



# DFS MEASUREMENT REPORT

## FCC 15.407 WLAN 802.11a/n/ac/ax

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**FCC ID:** LNQF3295SEV

**Applicant:** Actiontec Electronics, Inc.

**Application Type:** Certification

**Product:** Kinetic VoIP Modem

**Model No.:** T3280V


**Brand Name:** Actiontec

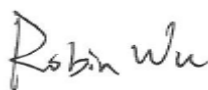
**FCC Classification:** Unlicensed National Information Infrastructure (NII)

**Type of Device:** Master Device

**FCC Rule Part(s):** Part 15 Subpart E - 15.407 Section (h)(2)  
KDB 905462 D02v02, KDB 905462 D04v01

**Test Date:** April 28 ~ May 13, 2021

Reviewed By:   
Sunny Sun

Approved By:   
Robin Wu



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.

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## Revision History

Report No.	Version	Description	Issue Date	Note
2103RSU011-U3	Rev. 01	Initial Report	06-11-2021	Valid

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## 1. GENERAL INFORMATION

### 1.1. Applicant

Actiontec Electronics, Inc.  
3301 Olcott St, Santa Clara, CA 95054, United States

### 1.2. Manufacturer

Actiontec Electronics, Inc.  
3301 Olcott St, Santa Clara, CA 95054, United States

### 1.3. Testing Facility

<input checked="" type="checkbox"/>	<p><b>Test Site - MRT Suzhou Laboratory</b></p> <p><b>Laboratory Location (Suzhou - Wuzhong)</b> D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China</p> <p><b>Laboratory Location (Suzhou - SIP)</b> 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China</p> <p><b>Laboratory Accreditations</b></p> <table> <tr> <td>A2LA: 3628.01</td> <td>CNAS: L10551</td> </tr> <tr> <td>FCC: CN1166</td> <td>ISED: CN0001</td> </tr> <tr> <td colspan="2">VCCI: R-20025, G-20034, C-20020, T-20020</td> </tr> </table>	A2LA: 3628.01	CNAS: L10551	FCC: CN1166	ISED: CN0001	VCCI: R-20025, G-20034, C-20020, T-20020	
A2LA: 3628.01	CNAS: L10551						
FCC: CN1166	ISED: CN0001						
VCCI: R-20025, G-20034, C-20020, T-20020							
<input type="checkbox"/>	<p><b>Test Site - MRT Shenzhen Laboratory</b></p> <p><b>Laboratory Location (Shenzhen)</b> 1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China</p> <p><b>Laboratory Accreditations</b></p> <table> <tr> <td>A2LA: 3628.02</td> <td>CNAS: L10551</td> </tr> <tr> <td>FCC: CN1284</td> <td>ISED: CN0105</td> </tr> </table>	A2LA: 3628.02	CNAS: L10551	FCC: CN1284	ISED: CN0105		
A2LA: 3628.02	CNAS: L10551						
FCC: CN1284	ISED: CN0105						
<input type="checkbox"/>	<p><b>Test Site - MRT Taiwan Laboratory</b></p> <p><b>Laboratory Location (Taiwan)</b> No. 38, Fuxing 2<sup>nd</sup> Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)</p> <p><b>Laboratory Accreditations</b></p> <table> <tr> <td>TAF: L3261-190725</td> <td></td> </tr> <tr> <td>FCC: 291082, TW3261</td> <td>ISED: TW3261</td> </tr> </table>	TAF: L3261-190725		FCC: 291082, TW3261	ISED: TW3261		
TAF: L3261-190725							
FCC: 291082, TW3261	ISED: TW3261						

#### 1.4. Product Information

Product Name:	Kinetic VoIP Modem
Model No.:	T3280V
Brand Name:	Actiontec
Wi-Fi Specification:	802.11a/b/g/n/ac/ax
Operating Mode:	Master
Accessory	
AC/DC Adapter 1#	Model: RD1203000-C55-195MG Input: 100-240V ~ 50/60Hz, 1.5A MAX Output: 12VDC, 3.0A
AC/DC Adapter 2#	Model: CDS036-W120U Input: 120VAC, 50/60Hz, 0.8A Output: 12VDC, 3.0A

#### 1.5. Radio Specification under Test

Frequency Range:	For 802.11a/n-HT20/ac-VHT20/ax-HE20: 5260~5320MHz, 5500~5720MHz For 802.11n-HT40/ac-VHT40/ax-HE40: 5270~5310MHz, 5510~5710MHz For 802.11ac-VHT80/ax-HE80: 5290MHz, 5530MHz, 5610MHz, 5690MHz For 802.11ac-VHT160/ax-HE160: 5250MHz, 5570MHz
Type of Modulation:	802.11a/n/ac: OFDM 802.11ax: OFDMA
Data Rate:	802.11a: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 600Mbps 802.11ac: up to 3466.8Mbps 802.11ax: up to 2402Mbps
Power-on cycle:	Requires 28.69 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.

Note: For other features of this EUT, test report will be issued separately.

### 1.6. Description of Available Antennas

Antenna Type	Ant Port	Freq. Band (MHz)	T <sub>x</sub> Paths	Max Antenna Gain (dBi)	Directional Gain (dBi)	
					For Power	For PSD
PCB Antenna	Ant 0	2412 ~ 2462	3	4.86	4.86	6.49
PIFA Antenna	Ant 1					
PCB Antenna	Ant 2					
PIFA Antenna	Ant 0	5150 ~ 5250	4	5.32	5.32	6.19
PIFA Antenna	Ant 1	5250 ~ 5350		5.38	5.38	6.19
PIFA Antenna	Ant 2	5470 ~ 5725		5.64	5.64	6.12
PCB Antenna	Ant 3	5725 ~ 5850		5.89	5.89	6.63

**Remark:**

1. The EUT supports Cyclic Delay Diversity (CDD) mode.
2. The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.
3. For PSD directional gain calculation refer to FCC Inquiry Tracking Number: 926285.

## 1.7. DFS Band Carrier Frequencies Operation

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

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

### 802.11n-HT40/ac-VHT40/ax-HE40

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

### 802.11ac-VHT80/ax-HE80

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

### 802.11ac-VHT160/ax-HE160

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



**1.8. Test Channel for this Report**

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

**1.9. Test Mode**

Test Mode	Operating under Master mode
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## 2. DFS DETECTION THRESHOLDS AND RADAR TEST WAVEFORMS

### 2.1. 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**

## 2.2. DFS Devices Requirements

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

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

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

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds 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**

### 2.3. DFS Detection Threshold Values

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

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

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

Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

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

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

## 2.4. Parameters of DFS Test Signals

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

### Short Pulse Radar Test Waveforms

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

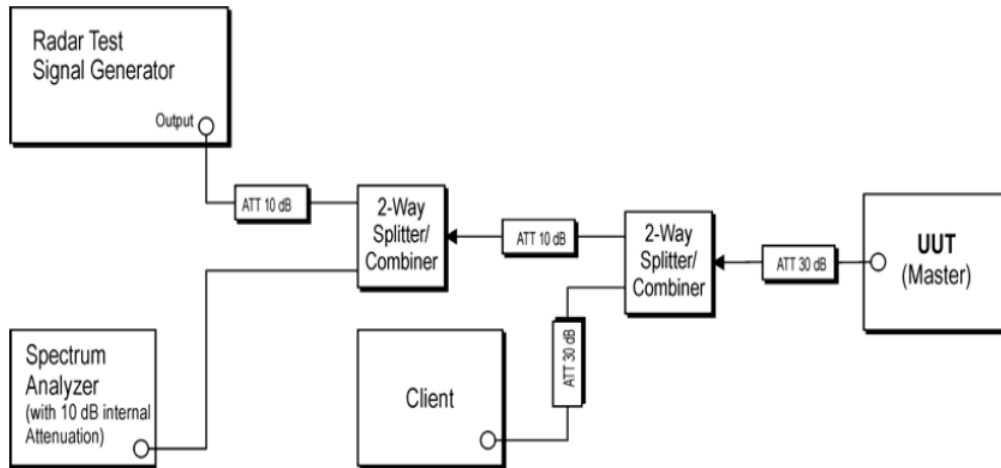
**Table 3-8: Parameters for Frequency Hopping Radar Waveforms**

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.

## 2.5. 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**



### 3. TEST EQUIPMENT CALIBRATION DATE

#### Dynamic Frequency Selection (DFS) (WZ-SR4)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTSUE06457	1 year	2021/07/02
EXA Signal Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2022/04/13
Signal Analyzer	R&S	FSV40	MRTSUE06218	1 year	2022/04/13
ESG Vector Signal Generator	Agilent	E4438C	MRTSUE06026	1 year	2021/10/22
Power divider	Marvelous Microwave Inc.	MVE8576	MRTSUE06259	1 year	2021/10/29
Power divider	Woken Technology Inc.	2-8GB	MRTSUE06261	1 year	2021/10/29
Power divider	Woken Technology Inc.	2-8GB	MRTSUE06262	1 year	2021/10/29
Power divider	Weinschel	6179	MRTSUE06567	1 year	2021/10/29
MXG Vector Signal Generator	KEYSIGHT	N5182B	MRTSUE06451	1 year	2021/07/02
Signal Analyzer	R&S	FSV40	MRTSUE06218	1 year	2022/04/13
Vector Signal Generator	R&S	SMBV100A	MRTSUE06279	1 year	2022/04/13
Thermohygrometer	Testo	608-H1	MRTSUE06222	1 year	2021/10/25

#### Client Information

Instrument	Manufacturer	Type No.
PC	HP	ZHAN 99 Pro G1M1

Software	Version	Manufacturer	Function
Pulse Building	N/A	Agilent	Radar Signal Generation Software
DFS Tool	V 6.9.2	Agilent	DFS Test Software
R&S Pulse Sequencer DFS	V 2.0	R&S	DFS Test Software
DFS Tool	V2.2.0.0	Keysight	DFS Test Software

## 4. TEST RESULT

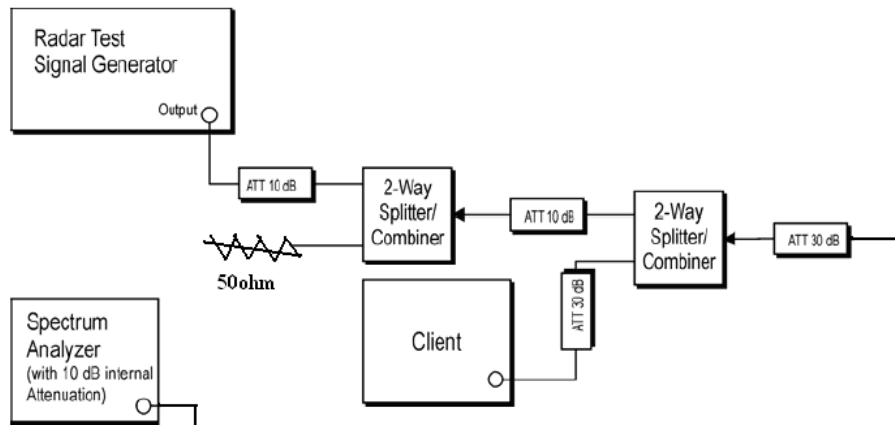
### 4.1. Summary

Parameter	Limit	Test Result	Reference
NII Detection Bandwidth Measurement	Refer Table 3-3	Pass	Section 4.3
Initial Channel Availability Check Time	Refer Table 3-3	Pass	Section 4.4
Radar Burst at the Beginning of the Channel Availability Check Time	Refer Table 3-3	Pass	Section 4.5
Radar Burst at the End of the Channel Availability Check Time	Refer Table 3-3	Pass	Section 4.6
In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time	Refer Table 3-3	Pass	Section 4.7
Non-Occupancy Period	Refer Table 3-3	Pass	Section 4.7
Statistical Performance Check	Refer Table 3-3	Pass	Section 4.8

## 4.2. Radar Waveform Calibration

### 4.2.1. Calibration Setup

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



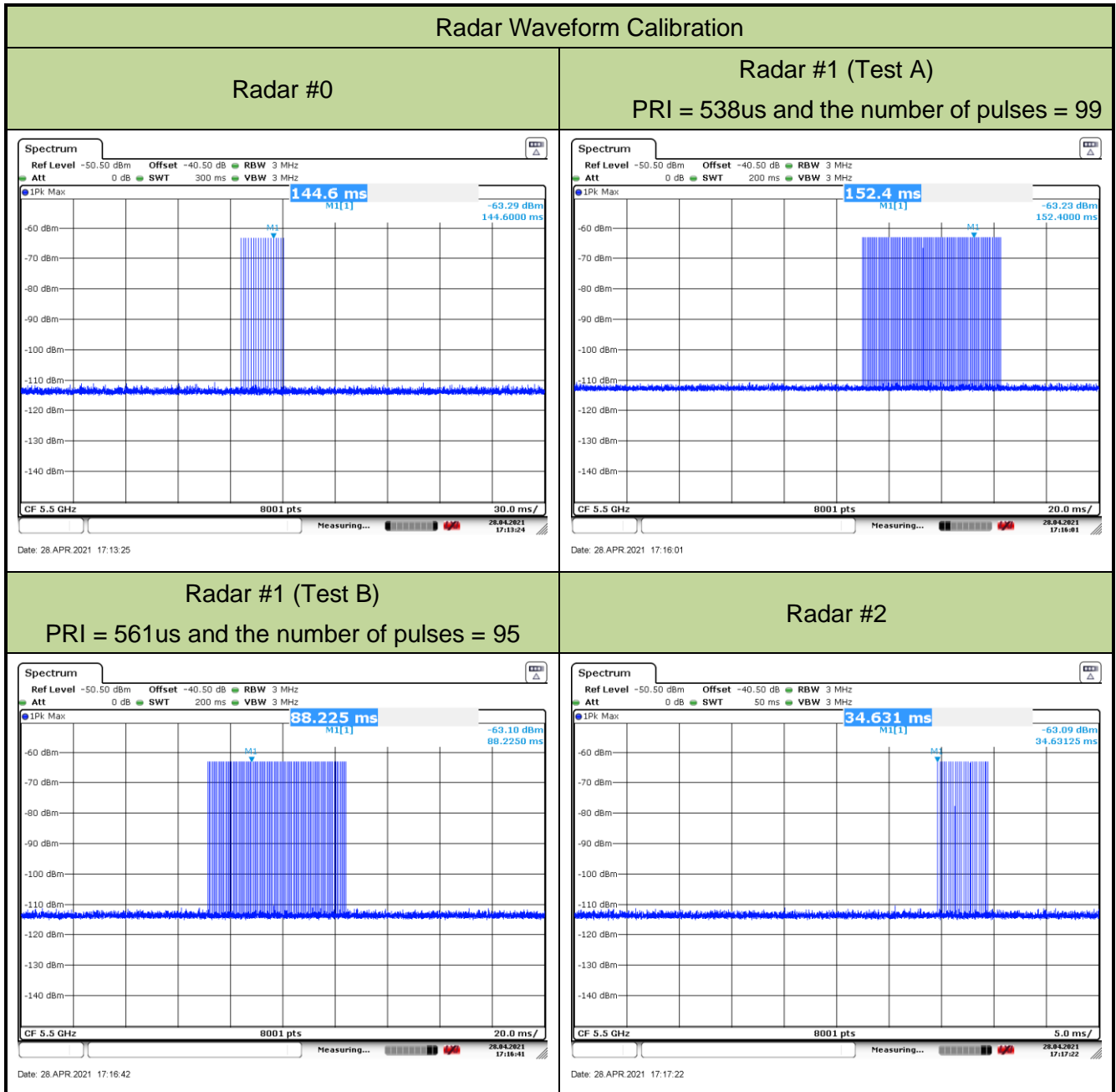
**Figure 3-2: Conducted Test Setup**

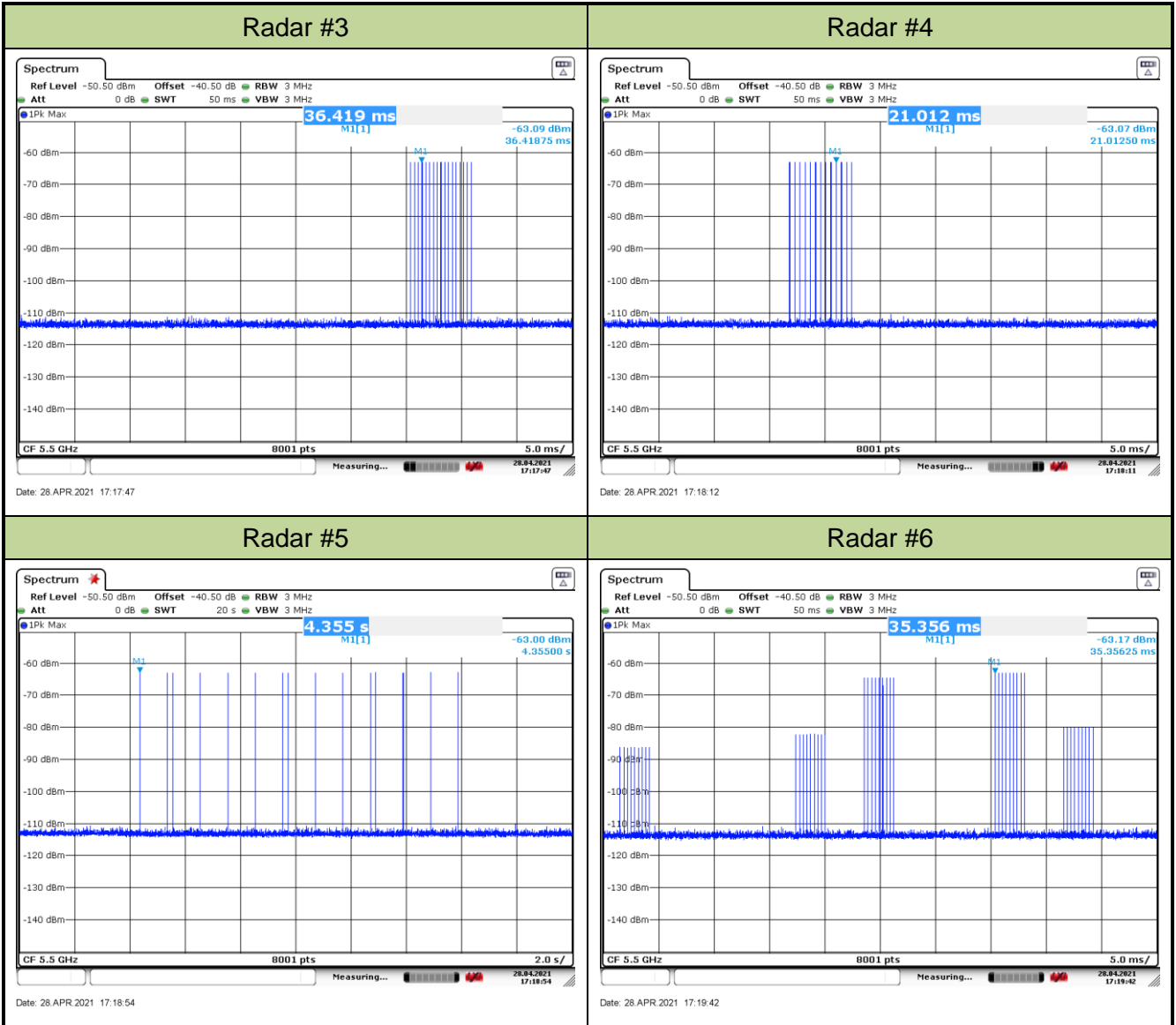
### 4.2.2. Calibration Procedure

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.

### 4.2.3. Cablibration Result

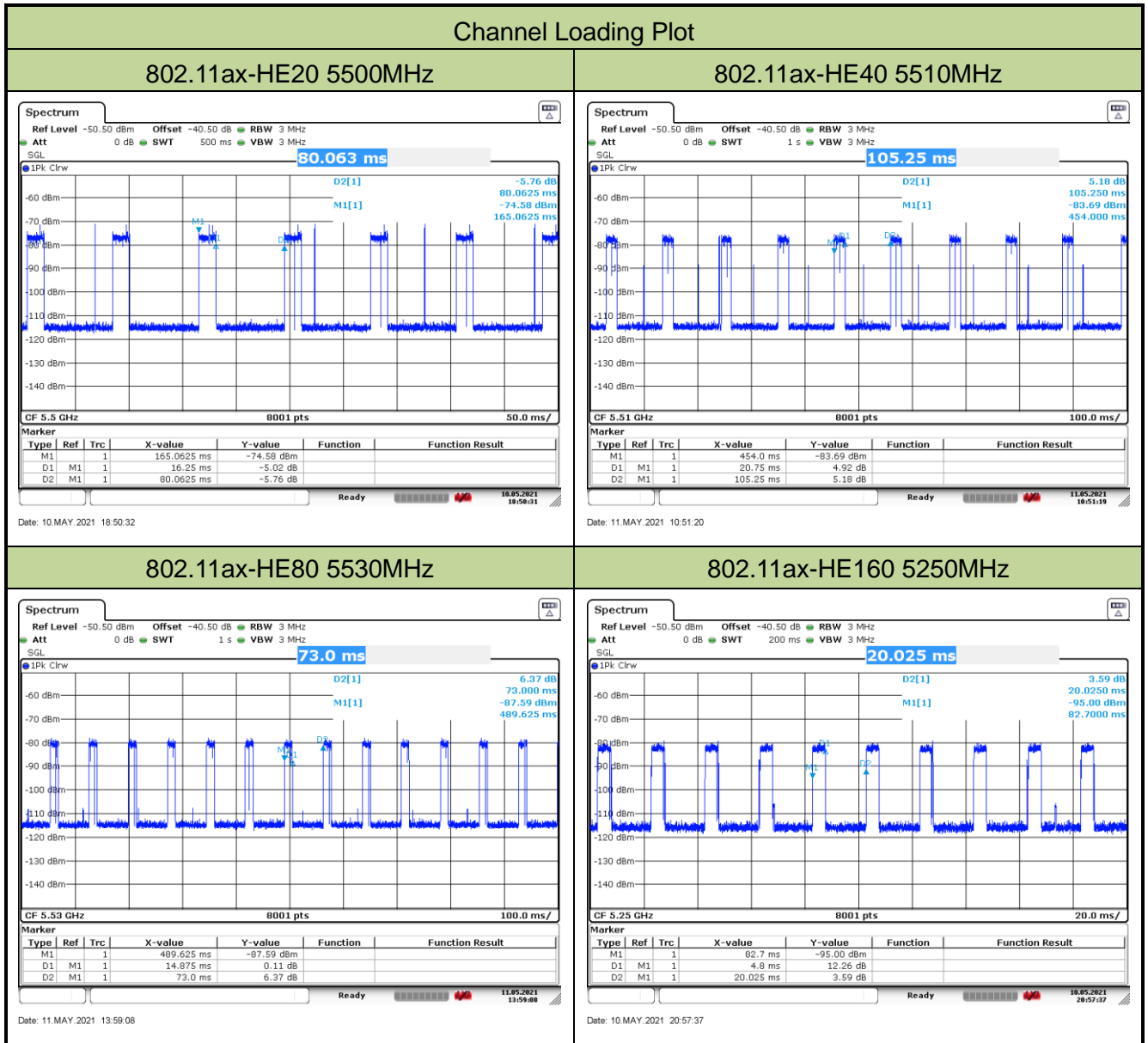
Product	Kinetic VoIP Modem	Temperature	25°C
Test Engineer	Jake Lan	Relative Humidity	60%
Test Site	WZ-SR4	Test Date	2021/04/28
Test Item	Radar Waveform Calibration		

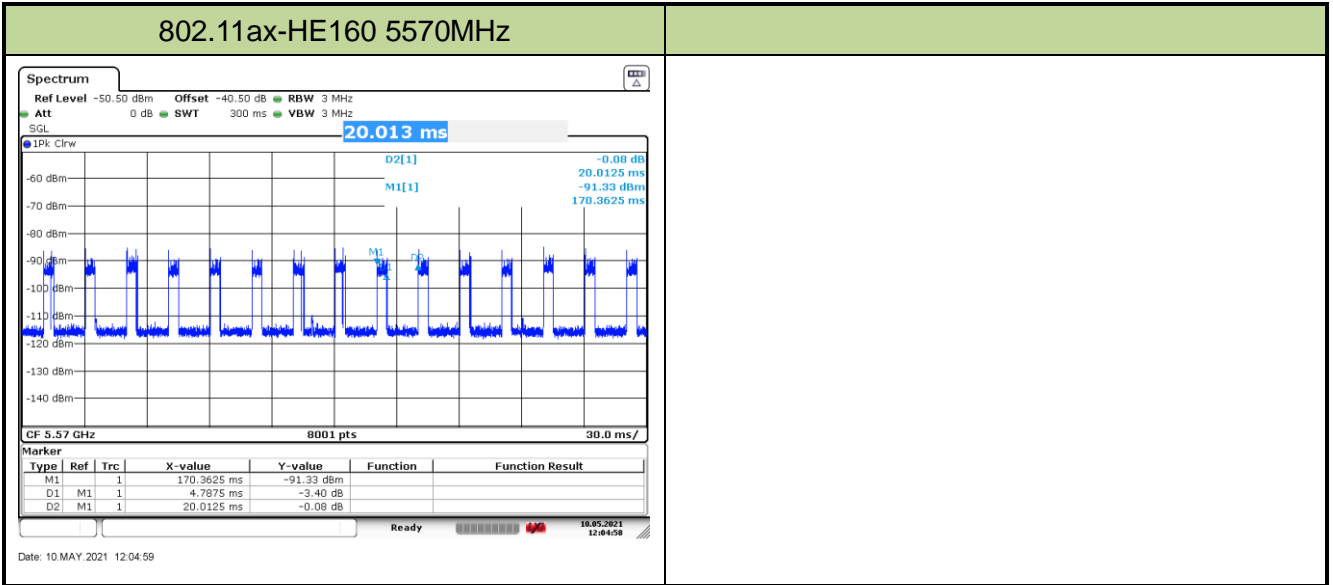




### 4.2.4. Channel Loading Test Result

Product	Kinetic VoIP Modem	Temperature	25°C
Test Engineer	Jake Lan	Relative Humidity	62%
Test Site	WZ-SR4	Test Date	2021/05/10~05/11
Test Item	Channel Loading		





Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11ax-HE20	5500 MHz	20.30%	≥ 17%	Pass
802.11ax-HE40	5510 MHz	19.71%	≥ 17%	Pass
802.11ax-HE80	5530 MHz	20.38%	≥ 17%	Pass
802.11ax-HE160	5250 MHz	23.97%	≥ 17%	Pass
802.11ax-HE160	5570 MHz	23.92%	≥ 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).

