5259	147	28	5315	84
61	5310	183	29	5291	87
--	--	--	38	5306	114
--	--	--	41	5289	123
--	--	--	54	5261	162
--	--	--	63	5265	189
--	--	--	66	5285	198
--	--	--	72	5312	216
--	--	--	73	5298	219
Radar waveform #15			Radar waveform #16		

Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5301	6	1	5268	3
20	5262	60	2	5315	6
24	5273	72	4	5283	12
28	5283	84	22	5267	66
50	5285	150	31	5278	93
52	5269	156	40	5312	120
65	5315	195	44	5306	132
74	5267	222	61	5301	183
77	5300	231	63	5300	189
78	5307	234	73	5273	219
--	--	--	93	5274	279
--	--	--	96	5297	288

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5283	21	2	5263	6
17	5285	51	5	5274	15
24	5264	72	6	5321	18
52	5308	156	7	5304	21
60	5261	180	21	5284	63
64	5275	192	38	5314	114
70	5315	210	49	5277	147
73	5295	219	50	5290	150
81	5296	243	55	5276	165
85	5316	255	60	5303	180
--	--	--	64	5299	192
--	--	--	68	5302	204
--	--	--	77	5283	231
--	--	--	81	5293	243
--	--	--	86	5308	258
--	--	--	87	5318	261
--	--	--	89	5319	267
--	--	--	94	5287	282
--	--	--	96	5310	288
--	--	--	99	5320	297

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5316	21	5	5299	15
22	5293	66	7	5276	21
54	5281	162	8	5285	24
66	5323	198	9	5302	27
70	5321	210	13	5309	39
76	5286	228	20	5289	60
79	5329	237	35	5303	105
96	5278	288	41	5324	123
--	--	--	50	5312	150
--	--	--	63	5283	189
--	--	--	66	5316	198
--	--	--	86	5278	258
--	--	--	87	5301	261
--	--	--	89	5270	267
--	--	--	92	5323	276
--	--	--	97	5314	291

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5306	0	6	5299	18
9	5335	27	7	5298	21
12	5328	36	10	5301	30
17	5304	51	11	5296	33
23	5289	69	37	5338	111
27	5307	81	44	5322	132
30	5281	90	62	5333	186
35	5300	105	69	5305	207
43	5314	129	82	5323	246
71	5339	213	95	5313	285
73	5326	219	96	5293	288
76	5283	228	99	5332	297
84	5299	252	--	--	--
98	5292	294	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5335	9	1	5323	3
10	5327	30	8	5315	24
22	5311	66	34	5325	102
28	5294	84	36	5332	108
34	5301	102	41	5280	123
54	5284	162	76	5304	228
58	5298	174	80	5337	240
69	5295	207	87	5298	261
72	5333	216	--	--	--
75	5304	225	--	--	--
78	5280	234	--	--	--
79	5286	237	--	--	--
86	5281	258	--	--	--
88	5330	264	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5298	21	1	5317	3
12	5304	36	5	5322	15
33	5310	99	12	5306	36
41	5282	123	35	5339	105
54	5296	162	41	5294	123
63	5297	189	46	5288	138
64	5334	192	49	5335	147
66	5341	198	59	5316	177
67	5312	201	62	5328	186
73	5290	219	67	5300	201
76	5339	228	72	5336	216
81	5315	243	73	5298	219
82	5340	246	98	5321	294

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5330	21	19	5340	57
17	5343	51	20	5303	60
24	5326	72	33	5318	99
25	5299	75	34	5297	102
32	5313	96	46	5344	138
35	5333	105	48	5312	144
46	5303	138	65	5337	195
48	5335	144	74	5309	222
51	5294	153	79	5306	237
54	5342	162	90	5323	270
57	5341	171	--	--	--
58	5322	174	--	--	--
69	5316	207	--	--	--
72	5320	216	--	--	--
89	5336	267	--	--	--
94	5306	282	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5318	39	16	5300	48
26	5308	78	17	5322	51
60	5323	180	19	5312	57
61	5357	183	21	5308	63
74	5311	222	22	5325	66
77	5322	231	31	5306	93
87	5338	261	36	5315	108
97	5346	291	48	5355	144
--	--	--	60	5352	180
--	--	--	75	5330	225

