



# DFS MEASUREMENT REPORT

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

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**FCC ID:** SFK-140W  
**APPLICANT:** CIG Shanghai Co., Ltd.

**Application Type:** Certification  
**Product:** G-140W-C  
**Model No.:** G-140W-C  
**Brand Name:** Shanghai Nokia bell  
**FCC Classification:** Unlicensed National Information Infrastructure (NII)  
**FCC Rule Part(s):** Part 15 Subpart E - 15.407 Section (h)(2)  
KDB 905462 D02v02, KDB 905462 D04v01

**Type of Device:** ☒ Master Device  
☐ Client Device (No radar detection)  
☐ Client Device with radar detection

**Test Date:** December 01 ~ 23, 2017

Reviewed By : Sunny Sun  
( Sunny Sun )

Approved By : Marlinchen  
( Marlin Chen )



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 905462 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 (Suzhou) Co., Ltd.

## Revision History

| Report No.    | Version | Description    | Issue Date | Note  |
|---------------|---------|----------------|------------|-------|
| 1708RSU021-U3 | Rev. 01 | Initial Report | 02-26-2018 | Valid |
|               |         |                |            |       |

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## §2.1033 General Information

|                                |                                                                                                                                 |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>              | CIG Shanghai Co., Ltd.                                                                                                          |
| <b>Applicant Address:</b>      | 5F, Building 8, No.2388 ChenHang Road, Minghang Di, Shanghai, China                                                             |
| <b>Manufacturer:</b>           | CIG Shanghai Co., Ltd., Shanghai Branch.                                                                                        |
| <b>Manufacturer Address:</b>   | F/2, 3 Building 1, No. 505 Jiangyue Road, Minhang District, Shanghai, P.R.China                                                 |
| <b>Test Site:</b>              | MRT Technology (Suzhou) Co., Ltd                                                                                                |
| <b>Test Site Address:</b>      | D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China                                              |
| <b>MRT Registration No.:</b>   | 893164                                                                                                                          |
| <b>Test Device Serial No.:</b> | N/A <input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> Engineering |

### Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Tian'edang Rd., Suzhou, China.

- MRT facility is a FCC registered (MRT Reg. No. 893164) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules.
- MRT facility is an IC registered (MRT Reg. No. 11384A-1) test laboratory with the site description on file at Industry Canada.
- MRT facility is a VCCI registered (R-20025, G-20034, C-20020, T-20020) test laboratory with the site description on file at VCCI Council.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, EU and TELEC Rules.



## 1. INTRODUCTION

### 1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

### 1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taihu Lake. These measurement tests were conducted at the MRT Technology (Suzhou) Co., Ltd. Facility located at D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2009 on September 30, 2013.



## 2. PRODUCT INFORMATION

### 2.1. Equipment Description

|                     |                     |
|---------------------|---------------------|
| Product Name:       | G-140W-C            |
| Model No.:          | G-140W-C            |
| Brand Name:         | Shanghai Nokia bell |
| Wi-Fi Specification | 802.11a/b/g/n/ac    |

### 2.2. Product Specification Subjective to this Report

|                                            |                                                                                                                                                                                                                                  |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency Range                            | For 802.11a/n-HT20/ac-VHT20:<br>5260~5320MHz, 5500~5720MHz<br>For 802.11n-HT40/ac-VHT40:<br>5270~5310MHz, 5510~5710MHz<br>For 802.11ac-VHT80:<br>5290MHz, 5530MHz, 5610MHz, 5690MHz                                              |
| Type of Modulation                         | 802.11b: DSSS, 802.11a/g/n/ac: OFDM                                                                                                                                                                                              |
| Modulation Type                            | CCK, DQPSK, DBPSK for DSSS<br>16QAM, 64QAM, 256QAM, QPSK, BPSK for OFDM                                                                                                                                                          |
| Power-on cycle                             | Requires 125.1 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

| Antenna     | Frequency | TX Paths | Max Peak Gain (dBi) | CDD Directional Gain (dBi) |         |
|-------------|-----------|----------|---------------------|----------------------------|---------|
|             |           |          |                     | For Power                  | For PSD |
| PCB Antenna | 2.4GHz    | 2        | 3.0                 | 3.0                        | 6.01    |
|             | 5GHz      | 2        | 3.0                 | 3.0                        | 6.01    |

Note1: The EUT supports Cyclic Delay Diversity (CDD) technology for 802.11a/b/g/n/ac mode, and CDD signals are correlated.

Note2: For CDD transmissions, directional gain is calculated as follows,  $N_{ANT} = 2$ ,  $N_{SS} = 1$ .

Three antennas have the same gain,  $G_{ANT}$ , Directional gain =  $G_{ANT} + \text{Array Gain}$ , where Array Gain is as follows.

- For power spectral density (PSD) measurements on all devices,  
Array Gain =  $10 \log (N_{ANT} / N_{SS}) \text{ dB} = 3.01$ ;
- For power measurements on IEEE 802.11 devices,  
Array Gain = 0 dB for  $N_{ANT} \leq 4$ ;



## 2.4. DFS Band Working Frequencies

### 802.11 a/n-HT20/ac-VHT20

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

### 802.11n-HT40/ac-VHT40

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

### 802.11ac-VHT80

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

## 2.5. Test Mode

|           |                                     |
|-----------|-------------------------------------|
| Test Mode | Mode 1: Communication with Notebook |
|-----------|-------------------------------------|

### 3. DFS DETECTION THRESHOLDS AND RADAR TEST WAVEFORMS

#### 3.1. Applicability

The following table from FCC KDB 905462 D02 NII 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 NII 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<br>See Note 1.                                                                                 |
| Channel Closing Transmission Time                                                                                                                                              | 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.<br>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<br>(See Notes 1, 2, and 3) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| EIRP $\geq$ 200 milliwatt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | -64 dBm                          |
| EIRP < 200 milliwatt and<br>power spectral density < 10 dBm/MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -62 dBm                          |
| EIRP < 200 milliwatt that do not meet the power<br>spectral density requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -64 dBm                          |
| <p><b>Note 1:</b> This is the level at the input of the receiver assuming a 0 dBi receive antenna.</p> <p><b>Note 2:</b> Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.</p> <p><b>Note3:</b> EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.</p> |                                  |

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

### 3.4. Parameters of DFS Test Signals

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

#### Short Pulse Radar Test Waveforms

| Radar Type                                                                                                                                  | Pulse Width (μsec) | PRI (μsec)                                                                                                                                                    | Number of Pulses                                                                                                              | Minimum Percentage of Successful Detection | Minimum Number of Trials |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------|
| 0                                                                                                                                           | 1                  | 1428                                                                                                                                                          | 18                                                                                                                            | See Note 1                                 | See Note 1               |
| 1                                                                                                                                           | 1                  | Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 3-6                                                                    | Roundup $\left\{ \left( \frac{1}{360} \right) \cdot \left( \frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$ | 60%                                        | 30                       |
|                                                                                                                                             |                    | Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A |                                                                                                                               |                                            |                          |
| 2                                                                                                                                           | 1-5                | 150-230                                                                                                                                                       | 23-29                                                                                                                         | 60%                                        | 30                       |
| 3                                                                                                                                           | 6-10               | 200-500                                                                                                                                                       | 16-18                                                                                                                         | 60%                                        | 30                       |
| 4                                                                                                                                           | 11-20              | 200-500                                                                                                                                                       | 12-16                                                                                                                         | 60%                                        | 30                       |
| Aggregate (Radar Types 1-4)                                                                                                                 |                    |                                                                                                                                                               |                                                                                                                               | 80%                                        | 120                      |
| <b>Note 1:</b> 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<br>Number | Pulse Repetition Frequency<br>(Pulses Per Second) | Pulse Repetition Interval<br>(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                       |

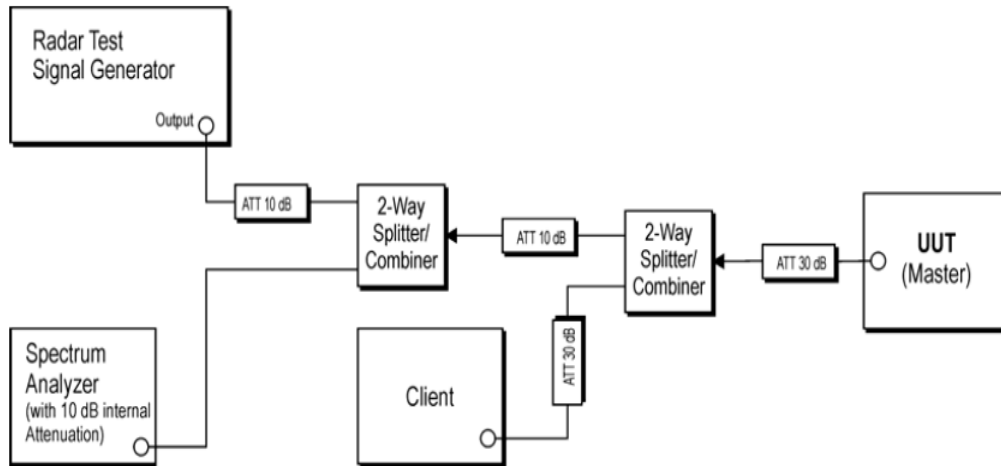
**Table 3-8: Parameters for Frequency Hopping Radar Waveforms**

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



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



#### 4. TEST EQUIPMENT CALIBRATION DATE

Dynamic Frequency Selection (DFS)

| Instrument                  | Manufacturer             | Type No.  | Asset No.   | Cali. Interval | Cali. Due Date |
|-----------------------------|--------------------------|-----------|-------------|----------------|----------------|
| EXA Signal Analyzer         | Keysight                 | N9010A    | MRTSUE06195 | 1 year         | 2018/04/22     |
| ESG Vector Signal Generator | Agilent                  | E4438C    | MRTSUE06026 | 1 year         | 2018/12/06     |
| Thermohygrometer            | Testo                    | 608-H1    | MRTSUE06222 | 1 year         | 2018/11/21     |
| Power divider               | Marvelous Microwave Inc. | 2-8GB     | MRTSUE06261 | 1 year         | 2018/11/02     |
| Broad Band Horn Antenna     | Schwarzbeck              | BBHA9120D | MRTSUE06023 | 1 year         | 2018/10/21     |

Client Information

| Instrument               | Manufacturer | Type No. |
|--------------------------|--------------|----------|
| Wireless Network Adapter | Intel        | 7260HMW  |

| Software       | Version | Manufacturer | Function                         |
|----------------|---------|--------------|----------------------------------|
| Pulse Building | N/A     | Agilent      | Radar Signal Generation Software |
| DFS Tool       | V 6.9.2 | Agilent      | DFS Test Software                |

## 5. TEST RESULT

### 5.1. Summary

**Company Name:** CIG Shanghai Co., Ltd.

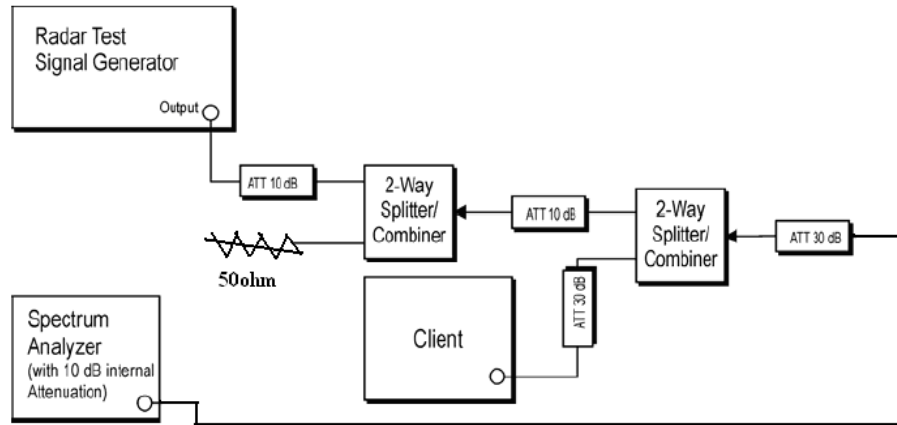
**FCC ID:** SFK-140W

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

## 5.2. Radar Waveform Calibration

### 5.2.1. Calibration Setup

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



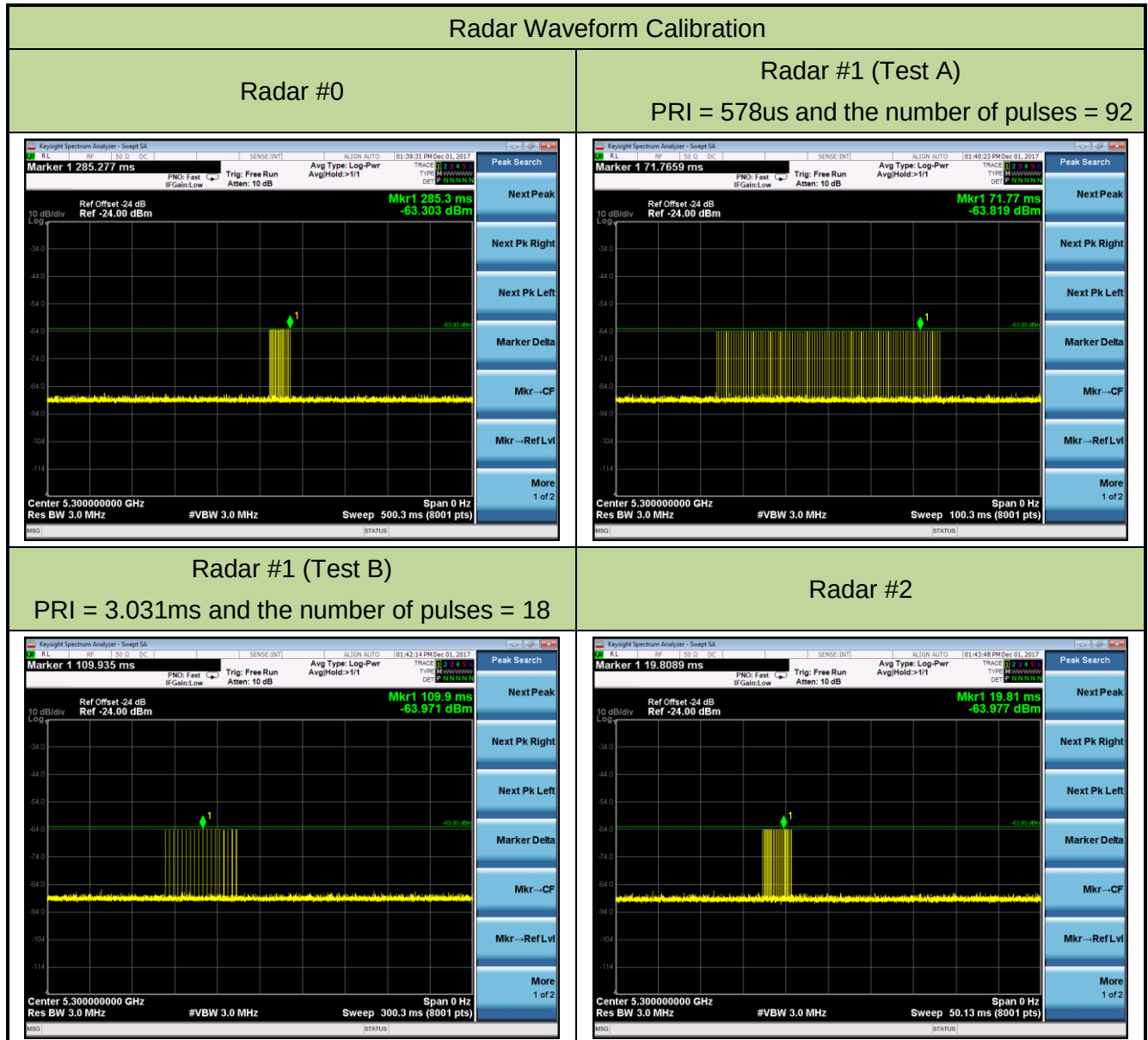
**Figure 3-2: Conducted Test Setup**

### 5.2.2. Calibration Procedure

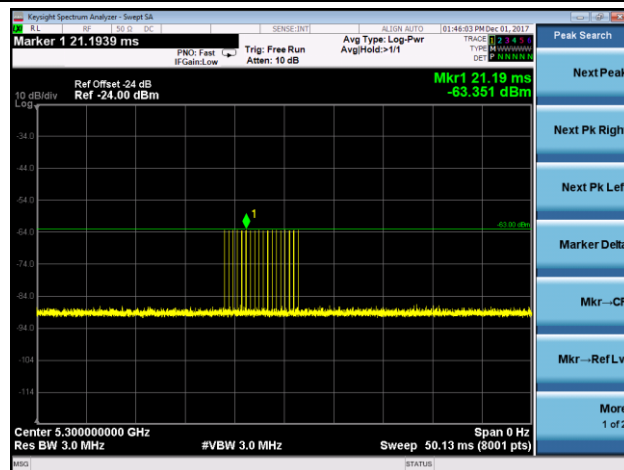
The Interference Radar Detection Threshold Level is  $(-64\text{dBm}) + (0) [\text{dBi}] + 1 \text{ dB} = -63 \text{ dBm}$  that had been taken into account the output power range and antenna gain. The above equipment setup was used to calibrate the conducted Radar Waveform. A vector signal generator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

### 5.2.3. Cablibration Result

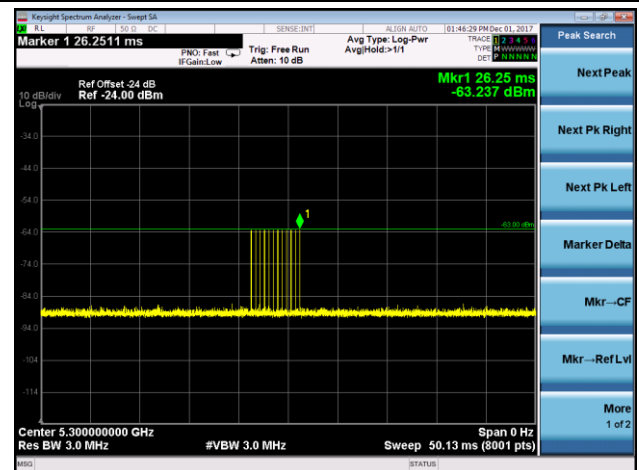
|               |                            |                   |            |
|---------------|----------------------------|-------------------|------------|
| Product       | G-140W-C                   | Temperature       | 27°C       |
| Test Engineer | Amy Zhang                  | Relative Humidity | 65%        |
| Test Site     | TR5                        | Test Date         | 2017/12/01 |
| Test Item     | Radar Waveform Calibration |                   |            |



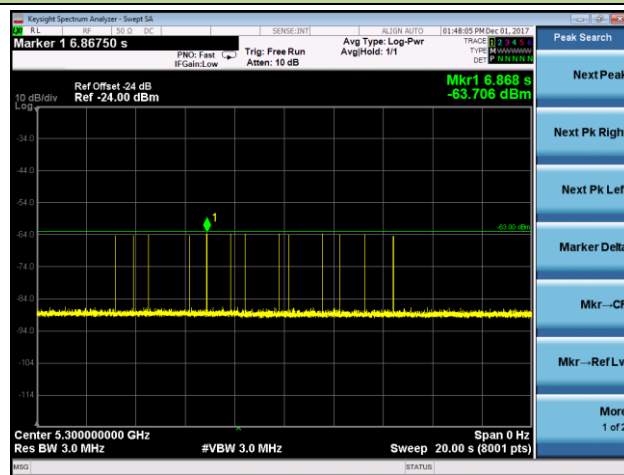
Radars #3



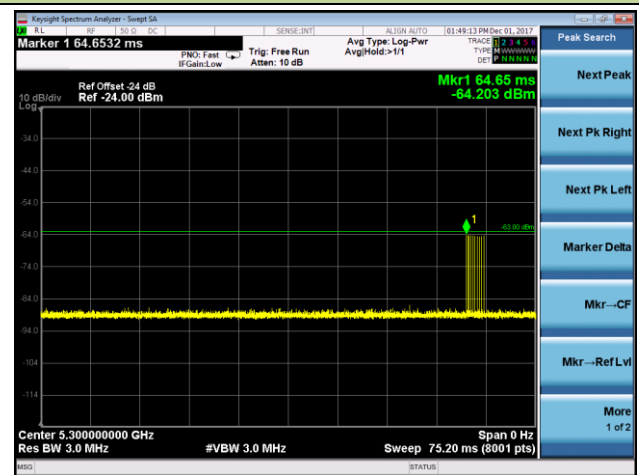
Radars #4



Radars #5

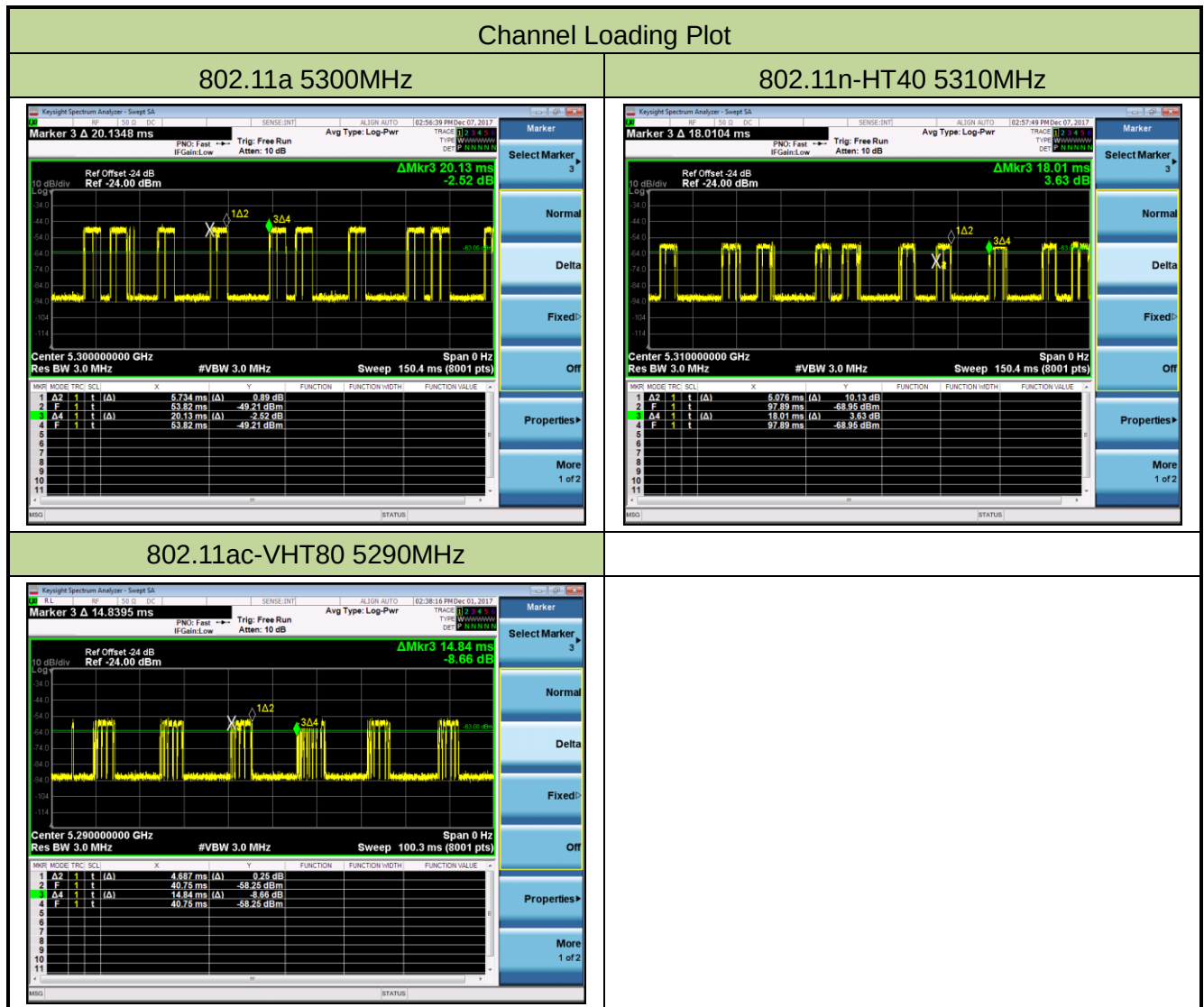


Radars #6



### 5.2.4. Channel Loading Test Result

|               |                 |                   |            |
|---------------|-----------------|-------------------|------------|
| Product       | G-140W-C        | Temperature       | 27°C       |
| Test Engineer | Amy Zhang       | Relative Humidity | 65%        |
| Test Site     | TR5             | Test Date         | 2017/12/07 |
| Test Item     | Channel Loading |                   |            |



| Test Mode      | Test Frequency | Packet ratio | Requirement ratio | Test Result |
|----------------|----------------|--------------|-------------------|-------------|
| 802.11a        | 5300 MHz       | 28.48%       | ≥ 17%             | Pass        |
| 802.11n-HT40   | 5310 MHz       | 28.18%       | ≥ 17%             | Pass        |
| 802.11ac-VHT80 | 5290 MHz       | 31.58%       | ≥ 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. NII Detection Bandwidth Measurement**

#### **5.3.1. Test Limit**

Minimum 100% of the NII 99% transmission power bandwidth. During the U-NII Detection Bandwidth detection test, each frequency step the minimum percentage of detection is 90 percent.

Measurements are performed with no data traffic.

#### **5.3.2. Test Procedure**

1. Adjust the equipment to produce a single Burst of any one of the Short Pulse Radar Types 0-4 in Table 3-5 at the center frequency of the EUT Operating Channel at the specified DFS Detection Threshold level.
2. The generating equipment is configured as shown in the Conducted Test Setup above section 3.5.
3. The EUT is set up as a stand-alone device (no associated Client or Master, as appropriate) and no traffic. Frame based systems will be set to a talk/listen ratio reflecting the worst case (maximum) that is user configurable during this test.
4. Generate a single radar Burst, and note the response of the EUT. Repeat for a minimum of 10 trials. The EUT must detect the Radar Waveform using the specified U-NII Detection Bandwidth criterion shown in Table 3-5. In cases where the channel bandwidth may exceed past the DFS band edge on specific channels (i.e., 802.11ac or wideband frame based systems) select a channel that has the entire emission bandwidth within the DFS band. If this is not possible, test the detection BW to the DFS band edge.
5. Starting at the center frequency of the UUT operating Channel, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in Table 3-3. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as FH) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies above FH is not required to demonstrate compliance.
6. Starting at the center frequency of the EUT operating Channel, decrease the radar frequency in 1 MHz steps, repeating the above item 4 test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion. Record the lowest frequency (denote as FL) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies below FL is not required to demonstrate compliance.
7. The U-NII Detection Bandwidth is calculated as follows:  $\text{U-NII Detection Bandwidth} = \text{FH} - \text{FL}$
8. The U-NII Detection Bandwidth must be at least 100% of the EUT transmitter 99% power, otherwise, the EUT does not comply with DFS requirements.

### 5.3.3. Test Result

|               |                                              |                   |            |
|---------------|----------------------------------------------|-------------------|------------|
| Product       | G-140W-C                                     | Temperature       | 27°C       |
| Test Engineer | Amy Zhang                                    | Relative Humidity | 65%        |
| Test Site     | TR5                                          | Test Date         | 2017/12/07 |
| Test Item     | Detection Bandwidth (802.11a mode – 5300MHz) |                   |            |

| Radar Frequency<br>(MHz) | DFS Detection Trials (1=Detection, 0= No Detection) |   |   |   |   |   |   |   |   |    | Detection Rate (%) |
|--------------------------|-----------------------------------------------------|---|---|---|---|---|---|---|---|----|--------------------|
|                          | 1                                                   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                    |
| 5290                     | 0                                                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0%                 |
| 5291 FL                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5292                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5293                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5294                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5295                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5300                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5305                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5306                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5307                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5308                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5309 FH                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5310                     | 0                                                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0%                 |

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5300MHz. The 99% channel bandwidth is 16.63MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5309MHz - 5291MHz = 18MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 16.63MHz x 100% = 16.63MHz.



|               |                                                   |                   |            |
|---------------|---------------------------------------------------|-------------------|------------|
| Product       | G-140W-C                                          | Temperature       | 27°C       |
| Test Engineer | Amy Zhang                                         | Relative Humidity | 65%        |
| Test Site     | TR5                                               | Test Date         | 2017/12/07 |
| Test Item     | Detection Bandwidth (802.11n-HT40 mode – 5310MHz) |                   |            |

| Radar Frequency<br>(MHz) | DFS Detection Trials (1=Detection, 0= No Detection) |   |   |   |   |   |   |   |   |    | Detection Rate (%) |
|--------------------------|-----------------------------------------------------|---|---|---|---|---|---|---|---|----|--------------------|
|                          | 1                                                   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                    |
| 5290                     | 0                                                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0%                 |
| 5291                     | 0                                                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0%                 |
| 5292 FL                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5293                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5294                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5295                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 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 5310MHz. The 99% channel bandwidth is 36.08MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5329MHz - 5292MHz = 37MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 36.08MHz x 100% = 36.08MHz.

|               |                                                     |                   |            |
|---------------|-----------------------------------------------------|-------------------|------------|
| Product       | G-140W-C                                            | Temperature       | 27°C       |
| Test Engineer | Amy Zhang                                           | Relative Humidity | 65%        |
| Test Site     | TR5                                                 | Test Date         | 2017/12/07 |
| Test Item     | Detection Bandwidth (802.11ac-VHT80 mode – 5290MHz) |                   |            |

| Radar Frequency<br>(MHz) | DFS Detection Trials (1=Detection, 0= No Detection) |   |   |   |   |   |   |   |   |    | Detection Rate (%) |
|--------------------------|-----------------------------------------------------|---|---|---|---|---|---|---|---|----|--------------------|
|                          | 1                                                   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                    |
| 5250                     | 0                                                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0%                 |
| 5251 FL                  | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5252                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5253                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5254                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 5255                     | 1                                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 100%               |
| 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 5290MHz. The 99% channel bandwidth is 74.90MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5329MHz - 5251MHz = 78MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 74.90MHz x 100% = 74.90MHz.

## **5.4. Initial Channel Availability Check Time Measurement**

### **5.4.1. Test Limit**

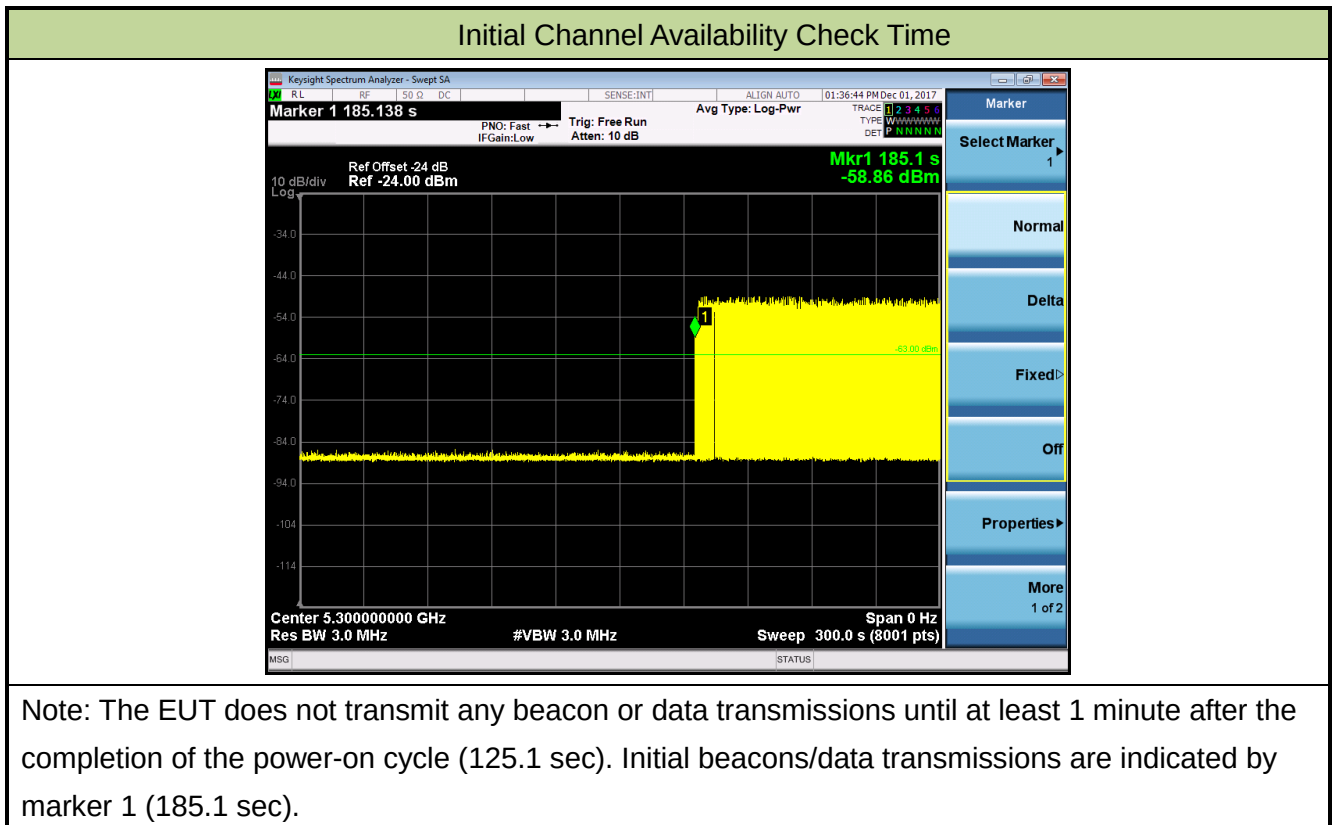
The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute on the intended operating frequency.