### **4.3. NII Detection Bandwidth Measurement**

#### **4.3.1. 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.

#### **4.3.2. Test Procedure**

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



7. The U-NII Detection Bandwidth is calculated as follows:  $\text{U-NII Detection Bandwidth} = \text{FH} - \text{FL}$
8. The U-NII Detection Bandwidth must be at least 100% of the EUT transmitter 99% power, otherwise, the EUT does not comply with DFS requirements.

### 4.3.3. Test Result

Product	Kinetic VoIP Modem	Temperature	23 ~ 27°C
Test Engineer	Jake Lan	Relative Humidity	52 ~ 65%
Test Site	WZ-SR4	Test Date	2021/05/10
Test Item	Detection Bandwidth (802.11ax-HE20 mode - 5500MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5490	0	0	0	0	0	0	0	0	0	0	0%
5490.4 FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509.5 FH	1	1	1	1	1	1	1	1	1	1	100%
5510	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5500MHz. The 99% channel bandwidth is 19.01MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5509.5MHz – 5490.4MHz = 19.1MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 19.01MHz x 100% = 19.01MHz.

Product	Kinetic VoIP Modem	Temperature	23 ~ 27°C
Test Engineer	Jake Lan	Relative Humidity	52 ~ 65%
Test Site	WZ-SR4	Test Date	2021/05/10
Test Item	Detection Bandwidth (802.11ax-HE40 mode - 5510MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)	
	1	2	3	4	5	6	7	8	9	10		
5490	0	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	1	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	1	100%
5526	1	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	1	100%
5529 FH	1	1	1	1	1	1	1	1	1	1	1	100%
5530	0	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5510MHz. The 99% channel bandwidth is 37.54MHz. (See the 99% BW section of the RF report for further measurement details).

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

Note 3: NII Detection Bandwidth Min. Limit (MHz): 37.54MHz x 100% = 37.54MHz.

Product	Kinetic VoIP Modem	Temperature	23 ~ 27°C
Test Engineer	Jake Lan	Relative Humidity	52 ~ 65%
Test Site	WZ-SR4	Test Date	2021/05/10
Test Item	Detection Bandwidth (802.11ax-HE80 mode - 5530MHz)		

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

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz. The 99% channel bandwidth is 76.81MHz. (See the 99% BW section of the RF report for further measurement details).

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

Note 3: NII Detection Bandwidth Min. Limit (MHz): 76.81MHz x 100% = 76.81MHz.

Product	Kinetic VoIP Modem	Temperature	23 ~ 27°C
Test Engineer	Jake Lan	Relative Humidity	52 ~ 65%
Test Site	WZ-SR4	Test Date	2021/05/10
Test Item	Detection Bandwidth (802.11ax-HE160 mode - 5250MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5250 FL	1	1	1	1	1	1	1	1	1	1	100%
5251	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 FH	1	1	1	1	1	1	1	1	1	1	100%
5329	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5250MHz. The 99% channel bandwidth within U-NII Band-2A is 77.44MHz (99% BW / 2 = 154.88MHz / 2 = 77.44MHz). (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5328MHz - 5250MHz = 78MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 77.44MHz x 100% = 77.44MHz.

Product	Kinetic VoIP Modem	Temperature	23 ~ 27°C
Test Engineer	Jake Lan	Relative Humidity	52 ~ 65%
Test Site	WZ-SR4	Test Date	2021/05/10
Test Item	Detection Bandwidth (802.11ax-HE160 mode - 5570MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%
5530	1	1	1	1	1	1	1	1	1	1	100%
5535	1	1	1	1	1	1	1	1	1	1	100%
5540	1	1	1	1	1	1	1	1	1	1	100%
5545	1	1	1	1	1	1	1	1	1	1	100%
5550	1	1	1	1	1	1	1	1	1	1	100%
5555	1	1	1	1	1	1	1	1	1	1	100%
5560	1	1	1	1	1	1	1	1	1	1	100%
5565	1	1	1	1	1	1	1	1	1	1	100%
5570	1	1	1	1	1	1	1	1	1	1	100%
5575	1	1	1	1	1	1	1	1	1	1	100%
5580	1	1	1	1	1	1	1	1	1	1	100%
5585	1	1	1	1	1	1	1	1	1	1	100%
5590	1	1	1	1	1	1	1	1	1	1	100%
5595	1	1	1	1	1	1	1	1	1	1	100%
5600	1	1	1	1	1	1	1	1	1	1	100%
5605	1	1	1	1	1	1	1	1	1	1	100%
5610	1	1	1	1	1	1	1	1	1	1	100%
5615	1	1	1	1	1	1	1	1	1	1	100%

5620	1	1	1	1	1	1	1	1	1	1	100%
5625	1	1	1	1	1	1	1	1	1	1	100%
5630	1	1	1	1	1	1	1	1	1	1	100%
5635	1	1	1	1	1	1	1	1	1	1	100%
5640	1	1	1	1	1	1	1	1	1	1	100%
5645	1	1	1	1	1	1	1	1	1	1	100%
5646	1	1	1	1	1	1	1	1	1	1	100%
5647	1	1	1	1	1	1	1	1	1	1	100%
5648 FH	1	1	1	1	1	1	1	1	1	1	100%
5649	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5570MHz. The 99% channel bandwidth is 154.85MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5648MHz - 5491MHz = 157MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 154.85MHz x 100% = 154.85MHz.

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

##### **4.4.1. 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.

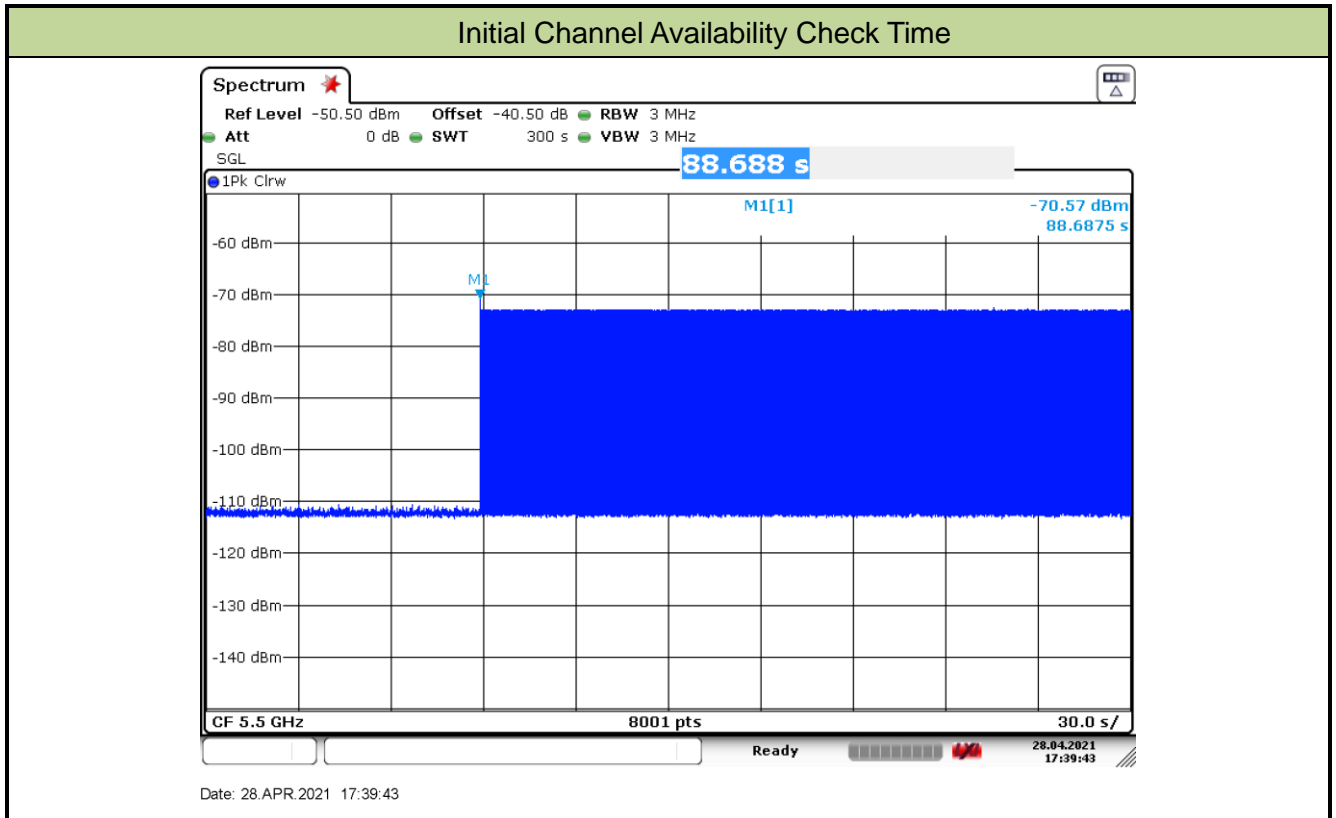
##### **4.4.2. Test Procedure**

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.



**4.4.3. Test Result**

Product	Kinetic VoIP Modem	Temperature	27°C
Test Engineer	Jake Lan	Relative Humidity	65%
Test Site	WZ-SR4	Test Date	2021/04/28
Test Item	Initial Channel Availability Check Time (802.11ax-HE20 mode - 5500MHz)		



Note: The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (28.69 sec). Initial beacons/data transmissions are indicated by marker 1 (88.69 sec).

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

### **4.5.1. Test Limit**

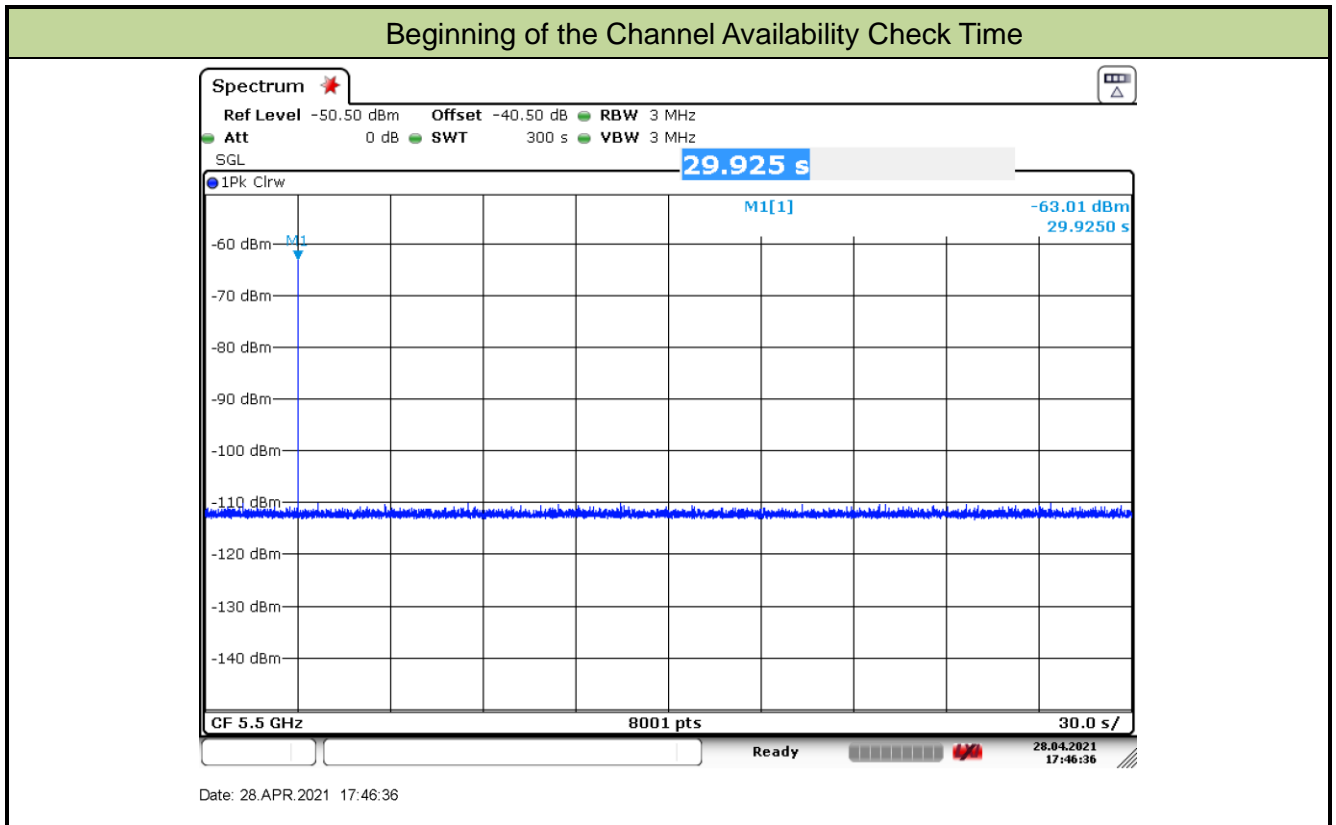
In beginning of the Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

### **4.5.2. 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.

**4.5.3. Test Result**

Product	Kinetic VoIP Modem	Temperature	27°C
Test Engineer	Jake Lan	Relative Humidity	65%
Test Site	WZ-SR4	Test Date	2021/04/28
Test Item	Beginning of the Channel Availability Check Time (802.11ax-HE20 mode - 5500MHz)		



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

### **4.6.1. Test Limit**

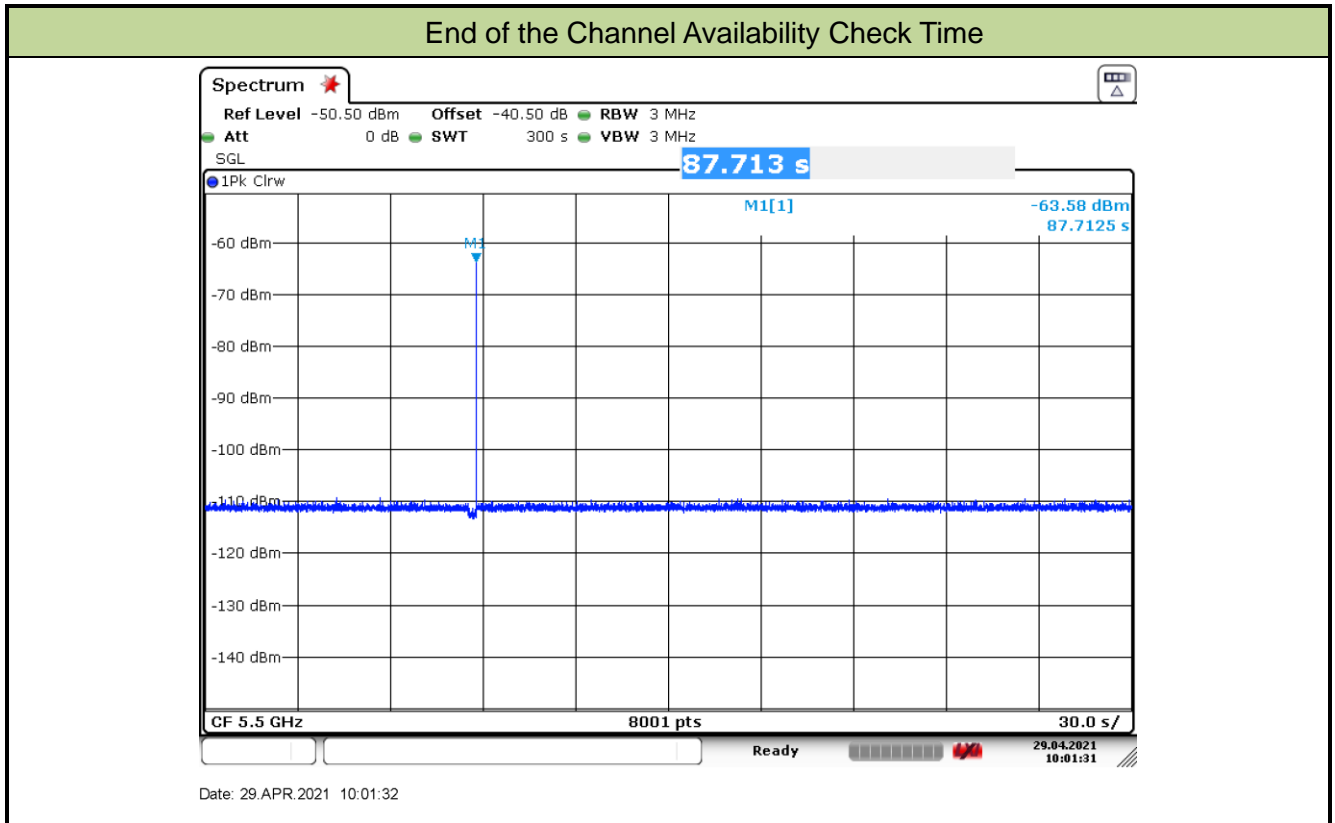
In the end of Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

### **4.6.2. 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.

4.6.3. Test Result

Product	Kinetic VoIP Modem	Temperature	27°C
Test Engineer	Jake Lan	Relative Humidity	65%
Test Site	WZ-SR4	Test Date	2021/04/29
Test Item	End of the Channel Availability Check Time (802.11ax-HE20 mode - 5500MHz)		



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

### **4.7.1. Test Limit**

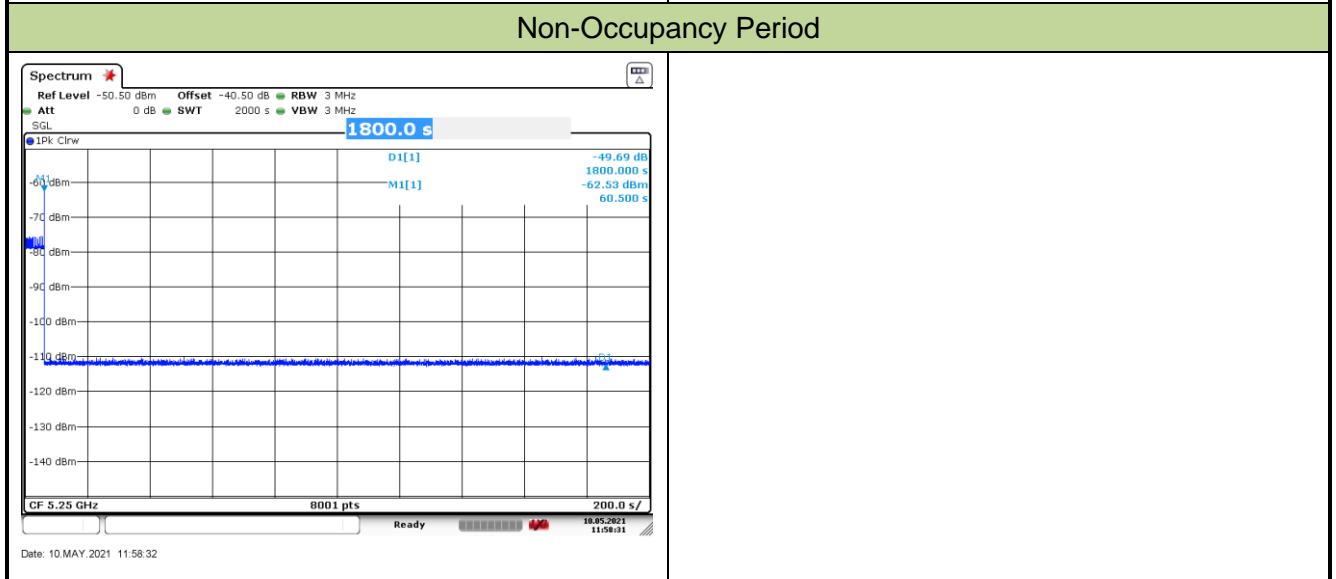
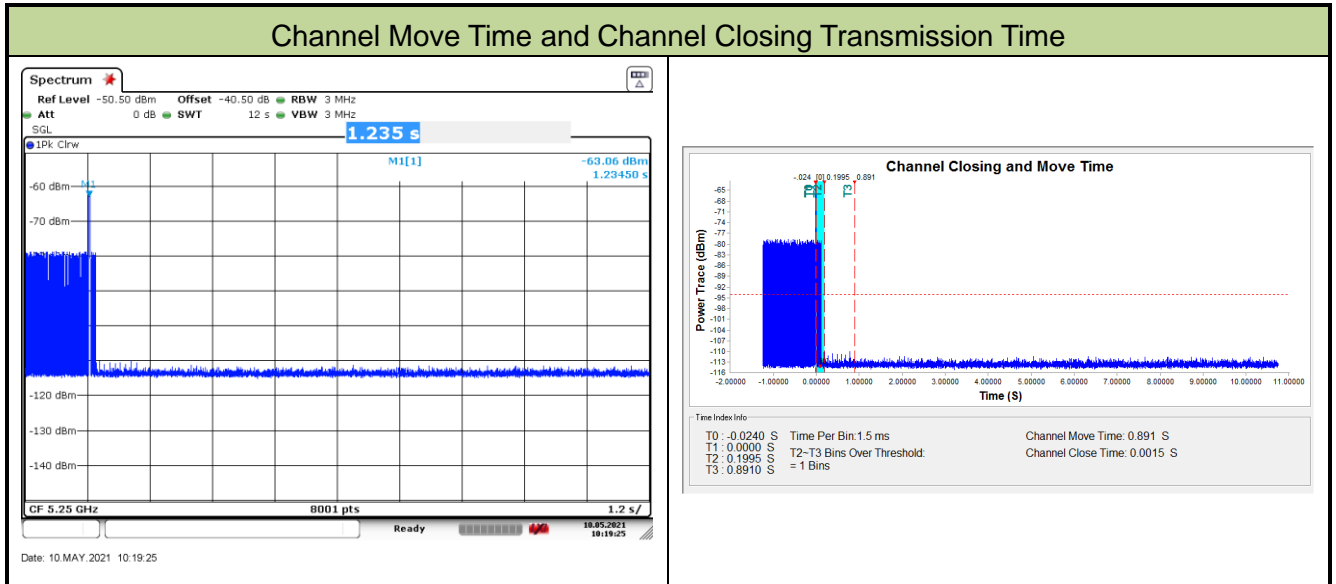
The EUT has In-Service Monitoring function to continuously monitor the radar signals. If the radar is detected, must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec.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

### **4.7.2. Test Procedure Used**

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

### 4.7.3. Test Result

Product	Kinetic VoIP Modem	Temperature	27°C
Test Engineer	Jake Lan	Relative Humidity	65%
Test Site	WZ-SR4	Test Date	2021/05/10
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11ax-HE160 mode - 5250MHz)		



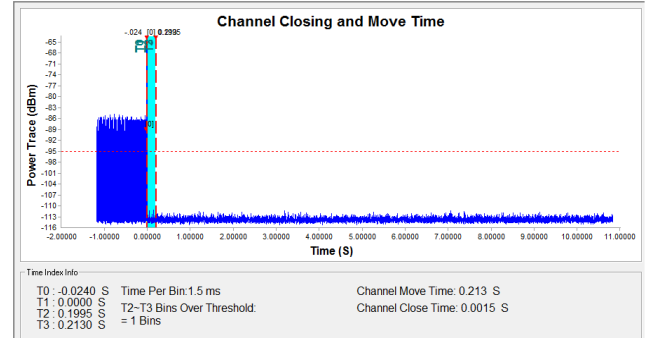
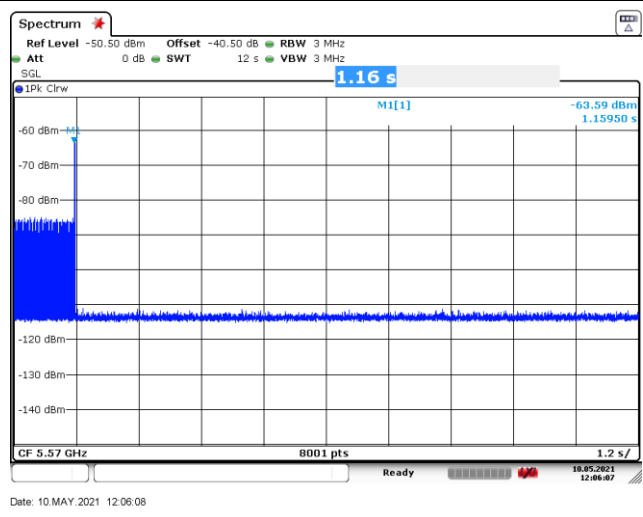
Parameter	Test Result	Limit
Channel Move Time (s)	0.891s	<10s
Channel Closing Transmission Time (ms) (Note)	1.5ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min

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

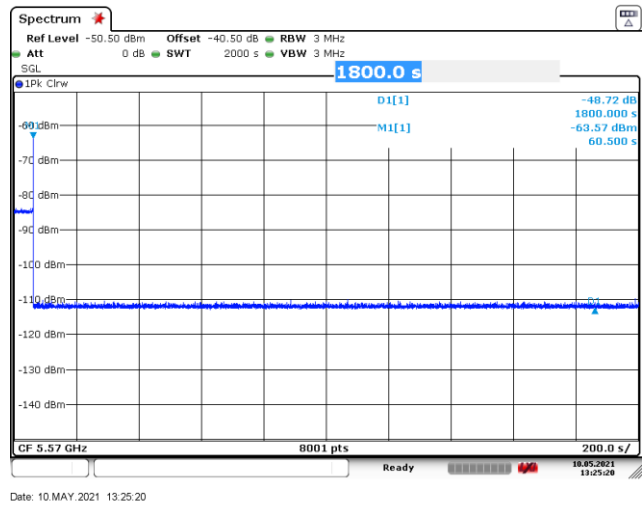


Product	Kinetic VoIP Modem	Temperature	27°C
Test Engineer	Jake Lan	Relative Humidity	65%
Test Site	WZ-SR4	Test Date	2021/05/10
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11ax-HE160 mode - 5570MHz)		