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Amy Zhang	Relative Humidity	65%
Test Site	SR2	Test Date	2018/12/11
Test Item	Radar Statistical Performance Check (802.11ax-HE160 mode – 5570MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5594.6	1	818	65	1
2	5497.5	1	638	83	1
3	5588.6	1	898	59	1
4	5509.5	1	678	78	1
5	5582.7	1	578	92	1
6	5527.9	1	778	68	1
7	5644.4	1	718	74	1
8	5491.0	1	918	58	1
9	5648.2	1	878	61	1
10	5557.4	1	518	102	1
11	5515.3	1	838	63	1
12	5649.0	1	3066	18	1
13	5533.5	1	618	86	1
14	5642.6	1	938	57	1
15	5576.4	1	798	67	1
16	5503.3	1	1431	37	1
17	5618.3	1	2898	19	1
18	5570.0	1	1080	49	1
19	5545.7	1	1940	28	1
20	5612.5	1	1043	51	1
21	5600.3	1	2314	23	1
22	5624.8	1	2022	27	1
23	5539.7	1	2026	27	1
24	5636.5	1	3062	18	1
25	5563.8	1	3012	18	1
26	5646.8	1	1294	41	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5521.4	1	986	54	1
28	5630.4	1	1273	42	1
29	5606.7	1	925	58	1
30	5551.3	1	1572	34	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5508.3	1.5	163	29	1
2	5623.5	2.6	179	26	1
3	5611.3	5.0	172	24	1
4	5496.9	4.6	165	25	1
5	5599.2	3.6	195	24	1
6	5514.8	4.9	183	26	1
7	5593.2	1.7	159	27	1
8	5538.1	4.6	204	27	0
9	5491.0	5.0	172	23	1
10	5647.8	2.1	182	29	1
11	5570.0	2.1	204	28	1
12	5556.7	4.4	164	24	1
13	5645.2	4.5	203	23	1
14	5502.5	3.1	187	26	1
15	5575.8	3.3	198	28	1
16	5532.7	5.0	191	24	1
17	5617.8	1.1	152	27	1
18	5526.5	2.6	206	26	1
19	5629.4	4.9	174	24	1
20	5605.9	1.3	165	26	1
21	5641.3	1.0	164	23	1
22	5532.7	1.5	188	23	1
23	5550.3	1.3	210	26	1
24	5635.7	3.8	206	23	1
25	5520.6	1.7	204	23	1
26	5643.9	1.3	219	24	1
27	5544.6	2.1	151	25	1
28	5649.0	1.8	151	29	1
29	5581.3	2.3	195	28	1
30	5562.9	4.3	191	23	1
Detection Percentage (%)					96.7%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5501.9	8.9	479	16	1
2	5543.4	8.6	472	16	1
3	5495.6	9.1	348	18	1
4	5537.3	9.3	264	17	1
5	5525.4	9.9	486	17	1
6	5648.4	7.1	299	17	1
7	5531.8	9.6	382	17	1
8	5507.3	10.0	483	16	1
9	5643.5	7.7	361	16	1
10	5549.5	8.8	468	17	1
11	5513.5	7.5	290	16	1
12	5645.2	9.0	301	17	1
13	5561.4	7.5	330	16	1
14	5555.5	8.9	280	17	1
15	5491.0	6.1	297	18	1
16	5649.0	6.9	452	16	1
17	5598.3	6.0	397	17	1
18	5592.8	6.5	250	16	1
19	5519.3	6.2	464	17	1
20	5640.9	6.6	283	18	1
21	5610.2	8.7	417	18	1
22	5570.0	8.6	456	17	1
23	5622.8	7.1	461	16	1
24	5604.6	6.5	356	18	1
25	5634.1	7.9	347	16	1
26	5574.7	7.7	375	16	1
27	5628.6	6.8	336	17	1
28	5580.3	8.5	356	16	1
29	5616.3	7.0	262	16	1
30	5586.2	7.8	262	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	5500.2	17.4	324	16	1
2	5639.7	19.1	273	13	1
3	5506.8	19.5	445	16	1
4	5627.6	11.0	271	15	1
5	5524.2	17.6	432	16	1
6	5494.6	12.2	465	13	1
7	5633.8	13.1	376	14	1
8	5530.5	19.1	476	14	1
9	5646.8	19.3	479	16	1
10	5518.9	11.6	370	16	0
11	5649.0	18.9	493	15	1
12	5554.9	17.0	470	14	1
13	5542.9	16.4	442	13	1
14	5615.7	15.7	378	13	1
15	5491.0	12.5	398	12	1
16	5585.4	16.7	250	13	1
17	5560.2	20.0	434	14	1
18	5536.2	15.8	269	15	1
19	5591.4	11.2	336	16	1
20	5603.9	12.2	368	15	1
21	5548.3	17.2	259	13	1
22	5609.1	15.2	476	12	1
23	5579.1	12.9	498	12	1
24	5641.4	11.6	303	15	1
25	5570.0	14.7	348	13	1
26	5621.5	18.5	374	12	1
27	5512.3	16.4	349	16	1
28	5645.9	15.1	415	13	1
29	5597.6	16.7	332	14	1
30	5573.5	17.4	479	13	1
Detection Percentage (%)					96.7%

