



# DFS MEASUREMENT REPORT

FCC PART 15 Subpart E & IC RSS-247 WLAN 802.11a/n/ac

**FCC ID:** 2ABLK-804MESH

**IC:** 4009A-804MESH

**APPLICANT:** Calix Inc.

**Application Type:** Certification

**Product:** 804Mesh Dual Wi-Fi

**Model No.:** 804MESH

**Brand Name:** Calix

**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

**IC Rule(s):** RSS-247 Issue 2

**Type of Device:**  Master Device

Client Device (No radar detection)

Client Device with radar detection

**Test Date:** December 08, 2017 ~ January 03, 2018

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
1709RSU00407	Rev. 01	Initial Report	12-14-2017	Invalid
1709RSU00407	Rev. 02	Add the test result of client mode	01-03-2018	Valid

## CONTENTS

Description	Page
<b>§2.1033 General Information .....</b>	<b>5</b>
<b>1. INTRODUCTION .....</b>	<b>6</b>
1.1. Scope .....	6
1.2. MRT Test Location .....	6
<b>2. PRODUCT INFORMATION .....</b>	<b>7</b>
2.1. Equipment Description.....	7
2.2. Description of Available Antennas.....	8
2.3. Description of Antenna RF Port .....	9
2.4. DFS Band Carrier Frequencies Operation .....	10
2.5. Test Mode .....	10
<b>3. DFS DETECTION THRESHOLDS AND RADAR TEST WAVEFORMS.....</b>	<b>11</b>
3.1. Applicability .....	11
3.2. DFS Devices Requirements.....	12
3.3. DFS Detection Threshold Values .....	13
3.4. Parameters of DFS Test Signals .....	15
3.5. Conducted Test Setup .....	18
<b>4. TEST EQUIPMENT CALIBRATION DATE .....</b>	<b>19</b>
<b>5. TEST RESULT .....</b>	<b>20</b>
5.1. Summary .....	20
5.2. Radar Waveform Calibration.....	21
5.2.1. Calibration Setup .....	21
5.2.2. Calibration Procedure .....	21
5.2.3. Cablibration Result .....	22
5.2.4. Channel Loading Test Result .....	24
5.3. NII Detection Bandwidth Measurement.....	25
5.3.1. Test Limit .....	25
5.3.2. Test Procedure .....	25
5.3.3. Test Result.....	26
5.4. Initial Channel Availability Check Time Measurement .....	29
5.4.1. Test Limit .....	29
5.4.2. Test Procedure .....	29
5.4.3. Test Result.....	30
5.5. Radar Burst at the Beginning of the Channel Availability Check Time Measurement ..	31

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5.5.1. Test Limit .....	31
5.5.2. Test Procedure .....	31
5.5.3. Test Result.....	32
5.6. Radar Burst at the End of the Channel Availability Check Time Measurement .....	33
5.6.1. Test Limit .....	33
5.6.2. Test Procedure .....	33
5.6.3. Test Result.....	34
5.7. In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period Measurement .....	35
5.7.1. Test Limit .....	35
5.7.2. Test Procedure Used .....	35
5.7.3. Test Result.....	36
5.8. Statistical Performance Check Measurement.....	38
5.8.1. Test Limit .....	38
5.8.2. Test Procedure .....	38
5.8.3. Test Result.....	39
<b>6. CONCLUSION.....</b>	<b>115</b>

## §2.1033 General Information

<b>Applicant:</b>	Calix Inc.
<b>Applicant Address:</b>	1035 N. McDowell Blvd Petaluma, CA94954 U.S.A
<b>Manufacturer:</b>	Wuxi MitraStar Technology Co.Ltd
<b>Manufacturer Address:</b>	1-1# Minshan Road, Wuxi New Wu District, Jiangsu, P.R.C.
<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>FCC Registration No.:</b>	893164
<b>IC Registration No.:</b>	11384A-1
<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-4179, G-814, C-4664, T-2206) test laboratory with the site description on file at VCCI Council.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, EU and TELEC Rules.



## 1. INTRODUCTION

### 1.1. Scope

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

### 1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taihu Lake. These measurement tests were conducted at the MRT Technology (Suzhou) Co., Ltd. Facility located at D8 Building, 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:	804Mesh Dual Wi-Fi
Model No.:	804MESH
Brand Name:	Calix
Wi-Fi Specification:	802.11a/b/g/n/ac
Frequency Range	<b><u>2.4GHz:</u></b> For 802.11b/g/n-HT20: 2412 ~ 2462 MHz For 802.11n-HT40: 2422 ~ 2452 MHz <b><u>5GHz:</u></b> For 802.11a/n-HT20/ac-VHT20: 5180~5320MHz, 5500~5720MHz, 5745~5825MHz For 802.11n-HT40/ac-VHT40: 5190~5310MHz, 5510~5710MHz, 5755~5795MHz For 802.11ac-VHT80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5690MHz, 5775MHz
Type of Modulation	802.11b: DSSS, 802.11a/g/n/ac: OFDM
Modulation Type	CCK, DQPSK, DBPSK for DSSS 16QAM, 64QAM, 256QAM, QPSK, BPSK for OFDM
Power-on cycle	Requires 79.8 seconds to complete its power-on cycle
Uniform Spreading (For DFS Frequency Band)	For the 5250-5350MHz, 5470-5725 MHz bands, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a random algorithm.

## 2.2. Description of Available Antennas

Antenna Type	Frequency Band (GHz)	Tx Paths	Directional Gain (dBi)	
			Non Beam Forming Mode	CDD & Beam-Forming Mode
PCB Antenna	2.4	2	1.40	--
	5.2	4	--	8.90
	5.3	4	--	9.00
	5.5	4	--	8.70
	5.8	4	--	9.00

Note:

1. Transmit at 2.4GHz support two antennas, and support four antennas at 5GHz transmit.
2. The EUT working on Beam Forming mode at 802.11n/ac, and working on CDD mode at 802.11a.
3. Correlated signals include, but are not limited to, signals transmitted in any of the following modes:
  - Any transmit Beam Forming mode, whether fixed or adaptive (e.g., phased array modes, closed loop MIMO modes, Transmitter Adaptive Antenna modes, Maximum Ratio Transmission (MRT) modes, and Statistical Eigen Beam Forming (EBF) modes).
4. Unequal antenna gains, with equal transmit powers. For antenna gains given by  $G_1, G_2, \dots, G_N$  dBi
  - transmit signals are correlated, then
  - Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/N_{ANT}]$  dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

### 2.3. Description of Antenna RF Port

Antenna RF Port						
--	2.4GHz RF Port		5GHz RF Port			
Software Control Port	Ant 0	Ant 1	Ant 0	Ant 1	Ant 2	Ant 3

2.4GHz Ant 1  
2.4GHz Ant 0

5GHz Ant 3  
5GHz Ant 2  
5GHz Ant 1  
5GHz Ant 0

## 2.4. DFS Band Carrier Frequencies Operation

802.11 a/n-HT20/ac-VHT20 Center Working Frequency of Each Channel

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

802.11n-HT40/ ac-VHT40 Center Working Frequency of Each Channel

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

802.11ac-VHT80 Center Working Frequency of Each Channel

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

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

## 2.5. Test Mode

Test Mode	Mode 1: Master Mode - Communication with Notebook Mode 2: Client Mode – Communication with Access Point
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### 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.

**For Client Devices:**

- a) A Client Device will not transmit before having received appropriate control signals from a Master Device.
- b) A Client Device will stop all its transmissions whenever instructed by a Master Device to which it is associated and will meet the Channel Move Time and Channel Closing transmission time requirements. The Client Device will not resume any transmissions until it has again received control signals from a Master Device.
- c) If a Client Device is performing In-Service Monitoring and detects a Radar Waveform above the DFS Detection Threshold, it will inform the Master Device. This is equivalent to the Master Device detecting the Radar Waveform.
- d) Irrespective of Client Device or Master Device detection the Channel Move Time and Channel Closing Transmission Time requirements remain the same.
- e) The client test frequency must be monitored to ensure no transmission of any type has occurred for 30 minutes. Note: If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear.

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

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

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

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

**Table 3-3: DFS Response Requirements**

### 3.3. DFS Detection Threshold Values

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

Maximum Transmit Power	Value <b>(See Notes 1, 2, and 3)</b>
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm

**Note 1:** This is the level at the input of the receiver assuming a 0 dBi receive antenna.

**Note 2:** Throughout these test procedures an additional 1 dB has been added to the amplitude of the

test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

**Note3:** EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

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

### 3.4. Parameters of DFS Test Signals

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

#### Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 3-6	Roundup $\left\lceil \frac{1}{360} \cdot \frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right\rceil$	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 Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

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

**Long Pulse Radar Test Waveform**

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

**Table 3-7: Parameters for Long Pulse Radar Waveforms**

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

**Frequency Hopping Radar Test Waveform**

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

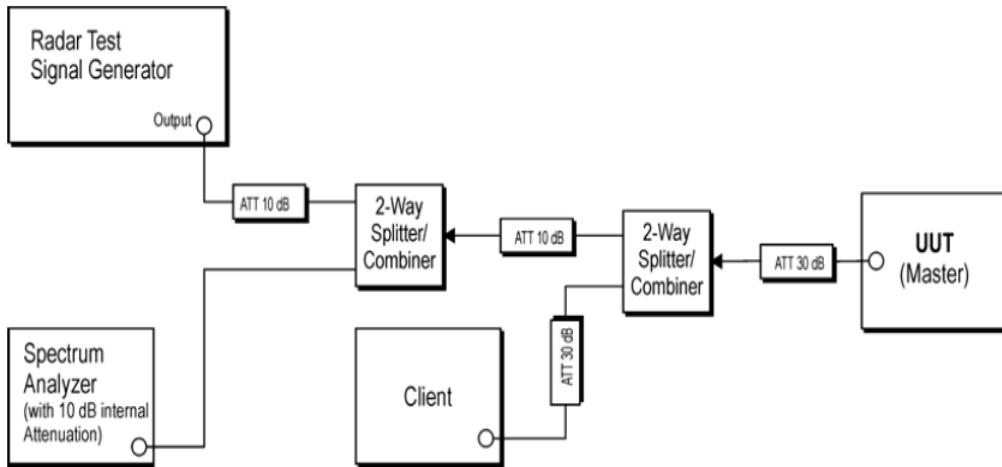
**Table 3-8: Parameters for Frequency Hopping Radar Waveforms**

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

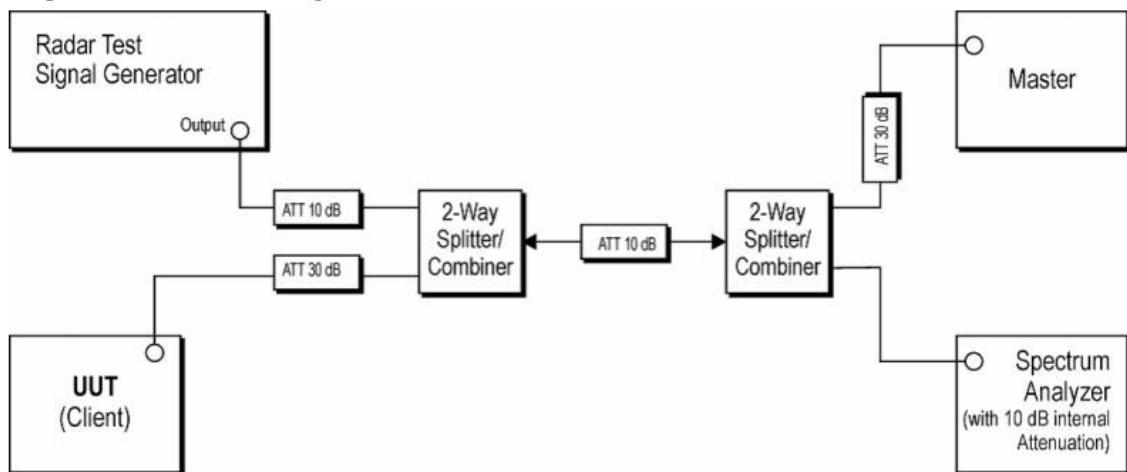
The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250 – 5724MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues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

### 3.5. Conducted Test Setup

The FCC KDB 905462 D02 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**



**Figure 3-2: Conducted Test Setup where UUT is a Client and Radar Test Waveforms are injected into the Masters**

#### 4. TEST EQUIPMENT CALIBRATION DATE

Dynamic Frequency Selection (DFS) – TR5

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2018/05/08
ESG Vector Signal Generator	Agilent	E4438C	MRTSUE06026	1 year	2018/12/08
Temperature/Humidity Meter	Yuhuaze	HTC-2	MRTSUE06180	1 year	2018/11/19
Combiner	WOKEN	0120N02208001D	MRTSUE06200	1 year	N/A
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06023	1 year	2018/11/06

Master & Client Information

Instrument	Manufacturer	Type No.
Wireless Network Adapter	Intel	7260HMW
804Mesh Dual Wi-Fi	Calix	804MESH

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

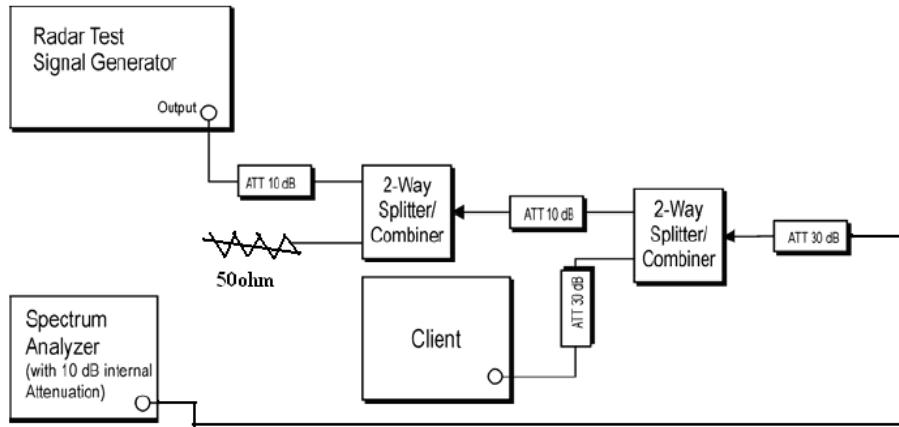
**Company Name:** Calix Inc.  
**FCC ID:** 2ABLK-804MESH  
**IC:** 4009A-804MESH

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.



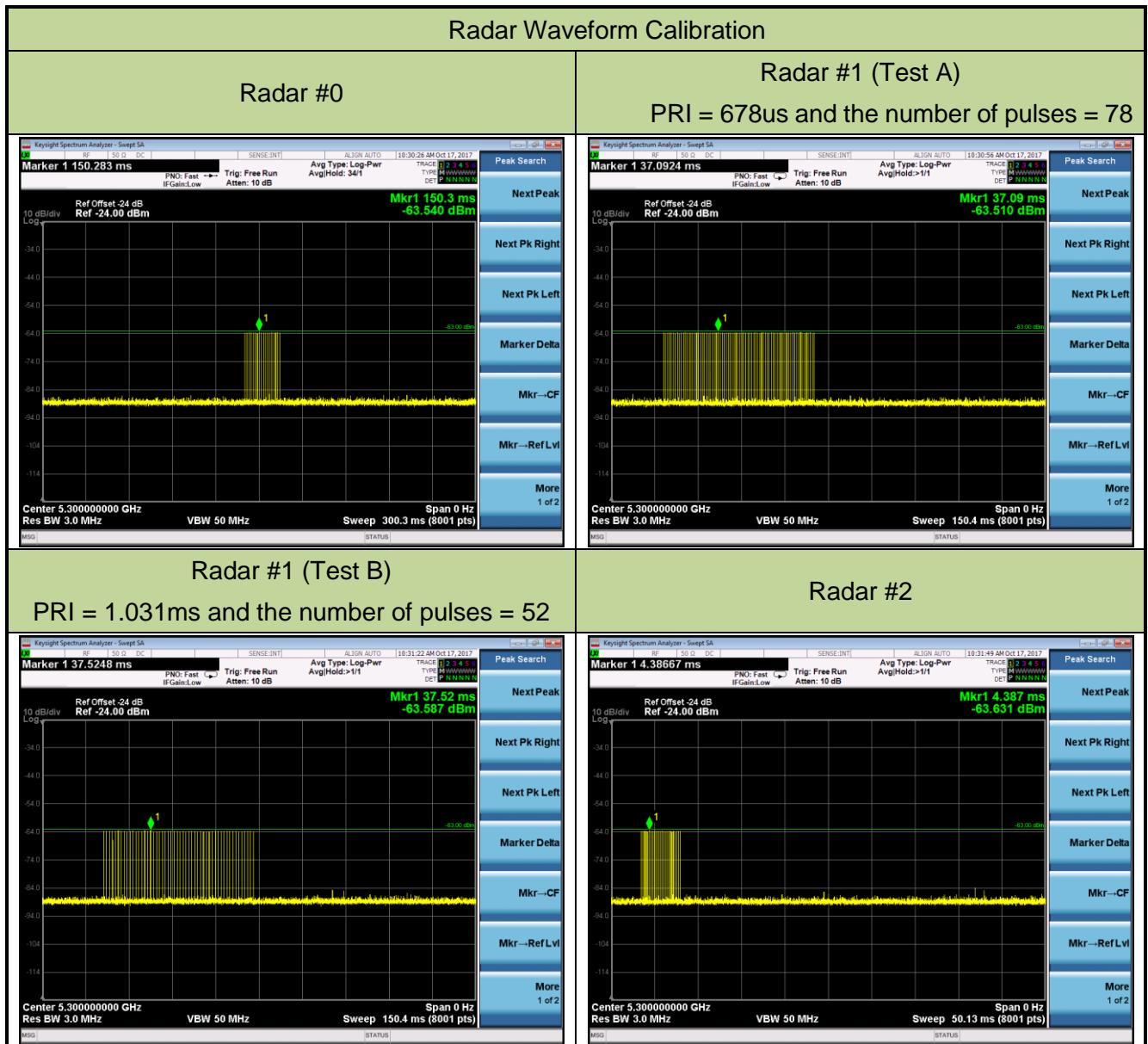
**Figure 3-2: Conducted Test Setup**

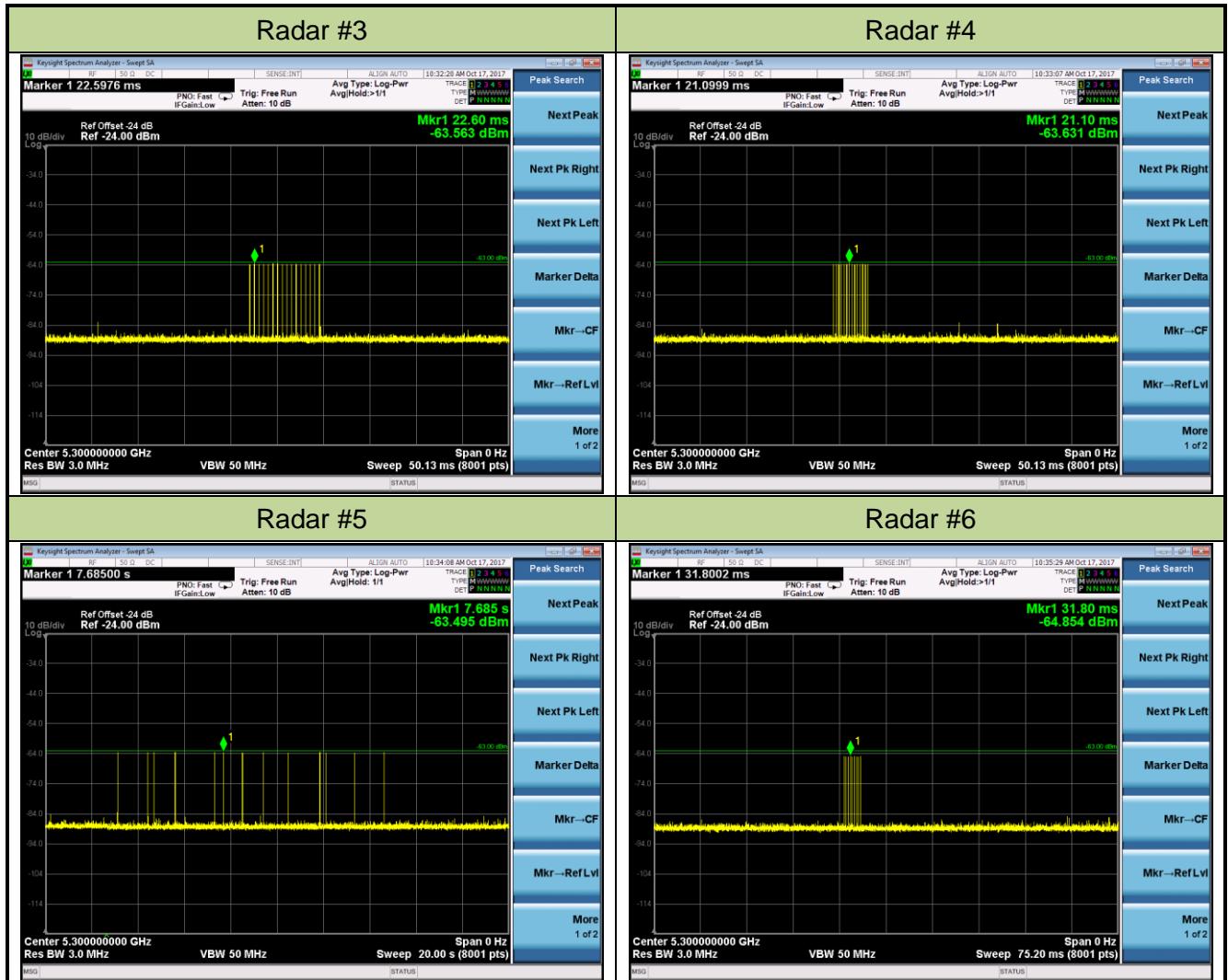
### 5.2.2. Calibration Procedure

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

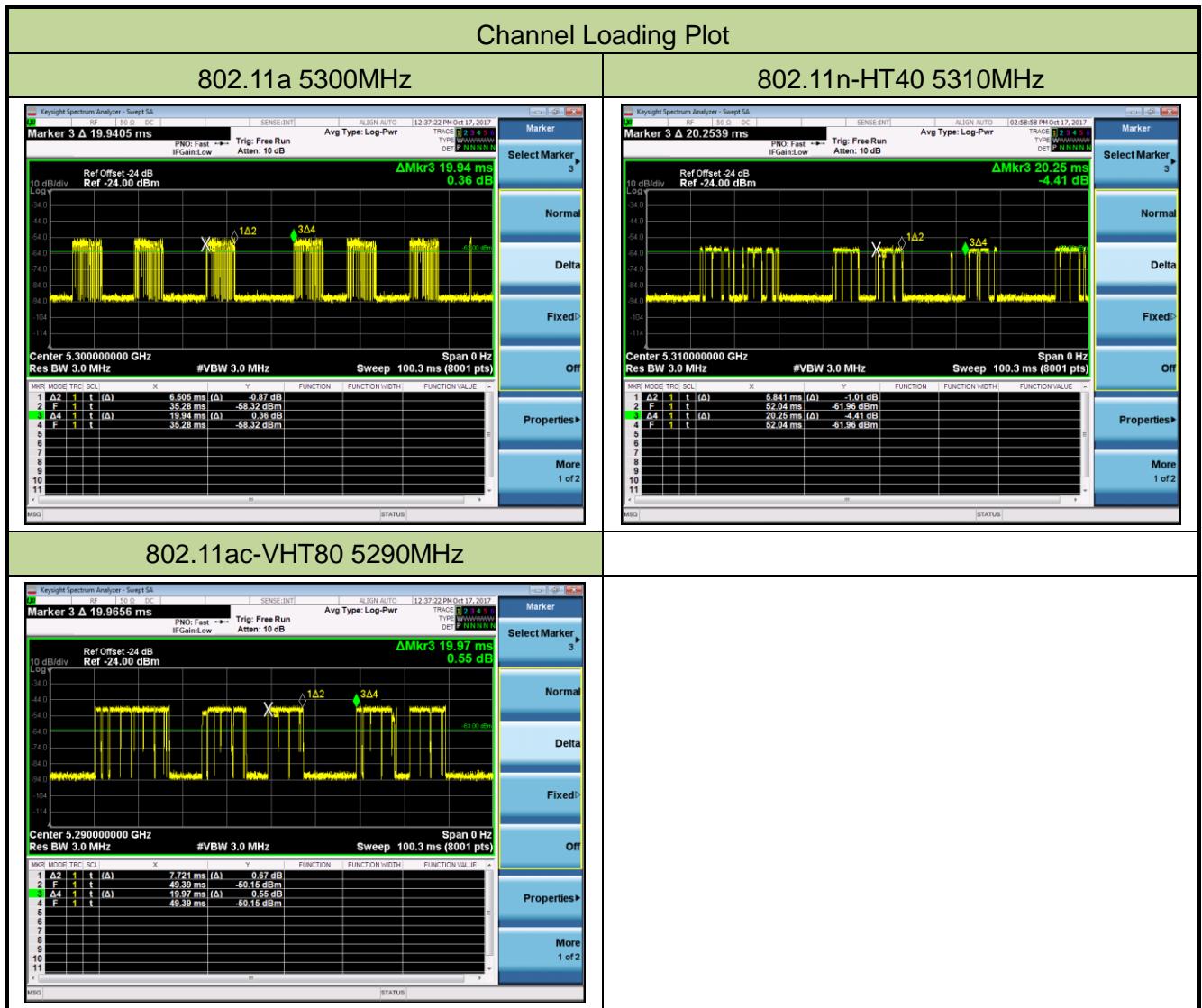
Product	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
Test Item	Radar Waveform Calibration		





### 5.2.4. Channel Loading Test Result

Product	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
Test Item	Channel Loading		



Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11a	5300 MHz	32.62%	≥ 17%	Pass
802.11n-HT40	5310 MHz	28.84%	≥ 17%	Pass
802.11ac-VHT80	5290 MHz	38.66%	≥ 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: U-NII Detection Bandwidth = FH – FL
8. The U-NII Detection Bandwidth must be at least 100% of the EUT transmitter 99% power, otherwise, the EUT does not comply with DFS requirements.