**Channel Move Time and Channel Closing Transmission Time**



**Non-Occupancy Period**



Parameter	Test Result	Limit
Channel Move Time (s)	0.213s	<10s
Channel Closing Transmission Time (ms) (Note)	1.5ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min

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

## 4.8. Statistical Performance Check Measurement

### 4.8.1. Test Limit

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

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

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

### 4.8.2. 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.

### 4.8.3. Test Result

Product	Kinetic VoIP Modem	Temperature	27°C
Test Engineer	Jake Lan	Relative Humidity	65%
Test Site	WZ-SR4	Test Date	2021/05/11-05/13
Test Item	Radar Statistical Performance Check (802.11ax-HE20 – 5500MHz)		

#### Radar Type 1-4 - Radar Statistical Performance

Trial	Frequency (MHz)	1 detect ,0 no detect			
		Radar Type 1	Radar Type 2	Radar Type 3	Radar Type 4
0	5490.4	1	1	1	1
1	5491	1	1	1	1
2	5492	1	1	1	1
3	5509	1	1	1	1
4	5493	1	1	1	1
5	5494	1	1	1	1
6	5495	1	1	1	1
7	5500	1	1	1	1
8	5496	1	1	1	1
9	5497	1	1	1	1
10	5508	1	1	1	1
11	5498	1	1	1	1
12	5499	1	1	1	1
13	5501	1	1	1	1
14	5500	1	1	0	1
15	5501	1	1	0	1
16	5506	1	1	1	1
17	5502	1	1	1	0
18	5503	1	1	1	1
19	5504	1	0	1	1
20	5504	1	1	1	1
21	5505	1	1	1	1
22	5506	1	1	1	1
23	5493	1	0	1	1
24	5507	1	1	1	1
25	5508	1	1	1	0
26	5498	1	1	0	1

Trial	Frequency	1 detect ,0 no detect	Trial	Frequency	1 detect ,0 no detect
27	5509	1	0	1	1
28	5495	1	1	1	1
29	5509.5	0	1	1	1
Probability:		96.7%	90.0%	90.0%	93.3%
Aggregate (Radar Types 1-4):		92.5% (>80%)			

## Radar Type 1 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 1	1.0	818.0	65	53170.0
Download	1	Type 1	1.0	678.0	78	52884.0
Download	2	Type 1	1.0	738.0	72	53136.0
Download	3	Type 1	1.0	838.0	63	52794.0
Download	4	Type 1	1.0	538.0	99	53262.0
Download	5	Type 1	1.0	878.0	61	53558.0
Download	6	Type 1	1.0	858.0	62	53196.0
Download	7	Type 1	1.0	758.0	70	53060.0
Download	8	Type 1	1.0	618.0	86	53148.0
Download	9	Type 1	1.0	698.0	76	53048.0
Download	10	Type 1	1.0	638.0	83	52954.0
Download	11	Type 1	1.0	3066.0	18	55188.0
Download	12	Type 1	1.0	598.0	89	53222.0
Download	13	Type 1	1.0	558.0	95	53010.0
Download	14	Type 1	1.0	938.0	57	53466.0
Download	15	Type 1	1.0	2445.0	22	53790.0
Download	16	Type 1	1.0	1400.0	38	53200.0
Download	17	Type 1	1.0	602.0	88	52976.0
Download	18	Type 1	1.0	2757.0	20	55140.0
Download	19	Type 1	1.0	1120.0	48	53760.0
Download	20	Type 1	1.0	2544.0	21	53424.0
Download	21	Type 1	1.0	1810.0	30	54300.0
Download	22	Type 1	1.0	594.0	89	52866.0
Download	23	Type 1	1.0	3013.0	18	54234.0
Download	24	Type 1	1.0	1540.0	35	53900.0
Download	25	Type 1	1.0	1556.0	34	52904.0
Download	26	Type 1	1.0	1010.0	53	53530.0
Download	27	Type 1	1.0	1648.0	33	54384.0
Download	28	Type 1	1.0	902.0	59	53218.0
Download	29	Type 1	1.0	1381.0	39	53859.0

## Radar Type 2 - Radar Waveform

	<b>Trial Id</b>	<b>Radar Type</b>	<b>Pulse Width (us)</b>	<b>PRI (us)</b>	<b>Number of Pulses</b>	<b>Waveform Length (us)</b>
Download	0	Type 2	1.6	187.0	24	4488.0
Download	1	Type 2	4.1	152.0	28	4256.0
Download	2	Type 2	1.3	170.0	23	3910.0
Download	3	Type 2	4.3	169.0	28	4732.0
Download	4	Type 2	3.4	203.0	27	5481.0
Download	5	Type 2	2.3	208.0	25	5200.0
Download	6	Type 2	2.1	225.0	25	5625.0
Download	7	Type 2	2.8	161.0	26	4186.0
Download	8	Type 2	1.9	219.0	24	5256.0
Download	9	Type 2	2.5	155.0	25	3875.0
Download	10	Type 2	5.0	205.0	29	5945.0
Download	11	Type 2	4.3	202.0	28	5656.0
Download	12	Type 2	3.3	156.0	26	4056.0
Download	13	Type 2	3.7	228.0	27	6156.0
Download	14	Type 2	2.5	182.0	25	4550.0
Download	15	Type 2	2.5	227.0	25	5675.0
Download	16	Type 2	4.4	221.0	28	6188.0
Download	17	Type 2	4.4	180.0	28	5040.0
Download	18	Type 2	4.2	220.0	28	6160.0
Download	19	Type 2	4.1	167.0	28	4676.0
Download	20	Type 2	3.4	163.0	27	4401.0
Download	21	Type 2	4.1	195.0	28	5460.0
Download	22	Type 2	4.8	223.0	29	6467.0
Download	23	Type 2	2.2	222.0	25	5550.0
Download	24	Type 2	3.6	151.0	27	4077.0
Download	25	Type 2	3.6	197.0	27	5319.0
Download	26	Type 2	4.4	224.0	28	6272.0
Download	27	Type 2	1.0	193.0	23	4439.0
Download	28	Type 2	2.6	157.0	25	3925.0
Download	29	Type 2	3.3	176.0	27	4752.0

## Radar Type 3 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 3	6.6	246.0	16	3936.0
Download	1	Type 3	9.1	364.0	18	6552.0
Download	2	Type 3	6.3	484.0	16	7744.0
Download	3	Type 3	9.3	292.0	18	5256.0
Download	4	Type 3	8.4	320.0	17	5440.0
Download	5	Type 3	7.3	384.0	17	6528.0
Download	6	Type 3	7.1	351.0	16	5616.0
Download	7	Type 3	7.8	261.0	17	4437.0
Download	8	Type 3	6.9	350.0	16	5600.0
Download	9	Type 3	7.5	396.0	17	6732.0
Download	10	Type 3	10.0	386.0	18	6948.0
Download	11	Type 3	9.3	352.0	18	6336.0
Download	12	Type 3	8.3	355.0	17	6035.0
Download	13	Type 3	8.7	496.0	18	8928.0
Download	14	Type 3	7.5	238.0	17	4046.0
Download	15	Type 3	7.5	219.0	17	3723.0
Download	16	Type 3	9.4	388.0	18	6984.0
Download	17	Type 3	9.4	284.0	18	5112.0
Download	18	Type 3	9.2	254.0	18	4572.0
Download	19	Type 3	9.1	342.0	18	6156.0
Download	20	Type 3	8.4	316.0	17	5372.0
Download	21	Type 3	9.1	434.0	18	7812.0
Download	22	Type 3	9.8	491.0	18	8838.0
Download	23	Type 3	7.2	356.0	16	5696.0
Download	24	Type 3	8.6	432.0	17	7344.0
Download	25	Type 3	8.6	429.0	17	7293.0
Download	26	Type 3	9.4	229.0	18	4122.0
Download	27	Type 3	6.0	417.0	16	6672.0
Download	28	Type 3	7.6	440.0	17	7480.0
Download	29	Type 3	8.3	201.0	17	3417.0

## Radar Type 4 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 4	12.5	246.0	12	2952.0
Download	1	Type 4	18.0	364.0	15	5460.0
Download	2	Type 4	11.8	484.0	12	5808.0
Download	3	Type 4	18.3	292.0	16	4672.0
Download	4	Type 4	16.5	320.0	15	4800.0
Download	5	Type 4	14.0	384.0	13	4992.0
Download	6	Type 4	13.6	351.0	13	4563.0
Download	7	Type 4	15.0	261.0	14	3654.0
Download	8	Type 4	13.0	350.0	13	4550.0
Download	9	Type 4	14.3	396.0	13	5148.0
Download	10	Type 4	20.0	386.0	16	6176.0
Download	11	Type 4	18.4	352.0	16	5632.0
Download	12	Type 4	16.1	355.0	14	4970.0
Download	13	Type 4	17.1	496.0	15	7440.0
Download	14	Type 4	14.4	238.0	13	3094.0
Download	15	Type 4	14.5	219.0	13	2847.0
Download	16	Type 4	18.7	388.0	16	6208.0
Download	17	Type 4	18.6	284.0	16	4544.0
Download	18	Type 4	18.1	254.0	15	3810.0
Download	19	Type 4	18.0	342.0	15	5130.0
Download	20	Type 4	16.4	316.0	15	4740.0
Download	21	Type 4	18.0	434.0	15	6510.0
Download	22	Type 4	19.6	491.0	16	7856.0
Download	23	Type 4	13.8	356.0	13	4628.0
Download	24	Type 4	16.7	432.0	15	6480.0
Download	25	Type 4	16.7	429.0	15	6435.0
Download	26	Type 4	18.7	229.0	16	3664.0
Download	27	Type 4	11.1	417.0	12	5004.0
Download	28	Type 4	14.5	440.0	13	5720.0
Download	29	Type 4	16.3	201.0	14	2814.0



## Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
0	5500	0	15	5495.6	1
1	5500	1	16	5498	1
2	5500	1	17	5497.6	1
3	5500	1	18	5497.6	1
4	5500	1	19	5497.6	1
5	5500	1	20	5503.5	1
6	5500	1	21	5502.3	1
7	5500	1	22	5501.5	1
8	5500	1	23	5504.7	1
9	5500	1	24	5503.1	1
10	5498.4	1	25	5503.1	1
11	5497.6	1	26	5501.9	1
12	5496.4	1	27	5506.3	1
13	5496.8	1	28	5504.3	1
14	5495.2	1	29	5503.5	1
Detection Percentage (%)					96.7%

## Type 5 Radar Waveform\_0

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
490256.0	58.3	7	1	1022.0	-	-
778904.0	88.9	7	3	1092.0	1836.0	1382.0
1071017.0	54.7	7	1	1938.0	-	-
163107.0	90.6	7	3	1880.0	1603.0	1503.0
453675.0	80.3	7	2	1714.0	1320.0	-
744160.0	66.9	7	2	1736.0	1004.0	-
1035779.0	64.3	7	1	1297.0	-	-
127623.0	72.5	7	2	1090.0	1862.0	-
418283.0	61.2	7	1	1983.0	-	-
708327.0	68.3	7	2	1440.0	1410.0	-

**Type 5 Radar Waveform\_1**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
551500.0	99.6	17	3	1764.0	1870.0	1928.0
50844.0	91.0	17	3	1158.0	1046.0	1921.0
211943.0	78.3	17	2	1400.0	1436.0	-
371433.0	84.1	17	3	1990.0	1681.0	1853.0
533534.0	68.9	17	2	1479.0	1865.0	-
31080.0	69.3	17	2	1850.0	1651.0	-
191705.0	92.6	17	3	1581.0	1592.0	1067.0
352058.0	92.1	17	3	1338.0	1669.0	1809.0
512864.0	89.3	17	3	1326.0	1876.0	1244.0
11263.0	88.6	17	3	1381.0	1135.0	1342.0
172069.0	80.1	17	2	1855.0	1793.0	-
332522.0	88.6	17	3	1188.0	1905.0	1252.0
493072.0	97.4	17	3	1306.0	1430.0	1722.0
658438.0	65.4	17	1	1662.0	-	-
152490.0	81.9	17	2	1538.0	1117.0	-
313622.0	81.8	17	2	1299.0	1168.0	-
472986.0	92.6	17	3	1984.0	1755.0	1143.0
636321.0	50.7	17	1	1924.0	-	-

**Type 5 Radar Waveform\_2**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
265739.0	69.7	6	2	1652.0	1488.0	-
588150.0	79.3	6	2	1710.0	1888.0	-
910839.0	77.9	6	2	1608.0	1718.0	-
1233437.0	80.3	6	2	1500.0	1795.0	-
225709.0	91.4	6	3	1645.0	1773.0	1438.0
548287.0	68.0	6	2	1996.0	1937.0	-
870867.0	78.9	6	2	1779.0	1913.0	-
1195243.0	60.1	6	1	1579.0	-	-
186449.0	56.1	6	1	1800.0	-	-

**Type 5 Radar Waveform\_3**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
253956.0	72.6	17	2	1802.0	1029.0	-
414834.0	68.0	17	2	1601.0	1426.0	-
575222.0	78.4	17	2	1688.0	1991.0	-
73130.0	78.6	17	2	1296.0	1475.0	-
233666.0	95.1	17	3	1021.0	1423.0	1687.0
395328.0	68.2	17	2	1307.0	1183.0	-
556861.0	60.7	17	1	1954.0	-	-
53391.0	63.7	17	1	1594.0	-	-
213742.0	91.6	17	3	1146.0	1680.0	1709.0
375331.0	76.8	17	2	1075.0	1690.0	-
534967.0	88.9	17	3	1110.0	1535.0	1829.0
33444.0	76.1	17	2	1284.0	1856.0	-
194823.0	51.8	17	1	1593.0	-	-
354613.0	87.0	17	3	1386.0	1591.0	1437.0
515583.0	97.7	17	3	1343.0	1304.0	1315.0
13582.0	96.3	17	3	1760.0	1619.0	1675.0
175038.0	58.2	17	1	1278.0	-	-
335994.0	72.5	17	2	1025.0	1086.0	-

**Type 5 Radar Waveform\_4**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
596591.0	69.8	14	2	1255.0	1295.0	-
787853.0	91.5	14	3	1596.0	1886.0	1233.0
185500.0	89.3	14	3	1123.0	1553.0	1823.0
379925.0	58.7	14	1	1365.0	-	-
570471.0	98.6	14	3	1994.0	1893.0	1861.0
766056.0	74.3	14	2	1350.0	1323.0	-
162356.0	63.5	14	1	1442.0	-	-
355946.0	52.8	14	1	1635.0	-	-
548955.0	82.0	14	2	1085.0	1450.0	-
741522.0	90.4	14	3	1093.0	1059.0	1290.0
138274.0	69.2	14	2	1084.0	1658.0	-
330597.0	99.6	14	3	1951.0	1883.0	1402.0
525704.0	60.3	14	1	1665.0	-	-
719349.0	55.1	14	1	1640.0	-	-
114642.0	58.8	14	1	1449.0	-	-

**Type 5 Radar Waveform\_5**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
385502.0	63.1	10	1	1533.0	-	-
626653.0	69.9	10	2	1626.0	1513.0	-
868652.0	74.0	10	2	1408.0	1468.0	-
113559.0	60.8	10	1	1137.0	-	-
355761.0	59.9	10	1	1289.0	-	-
596046.0	85.0	10	3	1980.0	1227.0	1312.0
839106.0	70.3	10	2	1424.0	1163.0	-
83426.0	86.7	10	3	1663.0	1549.0	1392.0
325892.0	51.7	10	1	1390.0	-	-
566401.0	90.3	10	3	1838.0	1099.0	1415.0
810406.0	54.9	10	1	1236.0	-	-
53883.0	53.6	10	1	1053.0	-	-

**Type 5 Radar Waveform\_6**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
322533.0	74.6	9	2	1577.0	1427.0	-
586336.0	67.8	9	2	1672.0	1421.0	-
848671.0	92.3	9	3	1955.0	1607.0	1444.0
26181.0	80.2	9	2	1321.0	1699.0	-
289625.0	84.0	9	3	1182.0	1480.0	1872.0
554127.0	83.2	9	2	1366.0	1161.0	-
816873.0	95.6	9	3	1115.0	1495.0	1541.0
1082995.0	59.0	9	1	1587.0	-	-
257546.0	68.7	9	2	1422.0	1522.0	-
521290.0	66.9	9	2	1948.0	1250.0	-
786239.0	63.9	9	1	1613.0	-	-

**Type 5 Radar Waveform\_7**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
886996.0	69.5	12	2	1616.0	1643.0	-
190687.0	54.1	12	1	1207.0	-	-
413954.0	65.1	12	1	1909.0	-	-
635334.0	92.3	12	3	1833.0	1294.0	1720.0
858382.0	86.2	12	3	1121.0	1393.0	1960.0
162685.0	70.3	12	2	1982.0	1837.0	-
384936.0	94.5	12	3	1852.0	1717.0	1914.0
607755.0	92.0	12	3	1725.0	1940.0	1404.0
833785.0	66.5	12	1	1328.0	-	-
135099.0	83.7	12	3	1335.0	1433.0	1890.0
358684.0	67.3	12	2	1357.0	1147.0	-
580378.0	88.8	12	3	1707.0	1309.0	1977.0
804195.0	67.1	12	2	1774.0	1902.0	-

**Type 5 Radar Waveform\_8**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
140263.0	73.6	8	2	1578.0	1901.0	-
430063.0	85.4	8	3	1040.0	1839.0	1694.0
720244.0	98.3	8	3	1273.0	1682.0	1199.0
1010478.0	87.5	8	3	1737.0	1118.0	1058.0
104479.0	99.5	8	3	1034.0	1141.0	1749.0
395425.0	54.8	8	1	1316.0	-	-
684672.0	87.6	8	3	1239.0	1132.0	1516.0
975594.0	68.4	8	2	1751.0	1122.0	-
68696.0	93.6	8	3	1098.0	1758.0	1943.0
358980.0	70.6	8	2	1637.0	1796.0	-

**Type 5 Radar Waveform\_9**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
540077.0	89.0	10	3	1329.0	1945.0	1265.0
781209.0	85.0	10	3	1195.0	1826.0	1900.0
27472.0	89.7	10	3	1716.0	1965.0	1055.0
269603.0	60.1	10	1	1966.0	-	-
510513.0	85.3	10	3	1689.0	1134.0	1375.0
753955.0	66.4	10	1	1644.0	-	-
996661.0	64.7	10	1	1070.0	-	-
239357.0	96.1	10	3	1096.0	1511.0	1151.0
480927.0	90.1	10	3	1170.0	1519.0	1171.0
722002.0	96.3	10	3	1972.0	1564.0	1042.0
966530.0	55.9	10	1	1368.0	-	-
210108.0	54.5	10	1	1317.0	-	-

**Type 5 Radar Waveform\_10**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
270912.0	58.7	20	1	1851.0	-	-
414201.0	94.9	20	3	1529.0	1077.0	1805.0
558021.0	92.8	20	3	1327.0	1974.0	1781.0
107585.0	84.1	20	3	1241.0	1155.0	1712.0
253173.0	66.3	20	1	1543.0	-	-
398515.0	57.2	20	1	1246.0	-	-
540408.0	98.4	20	3	1979.0	1367.0	1560.0
89727.0	88.5	20	3	1027.0	1638.0	1686.0
235000.0	69.9	20	2	1125.0	1166.0	-
380619.0	57.2	20	1	1260.0	-	-
523885.0	79.1	20	2	1849.0	1628.0	-
72023.0	75.2	20	2	1804.0	1791.0	-
217606.0	58.6	20	1	1019.0	-	-
360221.0	98.7	20	3	1961.0	1451.0	1993.0
505072.0	84.9	20	3	1269.0	1949.0	1429.0
54413.0	58.1	20	1	1318.0	-	-
199448.0	59.6	20	1	1811.0	-	-
344601.0	63.8	20	1	1683.0	-	-
488496.0	79.3	20	2	1910.0	1259.0	-
36386.0	95.6	20	3	1010.0	1131.0	1502.0

**Type 5 Radar Waveform\_11**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
201455.0	76.0	18	2	1119.0	1875.0	-
361787.0	83.5	18	3	1868.0	1149.0	1129.0
523219.0	76.2	18	2	1214.0	1981.0	-
20711.0	57.3	18	1	1569.0	-	-
181230.0	96.6	18	3	1050.0	1708.0	1691.0
343515.0	60.1	18	1	1202.0	-	-
504849.0	59.2	18	1	1283.0	-	-
639.0	75.6	18	2	1590.0	1618.0	-
162059.0	51.7	18	1	1935.0	-	-
321969.0	87.7	18	3	1580.0	1842.0	1204.0
483733.0	77.2	18	2	1804.0	1378.0	-
642383.0	92.6	18	3	1806.0	1820.0	1739.0
142216.0	61.2	18	1	1863.0	-	-
302711.0	69.1	18	2	1530.0	1957.0	-
463680.0	78.6	18	2	1620.0	1685.0	-
626081.0	53.4	18	1	1696.0	-	-
121961.0	94.8	18	3	1072.0	1425.0	1509.0
283959.0	65.3	18	1	1003.0	-	-

**Type 5 Radar Waveform\_12**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
531837.0	88.5	14	3	1597.0	1666.0	1895.0
726109.0	80.3	14	2	1794.0	1721.0	-
122846.0	70.1	14	2	1799.0	1395.0	-
316615.0	55.0	14	1	1889.0	-	-
510661.0	50.6	14	1	1139.0	-	-
703438.0	81.7	14	2	1225.0	1016.0	-
99203.0	55.8	14	1	1904.0	-	-
292994.0	64.5	14	1	1282.0	-	-
486805.0	53.5	14	1	1124.0	-	-
677560.0	86.6	14	3	1126.0	1843.0	1674.0
75215.0	81.5	14	2	1624.0	1812.0	-
269169.0	56.5	14	1	1175.0	-	-
460576.0	86.5	14	3	1787.0	1830.0	1586.0
654751.0	76.3	14	2	1817.0	1667.0	-
51489.0	66.9	14	2	1071.0	1279.0	-

**Type 5 Radar Waveform\_13**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
229921.0	60.3	15	1	1271.0	-	-
410368.0	78.5	15	2	1818.0	1534.0	-
591746.0	73.3	15	2	1460.0	1523.0	-
25924.0	68.6	15	2	1383.0	1007.0	-
206812.0	85.4	15	3	1094.0	1770.0	1083.0
387347.0	87.6	15	3	1311.0	1610.0	1808.0
570383.0	56.1	15	1	1732.0	-	-
3583.0	98.1	15	3	1101.0	1490.0	1211.0
184769.0	72.8	15	2	1847.0	1108.0	-
365004.0	86.7	15	3	1465.0	1884.0	1539.0
546911.0	82.3	15	2	1727.0	1531.0	-
727662.0	80.0	15	2	1700.0	1925.0	-
161879.0	86.6	15	3	1807.0	1967.0	1813.0
344440.0	64.0	15	1	1203.0	-	-
523570.0	87.5	15	3	1106.0	1723.0	1899.0
706016.0	70.0	15	2	1929.0	1006.0	-

**Type 5 Radar Waveform\_14**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
187014.0	81.4	11	2	1780.0	1263.0	-
429553.0	63.4	11	1	1308.0	-	-
669776.0	94.4	11	3	1775.0	1208.0	1286.0
912603.0	75.3	11	2	1287.0	1528.0	-
156966.0	99.1	11	3	1544.0	1212.0	1964.0
399126.0	75.5	11	2	1189.0	1599.0	-
640865.0	71.0	11	2	1363.0	1605.0	-
882614.0	82.8	11	2	1193.0	1846.0	-
127364.0	94.5	11	3	1223.0	1455.0	1012.0
369785.0	51.5	11	1	1572.0	-	-
610892.0	82.1	11	2	1798.0	1476.0	-
853802.0	56.6	11	1	1903.0	-	-

**Type 5 Radar Waveform\_15**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
90099.0	72.6	11	2	1403.0	1934.0	-
312466.0	94.1	11	3	1797.0	1664.0	1930.0
535580.0	95.2	11	3	1267.0	1778.0	1409.0
761189.0	51.1	11	1	1045.0	-	-
62737.0	50.9	11	1	1660.0	-	-
285825.0	75.6	11	2	1684.0	1859.0	-
509624.0	50.8	11	1	1765.0	-	-
731034.0	90.7	11	3	1844.0	1145.0	1336.0
35220.0	55.2	11	1	1389.0	-	-
257944.0	84.9	11	3	1419.0	1584.0	1288.0
482121.0	59.3	11	1	1726.0	-	-
704601.0	77.7	11	2	1300.0	1701.0	-
7672.0	82.4	11	2	1062.0	1998.0	-

**Type 5 Radar Waveform\_16**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
157463.0	82.2	18	2	1911.0	2000.0	-
309489.0	97.4	18	3	1785.0	1508.0	1031.0
463008.0	68.3	18	2	1391.0	1044.0	-
615532.0	68.3	18	2	1008.0	1492.0	-
139355.0	51.6	18	1	1002.0	-	-
291243.0	69.2	18	2	1832.0	1428.0	-
444821.0	50.5	18	1	1573.0	-	-
597552.0	66.0	18	1	1642.0	-	-
120370.0	66.5	18	1	1771.0	-	-
273082.0	50.0	18	1	1854.0	-	-
423609.0	93.2	18	3	1127.0	1985.0	1997.0
576227.0	92.2	18	3	1728.0	1622.0	1020.0
101638.0	50.9	18	1	1254.0	-	-
253645.0	67.8	18	2	1766.0	1615.0	-
404619.0	84.9	18	3	1753.0	1918.0	1864.0
560460.0	57.5	18	1	1028.0	-	-
82457.0	90.5	18	3	1043.0	1339.0	1545.0
234888.0	74.2	18	2	1506.0	1871.0	-
387023.0	83.9	18	3	1398.0	1201.0	1140.0