### **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       | G-140W-C                                                         | Temperature       | 27°C       |
| Test Engineer | Amy Zhang                                                        | Relative Humidity | 65%        |
| Test Site     | TR5                                                              | Test Date         | 2017/12/01 |
| Test Item     | Initial Channel Availability Check Time (802.11a mode – 5300MHz) |                   |            |



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

### **5.5.1. Test Limit**

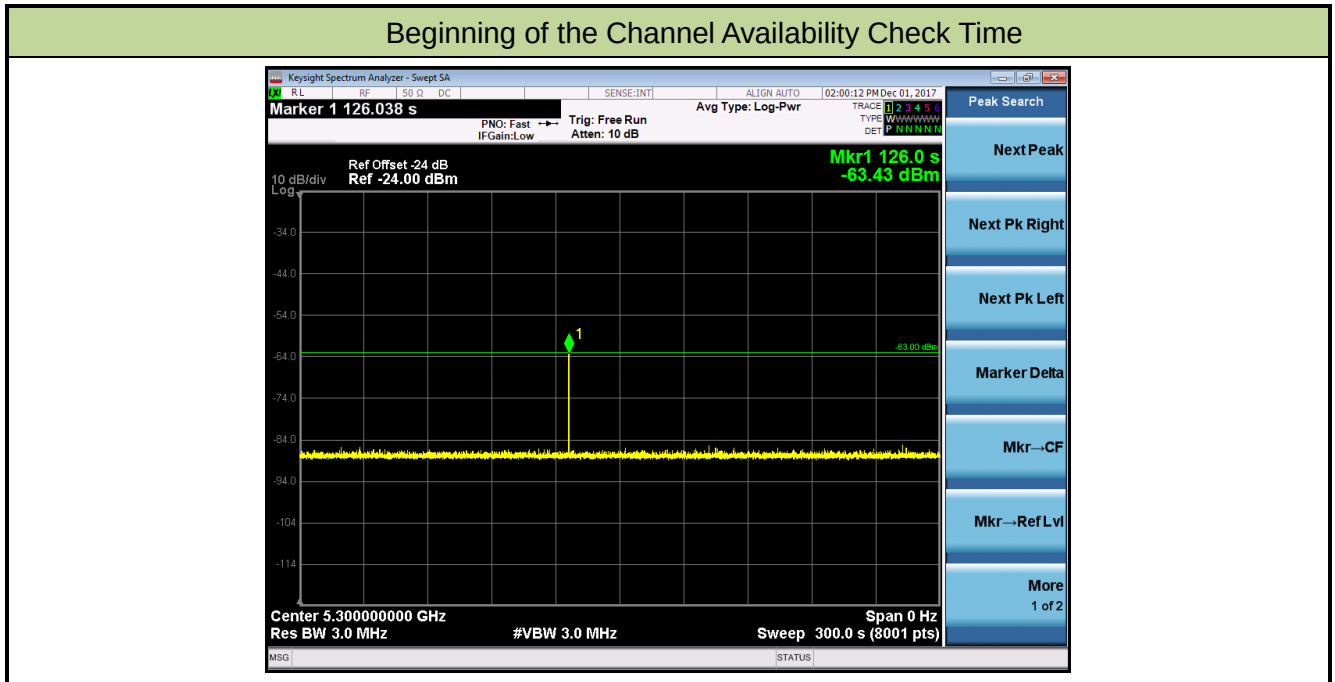
In beginning of the Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

### **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       | G-140W-C                                                                  | Temperature       | 27°C       |
| Test Engineer | Amy Zhang                                                                 | Relative Humidity | 65%        |
| Test Site     | TR5                                                                       | Test Date         | 2017/12/01 |
| Test Item     | Beginning of the Channel Availability Check Time (802.11a mode – 5300MHz) |                   |            |



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

### **5.6.1. Test Limit**

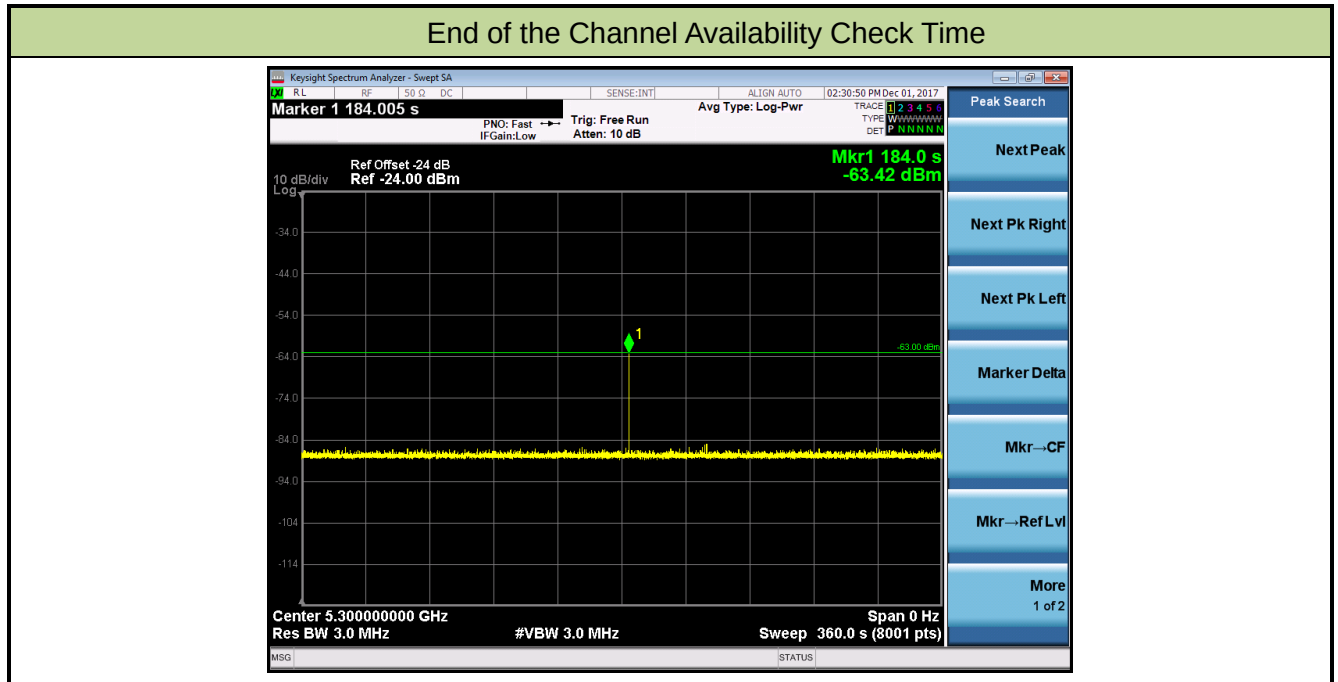
In the end of Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

### **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 than T1 + 60 seconds. A single Burst of one of Short Pulse Radar Types 0-4 at DFS Detection Threshold + 1 dB will commence within a 6 second window starting at T1+ 54 seconds.
3. Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions 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       | G-140W-C                                                            | Temperature       | 27°C       |
| Test Engineer | Amy Zhang                                                           | Relative Humidity | 65%        |
| Test Site     | TR5                                                                 | Test Date         | 2017/12/01 |
| Test Item     | End of the Channel Availability Check Time (802.11a mode – 5300MHz) |                   |            |





## **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.

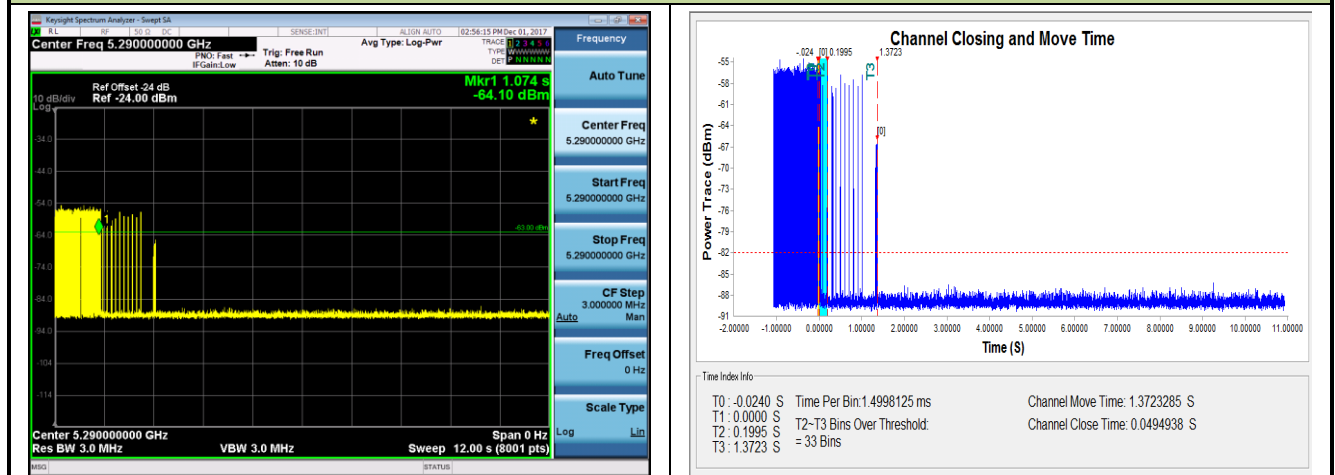
### **5.7.2. Test Procedure Used**

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:  $Dwell (1.5ms) = S (12 \text{ sec}) / B (8000)$ ; where Dwell is the dwell time per spectrum analyzer sampling bin, S is the sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by:  $C = N \times Dwell$ ; 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       | G-140W-C                                                                                   | Temperature       | 27°C       |
| Test Engineer | Amy Zhang                                                                                  | Relative Humidity | 65%        |
| Test Site     | TR5                                                                                        | Test Date         | 2017/12/01 |
| Test Item     | Channel Move Time and Channel Closing Transmission Time<br>(802.11ac-VHT80 mode – 5290MHz) |                   |            |

#### Channel Move Time and Channel Closing Transmission Time



#### Non-Occupancy Period



| Parameter                                                                                                                                                                                                                                                                                                                                                                                                | Test Result | Limit    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|
|                                                                                                                                                                                                                                                                                                                                                                                                          | Type 0      |          |
| Channel Move Time (s)                                                                                                                                                                                                                                                                                                                                                                                    | 1.372s      | <10s     |
| Channel Closing Transmission Time (ms)<br>(Note)                                                                                                                                                                                                                                                                                                                                                         | 49.5ms      | < 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%              |

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

### 5.8.2. 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       | G-140W-C                                                     | Temperature       | 27°C       |
| Test Engineer | Amy Zhang                                                    | Relative Humidity | 65%        |
| Test Site     | TR5                                                          | Test Date         | 2017/12/09 |
| Test Item     | Radar Statistical Performance Check (802.11a mode – 5300MHz) |                   |            |

#### Radar Type 1 - Radar Statistical Performance

| Trail # | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|---------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1       | 5291                | 1                   | 798      | 67             | 1                             |
| 2       | 5291                | 1                   | 698      | 76             | 1                             |
| 3       | 5292                | 1                   | 858      | 62             | 1                             |
| 4       | 5292                | 1                   | 718      | 74             | 1                             |
| 5       | 5293                | 1                   | 838      | 63             | 1                             |
| 6       | 5293                | 1                   | 518      | 102            | 1                             |
| 7       | 5294                | 1                   | 658      | 81             | 1                             |
| 8       | 5294                | 1                   | 898      | 59             | 1                             |
| 9       | 5295                | 1                   | 538      | 99             | 1                             |
| 10      | 5296                | 1                   | 578      | 92             | 1                             |
| 11      | 5307                | 1                   | 918      | 58             | 1                             |
| 12      | 5298                | 1                   | 938      | 57             | 1                             |
| 13      | 5299                | 1                   | 558      | 95             | 1                             |
| 14      | 5300                | 1                   | 778      | 68             | 1                             |
| 15      | 5300                | 1                   | 818      | 65             | 1                             |
| 16      | 5300                | 1                   | 526      | 101            | 1                             |
| 17      | 5301                | 1                   | 1847     | 29             | 1                             |
| 18      | 5302                | 1                   | 660      | 80             | 1                             |
| 19      | 5303                | 1                   | 716      | 74             | 1                             |
| 20      | 5304                | 1                   | 2651     | 20             | 1                             |
| 21      | 5305                | 1                   | 2526     | 21             | 1                             |
| 22      | 5305                | 1                   | 1236     | 43             | 1                             |
| 23      | 5306                | 1                   | 981      | 54             | 1                             |
| 24      | 5306                | 1                   | 2170     | 25             | 1                             |
| 25      | 5307                | 1                   | 2166     | 25             | 1                             |
| 26      | 5307                | 1                   | 2701     | 20             | 1                             |

| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 27                       | 5308                | 1                   | 2365     | 23             | 1                             |
| 28                       | 5308                | 1                   | 2215     | 24             | 1                             |
| 29                       | 5309                | 1                   | 836      | 64             | 1                             |
| 30                       | 5309                | 1                   | 2162     | 25             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |

## Radar Type 2 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1                        | 5291                | 2.2                 | 157      | 28             | 1                             |
| 2                        | 5291                | 4.1                 | 193      | 23             | 1                             |
| 3                        | 5292                | 4.9                 | 228      | 29             | 1                             |
| 4                        | 5292                | 4.1                 | 206      | 29             | 1                             |
| 5                        | 5293                | 1.7                 | 173      | 26             | 1                             |
| 6                        | 5293                | 2.4                 | 179      | 27             | 1                             |
| 7                        | 5294                | 2.2                 | 160      | 27             | 1                             |
| 8                        | 5294                | 5.0                 | 211      | 25             | 1                             |
| 9                        | 5295                | 3.7                 | 213      | 28             | 1                             |
| 10                       | 5296                | 2.6                 | 161      | 24             | 1                             |
| 11                       | 5307                | 5.0                 | 199      | 26             | 1                             |
| 12                       | 5298                | 1.4                 | 187      | 29             | 1                             |
| 13                       | 5299                | 4.1                 | 155      | 23             | 1                             |
| 14                       | 5300                | 1.3                 | 184      | 23             | 1                             |
| 15                       | 5300                | 1.2                 | 215      | 24             | 1                             |
| 16                       | 5300                | 1.7                 | 151      | 26             | 1                             |
| 17                       | 5301                | 2.3                 | 163      | 24             | 1                             |
| 18                       | 5302                | 2.5                 | 183      | 25             | 1                             |
| 19                       | 5303                | 1.2                 | 188      | 24             | 1                             |
| 20                       | 5304                | 1.5                 | 177      | 29             | 1                             |
| 21                       | 5305                | 5.0                 | 177      | 23             | 1                             |
| 22                       | 5305                | 1.3                 | 215      | 24             | 1                             |
| 23                       | 5306                | 2.7                 | 192      | 25             | 1                             |
| 24                       | 5306                | 1.9                 | 188      | 28             | 1                             |
| 25                       | 5307                | 1.8                 | 199      | 23             | 1                             |
| 26                       | 5307                | 4.6                 | 193      | 26             | 1                             |
| 27                       | 5308                | 2.0                 | 154      | 26             | 1                             |
| 28                       | 5308                | 2.6                 | 186      | 24             | 1                             |
| 29                       | 5309                | 2.8                 | 178      | 24             | 1                             |
| 30                       | 5309                | 4.2                 | 153      | 23             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |

## Radar Type 3 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1                        | 5291                | 6.1                 | 482      | 18             | 1                             |
| 2                        | 5291                | 7.1                 | 304      | 17             | 1                             |
| 3                        | 5292                | 6.7                 | 258      | 16             | 1                             |
| 4                        | 5292                | 6.9                 | 361      | 17             | 1                             |
| 5                        | 5293                | 7.5                 | 256      | 18             | 1                             |
| 6                        | 5293                | 8.2                 | 395      | 18             | 1                             |
| 7                        | 5294                | 6.3                 | 496      | 16             | 1                             |
| 8                        | 5294                | 8.7                 | 294      | 18             | 1                             |
| 9                        | 5295                | 9.9                 | 391      | 16             | 1                             |
| 10                       | 5296                | 8.5                 | 378      | 16             | 1                             |
| 11                       | 5307                | 8.4                 | 449      | 17             | 1                             |
| 12                       | 5298                | 9.9                 | 475      | 17             | 1                             |
| 13                       | 5299                | 8.0                 | 466      | 17             | 1                             |
| 14                       | 5300                | 9.5                 | 379      | 17             | 1                             |
| 15                       | 5300                | 9.3                 | 493      | 16             | 1                             |
| 16                       | 5300                | 8.0                 | 290      | 18             | 1                             |
| 17                       | 5301                | 7.2                 | 362      | 16             | 1                             |
| 18                       | 5302                | 6.7                 | 295      | 17             | 1                             |
| 19                       | 5303                | 6.5                 | 269      | 17             | 1                             |
| 20                       | 5304                | 7.3                 | 311      | 18             | 1                             |
| 21                       | 5305                | 7.3                 | 456      | 17             | 1                             |
| 22                       | 5305                | 8.9                 | 255      | 17             | 1                             |
| 23                       | 5306                | 6.1                 | 435      | 16             | 1                             |
| 24                       | 5306                | 8.9                 | 272      | 18             | 1                             |
| 25                       | 5307                | 9.8                 | 293      | 18             | 1                             |
| 26                       | 5307                | 8.2                 | 260      | 17             | 1                             |
| 27                       | 5308                | 6.0                 | 380      | 17             | 1                             |
| 28                       | 5308                | 9.5                 | 385      | 18             | 1                             |
| 29                       | 5309                | 9.3                 | 354      | 16             | 1                             |
| 30                       | 5309                | 9.2                 | 395      | 16             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |



## Radar Type 4 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1                        | 5291                | 13.4                | 316      | 13             | 1                             |
| 2                        | 5291                | 16.5                | 259      | 15             | 1                             |
| 3                        | 5292                | 18.6                | 300      | 16             | 1                             |
| 4                        | 5292                | 11.2                | 409      | 13             | 1                             |
| 5                        | 5293                | 11.8                | 272      | 15             | 1                             |
| 6                        | 5293                | 12.0                | 310      | 15             | 1                             |
| 7                        | 5294                | 19.2                | 276      | 15             | 1                             |
| 8                        | 5294                | 19.1                | 373      | 12             | 1                             |
| 9                        | 5295                | 16.4                | 372      | 14             | 1                             |
| 10                       | 5296                | 13.5                | 454      | 14             | 1                             |
| 11                       | 5307                | 19.2                | 447      | 14             | 1                             |
| 12                       | 5298                | 15.1                | 446      | 16             | 1                             |
| 13                       | 5299                | 17.9                | 368      | 16             | 1                             |
| 14                       | 5300                | 14.6                | 271      | 14             | 1                             |
| 15                       | 5300                | 18.2                | 327      | 16             | 1                             |
| 16                       | 5300                | 16.1                | 305      | 12             | 1                             |
| 17                       | 5301                | 16.8                | 273      | 12             | 1                             |
| 18                       | 5302                | 15.4                | 499      | 12             | 1                             |
| 19                       | 5303                | 19.6                | 416      | 15             | 1                             |
| 20                       | 5304                | 11.8                | 451      | 14             | 1                             |
| 21                       | 5305                | 11.5                | 452      | 16             | 1                             |
| 22                       | 5305                | 14.4                | 439      | 15             | 1                             |
| 23                       | 5306                | 19.8                | 431      | 16             | 1                             |
| 24                       | 5306                | 18.4                | 314      | 16             | 1                             |
| 25                       | 5307                | 14.7                | 377      | 12             | 1                             |
| 26                       | 5307                | 13.1                | 335      | 12             | 1                             |
| 27                       | 5308                | 12.5                | 286      | 14             | 1                             |
| 28                       | 5308                | 15.4                | 365      | 14             | 1                             |
| 29                       | 5309                | 14.3                | 313      | 16             | 1                             |
| 30                       | 5309                | 19.4                | 444      | 12             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |

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

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



## Radar Type 5 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection | Trail # | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|-------------------------------|---------|---------------------|-------------------------------|
| 1                        | 5298.8              | 1                             | 16      | 5300.0              | 1                             |
| 2                        | 5296.0              | 1                             | 17      | 5300.0              | 1                             |
| 3                        | 5295.6              | 1                             | 18      | 5300.0              | 1                             |
| 4                        | 5294.0              | 1                             | 19      | 5300.0              | 1                             |
| 5                        | 5297.6              | 1                             | 20      | 5300.0              | 1                             |
| 6                        | 5299.2              | 1                             | 21      | 5304.0              | 1                             |
| 7                        | 5294.4              | 1                             | 22      | 5304.8              | 1                             |
| 8                        | 5299.6              | 1                             | 23      | 5301.2              | 1                             |
| 9                        | 5295.2              | 1                             | 24      | 5306.0              | 1                             |
| 10                       | 5296.8              | 1                             | 25      | 5300.8              | 1                             |
| 11                       | 5300.0              | 1                             | 26      | 5305.6              | 1                             |
| 12                       | 5300.0              | 1                             | 27      | 5300.4              | 1                             |
| 13                       | 5300.0              | 1                             | 28      | 5302.4              | 1                             |
| 14                       | 5300.0              | 1                             | 29      | 5304.4              | 1                             |
| 15                       | 5300.0              | 1                             | 30      | 5303.2              | 1                             |
| Detection Percentage (%) |                     |                               |         |                     | 100%                          |

| Type 5 Radar Waveform_1                            |               |          |             |         |                  |                  |                  |                |                           |                         |
|----------------------------------------------------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| Num of Bursts = 20<br>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                                                  | 3580          | 3        | 17          | 80      | 1901             | 1158             | 1263             | 3580           | 0                         | 5999999                 |
| 2                                                  | 871326        | 2        | 17          | 85      | 1448             | 1980             | 0                | 879228         | 600000                    | 1199999                 |
| 3                                                  | 820371        | 1        | 17          | 95      | 1287             | 0                | 0                | 1709027        | 1200000                   | 1799999                 |
| 4                                                  | 339094        | 1        | 17          | 80      | 1523             | 0                | 0                | 2043408        | 1800000                   | 2399999                 |
| 5                                                  | 398153        | 3        | 17          | 60      | 1440             | 1102             | 1804             | 2443084        | 2400000                   | 2999999                 |
| 6                                                  | 881133        | 3        | 17          | 80      | 1873             | 1322             | 1906             | 3328563        | 3000000                   | 3599999                 |
| 7                                                  | 567033        | 3        | 17          | 95      | 1023             | 1948             | 1360             | 3900697        | 3600000                   | 4199999                 |
| 8                                                  | 357988        | 1        | 17          | 100     | 1520             | 0                | 0                | 4263016        | 4200000                   | 4799999                 |
| 9                                                  | 604613        | 3        | 17          | 60      | 1013             | 1202             | 1668             | 4869149        | 4800000                   | 5399999                 |
| 10                                                 | 713976        | 2        | 17          | 70      | 1471             | 1544             | 0                | 5587008        | 5400000                   | 5999999                 |
| 11                                                 | 565712        | 3        | 17          | 80      | 1364             | 1365             | 1222             | 6155735        | 6000000                   | 6599999                 |
| 12                                                 | 759824        | 3        | 17          | 70      | 1709             | 1950             | 1185             | 6919510        | 6600000                   | 7199999                 |
| 13                                                 | 771340        | 2        | 17          | 90      | 1280             | 1953             | 0                | 7695694        | 7200000                   | 7799999                 |
| 14                                                 | 678310        | 1        | 17          | 90      | 1953             | 0                | 0                | 8377237        | 7800000                   | 8399999                 |
| 15                                                 | 374095        | 2        | 17          | 75      | 1318             | 1487             | 0                | 8753285        | 8400000                   | 8999999                 |
| 16                                                 | 322029        | 3        | 17          | 60      | 1437             | 1533             | 1628             | 9078119        | 9000000                   | 9599999                 |
| 17                                                 | 970818        | 2        | 17          | 55      | 1952             | 1540             | 0                | 10053535       | 9600000                   | 10199999                |
| 18                                                 | 432922        | 3        | 17          | 90      | 1114             | 1086             | 1895             | 10489949       | 10200000                  | 10799999                |
| 19                                                 | 489153        | 1        | 17          | 55      | 1163             | 0                | 0                | 10983197       | 10800000                  | 11399999                |
| 20                                                 | 476449        | 3        | 17          | 100     | 1886             | 1965             | 1432             | 11460809       | 11400000                  | 11999999                |
| Total number of pulses in waveform = 45<br>*****   |               |          |             |         |                  |                  |                  |                |                           |                         |



## 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       | 380615        | 3        | 10          | 65      | 1186            | 1294            | 1553            | 380615         | 0                        | 705881                 |
| 2       | 1009747       | 1        | 10          | 65      | 1670            | 0               | 0               | 1394375        | 705882                   | 1411763                |
| 3       | 122215        | 3        | 10          | 75      | 1340            | 1256            | 1966            | 1518260        | 1411764                  | 2117645                |
| 4       | 1270308       | 2        | 10          | 80      | 1422            | 1311            | 0               | 2793130        | 2117646                  | 2823527                |
| 5       | 45403         | 2        | 10          | 75      | 1654            | 1516            | 0               | 2841266        | 2823528                  | 3529409                |
| 6       | 1009562       | 1        | 10          | 50      | 1498            | 0               | 0               | 3853998        | 3529410                  | 4235291                |
| 7       | 1026103       | 1        | 10          | 50      | 1191            | 0               | 0               | 4881599        | 4235292                  | 4941173                |
| 8       | 495464        | 3        | 10          | 75      | 1821            | 1495            | 1644            | 5378254        | 4941174                  | 5647055                |
| 9       | 881446        | 2        | 10          | 80      | 1069            | 1386            | 0               | 6264660        | 5647056                  | 6352937                |
| 10      | 617462        | 3        | 10          | 50      | 1217            | 1974            | 1894            | 6884577        | 6352938                  | 7058819                |
| 11      | 835380        | 3        | 10          | 75      | 1790            | 1357            | 1005            | 7725042        | 7058820                  | 7764701                |
| 12      | 557020        | 2        | 10          | 50      | 1931            | 1325            | 0               | 8286214        | 7764702                  | 8470583                |
| 13      | 700013        | 2        | 10          | 100     | 1652            | 1223            | 0               | 8989483        | 8470584                  | 9176465                |
| 14      | 750385        | 3        | 10          | 70      | 1886            | 1532            | 1651            | 9742743        | 9176466                  | 9882347                |
| 15      | 809289        | 3        | 10          | 90      | 1495            | 1525            | 1272            | 10557101       | 9882348                  | 10588229               |
| 16      | 702851        | 3        | 10          | 80      | 1629            | 1771            | 1914            | 11264244       | 10588230                 | 11294111               |
| 17      | 640592        | 3        | 10          | 60      | 1356            | 1018            | 1442            | 11910150       | 11294112                 | 11999993               |

Total number of pulses in waveform = 40

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## Type 5 Radar Waveform\_3

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 444439        | 3        | 9           | 70      | 1333            | 1354            | 1007            | 444439         | 0                        | 1333332                |
| 2       | 1261012       | 1        | 9           | 60      | 1694            | 0               | 0               | 1709145        | 1333333                  | 2666665                |
| 3       | 1209549       | 2        | 9           | 60      | 1811            | 1398            | 0               | 2920388        | 2666666                  | 3999998                |
| 4       | 1566354       | 2        | 9           | 55      | 1707            | 1421            | 0               | 4489951        | 3999999                  | 5333331                |
| 5       | 1310253       | 1        | 9           | 80      | 1852            | 0               | 0               | 5803332        | 5333332                  | 6666664                |
| 6       | 923453        | 3        | 9           | 65      | 1533            | 1711            | 1260            | 6728637        | 6666665                  | 7999997                |
| 7       | 2038481       | 1        | 9           | 95      | 1813            | 0               | 0               | 8771622        | 7999998                  | 9333330                |
| 8       | 588920        | 2        | 9           | 85      | 1371            | 1951            | 0               | 9362355        | 9333331                  | 10666663               |
| 9       | 2134305       | 1        | 9           | 95      | 1607            | 0               | 0               | 11499982       | 10666664                 | 11999996               |

Total number of pulses in waveform = 16

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## Type 5 Radar Waveform\_4

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       | 1064101       | 3        | 5           | 100     | 1802            | 1889            | 1270            | 1064101        | 0                        | 1199999                |
| 2       | 974010        | 3        | 5           | 70      | 1870            | 1879            | 1784            | 2043072        | 1200000                  | 2399999                |
| 3       | 1527810       | 3        | 5           | 95      | 1707            | 1430            | 1255            | 3576415        | 2400000                  | 3599999                |
| 4       | 1173347       | 2        | 5           | 65      | 1500            | 1381            | 0               | 4754154        | 3600000                  | 4799999                |
| 5       | 68962         | 2        | 5           | 95      | 1358            | 1648            | 0               | 4825997        | 4800000                  | 5999999                |
| 6       | 2037481       | 2        | 5           | 55      | 1539            | 1154            | 0               | 6866484        | 6000000                  | 7199999                |
| 7       | 528820        | 3        | 5           | 75      | 1934            | 1507            | 1431            | 7397997        | 7200000                  | 8399999                |
| 8       | 1248847       | 1        | 5           | 100     | 1682            | 0               | 0               | 8651716        | 8400000                  | 9599999                |
| 9       | 1736983       | 3        | 5           | 70      | 1582            | 1998            | 1405            | 10390381       | 9600000                  | 10799999               |
| 10      | 959087        | 1        | 5           | 65      | 1678            | 0               | 0               | 11354453       | 10800000                 | 11999999               |

Total number of pulses in waveform = 23

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## Type 5 Radar Waveform\_5

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 597974        | 2        | 14          | 85      | 1111             | 1678             | 0                | 597974         | 0                         | 799999                  |
| 2       | 756575        | 3        | 14          | 95      | 1540             | 1993             | 1875             | 1357338        | 800000                    | 1599999                 |
| 3       | 302175        | 1        | 14          | 65      | 1136             | 0                | 0                | 1664921        | 1600000                   | 2399999                 |
| 4       | 1168353       | 2        | 14          | 55      | 1866             | 1018             | 0                | 2834410        | 2400000                   | 3199999                 |
| 5       | 1011576       | 1        | 14          | 50      | 1416             | 0                | 0                | 3848870        | 3200000                   | 3999999                 |
| 6       | 733159        | 3        | 14          | 90      | 1390             | 1629             | 1967             | 4583445        | 4000000                   | 4799999                 |
| 7       | 302572        | 1        | 14          | 90      | 1896             | 0                | 0                | 4891003        | 4800000                   | 5599999                 |
| 8       | 978849        | 1        | 14          | 50      | 1385             | 0                | 0                | 5871748        | 5600000                   | 6399999                 |
| 9       | 846632        | 2        | 14          | 65      | 1848             | 1693             | 0                | 6719765        | 6400000                   | 7199999                 |
| 10      | 488473        | 3        | 14          | 50      | 1929             | 1798             | 1928             | 7211779        | 7200000                   | 7999999                 |
| 11      | 790997        | 1        | 14          | 95      | 1216             | 0                | 0                | 8008431        | 8000000                   | 8799999                 |
| 12      | 1103670       | 1        | 14          | 85      | 1270             | 0                | 0                | 9113317        | 8800000                   | 9599999                 |
| 13      | 825311        | 1        | 14          | 75      | 1703             | 0                | 0                | 9939898        | 9600000                   | 10399999                |
| 14      | 866551        | 3        | 14          | 60      | 1167             | 1815             | 1547             | 10808152       | 10400000                  | 11199999                |
| 15      | 652847        | 2        | 14          | 80      | 1407             | 1751             | 0                | 11465528       | 11200000                  | 11999999                |

Total number of pulses in waveform = 27

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## 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       | 409229        | 3        | 18          | 50      | 1198             | 1337             | 1889             | 409229         | 0                         | 799999                  |
| 2       | 1144459       | 1        | 18          | 100     | 1475             | 0                | 0                | 1558112        | 800000                    | 1599999                 |
| 3       | 248535        | 1        | 18          | 55      | 1531             | 0                | 0                | 1808122        | 1600000                   | 2399999                 |
| 4       | 1243270       | 1        | 18          | 50      | 1216             | 0                | 0                | 3052923        | 2400000                   | 3199999                 |
| 5       | 493769        | 1        | 18          | 100     | 1029             | 0                | 0                | 3547908        | 3200000                   | 3999999                 |
| 6       | 712890        | 3        | 18          | 95      | 1719             | 1114             | 1347             | 4261827        | 4000000                   | 4799999                 |
| 7       | 1114124       | 2        | 18          | 70      | 1883             | 1941             | 0                | 5380131        | 4800000                   | 5599999                 |
| 8       | 764877        | 1        | 18          | 65      | 1341             | 0                | 0                | 6148832        | 5600000                   | 6399999                 |
| 9       | 590641        | 3        | 18          | 80      | 1992             | 1948             | 1018             | 6740814        | 6400000                   | 7199999                 |
| 10      | 1101103       | 1        | 18          | 65      | 1949             | 0                | 0                | 7846875        | 7200000                   | 7999999                 |
| 11      | 717762        | 2        | 18          | 55      | 1003             | 1773             | 0                | 8566586        | 8000000                   | 8799999                 |
| 12      | 557572        | 2        | 18          | 50      | 1860             | 1435             | 0                | 9126934        | 8800000                   | 9599999                 |
| 13      | 623104        | 1        | 18          | 85      | 1308             | 0                | 0                | 9753333        | 9600000                   | 10399999                |
| 14      | 1156250       | 1        | 18          | 80      | 1677             | 0                | 0                | 10910891       | 10400000                  | 11199999                |
| 15      | 884199        | 3        | 18          | 100     | 1008             | 1079             | 1204             | 11796767       | 11200000                  | 11999999                |

Total number of pulses in waveform = 26

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## 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       | 14746         | 2        | 6           | 100     | 1850             | 1359             | 0                | 14746          | 0                         | 857142                  |
| 2       | 1482116       | 1        | 6           | 75      | 1800             | 0                | 0                | 1500071        | 857143                    | 1714285                 |
| 3       | 529722        | 3        | 6           | 60      | 1755             | 1252             | 1820             | 2031593        | 1714286                   | 2571428                 |
| 4       | 1149776       | 2        | 6           | 80      | 1180             | 1016             | 0                | 3186196        | 2571429                   | 3428571                 |
| 5       | 285344        | 1        | 6           | 80      | 1572             | 0                | 0                | 3473736        | 3428572                   | 4285714                 |
| 6       | 1182909       | 3        | 6           | 90      | 1563             | 1829             | 1215             | 4658217        | 4285715                   | 5142857                 |
| 7       | 661990        | 3        | 6           | 60      | 1022             | 1098             | 1276             | 5324814        | 5142858                   | 6000000                 |
| 8       | 1241463       | 3        | 6           | 75      | 1329             | 1634             | 1365             | 6569673        | 6000001                   | 6857143                 |
| 9       | 1116304       | 3        | 6           | 55      | 1984             | 1218             | 1282             | 7690305        | 6857144                   | 7714286                 |
| 10      | 380536        | 3        | 6           | 100     | 1574             | 1315             | 1948             | 8075325        | 7714287                   | 8571429                 |
| 11      | 495153        | 1        | 6           | 65      | 1532             | 0                | 0                | 8575315        | 8571430                   | 9428572                 |
| 12      | 1634492       | 1        | 6           | 95      | 1758             | 0                | 0                | 10211339       | 9428573                   | 10285715                |
| 13      | 208519        | 2        | 6           | 50      | 1795             | 1939             | 0                | 10421616       | 10285716                  | 11142858                |
| 14      | 1298706       | 3        | 6           | 55      | 1513             | 1013             | 1116             | 11724056       | 11142859                  | 12000001                |

Total number of pulses in waveform = 31

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## 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       | 590471        | 3        | 19          | 90      | 1058             | 1561             | 1368             | 590471         | 0                         | 631578                  |
| 2       | 352042        | 2        | 19          | 95      | 1868             | 1293             | 0                | 946500         | 631579                    | 1263157                 |
| 3       | 809886        | 1        | 19          | 80      | 1595             | 0                | 0                | 1759547        | 1263158                   | 1894736                 |
| 4       | 673813        | 3        | 19          | 75      | 1276             | 1125             | 1137             | 2434955        | 1894737                   | 2526315                 |
| 5       | 705931        | 1        | 19          | 65      | 1660             | 0                | 0                | 3144424        | 2526316                   | 3157894                 |
| 6       | 386437        | 3        | 19          | 70      | 1969             | 1648             | 1523             | 3532521        | 3157895                   | 3789473                 |
| 7       | 572361        | 3        | 19          | 70      | 1676             | 1372             | 1128             | 4110022        | 3789474                   | 4421052                 |
| 8       | 829282        | 3        | 19          | 75      | 1858             | 1431             | 1706             | 4943480        | 4421053                   | 5052631                 |
| 9       | 260467        | 3        | 19          | 95      | 1239             | 1768             | 1058             | 5208942        | 5052632                   | 5684210                 |
| 10      | 563573        | 2        | 19          | 55      | 1061             | 1697             | 0                | 5776580        | 5684211                   | 6315789                 |
| 11      | 925133        | 1        | 19          | 70      | 1744             | 0                | 0                | 6704471        | 6315790                   | 6947368                 |
| 12      | 569502        | 3        | 19          | 85      | 1073             | 1540             | 1542             | 7275717        | 6947369                   | 7578947                 |
| 13      | 482335        | 1        | 19          | 90      | 1496             | 0                | 0                | 7762207        | 7578948                   | 8210526                 |
| 14      | 584585        | 3        | 19          | 90      | 1286             | 1799             | 1829             | 8348288        | 8210527                   | 8842105                 |
| 15      | 540343        | 1        | 19          | 65      | 1001             | 0                | 0                | 8893545        | 8842106                   | 9473684                 |
| 16      | 741172        | 1        | 19          | 100     | 1740             | 0                | 0                | 9635718        | 9473685                   | 10105263                |
| 17      | 793517        | 3        | 19          | 85      | 1968             | 1546             | 1397             | 10430975       | 10105264                  | 10736842                |
| 18      | 739011        | 3        | 19          | 100     | 1153             | 1953             | 1602             | 11174897       | 10736843                  | 11368421                |
| 19      | 298774        | 3        | 19          | 90      | 1459             | 1211             | 1853             | 11478379       | 11368422                  | 12000000                |

Total number of pulses in waveform = 43

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## 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       | 284064        | 2        | 8           | 60      | 1633             | 1906             | 0                | 284064         | 0                         | 1499999                 |
| 2       | 2311376       | 3        | 8           | 50      | 1869             | 1727             | 1017             | 2598979        | 1500000                   | 2999999                 |
| 3       | 770016        | 1        | 8           | 90      | 1301             | 0                | 0                | 3373608        | 3000000                   | 4499999                 |
| 4       | 1818562       | 2        | 8           | 50      | 1841             | 1820             | 0                | 5193471        | 4500000                   | 5999999                 |
| 5       | 1855901       | 3        | 8           | 60      | 1067             | 1165             | 1219             | 7053033        | 6000000                   | 7499999                 |
| 6       | 991363        | 1        | 8           | 50      | 1313             | 0                | 0                | 8047847        | 7500000                   | 8999999                 |
| 7       | 1187717       | 3        | 8           | 60      | 1223             | 1009             | 1501             | 9236877        | 9000000                   | 10499999                |
| 8       | 2152158       | 3        | 8           | 95      | 1332             | 1792             | 1892             | 11392768       | 10500000                  | 11999999                |

Total number of pulses in waveform = 18

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## Type 5 Radar Waveform\_10

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       | 536696        | 2        | 12          | 100     | 1893             | 1729             | 0                | 536696         | 0                         | 631578                  |
| 2       | 468707        | 2        | 12          | 70      | 1186             | 1392             | 0                | 1009025        | 631579                    | 1263157                 |
| 3       | 667161        | 3        | 12          | 100     | 1845             | 1894             | 1039             | 1678764        | 1263158                   | 1894736                 |
| 4       | 229218        | 3        | 12          | 55      | 1990             | 1332             | 1915             | 1912760        | 1894737                   | 2526315                 |
| 5       | 1131822       | 1        | 12          | 100     | 1857             | 0                | 0                | 3049819        | 2526316                   | 3157894                 |
| 6       | 569013        | 1        | 12          | 100     | 1642             | 0                | 0                | 3620689        | 3157895                   | 3789473                 |
| 7       | 473715        | 2        | 12          | 85      | 1253             | 1290             | 0                | 4096046        | 3789474                   | 4421052                 |
| 8       | 777277        | 3        | 12          | 50      | 1162             | 1293             | 1660             | 4875866        | 4421053                   | 5052631                 |
| 9       | 353980        | 3        | 12          | 50      | 1392             | 1514             | 1578             | 5233961        | 5052632                   | 5684210                 |
| 10      | 1055613       | 3        | 12          | 95      | 1132             | 1802             | 1750             | 6294058        | 5684211                   | 6315789                 |
| 11      | 207296        | 1        | 12          | 75      | 1516             | 0                | 0                | 6506038        | 6315790                   | 6947368                 |
| 12      | 600088        | 1        | 12          | 50      | 1586             | 0                | 0                | 7107642        | 6947369                   | 7578947                 |
| 13      | 690001        | 3        | 12          | 90      | 1113             | 1983             | 1782             | 7799229        | 7578948                   | 8210526                 |
| 14      | 435848        | 1        | 12          | 80      | 1344             | 0                | 0                | 8239955        | 8210527                   | 8842105                 |
| 15      | 1063015       | 3        | 12          | 75      | 1225             | 1318             | 1504             | 9304314        | 8842106                   | 9473684                 |
| 16      | 333025        | 1        | 12          | 95      | 1356             | 0                | 0                | 9641386        | 9473685                   | 10105263                |
| 17      | 656509        | 1        | 12          | 60      | 1949             | 0                | 0                | 10299251       | 10105264                  | 10736842                |
| 18      | 541550        | 3        | 12          | 95      | 1250             | 1199             | 1184             | 10842760       | 10736843                  | 11368421                |
| 19      | 943902        | 1        | 12          | 50      | 1774             | 0                | 0                | 11790285       | 11368422                  | 12000000                |

Total number of pulses in waveform = 38

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## Type 5 Radar Waveform\_11

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 403254        | 2        | 14          | 95      | 1218            | 1512            | 0               | 403254         | 0                        | 999999                 |
| 2       | 802991        | 2        | 14          | 55      | 1768            | 1700            | 0               | 1208975        | 1000000                  | 1999999                |
| 3       | 1147263       | 2        | 14          | 95      | 1838            | 1048            | 0               | 2359706        | 2000000                  | 2999999                |
| 4       | 986164        | 3        | 14          | 55      | 1539            | 1033            | 1017            | 3348756        | 3000000                  | 3999999                |
| 5       | 709497        | 2        | 14          | 85      | 1855            | 1730            | 0               | 4061842        | 4000000                  | 4999999                |
| 6       | 1612647       | 2        | 14          | 95      | 1514            | 1700            | 0               | 5678074        | 5000000                  | 5999999                |
| 7       | 533244        | 1        | 14          | 95      | 1842            | 0               | 0               | 6214532        | 6000000                  | 6999999                |
| 8       | 1577446       | 1        | 14          | 55      | 1507            | 0               | 0               | 7793820        | 7000000                  | 7999999                |
| 9       | 671722        | 1        | 14          | 100     | 1450            | 0               | 0               | 8467049        | 8000000                  | 8999999                |
| 10      | 799144        | 2        | 14          | 90      | 1427            | 1263            | 0               | 9267643        | 9000000                  | 9999999                |
| 11      | 733742        | 3        | 14          | 100     | 1667            | 1189            | 1424            | 10004075       | 10000000                 | 10999999               |
| 12      | 1219869       | 2        | 14          | 60      | 1860            | 1944            | 0               | 11228224       | 11000000                 | 11999999               |