### 5.3.3. Test Result

Product	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
Test Item	Detection Bandwidth (802.11a mode – 5300MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5290	0	0	0	0	0	0	0	0	0	0	0%
5291 FL	1	1	1	1	1	1	1	1	1	1	100%
5292	1	1	1	1	1	1	1	1	1	1	100%
5293	1	1	1	1	1	1	1	1	1	1	100%
5294	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
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 16.68MHz. (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):  $16.68\text{MHz} \times 100\% = 16.68\text{MHz}$ .

Product	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
Test Item	Detection Bandwidth (802.11n-HT40 mode – 5310MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5290	0	0	0	0	0	0	0	0	0	0	0%
5291	0	0	0	0	0	0	0	0	0	0	0%
5292 FL	1	1	1	1	1	1	1	1	1	1	100%
5293	1	1	1	1	1	1	1	1	1	1	100%
5294	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
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 36.48MHz. (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):  $36.48\text{MHz} \times 100\% = 36.48\text{MHz}$ .

Product	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
Test Item	Detection Bandwidth (802.11ac-VHT80 mode – 5290MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5250	0	0	0	0	0	0	0	0	0	0	0%
5251 FL	1	1	1	1	1	1	1	1	1	1	100%
5252	1	1	1	1	1	1	1	1	1	1	100%
5253	1	1	1	1	1	1	1	1	1	1	100%
5254	1	1	1	1	1	1	1	1	1	1	100%
5255	1	1	1	1	1	1	1	1	1	1	100%
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 75.54MHz. (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):  $75.54\text{MHz} \times 100\% = 75.54\text{MHz}$ .

## 5.4. Initial Channel Availability Check Time Measurement

### 5.4.1. Test Limit

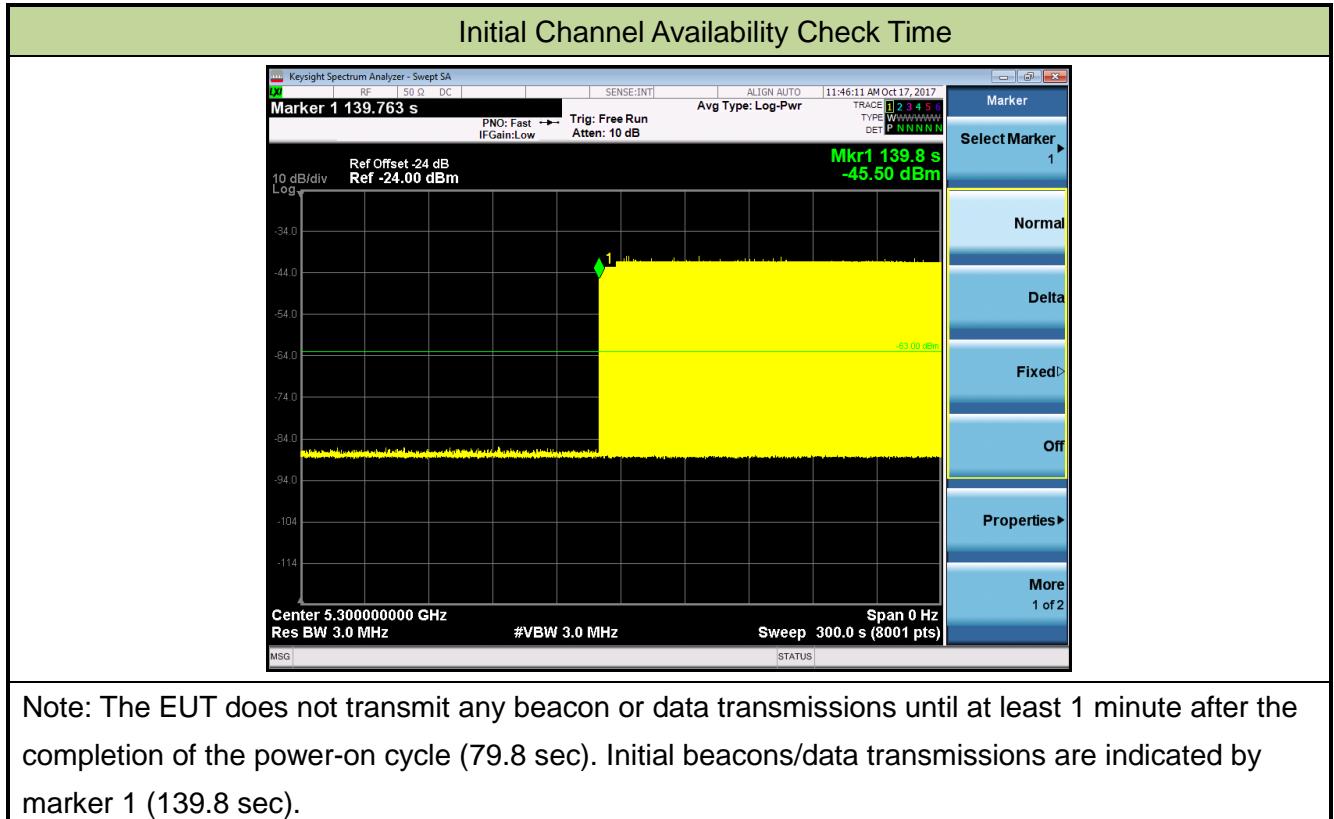
The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute on the intended operating frequency.

### 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	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
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

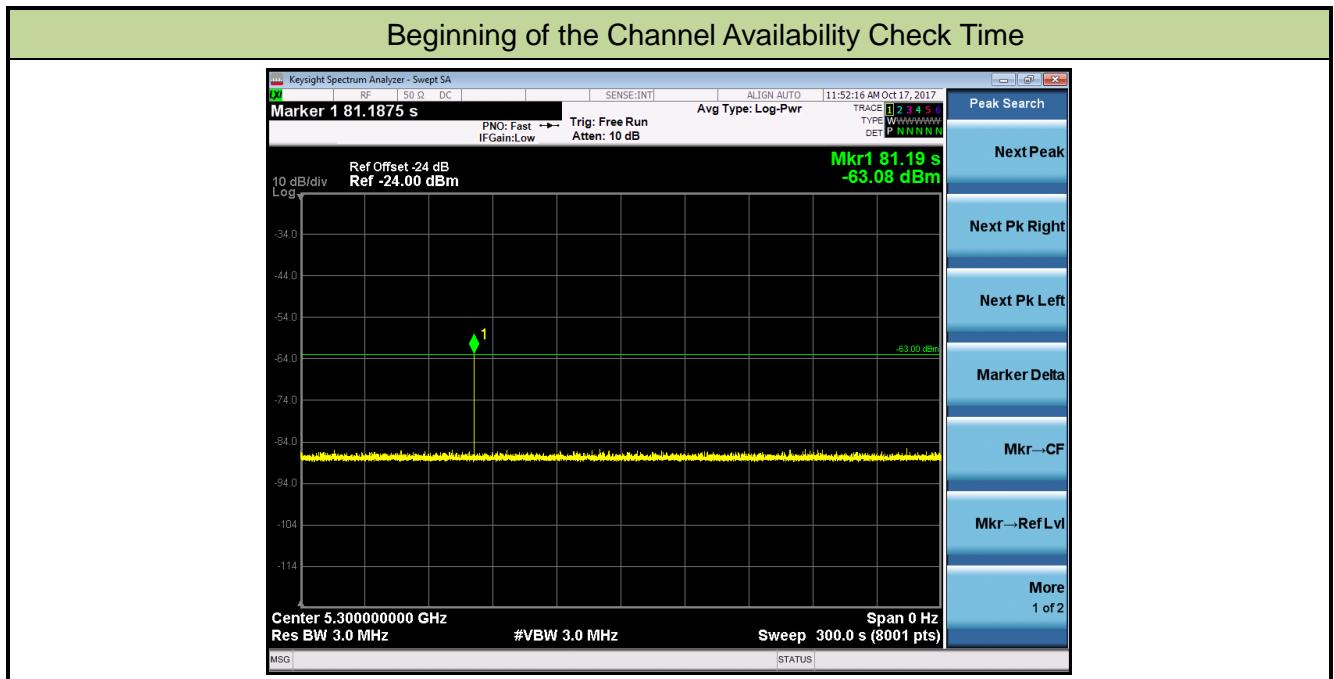
In beginning of the Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

### 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	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
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**

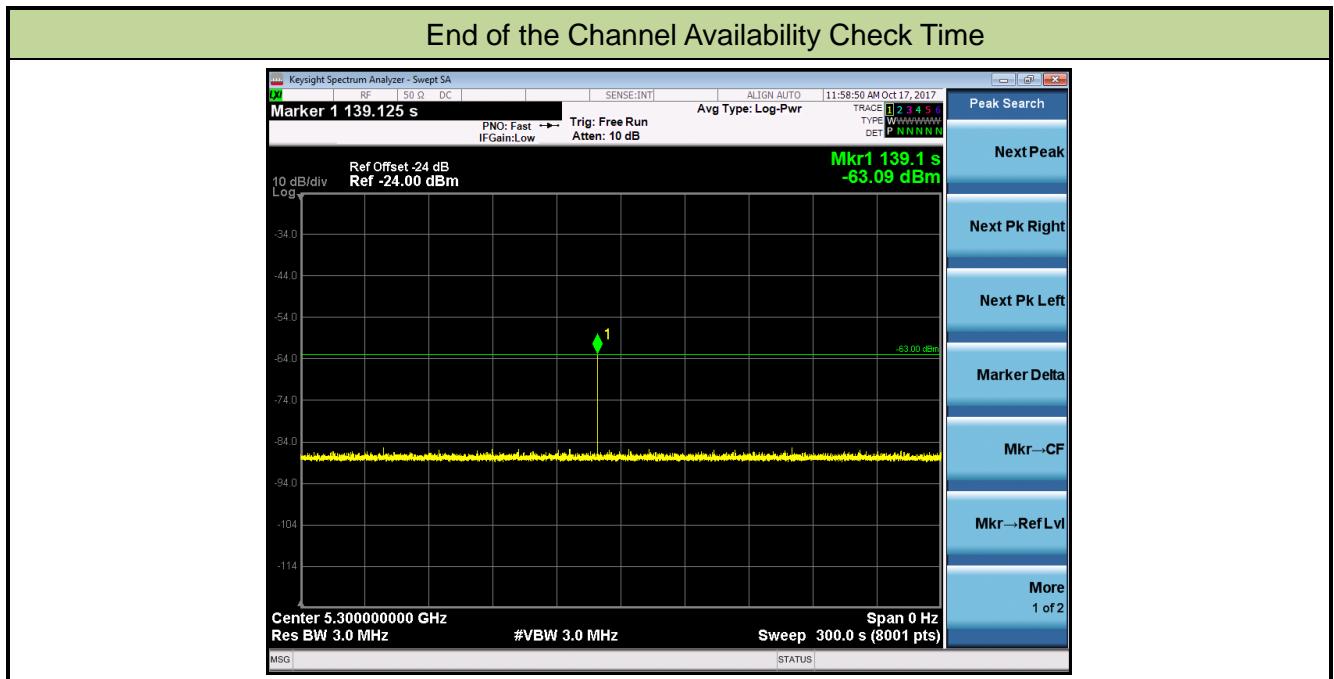
In the end of Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

### **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	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
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

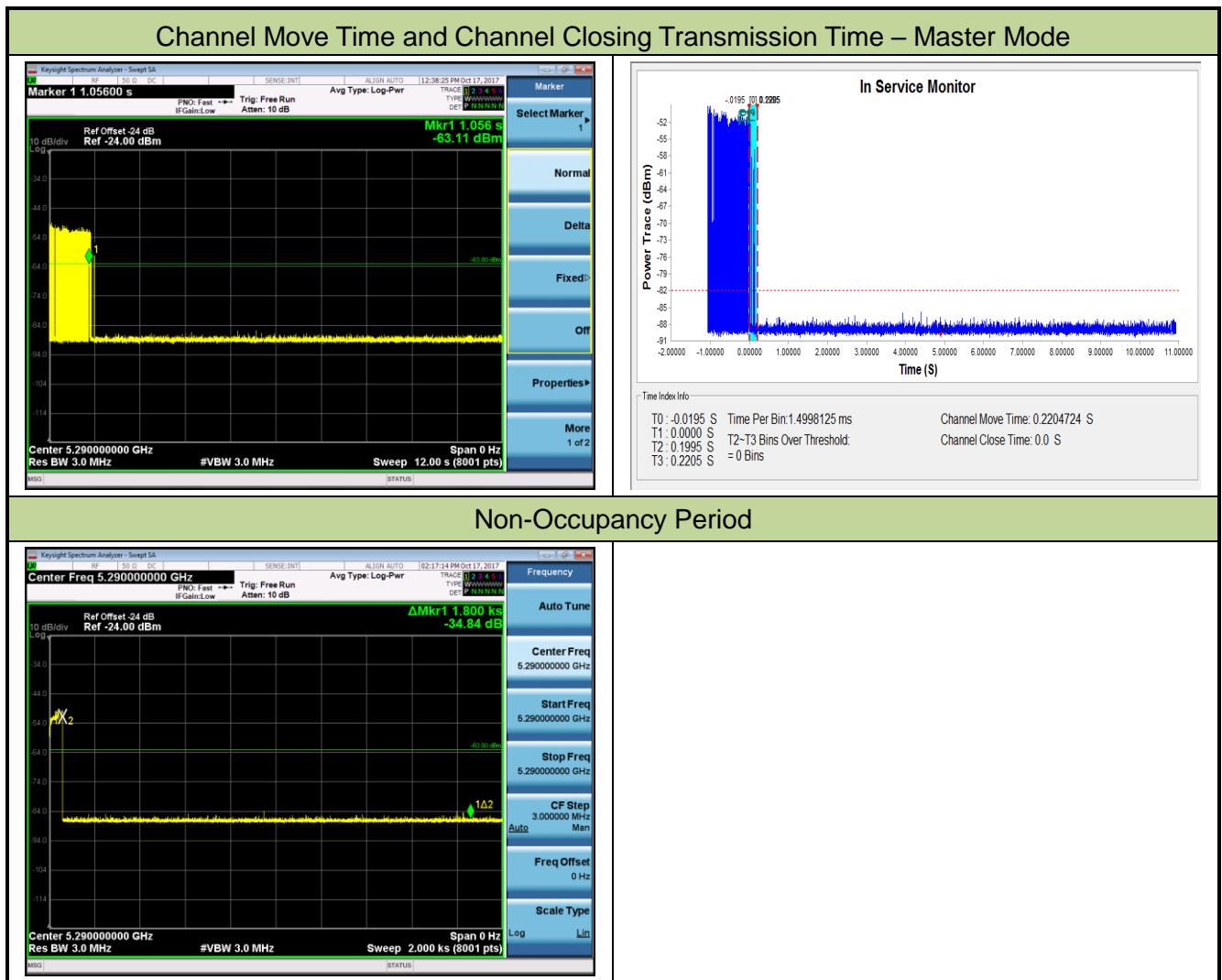
The EUT has In-Service Monitoring function to continuously monitor the radar signals. If the radar is detected, must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec.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

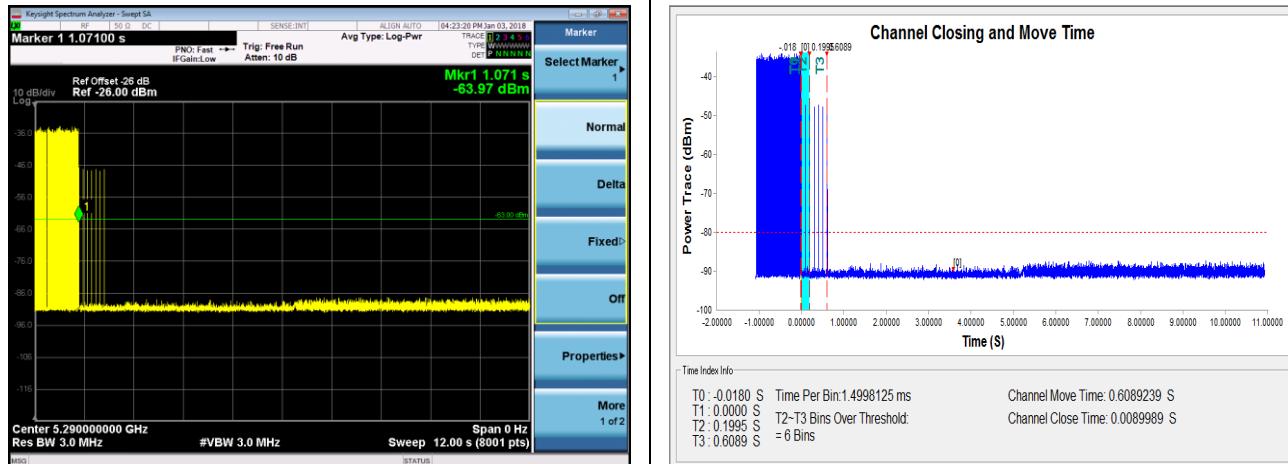
### 5.7.3. Test Result

Product	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11ac-VHT80 mode – 5290MHz)		



Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.220s	<10s
Channel Closing Transmission Time (ms) (Note)	0ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min

### Channel Move Time and Channel Closing Transmission Time – Slave Mode



### Non-Occupancy Period



Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.609s	<10s
Channel Closing Transmission Time (ms) (Note)	9.0ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min

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

### 5.8.2. Test Procedure

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

### 5.8.3. Test Result

Product	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
Test Item	Radar Statistical Performance Check (802.11a mode – 5300MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5292	1	638	83	1
2	5292	1	538	99	1
3	5293	1	618	86	1
4	5293	1	898	59	1
5	5294	1	818	65	1
6	5294	1	558	95	1
7	5295	1	918	58	1
8	5295	1	778	68	1
9	5296	1	938	57	1
10	5296	1	878	61	1
11	5297	1	678	78	1
12	5297	1	838	63	1
13	5298	1	3066	18	1
14	5299	1	698	76	1
15	5300	1	738	72	1
16	5301	1	2683	20	1
17	5302	1	2712	20	1
18	5302	1	2543	21	1
19	5303	1	2321	23	1
20	5303	1	2852	19	1
21	5304	1	2216	24	1
22	5304	1	2394	23	1
23	5305	1	758	70	1
24	5305	1	1996	27	1
25	5306	1	2662	20	1
26	5306	1	577	92	1
27	5307	1	2824	19	1
28	5307	1	556	95	1

29	5308	1	2150	25	1
30	5308	1	1646	33	1
Detection Percentage (%)					100%

## Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5292	2.6	227	26	1
2	5292	2.6	164	29	1
3	5293	1.3	158	24	1
4	5293	2.7	212	26	1
5	5294	1.7	180	28	1
6	5294	2.6	208	25	1
7	5295	1.5	225	27	1
8	5295	3.4	191	25	1
9	5296	3.4	207	27	1
10	5296	3.1	224	28	1
11	5297	3.8	190	29	1
12	5297	2.4	179	24	1
13	5298	2.2	167	29	1
14	5299	4.7	223	24	1
15	5300	4.8	216	27	1
16	5301	1.7	154	25	1
17	5302	3.0	161	26	1
18	5302	1.0	212	28	1
19	5303	2.7	230	29	1
20	5303	1.9	182	26	1
21	5304	3.7	223	24	1
22	5304	1.4	152	23	1
23	5305	4.2	194	23	1
24	5305	2.9	186	29	1
25	5306	1.2	175	29	1
26	5306	2.9	170	25	1
27	5307	1.3	207	24	1
28	5307	3.8	221	29	1
29	5308	2.3	201	24	1
30	5308	2.4	209	24	1
Detection Percentage (%)					100%

## Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5292	7.5	265	16	1
2	5292	7.9	305	18	1
3	5293	8.1	433	17	1
4	5293	8.1	429	17	1
5	5294	9.2	364	18	1
6	5294	8.3	407	16	1
7	5295	6.3	286	16	1
8	5295	10.0	270	16	1
9	5296	8.8	476	18	1
10	5296	9.1	342	17	1
11	5297	7.2	383	16	1
12	5297	6.0	393	17	1
13	5298	8.2	469	18	1
14	5299	6.7	356	16	1
15	5300	7.6	477	18	1
16	5301	8.5	350	18	1
17	5302	8.8	390	17	1
18	5302	7.4	345	18	1
19	5303	7.7	379	18	1
20	5303	9.3	361	17	1
21	5304	8.3	499	17	1
22	5304	8.6	298	18	1
23	5305	9.7	402	17	1
24	5305	6.0	486	18	1
25	5306	7.4	336	16	1
26	5306	7.4	414	17	1
27	5307	9.6	378	16	1
28	5307	6.0	493	16	1
29	5308	7.8	315	17	1
30	5308	7.9	479	18	1
Detection Percentage (%)					100%

## Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5292	12.2	424	15	1
2	5292	20.0	425	15	1
3	5293	18.5	303	13	1
4	5293	12.5	368	16	1
5	5294	12.4	380	13	1
6	5294	16.9	348	13	1
7	5295	14.2	279	12	1
8	5295	16.1	445	15	1
9	5296	19.4	296	13	1
10	5296	17.6	439	13	1
11	5297	16.7	394	16	1
12	5297	18.4	386	14	1
13	5298	18.3	357	15	1
14	5299	13.7	293	13	1
15	5300	16.6	361	15	1
16	5301	11.5	349	16	1
17	5302	14.0	257	12	1
18	5302	13.5	365	14	1
19	5303	16.0	405	16	1
20	5303	17.2	337	14	1
21	5304	12.6	301	12	1
22	5304	13.8	479	13	1
23	5305	15.7	489	16	1
24	5305	18.9	490	16	1
25	5306	15.6	368	13	1
26	5306	11.5	314	13	1
27	5307	19.4	461	15	1
28	5307	13.7	302	13	1
29	5308	19.9	364	16	1
30	5308	14.7	260	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:  $\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100\%+100\%+100\%+100\%)/4 = 100\% (>80\%)$

## Radar Type 5 - Radar Statistical Performance

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

Type 5 Radar Waveform_1											
Num of Bursts = 18 Burst Interval (us)= 6666667											
Burst # Off Time (us) # Pulses Chirp (MHz) PW (us) Pulse 1 Pri(us) Pulse 2 Pri(us) Pulse 3 Pri(us) Start Loc (us) Start Burst Interval(us) End Burst Interval(us)											
1	514890	2	12	70	1060	1427	0	514890	0	666666	
2	253706	3	12	100	1420	1252	1961	771083	666667	1333333	
3	963639	3	12	70	1168	1340	1513	1739355	1333334	2000000	
4	792793	2	12	100	1818	1827	0	2536169	2000001	2666667	
5	791688	1	12	85	1329	0	0	3331502	2666668	3333334	
6	651493	2	12	85	1535	1650	0	3984324	3333335	4000001	
7	162962	1	12	50	1271	0	0	4150471	4000002	4666668	
8	837946	3	12	80	1460	1119	1647	4989688	4666669	5333335	
9	444403	3	12	75	1082	1579	1106	5438317	5333336	6000002	
10	818189	1	12	60	1273	0	0	6260253	6000003	6666669	
11	519398	2	12	60	1444	1983	0	6780924	6666670	7333336	
12	1029960	3	12	90	1844	1878	1085	7813711	7333337	8000003	
13	225207	2	12	100	1315	1267	0	8043725	8000004	8666670	
14	975199	2	12	65	1550	1733	0	9021506	8666671	9333337	
15	900477	2	12	85	1222	1394	0	9925266	9333338	10000004	
16	698198	1	12	85	1235	0	0	106260680	10000005	10666671	
17	66239	3	12	85	1363	1848	1055	10693554	10666672	11333338	
18	1087801	1	12	65	1088	0	0	11785611	11333339	12000005	
Total number of pulses in waveform = 37											

### Type 5 Radar Waveform\_2

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	224791	2	9	65	1994	1328	0	224791	0	799999
2	624760	3	9	80	1971	1642	1486	852873	800000	1599999
3	1385887	3	9	75	1125	1491	1056	2243859	1600000	2399999
4	599942	3	9	100	1978	1030	1466	2847473	2400000	3199999
5	888514	2	9	50	1285	1961	0	3740461	3200000	3999999
6	553409	1	9	80	1969	0	0	4297116	4000000	4799999
7	1234286	2	9	65	1436	1870	0	5533371	4800000	5599999
8	527085	2	9	65	1342	1713	0	6063762	5600000	6399999
9	971050	1	9	65	1484	0	0	7057867	6400000	7199999
10	231985	2	9	75	1770	1122	0	7271336	7200000	7999999
11	1346556	1	9	65	1154	0	0	8620784	8000000	8799999
12	939432	1	9	95	1939	0	0	9561370	8800000	9599999
13	715732	2	9	70	1721	1736	0	10279041	9600000	10399999
14	266925	3	9	100	1179	1285	1802	10549423	10400000	11199999
15	987837	3	9	50	1399	1737	1428	11541526	11200000	11999999