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%+96.7%+100%+96.7%)/4 = 98.3% (>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	5496.3	1	16	5570.0	1
2	5498.3	1	17	5570.0	1
3	5497.5	1	18	5570.0	0
4	5499.5	0	19	5570.0	1
5	5499.9	1	20	5570.0	1
6	5494.7	1	21	5644.2	1
7	5500.3	1	22	5643.8	1
8	5496.7	1	23	5641.8	1
9	5495.9	1	24	5643.4	1
10	5495.1	1	25	5640.2	1
11	5570.0	1	26	5645.4	1
12	5570.0	1	27	5640.6	1
13	5570.0	1	28	5645.0	0
14	5570.0	1	29	5639.8	1
15	5570.0	1	30	5642.6	1
Detection Percentage (%)					90%

Type 5 Radar Waveform_1

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	260956	1	9	90	1540	0	0	260956	0	666666
2	646214	1	9	55	1629	0	0	908710	666667	1333333
3	711274	1	9	90	1809	0	0	1621613	1333334	2000000
4	547173	1	9	55	1743	0	0	2170595	2000001	2666667
5	964059	3	9	75	1021	1677	1377	3136397	2666668	3333334
6	611081	1	9	95	1137	0	0	3751553	3333335	4000001
7	631891	3	9	100	1596	1736	1602	4384581	4000002	4666668
8	618241	2	9	75	1397	1767	0	5007756	4666669	5333335
9	518853	3	9	100	1100	1741	1214	5529773	5333336	6000002
10	1112359	2	9	80	1698	1062	0	6646187	6000003	6666669
11	77747	2	9	85	1741	1708	0	6726694	6666670	7333336
12	764739	1	9	70	1347	0	0	7494882	7333337	8000003
13	1117960	3	9	70	1846	1220	1141	8614189	8000004	8666670
14	635888	3	9	60	1147	1190	1661	9254284	8666671	9333337
15	709155	3	9	85	1874	1918	1068	9967437	9333338	10000004
16	233770	3	9	100	1144	1021	1572	10206067	10000005	10666671
17	1068080	1	9	85	1194	0	0	11277884	10666672	11333338
18	413301	2	9	50	1145	1485	0	11692379	11333339	12000005

Total number of pulses in waveform = 36

Type 5 Radar Waveform_2

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	356111	3	14	100	1553	1728	1662	356111	0	857142
2	590057	2	14	65	1681	1096	0	951111	857143	1714285
3	775307	3	14	60	1345	1840	1551	1729195	1714286	2571428
4	887731	1	14	85	1063	0	0	2621662	2571429	3428571
5	1214781	2	14	70	1250	1952	0	3837506	3428572	4285714
6	1125346	1	14	70	1683	0	0	4966054	4285715	5142857
7	520018	2	14	85	1068	1038	0	5487755	5142858	6000000
8	659104	2	14	85	1303	1288	0	6148965	6000001	6857143
9	1066549	2	14	60	1155	1363	0	7218105	6857144	7714286
10	943303	1	14	60	1047	0	0	8163926	7714287	8571429
11	1187554	3	14	80	1384	1103	1985	9352527	8571430	9428572
12	480685	2	14	80	1947	1022	0	9837684	9428573	10285715
13	942362	2	14	90	1837	1064	0	10783015	10285716	11142858
14	1170634	2	14	80	1262	1428	0	11956550	11142859	12000001