Total number of pulses in waveform = 23

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## Type 5 Radar Waveform\_12

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       | 692755        | 3        | 19          | 75      | 1155            | 1373            | 1869            | 692755         | 0                        | 799999                 |
| 2       | 293102        | 2        | 19          | 55      | 1250            | 1971            | 0               | 990254         | 800000                   | 1599999                |
| 3       | 663634        | 3        | 19          | 50      | 1619            | 1386            | 1305            | 1657109        | 1600000                  | 2399999                |
| 4       | 1357078       | 2        | 19          | 75      | 1450            | 1154            | 0               | 3018497        | 2400000                  | 3199999                |
| 5       | 187622        | 2        | 19          | 70      | 1491            | 1450            | 0               | 3206723        | 3200000                  | 3999999                |
| 6       | 861462        | 2        | 19          | 65      | 1127            | 1044            | 0               | 4073126        | 4000000                  | 4799999                |
| 7       | 1516329       | 2        | 19          | 80      | 1763            | 1004            | 0               | 5591626        | 4800000                  | 5599999                |
| 8       | 38238         | 1        | 19          | 60      | 1604            | 0               | 0               | 5632631        | 5600000                  | 6399999                |
| 9       | 1200426       | 2        | 19          | 100     | 1664            | 1821            | 0               | 6834661        | 6400000                  | 7199999                |
| 10      | 927476        | 3        | 19          | 100     | 1733            | 1669            | 1712            | 7765622        | 7200000                  | 7999999                |
| 11      | 592818        | 1        | 19          | 70      | 1685            | 0               | 0               | 8363554        | 8000000                  | 8799999                |
| 12      | 519494        | 2        | 19          | 65      | 1471            | 1286            | 0               | 8884733        | 8800000                  | 9599999                |
| 13      | 782281        | 2        | 19          | 50      | 1507            | 1382            | 0               | 9669771        | 9600000                  | 10399999               |
| 14      | 1386040       | 1        | 19          | 50      | 1869            | 0               | 0               | 11058700       | 10400000                 | 11199999               |
| 15      | 729178        | 1        | 19          | 70      | 1502            | 0               | 0               | 11789747       | 11200000                 | 11999999               |

Total number of pulses in waveform = 29

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## 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       | 422608        | 3        | 8           | 75      | 1440            | 1443            | 1637            | 422608         | 0                        | 1090908                |
| 2       | 1437312       | 1        | 8           | 55      | 1750            | 0               | 0               | 1864440        | 1090909                  | 2181817                |
| 3       | 588260        | 1        | 8           | 55      | 1934            | 0               | 0               | 2454450        | 2181818                  | 3272726                |
| 4       | 1061411       | 1        | 8           | 80      | 1917            | 0               | 0               | 3517795        | 3272727                  | 4363635                |
| 5       | 997231        | 2        | 8           | 90      | 1671            | 1075            | 0               | 4516943        | 4363636                  | 5454544                |
| 6       | 1227544       | 2        | 8           | 80      | 1760            | 1816            | 0               | 5747233        | 5454545                  | 6545453                |
| 7       | 1508178       | 3        | 8           | 100     | 1452            | 1952            | 1599            | 7258987        | 6545454                  | 7636362                |
| 8       | 1065165       | 1        | 8           | 50      | 1062            | 0               | 0               | 8329155        | 7636363                  | 8727271                |
| 9       | 514977        | 1        | 8           | 100     | 1047            | 0               | 0               | 8845194        | 8727272                  | 9818180                |
| 10      | 1456937       | 1        | 8           | 50      | 1238            | 0               | 0               | 10303178       | 9818181                  | 10909089               |
| 11      | 1677197       | 1        | 8           | 80      | 1743            | 0               | 0               | 11981613       | 10909090                 | 11999998               |

Total number of pulses in waveform = 17

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## Type 5 Radar Waveform\_14

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 237631        | 3        | 12          | 95      | 1592             | 1501             | 1237             | 237631         | 0                         | 749999                  |
| 2       | 604783        | 1        | 12          | 75      | 1240             | 0                | 0                | 846744         | 750000                    | 1499999                 |
| 3       | 1043509       | 3        | 12          | 50      | 1738             | 1095             | 1104             | 1891493        | 1500000                   | 2249999                 |
| 4       | 1033412       | 3        | 12          | 60      | 1387             | 1721             | 1571             | 2928842        | 2250000                   | 2999999                 |
| 5       | 761812        | 3        | 12          | 80      | 1035             | 1900             | 1975             | 3695333        | 3000000                   | 3749999                 |
| 6       | 398904        | 3        | 12          | 95      | 1671             | 1911             | 1755             | 4097147        | 3750000                   | 4499999                 |
| 7       | 600337        | 3        | 12          | 50      | 1169             | 1326             | 1591             | 4702821        | 4500000                   | 5249999                 |
| 8       | 735463        | 3        | 12          | 85      | 1039             | 1790             | 1033             | 5442370        | 5250000                   | 5999999                 |
| 9       | 598543        | 2        | 12          | 60      | 1819             | 1669             | 0                | 6044775        | 6000000                   | 6749999                 |
| 10      | 942881        | 1        | 12          | 60      | 1690             | 0                | 0                | 6991144        | 6750000                   | 7499999                 |
| 11      | 906629        | 1        | 12          | 55      | 1941             | 0                | 0                | 7899463        | 7500000                   | 8249999                 |
| 12      | 781374        | 2        | 12          | 100     | 1239             | 1117             | 0                | 8682778        | 8250000                   | 8999999                 |
| 13      | 436177        | 1        | 12          | 60      | 1738             | 0                | 0                | 9121311        | 9000000                   | 9749999                 |
| 14      | 850619        | 3        | 12          | 85      | 1223             | 1243             | 1784             | 9973668        | 9750000                   | 10499999                |
| 15      | 820834        | 2        | 12          | 100     | 1073             | 1835             | 0                | 10798752       | 10500000                  | 11249999                |
| 16      | 1168157       | 3        | 12          | 50      | 1672             | 1601             | 1293             | 11969817       | 11250000                  | 11999999                |

Total number of pulses in waveform = 37

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## 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       | 493521        | 1        | 5           | 85      | 1284             | 0                | 0                | 493521         | 0                         | 799999                  |
| 2       | 847078        | 2        | 5           | 65      | 1846             | 1442             | 0                | 1341883        | 800000                    | 1599999                 |
| 3       | 626284        | 1        | 5           | 80      | 1832             | 0                | 0                | 1971455        | 1600000                   | 2399999                 |
| 4       | 883271        | 2        | 5           | 60      | 1841             | 1103             | 0                | 2856558        | 2400000                   | 3199999                 |
| 5       | 347192        | 1        | 5           | 95      | 1256             | 0                | 0                | 3206694        | 3200000                   | 3999999                 |
| 6       | 1198064       | 3        | 5           | 65      | 1062             | 1538             | 1026             | 4404014        | 4000000                   | 4799999                 |
| 7       | 1179244       | 1        | 5           | 50      | 1501             | 0                | 0                | 5586884        | 4800000                   | 5599999                 |
| 8       | 153272        | 2        | 5           | 85      | 1603             | 1494             | 0                | 5741657        | 5600000                   | 6399999                 |
| 9       | 1238158       | 3        | 5           | 100     | 1103             | 1488             | 1584             | 6982912        | 6400000                   | 7199999                 |
| 10      | 297307        | 2        | 5           | 50      | 1647             | 1680             | 0                | 7284394        | 7200000                   | 7999999                 |
| 11      | 1151733       | 1        | 5           | 80      | 1448             | 0                | 0                | 8439454        | 8000000                   | 8799999                 |
| 12      | 943790        | 1        | 5           | 80      | 1824             | 0                | 0                | 9384692        | 8800000                   | 9599999                 |
| 13      | 368643        | 1        | 5           | 90      | 1844             | 0                | 0                | 9755159        | 9600000                   | 10399999                |
| 14      | 740451        | 1        | 5           | 80      | 1704             | 0                | 0                | 10497454       | 10400000                  | 11199999                |
| 15      | 1084200       | 1        | 5           | 80      | 1495             | 0                | 0                | 11583358       | 11200000                  | 11999999                |

Total number of pulses in waveform = 23

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## Type 5 Radar Waveform\_16

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 534132        | 3        | 6           | 85      | 1853             | 1244             | 1868             | 534132         | 0                         | 999999                  |
| 2       | 1205834       | 1        | 6           | 80      | 1568             | 0                | 0                | 1744931        | 1000000                   | 1999999                 |
| 3       | 693654        | 1        | 6           | 50      | 1098             | 0                | 0                | 2440153        | 2000000                   | 2999999                 |
| 4       | 712040        | 1        | 6           | 85      | 1918             | 0                | 0                | 3153291        | 3000000                   | 3999999                 |
| 5       | 1016854       | 3        | 6           | 85      | 1789             | 1669             | 1270             | 4172063        | 4000000                   | 4999999                 |
| 6       | 838278        | 1        | 6           | 60      | 1650             | 0                | 0                | 5015069        | 5000000                   | 5999999                 |
| 7       | 1807838       | 3        | 6           | 50      | 1292             | 1491             | 1553             | 6824557        | 6000000                   | 6999999                 |
| 8       | 256852        | 1        | 6           | 60      | 1413             | 0                | 0                | 7085745        | 7000000                   | 7999999                 |
| 9       | 925782        | 1        | 6           | 75      | 1199             | 0                | 0                | 8012940        | 8000000                   | 8999999                 |
| 10      | 1294122       | 1        | 6           | 100     | 1698             | 0                | 0                | 9308261        | 9000000                   | 9999999                 |
| 11      | 1037916       | 2        | 6           | 50      | 1225             | 1021             | 0                | 10347875       | 10000000                  | 10999999                |
| 12      | 1202970       | 1        | 6           | 65      | 1646             | 0                | 0                | 11553091       | 11000000                  | 11999999                |

Total number of pulses in waveform = 19

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## Type 5 Radar Waveform\_17

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       | 641684        | 2        | 18          | 70      | 1120             | 1760             | 0                | 641684         | 0                         | 749999                  |
| 2       | 408242        | 2        | 18          | 90      | 1063             | 1984             | 0                | 1052806        | 750000                    | 1499999                 |
| 3       | 948238        | 1        | 18          | 80      | 1917             | 0                | 0                | 2004091        | 1500000                   | 2249999                 |
| 4       | 798442        | 3        | 18          | 85      | 1716             | 1078             | 1530             | 2804450        | 2250000                   | 2999999                 |
| 5       | 385181        | 3        | 18          | 100     | 1819             | 1710             | 1383             | 3193955        | 3000000                   | 3749999                 |
| 6       | 889152        | 1        | 18          | 60      | 1500             | 0                | 0                | 4088019        | 3750000                   | 4499999                 |
| 7       | 873533        | 2        | 18          | 55      | 1509             | 1760             | 0                | 4963052        | 4500000                   | 5249999                 |
| 8       | 540974        | 1        | 18          | 60      | 1466             | 0                | 0                | 5507295        | 5250000                   | 5999999                 |
| 9       | 753231        | 3        | 18          | 100     | 1152             | 1576             | 1996             | 6261992        | 6000000                   | 6749999                 |
| 10      | 980709        | 2        | 18          | 75      | 1199             | 1403             | 0                | 7247425        | 6750000                   | 7499999                 |
| 11      | 865139        | 3        | 18          | 80      | 1000             | 1412             | 1776             | 8115166        | 7500000                   | 8249999                 |
| 12      | 170736        | 2        | 18          | 60      | 1590             | 1784             | 0                | 8290090        | 8250000                   | 8999999                 |
| 13      | 1393315       | 2        | 18          | 95      | 1630             | 1225             | 0                | 9686779        | 9000000                   | 9749999                 |
| 14      | 651574        | 2        | 18          | 65      | 1304             | 1715             | 0                | 10341208       | 9750000                   | 10499999                |
| 15      | 175144        | 1        | 18          | 75      | 1936             | 0                | 0                | 10519371       | 10500000                  | 11249999                |
| 16      | 1182707       | 1        | 18          | 85      | 1503             | 0                | 0                | 11704014       | 11250000                  | 11999999                |

Total number of pulses in waveform = 31

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## 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       | 18706         | 3        | 9           | 55      | 1364             | 1819             | 1028             | 18706          | 0                         | 749999                  |
| 2       | 1245792       | 3        | 9           | 70      | 1232             | 1228             | 1980             | 1268699        | 750000                    | 1499999                 |
| 3       | 748943        | 1        | 9           | 90      | 1713             | 0                | 0                | 2022082        | 1500000                   | 2249999                 |
| 4       | 962452        | 2        | 9           | 100     | 1542             | 1555             | 0                | 2986247        | 2250000                   | 2999999                 |
| 5       | 72879         | 2        | 9           | 75      | 1307             | 1370             | 0                | 3062223        | 3000000                   | 3749999                 |
| 6       | 771665        | 3        | 9           | 60      | 1365             | 1516             | 1561             | 3836565        | 3750000                   | 4499999                 |
| 7       | 1265299       | 3        | 9           | 50      | 1396             | 1927             | 1381             | 5106306        | 4500000                   | 5249999                 |
| 8       | 496708        | 1        | 9           | 100     | 1655             | 0                | 0                | 5607718        | 5250000                   | 5999999                 |
| 9       | 987413        | 2        | 9           | 85      | 1643             | 1612             | 0                | 6596786        | 6000000                   | 6749999                 |
| 10      | 649076        | 3        | 9           | 85      | 1700             | 1096             | 1756             | 7249117        | 6750000                   | 7499999                 |
| 11      | 879173        | 3        | 9           | 55      | 1966             | 1917             | 1838             | 8132842        | 7500000                   | 8249999                 |
| 12      | 113087        | 3        | 9           | 75      | 1745             | 1717             | 1498             | 8251640        | 8250000                   | 8999999                 |
| 13      | 961928        | 1        | 9           | 50      | 1228             | 0                | 0                | 9218528        | 9000000                   | 9749999                 |
| 14      | 767152        | 2        | 9           | 75      | 1321             | 1007             | 0                | 9986908        | 9750000                   | 10499999                |
| 15      | 982559        | 1        | 9           | 80      | 1077             | 0                | 0                | 10971795       | 10500000                  | 11249999                |
| 16      | 406125        | 1        | 9           | 80      | 1096             | 0                | 0                | 11378997       | 11250000                  | 11999999                |

Total number of pulses in waveform = 34

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## Type 5 Radar Waveform\_19

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 562502        | 3        | 17          | 50      | 1605             | 1172             | 1464             | 562502         | 0                         | 705881                  |
| 2       | 357543        | 2        | 17          | 90      | 1123             | 1347             | 0                | 924286         | 705882                    | 1411763                 |
| 3       | 1059279       | 2        | 17          | 70      | 1621             | 1579             | 0                | 1986035        | 1411764                   | 2117645                 |
| 4       | 771367        | 1        | 17          | 75      | 1191             | 0                | 0                | 2760602        | 2117646                   | 2823527                 |
| 5       | 625226        | 1        | 17          | 50      | 1921             | 0                | 0                | 3387019        | 2823528                   | 3529409                 |
| 6       | 782525        | 2        | 17          | 100     | 1969             | 1042             | 0                | 4171465        | 3529410                   | 4235291                 |
| 7       | 150728        | 2        | 17          | 80      | 1239             | 1829             | 0                | 4325204        | 4235292                   | 4941173                 |
| 8       | 1067491       | 3        | 17          | 75      | 1684             | 1126             | 1713             | 5395763        | 4941174                   | 5647055                 |
| 9       | 739921        | 2        | 17          | 95      | 1813             | 1655             | 0                | 6140207        | 5647056                   | 6352937                 |
| 10      | 241933        | 1        | 17          | 75      | 1498             | 0                | 0                | 6385608        | 6352938                   | 7058819                 |
| 11      | 1201941       | 1        | 17          | 70      | 1479             | 0                | 0                | 7589047        | 7058820                   | 7764701                 |
| 12      | 795822        | 3        | 17          | 65      | 1960             | 1208             | 1061             | 8386348        | 7764702                   | 8470583                 |
| 13      | 756118        | 3        | 17          | 65      | 1716             | 1997             | 1085             | 9146695        | 8470584                   | 9176465                 |
| 14      | 345857        | 1        | 17          | 75      | 1305             | 0                | 0                | 9497350        | 9176466                   | 9882347                 |
| 15      | 801807        | 3        | 17          | 55      | 1399             | 1903             | 1245             | 10300462       | 9882348                   | 10588229                |
| 16      | 314038        | 2        | 17          | 100     | 1972             | 1213             | 0                | 10619047       | 10588230                  | 11294111                |
| 17      | 1137754       | 2        | 17          | 70      | 1642             | 1084             | 0                | 11759986       | 11294112                  | 11999993                |

Total number of pulses in waveform = 34

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**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       | 697472        | 2        | 10          | 65      | 1830            | 1377            | 0               | 697472         | 0                        | 1499999                |
| 2       | 2191361       | 1        | 10          | 95      | 1805            | 0               | 0               | 2892040        | 1500000                  | 2999999                |
| 3       | 943782        | 1        | 10          | 50      | 1332            | 0               | 0               | 3837627        | 3000000                  | 4499999                |
| 4       | 778785        | 2        | 10          | 80      | 1542            | 1372            | 0               | 4617744        | 4500000                  | 5999999                |
| 5       | 1839884       | 2        | 10          | 95      | 1388            | 1711            | 0               | 6460542        | 6000000                  | 7499999                |
| 6       | 1196441       | 2        | 10          | 55      | 1909            | 1610            | 0               | 7660082        | 7500000                  | 8999999                |
| 7       | 2820092       | 1        | 10          | 85      | 1940            | 0               | 0               | 10483693       | 9000000                  | 10499999               |
| 8       | 368046        | 2        | 10          | 65      | 1324            | 1433            | 0               | 10853679       | 10500000                 | 11999999               |

Total number of pulses in waveform = 13

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**Type 5 Radar Waveform\_21**

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       | 1148153       | 1        | 10          | 70      | 1958            | 0               | 0               | 1148153        | 0                        | 1333332                |
| 2       | 1312299       | 2        | 10          | 65      | 1237            | 1577            | 0               | 2462410        | 1333333                  | 2666665                |
| 3       | 293145        | 2        | 10          | 80      | 1048            | 1136            | 0               | 2758369        | 2666666                  | 3999998                |
| 4       | 1777112       | 2        | 10          | 55      | 1854            | 1183            | 0               | 4537665        | 3999999                  | 5333331                |
| 5       | 1699300       | 1        | 10          | 80      | 1603            | 0               | 0               | 6240002        | 5333332                  | 6666664                |
| 6       | 904284        | 2        | 10          | 100     | 1679            | 1923            | 0               | 7145889        | 6666665                  | 7999997                |
| 7       | 2088063       | 2        | 10          | 50      | 1680            | 1888            | 0               | 9237554        | 7999998                  | 9333330                |
| 8       | 1159968       | 1        | 10          | 60      | 1191            | 0               | 0               | 10401090       | 9333331                  | 10666663               |
| 9       | 1476072       | 1        | 10          | 100     | 1029            | 0               | 0               | 11878353       | 10666664                 | 11999996               |

Total number of pulses in waveform = 14

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**Type 5 Radar Waveform\_22**

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       | 94901         | 3        | 8           | 50      | 1968            | 1322            | 1557            | 94901          | 0                        | 666666                 |
| 2       | 598249        | 3        | 8           | 90      | 1298            | 1325            | 1120            | 697997         | 666667                   | 1333333                |
| 3       | 1097026       | 2        | 8           | 80      | 1348            | 1957            | 0               | 1798766        | 1333334                  | 2000000                |
| 4       | 713363        | 2        | 8           | 100     | 1744            | 1162            | 0               | 2515434        | 2000001                  | 2666667                |
| 5       | 405407        | 2        | 8           | 100     | 1645            | 1522            | 0               | 2923747        | 2666668                  | 3333334                |
| 6       | 967490        | 3        | 8           | 100     | 1748            | 1935            | 1854            | 3894404        | 3333335                  | 4000001                |
| 7       | 212191        | 1        | 8           | 75      | 1432            | 0               | 0               | 4112132        | 4000002                  | 4666668                |
| 8       | 832755        | 3        | 8           | 100     | 1234            | 1937            | 1213            | 4946319        | 4666669                  | 5333335                |
| 9       | 497707        | 1        | 8           | 70      | 1623            | 0               | 0               | 5448410        | 5333336                  | 6000002                |
| 10      | 1116581       | 3        | 8           | 75      | 1330            | 1974            | 1878            | 6566614        | 6000003                  | 6666669                |
| 11      | 122591        | 1        | 8           | 90      | 1861            | 0               | 0               | 6694387        | 6666670                  | 7333336                |
| 12      | 814956        | 1        | 8           | 70      | 1691            | 0               | 0               | 7511204        | 7333337                  | 8000003                |
| 13      | 801832        | 2        | 8           | 70      | 1656            | 1083            | 0               | 8314727        | 8000004                  | 8666670                |
| 14      | 936351        | 3        | 8           | 50      | 1128            | 1046            | 1814            | 9253817        | 8666671                  | 9333337                |
| 15      | 419304        | 3        | 8           | 70      | 1500            | 1340            | 1530            | 9877109        | 9333338                  | 10000004               |
| 16      | 900300        | 3        | 8           | 50      | 1993            | 1982            | 1308            | 10581779       | 10000005                 | 10666671               |
| 17      | 714999        | 1        | 8           | 55      | 1416            | 0               | 0               | 11302061       | 10666672                 | 11333338               |
| 18      | 561453        | 3        | 8           | 50      | 1425            | 1475            | 1206            | 11864930       | 11333339                 | 12000005               |

Total number of pulses in waveform = 40

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**Type 5 Radar Waveform\_23**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 377140        | 3        | 17          | 65      | 1324            | 1503            | 1694            | 377140         | 0                        | 999999                 |
| 2       | 1383933       | 1        | 17          | 85      | 1687            | 0               | 0               | 1765594        | 1000000                  | 1999999                |
| 3       | 1162842       | 1        | 17          | 80      | 1521            | 0               | 0               | 2930123        | 2000000                  | 2999999                |
| 4       | 822721        | 1        | 17          | 90      | 1660            | 0               | 0               | 3754365        | 3000000                  | 3999999                |
| 5       | 274323        | 2        | 17          | 50      | 1155            | 1930            | 0               | 4030348        | 4000000                  | 4999999                |
| 6       | 1302620       | 2        | 17          | 50      | 1654            | 1193            | 0               | 5336053        | 5000000                  | 5999999                |
| 7       | 978320        | 1        | 17          | 50      | 1837            | 0               | 0               | 6317220        | 6000000                  | 6999999                |
| 8       | 776630        | 1        | 17          | 70      | 1343            | 0               | 0               | 7095687        | 7000000                  | 7999999                |
| 9       | 1826999       | 1        | 17          | 75      | 1984            | 0               | 0               | 8924029        | 8000000                  | 8999999                |
| 10      | 484841        | 3        | 17          | 90      | 1865            | 1644            | 1424            | 9410854        | 9000000                  | 9999999                |
| 11      | 942713        | 2        | 17          | 55      | 1389            | 1545            | 0               | 10358500       | 10000000                 | 10999999               |
| 12      | 788303        | 2        | 17          | 85      | 1396            | 1465            | 0               | 11149737       | 11000000                 | 11999999               |

Total number of pulses in waveform = 20

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**Type 5 Radar Waveform\_24**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 1055428       | 3        | 5           | 65      | 1795            | 1666            | 1979            | 1055428        | 0                        | 1499999                |
| 2       | 1377348       | 1        | 5           | 55      | 1894            | 0               | 0               | 2438216        | 1500000                  | 2999999                |
| 3       | 1351800       | 2        | 5           | 75      | 1644            | 1426            | 0               | 3791710        | 3000000                  | 4499999                |
| 4       | 1997498       | 1        | 5           | 95      | 1467            | 0               | 0               | 5792278        | 4500000                  | 5999999                |
| 5       | 633359        | 3        | 5           | 80      | 1095            | 1859            | 1436            | 6427104        | 6000000                  | 7499999                |
| 6       | 1476464       | 2        | 5           | 55      | 1519            | 1010            | 0               | 7907958        | 7500000                  | 8999999                |
| 7       | 2400157       | 1        | 5           | 60      | 1192            | 0               | 0               | 10310644       | 9000000                  | 10499999               |
| 8       | 650712        | 2        | 5           | 85      | 1431            | 1647            | 0               | 10962548       | 10500000                 | 11999999               |

Total number of pulses in waveform = 15

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**Type 5 Radar Waveform\_25**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 98059         | 1        | 18          | 100     | 1096            | 0               | 0               | 98059          | 0                        | 999999                 |
| 2       | 1717125       | 3        | 18          | 65      | 1156            | 1360            | 1689            | 1816280        | 1000000                  | 1999999                |
| 3       | 749308        | 1        | 18          | 95      | 1431            | 0               | 0               | 2569793        | 2000000                  | 2999999                |
| 4       | 1006414       | 3        | 18          | 80      | 1935            | 1266            | 1995            | 3577638        | 3000000                  | 3999999                |
| 5       | 604233        | 3        | 18          | 95      | 1073            | 1765            | 1573            | 4187067        | 4000000                  | 4999999                |
| 6       | 1232716       | 1        | 18          | 90      | 1409            | 0               | 0               | 5424194        | 5000000                  | 5999999                |
| 7       | 639253        | 2        | 18          | 75      | 1346            | 1398            | 0               | 6064856        | 6000000                  | 6999999                |
| 8       | 1912615       | 1        | 18          | 60      | 1879            | 0               | 0               | 7980215        | 7000000                  | 7999999                |
| 9       | 521266        | 2        | 18          | 85      | 1397            | 1467            | 0               | 8503360        | 8000000                  | 8999999                |
| 10      | 995871        | 1        | 18          | 70      | 1105            | 0               | 0               | 9502095        | 9000000                  | 9999999                |
| 11      | 1259148       | 1        | 18          | 55      | 1626            | 0               | 0               | 10762348       | 10000000                 | 10999999               |
| 12      | 1127278       | 1        | 18          | 80      | 1611            | 0               | 0               | 11891252       | 11000000                 | 11999999               |

Total number of pulses in waveform = 20

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**Type 5 Radar Waveform\_26**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 64013         | 2        | 6           | 55      | 1376            | 1280            | 0               | 64013          | 0                        | 1090908                |
| 2       | 1272414       | 3        | 6           | 75      | 1345            | 1636            | 1582            | 1339083        | 1090909                  | 2181817                |
| 3       | 951393        | 1        | 6           | 60      | 1277            | 0               | 0               | 2295039        | 2181818                  | 3272726                |
| 4       | 1737046       | 1        | 6           | 100     | 1492            | 0               | 0               | 4033362        | 3272727                  | 4363635                |
| 5       | 984109        | 2        | 6           | 50      | 1638            | 1350            | 0               | 5018963        | 4363636                  | 5454544                |
| 6       | 1096550       | 3        | 6           | 65      | 1834            | 1982            | 1927            | 6118501        | 5454545                  | 6545453                |
| 7       | 1244465       | 3        | 6           | 95      | 1478            | 1423            | 1542            | 7368709        | 6545454                  | 7636362                |
| 8       | 721169        | 1        | 6           | 100     | 1750            | 0               | 0               | 8094321        | 7636363                  | 8727271                |
| 9       | 721571        | 2        | 6           | 50      | 1573            | 1315            | 0               | 8817642        | 8727272                  | 9818180                |
| 10      | 1336807       | 1        | 6           | 70      | 1758            | 0               | 0               | 10157337       | 9818181                  | 10909089               |
| 11      | 1780015       | 3        | 6           | 90      | 1460            | 1644            | 1689            | 11939110       | 10909090                 | 11999998               |

Total number of pulses in waveform = 22

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**Type 5 Radar Waveform\_27**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 244381        | 3        | 19          | 100     | 1647            | 1360            | 1271            | 244381         | 0                        | 749999                 |
| 2       | 518549        | 3        | 19          | 80      | 1844            | 1634            | 1671            | 767208         | 750000                   | 1499999                |
| 3       | 1023433       | 2        | 19          | 65      | 1089            | 1488            | 0               | 1795790        | 1500000                  | 2249999                |
| 4       | 699500        | 3        | 19          | 80      | 1664            | 1410            | 1069            | 2497967        | 2250000                  | 2999999                |
| 5       | 1120508       | 1        | 19          | 80      | 1901            | 0               | 0               | 3622618        | 3000000                  | 3749999                |
| 6       | 870830        | 1        | 19          | 85      | 1079            | 0               | 0               | 4495349        | 3750000                  | 4499999                |
| 7       | 117457        | 2        | 19          | 65      | 1365            | 1167            | 0               | 4613885        | 4500000                  | 5249999                |
| 8       | 1212279       | 1        | 19          | 60      | 1332            | 0               | 0               | 5828696        | 5250000                  | 5999999                |
| 9       | 547020        | 3        | 19          | 60      | 1530            | 1453            | 1769            | 6377048        | 6000000                  | 6749999                |
| 10      | 447848        | 2        | 19          | 70      | 1651            | 1184            | 0               | 6829648        | 6750000                  | 7499999                |
| 11      | 722523        | 2        | 19          | 95      | 1181            | 1874            | 0               | 7555006        | 7500000                  | 8249999                |
| 12      | 1100733       | 3        | 19          | 60      | 1454            | 1534            | 1525            | 8658794        | 8250000                  | 8999999                |
| 13      | 1057835       | 2        | 19          | 70      | 1165            | 1238            | 0               | 9721142        | 9000000                  | 9749999                |
| 14      | 742537        | 2        | 19          | 75      | 1311            | 1416            | 0               | 10466082       | 9750000                  | 10499999               |
| 15      | 703951        | 3        | 19          | 55      | 1683            | 1324            | 1542            | 11172760       | 10500000                 | 11249999               |
| 16      | 741484        | 2        | 19          | 50      | 1249            | 1467            | 0               | 11918793       | 11250000                 | 11999999               |

Total number of pulses in waveform = 35

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**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       | 180470        | 2        | 14          | 75      | 1373            | 1379            | 0               | 180470         | 0                        | 1499999                |
| 2       | 1798278       | 2        | 14          | 85      | 1122            | 1285            | 0               | 1981500        | 1500000                  | 2999999                |
| 3       | 1038348       | 1        | 14          | 100     | 1166            | 0               | 0               | 3022255        | 3000000                  | 4499999                |
| 4       | 2838096       | 3        | 14          | 75      | 1658            | 1134            | 1960            | 5861517        | 4500000                  | 5999999                |
| 5       | 842504        | 1        | 14          | 100     | 1687            | 0               | 0               | 6708773        | 6000000                  | 7499999                |
| 6       | 1701345       | 1        | 14          | 50      | 1521            | 0               | 0               | 8411805        | 7500000                  | 8999999                |
| 7       | 1036756       | 1        | 14          | 90      | 1856            | 0               | 0               | 9450082        | 9000000                  | 10499999               |
| 8       | 1647636       | 2        | 14          | 70      | 1198            | 1398            | 0               | 11099574       | 10500000                 | 11999999               |

Total number of pulses in waveform = 13

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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       | 280738        | 3        | 9           | 95      | 1132             | 1002             | 1172             | 536989         | 0                         | 705881                  |
| 2       | 536989        | 2        | 9           | 60      | 1427             | 1780             | 0                | 821033         | 705882                    | 1411763                 |
| 3       | 822618        | 3        | 9           | 80      | 1117             | 1153             | 1591             | 1646858        | 1411764                   | 2117645                 |
| 4       | 537036        | 3        | 9           | 55      | 1599             | 1016             | 1136             | 2187755        | 2117646                   | 2823527                 |
| 5       | 1313120       | 3        | 9           | 55      | 1224             | 1051             | 1617             | 3504626        | 2823528                   | 3529409                 |
| 6       | 473585        | 1        | 9           | 70      | 1909             | 0                | 0                | 3982103        | 3529410                   | 4235291                 |
| 7       | 391354        | 2        | 9           | 70      | 1082             | 1459             | 0                | 4375366        | 4235292                   | 4941173                 |
| 8       | 844046        | 2        | 9           | 90      | 1389             | 1778             | 0                | 5221953        | 4941174                   | 5647055                 |
| 9       | 655725        | 3        | 9           | 50      | 1483             | 1788             | 1368             | 5880845        | 5647056                   | 6352937                 |
| 10      | 929730        | 3        | 9           | 75      | 1768             | 1234             | 1697             | 6815214        | 6352938                   | 7058819                 |
| 11      | 658399        | 3        | 9           | 100     | 1926             | 1592             | 1930             | 7478312        | 7058820                   | 7764701                 |
| 12      | 872442        | 2        | 9           | 90      | 1373             | 1781             | 0                | 8356202        | 7764702                   | 8470583                 |
| 13      | 707209        | 1        | 9           | 95      | 1939             | 0                | 0                | 9066565        | 8470584                   | 9176465                 |
| 14      | 182915        | 3        | 9           | 80      | 1547             | 1206             | 1278             | 9251419        | 9176466                   | 9882347                 |
| 15      | 1210094       | 3        | 9           | 100     | 1045             | 1424             | 1049             | 10465544       | 9882348                   | 10588229                |
| 16      | 231718        | 3        | 9           | 90      | 1821             | 1380             | 1154             | 10700780       | 10588230                  | 11294111                |
| 17      | 722396        | 1        | 9           | 70      | 1427             | 0                | 0                | 11427531       | 11294112                  | 11999993                |

Total number of pulses in waveform = 41

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## Type 5 Radar Waveform\_30

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       | 622148        | 3        | 12          | 60      | 1541             | 1738             | 1523             | 622148         | 0                         | 857142                  |
| 2       | 1020550       | 2        | 12          | 65      | 1509             | 1729             | 0                | 1647500        | 857143                    | 1714285                 |
| 3       | 295725        | 1        | 12          | 75      | 1317             | 0                | 0                | 1946463        | 1714286                   | 2571428                 |
| 4       | 1448357       | 3        | 12          | 85      | 1562             | 1950             | 1686             | 3396137        | 2571429                   | 3428571                 |
| 5       | 115612        | 1        | 12          | 95      | 1016             | 0                | 0                | 3516947        | 3428572                   | 4285714                 |
| 6       | 1422868       | 1        | 12          | 70      | 1589             | 0                | 0                | 4940831        | 4285715                   | 5142857                 |
| 7       | 358890        | 1        | 12          | 50      | 1134             | 0                | 0                | 5301310        | 5142858                   | 6000000                 |
| 8       | 1284933       | 1        | 12          | 90      | 1152             | 0                | 0                | 6587377        | 6000001                   | 6857143                 |
| 9       | 571887        | 3        | 12          | 60      | 1685             | 1100             | 1489             | 7160416        | 6857144                   | 7714286                 |
| 10      | 1243014       | 3        | 12          | 80      | 1954             | 1666             | 1491             | 8407704        | 7714287                   | 8571429                 |
| 11      | 914294        | 2        | 12          | 80      | 1772             | 1216             | 0                | 9327109        | 8571430                   | 9428572                 |
| 12      | 861223        | 1        | 12          | 95      | 1590             | 0                | 0                | 10191320       | 9428573                   | 10285715                |
| 13      | 169270        | 3        | 12          | 100     | 1130             | 1123             | 1780             | 10362180       | 10285716                  | 11142858                |
| 14      | 1188488       | 3        | 12          | 70      | 1121             | 1974             | 1325             | 11554701       | 11142859                  | 12000001                |