Total number of pulses in waveform = 31

### Type 5 Radar Waveform\_3

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	718539	2	17	60	1069	1934	0	718539	0	923076
2	684913	3	17	50	1242	1330	1220	1406455	923077	1846153
3	655359	2	17	65	1735	1641	0	2065606	1846154	2769230
4	1023990	3	17	70	1797	1648	1512	3092972	2769231	3692307
5	824115	2	17	65	1160	1489	0	3922044	3692308	4615384
6	921493	1	17	55	1472	0	0	4846186	4615385	5538461
7	1504193	1	17	95	1942	0	0	6351851	5538462	6461538
8	329387	2	17	75	1222	1732	0	6683180	6461539	7384615
9	1528004	1	17	50	1958	0	0	8214138	7384616	8307692
10	583535	3	17	85	1090	1572	1950	8799631	8307693	9230769
11	1084776	1	17	95	1482	0	0	9889019	9230770	10153846
12	749980	1	17	95	1717	0	0	10640481	10153847	11076923
13	531770	1	17	100	1407	0	0	11173968	11076924	12000000

Total number of pulses in waveform = 23

### 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	205955	2	8	65	1910	1200	0	205955	0	857142
2	690303	3	8	55	1605	1240	1122	899368	857143	1714285
3	999935	3	8	65	1639	1375	1818	1903270	1714286	2571428
4	1352625	3	8	80	1161	1409	1972	3260727	2571429	3428571
5	990150	2	8	60	1494	1463	0	4255419	3428572	4285714
6	398282	2	8	90	1632	1824	0	4656658	4285715	5142857
7	760571	3	8	100	1109	1813	1082	5420685	5142858	6000000
8	1372829	3	8	95	1646	1468	1883	6797518	6000001	6857143
9	743448	1	8	90	1017	0	0	7545963	6857144	7714286
10	766803	2	8	70	1935	1358	0	8313783	7714287	8571429
11	332414	3	8	100	1083	1011	1812	8649490	8571430	9428572
12	869314	3	8	50	1926	1913	1133	9522710	9428573	10285715
13	1148692	3	8	75	1599	1322	1180	10676374	10285716	11142858
14	876306	1	8	100	1093	0	0	11556781	11142859	12000001

Total number of pulses in waveform = 34

### Type 5 Radar Waveform\_5

Type 5 Radar Waveform_5											
Num of Bursts = 19 Burst Interval (us)= 631579											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	270640	3	18	50	1538	1526	1755	270640	0	631578	
2	434305	2	18	95	1836	1487	0	709764	631579	1263157	
3	939753	1	18	70	1738	0	0	1652840	1263158	1894736	
4	699484	1	18	50	1574	0	0	2354062	1894737	2526315	
5	607001	2	18	85	1497	1066	0	2962637	2526316	3157894	
6	255631	2	18	100	1144	1173	0	3220831	3157895	3789473	
7	583023	2	18	70	1018	1020	0	3806171	3789474	4421052	
8	10777330	2	18	85	1809	1529	0	4885539	4421053	5052631	
9	504695	1	18	80	1670	0	0	5393572	5052632	5684210	
10	821629	3	18	85	1307	1087	1718	6216871	5684211	6315789	
11	567617	2	18	60	1551	1017	0	6788600	6315790	6947368	
12	293087	3	18	60	1998	1876	1464	7084255	6947369	7578947	
13	943105	3	18	60	1418	1945	1829	8032698	7578948	8210526	
14	710455	2	18	65	1123	1184	0	8748345	8210527	8842105	
15	98989	3	18	50	1458	1029	1642	8849641	8842106	9473684	
16	903186	3	18	90	1260	1110	1500	9756956	9473685	10105263	
17	596518	2	18	50	1048	1246	0	10357344	10105264	10736842	
18	719288	2	18	70	1561	1934	0	11078926	10736843	11368421	
19	880901	3	18	60	1227	1122	1284	11963322	11368422	12000000	
Total number of pulses in waveform = 42											
*****											

### Type 5 Radar Waveform\_6

Type 5 Radar Waveform_6											
Num of Bursts = 12 Burst Interval (us)= 1000000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	850950	1	5	60	1538	0	0	850950	0	999999	
2	750063	1	5	80	1116	0	0	1602551	1000000	1999999	
3	496272	1	5	55	1474	0	0	2099939	2000000	2999999	
4	1052294	1	5	50	1673	1383	1588	3153707	3000000	3999999	
5	1275251	2	5	70	1101	1861	0	4433602	4000000	4999999	
6	1077103	1	5	60	1854	0	0	5513667	5000000	5999999	
7	1475234	1	5	100	1309	0	0	6990755	6000000	6999999	
8	254584	3	5	85	1265	1130	1337	7246648	7000000	7999999	
9	1740570	1	5	80	1216	0	0	8990950	8000000	8999999	
10	726877	2	5	90	1519	1811	0	9719043	9000000	9999999	
11	520597	2	5	90	1415	1942	0	10242970	10000000	10999999	
12	1080291	1	5	90	1224	0	0	11326618	11000000	11999999	
Total number of pulses in waveform = 19											
*****											

### Type 5 Radar Waveform\_7

Type 5 Radar Waveform_7											
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	123092	3	6	75	1664	1993	1446	123092	0	599999	
2	879508	1	6	95	1024	0	0	1007703	600000	1199999	
3	632441	2	6	65	1227	1419	0	1541168	1200000	1799999	
4	397593	2	6	70	1745	1761	0	1941407	1800000	2399999	
5	658918	1	6	90	1095	0	0	2603831	2400000	2999999	
6	742570	3	6	50	1646	1143	1897	3347496	3000000	3699999	
7	387325	2	6	90	1177	1467	0	3739507	3600000	4199999	
8	902005	2	6	60	1593	1820	0	4644156	4200000	4799999	
9	265327	1	6	80	1156	0	0	4912896	4800000	5399999	
10	887774	3	6	80	1315	1159	1275	5801826	5400000	5999999	
11	638267	1	6	55	1098	0	0	6443842	6000000	6599999	
12	373078	3	6	70	1893	1688	1659	6818018	6600000	7199999	
13	755402	1	6	80	1315	0	0	7578860	7200000	7799999	
14	394190	1	6	50	1806	0	0	7974165	7800000	8399999	
15	702949	2	6	90	1832	1925	0	8678920	8400000	8999999	
16	463928	1	6	100	1925	0	0	9146605	9000000	9599999	
17	1004356	1	6	80	1762	0	0	10152886	9600000	10199999	
18	290712	1	6	55	1425	0	0	10445360	10200000	10799999	
19	872171	1	6	55	1396	0	0	11318956	10800000	11399999	
20	328241	3	6	90	1401	1332	1628	11648593	11400000	11999999	
Total number of pulses in waveform = 35											
*****											

Type 5 Radar Waveform_8											
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	419396	3	19	80	1380	1268	1540	419396	0	705881	
2	327542	3	19	95	1273	1704	1945	751126	705882	1411763	
3	695357	3	19	80	1611	1207	1200	1451405	1411764	2117645	
4	1046267	2	19	55	1687	1463	0	2501690	2117646	2823527	
5	868232	3	19	90	1632	1875	1944	3373072	2823528	3529409	
6	265480	3	19	80	1755	1785	1892	3644003	3529410	4235291	
7	905002	2	19	85	1200	1916	0	4554237	4235292	4941173	
8	586012	3	19	55	1084	1923	1829	5143365	4941174	5647055	
9	914218	1	19	80	1402	0	0	6062419	5647056	6352937	
10	914491	1	19	95	1193	0	0	6978312	6352938	7058819	
11	109328	3	19	100	1019	1226	1028	7088833	7058820	7764701	
12	819770	3	19	55	1211	1723	1392	7911876	7764702	8470583	
13	782562	3	19	55	1578	1654	1821	8698754	8470584	9176465	
14	791222	1	19	70	1249	0	0	9495029	9176466	9882347	
15	403399	2	19	60	1877	1130	0	9899677	9882348	10588229	
16	962340	2	19	75	1047	1958	0	10865024	10588230	11294111	
17	538219	1	19	100	1090	0	0	11406248	11294112	11999993	
Total number of pulses in waveform = 39											
*****											
Type 5 Radar Waveform_9											
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	218084	1	10	85	1856	0	0	218084	0	923076	
2	1302191	2	10	65	1023	1587	0	1521931	923077	1846153	
3	589433	2	10	80	1339	1736	0	2113974	1846154	2769230	
4	1357069	1	10	75	1090	0	0	3474118	2769231	3692307	
5	316885	3	10	90	1791	1993	1745	3792093	3692308	4615384	
6	1076675	1	10	75	1432	0	0	4874297	4615385	5538461	
7	1327165	1	10	75	1329	0	0	6202894	5538462	6461538	
8	727922	1	10	55	1637	0	0	6932145	6461539	7384615	
9	1038315	3	10	85	1450	1542	1393	7972097	7384616	8307692	
10	1244254	3	10	90	1854	1378	1298	9220736	8307693	9230769	
11	909618	3	10	100	1180	1848	1357	10134884	9230770	10153846	
12	894552	2	10	80	1894	1855	0	11033821	10153847	11076923	
13	515192	1	10	90	1664	0	0	11552762	11076924	12000000	
Total number of pulses in waveform = 24											
*****											
Type 5 Radar Waveform_10											
Num of Bursts = 16 Burst Interval (us)= 750000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)	
1	329056	3	14	100	1688	1671	1536	329056	0	749999	
2	629734	2	14	50	1854	1767	0	963685	750000	1499999	
3	791004	2	14	100	1164	1103	0	1758310	1500000	2249999	
4	1032353	2	14	100	1290	1664	0	2792930	2250000	2999999	
5	820071	3	14	90	1294	1248	1053	3615955	3000000	3749999	
6	504401	2	14	65	1848	1438	0	4123951	3750000	4499999	
7	1066432	3	14	55	1908	1190	1821	5193669	4500000	5249999	
8	330232	1	14	60	1737	0	0	5528820	5250000	5999999	
9	604179	2	14	50	1325	1462	0	6134736	6000000	6749999	
10	949053	1	14	90	1397	0	0	7086576	6750000	7499999	
11	566747	3	14	55	1795	1160	1330	7654720	7500000	8249999	
12	1172739	3	14	65	1733	1716	1120	8331744	8250000	8999999	
13	441925	2	14	95	1934	1174	0	9278238	9000000	9749999	
14	535498	3	14	50	1028	1474	1587	9816844	9750000	10499999	
15	1123492	2	14	60	1808	1399	0	10944425	10500000	11249999	
16	931945	1	14	75	1795	0	0	11879577	11250000	11999999	
Total number of pulses in waveform = 35											
*****											

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	569872	2	8	75	1066	1302	0	569872	0	631578	
2	246477	3	8	70	1162	1863	1552	818717	631579	1263157	
3	698800	1	8	50	1054	0	0	1522094	1263158	1894736	
4	687561	3	8	80	1283	1212	1119	2210709	1894737	2526315	
5	550848	2	8	85	1365	1307	0	2765171	2526316	3157894	
6	528880	2	8	80	1781	1438	0	3296723	3157895	3789473	
7	834759	1	8	60	1562	0	0	4134701	3789474	4421052	
8	522890	3	8	70	1136	1853	1095	4659153	4421053	5052631	
9	762880	3	8	90	1537	1396	1797	5426117	5052632	5684210	
10	480212	2	8	75	1355	1876	0	5911059	5684211	6315789	
11	5661155	2	8	90	1472	1364	0	6480445	6315790	6947368	
12	503402	1	8	55	1329	0	0	6986683	6947369	7578947	
13	620367	1	8	55	1360	0	0	7608379	7578948	8210526	
14	900724	3	8	50	1625	1445	1400	8510463	8210527	8842105	
15	513295	3	8	80	1919	1594	1425	9028228	8842106	9473684	
16	515072	3	8	75	1893	1837	1017	9548238	9473685	10105263	
17	698215	3	8	80	1465	1901	1538	10251200	10105264	10736842	
18	659171	1	8	60	1317	0	0	10915275	10736843	11368421	
19	565757	3	8	75	1751	1430	1547	11472349	11368422	12000000	
****                     Total number of pulses in waveform = 42											
Type 5 Radar Waveform_12											
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	30822	3	14	55	1369	1065	1357	30822	0	1333332	
2	2039811	2	14	65	1029	1718	0	2074424	1333333	2666665	
3	755755	3	14	65	1312	1773	1061	2832926	2666666	3999998	
4	1736545	1	14	100	1115	0	0	4573617	3999999	5333331	
5	1582378	3	14	100	1695	1535	1793	6157110	5333332	6666664	
6	1787636	2	14	65	1020	1986	0	7949769	6666665	7999997	
7	103113	1	14	70	1100	0	0	8055888	7999998	9333330	
8	2110226	3	14	60	1496	1233	1515	10167214	9333331	10666663	
9	1497083	1	14	90	1217	0	0	11668541	10666664	11999996	
****                     Total number of pulses in waveform = 19											
Type 5 Radar Waveform_13											
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	963681	2	6	100	1725	1762	0	963681	0	1333332	
2	478253	1	6	60	1571	0	0	1445421	1333333	2666665	
3	1435274	1	6	100	1833	0	0	2882266	2666666	3999998	
4	2093044	3	6	80	1531	1610	1380	4977143	3999999	5333331	
5	424078	2	6	75	1628	1362	0	5405742	5333332	6666664	
6	2351670	3	6	80	1246	1365	1848	7760402	6666665	7999997	
7	448442	3	6	100	1740	1365	1217	8213303	7999998	9333330	
8	1193175	3	6	75	1711	1255	1202	9410800	9333331	10666663	
9	2035621	1	6	90	1007	0	0	11450589	10666664	11999996	
****                     Total number of pulses in waveform = 19											

Type 5 Radar Waveform_14											
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	124976	3	17	55	1519	1406	1457	536762	0	631578	
2	946192	3	17	55	1345	1115	1829	666120	631579	1263157	
3	361447	3	17	90	1037	1780	1926	1616601	1263158	1894736	
4	1072350	3	17	60	1636	1978	1917	1982791	1894737	2526315	
5	226454	2	17	70	1955	1480	0	3060672	2526316	3157894	
6	1108131	2	17	60	1430	1018	0	3290561	3157895	3789473	
7	368032	3	17	75	1196	1965	1516	4401140	3789474	4421052	
8	523521	1	17	100	1769	0	0	4773849	4421053	5052631	
9	636164	3	17	50	1182	1108	1523	5299139	5052632	5684210	
10	710242	2	17	85	1031	1032	0	5939116	5684211	6315789	
11	497893	2	17	100	1390	1368	0	6651421	6315790	6947368	
12	569484	3	17	80	1148	1037	1067	7152072	6947369	7578947	
13	784377	1	17	70	1169	0	0	7724808	7578948	8210526	
14	525306	1	17	100	1300	0	0	8510554	8210527	8842105	
15	859084	3	17	80	1769	1906	1715	9036960	8842106	9473684	
16	677533	2	17	70	1110	1909	0	9901434	9473685	10105263	
17	396530	1	17	80	1918	0	0	10581986	10105264	10736842	
18	737047	3	11	90	1516	1512	1982	10980434	10736843	11368421	
19		1	14	55	1343	0	0	11722491	11368422	12000000	
*****											
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	432062	1	5	90	1432	0	0	432062	0	999999	
2	1132777	3	5	90	1361	1162	1027	1566271	1000000	1999999	
3	1153886	3	5	100	1862	1181	1223	2774797	2000000	2999999	
4	207447	1	5	70	1402	0	0	3932949	3000000	3999999	
5	1112685	3	5	95	1762	1163	1983	4141798	4000000	4999999	
6	1230117	3	5	55	1216	1390	1591	5259391	5000000	5999999	
7	1420829	1	5	100	1408	0	0	6493705	6000000	6999999	
8	781281	2	5	55	1223	1116	0	7915942	7000000	7999999	
9	7677110	2	5	75	1073	1608	0	8699562	8000000	8999999	
10	1071083	1	5	90	1450	0	0	9469953	9000000	9999999	
11	1259404	2	5	85	1322	1270	0	10542486	10000000	10999999	
12		1	5	90	1884	0	0	11804482	11000000	11999999	
*****											
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	420741	1	9	70	1108	0	0	420741	0	666666	
2	446363	2	9	65	1703	1906	0	868212	1333333	2000000	
3	943495	3	9	55	1871	1528	1942	1815316	1333334	3333334	
4	399195	3	9	70	1607	1858	1899	2219852	2000001	2666667	
5	892436	2	9	55	1787	1759	0	3117652	2666668	3333334	
6	805839	1	9	85	1033	0	0	3927037	3333335	4000001	
7	379390	2	9	65	1701	1476	0	4307460	4000002	4666668	
8	961355	1	9	60	1426	0	0	5271992	4666669	5333335	
9	230954	3	9	90	1639	1836	1433	5504372	5333336	6000002	
10	765993	2	9	60	1353	1861	0	6275273	6000003	6666669	
11	854540	2	9	90	1802	1368	0	7133027	6666670	7333336	
12	762559	1	9	80	1455	0	0	7898756	7333337	8000003	
13	281542	1	9	55	1484	0	0	8181753	8000004	8666670	
14	1131789	3	9	85	1049	1835	1679	9315026	8666671	9333337	
15	321453	1	9	65	1827	0	0	9641042	9333338	10000004	
16	585355	1	9	60	1018	0	0	10228224	10000005	10666671	
17	751208	2	9	70	1126	1993	0	10980450	10666672	11333338	
18	946504	2	9	90	1613	1504	0	11930073	11333339	12000005	
*****											

Type 5 Radar Waveform_17											
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	603201	1	10	85	1529	0	0	603201	0	705881	
2	347358	1	10	80	1567	0	0	952088	705882	1411763	
3	592214	3	10	55	1070	1893	1640	1545869	1411764	2117645	
4	1133434	3	10	100	1532	1949	1465	2683906	2117646	2823527	
5	500255	2	10	90	1787	1984	0	3189107	2823528	3529409	
6	454699	2	10	50	1248	1747	0	3647577	3529410	4235291	
7	663895	2	10	95	1150	1631	0	4314467	4235292	4941173	
8	715583	3	10	55	1322	1054	1408	5032831	4941174	5647055	
9	654865	1	10	95	1719	0	0	5691480	5647056	6352937	
10	771653	1	10	95	1392	0	0	6464852	6352938	7058819	
11	673738	3	10	75	1498	1921	1059	7139982	7058820	7764701	
12	1219144	2	10	95	1438	1555	0	8363604	7764702	8470583	
13	405363	2	10	50	1566	1997	0	8771960	8470584	9176465	
14	548758	3	10	85	1061	1884	1025	9324281	9176466	9882347	
15	578423	2	10	80	1949	1937	0	9906674	9882348	10588229	
16	1203164	3	10	80	1602	1737	1229	11113724	10588230	11294111	
17	430386	1	10	60	1955	0	0	11548678	11294112	11999993	
*****Total number of pulses in waveform = 35*****											
Type 5 Radar Waveform_18											
Num of Bursts = 8 Burst Interval (us)= 1500000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)	
1	1092203	1	19	85	1785	0	0	1092203	0	1499999	
2	1627178	1	19	70	1771	0	0	2721166	1500000	2999999	
3	542147	1	19	100	1627	0	0	3265084	3000000	4499999	
4	1496589	1	19	100	1748	0	0	4763300	4500000	5999999	
5	1871858	3	19	70	1261	1771	1961	6636906	6000000	7499999	
6	1576554	2	19	80	1030	1626	0	8218453	7500000	8999999	
7	1059178	3	19	65	1234	1314	1884	9280287	9000000	10499999	
8	2072306	3	19	80	1841	1182	1527	11357025	10500000	11999999	
*****Total number of pulses in waveform = 15*****											
Type 5 Radar Waveform_19											
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	55096	3	18	100	1457	1190	1377	56096	0	699999	
2	910411	3	18	75	1234	1315	1946	969531	600000	1199999	
3	550960	2	18	65	1880	1008	0	1524986	1200000	1799999	
4	490286	1	18	75	1799	0	0	2018160	1800000	2399999	
5	449560	2	18	70	1282	1485	0	2469519	2400000	2999999	
6	638690	1	18	85	1657	0	0	3110976	3000000	3699999	
7	552578	2	18	85	1897	1450	0	3665211	3600000	4199999	
8	902248	2	18	65	1155	1039	0	4570806	4200000	4799999	
9	816457	1	18	60	1431	0	0	5389457	4800000	5399999	
10	161177	3	18	60	1942	1307	1997	5552065	5400000	5999999	
11	545761	2	18	65	1167	1951	0	6103072	6000000	6599999	
12	1044035	1	18	95	1014	0	0	7150225	6600000	7199999	
13	378232	1	18	70	1385	0	0	7529471	7200000	7799999	
14	475866	2	18	80	1321	1023	0	8006692	7800000	8399999	
15	514562	2	18	75	1919	1046	0	8523598	8400000	8899999	
16	650120	1	18	55	1921	0	0	9176683	9000000	9599999	
17	574631	1	18	95	1121	0	0	9753235	9600000	10199999	
18	999191	1	18	70	1761	0	0	10753547	10200000	10799999	
19	165821	2	18	70	2000	1291	0	10921129	10800000	11399999	
20	952946	1	18	85	1279	0	0	11877366	11400000	11999999	
*****Total number of pulses in waveform = 34*****											

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	787584	2	12	50	1142	1950	0	787584	0	1499999	
2	1795160	3	12	90	1366	1887	1268	2585836	1500000	2999999	
3	471836	1	12	100	1805	0	0	3062193	3000000	4499999	
4	2304086	3	12	80	1426	1343	1733	5368084	4500000	5999999	
5	1474358	3	12	70	1165	1969	1641	6846944	6000000	7499999	
6	1556234	2	12	100	1571	1626	0	8407953	7500000	8999999	
7	697765	1	12	75	1953	0	0	9108915	9000000	10499999	
8	2120401	3	12	75	1002	1797	1766	11231269	10500000	11999999	
Total number of pulses in waveform = 18											
*****											
Type 5 Radar Waveform_21											
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	544870	1	10	95	1866	0	0	544870	0	599999	
2	446780	3	10	55	1988	1558	1398	993516	600000	1199999	
3	553329	1	10	50	1710	0	0	1551789	1200000	1799999	
4	310848	1	10	55	1909	0	0	1864347	1800000	2399999	
5	941743	2	10	70	1345	1879	0	2807999	2400000	2999999	
6	513307	3	10	85	1447	1182	1825	3324530	3000000	3599999	
7	324196	3	10	95	1689	1129	1532	3653180	3600000	4199999	
8	621861	1	10	70	1348	0	0	4279391	4200000	4799999	
9	1051369	2	10	80	1286	1464	0	5332108	4800000	5399999	
10	89462	3	10	90	1909	1136	1633	5424310	5400000	5999999	
11	572557	3	10	95	1980	1135	1318	6001545	6000000	6599999	
12	644673	3	10	70	1142	1480	1339	6650651	6600000	7199999	
13	975378	1	10	95	1789	0	0	7629990	7200000	7799999	
14	181630	3	10	60	1024	1557	1694	7813409	7800000	8399999	
15	625836	1	10	95	1783	0	0	8443520	8400000	8999999	
16	871364	2	10	50	1644	1113	0	9316667	9000000	9699999	
17	692770	3	10	65	1905	1863	1059	10012194	9800000	10199999	
18	739004	3	10	65	1041	1369	1103	10756025	10200000	10799999	
19	304792	3	10	80	1566	1490	1223	11064330	10800000	11399999	
20	854465	3	10	85	1064	1855	1364	11923064	11400000	11999999	
Total number of pulses in waveform = 45											
*****											
Type 5 Radar Waveform_22											
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	954402	3	8	50	1328	1040	1244	954402	0	1199999	
2	1055482	1	8	70	1438	0	0	2013496	1200000	2399999	
3	1387944	3	8	100	1997	1696	1046	3402878	2400000	3599999	
4	672846	2	8	75	1435	1573	0	4080463	3600000	4799999	
5	896441	1	8	55	1575	0	0	4979912	4800000	5999999	
6	1548400	1	8	75	1184	0	0	6529887	6000000	7199999	
7	1359264	2	8	100	1654	1882	0	7890335	7200000	8399999	
8	1582051	1	8	55	1019	0	0	9475922	8400000	9599999	
9	504494	2	8	85	1605	1008	0	9981435	9600000	10799999	
10	1836107	2	8	55	1888	1976	0	11820155	10800000	11999999	
Total number of pulses in waveform = 18											
*****											