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

Type 5 Radar Waveform_3

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	850656	3	12	90	1705	1343	1979	850656	0	999999
2	1095778	2	12	75	1934	1389	0	1951461	1000000	1999999
3	218810	2	12	50	1771	1743	0	2173594	2000000	2999999
4	1684370	2	12	90	1917	1221	0	3861478	3000000	3999999
5	451762	2	12	65	1858	1046	0	4316378	4000000	4999999
6	715883	3	12	100	1647	1551	1064	5035165	5000000	5999999
7	1901639	1	12	100	1650	0	0	6941066	6000000	6999999
8	384700	1	12	75	1203	0	0	7327416	7000000	7999999
9	1034678	1	12	70	1025	0	0	8363297	8000000	8999999
10	1252827	3	12	70	1577	1820	1959	9617149	9000000	9999999
11	936393	2	12	85	1453	1916	0	10558898	10000000	10999999
12	635037	3	12	100	1946	1878	1724	11197304	11000000	11999999

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

Type 5 Radar Waveform_4

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	69968	1	17	65	1272	0	0	69968	0	666666
2	657856	1	17	60	1190	0	0	729096	666667	1333333
3	1261154	2	17	100	1070	1949	0	1991440	1333334	2000000
4	186112	2	17	50	1351	1126	0	2180571	2000001	2666667
5	930768	2	17	90	1484	1840	0	3113816	2666668	3333334
6	846318	1	17	65	1221	0	0	3963458	3333335	4000001
7	305486	1	17	60	1177	0	0	4270165	4000002	4666668
8	1042340	2	17	100	1052	1603	0	5313682	4666669	5333335
9	314462	2	17	65	1973	1123	0	5630799	5333336	6000002
10	780576	1	17	100	1299	0	0	6414471	6000003	6666669
11	773978	2	17	70	1851	1385	0	7189748	6666670	7333336
12	373233	2	17	100	1973	1671	0	7566217	7333337	8000003
13	901302	2	17	100	1324	1980	0	8471163	8000004	8666670
14	708067	2	17	75	1189	1733	0	9182534	8666671	9333337
15	192751	1	17	70	1635	0	0	9378207	9333338	10000004
16	1020369	1	17	80	1420	0	0	10400211	10000005	10666671
17	706940	1	17	65	1047	0	0	11108571	10666672	11333338
18	881959	2	17	85	1388	1013	0	11991577	11333339	12000005

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

Type 5 Radar Waveform_5

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	1206364	1	18	50	1690	0	0	1206364	0	1333332
2	488470	3	18	95	1468	1291	1351	1696524	1333333	2666665
3	1484180	1	18	70	1535	0	0	3184814	2666666	3999998
4	918012	1	18	100	1719	0	0	4104361	3999999	5333331
5	1228035	1	18	95	1298	0	0	5334115	5333332	6666664
6	2594933	1	18	55	1744	0	0	7930346	6666665	7999997
7	1072562	3	18	80	1073	1797	1191	9004652	7999998	9333330
8	1085699	2	18	55	1821	1164	0	10094412	9333331	10666663
9	780714	1	18	80	1696	0	0	10878111	10666664	11999996

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

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	615231	3	5	85	1035	1229	1438	615231	0	705881
2	433465	1	5	55	1483	0	0	1052398	705882	1411763
3	942157	1	5	85	1427	0	0	1996038	1411764	2117645
4	674281	1	5	80	1197	0	0	2671746	2117646	2823527
5	737369	1	5	60	1678	0	0	3410312	2823528	3529409
6	529352	2	5	95	1172	1927	0	3941342	3529410	4235291
7	442083	1	5	75	1075	0	0	4386524	4235292	4941173
8	733094	2	5	75	1934	1641	0	5120693	4941174	5647055
9	604556	1	5	100	1856	0	0	5728824	5647056	6352937
10	765795	2	5	75	1838	1805	0	6496475	6352938	7058819
11	824260	3	5	75	1972	1849	1602	7324378	7058820	7764701
12	748012	2	5	95	1205	1618	0	8077813	7764702	8470583
13	490341	3	5	95	1934	1600	1379	8570977	8470584	9176465
14	1098088	1	5	50	1119	0	0	9673978	9176466	9882347
15	240712	2	5	80	1574	1152	0	9915809	9882348	10588229
16	1143977	3	5	85	1607	1721	1713	11062512	10588230	11294111
17	762235	1	5	55	1697	0	0	11829788	11294112	11999993