Total number of pulses in waveform = 28

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## Radar Type 6 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection | Trail # | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|-------------------------------|---------|---------------------|-------------------------------|
| 1                        | 5291                | 1                             | 16      | 5300                | 1                             |
| 2                        | 5291                | 1                             | 17      | 5301                | 1                             |
| 3                        | 5292                | 1                             | 18      | 5302                | 1                             |
| 4                        | 5292                | 1                             | 19      | 5303                | 1                             |
| 5                        | 5293                | 1                             | 20      | 5304                | 1                             |
| 6                        | 5293                | 1                             | 21      | 5305                | 1                             |
| 7                        | 5294                | 1                             | 22      | 5305                | 1                             |
| 8                        | 5294                | 1                             | 23      | 5306                | 1                             |
| 9                        | 5295                | 1                             | 24      | 5306                | 1                             |
| 10                       | 5296                | 1                             | 25      | 5307                | 1                             |
| 11                       | 5307                | 1                             | 26      | 5307                | 1                             |
| 12                       | 5298                | 1                             | 27      | 5308                | 1                             |
| 13                       | 5299                | 1                             | 28      | 5308                | 1                             |
| 14                       | 5300                | 1                             | 29      | 5309                | 1                             |
| 15                       | 5300                | 1                             | 30      | 5309                | 1                             |
| Detection Percentage (%) |                     |                               |         |                     | 100%                          |

| Radar waveform #1 |                 |                  | Radar waveform #2 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 8                 | 5319            | 24               | 2                 | 5306            | 6                |
| 10                | 5291            | 30               | 12                | 5307            | 36               |
| 17                | 5292            | 51               | 22                | 5283            | 66               |
| 21                | 5298            | 63               | 27                | 5292            | 81               |
| 48                | 5317            | 144              | 32                | 5269            | 96               |
| 52                | 5310            | 156              | 36                | 5308            | 108              |
| 60                | 5300            | 180              | 37                | 5309            | 111              |
| 85                | 5301            | 255              | 39                | 5263            | 117              |
| 92                | 5264            | 276              | 42                | 5276            | 126              |
| 96                | 5286            | 288              | 44                | 5314            | 132              |
| --                | --              | --               | 47                | 5317            | 141              |
| --                | --              | --               | 48                | 5294            | 144              |
| --                | --              | --               | 66                | 5267            | 198              |
| --                | --              | --               | 76                | 5281            | 228              |
| --                | --              | --               | 77                | 5286            | 231              |
| --                | --              | --               | 95                | 5297            | 285              |

| Radar waveform #3 |                 |                  | Radar waveform #4 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 16                | 5280            | 48               | 10                | 5263            | 30               |
| 24                | 5319            | 72               | 23                | 5276            | 69               |
| 39                | 5285            | 117              | 25                | 5285            | 75               |
| 45                | 5268            | 135              | 32                | 5289            | 96               |
| 56                | 5270            | 168              | 40                | 5291            | 120              |
| 64                | 5263            | 192              | 44                | 5304            | 132              |
| 71                | 5267            | 213              | 49                | 5275            | 147              |
| 79                | 5296            | 237              | 50                | 5278            | 150              |
| 82                | 5278            | 246              | 66                | 5268            | 198              |
| 92                | 5320            | 276              | 72                | 5301            | 216              |
| 96                | 5307            | 288              | 78                | 5265            | 234              |
| --                | --              | --               | 80                | 5311            | 240              |

| Radar waveform #5 |                 |                  | Radar waveform #6 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 7                 | 5272            | 21               | 2                 | 5307            | 6                |
| 20                | 5268            | 60               | 13                | 5285            | 39               |
| 24                | 5283            | 72               | 34                | 5277            | 102              |
| 26                | 5276            | 78               | 37                | 5263            | 111              |
| 30                | 5319            | 90               | 40                | 5279            | 120              |
| 31                | 5304            | 93               | 41                | 5310            | 123              |
| 35                | 5320            | 105              | 43                | 5278            | 129              |
| 38                | 5296            | 114              | 45                | 5293            | 135              |
| 45                | 5279            | 135              | 50                | 5311            | 150              |
| 51                | 5308            | 153              | 55                | 5295            | 165              |
| 67                | 5313            | 201              | 58                | 5270            | 174              |
| 70                | 5273            | 210              | 81                | 5288            | 243              |
| 73                | 5281            | 219              | 85                | 5266            | 255              |
| 93                | 5321            | 279              | 95                | 5303            | 285              |
| 95                | 5314            | 285              | --                | --              | --               |

| Radar waveform #7 |                 |                  | Radar waveform #8 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 2                 | 5268            | 6                | 3                 | 5284            | 9                |
| 3                 | 5312            | 9                | 5                 | 5281            | 15               |
| 12                | 5311            | 36               | 24                | 5313            | 72               |
| 14                | 5298            | 42               | 34                | 5266            | 102              |
| 17                | 5314            | 51               | 37                | 5310            | 111              |
| 33                | 5287            | 99               | 46                | 5289            | 138              |
| 44                | 5276            | 132              | 53                | 5308            | 159              |
| 55                | 5320            | 165              | 64                | 5291            | 192              |
| 64                | 5307            | 192              | 68                | 5271            | 204              |
| 67                | 5316            | 201              | 90                | 5297            | 270              |
| 91                | 5318            | 273              | --                | --              | --               |

| Radar waveform #9 |                 |                  | Radar waveform #10 |                 |                  |
|-------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 5                 | 5272            | 15               | 6                  | 5303            | 18               |
| 10                | 5264            | 30               | 31                 | 5261            | 93               |
| 22                | 5317            | 66               | 37                 | 5285            | 111              |
| 25                | 5271            | 75               | 44                 | 5296            | 132              |
| 29                | 5269            | 87               | 46                 | 5319            | 138              |
| 30                | 5288            | 90               | 55                 | 5272            | 165              |
| 33                | 5315            | 99               | 57                 | 5320            | 171              |
| 35                | 5309            | 105              | 58                 | 5309            | 174              |
| 54                | 5276            | 162              | 67                 | 5291            | 201              |
| 63                | 5287            | 189              | 75                 | 5292            | 225              |
| 80                | 5306            | 240              | 82                 | 5264            | 246              |
| 83                | 5318            | 249              | 85                 | 5316            | 255              |
| 87                | 5292            | 261              | 97                 | 5274            | 291              |
| 89                | 5274            | 267              | --                 | --              | --               |

| Radar waveform #11 |                 |                  | Radar waveform #12 |                |                  |
|--------------------|-----------------|------------------|--------------------|----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Frequency (MHz)    | Hopping Number | Pulse Start (ms) |
| 13                 | 5323            | 39               | 4                  | 5294           | 12               |
| 15                 | 5299            | 45               | 12                 | 5284           | 36               |
| 32                 | 5290            | 96               | 13                 | 5298           | 39               |
| 37                 | 5297            | 111              | 29                 | 5323           | 87               |
| 39                 | 5315            | 117              | 32                 | 5313           | 96               |
| 44                 | 5325            | 132              | 35                 | 5283           | 105              |
| 47                 | 5289            | 141              | 37                 | 5325           | 111              |
| 58                 | 5273            | 174              | 45                 | 5329           | 135              |
| 59                 | 5330            | 177              | 46                 | 5281           | 138              |
| 62                 | 5314            | 186              | 51                 | 5286           | 153              |
| 73                 | 5275            | 219              | 62                 | 5272           | 186              |
| 76                 | 5281            | 228              | 66                 | 5330           | 198              |
| 79                 | 5324            | 237              | 71                 | 5300           | 213              |
| 84                 | 5303            | 252              | 85                 | 5327           | 255              |
| 91                 | 5328            | 273              | 91                 | 5310           | 273              |



| Radar waveform #13 |                 |                  | Radar waveform #14 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 3                  | 5294            | 9                | 21                 | 5297            | 63               |
| 6                  | 5309            | 18               | 33                 | 5308            | 99               |
| 9                  | 5322            | 27               | 39                 | 5316            | 117              |
| 14                 | 5272            | 42               | 51                 | 5326            | 153              |
| 30                 | 5326            | 90               | 53                 | 5277            | 159              |
| 36                 | 5300            | 108              | 59                 | 5309            | 177              |
| 40                 | 5297            | 120              | 60                 | 5294            | 180              |
| 56                 | 5270            | 168              | 74                 | 5278            | 222              |
| 69                 | 5305            | 207              | 86                 | 5288            | 258              |
| 80                 | 5316            | 240              | --                 | --              | --               |
| 92                 | 5315            | 276              | --                 | --              | --               |
| 97                 | 5319            | 291              | --                 | --              | --               |

| Radar waveform #15 |                 |                  | Radar waveform #16 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 0                  | 5282            | 0                | 1                  | 5329            | 3                |
| 2                  | 5328            | 6                | 4                  | 5289            | 12               |
| 8                  | 5323            | 24               | 7                  | 5327            | 21               |
| 15                 | 5303            | 45               | 18                 | 5281            | 54               |
| 16                 | 5284            | 48               | 20                 | 5309            | 60               |
| 21                 | 5327            | 63               | 29                 | 5297            | 87               |
| 26                 | 5288            | 78               | 33                 | 5319            | 99               |
| 32                 | 5283            | 96               | 43                 | 5298            | 129              |
| 33                 | 5302            | 99               | 44                 | 5282            | 132              |
| 44                 | 5275            | 132              | 52                 | 5316            | 156              |
| 63                 | 5322            | 189              | 59                 | 5299            | 177              |
| 80                 | 5314            | 240              | 61                 | 5293            | 183              |
| 89                 | 5301            | 267              | 66                 | 5305            | 198              |
| 93                 | 5285            | 279              | 83                 | 5286            | 249              |

| Radar waveform #17 |                 |                  | Radar waveform #18 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 2                  | 5291            | 6                | 2                  | 5271            | 6                |
| 5                  | 5286            | 15               | 3                  | 5281            | 9                |
| 15                 | 5278            | 45               | 7                  | 5285            | 21               |
| 21                 | 5330            | 63               | 13                 | 5329            | 39               |
| 61                 | 5320            | 183              | 20                 | 5275            | 60               |
| 68                 | 5292            | 204              | 21                 | 5317            | 63               |
| 81                 | 5311            | 243              | 24                 | 5308            | 72               |
| 83                 | 5304            | 249              | 28                 | 5276            | 84               |
| 96                 | 5306            | 288              | 36                 | 5292            | 108              |
| 97                 | 5319            | 291              | 45                 | 5291            | 135              |
| --                 | --              | --               | 50                 | 5323            | 150              |
| --                 | --              | --               | 66                 | 5327            | 198              |
| --                 | --              | --               | 72                 | 5282            | 216              |
| --                 | --              | --               | 85                 | 5311            | 255              |

| Radar waveform #19 |                 |                  | Radar waveform #20 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 1                  | 5281            | 3                | 15                 | 5283            | 45               |
| 11                 | 5287            | 33               | 24                 | 5273            | 72               |
| 16                 | 5311            | 48               | 25                 | 5314            | 75               |
| 35                 | 5317            | 105              | 29                 | 5326            | 87               |
| 41                 | 5330            | 123              | 39                 | 5293            | 117              |
| 42                 | 5302            | 126              | 42                 | 5297            | 126              |
| 71                 | 5290            | 213              | 65                 | 5271            | 195              |
| 75                 | 5292            | 225              | 80                 | 5290            | 240              |
| 85                 | 5295            | 255              | 92                 | 5301            | 276              |
| 87                 | 5319            | 261              | 94                 | 5279            | 282              |
| 90                 | 5291            | 270              | 96                 | 5286            | 288              |
| --                 | --              | --               | 97                 | 5277            | 291              |
| --                 | --              | --               | 99                 | 5292            | 297              |

| Radar waveform #21 |                 |                  | Radar waveform #22 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 15                 | 5304            | 45               | 7                  | 5324            | 21               |
| 40                 | 5318            | 120              | 8                  | 5326            | 24               |
| 54                 | 5334            | 162              | 30                 | 5310            | 90               |
| 58                 | 5303            | 174              | 37                 | 5336            | 111              |
| 60                 | 5294            | 180              | 46                 | 5299            | 138              |
| 62                 | 5288            | 186              | 56                 | 5296            | 168              |
| 78                 | 5290            | 234              | 67                 | 5290            | 201              |
| 84                 | 5327            | 252              | 75                 | 5292            | 225              |
| 85                 | 5284            | 255              | 77                 | 5305            | 231              |
| 92                 | 5313            | 276              | 85                 | 5300            | 255              |
| 99                 | 5319            | 297              | 94                 | 5312            | 282              |

| Radar waveform #23 |                 |                  | Radar waveform #24 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 9                  | 5280            | 27               | 9                  | 5304            | 27               |
| 14                 | 5320            | 42               | 15                 | 5292            | 45               |
| 17                 | 5296            | 51               | 18                 | 5326            | 54               |
| 19                 | 5301            | 57               | 45                 | 5301            | 135              |
| 20                 | 5306            | 60               | 57                 | 5321            | 171              |
| 28                 | 5334            | 84               | 69                 | 5322            | 207              |
| 36                 | 5302            | 108              | 90                 | 5313            | 270              |
| 46                 | 5318            | 138              | 93                 | 5290            | 279              |
| 54                 | 5324            | 162              | 97                 | 5334            | 291              |
| 76                 | 5307            | 228              | --                 | --              | --               |

| Radar waveform #25 |                 |                  | Radar waveform #26 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 3                  | 5298            | 9                | 1                  | 5333            | 3                |
| 25                 | 5310            | 75               | 6                  | 5310            | 18               |
| 28                 | 5279            | 84               | 9                  | 5285            | 27               |
| 36                 | 5303            | 108              | 12                 | 5301            | 36               |
| 45                 | 5328            | 135              | 14                 | 5295            | 42               |
| 55                 | 5327            | 165              | 20                 | 5336            | 60               |
| 61                 | 5336            | 183              | 28                 | 5282            | 84               |
| 72                 | 5338            | 216              | 43                 | 5279            | 129              |
| 78                 | 5326            | 234              | 59                 | 5309            | 177              |
| 81                 | 5317            | 243              | 68                 | 5313            | 204              |
| 85                 | 5295            | 255              | 80                 | 5306            | 240              |
| 89                 | 5293            | 267              | 82                 | 5332            | 246              |
| 94                 | 5304            | 282              | 90                 | 5304            | 270              |
| --                 | --              | --               | 96                 | 5316            | 288              |

| Radar waveform #27 |                 |                  | Radar waveform #28 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 13                 | 5316            | 39               | 1                  | 5327            | 3                |
| 16                 | 5287            | 48               | 4                  | 5324            | 12               |
| 27                 | 5302            | 81               | 34                 | 5303            | 102              |
| 28                 | 5301            | 84               | 36                 | 5299            | 108              |
| 32                 | 5325            | 96               | 43                 | 5283            | 129              |
| 37                 | 5303            | 111              | 47                 | 5309            | 141              |
| 49                 | 5280            | 147              | 59                 | 5291            | 177              |
| 56                 | 5292            | 168              | 63                 | 5300            | 189              |
| 57                 | 5296            | 171              | 65                 | 5313            | 195              |
| 70                 | 5291            | 210              | 70                 | 5331            | 210              |
| 71                 | 5313            | 213              | 84                 | 5280            | 252              |
| 76                 | 5305            | 228              | 98                 | 5318            | 294              |
| 77                 | 5323            | 231              | --                 | --              | --               |
| 98                 | 5330            | 294              | --                 | --              | --               |

| Radar waveform #29 |                 |                  | Radar waveform #30 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 2                  | 5293            | 6                | 1                  | 5320            | 3                |
| 10                 | 5292            | 30               | 11                 | 5299            | 33               |
| 18                 | 5334            | 54               | 25                 | 5300            | 75               |
| 23                 | 5311            | 69               | 28                 | 5293            | 84               |
| 27                 | 5285            | 81               | 34                 | 5301            | 102              |
| 29                 | 5331            | 87               | 36                 | 5303            | 108              |
| 34                 | 5303            | 102              | 50                 | 5319            | 150              |
| 37                 | 5294            | 111              | 63                 | 5336            | 189              |
| 48                 | 5316            | 144              | 66                 | 5297            | 198              |
| 57                 | 5302            | 171              | 73                 | 5280            | 219              |
| 73                 | 5305            | 219              | 78                 | 5291            | 234              |
| 83                 | 5300            | 249              | --                 | --              | --               |



|               |                                                                   |                   |            |
|---------------|-------------------------------------------------------------------|-------------------|------------|
| Product       | G-140W-C                                                          | Temperature       | 27°C       |
| Test Engineer | Amy Zhang                                                         | Relative Humidity | 65%        |
| Test Site     | TR5                                                               | Test Date         | 2017/12/10 |
| Test Item     | Radar Statistical Performance Check (802.11n-HT40 mode – 5310MHz) |                   |            |

## Radar Type 1 - Radar Statistical Performance

| Trail # | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|---------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1       | 5292                | 1                   | 518      | 102            | 1                             |
| 2       | 5293                | 1                   | 918      | 58             | 1                             |
| 3       | 5294                | 1                   | 618      | 86             | 1                             |
| 4       | 5295                | 1                   | 818      | 65             | 1                             |
| 5       | 5296                | 1                   | 638      | 83             | 1                             |
| 6       | 5297                | 1                   | 838      | 63             | 1                             |
| 7       | 5298                | 1                   | 858      | 62             | 1                             |
| 8       | 5299                | 1                   | 758      | 70             | 1                             |
| 9       | 5300                | 1                   | 598      | 89             | 1                             |
| 10      | 5301                | 1                   | 698      | 76             | 1                             |
| 11      | 5302                | 1                   | 738      | 72             | 1                             |
| 12      | 5303                | 1                   | 938      | 57             | 1                             |
| 13      | 5305                | 1                   | 538      | 99             | 1                             |
| 14      | 5307                | 1                   | 678      | 78             | 1                             |
| 15      | 5309                | 1                   | 3066     | 18             | 1                             |
| 16      | 5310                | 1                   | 3063     | 18             | 1                             |
| 17      | 5312                | 1                   | 2949     | 18             | 1                             |
| 18      | 5314                | 1                   | 2485     | 22             | 1                             |
| 19      | 5316                | 1                   | 3033     | 18             | 1                             |
| 20      | 5317                | 1                   | 1966     | 27             | 1                             |
| 21      | 5318                | 1                   | 1596     | 34             | 1                             |
| 22      | 5320                | 1                   | 1192     | 45             | 1                             |
| 23      | 5322                | 1                   | 1216     | 44             | 1                             |
| 24      | 5323                | 1                   | 851      | 63             | 1                             |
| 25      | 5324                | 1                   | 1832     | 29             | 1                             |
| 26      | 5325                | 1                   | 2063     | 26             | 1                             |

| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 27                       | 5326                | 1                   | 534      | 99             | 1                             |
| 28                       | 5327                | 1                   | 546      | 97             | 1                             |
| 29                       | 5328                | 1                   | 848      | 63             | 1                             |
| 30                       | 5329                | 1                   | 2980     | 18             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |

## Radar Type 2 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1                        | 5292                | 3.0                 | 157      | 29             | 1                             |
| 2                        | 5293                | 4.3                 | 192      | 27             | 1                             |
| 3                        | 5294                | 4.6                 | 159      | 28             | 1                             |
| 4                        | 5295                | 1.5                 | 218      | 26             | 1                             |
| 5                        | 5296                | 3.0                 | 169      | 23             | 1                             |
| 6                        | 5297                | 4.5                 | 182      | 23             | 1                             |
| 7                        | 5298                | 1.2                 | 155      | 29             | 1                             |
| 8                        | 5299                | 2.6                 | 153      | 28             | 1                             |
| 9                        | 5300                | 3.9                 | 208      | 29             | 1                             |
| 10                       | 5301                | 2.8                 | 215      | 23             | 1                             |
| 11                       | 5302                | 3.5                 | 186      | 25             | 1                             |
| 12                       | 5303                | 4.0                 | 212      | 23             | 1                             |
| 13                       | 5305                | 2.8                 | 228      | 26             | 1                             |
| 14                       | 5307                | 1.8                 | 199      | 24             | 1                             |
| 15                       | 5309                | 1.3                 | 177      | 26             | 1                             |
| 16                       | 5310                | 2.8                 | 164      | 29             | 1                             |
| 17                       | 5312                | 4.7                 | 213      | 24             | 1                             |
| 18                       | 5314                | 3.3                 | 201      | 26             | 1                             |
| 19                       | 5316                | 1.6                 | 193      | 25             | 1                             |
| 20                       | 5317                | 3.6                 | 210      | 26             | 1                             |
| 21                       | 5318                | 1.1                 | 190      | 26             | 1                             |
| 22                       | 5320                | 1.6                 | 196      | 26             | 1                             |
| 23                       | 5322                | 1.5                 | 174      | 28             | 1                             |
| 24                       | 5323                | 4.3                 | 223      | 28             | 1                             |
| 25                       | 5324                | 4.0                 | 192      | 29             | 1                             |
| 26                       | 5325                | 2.4                 | 204      | 28             | 1                             |
| 27                       | 5326                | 3.5                 | 225      | 26             | 1                             |
| 28                       | 5327                | 3.3                 | 164      | 23             | 1                             |
| 29                       | 5328                | 1.8                 | 173      | 28             | 1                             |
| 30                       | 5329                | 3.0                 | 175      | 26             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |



## Radar Type 3 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1                        | 5292                | 7.9                 | 405      | 16             | 1                             |
| 2                        | 5293                | 8.9                 | 462      | 17             | 1                             |
| 3                        | 5294                | 7.7                 | 462      | 16             | 1                             |
| 4                        | 5295                | 9.0                 | 418      | 18             | 1                             |
| 5                        | 5296                | 6.4                 | 428      | 18             | 1                             |
| 6                        | 5297                | 6.0                 | 420      | 18             | 1                             |
| 7                        | 5298                | 8.7                 | 393      | 18             | 1                             |
| 8                        | 5299                | 8.2                 | 384      | 17             | 1                             |
| 9                        | 5300                | 9.7                 | 387      | 16             | 1                             |
| 10                       | 5301                | 6.2                 | 293      | 16             | 1                             |
| 11                       | 5302                | 6.6                 | 264      | 16             | 1                             |
| 12                       | 5303                | 6.2                 | 399      | 17             | 1                             |
| 13                       | 5305                | 6.3                 | 270      | 16             | 1                             |
| 14                       | 5307                | 6.5                 | 267      | 18             | 1                             |
| 15                       | 5309                | 7.9                 | 347      | 16             | 1                             |
| 16                       | 5310                | 6.7                 | 372      | 18             | 1                             |
| 17                       | 5312                | 10.0                | 422      | 16             | 1                             |
| 18                       | 5314                | 6.6                 | 257      | 17             | 1                             |
| 19                       | 5316                | 8.0                 | 352      | 17             | 1                             |
| 20                       | 5317                | 8.9                 | 261      | 16             | 1                             |
| 21                       | 5318                | 9.0                 | 266      | 18             | 1                             |
| 22                       | 5320                | 9.2                 | 438      | 17             | 1                             |
| 23                       | 5322                | 9.4                 | 265      | 16             | 1                             |
| 24                       | 5323                | 9.2                 | 449      | 18             | 1                             |
| 25                       | 5324                | 7.5                 | 399      | 17             | 1                             |
| 26                       | 5325                | 8.9                 | 259      | 18             | 1                             |
| 27                       | 5326                | 7.2                 | 414      | 16             | 1                             |
| 28                       | 5327                | 9.9                 | 389      | 17             | 1                             |
| 29                       | 5328                | 8.9                 | 332      | 18             | 1                             |
| 30                       | 5329                | 6.7                 | 336      | 18             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |

## Radar Type 4 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1                        | 5292                | 19.2                | 412      | 15             | 1                             |
| 2                        | 5293                | 12.7                | 369      | 15             | 1                             |
| 3                        | 5294                | 15.7                | 252      | 13             | 1                             |
| 4                        | 5295                | 16.4                | 452      | 16             | 1                             |
| 5                        | 5296                | 15.8                | 344      | 14             | 1                             |
| 6                        | 5297                | 18.4                | 309      | 13             | 1                             |
| 7                        | 5298                | 12.4                | 359      | 16             | 1                             |
| 8                        | 5299                | 17.3                | 400      | 12             | 1                             |
| 9                        | 5300                | 17.3                | 457      | 16             | 1                             |
| 10                       | 5301                | 12.1                | 324      | 16             | 1                             |
| 11                       | 5302                | 17.9                | 329      | 16             | 1                             |
| 12                       | 5303                | 18.3                | 469      | 12             | 1                             |
| 13                       | 5305                | 11.9                | 330      | 12             | 1                             |
| 14                       | 5307                | 19.8                | 251      | 15             | 1                             |
| 15                       | 5309                | 14.1                | 364      | 15             | 1                             |
| 16                       | 5310                | 17.3                | 401      | 16             | 1                             |
| 17                       | 5312                | 12.9                | 346      | 12             | 1                             |
| 18                       | 5314                | 18.3                | 275      | 13             | 1                             |
| 19                       | 5316                | 12.5                | 251      | 15             | 1                             |
| 20                       | 5317                | 18.3                | 466      | 12             | 1                             |
| 21                       | 5318                | 16.9                | 480      | 15             | 1                             |
| 22                       | 5320                | 17.8                | 350      | 15             | 1                             |
| 23                       | 5322                | 14.6                | 340      | 12             | 1                             |
| 24                       | 5323                | 17.4                | 459      | 16             | 1                             |
| 25                       | 5324                | 16.0                | 430      | 14             | 1                             |
| 26                       | 5325                | 15.8                | 307      | 14             | 1                             |
| 27                       | 5326                | 18.8                | 455      | 12             | 1                             |
| 28                       | 5327                | 18.9                | 389      | 16             | 1                             |
| 29                       | 5328                | 19.6                | 393      | 14             | 1                             |
| 30                       | 5329                | 13.6                | 422      | 15             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |

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

waveforms is as follows:  $\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100\% + 100\% + 100\% + 100\%) / 4 = 100\% (>80\%)$



## Radar Type 5 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection | Trail # | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|-------------------------------|---------|---------------------|-------------------------------|
| 1                        | 5298.8              | 1                             | 16      | 5300.0              | 1                             |
| 2                        | 5296.0              | 1                             | 17      | 5300.0              | 1                             |
| 3                        | 5295.6              | 1                             | 18      | 5300.0              | 1                             |
| 4                        | 5294.0              | 1                             | 19      | 5300.0              | 1                             |
| 5                        | 5297.6              | 1                             | 20      | 5300.0              | 1                             |
| 6                        | 5299.2              | 1                             | 21      | 5324.0              | 1                             |
| 7                        | 5294.4              | 1                             | 22      | 5324.8              | 1                             |
| 8                        | 5299.6              | 1                             | 23      | 5321.2              | 1                             |
| 9                        | 5295.2              | 1                             | 24      | 5326.0              | 1                             |
| 10                       | 5296.8              | 1                             | 25      | 5320.8              | 1                             |
| 11                       | 5300.0              | 1                             | 26      | 5325.6              | 1                             |
| 12                       | 5300.0              | 1                             | 27      | 5320.4              | 1                             |
| 13                       | 5300.0              | 1                             | 28      | 5322.4              | 1                             |
| 14                       | 5300.0              | 1                             | 29      | 5324.4              | 1                             |
| 15                       | 5300.0              | 1                             | 30      | 5323.2              | 1                             |
| Detection Percentage (%) |                     |                               |         |                     | 5296.8                        |

## Type 5 Radar Waveform\_1

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 392674        | 3        | 17          | 80      | 1502             | 1176             | 1801             | 392674         | 0                         | 923076                  |
| 2       | 1023888       | 3        | 17          | 95      | 1964             | 1807             | 1179             | 1421041        | 923077                    | 1846153                 |
| 3       | 712247        | 2        | 17          | 70      | 1152             | 1360             | 0                | 2512459        | 1846154                   | 2769230                 |
| 4       | 1320099       | 2        | 17          | 55      | 1015             | 1332             | 0                | 3227218        | 2769231                   | 3692307                 |
| 5       | 534448        | 1        | 17          | 85      | 1772             | 0                | 0                | 4549664        | 3692308                   | 4615384                 |
| 6       | 1151701       | 2        | 17          | 75      | 1980             | 1811             | 0                | 5085884        | 4615385                   | 5538461                 |
| 7       | 702171        | 1        | 17          | 80      | 1525             | 0                | 0                | 6241376        | 5538462                   | 6461538                 |
| 8       | 456602        | 3        | 17          | 50      | 1956             | 1112             | 1735             | 6945072        | 6461539                   | 7384615                 |
| 9       | 1230825       | 2        | 17          | 50      | 1164             | 1385             | 0                | 7406477        | 7384616                   | 8307692                 |
| 10      | 1444946       | 3        | 17          | 70      | 1852             | 1950             | 1329             | 8639851        | 8307693                   | 9230769                 |
| 11      | 427538        | 1        | 17          | 75      | 1542             | 0                | 0                | 10089928       | 9230770                   | 10153846                |
| 12      | 1320697       | 3        | 17          | 85      | 1632             | 1344             | 1689             | 10519008       | 10153847                  | 11076923                |
| 13      |               | 2        | 17          | 80      | 1511             | 1595             | 0                | 11844370       | 11076924                  | 12000000                |

Total number of pulses in waveform = 28  
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## Type 5 Radar Waveform\_2

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       | 446285        | 3        | 10          | 70      | 1690             | 1890             | 1396             | 446285         | 0                         | 599999                  |
| 2       | 619026        | 2        | 10          | 90      | 1366             | 1585             | 0                | 1070287        | 600000                    | 1199999                 |
| 3       | 497122        | 2        | 10          | 50      | 1972             | 1252             | 0                | 1570350        | 1200000                   | 1799999                 |
| 4       | 504085        | 1        | 10          | 55      | 1992             | 0                | 0                | 2077659        | 1800000                   | 2399999                 |
| 5       | 554858        | 2        | 10          | 100     | 1122             | 1826             | 0                | 2634509        | 2400000                   | 2999999                 |
| 6       | 386168        | 3        | 10          | 70      | 1099             | 1503             | 1406             | 3023625        | 3000000                   | 3599999                 |
| 7       | 697615        | 1        | 10          | 60      | 1465             | 0                | 0                | 3725248        | 3600000                   | 4199999                 |
| 8       | 882196        | 3        | 10          | 60      | 1225             | 1006             | 1002             | 4608909        | 4200000                   | 4799999                 |
| 9       | 217532        | 2        | 10          | 55      | 1978             | 1881             | 0                | 4829674        | 4800000                   | 5399999                 |
| 10      | 936352        | 2        | 10          | 85      | 1586             | 1936             | 0                | 5769885        | 5400000                   | 5999999                 |
| 11      | 700801        | 1        | 10          | 95      | 1380             | 0                | 0                | 6474208        | 6000000                   | 6599999                 |
| 12      | 166293        | 3        | 10          | 100     | 1595             | 1781             | 1527             | 6641881        | 6600000                   | 7199999                 |
| 13      | 679635        | 1        | 10          | 55      | 1729             | 0                | 0                | 7326419        | 7200000                   | 7799999                 |
| 14      | 1042942       | 3        | 10          | 70      | 1208             | 1318             | 1531             | 8371090        | 7800000                   | 8399999                 |
| 15      | 509808        | 2        | 10          | 90      | 1482             | 1205             | 0                | 8884955        | 8400000                   | 8999999                 |
| 16      | 222334        | 1        | 10          | 90      | 1099             | 0                | 0                | 9109976        | 9000000                   | 9599999                 |
| 17      | 670277        | 3        | 10          | 60      | 1835             | 1102             | 1817             | 9781362        | 9600000                   | 10199999                |
| 18      | 786468        | 2        | 10          | 75      | 1431             | 1501             | 0                | 10572574       | 10200000                  | 10799999                |
| 19      | 513144        | 1        | 10          | 60      | 1926             | 0                | 0                | 11088650       | 10800000                  | 11399999                |
| 20      | 799084        | 2        | 10          | 95      | 1519             | 1512             | 0                | 11890560       | 11400000                  | 11999999                |

Total number of pulses in waveform = 40

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## Type 5 Radar Waveform\_3

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       | 596242        | 1        | 9           | 95      | 1907             | 0                | 0                | 596242         | 0                         | 631578                  |
| 2       | 478573        | 3        | 9           | 55      | 1949             | 1136             | 1772             | 1076722        | 631579                    | 1263157                 |
| 3       | 270904        | 1        | 9           | 95      | 1889             | 0                | 0                | 1352483        | 1263158                   | 1894736                 |
| 4       | 1129407       | 2        | 9           | 100     | 1039             | 1265             | 0                | 2483779        | 1894737                   | 2526315                 |
| 5       | 334764        | 1        | 9           | 50      | 1768             | 0                | 0                | 2820847        | 2526316                   | 3157894                 |
| 6       | 590434        | 2        | 9           | 100     | 1287             | 1408             | 0                | 3413049        | 3157895                   | 3789473                 |
| 7       | 923554        | 2        | 9           | 65      | 1261             | 1682             | 0                | 4339298        | 3789474                   | 4421052                 |
| 8       | 104818        | 2        | 9           | 70      | 1768             | 1708             | 0                | 4447059        | 4421053                   | 5052631                 |
| 9       | 801699        | 3        | 9           | 75      | 1930             | 1917             | 1198             | 5252234        | 5052632                   | 5684210                 |
| 10      | 654749        | 3        | 9           | 60      | 1472             | 1002             | 1864             | 5912028        | 5684211                   | 6315789                 |
| 11      | 459319        | 1        | 9           | 50      | 1679             | 0                | 0                | 6375685        | 6315790                   | 6947368                 |
| 12      | 624956        | 3        | 9           | 100     | 1982             | 1891             | 1703             | 7002320        | 6947369                   | 7578947                 |
| 13      | 767710        | 1        | 9           | 70      | 1259             | 0                | 0                | 7575606        | 7578948                   | 8210526                 |
| 14      | 623763        | 3        | 9           | 50      | 1367             | 1749             | 1838             | 8400628        | 8210527                   | 8842105                 |
| 15      | 751096        | 2        | 9           | 90      | 1377             | 1841             | 0                | 9156678        | 8842106                   | 9473684                 |
| 16      | 662919        | 2        | 9           | 100     | 1986             | 1733             | 0                | 9822815        | 9473685                   | 10105263                |
| 17      | 290559        | 2        | 9           | 75      | 1016             | 1922             | 0                | 10117093       | 10105264                  | 10736842                |
| 18      | 753340        | 2        | 9           | 100     | 1544             | 1242             | 0                | 10873371       | 10736843                  | 11368421                |
| 19      | 633876        | 3        | 9           | 85      | 2000             | 1270             | 1828             | 11510033       | 11368422                  | 12000000                |

Total number of pulses in waveform = 39

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## 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       | 180198        | 3        | 5           | 85      | 1146             | 1578             | 1912             | 180198         | 0                         | 857142                  |
| 2       | 1204780       | 3        | 5           | 60      | 1678             | 1532             | 1964             | 1389614        | 857143                    | 1714285                 |
| 3       | 1089616       | 3        | 5           | 65      | 1790             | 1144             | 1092             | 2484404        | 1714286                   | 2571428                 |
| 4       | 382909        | 2        | 5           | 85      | 1799             | 1766             | 0                | 2871339        | 2571429                   | 3428571                 |
| 5       | 1002584       | 2        | 5           | 50      | 1091             | 1860             | 0                | 3877488        | 3428572                   | 4285714                 |
| 6       | 945608        | 2        | 5           | 85      | 1673             | 1699             | 0                | 4826047        | 4285715                   | 5142857                 |
| 7       | 754052        | 1        | 5           | 70      | 1577             | 0                | 0                | 5583471        | 5142858                   | 6000000                 |
| 8       | 567371        | 3        | 5           | 60      | 1896             | 1253             | 1863             | 6152419        | 6000001                   | 6857143                 |
| 9       | 795283        | 1        | 5           | 55      | 1563             | 0                | 0                | 6952714        | 6857144                   | 7714286                 |
| 10      | 1491207       | 1        | 5           | 85      | 1369             | 0                | 0                | 8445484        | 7714287                   | 8571429                 |
| 11      | 493609        | 3        | 5           | 95      | 1538             | 1559             | 1434             | 8940462        | 8571430                   | 9428572                 |
| 12      | 528104        | 1        | 5           | 100     | 1285             | 0                | 0                | 9473097        | 9428573                   | 10285715                |
| 13      | 1109715       | 1        | 5           | 70      | 1562             | 0                | 0                | 10584097       | 10285716                  | 11142858                |
| 14      | 591552        | 1        | 5           | 85      | 1743             | 0                | 0                | 11177211       | 11142859                  | 12000001                |

Total number of pulses in waveform = 27

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**Type 5 Radar Waveform\_5**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 592803        | 2        | 14          | 50      | 1396            | 1706            | 0               | 592803         | 0                        | 1499999                |
| 2       | 1850839       | 2        | 14          | 85      | 1611            | 1156            | 0               | 2446744        | 1500000                  | 2999999                |
| 3       | 1016510       | 2        | 14          | 95      | 1097            | 1626            | 0               | 3466021        | 3000000                  | 4499999                |
| 4       | 2413155       | 2        | 14          | 80      | 1751            | 1856            | 0               | 5881899        | 4500000                  | 5999999                |
| 5       | 1331554       | 1        | 14          | 95      | 1664            | 0               | 0               | 7217060        | 6000000                  | 7499999                |
| 6       | 549481        | 3        | 14          | 80      | 1657            | 1553            | 1902            | 7768205        | 7500000                  | 8999999                |
| 7       | 2444470       | 1        | 14          | 75      | 1644            | 0               | 0               | 10217787       | 9000000                  | 10499999               |
| 8       | 1388731       | 3        | 14          | 55      | 1182            | 1735            | 1827            | 11608162       | 10500000                 | 11999999               |

Total number of pulses in waveform = 16

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**Type 5 Radar Waveform\_6**

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       | 548110        | 2        | 18          | 70      | 1984            | 1759            | 0               | 548110         | 0                        | 1333332                |
| 2       | 1022491       | 1        | 18          | 80      | 1484            | 0               | 0               | 1574344        | 1333333                  | 2666665                |
| 3       | 2391874       | 1        | 18          | 85      | 1516            | 0               | 0               | 3967702        | 2666666                  | 3999998                |
| 4       | 784786        | 2        | 18          | 70      | 1512            | 1941            | 0               | 4754004        | 3999999                  | 5333331                |
| 5       | 1517060       | 2        | 18          | 90      | 1881            | 1844            | 0               | 6274517        | 5333332                  | 6666664                |
| 6       | 1317772       | 1        | 18          | 70      | 1118            | 0               | 0               | 7596014        | 6666665                  | 7999997                |
| 7       | 823423        | 1        | 18          | 95      | 1445            | 0               | 0               | 8420555        | 7999998                  | 9333330                |
| 8       | 1714006       | 2        | 18          | 60      | 1646            | 1714            | 0               | 10136006       | 9333331                  | 10666663               |
| 9       | 550071        | 3        | 18          | 65      | 1249            | 1619            | 1611            | 10689437       | 10666664                 | 11999996               |

Total number of pulses in waveform = 15

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**Type 5 Radar Waveform\_7**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 90428         | 3        | 6           | 85      | 1240            | 1209            | 1521            | 90428          | 0                        | 749999                 |
| 2       | 707664        | 1        | 6           | 70      | 1841            | 0               | 0               | 802062         | 750000                   | 1499999                |
| 3       | 725947        | 2        | 6           | 95      | 1772            | 1284            | 0               | 1529850        | 1500000                  | 2249999                |
| 4       | 737375        | 1        | 6           | 70      | 1010            | 0               | 0               | 2270281        | 2250000                  | 2999999                |
| 5       | 828101        | 1        | 6           | 75      | 1031            | 0               | 0               | 3099392        | 3000000                  | 3749999                |
| 6       | 898420        | 2        | 6           | 75      | 1498            | 1146            | 0               | 3998843        | 3750000                  | 4499999                |
| 7       | 882723        | 2        | 6           | 60      | 1826            | 1771            | 0               | 4884210        | 4500000                  | 5249999                |
| 8       | 889552        | 1        | 6           | 65      | 1505            | 0               | 0               | 5777359        | 5250000                  | 5999999                |
| 9       | 673755        | 3        | 6           | 75      | 1509            | 1188            | 1169            | 6452619        | 6000000                  | 6749999                |
| 10      | 899766        | 3        | 6           | 100     | 1023            | 1716            | 1688            | 7356251        | 6750000                  | 7499999                |
| 11      | 523706        | 3        | 6           | 80      | 1797            | 1641            | 1735            | 7884384        | 7500000                  | 8249999                |
| 12      | 620582        | 1        | 6           | 80      | 1571            | 0               | 0               | 8510139        | 8250000                  | 8999999                |
| 13      | 1146448       | 2        | 6           | 80      | 1942            | 1691            | 0               | 9658158        | 9000000                  | 9749999                |
| 14      | 462170        | 3        | 6           | 50      | 1437            | 1476            | 1088            | 10123961       | 9750000                  | 10499999               |
| 15      | 436648        | 1        | 6           | 55      | 1218            | 0               | 0               | 10564610       | 10500000                 | 11249999               |
| 16      | 795073        | 3        | 6           | 70      | 1127            | 1184            | 1376            | 11360901       | 11250000                 | 11999999               |