**Type 5 Radar Waveform\_17**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
571335.0	55.5	18	1	1525.0	-	-
67194.0	99.6	18	3	1558.0	1434.0	1661.0
228306.0	75.4	18	2	1172.0	1873.0	-
389136.0	78.7	18	2	1249.0	1999.0	-
548917.0	91.5	18	3	1814.0	1743.0	1041.0
47498.0	81.2	18	2	1693.0	1822.0	-
208510.0	79.0	18	2	1222.0	1730.0	-
370363.0	60.9	18	1	1369.0	-	-
531497.0	63.1	18	1	1646.0	-	-
27621.0	96.9	18	3	1959.0	1228.0	1891.0
189134.0	64.7	18	1	1360.0	-	-
349010.0	96.6	18	3	1216.0	1510.0	1448.0
511591.0	54.0	18	1	1897.0	-	-
7901.0	66.6	18	1	1379.0	-	-
168406.0	93.0	18	3	1706.0	1056.0	1952.0
329879.0	66.8	18	2	1276.0	1568.0	-
490981.0	78.2	18	2	1491.0	1213.0	-
653513.0	52.6	18	1	1176.0	-	-

**Type 5 Radar Waveform\_18**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
149341.0	64.4	17	1	1550.0	-	-
309443.0	92.8	17	3	1374.0	1191.0	1575.0
470606.0	82.3	17	2	1606.0	1858.0	-
631627.0	81.5	17	2	1359.0	1923.0	-
128957.0	90.6	17	3	1477.0	1080.0	1632.0
290915.0	58.1	17	1	1247.0	-	-
450296.0	94.1	17	3	1441.0	1358.0	1396.0
613237.0	52.0	17	1	1733.0	-	-
109646.0	59.0	17	1	1277.0	-	-
271043.0	50.0	17	1	1230.0	-	-
432538.0	57.7	17	1	1068.0	-	-
593422.0	65.9	17	1	1678.0	-	-
89599.0	83.1	17	2	1445.0	1079.0	-
251010.0	64.8	17	1	1636.0	-	-
412529.0	60.6	17	1	1268.0	-	-
573025.0	75.5	17	2	1220.0	1073.0	-
69679.0	72.2	17	2	1348.0	1932.0	-
230811.0	82.6	17	2	1371.0	1221.0	-

**Type 5 Radar Waveform\_19**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
392693.0	56.8	17	1	1196.0	-	-
552741.0	68.6	17	2	1574.0	1243.0	-
49857.0	76.9	17	2	1386.0	1942.0	-
210335.0	87.2	17	3	1698.0	1526.0	1373.0
371966.0	72.6	17	2	1332.0	1376.0	-
534263.0	58.2	17	1	1130.0	-	-
29983.0	87.4	17	3	1958.0	1344.0	1305.0
190940.0	69.1	17	2	1705.0	1559.0	-
352521.0	51.7	17	1	1971.0	-	-
514121.0	53.4	17	1	1466.0	-	-
10208.0	89.2	17	3	1908.0	1074.0	1397.0
171246.0	75.5	17	2	1076.0	1702.0	-
333117.0	58.0	17	1	1065.0	-	-
494285.0	51.0	17	1	1418.0	-	-
655940.0	56.7	17	1	1102.0	-	-
151766.0	54.8	17	1	1232.0	-	-
312315.0	76.0	17	2	1023.0	1992.0	-
473261.0	81.4	17	2	1772.0	1258.0	-

**Type 5 Radar Waveform\_20**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
762793.0	51.5	14	1	1819.0	-	-
157925.0	74.0	14	2	1629.0	1556.0	-
351752.0	59.0	14	1	1882.0	-	-
544643.0	69.3	14	2	1676.0	1197.0	-
736369.0	84.7	14	3	1103.0	1711.0	1790.0
133815.0	89.5	14	3	1931.0	1656.0	1414.0
327291.0	72.1	14	2	1835.0	1551.0	-
520166.0	79.0	14	2	1944.0	1946.0	-
715624.0	53.2	14	1	1237.0	-	-
110259.0	97.3	14	3	1061.0	1081.0	1457.0
304182.0	63.7	14	1	1576.0	-	-
496633.0	100.0	14	3	1401.0	1082.0	1005.0
688327.0	85.9	14	3	1347.0	1857.0	2000.0
86624.0	78.6	14	2	1014.0	1144.0	-
279339.0	94.4	14	3	1803.0	1133.0	1461.0

**Type 5 Radar Waveform\_21**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
394882.0	60.1	17	1	1474.0	-	-
556386.0	60.0	17	1	1266.0	-	-
52349.0	59.5	17	1	1481.0	-	-
213228.0	75.8	17	2	1583.0	1298.0	-
374305.0	77.3	17	2	1091.0	1633.0	-
535276.0	70.2	17	2	1047.0	1747.0	-
32394.0	74.1	17	2	1454.0	1724.0	-
193080.0	94.2	17	3	1527.0	1285.0	1159.0
354437.0	71.4	17	2	1322.0	1464.0	-
516417.0	54.3	17	1	1540.0	-	-
12561.0	90.6	17	3	1439.0	1354.0	1009.0
174011.0	62.9	17	1	1184.0	-	-
333466.0	83.5	17	3	1385.0	1845.0	1815.0
494323.0	92.1	17	3	1621.0	1840.0	1057.0
657956.0	56.7	17	1	1443.0	-	-
154169.0	59.2	17	1	1015.0	-	-
314627.0	78.3	17	2	1916.0	1173.0	-
475192.0	88.8	17	3	1039.0	1217.0	1355.0



**Type 5 Radar Waveform\_22**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
572423.0	79.3	20	2	1463.0	1766.0	-
120365.0	73.9	20	2	1420.0	1922.0	-
264906.0	98.2	20	3	1370.0	1198.0	1150.0
409406.0	73.8	20	2	1969.0	1920.0	-
553393.0	87.5	20	3	1030.0	1986.0	1504.0
102272.0	84.0	20	3	1950.0	1634.0	1319.0
246781.0	87.4	20	3	1659.0	1156.0	1655.0
392919.0	65.1	20	1	1878.0	-	-
536026.0	93.7	20	3	1128.0	1494.0	1431.0
84932.0	55.0	20	1	1816.0	-	-
229289.0	90.1	20	3	1261.0	1052.0	1380.0
375048.0	55.3	20	1	1881.0	-	-
520795.0	51.7	20	1	1095.0	-	-
66921.0	67.5	20	2	1869.0	1200.0	-
212363.0	60.5	20	1	1187.0	-	-
356371.0	81.1	20	2	1896.0	1340.0	-
499492.0	97.9	20	3	1536.0	1729.0	1892.0
49009.0	91.1	20	3	1000.0	1246.0	1789.0
193529.0	97.2	20	3	1435.0	1627.0	1037.0
336495.0	79.0	20	2	1825.0	1496.0	-

**Type 5 Radar Waveform\_23**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
806292.0	98.8	9	3	1060.0	1834.0	1473.0
52283.0	61.1	9	1	1483.0	-	-
293932.0	77.5	9	2	1907.0	1349.0	-
535605.0	79.8	9	2	1752.0	1631.0	-
776672.0	87.6	9	3	1264.0	1292.0	1653.0
22446.0	65.0	9	1	1784.0	-	-
263867.0	94.1	9	3	1293.0	1501.0	1547.0
505804.0	76.6	9	2	1667.0	1570.0	-
746230.0	88.6	9	3	1801.0	1769.0	1563.0
987715.0	87.0	9	3	1478.0	1487.0	1968.0
234109.0	96.5	9	3	1887.0	1333.0	1179.0
475352.0	88.1	9	3	1915.0	1160.0	1788.0

**Type 5 Radar Waveform\_24**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
536547.0	85.5	15	3	1521.0	1906.0	1582.0
721078.0	61.2	15	1	1013.0	-	-
153632.0	56.6	15	1	1557.0	-	-
335342.0	54.6	15	1	1136.0	-	-
514643.0	96.2	15	3	1257.0	1897.0	1345.0
695992.0	86.3	15	3	1612.0	1142.0	1164.0
130968.0	72.5	15	2	1346.0	1947.0	-
311923.0	75.5	15	2	1715.0	1926.0	-
492646.0	88.5	15	3	1270.0	1561.0	1253.0
675734.0	62.2	15	1	1670.0	-	-
108669.0	76.6	15	2	1507.0	1731.0	-
289806.0	69.0	15	2	1782.0	1394.0	-
472102.0	54.0	15	1	1325.0	-	-
653179.0	66.0	15	1	1898.0	-	-
86533.0	52.5	15	1	1738.0	-	-
267406.0	73.0	15	2	1694.0	1532.0	-

**Type 5 Radar Waveform\_25**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
449653.0	52.3	15	1	1462.0	-	-
631083.0	52.3	15	1	1598.0	-	-
63896.0	94.2	15	3	1630.0	1546.0	1866.0
245836.0	65.7	15	1	1192.0	-	-
427476.0	62.0	15	1	1138.0	-	-
606238.0	99.3	15	3	1154.0	1828.0	1673.0
41677.0	90.0	15	3	1611.0	1051.0	1740.0
222862.0	68.1	15	2	1242.0	1973.0	-
403627.0	96.4	15	3	1372.0	1026.0	1471.0
585484.0	68.4	15	2	1518.0	1206.0	-
19409.0	86.3	15	3	1407.0	1411.0	1334.0
200601.0	72.5	15	2	1657.0	1377.0	-
381258.0	90.0	15	3	1565.0	1352.0	1107.0
564073.0	60.8	15	1	1512.0	-	-
743686.0	76.5	15	2	1520.0	1919.0	-
178593.0	56.6	15	1	1748.0	-	-

**Type 5 Radar Waveform\_26**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
303242.0	58.5	18	1	1416.0	-	-
456115.0	52.0	18	1	1362.0	-	-
606928.0	69.9	18	2	1827.0	1641.0	-
130936.0	90.6	18	3	1018.0	1555.0	1936.0
284582.0	60.9	18	1	1049.0	-	-
437229.0	55.9	18	1	1447.0	-	-
587881.0	84.9	18	3	1190.0	1361.0	1218.0
112679.0	61.5	18	1	1848.0	-	-
264992.0	68.5	18	2	1649.0	1186.0	-
417127.0	71.6	18	2	1384.0	1986.0	-
567926.0	90.6	18	3	1776.0	1692.0	1625.0
93552.0	86.6	18	3	1105.0	1671.0	1177.0
245766.0	84.6	18	3	1589.0	1157.0	1219.0
399271.0	58.5	18	1	1933.0	-	-
551026.0	75.8	18	2	1275.0	1746.0	-
74832.0	71.5	18	2	1824.0	1879.0	-
227835.0	62.4	18	1	1703.0	-	-
380242.0	71.1	18	2	1231.0	1064.0	-
532406.0	74.3	18	2	1235.0	1600.0	-

**Type 5 Radar Waveform\_27**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
133606.0	86.2	5	3	1330.0	1054.0	1609.0
496418.0	92.9	5	3	1650.0	1152.0	1240.0
859934.0	80.8	5	2	1356.0	1470.0	-
1222490.0	76.0	5	2	1744.0	1761.0	-
88870.0	86.2	5	3	1524.0	1412.0	1792.0
451889.0	71.2	5	2	1695.0	1810.0	-
814407.0	88.5	5	3	1011.0	1745.0	1537.0
1179372.0	58.2	5	1	1486.0	-	-

**Type 5 Radar Waveform\_28**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
27197.0	77.8	11	2	1399.0	1614.0	-
250819.0	50.0	11	1	1256.0	-	-
474185.0	50.0	11	1	1654.0	-	-
695900.0	85.6	11	3	1088.0	1148.0	1741.0
920172.0	77.6	11	2	1209.0	1406.0	-
222614.0	85.7	11	3	1452.0	1097.0	1458.0
446208.0	89.9	11	2	1467.0	1116.0	-
670278.0	60.4	11	1	1453.0	-	-
893543.0	52.0	11	1	1719.0	-	-
195089.0	96.2	11	3	1314.0	1821.0	1194.0
418976.0	62.0	11	1	1995.0	-	-
642610.0	62.0	11	1	1647.0	-	-
863085.0	96.4	11	3	1459.0	1639.0	1742.0

**Type 5 Radar Waveform\_29**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
145461.0	67.5	14	2	1648.0	1169.0	-
338688.0	82.6	14	2	1174.0	1912.0	-
530829.0	97.2	14	3	1735.0	1548.0	1505.0
723264.0	90.4	14	3	1860.0	1953.0	1446.0
121779.0	58.6	14	1	1941.0	-	-
315705.0	53.4	14	1	1001.0	-	-
507788.0	83.6	14	3	1274.0	1089.0	1303.0
700001.0	87.9	14	3	1364.0	1567.0	1783.0
97731.0	92.6	14	3	1351.0	1112.0	1165.0
291678.0	64.7	14	1	1432.0	-	-
485577.0	60.0	14	1	1069.0	-	-
677578.0	68.9	14	2	1963.0	1181.0	-
73766.0	86.6	14	3	1962.0	1554.0	1975.0
266656.0	90.4	14	3	1566.0	1585.0	1756.0
461466.0	63.8	14	1	1489.0	-	-

## Radar Type 6 - Radar Statistical Performance

Trail #	1=Detection 0=No Detection	Trail #	1=Detection 0=No Detection
0	1	15	1
1	1	16	1
2	1	17	1
3	1	18	1
4	1	19	1
5	1	20	1
6	1	21	1
7	1	22	1
8	1	23	1
9	1	24	1
10	1	25	1
11	1	26	1
12	1	27	1
13	1	28	1
14	1	29	1
Detection Percentage (%)		100.0%	

Type 6 Radar Waveform_0					
Frequency List (MHz)	0	1	2	3	4
0	5620	5488	5698	5588	5337
5	5688	5668	5414	5531	5618
10	5341	5584	5664	5514	5703
15	5645	5669	5455	5682	5436
20	5298	5323	5617	5286	5581
25	5452	5611	5360	5663	5585
30	5345	5349	5599	5633	5397
35	5646	5424	5317	5532	5379
40	5280	5712	5442	5710	5596
45	5572	5504	5674	5328	5434
50	5724	5644	5693	5284	5277
55	5707	5558	5250	5690	5529
60	5481	5586	5585	5640	5320
65	5498	5271	5281	5615	5587
70	5299	5466	5385	5626	5567
75	5506	5604	5636	5447	5680
80	5287	5460	5621	5539	5516
85	5511	5573	5578	5678	5477
90	5526	5421	5483	5643	5436
95	5444	5322	5356	5523	5319

**Type 6 Radar Waveform\_1**

Frequency List (MHz)	0	1	2	3	4
0	5400	5252	5634	5274	5557
5	5255	5690	5489	5694	5350
10	5650	5373	5705	5709	5724
15	5258	5699	5461	5630	5628
20	5306	5392	5558	5375	5534
25	5718	5463	5563	5518	5697
30	5478	5474	5302	5564	5276
35	5453	5536	5264	5695	5470
40	5263	5371	5462	5693	5477
45	5439	5721	5679	5464	5582
50	5610	5300	5419	5606	5465
55	5614	5377	5696	5344	5426
60	5418	5488	5683	5618	5447
65	5307	5588	5507	5615	5660
70	5655	5590	5623	5442	5595
75	5706	5710	5487	5361	5617
80	5417	5514	5365	5284	5621
85	5381	5678	5708	5346	5301
90	5368	5483	5257	5408	5433
95	5500	5698	5422	5342	5328

**Type 6 Radar Waveform\_2**

Frequency List (MHz)	0	1	2	3	4
0	5655	5491	5570	5338	5399
5	5394	5615	5564	5382	5654
10	5581	5637	5271	5332	5270
15	5346	5351	5675	5345	5692
20	5558	5499	5367	5507	5606
25	5315	5291	5719	5256	5617
30	5460	5259	5304	5525	5651
35	5355	5588	5720	5274	5685
40	5642	5631	5717	5436	5553
45	5573	5287	5688	5513	5458
50	5311	5444	5550	5653	5518
55	5329	5671	5667	5376	5364
60	5468	5250	5314	5629	5344
65	5396	5721	5323	5302	5418
70	5354	5263	5690	5472	5321
75	5303	5281	5613	5252	5673
80	5678	5428	5524	5320	5641
85	5328	5365	5516	5594	5596
90	5533	5586	5668	5542	5614
95	5278	5406	5715	5431	5374

**Type 6 Radar Waveform\_3**

Frequency List (MHz)	0	1	2	3	4
0	5435	5255	5506	5499	5619
5	5436	5637	5639	5545	5386
10	5415	5426	5312	5527	5291
15	5337	5478	5667	5720	5537
20	5700	5627	5440	5456	5480
25	5494	5264	5348	5290	5659
30	5349	5691	5422	5677	5471
35	5339	5543	5384	5398	5663
40	5524	5250	5569	5385	5433
45	5482	5553	5370	5649	5566
50	5616	5334	5487	5402	5533
55	5540	5397	5366	5472	5519
60	5393	5638	5505	5549	5413
65	5557	5615	5575	5642	5345
70	5282	5630	5669	5696	5724
75	5693	5321	5297	5262	5374
80	5424	5449	5293	5362	5454
85	5367	5491	5278	5427	5701
90	5520	5708	5470	5319	5698
95	5592	5703	5550	5651	5631

**Type 6 Radar Waveform\_4**

Frequency List (MHz)	0	1	2	3	4
0	5593	5494	5442	5660	5461
5	5478	5562	5714	5611	5346
10	5690	5353	5722	5312	5425
15	5605	5295	5290	5254	5708
20	5318	5448	5453	5285	5591
25	5697	5452	5324	5701	5713
30	5648	5637	5451	5291	5381
35	5634	5655	5551	5577	5363
40	5333	5507	5625	5430	5314
45	5533	5707	5619	5503	5685
50	5663	5622	5341	5554	5426
55	5612	5687	5512	5358	5389
60	5538	5618	5368	5294	5365
65	5464	5499	5595	5710	5645
70	5273	5696	5405	5470	5545
75	5375	5531	5653	5387	5427
80	5576	5664	5712	5673	5521
85	5615	5517	5388	5598	5262
90	5432	5471	5511	5680	5392
95	5518	5455	5443	5419	5501

**Type 6 Radar Waveform\_5**

Frequency List (MHz)	0	1	2	3	4
0	5373	5258	5378	5346	5681
5	5520	5584	5314	5299	5422
10	5277	5576	5491	5442	5333
15	5513	5257	5398	5713	5446
20	5619	5387	5419	5537	5426
25	5648	5540	5425	5556	5358
30	5268	5699	5605	5377	5603
35	5489	5250	5548	5326	5588
40	5445	5390	5524	5718	5536
45	5290	5672	5293	5464	5364
50	5504	5711	5564	5663	5267
55	5380	5327	5506	5483	5288
60	5404	5303	5318	5569	5259
65	5680	5667	5696	5321	5397
70	5724	5655	5614	5613	5411
75	5322	5485	5598	5714	5650
80	5582	5330	5418	5332	5541
85	5475	5291	5337	5553	5604
90	5296	5692	5297	5665	5443
95	5455	5409	5562	5265	5590

**Type 6 Radar Waveform\_6**

Frequency List (MHz)	0	1	2	3	4
0	5628	5497	5314	5507	5523
5	5659	5509	5389	5462	5629
10	5586	5365	5532	5637	5354
15	5601	5287	5404	5283	5638
20	5627	5553	5360	5529	5399
25	5439	5392	5531	5282	5407
30	5588	5562	5592	5377	5309
35	5341	5344	5479	5502	5613
40	5596	5286	5630	5521	5647
45	5493	5619	5348	5250	5655
50	5340	5540	5555	5325	5387
55	5607	5358	5334	5517	5454
60	5417	5569	5345	5625	5510
65	5667	5293	5626	5483	5264
70	5304	5324	5721	5700	5614
75	5259	5281	5574	5595	5272
80	5302	5708	5260	5687	5524
85	5506	5526	5539	5535	5718
90	5610	5406	5498	5536	5307
95	5541	5368	5313	5611	5480

**Type 6 Radar Waveform\_7**

Frequency List (MHz)	0	1	2	3	4
0	5408	5261	5250	5668	5268
5	5701	5531	5464	5625	5361
10	5517	5629	5573	5260	5375
15	5592	5414	5507	5328	5452
20	5635	5719	5398	5618	5372
25	5327	5259	5386	5426	5449
30	5477	5519	5710	5529	5432
35	5615	5632	5416	5679	5699
40	5298	5518	5479	5473	5702
45	5309	5303	5445	5691	5716
50	5606	5511	5685	5454	5546
55	5288	5707	5522	5425	5290
60	5457	5588	5456	5593	5713
65	5714	5421	5286	5433	5424
70	5570	5579	5282	5373	5351
75	5608	5528	5451	5365	5644
80	5594	5708	5674	5272	5619
85	5374	5480	5312	5355	5267
90	5359	5418	5321	5553	5520
95	5302	5471	5706	5692	5440

**Type 6 Radar Waveform\_8**

Frequency List (MHz)	0	1	2	3	4
0	5663	5500	5661	5354	5585
5	5268	5456	5539	5691	5665
10	5448	5418	5614	5455	5396
15	5680	5541	5610	5373	5644
20	5546	5313	5339	5345	5593
25	5668	5462	5490	5363	5491
30	5463	5476	5450	5303	5327
35	5365	5620	5411	5407	5427
40	5291	5287	5637	5538	5515
45	5408	5356	5310	5367	5259
50	5710	5470	5417	5657	5600
55	5508	5398	5717	5422	5341
60	5299	5578	5424	5289	5414
65	5499	5416	5662	5449	5564
70	5505	5276	5419	5555	5532
75	5562	5402	5451	5506	5718
80	5309	5615	5525	5641	5314
85	5611	5516	5336	5434	5560
90	5553	5719	5679	5716	5527
95	5338	5608	5504	5675	5574

**Type 6 Radar Waveform\_9**

Frequency List (MHz)	0	1	2	3	4
0	5346	5264	5597	5418	5330
5	5407	5478	5614	5379	5397
10	5282	5662	5655	5650	5417
15	5293	5668	5713	5321	5361
20	5554	5479	5280	5699	5318
25	5481	5520	5665	5594	5630
30	5352	5336	5455	5525	5504
35	5711	5304	5560	5341	5702
40	5467	5575	5303	5512	5715
45	5393	5425	5312	5593	5708
50	5689	5709	5720	5447	5671
55	5612	5635	5270	5707	5589
60	5277	5596	5337	5445	5617
65	5611	5281	5583	5367	5674
70	5359	5527	5646	5531	5491
75	5434	5522	5516	5432	5283
80	5353	5565	5588	5541	5509
85	5514	5358	5295	5528	5485
90	5333	5373	5641	5250	5501
95	5539	5355	5663	5585	5573

**Type 6 Radar Waveform\_10**

Frequency List (MHz)	0	1	2	3	4
0	5601	5503	5630	5579	5647
5	5449	5403	5689	5542	5604
10	5688	5568	5696	5370	5438
15	5381	5320	5341	5366	5553
20	5562	5548	5318	5691	5291
25	5369	5469	5393	5698	5431
30	5672	5338	5293	5405	5704
35	5345	5643	5327	5575	5713
40	5255	5541	5550	5513	5543
45	5606	5644	5316	5476	5386
50	5365	5387	5697	5294	5284
55	5303	5532	5664	5635	5625
60	5357	5716	5361	5279	5525
65	5638	5391	5440	5560	5718
70	5491	5378	5271	5530	5495
75	5507	5450	5642	5659	5413
80	5535	5346	5371	5651	5536
85	5514	5297	5256	5623	5439
90	5581	5571	5331	5256	5650
95	5363	5646	5372	5569	5471

**Type 6 Radar Waveform\_11**

Frequency List (MHz)	0	1	2	3	4
0	5381	5267	5566	5265	5392
5	5491	5425	5289	5705	5433
10	5522	5357	5262	5565	5459
15	5372	5350	5347	5411	5270
20	5473	5714	5259	5305	5264
25	5635	5321	5499	5424	5465
30	5702	5250	5523	5478	5640
35	5685	5418	5371	5391	5644
40	5380	5633	5451	5686	5603
45	5573	5296	5559	5444	5274
50	5470	5335	5489	5355	5511
55	5348	5579	5420	5651	5687
60	5490	5642	5464	5434	5641
65	5509	5279	5323	5351	5440
70	5331	5630	5344	5483	5409
75	5287	5394	5312	5476	5602
80	5535	5521	5417	5614	5318
85	5340	5515	5354	5496	5359
90	5684	5282	5486	5298	5553
95	5369	5717	5408	5547	5514

**Type 6 Radar Waveform\_12**

Frequency List (MHz)	0	1	2	3	4
0	5636	5603	5502	5426	5709
5	5533	5350	5364	5296	5640
10	5453	5621	5303	5663	5480
15	5460	5477	5450	5359	5462
20	5481	5308	5675	5297	5712
25	5523	5648	5702	5528	5499
30	5378	5591	5662	5263	5630
35	5363	5349	5509	5264	5641
40	5655	5694	5716	5389	5451
45	5600	5405	5276	5642	5471
50	5539	5352	5646	5386	5578
55	5653	5455	5439	5610	5470
60	5561	5619	5609	5587	5664
65	5387	5380	5464	5458	5693
70	5540	5629	5512	5317	5633
75	5668	5459	5366	5719	5310
80	5373	5375	5564	5489	5383
85	5699	5399	5532	5320	5553
90	5281	5435	5444	5505	5589
95	5661	5365	5525	5294	5503



