

# DFS MEASUREMENT REPORT

## FCC PART 15 Subpart E

**FCC ID:** TE7AX90

**APPLICANT:** TP-Link Technologies Co., Ltd.

**Application Type:** Certification

**Product:** AX6600 Tri-Band Wi-Fi 6 Router

**Model No.:** Archer AX90

**Brand Name:** tp-link

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

**FCC Rule Part(s):** Part 15 Subpart E - 15.407 Section (h)(2)

KDB 905462 D02v02, KDB 905462 D04v01

**Type of Device:** Master Device

**Test Date:** March 30 ~ May 12, 2020

Reviewed By:

*Paddy Chen*

( Paddy Chen )

Approved By:

*Chenz Ker*

(Chenz Ker)



The test results relate only to the samples tested.

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

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

## Revision History

Report No.	Version	Description	Issue Date	Note
2004TW0003-U3	Rev. 01	Initial Report	05-27-2020	Valid

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## General Information

<b>Applicant:</b>	TP-Link Technologies Co., Ltd.			
<b>Applicant Address:</b>	Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China			
<b>Manufacturer:</b>	TP-Link Technologies Co., Ltd.			
<b>Manufacturer Address:</b>	Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China			
<b>Test Site:</b>	MRT Technology (Taiwan) Co., Ltd			
<b>Test Site Address:</b>	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)			
<b>Test Device Serial No.:</b>	N/A	<input type="checkbox"/> Production	<input checked="" type="checkbox"/> Pre-Production	<input type="checkbox"/> Engineering

### Test Facility / Accreditations

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

- MRT facility is a FCC registered (Designation No. TW3261) test facility with the site description report on file and is designated by the FCC as an Accredited Test Film.
- MRT facility is an IC registered (MRT Reg. No. 21723-1) test laboratory with the site description on file at Industry Canada.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (TAF) under the American Association for Laboratory Accreditation Program (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, Taiwan, EU and TELEC Rules.

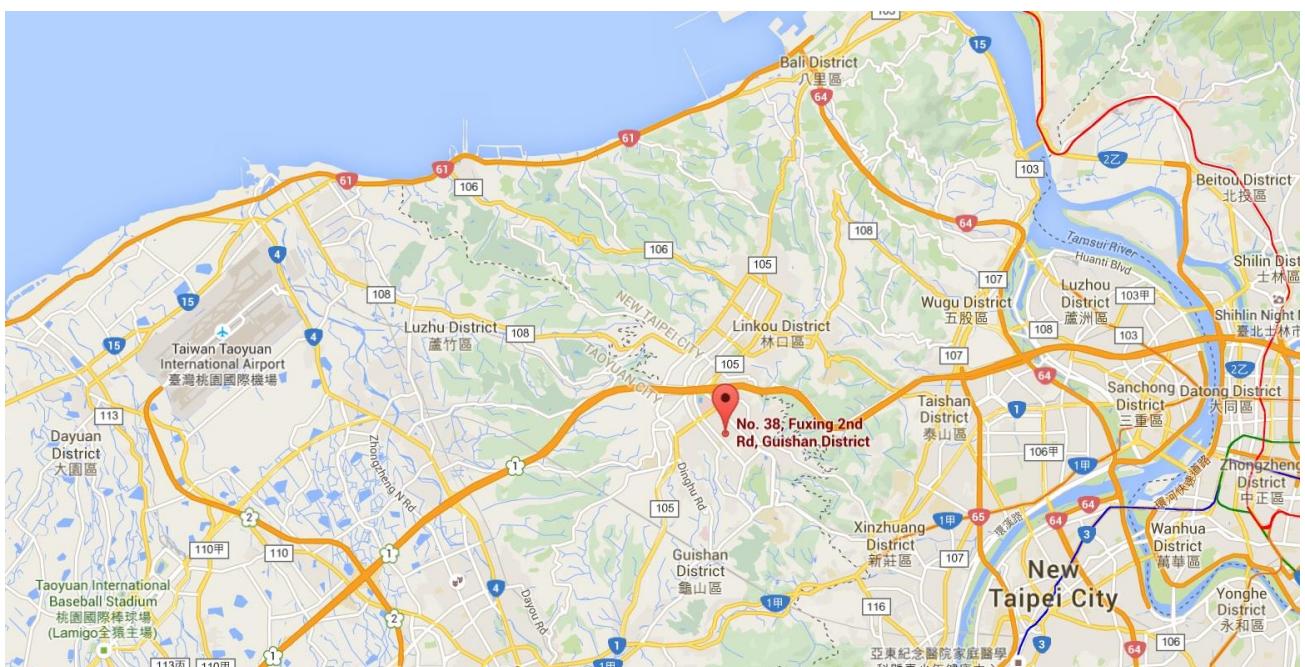
## 1. INTRODUCTION

### 1.1. Scope

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

### 1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taoyuan City. These measurement tests were conducted at the MRT Technology (Taiwan) Co., Ltd. Facility located at No.38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan (R.O.C).



## 2. PRODUCT INFORMATION

### 2.1. Equipment Description

Product Name:	AX6600 Tri-Band Wi-Fi 6 Router
Model No.:	Archer AX90
Brand Name:	tp-link
Wi-Fi Specification:	802.11a/b/g/n/ac/ax
Frequency Range:	<p><b><u>2.4GHz:</u></b></p> <p>For 802.11b/g/n-HT20/ax-HE20: 2412 ~ 2462 MHz</p> <p>For 802.11n-HT40/ax-HE40: 2422 ~ 2452 MHz</p> <p><b><u>5GHz:</u></b></p> <p>For 802.11a/n-HT20/ac-VHT20/ax-HE20: 5180~5240MHz, 5500~5720MHz, 5745~5825MHz</p> <p>For 802.11n-HT40/ac-VHT40/ax-HE40: 5190~5230MHz, 5510~5710MHz, 5755~5795MHz</p> <p>For 802.11ac-VHT80/ax-HE80: 5210MHz, 5530MHz, 5610MHz, 5690MHz, 5775MHz</p> <p>For 802.11ac-VHT160/ax-HE160: 5570MHz</p>
Type of Modulation:	802.11b: DSSS, 802.11a/g/n/ac: OFDM, 802.11ax: OFDMA
TPC mechanism:	Support (Details refer to operational description)
Power-on cycle:	Requires 93.9 seconds to complete its power-on cycle
Uniform Spreading (For DFS Frequency Band):	For the 5470-5725 MHz bands, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a random algorithm.

## 2.2. Description of Available Antennas

Antenna Type	Frequency Band (MHz)	Tx Paths	Number of spatial streams	Max Antenna Gain (dBi)	Beam-Forming Directional Gain (dBi)	CDD Directional Gain (dBi)	
						For Power	For PSD
Monopole Antenna	2412 ~ 2462	2	1	3.52	6.53	3.52	6.53
	5150 ~ 5250	2	1	3.54	6.55	3.54	6.55
	5470 ~ 5725	4	1	3.20	9.22	3.20	9.22
		4	2	3.20	--	3.20	6.21
	5725 ~ 5850	4	1	3.20	9.22	3.20	9.22

Note:

1. The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.

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

- For power spectral density (PSD) measurements on all devices,

$$\text{Array Gain} = 10 \log (N_{ANT}/ N_{SS}) \text{ dB};$$

- For power measurements on IEEE 802.11 devices,

$$\text{Array Gain} = 0 \text{ dB for } N_{ANT} \leq 4;$$

2. The EUT also supports Beam Forming mode, and the Beam Forming support 802.11ac/ax, not include 802.11a/b/g/n. BF Directional gain =  $G_{ANT} + 10 \log (N_{ANT})$ .

### 2.3. Description of Antenna RF Port

Antenna RF Port							
Software Control Port	2.4GHz RF Port		5GHz RF Port				
			U-NII - 1		U-NII - 2C / -3		
	Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	Ant 2
<p>Diagram labels:</p> <ul style="list-style-type: none"> <li>5G U-NII-1 Ant 0</li> <li>5G U-NII-1 Ant 1</li> <li>2.4G Ant 0</li> <li>2.4G Ant 1</li> <li>5G U-NII-2C / -3 Ant 3</li> <li>5G U-NII-2C / -3 Ant 2</li> <li>5G U-NII-2C / -3 Ant 1</li> <li>5G U-NII-2C / -3 Ant 0</li> </ul>							

## 2.4. Operating Frequency and Channel List for this Report

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

Channel	Frequency	Channel	Frequency	Channel	Frequency
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
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
106	5530 MHz	122	5610 MHz	138	5690 MHz

802.11ac-VHT160/ax-HE160

Channel	Frequency	Channel	Frequency	Channel	Frequency
114	5570 MHz	--	--	--	--

## 2.5. Test Channels 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	114	5570 MHz

## 2.6. Test Mode

Test Mode	Make the EUT communicate with notebook at DFS channel
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### 3. DFS DETECTION THRESHOLDS AND RADAR TEST WAVEFORMS

#### 3.1. Applicability

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

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

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

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

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

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

### 3.2. DFS Devices Requirements

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

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

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

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

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

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

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

### **3.3. DFS Detection Threshold Values**

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

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

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

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

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

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

### 3.4. Parameters of DFS Test Signals

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

#### Short Pulse Radar Test Waveforms

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

**Table 3-5: Parameters for Short Pulse Radar Waveforms**

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

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

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

**Long Pulse Radar Test Waveform**

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

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

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

**Frequency Hopping Radar Test Waveform**

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

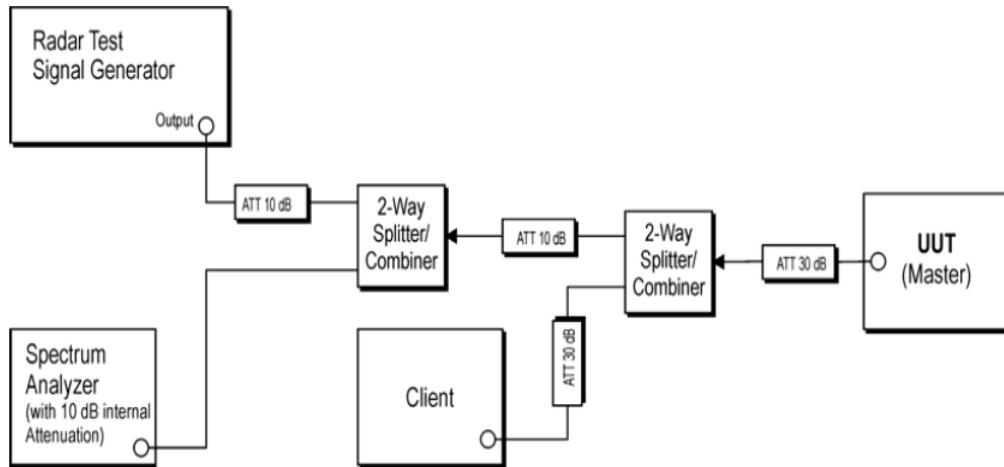
**Table 3-8: Parameters for Frequency Hopping Radar Waveforms**

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

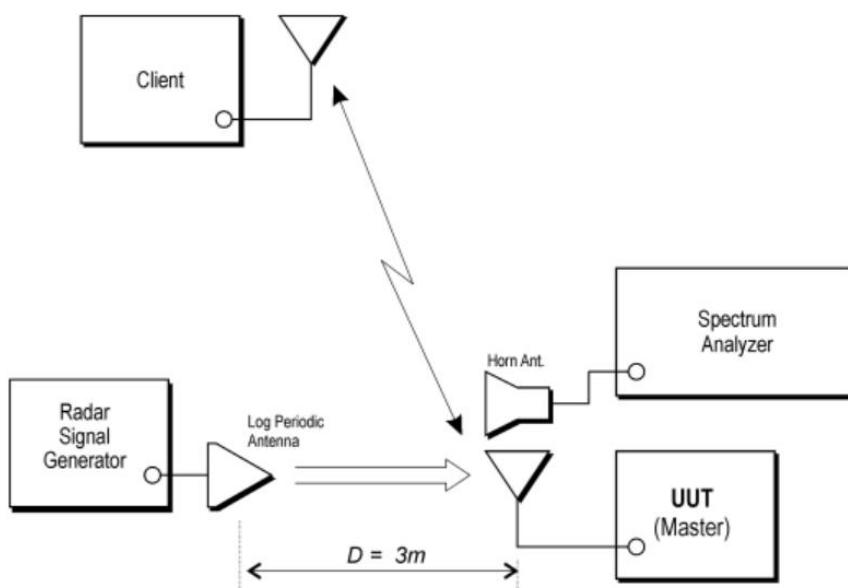
The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250 – 5724MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues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

### 3.5. Conducted Test Setup

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



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



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

#### 4. TEST EQUIPMENT CALIBRATION DATE

Dynamic Frequency Selection (DFS)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2020/10/02
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2020/07/11
Vector Signal Generator	Keysight	N5182B	MRTTWA00010	1 year	2021/04/24
Combiner	WOKEN	0120A04208001S	MRTTWE00008	1 year	2021/06/18

Client Information

Instrument	Manufacturer	Type No.
Access Point	TP-Link Technologies Co., Ltd.	Archer AX6000

Note: The Access Point was configured as client device by the manufacturer.

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

## 5. TEST RESULT

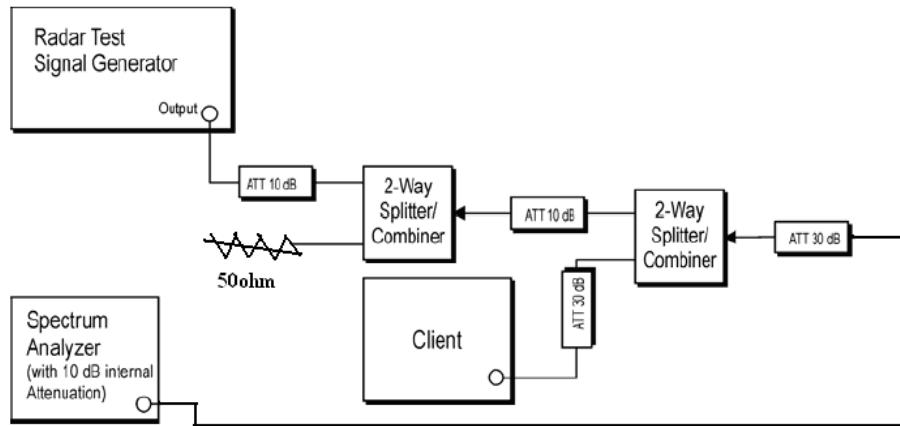
### 5.1. Summary

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

## 5.2. Radar Waveform Calibration

### 5.2.1. Calibration Setup

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



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

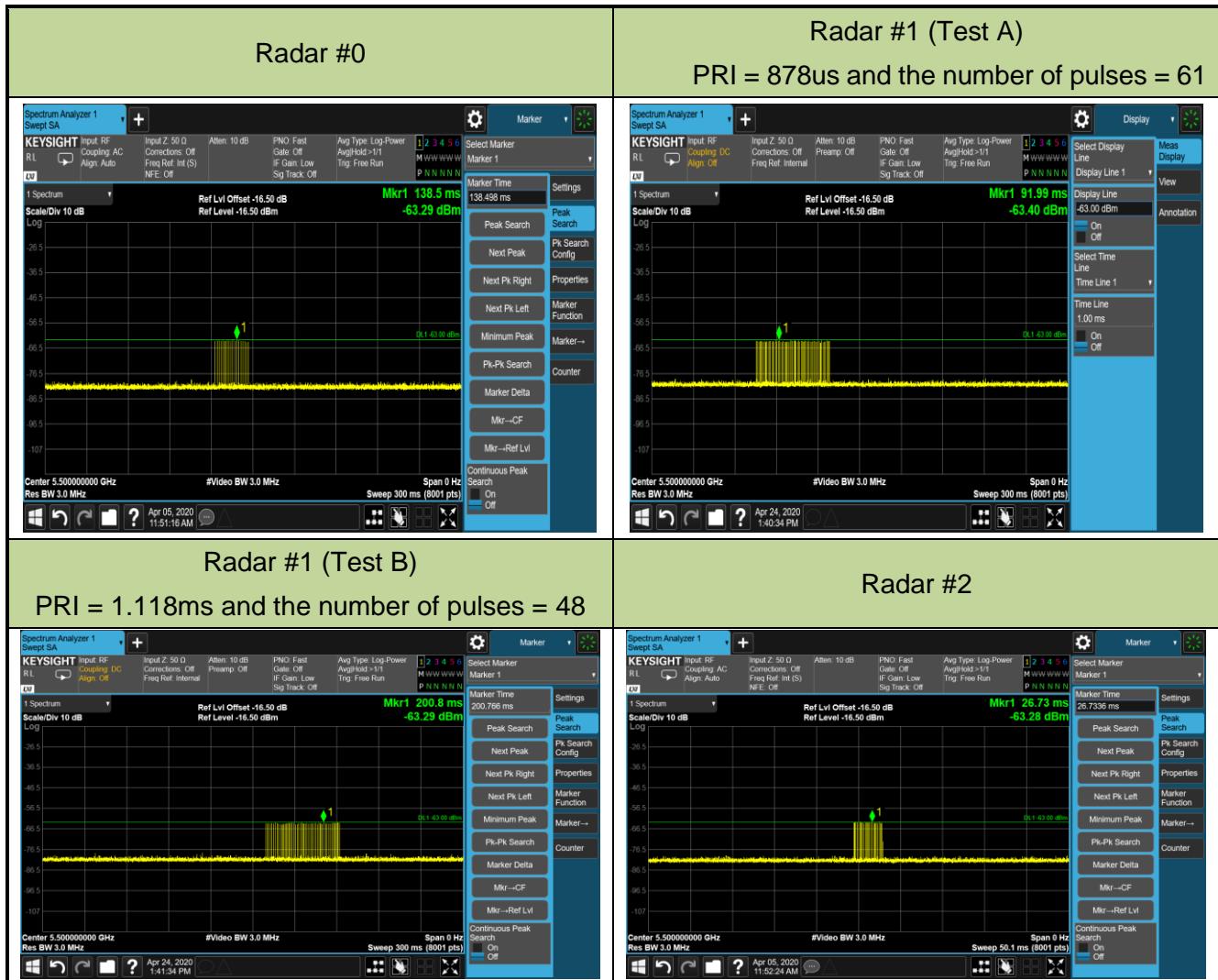
### 5.2.2. Calibration Procedure

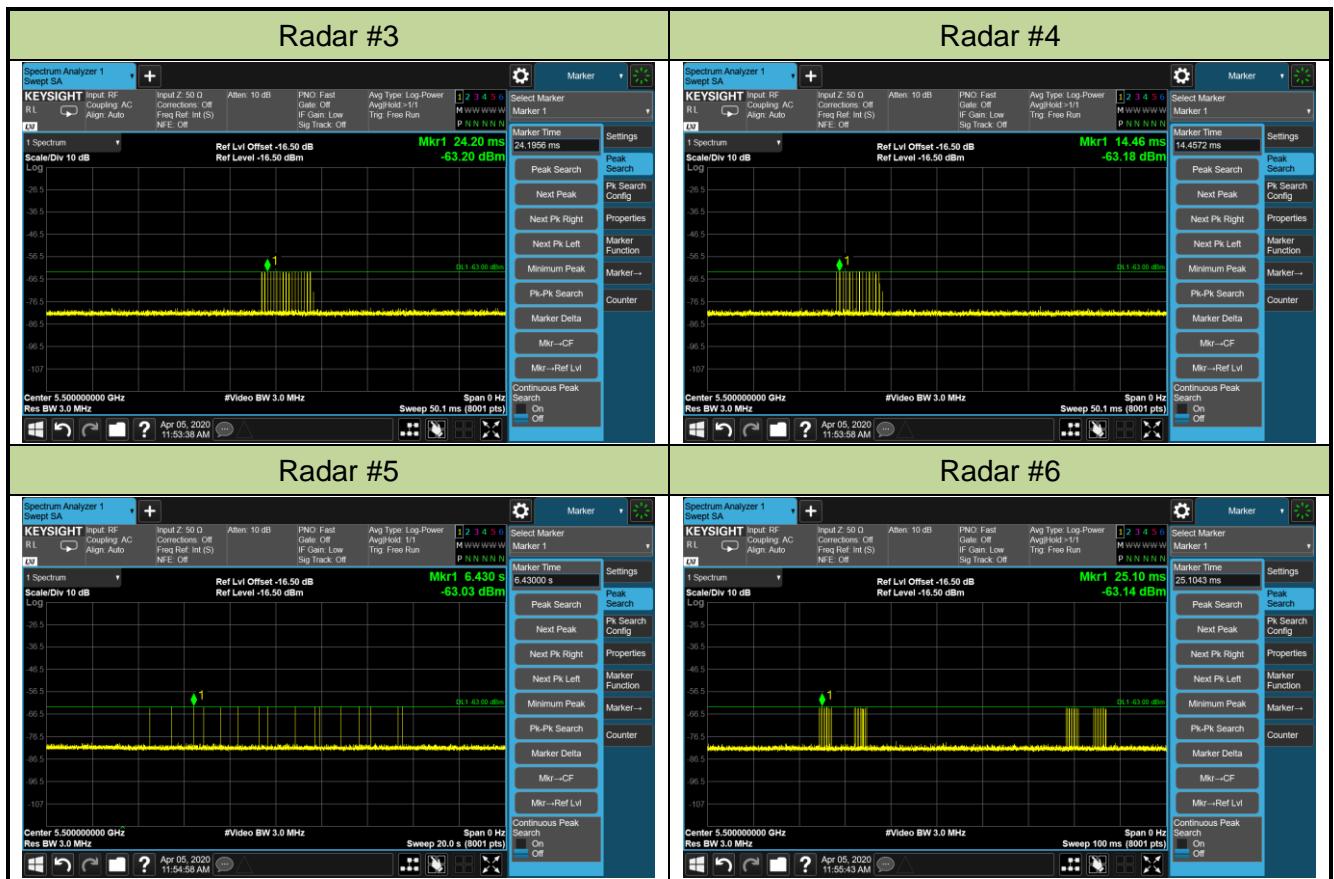
The Interference Radar Detection Threshold Level is  $(-64\text{dBm}) + (0) [\text{dBi}] + 1 \text{ dB} = -63 \text{ dBm}$  that had been taken into account the output power range and antenna gain. The above equipment setup was used to calibrate the conducted Radar Waveform. A vector signal generator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

Capture the spectrum analyzer plots on short pulse radar types, long pulse radar type and hopping radar waveform.