Total number of pulses in waveform = 32

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## Type 5 Radar Waveform\_8

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 739295        | 1        | 19          | 75      | 1936             | 0                | 0                | 739295         | 0                         | 857142                  |
| 2       | 740361        | 2        | 19          | 60      | 1405             | 1605             | 0                | 1481592        | 857143                    | 1714285                 |
| 3       | 528296        | 1        | 19          | 65      | 1496             | 0                | 0                | 2012898        | 1714286                   | 2571428                 |
| 4       | 1365068       | 3        | 19          | 85      | 1849             | 1659             | 1479             | 3379462        | 2571429                   | 3428571                 |
| 5       | 467308        | 3        | 19          | 95      | 1931             | 1536             | 1541             | 3851757        | 3428572                   | 4285714                 |
| 6       | 1197790       | 2        | 19          | 50      | 1958             | 1153             | 0                | 5054555        | 4285715                   | 5142857                 |
| 7       | 346340        | 3        | 19          | 95      | 1673             | 1180             | 1179             | 5404006        | 5142858                   | 6000000                 |
| 8       | 666739        | 2        | 19          | 80      | 1893             | 1543             | 0                | 6074777        | 6000001                   | 6857143                 |
| 9       | 1026463       | 2        | 19          | 60      | 1137             | 1538             | 0                | 7104676        | 6857144                   | 7714286                 |
| 10      | 1207271       | 1        | 19          | 85      | 1284             | 0                | 0                | 8314622        | 7714287                   | 8571429                 |
| 11      | 1034029       | 2        | 19          | 70      | 1693             | 1278             | 0                | 9349935        | 8571430                   | 9428572                 |
| 12      | 220479        | 2        | 19          | 75      | 1585             | 1877             | 0                | 9573385        | 9428573                   | 10285715                |
| 13      | 1376212       | 3        | 19          | 75      | 1138             | 1424             | 1777             | 10953059       | 10285716                  | 11142858                |
| 14      | 269739        | 2        | 19          | 75      | 1757             | 1119             | 0                | 11227137       | 11142859                  | 12000001                |

Total number of pulses in waveform = 29

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## Type 5 Radar Waveform\_9

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 226016        | 3        | 8           | 95      | 1118             | 1525             | 1911             | 226016         | 0                         | 599999                  |
| 2       | 620342        | 3        | 8           | 95      | 1947             | 1087             | 1404             | 850912         | 600000                    | 1199999                 |
| 3       | 588578        | 3        | 8           | 60      | 1486             | 1380             | 1352             | 1443928        | 1200000                   | 1799999                 |
| 4       | 819557        | 2        | 8           | 85      | 1614             | 1585             | 0                | 2267703        | 1800000                   | 2399999                 |
| 5       | 264286        | 2        | 8           | 90      | 1844             | 1645             | 0                | 2535188        | 2400000                   | 2999999                 |
| 6       | 822100        | 3        | 8           | 85      | 1142             | 1373             | 1048             | 3360777        | 3000000                   | 3599999                 |
| 7       | 303466        | 1        | 8           | 75      | 1614             | 0                | 0                | 3667806        | 3600000                   | 4199999                 |
| 8       | 597032        | 2        | 8           | 95      | 1940             | 1626             | 0                | 4266452        | 4200000                   | 4799999                 |
| 9       | 736944        | 3        | 8           | 80      | 1779             | 1298             | 1391             | 5006962        | 4800000                   | 5399999                 |
| 10      | 571275        | 1        | 8           | 95      | 1544             | 0                | 0                | 5582705        | 5400000                   | 5999999                 |
| 11      | 674016        | 1        | 8           | 100     | 1451             | 0                | 0                | 6258265        | 6000000                   | 6599999                 |
| 12      | 612400        | 1        | 8           | 50      | 1748             | 0                | 0                | 6872116        | 6600000                   | 7199999                 |
| 13      | 507494        | 3        | 8           | 55      | 1177             | 1607             | 1831             | 7381358        | 7200000                   | 7799999                 |
| 14      | 796800        | 2        | 8           | 100     | 1004             | 1408             | 0                | 8182773        | 7800000                   | 8399999                 |
| 15      | 811199        | 1        | 8           | 80      | 1073             | 0                | 0                | 8996384        | 8400000                   | 8999999                 |
| 16      | 230070        | 3        | 8           | 65      | 1975             | 1037             | 1693             | 9227527        | 9000000                   | 9599999                 |
| 17      | 580130        | 3        | 8           | 90      | 1895             | 1348             | 1116             | 9812362        | 9600000                   | 10199999                |
| 18      | 763515        | 1        | 8           | 100     | 1377             | 0                | 0                | 10580236       | 10200000                  | 10799999                |
| 19      | 412901        | 3        | 8           | 95      | 1208             | 1413             | 1650             | 10994514       | 10800000                  | 11399999                |
| 20      | 950594        | 1        | 8           | 60      | 1515             | 0                | 0                | 11949379       | 11400000                  | 11999999                |

Total number of pulses in waveform = 42

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## 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       | 80075         | 2        | 12          | 65      | 1257             | 1705             | 0                | 80075          | 0                         | 923076                  |
| 2       | 888692        | 1        | 12          | 60      | 1558             | 0                | 0                | 971729         | 923077                    | 1846153                 |
| 3       | 1059120       | 3        | 12          | 70      | 1234             | 1531             | 1900             | 2032407        | 1846154                   | 2769230                 |
| 4       | 1523239       | 2        | 12          | 50      | 1587             | 1102             | 0                | 3560311        | 2769231                   | 3692307                 |
| 5       | 180175        | 2        | 12          | 100     | 1870             | 1876             | 0                | 3743175        | 3692308                   | 4615384                 |
| 6       | 1744890       | 2        | 12          | 65      | 1872             | 1452             | 0                | 5491811        | 4615385                   | 5538461                 |
| 7       | 209503        | 2        | 12          | 75      | 1734             | 1683             | 0                | 5704638        | 5538462                   | 6461538                 |
| 8       | 1235265       | 1        | 12          | 100     | 1583             | 0                | 0                | 6943320        | 6461539                   | 7384615                 |
| 9       | 761363        | 3        | 12          | 100     | 1757             | 1501             | 1629             | 7706266        | 7384616                   | 8307692                 |
| 10      | 1100385       | 1        | 12          | 65      | 1958             | 0                | 0                | 8811538        | 8307693                   | 9230769                 |
| 11      | 1176185       | 1        | 12          | 90      | 1228             | 0                | 0                | 9989681        | 9230770                   | 10153846                |
| 12      | 447997        | 1        | 12          | 60      | 1833             | 0                | 0                | 10438906       | 10153847                  | 11076923                |
| 13      | 932337        | 1        | 12          | 80      | 1731             | 0                | 0                | 11373076       | 11076924                  | 12000000                |

Total number of pulses in waveform = 22

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## Type 5 Radar Waveform\_11

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 508753        | 3        | 14          | 70      | 1652             | 1545             | 1871             | 508753         | 0                         | 631578                  |
| 2       | 675957        | 2        | 14          | 55      | 1937             | 1583             | 0                | 1189778        | 631579                    | 1263157                 |
| 3       | 680791        | 3        | 14          | 95      | 1629             | 1083             | 1525             | 1874089        | 1263158                   | 1894736                 |
| 4       | 606765        | 3        | 14          | 85      | 1293             | 1795             | 1850             | 2485091        | 1894737                   | 2526315                 |
| 5       | 509399        | 1        | 14          | 85      | 1565             | 0                | 0                | 2999428        | 2526316                   | 3157894                 |
| 6       | 497969        | 2        | 14          | 75      | 1437             | 1087             | 0                | 3498952        | 3157895                   | 3789473                 |
| 7       | 361986        | 3        | 14          | 70      | 1359             | 1637             | 1328             | 3863472        | 3789474                   | 4421052                 |
| 8       | 748750        | 3        | 14          | 60      | 1171             | 1976             | 1299             | 4616546        | 4421053                   | 5052631                 |
| 9       | 780101        | 3        | 14          | 60      | 1920             | 1973             | 1148             | 5401093        | 5052632                   | 5684210                 |
| 10      | 381534        | 3        | 14          | 95      | 1470             | 1165             | 1851             | 5787668        | 5684211                   | 6315789                 |
| 11      | 922106        | 1        | 14          | 60      | 1750             | 0                | 0                | 6714260        | 6315790                   | 6947368                 |
| 12      | 342252        | 2        | 14          | 100     | 1485             | 1880             | 0                | 7058262        | 6947369                   | 7578947                 |
| 13      | 621065        | 2        | 14          | 95      | 1891             | 1585             | 0                | 7682692        | 7578948                   | 8210526                 |
| 14      | 813146        | 2        | 14          | 90      | 1328             | 1192             | 0                | 8499314        | 8210527                   | 8842105                 |
| 15      | 819622        | 3        | 14          | 85      | 1339             | 1944             | 1729             | 9321456        | 8842106                   | 9473684                 |
| 16      | 642039        | 3        | 14          | 65      | 1845             | 1418             | 1898             | 9968507        | 9473685                   | 10105263                |
| 17      | 379685        | 1        | 14          | 95      | 1762             | 0                | 0                | 10353353       | 10105264                  | 10736842                |
| 18      | 897414        | 2        | 14          | 90      | 1559             | 1818             | 0                | 11252529       | 10736843                  | 11368421                |
| 19      | 595551        | 2        | 14          | 65      | 1545             | 1741             | 0                | 11851457       | 11368422                  | 12000000                |

Total number of pulses in waveform = 44  
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## Type 5 Radar Waveform\_12

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 372816        | 2        | 19          | 80      | 1295             | 1684             | 0                | 372816         | 0                         | 666666                  |
| 2       | 571369        | 2        | 19          | 90      | 1755             | 1496             | 0                | 947164         | 666667                    | 1333333                 |
| 3       | 996777        | 2        | 19          | 85      | 1875             | 1545             | 0                | 1947192        | 1333334                   | 2000000                 |
| 4       | 274550        | 1        | 19          | 80      | 1190             | 0                | 0                | 2225162        | 2000001                   | 2666667                 |
| 5       | 581811        | 1        | 19          | 70      | 1703             | 0                | 0                | 2808163        | 2666668                   | 3333334                 |
| 6       | 906069        | 3        | 19          | 50      | 1069             | 1054             | 1115             | 3715935        | 3333335                   | 4000001                 |
| 7       | 556357        | 1        | 19          | 75      | 1544             | 0                | 0                | 4275530        | 4000002                   | 4666668                 |
| 8       | 831409        | 3        | 19          | 70      | 1583             | 1244             | 1106             | 5108483        | 4666669                   | 5333335                 |
| 9       | 652696        | 2        | 19          | 70      | 1818             | 1979             | 0                | 5765112        | 5333336                   | 6000002                 |
| 10      | 289642        | 2        | 19          | 70      | 1196             | 1066             | 0                | 6058551        | 6000003                   | 6666669                 |
| 11      | 920322        | 1        | 19          | 55      | 1147             | 0                | 0                | 6981135        | 6666670                   | 7333336                 |
| 12      | 364186        | 2        | 19          | 80      | 1112             | 1548             | 0                | 7346468        | 7333337                   | 8000003                 |
| 13      | 803285        | 3        | 19          | 65      | 1309             | 1493             | 1453             | 8152413        | 8000004                   | 8666670                 |
| 14      | 1090043       | 2        | 19          | 80      | 1547             | 1180             | 0                | 9246711        | 8666671                   | 9333337                 |
| 15      | 507171        | 1        | 19          | 70      | 1762             | 0                | 0                | 9756589        | 9333338                   | 10000004                |
| 16      | 339463        | 2        | 19          | 80      | 1773             | 1285             | 0                | 10097814       | 10000005                  | 10666671                |
| 17      | 1008341       | 1        | 19          | 70      | 1597             | 0                | 0                | 11109213       | 10666672                  | 11333338                |
| 18      | 651502        | 1        | 19          | 90      | 1119             | 0                | 0                | 11762312       | 11333339                  | 12000005                |

Total number of pulses in waveform = 32  
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## Type 5 Radar Waveform\_13

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 126579        | 2        | 8           | 95      | 1254             | 1013             | 0                | 126579         | 0                         | 631578                  |
| 2       | 680396        | 3        | 8           | 55      | 1575             | 1639             | 1432             | 809242         | 631579                    | 1263157                 |
| 3       | 1000349       | 2        | 8           | 65      | 1912             | 1153             | 0                | 1814237        | 1263158                   | 1894736                 |
| 4       | 500647        | 1        | 8           | 60      | 1904             | 0                | 0                | 2317949        | 1894737                   | 2526315                 |
| 5       | 756523        | 1        | 8           | 85      | 1893             | 0                | 0                | 3076376        | 2526316                   | 3157894                 |
| 6       | 125477        | 3        | 8           | 90      | 1907             | 1527             | 1689             | 3203746        | 3157895                   | 3789473                 |
| 7       | 1205091       | 2        | 8           | 55      | 1699             | 1589             | 0                | 4413960        | 3789474                   | 4421052                 |
| 8       | 254243        | 1        | 8           | 60      | 1383             | 0                | 0                | 4671491        | 4421053                   | 5052631                 |
| 9       | 577252        | 3        | 8           | 90      | 1204             | 1797             | 1514             | 5250126        | 5052632                   | 5684210                 |
| 10      | 935353        | 3        | 8           | 55      | 1446             | 1287             | 1707             | 6189994        | 5684211                   | 6315789                 |
| 11      | 711794        | 3        | 8           | 55      | 1608             | 1823             | 1600             | 6906228        | 6315790                   | 6947368                 |
| 12      | 104197        | 1        | 8           | 95      | 1641             | 0                | 0                | 7015456        | 6947369                   | 7578947                 |
| 13      | 682949        | 2        | 8           | 50      | 1313             | 1123             | 0                | 7700046        | 7578948                   | 8210526                 |
| 14      | 518766        | 2        | 8           | 95      | 1301             | 1233             | 0                | 8221248        | 8210527                   | 8842105                 |
| 15      | 843599        | 2        | 8           | 70      | 1794             | 1668             | 0                | 9067381        | 8842106                   | 9473684                 |
| 16      | 409967        | 1        | 8           | 65      | 1686             | 0                | 0                | 9480810        | 9473685                   | 10105263                |
| 17      | 804980        | 2        | 8           | 100     | 1643             | 1415             | 0                | 10287476       | 10105264                  | 10736842                |
| 18      | 567359        | 3        | 8           | 95      | 1320             | 1739             | 1131             | 10857893       | 10736843                  | 11368421                |
| 19      | 752762        | 3        | 8           | 60      | 1485             | 1011             | 1574             | 11614845       | 11368422                  | 12000000                |

Total number of pulses in waveform = 40  
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## 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       | 372936        | 3        | 12          | 90      | 1688             | 1477             | 1571             | 372936         | 0                         | 1090908                 |
| 2       | 1179397       | 2        | 12          | 60      | 1451             | 1242             | 0                | 1557069        | 1090909                   | 2181817                 |
| 3       | 908289        | 2        | 12          | 65      | 1531             | 1296             | 0                | 2468051        | 2181818                   | 3272726                 |
| 4       | 1228847       | 1        | 12          | 65      | 1744             | 0                | 0                | 3699725        | 3272727                   | 4363635                 |
| 5       | 1019719       | 2        | 12          | 80      | 1082             | 1176             | 0                | 4721188        | 4363636                   | 5454544                 |
| 6       | 1289747       | 1        | 12          | 90      | 1946             | 0                | 0                | 6013193        | 5454545                   | 6545453                 |
| 7       | 600454        | 3        | 12          | 65      | 1853             | 1417             | 1510             | 6615593        | 6545454                   | 7636362                 |
| 8       | 1248398       | 2        | 12          | 85      | 1881             | 1352             | 0                | 7868771        | 7636363                   | 8727271                 |
| 9       | 1452114       | 3        | 12          | 50      | 1938             | 1134             | 1385             | 9324118        | 8727272                   | 9818180                 |
| 10      | 1436931       | 3        | 12          | 60      | 1916             | 1518             | 1600             | 10765506       | 9818181                   | 10909089                |
| 11      | 372362        | 3        | 12          | 50      | 1891             | 1768             | 1887             | 11142902       | 10909090                  | 11999998                |

Total number of pulses in waveform = 25

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## 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       | 691779        | 1        | 5           | 60      | 1632             | 0                | 0                | 691779         | 0                         | 799999                  |
| 2       | 286399        | 1        | 5           | 55      | 1389             | 0                | 0                | 979810         | 800000                    | 1599999                 |
| 3       | 1158634       | 2        | 5           | 100     | 1853             | 1619             | 0                | 2139833        | 1600000                   | 2399999                 |
| 4       | 728014        | 1        | 5           | 70      | 1576             | 0                | 0                | 2871319        | 2400000                   | 3199999                 |
| 5       | 490802        | 1        | 5           | 80      | 1053             | 0                | 0                | 3363697        | 3200000                   | 3999999                 |
| 6       | 703081        | 3        | 5           | 85      | 1669             | 1579             | 1576             | 4067831        | 4000000                   | 4799999                 |
| 7       | 1133378       | 3        | 5           | 75      | 1620             | 1528             | 1384             | 5206033        | 4800000                   | 5599999                 |
| 8       | 727769        | 3        | 5           | 80      | 1632             | 1717             | 1460             | 5938334        | 5600000                   | 6399999                 |
| 9       | 959193        | 2        | 5           | 65      | 1879             | 1912             | 0                | 6902336        | 6400000                   | 7199999                 |
| 10      | 830782        | 3        | 5           | 80      | 1162             | 1013             | 1837             | 7736909        | 7200000                   | 7999999                 |
| 11      | 598173        | 3        | 5           | 70      | 1463             | 1693             | 1369             | 8339094        | 8000000                   | 8799999                 |
| 12      | 721675        | 2        | 5           | 85      | 1878             | 1837             | 0                | 9065294        | 8800000                   | 9599999                 |
| 13      | 1212467       | 2        | 5           | 70      | 1347             | 1609             | 0                | 10281476       | 9600000                   | 10399999                |
| 14      | 554530        | 2        | 5           | 85      | 1803             | 1037             | 0                | 10838962       | 10400000                  | 11199999                |
| 15      | 708281        | 1        | 5           | 75      | 1482             | 0                | 0                | 11550083       | 11200000                  | 11999999                |

Total number of pulses in waveform = 30

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## Type 5 Radar Waveform\_16

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 95184         | 1        | 6           | 85      | 1900             | 0                | 0                | 95184          | 0                         | 631578                  |
| 2       | 587177        | 3        | 6           | 60      | 1490             | 1673             | 1499             | 684261         | 631579                    | 1263157                 |
| 3       | 691370        | 2        | 6           | 85      | 1923             | 1502             | 0                | 1380293        | 1263158                   | 1894736                 |
| 4       | 1050890       | 3        | 6           | 50      | 1317             | 1432             | 1428             | 2434598        | 1894737                   | 2526315                 |
| 5       | 172382        | 3        | 6           | 85      | 1077             | 1434             | 1890             | 2611157        | 2526316                   | 3157894                 |
| 6       | 645192        | 1        | 6           | 90      | 1477             | 0                | 0                | 3260760        | 3157895                   | 3789473                 |
| 7       | 634288        | 2        | 6           | 85      | 1569             | 1608             | 0                | 3896515        | 3789474                   | 4421052                 |
| 8       | 1090842       | 2        | 6           | 60      | 1066             | 1401             | 0                | 4990534        | 4421053                   | 5052631                 |
| 9       | 114590        | 2        | 6           | 70      | 1151             | 1373             | 0                | 5107681        | 5052632                   | 5684210                 |
| 10      | 918823        | 3        | 6           | 85      | 1732             | 1451             | 1274             | 6028928        | 5684211                   | 6315789                 |
| 11      | 639848        | 2        | 6           | 90      | 1060             | 1086             | 0                | 6673233        | 6315790                   | 6947368                 |
| 12      | 684243        | 3        | 6           | 85      | 1691             | 1017             | 1689             | 7359622        | 6947369                   | 7578947                 |
| 13      | 599092        | 3        | 6           | 50      | 1540             | 1921             | 1434             | 7963111        | 7578948                   | 8210526                 |
| 14      | 486721        | 3        | 6           | 75      | 1007             | 1257             | 1268             | 8454727        | 8210527                   | 8842105                 |
| 15      | 601251        | 1        | 6           | 65      | 1327             | 0                | 0                | 9059510        | 8842106                   | 9473684                 |
| 16      | 676078        | 1        | 6           | 100     | 1923             | 0                | 0                | 9735915        | 9473685                   | 10105263                |
| 17      | 568355        | 3        | 6           | 60      | 1217             | 1500             | 1364             | 10306193       | 10105264                  | 10736842                |
| 18      | 815935        | 3        | 6           | 55      | 1500             | 1374             | 1638             | 11126209       | 10736843                  | 11368421                |
| 19      | 317224        | 1        | 6           | 80      | 1079             | 0                | 0                | 11447945       | 11368422                  | 12000000                |

Total number of pulses in waveform = 42

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## Type 5 Radar Waveform\_17

Num of Bursts = 19

Burst Interval (us)= 631579

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 171527        | 3        | 18          | 75      | 1378             | 1016             | 1002             | 171527         | 0                         | 631578                  |
| 2       | 1049552       | 3        | 18          | 60      | 1241             | 1697             | 1965             | 1224475        | 631579                    | 1263157                 |
| 3       | 208434        | 2        | 18          | 85      | 1149             | 1960             | 0                | 1437812        | 1263158                   | 1894736                 |
| 4       | 748428        | 2        | 18          | 70      | 1252             | 1169             | 0                | 2189349        | 1894737                   | 2526315                 |
| 5       | 900726        | 2        | 18          | 100     | 1479             | 1319             | 0                | 3092496        | 2526316                   | 3157894                 |
| 6       | 270287        | 1        | 18          | 60      | 1595             | 0                | 0                | 3365581        | 3157895                   | 3789473                 |
| 7       | 608000        | 1        | 18          | 75      | 1115             | 0                | 0                | 3975176        | 3789474                   | 4421052                 |
| 8       | 525445        | 3        | 18          | 90      | 1881             | 1510             | 1142             | 4501736        | 4421053                   | 5052631                 |
| 9       | 782436        | 1        | 18          | 85      | 1271             | 0                | 0                | 5288705        | 5052632                   | 5684210                 |
| 10      | 941102        | 3        | 18          | 90      | 1285             | 1980             | 1438             | 6231078        | 5684211                   | 6315789                 |
| 11      | 271592        | 3        | 18          | 95      | 1964             | 1336             | 1508             | 6507373        | 6315790                   | 6947368                 |
| 12      | 625600        | 2        | 18          | 100     | 1137             | 1536             | 0                | 7137781        | 6947369                   | 7578947                 |
| 13      | 693847        | 1        | 18          | 95      | 1242             | 0                | 0                | 7834301        | 7578948                   | 8210526                 |
| 14      | 411980        | 2        | 18          | 90      | 1369             | 1239             | 0                | 8247523        | 8210527                   | 8842105                 |
| 15      | 649326        | 3        | 18          | 55      | 1016             | 1461             | 1773             | 8899457        | 8842106                   | 9473684                 |
| 16      | 989376        | 3        | 18          | 90      | 1571             | 1896             | 1744             | 9893083        | 9473685                   | 10105263                |
| 17      | 284599        | 3        | 18          | 90      | 1698             | 1447             | 1101             | 10182883       | 10105264                  | 10736842                |
| 18      | 583551        | 1        | 18          | 90      | 1435             | 0                | 0                | 10770680       | 10736843                  | 11368421                |
| 19      | 710849        | 3        | 18          | 90      | 1945             | 1985             | 1410             | 11482964       | 11368422                  | 12000000                |

Total number of pulses in waveform = 42

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## Type 5 Radar Waveform\_18

Num of Bursts = 18

Burst Interval (us)= 666667

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 214161        | 2        | 9           | 55      | 1761             | 1055             | 0                | 214161         | 0                         | 666666                  |
| 2       | 797152        | 1        | 9           | 100     | 1899             | 0                | 0                | 1014129        | 666667                    | 1333333                 |
| 3       | 905794        | 2        | 9           | 100     | 1791             | 1428             | 0                | 1921822        | 1333334                   | 2000000                 |
| 4       | 341880        | 1        | 9           | 65      | 1350             | 0                | 0                | 2266921        | 2000001                   | 2666667                 |
| 5       | 976191        | 3        | 9           | 100     | 1925             | 1701             | 1357             | 3244462        | 2666668                   | 3333334                 |
| 6       | 434462        | 2        | 9           | 80      | 1246             | 1574             | 0                | 3683907        | 3333335                   | 4000001                 |
| 7       | 471399        | 1        | 9           | 65      | 1195             | 0                | 0                | 4158126        | 4000002                   | 4666668                 |
| 8       | 1039256       | 3        | 9           | 95      | 1990             | 1832             | 1109             | 5198577        | 4666669                   | 5333335                 |
| 9       | 490217        | 1        | 9           | 50      | 1347             | 0                | 0                | 5693725        | 5333336                   | 6000002                 |
| 10      | 929778        | 2        | 9           | 75      | 1520             | 1188             | 0                | 6624850        | 6000003                   | 6666669                 |
| 11      | 43963         | 2        | 9           | 60      | 1587             | 1139             | 0                | 6671521        | 6666670                   | 7333336                 |
| 12      | 1069785       | 1        | 9           | 60      | 1716             | 0                | 0                | 7744032        | 7333337                   | 8000003                 |
| 13      | 843514        | 2        | 9           | 100     | 1484             | 1909             | 0                | 8589262        | 8000004                   | 8666670                 |
| 14      | 194439        | 2        | 9           | 75      | 1242             | 1201             | 0                | 8787094        | 8666671                   | 9333337                 |
| 15      | 1149941       | 2        | 9           | 85      | 1890             | 1754             | 0                | 9939478        | 9333338                   | 10000004                |
| 16      | 390095        | 2        | 9           | 80      | 1370             | 1414             | 0                | 10333217       | 10000005                  | 10666671                |
| 17      | 896948        | 1        | 9           | 90      | 1624             | 0                | 0                | 11232949       | 10666672                  | 11333338                |
| 18      | 491594        | 2        | 9           | 50      | 1790             | 1412             | 0                | 11726167       | 11333339                  | 12000005                |

Total number of pulses in waveform = 32

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## 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       | 742093        | 1        | 17          | 55      | 1052             | 0                | 0                | 742093         | 0                         | 857142                  |
| 2       | 831008        | 3        | 17          | 90      | 1005             | 1686             | 1717             | 1574153        | 857143                    | 1714285                 |
| 3       | 327471        | 2        | 17          | 80      | 1127             | 1303             | 0                | 1906032        | 1714286                   | 2571428                 |
| 4       | 873025        | 1        | 17          | 100     | 1940             | 0                | 0                | 2781487        | 2571429                   | 3428571                 |
| 5       | 804852        | 1        | 17          | 60      | 1158             | 0                | 0                | 3588279        | 3428572                   | 4285714                 |
| 6       | 898805        | 2        | 17          | 50      | 1871             | 1519             | 0                | 4488242        | 4285715                   | 5142857                 |
| 7       | 1369860       | 1        | 17          | 50      | 1189             | 0                | 0                | 5861492        | 5142858                   | 6000000                 |
| 8       | 150188        | 1        | 17          | 65      | 1959             | 0                | 0                | 6012869        | 6000001                   | 6857143                 |
| 9       | 1693319       | 1        | 17          | 100     | 1966             | 0                | 0                | 7708147        | 6857144                   | 7714286                 |
| 10      | 620934        | 2        | 17          | 85      | 1469             | 1614             | 0                | 8331047        | 7714287                   | 8571429                 |
| 11      | 680281        | 1        | 17          | 85      | 1389             | 0                | 0                | 9014411        | 8571430                   | 9428572                 |
| 12      | 965483        | 2        | 17          | 50      | 1915             | 1219             | 0                | 9981283        | 9428573                   | 10285715                |
| 13      | 1079887       | 2        | 17          | 85      | 1562             | 1851             | 0                | 11064304       | 10285716                  | 11142858                |
| 14      | 844296        | 2        | 17          | 100     | 1135             | 1470             | 0                | 11912013       | 11142859                  | 12000001                |

Total number of pulses in waveform = 22

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**Type 5 Radar Waveform\_20**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 752878        | 2        | 10          | 90      | 1447            | 1393            | 0               | 752878         | 0                        | 1333332                |
| 2       | 876952        | 1        | 10          | 95      | 1778            | 0               | 0               | 1632670        | 1333333                  | 2666665                |
| 3       | 1480829       | 2        | 10          | 65      | 1994            | 1412            | 0               | 3115277        | 2666666                  | 3999998                |
| 4       | 1013402       | 3        | 10          | 55      | 1197            | 1172            | 1319            | 4132085        | 3999999                  | 5333331                |
| 5       | 1870752       | 3        | 10          | 95      | 1528            | 1630            | 1910            | 6006525        | 5333332                  | 6666664                |
| 6       | 736770        | 3        | 10          | 60      | 1319            | 1701            | 1929            | 6748363        | 6666665                  | 7999997                |
| 7       | 2004592       | 2        | 10          | 50      | 1463            | 1013            | 0               | 8757904        | 7999998                  | 9333330                |
| 8       | 1565076       | 3        | 10          | 95      | 1275            | 1264            | 1625            | 10325456       | 9333331                  | 10666663               |
| 9       | 675451        | 1        | 10          | 100     | 1286            | 0               | 0               | 11005071       | 10666664                 | 11999996               |

Total number of pulses in waveform = 20

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**Type 5 Radar Waveform\_21**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 511362        | 1        | 10          | 60      | 1352            | 0               | 0               | 511362         | 0                        | 1499999                |
| 2       | 1747519       | 3        | 10          | 75      | 1428            | 1981            | 1288            | 2260233        | 1500000                  | 2999999                |
| 3       | 933963        | 2        | 10          | 60      | 1905            | 1257            | 0               | 3198873        | 3000000                  | 4499999                |
| 4       | 1768434       | 2        | 10          | 90      | 1464            | 1034            | 0               | 4970469        | 4500000                  | 5999999                |
| 5       | 1339058       | 3        | 10          | 80      | 1131            | 1232            | 1993            | 6312025        | 6000000                  | 7499999                |
| 6       | 1507661       | 1        | 10          | 100     | 1634            | 0               | 0               | 7824042        | 7500000                  | 8999999                |
| 7       | 1515159       | 2        | 10          | 100     | 1802            | 1646            | 0               | 9340835        | 9000000                  | 10499999               |
| 8       | 2645051       | 3        | 10          | 50      | 1788            | 1082            | 1607            | 11989334       | 10500000                 | 11999999               |

Total number of pulses in waveform = 17

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**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       | 6192          | 1        | 8           | 90      | 1525            | 0               | 0               | 6192           | 0                        | 705881                 |
| 2       | 888271        | 1        | 8           | 50      | 1791            | 0               | 0               | 895988         | 705882                   | 1411763                |
| 3       | 1136000       | 2        | 8           | 70      | 1051            | 1381            | 0               | 2033779        | 1411764                  | 2117645                |
| 4       | 759553        | 2        | 8           | 100     | 1178            | 1906            | 0               | 2795764        | 2117646                  | 2823527                |
| 5       | 323529        | 1        | 8           | 100     | 1730            | 0               | 0               | 3122377        | 2823528                  | 3529409                |
| 6       | 1010252       | 1        | 8           | 85      | 1817            | 0               | 0               | 4134359        | 3529410                  | 4235291                |
| 7       | 232801        | 2        | 8           | 90      | 1594            | 1078            | 0               | 4368977        | 4235292                  | 4941173                |
| 8       | 1097985       | 1        | 8           | 85      | 1759            | 0               | 0               | 5469634        | 4941174                  | 5647055                |
| 9       | 237435        | 1        | 8           | 80      | 1439            | 0               | 0               | 6708828        | 5647056                  | 6352937                |
| 10      | 696439        | 2        | 8           | 95      | 1791            | 1468            | 0               | 6406706        | 6352938                  | 7058819                |
| 11      | 1155259       | 1        | 8           | 60      | 1593            | 0               | 0               | 7565224        | 7058820                  | 7764701                |
| 12      | 507123        | 3        | 8           | 50      | 1345            | 1276            | 1304            | 8073940        | 7764702                  | 8470583                |
| 13      | 565705        | 1        | 8           | 60      | 1049            | 0               | 0               | 8643570        | 8470584                  | 9176465                |
| 14      | 1010228       | 1        | 8           | 85      | 1865            | 0               | 0               | 9654847        | 9176466                  | 9882347                |
| 15      | 322930        | 3        | 8           | 95      | 1383            | 1826            | 1354            | 9979642        | 9882348                  | 10588229               |
| 16      | 1226169       | 3        | 8           | 90      | 1995            | 1085            | 1099            | 11210374       | 10588230                 | 11294111               |
| 17      | 455070        | 3        | 8           | 85      | 1235            | 1650            | 1614            | 11669623       | 11294112                 | 11999993               |

Total number of pulses in waveform = 29

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**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       | 123828        | 2        | 17          | 75      | 1672            | 1367            | 0               | 123828         | 0                        | 923076                 |
| 2       | 1547022       | 3        | 17          | 95      | 1272            | 1887            | 1984            | 1673889        | 923077                   | 1846153                |
| 3       | 205242        | 1        | 17          | 85      | 1210            | 0               | 0               | 1884274        | 1846154                  | 2769230                |
| 4       | 927333        | 2        | 17          | 75      | 1575            | 1714            | 0               | 2812817        | 2769231                  | 3692307                |
| 5       | 1193784       | 3        | 17          | 80      | 1786            | 1477            | 1947            | 4009890        | 3692308                  | 4615384                |
| 6       | 1324331       | 2        | 17          | 55      | 1327            | 1243            | 0               | 5339431        | 4615385                  | 5538461                |
| 7       | 593056        | 2        | 17          | 90      | 1511            | 1506            | 0               | 5935057        | 5538462                  | 6461538                |
| 8       | 735344        | 2        | 17          | 85      | 1434            | 1634            | 0               | 6673418        | 6461539                  | 7384615                |
| 9       | 1368865       | 1        | 17          | 75      | 1210            | 0               | 0               | 8045351        | 7384616                  | 8307692                |
| 10      | 800976        | 2        | 17          | 50      | 1813            | 1975            | 0               | 8847537        | 8307693                  | 9230769                |
| 11      | 754787        | 2        | 17          | 70      | 1507            | 1193            | 0               | 9606112        | 9230770                  | 10153846               |
| 12      | 1361678       | 2        | 17          | 50      | 1457            | 1417            | 0               | 10970490       | 10153847                 | 11076923               |
| 13      | 997279        | 2        | 17          | 55      | 1062            | 1225            | 0               | 11970643       | 11076924                 | 12000000               |

Total number of pulses in waveform = 26

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**Type 5 Radar Waveform\_24**Num of Bursts = 12  
Burst Interval (us)= 1000000

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 99382         | 2        | 5           | 100     | 1796            | 1708            | 0               | 99382          | 0                        | 999999                 |
| 2       | 1503680       | 2        | 5           | 70      | 1100            | 1228            | 0               | 1606566        | 1000000                  | 1999999                |
| 3       | 400982        | 2        | 5           | 60      | 1760            | 1568            | 0               | 2009876        | 2000000                  | 2999999                |
| 4       | 1140511       | 1        | 5           | 90      | 1765            | 0               | 0               | 3153715        | 3000000                  | 3999999                |
| 5       | 1698679       | 3        | 5           | 95      | 1703            | 1735            | 1590            | 4854159        | 4000000                  | 4999999                |
| 6       | 629563        | 2        | 5           | 60      | 1392            | 1727            | 0               | 5488750        | 5000000                  | 5999999                |
| 7       | 868917        | 2        | 5           | 100     | 1200            | 1264            | 0               | 6360786        | 6000000                  | 6999999                |
| 8       | 722579        | 1        | 5           | 70      | 1748            | 0               | 0               | 7085829        | 7000000                  | 7999999                |
| 9       | 1000319       | 3        | 5           | 60      | 1067            | 1736            | 1799            | 8087896        | 8000000                  | 8999999                |
| 10      | 1810239       | 3        | 5           | 80      | 1655            | 1204            | 1762            | 9902737        | 9000000                  | 9999999                |
| 11      | 115944        | 3        | 5           | 75      | 1661            | 1819            | 1331            | 10023302       | 10000000                 | 10999999               |
| 12      | 1771104       | 3        | 5           | 80      | 1392            | 1683            | 1123            | 11799217       | 11000000                 | 11999999               |

Total number of pulses in waveform = 27

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**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       | 90364         | 1        | 18          | 95      | 1056            | 0               | 0               | 90364          | 0                        | 1090908                |
| 2       | 1492707       | 1        | 18          | 55      | 1334            | 0               | 0               | 1584127        | 1090909                  | 2181817                |
| 3       | 636363        | 3        | 18          | 60      | 1427            | 1662            | 1502            | 2221824        | 2181818                  | 3272726                |
| 4       | 1918645       | 1        | 18          | 70      | 1995            | 0               | 0               | 4145060        | 3272727                  | 4363635                |
| 5       | 1254090       | 2        | 18          | 80      | 1016            | 1495            | 0               | 5401145        | 4363636                  | 5454544                |
| 6       | 756746        | 2        | 18          | 100     | 1935            | 1480            | 0               | 6160402        | 5454545                  | 6545453                |
| 7       | 668990        | 3        | 18          | 85      | 1208            | 1163            | 1962            | 6832807        | 6545454                  | 7636362                |
| 8       | 1412431       | 1        | 18          | 50      | 1079            | 0               | 0               | 8249571        | 7636363                  | 8727271                |
| 9       | 829722        | 3        | 18          | 90      | 1607            | 1544            | 1839            | 9080372        | 8727272                  | 9818180                |
| 10      | 1613471       | 3        | 18          | 95      | 1750            | 1112            | 1207            | 10698833       | 9818181                  | 10909089               |
| 11      | 574078        | 1        | 18          | 65      | 1457            | 0               | 0               | 11276980       | 10909090                 | 11999998               |

Total number of pulses in waveform = 21

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**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       | 596690        | 3        | 6           | 95      | 1641             | 1898             | 1103             | 596690         | 0                         | 1199999                 |
| 2       | 706484        | 2        | 6           | 95      | 1838             | 1574             | 0                | 1307816        | 1200000                   | 2399999                 |
| 3       | 2029379       | 1        | 6           | 100     | 1204             | 0                | 0                | 3340607        | 2400000                   | 3599999                 |
| 4       | 957280        | 2        | 6           | 95      | 1739             | 1692             | 0                | 4299091        | 3600000                   | 4799999                 |
| 5       | 1299361       | 1        | 6           | 70      | 1015             | 0                | 0                | 5601883        | 4800000                   | 5999999                 |
| 6       | 865883        | 2        | 6           | 60      | 1755             | 1627             | 0                | 6468781        | 6000000                   | 7199999                 |
| 7       | 1475747       | 1        | 6           | 90      | 1851             | 0                | 0                | 7947910        | 7200000                   | 8399999                 |
| 8       | 885088        | 2        | 6           | 70      | 1632             | 1284             | 0                | 8834849        | 8400000                   | 9599999                 |
| 9       | 877789        | 3        | 6           | 75      | 1177             | 1324             | 1592             | 9715554        | 9600000                   | 10799999                |
| 10      | 1275353       | 2        | 6           | 85      | 1140             | 1169             | 0                | 10995000       | 10800000                  | 11999999                |