Type 5 Radar Waveform_23											
Num of Bursts = 16 Burst Interval (us)= 750000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)	
1	280362	1	12	80	1372	0	0	280362	0	749999	
2	482360	3	12	100	1658	1893	1232	764094	750000	1499999	
3	907605	2	12	100	1140	1636	0	1676482	1500000	2249999	
4	941762	3	12	75	1827	1950	1056	2621020	2250000	2999999	
5	1101224	1	12	100	1869	0	0	3727077	3000000	3749999	
6	703102	1	12	50	1321	0	0	4432048	3750000	4499999	
7	619042	2	12	85	1014	1586	0	5052411	4500000	5249999	
8	943876	1	12	65	1035	0	0	5998887	5250000	5999999	
9	669833	2	12	75	1769	1188	0	6669755	6000000	6749999	
10	658261	1	12	90	1120	0	0	7330973	6750000	7499999	
11	572588	1	12	65	1886	0	0	7904681	7500000	8249999	
12	763860	2	12	75	1018	1369	0	8670427	8250000	8999999	
13	539155	2	12	100	1447	1252	0	9211969	9000000	9749999	
14	716926	2	12	80	1974	1281	0	9931594	9750000	10499999	
15	956036	3	12	70	1803	1901	1939	10890885	10500000	11249999	
16	886212	2	12	50	1631	1207	0	11782740	11250000	11999999	
Total number of pulses in waveform = 29											
*****											
Type 5 Radar Waveform_24											
Num of Bursts = 16 Burst Interval (us)= 750000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)	
1	410933	3	5	85	1797	1437	1899	410933	0	749999	
2	968633	3	5	70	1645	1828	1482	1384699	750000	1499999	
3	598934	3	5	85	1243	1228	1508	1988588	1500000	2249999	
4	379892	1	5	75	1411	0	0	2372459	2250000	2999999	
5	705937	2	5	85	1185	1007	0	3079807	3000000	3749999	
6	898424	3	5	65	1119	1486	1700	3980423	3750000	4499999	
7	951227	1	5	55	1246	0	0	4935955	4500000	5249999	
8	495844	2	5	75	1073	1924	0	5433045	5250000	5999999	
9	1020433	3	5	75	1593	1425	1428	6456475	6000000	6749999	
10	984984	2	5	50	1777	1075	0	7445905	6750000	7499999	
11	567891	2	5	75	1135	1807	0	8016648	7500000	8249999	
12	325908	1	5	100	1548	0	0	8345498	8250000	8999999	
13	1285573	2	5	70	1453	1315	0	9632619	9000000	9749999	
14	428317	2	5	80	1891	1042	0	10063704	9750000	10499999	
15	857982	3	5	60	1779	1729	1188	10924619	10500000	11249999	
16	864693	1	5	75	1481	0	0	11794008	11250000	11999999	
Total number of pulses in waveform = 34											
*****											
Type 5 Radar Waveform_25											
Num of Bursts = 15 Burst Interval (us)= 800000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)	
1	153024	3	17	95	1512	1704	1549	153024	0	799999	
2	1078324	2	17	75	1089	1057	0	1236113	800000	1599999	
3	452687	1	17	95	1729	0	0	1690946	1600000	2399999	
4	821547	1	17	85	1903	0	0	2514222	2400000	3199999	
5	787907	2	17	90	1208	1615	0	3304032	3200000	3999999	
6	1366398	2	17	70	1606	1545	0	4673253	4000000	4799999	
7	529886	1	17	70	1238	0	0	5206290	4800000	5599999	
8	931553	1	17	65	1539	0	0	6139081	5600000	6399999	
9	514403	3	17	50	1554	1576	1125	6655023	6400000	7199999	
10	925937	1	17	75	1175	0	0	7585215	7200000	7999999	
11	488617	1	17	85	1591	0	0	8075007	8000000	8799999	
12	1016308	2	17	90	1537	1175	0	9092906	8800000	9599999	
13	1232857	2	17	70	1571	1596	0	10328475	9600000	10399999	
14	802558	1	17	75	1927	0	0	11134200	10400000	11199999	
15	589832	1	17	50	1248	0	0	11725959	11200000	11999999	
Total number of pulses in waveform = 24											
*****											

### Type 5 Radar Waveform\_26

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	132126	2	14	70	1246	1939	0	132126	0	1333332
2	1380466	1	14	85	1043	0	0	1515777	1333333	2666665
3	1660144	2	14	60	1588	1346	0	3176964	2666666	3999998
4	1698143	1	14	55	1216	0	0	4878041	3999999	5333331
5	1204562	1	14	75	1531	0	0	6083819	5333332	6666664
6	873688	2	14	75	1019	1394	0	6959038	6666665	7999997
7	1792866	3	14	65	1664	1775	1505	8754317	7999998	9333330
8	1568790	1	14	50	1020	0	0	10328051	9333331	10666663
9	1228462	3	14	85	1708	1496	1531	11557533	10666664	11999996

Total number of pulses in waveform = 16

### Type 5 Radar Waveform\_27

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

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	228443	3	6	60	1176	1103	1800	228443	0	1090908
2	1597166	3	6	60	1620	1206	1994	1829688	1090909	2181817
3	1086999	2	6	60	1186	1421	0	2921507	2181818	3272726
4	1229137	2	6	90	1978	1108	0	4153251	3272727	4363635
5	458527	2	6	95	1530	1104	0	4614864	4363636	5454544
6	1162560	3	6	85	1633	1007	1263	5780058	5454545	6545453
7	1696320	3	6	55	1890	1118	1096	7480281	6545454	7636362
8	212903	2	6	100	1331	1807	0	7697288	7636363	8727271
9	1572231	3	6	70	1218	1817	1390	9272657	8727272	9818180
10	1527816	3	6	100	1451	1193	1852	10804898	9818181	10909089
11	714997	2	6	90	1371	1705	0	11524391	10909090	11999998

Total number of pulses in waveform = 28

### Type 5 Radar Waveform\_28

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	559127	2	19	80	1350	1913	0	559127	0	599999
2	434289	2	19	50	1979	1829	0	9966679	600000	1199999
3	304199	1	19	55	1936	0	0	1304686	1200000	1799999
4	10764173	3	19	60	1768	1273	1793	2382095	1800000	2399999
5	295820	2	19	80	1128	1574	0	2682739	2400000	2999999
6	353648	3	19	80	1596	1349	1487	3039289	3000000	3599999
7	925754	3	19	70	1373	1965	1357	3969475	3600000	4199999
8	654879	3	19	75	1604	1705	1657	4629049	4200000	4799999
9	269920	3	19	85	1143	1811	1224	4903935	4800000	5399999
10	1016241	2	19	60	1480	1749	0	5924354	5400000	5999999
11	575514	3	19	95	1565	1647	1598	6503097	6000000	6599999
12	106419	3	19	60	1382	1337	1168	6614326	6600000	7199999
13	915935	1	19	80	1728	0	0	7534148	7200000	7799999
14	849545	1	19	55	1799	0	0	8385421	7800000	8399999
15	428160	1	19	100	1506	0	0	8815380	8400000	8999999
16	556140	2	19	55	1574	1870	0	9373026	9000000	9599999
17	281148	2	19	70	1994	1557	0	9857618	9600000	10199999
18	692094	1	19	80	1270	0	0	10253263	10200000	10799999
19	939999	3	19	100	1588	1275	1999	11194532	10800000	11399999
20	585813	2	19	90	1809	1096	0	11785207	11400000	11999999

Total number of pulses in waveform = 43

Type 5 Radar Waveform_29										
Num of Bursts = 13 Burst Interval (us)= 923077										
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	374970	1	9	100	1751	0	0	374970	0	923076
2	1098177	1	9	85	1988	0	0	1474898	923077	1846153
3	999289	3	9	85	1709	1533	1306	2476175	1846154	2769230
4	1040094	1	9	50	1281	0	0	3520817	2769231	3692307
5	637218	3	9	65	1603	1691	1056	4159316	3692308	4615384
6	763625	1	9	70	1365	0	0	4927291	4615385	5538461
7	913249	2	9	50	1301	1223	0	5841905	5538462	6461538
8	856718	3	9	80	1817	1443	1740	6701147	6461539	7384615
9	1480661	2	9	95	1390	1030	0	8186808	7384616	8307692
10	526303	3	9	75	1000	1757	1896	8715531	8307693	9230769
11	629123	2	9	65	1380	1910	0	9349307	9230770	10153846
12	1421501	3	9	65	1650	1186	1411	10774098	10153847	11076923
13	374577	3	9	95	1329	1725	1379	11152922	11076924	12000000
Total number of pulses in waveform = 28										
*****										
Type 5 Radar Waveform_30										
Num of Bursts = 12 Burst Interval (us)= 1000000										
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)
1	339405	3	18	60	1947	1144	1686	339405	0	999999
2	1355994	2	18	55	1177	1471	0	1700176	1000000	1999999
3	410457	1	18	80	1371	0	0	2113281	2000000	2999999
4	899696	2	18	55	1621	1015	0	3014348	3000000	3999999
5	1341558	2	18	75	1360	1160	0	4358542	4000000	4999999
6	1167567	2	18	65	1672	1645	0	5528629	5000000	5999999
7	1067624	2	18	70	1570	1098	0	6599570	6000000	6999999
8	1030602	2	18	95	1391	1006	0	7632840	7000000	7999999
9	1109534	2	18	90	1796	1193	0	8744771	8000000	8999999
10	416708	2	18	65	1108	1300	0	9164468	9000000	9999999
11	1564693	2	18	80	1711	1114	0	10731569	10000000	10999999
12	1108429	1	18	75	1447	0	0	11842823	11000000	11999999
Total number of pulses in waveform = 23										
*****										

## Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5292	1	16	5301	1
2	5292	1	17	5302	1
3	5293	1	18	5302	1
4	5293	1	19	5303	1
5	5294	1	20	5303	1
6	5294	1	21	5304	1
7	5295	1	22	5304	1
8	5295	1	23	5305	1
9	5296	1	24	5305	1
10	5296	1	25	5306	1
11	5297	1	26	5306	1
12	5297	1	27	5307	1
13	5298	1	28	5307	1
14	5299	1	29	5308	1
15	5300	1	30	5308	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5266	21	6	5294	18
25	5289	75	8	5305	24
48	5270	144	10	5280	30
72	5274	216	16	5297	48
73	5305	219	17	5299	51
77	5311	231	51	5315	153
79	5301	237	70	5307	210
83	5263	249	80	5267	240
92	5262	276	91	5303	273
98	5319	294	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5310	3	4	5316	12
4	5284	12	11	5318	33
14	5262	42	14	5281	42
18	5317	54	17	5263	51
23	5301	69	31	5270	93
25	5281	75	34	5315	102
35	5308	105	40	5305	120
36	5287	108	45	5272	135
43	5302	129	47	5268	141
46	5321	138	49	5289	147
59	5269	177	58	5269	174
62	5267	186	71	5293	213
65	5272	195	77	5299	231
74	5299	222	94	5301	282
87	5289	261	--	--	--
88	5312	264	--	--	--
94	5295	282	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5315	12	19	5271	57
13	5291	39	51	5301	153
18	5293	54	61	5300	183
27	5317	81	68	5274	204
33	5286	99	89	5294	267
37	5283	111	94	5277	282
49	5312	147	95	5278	285
67	5264	201	98	5303	294
70	5294	210	--	--	--
82	5306	246	--	--	--
96	5322	288	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5273	18	3	5290	9
11	5302	33	13	5283	39
17	5313	51	19	5305	57
22	5278	66	28	5276	84
23	5276	69	29	5294	87
25	5290	75	34	5293	102
42	5316	126	40	5282	120
52	5263	156	57	5317	171
56	5301	168	61	5319	183
69	5275	207	78	5264	234
72	5283	216	80	5281	240
77	5300	231	92	5311	276
84	5322	252	98	5266	294
85	5319	255	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5264	0	13	5291	39
1	5293	3	21	5285	63
9	5303	27	22	5267	66
17	5275	51	23	5319	69
18	5262	54	27	5278	81
29	5312	87	33	5284	99
55	5322	165	41	5310	123
62	5274	186	49	5292	147
64	5313	192	56	5321	168
66	5268	198	57	5288	171
68	5310	204	58	5308	174
80	5319	240	78	5298	234
81	5267	243	81	5273	243
90	5280	270	84	5318	252
--	--	--	96	5268	288

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
0	5308	0	16	5285	48
14	5310	42	28	5321	84
20	5288	60	34	5284	102
27	5273	81	38	5327	114
29	5274	87	53	5309	159
34	5307	102	61	5299	183
41	5270	123	63	5316	189
44	5323	132	66	5322	198
46	5293	138	71	5288	213
48	5329	144	83	5275	249
51	5276	153	87	5297	261
56	5305	168	93	5287	279
57	5301	171	--	--	--
72	5298	216	--	--	--
81	5317	243	--	--	--
84	5302	252	--	--	--
85	5287	255	--	--	--
89	5271	267	--	--	--
98	5315	294	--	--	--
99	5297	297	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5299	6	12	5278	36
8	5294	24	15	5271	45
12	5306	36	35	5303	105
20	5270	60	42	5273	126
22	5291	66	43	5307	129
23	5314	69	49	5302	147
25	5321	75	65	5276	195
44	5275	132	67	5284	201
46	5273	138	82	5277	246
51	5302	153	--	--	--
61	5289	183	--	--	--
62	5330	186	--	--	--
75	5284	225	--	--	--
91	5280	273	--	--	--
95	5276	285	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5311	0	0	5299	0
7	5318	21	13	5278	39
12	5329	36	23	5273	69
18	5327	54	28	5324	84
20	5290	60	30	5305	90
31	5285	93	62	5285	186
33	5283	99	63	5315	189
35	5289	105	65	5309	195
47	5321	141	68	5313	204
58	5309	174	75	5289	225
74	5315	222	98	5328	294
80	5301	240	--	--	--
90	5295	270	--	--	--
94	5303	282	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5324	24	39	5330	117
18	5323	54	51	5319	153
19	5291	57	52	5312	156
22	5310	66	53	5309	159
28	5329	84	55	5327	165
33	5322	99	60	5292	180
41	5283	123	61	5314	183
42	5301	126	78	5299	234
46	5271	138	79	5281	237
76	5306	228	91	5287	273
80	5281	240	94	5273	282
90	5326	270	--	--	--
91	5280	273	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5278	3	9	5301	27
4	5288	12	18	5289	54
18	5316	54	39	5319	117
45	5285	135	47	5291	141
56	5293	168	57	5311	171
63	5305	189	75	5316	225
64	5312	192	77	5290	231
65	5311	195	79	5321	237
67	5313	201	80	5297	240
70	5327	210	87	5270	261
72	5306	216	--	--	--
80	5315	240	--	--	--
82	5321	246	--	--	--
88	5281	264	--	--	--
91	5329	273	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5282	15	3	5292	9
10	5324	30	7	5338	21
24	5295	72	8	5296	24
35	5319	105	9	5299	27
42	5317	126	20	5337	60
48	5305	144	27	5294	81
49	5296	147	40	5303	120
59	5337	177	46	5278	138
77	5331	231	47	5314	141
82	5338	246	48	5311	144
85	5308	255	52	5324	156
89	5290	267	68	5320	204
90	5289	270	83	5327	249
--	--	--	95	5332	285

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
15	5292	45	8	5304	24
16	5285	48	56	5294	168
34	5307	102	80	5328	240
36	5309	108	81	5295	243
46	5337	138	90	5291	270
54	5286	162	95	5332	285
61	5280	183	--	--	--
66	5329	198	--	--	--
68	5303	204	--	--	--
69	5299	207	--	--	--
75	5321	225	--	--	--
76	5297	228	--	--	--
83	5288	249	--	--	--
87	5323	261	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5311	12	17	5294	51
10	5303	30	31	5298	93
15	5336	45	35	5331	105
19	5310	57	37	5303	111
22	5285	66	66	5337	198
25	5325	75	67	5307	201
29	5335	87	81	5291	243
33	5289	99	84	5333	252
38	5332	114	85	5285	255
43	5337	129	92	5335	276
56	5329	168	--	--	--
58	5284	174	--	--	--
70	5326	210	--	--	--
77	5314	231	--	--	--
78	5291	234	--	--	--
94	5312	282	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5293	18	3	5295	9
14	5338	42	7	5297	21
23	5301	69	24	5330	72
28	5307	84	33	5318	99
38	5320	114	39	5306	117
44	5333	132	41	5316	123
68	5309	204	52	5314	156
78	5327	234	61	5292	183
79	5329	237	78	5321	234
86	5287	258	97	5291	291
87	5316	261	--	--	--
92	5322	276	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5295	0	0	5300	0
9	5305	27	2	5301	6
21	5334	63	5	5316	15
25	5308	75	13	5287	39
37	5336	111	17	5317	51
38	5337	114	19	5330	57
40	5313	120	24	5331	72
45	5290	135	29	5325	87
60	5311	180	37	5311	111
81	5304	243	42	5313	126
82	5320	246	47	5289	141
91	5280	273	58	5320	174
92	5299	276	62	5292	186
93	5328	279	67	5308	201
94	5279	282	79	5315	237
97	5310	291	84	5302	252
--	--	--	94	5278	282
--	--	--	98	5312	294
--	--	--	99	5282	297

Product	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
Test Item	Radar Statistical Performance Check (802.11n-HT40 mode – 5310MHz)		

#### Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5292	1	618	86	1
2	5293	1	538	99	1
3	5294	1	898	59	1
4	5295	1	738	72	1
5	5296	1	918	58	1
6	5299	1	878	61	1
7	5300	1	838	63	1
8	5301	1	938	57	1
9	5302	1	798	67	1
10	5303	1	678	78	1
11	5304	1	758	70	1
12	5306	1	598	89	1
13	5307	1	578	92	1
14	5308	1	518	102	1
15	5309	1	858	62	1
16	5310	1	1245	43	1
17	5311	1	1580	34	1
18	5312	1	2958	18	1
19	5316	1	1523	35	1
20	5317	1	1628	33	1
21	5318	1	2810	19	1
22	5319	1	2540	21	1
23	5320	1	641	83	1
24	5321	1	1148	46	1
25	5322	1	914	58	1
26	5323	1	3023	18	1
27	5324	1	2027	27	1
28	5325	1	1191	45	1
29	5326	1	845	63	1

30	5327	1	2183	25	1
Detection Percentage (%)					100%

## Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5292	4.8	221	28	1
2	5293	1.4	186	29	1
3	5294	1.9	178	28	1
4	5295	2.4	210	28	1
5	5296	4.2	159	27	1
6	5299	2.7	205	26	1
7	5300	3.9	163	24	1
8	5301	2.3	202	26	1
9	5302	1.8	182	28	1
10	5303	1.9	172	25	1
11	5304	4.5	179	27	1
12	5306	3.6	159	26	1
13	5307	4.7	187	29	1
14	5308	2.9	177	27	1
15	5309	5.0	204	26	1
16	5310	2.1	185	27	1
17	5311	2.7	216	29	1
18	5312	4.2	152	26	1
19	5316	3.0	159	28	1
20	5317	4.1	193	26	1
21	5318	4.4	220	26	1
22	5319	4.8	207	27	1
23	5320	4.5	157	26	1
24	5321	3.3	165	23	1
25	5322	2.2	156	29	1
26	5323	4.3	161	23	1
27	5324	2.4	199	27	1
28	5325	2.0	175	29	1
29	5326	1.4	212	24	1
30	5327	5.0	162	23	1
Detection Percentage (%)					100%

## Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5292	9.5	386	16	1
2	5293	8.0	432	18	1
3	5294	8.2	291	18	1
4	5295	8.9	398	17	1
5	5296	8.6	485	17	1
6	5299	8.1	483	16	1
7	5300	7.8	430	16	1
8	5301	6.0	478	18	1
9	5302	8.7	297	17	1
10	5303	9.7	469	18	1
11	5304	6.3	390	18	1
12	5306	7.6	308	16	1
13	5307	7.6	395	16	1
14	5308	7.4	494	16	1
15	5309	7.9	385	17	1
16	5310	9.1	287	16	1
17	5311	6.7	355	16	1
18	5312	8.4	491	18	1
19	5316	9.5	279	16	1
20	5317	7.1	313	18	1
21	5318	8.5	388	16	1
22	5319	8.7	316	18	1
23	5320	9.6	325	17	1
24	5321	8.5	490	16	1
25	5322	6.0	345	16	1
26	5323	7.7	383	17	1
27	5324	7.7	438	18	1
28	5325	9.2	415	16	1
29	5326	10.0	351	16	1
30	5327	7.5	283	18	1
Detection Percentage (%)					100%

## Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5292	15.3	315	16	1
2	5293	16.7	430	16	1
3	5294	12.3	268	14	1
4	5295	15.3	497	14	1
5	5296	13.1	470	13	1
6	5299	12.3	321	15	1
7	5300	14.9	356	14	1
8	5301	17.9	499	15	1
9	5302	19.4	334	16	1
10	5303	11.7	470	14	1
11	5304	17.6	271	15	1
12	5306	14.0	391	16	1
13	5307	16.6	410	15	1
14	5308	17.3	440	13	1
15	5309	16.1	350	12	1
16	5310	13.2	444	12	1
17	5311	18.8	265	15	1
18	5312	13.2	290	15	1
19	5316	14.8	371	14	1
20	5317	17.4	445	15	1
21	5318	11.0	448	15	1
22	5319	11.3	302	12	1
23	5320	12.9	353	14	1
24	5321	13.5	281	13	1
25	5322	14.0	267	16	1
26	5323	13.8	264	13	1
27	5324	18.4	467	12	1
28	5325	11.6	465	14	1
29	5326	15.8	313	16	1
30	5327	17.0	437	15	1
Detection Percentage (%)					100%

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

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

## Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5296.8	1	16	5310.0	1
2	5295.6	1	17	5310.0	1
3	5298.8	1	18	5310.0	1
4	5295.2	1	19	5310.0	1
5	5299.2	1	20	5310.0	1
6	5294.0	1	21	5324.0	1
7	5294.4	1	22	5324.8	1
8	5299.6	1	23	5323.2	1
9	5296.0	1	24	5326.0	1
10	5297.6	1	25	5321.2	1
11	5310.0	1	26	5322.4	1
12	5310.0	1	27	5325.6	1
13	5310.0	1	28	5320.4	1
14	5310.0	1	29	5324.4	1
15	5310.0	1	30	5320.8	1
Detection Percentage (%)					5296.8

Type 5 Radar Waveform_1											
Num of Bursts = 16 Burst Interval (us)= 750000											
Burst # Off Time (us) # Pulses Chirp (MHz) PW (us) Pulse 1 Pri(us) Pulse 2 Pri(us) Pulse 3 Pri(us) Start Loc Start Burst Interval(us) End Burst Interval(us)											
1	619630	3	12	75	1152	1133	1266	619630	0	749999	
2	175064	3	12	85	1700	1161	1738	798245	750000	1499999	
3	1286258	1	12	50	1576	0	0	2089102	1500000	2249999	
4	884531	3	12	80	1620	1976	1324	2975209	2250000	2999999	
5	269491	1	12	50	1383	0	0	3249620	3000000	3749999	
6	1188657	1	12	100	1852	0	0	4439860	3750000	4499999	
7	208799	1	12	60	1467	0	0	4650311	4500000	5249999	
8	1298879	1	12	80	1315	0	0	5950657	5250000	5999999	
9	467214	3	12	80	1676	1832	1743	6419186	6000000	6749999	
10	838122	2	12	50	1128	1506	0	7262559	6750000	7499999	
11	815303	2	12	70	1956	1813	0	8080496	7500000	8249999	
12	379408	1	12	60	1238	0	0	8463673	8250000	8999999	
13	994009	3	12	85	1798	1609	1484	9458920	9000000	9749999	
14	537842	3	12	50	1760	1361	1371	10001653	9750000	10499999	
15	1122820	1	12	100	1231	0	0	11128965	10500000	11249999	
16	801200	2	12	90	1258	1483	0	11931396	11250000	11999999	
Total number of pulses in waveform = 31											

### Type 5 Radar Waveform\_2

Num of Bursts = 12 Burst Interval (us)= 1000000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)	
1	1396518	2	9	55	1470	1591	0	538318	0	999999	
2	454766	2	9	90	1539	1233	0	1937897	1000000	1999999	
3	1396379	2	9	75	1480	1225	0	2395435	2000000	2999999	
4	942905	2	9	70	1136	1153	0	3794519	3000000	3999999	
5	377259	3	9	50	1559	1294	1019	4739713	4000000	4999999	
6	1842805	3	9	65	1167	1780	1697	5120844	5000000	5999999	
7	505694	1	9	55	1362	0	0	6968293	6000000	6999999	
8	945854	1	9	50	1560	0	0	7475349	7000000	7999999	
9	722159	3	9	100	1555	1607	1687	8422763	8000000	8999999	
10	1284567	1	9	70	1387	0	0	9149771	9000000	9999999	
11	1369112	3	9	75	1819	1181	1614	10435725	10000000	10999999	
12	1369112	2	9	65	1093	1913	0	11809451	11000000	11999999	
Total number of pulses in waveform = 25											
*****											

### Type 5 Radar Waveform\_3

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	743494	1	17	80	1595	0	0	743494	0	857142	
2	771874	2	17	95	1541	1530	0	1516963	857143	1714285	
3	287491	1	17	70	1674	0	0	1807525	1714286	2571428	
4	1436587	3	17	65	1738	1524	1343	3245786	2571429	3428571	
5	313387	2	17	70	1666	1882	0	3563778	3428572	4285714	
6	970090	3	17	50	1915	1955	1352	4537416	4285715	5142857	
7	1173544	3	17	85	1878	1955	1759	5716182	5142858	6000000	
8	305100	2	17	75	1107	1949	0	6026874	6000001	6857143	
9	892899	1	17	100	1259	0	0	6922829	6857144	7714286	
10	1420525	3	17	80	1242	1861	1160	8344613	7714287	8571429	
11	741954	3	17	85	1738	1395	1306	9090830	8571430	9428572	
12	972150	2	17	55	1605	1532	0	10067419	9428573	10285715	
13	501902	2	17	75	1084	1109	0	10572458	10285716	11142858	
14	1379210	3	17	95	1467	1295	1160	11953861	11142859	12000001	
Total number of pulses in waveform = 31											
*****											

### Type 5 Radar Waveform\_4

Num of Bursts = 15 Burst Interval (us)= 800000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)	
1	468328	3	8	60	1869	1176	1128	468328	0	799999	
2	715062	2	8	85	1648	1082	0	1187563	800000	1599999	
3	776073	3	8	100	1022	1650	1596	1966366	1600000	2399999	
4	732480	1	8	50	1620	0	0	2703114	2400000	3199999	
5	810029	2	8	80	1086	1818	0	3805712	3200000	3999999	
6	219639	3	8	75	1844	1263	1142	4618645	4000000	4799999	
7	1251293	3	8	80	1140	1998	1131	4842533	4800000	5599999	
8	647970	1	8	100	1954	0	0	6098095	5600000	6399999	
9	1011678	2	8	85	1320	1635	0	6748019	6400000	7199999	
10	899005	1	8	80	1648	0	0	7762652	7200000	7999999	
11	903366	2	8	55	1573	1117	0	8663305	8000000	8799999	
12	34631	3	8	75	1449	1996	1554	9569361	8800000	9599999	
13	913753	2	8	80	1455	1253	0	9608991	9600000	10399999	
14	1126098	3	8	55	1887	1717	1723	10525452	10400000	11199999	
15	1126098	3	8	90	1992	1387	1575	11656877	11200000	11999999	
Total number of pulses in waveform = 34											
*****											