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

Type 5 Radar Waveform_7

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	115665	1	19	60	1803	0	0	115665	0	857142
2	1464333	2	19	50	1335	1877	0	1581801	857143	1714285
3	411767	2	19	60	1948	1107	0	1996780	1714286	2571428
4	1210560	2	19	65	1348	1834	0	3210395	2571429	3428571
5	430666	1	19	60	1249	0	0	3644243	3428572	4285714
6	1248943	2	19	60	1858	1168	0	4894435	4285715	5142857
7	479160	3	19	70	1602	1803	1084	5376621	5142858	6000000
8	1098297	2	19	55	1473	1928	0	6479407	6000001	6857143
9	746186	1	19	75	1977	0	0	7228994	6857144	7714286
10	792794	2	19	100	1212	1444	0	8023765	7714287	8571429
11	1070090	3	19	65	1459	1046	1412	9096511	8571430	9428572
12	1011344	1	19	80	1635	0	0	10111772	9428573	10285715
13	984216	2	19	60	1393	1681	0	11097623	10285716	11142858
14	541809	2	19	55	1601	1075	0	11642506	11142859	12000001

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

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	575820	2	10	75	1963	1832	0	575820	0	631578
2	162378	1	10	50	1633	0	0	741993	631579	1263157
3	974896	3	10	80	1493	1596	1872	1718522	1263158	1894736
4	609009	3	10	70	1840	1449	1940	2332492	1894737	2526315
5	492063	1	10	80	1055	0	0	2829784	2526316	3157894
6	647562	2	10	80	1367	1688	0	3478401	3157895	3789473
7	496417	3	10	55	1192	1270	1461	3977873	3789474	4421052
8	981835	2	10	85	1679	1485	0	4963631	4421053	5052631
9	466784	3	10	75	1043	1022	1730	5433579	5052632	5684210
10	659687	1	10	100	1759	0	0	6097061	5684211	6315789
11	464805	1	10	85	1276	0	0	6563625	6315790	6947368
12	419674	1	10	100	1541	0	0	6984575	6947369	7578947
13	1043323	3	10	95	1937	1994	1234	8029439	7578948	8210526
14	588913	2	10	80	1912	1347	0	8623517	8210527	8842105
15	703439	1	10	50	1312	0	0	9330215	8842106	9473684
16	552077	2	10	50	1191	1564	0	9883604	9473685	10105263
17	501348	3	10	60	1321	1567	1835	10387707	10105264	10736842
18	654516	1	10	75	1388	0	0	11046946	10736843	11368421
19	738296	3	10	85	1364	1072	1167	11786630	11368422	12000000

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

Type 5 Radar Waveform_9

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	264497	1	8	70	1114	0	0	264497	0	1499999
2	2227993	1	8	65	1435	0	0	2493604	1500000	2999999
3	1509719	2	8	90	1462	1842	0	4004758	3000000	4499999
4	1284536	3	8	75	1249	1830	1033	5292598	4500000	5999999
5	1893745	3	8	80	1103	1439	1501	7190455	6000000	7499999
6	679631	2	8	50	1422	1179	0	7874129	7500000	8999999
7	2461573	2	8	65	1749	1479	0	10338303	9000000	10499999
8	1283045	3	8	65	1250	1674	1584	11624576	10500000	11999999

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

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	38866	3	6	95	1253	1253	1578	38866	0	599999
2	728318	3	6	50	1129	1429	1955	771268	600000	1199999
3	694501	3	6	70	1931	1464	1094	1470282	1200000	1799999
4	626625	3	6	95	1069	1199	1242	2101396	1800000	2399999
5	739813	2	6	65	1060	1641	0	2844719	2400000	2999999
6	501714	1	6	95	1268	0	0	3349134	3000000	3599999
7	809666	2	6	75	1556	1292	0	4160068	3600000	4199999
8	147658	2	6	75	1431	1751	0	4310574	4200000	4799999
9	907150	2	6	80	1204	1817	0	5220906	4800000	5399999
10	531607	1	6	85	1734	0	0	5755534	5400000	5999999
11	258057	1	6	100	1282	0	0	6015325	6000000	6599999
12	650764	2	6	85	1071	1615	0	6667371	6600000	7199999
13	692357	2	6	85	1530	1380	0	7362414	7200000	7799999
14	879381	3	6	100	1107	1323	1288	8244705	7800000	8399999
15	291619	3	6	100	1280	1738	1803	8540042	8400000	8999999
16	753338	1	6	75	1516	0	0	9298201	9000000	9599999
17	656167	3	6	90	1084	1060	1384	9955884	9600000	10199999
18	782261	2	6	80	1011	1719	0	10741673	10200000	10799999
19	544430	1	6	55	1261	0	0	11288833	10800000	11399999
20	194625	3	6	50	1707	1618	1560	11484719	11400000	11999999

Total number of pulses in waveform = 43
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