**Type 6 Radar Waveform\_13**

Frequency List (MHz)	0	1	2	3	4
0	5319	5367	5438	5587	5454
5	5672	5372	5439	5459	5384
10	5410	5441	5383	5501	5548
15	5604	5553	5404	5654	5489
20	5474	5713	5386	5685	5314
25	5597	5430	5632	5533	5420
30	5577	5639	5478	5658	5488
35	5600	5535	5569	5421	5327
40	5691	5334	5256	5250	5463
45	5524	5426	5703	5347	5437
50	5667	5379	5302	5627	5390
55	5325	5289	5532	5651	5299
60	5629	5496	5688	5326	5665
65	5407	5254	5365	5432	5661
70	5400	5258	5517	5338	5419
75	5356	5719	5599	5291	5462
80	5529	5436	5320	5395	5348
85	5495	5278	5409	5351	5371
90	5655	5403	5520	5408	5618
95	5262	5578	5614	5468	5607

**Type 6 Radar Waveform\_14**

Frequency List (MHz)	0	1	2	3	4
0	5574	5606	5374	5273	5296
5	5714	5297	5514	5622	5676
10	5693	5674	5482	5578	5522
15	5636	5256	5656	5449	5468
20	5400	5543	5654	5378	5658
25	5677	5633	5261	5567	5462
30	5466	5596	5556	5381	5530
35	5313	5331	5472	5483	5469
40	5504	5643	5359	5594	5641
45	5711	5333	5521	5480	5691
50	5579	5523	5488	5281	5721
55	5340	5344	5515	5486	5503
60	5305	5464	5425	5611	5272
65	5391	5356	5290	5575	5702
70	5710	5278	5386	5269	5314
75	5286	5560	5550	5562	5337
80	5496	5709	5420	5455	5525
85	5429	5631	5698	5712	5304
90	5526	5607	5516	5377	5689
95	5667	5512	5537	5463	5602

**Type 6 Radar Waveform\_15**

Frequency List (MHz)	0	1	2	3	4
0	5354	5370	5310	5434	5518
5	5281	5319	5589	5408	5624
10	5560	5523	5298	5543	5627
15	5383	5284	5494	5660	5709
20	5595	5467	5631	5468	5398
25	5361	5462	5601	5355	5553
30	5336	5330	5676	5669	5404
35	5602	5722	5308	5587	5581
40	5599	5688	5570	5594	5416
45	5579	5533	5578	5455	5699
50	5539	5500	5568	5528	5705
55	5305	5474	5629	5519	5257
60	5437	5315	5689	5704	5407
65	5497	5447	5372	5264	5593
70	5290	5720	5529	5670	5318
75	5273	5619	5685	5426	5351
80	5651	5267	5439	5656	5299
85	5427	5681	5626	5549	5524
90	5518	5683	5345	5486	5322
95	5488	5400	5457	5591	5366

**Type 6 Radar Waveform\_16**

Frequency List (MHz)	0	1	2	3	4
0	5609	5721	5595	5358	5323
5	5341	5664	5376	5615	5555
10	5349	5564	5493	5715	5413
15	5290	5442	5377	5416	5303
20	5633	5459	5604	5356	5250
25	5467	5566	5635	5643	5510
30	5551	5482	5399	5333	5495
35	5400	5408	5622	5292	5519
40	5364	5685	5499	5574	5540
45	5586	5368	5709	5590	5556
50	5512	5716	5252	5420	5599
55	5348	5563	5319	5464	5263
60	5261	5415	5254	5265	5617
65	5389	5694	5266	5679	5401
70	5315	5276	5299	5525	5357
75	5457	5308	5273	5423	5601
80	5327	5631	5524	5454	5547
85	5625	5371	5486	5660	5431
90	5668	5573	5667	5418	5448
95	5664	5320	5700	5395	5269

**Type 6 Radar Waveform\_17**

Frequency List (MHz)	0	1	2	3	4
0	5389	5373	5657	5659	5578
5	5462	5266	5264	5539	5347
10	5613	5605	5591	5585	5328
15	5540	5393	5487	5569	5327
20	5469	5574	5548	5577	5719
25	5670	5669	5685	5705	5467
30	5291	5256	5694	5472	5586
35	5553	5322	5461	5375	5457
40	5604	5682	5331	5554	5582
45	5598	5639	5255	5576	5641
50	5645	5621	5359	5429	5681
55	5610	5321	5319	5692	5484
60	5506	5396	5661	5713	5678
65	5679	5449	5497	5441	5367
70	5717	5638	5370	5338	5419
75	5280	5302	5336	5420	5363
80	5504	5335	5290	5348	5489
85	5505	5320	5536	5492	5597
90	5691	5267	5628	5651	5329
95	5300	5551	5415	5437	5390

**Type 6 Radar Waveform\_18**

Frequency List (MHz)	0	1	2	3	4
0	5547	5612	5593	5345	5420
5	5504	5288	5339	5702	5651
10	5320	5402	5646	5311	5606
15	5416	5667	5496	5532	5286
20	5335	5635	5515	5540	5550
25	5510	5526	5398	5299	5703
30	5252	5594	5424	5506	5408
35	5417	5514	5677	5562	5328
40	5333	5397	5458	5395	5272
45	5679	5260	5534	5665	5656
50	5692	5520	5461	5277	5259
55	5347	5303	5617	5615	5290
60	5346	5649	5451	5487	5250
65	5439	5627	5715	5659	5551
70	5300	5285	5427	5467	5518
75	5693	5597	5717	5465	5358
80	5554	5480	5494	5539	5399
85	5558	5407	5274	5350	5443
90	5357	5459	5568	5643	5701
95	5496	5631	5573	5279	5683

**Type 6 Radar Waveform\_19**

Frequency List (MHz)	0	1	2	3	4
0	5327	5376	5529	5506	5640
5	5546	5688	5414	5390	5383
10	5251	5666	5687	5627	5407
15	5319	5599	5577	5478	5343
20	5704	5456	5629	5523	5398
25	5378	5601	5500	5262	5391
30	5580	5381	5624	5657	5712
35	5653	5455	5481	5722	5711
40	5541	5333	5512	5676	5567
45	5514	5273	5617	5270	5715
50	5453	5268	5348	5645	5625
55	5708	5589	5418	5434	5261
60	5339	5396	5632	5313	5671
65	5576	5276	5491	5346	5578
70	5357	5413	5470	5367	5572
75	5556	5686	5608	5709	5590
80	5275	5703	5559	5278	5591
85	5635	5322	5510	5341	5366
90	5504	5568	5358	5368	5719
95	5263	5716	5697	5636	5282

**Type 6 Radar Waveform\_20**

Frequency List (MHz)	0	1	2	3	4
0	5582	5615	5465	5667	5482
5	5588	5710	5489	5553	5590
10	5560	5552	5253	5701	5648
15	5495	5446	5702	5525	5670
20	5254	5395	5494	5621	5496
25	5664	5327	5329	5604	5296
30	5433	5469	5336	5364	5334
35	5532	5317	5481	5251	5634
40	5636	5550	5721	5271	5277
45	5295	5356	5675	5323	5672
50	5591	5629	5319	5534	5468
55	5569	5421	5543	5608	5610
60	5507	5504	5341	5464	5711
65	5617	5463	5690	5616	5284
70	5526	5399	5570	5691	5548
75	5515	5655	5698	5654	5320
80	5486	5603	5531	5392	5622
85	5314	5473	5310	5530	5373
90	5255	5665	5492	5661	5556
95	5607	5602	5715	5497	5358

**Type 6 Radar Waveform\_21**

Frequency List (MHz)	0	1	2	3	4
0	5362	5379	5401	5353	5702
5	5252	5635	5564	5619	5419
10	5491	5341	5391	5421	5669
15	5583	5476	5708	5570	5387
20	5262	5464	5435	5710	5469
25	5552	5654	5330	5475	5455
30	5295	5579	5255	5359	5572
35	5522	5409	5647	5389	5329
40	5684	5517	5292	5425	5377
45	5439	5258	5279	5559	5467
50	5370	5623	5291	5416	5609
55	5497	5323	5450	5581	5636
60	5383	5296	5537	5563	5664
65	5474	5251	5533	5508	5562
70	5598	5482	5573	5540	5524
75	5527	5721	5322	5301	5263
80	5713	5312	5459	5685	5311
85	5290	5688	5372	5336	5447
90	5630	5418	5265	5384	5613
95	5539	5597	5509	5375	5373

**Type 6 Radar Waveform\_22**

Frequency List (MHz)	0	1	2	3	4
0	5520	5618	5337	5514	5544
5	5294	5657	5639	5307	5626
10	5325	5605	5432	5519	5690
15	5671	5603	5336	5615	5676
20	5270	5630	5376	5702	5442
25	5343	5506	5638	5364	5614
30	5344	5252	5319	5260	5550
35	5498	5663	5318	5562	5561
40	5703	5412	5525	5660	5289
45	5257	5357	5522	5694	5332
50	5349	5421	5712	5492	5360
55	5322	5451	5513	5269	5552
60	5290	5359	5328	5460	5606
65	5487	5423	5287	5268	5303
70	5365	5292	5468	5576	5389
75	5500	5433	5496	5366	5368
80	5282	5515	5348	5568	5623
85	5273	5308	5465	5688	5689
90	5396	5469	5679	5411	5619
95	5573	5382	5392	5428	5391

**Type 6 Radar Waveform\_23**

Frequency List (MHz)	0	1	2	3	4
0	5300	5382	5273	5675	5289
5	5336	5582	5714	5470	5358
10	5256	5394	5473	5711	5662
15	5255	5439	5563	5393	5656
20	5699	5414	5316	5415	5706
25	5455	5366	5538	5398	5708
30	5684	5437	5509	5637	5279
35	5686	5715	5475	5639	5592
40	5463	5425	5286	5661	5337
45	5702	5277	5385	5597	5585
50	5472	5326	5315	5682	5510
55	5405	5703	5523	5419	5524
60	5435	5552	5688	5372	5701
65	5575	5670	5643	5364	5454
70	5676	5616	5476	5392	5368
75	5486	5511	5263	5292	5361
80	5349	5312	5433	5305	5680
85	5591	5628	5359	5259	5423
90	5402	5576	5625	5607	5264
95	5630	5409	5483	5274	5694

**Type 6 Radar Waveform\_24**

Frequency List (MHz)	0	1	2	3	4
0	5555	5621	5684	5264	5606
5	5378	5604	5314	5633	5662
10	5658	5514	5434	5257	5275
15	5382	5542	5608	5585	5664
20	5390	5355	5308	5368	5594
25	5307	5569	5642	5432	5698
30	5694	5641	5652	5661	5568
35	5301	5370	5482	5490	5486
40	5478	5675	5401	5665	5283
45	5493	5317	5310	5335	5438
50	5501	5473	5286	5523	5512
55	5613	5626	5359	5418	5285
60	5397	5451	5689	5315	5364
65	5587	5498	5511	5321	5262
70	5465	5446	5533	5537	5679
75	5452	5351	5337	5654	5719
80	5447	5471	5605	5476	5496
85	5302	5400	5494	5470	5419
90	5331	5474	5534	5697	5266
95	5631	5544	5524	5538	5322

**Type 6 Radar Waveform\_25**

Frequency List (MHz)	0	1	2	3	4
0	5335	5385	5620	5425	5351
5	5517	5529	5389	5699	5394
10	5496	5544	5555	5629	5278
15	5363	5509	5645	5653	5302
20	5672	5459	5296	5397	5361
25	5256	5297	5271	5466	5362
30	5583	5598	5392	5435	5291
35	5343	5558	5643	5400	5317
40	5283	5339	5333	5377	5422
45	5393	5491	5388	5349	5462
50	5574	5601	5436	5473	5314
55	5691	5511	5579	5368	5580
60	5379	5260	5671	5510	5541
65	5712	5270	5676	5617	5627
70	5605	5523	5304	5331	5310
75	5684	5251	5700	5581	5386
80	5543	5559	5677	5595	5494
85	5312	5382	5546	5428	5307
90	5420	5431	5259	5578	5406
95	5373	5540	5593	5560	5694

**Type 6 Radar Waveform\_26**

Frequency List (MHz)	0	1	2	3	4
0	5590	5624	5558	5586	5668
5	5559	5551	5464	5387	5601
10	5427	5333	5596	5349	5299
15	5451	5539	5651	5698	5494
20	5583	5625	5334	5389	5273
25	5403	5375	5500	5404	5472
30	5555	5607	5587	5482	5649
35	5646	5321	5314	5631	5366
40	5277	5573	5374	5351	5476
45	5354	5544	5653	5700	5638
50	5690	5637	5417	5502	5645
55	5701	5398	5339	5709	5680
60	5503	5336	5487	5535	5694
65	5712	5352	5627	5430	5677
70	5509	5307	5269	5274	5366
75	5681	5594	5642	5707	5719
80	5674	5412	5397	5251	5345
85	5263	5639	5479	5715	5265
90	5515	5666	5385	5557	5648
95	5323	5673	5431	5542	5723

**Type 6 Radar Waveform\_27**

Frequency List (MHz)	0	1	2	3	4
0	5273	5388	5492	5272	5413
5	5601	5476	5539	5550	5430
10	5358	5597	5637	5447	5320
15	5442	5666	5279	5646	5686
20	5591	5694	5275	5478	5307
25	5532	5606	5576	5437	5446
30	5458	5512	5250	5361	5406
35	5621	5265	5571	5325	5567
40	5546	5690	5338	5371	5658
45	5635	5559	5412	5500	5540
50	5479	5339	5676	5304	5460
55	5264	5599	5416	5692	5310
60	5363	5709	5625	5335	5433
65	5261	5643	5659	5422	5708
70	5495	5407	5390	5283	5703
75	5622	5394	5414	5284	5253
80	5704	5423	5396	5671	5607
85	5300	5568	5405	5455	5604
90	5706	5438	5286	5271	5549
95	5548	5494	5574	5404	5453

**Type 6 Radar Waveform\_28**

Frequency List (MHz)	0	1	2	3	4
0	5528	5724	5428	5433	5633
5	5643	5498	5614	5713	5637
10	5667	5386	5678	5642	5341
15	5530	5318	5382	5691	5403
20	5599	5385	5470	5280	5427
25	5384	5334	5680	5471	5585
30	5347	5469	5465	5513	5604
35	5663	5356	5714	5406	5629
40	5628	5578	5368	5587	5615
45	5373	5553	5330	5355	5515
50	5252	5490	5283	5683	5606
55	5414	5659	5492	5399	5264
60	5560	5379	5462	5592	5687
65	5394	5314	5511	5443	5410
70	5259	5662	5494	5514	5557
75	5265	5505	5339	5679	5370
80	5668	5327	5300	5550	5472
85	5484	5479	5258	5451	5277
90	5486	5430	5603	5688	5661
95	5388	5351	5534	5598	5694

**Type 6 Radar Waveform\_29**

Frequency List (MHz)	0	1	2	3	4
0	5308	5488	5364	5594	5475
5	5307	5423	5689	5304	5369
10	5598	5650	5341	5362	5618
15	5445	5485	5261	5595	5510
20	5551	5254	5559	5253	5693
25	5711	5537	5309	5505	5627
30	5333	5426	5680	5287	5424
35	5327	5447	5509	5402	5628
40	5720	5712	5469	5721	5365
45	5419	5250	5431	5606	5692
50	5706	5691	5303	5579	5581
55	5530	5591	5507	5321	5708
60	5630	5621	5564	5612	5571
65	5386	5422	5285	5541	5723
70	5701	5584	5314	5563	5710
75	5463	5634	5603	5282	5352
80	5460	5433	5665	5522	5678
85	5349	5428	5267	5340	5438
90	5252	5456	5616	5380	5520
95	5690	5615	5705	5716	5372

Product	Kinetic VoIP Modem	Temperature	27°C
Test Engineer	Jake Lan	Relative Humidity	65%
Test Site	WZ-SR4	Test Date	2021/05/11-05/13
Test Item	Radar Statistical Performance Check (802.11ax-HE40 mode – 5510MHz)		

## Radar Type 1-4 - Radar Statistical Performance

Trial	Frequency (MHz)	1 detect ,0 no detect			
		Radar Type 1	Radar Type 2	Radar Type 3	Radar Type 4
0	5491	1	0	0	1
1	5493	1	1	1	1
2	5494	1	1	1	1
3	5496	1	1	1	1
4	5497	1	1	1	1
5	5499	1	0	1	1
6	5500	1	1	0	0
7	5502	1	1	1	0
8	5503	1	1	1	1
9	5505	1	1	1	1
10	5506	1	1	0	0
11	5507	1	1	1	0
12	5508	1	1	1	0
13	5510	1	1	1	1
14	5511	1	0	0	1
15	5512	1	1	1	1
16	5513	1	1	1	0
17	5514	1	1	1	1
18	5516	1	1	1	1
19	5517	1	1	0	1
20	5518	1	0	1	1
21	5519	1	1	1	1
22	5521	1	1	1	1
23	5522	1	0	0	1
24	5523	1	1	1	0
25	5525	1	1	1	1
26	5526	1	1	1	1

Trial	Frequency	1 detect ,0 no detect	Trial	Frequency	1 detect ,0 no detect
27	5527	1	1	1	0
28	5528	1	0	1	1
29	5529	1	0	0	1
Probability:		100.0%	76.7%	76.7%	73.3%
Aggregate (Radar Types 1-4):		81.7% (>80%)			

## Radar Type 1 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 1	1.0	618.0	86	53148.0
Download	1	Type 1	1.0	518.0	102	52836.0
Download	2	Type 1	1.0	798.0	67	53466.0
Download	3	Type 1	1.0	698.0	76	53048.0
Download	4	Type 1	1.0	938.0	57	53466.0
Download	5	Type 1	1.0	858.0	62	53196.0
Download	6	Type 1	1.0	678.0	78	52884.0
Download	7	Type 1	1.0	878.0	61	53558.0
Download	8	Type 1	1.0	538.0	99	53262.0
Download	9	Type 1	1.0	598.0	89	53222.0
Download	10	Type 1	1.0	558.0	95	53010.0
Download	11	Type 1	1.0	658.0	81	53298.0
Download	12	Type 1	1.0	638.0	83	52954.0
Download	13	Type 1	1.0	718.0	74	53132.0
Download	14	Type 1	1.0	838.0	63	52794.0
Download	15	Type 1	1.0	2598.0	21	54558.0
Download	16	Type 1	1.0	3033.0	18	54594.0
Download	17	Type 1	1.0	1901.0	28	53228.0
Download	18	Type 1	1.0	2226.0	24	53424.0
Download	19	Type 1	1.0	2673.0	20	53460.0
Download	20	Type 1	1.0	1632.0	33	53856.0
Download	21	Type 1	1.0	2707.0	20	54140.0
Download	22	Type 1	1.0	2292.0	24	55008.0
Download	23	Type 1	1.0	591.0	90	53190.0
Download	24	Type 1	1.0	1577.0	34	53618.0
Download	25	Type 1	1.0	2605.0	21	54705.0
Download	26	Type 1	1.0	2697.0	20	53940.0
Download	27	Type 1	1.0	2131.0	25	53275.0
Download	28	Type 1	1.0	1384.0	39	53976.0
Download	29	Type 1	1.0	2373.0	23	54579.0



## Radar Type 2 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 2	3.0	181.0	26	4706.0
Download	1	Type 2	3.9	153.0	28	4284.0
Download	2	Type 2	5.0	169.0	29	4901.0
Download	3	Type 2	2.2	177.0	25	4425.0
Download	4	Type 2	3.2	196.0	26	5096.0
Download	5	Type 2	1.5	187.0	24	4488.0
Download	6	Type 2	4.9	205.0	29	5945.0
Download	7	Type 2	2.3	176.0	25	4400.0
Download	8	Type 2	1.2	180.0	23	4140.0
Download	9	Type 2	4.4	201.0	28	5628.0
Download	10	Type 2	2.0	155.0	24	3720.0
Download	11	Type 2	2.6	212.0	25	5300.0
Download	12	Type 2	4.7	228.0	29	6612.0
Download	13	Type 2	2.0	154.0	24	3696.0
Download	14	Type 2	3.7	194.0	27	5238.0
Download	15	Type 2	1.4	230.0	23	5290.0
Download	16	Type 2	1.1	160.0	23	3680.0
Download	17	Type 2	3.5	195.0	27	5265.0
Download	18	Type 2	4.9	203.0	29	5887.0
Download	19	Type 2	4.5	190.0	29	5510.0
Download	20	Type 2	3.3	158.0	27	4266.0
Download	21	Type 2	4.5	173.0	29	5017.0
Download	22	Type 2	2.9	225.0	26	5850.0
Download	23	Type 2	4.9	216.0	29	6264.0
Download	24	Type 2	2.2	199.0	25	4975.0
Download	25	Type 2	4.1	218.0	28	6104.0
Download	26	Type 2	1.0	161.0	23	3703.0
Download	27	Type 2	3.3	175.0	27	4725.0
Download	28	Type 2	3.1	229.0	26	5954.0
Download	29	Type 2	5.0	170.0	29	4930.0

## Radar Type 3 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 3	8.0	330.0	17	5610.0
Download	1	Type 3	8.9	360.0	18	6480.0
Download	2	Type 3	10.0	201.0	18	3618.0
Download	3	Type 3	7.2	392.0	16	6272.0
Download	4	Type 3	8.2	292.0	17	4964.0
Download	5	Type 3	6.5	355.0	16	5680.0
Download	6	Type 3	9.9	256.0	18	4608.0
Download	7	Type 3	7.3	384.0	17	6528.0
Download	8	Type 3	6.2	327.0	16	5232.0
Download	9	Type 3	9.4	378.0	18	6804.0
Download	10	Type 3	7.0	443.0	16	7088.0
Download	11	Type 3	7.6	399.0	17	6783.0
Download	12	Type 3	9.7	377.0	18	6786.0
Download	13	Type 3	7.0	451.0	16	7216.0
Download	14	Type 3	8.7	435.0	18	7830.0
Download	15	Type 3	6.4	227.0	16	3632.0
Download	16	Type 3	6.1	237.0	16	3792.0
Download	17	Type 3	8.5	353.0	17	6001.0
Download	18	Type 3	9.9	461.0	18	8298.0
Download	19	Type 3	9.5	488.0	18	8784.0
Download	20	Type 3	8.3	216.0	17	3672.0
Download	21	Type 3	9.5	309.0	18	5562.0
Download	22	Type 3	7.9	364.0	17	6188.0
Download	23	Type 3	9.9	246.0	18	4428.0
Download	24	Type 3	7.2	473.0	16	7568.0
Download	25	Type 3	9.1	211.0	18	3798.0
Download	26	Type 3	6.0	289.0	16	4624.0
Download	27	Type 3	8.3	367.0	17	6239.0
Download	28	Type 3	8.1	385.0	17	6545.0
Download	29	Type 3	10.0	218.0	18	3924.0

## Radar Type 4 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 4	15.4	330.0	14	4620.0
Download	1	Type 4	17.5	360.0	15	5400.0
Download	2	Type 4	20.0	201.0	16	3216.0
Download	3	Type 4	13.8	392.0	13	5096.0
Download	4	Type 4	16.0	292.0	14	4088.0
Download	5	Type 4	12.3	355.0	12	4260.0
Download	6	Type 4	19.8	256.0	16	4096.0
Download	7	Type 4	14.0	384.0	13	4992.0
Download	8	Type 4	11.5	327.0	12	3924.0
Download	9	Type 4	18.7	378.0	16	6048.0
Download	10	Type 4	13.3	443.0	13	5759.0
Download	11	Type 4	14.6	399.0	13	5187.0
Download	12	Type 4	19.3	377.0	16	6032.0
Download	13	Type 4	13.3	451.0	13	5863.0
Download	14	Type 4	17.2	435.0	15	6525.0
Download	15	Type 4	12.0	227.0	12	2724.0
Download	16	Type 4	11.3	237.0	12	2844.0
Download	17	Type 4	16.6	353.0	15	5295.0
Download	18	Type 4	19.8	461.0	16	7376.0
Download	19	Type 4	18.9	488.0	16	7808.0
Download	20	Type 4	16.2	216.0	14	3024.0
Download	21	Type 4	18.8	309.0	16	4944.0
Download	22	Type 4	15.4	364.0	14	5096.0
Download	23	Type 4	19.7	246.0	16	3936.0
Download	24	Type 4	13.7	473.0	13	6149.0
Download	25	Type 4	18.0	211.0	15	3165.0
Download	26	Type 4	11.0	289.0	12	3468.0
Download	27	Type 4	16.2	367.0	14	5138.0
Download	28	Type 4	15.6	385.0	14	5390.0
Download	29	Type 4	19.9	218.0	16	3488.0

## Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
0	5510	0	15	5494.6	1
1	5510	1	16	5494.2	1
2	5510	1	17	5497.4	1
3	5510	1	18	5499	1
4	5510	1	19	5498.6	1
5	5510	1	20	5523	0
6	5510	1	21	5521.4	1
7	5510	1	22	5523.4	1
8	5510	1	23	5521	1
9	5510	1	24	5524.6	1
10	5495.4	1	25	5521.8	1
11	5496.2	1	26	5525.8	1
12	5498.6	1	27	5523	1
13	5495.4	1	28	5523.4	1
14	5497.4	1	29	5521	1
Detection Percentage (%)					93.3%

## Type 5 Radar Waveform\_0

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
625115.0	74.4	12	2	1018.0	1198.0	-
830127.0	86.3	12	3	1445.0	1210.0	1958.0
184177.0	99.9	12	3	1799.0	1700.0	1968.0
392456.0	65.5	12	1	1717.0	-	-
598650.0	78.0	12	2	1612.0	1921.0	-
808029.0	57.2	12	1	1041.0	-	-
158987.0	98.7	12	3	1789.0	1149.0	1189.0
366236.0	66.8	12	2	1955.0	1311.0	-
574821.0	52.9	12	1	1341.0	-	-
779364.0	92.6	12	3	1229.0	1399.0	1794.0
133849.0	62.7	12	1	1898.0	-	-
340823.0	69.8	12	2	1383.0	1644.0	-
546483.0	95.8	12	3	1654.0	1731.0	1963.0
756896.0	62.9	12	1	1021.0	-	-