Type 5 Radar Waveform_5											
Num of Bursts = 11 Burst Interval (us)= 1090909											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	292344	2	18	90	1814	1506	0	292344	0	1090908	
2	1612953	3	18	100	1809	1154	1800	1908617	1090909	2181817	
3	853917	2	18	85	1498	1634	0	2767297	2181818	3272726	
4	863598	2	18	80	1373	1501	0	3634027	3272727	4363635	
5	1775612	2	18	65	1687	1237	0	5412513	4363636	5454544	
6	105998	1	18	65	1488	0	0	5521435	5454545	6545453	
7	1982412	3	18	100	1081	1721	1824	7505335	6545454	7636362	
8	484812	1	18	100	1614	0	0	7994773	7636363	8727271	
9	987992	3	18	100	1324	1942	1059	8984379	8727272	9818180	
10	860852	3	18	55	1611	1910	1986	9849556	9818181	10909089	
11	1777102	2	18	65	1766	1491	0	11632165	10909090	11999998	
Total number of pulses in waveform = 24											
*****											
Type 5 Radar Waveform_6											
Num of Bursts = 16 Burst Interval (us)= 750000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	203003	2	5	85	1227	1574	0	203003	0	749999	
2	550680	3	5	50	1619	1103	1939	756484	750000	1499999	
3	1359895	3	5	60	1566	1234	1949	2121040	1500000	2249999	
4	823247	2	5	75	1098	1865	0	2949036	2250000	2999999	
5	346505	2	5	55	1694	1789	0	3298504	3000000	3749999	
6	1024660	1	5	80	1201	0	0	4326647	3750000	4499999	
7	2536664	1	5	50	1534	0	0	4581512	4500000	5249999	
8	1309249	2	5	95	1255	1204	0	5892295	5250000	5999999	
9	201416	3	5	55	1537	1665	1930	6096170	6000000	6749999	
10	970827	3	5	50	1141	1702	1085	7072129	6750000	7499999	
11	1055191	3	5	70	1709	1492	1298	8131248	7500000	8249999	
12	430733	3	5	55	1343	1978	1985	8566480	8250000	8999999	
13	904312	1	5	100	1410	0	0	9476098	9000000	9749999	
14	605940	3	5	60	1193	1862	1780	10083448	9750000	10499999	
15	1034776	2	5	90	1228	1561	0	11123059	10500000	11249999	
16	305442	1	5	65	1222	0	0	11431290	11250000	11999999	
Total number of pulses in waveform = 35											
*****											
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	699542	2	6	90	1283	1763	0	699542	0	799999	
2	599178	3	6	50	1611	1077	1415	1301766	800000	1599999	
3	364428	3	6	80	1908	1346	1447	1670297	1600000	2399999	
4	917672	3	6	70	1337	1087	1694	2592670	2400000	3199999	
5	1004313	3	6	60	1443	1935	1473	3601101	3200000	3999999	
6	446561	2	6	70	1691	1975	0	4052513	4000000	4799999	
7	1342248	2	6	100	1031	1745	0	5398427	4800000	5599999	
8	654084	1	6	55	1620	0	0	6055287	5600000	6399999	
9	1002316	3	6	80	1304	1390	1486	7059223	6400000	7199999	
10	205123	3	6	55	1106	1596	1103	7268526	7200000	7999999	
11	1407244	1	6	85	1721	0	0	8679575	8000000	8799999	
12	730375	2	6	55	1107	1607	0	9411671	8800000	9599999	
13	463630	3	6	55	1052	1643	1426	9878015	9600000	10399999	
14	594601	3	6	75	1322	1402	1257	10476737	10400000	11199999	
15	1250586	1	6	100	1763	0	0	11731304	11200000	11999999	
Total number of pulses in waveform = 35											
*****											

Type 5 Radar Waveform_8											
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	421394	3	19	60	1033	1325	1061	421394	0	599999	
2	262365	1	19	95	1818	0	0	687178	600000	1199999	
3	806354	1	19	95	1600	0	0	1495348	1200000	1799999	
4	866771	3	19	100	1597	1104	1009	2363719	1800000	2399999	
5	156265	2	19	100	1189	1984	0	2523694	2400000	2999999	
6	551142	2	19	60	1755	1461	0	3078009	3000000	3599999	
7	756950	3	19	80	1913	1158	1404	3838175	3600000	4199999	
8	597903	1	19	65	1084	0	0	4440553	4200000	4799999	
9	445152	2	19	80	1208	1383	0	4886789	4800000	5399999	
10	1065346	3	19	95	1874	1502	1322	5954726	5400000	5999999	
11	231572	1	19	75	1006	0	0	6190996	6000000	6599999	
12	546608	3	19	60	1276	1660	1493	6737610	6600000	7199999	
13	958407	3	19	60	1597	1154	1201	7700446	7200000	7799999	
14	220355	3	19	85	1972	1875	1320	7924753	7800000	8399999	
15	967456	3	19	90	1766	1665	1499	8897376	8400000	8999999	
16	226052	3	19	100	1623	1143	1228	9128358	9000000	9599999	
17	859717	3	19	85	1763	1957	1655	9992069	9800000	10199999	
18	369908	2	19	80	1695	1089	0	10367252	10200000	10799999	
19	1021544	1	19	60	1160	0	0	11391580	10800000	11399999	
20	510192	2	19	80	1616	1499	0	11902932	11400000	11999999	
Total number of pulses in waveform = 45											
*****											
Type 5 Radar Waveform_9											
Num of Bursts = 18 Burst Interval (us)= 666667											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)	
1	326855	3	10	60	1326	1848	1418	926855	0	666666	
2	558700	2	10	55	1735	1342	0	890147	666667	1333333	
3	969260	3	10	90	1388	1047	1598	1862484	1333334	2000000	
4	647131	1	10	50	1451	0	0	2513648	2000001	2666667	
5	233467	1	10	90	1188	0	0	2748566	2666668	3333334	
6	687297	3	10	70	1559	1643	1928	3437051	3333335	4000001	
7	1110446	1	10	100	1330	0	0	4552627	4000002	4666668	
8	382590	3	10	95	1954	1520	1861	4936547	4666669	5333335	
9	445828	3	10	75	1877	1425	1193	5387710	5333336	6000002	
10	812941	2	10	60	1463	1077	0	6205146	6000003	6666669	
11	903804	2	10	60	1150	1486	0	7111490	6666670	7333336	
12	358134	1	10	100	1116	0	0	7472240	7333337	8000003	
13	668629	2	10	100	1717	1411	0	8141985	8000004	8666670	
14	819545	2	10	50	1784	1667	0	8964658	8666671	9333337	
15	761907	3	10	85	1505	1195	1160	9730016	9333338	10000004	
16	805246	3	10	50	1974	1408	1983	10539122	10000005	10666671	
17	632469	1	10	90	1264	0	0	11176956	10666672	11333338	
18	666668	3	10	50	1707	1264	1996	11844888	11333339	12000005	
Total number of pulses in waveform = 39											
*****											
Type 5 Radar Waveform_10											
Num of Bursts = 20 Burst Interval (us)= 600000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval (us)	End Burst Interval (us)	
1	300131	3	14	100	1553	1878	1205	300131	0	599999	
2	739594	1	14	90	1130	0	0	1044361	600000	1199999	
3	637940	2	14	85	1317	1088	0	1683431	1200000	1799999	
4	141257	3	14	55	1676	1748	1497	1827093	1800000	2399999	
5	779975	3	14	50	1539	1166	1286	2611989	2400000	2999999	
6	8400449	2	14	55	1550	1121	0	3456029	3000000	3699999	
7	519681	3	14	70	1287	1816	1839	3978381	3600000	4199999	
8	650968	2	14	95	1966	1843	0	4634291	4200000	4799999	
9	272839	3	14	50	1334	1480	1865	4910929	4800000	5399999	
10	668561	3	14	80	1480	1910	1794	5584169	5400000	5999999	
11	666235	1	14	70	1080	0	0	6255588	6000000	6599999	
12	813748	2	14	85	1304	1299	0	7070416	6600000	7199999	
13	159906	2	14	95	1451	1846	0	7232925	7200000	7799999	
14	814695	2	14	65	1949	1686	0	8050917	7800000	8399999	
15	371305	1	14	50	1091	0	0	8425857	8400000	8999999	
16	937099	3	14	65	1052	1973	1075	9364047	9000000	9699999	
17	672875	1	14	65	1364	0	0	10041022	9600000	10199999	
18	179586	1	14	55	1637	0	0	10221962	10200000	10799999	
19	584595	1	14	85	1728	0	0	10808194	10800000	11399999	
20	800330	1	14	55	1457	0	0	11610252	11400000	11999999	
Total number of pulses in waveform = 40											
*****											

### Type 5 Radar Waveform\_11

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	718900	2	8	100	1463	1602	0	718900	0	1499999
2	1225588	3	8	85	1276	1559	1790	1947553	1500000	2999999
3	2416602	3	8	95	1954	1184	1259	4368780	3000000	4499999
4	1272404	3	8	55	1634	1078	1329	5645581	4500000	5999999
5	438753	1	8	90	1660	0	0	6088375	6000000	7499999
6	2115405	1	8	85	1025	0	0	8205440	7500000	8999999
7	1954708	1	8	55	1438	0	0	10161173	9000000	10499999
8	619475	3	8	60	1805	1099	1038	10782086	10500000	11999999

Total number of pulses in waveform = 17

### 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	397761	2	14	70	1686	1419	0	397761	0	799999
2	1154921	2	14	50	1381	1281	0	1555787	800000	1599999
3	275077	2	14	70	1356	1073	0	1833526	1600000	2399999
4	638555	3	14	95	1988	1600	1335	2474510	2400000	3199999
5	1116535	3	14	80	1746	1193	1014	3595968	3200000	3999999
6	638543	3	14	75	1815	1113	1176	4238484	4000000	4799999
7	619958	2	14	70	1699	1565	0	4862526	4800000	5599999
8	1400374	1	14	100	1094	0	0	6266164	5600000	6399999
9	814445	1	14	70	1351	0	0	7081703	6400000	7199999
10	834111	2	14	50	1197	1847	0	7917165	7200000	7999999
11	803491	3	14	95	1100	1211	1960	8723700	8000000	8799999
12	768912	1	14	85	1454	0	0	9496883	8800000	9599999
13	879932	1	14	75	1823	0	0	10378269	9600000	10399999
14	107676	2	14	80	1206	1600	0	10487768	10400000	11199999
15	1354493	1	14	65	1255	0	0	11845067	11200000	11999999

Total number of pulses in waveform = 29

### Type 5 Radar Waveform\_13

Num of Bursts = 18

Burst Interval (us)= 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	292509	3	6	60	1655	1465	1698	292509	0	666666
2	385001	2	6	65	1899	1430	0	682328	666667	1333333
3	901812	3	6	90	1056	1610	1397	1587469	1333334	2000000
4	724347	1	6	90	1732	0	0	2315879	2000001	2666667
5	474306	1	6	55	1850	0	0	2791917	2666668	3333334
6	615789	2	6	90	1105	1031	0	3409566	3333335	4000001
7	1086948	1	6	85	1303	0	0	4498640	4000002	4666668
8	546641	2	6	85	1593	1568	0	5046584	4666669	5333335
9	426997	2	6	85	1106	1836	0	5476742	5333336	6000002
10	756216	2	6	65	1695	1410	0	6235900	6000003	6666669
11	958213	3	6	50	1928	1193	1431	7197218	6666670	7333336
12	401576	3	6	80	1767	1911	1139	7603346	7333337	8000003
13	849358	3	6	70	1724	1834	1801	8457521	8000004	8666670
14	238231	2	6	95	1453	1875	0	8701111	8666671	9333337
15	1091978	2	6	60	1909	1480	0	9796417	9333338	10000004
16	525994	1	6	80	1625	0	0	10325800	10000005	10666671
17	836205	2	6	80	1858	1058	0	11163630	10666672	11333338
18	629434	2	6	80	1676	1653	0	11795980	11333339	12000005

Total number of pulses in waveform = 37

Type 5 Radar Waveform_14											
Num of Bursts = 13 Burst Interval (us)= 923077											
Burst # Off Time (us) # Pulses Chirp (MHz) PW (us) Pulse 1 Pri(us) Pulse 2 Pri(us) Pulse 3 Pri(us) Start Loc (us) Start Burst Interval(us) End Burst Interval(us)											
1	16845	2	17	100	1507	1623	0	16845	0	923076	
2	1027015	1	17	60	1648	0	0	1046990	923077	1846153	
3	954150	2	17	90	1191	1123	0	2002788	1846154	2769230	
4	1665589	3	17	80	1765	1326	1171	3670691	2769231	3692307	
5	801861	3	17	85	1045	1697	1230	4476814	3692308	4615384	
6	936075	1	17	55	1941	0	0	5416861	4615385	5538461	
7	619817	1	17	60	1388	0	0	6038619	5538462	6461538	
8	587070	3	17	55	1571	1183	1269	6627077	6461539	7384615	
9	1143906	1	17	75	1475	0	0	7775006	7384616	8307692	
10	595553	2	17	60	1860	1240	0	8371834	8307693	9230769	
11	1238412	2	17	85	1238	1511	0	9613346	9230770	10153846	
12	1237808	3	17	95	1230	1496	1953	10853903	10153847	11076923	
13	965063	3	17	80	1502	1189	1164	11823645	11076924	12000000	
Total number of pulses in waveform = 27											
****											
Type 5 Radar Waveform_15											
Num of Bursts = 9 Burst Interval (us)= 1333333											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	165188	3	5	85	1798	1605	1885	165188	0	1333332	
2	1327927	2	5	55	1526	1566	0	1498403	1333333	2666665	
3	1786966	2	5	90	1451	1517	0	3288461	2666666	3999998	
4	1920482	2	5	90	1883	1692	0	5211911	3999999	5333331	
5	425320	1	5	85	1114	0	0	5640806	5333332	6666664	
6	1136067	3	5	50	1478	1368	1560	6777987	6666665	7999997	
7	1519995	1	5	75	1675	0	0	8302388	7999998	9333330	
8	1723655	3	5	90	1183	1371	1941	10027718	9333331	10666663	
9	675086	3	5	65	1266	1541	1236	10707299	10666664	11999996	
Total number of pulses in waveform = 20											
****											
Type 5 Radar Waveform_16											
Num of Bursts = 15 Burst Interval (us)= 800000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	265696	3	9	75	1923	1443	1417	265696	0	799999	
2	690780	3	9	65	1984	1309	1983	961259	800000	1599999	
3	818536	1	9	90	1754	0	0	1785071	1600000	2399999	
4	1306423	1	9	95	1011	0	0	3093248	2400000	3199999	
5	895920	1	9	85	1204	0	0	3990179	3200000	3999999	
6	762260	1	9	70	1611	0	0	4753643	4000000	4799999	
7	1190442	2	9	85	1541	1424	0	4874296	4800000	5599999	
8	1483659	1	9	60	1134	0	0	6360920	5600000	6399999	
9	111154	3	9	60	1219	1682	1504	6473208	6400000	7199999	
10	796187	1	9	70	1978	0	0	7273800	7200000	7999999	
11	931077	1	9	85	1032	0	0	8206855	8000000	8799999	
12	734420	2	9	80	1051	1269	0	8942307	8800000	9599999	
13	851855	3	9	100	1323	1798	1941	9796482	9800000	10399999	
14	902423	3	9	90	1774	1189	1841	10703967	10400000	11199999	
15	516813	3	9	75	1493	1482	1178	11225584	11200000	11999999	
Total number of pulses in waveform = 29											
****											

### Type 5 Radar Waveform\_17

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	647218	1	10	65	1209	0	0	177629	0	666666
2	640772	2	10	95	1633	1042	0	826056	666667	1333333
3	1057208	2	10	85	1516	1036	0	1469503	1333334	2000000
4	462365	1	10	55	1463	0	0	2529263	2000001	2666667
5	351558	1	10	90	1971	0	0	2993091	2666668	3333334
6	1098829	3	10	50	1557	1132	1257	3346620	3333335	4000001
7	542037	1	10	55	1056	0	0	4449495	4000002	4666668
8	689374	2	10	85	1549	1231	0	4992588	4666669	5333335
9	3596119	2	10	65	1592	1306	0	5684742	5333336	6000002
10	655380	3	10	60	1691	1960	1591	6047259	6000003	6666669
11	967006	2	10	75	1147	1206	0	6707881	6666670	7333336
12	539613	3	10	55	1573	1730	1476	7677240	7333337	8000003
13	1001853	3	10	75	1474	1302	1742	8221632	8000004	8666670
14	324146	3	10	95	1977	1965	1297	9228003	8666671	9333337
15	560243	1	10	85	1446	0	0	9557388	9333338	10000004
16	971896	1	10	50	1587	0	0	10119077	10000005	10666671
17	435784	1	10	65	1200	0	0	11092560	10666672	11333338
18	5	10	90	1950	1049	1408	11529544	11333339	12000005	
*****										
Total number of pulses in waveform = 35										

### Type 5 Radar Waveform\_18

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	836648	2	19	75	1488	1235	0	382381	0	749999
2	812589	3	19	60	1558	1196	1997	1221752	750000	1499999
3	324823	1	19	100	1258	0	0	2039092	1500000	2249999
4	860063	1	19	80	1710	0	0	2366173	2250000	2999999
5	657895	2	19	55	1948	1591	0	3226946	3000000	3749999
6	993478	3	19	50	1740	1930	1524	3888380	3750000	4499999
7	934939	1	19	75	1843	0	0	4887052	4500000	5249999
8	577675	3	19	70	1998	1797	1750	5823834	5250000	5999999
9	706628	1	19	95	1079	0	0	6407054	6000000	6749999
10	831240	2	19	75	1425	1156	0	7114761	6750000	7499999
11	629511	3	19	100	1911	1154	1513	7948582	7500000	8249999
12	446928	2	19	70	1912	1215	0	8582671	8250000	8999999
13	749041	2	19	50	1345	1277	0	9032726	9000000	9749999
14	1147325	3	19	75	1072	1088	1506	9784389	9750000	10499999
15	601290	2	19	75	1891	1443	0	10935380	10500000	11249999
16	5	19	50	1056	1632	1332	11540004	11250000	11999999	
*****										
Total number of pulses in waveform = 34										

### Type 5 Radar Waveform\_19

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	81847	2	18	70	1017	1344	0	81847	0	923076
2	1243076	2	18	65	1619	1030	0	1327284	923077	1846153
3	1400721	2	18	50	1800	1318	0	2730654	1846154	2769230
4	1165777	1	18	50	1639	0	0	2850349	2769231	3692307
5	1671800	2	18	70	1436	1759	0	4523788	3692308	4615384
6	895191	2	18	70	1184	1203	0	5422174	4615385	5538461
7	172080	2	18	85	1694	1805	0	5596641	5538462	6461538
8	1678352	3	18	85	1385	1507	2000	7278492	6461539	7384615
9	281353	1	18	75	1365	0	0	7564737	7384616	8307692
10	922610	3	18	80	1710	1193	1710	8488712	8307693	9230769
11	835155	3	18	55	1063	1122	1758	9328480	9230770	10153846
12	1214981	1	18	55	1520	0	0	10547404	10153847	11076923
13	1145346	3	18	90	1636	1324	1152	11694270	11076924	12000000
*****										
Total number of pulses in waveform = 27										

### Type 5 Radar Waveform\_20

Type 5 Radar Waveform_20											
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	304676	1	12	75	1340	0	0	304676	0	705881	
2	434575	1	12	90	1813	0	0	740591	705882	1411763	
3	690059	1	12	70	1603	0	0	1432463	1411764	2117645	
4	1356716	3	12	60	1277	1135	1764	2790782	2117646	2823527	
5	573886	1	12	80	1846	0	0	3368844	2823528	3529409	
6	316170	3	12	55	1830	1956	1613	3686960	3529410	4235291	
7	711874	2	12	50	1338	1433	0	4404133	4235292	4941173	
8	574939	3	12	60	1699	1951	1263	4981843	4941174	5647055	
9	904780	2	12	85	1760	1313	0	5891536	5647056	6352937	
10	645904	3	12	70	1489	1125	1789	6540513	6352938	7058819	
11	809907	3	12	75	1545	1058	1249	7354823	7058820	7764701	
12	553699	3	12	65	1574	1227	1792	7912374	7764702	8470583	
13	902172	2	12	55	1306	1187	0	8819139	8470584	9176465	
14	1015228	1	12	70	1240	0	0	9836860	9176466	9882347	
15	186225	3	12	80	1827	1410	1040	10024325	9882348	10588229	
16	1137238	3	12	70	1660	1177	1504	11165840	10588230	11294111	
17	760289	1	12	50	1901	0	0	11930470	11294112	11999993	
Total number of pulses in waveform = 36											
*****											

### Type 5 Radar Waveform\_21

Type 5 Radar Waveform_21											
Num of Bursts = 10 Burst Interval (us)= 1200000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	930004	1	10	95	1077	0	0	930004	0	1199999	
2	1308254	1	10	100	1389	0	0	2239335	1200000	2399999	
3	1228708	3	10	80	1138	1580	1409	3469432	2400000	3599999	
4	1283037	1	10	55	1117	0	0	4756596	3600000	4799999	
5	891347	2	10	85	1907	1501	0	5649060	4800000	5999999	
6	1308809	2	10	50	1042	1177	0	6961277	6000000	7199999	
7	259358	3	10	95	1836	1541	1864	7222854	7200000	8399999	
8	1940623	3	10	60	1275	1455	1732	9168718	8400000	9599999	
9	1170558	1	10	90	1413	0	0	10343738	9600000	10799999	
10	593356	1	10	60	1408	0	0	10938507	10800000	11999999	
Total number of pulses in waveform = 18											
*****											

### Type 5 Radar Waveform\_22

Type 5 Radar Waveform_22											
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	2056683	1	8	65	1517	0	0	205668	0	599999	
2	589693	3	8	80	1912	1001	1662	796878	600000	1199999	
3	497714	1	8	50	1166	0	0	1299167	1200000	1799999	
4	950699	3	8	75	1566	1647	1748	2251032	1800000	2399999	
5	707609	2	8	80	1685	1306	0	2963692	2400000	2999999	
6	443721	3	8	100	1009	1576	1272	3410304	3000000	3599999	
7	683963	3	8	90	1896	1497	1835	4098124	3600000	4199999	
8	251254	2	8	60	1448	1150	0	4354606	4200000	4799999	
9	865162	2	8	65	1727	1637	0	5222366	4800000	5399999	
10	633895	3	8	95	1231	1215	1570	5859625	5400000	5999999	
11	632910	3	8	60	1994	1732	1170	6496551	6000000	6599999	
12	310100	1	8	100	1960	0	0	6811547	6600000	7199999	
13	882411	2	8	50	1549	1915	0	7696918	7200000	7799999	
14	235117	3	8	90	1370	1035	1087	7934499	7800000	8399999	
15	757786	2	8	70	1766	1441	0	8695777	8400000	8999999	
16	749942	1	8	80	1766	0	0	9448316	9000000	9599999	
17	181233	2	8	70	1322	1300	0	9631315	9600000	10199999	
18	921318	3	8	50	1519	1659	1507	10555255	10200000	10799999	
19	366141	1	8	75	1436	0	0	10916081	10800000	11399999	
20	872640	2	8	65	1907	1178	0	11790157	11400000	11999999	
Total number of pulses in waveform = 43											
*****											

Type 5 Radar Waveform_23											
Num of Bursts = 9 Burst Interval (us)= 1333333											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	220944	2	12	75	1153	1003	0	220944	0	1333332	
2	2016894	1	12	70	1528	0	0	2239994	1333333	2666665	
3	851084	2	12	75	1137	1387	0	3092606	2666666	3999998	
4	1330487	3	12	90	1505	1533	1512	4425617	3999999	5333331	
5	1797157	3	12	95	1853	1899	2000	6227324	5333332	6666664	
6	1057292	2	12	60	1060	1854	0	7290368	6666665	7999997	
7	1474197	1	12	50	1002	0	0	8767479	7999998	9333330	
8	1010325	1	12	85	1897	0	0	9778806	9333331	10666663	
9	1520638	2	12	90	1839	1851	0	11301341	10666664	11999996	
Total number of pulses in waveform = 17											
*****											
Type 5 Radar Waveform_24											
Num of Bursts = 9 Burst Interval (us)= 1333333											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	311511	1	5	60	1883	0	0	311511	0	1333332	
2	1734806	3	5	85	1507	1577	1796	2048200	1333333	2666665	
3	1399605	1	5	85	1105	0	0	3452685	2666666	3999998	
4	665326	2	5	75	1994	1756	0	4119116	3999999	5333331	
5	1500716	3	5	85	1508	1363	1691	5623582	5333332	6666664	
6	1264086	2	5	75	1995	1147	0	6892230	6666665	7999997	
7	1991290	2	5	55	1212	1300	0	8886662	7999998	9333330	
8	560956	1	5	75	1232	0	0	9450130	9333331	10666663	
9	2009164	1	5	65	1148	0	0	11460526	10666664	11999996	
Total number of pulses in waveform = 16											
*****											
Type 5 Radar Waveform_25											
Num of Bursts = 19 Burst Interval (us)= 6315159											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	436458	1	17	95	1614	0	0	436458	0	6315178	
2	442724	3	17	60	1074	1605	1579	880796	6315157	1263157	
3	694339	2	17	50	1394	1867	0	1579393	1263158	1894736	
4	731924	2	17	65	1918	1023	0	2314568	1894737	2526315	
5	680902	2	17	55	1904	1010	0	2998411	2526316	3157894	
6	778578	2	17	90	1109	1975	0	3777903	3157895	3789473	
7	956446	3	17	55	1823	1296	1513	3876433	3789474	4421052	
8	1112301	3	17	95	1096	1299	1599	4993366	4421053	5052631	
9	71369	2	17	95	1661	1486	0	5068729	5052632	5684210	
10	1204259	1	17	60	1985	0	0	6276155	5684211	6315179	
11	151823	2	17	70	1391	1947	0	6429963	6315179	6947368	
12	1084759	1	17	90	1431	0	0	7518060	6947369	7578947	
13	675145	2	17	75	1192	1371	0	8194636	7578948	8210526	
14	242093	3	17	70	1500	1103	1702	8439292	8210527	8842105	
15	827766	3	17	65	1296	1839	1181	9271363	8842106	9473684	
16	203104	1	17	80	1338	0	0	9478783	9473685	10105263	
17	1037618	1	17	90	1602	0	0	10517739	10105264	10736842	
18	729195	1	17	70	1050	0	0	11248536	10736843	11368421	
19	462569	3	17	50	1111	1365	1060	11712155	11368422	12000000	
Total number of pulses in waveform = 38											
*****											