Total number of pulses in waveform = 19

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**Type 5 Radar Waveform\_27**

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       | 557035        | 1        | 19          | 80      | 1270             | 0                | 0                | 557035         | 0                         | 1499999                 |
| 2       | 1742837       | 1        | 19          | 90      | 1073             | 0                | 0                | 2301142        | 1500000                   | 2999999                 |
| 3       | 767604        | 3        | 19          | 70      | 1480             | 1247             | 1143             | 3069819        | 3000000                   | 4499999                 |
| 4       | 1721474       | 3        | 19          | 55      | 1040             | 1541             | 1897             | 4795163        | 4500000                   | 5999999                 |
| 5       | 1362971       | 2        | 19          | 60      | 1282             | 1444             | 0                | 6162612        | 6000000                   | 7499999                 |
| 6       | 2207202       | 2        | 19          | 95      | 1681             | 1248             | 0                | 8372540        | 7500000                   | 8999999                 |
| 7       | 2067428       | 2        | 19          | 85      | 1309             | 1387             | 0                | 10442897       | 9000000                   | 10499999                |
| 8       | 1013681       | 2        | 19          | 100     | 1846             | 1449             | 0                | 11459274       | 10500000                  | 11999999                |

Total number of pulses in waveform = 16

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**Type 5 Radar Waveform\_28**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 102826        | 2        | 14          | 95      | 1807             | 1904             | 0                | 102826         | 0                         | 749999                  |
| 2       | 1165586       | 2        | 14          | 50      | 1143             | 1284             | 0                | 1272123        | 750000                    | 1499999                 |
| 3       | 593148        | 1        | 14          | 70      | 1287             | 0                | 0                | 1867698        | 1500000                   | 2249999                 |
| 4       | 553282        | 1        | 14          | 55      | 1857             | 0                | 0                | 2422267        | 2250000                   | 2999999                 |
| 5       | 776374        | 2        | 14          | 80      | 1497             | 1325             | 0                | 3200498        | 3000000                   | 3749999                 |
| 6       | 1284153       | 2        | 14          | 100     | 1783             | 1766             | 0                | 4487473        | 3750000                   | 4499999                 |
| 7       | 283621        | 2        | 14          | 85      | 1370             | 1458             | 0                | 4774633        | 4500000                   | 5249999                 |
| 8       | 520988        | 1        | 14          | 75      | 1608             | 0                | 0                | 5298449        | 5250000                   | 5999999                 |
| 9       | 735806        | 2        | 14          | 95      | 1132             | 1169             | 0                | 6035863        | 6000000                   | 6749999                 |
| 10      | 807239        | 2        | 14          | 70      | 1222             | 1751             | 0                | 6845403        | 6750000                   | 7499999                 |
| 11      | 796385        | 2        | 14          | 95      | 1807             | 1593             | 0                | 7644761        | 7500000                   | 8249999                 |
| 12      | 1029592       | 2        | 14          | 65      | 1937             | 1564             | 0                | 8677753        | 8250000                   | 8999999                 |
| 13      | 883434        | 1        | 14          | 80      | 1277             | 0                | 0                | 9564688        | 9000000                   | 9749999                 |
| 14      | 776222        | 3        | 14          | 65      | 1907             | 1496             | 1812             | 10342187       | 9750000                   | 10499999                |
| 15      | 429095        | 2        | 14          | 90      | 1246             | 1486             | 0                | 10776497       | 10500000                  | 11249999                |
| 16      | 726655        | 3        | 14          | 55      | 1848             | 1093             | 1690             | 11505884       | 11250000                  | 11999999                |

Total number of pulses in waveform = 30

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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       | 698578        | 2        | 9           | 65      | 1421             | 1390             | 0                | 698578         | 0                         | 705881                  |
| 2       | 662566        | 1        | 9           | 90      | 1810             | 0                | 0                | 1363955        | 705882                    | 1411763                 |
| 3       | 155463        | 2        | 9           | 50      | 1805             | 1717             | 0                | 1521228        | 1411764                   | 2117645                 |
| 4       | 845456        | 2        | 9           | 100     | 1921             | 1153             | 0                | 2370206        | 2117646                   | 2823527                 |
| 5       | 971838        | 3        | 9           | 50      | 1703             | 1770             | 1492             | 3346118        | 2823528                   | 3529409                 |
| 6       | 761696        | 1        | 9           | 100     | 1797             | 0                | 0                | 4111779        | 3529410                   | 4235291                 |
| 7       | 674528        | 3        | 9           | 85      | 1107             | 1547             | 1945             | 4788104        | 4235292                   | 4941173                 |
| 8       | 363338        | 2        | 9           | 90      | 1836             | 1989             | 0                | 5156041        | 4941174                   | 5647055                 |
| 9       | 549502        | 3        | 9           | 75      | 1896             | 1406             | 1637             | 5709368        | 5647056                   | 6352937                 |
| 10      | 991829        | 3        | 9           | 85      | 1648             | 1799             | 1823             | 6706136        | 6352938                   | 7058819                 |
| 11      | 1004329       | 2        | 9           | 75      | 1988             | 1531             | 0                | 7715735        | 7058820                   | 7764701                 |
| 12      | 416487        | 2        | 9           | 65      | 1024             | 1272             | 0                | 8135741        | 7764702                   | 8470583                 |
| 13      | 854353        | 1        | 9           | 70      | 1207             | 0                | 0                | 8992390        | 8470584                   | 9176465                 |
| 14      | 317291        | 2        | 9           | 85      | 1972             | 1168             | 0                | 9310888        | 9176466                   | 9882347                 |
| 15      | 1149734       | 2        | 9           | 95      | 1616             | 1575             | 0                | 10463762       | 9882348                   | 10588229                |
| 16      | 375779        | 2        | 9           | 85      | 1183             | 1781             | 0                | 10842732       | 10588230                  | 11294111                |
| 17      | 521282        | 3        | 9           | 50      | 1034             | 1756             | 1725             | 11366978       | 11294112                  | 11999993                |

Total number of pulses in waveform = 36  
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## Type 5 Radar Waveform\_30

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 704943        | 1        | 12          | 85      | 1629             | 0                | 0                | 704943         | 0                         | 799999                  |
| 2       | 737070        | 3        | 12          | 75      | 1309             | 1901             | 1943             | 1443642        | 800000                    | 1599999                 |
| 3       | 457340        | 3        | 12          | 85      | 1018             | 1200             | 1073             | 1906135        | 1600000                   | 2399999                 |
| 4       | 1272749       | 1        | 12          | 80      | 1993             | 0                | 0                | 3182175        | 2400000                   | 3199999                 |
| 5       | 145417        | 1        | 12          | 85      | 1022             | 0                | 0                | 3329585        | 3200000                   | 3999999                 |
| 6       | 1051952       | 1        | 12          | 90      | 1478             | 0                | 0                | 4382559        | 4000000                   | 4799999                 |
| 7       | 482428        | 2        | 12          | 70      | 1962             | 1764             | 0                | 4866465        | 4800000                   | 5599999                 |
| 8       | 1366839       | 2        | 12          | 100     | 1128             | 1039             | 0                | 6237030        | 5600000                   | 6399999                 |
| 9       | 425654        | 1        | 12          | 55      | 1884             | 0                | 0                | 6664851        | 6400000                   | 7199999                 |
| 10      | 1105024       | 1        | 12          | 75      | 1881             | 0                | 0                | 7771759        | 7200000                   | 7999999                 |
| 11      | 314384        | 3        | 12          | 65      | 1383             | 1786             | 1033             | 8088024        | 8000000                   | 8799999                 |
| 12      | 759538        | 3        | 12          | 70      | 1737             | 1189             | 1987             | 8851764        | 8800000                   | 9599999                 |
| 13      | 973406        | 2        | 12          | 55      | 1762             | 1737             | 0                | 9830083        | 9600000                   | 10399999                |
| 14      | 1060651       | 3        | 12          | 95      | 1529             | 1893             | 1329             | 10894233       | 10400000                  | 11199999                |
| 15      | 478712        | 2        | 12          | 95      | 1474             | 1587             | 0                | 11377696       | 11200000                  | 11999999                |

Total number of pulses in waveform = 29  
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## Radar Type 6 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection | Trail # | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|-------------------------------|---------|---------------------|-------------------------------|
| 1                        | 5292                | 1                             | 16      | 5310                | 1                             |
| 2                        | 5293                | 1                             | 17      | 5312                | 1                             |
| 3                        | 5294                | 1                             | 18      | 5314                | 1                             |
| 4                        | 5295                | 1                             | 19      | 5316                | 1                             |
| 5                        | 5296                | 1                             | 20      | 5317                | 1                             |
| 6                        | 5297                | 1                             | 21      | 5318                | 1                             |
| 7                        | 5298                | 1                             | 22      | 5320                | 1                             |
| 8                        | 5299                | 1                             | 23      | 5322                | 1                             |
| 9                        | 5300                | 1                             | 24      | 5323                | 1                             |
| 10                       | 5301                | 1                             | 25      | 5324                | 1                             |
| 11                       | 5302                | 1                             | 26      | 5325                | 1                             |
| 12                       | 5303                | 1                             | 27      | 5326                | 1                             |
| 13                       | 5305                | 1                             | 28      | 5327                | 1                             |
| 14                       | 5307                | 1                             | 29      | 5328                | 1                             |
| 15                       | 5309                | 1                             | 30      | 5329                | 1                             |
| Detection Percentage (%) |                     |                               |         |                     | 100%                          |

| Radar waveform #1 |                 |                  | Radar waveform #2 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 3                 | 5298            | 9                | 9                 | 5297            | 27               |
| 11                | 5321            | 33               | 14                | 5280            | 42               |
| 12                | 5320            | 36               | 26                | 5304            | 78               |
| 28                | 5302            | 84               | 41                | 5321            | 123              |
| 34                | 5262            | 102              | 48                | 5263            | 144              |
| 45                | 5271            | 135              | 54                | 5313            | 162              |
| 52                | 5312            | 156              | 63                | 5288            | 189              |
| 57                | 5290            | 171              | 64                | 5264            | 192              |
| 59                | 5318            | 177              | 80                | 5271            | 240              |
| 66                | 5267            | 198              | 88                | 5294            | 264              |
| 88                | 5283            | 264              | 91                | 5295            | 273              |
| --                | --              | --               | 94                | 5308            | 282              |

| Radar waveform #3 |                 |                  | Radar waveform #4 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 5                 | 5281            | 15               | 8                 | 5312            | 24               |
| 13                | 5282            | 39               | 16                | 5297            | 48               |
| 19                | 5296            | 57               | 19                | 5319            | 57               |
| 29                | 5263            | 87               | 20                | 5263            | 60               |
| 31                | 5279            | 93               | 22                | 5285            | 66               |
| 36                | 5292            | 108              | 36                | 5315            | 108              |
| 47                | 5290            | 141              | 44                | 5296            | 132              |
| 51                | 5310            | 153              | 46                | 5306            | 138              |
| 74                | 5295            | 222              | 56                | 5322            | 168              |
| 81                | 5262            | 243              | 67                | 5304            | 201              |
| 99                | 5275            | 297              | 74                | 5274            | 222              |
| --                | --              | --               | 82                | 5291            | 246              |
| --                | --              | --               | 96                | 5283            | 288              |

| Radar waveform #5 |                 |                  | Radar waveform #6 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 20                | 5302            | 60               | 30                | 5326            | 90               |
| 27                | 5311            | 81               | 41                | 5276            | 123              |
| 35                | 5277            | 105              | 47                | 5274            | 141              |
| 37                | 5306            | 111              | 55                | 5327            | 165              |
| 48                | 5278            | 144              | 58                | 5291            | 174              |
| 53                | 5313            | 159              | 64                | 5298            | 192              |
| 56                | 5314            | 168              | 77                | 5318            | 231              |
| 57                | 5312            | 171              | 78                | 5297            | 234              |
| 62                | 5326            | 186              | 88                | 5294            | 264              |
| 63                | 5322            | 189              | 89                | 5314            | 267              |
| 78                | 5329            | 234              | 98                | 5300            | 294              |
| 80                | 5293            | 240              | --                | --              | --               |
| 83                | 5320            | 249              | --                | --              | --               |
| 88                | 5321            | 264              | --                | --              | --               |

| Radar waveform #7 |                 |                  | Radar waveform #8 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 2                 | 5321            | 6                | 0                 | 5312            | 0                |
| 11                | 5294            | 33               | 4                 | 5295            | 12               |
| 12                | 5320            | 36               | 6                 | 5311            | 18               |
| 14                | 5308            | 42               | 15                | 5313            | 45               |
| 24                | 5274            | 72               | 34                | 5307            | 102              |
| 35                | 5311            | 105              | 35                | 5302            | 105              |
| 41                | 5326            | 123              | 43                | 5280            | 129              |
| 49                | 5318            | 147              | 48                | 5279            | 144              |
| 56                | 5300            | 168              | 60                | 5319            | 180              |
| 62                | 5302            | 186              | 72                | 5323            | 216              |
| 72                | 5299            | 216              | 86                | 5318            | 258              |
| 77                | 5323            | 231              | 89                | 5287            | 267              |
| 83                | 5317            | 249              | --                | --              | --               |
| 86                | 5330            | 258              | --                | --              | --               |
| 96                | 5282            | 288              | --                | --              | --               |



| Radar waveform #9 |                 |                  | Radar waveform #10 |                 |                  |
|-------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 0                 | 5320            | 0                | 0                  | 5305            | 0                |
| 4                 | 5336            | 12               | 1                  | 5326            | 3                |
| 15                | 5289            | 45               | 3                  | 5297            | 9                |
| 24                | 5278            | 72               | 4                  | 5309            | 12               |
| 25                | 5312            | 75               | 14                 | 5327            | 42               |
| 34                | 5285            | 102              | 16                 | 5312            | 48               |
| 35                | 5288            | 105              | 22                 | 5296            | 66               |
| 39                | 5291            | 117              | 25                 | 5317            | 75               |
| 40                | 5333            | 120              | 34                 | 5283            | 102              |
| 44                | 5280            | 132              | 36                 | 5336            | 108              |
| 52                | 5334            | 156              | 45                 | 5306            | 135              |
| 62                | 5315            | 186              | 51                 | 5318            | 153              |
| 93                | 5311            | 279              | 56                 | 5325            | 168              |
| 99                | 5308            | 297              | 58                 | 5308            | 174              |
| --                | --              | --               | 67                 | 5338            | 201              |
| --                | --              | --               | 86                 | 5335            | 258              |
| --                | --              | --               | 87                 | 5293            | 261              |
| --                | --              | --               | 91                 | 5289            | 273              |
| --                | --              | --               | 97                 | 5287            | 291              |

| Radar waveform #11 |                 |                  | Radar waveform #12 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 8                  | 5335            | 24               | 1                  | 5295            | 3                |
| 10                 | 5313            | 30               | 7                  | 5311            | 21               |
| 17                 | 5285            | 51               | 13                 | 5320            | 39               |
| 38                 | 5307            | 114              | 14                 | 5297            | 42               |
| 40                 | 5304            | 120              | 26                 | 5324            | 78               |
| 43                 | 5326            | 129              | 29                 | 5282            | 87               |
| 46                 | 5297            | 138              | 31                 | 5332            | 93               |
| 58                 | 5278            | 174              | 37                 | 5337            | 111              |
| 59                 | 5287            | 177              | 52                 | 5291            | 156              |
| 62                 | 5328            | 186              | 57                 | 5278            | 171              |
| 67                 | 5320            | 201              | 60                 | 5334            | 180              |
| 72                 | 5309            | 216              | 67                 | 5325            | 201              |
| 78                 | 5303            | 234              | 71                 | 5331            | 213              |
| 80                 | 5311            | 240              | 74                 | 5286            | 222              |
| 87                 | 5308            | 261              | 96                 | 5315            | 288              |

| Radar waveform #13 |                 |                  | Radar waveform #14 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 10                 | 5335            | 30               | 0                  | 5329            | 0                |
| 13                 | 5319            | 39               | 8                  | 5317            | 24               |
| 14                 | 5330            | 42               | 9                  | 5327            | 27               |
| 15                 | 5309            | 45               | 26                 | 5285            | 78               |
| 37                 | 5312            | 111              | 32                 | 5308            | 96               |
| 38                 | 5327            | 114              | 54                 | 5320            | 162              |
| 53                 | 5331            | 159              | 57                 | 5336            | 171              |
| 56                 | 5325            | 168              | 58                 | 5315            | 174              |
| 60                 | 5339            | 180              | 63                 | 5313            | 189              |
| 65                 | 5300            | 195              | 65                 | 5297            | 195              |
| 73                 | 5282            | 219              | 74                 | 5326            | 222              |
| 85                 | 5299            | 255              | 89                 | 5330            | 267              |
| 90                 | 5320            | 270              | 90                 | 5288            | 270              |

| Radar waveform #15 |                 |                  | Radar waveform #16 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 11                 | 5335            | 33               | 0                  | 5297            | 0                |
| 14                 | 5307            | 42               | 1                  | 5335            | 3                |
| 15                 | 5340            | 45               | 9                  | 5316            | 27               |
| 19                 | 5302            | 57               | 27                 | 5330            | 81               |
| 23                 | 5297            | 69               | 44                 | 5311            | 132              |
| 29                 | 5301            | 87               | 47                 | 5329            | 141              |
| 37                 | 5296            | 111              | 52                 | 5320            | 156              |
| 41                 | 5292            | 123              | 59                 | 5321            | 177              |
| 53                 | 5309            | 159              | 64                 | 5309            | 192              |
| 56                 | 5332            | 168              | 65                 | 5302            | 195              |
| 57                 | 5282            | 171              | 78                 | 5324            | 234              |
| 62                 | 5326            | 186              | 79                 | 5287            | 237              |
| 75                 | 5284            | 225              | 88                 | 5280            | 264              |
| 82                 | 5312            | 246              | 99                 | 5328            | 297              |
| 88                 | 5303            | 264              | --                 | --              | --               |
| 96                 | 5323            | 288              | --                 | --              | --               |
| 98                 | 5317            | 294              | --                 | --              | --               |

| Radar waveform #17 |                 |                  | Radar waveform #18 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 5                  | 5332            | 15               | 3                  | 5305            | 9                |
| 8                  | 5307            | 24               | 6                  | 5286            | 18               |
| 21                 | 5312            | 63               | 10                 | 5318            | 30               |
| 26                 | 5330            | 78               | 21                 | 5304            | 63               |
| 27                 | 5320            | 81               | 22                 | 5340            | 66               |
| 34                 | 5291            | 102              | 44                 | 5332            | 132              |
| 38                 | 5292            | 114              | 58                 | 5319            | 174              |
| 39                 | 5318            | 117              | 67                 | 5287            | 201              |
| 46                 | 5326            | 138              | 68                 | 5298            | 204              |
| 56                 | 5298            | 168              | 89                 | 5321            | 267              |
| 62                 | 5313            | 186              | --                 | --              | --               |
| 71                 | 5290            | 213              | --                 | --              | --               |
| 75                 | 5308            | 225              | --                 | --              | --               |
| 86                 | 5339            | 258              | --                 | --              | --               |
| 99                 | 5337            | 297              | --                 | --              | --               |

| Radar waveform #19 |                 |                  | Radar waveform #20 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 14                 | 5318            | 42               | 7                  | 5312            | 21               |
| 17                 | 5333            | 51               | 24                 | 5311            | 72               |
| 18                 | 5300            | 54               | 30                 | 5315            | 90               |
| 25                 | 5285            | 75               | 32                 | 5328            | 96               |
| 40                 | 5283            | 120              | 43                 | 5329            | 129              |
| 53                 | 5299            | 159              | 50                 | 5331            | 150              |
| 66                 | 5308            | 198              | 59                 | 5297            | 177              |
| 71                 | 5328            | 213              | 75                 | 5306            | 225              |
| 81                 | 5290            | 243              | 77                 | 5290            | 231              |
| 94                 | 5309            | 282              | 79                 | 5319            | 237              |
| 97                 | 5310            | 291              | 88                 | 5304            | 264              |
| 99                 | 5311            | 297              | 89                 | 5284            | 267              |
| --                 | --              | --               | 97                 | 5298            | 291              |

| Radar waveform #21 |                 |                  | Radar waveform #22 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 4                  | 5341            | 12               | 10                 | 5316            | 30               |
| 8                  | 5339            | 24               | 22                 | 5325            | 66               |
| 12                 | 5284            | 36               | 28                 | 5328            | 84               |
| 19                 | 5335            | 57               | 29                 | 5285            | 87               |
| 24                 | 5326            | 72               | 30                 | 5313            | 90               |
| 42                 | 5298            | 126              | 42                 | 5336            | 126              |
| 51                 | 5312            | 153              | 46                 | 5308            | 138              |
| 52                 | 5311            | 156              | 49                 | 5288            | 147              |
| 55                 | 5321            | 165              | 60                 | 5322            | 180              |
| 60                 | 5309            | 180              | 62                 | 5302            | 186              |
| 82                 | 5340            | 246              | 75                 | 5331            | 225              |
| 85                 | 5313            | 255              | 88                 | 5319            | 264              |
| 92                 | 5323            | 276              | 98                 | 5342            | 294              |
| 93                 | 5329            | 279              | --                 | --              | --               |
| 99                 | 5297            | 297              | --                 | --              | --               |

| Radar waveform #23 |                 |                  | Radar waveform #24 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 1                  | 5297            | 3                | 3                  | 5291            | 9                |
| 3                  | 5335            | 9                | 27                 | 5323            | 81               |
| 12                 | 5317            | 36               | 37                 | 5328            | 111              |
| 16                 | 5326            | 48               | 45                 | 5296            | 135              |
| 20                 | 5302            | 60               | 58                 | 5320            | 174              |
| 37                 | 5323            | 111              | 59                 | 5303            | 177              |
| 41                 | 5295            | 123              | 65                 | 5308            | 195              |
| 43                 | 5296            | 129              | 67                 | 5343            | 201              |
| 46                 | 5308            | 138              | 69                 | 5350            | 207              |
| 63                 | 5311            | 189              | 79                 | 5319            | 237              |
| 65                 | 5299            | 195              | 82                 | 5312            | 246              |
| 78                 | 5291            | 234              | 87                 | 5342            | 261              |
| 86                 | 5333            | 258              | 93                 | 5338            | 279              |
| --                 | --              | --               | 98                 | 5324            | 294              |
| --                 | --              | --               | 99                 | 5311            | 297              |

| Radar waveform #25 |                 |                  | Radar waveform #26 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 6                  | 5291            | 18               | 3                  | 5298            | 9                |
| 7                  | 5290            | 21               | 12                 | 5309            | 36               |
| 21                 | 5311            | 63               | 13                 | 5293            | 39               |
| 36                 | 5323            | 108              | 16                 | 5305            | 48               |
| 38                 | 5292            | 114              | 21                 | 5327            | 63               |
| 39                 | 5298            | 117              | 43                 | 5337            | 129              |
| 42                 | 5304            | 126              | 48                 | 5322            | 144              |
| 44                 | 5330            | 132              | 57                 | 5296            | 171              |
| 45                 | 5302            | 135              | 68                 | 5294            | 204              |
| 48                 | 5344            | 144              | 82                 | 5314            | 246              |
| 53                 | 5316            | 159              | 85                 | 5308            | 255              |
| 55                 | 5296            | 165              | 86                 | 5330            | 258              |
| 64                 | 5301            | 192              | 91                 | 5303            | 273              |
| 66                 | 5338            | 198              | 93                 | 5328            | 279              |
| 67                 | 5313            | 201              | --                 | --              | --               |
| 88                 | 5331            | 264              | --                 | --              | --               |
| 92                 | 5306            | 276              | --                 | --              | --               |

| Radar waveform #27 |                 |                  | Radar waveform #28 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 8                  | 5338            | 24               | 4                  | 5316            | 12               |
| 12                 | 5358            | 36               | 9                  | 5328            | 27               |
| 16                 | 5312            | 48               | 25                 | 5306            | 75               |
| 45                 | 5345            | 135              | 28                 | 5318            | 84               |
| 51                 | 5351            | 153              | 35                 | 5353            | 105              |
| 59                 | 5311            | 177              | 43                 | 5355            | 129              |
| 76                 | 5303            | 228              | 55                 | 5336            | 165              |
| 81                 | 5322            | 243              | 77                 | 5349            | 231              |
| 84                 | 5313            | 252              | 82                 | 5307            | 246              |

| Radar waveform #29 |                 |                  | Radar waveform #30 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 3                  | 5342            | 9                | 6                  | 5309            | 18               |
| 10                 | 5304            | 30               | 11                 | 5356            | 33               |
| 19                 | 5341            | 57               | 13                 | 5305            | 39               |
| 36                 | 5319            | 108              | 27                 | 5300            | 81               |
| 59                 | 5300            | 177              | 30                 | 5330            | 90               |
| 70                 | 5356            | 210              | 41                 | 5353            | 123              |
| 76                 | 5338            | 228              | 49                 | 5303            | 147              |
| 83                 | 5332            | 249              | 55                 | 5308            | 165              |
| 85                 | 5302            | 255              | 60                 | 5343            | 180              |
| 95                 | 5331            | 285              | 85                 | 5344            | 255              |
| --                 | --              | --               | 86                 | 5346            | 258              |
| --                 | --              | --               | 87                 | 5340            | 261              |
| --                 | --              | --               | 97                 | 5341            | 291              |
| --                 | --              | --               | 98                 | 5326            | 294              |



|               |                                                                     |                   |            |
|---------------|---------------------------------------------------------------------|-------------------|------------|
| Product       | G-140W-C                                                            | Temperature       | 27°C       |
| Test Engineer | Amy Zhang                                                           | Relative Humidity | 65%        |
| Test Site     | TR5                                                                 | Test Date         | 2017/12/11 |
| Test Item     | Radar Statistical Performance Check (802.11ac-VHT80 mode – 5290MHz) |                   |            |

## Radar Type 1 - Radar Statistical Performance

| Trail # | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|---------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1       | 5252                | 1                   | 858      | 62             | 1                             |
| 2       | 5253                | 1                   | 678      | 78             | 1                             |
| 3       | 5255                | 1                   | 618      | 86             | 1                             |
| 4       | 5261                | 1                   | 578      | 92             | 1                             |
| 5       | 5264                | 1                   | 838      | 63             | 1                             |
| 6       | 5267                | 1                   | 878      | 61             | 1                             |
| 7       | 5270                | 1                   | 598      | 89             | 1                             |
| 8       | 5273                | 1                   | 718      | 74             | 1                             |
| 9       | 5276                | 1                   | 698      | 76             | 1                             |
| 10      | 5279                | 1                   | 738      | 72             | 1                             |
| 11      | 5282                | 1                   | 798      | 67             | 1                             |
| 12      | 5285                | 1                   | 3066     | 18             | 1                             |
| 13      | 5288                | 1                   | 538      | 99             | 1                             |
| 14      | 5290                | 1                   | 658      | 81             | 1                             |
| 15      | 5294                | 1                   | 558      | 95             | 1                             |
| 16      | 5297                | 1                   | 868      | 61             | 1                             |
| 17      | 5300                | 1                   | 2950     | 18             | 1                             |
| 18      | 5303                | 1                   | 2370     | 23             | 1                             |
| 19      | 5306                | 1                   | 837      | 64             | 1                             |
| 20      | 5309                | 1                   | 2129     | 25             | 1                             |
| 21      | 5312                | 1                   | 1350     | 40             | 1                             |
| 22      | 5315                | 1                   | 1353     | 40             | 1                             |
| 23      | 5318                | 1                   | 1167     | 46             | 1                             |
| 24      | 5321                | 1                   | 711      | 75             | 1                             |
| 25      | 5323                | 1                   | 1361     | 39             | 1                             |
| 26      | 5325                | 1                   | 940      | 57             | 1                             |





| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 27                       | 5326                | 1                   | 2024     | 27             | 1                             |
| 28                       | 5327                | 1                   | 807      | 66             | 1                             |
| 29                       | 5328                | 1                   | 1052     | 51             | 1                             |
| 30                       | 5328                | 1                   | 1632     | 33             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |

## Radar Type 2 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1                        | 5252                | 1.8                 | 201      | 28             | 1                             |
| 2                        | 5253                | 1.2                 | 208      | 26             | 1                             |
| 3                        | 5255                | 1.8                 | 214      | 28             | 1                             |
| 4                        | 5261                | 1.6                 | 214      | 26             | 1                             |
| 5                        | 5264                | 3.8                 | 190      | 23             | 1                             |
| 6                        | 5267                | 2.9                 | 199      | 24             | 1                             |
| 7                        | 5270                | 2.1                 | 176      | 28             | 1                             |
| 8                        | 5273                | 1.4                 | 196      | 23             | 1                             |
| 9                        | 5276                | 3.1                 | 225      | 28             | 1                             |
| 10                       | 5279                | 3.8                 | 152      | 25             | 1                             |
| 11                       | 5282                | 4.4                 | 165      | 24             | 1                             |
| 12                       | 5285                | 1.0                 | 154      | 29             | 1                             |
| 13                       | 5288                | 1.1                 | 214      | 27             | 1                             |
| 14                       | 5290                | 4.1                 | 229      | 27             | 1                             |
| 15                       | 5294                | 4.2                 | 188      | 28             | 1                             |
| 16                       | 5297                | 5.0                 | 199      | 26             | 1                             |
| 17                       | 5300                | 2.0                 | 151      | 24             | 1                             |
| 18                       | 5303                | 4.4                 | 175      | 29             | 1                             |
| 19                       | 5306                | 3.0                 | 191      | 29             | 1                             |
| 20                       | 5309                | 2.4                 | 214      | 29             | 1                             |
| 21                       | 5312                | 1.3                 | 172      | 28             | 1                             |
| 22                       | 5315                | 4.4                 | 200      | 28             | 1                             |
| 23                       | 5318                | 1.7                 | 230      | 27             | 1                             |
| 24                       | 5321                | 2.8                 | 154      | 23             | 1                             |
| 25                       | 5323                | 1.9                 | 153      | 28             | 1                             |
| 26                       | 5325                | 1.5                 | 222      | 25             | 1                             |
| 27                       | 5326                | 3.8                 | 188      | 28             | 1                             |
| 28                       | 5327                | 4.8                 | 214      | 23             | 1                             |
| 29                       | 5328                | 4.8                 | 219      | 23             | 1                             |
| 30                       | 5328                | 5.0                 | 174      | 29             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |

## Radar Type 3 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1                        | 5252                | 9.0                 | 366      | 16             | 1                             |
| 2                        | 5253                | 9.3                 | 414      | 18             | 1                             |
| 3                        | 5255                | 6.2                 | 325      | 16             | 1                             |
| 4                        | 5261                | 9.2                 | 402      | 17             | 1                             |
| 5                        | 5264                | 8.2                 | 355      | 18             | 1                             |
| 6                        | 5267                | 7.6                 | 412      | 16             | 1                             |
| 7                        | 5270                | 9.4                 | 259      | 17             | 1                             |
| 8                        | 5273                | 7.1                 | 436      | 16             | 1                             |
| 9                        | 5276                | 9.8                 | 456      | 18             | 1                             |
| 10                       | 5279                | 6.5                 | 314      | 18             | 1                             |
| 11                       | 5282                | 9.8                 | 469      | 17             | 1                             |
| 12                       | 5285                | 7.9                 | 444      | 18             | 1                             |
| 13                       | 5288                | 7.9                 | 306      | 16             | 1                             |
| 14                       | 5290                | 7.9                 | 381      | 18             | 1                             |
| 15                       | 5294                | 6.5                 | 368      | 18             | 1                             |
| 16                       | 5297                | 8.3                 | 296      | 17             | 1                             |
| 17                       | 5300                | 7.6                 | 280      | 17             | 1                             |
| 18                       | 5303                | 8.8                 | 257      | 17             | 1                             |
| 19                       | 5306                | 6.3                 | 303      | 17             | 1                             |
| 20                       | 5309                | 7.3                 | 295      | 17             | 1                             |
| 21                       | 5312                | 6.7                 | 367      | 16             | 1                             |
| 22                       | 5315                | 6.2                 | 384      | 16             | 1                             |
| 23                       | 5318                | 9.7                 | 317      | 17             | 1                             |
| 24                       | 5321                | 10.0                | 389      | 18             | 1                             |
| 25                       | 5323                | 8.6                 | 314      | 18             | 1                             |
| 26                       | 5325                | 6.6                 | 449      | 16             | 1                             |
| 27                       | 5326                | 6.1                 | 276      | 16             | 1                             |
| 28                       | 5327                | 7.0                 | 477      | 16             | 1                             |
| 29                       | 5328                | 7.5                 | 413      | 17             | 1                             |
| 30                       | 5328                | 8.5                 | 397      | 16             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |

## Radar Type 4 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | Pulse Width<br>(us) | PRI (us) | Pulses / Burst | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|---------------------|----------|----------------|-------------------------------|
| 1                        | 5252                | 18.3                | 442      | 16             | 1                             |
| 2                        | 5253                | 19.7                | 362      | 13             | 1                             |
| 3                        | 5255                | 18.0                | 269      | 13             | 1                             |
| 4                        | 5261                | 13.6                | 328      | 14             | 1                             |
| 5                        | 5264                | 12.2                | 308      | 16             | 1                             |
| 6                        | 5267                | 11.9                | 389      | 12             | 1                             |
| 7                        | 5270                | 15.8                | 367      | 16             | 1                             |
| 8                        | 5273                | 12.5                | 303      | 16             | 1                             |
| 9                        | 5276                | 17.1                | 497      | 13             | 1                             |
| 10                       | 5279                | 17.0                | 414      | 12             | 1                             |
| 11                       | 5282                | 19.1                | 404      | 14             | 1                             |
| 12                       | 5285                | 16.3                | 273      | 15             | 1                             |
| 13                       | 5288                | 12.1                | 325      | 12             | 1                             |
| 14                       | 5290                | 14.3                | 296      | 14             | 1                             |
| 15                       | 5294                | 15.0                | 254      | 15             | 1                             |
| 16                       | 5297                | 11.0                | 418      | 12             | 1                             |
| 17                       | 5300                | 12.9                | 378      | 15             | 1                             |
| 18                       | 5303                | 11.5                | 272      | 14             | 1                             |
| 19                       | 5306                | 15.3                | 460      | 13             | 1                             |
| 20                       | 5309                | 12.5                | 348      | 12             | 1                             |
| 21                       | 5312                | 18.2                | 382      | 13             | 1                             |
| 22                       | 5315                | 12.8                | 353      | 12             | 1                             |
| 23                       | 5318                | 13.3                | 423      | 16             | 1                             |
| 24                       | 5321                | 20.0                | 496      | 16             | 1                             |
| 25                       | 5323                | 11.9                | 298      | 13             | 1                             |
| 26                       | 5325                | 17.1                | 262      | 15             | 1                             |
| 27                       | 5326                | 19.0                | 331      | 13             | 1                             |
| 28                       | 5327                | 14.7                | 465      | 15             | 1                             |
| 29                       | 5328                | 12.3                | 482      | 13             | 1                             |
| 30                       | 5328                | 19.1                | 385      | 14             | 1                             |
| Detection Percentage (%) |                     |                     |          |                | 100%                          |

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

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



## Radar Type 5 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection | Trail # | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|-------------------------------|---------|---------------------|-------------------------------|
| 1                        | 5258.8              | 1                             | 16      | 5300.0              | 1                             |
| 2                        | 5256.0              | 1                             | 17      | 5300.0              | 1                             |
| 3                        | 5255.6              | 1                             | 18      | 5300.0              | 1                             |
| 4                        | 5254.0              | 1                             | 19      | 5300.0              | 1                             |
| 5                        | 5257.6              | 1                             | 20      | 5300.0              | 1                             |
| 6                        | 5259.2              | 1                             | 21      | 5324.0              | 1                             |
| 7                        | 5254.4              | 1                             | 22      | 5324.8              | 1                             |
| 8                        | 5259.6              | 1                             | 23      | 5321.2              | 1                             |
| 9                        | 5255.2              | 1                             | 24      | 5326.0              | 1                             |
| 10                       | 5256.8              | 1                             | 25      | 5320.8              | 1                             |
| 11                       | 5300.0              | 1                             | 26      | 5325.6              | 1                             |
| 12                       | 5300.0              | 1                             | 27      | 5320.4              | 1                             |
| 13                       | 5300.0              | 1                             | 28      | 5322.4              | 1                             |
| 14                       | 5300.0              | 1                             | 29      | 5324.4              | 1                             |
| 15                       | 5300.0              | 1                             | 30      | 5323.2              | 1                             |
| Detection Percentage (%) |                     |                               |         |                     | 100%                          |

## 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       | 526417        | 2        | 17          | 95      | 1647             | 1468             | 0                | 526417         | 0                         | 705881                  |
| 2       | 663704        | 2        | 17          | 75      | 1091             | 1612             | 0                | 1193226        | 705882                    | 1411763                 |
| 3       | 799540        | 3        | 17          | 60      | 1366             | 1619             | 1059             | 1995469        | 1411764                   | 2117645                 |
| 4       | 719611        | 1        | 17          | 80      | 1357             | 0                | 0                | 2719124        | 2117646                   | 2823527                 |
| 5       | 375378        | 3        | 17          | 60      | 1263             | 1392             | 1098             | 3095859        | 2823528                   | 3529409                 |
| 6       | 945779        | 1        | 17          | 80      | 1834             | 0                | 0                | 4045391        | 3529410                   | 4235291                 |
| 7       | 245178        | 3        | 17          | 60      | 1246             | 1739             | 1921             | 4292403        | 4235292                   | 4941173                 |
| 8       | 714710        | 2        | 17          | 65      | 1644             | 1957             | 0                | 5012019        | 4941174                   | 5647055                 |
| 9       | 813798        | 3        | 17          | 90      | 1058             | 1266             | 1882             | 5829418        | 5647056                   | 6352937                 |
| 10      | 671250        | 2        | 17          | 50      | 1201             | 1799             | 0                | 6504874        | 6352938                   | 7058819                 |
| 11      | 947692        | 1        | 17          | 55      | 1605             | 0                | 0                | 7455566        | 7058820                   | 7764701                 |
| 12      | 930091        | 3        | 17          | 90      | 1540             | 1368             | 1060             | 8387262        | 7764702                   | 8470583                 |
| 13      | 503707        | 2        | 17          | 80      | 1438             | 1817             | 0                | 8894937        | 8470584                   | 9176465                 |
| 14      | 744543        | 2        | 17          | 90      | 1005             | 1935             | 0                | 9642735        | 9176466                   | 9882347                 |
| 15      | 251513        | 2        | 17          | 95      | 1838             | 1605             | 0                | 9897188        | 9882348                   | 10588229                |
| 16      | 1342675       | 3        | 17          | 80      | 1975             | 1516             | 1196             | 11243306       | 10588230                  | 11294111                |
| 17      | 53056         | 1        | 17          | 60      | 1777             | 0                | 0                | 11301049       | 11294112                  | 11999993                |