### 5.2.3. Cablibration Result

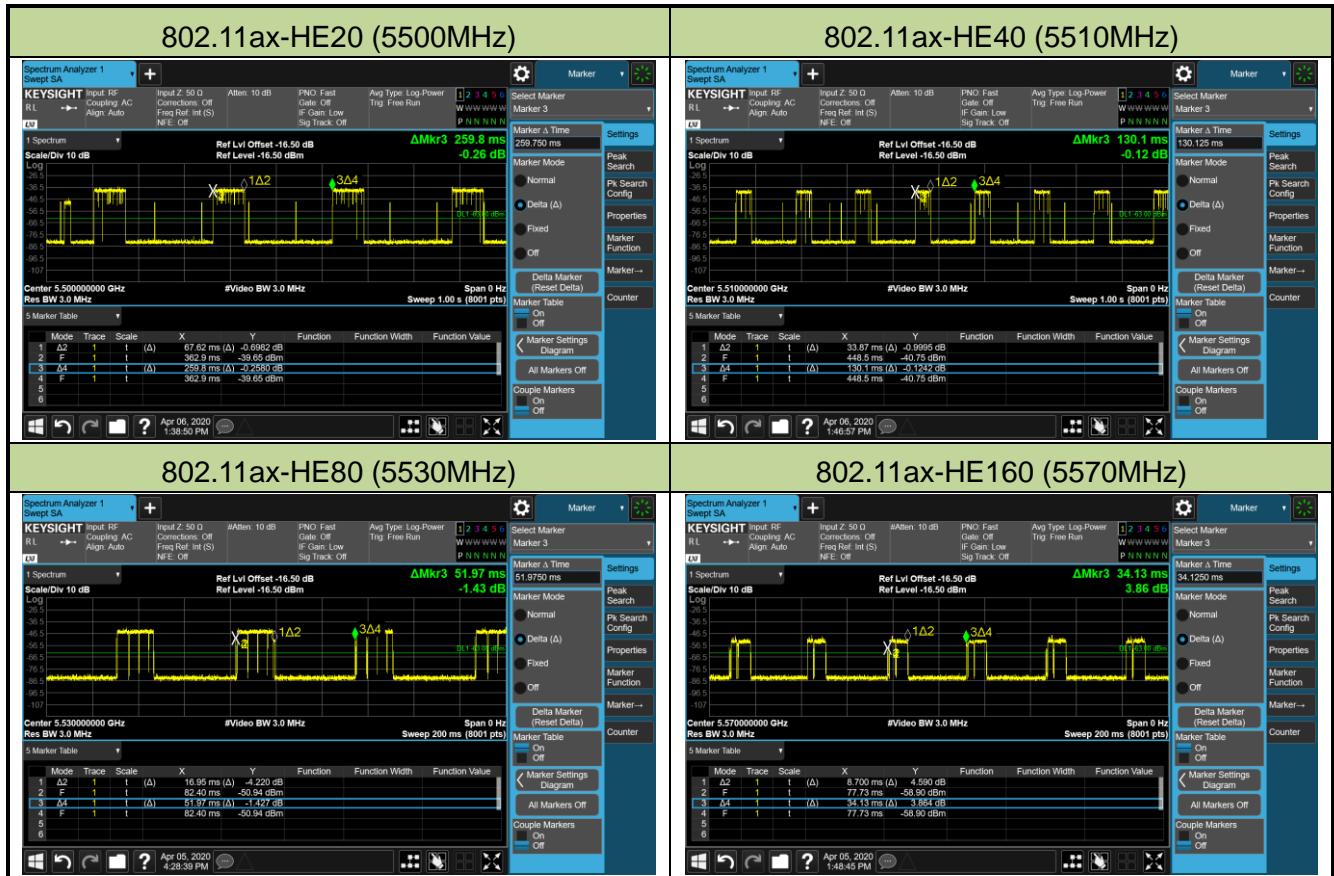
Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/05~ 2020/04/24
Test Item	Radar Waveform Calibration		





### 5.2.4. Channel Loading Test Result

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/06
Test Item	Channel Loading		



Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11ax-HE20	5500 MHz	26.03%	≥ 17%	Pass
802.11ax-HE40	5510 MHz	26.05%	≥ 17%	Pass
802.11ax-HE80	5530 MHz	32.61%	≥ 17%	Pass
802.11ax-HE160	5570 MHz	25.49%	≥ 17%	Pass

Note: System testing was performed with the designated iperf test file. This file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. Packet ratio = Time On / (Time On + Off Time).

### 5.3. UNII Detection Bandwidth Measurement

#### 5.3.1. Test Limit

Minimum 100% of the UNII 99% transmission power bandwidth. During the U-NII Detection Bandwidth detection test, each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

#### 5.3.2. Test Procedure

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

### 5.3.3. Test Result

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/07
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%
5491	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509	1	1	1	1	1	1	1	1	1	1	100%
5509.6 FH	1	1	1	1	1	1	1	1	1	1	100%
5510	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5500MHz. The 99% channel bandwidth is 19.04MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5509.6MHz – 5490.4MHz = 19.2MHz

Note 3: NII Detection Bandwidth Min. Limit (MHz): 19.04MHz x 100% = 19.04MHz.

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/07
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%
5491FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%
5526	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	100%
5529 FH	1	1	1	1	1	1	1	1	1	1	100%
5530	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5510MHz. The 99% channel bandwidth is 37.47MHz. (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):  $37.47\text{MHz} \times 100\% = 37.47\text{MHz}$ .

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/07
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%
5569 FH	1	1	1	1	1	1	1	1	1	1	100%
5570	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz. The 99% channel bandwidth is 77.06MHz. (See the 99% BW section of the RF report for further measurement details).

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

Note 3: NII Detection Bandwidth Min. Limit (MHz): 77.06MHz x 100% = 77.06MHz.

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/07
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%
5600	1	1	1	1	1	1	1	1	1	1	100%
5610	1	1	1	1	1	1	1	1	1	1	100%
5615	1	1	1	1	1	1	1	1	1	1	100%

5620	1	1	1	1	1	1	1	1	1	1	100%
5625	1	1	1	1	1	1	1	1	1	1	100%
5630	1	1	1	1	1	1	1	1	1	1	100%
5635	1	1	1	1	1	1	1	1	1	1	100%
5640	1	1	1	1	1	1	1	1	1	1	100%
5645	1	1	1	1	1	1	1	1	1	1	100%
5646	1	1	1	1	1	1	1	1	1	1	100%
5647	1	1	1	1	1	1	1	1	1	1	100%
5648	1	1	1	1	1	1	1	1	1	1	100%
5649 FH	1	1	1	1	1	1	1	1	1	1	100%
5650	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5570MHz. The 99% channel bandwidth is 154.69MHz. (See the 99% BW section of the RF report for further measurement details).

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

Note 3: NII Detection Bandwidth Min. Limit (MHz): 154.69MHz x 100% = 154.69MHz.

## 5.4. Initial Channel Availability Check Time Measurement

### 5.4.1. Test Limit

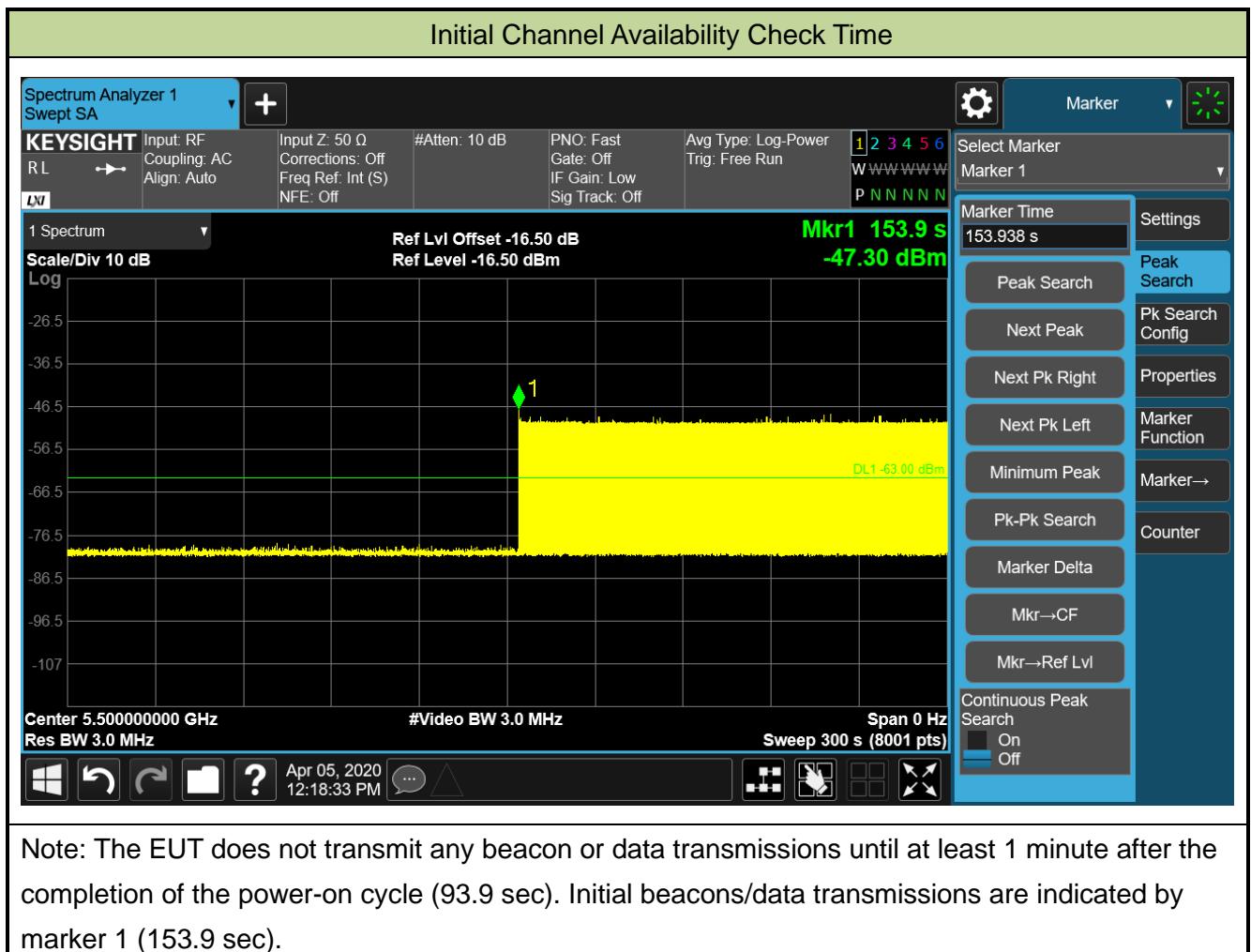
The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute on the intended operating frequency.

### 5.4.2. Test Procedure

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

### 5.4.3. Test Result

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/05
Test Item	Initial Channel Availability Check Time (802.11ax-HE20 mode - 5500MHz)		



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

### 5.5.1. Test Limit

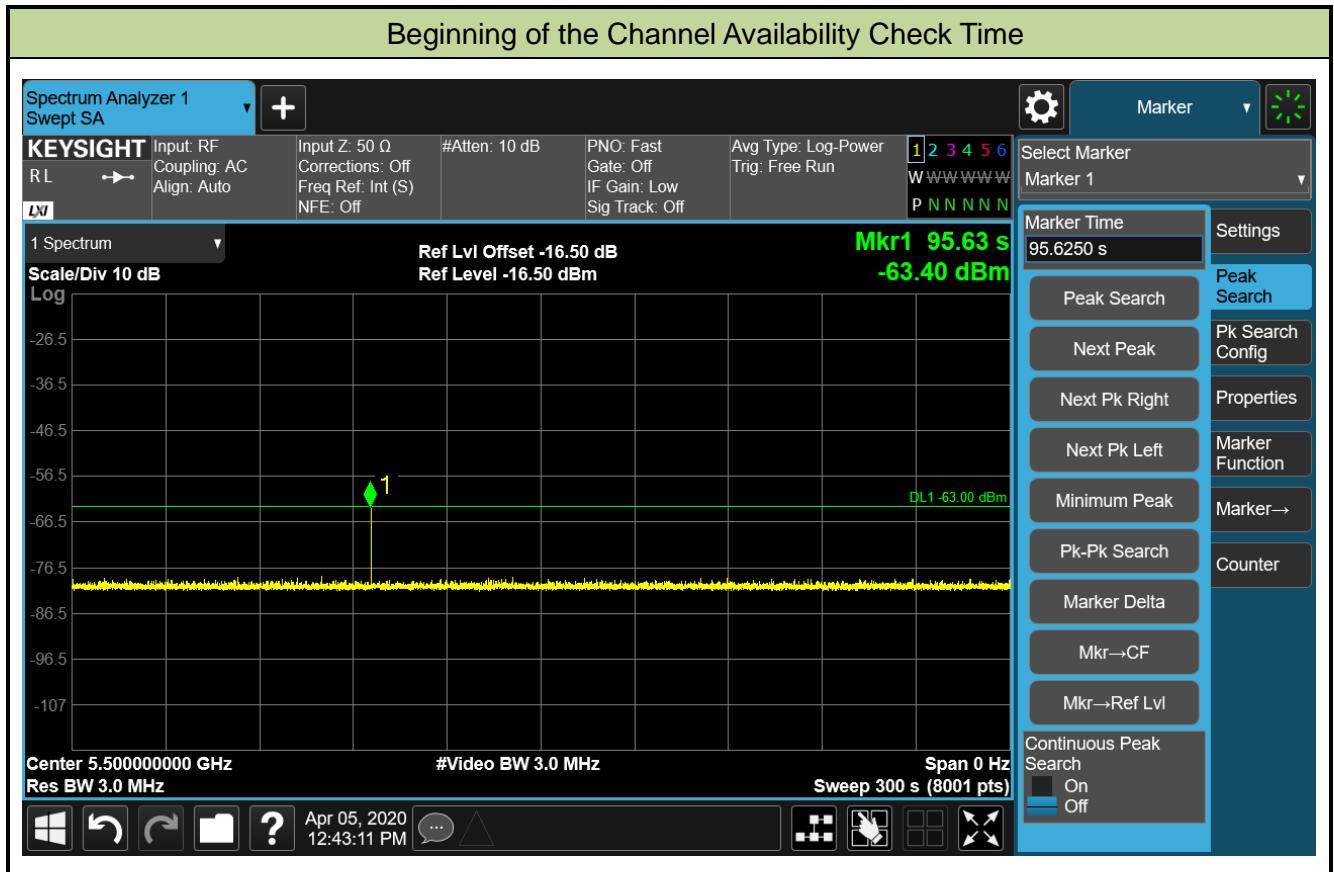
In beginning of the Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

### 5.5.2. Test Procedure

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

### 5.5.3. Test Result

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/05
Test Item	Beginning of the Channel Availability Check Time (802.11ax-HE20 mode - 5500MHz)		



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

### **5.6.1. Test Limit**

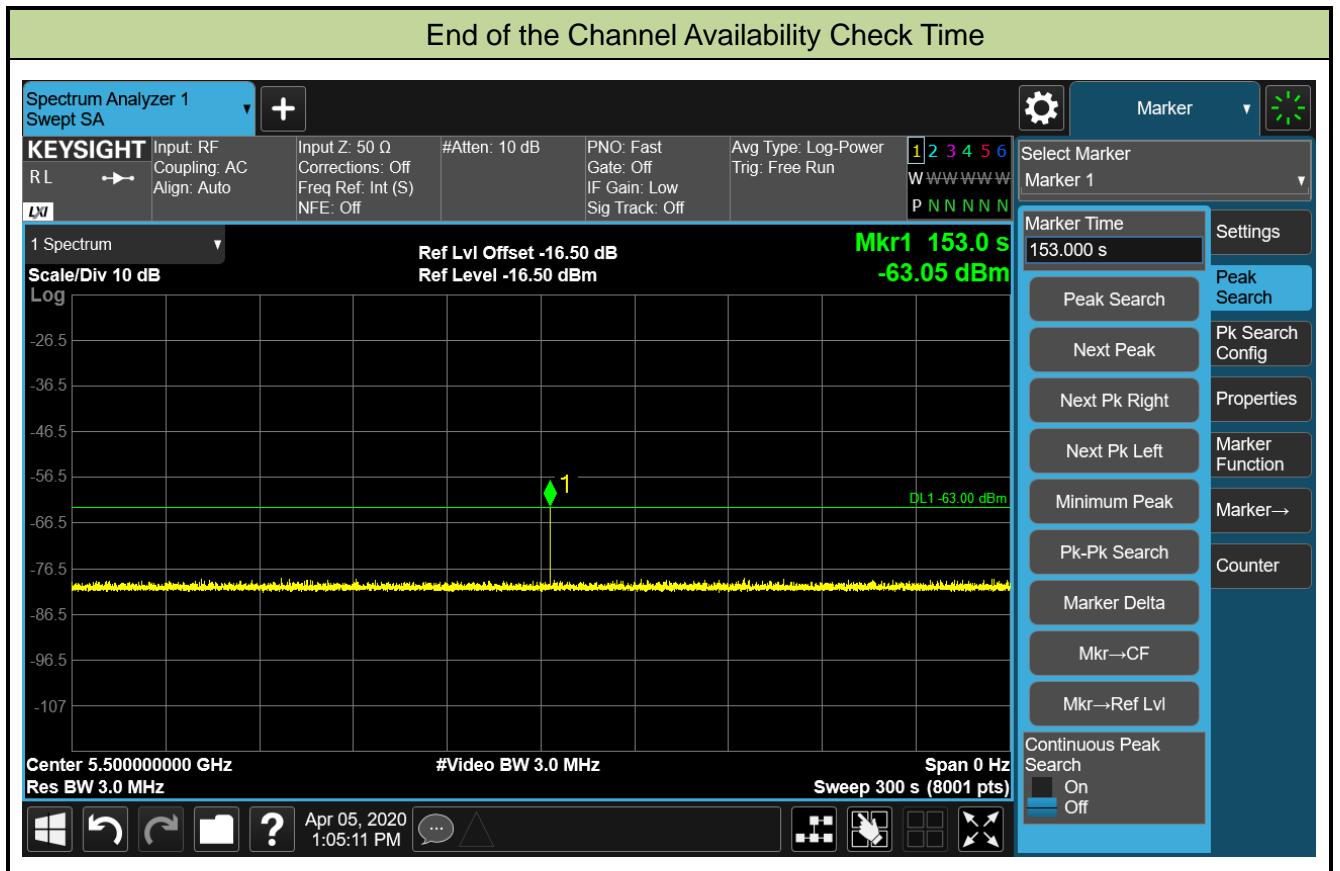
In the end of Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

### **5.6.2. Test Procedure**

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

### 5.6.3. Test Result

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/05
Test Item	End of the Channel Availability Check Time (802.11ax-HE20 mode - 5500MHz)		



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

### 5.7.1. Test Limit

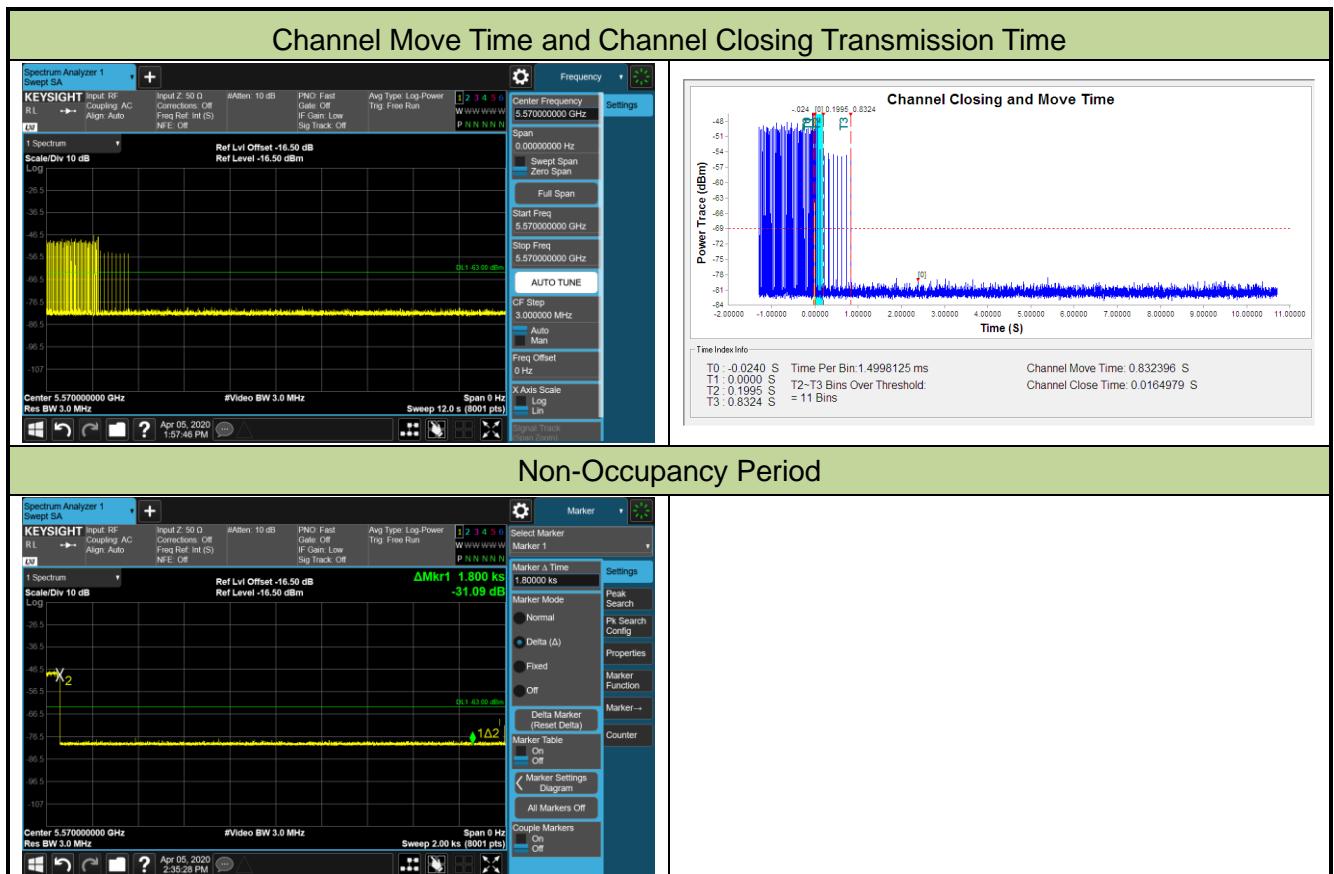
The EUT has In-Service Monitoring function to continuously monitor the radar signals. If the radar is detected, must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec.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

### 5.7.2. Test Procedure Used

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

### 5.7.3. Test Result

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/05
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11ax-HE160 mode - 5570MHz)		



Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.832s	<10s
Channel Closing Transmission Time (ms) (Note)	16.5ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min
<p>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.</p>		

## 5.8. Statistical Performance Check Measurement

### 5.8.1. Test Limit

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

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

The percentage of successful detection is calculated by:

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

### 5.8.2. Test Procedure

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

**5.8.3. Test Result**

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/08
Test Item	Radar Statistical Performance Check (802.11ax-HE20 – 5500MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5490.4	1	538	98	1
2	5490.4	1	778	68	1
3	5490.4	1	858	62	1
4	5490.4	1	758	70	1
5	5490.4	1	518	102	1
6	5490.4	1	718	74	1
7	5490.4	1	698	76	1
8	5490.4	1	618	86	1
9	5490.4	1	838	63	1
10	5490.4	1	938	57	1
11	5500	1	658	81	1
12	5500	1	3066	18	1
13	5500	1	738	72	1
14	5500	1	578	92	1
15	5500	1	898	59	1
16	5500	1	831	64	1
17	5500	1	1054	50	1
18	5500	1	595	89	1
19	5500	1	1167	46	1
20	5500	1	2269	24	1
21	5509.6	1	2110	25	1
22	5509.6	1	584	91	1
23	5509.6	1	1866	29	1
24	5509.6	1	2086	26	1
25	5509.6	1	2022	27	1
26	5509.6	1	1327	40	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5509.6	1	1988	27	1
28	5509.6	1	1426	37	1
29	5509.6	1	2808	19	1
30	5509.6	1	1035	51	1
Detection Percentage (%)					100%

## Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5490.4	1.4	215	29	0
2	5490.4	2.7	203	29	1
3	5490.4	1.5	206	28	1
4	5490.4	2.4	172	24	1
5	5490.4	1.3	185	25	1
6	5490.4	4.2	158	28	1
7	5490.4	2.4	219	26	1
8	5490.4	3.2	176	26	1
9	5490.4	4.0	178	28	1
10	5490.4	2.0	176	23	1
11	5500	2.9	179	28	1
12	5500	3.3	178	29	0
13	5500	1.5	172	24	1
14	5500	2.7	201	28	0
15	5500	2.8	175	24	1
16	5500	3.5	230	28	1
17	5500	4.8	177	26	1
18	5500	2.0	165	26	1
19	5500	4.0	191	23	1
20	5500	1.7	151	27	1
21	5509.6	3.4	208	24	1
22	5509.6	2.8	166	26	1
23	5509.6	3.0	223	28	1
24	5509.6	1.3	193	25	1
25	5509.6	4.8	211	25	1
26	5509.6	4.2	224	24	1
27	5509.6	2.1	159	26	1
28	5509.6	3.3	222	25	1
29	5509.6	1.7	156	23	1
30	5509.6	4.3	192	26	1
Detection Percentage (%)					90%

## Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5490.4	6.6	423	17	1
2	5490.4	8.8	317	17	1
3	5490.4	9.4	356	17	1
4	5490.4	8.2	461	16	0
5	5490.4	7.1	262	16	1
6	5490.4	6.6	339	17	0
7	5490.4	7.6	315	16	1
8	5490.4	6.4	336	17	1
9	5490.4	8.2	458	18	1
10	5490.4	9.3	402	17	1
11	5500	9.7	343	17	1
12	5500	8.2	274	18	1
13	5500	9.7	495	17	1
14	5500	8.8	349	16	1
15	5500	9.1	344	17	1
16	5500	6.9	326	16	1
17	5500	8.2	319	17	0
18	5500	9.1	222	17	1
19	5500	8.5	294	16	0
20	5500	9.2	226	18	1
21	5509.6	9.5	451	17	1
22	5509.6	6.7	223	17	1
23	5509.6	9.3	496	17	1
24	5509.6	7.4	237	17	1
25	5509.6	6.8	456	17	1
26	5509.6	8.2	312	16	1
27	5509.6	6.7	441	17	0
28	5509.6	9.6	291	17	1
29	5509.6	8.2	307	17	0
30	5509.6	8.5	369	18	1
Detection Percentage (%)					80%

## Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5490.4	14.0	438	15	1
2	5490.4	12.9	276	13	1
3	5490.4	16.8	261	15	1
4	5490.4	13.9	324	15	1
5	5490.4	17.8	437	16	1
6	5490.4	15.1	224	12	1
7	5490.4	17.7	270	14	1
8	5490.4	13.8	304	13	1
9	5490.4	11.8	398	14	0
10	5490.4	16.1	282	14	1
11	5500	11.4	251	16	1
12	5500	19.0	410	14	1
13	5500	14.1	244	16	1
14	5500	17.5	328	14	1
15	5500	17.1	275	12	1
16	5500	11.1	493	13	0
17	5500	12.2	344	15	1
18	5500	14.9	214	13	0
19	5500	16.8	275	13	1
20	5500	17.6	268	15	1
21	5509.6	19.5	476	15	1
22	5509.6	18.9	408	13	1
23	5509.6	15.9	456	15	1
24	5509.6	14.2	207	14	1
25	5509.6	18.7	319	13	1
26	5509.6	12.0	464	15	1
27	5509.6	15.7	279	15	1
28	5509.6	20.0	222	12	1
29	5509.6	19.6	236	16	1
30	5509.6	15.3	376	13	1
Detection Percentage (%)					90%

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

waveforms is as follows:  $\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100\%+90\%+80\%+90\%)/4 = 90\% (>80\%)$

## Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5500.0	1	16	5495.6	1
2	5500.0	1	17	5496.0	1
3	5500.0	1	18	5494.0	0
4	5500.0	1	19	5494.4	1
5	5500.0	1	20	5496.8	0
6	5500.0	1	21	5504.4	1
7	5500.0	1	22	5506.4	1
8	5500.0	1	23	5502.4	1
9	5500.0	1	24	5507.2	0
10	5500.0	1	25	5506.8	1
11	5495.2	1	26	5505.2	1
12	5492.4	1	27	5505.2	1
13	5492.4	1	28	5506.0	1
14	5497.2	1	29	5506.0	1
15	5492.8	1	30	5502.8	1
Detection Percentage (%)					90%

Type 5 Radar Waveform_1						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	1	55.3	11			527.553
2	2	53.9	11	1445		81.322
3	3	77	11	1113	1155	567.03
4	1	84	11			220.94
5	2	77.3	11	1178		163.76
6	2	51.4	11	1844		477.61
7	2	95.9	11	1195		477.41
8	2	94.2	11	1384		113.95
9	1	90.1	11			174.27
10	1	91	11			204.21
11	2	90	11	1042		198.65
12	2	89.5	11	1674		517.42
13	2	82.4	11	1143		410.2
14	3	59.5	11	1499	1874	2.36
15	2	67.2	11	1825		558.39
16	2	78.1	11	1634		96.77
17	1	96	11			275.54
18	2	94	11	1297		550.3
19	2	92.3	11	1558		449.8
20	2	83.7	11	1996		589.4

**Type 5 Radar Waveform\_2**

Burst	Number of Pulses	Pulse Width (µ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	62.6	19	1350		410.325
2	1	69.2	19			539.057
3	2	94.9	19	1323		712.944
4	3	76.8	19	1305	1899	510.431
5	1	87.5	19			177.039
6	2	81.6	19	1113		157.546
7	2	98.8	19	1474		625.753
8	2	96.9	19	1974		721.99
9	2	61.9	19	1166		579.537
10	1	89.5	19			792.144
11	1	63	19			567.151
12	1	90.6	19			744.229
13	1	97.9	19			373.286
14	1	68.7	19			733.843

**Type 5 Radar Waveform\_3**

Burst	Number of Pulses	Pulse Width (µ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	66.1	17	1836		648.483
2	2	90.5	17	1100		247.013
3	1	77.8	17			840.986
4	3	84.9	17	1345	1771	444.439
5	1	59.8	17			133.892
6	2	86.7	17	1100		202.665
7	3	64.5	17	1078	1635	896.728
8	1	53.9	17			880.222
9	2	93.8	17	1766		736.455
10	2	66.9	17	1049		491.838
11	3	50.2	17	1692	1442	432.001
12	3	77.6	17	1237	1179	151.954
13	3	96.7	17	1921	1821	600.977

**Type 5 Radar Waveform\_4**

Burst	Number of Pulses	Pulse Width (µ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	3	97.7	10	1656	1439	815.86
2	2	98.3	10	1663		794.61
3	2	53.9	10	1599		876.06
4	3	97.1	10	1036	1517	186.77
5	2	95.9	10	1519		42.92
6	1	92	10			1040.16
7	3	56.5	10	1000	1871	408
8	1	51.5	10			137.74
9	2	56.9	10	1730		677.2
10	3	74.2	10	1197	1910	170.4

**Type 5 Radar Waveform\_5**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	2	83.1	5	1402		190.09
2	2	59.5	5	1737		89.044
3	3	97.4	5	1751	1774	409.9
4	2	53.4	5	1751		327.38
5	1	94.4	5			72.14
6	3	86.8	5	1834	1283	283.68
7	3	97.2	5	1487	1036	164.12
8	3	79	5	1533	1221	353.52
9	2	57.6	5	1204		28.85
10	2	72.8	5	1662		714.11
11	3	99.5	5	1927	1631	517.49
12	3	81	5	1701	1530	163.4
13	1	88.9	5			118.57
14	2	77.6	5	1891		464.8
15	1	50.7	5			388
16	3	68.3	5	1084	1203	243.4

**Type 5 Radar Waveform\_6**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	1	72.7	7			419.999
2	2	58.6	7	1169		161.266
3	3	68.7	7	1278	1425	316.842
4	1	91.2	7			487.243
5	2	88.8	7	1760		571.364
6	3	97.8	7	1180	1428	357.905
7	1	57.2	7			243.886
8	1	54.8	7			527.227
9	1	93.1	7			611.248
10	3	55.9	7	1156	1705	509.889
11	3	53.2	7	1313	1417	166.291
12	1	57.8	7			72.912
13	3	59.8	7	1996	1899	545.173
14	3	83.9	7	1206	1864	118.934
15	1	72.2	7			564.995
16	1	87.2	7			535.516
17	1	73.7	7			353.737
18	2	93.3	7	1460		276.158
19	3	90.2	7	1247	1000	342.679

**Type 5 Radar Waveform\_7**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	2	64.3	5	1639		872.772
2	2	78.2	5	1616		726.17
3	3	75.4	5	1911	1772	217.57
4	2	51.4	5	1161		305.54
5	2	59.4	5	1548		332.03
6	1	77.6	5			977.17
7	1	62.6	5			431.84
8	1	71.2	5			901.26
9	2	70.3	5	1279		543.73
10	2	80.7	5	1468		516.79
11	1	83.5	5			215.2
12	2	56.6	5	1573		447.2

**Type 5 Radar Waveform\_8**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	63.5	9	1735		347.391
2	1	50.2	9			160.8
3	3	59.3	9	1042	1394	22.69
4	2	69.9	9	1759		252.42
5	3	52.1	9	1267	1598	785.73
6	1	87.4	9			620.27
7	3	73.7	9	1618	1613	784.67
8	1	55.6	9			637.93
9	2	87	9	1155		690
10	1	71.7	9			334

**Type 5 Radar Waveform\_9**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	72.4	6			448.886
2	3	84.6	6	1089	1668	631.59
3	3	59.4	6	1584	1761	320.35
4	2	68.3	6	1983		445.78
5	2	61.3	6	1576		668.39
6	1	72.2	6			192.19
7	3	86.3	6	1739	1932	232.48
8	2	51	6	1331		6.41
9	2	74.5	6	1374		358.66
10	2	78.2	6	1293		846.45
11	2	70.4	6	1801		391
12	1	88.7	6			600

**Type 5 Radar Waveform\_10**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	78.2	14	1081	1430	66.316
2	2	62	14	1566		608.238
3	2	74.4	14	1139		103.085
4	3	80	14	1629	1388	334.973
5	2	70.9	14	1731		198.671
6	1	94.6	14			238.958
7	1	57.5	14			616.116
8	2	71.9	14	1839		61.904
9	3	85.9	14	1741	1798	410.111
10	1	78.1	14			425.799
11	2	65.6	14	1462		274.206
12	3	87.7	14	1570	1275	652.214
13	3	92.9	14	1501	1084	489.802
14	2	76.9	14	1806		44.039
15	2	51.8	14	1487		686.347
16	2	68	14	1978		66.765
17	1	91.7	14			263.482

Type 5 Radar Waveform_11						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	74.4	13	1248		684.681
2	2	77.3	13	1340		388.33
3	2	81.6	13	1165		539.3
4	3	97.8	13	1985	1743	176.27
5	3	98.6	13	1482	1943	1106.06
6	1	93.5	13			655.19
7	2	99.8	13	1367		750.37
8	1	54.5	13			824.83
9	2	53.4	13	1149		477.6
10	2	91.2	13	1522		787.3

Type 5 Radar Waveform_12						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	1	61.2	6			881.279
2	3	59.2	6	1054	1890	543.58
3	3	61.5	6	1224	1577	61.44
4	2	56.2	6	1714		399.67
5	3	71.6	6	1511	1962	42.63
6	2	80.2	6	1397		99.94
7	1	83.7	6			29.33
8	3	97.9	6	1123	1036	648.43
9	1	72.3	6			20.24
10	1	60.4	6			590.2
11	2	57.7	6	1044		850.6
12	2	51.4	6	1415		420.4

Type 5 Radar Waveform_13						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	71.5	6	1529		615.638
2	2	73.3	6	1755		1216.927
3	2	93.9	6	1662		1258.033
4	3	98.9	6	1868	1163	784.45
5	2	75.9	6	1744		27.657
6	1	86	6			735.553
7	2	60.8	6	1301		347.59
8	2	74	6	1494		30.857
9	2	65	6	1321		1215.533

Type 5 Radar Waveform_14						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	1	77.1	18			287.708
2	2	98.7	18	1018		81.391
3	2	92	18	1028		274.892
4	3	82.7	18	1706	1475	272.353
5	1	88.2	18			461.604
6	2	95.9	18	1386		18.545
7	2	96.8	18	1776		69.365
8	3	71.7	18	1121	1830	1033.756
9	3	52.1	18	1851	1979	225.217
10	2	98.2	18	1975		791.218
11	1	81.3	18			255.309

Type 5 Radar Waveform_15						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	3	86.8	7	1207	1275	576.172
2	2	53.9	7	1738		924.6
3	3	83.8	7	1379	1683	497.96
4	2	77.6	7	1383		74.73
5	3	79	7	1366	1606	546.47
6	2	60.9	7	1938		955.53
7	1	64	7			27.26
8	2	75.1	7	1573		75.41
9	3	63.9	7	1767	1773	892.32
10	1	85.1	7			561.4
11	1	56.7	7			130.5
12	2	83.2	7	1396		294.3

Type 5 Radar Waveform_16						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	84.2	14	1337		694.503
2	3	63.1	14	1727	1601	273.16
3	2	84	14	1050		681.17
4	2	99.5	14	1726		154.4
5	3	88.6	14	1414	1268	150.93
6	2	69.2	14	1441		418.59
7	1	54.4	14			744.44
8	2	50.8	14	1187		698.15
9	2	80.5	14	1836		373.51
10	2	67.3	14	1196		507.91
11	2	58.9	14	1968		84.57
12	3	96.2	14	1161	1888	464.36
13	1	50.2	14			80
14	3	79.9	14	1584	1475	137.6
15	2	90.9	14	1476		562.8

**Type 5 Radar Waveform\_17**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	1	51.6	15			472.685
2	2	55.3	15	1054		671.86
3	3	76.4	15	1597	1929	108.18
4	2	98.5	15	1432		465.16
5	1	57.6	15			54.77
6	2	66.6	15	1093		695.62
7	2	90.2	15	1831		388.94
8	2	69.8	15	1306		495.64
9	2	50.6	15	1357		270.44
10	3	52	15	1339	1656	298.16
11	2	93.3	15	1585		565.44
12	2	52.9	15	1064		135.42
13	1	83.9	15			638.46
14	3	75.5	15	1461	1757	489.5
15	2	76.9	15	1377		730.1
16	2	66.5	15	1140		312.3

**Type 5 Radar Waveform\_18**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	1	86.2	10			1003.09
2	2	55.1	10	1619		1069.987
3	2	86.1	10	1711		949.763
4	1	95.2	10			897.59
5	1	98.4	10			401.987
6	2	87	10	1612		697.703
7	3	70.9	10	1328	1436	677.78
8	2	53.1	10	1755		491.777
9	3	73.7	10	1374	1322	617.533

**Type 5 Radar Waveform\_19**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	3	51.7	11	1527	1208	354.333
2	2	61.6	11	1464		331.137
3	2	98.7	11	1172		239.534
4	1	70.1	11			213.181
5	1	86	11			597.959
6	1	95.2	11			235.776
7	1	59.9	11			219.103
8	3	51.4	11	1115	1721	300.95
9	3	81.2	11	1258	1199	732.847
10	2	80.4	11	1373		570.344
11	3	89.5	11	1919	1966	486.711
12	2	77.2	11	1335		130.009
13	1	72.4	11			87.986
14	3	70	11	1978	1387	447.143

**Type 5 Radar Waveform\_20**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	79.3	17	1244		480.438
2	2	52.4	17	1495		627.743
3	1	72.1	17			503.507
4	1	57.4	17			594.08
5	3	54.3	17	1087	1616	194.463
6	2	55.2	17	1613		642.757
7	3	76.9	17	1460	1242	125.93
8	1	97.4	17			146.373
9	2	66.4	17	1684		357.717
10	2	58.7	17	1595		304.66
11	2	86.1	17	1933		336.553
12	1	61.4	17			396.337
13	2	83.2	17	1280		104.85
14	2	79	17	1479		522.893
15	2	61.6	17	1568		361.137
16	2	88.3	17	1909		32.3
17	2	81.5	17	1764		142.533
18	3	73.2	17	1365	1834	477.967

**Type 5 Radar Waveform\_21**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	67.6	14			147.919
2	2	54.5	14	1942		231.69
3	2	79.1	14	1212		185.342
4	3	55.8	14	1382	1226	276.253
5	3	60.6	14	1163	1970	588.784
6	3	89.8	14	1113	1290	300.615
7	3	53.3	14	1582	1604	316.506
8	3	59.6	14	1207	1265	582.577
9	2	68.3	14	1848		437.958
10	2	93.1	14	1065		246.389
11	2	99.4	14	1942		90.021
12	3	75.5	14	1754	1117	508.602
13	1	58.4	14			461.203
14	1	59.1	14			79.494
15	3	83.6	14	1555	1012	76.485
16	3	83.2	14	1460	1873	288.956
17	2	88.1	14	1419		164.537
18	2	54.7	14	1183		245.658
19	1	98.2	14			358.279

**Type 5 Radar Waveform\_22**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	66.4	9	1578		288.515
2	1	89.7	9			424.863
3	1	66.2	9			540.936
4	2	82.1	9	1763		321.439
5	3	53.8	9	1092	1349	801.232
6	3	83.7	9	1639	1168	762.865
7	1	62.1	9			318.938
8	1	92.9	9			169.002
9	1	85.4	9			883.775
10	2	52	9	1238		314.168
11	2	88.3	9	1266		528.661
12	2	84.9	9	1555		735.754
13	3	75.7	9	1851	1321	702.777

Type 5 Radar Waveform_23						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	3	99.3	19	1484	1109	302.793
2	3	84.4	19	1176	1444	718.21
3	1	82.6	19			12.32
4	2	76.1	19	1608		259.74
5	1	95.4	19			451.98
6	2	60.5	19	1756		695.01
7	3	91.4	19	1359	1126	534.46
8	2	54.7	19	1434		790.7
9	3	63.4	19	1722	1670	445.5
10	2	62.7	19	1707		170.16
11	1	78.6	19			449.61
12	1	77.7	19			27.42
13	3	68	19	1397	1709	579.9
14	2	93.9	19	1941		161.4
15	2	50.5	19	1404		50.4

Type 5 Radar Waveform_24						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	90	7	1116		801.728
2	2	55.9	7	1331		792.771
3	2	78.7	7	1309		539.982
4	1	78.8	7			966.333
5	3	91.9	7	1301	1534	779.144
6	1	89.1	7			779.625
7	3	71	7	1056	1290	80.865
8	1	84.7	7			729.436
9	3	94.7	7	1938	1728	41.167
10	2	83.4	7	1584		558.418
11	3	81.5	7	1724	1620	174.309

Type 5 Radar Waveform_25						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	69.1	8	1440		379.408
2	2	91.1	8	1874		575.433
3	2	96	8	1264		515.586
4	2	65.5	8	1585		448.599
5	3	51.7	8	1088	1413	457.892
6	3	50.3	8	1731	1781	388.845
7	2	93.4	8	1694		610.698
8	1	56.2	8			141.892
9	1	93.6	8			168.325
10	1	89.7	8			235.288
11	2	83.5	8	1437		400.151
12	1	57.7	8			403.954
13	1	66	8			481.877

**Type 5 Radar Waveform\_26**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	64.4	12	1883	1811	775.303
2	1	99.9	12			16.489
3	3	95.7	12	1361	1125	163.596
4	2	68.6	12	1018		824.459
5	3	76.9	12	1235	1374	838.522
6	2	62.1	12	1233		272.075
7	2	71.9	12	1716		742.578
8	1	58.2	12			61.662
9	2	72.9	12	1590		789.625
10	1	81.4	12			760.388
11	2	63.4	12	1388		600.821
12	1	84.6	12			528.554
13	2	70.2	12	1919		657.577

**Type 5 Radar Waveform\_27**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	66.8	12	1533		309.698
2	1	89.6	12			386.783
3	2	89.4	12	1769		262.687
4	3	90	12	1533	1657	535.73
5	2	51.3	12	1418		44.273
6	2	88.6	12	1239		5.997
7	3	96.4	12	1273	1105	265.57
8	2	75.3	12	1514		527.523
9	1	50.6	12			377.417
10	3	99.4	12	1525	1741	472.9
11	2	97.4	12	1565		207.773
12	1	50.8	12			580.717
13	2	57.4	12	1319		437.88
14	3	90.2	12	1708	1781	34.193
15	2	77.4	12	1369		138.447
16	1	65.5	12			549.1
17	2	57	12	1747		92.733
18	3	80.9	12	1777	1112	288.267

**Type 5 Radar Waveform\_28**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	83.8	10	1538		244.518
2	2	59.9	10	1894		287.29
3	2	67.9	10	1063		146.64
4	1	85.8	10			753.24
5	1	66.9	10			494.97
6	2	63.6	10	1265		2.39
7	3	51.5	10	1733	1395	83.7
8	1	62.3	10			983.9

**Type 5 Radar Waveform\_29**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	3	98.6	10	1858	1623	498.549
2	2	50.3	10	1597		584.347
3	2	72.4	10	1814		562.314
4	3	57.2	10	1236	1405	819.741
5	1	78	10			287.039
6	2	79	10	1918		628.976
7	3	95	10	1778	1648	11.523
8	2	98.7	10	1160		838.73
9	3	54	10	1343	1374	413.587
10	1	82.1	10			180.964
11	2	52.6	10	1038		541.371
12	3	78	10	1915	1163	512.859
13	1	75.2	10			591.786
14	1	77.4	10			327.043

**Type 5 Radar Waveform\_30**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	78.2	18	1487		415.043
2	2	65.2	18	1564		798.88
3	1	76.1	18			913.24
4	1	55.1	18			10.21
5	2	75.2	18	1759		793.17
6	2	88.5	18	1182		436.16
7	2	99.1	18	1013		428.65
8	2	51.1	18	1669		896.45
9	3	73.2	18	1906	1055	821.48
10	2	90.8	18	1764		776.85
11	3	69.7	18	1963	1209	129.3
12	2	83.8	18	1814		832.4

## Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5490.4	1	16	5500	1
2	5490.4	1	17	5500	1
3	5490.4	1	18	5500	1
4	5490.4	1	19	5500	1
5	5490.4	1	20	5500	1
6	5490.4	1	21	5509.6	1
7	5490.4	1	22	5509.6	1
8	5490.4	1	23	5509.6	1
9	5490.4	1	24	5509.6	1
10	5490.4	1	25	5509.6	1
11	5500	1	26	5509.6	1
12	5500	1	27	5509.6	1
13	5500	1	28	5509.6	1
14	5500	1	29	5509.6	1
15	5500	1	30	5509.6	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5495	21	27	5509	81
36	5506	108	38	5490	114
68	5490	204	42	5495	126
81	5499	243	52	5503	156
--	--	--	56	5494	168
--	--	--	80	5510	240

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
19	5509	57	13	5492	39
64	5508	192	25	5494	75
65	5503	195	50	5504	150
86	5504	258	60	5497	180
--	--	--	83	5496	249

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5491	27	30	5501	90
13	5507	39	31	5502	93
69	5495	207	43	5495	129
--	--	--	51	5503	153
--	--	--	73	5500	219

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
53	5498	159	43	5495	129
58	5509	174	48	5502	144
--	--	--	65	5508	195

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
40	5496	120	26	5499	78
68	5497	204	37	5509	111
71	5502	213	58	5496	174
79	5493	237	80	5490	240

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
27	5505	81	30	5495	90
43	5503	129	35	5498	105
80	5507	240	57	5507	171
--	--	--	65	5509	195
--	--	--	74	5497	222
--	--	--	90	5490	270

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
36	5504	108	6	5495	18
48	5494	144	29	5504	87
58	5506	174	71	5506	213
99	5508	297	88	5505	264
--	--	--	91	5507	273
--	--	--	97	5508	291

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5570	30	17	5490	51
22	5579	66	25	5498	75
28	5585	84	36	5505	108
96	5581	288	51	5497	153
--	--	--	59	5494	177
--	--	--	88	5502	264
--	--	--	89	5499	267

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
45	5501	135	43	5491	129
52	5503	156	61	5495	183
58	5496	174	63	5496	189
63	5507	189	--	--	--
82	5499	246	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
32	5501	96	63	5492	189
68	5505	204	98	5507	294
80	5500	240	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5507	9	3	5508	9
10	5491	30	8	5491	24
34	5502	102	10	5490	30
38	5499	114	30	5503	90
--	--	--	47	5502	141
--	--	--	49	5499	147
--	--	--	55	5492	165
--	--	--	66	5507	198
--	--	--	78	5494	234
--	--	--	92	5505	276

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5505	24	34	5506	102
--	--	--	44	5490	132
--	--	--	66	5504	198
--	--	--	73	5505	219
--	--	--	86	5499	258
--	--	--	91	5508	273

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5500	27	16	5499	48
32	5495	96	30	5507	90
44	5496	132	52	5497	156
75	5498	225	59	5493	177

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
38	5499	114	5	5505	15
39	5497	117	17	5495	51
44	5504	132	24	5490	72
45	5502	135	73	5507	219
71	5490	213	92	5496	276
74	5498	222	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
94	5498	282	21	5497	63
--	--	--	43	5491	129
--	--	--	49	5501	147
--	--	--	88	5508	264
--	--	--	89	5506	267

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/08
Test Item	Radar Statistical Performance Check (802.11ax-HE40 mode – 5510MHz)		

#### Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1	878	61	1
2	5491	1	798	67	1
3	5491	1	918	58	1
4	5491	1	818	65	1
5	5500	1	658	81	1
6	5500	1	578	92	1
7	5500	1	758	70	1
8	5500	1	738	72	1
9	5509	1	638	83	1
10	5509	1	3066	18	1
11	5509	1	678	78	1
12	5509	1	598	89	0
13	5510	1	898	59	1
14	5510	1	538	98	1
15	5510	1	858	62	1
16	5510	1	836	64	0
17	5510	1	3005	18	0
18	5510	1	2651	20	1
19	5511	1	2040	26	1
20	5511	1	883	60	1
21	5511	1	1715	31	1
22	5511	1	911	58	0
23	5520	1	2480	22	0
24	5520	1	1328	40	1
25	5520	1	958	56	0
26	5520	1	1345	40	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5529	1	1368	39	1
28	5529	1	597	89	0
29	5529	1	1515	35	1
30	5529	1	1985	27	0
Detection Percentage (%)					73.3%

## Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	2.1	186	29	1
2	5491	3.0	230	27	1
3	5491	2.8	177	25	1
4	5491	2.7	150	29	1
5	5500	2.6	199	26	1
6	5500	3.4	216	24	1
7	5500	4.0	229	27	1
8	5500	3.2	205	26	1
9	5509	2.9	215	28	1
10	5509	2.5	228	28	1
11	5509	2.4	204	26	1
12	5509	3.3	227	23	1
13	5510	4.9	229	26	1
14	5510	1.2	178	28	1
15	5510	3.2	156	24	1
16	5510	2.3	213	25	1
17	5510	3.2	215	27	1
18	5510	1.6	186	27	1
19	5511	3.3	158	27	1
20	5511	4.8	227	23	1
21	5511	3.8	212	29	1
22	5511	4.8	206	24	1
23	5520	1.4	162	23	1
24	5520	3.4	167	26	1
25	5520	4.7	208	26	1
26	5520	4.8	169	23	1
27	5529	1.6	158	26	1
28	5529	1.7	210	24	1
29	5529	3.8	201	28	1
30	5529	4.2	161	28	1
Detection Percentage (%)					100%

## Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	7.7	436	16	1
2	5491	9.3	232	18	0
3	5491	10.0	451	17	1
4	5491	9.2	466	16	1
5	5500	6.7	467	16	1
6	5500	9.7	491	16	1
7	5500	6.0	221	17	1
8	5500	6.3	361	17	1
9	5509	8.4	500	17	1
10	5509	8.7	390	16	0
11	5509	10.0	358	16	1
12	5509	9.4	373	17	1
13	5510	6.1	360	16	0
14	5510	8.9	250	17	1
15	5510	9.7	323	16	1
16	5510	8.8	278	16	1
17	5510	9.6	249	18	1
18	5510	6.6	349	16	1
19	5511	8.0	360	16	0
20	5511	6.0	469	17	1
21	5511	6.0	500	16	1
22	5511	9.6	417	17	1
23	5520	8.5	348	17	1
24	5520	9.9	492	17	1
25	5520	6.2	315	17	1
26	5520	8.2	338	17	1
27	5529	7.4	492	16	1
28	5529	7.5	225	17	1
29	5529	7.9	369	17	1
30	5529	6.4	281	17	1
Detection Percentage (%)					86.7%

## Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	15.6	358	16	1
2	5491	16.7	374	13	1
3	5491	11.5	346	13	0
4	5491	13.1	482	12	1
5	5500	12.7	302	15	1
6	5500	14.9	220	14	1
7	5500	16.2	473	14	1
8	5500	14.4	386	13	1
9	5509	14.4	444	13	1
10	5509	11.5	236	15	0
11	5509	14.4	435	15	1
12	5509	17.9	282	14	1
13	5510	16.5	289	14	0
14	5510	13.8	406	12	1
15	5510	14.5	424	13	1
16	5510	15.7	347	15	1
17	5510	11.8	358	14	0
18	5510	15.3	300	12	1
19	5511	12.6	365	12	1
20	5511	19.4	222	16	1
21	5511	14.5	348	13	1
22	5511	19.9	475	14	1
23	5520	13.9	290	16	1
24	5520	13.5	439	13	1
25	5520	19.9	483	13	1
26	5520	12.3	238	14	1
27	5529	16.3	287	15	1
28	5529	19.1	374	16	1
29	5529	11.2	336	12	1
30	5529	13.1	251	16	1
Detection Percentage (%)					86.7%

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

waveforms is as follows:  $\frac{P_d\ 1 + P_d\ 2 + P_d\ 3 + P_d\ 4}{4} = (73.3\% + 100\% + 86.7\% + 86.7\%) / 4 = 86.7\% (>80\%)$

## Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5510.0	0	16	5497.4	1
2	5510.0	1	17	5495.8	1
3	5510.0	1	18	5497.8	1
4	5510.0	1	19	5496.2	1
5	5510.0	1	20	5497.0	1
6	5510.0	1	21	5521.0	1
7	5510.0	1	22	5525.0	1
8	5510.0	0	23	5522.2	1
9	5510.0	1	24	5523.0	0
10	5510.0	1	25	5523.4	1
11	5494.2	1	26	5526.2	1
12	5494.6	1	27	5527.0	1
13	5499.0	1	28	5525.0	1
14	5497.0	1	29	5525.4	1
15	5495.0	1	30	5526.6	1
Detection Percentage (%)					90%

## Type 5 Radar Waveform\_1

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	100	15			71.053
2	2	59.4	15	1827		520.35
3	1	72.7	15			347.7
4	2	72.6	15	1675		948.15
5	2	74.3	15	1553		566.18
6	1	67.5	15			973.75
7	1	63.7	15			799.19
8	2	54	15	1900		318.01
9	2	54.8	15	1119		56.95
10	1	80.9	15			532

**Type 5 Radar Waveform\_2**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	68.4	20	1768		823.276
2	3	62.3	20	1898	1360	866.141
3	2	95.1	20	1424		259.892
4	2	93.2	20	1387		1002.243
5	1	92.1	20			441.484
6	3	61.4	20	1295	1493	718.345
7	2	67.4	20	1100		597.235
8	3	70.5	20	1997	1278	260.726
9	2	81.2	20	1190		227.197
10	1	99.4	20			120.548
11	2	81.4	20	1356		1030.909

**Type 5 Radar Waveform\_3**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	1	87.2	6			26.894
2	1	61.1	6			351.231
3	3	83.9	6	1503	1701	353.472
4	2	57.9	6	1071		494.883
5	2	77.8	6	1694		73.174
6	2	67.9	6	1318		98.065
7	1	88.6	6			290.306
8	2	59.9	6	1815		10.807
9	1	55.5	6			59.438
10	3	84.5	6	1896	1324	318.059
11	2	72.4	6	1940		581.091
12	1	69	6			172.722
13	2	99.8	6	1879		410.873
14	2	66.4	6	1670		343.294
15	1	94.4	6			121.005
16	3	84.5	6	1032	1311	177.236
17	2	62.3	6	1974		122.237
18	3	66	6	1552	1371	491.158
19	2	56.7	6	1787		256.479

**Type 5 Radar Waveform\_4**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	1	70	20			606.009
2	3	83.7	20	1636	1782	827.171
3	1	98.6	20			1025.982
4	2	85.5	20	1845		843.003
5	2	89.3	20	1558		844.104
6	2	60.2	20	1857		965.235
7	3	98.5	20	1148	1270	164.915
8	2	76.9	20	1914		175.536
9	2	93.2	20	1712		494.737
10	1	81.8	20			469.018
11	3	91.7	20	1638	1612	899.809

**Type 5 Radar Waveform\_5**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	76.7	7	1548		230.853
2	1	99.2	7			433.361
3	1	95.8	7			72.872
4	2	69.6	7	1836		378.423
5	1	80.8	7			356.814
6	2	80.1	7	1668		538.425
7	3	73	7	1412	1451	562.626
8	1	80.4	7			37.337
9	3	97.3	7	1287	1429	91.848
10	2	85.2	7	1278		290.839
11	3	96.4	7	1550	1614	247.151
12	2	63.9	7	1035		383.222
13	1	76	7			561.053
14	2	91.1	7	1749		12.494
15	1	65.7	7			375.015
16	2	51.4	7	1567		500.946
17	3	92.3	7	1197	1161	385.937
18	2	84.4	7	1355		329.458
19	3	74.8	7	1478	1039	527.179

**Type 5 Radar Waveform\_6**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	99	15	1920		1230.89
2	2	87.2	15	1300		1084.86
3	2	95.5	15	1751		1092.03
4	1	67.4	15			96.54
5	2	79.9	15	1957		305.83
6	2	50.3	15	1834		985.27
7	1	77.7	15			1256.1
8	2	83.6	15	1813		1254.3

**Type 5 Radar Waveform\_7**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	98.6	10	1621	1763	393.388
2	2	92.6	10	1498		133.131
3	2	84.2	10	1592		625.68
4	2	60.4	10	1016		402.85
5	2	85.3	10	1486		39.91
6	1	76.8	10			595.83
7	1	51.1	10			494.4
8	3	96.1	10	1438	1383	605.73
9	3	60	10	1097	1472	593.17
10	2	51.5	10	1324		429.92
11	2	72.1	10	1104		224.16
12	2	71.9	10	1558		125.48
13	2	76.1	10	1823		425.15
14	2	57.8	10	1909		247.59
15	2	52.2	10	1441		706
16	3	95.2	10	1121	1896	44

**Type 5 Radar Waveform\_8**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μ sec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	1	91.1	16			532.972
2	2	87	16	1649		1061.991
3	2	71.7	16	1444		474.632
4	1	71.5	16			946.303
5	1	84.1	16			274.864
6	1	78	16			543.365
7	2	75.2	16	1943		423.855
8	2	69.3	16	1902		161.886
9	1	74.4	16			330.537
10	1	88.2	16			580.018
11	2	61.7	16	1599		295.609

**Type 5 Radar Waveform\_9**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	74	15	1336		74.855
2	1	90.6	15			595.768
3	1	72	15			180.105
4	2	85.5	15	1325		688.883
5	3	94.2	15	1250	1007	688.721
6	1	95.1	15			300.978
7	1	61.8	15			200.206
8	3	90.9	15	1541	1826	236.474
9	1	54.6	15			138.441
10	2	92.6	15	1038		673.639
11	2	70.5	15	1735		188.816
12	1	83.4	15			463.714
13	2	92	15	1056		229.532
14	1	54.8	15			152.699
15	3	82.6	15	1315	1284	544.447
16	1	70.1	15			590.265
17	2	93.4	15	1742		585.582

**Type 5 Radar Waveform\_10**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	61.1	19	1501		116.404
2	2	52.7	19	1751		500.44
3	3	76	19	1518	1094	873.69
4	2	65.1	19	1186		968.53
5	3	56.4	19	1727	1310	647.59
6	2	86.1	19	1809		177.67
7	3	62.2	19	1297	1560	37.78
8	3	92.7	19	1546	1976	184.87
9	2	99.7	19	1187		303.94
10	1	50.8	19			391

Type 5 Radar Waveform_11						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	81.7	8	1555		1018.32
2	3	74.4	8	1564	1019	1157.577
3	3	50.4	8	1331	1806	613.733
4	2	87.1	8	1825		275.61
5	2	64.6	8	1434		1248.267
6	3	86.4	8	1150	1017	1061.953
7	2	93.4	8	1134		486.71
8	3	50.1	8	1484	1773	931.867
9	3	90	8	1348	1763	1127.633

Type 5 Radar Waveform_12						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	1	70	9			415.672
2	2	67.6	9	1522		75.85
3	3	57	9	1398	1428	791.99
4	1	56.9	9			49.85
5	2	57	9	1355		1061.31
6	2	78.6	9	1171		15.51
7	2	92.9	9	1095		1006.93
8	3	99.4	9	1570	1942	987.48
9	3	89	9	1421	1358	79.47
10	3	94.4	9	1692	1117	1065.1

Type 5 Radar Waveform_13						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	56.1	20	1994		172.399
2	2	50.7	20	1649		312.16
3	2	50.3	20	1496		366.34
4	3	90.5	20	1763	1220	115.39
5	2	85.1	20	1781		621.16
6	2	60.9	20	1110		136.23
7	2	88.4	20	1164		918.21
8	2	58.8	20	1716		814.81
9	1	59	20			112.91
10	3	79.4	20	1380	1927	851.22
11	3	93.4	20	1355	1082	724.1
12	2	95.4	20	1253		668.5

Type 5 Radar Waveform_14						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	97.2	15	1060	1562	95.444
2	2	71.2	15	1364		647.18
3	2	79	15	1071		61.42
4	2	92.7	15	1671		593.3
5	2	57.7	15	1275		735.82
6	3	69.5	15	1280	1642	170.75
7	3	60.7	15	1710	1674	671.2
8	2	64.7	15	1335		490.42
9	2	95.2	15	1357		441.6
10	2	84.1	15	1615		508.53
11	2	76.9	15	1424		108.28
12	3	94.4	15	1665	1238	534.2
13	2	73.5	15	1304		237.98
14	2	64.3	15	1056		242.7
15	2	83.5	15	1840		681.4

Type 5 Radar Waveform_15						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	73.7	10			414.097
2	1	68	10			225.913
3	2	63.9	10	1013		405.595
4	3	86.2	10	1857	1650	669.553
5	2	78.2	10	1295		187.101
6	2	97.3	10	1108		494.138
7	1	90.1	10			508.216
8	2	94.8	10	1762		457.514
9	2	57.8	10	1809		554.221
10	2	95.6	10	1472		438.049
11	1	56.5	10			616.986
12	2	59.4	10	1874		270.784
13	2	54.1	10	1045		248.992
14	1	76.3	10			28.719
15	2	66.8	10	1725		537.347
16	1	60.7	10			535.465
17	3	76.8	10	1717	1059	120.282

Type 5 Radar Waveform_16						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	78.7	16			389.457
2	2	78.8	16	1886		109.013
3	2	70.2	16	1452		406.11
4	3	52.2	16	1998	1760	288.71
5	2	53.8	16	1851		719.63
6	1	83.3	16			633.26
7	2	87.7	16	1112		78.31
8	1	96.4	16			124.84
9	2	85.7	16	1557		763.07
10	1	78.3	16			447.12
11	2	98.5	16	1238		615.72
12	2	94.7	16	1366		571.42
13	1	78.1	16			441.1
14	2	65.2	16	1078		773
15	2	70.7	16	1012		254.9

**Type 5 Radar Waveform\_17**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	70.3	12	1954		199.648
2	1	99.7	12			423.29
3	2	91.2	12	1175		109.4
4	3	88.1	12	1129	1436	302.81
5	2	63	12	1977		1140.92
6	3	58.7	12	1261	1551	473.38
7	1	69.3	12			782.96
8	2	69.1	12	1914		116.6
9	3	59.4	12	1144	1124	564.8
10	1	59.4	12			71.8

**Type 5 Radar Waveform\_18**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	69	17	1795		112.122
2	1	54.4	17			473.411
3	2	78.1	17	1308		16.422
4	2	52.8	17	1971		217.603
5	1	61.7	17			623.344
6	1	54.8	17			186.605
7	1	97	17			537.546
8	1	52.7	17			100.267
9	3	71.3	17	1215	1786	63.618
10	2	94.7	17	1559		489.299
11	2	53.9	17	1102		34.351
12	3	61.5	17	1344	1460	35.622
13	2	63	17	1569		478.913
14	3	56.8	17	1943	1915	133.044
15	2	57.6	17	1783		285.955
16	2	64.3	17	1802		600.016
17	2	99.4	17	1396		143.137
18	2	73	17	1480		129.058
19	2	55.2	17	1196		551.679

**Type 5 Radar Waveform\_19**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	88.5	13	1675		55.355
2	1	76.7	13			268.602
3	2	94.3	13	1758		556.385
4	3	81.6	13	1400	1686	328.523
5	1	96.2	13			362.621
6	1	97.3	13			35.948
7	2	74	13	1104		660.356
8	3	98.9	13	1931	1459	348.754
9	3	81.3	13	1713	1786	27.631
10	2	58.8	13	1025		269.859
11	3	70.6	13	1854	1256	71.886
12	3	71.2	13	1855	1087	59.944
13	2	76.3	13	1913		524.222
14	1	55	13			530.719
15	1	96.9	13			71.497
16	2	70.1	13	1836		331.365
17	2	85.3	13	1553		591.782

**Type 5 Radar Waveform\_20**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	98.4	15	1819	1027	450.533
2	3	61	15	1123	1092	348.913
3	1	94.1	15			171.357
4	2	68.5	15	1106		224.2
5	2	81.3	15	1329		610.173
6	1	58.2	15			357.997
7	2	66.9	15	1390		306.13
8	3	66.9	15	1787	1043	529.713
9	2	78.7	15	1995		550.597
10	2	80.6	15	1244		393.53
11	3	66.9	15	1293	1075	354.793
12	1	73	15			99.347
13	1	80.4	15			92.79
14	2	67.2	15	1032		16.343
15	1	64.9	15			58.177
16	2	75.7	15	1561		152.7
17	2	62.4	15	1954		25.133
18	2	67.4	15	1803		380.567

**Type 5 Radar Waveform\_21**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	69.1	20	1332	1974	595.883
2	2	85.2	20	1131		71.267
3	2	66.2	20	1784		566.667
4	2	72.3	20	1632		399.98
5	3	86.2	20	1183	1374	433.393
6	3	65.8	20	1280	1822	643.467
7	2	78.6	20	1835		427.78
8	1	72.2	20			590.873
9	1	67.2	20			57.197
10	3	50.4	20	1208	1318	641.82
11	1	70.3	20			80.003
12	1	84.9	20			659.437
13	3	71.3	20	1232	1237	332.99
14	1	90	20			60.483
15	1	98.3	20			67.097
16	2	63.4	20	1374		206.3
17	1	56.7	20			643.633
18	2	58.9	20	1234		247.267

**Type 5 Radar Waveform\_22**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	51.1	10			288.923
2	2	96	10	1497		712.1
3	3	54.6	10	1885	1769	336.02
4	2	74.4	10	1145		916.55
5	2	68.6	10	1556		29.61
6	1	58.5	10			606.92
7	1	97.9	10			702.28
8	2	72.9	10	1677		80.58
9	3	50.1	10	1856	1709	280.48
10	2	70	10	1173		529.08
11	1	96	10			687
12	2	65.6	10	1297		470.6

Type 5 Radar Waveform_23						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	65.1	17	1441		581.236
2	3	53.4	17	1532	1284	71.272
3	3	96	17	1078	1435	663
4	3	65.6	17	1270	1715	164.08
5	2	100	17	1968		628.5
6	3	81.9	17	1113	1474	599.97
7	3	79.8	17	1327	1340	99.84
8	2	69.8	17	1915		664.14
9	2	68.8	17	1337		615.32
10	1	62.8	17			215.88
11	2	60.4	17	1999		533.15
12	3	94.4	17	1867	1140	225.52
13	2	74.9	17	1672		436.97
14	1	74.2	17			302
15	3	94.8	17	1089	1303	735.9
16	2	75.6	17	1550		277

Type 5 Radar Waveform_24						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	50.6	15	1917		829.811
2	2	99.3	15	1423		978.697
3	3	94.6	15	1566	1851	170.103
4	1	52.7	15			945.34
5	1	84	15			274.707
6	2	85.8	15	1339		387.933
7	2	87.7	15	1937		280.01
8	1	66.1	15			976.167
9	1	55.2	15			794.433