Type 5 Radar Waveform_26										
Num of Bursts = 8 Burst Interval (us)= 1500000										
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	1360140	2	14	75	1276	1508	0	1360140	0	1499999
2	1596058	2	14	95	1435	1572	0	2958982	1500000	2999999
3	685589	1	14	70	1193	0	0	3647578	3000000	4499999
4	2100539	3	14	100	1412	1121	1190	5749310	4500000	5999999
5	818700	1	14	90	1912	0	0	6571733	6000000	7499999
6	1855740	2	14	80	1972	1335	0	8429385	7500000	8999999
7	1640540	1	14	95	1864	0	0	10073232	9000000	10499999
8	976454	3	14	95	1984	1660	1137	11051550	10500000	11999999
Total number of pulses in waveform = 15 *****										
Type 5 Radar Waveform_27										
Num of Bursts = 11 Burst Interval (us)= 1090909										
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	143069	2	6	100	1730	1019	0	143069	0	1090908
2	1573675	2	6	85	1742	1906	0	1719493	1090909	2181817
3	695552	1	6	60	1278	0	0	2418693	2181818	3272726
4	1025759	3	6	100	1232	1192	1258	3445730	3272727	4363635
5	1494328	2	6	65	1689	1598	0	4943740	4363636	5454544
6	1518407	2	6	95	1434	1226	0	6465434	5454545	6545453
7	78387	3	6	75	1783	1384	1716	6546481	6545454	7636362
8	2024811	1	6	80	1631	0	0	8576175	7636363	8727271
9	172922	1	6	100	1308	0	0	8750728	8727272	9818180
10	1494165	3	6	60	1775	1385	1472	10246201	9818181	10909089
11	1375555	1	7	75	1111	0	0	11826388	10909090	11999998
Total number of pulses in waveform = 21 *****										
Type 5 Radar Waveform_28										
Num of Bursts = 9 Burst Interval (us)= 1333333										
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	417196	2	19	50	1450	1357	0	417196	0	1333332
2	926645	2	19	85	1310	1679	0	1346648	1333333	2666665
3	2487480	1	19	65	1590	0	0	3837117	2666666	3999998
4	1250764	3	19	95	1414	1166	1719	5089471	3999999	5333331
5	831824	3	19	90	1502	1275	1837	5925594	5333332	6666664
6	895759	3	19	100	1391	1126	1542	6825967	6666665	7999997
7	1474323	3	19	85	1690	1739	1240	8304349	7999998	9333330
8	1782616	2	19	75	1969	1984	0	10091634	9333331	10666663
9	702767	1	19	60	1585	0	0	10798354	10666664	11999996
Total number of pulses in waveform = 20 *****										

Type 5 Radar Waveform_29											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	714550	3	9	55	1692	1885	1659	290800	0	631578	
2	709601	1	9	65	1423	0	0	1010586	631579	1263157	
3	498897	2	9	70	1924	1149	0	1721610	1263158	1894736	
4	765274	2	9	60	1827	1475	0	2223580	1894737	2526315	
5	488920	1	9	85	1336	0	0	2992156	2526316	3157894	
6	411079	1	9	65	1749	0	0	3482412	3157895	3789473	
7	732228	1	9	90	1372	0	0	3895240	3789474	4421052	
8	983006	2	9	95	1418	1110	0	4628840	4421053	5052631	
9	522451	3	9	60	1106	1087	1648	5614374	5052632	5684210	
10	337550	1	9	100	1724	0	0	6140666	5684211	6315789	
11	849651	2	9	50	1726	1847	0	6479940	6315790	6947368	
12	571233	1	9	70	1533	0	0	7333164	6947369	7578947	
13	333608	3	9	70	1389	1316	1044	7905930	7578948	8210526	
14	1077422	2	9	50	1558	1656	0	8243287	8210527	8842105	
15	544971	3	9	65	1958	1871	1536	9323923	8842106	9473684	
16	336504	1	9	75	1215	0	0	9874258	9473685	10105263	
17	763120	3	9	90	1742	1495	1491	10211977	10105264	10736842	
18	657958	3	9	70	1431	1301	1756	10979825	10736843	11368421	
19	1000000	3	9	75	1390	1684	1392	11642271	11368422	12000000	
Total number of pulses in waveform = 38											
*****											
Type 5 Radar Waveform_30											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	918633	1	18	65	1950	0	0	172370	0	799999	
2	640297	3	18	100	1983	1512	1026	1092953	800000	1599999	
3	1333257	1	18	95	1282	0	0	1737771	1600000	2399999	
4	259204	3	18	70	1693	1582	1967	3072310	2400000	3199999	
5	1150642	2	18	60	1530	1386	0	3336756	3200000	3999999	
6	951401	3	18	75	1512	1173	1982	4490314	4000000	4799999	
7	313545	1	18	55	1525	0	0	5446382	4800000	5599999	
8	1363747	2	18	60	1642	1067	0	5761452	5600000	6399999	
9	780999	3	18	65	1512	1115	1456	7127908	6400000	7199999	
10	295037	1	18	60	1415	0	0	7912990	7200000	7999999	
11	685532	2	18	90	1469	1837	0	8209442	8000000	8799999	
12	1426345	2	18	80	1136	1756	0	8898280	8800000	9599999	
13	551594	3	18	80	1508	1067	1279	10327517	9600000	10399999	
14	638720	2	18	65	1070	1638	0	10882965	10400000	11199999	
15	1000000	2	18	85	1683	1064	0	11524393	11200000	11999999	
Total number of pulses in waveform = 31											
*****											

## Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5292	1	16	5310	1
2	5293	1	17	5311	1
3	5294	1	18	5312	1
4	5295	1	19	5316	1
5	5296	1	20	5317	1
6	5299	1	21	5318	1
7	5300	1	22	5319	1
8	5301	1	23	5320	1
9	5302	1	24	5321	1
10	5303	1	25	5322	1
11	5304	1	26	5323	1
12	5306	1	27	5324	1
13	5307	1	28	5325	1
14	5308	1	29	5326	1
15	5309	1	30	5327	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5301	0	1	5312	3
13	5268	39	2	5307	6
22	5263	66	6	5285	18
39	5291	117	9	5293	27
56	5304	168	48	5267	144
57	5298	171	50	5279	150
61	5271	183	55	5272	165
64	5322	192	70	5295	210
67	5277	201	71	5277	213
68	5321	204	81	5302	243
74	5262	222	85	5273	255
79	5305	237	93	5265	279
92	5313	276	--	--	--
96	5315	288	--	--	--
99	5311	297	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5272	6	8	5271	24
7	5286	21	9	5273	27
9	5320	27	14	5280	42
10	5317	30	18	5308	54
14	5271	42	24	5279	72
28	5278	84	30	5315	90
33	5299	99	40	5305	120
37	5282	111	45	5294	135
70	5295	210	48	5292	144
71	5280	213	51	5285	153
72	5298	216	56	5317	168
74	5318	222	86	5276	258
76	5313	228	98	5267	294
92	5284	276	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5317	12	2	5326	6
7	5294	21	11	5292	33
15	5300	45	16	5280	48
26	5301	78	28	5277	84
37	5282	111	29	5325	87
48	5279	144	33	5317	99
57	5321	171	43	5307	129
61	5285	183	47	5299	141
67	5303	201	49	5275	147
77	5275	231	50	5316	150
78	5313	234	53	5314	159
87	5311	261	54	5276	162
--	--	--	58	5312	174
--	--	--	62	5284	186
--	--	--	65	5304	195
--	--	--	72	5319	216
--	--	--	85	5270	255
--	--	--	92	5320	276

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5298	9	3	5278	9
12	5304	36	4	5307	12
14	5308	42	7	5320	21
28	5294	84	20	5301	60
39	5295	117	29	5324	87
47	5274	141	53	5304	159
54	5271	162	66	5302	198
59	5290	177	71	5280	213
61	5285	183	72	5300	216
72	5276	216	73	5327	219
84	5315	252	81	5309	243
--	--	--	82	5293	246

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5333	6	11	5278	33
18	5293	54	30	5298	90
19	5304	57	34	5294	102
21	5326	63	35	5291	105
32	5309	96	42	5279	126
39	5292	117	54	5320	162
40	5282	120	73	5329	219
52	5285	156	76	5304	228
82	5296	246	90	5316	270

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5300	12	3	5333	9
29	5289	87	8	5314	24
30	5319	90	10	5311	30
32	5280	96	22	5326	66
34	5299	102	27	5321	81
36	5321	108	41	5285	123
40	5328	120	50	5286	150
44	5333	132	53	5320	159
55	5298	165	54	5299	162
59	5338	177	57	5334	171
72	5278	216	59	5312	177
75	5329	225	64	5332	192
81	5323	243	65	5329	195
88	5322	264	71	5308	213
90	5304	270	77	5305	231
--	--	--	90	5292	270
--	--	--	97	5281	291
--	--	--	99	5297	297

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5311	0	5	5296	15
5	5291	15	8	5286	24
12	5332	36	9	5313	27
25	5305	75	12	5298	36
41	5294	123	31	5315	93
45	5286	135	42	5340	126
46	5329	138	46	5310	138
49	5302	147	52	5306	156
53	5324	159	75	5297	225
55	5290	165	80	5328	240
59	5328	177	81	5321	243
66	5330	198	85	5299	255
70	5335	210	91	5281	273
76	5303	228	--	--	--
77	5284	231	--	--	--
83	5316	249	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5314	63	0	5284	0
28	5323	84	13	5325	39
43	5305	129	22	5331	66
62	5296	186	33	5291	99
74	5333	222	34	5324	102
75	5340	225	45	5323	135
91	5303	273	52	5338	156
93	5308	279	54	5296	162
95	5300	285	66	5339	198
97	5320	291	94	5340	282
99	5325	297	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5319	0	2	5300	6
3	5316	9	5	5295	15
5	5299	15	11	5303	33
19	5296	57	14	5338	42
26	5329	78	54	5284	162
29	5314	87	76	5297	228
32	5281	96	78	5306	234
46	5293	138	79	5301	237
61	5317	183	81	5296	243
73	5294	219	93	5318	279
80	5289	240	--	--	--
87	5323	261	--	--	--
89	5336	267	--	--	--
93	5320	279	--	--	--
95	5326	285	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5335	18	3	5316	9
12	5323	36	7	5297	21
16	5309	48	10	5288	30
18	5331	54	11	5290	33
26	5328	78	12	5323	36
33	5340	99	14	5305	42
36	5294	108	28	5304	84
48	5319	144	60	5300	180
52	5308	156	65	5287	195
57	5296	171	70	5283	210
61	5305	183	81	5325	243
88	5320	264	82	5332	246
93	5300	279	86	5307	258
97	5288	291	93	5326	279
99	5286	297	94	5333	282

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5291	15	10	5311	30
10	5320	30	20	5294	60
16	5304	48	26	5304	78
18	5328	54	31	5296	93
28	5297	84	33	5287	99
46	5341	138	44	5336	132
47	5340	141	47	5289	141
61	5296	183	49	5335	147
65	5305	195	61	5306	183
99	5299	297	65	5320	195
--	--	--	71	5309	213
--	--	--	72	5331	216
--	--	--	74	5332	222
--	--	--	78	5312	234
--	--	--	84	5302	252
--	--	--	85	5282	255
--	--	--	88	5341	264
--	--	--	95	5285	285

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5322	27	7	5298	21
16	5343	48	13	5319	39
21	5303	63	15	5332	45
26	5330	78	18	5294	54
28	5319	84	26	5304	78
44	5317	132	30	5335	90
66	5341	198	31	5336	93
82	5314	246	35	5323	105
99	5292	297	36	5312	108
--	--	--	37	5341	111
--	--	--	54	5297	162
--	--	--	59	5326	177
--	--	--	67	5310	201
--	--	--	85	5317	255
--	--	--	86	5321	258

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5290	27	3	5333	9
18	5315	54	18	5327	54
27	5322	81	21	5321	63
37	5345	111	28	5299	84
51	5343	153	41	5300	123
66	5303	198	64	5304	192
80	5302	240	65	5349	195
81	5317	243	76	5347	228
87	5297	261	96	5348	288
88	5301	264	--	--	--
95	5329	285	--	--	--
96	5350	288	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5349	33	1	5319	3
12	5322	36	17	5335	51
33	5320	99	21	5343	63
34	5341	102	34	5344	102
44	5318	132	40	5352	120
47	5307	141	46	5357	138
52	5358	156	49	5305	147
53	5327	159	50	5326	150
69	5306	207	51	5328	153
73	5332	219	65	5308	195
95	5304	285	66	5300	198
--	--	--	88	5320	264
--	--	--	91	5322	273

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5307	12	5	5358	15
8	5305	24	10	5337	30
9	5348	27	15	5327	45
39	5328	117	26	5325	78
40	5311	120	28	5315	84
50	5353	150	54	5322	162
53	5342	159	69	5317	207
54	5336	162	77	5334	231
56	5302	168	82	5331	246
69	5329	207	--	--	--
70	5355	210	--	--	--
72	5334	216	--	--	--
74	5310	222	--	--	--

Product	804Mesh Dual Wi-Fi	Temperature	27°C
Test Engineer	Hunk Li	Relative Humidity	65%
Test Site	TR5	Test Date	2017/10/17
Test Item	Radar Statistical Performance Check (802.11ac-VHT80 mode – 5290MHz)		

#### Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5252	1	538	99	1
2	5252	1	598	89	1
3	5260	1	518	102	1
4	5260	1	858	62	1
5	5268	1	578	92	1
6	5268	1	918	58	1
7	5270	1	838	63	1
8	5270	1	778	68	1
9	5272	1	678	78	1
10	5272	1	3066	18	1
11	5280	1	638	83	1
12	5280	1	698	76	1
13	5288	1	898	59	1
14	5288	1	818	65	1
15	5290	1	558	95	1
16	5290	1	1638	33	1
17	5292	1	1383	39	1
18	5292	1	700	76	1
19	5300	1	523	101	1
20	5300	1	1563	34	1
21	5308	1	1707	31	1
22	5308	1	1400	38	1
23	5310	1	2698	20	1
24	5310	1	1788	30	1
25	5312	1	859	62	1
26	5312	1	2637	21	1
27	5320	1	2477	22	1
28	5320	1	1727	31	1
29	5328	1	1944	28	1

30	5328	1	1903	28	1
Detection Percentage (%)					100%

## Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5253	1.7	199	29	1
2	5256	3.1	228	25	1
3	5259	1.7	198	26	1
4	5262	4.5	211	27	1
5	5265	1.6	230	25	1
6	5268	5.0	199	23	1
7	5271	3.0	165	28	1
8	5274	3.5	170	25	1
9	5277	1.0	222	25	1
10	5280	1.2	150	28	1
11	5283	4.5	204	25	1
12	5286	1.0	200	26	1
13	5289	1.5	159	26	1
14	5292	3.7	174	24	1
15	5295	2.9	186	29	1
16	5298	4.2	193	27	1
17	5301	4.9	174	28	1
18	5304	1.1	184	23	1
19	5307	1.8	187	23	1
20	5310	3.6	222	26	1
21	5313	2.5	194	24	1
22	5316	4.1	196	25	1
23	5319	1.5	157	27	1
24	5322	2.9	186	25	1
25	5325	3.8	206	25	1
26	5328	2.4	219	29	1
27	5271	2.0	166	27	1
28	5290	2.0	168	26	1
29	5311	1.3	200	23	1
30	5327	5.0	174	24	1
Detection Percentage (%)					100%

## Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5253	9.4	403	18	1
2	5256	7.6	271	18	1
3	5259	8.8	484	17	1
4	5262	9.9	479	18	1
5	5265	6.0	432	16	1
6	5268	7.7	350	17	1
7	5271	7.4	298	18	1
8	5274	7.4	451	17	1
9	5277	6.6	450	16	1
10	5280	8.5	261	17	1
11	5283	6.3	267	17	1
12	5286	6.1	449	16	1
13	5289	7.0	464	18	1
14	5292	7.5	488	16	1
15	5295	9.6	311	16	1
16	5298	8.2	419	16	1
17	5301	9.5	411	16	1
18	5304	9.7	483	16	1
19	5307	8.4	452	16	1
20	5310	8.5	481	18	1
21	5313	9.9	462	18	1
22	5316	6.5	469	16	1
23	5319	7.0	381	17	1
24	5322	6.4	380	17	1
25	5325	7.3	251	17	1
26	5328	9.4	488	16	1
27	5271	9.0	445	16	1
28	5290	9.3	494	16	1
29	5311	8.8	484	16	1
30	5327	6.0	493	16	1
Detection Percentage (%)					100%

## Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5253	12.7	469	14	1
2	5256	13.3	449	16	1
3	5259	11.7	409	13	1
4	5262	15.3	335	15	1
5	5265	19.8	418	14	1
6	5268	18.9	464	16	1
7	5271	15.4	354	15	1
8	5274	14.3	318	15	1
9	5277	19.1	354	14	1
10	5280	13.5	419	16	1
11	5283	11.7	418	15	1
12	5286	13.0	298	13	1
13	5289	12.0	333	15	1
14	5292	19.9	417	14	1
15	5295	18.9	465	12	1
16	5298	12.1	299	16	1
17	5301	11.9	438	15	1
18	5304	17.7	354	15	1
19	5307	15.9	303	15	1
20	5310	17.5	497	16	1
21	5313	12.7	419	12	1
22	5316	13.2	434	12	1
23	5319	11.2	311	16	1
24	5322	15.9	253	12	1
25	5325	14.1	442	16	1
26	5328	15.2	466	12	1
27	5271	18.7	275	13	1
28	5290	17.2	287	15	1
29	5311	19.8	495	15	1
30	5327	16.4	471	16	1
Detection Percentage (%)					100%

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

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

## Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5258.8	1	16	5290.0	1
2	5257.6	1	17	5290.0	1
3	5255.6	1	18	5290.0	1
4	5255.2	1	19	5290.0	1
5	5259.6	1	20	5290.0	1
6	5254.0	1	21	5324.8	1
7	5256.8	1	22	5324.0	1
8	5259.2	1	23	5326.0	1
9	5254.4	1	24	5323.2	1
10	5256.0	1	25	5325.6	1
11	5290.0	1	26	5320.8	1
12	5290.0	1	27	5324.4	1
13	5290.0	1	28	5320.4	1
14	5290.0	1	29	5322.4	1
15	5290.0	1	30	5321.2	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1											
Num of Bursts = 16 Burst Interval (us)= 750000											
Burst #      Off Time (us)      # Pulses      Chirp (MHz)      PW (us)      Pulse 1 Pri(us)      Pulse 2 Pri(us)      Pulse 3 Pri(us)      Start Loc (us)      Start Burst Interval(us)      End Burst Interval(us)											
1	249245	1	17	50	1911	0	0	249245	0	749999	
2	839496	2	17	90	1475	1035	0	1090652	750000	1499999	
3	1056352	1	17	80	1689	0	0	2149514	1500000	2249999	
4	643944	2	17	75	1908	1310	0	2795147	2250000	2999999	
5	755530	2	17	75	1164	1152	0	3553895	3000000	3749999	
6	830269	3	17	100	1774	1208	1285	4386480	3750000	4499999	
7	357368	3	17	95	1843	1953	1017	4748115	4500000	5249999	
8	676817	3	17	55	1040	1872	1789	5429745	5250000	5999999	
9	1028645	3	17	100	1733	1605	1469	6463091	6000000	6749999	
10	466342	2	17	65	1103	1846	0	6934240	6750000	7499999	
11	574933	1	17	80	1036	0	0	7512122	7500000	8249999	
12	1454531	1	17	90	1810	0	0	8967689	8250000	8999999	
13	729965	1	17	50	1219	0	0	9699464	9000000	9749999	
14	123105	3	17	100	1538	1559	1250	9823788	9750000	10499999	
15	1176907	1	17	75	1986	0	0	11005042	10500000	11249999	
16	670975	1	17	65	1639	0	0	11678003	11250000	11999999	
Total number of pulses in waveform = 30											
*****											

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	126713	1	14	50	1055	0	0	126713	0	5999999	
2	929570	2	14	95	1309	1180	0	1057338	600000	11999999	
3	594203	2	14	100	1041	1364	0	1654120	1200000	17999999	
4	414985	1	14	100	1643	0	0	2071510	1800000	23999999	
5	481463	3	14	70	1087	1156	1900	2554616	2400000	29999999	
6	716163	1	14	75	1702	0	0	3274922	3000000	35999999	
7	705813	3	14	55	1609	1800	1996	3982437	3600000	41999999	
8	713002	3	14	60	1881	1464	1977	4700744	4200000	47999999	
9	329793	2	14	60	1441	1481	0	5035859	4800000	53999999	
10	714589	2	14	55	1776	1510	0	5753370	5400000	59999999	
11	556545	3	14	55	1214	1779	1401	6313201	6000000	65999999	
12	420509	2	14	55	1791	1746	0	6738104	6600000	71999999	
13	993318	2	14	75	1022	1432	0	7734959	7200000	77999999	
14	597342	2	14	55	1109	1114	0	8334755	7800000	83999999	
15	389379	3	14	90	1477	1882	1859	8726357	8400000	89999999	
16	851959	1	14	55	1324	0	0	9583534	9000000	95999999	
17	114319	1	14	75	1733	0	0	9699177	9600000	10199999	
18	976197	2	14	85	1749	1681	0	10677107	10200000	10799999	
19	419605	1	14	50	1851	0	0	11100142	10800000	11399999	
20	555429	2	14	85	1915	1755	0	11657422	11400000	11999999	
Total number of pulses in waveform = 39											
*****											
Type 5 Radar Waveform_3											
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	714411	1	9	100	1274	0	0	714411	0	857142	
2	644421	2	9	70	1276	1717	0	1360106	857143	1714285	
3	445902	3	9	85	1650	1069	1492	1809001	1714286	2571428	
4	888308	3	9	60	1049	1950	1427	2701520	2571429	3428571	
5	1491588	2	9	80	1511	1021	0	4197534	3428572	4285714	
6	251524	2	9	75	1504	1879	0	4451590	4285715	5142857	
7	963430	3	9	80	1722	1140	1037	5418403	5142858	6000000	
8	740907	1	9	75	1301	0	0	6163209	6000001	6857143	
9	952541	3	9	100	1966	1384	1133	7117051	6857144	7714286	
10	1157253	1	9	85	1583	0	0	8276787	7714287	8571429	
11	346803	1	9	70	1951	0	0	8627173	8571430	9428572	
12	922187	3	9	100	1330	1609	1939	9551311	9428573	10285715	
13	734981	3	9	60	1362	1562	2000	10291170	10285716	11142858	
14	1442489	3	9	70	1706	1820	1676	11738583	11142859	12000001	
Total number of pulses in waveform = 31											
*****											
Type 5 Radar Waveform_4											
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	617738	3	8	55	1934	1956	1931	617738	0	1090908	
2	1453655	3	8	55	1010	1464	1247	2077214	1090909	2181817	
3	497231	2	8	55	1708	1284	0	2578166	2181818	3272726	
4	811884	3	8	95	1067	1644	1851	3393042	3272727	4363635	
5	1155256	2	8	80	1217	1709	0	4552860	4363636	5454544	
6	1523163	2	8	80	1341	1018	0	6078949	5454545	6545453	
7	800785	1	8	70	1055	0	0	6882093	6545454	7636362	
8	1803886	3	8	75	1951	1965	1476	8687034	7636363	8727271	
9	47281	2	8	55	1793	1623	0	8739707	8727272	9818180	
10	1886277	2	8	100	1967	1801	0	10629400	9818181	10909089	
11	1285118	2	8	75	1838	1861	0	11918286	10909090	11999998	
Total number of pulses in waveform = 25											
*****											