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



## Type 5 Radar Waveform\_2

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 593572        | 1        | 10          | 50      | 1824             | 0                | 0                | 593572         | 0                         | 631578                  |
| 2       | 210511        | 1        | 10          | 50      | 1949             | 0                | 0                | 805907         | 631579                    | 1263157                 |
| 3       | 588860        | 1        | 10          | 85      | 1175             | 0                | 0                | 1394716        | 1263158                   | 1894736                 |
| 4       | 770089        | 1        | 10          | 90      | 1103             | 0                | 0                | 2165980        | 1894737                   | 2526315                 |
| 5       | 461584        | 1        | 10          | 75      | 1221             | 0                | 0                | 2628667        | 2526316                   | 3157894                 |
| 6       | 765418        | 2        | 10          | 60      | 1858             | 1600             | 0                | 3395306        | 3157895                   | 3789473                 |
| 7       | 894795        | 1        | 10          | 70      | 1147             | 0                | 0                | 4293559        | 3789474                   | 4421052                 |
| 8       | 174154        | 2        | 10          | 100     | 1457             | 1720             | 0                | 4468860        | 4421053                   | 5052631                 |
| 9       | 970712        | 2        | 10          | 55      | 1981             | 1739             | 0                | 5442749        | 5052632                   | 5684210                 |
| 10      | 545768        | 3        | 10          | 100     | 1764             | 1613             | 1697             | 5992237        | 5684211                   | 6315789                 |
| 11      | 742398        | 1        | 10          | 70      | 1823             | 0                | 0                | 6739709        | 6315790                   | 6947368                 |
| 12      | 567181        | 2        | 10          | 70      | 1784             | 1563             | 0                | 7308713        | 6947369                   | 7578947                 |
| 13      | 878126        | 2        | 10          | 65      | 1742             | 1955             | 0                | 8190186        | 7578948                   | 8210526                 |
| 14      | 216482        | 2        | 10          | 65      | 1763             | 1762             | 0                | 8410365        | 8210527                   | 8842105                 |
| 15      | 766920        | 3        | 10          | 55      | 1773             | 1854             | 1057             | 9180810        | 8842106                   | 9473684                 |
| 16      | 790203        | 2        | 10          | 90      | 1871             | 1135             | 0                | 9975697        | 9473685                   | 10105263                |
| 17      | 553986        | 2        | 10          | 60      | 1819             | 1711             | 0                | 10532689       | 10105264                  | 10736842                |
| 18      | 812267        | 2        | 10          | 65      | 1559             | 1197             | 0                | 11348486       | 10736843                  | 11368421                |
| 19      | 75605         | 3        | 10          | 90      | 1406             | 1956             | 1677             | 11426847       | 11368422                  | 12000000                |

Total number of pulses in waveform = 34  
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## Type 5 Radar Waveform\_3

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 254346        | 3        | 9           | 60      | 1557             | 1273             | 1357             | 254346         | 0                         | 749999                  |
| 2       | 881541        | 3        | 9           | 85      | 1621             | 1904             | 1808             | 1140074        | 750000                    | 1499999                 |
| 3       | 464660        | 1        | 9           | 70      | 1592             | 0                | 0                | 1610067        | 1500000                   | 2249999                 |
| 4       | 979125        | 3        | 9           | 55      | 1495             | 1218             | 1806             | 2590784        | 2250000                   | 2999999                 |
| 5       | 1069620       | 1        | 9           | 85      | 1881             | 0                | 0                | 3664923        | 3000000                   | 3749999                 |
| 6       | 133937        | 2        | 9           | 70      | 1800             | 1508             | 0                | 3800741        | 3750000                   | 4499999                 |
| 7       | 856639        | 1        | 9           | 85      | 1431             | 0                | 0                | 4660688        | 4600000                   | 5249999                 |
| 8       | 1153633       | 1        | 9           | 95      | 1588             | 0                | 0                | 5815752        | 5250000                   | 5999999                 |
| 9       | 206755        | 3        | 9           | 95      | 1558             | 1845             | 1228             | 6024095        | 6000000                   | 6749999                 |
| 10      | 1282949       | 3        | 9           | 60      | 1900             | 1134             | 1476             | 7311675        | 6750000                   | 7499999                 |
| 11      | 703582        | 3        | 9           | 75      | 1906             | 1077             | 1081             | 8019767        | 7500000                   | 8249999                 |
| 12      | 787413        | 2        | 9           | 70      | 1732             | 1320             | 0                | 8811244        | 8250000                   | 8999999                 |
| 13      | 255148        | 3        | 9           | 90      | 1508             | 1162             | 1085             | 9069444        | 9000000                   | 9749999                 |
| 14      | 781485        | 2        | 9           | 65      | 1784             | 1292             | 0                | 9854684        | 9750000                   | 10499999                |
| 15      | 1294843       | 2        | 9           | 60      | 1572             | 1632             | 0                | 11152603       | 10500000                  | 11249999                |
| 16      | 329978        | 2        | 9           | 80      | 1137             | 1523             | 0                | 11485785       | 11250000                  | 11999999                |

Total number of pulses in waveform = 35  
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## Type 5 Radar Waveform\_4

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       | 396938        | 1        | 5           | 50      | 1144             | 0                | 0                | 396938         | 0                         | 631578                  |
| 2       | 612244        | 1        | 5           | 80      | 1552             | 0                | 0                | 1010326        | 631579                    | 1263157                 |
| 3       | 765564        | 1        | 5           | 70      | 1592             | 0                | 0                | 1777442        | 1263158                   | 1894736                 |
| 4       | 262804        | 1        | 5           | 80      | 1825             | 0                | 0                | 2041638        | 1894737                   | 2526315                 |
| 5       | 704145        | 2        | 5           | 80      | 1103             | 1861             | 0                | 2747608        | 2526316                   | 3157894                 |
| 6       | 683132        | 3        | 5           | 65      | 1682             | 1094             | 1620             | 3433704        | 3157895                   | 3789473                 |
| 7       | 561399        | 3        | 5           | 55      | 1163             | 1146             | 1027             | 3999499        | 3789474                   | 4421052                 |
| 8       | 635914        | 1        | 5           | 95      | 1577             | 0                | 0                | 4638749        | 4421053                   | 5052631                 |
| 9       | 665853        | 2        | 5           | 55      | 1129             | 1928             | 0                | 5306179        | 5052632                   | 5684210                 |
| 10      | 452534        | 3        | 5           | 55      | 1330             | 1624             | 1784             | 5761770        | 5684211                   | 6315789                 |
| 11      | 752432        | 3        | 5           | 85      | 1478             | 1237             | 1592             | 6518940        | 6315790                   | 6947368                 |
| 12      | 762245        | 3        | 5           | 75      | 1596             | 1733             | 1613             | 7285492        | 6947369                   | 7578947                 |
| 13      | 533882        | 3        | 5           | 65      | 1181             | 1551             | 1756             | 7824316        | 7578948                   | 8210526                 |
| 14      | 910217        | 1        | 5           | 85      | 1911             | 0                | 0                | 8739021        | 8210527                   | 8842105                 |
| 15      | 543714        | 1        | 5           | 60      | 1897             | 0                | 0                | 9284646        | 8842106                   | 9473684                 |
| 16      | 448488        | 1        | 5           | 75      | 1687             | 0                | 0                | 9735031        | 9473685                   | 10105263                |
| 17      | 839511        | 1        | 5           | 55      | 1959             | 0                | 0                | 10576229       | 10105264                  | 10736842                |
| 18      | 437650        | 2        | 5           | 55      | 1944             | 1762             | 0                | 11015838       | 10736843                  | 11368421                |
| 19      | 807190        | 3        | 5           | 55      | 1913             | 1868             | 1463             | 11826734       | 11368422                  | 12000000                |

Total number of pulses in waveform = 96  
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## 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       | 497531        | 1        | 14          | 70      | 1966             | 0                | 0                | 497531         | 0                         | 1333332                 |
| 2       | 965874        | 3        | 14          | 85      | 1058             | 1155             | 1679             | 1465371        | 1333333                   | 2666665                 |
| 3       | 1405138       | 2        | 14          | 70      | 1472             | 1339             | 0                | 2874401        | 2666666                   | 3999998                 |
| 4       | 1304945       | 2        | 14          | 100     | 1282             | 1440             | 0                | 4182157        | 3999999                   | 5333331                 |
| 5       | 1913848       | 1        | 14          | 100     | 1718             | 0                | 0                | 6098727        | 5333332                   | 6666664                 |
| 6       | 1521995       | 1        | 14          | 55      | 1899             | 0                | 0                | 7622440        | 6666665                   | 7999997                 |
| 7       | 699374        | 1        | 14          | 70      | 1301             | 0                | 0                | 8323713        | 7999998                   | 9333330                 |
| 8       | 1315697       | 1        | 14          | 100     | 1738             | 0                | 0                | 9640711        | 9333331                   | 10666663                |
| 9       | 2106378       | 1        | 14          | 100     | 1477             | 0                | 0                | 11748827       | 10666664                  | 11999996                |

Total number of pulses in waveform = 13

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## Type 5 Radar Waveform\_6

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 43576         | 3        | 18          | 70      | 1097             | 1310             | 1764             | 43576          | 0                         | 631578                  |
| 2       | 747571        | 2        | 18          | 65      | 1062             | 1249             | 0                | 795318         | 631579                    | 1263157                 |
| 3       | 607546        | 1        | 18          | 95      | 1476             | 0                | 0                | 1405175        | 1263158                   | 1894736                 |
| 4       | 535166        | 2        | 18          | 95      | 1602             | 1357             | 0                | 1941817        | 1894737                   | 2526315                 |
| 5       | 630228        | 2        | 18          | 55      | 1223             | 1820             | 0                | 2575004        | 2526316                   | 3157894                 |
| 6       | 608635        | 1        | 18          | 90      | 1388             | 0                | 0                | 3186682        | 3157895                   | 3789473                 |
| 7       | 648221        | 2        | 18          | 80      | 1147             | 1111             | 0                | 3836291        | 3789474                   | 4421052                 |
| 8       | 983582        | 1        | 18          | 55      | 1256             | 0                | 0                | 4822131        | 4421053                   | 5052631                 |
| 9       | 739507        | 3        | 18          | 65      | 1940             | 1428             | 1359             | 5562894        | 5052632                   | 5684210                 |
| 10      | 329316        | 2        | 18          | 70      | 1523             | 1942             | 0                | 5896937        | 5684211                   | 6315789                 |
| 11      | 1043063       | 2        | 18          | 80      | 1534             | 1961             | 0                | 6943465        | 6315790                   | 6947368                 |
| 12      | 551816        | 2        | 18          | 95      | 1159             | 1688             | 0                | 7498776        | 6947369                   | 7578947                 |
| 13      | 609704        | 1        | 18          | 70      | 1052             | 0                | 0                | 8111327        | 7578948                   | 8210526                 |
| 14      | 267959        | 3        | 18          | 75      | 1616             | 1717             | 1412             | 8380338        | 8210527                   | 8842105                 |
| 15      | 1002469       | 1        | 18          | 80      | 1261             | 0                | 0                | 9387552        | 8842106                   | 9473684                 |
| 16      | 339441        | 2        | 18          | 100     | 1516             | 1493             | 0                | 9728254        | 9473685                   | 10105263                |
| 17      | 407167        | 1        | 18          | 90      | 1559             | 0                | 0                | 10138430       | 10105264                  | 10736842                |
| 18      | 715930        | 1        | 18          | 65      | 1039             | 0                | 0                | 10855919       | 10736843                  | 11368421                |
| 19      | 1105178       | 2        | 18          | 50      | 1661             | 1352             | 0                | 11962136       | 11368422                  | 12000000                |

Total number of pulses in waveform = 34

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## 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       | 472160        | 3        | 6           | 50      | 1107             | 1341             | 1807             | 472160         | 0                         | 799999                  |
| 2       | 612278        | 2        | 6           | 50      | 1372             | 1194             | 0                | 1088693        | 800000                    | 1599999                 |
| 3       | 921487        | 2        | 6           | 60      | 1564             | 1110             | 0                | 2012746        | 1600000                   | 2399999                 |
| 4       | 408280        | 1        | 6           | 55      | 1557             | 0                | 0                | 2423700        | 2400000                   | 3199999                 |
| 5       | 786804        | 2        | 6           | 95      | 1266             | 1817             | 0                | 3212061        | 3200000                   | 3999999                 |
| 6       | 968237        | 2        | 6           | 70      | 1019             | 1298             | 0                | 4183381        | 4000000                   | 4799999                 |
| 7       | 1222691       | 1        | 6           | 80      | 1225             | 0                | 0                | 5408389        | 4800000                   | 5599999                 |
| 8       | 472586        | 2        | 6           | 55      | 1824             | 1540             | 0                | 5882200        | 5600000                   | 6399999                 |
| 9       | 1134402       | 3        | 6           | 90      | 1874             | 1040             | 1280             | 7019966        | 6400000                   | 7199999                 |
| 10      | 706682        | 1        | 6           | 75      | 1097             | 0                | 0                | 7730842        | 7200000                   | 7999999                 |
| 11      | 355314        | 3        | 6           | 70      | 1411             | 1746             | 1958             | 8087253        | 8000000                   | 8799999                 |
| 12      | 1396018       | 3        | 6           | 85      | 1009             | 1458             | 1608             | 9488386        | 8800000                   | 9599999                 |
| 13      | 630035        | 2        | 6           | 95      | 1819             | 1331             | 0                | 10122496       | 9600000                   | 10399999                |
| 14      | 341045        | 1        | 6           | 50      | 1612             | 0                | 0                | 10466691       | 10400000                  | 11199999                |
| 15      | 761881        | 2        | 6           | 55      | 1241             | 1310             | 0                | 11230184       | 11200000                  | 11999999                |

Total number of pulses in waveform = 30

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## Type 5 Radar Waveform\_8

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|---------------------------|-------------------------|
| 1       | 584975        | 2        | 19          | 90      | 1110            | 1690            | 0               | 584975         | 0                         | 857142                  |
| 2       | 675045        | 1        | 19          | 100     | 1753            | 0               | 0               | 1262820        | 857143                    | 1714285                 |
| 3       | 871496        | 1        | 19          | 80      | 1864            | 0               | 0               | 2136069        | 1714286                   | 2571428                 |
| 4       | 1236896       | 2        | 19          | 60      | 1998            | 1984            | 0               | 3374829        | 2571429                   | 3428571                 |
| 5       | 675961        | 1        | 19          | 95      | 1180            | 0               | 0               | 4054772        | 3428572                   | 4285714                 |
| 6       | 680474        | 3        | 19          | 95      | 1679            | 1819            | 1112            | 4736426        | 4285715                   | 5142857                 |
| 7       | 1138007       | 1        | 19          | 90      | 1289            | 0               | 0               | 5879043        | 5142858                   | 6000000                 |
| 8       | 265589        | 3        | 19          | 55      | 1645            | 1381            | 1786            | 6145921        | 6000001                   | 6857143                 |
| 9       | 866396        | 3        | 19          | 55      | 1911            | 1436            | 1378            | 7017129        | 6857144                   | 7714286                 |
| 10      | 1180724       | 1        | 19          | 70      | 1417            | 0               | 0               | 8202578        | 7714287                   | 8571429                 |
| 11      | 946558        | 2        | 19          | 55      | 1606            | 1969            | 0               | 9150553        | 8571430                   | 9428572                 |
| 12      | 931107        | 2        | 19          | 95      | 1692            | 1637            | 0               | 10085235       | 9428573                   | 10285715                |
| 13      | 320791        | 1        | 19          | 85      | 1541            | 0               | 0               | 10409355       | 10285716                  | 11142858                |
| 14      | 1325316       | 3        | 19          | 85      | 1544            | 1909            | 1783            | 11736212       | 11142859                  | 12000001                |

Total number of pulses in waveform = 26

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## Type 5 Radar Waveform\_9

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|---------------------------|-------------------------|
| 1       | 1079336       | 1        | 8           | 80      | 1124            | 0               | 0               | 1079336        | 0                         | 1090908                 |
| 2       | 886091        | 1        | 8           | 60      | 1768            | 0               | 0               | 1966551        | 1090909                   | 2181817                 |
| 3       | 1136089       | 1        | 8           | 60      | 1727            | 0               | 0               | 3104408        | 2181818                   | 3272726                 |
| 4       | 441357        | 1        | 8           | 100     | 1075            | 0               | 0               | 3547492        | 3272727                   | 4363635                 |
| 5       | 1707178       | 3        | 8           | 85      | 1867            | 1610            | 1918            | 5255745        | 4363636                   | 5454544                 |
| 6       | 709344        | 1        | 8           | 95      | 1641            | 0               | 0               | 5970484        | 5454545                   | 6545453                 |
| 7       | 1448483       | 1        | 8           | 90      | 1971            | 0               | 0               | 7420608        | 6545454                   | 7636362                 |
| 8       | 470062        | 2        | 8           | 80      | 1180            | 1659            | 0               | 7892641        | 7636363                   | 8727271                 |
| 9       | 988158        | 1        | 8           | 50      | 1765            | 0               | 0               | 8883638        | 8727272                   | 9818180                 |
| 10      | 1871026       | 3        | 8           | 75      | 1206            | 1368            | 1065            | 10756429       | 9818181                   | 10909089                |
| 11      | 866628        | 2        | 8           | 100     | 1646            | 1329            | 0               | 11626696       | 10909090                  | 11999998                |

Total number of pulses in waveform = 17

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## Type 5 Radar Waveform\_10

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|---------------------------|-------------------------|
| 1       | 63232         | 2        | 12          | 95      | 1480            | 1523            | 0               | 63232          | 0                         | 599999                  |
| 2       | 947661        | 3        | 12          | 75      | 1663            | 1775            | 1827            | 1013896        | 6000000                   | 1199999                 |
| 3       | 754014        | 2        | 12          | 100     | 1019            | 1311            | 0               | 1773175        | 12000000                  | 1799999                 |
| 4       | 399195        | 2        | 12          | 50      | 1599            | 1561            | 0               | 2174700        | 18000000                  | 2399999                 |
| 5       | 512850        | 1        | 12          | 65      | 1903            | 0               | 0               | 2690710        | 24000000                  | 2999999                 |
| 6       | 486784        | 3        | 12          | 60      | 1624            | 1264            | 1743            | 3179397        | 30000000                  | 3599999                 |
| 7       | 879139        | 1        | 12          | 50      | 1437            | 0               | 0               | 4063167        | 36000000                  | 4199999                 |
| 8       | 239095        | 3        | 12          | 95      | 1915            | 1781            | 1781            | 4303699        | 42000000                  | 4799999                 |
| 9       | 838570        | 1        | 12          | 50      | 1466            | 0               | 0               | 5147746        | 48000000                  | 5399999                 |
| 10      | 602928        | 2        | 12          | 55      | 1547            | 1322            | 0               | 5752140        | 54000000                  | 5999999                 |
| 11      | 333092        | 1        | 12          | 65      | 1118            | 0               | 0               | 6088101        | 60000000                  | 6599999                 |
| 12      | 862357        | 2        | 12          | 100     | 1507            | 1016            | 0               | 6951576        | 66000000                  | 7199999                 |
| 13      | 803861        | 2        | 12          | 55      | 1579            | 1748            | 0               | 7757960        | 72000000                  | 7799999                 |
| 14      | 328832        | 3        | 12          | 60      | 1660            | 1443            | 1411            | 8090119        | 78000000                  | 8399999                 |
| 15      | 668246        | 2        | 12          | 95      | 1812            | 1818            | 0               | 8762879        | 84000000                  | 8999999                 |
| 16      | 517592        | 2        | 12          | 65      | 1614            | 1616            | 0               | 9284101        | 90000000                  | 9599999                 |
| 17      | 880601        | 2        | 12          | 90      | 1870            | 1798            | 0               | 10167932       | 96000000                  | 10199999                |
| 18      | 107029        | 2        | 12          | 70      | 1280            | 1131            | 0               | 10278629       | 102000000                 | 10799999                |
| 19      | 774958        | 2        | 12          | 65      | 1567            | 1631            | 0               | 11055998       | 108000000                 | 11399999                |
| 20      | 897325        | 3        | 12          | 100     | 1710            | 1346            | 1721            | 11956521       | 114000000                 | 11999999                |

Total number of pulses in waveform = 41

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## Type 5 Radar Waveform\_11

Num of Bursts = 13

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       | 98258         | 3        | 14          | 50      | 1489             | 1431             | 1329             | 98258          | 0                         | 666666                  |
| 2       | 1180515       | 1        | 14          | 55      | 1034             | 0                | 0                | 1283022        | 666667                    | 1333333                 |
| 3       | 614013        | 2        | 14          | 70      | 1232             | 1522             | 0                | 1898069        | 1333334                   | 2000000                 |
| 4       | 278107        | 3        | 14          | 75      | 1661             | 1522             | 1860             | 2178930        | 2000001                   | 2666667                 |
| 5       | 965290        | 1        | 14          | 90      | 1350             | 0                | 0                | 3149263        | 2666668                   | 3333334                 |
| 6       | 758238        | 1        | 14          | 65      | 1374             | 0                | 0                | 3908851        | 3333335                   | 4000001                 |
| 7       | 112030        | 1        | 14          | 75      | 1784             | 0                | 0                | 4022255        | 4000002                   | 4666668                 |
| 8       | 1085027       | 3        | 14          | 65      | 1216             | 1237             | 1450             | 5109066        | 4666669                   | 5333335                 |
| 9       | 552559        | 2        | 14          | 85      | 1644             | 1430             | 0                | 5665528        | 5333336                   | 6000002                 |
| 10      | 452734        | 2        | 14          | 95      | 1429             | 1535             | 0                | 6121336        | 6000003                   | 6666669                 |
| 11      | 934659        | 1        | 14          | 95      | 1450             | 0                | 0                | 7058959        | 6666670                   | 7333336                 |
| 12      | 417598        | 1        | 14          | 70      | 1833             | 0                | 0                | 7478007        | 7333337                   | 8000003                 |
| 13      | 808468        | 2        | 14          | 85      | 1510             | 1037             | 0                | 8288308        | 8000004                   | 8666670                 |
| 14      | 771283        | 1        | 14          | 85      | 1653             | 0                | 0                | 9062138        | 8666671                   | 9333337                 |
| 15      | 728062        | 1        | 14          | 75      | 1253             | 0                | 0                | 9791853        | 9333338                   | 10000004                |
| 16      | 644098        | 3        | 14          | 70      | 1953             | 1020             | 1559             | 10437204       | 10000005                  | 10666671                |
| 17      | 320162        | 2        | 14          | 95      | 1747             | 1700             | 0                | 10761898       | 10666672                  | 11333338                |
| 18      | 1180201       | 2        | 14          | 70      | 1020             | 1973             | 0                | 11945546       | 11333339                  | 12000005                |

Total number of pulses in waveform = 32

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## Type 5 Radar Waveform\_12

Num of Bursts = 16

Burst Interval (us)= 750000

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 395576        | 2        | 19          | 75      | 1079             | 1461             | 0                | 395576         | 0                         | 749999                  |
| 2       | 703470        | 2        | 19          | 55      | 1798             | 1455             | 0                | 1101586        | 750000                    | 1499999                 |
| 3       | 549971        | 3        | 19          | 100     | 1730             | 1096             | 1602             | 1654810        | 1500000                   | 2249999                 |
| 4       | 705339        | 1        | 19          | 55      | 1827             | 0                | 0                | 2364577        | 2250000                   | 2999999                 |
| 5       | 1250009       | 1        | 19          | 80      | 1290             | 0                | 0                | 3616413        | 3000000                   | 3749999                 |
| 6       | 834707        | 3        | 19          | 60      | 1045             | 1547             | 1002             | 4452410        | 3750000                   | 4499999                 |
| 7       | 578420        | 2        | 19          | 65      | 1731             | 1660             | 0                | 5034424        | 4500000                   | 5249999                 |
| 8       | 257814        | 3        | 19          | 55      | 1247             | 1980             | 1532             | 5295629        | 5250000                   | 5999999                 |
| 9       | 1038003       | 2        | 19          | 65      | 1873             | 1272             | 0                | 6338391        | 6000000                   | 6749999                 |
| 10      | 471578        | 3        | 19          | 65      | 1869             | 1279             | 1317             | 6813114        | 6750000                   | 7499999                 |
| 11      | 1210000       | 1        | 19          | 50      | 1129             | 0                | 0                | 8027579        | 7500000                   | 8249999                 |
| 12      | 869304        | 2        | 19          | 70      | 1068             | 1681             | 0                | 8898012        | 8250000                   | 8999999                 |
| 13      | 649545        | 3        | 19          | 100     | 1264             | 1019             | 1954             | 9550306        | 9000000                   | 9749999                 |
| 14      | 594486        | 1        | 19          | 85      | 1107             | 0                | 0                | 10149029       | 9750000                   | 10499999                |
| 15      | 1058735       | 3        | 19          | 100     | 1882             | 1263             | 1677             | 11208871       | 10500000                  | 11249999                |
| 16      | 451161        | 1        | 19          | 60      | 1792             | 0                | 0                | 11664854       | 11250000                  | 11999999                |

Total number of pulses in waveform = 33

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## Type 5 Radar Waveform\_13

Num of Bursts = 19

Burst Interval (us)= 631579

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 129735        | 3        | 8           | 70      | 1903             | 1652             | 1530             | 129735         | 0                         | 631578                  |
| 2       | 622770        | 1        | 8           | 80      | 1947             | 0                | 0                | 757690         | 631579                    | 1263157                 |
| 3       | 574981        | 3        | 8           | 85      | 1182             | 1487             | 1752             | 1334518        | 1263158                   | 1894736                 |
| 4       | 804052        | 2        | 8           | 70      | 1908             | 1302             | 0                | 2142991        | 1894737                   | 2526315                 |
| 5       | 706152        | 3        | 8           | 70      | 1888             | 1905             | 1339             | 2852353        | 2526316                   | 3157894                 |
| 6       | 387262        | 3        | 8           | 65      | 1442             | 1349             | 1496             | 3244747        | 3157895                   | 3789473                 |
| 7       | 683573        | 3        | 8           | 60      | 1333             | 1331             | 1644             | 3932607        | 3789474                   | 4421052                 |
| 8       | 928608        | 2        | 8           | 55      | 1029             | 1829             | 0                | 4865523        | 4421053                   | 5052631                 |
| 9       | 310922        | 2        | 8           | 85      | 1752             | 1141             | 0                | 5179303        | 5052632                   | 5684210                 |
| 10      | 711173        | 1        | 8           | 70      | 1162             | 0                | 0                | 5893369        | 5684211                   | 6315789                 |
| 11      | 746165        | 1        | 8           | 70      | 1483             | 0                | 0                | 6640696        | 6315790                   | 6947368                 |
| 12      | 734332        | 3        | 8           | 70      | 1901             | 1460             | 1947             | 7376511        | 6947369                   | 7578947                 |
| 13      | 453981        | 3        | 8           | 65      | 1663             | 1689             | 1785             | 7835800        | 7578948                   | 8210526                 |
| 14      | 765870        | 2        | 8           | 85      | 1192             | 1639             | 0                | 8606807        | 8210527                   | 8842105                 |
| 15      | 827912        | 3        | 8           | 80      | 1343             | 1893             | 1629             | 9437550        | 8842106                   | 9473684                 |
| 16      | 601682        | 1        | 8           | 65      | 1262             | 0                | 0                | 10044097       | 9473685                   | 10105263                |
| 17      | 238234        | 2        | 8           | 95      | 1475             | 1711             | 0                | 10283593       | 10105264                  | 10736842                |
| 18      | 653666        | 2        | 8           | 65      | 1168             | 1808             | 0                | 10940445       | 10736843                  | 11368421                |
| 19      | 498384        | 2        | 8           | 75      | 1181             | 1637             | 0                | 11441805       | 11368422                  | 12000000                |

Total number of pulses in waveform = 42

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## Type 5 Radar Waveform\_14

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 87695         | 3        | 12          | 65      | 1001             | 1982             | 1478             | 87695          | 0                         | 799999                  |
| 2       | 1434915       | 2        | 12          | 75      | 1193             | 1174             | 0                | 1527071        | 800000                    | 1599999                 |
| 3       | 520288        | 3        | 12          | 55      | 1581             | 1087             | 1817             | 2049726        | 1600000                   | 2399999                 |
| 4       | 1049119       | 2        | 12          | 60      | 1840             | 1365             | 0                | 3103330        | 2400000                   | 3199999                 |
| 5       | 309771        | 2        | 12          | 100     | 1233             | 1605             | 0                | 3416306        | 3200000                   | 3999999                 |
| 6       | 1214568       | 3        | 12          | 100     | 1546             | 1733             | 1070             | 4633712        | 4000000                   | 4799999                 |
| 7       | 167136        | 1        | 12          | 75      | 1755             | 0                | 0                | 4805197        | 4800000                   | 5599999                 |
| 8       | 903103        | 3        | 12          | 80      | 1316             | 1381             | 2000             | 5710055        | 5600000                   | 6399999                 |
| 9       | 1189199       | 2        | 12          | 65      | 1636             | 1848             | 0                | 6903951        | 6400000                   | 7199999                 |
| 10      | 799535        | 1        | 12          | 55      | 1884             | 0                | 0                | 7706970        | 7200000                   | 7999999                 |
| 11      | 1054345       | 2        | 12          | 50      | 1751             | 1257             | 0                | 8763199        | 8000000                   | 8799999                 |
| 12      | 588002        | 1        | 12          | 90      | 1907             | 0                | 0                | 9354209        | 8800000                   | 9599999                 |
| 13      | 993237        | 1        | 12          | 50      | 1403             | 0                | 0                | 10349353       | 9600000                   | 10399999                |
| 14      | 254877        | 1        | 12          | 60      | 1057             | 0                | 0                | 10615633       | 10400000                  | 11199999                |
| 15      | 839052        | 1        | 12          | 100     | 1641             | 0                | 0                | 11455742       | 11200000                  | 11999999                |

Total number of pulses in waveform = 28

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## Type 5 Radar Waveform\_15

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 274870        | 3        | 5           | 85      | 1104             | 1416             | 1190             | 274870         | 0                         | 1499999                 |
| 2       | 1286878       | 3        | 5           | 55      | 1117             | 1045             | 1613             | 1565458        | 1500000                   | 2999999                 |
| 3       | 1948018       | 3        | 5           | 60      | 1746             | 1469             | 1979             | 3517251        | 3000000                   | 4499999                 |
| 4       | 1558933       | 3        | 5           | 55      | 1469             | 1777             | 1438             | 5081378        | 4500000                   | 5999999                 |
| 5       | 1322707       | 2        | 5           | 90      | 1028             | 1309             | 0                | 6408769        | 6000000                   | 7499999                 |
| 6       | 1186203       | 2        | 5           | 100     | 1088             | 1983             | 0                | 7597309        | 7500000                   | 8999999                 |
| 7       | 2851842       | 2        | 5           | 100     | 1523             | 1409             | 0                | 10452222       | 9000000                   | 10499999                |
| 8       | 523171        | 1        | 5           | 90      | 1658             | 0                | 0                | 10978325       | 10500000                  | 11999999                |

Total number of pulses in waveform = 19

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## 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       | 695178        | 1        | 6           | 90      | 1621             | 0                | 0                | 695178         | 0                         | 857142                  |
| 2       | 786529        | 2        | 6           | 65      | 1717             | 1063             | 0                | 1483328        | 857143                    | 1714285                 |
| 3       | 417930        | 1        | 6           | 80      | 1501             | 0                | 0                | 1904038        | 1714286                   | 2571428                 |
| 4       | 763046        | 2        | 6           | 75      | 1618             | 1701             | 0                | 2668585        | 2571429                   | 3428571                 |
| 5       | 932241        | 1        | 6           | 90      | 1050             | 0                | 0                | 3604145        | 3428572                   | 4285714                 |
| 6       | 1207183       | 2        | 6           | 85      | 1547             | 1484             | 0                | 4812378        | 4285715                   | 5142857                 |
| 7       | 1156381       | 2        | 6           | 60      | 1778             | 1058             | 0                | 5971790        | 5142858                   | 6000000                 |
| 8       | 449169        | 2        | 6           | 80      | 1606             | 1373             | 0                | 6423795        | 6000001                   | 6857143                 |
| 9       | 475806        | 1        | 6           | 80      | 1260             | 0                | 0                | 6902580        | 6857144                   | 7714286                 |
| 10      | 1302484       | 2        | 6           | 100     | 1523             | 1620             | 0                | 8206324        | 7714287                   | 8571429                 |
| 11      | 1178189       | 3        | 6           | 70      | 1192             | 1075             | 1197             | 9387656        | 8571430                   | 9428572                 |
| 12      | 61282         | 3        | 6           | 70      | 1660             | 1062             | 1382             | 9452402        | 9428573                   | 10285715                |
| 13      | 1221954       | 3        | 6           | 85      | 1859             | 1461             | 1764             | 10678460       | 10285716                  | 11142858                |
| 14      | 1089919       | 3        | 6           | 80      | 1072             | 1871             | 1197             | 11773463       | 11142859                  | 12000001                |

Total number of pulses in waveform = 28

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## Type 5 Radar Waveform\_17

| Num of Bursts = 17<br>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                                                 | 436244        | 3        | 18          | 100     | 1089            | 1496            | 1727            | 436244         | 0                        | 705881                 |
| 2                                                 | 714259        | 2        | 18          | 85      | 1819            | 1718            | 0               | 1154815        | 705882                   | 1411763                |
| 3                                                 | 387357        | 3        | 18          | 50      | 1564            | 1167            | 1114            | 1545709        | 1411764                  | 2117645                |
| 4                                                 | 780099        | 2        | 18          | 50      | 1962            | 1966            | 0               | 2329653        | 2117646                  | 2823527                |
| 5                                                 | 622557        | 1        | 18          | 70      | 1154            | 0               | 0               | 2956138        | 2823528                  | 3529409                |
| 6                                                 | 1004862       | 2        | 18          | 75      | 1442            | 1537            | 0               | 3962154        | 3529410                  | 4235291                |
| 7                                                 | 451765        | 3        | 18          | 80      | 1984            | 1163            | 1858            | 4416898        | 4235292                  | 4941173                |
| 8                                                 | 788392        | 1        | 18          | 50      | 1157            | 0               | 0               | 5210295        | 4941174                  | 5647055                |
| 9                                                 | 1108276       | 2        | 18          | 75      | 1234            | 1396            | 0               | 6319728        | 5647056                  | 6352937                |
| 10                                                | 674788        | 1        | 18          | 95      | 1989            | 0               | 0               | 6997146        | 6352938                  | 7058819                |
| 11                                                | 98895         | 3        | 18          | 70      | 1806            | 1812            | 1139            | 7098030        | 7058820                  | 7764701                |
| 12                                                | 908869        | 3        | 18          | 100     | 1407            | 1260            | 1844            | 8011656        | 7764702                  | 8470583                |
| 13                                                | 811560        | 3        | 18          | 90      | 1379            | 1639            | 1885            | 8827727        | 8470584                  | 9176465                |
| 14                                                | 919578        | 1        | 18          | 60      | 1923            | 0               | 0               | 9752208        | 9176466                  | 9882347                |
| 15                                                | 496220        | 1        | 18          | 85      | 1656            | 0               | 0               | 10250351       | 9882348                  | 10588229               |
| 16                                                | 396918        | 3        | 18          | 55      | 1109            | 1977            | 1731            | 10648925       | 10588230                 | 11294111               |
| 17                                                | 1011664       | 1        | 18          | 95      | 1174            | 0               | 0               | 11665406       | 11294112                 | 11999993               |
| Total number of pulses in waveform = 35<br>*****  |               |          |             |         |                 |                 |                 |                |                          |                        |

## Type 5 Radar Waveform\_18

| Num of Bursts = 12<br>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                                                  | 918209        | 1        | 9           | 70      | 1937            | 0               | 0               | 918209         | 0                        | 999999                 |
| 2                                                  | 81982         | 3        | 9           | 65      | 1190            | 1690            | 1465            | 1002128        | 1000000                  | 1999999                |
| 3                                                  | 1433391       | 3        | 9           | 100     | 1674            | 1650            | 1421            | 2439864        | 2000000                  | 2999999                |
| 4                                                  | 1342186       | 1        | 9           | 75      | 1270            | 0               | 0               | 3786795        | 3000000                  | 3999999                |
| 5                                                  | 712836        | 2        | 9           | 50      | 1596            | 1044            | 0               | 4500901        | 4000000                  | 4999999                |
| 6                                                  | 1118347       | 1        | 9           | 50      | 1198            | 0               | 0               | 5621888        | 5000000                  | 5999999                |
| 7                                                  | 967549        | 3        | 9           | 50      | 1017            | 1960            | 1775            | 6590635        | 6000000                  | 6999999                |
| 8                                                  | 1070998       | 3        | 9           | 50      | 1083            | 1723            | 1170            | 7666385        | 7000000                  | 7999999                |
| 9                                                  | 794890        | 3        | 9           | 60      | 1832            | 1416            | 1091            | 8465251        | 8000000                  | 8999999                |
| 10                                                 | 1226457       | 1        | 9           | 55      | 1830            | 0               | 0               | 9696047        | 9000000                  | 9999999                |
| 11                                                 | 318212        | 2        | 9           | 75      | 1441            | 1972            | 0               | 10016089       | 10000000                 | 10999999               |
| 12                                                 | 1806075       | 2        | 9           | 85      | 1869            | 1174            | 0               | 11825577       | 11000000                 | 11999999               |
| Total number of pulses in waveform = 25<br>*****   |               |          |             |         |                 |                 |                 |                |                          |                        |