Type 5 Radar Waveform_25						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	3	79	14	1701	1668	117.506
2	2	83	14	1995		852.4
3	3	52.3	14	1549	1558	428.04
4	1	58.6	14			22.25
5	2	55.8	14	1126		573.34
6	3	89	14	1553	1024	335.56
7	3	59.1	14	1571	1874	504.19
8	2	78.8	14	1598		611.61
9	3	89.8	14	1987	1319	885.94
10	2	64.6	14	1020		16.13
11	2	70.1	14	1412		879.3
12	1	50.7	14			837

Type 5 Radar Waveform_26						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	80.9	7	1407		890.097
2	2	83.9	7	1561		133.93
3	2	62.2	7	1968		132.32
4	1	73.3	7			158.97
5	1	94.2	7			501.8
6	2	70.3	7	1197		687.6
7	3	60.7	7	1640	1471	85.93
8	2	76.8	7	1653		821.99
9	3	75.5	7	2000	1938	627.55
10	1	97.3	7			510.47
11	2	73.3	7	1475		516.8
12	2	76	7	1762		298.4

Type 5 Radar Waveform_27						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	3	75.5	5	1383	1854	1033.85
2	2	51.8	5	1310		195.791
3	2	100	5	1786		585.332
4	1	96.8	5			242.393
5	1	56.3	5			240.194
6	2	78.3	5	1593		273.405
7	2	98.1	5	1994		618.435
8	3	71	5	1380	1292	490.306
9	2	76.4	5	1377		1060.387
10	1	65.2	5			611.718
11	2	87.3	5	1026		594.109

Type 5 Radar Waveform_28						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	3	80.1	10	1144	1372	486.727
2	2	50.4	10	1938		257.01
3	2	97.3	10	1213		453.315
4	3	95.4	10	1888	1006	677.593
5	3	90.6	10	1747	1833	322.341
6	2	82.4	10	1702		314.268
7	1	74.9	10			1.096
8	2	50.9	10	1304		391.214
9	3	66.9	10	1747	1069	254.791
10	1	61.9	10			411.089
11	2	55.6	10	1532		600.716
12	2	55.2	10	1260		204.314
13	2	74.5	10	1669		676.192
14	1	50.8	10			252.969
15	2	71.6	10	1505		508.747
16	2	63.5	10	1681		531.265
17	1	93.6	10			635.482

Type 5 Radar Waveform_29						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	83.1	9	1840		288.035
2	2	66.5	9	1673		387.67
3	2	59.6	9	1324		825.8
4	3	88.3	9	1331	1714	499.89
5	1	67.4	9			63.9
6	2	91.8	9	1688		882.68
7	2	97.4	9	1371		510.72
8	1	54.4	9			488.03
9	2	95.3	9	1234		898.75
10	2	78.6	9	1213		418.53
11	1	62.4	9			506.8
12	1	56.3	9			2.8

Type 5 Radar Waveform_30						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	95.2	6	1073	1694	530.757
2	2	56.2	6	1670		365.421
3	2	72.5	6	1113		185.102
4	3	72.2	6	1504	1899	357.653
5	3	97.8	6	1627	1729	659.434
6	3	56.3	6	1190	1871	596.175
7	2	76.2	6	1968		176.165
8	2	66.5	6	1316		442.186
9	3	75.8	6	1952	1332	562.547
10	2	77.6	6	1799		326.918
11	2	71.3	6	1519		475.909

## Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5491	1	16	5510	1
2	5491	1	17	5510	1
3	5491	1	18	5510	1
4	5491	1	19	5511	1
5	5500	1	20	5511	1
6	5500	1	21	5511	1
7	5500	1	22	5511	1
8	5500	1	23	5520	1
9	5509	1	24	5520	1
10	5509	1	25	5520	1
11	5509	1	26	5520	1
12	5509	1	27	5529	1
13	5510	1	28	5529	1
14	5510	1	29	5529	1
15	5510	1	30	5529	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5495	39	2	5495	6
22	5510	66	6	5493	18
26	5493	78	15	5492	45
31	5521	93	16	5529	48
35	5524	105	19	5497	57
51	5498	153	22	5513	66
54	5491	162	27	5510	81
71	5528	213	36	5512	108
87	5502	261	52	5491	156
--	--	--	64	5518	192
--	--	--	68	5501	204
--	--	--	97	5528	291

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5494	21	4	5515	12
29	5503	87	7	5519	21
30	5525	90	8	5495	24
32	5517	96	18	5496	54
42	5500	126	30	5524	90
51	5512	153	32	5525	96
52	5497	156	42	5530	126
54	5492	162	44	5529	132
79	5495	237	53	5512	159
100	5508	300	56	5517	168
--	--	--	66	5528	198
--	--	--	69	5503	207

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
18	5496	54	25	5518	75
32	5510	96	29	5523	87
63	5524	189	33	5504	99
65	5527	195	40	5528	120
76	5521	228	44	5502	132
83	5498	249	52	5503	156
86	5530	258	61	5520	183
90	5502	270	76	5513	228

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5516	12	10	5495	30
7	5511	21	16	5529	48
19	5493	57	25	5525	75
29	5527	87	34	5509	102
38	5515	114	41	5494	123
49	5494	147	60	5520	180
63	5523	189	71	5492	213
67	5507	201	84	5490	252
71	5514	213	88	5526	264
80	5499	240	--	--	--
87	5512	261	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
18	5494	54	7	5511	21
37	5509	111	59	5515	177
62	5529	186	65	5508	195
64	5503	192	71	5517	213
67	5517	201	76	5530	228
70	5493	210	84	5496	252
79	5514	237	85	5501	255
92	5505	276	87	5494	261
--	--	--	97	5492	291

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5525	3	4	5513	12
9	5491	27	12	5502	36
16	5502	48	13	5520	39
20	5528	60	20	5516	60
24	5504	72	21	5498	63
49	5509	147	38	5514	114
53	5522	159	58	5509	174
68	5521	204	74	5497	222
75	5518	225	77	5528	231
86	5512	258	81	5496	243
--	--	--	89	5510	267
--	--	--	95	5517	285
--	--	--	96	5500	288

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5509	3	12	5514	36
15	5490	45	27	5490	81
65	5518	195	46	5510	138
88	5492	264	67	5517	201
93	5523	279	70	5520	210
--	--	--	73	5496	219
--	--	--	89	5499	267
--	--	--	91	5522	273
--	--	--	97	5508	291
--	--	--	99	5509	297

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
15	5503	45	11	5523	33
34	5500	102	30	5506	90
37	5528	111	37	5494	111
39	5518	117	56	5528	168
43	5490	129	59	5514	177
45	5505	135	73	5512	219
--	--	--	91	5508	273
--	--	--	98	5492	294

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
26	5509	78	1	5522	3
28	5520	84	34	5508	102
38	5499	114	51	5526	153
57	5529	171	61	5497	183
72	5530	216	76	5524	228
81	5493	243	79	5517	237
83	5512	249	85	5518	255
--	--	--	89	5506	267
--	--	--	90	5504	270
--	--	--	95	5510	285

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5529	9	3	5500	9
5	5530	15	38	5523	114
20	5502	60	45	5498	135
28	5519	84	80	5524	240
30	5523	90	81	5492	243
32	5497	96	--	--	--
38	5508	114	--	--	--
43	5522	129	--	--	--
66	5521	198	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
22	5492	66	16	5524	48
24	5519	72	28	5512	84
45	5520	135	31	5513	93
49	5502	147	41	5526	123
56	5493	168	49	5528	147
79	5509	237	50	5505	150
--	--	--	80	5520	240
--	--	--	81	5517	243

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
12	5503	36	6	5507	18
16	5516	48	31	5494	93
26	5526	78	34	5529	102
52	5498	156	35	5522	105
68	5515	204	43	5530	129
71	5524	213	47	5498	141
99	5521	297	48	5501	144
--	--	--	50	5528	150
--	--	--	61	5497	183
--	--	--	63	5491	189
--	--	--	68	5506	204
--	--	--	72	5520	216
--	--	--	96	5492	288

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5521	15	1	5497	3
19	5506	57	11	5513	33
22	5494	66	21	5525	63
46	5520	138	25	5514	75
48	5503	144	31	5498	93
68	5505	204	45	5510	135
80	5527	240	53	5502	159
100	5508	300	67	5520	201
--	--	--	81	5508	243
--	--	--	96	5516	288

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
25	5509	75	43	5516	129
28	5530	84	62	5503	186
39	5499	117	73	5523	219
48	5493	144	76	5509	228
73	5498	219	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5530	39	31	5497	93
17	5517	51	43	5523	129
19	5504	57	47	5509	141
26	5514	78	52	5498	156
31	5491	93	54	5510	162
49	5497	147	59	5508	177
71	5501	213	62	5530	186
95	5490	285	95	5517	285
98	5494	294	--	--	--

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/09
Test Item	Radar Statistical Performance Check (802.11ax-HE80 mode – 5530MHz)		

#### Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1	898	59	1
2	5491	1	618	86	1
3	5500	1	598	89	1
4	5500	1	538	98	1
5	5509	1	758	70	1
6	5509	1	678	78	1
7	5510	1	798	67	1
8	5510	1	718	74	1
9	5511	1	858	62	1
10	5511	1	558	95	1
11	5520	1	938	57	1
12	5520	1	818	65	1
13	5529	1	638	83	1
14	5529	1	738	72	1
15	5530	1	878	61	1
16	5530	1	2442	22	1
17	5531	1	1743	31	1
18	5531	1	2877	19	1
19	5540	1	1147	46	1
20	5540	1	814	65	1
21	5549	1	2793	19	1
22	5549	1	1068	50	1
23	5550	1	1966	27	1
24	5550	1	2867	19	1
25	5551	1	1680	32	1
26	5551	1	1978	27	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5560	1	2668	20	1
28	5560	1	2220	24	1
29	5569	1	2671	20	1
30	5569	1	2327	23	1
Detection Percentage (%)					100%

## Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1.9	190	26	1
2	5491	2.7	195	26	0
3	5500	2.2	173	26	1
4	5500	4.4	221	28	0
5	5509	4.8	213	23	0
6	5509	3.0	189	25	1
7	5510	3.4	222	26	1
8	5510	1.0	169	29	1
9	5511	2.0	217	29	0
10	5511	1.5	170	24	1
11	5520	3.4	224	26	1
12	5520	3.4	222	23	1
13	5529	3.5	223	27	1
14	5529	1.4	221	25	1
15	5530	1.5	188	27	1
16	5530	4.4	193	25	1
17	5531	2.5	209	23	1
18	5531	3.0	173	26	1
19	5540	3.0	186	28	1
20	5540	1.3	221	23	1
21	5549	2.7	158	24	1
22	5549	3.1	182	25	1
23	5550	4.5	201	27	1
24	5550	2.1	200	26	1
25	5551	4.7	187	26	1
26	5551	2.5	195	23	1
27	5560	1.1	152	23	1
28	5560	4.9	227	26	1
29	5569	1.1	199	24	1
30	5569	3.8	227	28	1
Detection Percentage (%)					86.7%

## Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	6.7	309	17	0
2	5491	7.5	206	16	1
3	5500	6.1	431	17	1
4	5500	9.4	244	17	1
5	5509	9.5	346	18	1
6	5509	10.0	416	16	1
7	5510	9.8	266	17	1
8	5510	7.0	449	17	0
9	5511	9.0	269	17	1
10	5511	6.2	355	18	1
11	5520	9.7	479	18	1
12	5520	7.6	388	18	0
13	5529	9.8	298	17	1
14	5529	10.0	263	17	1
15	5530	8.7	416	17	1
16	5530	8.8	271	17	1
17	5531	6.4	309	17	1
18	5531	9.2	244	17	0
19	5540	10.0	225	17	1
20	5540	8.8	440	17	1
21	5549	7.3	222	16	1
22	5549	7.2	434	18	1
23	5550	9.2	343	16	1
24	5550	10.0	474	17	1
25	5551	8.9	401	16	1
26	5551	6.6	422	16	0
27	5560	9.0	241	16	1
28	5560	8.4	378	16	1
29	5569	6.1	212	18	1
30	5569	8.4	447	18	1
Detection Percentage (%)					83.3%

## Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	14.0	377	14	0
2	5491	14.9	479	15	1
3	5500	13.4	465	15	1
4	5500	11.5	200	16	1
5	5509	18.0	250	15	1
6	5509	13.7	295	15	1
7	5510	17.9	368	13	1
8	5510	11.7	207	12	0
9	5511	12.6	335	14	0
10	5511	11.5	384	13	1
11	5520	18.6	345	16	1
12	5520	14.9	260	15	1
13	5529	16.6	470	13	1
14	5529	13.5	387	15	1
15	5530	14.0	303	15	1
16	5530	20.0	260	14	1
17	5531	18.0	482	13	1
18	5531	14.0	336	14	1
19	5540	17.5	423	14	1
20	5540	16.9	200	14	1
21	5549	11.3	290	15	1
22	5549	15.4	230	15	1
23	5550	16.8	469	15	1
24	5550	14.5	205	12	1
25	5551	17.7	243	15	1
26	5551	17.9	265	14	1
27	5560	13.3	271	13	1
28	5560	13.3	212	15	1
29	5569	16.3	423	12	1
30	5569	14.3	430	14	1
Detection Percentage (%)					90%

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

waveforms is as follows:  $\frac{P_d\ 1 + P_d\ 2 + P_d\ 3 + P_d\ 4}{4} = (100\% + 86.7\% + 83.3\% + 90\%)/4 = 90\% (>80\%)$

## Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5530.0	1	16	5496.6	1
2	5530.0	1	17	5498.2	1
3	5530.0	1	18	5495.8	1
4	5530.0	1	19	5499.0	1
5	5530.0	1	20	5493.0	1
6	5530.0	1	21	5566.2	0
7	5530.0	1	22	5565.8	1
8	5530.0	1	23	5561.4	1
9	5530.0	1	24	5562.6	1
10	5530.0	1	25	5563.8	0
11	5493.0	1	26	5565.4	1
12	5495.8	1	27	5561.8	0
13	5498.6	1	28	5561.4	1
14	5498.2	1	29	5563.4	1
15	5495.8	1	30	5561.8	0
Detection Percentage (%)					86.6%

## Type 5 Radar Waveform\_1

Burst	Number of Pulses	Pulse Width (μsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	1	67.7	20			155.604
2	1	96.5	20			392.728
3	3	86.1	20	1388	1716	654.205
4	2	76.2	20	1092		325.383
5	3	83	20	1258	1710	275.191
6	1	60.7	20			588.318
7	2	57.3	20	1035		68.016
8	2	96.8	20	1169		178.924
9	2	83.6	20	1350		15.111
10	2	92.6	20	1599		483.369
11	2	58.7	20	1183		55.096
12	1	94.9	20			491.614
13	2	81.3	20	1299		253.942
14	2	63.5	20	1599		239.129
15	3	94.2	20	1592	1306	656.147
16	2	92.1	20	1477		169.365
17	2	78.8	20	1678		496.382

Type 5 Radar Waveform_2						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	1	89.5	5			126.52
2	3	99.6	5	1297	1649	919.99
3	2	64.2	5	1184		875.03
4	2	83.9	5	1809		211.71
5	3	89	5	1223	1786	56.46
6	2	86.9	5	1214		979.15
7	2	63.1	5	1529		259.21
8	1	81.4	5			198.8
9	1	69.6	5			189.49
10	1	74.6	5			942.4

Type 5 Radar Waveform_3						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	1	67	15			723.351
2	3	69	15	1213	1791	532.363
3	1	62.3	15			867.966
4	3	86.6	15	1828	1275	101.999
5	3	90.1	15	1096	1504	201.292
6	1	87.4	15			622.785
7	2	71.5	15	1278		602.408
8	2	76.5	15	1454		659.932
9	1	90.2	15			277.125
10	2	81.6	15	1147		442.998
11	1	55.6	15			564.221
12	2	68.7	15	1399		169.154
13	1	88.5	15			755.477

Type 5 Radar Waveform_4						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	3	52.8	18	1939	1641	477.928
2	3	98.4	18	1205	1736	185.206
3	1	69.9	18			444.01
4	1	64.7	18			196.51
5	1	52.6	18			113.51
6	1	68.7	18			50.28
7	1	56.2	18			140.23
8	2	52.7	18	1186		310.47
9	2	92	18	1431		21.14
10	2	55.4	18	1562		483.79
11	2	78.9	18	1806		183.34
12	2	99.2	18	1926		503.7
13	3	57.6	18	1868	1679	120.65
14	1	52.4	18			83.82
15	2	71	18	1698		226.9
16	3	73.9	18	1600	1597	575

**Type 5 Radar Waveform\_5**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	70.1	10	1268		910.295
2	1	58.3	10			675.243
3	2	84.2	10	1437		247.996
4	3	65.7	10	1215	1860	803.019
5	3	74.1	10	1632	1046	682.542
6	2	51.8	10	1709		209.655
7	1	90	10			404.098
8	2	54.7	10	1732		49.082
9	3	83.7	10	1233	1104	463.795
10	2	62.5	10	1121		58.078
11	2	98.1	10	1763		548.951
12	2	82.9	10	1039		22.554
13	1	96	10			188.977

**Type 5 Radar Waveform\_6**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	3	86.1	8	1221	1336	347.517
2	3	65.6	8	1418	1404	34.572
3	1	54.7	8			552.635
4	2	95.1	8	1005		456.913
5	3	69.9	8	1468	1755	174.201
6	2	78.3	8	1298		81.308
7	2	80.7	8	1605		164.286
8	2	69.6	8	1894		474.644
9	2	74.3	8	1351		592.621
10	1	93.5	8			249.239
11	3	72.6	8	1088	1297	524.166
12	1	85.1	8			328.754
13	3	65.3	8	1748	1426	206.762
14	2	87.1	8	1392		485.949
15	3	96.4	8	1600	1035	592.147
16	3	54.8	8	1928	1050	174.365
17	2	98.2	8	1908		294.382

**Type 5 Radar Waveform\_7**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	94.4	6	1113		472.537
2	3	72.3	6	1521	1656	813.473
3	3	84.5	6	1504	1385	685.726
4	1	75	6			9.979
5	2	92.4	6	1756		778.442
6	3	82.5	6	2000	1651	438.185
7	1	52.9	6			178.448
8	2	69	6	1730		319.652
9	3	63.6	6	1415	1695	467.685
10	3	67.7	6	1906	1792	613.668
11	3	50.3	6	1564	1644	342.271
12	2	61.6	6	1225		905.954
13	2	98	6	1475		427.177

**Type 5 Radar Waveform\_8**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	65.8	5	1015	1168	360.678
2	2	54.4	5	1769		10.735
3	3	51.3	5	1643	1208	239.15
4	3	83	5	1320	1843	281.47
5	2	65.8	5	1200		502.51
6	2	72.3	5	1597		474.27
7	1	82.2	5			81
8	3	73	5	1116	1549	235.83
9	2	72.8	5	1095		193.37
10	2	70.2	5	1341		163.28
11	2	64.6	5	1496		147.05
12	1	83.4	5			359.08
13	2	74.8	5	1635		406.62
14	3	85.7	5	1704	1311	650.7
15	2	99.7	5	1359		699.5
16	1	72.7	5			406.8

**Type 5 Radar Waveform\_9**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	88.6	15			423.479
2	1	87.5	15			633.8
3	2	51.9	15	1349		620.31
4	1	79.9	15			341.98
5	1	70.7	15			462.21
6	3	77.7	15	1802	1761	475.05
7	3	62.4	15	1638	1728	106.92
8	2	93.1	15	1643		26.76
9	2	59.5	15	1626		340.34
10	2	58.6	15	1289		145.98
11	3	81.1	15	1059	1598	459.26
12	2	52.5	15	1490		569.42
13	3	98.2	15	1823	1750	174.23
14	2	58.7	15	1999		687.8
15	3	61.6	15	1481	1394	691
16	3	77.5	15	1209	1908	643.3

**Type 5 Radar Waveform\_10**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	63.7	6	1276		1163.79
2	2	97.4	6	1506		370.67
3	2	90.7	6	1022		597.96
4	1	60.7	6			1076.17
5	1	89.7	6			1177.99
6	3	64.2	6	1874	1900	745.42
7	1	87.8	6			399.62
8	2	95.4	6	1332		24.97
9	3	55.5	6	1753	1977	270.76
10	2	77.9	6	1772		1181.9

Type 5 Radar Waveform_11						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	63.8	5	1328	1165	943.106
2	2	71.6	5	1743		467.55
3	1	94	5			816.43
4	1	67.3	5			503.67
5	2	50.1	5	1805		840.4
6	2	98.5	5	1994		674.99
7	1	89.8	5			651.14
8	2	65.2	5	1620		209.77
9	2	96.1	5	1089		656.28
10	2	65.3	5	1822		737.79
11	3	53.4	5	1777	1753	859
12	1	91.1	5			853.9

Type 5 Radar Waveform_12						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	75.1	12	1318		691.439
2	3	65.3	12	1240	1977	250.1
3	2	99.2	12	1956		128.02
4	3	93.2	12	1190	1482	301.08
5	1	96.9	12			339.87
6	1	69.7	12			82.37
7	2	78.3	12	1351		17.22
8	2	90.1	12	1301		473.06
9	3	54.5	12	1674	1768	311.67
10	3	52.4	12	1720	1346	251.99
11	2	94.9	12	1103		254.02
12	3	94.7	12	1718	1626	262.85
13	2	60.9	12	1518		378.33
14	1	82.7	12			418.3
15	3	82.6	12	1200	1700	601.4

Type 5 Radar Waveform_13						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	79.5	19			90.437
2	2	99.2	19	1300		57.6
3	2	60.1	19	1251		711.514
4	3	67.5	19	1485	1914	839.301
5	2	83.9	19	1182		168.869
6	2	95.7	19	1152		545.776
7	3	63.2	19	1986	1126	195.303
8	1	99	19			189.6
9	1	82.2	19			321.787
10	2	61.3	19	1507		819.724
11	2	78.5	19	1246		707.191
12	1	71.6	19			280.299
13	2	51.9	19	1574		802.186
14	2	81.9	19	1112		641.443

Type 5 Radar Waveform_14						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	73.5	18	1986	1770	84.627
2	2	68.4	18	1735		392.873
3	2	67.7	18	1336		177.496
4	2	91.3	18	1269		204.309
5	3	100	18	1759	1463	65.192
6	1	64.9	18			871.085
7	2	68.1	18	1944		534.828
8	2	76.2	18	1313		34.002
9	2	95.7	18	1444		911.985
10	2	73.7	18	1994		705.668
11	2	81.4	18	1363		202.901
12	2	86.6	18	1931		369.854
13	2	62.5	18	1312		362.777

Type 5 Radar Waveform_15						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	94.6	12			208.808
2	3	68.8	12	1746	1356	87.022
3	2	68.1	12	1409		523.772
4	1	98.3	12			431.573
5	3	98	12	1895	1878	138.584
6	1	69.3	12			552.805
7	2	51.3	12	1641		514.216
8	2	64.9	12	1684		323.417
9	3	76.9	12	1741	1827	516.918
10	3	51	12	1218	1984	457.049
11	2	59.1	12	1761		286.861
12	2	86.2	12	1430		408.612
13	2	93.7	12	1166		238.363
14	2	71.2	12	1544		201.034
15	1	59.2	12			434.085
16	2	61.4	12	1206		595.016
17	2	73.6	12	1286		12.537
18	3	90.5	12	1168	1703	502.258
19	2	70.9	12	1367		453.679