Type 5 Radar Waveform_5																																																																																																																																																																					
Num of Bursts = 13 Burst Interval (us)= 923077																																																																																																																																																																					
<table border="1"> <thead> <tr> <th>Burst #</th><th>Off Time (us)</th><th># Pulses</th><th>Chirp (MHz)</th><th>PW (us)</th><th>Pulse 1 Pri(us)</th><th>Pulse 2 Pri(us)</th><th>Pulse 3 Pri(us)</th><th>Start Loc (us)</th><th>Start Burst Interval(us)</th><th>End Burst Interval(us)</th></tr> </thead> <tbody> <tr><td>1</td><td>454581</td><td>2</td><td>19</td><td>50</td><td>1817</td><td>1569</td><td>0</td><td>454581</td><td>0</td><td>923076</td></tr> <tr><td>2</td><td>813092</td><td>1</td><td>19</td><td>60</td><td>1886</td><td>0</td><td>0</td><td>1271059</td><td>923077</td><td>1846153</td></tr> <tr><td>3</td><td>880286</td><td>2</td><td>19</td><td>75</td><td>1355</td><td>1632</td><td>0</td><td>2153231</td><td>1846154</td><td>2769230</td></tr> <tr><td>4</td><td>797675</td><td>1</td><td>19</td><td>50</td><td>1941</td><td>0</td><td>0</td><td>2953893</td><td>2769231</td><td>3692307</td></tr> <tr><td>5</td><td>1226318</td><td>2</td><td>19</td><td>80</td><td>1184</td><td>1906</td><td>0</td><td>4182152</td><td>3692308</td><td>4615384</td></tr> <tr><td>6</td><td>1087776</td><td>3</td><td>19</td><td>70</td><td>1825</td><td>1863</td><td>1410</td><td>5273018</td><td>4615385</td><td>5538461</td></tr> <tr><td>7</td><td>1043110</td><td>1</td><td>19</td><td>65</td><td>1783</td><td>0</td><td>0</td><td>6321226</td><td>5538462</td><td>6461538</td></tr> <tr><td>8</td><td>252532</td><td>3</td><td>19</td><td>75</td><td>1168</td><td>1218</td><td>1934</td><td>6575541</td><td>6461539</td><td>7384615</td></tr> <tr><td>9</td><td>1563620</td><td>3</td><td>19</td><td>80</td><td>1265</td><td>1431</td><td>1592</td><td>8143481</td><td>7384616</td><td>8307692</td></tr> <tr><td>10</td><td>534911</td><td>3</td><td>19</td><td>90</td><td>1793</td><td>1122</td><td>1760</td><td>8682680</td><td>8307693</td><td>9230769</td></tr> <tr><td>11</td><td>689967</td><td>2</td><td>19</td><td>70</td><td>1111</td><td>1964</td><td>0</td><td>9377322</td><td>9230770</td><td>10153846</td></tr> <tr><td>12</td><td>1076966</td><td>2</td><td>19</td><td>100</td><td>1197</td><td>1453</td><td>0</td><td>10457363</td><td>10153847</td><td>11076923</td></tr> <tr><td>13</td><td>1150819</td><td>2</td><td>19</td><td>50</td><td>1169</td><td>1598</td><td>0</td><td>11610832</td><td>11076924</td><td>12000000</td></tr> </tbody> </table>												Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	1	454581	2	19	50	1817	1569	0	454581	0	923076	2	813092	1	19	60	1886	0	0	1271059	923077	1846153	3	880286	2	19	75	1355	1632	0	2153231	1846154	2769230	4	797675	1	19	50	1941	0	0	2953893	2769231	3692307	5	1226318	2	19	80	1184	1906	0	4182152	3692308	4615384	6	1087776	3	19	70	1825	1863	1410	5273018	4615385	5538461	7	1043110	1	19	65	1783	0	0	6321226	5538462	6461538	8	252532	3	19	75	1168	1218	1934	6575541	6461539	7384615	9	1563620	3	19	80	1265	1431	1592	8143481	7384616	8307692	10	534911	3	19	90	1793	1122	1760	8682680	8307693	9230769	11	689967	2	19	70	1111	1964	0	9377322	9230770	10153846	12	1076966	2	19	100	1197	1453	0	10457363	10153847	11076923	13	1150819	2	19	50	1169	1598	0	11610832	11076924	12000000
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)																																																																																																																																																											
1	454581	2	19	50	1817	1569	0	454581	0	923076																																																																																																																																																											
2	813092	1	19	60	1886	0	0	1271059	923077	1846153																																																																																																																																																											
3	880286	2	19	75	1355	1632	0	2153231	1846154	2769230																																																																																																																																																											
4	797675	1	19	50	1941	0	0	2953893	2769231	3692307																																																																																																																																																											
5	1226318	2	19	80	1184	1906	0	4182152	3692308	4615384																																																																																																																																																											
6	1087776	3	19	70	1825	1863	1410	5273018	4615385	5538461																																																																																																																																																											
7	1043110	1	19	65	1783	0	0	6321226	5538462	6461538																																																																																																																																																											
8	252532	3	19	75	1168	1218	1934	6575541	6461539	7384615																																																																																																																																																											
9	1563620	3	19	80	1265	1431	1592	8143481	7384616	8307692																																																																																																																																																											
10	534911	3	19	90	1793	1122	1760	8682680	8307693	9230769																																																																																																																																																											
11	689967	2	19	70	1111	1964	0	9377322	9230770	10153846																																																																																																																																																											
12	1076966	2	19	100	1197	1453	0	10457363	10153847	11076923																																																																																																																																																											
13	1150819	2	19	50	1169	1598	0	11610832	11076924	12000000																																																																																																																																																											
Total number of pulses in waveform = 27																																																																																																																																																																					
*****																																																																																																																																																																					
Type 5 Radar Waveform_6																																																																																																																																																																					
Num of Bursts = 8 Burst Interval (us)= 1500000																																																																																																																																																																					
<table border="1"> <thead> <tr> <th>Burst #</th><th>Off Time (us)</th><th># Pulses</th><th>Chirp (MHz)</th><th>PW (us)</th><th>Pulse 1 Pri(us)</th><th>Pulse 2 Pri(us)</th><th>Pulse 3 Pri(us)</th><th>Start Loc (us)</th><th>Start Burst Interval(us)</th><th>End Burst Interval(us)</th></tr> </thead> <tbody> <tr><td>1</td><td>1276839</td><td>1</td><td>5</td><td>90</td><td>1151</td><td>0</td><td>0</td><td>1276839</td><td>0</td><td>1499999</td></tr> <tr><td>2</td><td>273463</td><td>2</td><td>5</td><td>50</td><td>1616</td><td>1833</td><td>0</td><td>1551453</td><td>1500000</td><td>2999999</td></tr> <tr><td>3</td><td>2188178</td><td>2</td><td>5</td><td>55</td><td>1040</td><td>1764</td><td>0</td><td>3743080</td><td>3000000</td><td>4499999</td></tr> <tr><td>4</td><td>1533263</td><td>3</td><td>5</td><td>55</td><td>1540</td><td>1639</td><td>1623</td><td>5279147</td><td>4500000</td><td>5999999</td></tr> <tr><td>5</td><td>1046634</td><td>1</td><td>5</td><td>85</td><td>1862</td><td>0</td><td>0</td><td>6330583</td><td>6000000</td><td>7499999</td></tr> <tr><td>6</td><td>2383127</td><td>1</td><td>5</td><td>85</td><td>1329</td><td>0</td><td>0</td><td>8715572</td><td>7500000</td><td>8999999</td></tr> <tr><td>7</td><td>1047752</td><td>1</td><td>5</td><td>75</td><td>1899</td><td>0</td><td>0</td><td>9764653</td><td>9000000</td><td>10499999</td></tr> <tr><td>8</td><td>2143119</td><td>3</td><td>5</td><td>50</td><td>1289</td><td>1373</td><td>1346</td><td>11909671</td><td>10500000</td><td>11999999</td></tr> </tbody> </table>												Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	1	1276839	1	5	90	1151	0	0	1276839	0	1499999	2	273463	2	5	50	1616	1833	0	1551453	1500000	2999999	3	2188178	2	5	55	1040	1764	0	3743080	3000000	4499999	4	1533263	3	5	55	1540	1639	1623	5279147	4500000	5999999	5	1046634	1	5	85	1862	0	0	6330583	6000000	7499999	6	2383127	1	5	85	1329	0	0	8715572	7500000	8999999	7	1047752	1	5	75	1899	0	0	9764653	9000000	10499999	8	2143119	3	5	50	1289	1373	1346	11909671	10500000	11999999																																																							
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)																																																																																																																																																											
1	1276839	1	5	90	1151	0	0	1276839	0	1499999																																																																																																																																																											
2	273463	2	5	50	1616	1833	0	1551453	1500000	2999999																																																																																																																																																											
3	2188178	2	5	55	1040	1764	0	3743080	3000000	4499999																																																																																																																																																											
4	1533263	3	5	55	1540	1639	1623	5279147	4500000	5999999																																																																																																																																																											
5	1046634	1	5	85	1862	0	0	6330583	6000000	7499999																																																																																																																																																											
6	2383127	1	5	85	1329	0	0	8715572	7500000	8999999																																																																																																																																																											
7	1047752	1	5	75	1899	0	0	9764653	9000000	10499999																																																																																																																																																											
8	2143119	3	5	50	1289	1373	1346	11909671	10500000	11999999																																																																																																																																																											
Total number of pulses in waveform = 14																																																																																																																																																																					
*****																																																																																																																																																																					
Type 5 Radar Waveform_7																																																																																																																																																																					
Num of Bursts = 11 Burst Interval (us)= 1090909																																																																																																																																																																					
<table border="1"> <thead> <tr> <th>Burst #</th><th>Off Time (us)</th><th># Pulses</th><th>Chirp (MHz)</th><th>PW (us)</th><th>Pulse 1 Pri(us)</th><th>Pulse 2 Pri(us)</th><th>Pulse 3 Pri(us)</th><th>Start Loc (us)</th><th>Start Burst Interval(us)</th><th>End Burst Interval(us)</th></tr> </thead> <tbody> <tr><td>1</td><td>816814</td><td>2</td><td>12</td><td>65</td><td>1290</td><td>1659</td><td>0</td><td>816814</td><td>0</td><td>1090908</td></tr> <tr><td>2</td><td>1357236</td><td>2</td><td>12</td><td>70</td><td>1086</td><td>1736</td><td>0</td><td>2176999</td><td>1090909</td><td>2181817</td></tr> <tr><td>3</td><td>1066293</td><td>3</td><td>12</td><td>65</td><td>1717</td><td>1590</td><td>1077</td><td>3246114</td><td>2181818</td><td>3272726</td></tr> <tr><td>4</td><td>363411</td><td>1</td><td>12</td><td>60</td><td>1831</td><td>0</td><td>0</td><td>3613909</td><td>3272727</td><td>4363635</td></tr> <tr><td>5</td><td>908190</td><td>3</td><td>12</td><td>90</td><td>1935</td><td>1039</td><td>1167</td><td>4523930</td><td>4363636</td><td>5454544</td></tr> <tr><td>6</td><td>1250752</td><td>1</td><td>12</td><td>85</td><td>1922</td><td>0</td><td>0</td><td>577823</td><td>5454545</td><td>6545453</td></tr> <tr><td>7</td><td>790690</td><td>3</td><td>12</td><td>85</td><td>1264</td><td>1737</td><td>1768</td><td>6571435</td><td>6545454</td><td>7636362</td></tr> <tr><td>8</td><td>1727361</td><td>1</td><td>12</td><td>85</td><td>1603</td><td>0</td><td>0</td><td>8303565</td><td>7636363</td><td>8727271</td></tr> <tr><td>9</td><td>689214</td><td>2</td><td>12</td><td>85</td><td>1983</td><td>1538</td><td>0</td><td>8994382</td><td>8727272</td><td>9818180</td></tr> <tr><td>10</td><td>1056237</td><td>3</td><td>12</td><td>70</td><td>1886</td><td>1302</td><td>1407</td><td>10054140</td><td>9818181</td><td>10909089</td></tr> <tr><td>11</td><td>1486713</td><td>3</td><td>12</td><td>100</td><td>1410</td><td>1640</td><td>1225</td><td>11545448</td><td>10909090</td><td>11999998</td></tr> </tbody> </table>												Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	1	816814	2	12	65	1290	1659	0	816814	0	1090908	2	1357236	2	12	70	1086	1736	0	2176999	1090909	2181817	3	1066293	3	12	65	1717	1590	1077	3246114	2181818	3272726	4	363411	1	12	60	1831	0	0	3613909	3272727	4363635	5	908190	3	12	90	1935	1039	1167	4523930	4363636	5454544	6	1250752	1	12	85	1922	0	0	577823	5454545	6545453	7	790690	3	12	85	1264	1737	1768	6571435	6545454	7636362	8	1727361	1	12	85	1603	0	0	8303565	7636363	8727271	9	689214	2	12	85	1983	1538	0	8994382	8727272	9818180	10	1056237	3	12	70	1886	1302	1407	10054140	9818181	10909089	11	1486713	3	12	100	1410	1640	1225	11545448	10909090	11999998																						
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)																																																																																																																																																											
1	816814	2	12	65	1290	1659	0	816814	0	1090908																																																																																																																																																											
2	1357236	2	12	70	1086	1736	0	2176999	1090909	2181817																																																																																																																																																											
3	1066293	3	12	65	1717	1590	1077	3246114	2181818	3272726																																																																																																																																																											
4	363411	1	12	60	1831	0	0	3613909	3272727	4363635																																																																																																																																																											
5	908190	3	12	90	1935	1039	1167	4523930	4363636	5454544																																																																																																																																																											
6	1250752	1	12	85	1922	0	0	577823	5454545	6545453																																																																																																																																																											
7	790690	3	12	85	1264	1737	1768	6571435	6545454	7636362																																																																																																																																																											
8	1727361	1	12	85	1603	0	0	8303565	7636363	8727271																																																																																																																																																											
9	689214	2	12	85	1983	1538	0	8994382	8727272	9818180																																																																																																																																																											
10	1056237	3	12	70	1886	1302	1407	10054140	9818181	10909089																																																																																																																																																											
11	1486713	3	12	100	1410	1640	1225	11545448	10909090	11999998																																																																																																																																																											
Total number of pulses in waveform = 24																																																																																																																																																																					
*****																																																																																																																																																																					

Type 5 Radar Waveform_8											
<b>Num of Bursts = 20</b> Burst Interval (us)= 600000											
<b>Burst #</b> <b>Off Time (us)</b> <b># Pulses</b> <b>Chirp (MHz)</b> <b>PW (us)</b> <b>Pulse 1 Pri(us)</b> <b>Pulse 2 Pri(us)</b> <b>Pulse 3 Pri(us)</b> <b>Start Loc (us)</b> <b>Start Burst Interval(us)</b> <b>End Burst Interval(us)</b>											
1	225302	1	18	95	1293	0	0	225302	0	599999	
2	671128	1	18	50	1392	0	0	897723	600000	1199999	
3	657794	2	18	80	1474	1388	0	1556909	1200000	1799999	
4	590205	1	18	50	1631	0	0	2149976	1800000	2399999	
5	600507	3	18	80	1478	1848	1621	2752114	2400000	2999999	
6	437364	3	18	80	1216	1149	1973	3194415	3000000	3599999	
7	412919	3	18	80	1420	1048	1810	3611672	3600000	4199999	
8	1100898	2	18	85	1001	1385	0	4716848	4200000	4799999	
9	182085	3	18	90	1434	1051	1854	4901319	4800000	5399999	
10	992561	3	18	100	1594	1778	1121	5898219	5400000	5999999	
11	501875	1	18	55	1393	0	0	6404587	6000000	6599999	
12	698677	3	18	80	1800	1357	1543	7104657	6600000	7199999	
13	268671	1	18	60	1308	0	0	7378028	7200000	7799999	
14	747702	2	18	95	1580	1311	0	8127038	7800000	8399999	
15	334191	3	18	65	1732	1136	1601	8464120	8400000	8999999	
16	821341	1	18	80	1085	0	0	9289930	9000000	9599999	
17	511564	1	18	70	1481	0	0	9802579	9600000	10199999	
18	419483	2	18	90	1513	1214	0	10223543	10200000	10799999	
19	1079450	3	18	50	1201	1903	1589	11305720	10800000	11399999	
20	606622	1	18	65	1344	0	0	11917035	11400000	11999999	
Total number of pulses in waveform = 40											
*****											
Type 5 Radar Waveform_9											
<b>Num of Bursts = 13</b> Burst Interval (us)= 923077											
<b>Burst #</b> <b>Off Time (us)</b> <b># Pulses</b> <b>Chirp (MHz)</b> <b>PW (us)</b> <b>Pulse 1 Pri(us)</b> <b>Pulse 2 Pri(us)</b> <b>Pulse 3 Pri(us)</b> <b>Start Loc (us)</b> <b>Start Burst Interval(us)</b> <b>End Burst Interval(us)</b>											
1	27540	1	6	70	1700	0	0	27540	0	923076	
2	1581598	1	6	75	1330	0	0	1610838	923077	1846153	
3	296486	3	6	70	1482	1535	1270	1908654	1846154	2769230	
4	1712679	2	6	55	1156	1590	0	3625620	2769231	3692307	
5	136873	2	6	85	1511	1597	0	3765239	3692308	4615384	
6	1609727	2	6	60	1008	1454	0	5378074	4615385	5538461	
7	272145	1	6	55	1817	0	0	5652681	5538462	6461538	
8	1495435	3	6	90	1641	1331	1442	7149933	6461539	7384615	
9	374297	2	6	50	1810	1719	0	7528644	7384616	8307692	
10	838905	1	6	60	1765	0	0	8371078	8307693	9230769	
11	1094394	3	6	55	1801	1943	1961	9467237	9230770	10153846	
12	1308613	1	6	95	1006	0	0	10781555	10153847	11076923	
13	1094552	3	6	90	1266	1245	1696	11877113	11076924	12000000	
Total number of pulses in waveform = 25											
*****											
Type 5 Radar Waveform_10											
<b>Num of Bursts = 12</b> Burst Interval (us)= 1000000											
<b>Burst #</b> <b>Off Time (us)</b> <b># Pulses</b> <b>Chirp (MHz)</b> <b>PW (us)</b> <b>Pulse 1 Pri(us)</b> <b>Pulse 2 Pri(us)</b> <b>Pulse 3 Pri(us)</b> <b>Start Loc (us)</b> <b>Start Burst Interval(us)</b> <b>End Burst Interval(us)</b>											
1	60952	1	10	75	1460	0	0	60952	0	999999	
2	1221461	1	10	100	1208	1222	1672	1283873	1000000	1999999	
3	944542	3	10	75	1409	0	0	2232517	2000000	2999999	
4	869383	1	10	55	1190	0	0	3103309	3000000	3999999	
5	1013926	1	10	50	1381	0	0	4118425	4000000	4999999	
6	1524282	1	10	55	1678	0	0	5644088	5000000	5999999	
7	531145	1	10	90	1291	0	0	6176911	6000000	6999999	
8	1375040	3	10	60	1683	1246	1257	7553242	7000000	7999999	
9	824581	3	10	55	1548	1646	0	8382009	8000000	8999999	
10	623524	2	10	80	1243	0	0	9008727	9000000	9999999	
11	1954225	1	10	100	1607	1863	1369	10964195	10000000	10999999	
12	210365	3	10	50	1000	1874	1578	11179399	11000000	11999999	
Total number of pulses in waveform = 21											
*****											

### Type 5 Radar Waveform\_11

Num of Bursts = 18 Burst Interval (us)= 666667											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	611452	3	10	90	1847	1017	1284	53276	0	666666	
2	875248	1	10	80	1839	0	0	668876	666667	1333333	
3	815349	1	10	65	1030	0	0	1545963	1333334	2000000	
4	472793	2	10	65	1370	1344	0	2362342	2000001	2666667	
5	509519	3	10	90	1674	1639	1916	2837849	2666668	3333334	
6	1000915	2	10	90	1426	1169	0	3352597	3333335	4000001	
7	404712	2	10	60	1648	1814	0	4356107	4000002	4666668	
8	756489	2	10	100	1834	1163	0	4764281	4666669	5333335	
9	493253	3	10	70	1222	1457	1256	5523767	5333336	6000002	
10	1196629	1	10	100	1784	0	0	6020955	6000003	6666669	
11	205562	2	10	85	1701	1769	0	7219368	6666670	7333336	
12	798717	3	10	95	1210	1259	1682	7428400	7333337	8000003	
13	576404	1	10	95	1452	0	0	8231268	8000004	8666670	
14	1121102	1	10	90	1854	0	0	8809124	8666671	9333337	
15	718298	3	10	65	1845	1238	1534	9932080	9333338	10000004	
16	569920	3	10	65	1138	1341	1334	10654995	10000005	10666671	
17	361534	3	10	60	1163	1242	1017	11228728	10666672	11333338	
18		1	10	65	1590	0	0	11583684	11333339	12000005	
Total number of pulses in waveform = 37											
*****											

### Type 5 Radar Waveform\_12

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	996753	2	17	80	1371	1736	0	996753	0	999999	
2	571722	1	17	95	1527	0	0	1934156	1000000	1999999	
3	1413702	3	17	65	1000	1848	1728	2507385	2000000	2999999	
4	565115	3	17	65	1500	1885	1071	3925663	3000000	3999999	
5	1442133	3	17	95	1694	1586	1435	4495234	4000000	4999999	
6	323365	3	17	50	1824	1123	1606	5942082	5000000	5999999	
7	1520616	3	17	65	1982	1200	1531	6270000	6000000	6999999	
8	929002	3	17	75	1662	1917	1170	7795329	7000000	7999999	
9	333512	2	17	75	1001	1366	0	8729080	8000000	8999999	
10	1270008	2	17	80	1349	1102	0	9064959	9000000	9999999	
11	1061130	1	17	90	1218	0	0	10337418	10000000	10999999	
12		3	17	55	1293	1844	1428	11399766	11000000	11999999	
Total number of pulses in waveform = 29											
*****											

### Type 5 Radar Waveform\_13

Num of Bursts = 14 Burst Interval (us)= 857143											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	608600	3	9	80	1424	1735	1216	608600	0	857142	
2	410076	3	9	60	1523	1000	1290	1023051	857143	1714285	
3	696619	2	9	95	1789	1118	0	1723483	1714286	2571428	
4	1458734	2	9	85	1234	1478	0	3185124	2571429	3428571	
5	744460	1	9	55	1115	0	0	3932296	3428572	4285714	
6	354944	3	9	65	1635	1223	1449	4916830	4285715	5142857	
7	1386022	1	9	60	1417	0	0	5276081	5142858	6000000	
8	923645	2	9	65	1827	1839	0	6663520	6000001	6857143	
9	264659	3	9	95	1512	1478	1150	7590831	6857144	7714286	
10	743295	1	9	85	1576	0	0	7859630	7714287	8571429	
11	1137696	3	9	100	1945	1575	1434	8604501	8571430	9428572	
12	941384	2	9	95	1595	1327	0	9747151	9428573	10285715	
13	1214416	3	9	50	1642	1887	1466	10691457	10285716	11142858	
14		1	9	50	1052	0	0	11910868	11142859	12000001	
Total number of pulses in waveform = 30											
*****											

### 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	548787	3	12	55	1763	1575	1569	548787	0	749999	
2	452885	2	12	100	1543	1661	0	1006579	750000	1499999	
3	896873	2	12	55	1929	1527	0	1906656	1500000	2249999	
4	695382	3	12	60	1911	1252	1230	2605464	2250000	2999999	
5	458683	2	12	85	1259	1346	0	3068540	3000000	3749999	
6	965385	3	12	60	1074	1085	1695	4036530	3750000	4499999	
7	768782	2	12	70	1215	1474	0	4809166	4500000	5249999	
8	725991	2	12	100	1774	1119	0	5537846	5250000	5999999	
9	549742	2	12	70	1598	1740	0	6090481	6000000	6749999	
10	1142147	3	12	70	1399	1130	1447	7235966	6750000	7499999	
11	384318	2	12	65	1481	1564	0	7624260	7500000	8249999	
12	676594	1	12	75	1871	0	0	8303899	8250000	8999999	
13	898141	3	12	85	1083	1140	1849	9203911	9000000	9749999	
14	774983	3	12	65	1988	1263	1544	9982966	9750000	10499999	
15	1097110	2	12	70	1444	1339	0	11084871	10500000	11249999	
16	267033	3	12	80	1564	1888	1292	11354687	11250000	11999999	
***** Total number of pulses in waveform = 38											

### Type 5 Radar Waveform\_15

Num of Bursts = 10 Burst Interval (us)= 1200000											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	891743	3	5	95	1954	1801	1874	891743	0	1199999	
2	1204002	1	5	100	1865	0	0	2101374	1200000	2399999	
3	1308040	3	5	75	1274	1783	1843	3411279	2400000	3599999	
4	977928	2	5	65	1249	1986	0	4394107	3600000	4799999	
5	1489447	2	5	75	1058	1544	0	5886789	4800000	5999999	
6	453519	2	5	90	1436	1894	0	6342910	6000000	7199999	
7	1347065	2	5	50	1583	1296	0	7693305	7200000	8399999	
8	720478	2	5	90	1146	1998	0	8416662	8400000	9599999	
9	1734541	3	5	90	1577	1632	1205	10154347	9600000	10799999	
10	1559146	1	5	80	1302	0	0	11717907	10800000	11999999	
***** Total number of pulses in waveform = 21											

### Type 5 Radar Waveform\_16

Num of Bursts = 9 Burst Interval (us)= 1333333											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	525356	1	14	55	1566	0	0	525356	0	1333332	
2	822388	3	14	85	1681	1332	1511	1349310	1333333	2666665	
3	1968274	1	14	80	1818	0	0	3322108	2666666	3999998	
4	1308338	2	14	75	1244	1285	0	4632264	3999999	5333331	
5	1788626	2	14	95	1862	1864	0	6423419	5333332	6666664	
6	575601	1	14	70	1126	0	0	7002746	6666665	7999997	
7	1852660	2	14	70	1990	1878	0	8856532	7999998	9333330	
8	757231	3	14	95	1438	1697	1565	9617631	9333331	10666663	
9	1222338	3	14	100	1498	1614	1089	10844669	10666664	11999996	
***** Total number of pulses in waveform = 18											