**Type 5 Radar Waveform\_1**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
88835.0	84.1	16	3	1421.0	1899.0	1027.0
260179.0	55.7	16	1	1098.0	-	-
431002.0	51.6	16	1	1277.0	-	-
599772.0	80.9	16	2	1884.0	1874.0	-
67775.0	98.6	16	3	1845.0	1703.0	1854.0
237771.0	93.8	16	3	1789.0	1650.0	1648.0
408799.0	78.7	16	2	1776.0	1484.0	-
578080.0	93.2	16	3	1919.0	1264.0	1444.0
47012.0	74.2	16	2	1113.0	1849.0	-
216959.0	98.2	16	3	1432.0	1329.0	1924.0
388865.0	64.9	16	1	1346.0	-	-
557432.0	88.7	16	3	1004.0	1860.0	1384.0
26072.0	50.4	16	1	1373.0	-	-
196309.0	78.8	16	2	1817.0	1803.0	-
366934.0	75.8	16	2	1558.0	1480.0	-
535654.0	99.3	16	3	1838.0	1679.0	1800.0
5016.0	68.8	16	2	1071.0	1585.0	-

**Type 5 Radar Waveform\_2**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
148805.0	95.4	20	3	1074.0	1017.0	1887.0
292981.0	96.3	20	3	1530.0	1505.0	1712.0
438347.0	77.3	20	2	1807.0	1581.0	-
583400.0	70.7	20	2	1753.0	1271.0	-
131185.0	83.3	20	2	1414.0	1719.0	-
275375.0	86.7	20	3	1380.0	1618.0	1367.0
420664.0	81.0	20	2	1844.0	1345.0	-
563687.0	86.1	20	3	1977.0	1936.0	1094.0
113395.0	87.8	20	2	1419.0	1500.0	-
258265.0	81.9	20	2	1754.0	1028.0	-
401774.0	87.5	20	3	1902.0	1296.0	1562.0
547033.0	77.6	20	2	1814.0	1971.0	-
95354.0	94.5	20	3	1413.0	1334.0	1443.0
240867.0	66.0	20	1	1680.0	-	-
386107.0	53.5	20	1	1481.0	-	-
531186.0	66.1	20	1	1572.0	-	-
77959.0	54.9	20	1	1086.0	-	-
221767.0	99.3	20	3	1826.0	1465.0	1678.0
367616.0	76.9	20	2	1107.0	1366.0	-
512975.0	51.1	20	1	1961.0	-	-

**Type 5 Radar Waveform\_3**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
99988.0	77.0	9	2	1351.0	1676.0	-
341636.0	76.7	9	2	1601.0	1864.0	-
583709.0	79.2	9	2	1724.0	1088.0	-
826472.0	65.3	9	1	1708.0	-	-
70189.0	81.3	9	2	1349.0	1904.0	-
312563.0	62.0	9	1	1233.0	-	-
554592.0	51.7	9	1	1600.0	-	-
796905.0	50.6	9	1	1387.0	-	-
40332.0	89.3	9	3	1778.0	1571.0	1858.0
282602.0	56.8	9	1	1669.0	-	-
524275.0	69.8	9	2	1498.0	1035.0	-
765116.0	91.0	9	3	1295.0	1254.0	1385.0

**Type 5 Radar Waveform\_4**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
8523.0	53.7	13	1	1190.0	-	-
201757.0	73.8	13	2	1785.0	1390.0	-
395195.0	67.3	13	2	1797.0	1009.0	-
588372.0	73.6	13	2	1521.0	1512.0	-
781878.0	68.5	13	2	1142.0	1671.0	-
177479.0	92.3	13	3	1565.0	1795.0	1932.0
372116.0	50.8	13	1	1226.0	-	-
564379.0	69.0	13	2	1950.0	1343.0	-
758210.0	70.7	13	2	1134.0	1523.0	-
154021.0	94.9	13	3	1064.0	1685.0	1080.0
347342.0	80.8	13	2	1796.0	1517.0	-
541983.0	61.8	13	1	1221.0	-	-
732685.0	91.2	13	3	1049.0	1549.0	1911.0
130645.0	65.5	13	1	1325.0	-	-
323554.0	79.8	13	2	1324.0	1960.0	-

**Type 5 Radar Waveform\_5**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
862547.0	82.2	7	2	1739.0	1818.0	-
1186690.0	61.3	7	1	1727.0	-	-
177969.0	72.6	7	2	1180.0	1079.0	-
500127.0	95.5	7	3	1187.0	1090.0	1762.0
823257.0	79.6	7	2	1564.0	1288.0	-
1144622.0	99.0	7	3	1253.0	1236.0	1894.0
137866.0	98.1	7	3	1632.0	1974.0	1903.0
459922.0	91.8	7	3	1774.0	1982.0	1705.0
783720.0	68.7	7	2	1001.0	1494.0	-

**Type 5 Radar Waveform\_6**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
496347.0	67.0	20	2	1300.0	1716.0	-
44236.0	61.9	20	1	1848.0	-	-
188842.0	89.4	20	3	1013.0	1240.0	1063.0
333338.0	71.3	20	2	1966.0	1742.0	-
478244.0	85.0	20	3	1132.0	1163.0	1055.0
26335.0	80.4	20	2	1336.0	1227.0	-
170342.0	96.6	20	3	1925.0	1901.0	1843.0
316527.0	60.9	20	1	1813.0	-	-
461556.0	62.1	20	1	1878.0	-	-
8457.0	96.6	20	3	1591.0	1330.0	1751.0
153296.0	73.9	20	2	1232.0	1677.0	-
297777.0	70.7	20	2	1805.0	1770.0	-
442027.0	98.8	20	3	1759.0	1178.0	1179.0
587666.0	79.9	20	2	1840.0	1140.0	-
135132.0	97.6	20	3	1376.0	1167.0	1804.0
281026.0	62.7	20	1	1301.0	-	-
423971.0	98.5	20	3	1401.0	1930.0	1143.0
570916.0	57.9	20	1	1842.0	-	-
117550.0	80.5	20	2	1827.0	1438.0	-
262725.0	82.1	20	2	1216.0	1030.0	-

**Type 5 Radar Waveform\_7**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
679244.0	95.9	10	3	1081.0	1164.0	1871.0
921486.0	67.4	10	2	1711.0	1639.0	-
166633.0	74.2	10	2	1097.0	1783.0	-
409026.0	65.8	10	1	1513.0	-	-
650043.0	82.2	10	2	1320.0	1953.0	-
892021.0	69.5	10	2	1985.0	1019.0	-
136622.0	89.3	10	3	1048.0	1986.0	1470.0
379221.0	66.6	10	1	1449.0	-	-
621150.0	61.4	10	1	1853.0	-	-
860727.0	90.2	10	3	1350.0	1746.0	1653.0
106872.0	92.1	10	3	1412.0	1701.0	1490.0
349485.0	55.6	10	1	1177.0	-	-

**Type 5 Radar Waveform\_8**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
886541.0	82.0	5	2	1718.0	1831.0	-
1248384.0	98.6	5	3	1931.0	1202.0	1725.0
116083.0	56.6	5	1	1991.0	-	-
479576.0	56.6	5	1	1431.0	-	-
842711.0	52.9	5	1	1992.0	-	-
1205742.0	79.6	5	2	1070.0	1274.0	-
71193.0	84.0	5	3	1738.0	1979.0	1160.0
433941.0	90.4	5	3	1631.0	1365.0	1420.0

**Type 5 Radar Waveform\_9**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
334183.0	98.2	18	3	1031.0	1923.0	1263.0
487872.0	89.9	18	2	1173.0	1065.0	-
11124.0	99.7	18	3	1989.0	1146.0	1515.0
163058.0	94.6	18	3	1970.0	1307.0	1819.0
315009.0	91.7	18	3	1578.0	1997.0	1501.0
469909.0	59.1	18	1	1114.0	-	-
620681.0	83.4	18	3	1192.0	1076.0	1008.0
144754.0	81.4	18	2	1976.0	1331.0	-
297386.0	75.0	18	2	1224.0	1541.0	-
450021.0	82.7	18	2	1400.0	1186.0	-
602033.0	81.2	18	2	1453.0	1695.0	-
125506.0	91.1	18	3	1964.0	1947.0	1784.0
278549.0	67.6	18	2	1670.0	1211.0	-
432175.0	59.6	18	1	1209.0	-	-
583529.0	72.9	18	2	1786.0	1072.0	-
107161.0	99.7	18	3	1262.0	1106.0	1257.0
259150.0	87.7	18	3	1454.0	1790.0	1130.0
411855.0	73.6	18	2	1973.0	1504.0	-
563130.0	89.1	18	3	1082.0	1910.0	1665.0

**Type 5 Radar Waveform\_10**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
153335.0	65.4	9	1	1702.0	-	-
416348.0	91.1	9	3	1952.0	1735.0	1026.0
680417.0	80.1	9	2	1881.0	1822.0	-
944250.0	99.6	9	3	1006.0	1362.0	1161.0
120664.0	72.0	9	2	1037.0	1852.0	-
385115.0	54.4	9	1	1273.0	-	-
648307.0	68.2	9	2	1869.0	1215.0	-
910291.0	88.7	9	3	1688.0	1948.0	1651.0
88267.0	50.1	9	1	1576.0	-	-
352052.0	73.3	9	2	1660.0	1191.0	-
614714.0	91.0	9	3	1882.0	1372.0	1764.0

**Type 5 Radar Waveform\_11**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
745124.0	59.8	11	1	1604.0	-	-
47092.0	68.9	11	2	1361.0	1124.0	-
270257.0	73.9	11	2	1583.0	1269.0	-
492834.0	90.2	11	3	1252.0	1256.0	1475.0
715958.0	84.0	11	3	1546.0	1121.0	1040.0
19591.0	76.0	11	2	1294.0	1153.0	-
242691.0	67.8	11	2	1144.0	1990.0	-
466118.0	79.6	11	2	1036.0	1483.0	-
689529.0	74.1	11	2	1213.0	1110.0	-
912261.0	73.1	11	2	1379.0	1528.0	-
215078.0	86.1	11	3	1102.0	1165.0	1424.0
439083.0	57.9	11	1	1539.0	-	-
660862.0	91.7	11	3	1297.0	1427.0	1212.0

**Type 5 Radar Waveform\_12**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
604766.0	78.7	19	2	1195.0	1402.0	-
128494.0	59.0	19	1	1900.0	-	-
281183.0	51.0	19	1	1962.0	-	-
432267.0	88.1	19	3	1093.0	1998.0	1219.0
585679.0	72.3	19	2	1321.0	1616.0	-
109369.0	75.7	19	2	1916.0	1787.0	-
262756.0	56.9	19	1	1044.0	-	-
414983.0	68.9	19	2	1100.0	1002.0	-
567038.0	79.3	19	2	1159.0	1623.0	-
90444.0	90.5	19	3	1879.0	1168.0	1812.0
243044.0	68.5	19	2	1476.0	1830.0	-
394867.0	99.3	19	3	1319.0	1757.0	1109.0
547928.0	68.0	19	2	1972.0	1183.0	-
71980.0	70.3	19	2	1029.0	1569.0	-
224435.0	77.6	19	2	1573.0	1286.0	-
375686.0	90.2	19	3	1835.0	1699.0	1382.0
529542.0	73.5	19	2	1207.0	1466.0	-
53183.0	70.4	19	2	1239.0	1439.0	-
205666.0	83.3	19	2	1548.0	1268.0	-



**Type 5 Radar Waveform\_13**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
620335.0	58.0	9	1	1892.0	-	-
882387.0	84.0	9	3	1335.0	1683.0	1422.0
59500.0	72.9	9	2	1322.0	1643.0	-
323804.0	62.3	9	1	1477.0	-	-
587154.0	67.1	9	2	1363.0	1728.0	-
851475.0	77.4	9	2	1391.0	1073.0	-
26985.0	75.7	9	2	1588.0	1954.0	-
290326.0	97.0	9	3	1846.0	1592.0	1524.0
554918.0	81.9	9	2	1342.0	1235.0	-
819690.0	58.0	9	1	1491.0	-	-
1080579.0	99.5	9	3	1318.0	1816.0	1704.0

**Type 5 Radar Waveform\_14**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
177798.0	65.9	15	1	1293.0	-	-
358464.0	79.4	15	2	1949.0	1259.0	-
539436.0	83.2	15	2	1999.0	1416.0	-
720150.0	88.5	15	3	1247.0	1255.0	1281.0
155148.0	70.9	15	2	1062.0	1594.0	-
336739.0	63.0	15	1	1909.0	-	-
518124.0	53.3	15	1	1981.0	-	-
699348.0	80.2	15	2	1014.0	1175.0	-
132963.0	66.3	15	1	1862.0	-	-
313646.0	74.5	15	2	1935.0	1744.0	-
496136.0	66.4	15	1	1441.0	-	-
676626.0	72.0	15	2	1267.0	1344.0	-
110424.0	80.5	15	2	1151.0	1988.0	-
291624.0	78.4	15	2	1176.0	1802.0	-
474037.0	55.4	15	1	1024.0	-	-
652406.0	90.9	15	3	1755.0	1395.0	1622.0

**Type 5 Radar Waveform\_15**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
157172.0	65.9	6	1	1101.0	-	-
480066.0	55.6	6	1	1694.0	-	-
801196.0	90.2	6	3	1333.0	1673.0	1730.0
1123764.0	89.5	6	3	1956.0	1022.0	1355.0
117363.0	50.6	6	1	1205.0	-	-
440185.0	52.6	6	1	1994.0	-	-
763126.0	52.8	6	1	1908.0	-	-
1084319.0	99.9	6	3	1265.0	1172.0	1579.0
77554.0	57.6	6	1	1418.0	-	-

**Type 5 Radar Waveform\_16**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
450572.0	55.7	5	1	1885.0	-	-
812097.0	96.7	5	3	1720.0	1666.0	1839.0
1174986.0	84.0	5	3	1647.0	1602.0	1520.0
42496.0	60.6	5	1	1194.0	-	-
404868.0	96.7	5	3	1914.0	1698.0	1773.0
768818.0	78.7	5	2	1511.0	1033.0	-
1131624.0	75.1	5	2	1099.0	1941.0	-
1495846.0	60.9	5	1	1876.0	-	-

**Type 5 Radar Waveform\_17**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
180096.0	79.8	14	2	1656.0	1089.0	-
361359.0	74.6	14	2	1496.0	1188.0	-
541749.0	89.2	14	3	1152.0	1629.0	1083.0
724722.0	66.1	14	1	1788.0	-	-
157555.0	79.6	14	2	1837.0	1940.0	-
337689.0	99.5	14	3	1820.0	1943.0	1883.0
520902.0	64.6	14	1	1792.0	-	-
699723.0	86.8	14	3	1436.0	1933.0	1238.0
135099.0	93.3	14	3	1743.0	1426.0	1507.0
317374.0	54.0	14	1	1112.0	-	-
498604.0	58.7	14	1	1710.0	-	-
677181.0	91.7	14	3	1606.0	1621.0	1681.0
113304.0	62.0	14	1	1566.0	-	-
293348.0	92.5	14	3	1696.0	1722.0	1890.0
474514.0	83.9	14	3	1555.0	1266.0	1615.0
657965.0	61.6	14	1	1446.0	-	-

**Type 5 Radar Waveform\_18**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
72499.0	86.6	20	3	1084.0	1045.0	1234.0
217821.0	59.7	20	1	1664.0	-	-
360712.0	91.3	20	3	1993.0	1828.0	1510.0
505863.0	91.7	20	3	1135.0	1375.0	1732.0
54702.0	68.6	20	2	1392.0	1674.0	-
198815.0	98.9	20	3	1630.0	1563.0	1856.0
345281.0	63.3	20	1	1284.0	-	-
489072.0	76.5	20	2	1222.0	1791.0	-
36871.0	83.3	20	2	1428.0	1619.0	-
181479.0	80.8	20	2	1668.0	1942.0	-
327189.0	65.1	20	1	1697.0	-	-
472408.0	66.3	20	1	1529.0	-	-
19018.0	69.4	20	2	1752.0	1897.0	-
163831.0	69.5	20	2	1587.0	1410.0	-
308564.0	69.7	20	2	1832.0	1278.0	-
452994.0	95.8	20	3	1377.0	1012.0	1162.0
1201.0	91.3	20	3	1115.0	1808.0	1244.0
146331.0	61.1	20	1	1627.0	-	-
291542.0	50.6	20	1	1448.0	-	-
436807.0	53.8	20	1	1314.0	-	-

**Type 5 Radar Waveform\_19**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
612899.0	66.3	18	1	1116.0	-	-
134974.0	74.8	18	2	1196.0	1642.0	-
286595.0	86.4	18	3	1741.0	1486.0	1509.0
440702.0	56.1	18	1	1767.0	-	-
592700.0	75.5	18	2	1518.0	1046.0	-
116390.0	52.6	18	1	1761.0	-	-
269216.0	57.3	18	1	1584.0	-	-
419984.0	98.6	18	3	1456.0	1693.0	1459.0
572173.0	94.2	18	3	1866.0	1434.0	1145.0
97611.0	58.1	18	1	1522.0	-	-
249242.0	95.7	18	3	1317.0	1303.0	1866.0
403239.0	63.3	18	1	1506.0	-	-
556477.0	62.8	18	1	1023.0	-	-
78674.0	72.3	18	2	1302.0	1136.0	-
230916.0	74.0	18	2	1782.0	1593.0	-
382775.0	87.0	18	3	1150.0	1305.0	1740.0
534689.0	87.5	18	3	1906.0	1447.0	1131.0
59724.0	83.4	18	3	1155.0	1474.0	1435.0
211660.0	92.3	18	3	1661.0	1076.0	1433.0

**Type 5 Radar Waveform\_20**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
462336.0	81.0	14	2	1534.0	1663.0	-
657099.0	61.2	14	1	1358.0	-	-
52112.0	62.7	14	1	1984.0	-	-
245258.0	82.8	14	2	1537.0	1737.0	-
437936.0	98.8	14	3	1231.0	1877.0	1171.0
630960.0	84.4	14	3	1119.0	1857.0	1258.0
28204.0	98.4	14	3	1054.0	1514.0	1312.0
221643.0	67.4	14	2	1596.0	1007.0	-
414825.0	73.8	14	2	1951.0	1060.0	-
607392.0	84.4	14	3	1567.0	1251.0	1147.0
4432.0	62.9	14	1	1865.0	-	-
198133.0	50.3	14	1	1348.0	-	-
391662.0	50.8	14	1	1652.0	-	-
583295.0	91.8	14	3	1141.0	1927.0	1326.0
778136.0	80.1	14	2	1043.0	1423.0	-

**Type 5 Radar Waveform\_21**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
136975.0	95.4	18	3	1157.0	1409.0	1292.0
290450.0	61.8	18	1	1182.0	-	-
441776.0	73.3	18	2	1553.0	1855.0	-
593561.0	85.2	18	3	1020.0	1091.0	1895.0
118650.0	66.2	18	1	1589.0	-	-
271522.0	66.0	18	1	1403.0	-	-
422071.0	91.6	18	3	1815.0	1068.0	1918.0
576796.0	64.7	18	1	1841.0	-	-
99597.0	82.3	18	2	1332.0	1723.0	-
252225.0	75.1	18	2	1374.0	1203.0	-
403129.0	85.2	18	3	1960.0	1635.0	1525.0
558296.0	51.7	18	1	1485.0	-	-
81070.0	53.5	18	1	1111.0	-	-
232722.0	97.1	18	3	1289.0	1339.0	1868.0
385001.0	95.5	18	3	1370.0	1568.0	1246.0
536323.0	62.7	18	2	1359.0	1471.0	-
62197.0	58.3	18	1	1497.0	-	-
215030.0	57.9	18	1	1442.0	-	-
366933.0	68.8	18	2	1218.0	1809.0	-

**Type 5 Radar Waveform\_22**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
705854.0	69.7	12	2	1508.0	1407.0	-
58718.0	92.6	12	3	1749.0	1201.0	1206.0
266429.0	53.5	12	1	1476.0	-	-
472934.0	92.0	12	3	1104.0	1059.0	1156.0
679730.0	87.6	12	3	1085.0	1551.0	1038.0
33295.0	71.8	12	2	1360.0	1282.0	-
240484.0	77.2	12	2	1405.0	1430.0	-
446948.0	85.2	12	3	1503.0	1460.0	1270.0
653987.0	83.6	12	3	1779.0	1058.0	1158.0
7781.0	64.2	12	1	1056.0	-	-
214820.0	81.2	12	2	1928.0	1472.0	-
423022.0	57.8	12	1	1087.0	-	-
627635.0	94.8	12	3	1577.0	1946.0	1646.0
836560.0	71.5	12	2	1499.0	1327.0	-

**Type 5 Radar Waveform\_23**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
132288.0	82.7	20	2	1713.0	1714.0	-
277371.0	77.0	20	2	1249.0	1326.0	-
422957.0	62.2	20	1	1597.0	-	-
568605.0	63.6	20	1	1053.0	-	-
114837.0	52.2	20	1	1493.0	-	-
259274.0	67.2	20	2	1969.0	1181.0	-
404428.0	78.3	20	2	1323.0	1237.0	-
547591.0	89.5	20	3	1208.0	1692.0	1547.0
96502.0	96.6	20	3	1011.0	1533.0	1756.0
241560.0	80.4	20	2	1228.0	1634.0	-
387183.0	57.6	20	1	1628.0	-	-
532474.0	63.6	20	1	1440.0	-	-
78943.0	82.6	20	2	1166.0	1338.0	-
223320.0	94.8	20	3	1137.0	1389.0	1406.0
368335.0	70.4	20	2	1851.0	1353.0	-
513267.0	78.3	20	2	1886.0	1096.0	-
61194.0	51.6	20	1	1526.0	-	-
206190.0	54.6	20	1	1967.0	-	-
349817.0	92.5	20	3	1811.0	1531.0	1034.0
495256.0	82.0	20	2	1721.0	1473.0	-

**Type 5 Radar Waveform\_24**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
78720.0	72.1	9	2	1920.0	1313.0	-
341921.0	87.6	9	3	1386.0	1824.0	1912.0
605711.0	91.8	9	3	1691.0	1306.0	1315.0
870103.0	69.8	9	2	1996.0	1243.0	-
46170.0	85.7	9	3	1398.0	1599.0	1582.0
310526.0	63.4	9	1	1468.0	-	-
572721.0	89.0	9	3	1893.0	1771.0	1649.0
838097.0	80.8	9	2	1052.0	1554.0	-
13754.0	57.9	9	1	1608.0	-	-
278061.0	50.5	9	1	1148.0	-	-
542039.0	51.1	9	1	1798.0	-	-

**Type 5 Radar Waveform\_25**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
490809.0	67.3	17	2	1667.0	1922.0	-
650589.0	90.4	17	3	1763.0	1775.0	1122.0
149548.0	80.2	17	2	1450.0	1396.0	-
310394.0	70.8	17	2	1437.0	1733.0	-
471267.0	70.1	17	2	1309.0	1926.0	-
632555.0	83.3	17	2	1279.0	1552.0	-
129614.0	69.1	17	2	1394.0	1978.0	-
291288.0	56.0	17	1	1536.0	-	-
450877.0	90.8	17	3	1275.0	1580.0	1217.0
611393.0	92.6	17	3	1863.0	1225.0	1184.0
109738.0	80.2	17	2	1945.0	1793.0	-
270039.0	96.0	17	3	1598.0	1913.0	1404.0
432011.0	73.2	17	2	1570.0	1075.0	-
590675.0	84.3	17	3	1655.0	2000.0	1658.0
90005.0	74.0	17	2	1747.0	1464.0	-
250591.0	89.2	17	3	1245.0	1174.0	1645.0
412052.0	82.4	17	2	1543.0	1299.0	-
574251.0	64.8	17	1	1451.0	-	-

**Type 5 Radar Waveform\_26**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
158558.0	55.3	5	1	1138.0	-	-
521968.0	62.5	5	1	1458.0	-	-
884119.0	76.6	5	2	1825.0	1821.0	-
1248798.0	65.4	5	1	1527.0	-	-
113778.0	62.8	5	1	1170.0	-	-
476322.0	99.5	5	3	1393.0	1781.0	1042.0
838629.0	95.2	5	3	1875.0	1777.0	1397.0
1201673.0	85.2	5	3	1917.0	1469.0	1077.0

**Type 5 Radar Waveform\_27**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
36597.0	92.4	14	3	1706.0	1686.0	1672.0
229923.0	78.0	14	2	1290.0	1939.0	-
423096.0	88.9	14	3	1242.0	1066.0	1051.0
616174.0	78.2	14	2	1595.0	1937.0	-
12853.0	95.6	14	3	1354.0	1748.0	1709.0
206199.0	81.5	14	2	1197.0	1726.0	-
398676.0	96.1	14	3	1230.0	1810.0	1559.0
592317.0	79.2	14	2	1620.0	1995.0	-
784258.0	90.4	14	3	1540.0	1891.0	1408.0
182417.0	73.3	14	2	1667.0	1128.0	-
376578.0	52.3	14	1	1067.0	-	-
568349.0	74.0	14	2	1975.0	1889.0	-
763594.0	50.2	14	1	1609.0	-	-
158270.0	95.0	14	3	1352.0	1466.0	1640.0
351915.0	82.6	14	2	1768.0	1103.0	-