Type 5 Radar Waveform_16						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	52.3	14			385.945
2	3	61	14	1222	1686	784.137
3	3	53.9	14	1398	1026	377.404
4	2	57.8	14	1805		372.611
5	1	60.6	14			90.219
6	3	63.9	14	1590	1910	633.366
7	3	94.4	14	1785	1788	529.053
8	1	78.8	14			137.82
9	2	75.3	14	1500		436.747
10	2	84.1	14	1702		141.534
11	2	78.8	14	1068		823.761
12	2	51	14	1756		265.069
13	2	75	14	1510		753.286
14	2	62.4	14	1410		69.443

**Type 5 Radar Waveform\_17**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	88.5	18	1344	1525	29.872
2	2	91.8	18	1294		448.353
3	2	83.3	18	1567		389.097
4	3	97.4	18	1251	1021	465.64
5	2	58.4	18	1304		368.313
6	2	78.9	18	1171		357.687
7	2	99.7	18	1855		596.76
8	3	75.5	18	1157	1756	95.833
9	3	69.7	18	1856	1534	398.057
10	2	91.7	18	1243		648.42
11	3	55.4	18	1905	1911	283.313
12	3	83.1	18	1505	1587	643.207
13	2	66	18	1253		74.51
14	1	71.1	18			267.253
15	3	61.5	18	1347	1631	72.657
16	1	72.7	18			59.6
17	1	77.1	18			62.533
18	3	82.5	18	1757	1979	285.067

**Type 5 Radar Waveform\_18**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	57.1	12			601.899
2	3	62.2	12	1331	1566	99.442
3	2	67	12	1870		476.297
4	3	52.6	12	1247	1053	7.48
5	2	63.9	12	1805		263.553
6	3	59.8	12	1137	1848	305.797
7	2	67.1	12	1321		559.55
8	2	97	12	1019		637.363
9	2	77.6	12	1661		576.797
10	2	63.5	12	1244		654.52
11	3	77.9	12	1383	1860	257.903
12	2	92.1	12	1480		237.507
13	3	85.7	12	1884	1803	46.92
14	2	91.5	12	1899		230.853
15	2	86.3	12	1526		218.707
16	3	50.7	12	1723	1553	16.1
17	3	68.5	12	1623	1571	219.933
18	2	51.4	12	1236		621.467

**Type 5 Radar Waveform\_19**

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	87.1	20	1713		207.93
2	2	76.2	20	1013		772.967
3	3	74.5	20	1802	1769	366.024
4	3	54.7	20	1961	1441	240.461
5	1	97	20			770.679
6	2	88.1	20	1303		675.416
7	3	63.8	20	1074	1541	90.923
8	1	61.4	20			287.26
9	1	76.9	20			311.067
10	3	76.2	20	1604	1811	781.444
11	1	91.3	20			714.621
12	2	69.9	20	1176		764.229
13	2	92.9	20	1925		468.286
14	3	51.1	20	1521	1703	436.143

Type 5 Radar Waveform_20						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	1	80.3	5			634.695
2	2	54.5	5	1488		627.45
3	2	78.6	5	1581		68.28
4	2	95	5	1757		399.93
5	1	85.5	5			118.91
6	1	86.3	5			774.98
7	3	66.3	5	1749	1851	1090.4
8	2	84.4	5	1445		993.9

Type 5 Radar Waveform_21						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	2	62.6	7	1332		339.243
2	3	67.2	7	1388	1779	197.068
3	1	72.6	7			48.95
4	1	57.4	7			662.77
5	3	79.6	7	1040	1428	561.8
6	1	77.7	7			485.32
7	2	68.7	7	1501		673.27
8	1	97.3	7			497.41
9	2	82.7	7	1118		480.34
10	1	69.1	7			286.52
11	2	82.2	7	1938		432.74
12	2	73.9	7	1664		341.68
13	2	90.1	7	1731		459.46
14	3	64.3	7	1299	1722	162.04
15	3	64.3	7	1701	1779	232.2
16	2	77.8	7	1557		112

Type 5 Radar Waveform_22						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	3	60.2	8	1847	1852	231.468
2	1	55.9	8			808.727
3	2	60.4	8	1597		619.234
4	1	66	8			198.661
5	2	69.9	8	1482		101.409
6	2	58.6	8	1128		479.276
7	3	89.3	8	1340	1286	833.453
8	1	78.8	8			719.86
9	2	59.1	8	1200		274.987
10	2	67.1	8	1874		615.644
11	1	76.3	8			785.991
12	2	72.2	8	1419		603.629
13	2	75.4	8	1251		413.786
14	1	64.8	8			719.143

Type 5 Radar Waveform_23						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	56.7	19			305.894
2	2	74.1	19	1825		405.17
3	1	86.7	19			327.62
4	1	54.9	19			419.65
5	3	92.9	19	1488	1340	350.12
6	1	65	19			291.44
7	2	76.8	19	1834		584.15
8	3	97.8	19	1211	1821	100.69
9	1	60.7	19			220.19
10	3	64.7	19	1015	1143	496.38
11	3	68.1	19	1228	1467	410.83
12	2	69.5	19	1790		604.11
13	2	99.2	19	1745		690.2
14	1	65.3	19			133.2
15	1	77.8	19			641.4

Type 5 Radar Waveform_24						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	84.3	16			499.325
2	2	57.7	16	1794		155.621
3	1	62.7	16			699.1
4	3	52.7	16	1569	1970	229.85
5	2	81.7	16	1505		263.39
6	3	79	16	1564	1635	597.17
7	2	88.9	16	1762		5.37
8	3	97	16	1746	1667	679.48
9	1	60.5	16			286.09
10	2	55	16	1348		271.68
11	1	88	16			118.97
12	3	74.7	16	1191	1119	268.43
13	2	56.1	16	1523		381.68
14	2	98	16	1096		287.5
15	3	93.2	16	1198	1749	413.2
16	3	86.8	16	1302	1698	706.1

Type 5 Radar Waveform_25						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	55.4	13	1033		540.234
2	3	84.8	13	1338	1731	361.042
3	3	86.1	13	1149	1180	511.49
4	2	85.7	13	1274		394.31
5	2	71.1	13	1280		111.92
6	2	62.7	13	1403		476.27
7	2	90.8	13	1069		509.46
8	1	66.1	13			561.9
9	3	85.2	13	1595	1657	336.42
10	2	61.6	13	1399		319.16
11	1	74	13			250.91
12	3	91	13	1416	1003	143.69
13	1	63.3	13			15.63
14	1	67.5	13			217.82
15	3	79	13	1617	1730	565.42
16	1	59.3	13			501.88
17	2	65	13	1757		552.8
18	2	86.1	13	1396		424.1
19	1	77.7	13			368.2
20	2	72.9	13	1028		82.3

Type 5 Radar Waveform_26						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	3	79	9	1411	1618	272.911
2	3	76	9	1126	1223	382.108
3	2	94.9	9	1572		456.295
4	1	51.1	9			173.283
5	2	61	9	1242		228.401
6	1	67.6	9			431.498
7	1	58	9			571.326
8	2	66.7	9	1321		403.984
9	1	88.2	9			114.301
10	1	56	9			352.919
11	2	73.4	9	1194		19.896
12	1	94	9			422.544
13	1	68.5	9			695.332
14	1	70.5	9			223.329
15	3	77.6	9	1663	1727	470.447
16	1	94.8	9			694.365
17	1	79.3	9			396.382

Type 5 Radar Waveform_27						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	1	51.4	18			1106.44
2	1	77.3	18			819.43
3	2	87.2	18	1050		1120.46
4	2	69.4	18	1200		351.16
5	2	85.5	18	1919		886.99
6	2	82.9	18	1820		618.89
7	3	73.5	18	1309	1400	640.45
8	1	65.4	18			234.87
9	1	94.9	18			1128.8
10	2	63	18	1236		460.5

Type 5 Radar Waveform_28						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	2	86.2	19	1593		166.497
2	2	99.4	19	1933		17.317
3	2	75.5	19	1685		154.023
4	1	57.6	19			770.78
5	2	89.5	19	1857		1298.347
6	2	50.6	19	1760		134.073
7	1	83.9	19			28.41
8	2	98	19	1831		1053.267
9	2	64.3	19	1072		1042.733

Type 5 Radar Waveform_29						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	2	80.7	14	1114		355.35
2	3	98.2	14	1262	1764	333.823
3	3	71.4	14	1623	1460	643.937
4	2	50.9	14	1400		227.46
5	1	76.5	14			131.953
6	2	85.3	14	1271		9.627
7	3	67.7	14	1522	1371	217.46
8	1	93.5	14			173.013
9	3	50.3	14	1304	1135	269.967
10	3	62.2	14	1241	1187	335.7
11	1	57	14			130.603
12	1	85	14			195.827
13	3	79.8	14	1750	1285	141.91
14	1	89.5	14			366.693
15	1	64.5	14			468.097
16	2	80.8	14	1542		390.8
17	3	90.3	14	1702	1667	176.833
18	2	71.9	14	1928		426.167

Type 5 Radar Waveform_30						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (usec)	Pulse 2-to-3 PRI (usec)	Start Location Within Interval (msec)
1	2	58.5	18	1339		211.458
2	2	52.1	18	1729		224.57
3	1	71	18			318.03
4	3	83.7	18	1647	1171	543.95
5	3	62	18	1685	1959	316.39
6	2	68.3	18	1932		512.66
7	3	59.3	18	1740	1737	487.88
8	1	97.8	18			565.07
9	1	71.3	18			14.22
10	2	74.8	18	1450		283.07
11	3	94	18	1365	1355	305.71
12	1	73.4	18			250.4
13	2	97.7	18	1025		2.38
14	2	81.5	18	1669		509
15	2	94.3	18	1596		166.1
16	3	79	18	1013	1241	246.2

## Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5491	1	16	5530	1
2	5491	1	17	5531	1
3	5500	1	18	5531	1
4	5500	1	19	5540	1
5	5509	1	20	5540	1
6	5509	1	21	5549	1
7	5510	1	22	5549	1
8	5510	1	23	5550	1
9	5511	1	24	5550	1
10	5511	1	25	5551	1
11	5520	1	26	5551	1
12	5520	1	27	5560	1
13	5529	1	28	5560	1
14	5529	1	29	5569	1
15	5530	1	30	5569	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5537	3	9	5567	27
15	5533	45	16	5541	48
20	5516	60	17	5493	51
24	5553	72	35	5537	105
27	5503	81	40	5531	120
30	5550	90	52	5497	156
37	5541	111	55	5553	165
39	5557	117	57	5514	171
50	5512	150	61	5554	183
51	5499	153	63	5566	189
53	5569	159	70	5522	210
56	5547	168	77	5511	231
71	5530	213	78	5550	234
73	5566	219	81	5539	243
86	5509	258	82	5520	246
--	--	--	88	5527	264
--	--	--	94	5492	282
--	--	--	96	5523	288
--	--	--	100	5499	300

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5554	39	5	5516	15
23	5535	69	10	5559	30
25	5557	75	14	5551	42
40	5565	120	18	5563	54
48	5522	144	23	5493	69
52	5564	156	24	5508	72
55	5504	165	29	5570	87
61	5529	183	31	5552	93
65	5550	195	35	5556	105
69	5530	207	37	5544	111
74	5541	222	41	5540	123
75	5524	225	56	5519	168
78	5532	234	57	5501	171
95	5526	285	71	5546	213
96	5562	288	86	5558	258
99	5497	297	87	5557	261
--	--	--	97	5511	291

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5560	6	3	5522	9
19	5544	57	7	5535	21
36	5537	108	9	5527	27
44	5555	132	35	5530	105
50	5559	150	42	5547	126
52	5542	156	47	5555	141
57	5516	171	50	5536	150
60	5504	180	51	5564	153
74	5539	222	55	5549	165
94	5496	282	59	5556	177
100	5533	300	62	5496	186
--	--	--	66	5541	198
--	--	--	69	5525	207
--	--	--	79	5505	237
--	--	--	82	5560	246
--	--	--	87	5539	261
--	--	--	88	5533	264
--	--	--	94	5531	282
--	--	--	98	5491	294

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5533	42	2	5519	6
16	5538	48	7	5543	21
17	5564	51	14	5528	42
21	5553	63	16	5567	48
23	5536	69	18	5514	54
39	5549	117	35	5561	105
43	5539	129	39	5501	117
82	5566	246	40	5565	120
85	5510	255	41	5521	123
86	5545	258	44	5511	132
98	5561	294	49	5540	147
--	--	--	59	5558	177
--	--	--	62	5515	186
--	--	--	64	5568	192
--	--	--	65	5559	195
--	--	--	68	5532	204
--	--	--	82	5496	246

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5569	18	6	5524	18
26	5552	78	11	5565	33
34	5531	102	20	5567	60
38	5545	114	31	5522	93
53	5509	159	41	5569	123
55	5561	165	42	5508	126
75	5521	225	51	5526	153
79	5567	237	52	5517	156
82	5529	246	53	5492	159
83	5533	249	63	5550	189
95	5514	285	70	5501	210
--	--	--	74	5496	222
--	--	--	88	5541	264
--	--	--	95	5532	285

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5566	33	12	5532	36
18	5505	54	15	5529	45
26	5512	78	16	5537	48
30	5542	90	19	5565	57
41	5532	123	21	5515	63
49	5511	147	28	5544	84
52	5503	156	29	5560	87
53	5515	159	34	5568	102
61	5514	183	41	5562	123
86	5560	258	55	5554	165
94	5498	282	67	5528	201
95	5517	285	69	5559	207
97	5534	291	71	5525	213
--	--	--	73	5490	219
--	--	--	93	5539	279

--	--	--	96	5510	288
--	--	--	100	5493	300

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5527	18	13	5566	39
8	5533	24	19	5557	57
10	5508	30	27	5504	81
15	5519	45	30	5523	90
22	5500	66	44	5551	132
30	5569	90	61	5525	183
42	5531	126	64	5532	192
51	5554	153	66	5515	198
56	5501	168	70	5506	210
63	5545	189	75	5503	225
64	5568	192	77	5520	231
67	5565	201	95	5569	285
68	5564	204	--	--	--
77	5535	231	--	--	--
78	5555	234	--	--	--
84	5514	252	--	--	--
86	5552	258	--	--	--
87	5495	261	--	--	--
88	5510	264	--	--	--
98	5512	294	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5530	24	21	5535	63
17	5512	51	28	5504	84
26	5548	78	44	5534	132
31	5500	93	60	5515	180
39	5525	117	64	5518	192
43	5507	129	66	5565	198
56	5558	168	68	5516	204
61	5535	183	77	5502	231
62	5538	186	78	5527	234
68	5501	204	80	5524	240
77	5515	231	98	5519	294
79	5527	237	99	5540	297
80	5504	240	--	--	--
81	5559	243	--	--	--
85	5517	255	--	--	--
90	5533	270	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5560	21	10	5511	30
9	5548	27	12	5559	36
12	5530	36	13	5549	39
13	5555	39	14	5569	42
14	5556	42	18	5504	54
22	5549	66	20	5570	60
24	5562	72	33	5525	99
34	5525	102	46	5539	138
39	5491	117	49	5543	147
40	5505	120	50	5550	150
53	5495	159	53	5545	159
54	5563	162	56	5557	168
59	5568	177	60	5560	180
61	5521	183	68	5538	204
64	5492	192	72	5552	216
66	5494	198	75	5495	225
72	5516	216	77	5514	231
84	5533	252	84	5520	252
86	5561	258	86	5567	258
91	5538	273	89	5565	267
93	5567	279	92	5528	276

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5565	18	3	5557	9
14	5536	42	4	5503	12
34	5554	102	6	5537	18
35	5560	105	7	5496	21
45	5544	135	13	5532	39
53	5539	159	24	5509	72
56	5531	168	31	5495	93
58	5542	174	34	5524	102
65	5552	195	37	5491	111
69	5530	207	38	5544	114
74	5521	222	39	5570	117
82	5497	246	40	5566	120
99	5527	297	44	5548	132
--	--	--	51	5554	153
--	--	--	57	5531	171
--	--	--	61	5534	183
--	--	--	67	5502	201
--	--	--	69	5517	207
--	--	--	74	5543	222
--	--	--	76	5565	228
--	--	--	84	5512	252
--	--	--	100	5526	300

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5495	39	9	5513	27
16	5502	48	12	5537	36
30	5553	90	36	5502	108
38	5536	114	40	5540	120
67	5552	201	41	5519	123
68	5497	204	46	5514	138
70	5566	210	49	5534	147
75	5569	225	62	5555	186
79	5522	237	64	5505	192
86	5514	258	69	5496	207
92	5554	276	76	5495	228
97	5517	291	80	5559	240
98	5498	294	81	5500	243
100	5568	300	84	5516	252
--	--	--	87	5521	261

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5519	9	5	5519	15
4	5567	12	10	5561	30
7	5531	21	18	5500	54
9	5509	27	22	5524	66
13	5501	39	37	5497	111
18	5514	54	40	5548	120
19	5518	57	42	5494	126
22	5537	66	59	5558	177
23	5539	69	62	5508	186
26	5533	78	68	5516	204
27	5534	81	69	5492	207
30	5547	90	74	5555	222
40	5496	120	77	5503	231
46	5564	138	81	5529	243
47	5512	141	85	5534	255

49	5559	147	87	5557	261
52	5523	156	--	--	--
54	5491	162	--	--	--
57	5563	171	--	--	--
60	5545	180	--	--	--
68	5502	204	--	--	--
72	5570	216	--	--	--
77	5490	231	--	--	--
82	5546	246	--	--	--
95	5524	285	--	--	--
99	5493	297	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5563	30	10	5535	30
16	5514	48	11	5554	33
19	5508	57	33	5509	99
22	5520	66	50	5516	150
23	5524	69	54	5569	162
34	5552	102	56	5529	168
37	5522	111	64	5496	192
45	5516	135	79	5560	237
46	5567	138	94	5495	282
49	5559	147	--	--	--
59	5533	177	--	--	--
63	5495	189	--	--	--
66	5558	198	--	--	--
74	5540	222	--	--	--
80	5505	240	--	--	--
89	5550	267	--	--	--
95	5510	285	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5521	12	1	5553	3
20	5555	60	4	5506	12
26	5567	78	6	5521	18
28	5549	84	15	5507	45
30	5526	90	20	5492	60
32	5565	96	30	5542	90
41	5524	123	37	5514	111
51	5540	153	38	5527	114
64	5554	192	41	5504	123
66	5492	198	45	5529	135
88	5511	264	52	5510	156
89	5499	267	62	5493	186
97	5498	291	63	5534	189
--	--	--	64	5513	192
--	--	--	79	5532	237
--	--	--	88	5531	264

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5563	9	1	5557	3
4	5518	12	5	5539	15
9	5517	27	11	5506	33
11	5492	33	14	5524	42
14	5539	42	15	5566	45
15	5534	45	18	5495	54
17	5524	51	32	5550	96
22	5527	66	47	5525	141
33	5565	99	63	5568	189
35	5497	105	66	5523	198
44	5511	132	77	5496	231
48	5498	144	85	5556	255
52	5544	156	90	5560	270
66	5506	198	98	5505	294
74	5532	222	--	--	--
76	5542	228	--	--	--
91	5523	273	--	--	--
99	5516	297	--	--	--
100	5550	300	--	--	--

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/09
Test Item	Radar Statistical Performance Check (802.11ax-HE160 mode -5570)		

#### Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1	618	86	1
2	5500	1	518	102	1
3	5509	1	698	76	1
4	5510	1	598	89	1
5	5511	1	858	62	1
6	5520	1	898	59	1
7	5529	1	658	81	1
8	5530	1	798	67	1
9	5531	1	678	78	1
10	5540	1	938	57	1
11	5549	1	758	70	1
12	5550	1	778	68	1
13	5551	1	578	92	1
14	5560	1	878	61	1
15	5569	1	818	65	1
16	5570	1	752	71	1
17	5571	1	1969	27	1
18	5580	1	2425	22	1
19	5589	1	1448	37	1
20	5590	1	2701	20	1
21	5591	1	1846	29	1
22	5600	1	2228	24	1
23	5609	1	2323	23	1
24	5610	1	881	60	1
25	5611	1	3066	18	1
26	5620	1	961	55	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5629	1	2789	19	1
28	5630	1	2718	20	1
29	5640	1	2934	18	1
30	5649	1	788	67	1
Detection Percentage (%)					100%

## Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1.9	193	23	0
2	5500	4.4	190	26	1
3	5509	2.1	192	27	1
4	5510	1.7	194	26	1
5	5511	2.5	157	29	1
6	5520	4.2	229	26	1
7	5529	2.1	174	24	1
8	5530	3.2	220	26	1
9	5531	1.7	168	28	1
10	5540	2.1	189	26	0
11	5549	1.7	213	23	1
12	5550	3.3	171	27	1
13	5551	1.0	204	23	1
14	5560	2.9	175	26	1
15	5569	1.9	170	26	1
16	5570	3.3	197	29	1
17	5571	4.5	190	23	1
18	5580	4.2	151	27	0
19	5589	3.2	205	24	1
20	5590	4.2	200	28	1
21	5591	2.8	189	28	1
22	5600	3.9	226	28	1
23	5609	1.4	191	26	1
24	5610	2.8	158	27	1
25	5611	1.3	157	27	1
26	5620	3.5	200	25	1
27	5629	3.9	192	26	1
28	5630	1.0	206	25	1
29	5640	4.6	224	28	1
30	5649	4.3	179	27	1
Detection Percentage (%)					90%

## Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	9.5	212	17	1
2	5500	9.5	322	17	1
3	5509	8.4	289	17	1
4	5510	6.8	384	18	1
5	5511	8.6	254	17	1
6	5520	8.6	419	16	0
7	5529	6.8	363	17	1
8	5530	7.0	277	17	1
9	5531	9.0	315	18	0
10	5540	7.2	376	17	1
11	5549	6.4	371	17	1
12	5550	8.9	471	17	0
13	5551	7.0	370	17	1
14	5560	8.9	419	17	1
15	5569	9.5	429	17	1
16	5570	6.5	248	16	1
17	5571	9.4	451	17	1
18	5580	7.2	439	17	1
19	5589	8.5	499	17	1
20	5590	7.3	444	18	1
21	5591	9.3	338	18	1
22	5600	6.0	266	17	1
23	5609	7.0	383	17	1
24	5610	8.6	308	16	1
25	5611	10.0	313	17	1
26	5620	8.4	357	18	1
27	5629	9.6	207	17	1
28	5630	8.7	291	16	1
29	5640	6.0	280	18	0
30	5649	8.5	381	17	1
Detection Percentage (%)					86.7%

## Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	13.1	440	15	1
2	5500	14.8	474	14	1
3	5509	14.4	314	13	1
4	5510	16.9	381	16	1
5	5511	18.0	397	16	1
6	5520	18.0	221	14	1
7	5529	17.3	296	13	1
8	5530	16.9	277	14	1
9	5531	17.8	466	14	1
10	5540	15.3	212	14	1
11	5549	12.7	286	12	1
12	5550	12.2	297	12	1
13	5551	13.3	271	14	1
14	5560	19.6	474	15	1
15	5569	14.8	243	15	1
16	5570	18.4	412	14	1
17	5571	11.6	268	14	1
18	5580	17.2	226	16	1
19	5589	17.2	391	13	1
20	5590	17.8	432	13	0
21	5591	16.9	484	13	1
22	5600	11.3	239	15	1
23	5609	19.2	284	16	1
24	5610	11.9	215	13	0
25	5611	14.3	401	13	1
26	5620	13.3	410	15	1
27	5629	19.3	465	14	0
28	5630	11.1	213	15	1
29	5640	13.7	355	15	1
30	5649	18.4	385	14	1
Detection Percentage (%)					90%

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

waveforms is as follows:  $\frac{P_d\ 1 + P_d\ 2 + P_d\ 3 + P_d\ 4}{4} = (100\% + 90\% + 86.7\% + 90\%)/4 = 91.7\% (>80\%)$

## Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5570.0	1	16	5493.8	1
2	5570.0	1	17	5496.6	0
3	5570.0	1	18	5498.6	1
4	5570.0	1	19	5493.0	1
5	5570.0	1	20	5497.4	1
6	5570.0	1	21	5642.6	1
7	5570.0	1	22	5645.4	1
8	5570.0	1	23	5646.6	1
9	5570.0	1	24	5644.6	1
10	5570.0	1	25	5641.8	0
11	5495.4	1	26	5641.0	1
12	5497.8	1	27	5644.2	0
13	5495.8	1	28	5642.6	0
14	5493.4	1	29	5643.8	0
15	5494.6	1	30	5646.6	1
Detection Percentage (%)					83.3%

## Type 5 Radar Waveform\_1

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	83.6	6	1798		100.7
2	3	71.2	6	1016	1836	521.05
3	3	88.4	6	1542	1850	373.1
4	3	65	6	1615	1808	472.5
5	1	61.5	6			306.58
6	2	67.5	6	1950		17.29
7	1	69.2	6			116.61
8	1	61.2	6			549.03
9	2	74.5	6	1817		54.71
10	1	98.7	6			466.23
11	3	56.6	6	1798	1145	135.92
12	1	88.2	6			257.81
13	1	63.2	6			240.24
14	2	53.5	6	1097		742
15	1	86.8	6			620.3
16	2	88.4	6	1857		551.2

Type 5 Radar Waveform_2						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	71.6	20	1081		710.811
2	1	90.2	20			1034.991
3	3	58.9	20	1631	1757	545.772
4	1	50.6	20			927.963
5	2	89.9	20	1502		652.344
6	2	61	20	1776		1058.035
7	1	58.7	20			642.145
8	2	97.7	20	1737		377.056
9	1	75	20			250.317
10	3	97.8	20	1661	1988	960.718
11	1	50.3	20			458.909

Type 5 Radar Waveform_3						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	81.1	18	1003	1377	1477.67
2	2	84.1	18	1483		320.43
3	3	82.4	18	1993	1088	1429.6
4	2	99.3	18	1241		135.61
5	2	85.5	18	1827		1242.57
6	2	55.4	18	1922		402.69
7	3	88.1	18	1314	1935	1467.7
8	3	76.2	18	1203	1179	1021.8

Type 5 Radar Waveform_4						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	96.6	17	1884	1901	523.618
2	2	77.1	17	1857		577.06
3	3	55.3	17	1420	1921	25.91
4	3	74.9	17	1252	1738	151.57
5	1	73.1	17			85.37
6	2	65.8	17	1751		222.96
7	1	78	17			494.77
8	3	94.4	17	1567	1568	133.69
9	1	99.7	17			707.35
10	2	75.7	17	1695		544.76
11	1	97.6	17			615.1
12	1	72.8	17			203.73
13	3	57.4	17	1855	1348	320.36
14	3	55.5	17	1991	1590	285.4
15	1	75.6	17			354.2

Type 5 Radar Waveform_5						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	76.5	6	1657		263.638
2	1	59.3	6			528.34
3	2	78.2	6	1525		435.2
4	2	76.7	6	1722		110.67
5	2	77.2	6	1485		12.88
6	2	72.3	6	1956		356.51
7	3	76.3	6	1328	1869	567.92
8	3	52.3	6	1809	1266	375.78
9	2	93.8	6	1491		314.47
10	1	90.6	6			181.61
11	2	57.4	6	1332		144
12	2	62.8	6	1445		492.91
13	2	55.7	6	1272		114.22
14	2	96.7	6	1359		384.4
15	1	85.5	6			280.2

Type 5 Radar Waveform_6						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	88.6	15	1411		217.968
2	3	81.9	15	1187	1092	354.613
3	1	80.1	15			517.217
4	2	73.8	15	1470		80.28
5	2	50.2	15	1277		284.713
6	2	97.9	15	1951		197.137
7	1	86.9	15			523.22
8	3	81.5	15	1611	1735	475.533
9	2	89.9	15	1254		273.237
10	1	60.6	15			16.22
11	3	90.9	15	1623	1520	504.623
12	3	64.3	15	1685	1632	590.237
13	3	61.5	15	1826	1854	93.4
14	2	50.6	15	1757		237.813
15	1	68.8	15			368.867
16	3	83.9	15	1170	1114	521.8
17	1	91.5	15			62.333
18	2	65.5	15	1323		449.367

Type 5 Radar Waveform_7						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	59.6	13			908.845
2	2	61.7	13	1169		1444.22
3	1	73.6	13			1160.12
4	1	93.5	13			590.6
5	3	98.4	13	1104	1972	1373.43
6	3	86.6	13	1309	1333	662.77
7	1	97	13			212.11
8	3	77.8	13	1829	1921	945.6

**Type 5 Radar Waveform\_8**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μ sec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	3	93.7	18	1166	1061	168.136
2	1	78.6	18			3.178
3	1	71.3	18			109.885
4	2	61.8	18	1622		124.893
5	2	55.6	18	1527		681.311
6	2	83.8	18	1032		601.668
7	1	71.1	18			501.406
8	1	98.7	18			371.904
9	2	88.3	18	1714		56.121
10	3	90.5	18	1053	1096	150.829
11	3	70.5	18	1963	1266	510.536
12	2	65.5	18	1792		95.264
13	2	73.7	18	1583		513.732
14	2	97.4	18	1211		573.739
15	3	94.3	18	1365	1330	682.947
16	1	70.3	18			423.065
17	2	72.7	18	1338		440.182

**Type 5 Radar Waveform\_9**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	56.3	16	1625		1018.57
2	3	78.2	16	1212	1737	1030.171
3	2	54.8	16	1136		127.122
4	1	74.2	16			0.193
5	3	67.9	16	1613	1590	700.664
6	3	51.9	16	1800	1921	433.005
7	3	89.5	16	1422	1750	934.915
8	3	91.1	16	1172	1775	984.396
9	2	99.1	16	1288		480.157
10	2	68.3	16	1036		962.118
11	1	99.8	16			114.809

**Type 5 Radar Waveform\_10**

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	3	77.2	13	1977	1190	613.936
2	2	51.3	13	1912		273.972
3	2	85.8	13	1872		367.937
4	3	96.4	13	1762	1429	636.37
5	3	52	13	1388	1011	539.583
6	1	87.7	13			170.867
7	2	63	13	1208		420.77
8	1	70.7	13			650.583
9	3	69	13	1752	1191	196.967
10	3	73.7	13	1196	1448	126.71
11	2	82.1	13	1455		192.813
12	1	51.9	13			394.407
13	1	63.5	13			243.35
14	1	78.3	13			556.203
15	1	95.8	13			263.677
16	3	93	13	1735	1381	259
17	1	65.2	13			503.433
18	2	80	13	1212		317.167

Type 5 Radar Waveform_11						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	59.1	11			700.968
2	3	74.4	11	1567	1835	600.5
3	1	68.5	11			48.43
4	2	98.8	11	1933		114.24
5	2	90.1	11	1714		53.53
6	1	98.1	11			269.96
7	3	84	11	1219	1763	375.98
8	1	67.2	11			360.21
9	2	90.3	11	1213		526.6
10	2	82.6	11	1137		283.03
11	2	89.2	11	1128		553.58
12	2	85.6	11	1911		694.54
13	2	99.6	11	1421		513.49
14	1	80.5	11			539.8
15	2	92.5	11	1086		364.5
16	2	74.9	11	1100		463.6

Type 5 Radar Waveform_12						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	81.2	17	1291		444.522
2	2	77	17	1050		742.263
3	2	73	17	1603		485.046
4	2	91.8	17	1721		317.069
5	1	79.9	17			324.852
6	2	66.8	17	1060		460.215
7	1	75.5	17			603.198
8	3	89.5	17	1758	1962	842.102
9	3	54.6	17	1353	1029	179.505
10	1	79.5	17			329.198
11	1	60	17			438.381
12	1	77.3	17			854.254
13	2	69.2	17	1865		392.277

Type 5 Radar Waveform_13						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	56.9	12	1614		25.964
2	1	69.3	12			335.831
3	2	52.8	12	1991		260.012
4	2	79.4	12	1429		911.823
5	1	84.4	12			321.704
6	1	83.7	12			268.885
7	2	69.7	12	1064		919.295
8	1	95.5	12			979.606
9	3	74.4	12	1241	1784	529.897
10	1	67.2	12			738.218
11	2	96.1	12	1411		701.009

Type 5 Radar Waveform_14						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	63.2	6			684.397
2	1	66.1	6			69.413
3	2	83	6	1995		801.884
4	3	66.4	6	1286	1546	23.941
5	3	85.4	6	1053	1178	841.439
6	3	71.5	6	1071	1889	515.146
7	2	90.3	6	1314		372.403
8	2	55	6	1157		731.83
9	2	59.8	6	1363		165.477
10	2	89.5	6	1143		466.434
11	3	55.2	6	1529	1151	656.231
12	3	81.9	6	1413	1718	246.899
13	2	66.1	6	1329		113.986
14	2	55.8	6	1707		306.643

Type 5 Radar Waveform_15						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	63	9	1361		394.638
2	2	54.8	9	1674		720.46
3	3	81.5	9	1428	1823	181.25
4	2	76.3	9	1363		128.35
5	3	68	9	1926	1842	659.5
6	2	98.4	9	1888		490.3
7	2	89.8	9	1803		135.99
8	2	80.2	9	1506		126.36
9	3	83	9	1732	1484	577.62
10	2	86.6	9	1681		564.03
11	3	76.8	9	1703	1206	140.87
12	3	77.4	9	1533	1871	531.14
13	1	77.2	9			73.79
14	2	90.7	9	1035		524.6
15	2	62.8	9	1774		264.4
16	3	89.8	9	1045	1780	637.1

Type 5 Radar Waveform_16						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	62.1	7	1467		492.545
2	2	80.2	7	1483		656.013
3	1	77.1	7			123.747
4	3	66.4	7	1493	1376	516.1
5	2	53.6	7	1537		527.103
6	3	95.2	7	1738	1316	186.847
7	2	68.7	7	1049		391.82
8	2	75.4	7	1759		153.703
9	2	64.8	7	1081		191.167
10	1	69.7	7			484.08
11	3	59.3	7	1250	1948	422.323
12	2	60.3	7	1385		46.427
13	2	69.8	7	1048		568.79
14	3	99.1	7	1065	1462	154.723
15	3	63.9	7	1421	1921	618.137
16	3	54.3	7	1493	1710	41.1
17	1	64.9	7			5.833
18	2	50.3	7	1401		499.767

Type 5 Radar Waveform_17						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	71.9	14	1846	1895	569.717
2	2	63.2	14	1614		596.171
3	1	97.4	14			533.032
4	2	65.5	14	1695		493.873
5	2	66.2	14	1376		379.304
6	2	93	14	1045		197.085
7	3	73.7	14	1209	1044	44.406
8	2	63.2	14	1654		371.847
9	3	52.8	14	1282	1530	152.898
10	2	63.3	14	1331		419.599
11	1	71.8	14			353.781
12	2	91.4	14	1130		500.622
13	1	85.6	14			218.573
14	2	78.1	14	1865		474.414
15	2	55.7	14	1692		154.445
16	2	70.8	14	1177		304.226
17	1	96.2	14			195.037
18	1	73.8	14			0.358
19	2	55.7	14	1806		586.979

Type 5 Radar Waveform_18						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	61.1	19	1446		1261.72
2	2	91.5	19	1493		194.037
3	2	55.6	19	1882		1122.123
4	2	99.3	19	1724		76.26
5	2	82.5	19	1994		394.437
6	2	97.4	19	1639		977.663
7	3	92	19	1179	1504	1304.07
8	2	86.6	19	1711		658.117
9	1	55	19			458.433

Type 5 Radar Waveform_19						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	54.3	5			966.436
2	1	50	5			247.14
3	2	75.5	5	1510		572.95
4	2	63.9	5	1923		192.48
5	2	63	5	1800		922
6	3	55.8	5	1055	1591	131.92
7	2	91.3	5	1570		11.65
8	2	78.5	5	1964		337.01
9	3	86.6	5	1626	1732	430.27
10	2	79.6	5	1707		22.13
11	2	52	5	1481		849.4
12	1	99.6	5			389.6

Type 5 Radar Waveform_20						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	72.2	16	1605		776.863
2	2	66.9	16	1258		960.041
3	2	64.4	16	1561		512.182
4	2	83.3	16	1381		805.673
5	1	81.9	16			985.204
6	3	53.5	16	1601	1670	971.205
7	2	96.2	16	1906		760.525
8	2	58.3	16	1061		221.926
9	3	100	16	1702	1666	222.127
10	2	69.1	16	1205		666.718
11	3	65.2	16	1454	1570	138.609

Type 5 Radar Waveform_21						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	73.4	16	1567		109.01
2	3	60.4	16	1406	1970	381.343
3	1	64.7	16			232.196
4	2	67.1	16	1860		522.079
5	2	80.9	16	1835		873.272
6	3	56.6	16	1728	1136	406.325
7	3	53	16	1680	1330	854.518
8	3	66.5	16	1171	1085	587.622
9	2	99	16	1078		564.325
10	2	83.7	16	1994		475.638
11	1	52.6	16			849.631
12	3	96.6	16	1701	1678	845.254
13	2	53.6	16	1970		391.877

Type 5 Radar Waveform_22						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	3	69.9	9	1511	1597	673.439
2	3	62	9	1200	1046	698.85
3	1	50.2	9			340.93
4	3	69.3	9	1793	1559	337.19
5	2	86.7	9	1238		734.96
6	2	92.9	9	1394		118.43
7	1	73.9	9			219.73
8	2	65	9	1279		491.09
9	1	60.1	9			323.62
10	2	72.2	9	1319		338.18
11	2	63.9	9	1125		591.72
12	2	57.4	9	1435		683.86
13	2	67.7	9	1271		355.76
14	3	51.9	9	1676	1440	203.42
15	2	65.7	9	1099		261.9
16	2	64.6	9	1360		8.3

Type 5 Radar Waveform_23						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	92.1	6	1514	1564	16.679
2	2	73.1	6	1385		410.18
3	2	67.9	6	1228		135.7
4	2	66.9	6	1287		455.96
5	3	84.6	6	1200	1173	519.65
6	3	90.9	6	1677	1317	144.5
7	3	65.4	6	1946	1722	250.73
8	3	58.1	6	1740	1161	41.14
9	2	92.4	6	1172		523.84
10	2	52.9	6	1649		103.78
11	2	92.9	6	1794		329.95
12	2	62.3	6	1166		323.11
13	2	50.8	6	1732		340.59
14	1	84.7	6			386.4
15	2	77.5	6	1764		545.8

Type 5 Radar Waveform_24						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	67.2	11	1440		704.435
2	2	89.7	11	1787		465.85
3	1	98.2	11			81.18
4	1	54.9	11			119.69
5	2	95.6	11	1357		289.5
6	2	72.1	11	1037		151.8
7	2	59.9	11	1218		715
8	3	56.2	11	1944	1596	322.94
9	2	84.4	11	1063		551.86
10	2	64.6	11	1948		311.8
11	3	56.5	11	1007	1500	546.74
12	2	78	11	1251		68.1
13	1	96.1	11			334.52
14	2	61.9	11	1583		323
15	2	72.2	11	1037		618.7
16	1	76.9	11			733.2

Type 5 Radar Waveform_25						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	91.7	18	1821	1933	355.922
2	2	67.8	18	1443		511.92
3	1	62.1	18			297.55
4	2	71.1	18	1085		141.27
5	3	58.5	18	1572	1307	494.22
6	3	68.8	18	1415	1549	702.65
7	2	80.4	18	1249		54.28
8	3	90.6	18	1578	1636	736.31
9	1	71.6	18			733.41
10	2	77.2	18	1250		15.56
11	2	60.1	18	1468		188.69
12	3	94.2	18	1055	1838	583.67
13	3	82.8	18	1546	1798	68.25
14	3	51.2	18	1205	1039	461.8
15	2	68.1	18	1716		500.8
16	2	94.9	18	1885		669.2

Type 5 Radar Waveform_26						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	97.6	20			320.301
2	3	86.7	20	1299	1571	246.129
3	3	83.4	20	1854	1051	518.165
4	1	63.3	20			148.653
5	2	89.5	20	1734		421.351
6	1	54	20			545.968
7	2	58.8	20	1291		390.416
8	2	63	20	1392		474.244
9	3	99.9	20	1391	1625	274.581
10	1	74.8	20			525.479
11	2	85.7	20	1316		453.386
12	2	85.7	20	1718		251.284
13	2	91	20	1387		470.472
14	1	68.6	20			270.629
15	1	93.2	20			499.547
16	2	55.9	20	1537		147.365
17	2	76.4	20	1493		548.782

Type 5 Radar Waveform_27						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	2	60.5	12	1764		163.286
2	1	82	12			225.087
3	2	78	12	1927		916.043
4	1	80.5	12			799.2
5	2	62.5	12	1994		1155.417
6	2	57.7	12	1983		634.023
7	3	97.2	12	1211	1205	33.07
8	2	57.9	12	1375		778.667
9	2	56.9	12	1923		699.233

Type 5 Radar Waveform_28						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	99.1	16			360.172
2	2	95.8	16	1301		216.854
3	3	81.3	16	1865	1768	120.482
4	3	53.7	16	1761	1968	23.763
5	1	76.8	16			7.524
6	3	56.2	16	1865	1944	530.965
7	2	65.3	16	1839		158.586
8	1	97.7	16			339.067
9	2	86.3	16	1297		561.088
10	3	65.4	16	1666	1881	429.149
11	3	62.6	16	1139	1441	236.871
12	1	66.7	16			73.232
13	2	94.2	16	1509		624.483
14	1	66.5	16			566.004
15	2	67.4	16	1860		319.855
16	2	86.1	16	1402		84.776
17	2	90	16	1414		117.237
18	3	89.7	16	1088	1042	39.258
19	1	94.7	16			269.279

Type 5 Radar Waveform_29						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	62.2	13	1169	1703	798.419
2	2	53.1	13	1855		178.32
3	3	91.6	13	1034	1663	768.81
4	2	81.3	13	1930		773.87
5	3	73.1	13	1581	1421	374.63
6	3	64.6	13	1618	1387	809.26
7	1	50.5	13			349.84
8	2	92.5	13	1246		571.02
9	2	82	13	1479		942.2
10	1	90.5	13			62.95
11	2	82	13	1552		101.4
12	2	79.4	13	1082		450.3

Type 5 Radar Waveform_30						
Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	1	94.6	6			276.777
2	2	81.2	6	1893		768.99
3	2	78.3	6	1216		150.59
4	2	61.9	6	1629		724.29
5	3	60.5	6	1432	1892	81.5
6	2	83.8	6	1100		700.21
7	3	52	6	1393	1501	323.79
8	1	92.3	6			291.1
9	2	57.8	6	1554		47.26
10	2	75.8	6	1362		952.1
11	1	84.5	6			105.7
12	3	93.2	6	1085	1026	322.6

## Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5491	1	16	5570	1
2	5500	1	17	5571	1
3	5509	1	18	5580	1
4	5510	1	19	5589	1
5	5511	1	20	5590	1
6	5520	1	21	5591	1
7	5529	1	22	5600	1
8	5530	1	23	5609	1
9	5531	1	24	5610	1
10	5540	1	25	5611	1
11	5549	1	26	5620	1
12	5550	1	27	5629	1
13	5551	1	28	5630	1
14	5560	1	29	5640	1
15	5569	1	30	5649	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5592	6	1	5558	3
5	5516	15	4	5549	12
6	5523	18	5	5632	15
7	5582	21	9	5495	27
8	5648	24	12	5576	36
9	5615	27	15	5561	45
11	5606	33	18	5557	54
13	5616	39	21	5523	63
15	5632	45	23	5505	69
17	5573	51	27	5572	81
22	5545	66	28	5547	84
23	5566	69	30	5527	90
24	5498	72	31	5611	93
25	5645	75	34	5602	102
26	5594	78	36	5526	108
32	5517	96	37	5615	111
33	5541	99	38	5504	114
34	5491	102	39	5608	117
37	5640	111	42	5619	126
39	5559	117	44	5637	132
40	5494	120	47	5519	141
41	5506	123	53	5646	159
44	5609	132	59	5600	177
45	5587	135	60	5601	180
47	5551	141	62	5563	186
50	5650	150	64	5499	192
51	5500	153	67	5584	201
53	5560	159	70	5546	210
58	5512	174	71	5517	213
59	5547	177	75	5635	225
61	5635	183	80	5644	240
62	5581	186	81	5588	243
64	5496	192	82	5641	246
66	5507	198	84	5591	252

67	5536	201	85	5529	255
71	5603	213	91	5520	273
73	5607	219	95	5491	285
74	5510	222	98	5541	294
75	5598	225	100	5503	300
78	5577	234	--	--	--
81	5591	243	--	--	--
82	5638	246	--	--	--
86	5623	258	--	--	--
89	5584	267	--	--	--
92	5620	276	--	--	--
93	5527	279	--	--	--
97	5628	291	--	--	--
98	5625	294	--	--	--
99	5557	297	--	--	--
100	5553	300	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5609	9	6	5528	18
12	5548	36	8	5556	24
17	5592	51	9	5557	27
19	5524	57	10	5555	30
21	5637	63	21	5527	63
22	5573	66	22	5582	66
23	5541	69	23	5574	69
28	5498	84	33	5570	99
30	5598	90	37	5534	111
31	5638	93	38	5533	114
36	5599	108	39	5497	117
38	5500	114	40	5502	120
40	5646	120	44	5629	132
42	5564	126	45	5627	135
45	5623	135	47	5613	141
47	5597	141	53	5626	159
48	5565	144	54	5538	162