### Type 5 Radar Waveform\_17

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	377226	3	6	100	1074	1100	1855	377226	0	705881	
2	883807	2	6	70	1572	1584	0	1265062	705882	1411763	
3	543454	2	6	85	1324	1138	0	1811672	1411764	2117645	
4	678662	2	6	80	1539	1969	0	2492796	2117646	2823527	
5	798783	2	6	100	1750	1775	0	3295087	2823528	3529409	
6	798754	3	6	65	1089	1277	1470	4097366	3529410	4235291	
7	301047	2	6	65	1575	1349	0	4402249	4235292	4941173	
8	842621	3	6	85	1193	1999	1149	5247794	4941174	5647056	
9	1054434	1	6	55	1618	0	0	6306569	5647056	6352937	
10	233232	1	6	75	1812	0	0	6541419	6352938	7058819	
11	559581	3	6	65	1863	1792	1803	7102812	7058820	7764701	
12	1177420	2	6	70	1001	1104	0	8285690	7764702	8470583	
13	716179	2	6	65	1165	1585	0	9003974	8470584	9176465	
14	689695	3	6	80	1019	1181	1866	9696419	9176466	9882347	
15	326918	1	6	95	1301	0	0	10027403	9882348	10588229	
16	1227712	2	6	95	1361	1446	0	11256416	10588230	11294111	
17	727948	2	6	75	1596	1485	0	11987171	11294112	11999993	
Total number of pulses in waveform = 36											
*****											

### 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	351208	2	18	60	1713	1291	0	351208	0	749999	
2	446075	2	18	75	1154	1092	0	799287	750000	1499999	
3	789994	3	18	90	1804	1784	1440	1591527	1500000	2249999	
4	692305	3	18	70	1309	1504	1882	2288860	2250000	2999999	
5	1017981	1	18	75	1729	0	0	3311536	3000000	3749999	
6	545271	1	18	50	1393	0	0	3858536	3750000	4499999	
7	655240	1	18	50	1355	0	0	4515169	4500000	5249999	
8	1257938	2	18	65	1063	1883	0	5774462	5250000	5999999	
9	244838	1	18	90	1586	0	0	6022246	6000000	6749999	
10	1028202	3	18	90	1680	1803	1948	7052034	6750000	7499999	
11	1189585	1	18	75	1092	0	0	8247050	7500000	8249999	
12	125455	2	18	75	1011	1728	0	8373597	8250000	8999999	
13	1356955	2	18	70	1734	1403	0	9733291	9000000	9749999	
14	602939	2	18	65	1634	1314	0	10339367	9750000	10499999	
15	723720	1	18	95	1641	0	0	11066035	10500000	11249999	
16	521833	2	18	85	1457	1063	0	11589509	11250000	11999999	
Total number of pulses in waveform = 29											
*****											

### 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	223378	3	19	100	1163	1187	1906	223378	0	705881	
2	1082585	2	19	95	1494	1502	0	1310219	1411763		
3	411693	1	19	95	1530	0	0	1724908	1411764	2117645	
4	807018	3	19	95	1704	1789	1563	2533456	2117646	2823527	
5	576178	1	19	60	1789	0	0	3114690	2823528	3529409	
6	556122	2	19	100	1394	1938	0	3672601	3529410	4235291	
7	1023673	1	19	80	1321	0	0	4699606	4235292	4941173	
8	883298	3	19	95	1536	1352	1007	5584225	4941174	5647055	
9	230006	1	19	65	1804	0	0	5818126	5647056	6352937	
10	624564	3	19	50	1382	1028	1082	6444494	6352938	7058819	
11	1235765	3	19	70	1282	1591	1163	7683751	7058820	7764701	
12	352325	2	19	100	1942	1200	0	8040112	7764702	8470583	
13	1066757	2	19	55	1502	1753	0	9110011	8470584	9176465	
14	433216	3	19	60	1977	1636	1208	9546482	9176466	9882347	
15	414349	2	19	80	1992	1639	0	9965652	9882348	10588229	
16	689177	3	19	70	1591	1724	1597	10658460	10588230	11294111	
17	656173	2	19	50	1097	1859	0	11319545	11294112	11999993	
Total number of pulses in waveform = 37											
*****											

Type 5 Radar Waveform_20												
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)		
1	434817	2	8	55	1258	1567	0	214506	0	631578		
2	655083	2	8	70	1845	1385	0	652148	1263158	1894736		
3	1135183	2	8	65	1242	1093	0	1310461	1263158	1894736		
4	165134	1	8	90	1971	0	0	2447979	1894737	2526315		
5	634355	3	8	100	1292	1207	1260	2615084	2526316	3157894		
6	864650	1	8	85	1270	0	0	3253198	3157895	3789473		
7	723997	1	8	55	1789	0	0	4119128	3789474	4421052		
8	639353	2	8	85	1906	1290	0	4844914	4421053	5052631		
9	694493	2	8	95	1005	1784	0	5487463	5052632	5684210		
10	293556	2	8	60	1936	1517	0	6184745	5684211	6315789		
11	1081211	2	8	95	1054	1907	0	6481754	6315790	6947368		
12	37146	2	8	55	1109	1516	0	7565926	6947369	7578947		
13	629211	1	8	75	1074	0	0	7605697	7578948	8210526		
14	1011142	1	8	75	1222	0	0	8235982	8210527	8842105		
15	712781	1	8	80	1453	0	0	9248346	8842106	9473684		
16	382907	1	8	70	1866	0	0	9962580	9473685	10105263		
17	870669	2	8	70	1622	1035	0	10347353	10105264	10736842		
18	266616	3	8	80	1067	1769	1844	11220979	10736843	11368421		
19		2	8	65	1784	1146	0	11492275	11368422	12000000		
Total number of pulses in waveform = 33												
*****												
Type 5 Radar Waveform_21												
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)		
1	570742	2	8	75	1971	1765	0	570742	0	923076		
2	1058083	2	8	80	1283	1416	0	1632561	923077	1846153		
3	1124190	1	8	60	1477	0	0	2759450	1846154	2769230		
4	40894	2	8	85	1418	1055	0	2801821	2769231	3692307		
5	1660198	3	8	85	1218	1692	1397	4464492	3692308	4615384		
6	842115	1	8	60	1885	0	0	5310914	4615385	5538461		
7	458835	3	8	50	1691	1011	1973	5771634	5538462	6461538		
8	1241904	1	8	50	1989	0	0	7018213	6461539	7384615		
9	509652	2	8	70	1748	1020	0	7529854	7384616	8307692		
10	1519907	3	8	65	1064	1140	1958	9062529	8307693	9230769		
11	814382	1	8	70	1533	0	0	9871073	9230770	10153846		
12	1166266	3	8	60	1346	1834	1017	11038872	10153847	11076923		
13	717920	1	8	100	1893	0	0	11760989	11076924	12000000		
Total number of pulses in waveform = 25												
*****												
Type 5 Radar Waveform_22												
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)		
1	683101	2	10	95	1029	1720	0	683101	0	799999		
2	424808	1	10	95	1781	0	0	1110658	800000	1599999		
3	1114010	3	10	95	1471	1358	1864	2226449	1600000	2399999		
4	264574	3	10	100	1672	1723	1688	2495716	2400000	3199999		
5	1222958	3	10	75	1698	1118	1141	3723757	3200000	3999999		
6	302147	1	10	85	1002	0	0	4029861	4000000	4799999		
7	1180840	1	10	80	1146	0	0	5211703	4800000	5599999		
8	589368	2	10	80	1768	1567	0	5802217	5600000	6399999		
9	616273	2	10	100	1820	1673	0	6421825	6400000	7199999		
10	1355542	2	10	90	1406	1155	0	7780860	7200000	7999999		
11	727941	1	10	50	1149	0	0	8511362	8000000	8799999		
12	298848	1	10	60	1945	0	0	8811359	8800000	9599999		
13	962247	1	10	60	1109	0	0	9775551	9600000	10399999		
14	1102443	1	10	60	1262	0	0	10879103	10400000	11199999		
15	441839	1	10	85	1697	0	0	11322204	11200000	11999999		
Total number of pulses in waveform = 25												
*****												

### Type 5 Radar Waveform\_23

Type 5 Radar Waveform_23											
Num of Bursts = 19 Burst Interval (us)= 631579											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	115706	3	5	55	1938	1881	1410	115706	0	631578	
2	1010086	2	5	75	1566	1425	0	1131020	631579	1263157	
3	285230	1	5	60	1138	0	0	1429241	1263158	1894736	
4	969458	2	5	70	1516	1801	0	2399837	1894737	2526315	
5	638824	1	5	65	1184	0	0	3041978	2526316	3157894	
6	699442	1	5	55	1808	0	0	3742604	3157895	3789473	
7	450976	2	5	100	1385	1690	0	4195388	3789474	4421052	
8	262269	1	5	65	1224	0	0	4460732	4421053	5052631	
9	1114940	1	5	50	1668	0	0	5576896	5052632	5684210	
10	329545	1	5	60	1851	0	0	5908109	5684211	6315789	
11	957434	2	5	55	1555	1095	0	6867394	6315790	6947368	
12	347563	2	5	75	1880	1494	0	7217607	6947369	7578947	
13	630735	3	5	100	1552	1015	1134	7851716	7578948	8210526	
14	890564	3	5	95	1098	1755	1341	8745981	8210527	8842105	
15	261174	3	5	85	1158	1143	1282	9011349	8842106	9473684	
16	996183	1	5	100	1784	0	0	10011115	9473685	10105263	
17	436848	2	5	90	1248	1422	0	10449747	10105264	10736842	
18	426690	3	5	95	1802	1471	1152	10879107	10736843	11368421	
19	906260	1	5	100	1292	0	0	11789792	11368422	12000000	
Total number of pulses in waveform = 35											
*****											

### Type 5 Radar Waveform\_24

Type 5 Radar Waveform_24											
Num of Bursts = 19 Burst Interval (us)= 631579											
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)	
1	141706	2	12	50	1007	1387	0	141706	0	631578	
2	846676	2	12	65	1680	1084	0	990726	631579	1263157	
3	332089	1	12	85	1730	0	0	1325579	1263158	1894736	
4	835520	3	12	100	1380	1704	1363	2162829	1894737	2526315	
5	436708	1	12	100	1162	0	0	2603984	2526316	3157894	
6	850362	2	12	80	1483	1656	0	3455508	3157895	3789473	
7	543963	3	12	60	1202	1430	1726	4002610	3789474	4421052	
8	479873	3	12	50	1350	1156	1353	4486841	4421053	5052631	
9	1078545	1	12	90	1975	0	0	5669245	5052632	5684210	
10	499436	1	12	60	1116	0	0	6070656	5684211	6315789	
11	666529	2	12	65	1295	1050	0	6738301	6315790	6947368	
12	281134	2	12	60	1816	1591	0	7021780	6947369	7578947	
13	711991	3	12	90	1197	1003	1590	7737178	7578948	8210526	
14	1072063	3	12	55	1770	1877	1504	8813031	8210527	8842105	
15	75001	1	12	50	1955	0	0	8893183	8842106	9473684	
16	662440	1	12	65	1299	0	0	9667578	9473685	10105263	
17	1026525	3	12	60	1154	1050	1183	10585402	10105264	10736842	
18	170998	3	12	80	1027	1531	1761	10759787	10736843	11368421	
19	919820	3	12	80	1861	1476	1151	11683926	11368422	12000000	
Total number of pulses in waveform = 40											
*****											

### Type 5 Radar Waveform\_25

Type 5 Radar Waveform_25											
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	746834	1	6	95	1055	0	0	746834	0	1499999	
2	1027361	2	6	50	1671	1766	0	1775250	1500000	2999999	
3	2693293	2	6	85	1595	1392	0	4471980	3000000	4499999	
4	1267213	2	6	75	1481	1067	0	5742180	4500000	5999999	
5	760047	3	6	55	1764	1857	1431	6504775	6000000	7499999	
6	1949149	1	6	95	1128	0	0	8458976	7500000	8999999	
7	2038521	1	6	70	1285	0	0	10498625	9000000	10499999	
8	287025	2	6	75	1152	1344	0	10786935	10500000	11999999	
Total number of pulses in waveform = 14											
*****											

### Type 5 Radar Waveform\_26

Type 5 Radar Waveform_26										
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	246586	1	18	50	1744	0	0	246586	0	1090908
2	849150	1	18	90	1837	0	0	1097480	1090909	2181817
3	1625592	2	18	50	1247	1046	0	2724909	2181818	3272726
4	1203973	2	18	100	1062	1870	0	3931175	3272727	4363635
5	524818	2	18	95	1431	1631	0	4458925	4363636	5454544
6	1217522	2	18	50	1595	1262	0	5679509	5454545	6545453
7	1321594	3	18	100	1387	1968	1219	7003960	6545454	7636362
8	733219	1	18	75	1816	0	0	7741753	7636363	8727271
9	1598377	2	18	95	1035	1228	0	9341946	8727272	9818180
10	505755	3	18	60	1036	1584	1797	9849964	9818181	10909089
11	1243455	2	18	65	1396	1367	0	11097836	10909090	11999998
Total number of pulses in waveform = 21										
*****										

### Type 5 Radar Waveform\_27

Type 5 Radar Waveform_27										
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	608548	2	9	80	1488	1510	0	608548	0	705881
2	680987	1	9	50	1457	0	0	1292533	705882	1411763
3	245725	1	9	85	1889	0	0	1539715	1411764	2117645
4	994135	2	9	95	1045	1887	0	2535739	2117646	2823527
5	706015	2	9	50	1994	1109	0	3244686	2823528	3529409
6	389967	3	9	80	1231	1680	1915	3637756	3529410	4235291
7	740222	2	9	95	1439	1661	0	4382804	4235292	4941173
8	1181824	2	9	85	1188	1153	0	5567728	4941174	5647055
9	477394	3	9	85	1607	1620	1694	6047463	5647056	6352937
10	550730	1	9	60	1813	0	0	6603114	6352938	7058819
11	786447	3	9	95	1005	1736	1167	7371974	7058820	7764701
12	415060	2	9	70	1952	1557	0	7790342	7764702	8470583
13	1037336	3	9	50	1192	1761	1525	8831187	8470584	9176465
14	1013678	2	9	60	1685	1460	0	9849343	9176466	9882347
15	51983	2	9	65	1310	1239	0	9904471	9882348	10588229
16	1008112	3	9	60	1217	1016	1575	10915132	10588230	11294111
17	931448	2	9	50	1703	1976	1759	11860388	11294112	11999993
Total number of pulses in waveform = 37										
*****										

### Type 5 Radar Waveform\_28

Type 5 Radar Waveform_28										
Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	290247	3	19	80	1030	1531	1045	290247	0	749999
2	578054	3	19	60	1040	1737	1535	871907	750000	1499999
3	1185306	1	19	80	1660	0	0	2061525	1500000	2249999
4	761765	3	19	65	1187	1270	1759	2824950	2250000	2999999
5	565615	1	19	60	1460	0	0	3394781	3000000	3749999
6	490994	3	19	75	1134	1048	1314	3887235	3750000	4499999
7	983195	2	19	55	1956	1630	0	4873926	4500000	5249999
8	1023090	2	19	65	1416	1107	0	5900602	5250000	5999999
9	450323	1	19	85	1820	0	0	6353448	6000000	6749999
10	473241	2	19	55	1115	1028	0	6828509	6750000	7499999
11	857821	1	19	70	1754	0	0	7688473	7500000	8249999
12	842386	3	19	65	1818	1404	1842	8532613	8250000	8999999
13	1071276	3	19	80	1010	1584	1342	9608953	9000000	9749999
14	869117	2	19	80	1343	1406	0	10482006	9750000	10499999
15	53302	3	19	90	1142	1271	1972	10538057	10500000	11249999
16	886987	3	19	50	1612	1259	1134	11429429	11250000	11999999
Total number of pulses in waveform = 36										
*****										

### Type 5 Radar Waveform\_29

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	644439	1	14	100	1552	0	0	644439	0	749999
2	337758	1	14	95	1886	0	0	983749	750000	1499999
3	584794	2	14	60	1064	1034	0	1570429	1500000	2249999
4	895557	2	14	50	1500	1076	0	2468084	2250000	2999999
5	924337	3	14	85	1581	1217	1096	3394997	3000000	3749999
6	584637	3	14	75	1319	1541	1826	3983528	3750000	4499999
7	552307	1	14	80	1891	0	0	4540521	4500000	5249999
8	1065301	1	14	70	1871	0	0	5607713	5250000	5999999
9	700201	3	14	80	1667	1468	1323	6309785	6000000	6749999
10	1003530	3	14	90	1451	1126	1822	7317773	6750000	7499999
11	518067	3	14	85	1494	1255	1031	7840039	7500000	8249999
12	1103028	1	14	75	1204	0	0	8946847	8250000	8999999
13	111226	2	14	65	1736	1509	0	9059277	9000000	9749999
14	1069436	2	14	70	1061	1510	0	10131958	9750000	10499999
15	718724	3	14	90	1853	1704	1606	10853253	10500000	11249999
16	962959	1	14	95	1020	0	0	11811375	11250000	11999999
*****										
Total number of pulses in waveform = 32										

### Type 5 Radar Waveform\_30

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri(us)	Pulse 2 Pri(us)	Pulse 3 Pri(us)	Start Loc (us)	Start Burst Interval(us)	End Burst Interval(us)
1	199743	3	17	65	1923	1828	1045	199743	0	705881
2	658006	3	17	70	1171	1460	1075	862545	705882	1411763
3	772466	2	17	65	1012	1210	0	1638717	1411764	2117645
4	1039218	1	17	100	1516	0	0	2680157	2117646	2823527
5	714797	1	17	70	1549	0	0	3396470	2823528	3529409
6	569295	3	17	65	1543	1333	1210	3967314	3529410	4235291
7	457122	3	17	100	1428	1055	1069	4428922	4235292	4941173
8	1074960	1	17	60	1689	0	0	5507434	4941174	5647055
9	290098	1	17	90	1064	0	0	5799221	5647056	6362937
10	788497	1	17	80	1930	0	0	6586782	6352938	7058819
11	954712	3	17	50	1811	1060	1973	7543424	7058820	7764701
12	657813	3	17	55	1402	1312	1448	8206081	7764702	8470583
13	957206	3	17	55	1260	1094	1601	9167449	8470584	9176465
14	622312	1	17	60	1653	0	0	9793716	9176466	9882347
15	650534	1	17	55	1114	0	0	10445903	9882348	10588229
16	551832	2	17	95	1412	1858	0	10998849	10588230	11294111
17	813828	2	17	90	1595	1537	0	11815947	11294112	11999993
*****										
Total number of pulses in waveform = 34										

## Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5253	1	16	5298	1
2	5256	1	17	5301	1
3	5259	1	18	5304	1
4	5262	1	19	5307	1
5	5265	1	20	5310	1
6	5268	1	21	5313	1
7	5271	1	22	5316	1
8	5274	1	23	5319	1
9	5277	1	24	5322	1
10	5280	1	25	5325	1
11	5283	1	26	5328	1
12	5286	1	27	5271	1
13	5289	1	28	5290	1
14	5292	1	29	5311	1
15	5295	1	30	5327	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5255	0	8	5271	24
2	5276	6	17	5257	51
15	5253	45	36	5274	108
17	5274	51	49	5268	147
22	5251	66	53	5253	159
40	5281	120	71	5266	213
69	5267	207	93	5279	279
75	5268	225	99	5252	297

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5255	6	34	5287	102
9	5256	27	47	5286	141
34	5280	102	60	5276	180
41	5273	123	62	5260	186
48	5252	144	67	5251	201
54	5278	162	68	5268	204
64	5251	192	84	5282	252
66	5290	198	92	5263	276
77	5262	231	95	5261	285
79	5281	237	99	5280	297
85	5288	255	--	--	--
87	5283	261	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5264	3	0	5268	0
19	5293	57	8	5295	24
35	5276	105	38	5261	114
38	5261	114	39	5266	117
46	5266	138	47	5291	141
51	5269	153	53	5262	159
--	--	--	61	5257	183
--	--	--	62	5265	186
--	--	--	73	5270	219
--	--	--	75	5251	225

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5285	27	7	5297	21
23	5265	69	17	5263	51
27	5254	81	30	5292	90
32	5289	96	35	5264	105
43	5275	129	50	5293	150
46	5297	138	64	5285	192
62	5252	186	79	5267	237
63	5255	189	93	5294	279
68	5260	204	--	--	--
80	5270	240	--	--	--
81	5288	243	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5279	3	0	5278	0
22	5269	66	4	5267	12
33	5265	99	17	5266	51
37	5260	111	19	5256	57
44	5270	132	30	5269	90
58	5256	174	43	5298	129
65	5282	195	60	5284	180
--	--	--	70	5253	210
--	--	--	77	5268	231
--	--	--	78	5286	234

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5288	3	2	5255	6
6	5289	18	7	5256	21
21	5310	63	14	5286	42
27	5253	81	15	5260	45
31	5299	93	17	5258	51
33	5284	99	21	5250	63
39	5294	117	30	5283	90
41	5267	123	41	5272	123
44	5276	132	44	5273	132
45	5274	135	45	5288	135
50	5256	150	48	5262	144
57	5270	171	69	5287	207
66	5286	198	74	5275	222
74	5262	222	76	5304	228
97	5302	291	77	5305	231
--	--	--	80	5278	240
--	--	--	87	5296	261
--	--	--	88	5261	264

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
19	5277	57	2	5295	6
28	5316	84	9	5299	27
39	5287	117	14	5309	42
42	5267	126	29	5275	87
43	5275	129	34	5276	102
66	5259	198	36	5308	108
72	5298	216	37	5260	111
80	5276	240	38	5311	114
84	5291	252	40	5270	120
85	5268	255	41	5291	123
89	5318	267	47	5284	141
93	5284	279	50	5293	150
--	--	--	75	5307	225
--	--	--	77	5300	231
--	--	--	92	5314	276
--	--	--	94	5272	282
--	--	--	97	5313	291
--	--	--	99	5273	297

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5260	18	2	5261	6
11	5277	33	5	5289	15
16	5286	48	10	5262	30
17	5272	51	14	5300	42
18	5314	54	15	5294	45
28	5271	84	24	5313	72
30	5319	90	30	5283	90
34	5261	102	54	5295	162
45	5298	135	57	5320	171
51	5291	153	63	5285	189
53	5294	159	64	5269	192
55	5262	165	71	5278	213
58	5305	174	75	5304	225
64	5297	192	84	5308	252
65	5315	195	85	5279	255
74	5312	222	89	5286	267
92	5284	276	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5271	27	21	5311	63
16	5313	48	24	5280	72
20	5311	60	31	5310	93
24	5298	72	35	5292	105
25	5314	75	49	5320	147
40	5316	120	51	5281	153
47	5290	141	60	5288	180
56	5296	168	80	5263	240
60	5276	180	89	5274	267
66	5305	198	--	--	--
86	5304	258	--	--	--
89	5295	267	--	--	--
99	5283	297	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5294	9	0	5280	0
7	5284	21	1	5284	3
12	5326	36	10	5327	30
20	5293	60	15	5303	45
22	5325	66	28	5286	84
30	5277	90	46	5275	138
43	5315	129	48	5321	144
59	5313	177	50	5314	150
79	5278	237	58	5324	174
87	5299	261	64	5309	192
88	5302	264	69	5285	207
97	5281	291	75	5304	225
98	5291	294	79	5316	237
--	--	--	81	5298	243
--	--	--	89	5270	267
--	--	--	94	5294	282

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5278	0	1	5322	3
3	5305	9	2	5325	6
4	5330	12	10	5334	30
26	5310	78	16	5307	48
29	5328	87	33	5323	99
58	5323	174	34	5279	102
70	5296	210	37	5311	111
76	5321	228	43	5330	129
77	5304	231	70	5290	210
83	5329	249	72	5312	216
87	5281	261	73	5310	219
--	--	--	81	5289	243
--	--	--	85	5326	255

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5326	3	11	5296	33
4	5316	12	12	5297	36
8	5289	24	22	5298	66
9	5287	27	29	5320	87
15	5336	45	36	5319	108
19	5318	57	44	5325	132
27	5300	81	46	5331	138
43	5302	129	67	5313	201
45	5325	135	78	5315	234
47	5283	141	--	--	--
59	5291	177	--	--	--
62	5295	186	--	--	--
65	5320	195	--	--	--
69	5301	207	--	--	--
72	5293	216	--	--	--
76	5311	228	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5323	39	3	5323	9
19	5352	57	8	5348	24
29	5320	87	17	5342	51
41	5301	123	19	5335	57
55	5355	165	29	5344	87
71	5332	213	40	5302	120
76	5307	228	53	5354	159
81	5356	243	67	5341	201
87	5314	261	76	5328	228
90	5336	270	86	5322	258
91	5324	273	--	--	--
98	5338	294	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
0	5329	0	8	5314	24
16	5293	48	20	5300	60
23	5340	69	32	5301	96
26	5291	78	48	5323	144
29	5299	87	74	5331	222
38	5326	114	87	5304	261
57	5333	171	--	--	--
64	5324	192	--	--	--
88	5307	264	--	--	--
95	5283	285	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5314	3	14	5345	42
11	5290	33	22	5327	66
12	5309	36	26	5294	78
16	5297	48	29	5334	87
17	5308	51	30	5332	90
32	5307	96	37	5344	111
37	5327	111	40	5301	120
39	5311	117	43	5350	129
44	5320	132	52	5337	156
56	5340	168	54	5336	162
69	5338	207	58	5329	174
78	5330	234	60	5330	180
85	5318	255	68	5338	204
89	5291	267	78	5296	234
--	--	--	82	5291	246

## 6. CONCLUSION

The data collected relate only the item(s) tested and show that the **804Mesh Dual Wi-Fi FCC ID: 2ABLK-804MESH** is in compliance with Part 15E of the FCC Rules and IC Rules.

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The End

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