**Type 5 Radar Waveform\_28**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
583251.0	98.6	13	3	1347.0	1185.0	1915.0
793221.0	51.6	13	1	1032.0	-	-
144249.0	89.5	13	3	1636.0	1015.0	1308.0
350788.0	91.9	13	3	1204.0	1829.0	1861.0
557835.0	91.6	13	3	1479.0	1452.0	1429.0
766072.0	68.6	13	2	1502.0	1285.0	-
118696.0	85.6	13	3	1200.0	1590.0	1637.0
326533.0	61.7	13	1	1736.0	-	-
533151.0	74.2	13	2	1867.0	1223.0	-
741778.0	56.5	13	1	1368.0	-	-
93519.0	65.9	13	1	1707.0	-	-
301044.0	52.6	13	1	1550.0	-	-
506782.0	88.0	13	3	1614.0	1575.0	1340.0
714829.0	74.6	13	2	1039.0	1983.0	-

**Type 5 Radar Waveform\_29**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
47574.0	51.9	20	1	1199.0	-	-
192462.0	77.6	20	2	1129.0	1126.0	-
336571.0	80.8	20	2	1934.0	1850.0	-
482284.0	75.7	20	2	1050.0	1356.0	-
29483.0	84.9	20	3	1624.0	1987.0	1675.0
173824.0	90.9	20	3	1938.0	1611.0	1378.0
318424.0	91.2	20	3	1880.0	1532.0	1000.0
463538.0	67.2	20	2	2000.0	1556.0	-
11785.0	62.5	20	1	1772.0	-	-
156221.0	97.0	20	3	1214.0	1929.0	1120.0
300271.0	98.8	20	3	1638.0	1729.0	1758.0
445197.0	100.0	20	3	1872.0	1291.0	1092.0
589741.0	94.0	20	3	1896.0	1108.0	1193.0
138316.0	94.0	20	3	1734.0	1169.0	1823.0
284088.0	50.6	20	1	1780.0	-	-
427618.0	86.8	20	3	1280.0	1610.0	1061.0
574771.0	58.4	20	1	1250.0	-	-
121174.0	64.5	20	1	1560.0	-	-
266347.0	60.3	20	1	1487.0	-	-
410421.0	79.9	20	2	1105.0	1959.0	-

## Radar Type 6 - Radar Statistical Performance

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

Type 6 Radar Waveform_0					
Frequency List (MHz)	0	1	2	3	4
0	5598	5389	5359	5349	5387
5	5318	5622	5608	5670	5329
10	5612	5519	5661	5577	5505
15	5429	5434	5320	5677	5287
20	5541	5579	5525	5580	5402
25	5465	5426	5512	5587	5703
30	5495	5341	5724	5335	5516
35	5542	5411	5547	5455	5527
40	5514	5523	5356	5336	5342
45	5520	5481	5331	5506	5262
50	5560	5303	5364	5589	5504
55	5672	5269	5617	5360	5368
60	5314	5559	5618	5576	5408
65	5688	5365	5709	5687	5400
70	5498	5473	5264	5494	5310
75	5292	5528	5428	5691	5262
80	5539	5671	5383	5499	5678
85	5632	5600	5533	5635	5404
90	5502	5299	5540	5291	5420
95	5391	5375	5695	5474	5530

**Type 6 Radar Waveform\_1**

Frequency List (MHz)	0	1	2	3	4
0	5376	5628	5295	5510	5607
5	5457	5547	5683	5358	5536
10	5543	5308	5702	5297	5526
15	5517	5561	5423	5625	5479
20	5549	5648	5466	5572	5375
25	5256	5715	5691	5640	5537
30	5705	5681	5550	5290	5265
35	5453	5638	5251	5680	5428
40	5362	5439	5449	5576	5436
45	5461	5414	5564	5315	5350
50	5403	5253	5412	5448	5385
55	5698	5332	5654	5717	5443
60	5724	5563	5499	5354	5511
65	5314	5270	5422	5670	5301
70	5437	5459	5267	5343	5286
75	5629	5639	5474	5672	5649
80	5452	5562	5675	5352	5503
85	5695	5596	5370	5721	5263
90	5712	5454	5500	5392	5275
95	5458	5719	5395	5446	5319

**Type 6 Radar Waveform\_2**

Frequency List (MHz)	0	1	2	3	4
0	5631	5392	5706	5671	5449
5	5499	5569	5283	5521	5268
10	5474	5572	5492	5547	5605
15	5688	5429	5670	5460	5339
20	5504	5661	5348	5619	5702
25	5443	5320	5674	5676	5594
30	5636	5668	5442	5560	5592
35	5254	5522	5455	5439	5387
40	5341	5433	5281	5441	5497
45	5525	5368	5712	5657	5655
50	5304	5542	5710	5295	5573
55	5652	5473	5414	5325	5300
60	5263	5684	5562	5579	5606
65	5367	5570	5262	5588	5608
70	5617	5653	5689	5662	5708
75	5711	5625	5672	5503	5692
80	5658	5691	5335	5297	5461
85	5402	5303	5391	5510	5609
90	5409	5330	5326	5520	5347
95	5593	5314	5261	5527	5418

**Type 6 Radar Waveform\_3**

Frequency List (MHz)	0	1	2	3	4
0	5314	5631	5642	5357	5689
5	5541	5494	5358	5684	5572
10	5308	5458	5309	5687	5568
15	5693	5340	5532	5715	5388
20	5468	5408	5445	5653	5321
25	5410	5651	5549	5521	5708
30	5718	5580	5595	5691	5380
35	5256	5345	5415	5608	5353
40	5515	5702	5325	5484	5430
45	5685	5421	5583	5502	5533
50	5356	5355	5253	5714	5286
55	5509	5712	5670	5659	5701
60	5579	5550	5626	5343	5535
65	5720	5464	5382	5678	5528
70	5370	5419	5713	5547	5480
75	5316	5663	5634	5466	5297
80	5489	5400	5310	5267	5406
85	5251	5281	5567	5425	5295
90	5621	5523	5385	5499	5450
95	5413	5545	5395	5482	5721



**Type 6 Radar Waveform\_4**

Frequency List (MHz)	0	1	2	3	4
0	5569	5395	5578	5518	5511
5	5583	5516	5433	5275	5304
10	5714	5722	5350	5310	5589
15	5684	5467	5635	5663	5580
20	5476	5574	5386	5267	5294
25	5298	5503	5277	5625	5285
30	5469	5455	5623	5368	5533
35	5686	5286	5451	5263	5724
40	5427	5614	5401	5641	5474
45	5389	5409	5532	5406	5342
50	5259	5561	5463	5489	5630
55	5355	5269	5495	5517	5549
60	5289	5261	5636	5281	5296
65	5563	5514	5470	5268	5689
70	5506	5449	5436	5331	5615
75	5718	5407	5270	5373	5559
80	5309	5473	5681	5600	5546
85	5302	5341	5479	5257	5315
90	5362	5652	5255	5540	5440
95	5507	5694	5381	5553	5611

**Type 6 Radar Waveform\_5**

Frequency List (MHz)	0	1	2	3	4
0	5349	5634	5514	5679	5256
5	5722	5441	5508	5438	5511
10	5548	5391	5505	5610	5297
15	5497	5263	5708	5387	5643
20	5424	5259	5267	5661	5452
25	5480	5254	5301	5358	5412
30	5363	5617	5398	5437	5624
35	5482	5536	5656	5290	5393
40	5676	5489	5446	5381	5271
45	5602	5527	5654	5285	5457
50	5431	5557	5662	5417	5308
55	5504	5484	5434	5440	5375
60	5710	5559	5585	5695	5506
65	5519	5366	5444	5597	5473
70	5592	5568	5465	5321	5556
75	5377	5596	5495	5420	5526
80	5631	5436	5566	5279	5309
85	5315	5266	5492	5299	5422
90	5418	5396	5364	5491	5360
95	5334	5260	5344	5546	5477

**Type 6 Radar Waveform\_6**

Frequency List (MHz)	0	1	2	3	4
0	5604	5398	5450	5268	5573
5	5289	5463	5583	5601	5340
10	5479	5300	5432	5700	5631
15	5385	5624	5366	5278	5489
20	5395	5334	5365	5348	5715
25	5452	5304	5683	5358	5335
30	5466	5344	5369	5481	5294
35	5596	5576	5375	5689	5667
40	5614	5254	5518	5264	5354
45	5660	5580	5541	5539	5409
50	5508	5520	5380	5352	5371
55	5332	5505	5475	5516	5599
60	5482	5656	5676	5285	5534
65	5256	5338	5314	5644	5441
70	5544	5424	5290	5577	5272
75	5530	5307	5320	5499	5563
80	5474	5687	5704	5412	5379
85	5265	5497	5587	5430	5319
90	5376	5574	5550	5572	5490
95	5717	5284	5629	5258	5556

**Type 6 Radar Waveform\_7**

Frequency List (MHz)	0	1	2	3	4
0	5287	5637	5386	5429	5318
5	5331	5388	5658	5289	5547
10	5410	5564	5473	5420	5652
15	5276	5372	5323	5303	5403
20	5306	5340	5688	5631	5411
25	5559	5369	5508	5708	5326
30	5696	5543	5416	5715	5646
35	5367	5581	5443	5656	5552
40	5397	5515	5682	5719	5437
45	5718	5536	5415	5585	5609
50	5678	5296	5466	5325	5425
55	5324	5446	5645	5427	5599
60	5699	5583	5483	5670	5548
65	5681	5447	5685	5589	5576
70	5668	5520	5383	5259	5566
75	5558	5640	5563	5484	5659
80	5560	5669	5590	5571	5604
85	5344	5261	5513	5317	5277
90	5430	5676	5485	5591	5605
95	5556	5387	5352	5353	5293

**Type 6 Radar Waveform\_8**

Frequency List (MHz)	0	1	2	3	4
0	5542	5401	5322	5590	5635
5	5373	5410	5258	5452	5279
10	5719	5450	5611	5615	5673
15	5464	5403	5475	5271	5495
20	5314	5569	5722	5429	5661
25	5606	5580	5517	5663	5647
30	5694	5283	5436	5695	5614
35	5282	5422	5442	5617	5379
40	5264	5490	5637	5512	5699
45	5520	5679	5569	5693	5291
50	5286	5610	5320	5404	5618
55	5654	5417	5299	5454	5372
60	5425	5645	5309	5432	5706
65	5380	5476	5250	5555	5579
70	5496	5342	5344	5709	5539
75	5653	5551	5557	5486	5510
80	5252	5687	5312	5515	5461
85	5497	5705	5660	5540	5578
90	5550	5448	5505	5284	5356
95	5524	5433	5485	5500	5541

**Type 6 Radar Waveform\_9**

Frequency List (MHz)	0	1	2	3	4
0	5322	5640	5258	5276	5380
5	5512	5335	5333	5518	5486
10	5650	5714	5652	5713	5694
15	5552	5530	5578	5316	5687
20	5260	5285	5421	5634	5494
25	5432	5720	5292	5437	5689
30	5583	5715	5651	5469	5434
35	5610	5295	5506	5693	5347
40	5331	5402	5509	5540	5679
45	5603	5262	5642	5483	5462
50	5661	5409	5702	5562	5367
55	5708	5330	5291	5428	5619
60	5414	5724	5348	5591	5510
65	5381	5267	5590	5368	5528
70	5451	5638	5366	5472	5301
75	5575	5464	5377	5617	5456
80	5288	5600	5310	5457	5681
85	5493	5352	5690	5416	5266
90	5534	5607	5539	5338	5343
95	5606	5722	5621	5281	5557

**Type 6 Radar Waveform\_10**

Frequency List (MHz)	0	1	2	3	4
0	5577	5404	5669	5437	5697
5	5554	5357	5408	5681	5315
10	5581	5503	5693	5433	5715
15	5640	5560	5361	5330	5329
20	5701	5510	5607	5285	5381
25	5448	5396	5471	5256	5472
30	5672	5294	5621	5254	5608
35	5420	5532	5527	5269	5545
40	5506	5372	5659	5686	5320
45	5695	5370	5421	5638	5712
50	5498	5525	5555	5662	5520
55	5634	5262	5557	5309	5359
60	5556	5649	5333	5427	5422
65	5709	5523	5624	5682	5690
70	5260	5447	5584	5423	5598
75	5708	5301	5470	5454	5401
80	5275	5511	5317	5307	5533
85	5297	5603	5264	5295	5605
90	5654	5439	5696	5568	5541
95	5274	5323	5397	5661	5684

**Type 6 Radar Waveform\_11**

Frequency List (MHz)	0	1	2	3	4
0	5357	5643	5605	5598	5442
5	5596	5282	5483	5369	5522
10	5415	5292	5259	5628	5261
15	5253	5687	5309	5406	5716
20	5495	5642	5502	5580	5648
25	5708	5651	5597	5505	5395
30	5458	5629	5509	5452	5699
35	5317	5402	5698	5334	5371
40	5610	5682	5310	5600	5301
45	5639	5294	5261	5273	5635
50	5297	5339	5288	5587	5348
55	5353	5268	5616	5710	5453
60	5589	5474	5304	5388	5475
65	5534	5376	5717	5632	5433
70	5512	5692	5307	5327	5694
75	5416	5607	5566	5579	5485
80	5411	5637	5568	5533	5451
85	5396	5608	5713	5703	5271
90	5555	5462	5551	5252	5350
95	5552	5418	5324	5291	5636

**Type 6 Radar Waveform\_12**

Frequency List (MHz)	0	1	2	3	4
0	5515	5504	5541	5284	5636
5	5304	5558	5532	5254	5346
10	5556	5300	5348	5282	5719
15	5339	5315	5354	5313	5724
20	5564	5680	5591	5553	5536
25	5560	5379	5701	5539	5437
30	5347	5586	5547	5272	5266
35	5408	5673	5376	5345	5685
40	5693	5620	5550	5597	5606
45	5619	5377	5326	5522	5648
50	5418	5298	5549	5297	5456
55	5570	5425	5679	5718	5639
60	5317	5398	5526	5357	5325
65	5656	5464	5289	5596	5310
70	5291	5303	5653	5288	5252
75	5612	5640	5521	5635	5448
80	5316	5299	5450	5420	5353
85	5322	5706	5551	5627	5557
90	5343	5367	5361	5395	5405
95	5573	5397	5427	5256	5403

**Type 6 Radar Waveform\_13**

Frequency List (MHz)	0	1	2	3	4
0	5295	5268	5477	5348	5504
5	5302	5704	5633	5598	5558
10	5655	5442	5341	5543	5303
15	5332	5466	5418	5399	5505
20	5257	5255	5621	5583	5526
25	5327	5509	5485	5330	5573
30	5479	5711	5484	5321	5470
35	5405	5499	5566	5529	5259
40	5398	5315	5594	5537	5502
45	5460	5397	5282	5312	5427
50	5390	5387	5372	5619	5547
55	5524	5615	5469	5553	5329
60	5291	5624	5699	5472	5274
65	5692	5674	5595	5593	5458
70	5679	5410	5279	5612	5280
75	5541	5417	5534	5324	5659
80	5445	5608	5677	5292	5261
85	5515	5318	5276	5371	5317
90	5563	5627	5412	5654	5530
95	5309	5351	5637	5444	5620

**Type 6 Radar Waveform\_14**

Frequency List (MHz)	0	1	2	3	4
0	5550	5507	5413	5509	5346
5	5344	5251	5708	5286	5290
10	5586	5706	5382	5641	5324
15	5420	5593	5521	5444	5697
20	5643	5562	5672	5499	5690
25	5361	5688	5434	5607	5500
30	5582	5473	5544	5590	5362
35	5304	5648	5460	5481	5496
40	5458	5591	5466	5482	5543
45	5358	5335	5674	5303	5295
50	5441	5476	5670	5563	5260
55	5478	5288	5524	5501	5494
60	5711	5456	5525	5515	5381
65	5696	5253	5506	5487	5396
70	5530	5665	5464	5255	5571
75	5604	5492	5326	5522	5669
80	5644	5455	5488	5345	5328
85	5677	5321	5707	5661	5705
90	5252	5569	5666	5314	5429
95	5638	5721	5258	5633	5349

**Type 6 Radar Waveform\_15**

Frequency List (MHz)	0	1	2	3	4
0	5330	5271	5349	5670	5566
5	5386	5651	5308	5449	5497
10	5517	5495	5423	5361	5345
15	5508	5623	5624	5392	5511
20	5490	5600	5664	5569	5481
25	5310	5416	5635	5641	5660
30	5586	5457	5322	5722	5488
35	5683	5303	5633	5659	5299
40	5564	5434	5698	5588	5298
45	5462	5626	5388	5464	5654
50	5471	5492	5565	5493	5410
55	5448	5335	5582	5630	5656
60	5288	5461	5647	5667	5716
65	5282	5577	5602	5513	5313
70	5706	5530	5573	5612	5469
75	5503	5446	5279	5711	5652
80	5407	5342	5523	5580	5548
85	5284	5327	5281	5500	5292
90	5672	5348	5294	5591	5570
95	5622	5615	5261	5444	5627

**Type 6 Radar Waveform\_16**

Frequency List (MHz)	0	1	2	3	4
0	5488	5510	5285	5356	5408
5	5525	5673	5383	5612	5326
10	5351	5284	5561	5556	5366
15	5499	5275	5252	5437	5703
20	5659	5559	5541	5278	5542
25	5369	5637	5619	5264	5675
30	5702	5475	5414	5537	5399
35	5308	5250	5394	5429	5610
40	5573	5613	5647	5372	5463
45	5682	5442	5709	5474	5441
50	5530	5543	5276	5694	5354
55	5636	5289	5401	5466	5662
60	5349	5601	5595	5274	5407
65	5596	5548	5552	5380	5296
70	5516	5540	5585	5489	5635
75	5515	5484	5698	5292	5492
80	5719	5470	5339	5718	5483
85	5390	5344	5519	5494	5710
90	5273	5587	5337	5678	5651
95	5700	5560	5625	5614	5594

**Type 6 Radar Waveform\_17**

Frequency List (MHz)	0	1	2	3	4
0	5268	5274	5696	5517	5628
5	5567	5598	5458	5678	5533
10	5282	5548	5602	5276	5387
15	5587	5402	5258	5482	5420
20	5570	5250	5270	5515	5635
25	5489	5347	5368	5709	5269
30	5461	5371	5277	5648	5506
35	5389	5485	5322	5365	5487
40	5549	5352	5688	5703	5679
45	5534	5422	5317	5435	5494
50	5616	5309	5348	5594	5365
55	5676	5349	5718	5328	5340
60	5316	5514	5643	5524	5672
65	5450	5606	5545	5642	5283
70	5444	5658	5720	5519	5561
75	5448	5414	5280	5465	5475
80	5273	5408	5336	5438	5483
85	5329	5307	5711	5459	5286
90	5521	5310	5502	5684	5319
95	5712	5577	5680	5687	5512

**Type 6 Radar Waveform\_18**

Frequency List (MHz)	0	1	2	3	4
0	5523	5513	5632	5678	5470
5	5609	5620	5533	5366	5265
10	5688	5434	5643	5471	5408
15	5675	5529	5361	5527	5612
20	5578	5319	5520	5359	5488
25	5438	5453	5472	5268	5350
30	5328	5395	5325	5326	5528
35	5576	5593	5538	5498	5388
40	5435	5626	5371	5676	5483
45	5402	5400	5493	5547	5503
50	5660	5524	5645	5454	5340
55	5537	5672	5518	5417	5311
60	5445	5679	5588	5356	5396
65	5332	5494	5590	5714	5461
70	5706	5619	5713	5407	5383
75	5446	5630	5512	5572	5693
80	5333	5255	5386	5646	5367
85	5331	5327	5715	5294	5605
90	5667	5312	5256	5318	5346
95	5594	5260	5671	5410	5455

**Type 6 Radar Waveform\_19**

Frequency List (MHz)	0	1	2	3	4
0	5303	5277	5568	5364	5690
5	5651	5545	5608	5529	5569
10	5522	5698	5684	5429	5288
15	5656	5464	5475	5329	5586
20	5485	5461	5351	5411	5290
25	5673	5680	5450	5336	5285
30	5610	5574	5621	5570	5667
35	5389	5691	5412	5702	5518
40	5564	5611	5392	5483	5551
45	5503	5293	5536	5700	5696
50	5543	5638	5467	5250	5626
55	5708	5711	5282	5369	5533
60	5663	5324	5342	5630	5443
65	5714	5325	5606	5264	5609
70	5692	5622	5562	5513	5269
75	5255	5520	5372	5524	5407
80	5525	5310	5261	5281	5289
85	5585	5330	5523	5292	5291
90	5542	5328	5357	5318	5675
95	5455	5693	5308	5337	5576

**Type 6 Radar Waveform\_20**

Frequency List (MHz)	0	1	2	3	4
0	5558	5516	5504	5525	5532
5	5315	5567	5683	5692	5301
10	5453	5487	5250	5289	5450
15	5279	5686	5520	5521	5497
20	5651	5402	5440	5434	5677
25	5714	5384	5302	5492	5700
30	5717	5350	5251	5344	5709
35	5380	5282	5466	5326	5541
40	5698	5502	5376	5670	5699
45	5265	5566	5609	5556	5655
50	5412	5401	5272	5632	5364
55	5411	5341	5580	5423	5433
60	5253	5703	5534	5478	5495
65	5722	5288	5356	5392	5653
70	5445	5303	5300	5314	5489
75	5640	5515	5505	5659	5635
80	5328	5705	5645	5427	5390
85	5618	5720	5693	5623	5425
90	5324	5702	5460	5467	5628
95	5273	5261	5681	5316	5679

**Type 6 Radar Waveform\_21**

Frequency List (MHz)	0	1	2	3	4
0	5716	5280	5440	5589	5277
5	5357	5492	5283	5508	5384
10	5276	5291	5484	5471	5367
15	5338	5670	5565	5713	5505
20	5720	5432	5407	5566	5587
25	5406	5273	5631	5674	5500
30	5639	5373	5553	5619	5337
35	5380	5306	5519	5667	5628
40	5649	5570	5609	5445	5666
45	5577	5323	5343	5662	5258
50	5529	5534	5516	5252	5602
55	5699	5520	5424	5548	5331
60	5654	5341	5689	5671	5723
65	5375	5286	5250	5638	5465
70	5571	5663	5561	5486	5436
75	5648	5347	5504	5702	5365
80	5269	5353	5335	5600	5296
85	5466	5346	5590	5330	5261
90	5342	5576	5267	5328	5579
95	5295	5307	5345	5411	5597

**Type 6 Radar Waveform\_22**

Frequency List (MHz)	0	1	2	3	4
0	5496	5519	5376	5275	5594
5	5399	5514	5358	5446	5337
10	5693	5540	5332	5679	5492
15	5455	5465	5676	5610	5430
20	5513	5411	5381	5521	5380
25	5356	5418	5315	5510	5307
30	5673	5575	5631	5683	5652
35	5362	5512	5562	5349	5297
40	5251	5316	5389	5378	5284
45	5286	5460	5700	5257	5628
50	5662	5542	5278	5374	5432
55	5485	5677	5717	5488	5706
60	5546	5573	5256	5277	5290
65	5250	5674	5563	5526	5544
70	5272	5350	5487	5344	5621
75	5308	5704	5467	5688	5283
80	5656	5567	5699	5560	5570
85	5527	5468	5714	5641	5280
90	5336	5602	5588	5383	5326
95	5574	5410	5482	5440	5623

**Type 6 Radar Waveform\_23**

Frequency List (MHz)	0	1	2	3	4
0	5276	5283	5312	5436	5339
5	5441	5439	5433	5609	5544
10	5624	5426	5373	5399	5513
15	5543	5592	5304	5558	5719
20	5424	5480	5322	5353	5367
25	5421	5614	5341	5715	5464
30	5588	5423	5657	5554	5653
35	5620	5547	5640	5630	5472
40	5316	5524	5389	5680	5340
45	5686	5597	5418	5454	5425
50	5521	5308	5430	5442	5365
55	5518	5410	5563	5297	5698
60	5581	5714	5664	5409	5358
65	5329	5616	5258	5336	5320
70	5580	5412	5428	5275	5448
75	5368	5393	5481	5345	5696
80	5377	5570	5525	5376	5622
85	5301	5487	5364	5445	5707
90	5484	5697	5438	5310	5631
95	5535	5360	5587	5259	5662

**Type 6 Radar Waveform\_24**

Frequency List (MHz)	0	1	2	3	4
0	5531	5522	5723	5597	5656
5	5580	5461	5508	5297	5276
10	5458	5690	5511	5497	5534
15	5631	5719	5407	5603	5436
20	5432	5646	5263	5602	5326
25	5510	5694	5624	5340	5375
30	5379	5353	5545	5638	5578
35	5380	5693	5269	5513	5700
40	5651	5469	5652	5632	5289
45	5280	5318	5660	5423	5647
50	5293	5484	5294	5630	5476
55	5610	5509	5468	5618	5396
60	5611	5562	5515	5452	5395
65	5598	5266	5404	5663	5716
70	5250	5607	5688	5341	5453
75	5296	5539	5381	5548	5418
80	5429	5620	5406	5262	5412
85	5572	5473	5367	5339	5301
90	5255	5260	5659	5445	5366
95	5331	5493	5370	5616	5403

**Type 6 Radar Waveform\_25**

Frequency List (MHz)	0	1	2	3	4
0	5689	5286	5659	5283	5401
5	5622	5483	5583	5460	5389
10	5479	5552	5692	5555	5274
15	5510	5648	5628	5440	5715
20	5301	5594	5299	5398	5643
25	5352	5444	5409	5421	5339
30	5502	5378	5675	5357	5457
35	5309	5565	5308	5260	5570
40	5432	5277	5625	5543	5506
45	5705	5724	5548	5331	5527
50	5321	5332	5315	5350	5326
55	5381	5397	5702	5521	5687
60	5605	5612	5639	5451	5520
65	5313	5382	5327	5456	5412
70	5272	5498	5571	5561	5410
75	5516	5518	5576	5593	5292
80	5376	5306	5399	5434	5644
85	5508	5300	5678	5626	5343
90	5375	5268	5492	5719	5698
95	5577	5323	5535	5650	5616