49	5643	147	58	5544	174
50	5512	150	61	5514	183
54	5616	162	67	5500	201
56	5594	168	70	5605	210
61	5510	183	73	5553	219
65	5534	195	74	5523	222
72	5629	216	75	5496	225
75	5567	225	76	5596	228
76	5600	228	79	5636	237
78	5513	234	80	5490	240
79	5620	237	82	5632	246
89	5523	267	83	5640	249
90	5647	270	85	5625	255
92	5590	276	86	5550	258
--	--	--	89	5573	267
--	--	--	90	5643	270
--	--	--	91	5522	273
--	--	--	93	5579	279
--	--	--	99	5641	297
--	--	--	100	5614	300

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5635	3	6	5509	18
2	5562	6	8	5634	24
3	5498	9	13	5596	39
4	5604	12	15	5548	45
5	5503	15	17	5650	51
10	5545	30	21	5568	63
11	5553	33	22	5639	66
13	5619	39	35	5501	105
22	5530	66	39	5617	117
24	5638	72	41	5563	123
25	5551	75	43	5613	129
27	5621	81	43	5613	129
30	5501	90	44	5550	132

34	5536	102	48	5538	144
42	5547	126	55	5532	165
52	5559	156	56	5649	168
57	5569	171	58	5605	174
59	5561	177	65	5556	195
60	5579	180	67	5638	201
62	5493	186	73	5522	219
64	5608	192	76	5640	228
65	5595	195	77	5525	231
66	5614	198	79	5646	237
69	5527	207	80	5524	240
71	5620	213	83	5539	249
72	5542	216	88	5616	264
75	5515	225	89	5593	267
76	5606	228	91	5641	273
82	5550	246	94	5516	282
83	5520	249	97	5627	291
88	5502	264	98	5529	294
89	5632	267	--	--	--
94	5630	282	--	--	--
95	5564	285	--	--	--
100	5628	300	--	--	--
Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5602	12	2	5627	6
16	5553	48	4	5650	12
21	5500	63	5	5561	15
25	5491	75	8	5597	24
27	5535	81	12	5509	36
28	5555	84	19	5535	57
34	5599	102	20	5557	60
35	5617	105	23	5580	69
38	5522	114	33	5632	99
40	5594	120	43	5596	129
43	5564	129	46	5637	138
44	5635	132	49	5494	147

46	5492	138	50	5634	150
50	5583	150	54	5491	162
55	5539	165	61	5625	183
56	5643	168	62	5562	186
59	5632	177	68	5611	204
66	5641	198	69	5605	207
69	5560	207	72	5502	216
72	5521	216	74	5600	222
74	5550	222	78	5501	234
77	5608	231	84	5640	252
78	5574	234	92	5581	276
79	5543	237	93	5522	279
84	5607	252	96	5493	288
89	5566	267	97	5505	291
93	5563	279	--	--	--
94	5494	282	--	--	--
97	5636	291	--	--	--
100	5595	300	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5526	3	1	5.562	3
3	5591	9	2	5.499	6
5	5533	15	4	5.539	12
6	5606	18	5	5.626	15
13	5564	39	8	5.586	24
17	5612	51	10	5.502	30
22	5562	66	20	5.573	60
29	5548	87	21	5.547	63
31	5629	93	24	5.5	72
35	5579	105	29	5.522	87
36	5538	108	34	5.521	102
38	5552	114	40	5.593	120
44	5514	132	42	5.584	126
47	5580	141	44	5.592	132
48	5603	144	46	5.551	138

56	5645	168	52	5.541	156
63	5644	189	53	5.556	159
68	5559	204	56	5.51	168
69	5495	207	59	5.491	177
70	5557	210	62	5.609	186
72	5523	216	68	5.625	204
77	5605	231	70	5.529	210
81	5518	243	71	5.631	213
86	5519	258	72	5.552	216
90	5616	270	75	5.575	225
91	5531	273	76	5.637	228
92	5608	276	79	5.59	237
95	5647	285	85	5.647	255
97	5617	291	86	5.566	258
99	5577	297	87	5.582	261
100	5551	300	88	5.494	264
--	--	--	89	5.49	267
--	--	--	93	5.569	279
--	--	--	100	5.505	300

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5540	3	3	5553	9
5	5641	15	5	5490	15
7	5498	21	6	5573	18
8	5538	24	11	5511	33
10	5513	30	13	5576	39
13	5542	39	15	5562	45
17	5533	51	16	5634	48
19	5499	57	20	5501	60
20	5650	60	29	5550	87
23	5532	69	31	5595	93
25	5584	75	39	5530	117
29	5548	87	44	5639	132
30	5528	90	47	5613	141
34	5574	102	48	5581	144
37	5643	111	49	5544	147
40	5546	120	51	5574	153
41	5649	123	52	5608	156
47	5553	141	54	5506	162
49	5534	147	57	5577	171
52	5524	156	59	5513	177
54	5647	162	63	5630	189
59	5606	177	70	5627	210
64	5627	192	72	5557	216
65	5570	195	73	5560	219
67	5620	201	74	5507	222
72	5494	216	78	5493	234
77	5608	231	80	5540	240
81	5545	243	85	5571	255
83	5612	249	90	5531	270
84	5505	252	91	5556	273
87	5648	261	92	5611	276
88	5579	264	96	5637	288
90	5609	270	97	5587	291
91	5502	273	99	5536	297

94	5572	282	--	--	--
96	5497	288	--	--	--
99	5646	297	--	--	--
100	5637	300	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5595	3	5	5643	15
3	5647	9	6	5634	18
7	5602	21	7	5584	21
9	5521	27	10	5611	30
10	5613	30	12	5561	36
12	5494	36	17	5636	51
24	5625	72	22	5494	66
30	5614	90	25	5610	75
33	5605	99	31	5606	93
36	5604	108	35	5549	105
40	5568	120	37	5589	111
41	5527	123	39	5608	117
42	5606	126	40	5541	120
52	5620	156	43	5607	129
55	5629	165	45	5586	135
58	5637	174	47	5599	141
59	5616	177	49	5500	147
60	5578	180	50	5630	150
64	5496	192	58	5648	174
67	5512	201	62	5551	186
68	5584	204	67	5521	201
69	5573	207	72	5632	216
72	5550	216	76	5585	228
75	5529	225	77	5565	231
76	5532	228	78	5633	234
78	5644	234	80	5497	240
80	5553	240	81	5514	243
84	5506	252	85	5644	255
86	5530	258	86	5638	258

87	5591	261	88	5613	264
90	5603	270	89	5649	267
93	5598	279	--	--	--
95	5522	285	--	--	--
97	5624	291	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5494	3	2	5572	6
2	5496	6	4	5539	12
4	5639	12	8	5529	24
8	5607	24	9	5552	27
9	5625	27	11	5553	33
15	5565	45	12	5605	36
18	5529	54	14	5493	42
20	5548	60	18	5619	54
23	5497	69	19	5528	57
24	5602	72	22	5617	66
27	5555	81	24	5505	72
30	5490	90	29	5649	87
37	5609	111	30	5603	90
41	5615	123	31	5621	93
43	5644	129	33	5610	99
45	5618	135	42	5629	126
47	5516	141	56	5589	168
50	5550	150	57	5573	171
51	5558	153	58	5592	174
53	5556	159	61	5506	183
59	5585	177	63	5616	189
61	5580	183	67	5593	201
62	5617	186	73	5491	219
63	5508	189	79	5507	237
64	5620	192	84	5530	252
66	5499	198	90	5627	270
67	5534	201	93	5582	279
68	5629	204	94	5580	282
70	5621	210	97	5618	291
79	5640	237	98	5626	294
81	5593	243	100	5639	300
83	5630	249	--	--	--
96	5527	288	--	--	--
97	5495	291	--	--	--

99	5600	297	--	--	--
----	------	-----	----	----	----

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5580	6	2	5528	6
3	5545	9	4	5508	12
4	5551	12	11	5585	33
6	5510	18	14	5520	42
9	5538	27	18	5547	54
12	5649	36	19	5590	57
13	5559	39	20	5629	60
14	5493	42	21	5604	63
17	5601	51	22	5535	66
19	5624	57	24	5634	72
20	5603	60	27	5624	81
22	5568	66	28	5570	84
24	5621	72	29	5637	87
30	5533	90	32	5505	96
31	5638	93	35	5584	105
33	5518	99	36	5577	108
36	5641	108	44	5620	132
42	5598	126	46	5558	138
46	5558	138	47	5533	141
47	5525	141	51	5596	153
49	5615	147	52	5499	156
51	5532	153	53	5551	159
52	5503	156	54	5609	162
64	5550	192	61	5529	183
67	5570	201	69	5578	207
73	5505	219	73	5641	219
75	5506	225	76	5532	228
76	5519	228	78	5594	234
79	5626	237	80	5582	240
80	5572	240	81	5566	243
83	5549	249	83	5581	249
84	5517	252	86	5580	258

86	5613	258	89	5560	267
91	5557	273	95	5626	285
94	5605	282	99	5537	297
95	5502	285	--	--	--
97	5631	291	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5576	12	4	5563	12
7	5563	21	5	5641	15
8	5510	24	7	5594	21
12	5493	36	9	5600	27
14	5505	42	11	5502	33
18	5545	54	13	5513	39
22	5532	66	14	5542	42
23	5617	69	15	5646	45
29	5537	87	20	5555	60
32	5614	96	24	5501	72
38	5530	114	25	5521	75
40	5538	120	37	5638	111
41	5601	123	38	5557	114
43	5529	129	39	5642	117
44	5513	132	45	5517	135
45	5541	135	49	5574	147
48	5524	144	56	5499	168
49	5540	147	60	5550	180
50	5580	150	62	5611	186
52	5648	156	69	5564	207
56	5519	168	73	5518	219
58	5504	174	74	5635	222
61	5627	183	75	5520	225
63	5588	189	76	5547	228
65	5607	195	80	5525	240
67	5577	201	82	5545	246
71	5550	213	85	5592	255
74	5629	222	88	5570	264

76	5630	228	91	5528	273
78	5625	234	94	5585	282
79	5573	237	95	5599	285
80	5508	240	100	5643	300
82	5583	246	--	--	--
85	5612	255	--	--	--
87	5631	261	--	--	--
89	5548	267	--	--	--
92	5520	276	--	--	--
94	5490	282	--	--	--
97	5514	291	--	--	--
98	5501	294	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5587	3	3	5610	9
2	5538	6	6	5577	18
11	5605	33	8	5490	24
15	5522	45	9	5581	27
17	5565	51	10	5572	30
22	5547	66	11	5611	33
29	5615	87	15	5571	45
30	5524	90	16	5554	48
31	5512	93	18	5582	54
34	5531	102	21	5633	63
36	5595	108	25	5619	75
37	5495	111	26	5636	78
38	5575	114	36	5502	108
40	5546	120	40	5493	120
41	5499	123	43	5558	129
43	5526	129	57	5506	171
46	5574	138	60	5504	180
47	5601	141	65	5550	195
51	5554	153	67	5600	201
54	5580	162	70	5529	210
55	5553	165	72	5551	216
56	5509	168	73	5496	219
58	5644	174	75	5593	225
61	5496	183	78	5544	234
62	5609	186	80	5621	240
65	5506	195	84	5536	252
66	5519	198	85	5597	255
79	5555	237	90	5602	270
86	5640	258	91	5583	273
91	5566	273	94	5648	282
96	5507	288	100	5520	300

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5581	6	2	5572	6
4	5582	12	5	5509	15
6	5565	18	8	5492	24
7	5631	21	11	5502	33
11	5574	33	15	5567	45
15	5524	45	20	5641	60
19	5588	57	21	5611	63
22	5602	66	24	5585	72
23	5564	69	25	5580	75
28	5638	84	29	5491	87
29	5626	87	32	5557	96
30	5537	90	40	5593	120
31	5535	93	42	5635	126
33	5522	99	44	5516	132
38	5526	114	45	5609	135
45	5558	135	48	5562	144
48	5511	144	49	5520	147
49	5629	147	50	5553	150
56	5527	168	53	5504	159
58	5551	174	55	5622	165
59	5531	177	64	5582	192
63	5584	189	65	5551	195
64	5624	192	69	5613	207
71	5580	213	73	5612	219
72	5556	216	74	5542	222
73	5633	219	75	5596	225
74	5617	222	76	5627	228
77	5630	231	78	5603	234
81	5601	243	79	5626	237
83	5506	249	82	5633	246
86	5507	258	84	5570	252
88	5514	264	85	5642	255
92	5569	276	87	5534	261
95	5561	285	88	5587	264

97	5604	291	89	5539	267
--	--	--	90	5636	270
--	--	--	93	5548	279
--	--	--	94	5543	282
--	--	--	95	5576	285

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5521	12	3	5624	9
5	5590	15	5	5630	15
6	5554	18	6	5616	18
7	5510	21	14	5596	42
9	5522	27	16	5509	48
10	5580	30	19	5589	57
12	5606	36	21	5569	63
13	5518	39	27	5643	81
14	5631	42	29	5599	87
22	5587	66	34	5557	102
24	5553	72	45	5608	135
27	5512	81	47	5614	141
30	5543	90	53	5568	159
31	5511	93	57	5619	171
33	5499	99	62	5527	186
34	5542	102	66	5516	198
35	5544	105	67	5578	201
37	5650	111	68	5558	204
41	5617	123	70	5645	210
47	5600	141	73	5503	219
56	5605	168	74	5647	222
61	5621	183	80	5648	240
63	5626	189	81	5642	243
66	5633	198	87	5650	261
69	5533	207	88	5574	264
72	5545	216	95	5507	285
80	5630	240	--	--	--
81	5547	243	--	--	--

87	5622	261	--	--	--
89	5573	267	--	--	--
99	5618	297	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5524	9	6	5525	18
4	5564	12	8	5531	24
10	5535	30	10	5641	30
14	5638	42	17	5624	51
16	5553	48	21	5612	63
18	5559	54	23	5619	69
21	5525	63	27	5644	81
23	5586	69	30	5638	90
26	5585	78	33	5501	99
32	5594	96	34	5648	102
37	5627	111	37	5524	111
38	5647	114	39	5581	117
39	5548	117	40	5643	120
40	5518	120	43	5502	129
44	5501	132	44	5578	132
45	5572	135	45	5591	135
46	5600	138	48	5626	144
48	5563	144	49	5642	147
53	5527	159	53	5511	159
55	5497	165	54	5542	162
56	5623	168	59	5540	177
57	5540	171	62	5563	186
59	5568	177	66	5560	198
66	5552	198	69	5568	207
68	5510	204	71	5583	213
70	5624	210	73	5625	219
72	5601	216	74	5631	222
73	5562	219	82	5504	246
74	5573	222	86	5647	258
76	5629	228	90	5627	270

80	5542	240	93	5640	279
83	5592	249	94	5632	282
85	5631	255	--	--	--
86	5640	258	--	--	--
87	5617	261	--	--	--
88	5534	264	--	--	--
89	5554	267	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5573	6	1	5560	3
4	5647	12	3	5529	9
18	5613	54	4	5646	12
22	5570	66	12	5641	36
24	5631	72	16	5494	48
25	5607	75	18	5623	54
28	5553	84	21	5578	63
29	5588	87	22	5557	66
34	5525	102	24	5490	72
38	5601	114	25	5636	75
39	5551	117	27	5511	81
40	5629	120	35	5515	105
41	5584	123	44	5530	132
47	5547	141	48	5535	144
48	5548	144	59	5493	177
49	5540	147	60	5551	180
52	5572	156	65	5525	195
53	5581	159	69	5550	207
54	5600	162	71	5508	213
55	5585	165	74	5589	222
59	5542	177	77	5553	231
60	5507	180	82	5626	246
61	5589	183	83	5496	249
66	5524	198	84	5622	252
67	5508	201	89	5523	267
69	5621	207	90	5505	270

70	5556	210	91	5606	273
72	5580	216	96	5531	288
73	5650	219	--	--	--
74	5500	222	--	--	--
76	5526	228	--	--	--
77	5563	231	--	--	--
78	5501	234	--	--	--
86	5579	258	--	--	--
87	5546	261	--	--	--
89	5528	267	--	--	--

## 6. Test Result for Off-Channel CAC

Product	AX6600 Tri-Band Wi-Fi 6 Router	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	AC1	Test Date	2020/04/16
Test Item	Off-Channel CAC (Operating Channel 5500MHz, Off-Channel CAC Channel 5580MHz )		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5570.4	1	558	95	1
2	5570.4	1	618	86	1
3	5570.4	1	698	76	1
4	5570.4	1	658	81	1
5	5570.4	1	638	83	1
6	5570.4	1	758	70	1
7	5570.4	1	798	67	1
8	5570.4	1	718	74	1
9	5570.4	1	598	89	1
10	5570.4	1	838	63	1
11	5580.0	1	878	61	1
12	5580.0	1	858	62	1
13	5580.0	1	938	57	1
14	5580.0	1	538	98	1
15	5580.0	1	918	58	1
16	5580.0	1	741	72	1
17	5580.0	1	2221	24	1
18	5580.0	1	1799	30	1
19	5580.0	1	1321	40	1
20	5580.0	1	2692	20	1
21	5589.6	1	2251	24	1
22	5589.6	1	2621	21	1
23	5589.6	1	2688	20	1
24	5589.6	1	2280	24	1
25	5589.6	1	1892	28	1
26	5589.6	1	874	61	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5589.6	1	795	67	1
28	5589.6	1	1638	33	1
29	5589.6	1	1394	38	1
30	5589.6	1	713	74	1
Detection Percentage (%)					100%

## Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5570.4	2.7	153	23	1
2	5570.4	3.7	185	23	1
3	5570.4	1.1	155	26	1
4	5570.4	3.3	207	26	1
5	5570.4	4.9	192	28	1
6	5570.4	4.9	153	23	1
7	5570.4	1.1	207	29	1
8	5570.4	4.1	161	23	1
9	5570.4	1.4	207	28	1
10	5570.4	1.5	203	27	1
11	5580.0	3.0	214	25	1
12	5580.0	4.8	230	28	1
13	5580.0	2.4	160	25	0
14	5580.0	4.0	183	26	0
15	5580.0	2.6	197	26	1
16	5580.0	1.2	152	29	1
17	5580.0	1.4	220	28	1
18	5580.0	1.2	156	23	1
19	5580.0	4.9	179	25	1
20	5580.0	1.1	153	24	1
21	5589.6	1.6	208	26	1
22	5589.6	2.0	208	25	1
23	5589.6	4.3	192	27	1
24	5589.6	3.9	183	27	1
25	5589.6	2.3	159	27	1
26	5589.6	2.5	168	25	1
27	5589.6	1.3	151	27	1
28	5589.6	4.8	179	28	1
29	5589.6	3.0	221	29	1
30	5589.6	3.6	205	24	0
Detection Percentage (%)					90%

## Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5570.4	7.5	481	17	1
2	5570.4	9.4	275	18	1
3	5570.4	9.8	238	17	1
4	5570.4	8.7	416	17	1
5	5570.4	9.0	287	16	1
6	5570.4	6.9	489	17	1
7	5570.4	7.8	215	17	1
8	5570.4	7.3	462	18	1
9	5570.4	9.8	365	18	0
10	5570.4	9.7	202	16	1
11	5580.0	8.3	457	17	1
12	5580.0	8.6	301	16	1
13	5580.0	6.7	251	16	0
14	5580.0	7.4	245	16	1
15	5580.0	9.3	400	18	1
16	5580.0	6.0	300	16	1
17	5580.0	9.4	217	17	1
18	5580.0	6.9	245	18	1
19	5580.0	8.5	401	17	1
20	5580.0	9.0	298	18	1
21	5589.6	6.1	344	17	1
22	5589.6	7.3	282	18	1
23	5589.6	7.1	280	17	1
24	5589.6	8.4	218	17	1
25	5589.6	6.8	419	16	1
26	5589.6	6.2	275	17	1
27	5589.6	6.5	239	17	1
28	5589.6	7.9	298	17	1
29	5589.6	7.8	259	16	1
30	5589.6	7.8	258	18	1
Detection Percentage (%)					93.3%

## Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5570.4	18.8	443	15	1
2	5570.4	11.5	254	13	1
3	5570.4	12.4	375	14	0
4	5570.4	19.9	381	14	1
5	5570.4	12.6	263	13	1
6	5570.4	17.5	350	14	1
7	5570.4	16.8	279	15	1
8	5570.4	18.1	474	15	1
9	5570.4	19.7	282	13	1
10	5570.4	11.8	271	14	0
11	5580.0	13.3	327	14	0
12	5580.0	16.2	419	16	1
13	5580.0	13.9	200	12	1
14	5580.0	11.6	334	13	1
15	5580.0	11.8	376	13	1
16	5580.0	16.2	492	16	1
17	5580.0	12.9	273	16	1
18	5580.0	11.0	345	13	1
19	5580.0	17.1	404	16	1
20	5580.0	17.9	216	15	1
21	5589.6	17.6	237	14	1
22	5589.6	16.7	352	13	1
23	5589.6	13.8	394	14	1
24	5589.6	18.4	450	15	1
25	5589.6	18.9	467	16	1
26	5589.6	11.2	219	13	1
27	5589.6	16.0	283	14	1
28	5589.6	12.5	357	14	1
29	5589.6	15.3	287	14	1
30	5589.6	18.9	209	16	1
Detection Percentage (%)					90%

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

waveforms is as follows:  $\frac{P_d\ 1 + P_d\ 2 + P_d\ 3 + P_d\ 4}{4} = (100\% + 90\% + 93.3\% + 90\%) / 4 = 93.3\% (>80\%)$

## Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5580.0	1	16	5575.2	1
2	5580.0	1	17	5577.2	1
3	5580.0	1	18	5576.0	1
4	5580.0	1	19	5574.8	1
5	5580.0	1	20	5578.4	1
6	5580.0	1	21	5587.6	1
7	5580.0	1	22	5587.6	1
8	5580.0	1	23	5585.6	1
9	5580.0	1	24	5586.0	1
10	5580.0	1	25	5582.0	1
11	5575.6	1	26	5586.4	1
12	5578.4	1	27	5585.6	0
13	5573.6	1	28	5582.8	1
14	5577.6	1	29	5584.4	1
15	5575.6	1	30	5582.4	1
Detection Percentage (%)					96.7%

## Type 5 Radar Waveform\_1

Burst	Number of Pulses	Pulse Width ( $\mu$ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI ( $\mu$ sec)	Pulse 2-to-3 PRI ( $\mu$ sec)	Start Location Within Interval (msec)
1	3	96.7	16	1130	1300	147.519
2	2	98.2	16	1517		305.128
3	1	96.5	16			357.692
4	2	97.8	16	1601		298.373
5	2	87.6	16	1891		574.154
6	3	60.1	16	1464	1638	218.995
7	1	72.5	16			271.696
8	2	94.2	16	1651		507.427
9	1	74.6	16			361.918
10	3	85	16	1968	1699	181.709
11	1	68.5	16			422.831
12	3	72.9	16	1308	1127	149.612
13	2	96.1	16	1711		538.183
14	3	80	16	1304	1351	224.304
15	2	83.7	16	1650		160.905
16	2	93.8	16	1004		220.756
17	1	79.9	16			513.437
18	3	93.4	16	1305	1166	303.558
19	3	56.4	16	1220	1074	113.979