## Type 5 Radar Waveform\_19

| Num of Bursts = 11<br>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                                                  | 847553        | 2        | 17          | 70      | 1766            | 1805            | 0               | 847553         | 0                        | 1090908                |
| 2                                                  | 1322988       | 2        | 17          | 70      | 1667            | 1647            | 0               | 2174112        | 1090909                  | 2181817                |
| 3                                                  | 530632        | 2        | 17          | 90      | 1381            | 1556            | 0               | 2708058        | 2181818                  | 3272726                |
| 4                                                  | 659753        | 1        | 17          | 65      | 1524            | 0               | 0               | 3370748        | 3272727                  | 4363635                |
| 5                                                  | 1111990       | 2        | 17          | 70      | 1494            | 1626            | 0               | 4484262        | 4363636                  | 5454544                |
| 6                                                  | 1613088       | 3        | 17          | 70      | 1369            | 1052            | 1552            | 6100470        | 5454545                  | 6545453                |
| 7                                                  | 660877        | 1        | 17          | 55      | 1569            | 0               | 0               | 6765320        | 6545454                  | 7636362                |
| 8                                                  | 1660555       | 2        | 17          | 55      | 1579            | 1168            | 0               | 8427444        | 7636363                  | 8727271                |
| 9                                                  | 1382376       | 1        | 17          | 50      | 1715            | 0               | 0               | 9812567        | 8727272                  | 9818180                |
| 10                                                 | 510373        | 2        | 17          | 50      | 1022            | 1181            | 0               | 10324655       | 9818181                  | 10909089               |
| 11                                                 | 1366471       | 1        | 17          | 70      | 1990            | 0               | 0               | 11693329       | 10909090                 | 11999998               |
| Total number of pulses in waveform = 19<br>*****   |               |          |             |         |                 |                 |                 |                |                          |                        |

**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       | 429672        | 2        | 10          | 55      | 1513            | 1226            | 0               | 429672         | 0                        | 1499999                |
| 2       | 2332057       | 2        | 10          | 95      | 1840            | 1705            | 0               | 2764468        | 1500000                  | 2999999                |
| 3       | 742637        | 2        | 10          | 75      | 1850            | 1502            | 0               | 3510650        | 3000000                  | 4499999                |
| 4       | 2108690       | 2        | 10          | 65      | 1000            | 1271            | 0               | 5622692        | 4500000                  | 5999999                |
| 5       | 1175462       | 3        | 10          | 85      | 1401            | 1768            | 1541            | 6800425        | 6000000                  | 7499999                |
| 6       | 1222049       | 3        | 10          | 85      | 1879            | 1113            | 1981            | 8027184        | 7500000                  | 8999999                |
| 7       | 2026031       | 1        | 10          | 65      | 1103            | 0               | 0               | 10058188       | 9000000                  | 10499999               |
| 8       | 1116699       | 2        | 10          | 55      | 1930            | 1417            | 0               | 11175990       | 10500000                 | 11999999               |

Total number of pulses in waveform = 17

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**Type 5 Radar Waveform\_21**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 338921        | 2        | 10          | 90      | 1056            | 1369            | 0               | 338921         | 0                        | 999999                 |
| 2       | 1323418       | 2        | 10          | 80      | 1038            | 1322            | 0               | 1664764        | 1000000                  | 1999999                |
| 3       | 592670        | 1        | 10          | 60      | 1529            | 0               | 0               | 2259794        | 2000000                  | 2999999                |
| 4       | 1503601       | 2        | 10          | 95      | 1834            | 1415            | 0               | 3764924        | 3000000                  | 3999999                |
| 5       | 985508        | 2        | 10          | 50      | 1101            | 1911            | 0               | 4753681        | 4000000                  | 4999999                |
| 6       | 716087        | 3        | 10          | 55      | 1657            | 1317            | 1685            | 5472780        | 5000000                  | 5999999                |
| 7       | 658219        | 2        | 10          | 85      | 1966            | 1248            | 0               | 6135658        | 6000000                  | 6999999                |
| 8       | 1800035       | 3        | 10          | 75      | 1290            | 1632            | 1792            | 7938907        | 7000000                  | 7999999                |
| 9       | 558012        | 1        | 10          | 65      | 1677            | 0               | 0               | 8501633        | 8000000                  | 8999999                |
| 10      | 1409476       | 2        | 10          | 65      | 1747            | 1551            | 0               | 9912786        | 9000000                  | 9999999                |
| 11      | 444920        | 3        | 10          | 80      | 1169            | 1764            | 1712            | 10361004       | 10000000                 | 10999999               |
| 12      | 1202299       | 3        | 10          | 50      | 1626            | 1731            | 1862            | 11567948       | 11000000                 | 11999999               |

Total number of pulses in waveform = 26

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**Type 5 Radar Waveform\_22**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri(us) | Pulse 2 Pri(us) | Pulse 3 Pri(us) | Start Loc (us) | Start Burst Interval(us) | End Burst Interval(us) |
|---------|---------------|----------|-------------|---------|-----------------|-----------------|-----------------|----------------|--------------------------|------------------------|
| 1       | 416030        | 3        | 8           | 100     | 1403            | 1019            | 1575            | 416030         | 0                        | 1090908                |
| 2       | 960974        | 2        | 8           | 55      | 1531            | 1555            | 0               | 1381001        | 1090909                  | 2181817                |
| 3       | 1464878       | 1        | 8           | 90      | 1886            | 0               | 0               | 2848965        | 2181818                  | 3272726                |
| 4       | 787526        | 1        | 8           | 90      | 1922            | 0               | 0               | 3638377        | 3272727                  | 4363635                |
| 5       | 841826        | 2        | 8           | 100     | 1510            | 1280            | 0               | 4482125        | 4363636                  | 5454544                |
| 6       | 1736602       | 2        | 8           | 85      | 1484            | 1782            | 0               | 6221517        | 5454545                  | 6545453                |
| 7       | 577754        | 2        | 8           | 80      | 1716            | 1576            | 0               | 6802537        | 6545454                  | 7636362                |
| 8       | 951428        | 3        | 8           | 80      | 1978            | 1553            | 1392            | 7757257        | 7636363                  | 8727271                |
| 9       | 1718294       | 2        | 8           | 50      | 1039            | 1879            | 0               | 9480474        | 8727272                  | 9818180                |
| 10      | 623541        | 3        | 8           | 75      | 1623            | 1423            | 1051            | 10106933       | 9818181                  | 10909089               |
| 11      | 1364984       | 3        | 8           | 65      | 1693            | 1777            | 1864            | 11476014       | 10909090                 | 11999998               |

Total number of pulses in waveform = 24

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## Type 5 Radar Waveform\_23

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       | 659058        | 2        | 17          | 60      | 1147            | 1550            | 0               | 659058         | 0                        | 1499999                |
| 2       | 1678403       | 1        | 17          | 50      | 1735            | 0               | 0               | 2340158        | 1500000                  | 2999999                |
| 3       | 1366454       | 3        | 17          | 55      | 1890            | 1773            | 1731            | 3708347        | 3000000                  | 4499999                |
| 4       | 1503970       | 1        | 17          | 90      | 1203            | 0               | 0               | 5217711        | 4500000                  | 5999999                |
| 5       | 2132854       | 3        | 17          | 75      | 1040            | 1108            | 1115            | 7351768        | 6000000                  | 7499999                |
| 6       | 743330        | 3        | 17          | 80      | 1969            | 1560            | 1365            | 8098361        | 7500000                  | 8999999                |
| 7       | 1128005       | 2        | 17          | 55      | 1531            | 1178            | 0               | 9231260        | 9000000                  | 10499999               |
| 8       | 1807369       | 2        | 17          | 60      | 1300            | 1053            | 0               | 11041338       | 10500000                 | 11999999               |

Total number of pulses in waveform = 17

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## Type 5 Radar Waveform\_24

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       | 375126        | 1        | 5           | 100     | 1110            | 0               | 0               | 375126         | 0                        | 857142                 |
| 2       | 653619        | 2        | 5           | 65      | 1348            | 1581            | 0               | 1029855        | 857143                   | 1714285                |
| 3       | 1144533       | 1        | 5           | 85      | 1051            | 0               | 0               | 2177317        | 1714286                  | 2571428                |
| 4       | 538700        | 3        | 5           | 90      | 1235            | 1396            | 1639            | 2717068        | 2571429                  | 3428571                |
| 5       | 1507212       | 2        | 5           | 65      | 1755            | 1118            | 0               | 4228550        | 3428572                  | 4285714                |
| 6       | 569218        | 3        | 5           | 75      | 1140            | 1627            | 1293            | 4800641        | 4285715                  | 5142857                |
| 7       | 604564        | 3        | 5           | 95      | 1603            | 1452            | 1240            | 5409265        | 5142858                  | 6000000                |
| 8       | 1220059       | 2        | 5           | 80      | 1453            | 1979            | 0               | 6633619        | 6000001                  | 6857143                |
| 9       | 654331        | 2        | 5           | 95      | 1281            | 1421            | 0               | 7291382        | 6857144                  | 7714286                |
| 10      | 790192        | 2        | 5           | 100     | 1941            | 1925            | 0               | 8084276        | 7714287                  | 8571429                |
| 11      | 503098        | 3        | 5           | 95      | 1199            | 1858            | 1377            | 8591240        | 8571430                  | 9428572                |
| 12      | 1235478       | 2        | 5           | 100     | 1914            | 1782            | 0               | 9831152        | 9428573                  | 10285715               |
| 13      | 597630        | 3        | 5           | 85      | 1841            | 1985            | 1276            | 10432478       | 10285716                 | 11142858               |
| 14      | 1225177       | 2        | 5           | 55      | 1530            | 1364            | 0               | 11662757       | 11142859                 | 12000001               |

Total number of pulses in waveform = 31

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## Type 5 Radar Waveform\_25

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       | 230476        | 1        | 18          | 90      | 1440            | 0               | 0               | 230476         | 0                        | 631578                 |
| 2       | 567919        | 2        | 18          | 65      | 1887            | 1813            | 0               | 799835         | 631579                   | 1263157                |
| 3       | 649063        | 2        | 18          | 75      | 1639            | 1743            | 0               | 1452598        | 1263158                  | 1894736                |
| 4       | 970248        | 3        | 18          | 55      | 1800            | 1616            | 1989            | 2426228        | 1894737                  | 2526315                |
| 5       | 412022        | 1        | 18          | 95      | 1870            | 0               | 0               | 2843655        | 2526316                  | 3157894                |
| 6       | 490498        | 2        | 18          | 100     | 1508            | 1629            | 0               | 3336023        | 3157895                  | 3789473                |
| 7       | 576118        | 3        | 18          | 80      | 1710            | 1665            | 1626            | 3915278        | 3789474                  | 4421052                |
| 8       | 594747        | 1        | 18          | 85      | 1416            | 0               | 0               | 4515026        | 4421053                  | 5052631                |
| 9       | 547887        | 1        | 18          | 55      | 1606            | 0               | 0               | 5064329        | 5052632                  | 5684210                |
| 10      | 700941        | 1        | 18          | 90      | 1953            | 0               | 0               | 5766876        | 5684211                  | 6315789                |
| 11      | 607115        | 2        | 18          | 75      | 1878            | 1231            | 0               | 6375944        | 6315790                  | 6947368                |
| 12      | 695008        | 1        | 18          | 95      | 1159            | 0               | 0               | 7074061        | 6947369                  | 7578947                |
| 13      | 637485        | 1        | 18          | 90      | 1152            | 0               | 0               | 7712705        | 7578948                  | 8210526                |
| 14      | 856664        | 1        | 18          | 60      | 1964            | 0               | 0               | 8570521        | 8210527                  | 8842105                |
| 15      | 363455        | 1        | 18          | 50      | 1393            | 0               | 0               | 8935940        | 8842106                  | 9473684                |
| 16      | 1035224       | 2        | 18          | 65      | 1386            | 1957            | 0               | 9972557        | 9473685                  | 10105263               |
| 17      | 502568        | 2        | 18          | 50      | 1884            | 1472            | 0               | 10478468       | 10105264                 | 10736842               |
| 18      | 853100        | 1        | 18          | 80      | 1032            | 0               | 0               | 11334924       | 10736843                 | 11368421               |
| 19      | 281112        | 3        | 18          | 85      | 1305            | 1052            | 1877            | 11617068       | 11368422                 | 12000000               |

Total number of pulses in waveform = 31

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## Type 5 Radar Waveform\_26

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 52559         | 2        | 6           | 65      | 1835             | 1509             | 0                | 52559          | 0                         | 857142                  |
| 2       | 1284462       | 1        | 6           | 85      | 1475             | 0                | 0                | 1340365        | 857143                    | 1714285                 |
| 3       | 946721        | 2        | 6           | 55      | 1447             | 1583             | 0                | 2288561        | 1714286                   | 2571428                 |
| 4       | 580510        | 1        | 6           | 75      | 1569             | 0                | 0                | 2872101        | 2571429                   | 3428571                 |
| 5       | 1274153       | 3        | 6           | 90      | 1146             | 1409             | 1236             | 4147823        | 3428572                   | 4285714                 |
| 6       | 230035        | 3        | 6           | 95      | 1198             | 1475             | 1186             | 4381649        | 4285715                   | 5142857                 |
| 7       | 1369847       | 1        | 6           | 95      | 1042             | 0                | 0                | 5755355        | 5142858                   | 6000000                 |
| 8       | 583261        | 1        | 6           | 60      | 1588             | 0                | 0                | 6339658        | 6000001                   | 6857143                 |
| 9       | 1306783       | 3        | 6           | 60      | 1218             | 1656             | 1601             | 7648029        | 6857144                   | 7714286                 |
| 10      | 267574        | 2        | 6           | 50      | 1118             | 1669             | 0                | 7920078        | 7714287                   | 8571429                 |
| 11      | 1486629       | 2        | 6           | 50      | 1429             | 1225             | 0                | 9409494        | 8571430                   | 9428572                 |
| 12      | 492006        | 2        | 6           | 65      | 1171             | 1828             | 0                | 9904154        | 9428573                   | 10285715                |
| 13      | 1006983       | 3        | 6           | 90      | 1361             | 1546             | 1413             | 10914136       | 10285716                  | 11142858                |
| 14      | 893511        | 2        | 6           | 50      | 1631             | 1508             | 0                | 11811967       | 11142859                  | 12000001                |

Total number of pulses in waveform = 28

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## 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       | 489408        | 2        | 19          | 60      | 1965             | 1831             | 0                | 489408         | 0                         | 631578                  |
| 2       | 458600        | 2        | 19          | 65      | 1106             | 1476             | 0                | 951804         | 631579                    | 1263157                 |
| 3       | 912049        | 3        | 19          | 50      | 1222             | 1546             | 1918             | 1866435        | 1263158                   | 1894736                 |
| 4       | 93331         | 3        | 19          | 75      | 1307             | 1790             | 1245             | 1964452        | 1894737                   | 2526315                 |
| 5       | 987752        | 1        | 19          | 65      | 1589             | 0                | 0                | 2566546        | 2526316                   | 3157894                 |
| 6       | 297195        | 1        | 19          | 55      | 1718             | 0                | 0                | 3255330        | 3157895                   | 3789473                 |
| 7       | 1087885       | 1        | 19          | 80      | 1591             | 0                | 0                | 4344933        | 3789474                   | 4421052                 |
| 8       | 213842        | 1        | 19          | 95      | 1870             | 0                | 0                | 4560366        | 4421053                   | 5052631                 |
| 9       | 985100        | 3        | 19          | 55      | 1022             | 1369             | 1399             | 5547336        | 5052632                   | 5684210                 |
| 10      | 558805        | 1        | 19          | 60      | 1331             | 0                | 0                | 6109931        | 5684211                   | 6315789                 |
| 11      | 721001        | 3        | 19          | 75      | 1714             | 1497             | 1159             | 6832263        | 6315790                   | 6947368                 |
| 12      | 469324        | 3        | 19          | 50      | 1454             | 1991             | 1596             | 7305957        | 6947369                   | 7578947                 |
| 13      | 320897        | 3        | 19          | 70      | 1401             | 1590             | 1790             | 7631895        | 7578948                   | 8210526                 |
| 14      | 742958        | 3        | 19          | 50      | 1192             | 1016             | 1671             | 8379634        | 8210527                   | 8842105                 |
| 15      | 1001509       | 3        | 19          | 70      | 1630             | 1769             | 1036             | 9385022        | 8842106                   | 9473684                 |
| 16      | 337461        | 2        | 19          | 95      | 1618             | 1570             | 0                | 9726918        | 9473685                   | 10105263                |
| 17      | 481008        | 1        | 19          | 80      | 1145             | 0                | 0                | 10211114       | 10105264                  | 10736842                |
| 18      | 1045824       | 2        | 19          | 80      | 1744             | 1236             | 0                | 11258083       | 10736843                  | 11368421                |
| 19      | 478232        | 1        | 19          | 70      | 1346             | 0                | 0                | 11739295       | 11368422                  | 12000000                |

Total number of pulses in waveform = 39

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## Type 5 Radar Waveform\_28

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       | 75379         | 3        | 14          | 75      | 1588             | 1395             | 1591             | 75379          | 0                         | 799999                  |
| 2       | 1171387       | 2        | 14          | 50      | 1064             | 1653             | 0                | 1251340        | 800000                    | 1599999                 |
| 3       | 444792        | 2        | 14          | 60      | 1369             | 1583             | 0                | 1698849        | 1600000                   | 2399999                 |
| 4       | 1474118       | 1        | 14          | 65      | 1754             | 0                | 0                | 3175919        | 2400000                   | 3199999                 |
| 5       | 630597        | 1        | 14          | 70      | 1472             | 0                | 0                | 3808270        | 3200000                   | 3999999                 |
| 6       | 660467        | 3        | 14          | 50      | 1892             | 1258             | 1370             | 4470209        | 4000000                   | 4799999                 |
| 7       | 1059997       | 3        | 14          | 65      | 1597             | 1529             | 1960             | 5534726        | 4800000                   | 5599999                 |
| 8       | 389365        | 2        | 14          | 70      | 1636             | 1030             | 0                | 5929177        | 5600000                   | 6399999                 |
| 9       | 622105        | 1        | 14          | 75      | 1891             | 0                | 0                | 6553948        | 6400000                   | 7199999                 |
| 10      | 1265390       | 1        | 14          | 75      | 1629             | 0                | 0                | 7821229        | 7200000                   | 7999999                 |
| 11      | 556454        | 1        | 14          | 70      | 1816             | 0                | 0                | 8379312        | 8000000                   | 8799999                 |
| 12      | 983911        | 1        | 14          | 100     | 1772             | 0                | 0                | 9365039        | 8800000                   | 9599999                 |
| 13      | 312571        | 1        | 14          | 55      | 1061             | 0                | 0                | 9679382        | 9600000                   | 10399999                |
| 14      | 1471299       | 1        | 14          | 80      | 1370             | 0                | 0                | 11151742       | 10400000                  | 11199999                |
| 15      | 142256        | 3        | 14          | 55      | 1909             | 1415             | 1900             | 11295368       | 11200000                  | 11999999                |

Total number of pulses in waveform = 26

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**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       | 536338        | 2        | 9           | 85      | 1379             | 1551             | 0                | 536338         | 0                         | 999999                  |
| 2       | 1098827       | 1        | 9           | 90      | 1256             | 0                | 0                | 1638095        | 1000000                   | 1999999                 |
| 3       | 774499        | 2        | 9           | 60      | 1375             | 1922             | 0                | 2413850        | 2000000                   | 2999999                 |
| 4       | 1310452       | 1        | 9           | 90      | 1719             | 0                | 0                | 3727599        | 3000000                   | 3999999                 |
| 5       | 526238        | 2        | 9           | 60      | 1319             | 1250             | 0                | 4255556        | 4000000                   | 4999999                 |
| 6       | 1358998       | 1        | 9           | 80      | 1348             | 0                | 0                | 5617123        | 5000000                   | 5999999                 |
| 7       | 888697        | 1        | 9           | 65      | 1129             | 0                | 0                | 6507168        | 6000000                   | 6999999                 |
| 8       | 789474        | 3        | 9           | 75      | 1257             | 1301             | 1510             | 7297771        | 7000000                   | 7999999                 |
| 9       | 1528547       | 2        | 9           | 95      | 1135             | 1482             | 0                | 8830386        | 8000000                   | 8999999                 |
| 10      | 784145        | 3        | 9           | 65      | 1454             | 1388             | 1398             | 9617148        | 9000000                   | 9999999                 |
| 11      | 389981        | 1        | 9           | 75      | 1649             | 0                | 0                | 10011369       | 10000000                  | 10999999                |
| 12      | 1019338       | 3        | 9           | 95      | 1211             | 1287             | 1940             | 11032356       | 11000000                  | 11999999                |

Total number of pulses in waveform = 22

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**Type 5 Radar Waveform\_30**

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

| Burst # | Off Time (us) | # Pulses | Chirp (MHz) | PW (us) | Pulse 1 Pri (us) | Pulse 2 Pri (us) | Pulse 3 Pri (us) | Start Loc (us) | Start Burst Interval (us) | End Burst Interval (us) |
|---------|---------------|----------|-------------|---------|------------------|------------------|------------------|----------------|---------------------------|-------------------------|
| 1       | 641880        | 3        | 12          | 65      | 1075             | 1674             | 1658             | 641880         | 0                         | 799999                  |
| 2       | 527888        | 3        | 12          | 80      | 1869             | 1958             | 1132             | 1174175        | 800000                    | 1599999                 |
| 3       | 782828        | 1        | 12          | 80      | 1365             | 0                | 0                | 1961962        | 1600000                   | 2399999                 |
| 4       | 788325        | 1        | 12          | 65      | 1979             | 0                | 0                | 2751652        | 2400000                   | 3199999                 |
| 5       | 1069263       | 3        | 12          | 95      | 1074             | 1286             | 1493             | 3822894        | 3200000                   | 3999999                 |
| 6       | 835398        | 3        | 12          | 70      | 1405             | 1212             | 1272             | 4662145        | 4000000                   | 4799999                 |
| 7       | 591686        | 2        | 12          | 70      | 1213             | 1210             | 0                | 5257720        | 4800000                   | 5599999                 |
| 8       | 680672        | 2        | 12          | 80      | 1074             | 1006             | 0                | 5940815        | 5600000                   | 6399999                 |
| 9       | 880234        | 3        | 12          | 70      | 1733             | 1057             | 1566             | 6823129        | 6400000                   | 7199999                 |
| 10      | 754488        | 2        | 12          | 65      | 1748             | 1519             | 0                | 7581973        | 7200000                   | 7999999                 |
| 11      | 1189974       | 2        | 12          | 90      | 1091             | 1733             | 0                | 8775214        | 8000000                   | 8799999                 |
| 12      | 360113        | 3        | 12          | 95      | 1243             | 1554             | 1558             | 9138151        | 8800000                   | 9599999                 |
| 13      | 1018969       | 1        | 12          | 65      | 1209             | 0                | 0                | 10161475       | 9600000                   | 10399999                |
| 14      | 745820        | 1        | 12          | 75      | 1354             | 0                | 0                | 10908504       | 10400000                  | 11199999                |
| 15      | 604401        | 3        | 12          | 80      | 1554             | 1086             | 1253             | 11514259       | 11200000                  | 11999999                |

Total number of pulses in waveform = 33

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### Radar Type 6 - Radar Statistical Performance

| Trail #                  | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection | Trail # | Test Freq.<br>(MHz) | 1=Detection<br>0=No Detection |
|--------------------------|---------------------|-------------------------------|---------|---------------------|-------------------------------|
| 1                        | 5252                | 1                             | 16      | 5297                | 1                             |
| 2                        | 5253                | 1                             | 17      | 5300                | 1                             |
| 3                        | 5255                | 1                             | 18      | 5303                | 1                             |
| 4                        | 5261                | 1                             | 19      | 5306                | 1                             |
| 5                        | 5264                | 1                             | 20      | 5309                | 1                             |
| 6                        | 5267                | 1                             | 21      | 5312                | 1                             |
| 7                        | 5270                | 1                             | 22      | 5315                | 1                             |
| 8                        | 5273                | 1                             | 23      | 5318                | 1                             |
| 9                        | 5276                | 1                             | 24      | 5321                | 1                             |
| 10                       | 5279                | 1                             | 25      | 5323                | 1                             |
| 11                       | 5282                | 1                             | 26      | 5325                | 1                             |
| 12                       | 5285                | 1                             | 27      | 5326                | 1                             |
| 13                       | 5288                | 1                             | 28      | 5327                | 1                             |
| 14                       | 5290                | 1                             | 29      | 5328                | 1                             |
| 15                       | 5294                | 1                             | 30      | 5328                | 1                             |
| Detection Percentage (%) |                     |                               |         |                     | 100%                          |



| Radar waveform #1 |                 |                  | Radar waveform #2 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 9                 | 5272            | 27               | 13                | 5256            | 39               |
| 12                | 5278            | 36               | 30                | 5270            | 90               |
| 31                | 5257            | 93               | 41                | 5251            | 123              |
| 53                | 5263            | 159              | 56                | 5276            | 168              |
| 70                | 5281            | 210              | 88                | 5250            | 264              |
| 76                | 5252            | 228              | --                | --              | --               |
| 78                | 5264            | 234              | --                | --              | --               |
| 88                | 5270            | 264              | --                | --              | --               |

| Radar waveform #3 |                 |                  | Radar waveform #4 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 5                 | 5257            | 15               | 3                 | 5264            | 9                |
| 14                | 5253            | 42               | 5                 | 5277            | 15               |
| 20                | 5288            | 60               | 16                | 5262            | 48               |
| 22                | 5250            | 66               | 18                | 5252            | 54               |
| 29                | 5277            | 87               | 27                | 5275            | 81               |
| 33                | 5282            | 99               | 43                | 5260            | 129              |
| 48                | 5258            | 144              | 45                | 5273            | 135              |
| 69                | 5284            | 207              | 59                | 5259            | 177              |
| 74                | 5254            | 222              | 67                | 5257            | 201              |
| 78                | 5280            | 234              | 79                | 5271            | 237              |
| 84                | 5278            | 252              | 92                | 5282            | 276              |
| 91                | 5261            | 273              | --                | --              | --               |

| Radar waveform #5 |                 |                  | Radar waveform #6 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 6                 | 5266            | 18               | 37                | 5278            | 111              |
| 9                 | 5291            | 27               | 51                | 5295            | 153              |
| 14                | 5282            | 42               | 54                | 5267            | 162              |
| 16                | 5252            | 48               | 65                | 5262            | 195              |
| 20                | 5290            | 60               | 94                | 5265            | 282              |
| 25                | 5284            | 75               | 97                | 5275            | 291              |
| 44                | 5292            | 132              | --                | --              | --               |
| 46                | 5250            | 138              | --                | --              | --               |
| 51                | 5288            | 153              | --                | --              | --               |
| 60                | 5254            | 180              | --                | --              | --               |
| 62                | 5278            | 186              | --                | --              | --               |

| Radar waveform #7 |                 |                  | Radar waveform #8 |                 |                  |
|-------------------|-----------------|------------------|-------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number    | Frequency (MHz) | Pulse Start (ms) |
| 1                 | 5259            | 3                | 3                 | 5293            | 9                |
| 6                 | 5257            | 18               | 25                | 5286            | 75               |
| 21                | 5266            | 63               | 28                | 5269            | 84               |
| 27                | 5255            | 81               | 33                | 5265            | 99               |
| 34                | 5272            | 102              | 45                | 5298            | 135              |
| 43                | 5256            | 129              | 54                | 5266            | 162              |
| 50                | 5275            | 150              | 69                | 5283            | 207              |
| 62                | 5287            | 186              | 70                | 5295            | 210              |
| 81                | 5298            | 243              | 86                | 5250            | 258              |
| 86                | 5268            | 258              | 87                | 5292            | 261              |
| --                | --              | --               | 93                | 5294            | 279              |
| --                | --              | --               | 94                | 5270            | 282              |

| Radar waveform #9 |                 |                  | Radar waveform #10 |                 |                  |
|-------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number    | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 0                 | 5266            | 0                | 5                  | 5275            | 15               |
| 2                 | 5250            | 6                | 13                 | 5269            | 39               |
| 11                | 5264            | 33               | 36                 | 5280            | 108              |
| 21                | 5285            | 63               | 38                 | 5266            | 114              |
| 55                | 5267            | 165              | 41                 | 5278            | 123              |
| 61                | 5259            | 183              | 74                 | 5284            | 222              |
| 81                | 5282            | 243              | 78                 | 5256            | 234              |
| 85                | 5286            | 255              | 89                 | 5262            | 267              |
| --                | --              | --               | 91                 | 5291            | 273              |
| --                | --              | --               | 93                 | 5268            | 279              |
| --                | --              | --               | 99                 | 5281            | 297              |

| Radar waveform #11 |                 |                  | Radar waveform #12 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 3                  | 5291            | 9                | 12                 | 5287            | 36               |
| 8                  | 5250            | 24               | 23                 | 5281            | 69               |
| 37                 | 5260            | 111              | 24                 | 5262            | 72               |
| 39                 | 5297            | 117              | 43                 | 5296            | 129              |
| 57                 | 5262            | 171              | 44                 | 5261            | 132              |
| 64                 | 5270            | 192              | 45                 | 5253            | 135              |
| 65                 | 5258            | 195              | 63                 | 5286            | 189              |
| 73                 | 5306            | 219              | 67                 | 5272            | 201              |
| 77                 | 5259            | 231              | 79                 | 5278            | 237              |
| 83                 | 5309            | 249              | 81                 | 5254            | 243              |
| 91                 | 5286            | 273              | 89                 | 5310            | 267              |
| --                 | --              | --               | 95                 | 5280            | 285              |

| Radar waveform #13 |                 |                  | Radar waveform #14 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 5                  | 5314            | 15               | 7                  | 5298            | 21               |
| 8                  | 5258            | 24               | 10                 | 5274            | 30               |
| 11                 | 5267            | 33               | 19                 | 5269            | 57               |
| 22                 | 5285            | 66               | 20                 | 5277            | 60               |
| 28                 | 5287            | 84               | 39                 | 5297            | 117              |
| 31                 | 5295            | 93               | 46                 | 5279            | 138              |
| 37                 | 5286            | 111              | 49                 | 5317            | 147              |
| 38                 | 5266            | 114              | 54                 | 5294            | 162              |
| 41                 | 5307            | 123              | 55                 | 5295            | 165              |
| 52                 | 5259            | 156              | 58                 | 5288            | 174              |
| 58                 | 5301            | 174              | 65                 | 5275            | 195              |
| 60                 | 5271            | 180              | 66                 | 5273            | 198              |
| 67                 | 5264            | 201              | 68                 | 5283            | 204              |
| 79                 | 5304            | 237              | 74                 | 5286            | 222              |
| 84                 | 5299            | 252              | 75                 | 5261            | 225              |
| --                 | --              | --               | 83                 | 5280            | 249              |

| Radar waveform #15 |                 |                  | Radar waveform #16 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 11                 | 5274            | 33               | 0                  | 5266            | 0                |
| 17                 | 5306            | 51               | 3                  | 5279            | 9                |
| 27                 | 5260            | 81               | 8                  | 5278            | 24               |
| 28                 | 5266            | 84               | 16                 | 5289            | 48               |
| 31                 | 5310            | 93               | 20                 | 5283            | 60               |
| 33                 | 5298            | 99               | 29                 | 5316            | 87               |
| 42                 | 5318            | 126              | 34                 | 5292            | 102              |
| 75                 | 5305            | 225              | 39                 | 5265            | 117              |
| 81                 | 5302            | 243              | 40                 | 5291            | 120              |
| 82                 | 5270            | 246              | 56                 | 5280            | 168              |
| 91                 | 5262            | 273              | 64                 | 5264            | 192              |
| 93                 | 5314            | 279              | 67                 | 5312            | 201              |
| 94                 | 5316            | 282              | 68                 | 5320            | 204              |
| 99                 | 5261            | 297              | 75                 | 5281            | 225              |
| --                 | --              | --               | 97                 | 5318            | 291              |

| Radar waveform #17 |                 |                  | Radar waveform #18 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 13                 | 5271            | 39               | 23                 | 5274            | 69               |
| 33                 | 5314            | 99               | 35                 | 5271            | 105              |
| 35                 | 5308            | 105              | 42                 | 5302            | 126              |
| 38                 | 5285            | 114              | 50                 | 5290            | 150              |
| 42                 | 5282            | 126              | 69                 | 5310            | 207              |
| 76                 | 5264            | 228              | 73                 | 5273            | 219              |
| 85                 | 5310            | 255              | 77                 | 5298            | 231              |
| 86                 | 5312            | 258              | 82                 | 5280            | 246              |
| 91                 | 5266            | 273              | 99                 | 5288            | 297              |
| 92                 | 5286            | 276              | --                 | --              | --               |

| Radar waveform #19 |                 |                  | Radar waveform #20 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 20                 | 5292            | 60               | 1                  | 5279            | 3                |
| 25                 | 5286            | 75               | 2                  | 5309            | 6                |
| 39                 | 5309            | 117              | 8                  | 5306            | 24               |
| 53                 | 5311            | 159              | 26                 | 5300            | 78               |
| 64                 | 5329            | 192              | 30                 | 5320            | 90               |
| 71                 | 5308            | 213              | 39                 | 5314            | 117              |
| 81                 | 5324            | 243              | 44                 | 5283            | 132              |
| --                 | --              | --               | 54                 | 5281            | 162              |
| --                 | --              | --               | 55                 | 5317            | 165              |
| --                 | --              | --               | 57                 | 5325            | 171              |
| --                 | --              | --               | 61                 | 5308            | 183              |
| --                 | --              | --               | 62                 | 5270            | 186              |
| --                 | --              | --               | 76                 | 5292            | 228              |

| Radar waveform #21 |                 |                  | Radar waveform #22 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 3                  | 5325            | 9                | 9                  | 5328            | 27               |
| 8                  | 5314            | 24               | 14                 | 5321            | 42               |
| 11                 | 5279            | 33               | 24                 | 5297            | 72               |
| 15                 | 5308            | 45               | 27                 | 5318            | 81               |
| 18                 | 5285            | 54               | 28                 | 5283            | 84               |
| 32                 | 5288            | 96               | 29                 | 5336            | 87               |
| 36                 | 5306            | 108              | 35                 | 5302            | 105              |
| 45                 | 5333            | 135              | 43                 | 5317            | 129              |
| 49                 | 5334            | 147              | 60                 | 5315            | 180              |
| 56                 | 5332            | 168              | 61                 | 5337            | 183              |
| 74                 | 5317            | 222              | 66                 | 5293            | 198              |
| 87                 | 5300            | 261              | 70                 | 5309            | 210              |
| 88                 | 5335            | 264              | 72                 | 5308            | 216              |
| 91                 | 5321            | 273              | 77                 | 5312            | 231              |
| --                 | --              | --               | 84                 | 5307            | 252              |

| Radar waveform #23 |                 |                  | Radar waveform #24 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 0                  | 5335            | 0                | 3                  | 5280            | 9                |
| 14                 | 5325            | 42               | 8                  | 5285            | 24               |
| 16                 | 5319            | 48               | 24                 | 5337            | 72               |
| 19                 | 5326            | 57               | 26                 | 5306            | 78               |
| 20                 | 5288            | 60               | 28                 | 5303            | 84               |
| 21                 | 5286            | 63               | 38                 | 5290            | 114              |
| 29                 | 5316            | 87               | 53                 | 5288            | 159              |
| 44                 | 5339            | 132              | 58                 | 5302            | 174              |
| 54                 | 5305            | 162              | 62                 | 5317            | 186              |
| 55                 | 5307            | 165              | 63                 | 5313            | 189              |
| 58                 | 5334            | 174              | 64                 | 5314            | 192              |
| 72                 | 5301            | 216              | 73                 | 5334            | 219              |
| 87                 | 5308            | 261              | 77                 | 5328            | 231              |
| 88                 | 5300            | 264              | 79                 | 5282            | 237              |
| 89                 | 5287            | 267              | 89                 | 5301            | 267              |
| 98                 | 5290            | 294              | 96                 | 5333            | 288              |
| --                 | --              | --               | 97                 | 5321            | 291              |

| Radar waveform #25 |                 |                  | Radar waveform #26 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 18                 | 5335            | 54               | 3                  | 5321            | 9                |
| 33                 | 5321            | 99               | 21                 | 5325            | 63               |
| 38                 | 5296            | 114              | 35                 | 5337            | 105              |
| 49                 | 5323            | 147              | 37                 | 5322            | 111              |
| 51                 | 5298            | 153              | 51                 | 5341            | 153              |
| 59                 | 5338            | 177              | 54                 | 5335            | 162              |
| 67                 | 5317            | 201              | 65                 | 5342            | 195              |
| 76                 | 5305            | 228              | 91                 | 5314            | 273              |
| 78                 | 5301            | 234              | 94                 | 5333            | 282              |
| 84                 | 5316            | 252              | --                 | --              | --               |

| Radar waveform #27 |                 |                  | Radar waveform #28 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 1                  | 5327            | 3                | 2                  | 5302            | 6                |
| 5                  | 5344            | 15               | 15                 | 5310            | 45               |
| 6                  | 5297            | 18               | 17                 | 5301            | 51               |
| 9                  | 5342            | 27               | 40                 | 5314            | 120              |
| 10                 | 5337            | 30               | 45                 | 5320            | 135              |
| 29                 | 5312            | 87               | 58                 | 5293            | 174              |
| 33                 | 5306            | 99               | 78                 | 5348            | 234              |
| 34                 | 5310            | 102              | 83                 | 5312            | 249              |
| 49                 | 5330            | 147              | 96                 | 5297            | 288              |
| 58                 | 5292            | 174              | --                 | --              | --               |
| 68                 | 5334            | 204              | --                 | --              | --               |
| 74                 | 5305            | 222              | --                 | --              | --               |
| 80                 | 5296            | 240              | --                 | --              | --               |
| 81                 | 5298            | 243              | --                 | --              | --               |

| Radar waveform #29 |                 |                  | Radar waveform #30 |                 |                  |
|--------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Hopping Number     | Frequency (MHz) | Pulse Start (ms) | Hopping Number     | Frequency (MHz) | Pulse Start (ms) |
| 6                  | 5332            | 18               | 15                 | 5327            | 45               |
| 11                 | 5348            | 33               | 20                 | 5304            | 60               |
| 14                 | 5310            | 42               | 23                 | 5313            | 69               |
| 26                 | 5321            | 78               | 64                 | 5305            | 192              |
| 29                 | 5311            | 87               | 83                 | 5326            | 249              |
| 33                 | 5352            | 99               | 89                 | 5315            | 267              |
| 37                 | 5307            | 111              | --                 | --              | --               |
| 48                 | 5335            | 144              | --                 | --              | --               |
| 70                 | 5336            | 210              | --                 | --              | --               |
| 92                 | 5322            | 276              | --                 | --              | --               |
| 99                 | 5349            | 297              | --                 | --              | --               |



## 6. CONCLUSION

The data collected relate only the item(s) tested and show that the **G-140W-C, FCC ID: SFK-140W** is in compliance with Part 15E of the FCC Rules.

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The End

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