**Type 6 Radar Waveform\_26**

Frequency List (MHz)	0	1	2	3	4
0	5469	5525	5595	5444	5718
5	5664	5408	5658	5526	5312
10	5320	5268	5593	5412	5576
15	5710	5401	5613	5596	5345
20	5351	5406	5717	5683	5272
25	5495	5555	5548	5443	5463
30	5703	5459	5496	5504	5399
35	5580	5628	5479	5719	5343
40	5508	5672	5274	5554	5523
45	5589	5288	5302	5636	5424
50	5507	5578	5410	5630	5259
55	5422	5304	5516	5675	5360
60	5430	5574	5342	5631	5347
65	5633	5428	5561	5283	5315
70	5591	5454	5313	5261	5723
75	5457	5697	5691	5607	5391
80	5649	5626	5299	5265	5441
85	5590	5487	5376	5623	5362
90	5609	5260	5281	5677	5465
95	5712	5452	5449	5603	5359

**Type 6 Radar Waveform\_27**

Frequency List (MHz)	0	1	2	3	4
0	5724	5386	5531	5605	5463
5	5706	5430	5258	5689	5519
10	5629	5532	5634	5607	5597
15	5323	5528	5619	5641	5537
20	5359	5475	5658	5675	5720
25	5552	5347	5283	5652	5477
30	5505	5592	5416	5711	5278
35	5693	5538	5639	5473	5306
40	5490	5558	5426	5446	5437
45	5368	5503	5672	5355	5300
50	5683	5499	5453	5581	5610
55	5636	5397	5331	5462	5264
60	5287	5648	5579	5510	5493
65	5682	5394	5623	5299	5559
70	5585	5699	5666	5336	5275
75	5372	5555	5429	5504	5587
80	5304	5279	5582	5422	5343
85	5432	5400	5630	5560	5649
90	5293	5561	5466	5539	5353
95	5450	5567	5290	5408	5403



**Type 6 Radar Waveform\_28**

Frequency List (MHz)	0	1	2	3	4
0	5504	5625	5467	5669	5305
5	5370	5355	5333	5377	5251
10	5560	5418	5675	5327	5618
15	5411	5655	5722	5686	5254
20	5367	5641	5696	5289	5693
25	5440	5296	5389	5378	5511
30	5644	5578	5373	5451	5430
35	5513	5677	5255	5269	5459
40	5404	5397	5606	5384	5365
45	5315	5483	5280	5307	5408
50	5313	5554	5680	5588	5654
55	5525	5323	5590	5324	5691
60	5302	5591	5429	5329	5295
65	5571	5622	5452	5650	5325
70	5477	5672	5695	5382	5562
75	5434	5375	5538	5456	5321
80	5450	5581	5274	5336	5496
85	5664	5584	5499	5657	5385
90	5438	5442	5265	5598	5320
95	5566	5683	5573	5713	5424

**Type 6 Radar Waveform\_29**

Frequency List (MHz)	0	1	2	3	4
0	5284	5389	5403	5355	5525
5	5412	5377	5408	5540	5555
10	5491	5682	5716	5425	5639
15	5402	5307	5350	5256	5446
20	5278	5710	5637	5281	5666
25	5706	5623	5592	5482	5545
30	5686	5467	5330	5679	5711
35	5341	5346	5612	5318	5689
40	5322	5345	5362	5719	5463
45	5363	5365	5461	5578	5430
50	5560	5299	5477	5372	5511
55	5544	5514	5510	5651	5720
60	5594	5274	5602	5397	5568
65	5653	5535	5369	5475	5366
70	5662	5661	5554	5334	5507
75	5576	5464	5431	5358	5287
80	5660	5252	5581	5694	5657
85	5721	5445	5630	5310	5453
90	5418	5485	5572	5620	5532
95	5500	5293	5432	5656	5436

Product	Kinetic VoIP Modem	Temperature	27°C
Test Engineer	Jake Lan	Relative Humidity	65%
Test Site	WZ-SR4	Test Date	2021/05/11-05/13
Test Item	Radar Statistical Performance Check (802.11ax-HE80 mode – 5530MHz)		

## Radar Type 1-4 - Radar Statistical Performance

Trial	Frequency (MHz)	1 detect ,0 no detect			
		Radar Type 1	Radar Type 2	Radar Type 3	Radar Type 4
0	5491	1	1	1	1
1	5494	1	1	1	1
2	5497	1	1	0	1
3	5499	1	1	1	1
4	5502	1	0	1	1
5	5505	1	1	1	1
6	5508	1	1	1	1
7	5510	1	1	1	1
8	5513	1	1	1	1
9	5516	1	1	1	1
10	5519	1	1	1	1
11	5522	1	1	1	1
12	5524	1	1	1	0
13	5528	1	1	1	1
14	5530	1	1	1	1
15	5533	1	1	1	1
16	5536	1	1	1	0
17	5540	1	1	0	0
18	5543	1	1	0	0
19	5546	1	1	1	1
20	5548	1	1	1	1
21	5551	1	1	1	0
22	5553	1	1	0	1
23	5555	1	0	1	1
24	5558	1	1	1	0
25	5560	1	1	1	1
26	5562	1	0	0	1

Trial	Frequency	1 detect ,0 no detect	Trial	Frequency	1 detect ,0 no detect
27	5564	1	1	1	1
28	5567	1	1	1	1
29	5569	1	1	1	1
Probability:		100.0%	90.0%	83.3%	80.0%
Aggregate (Radar Types 1-4):		88.3% (>80%)			

## Radar Type 1 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 1	1.0	578.0	92	53176.0
Download	1	Type 1	1.0	798.0	67	53466.0
Download	2	Type 1	1.0	658.0	81	53298.0
Download	3	Type 1	1.0	518.0	102	52836.0
Download	4	Type 1	1.0	3066.0	18	55188.0
Download	5	Type 1	1.0	938.0	57	53466.0
Download	6	Type 1	1.0	718.0	74	53132.0
Download	7	Type 1	1.0	738.0	72	53136.0
Download	8	Type 1	1.0	558.0	95	53010.0
Download	9	Type 1	1.0	618.0	86	53148.0
Download	10	Type 1	1.0	898.0	59	52982.0
Download	11	Type 1	1.0	758.0	70	53060.0
Download	12	Type 1	1.0	818.0	65	53170.0
Download	13	Type 1	1.0	678.0	78	52884.0
Download	14	Type 1	1.0	878.0	61	53558.0
Download	15	Type 1	1.0	1089.0	49	53361.0
Download	16	Type 1	1.0	1280.0	42	53760.0
Download	17	Type 1	1.0	1617.0	33	53361.0
Download	18	Type 1	1.0	2983.0	18	53694.0
Download	19	Type 1	1.0	1567.0	34	53278.0
Download	20	Type 1	1.0	2160.0	25	54000.0
Download	21	Type 1	1.0	2799.0	19	53181.0
Download	22	Type 1	1.0	2114.0	25	52850.0
Download	23	Type 1	1.0	1858.0	29	53882.0
Download	24	Type 1	1.0	1874.0	29	54346.0
Download	25	Type 1	1.0	2444.0	22	53768.0
Download	26	Type 1	1.0	3043.0	18	54774.0
Download	27	Type 1	1.0	2070.0	26	53820.0
Download	28	Type 1	1.0	997.0	53	52841.0
Download	29	Type 1	1.0	2602.0	21	54642.0

## Radar Type 2 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 2	1.8	168.0	24	4032.0
Download	1	Type 2	4.5	163.0	29	4727.0
Download	2	Type 2	1.7	208.0	24	4992.0
Download	3	Type 2	5.0	229.0	29	6641.0
Download	4	Type 2	4.6	227.0	29	6583.0
Download	5	Type 2	4.4	180.0	28	5040.0
Download	6	Type 2	4.7	205.0	29	5945.0
Download	7	Type 2	3.7	183.0	27	4941.0
Download	8	Type 2	3.3	196.0	26	5096.0
Download	9	Type 2	2.6	156.0	25	3900.0
Download	10	Type 2	1.2	178.0	23	4094.0
Download	11	Type 2	1.7	153.0	24	3672.0
Download	12	Type 2	4.3	159.0	28	4452.0
Download	13	Type 2	4.1	175.0	28	4900.0
Download	14	Type 2	4.0	214.0	28	5992.0
Download	15	Type 2	2.3	218.0	25	5450.0
Download	16	Type 2	3.4	173.0	27	4671.0
Download	17	Type 2	2.0	210.0	24	5040.0
Download	18	Type 2	4.1	195.0	28	5460.0
Download	19	Type 2	1.8	203.0	24	4872.0
Download	20	Type 2	3.4	158.0	27	4266.0
Download	21	Type 2	3.3	152.0	26	3952.0
Download	22	Type 2	3.9	199.0	27	5373.0
Download	23	Type 2	2.0	172.0	24	4128.0
Download	24	Type 2	2.7	177.0	25	4425.0
Download	25	Type 2	2.1	157.0	24	3768.0
Download	26	Type 2	1.3	164.0	23	3772.0
Download	27	Type 2	2.9	192.0	26	4992.0
Download	28	Type 2	4.9	169.0	29	4901.0
Download	29	Type 2	2.1	166.0	25	4150.0

## Radar Type 3 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 3	6.8	213.0	16	3408.0
Download	1	Type 3	9.5	378.0	18	6804.0
Download	2	Type 3	6.7	324.0	16	5184.0
Download	3	Type 3	10.0	358.0	18	6444.0
Download	4	Type 3	9.6	258.0	18	4644.0
Download	5	Type 3	9.4	204.0	18	3672.0
Download	6	Type 3	9.7	223.0	18	4014.0
Download	7	Type 3	8.7	486.0	18	8748.0
Download	8	Type 3	8.3	356.0	17	6052.0
Download	9	Type 3	7.6	214.0	17	3638.0
Download	10	Type 3	6.2	375.0	16	6000.0
Download	11	Type 3	6.7	240.0	16	3840.0
Download	12	Type 3	9.3	434.0	18	7812.0
Download	13	Type 3	9.1	381.0	18	6858.0
Download	14	Type 3	9.0	353.0	18	6354.0
Download	15	Type 3	7.3	370.0	16	5920.0
Download	16	Type 3	8.4	438.0	17	7446.0
Download	17	Type 3	7.0	328.0	16	5248.0
Download	18	Type 3	9.1	338.0	18	6084.0
Download	19	Type 3	6.8	336.0	16	5376.0
Download	20	Type 3	8.4	285.0	17	4845.0
Download	21	Type 3	8.3	236.0	17	4012.0
Download	22	Type 3	8.9	435.0	18	7830.0
Download	23	Type 3	7.0	366.0	16	5856.0
Download	24	Type 3	7.7	474.0	17	8058.0
Download	25	Type 3	7.1	209.0	16	3344.0
Download	26	Type 3	6.3	491.0	16	7856.0
Download	27	Type 3	7.9	256.0	17	4352.0
Download	28	Type 3	9.9	456.0	18	8208.0
Download	29	Type 3	7.1	472.0	16	7552.0

## Radar Type 4 - Radar Waveform

	<b>Trial Id</b>	<b>Radar Type</b>	<b>Pulse Width (us)</b>	<b>PRI (us)</b>	<b>Number of Pulses</b>	<b>Waveform Length (us)</b>
Download	0	Type 4	12.8	213.0	13	2769.0
Download	1	Type 4	18.9	378.0	16	6048.0
Download	2	Type 4	12.6	324.0	12	3888.0
Download	3	Type 4	20.0	358.0	16	5728.0
Download	4	Type 4	19.1	258.0	16	4128.0
Download	5	Type 4	18.6	204.0	16	3264.0
Download	6	Type 4	19.3	223.0	16	3568.0
Download	7	Type 4	17.1	486.0	15	7290.0
Download	8	Type 4	16.1	356.0	14	4984.0
Download	9	Type 4	14.7	214.0	14	2996.0
Download	10	Type 4	11.5	375.0	12	4500.0
Download	11	Type 4	12.6	240.0	12	2880.0
Download	12	Type 4	18.5	434.0	16	6944.0
Download	13	Type 4	18.0	381.0	15	5715.0
Download	14	Type 4	17.7	353.0	15	5295.0
Download	15	Type 4	14.0	370.0	13	4810.0
Download	16	Type 4	16.5	438.0	15	6570.0
Download	17	Type 4	13.2	328.0	13	4264.0
Download	18	Type 4	17.9	338.0	15	5070.0
Download	19	Type 4	12.9	336.0	13	4368.0
Download	20	Type 4	16.3	285.0	14	3990.0
Download	21	Type 4	16.1	236.0	14	3304.0
Download	22	Type 4	17.4	435.0	15	6525.0
Download	23	Type 4	13.4	366.0	13	4758.0
Download	24	Type 4	14.8	474.0	14	6636.0
Download	25	Type 4	13.5	209.0	13	2717.0
Download	26	Type 4	11.8	491.0	12	5892.0
Download	27	Type 4	15.4	256.0	14	3584.0
Download	28	Type 4	19.7	456.0	16	7296.0
Download	29	Type 4	13.6	472.0	13	6136.0

## Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
0	5530	1	15	5495.8	1
1	5530	1	16	5497	1
2	5530	1	17	5495.4	1
3	5530	1	18	5497.8	1
4	5530	1	19	5495	1
5	5530	1	20	5563	1
6	5530	1	21	5563	1
7	5530	1	22	5562.2	1
8	5530	1	23	5564.6	1
9	5530	1	24	5563.8	1
10	5494.2	1	25	5564.6	1
11	5495	1	26	5565.4	1
12	5498.2	1	27	5563.4	1
13	5498.2	1	28	5561	1
14	5497.8	1	29	5564.6	1
Detection Percentage (%)					100%

## Type 5 Radar Waveform\_0

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
538854.0	60.3	8	1	1435.0	-	-
827522.0	93.8	8	3	1664.0	1394.0	1298.0
1119971.0	59.0	8	1	1716.0	-	-
211902.0	99.7	8	3	1384.0	1349.0	1276.0
501434.0	94.8	8	3	1778.0	1792.0	1709.0
791309.0	92.0	8	3	1864.0	1900.0	1337.0
1081670.0	95.7	8	3	1019.0	1910.0	1553.0
176215.0	83.6	8	3	1422.0	1190.0	1110.0
466315.0	78.4	8	2	1870.0	1942.0	-
756538.0	70.7	8	2	1839.0	1800.0	-

**Type 5 Radar Waveform\_1**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
551173.0	53.2	18	1	1593.0	-	-
74045.0	59.1	18	1	1028.0	-	-
226063.0	91.3	18	3	1047.0	1441.0	1068.0
377972.0	89.0	18	3	1292.0	1482.0	1456.0
529614.0	87.2	18	3	1365.0	1607.0	1862.0
55149.0	66.5	18	1	1693.0	-	-
207510.0	80.4	18	2	1499.0	1425.0	-
360534.0	62.5	18	1	1954.0	-	-
510609.0	88.3	18	3	1908.0	1608.0	1663.0
36315.0	60.6	18	1	1980.0	-	-
188633.0	79.3	18	2	1667.0	1577.0	-
341575.0	78.4	18	2	1060.0	1170.0	-
492391.0	85.7	18	3	1929.0	1296.0	1323.0
17525.0	63.3	18	1	1315.0	-	-
169678.0	71.1	18	2	1963.0	1961.0	-
323020.0	63.9	18	1	1748.0	-	-
475715.0	54.5	18	1	1827.0	-	-
626724.0	74.2	18	2	1849.0	1707.0	-
150797.0	98.0	18	3	1688.0	1476.0	1302.0

**Type 5 Radar Waveform\_2**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
579067.0	64.3	7	1	1088.0	-	-
869389.0	54.4	7	1	1710.0	-	-
1157176.0	87.8	7	3	1500.0	1480.0	1661.0
252018.0	68.2	7	2	1535.0	1732.0	-
543104.0	59.9	7	1	1412.0	-	-
831459.0	84.9	7	3	1470.0	1307.0	1999.0
1121631.0	92.2	7	3	1491.0	1457.0	1515.0
216289.0	78.4	7	2	1279.0	1861.0	-
506321.0	83.7	7	3	1133.0	1016.0	1567.0
798199.0	53.6	7	1	1101.0	-	-

**Type 5 Radar Waveform\_3**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
540972.0	93.8	20	3	1879.0	1514.0	1025.0
90319.0	63.2	20	1	1222.0	-	-
234811.0	82.0	20	2	1420.0	1659.0	-
380186.0	75.3	20	2	1035.0	1097.0	-
525484.0	50.2	20	1	1794.0	-	-
72338.0	55.6	20	1	1992.0	-	-
217561.0	57.8	20	1	1478.0	-	-
361416.0	73.7	20	2	1859.0	1773.0	-
507477.0	60.9	20	1	1955.0	-	-
54366.0	67.1	20	2	1733.0	1440.0	-
199783.0	54.3	20	1	1169.0	-	-
344100.0	77.0	20	2	1434.0	1330.0	-
488982.0	69.8	20	2	1011.0	1712.0	-
36461.0	97.5	20	3	1242.0	1326.0	1826.0
180829.0	98.8	20	3	1506.0	1699.0	1469.0
326178.0	74.0	20	2	1219.0	1691.0	-
470919.0	82.0	20	2	1374.0	1628.0	-
18748.0	58.1	20	1	1829.0	-	-
163015.0	95.7	20	3	1938.0	1531.0	1313.0
308271.0	78.5	20	2	1915.0	1129.0	-



**Type 5 Radar Waveform\_4**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
476862.0	80.8	19	2	1873.0	1377.0	-
922.0	87.5	19	3	1373.0	1260.0	1013.0
153289.0	71.4	19	2	1600.0	1744.0	-
305018.0	85.6	19	3	1579.0	1128.0	1948.0
459658.0	64.1	19	1	1100.0	-	-
612292.0	66.2	19	1	1386.0	-	-
134997.0	65.5	19	1	1119.0	-	-
285909.0	90.9	19	3	1804.0	1785.0	1898.0
439105.0	81.4	19	2	1596.0	1962.0	-
593221.0	54.1	19	1	1645.0	-	-
115483.0	95.0	19	3	1818.0	1636.0	1356.0
267447.0	88.2	19	3	1871.0	1103.0	1946.0
420316.0	96.8	19	3	1270.0	1202.0	1127.0
574526.0	58.8	19	1	1509.0	-	-
96828.0	94.6	19	3	1558.0	1459.0	1339.0
248946.0	97.4	19	3	1982.0	1319.0	1064.0
401133.0	97.4	19	3	1159.0	1957.0	1143.0
556072.0	53.0	19	1	1091.0	-	-
78028.0	85.5	19	3	1770.0	1844.0	1241.0

**Type 5 Radar Waveform\_5**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
244008.0	57.7	18	1	1857.0	-	-
405427.0	63.3	18	1	1559.0	-	-
564009.0	90.3	18	3	1153.0	1635.0	1972.0
62615.0	93.7	18	3	1673.0	1481.0	1814.0
224304.0	57.0	18	1	1391.0	-	-
383920.0	93.7	18	3	1912.0	1419.0	1051.0
544605.0	87.3	18	3	1309.0	1179.0	1821.0
42869.0	84.7	18	3	1830.0	1314.0	1485.0
203519.0	90.3	18	3	1465.0	1056.0	1832.0
364968.0	69.5	18	2	1532.0	1336.0	-
524365.0	85.9	18	3	1258.0	1755.0	1868.0
23187.0	52.8	18	1	1883.0	-	-
183959.0	84.1	18	3	1248.0	1172.0	1117.0
344948.0	82.7	18	2	1822.0	1410.0	-
506914.0	55.1	18	1	1838.0	-	-
3323.0	72.9	18	2	1389.0	1231.0	-
164758.0	58.3	18	1	1075.0	-	-
324088.0	91.8	18	3	1602.0	1823.0	1930.0

**Type 5 Radar Waveform\_6**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
459540.0	96.5	19	3	1407.0	1742.0	1157.0
614082.0	61.2	19	1	1836.0	-	-
136520.0	84.0	19	3	1165.0	1951.0	1251.0
288677.0	90.2	19	3	1413.0	1796.0	1074.0
441433.0	67.0	19	2	1815.0	1590.0	-
591657.0	92.4	19	3	1913.0	1981.0	1763.0
118313.0	56.7	19	1	1544.0	-	-
270349.0	72.1	19	2	1881.0	1445.0	-
424044.0	66.2	19	1	1359.0	-	-
575663.0	80.3	19	2	1008.0	1694.0	-
99564.0	60.9	19	1	1083.0	-	-
252466.0	52.9	19	1	1116.0	-	-
405133.0	51.3	19	1	1488.0	-	-
556362.0	76.7	19	2	1904.0	1378.0	-
80375.0	79.0	19	2	1921.0	1919.0	-
232938.0	72.6	19	2	1263.0	1723.0	-
384962.0	88.0	19	3	1054.0	1612.0	1020.0
538889.0	65.2	19	1	1766.0	-	-
61542.0	90.6	19	3	1505.0	1225.0	1925.0

**Type 5 Radar Waveform\_7**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
254035.0	93.8	15	3	1167.0	1745.0	1451.0
436675.0	64.4	15	1	1278.0	-	-
615197.0	91.9	15	3	1644.0	1808.0	1540.0
51015.0	76.8	15	2	1243.0	1721.0	-
231963.0	81.6	15	2	1713.0	1996.0	-
413722.0	75.2	15	2	1063.0	1274.0	-
594448.0	71.3	15	2	1460.0	1637.0	-
28649.0	95.5	15	3	1293.0	1210.0	1743.0
210283.0	51.2	15	1	1522.0	-	-
391642.0	60.9	15	1	1848.0	-	-
573576.0	55.4	15	1	1216.0	-	-
6361.0	91.6	15	3	1833.0	1893.0	1565.0
187247.0	86.0	15	3	1737.0	1398.0	1076.0
368145.0	88.3	15	3	1530.0	1007.0	1632.0
551165.0	55.6	15	1	1273.0	-	-
733020.0	50.8	15	1	1002.0	-	-

**Type 5 Radar Waveform\_8**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
176006.0	91.8	14	3	1390.0	1411.0	1507.0
370211.0	51.4	14	1	1668.0	-	-
563429.0	67.5	14	2	1220.0	1018.0	-
754209.0	96.4	14	3	1541.0	1788.0	1758.0
152184.0	97.9	14	3	1213.0	1483.0	1882.0
344927.0	86.9	14	3	1750.0	1552.0	1672.0
537546.0	84.9	14	3	1662.0	1596.0	1989.0
732485.0	77.5	14	2	1267.0	1617.0	-
128901.0	56.9	14	1	1606.0	-	-
321934.0	73.7	14	2	1609.0	1489.0	-
514563.0	87.3	14	3	1037.0	1508.0	1550.0
709000.0	68.1	14	2	1388.0	1126.0	-
105093.0	59.2	14	1	1277.0	-	-
297956.0	73.9	14	2	1863.0	1690.0	-
492497.0	61.4	14	1	1320.0	-	-

**Type 5 Radar Waveform\_9**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
789926.0	94.7	11	3	1311.0	1246.0	1114.0
93460.0	89.9	11	3	1642.0	1360.0	1112.0
316673.0	82.4	11	2	1228.0	1911.0	-
540494.0	62.5	11	1	1934.0	-	-
763536.0	77.4	11	2	1166.0	1206.0	-
66217.0	54.5	11	1	1177.0	-	-
288678.0	84.5	11	3	1585.0	1825.0	1357.0
513412.0	52.4	11	1	1149.0	-	-
736964.0	64.9	11	1	1205.0	-	-
38526.0	95.7	11	3	1726.0	1062.0	1977.0
261176.0	97.0	11	3	1461.0	1747.0	1801.0
485671.0	55.5	11	1	1528.0	-	-
708939.0	61.2	11	1	1835.0	-	-

**Type 5 Radar Waveform\_10**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
18103.0	60.7	6	1	1161.0	-	-
380848.0	88.7	6	3	1922.0	1221.0	1044.0
744393.0	75.0	6	2	1551.0	1102.0	-
1108055.0	64.7	6	1	1966.0	-	-
1468677.0	95.8	6	3	1502.0	1408.0	1802.0
336280.0	75.8	6	2	1811.0	1852.0	-
698654.0	87.2	6	3	1475.0	1998.0	1333.0
1062747.0	71.2	6	2	1171.0	1576.0	-

**Type 5 Radar Waveform\_11**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
1140076.0	70.5	7	2	1817.0	1038.0	-
233304.0	68.9	7	2	1622.0	1094.0	-
522593.0	92.7	7	3	1680.0	1880.0	1648.0
815228.0	56.9	7	1	1001.0	-	-
1103983.0	79.5	7	2	1265.0	1947.0	-
197779.0	64.4	7	1	1239.0	-	-
487901.0	69.8	7	2	1399.0	1352.0	-
779223.0	57.8	7	1	1287.0	-	-
1066993.0	87.9	7	3	1646.0	1902.0	1050.0
161874.0	53.2	7	1	1926.0	-	-

**Type 5 Radar Waveform\_12**

Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
250208.0	86.2	18	3	1253.0	1592.0	1272.0
411248.0	77.3	18	2	1805.0	1746.0	-
570855.0	99.6	18	3	1426.0	1786.0	1751.0
70042.0	60.8	18	1	1115.0	-	-
231475.0	51.6	18	1	1069.0	-	-
392641.0	53.5	18	1	1513.0	-	-
552768.0	75.8	18	2	1123.0	1824.0	-
49991.0	78.2	18	2	1924.0	1416.0	-
210647.0	96.4	18	3	1783.0	1010.0	1244.0
372604.0	57.3	18	1	1809.0	-	-
531600.0	99.1	18	3	1524.0	1652.0	1439.0
30261.0	52.5	18	1	1448.0	-	-
191552.0	50.6	18	1	1603.0	-	-
353017.0	50.9	18	1	1291.0	-	-
512851.0	81.3	18	2	1936.0	1347.0	-
10371.0	73.7	18	2	1343.0	1173.0	-
171295.0	66.8	18	2	1516.0	1595.0	-
332448.0	68.2	18	2	1583.0	1089.0	-