DFS MEASUREMENT REPORT

FCC PART 15 Subpart E

FCC ID:	2AXJ4RE205V4
Applicant:	TP-Link Corporation Limited
Application Type:	Certification
Product:	AC750 Wi-Fi Range Extender
Model No.:	RE205
Brand Name:	tp-link
FCC Classification:	Unlicensed National Information Infrastructure (NII)
FCC Rule Part(s):	Part 15 Subpart E - 15.407 Section (h)(2)
Type of Device:	Master Device Client with Radar Detection
Receive Date:	May 24, 2021
Test Date:	June 01 ~ 25, 2021

Tested By : (Kevin Ker)

Reviewed By : (Paddy Chen)

Approved By : (Chenz Ker)

Testing Laboratory
3261

The test results relate only to the samples tested.

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

Revision History

Report No.	Version	Description	Issue Date	Note
2105TW0002-U3	V1.0	Original report	2021-08-24	Valid

CONTENTS

General Information

Applicant	TP-Link Corporation Limited
Applicant Address	Room 901, 9/F., New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hongkong
Manufacturer	TP-Link Corporation Limited
Manufacturer Address	Room 901, 9/F., New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hongkong
Test Site	MRT Technology (Taiwan) Co., Ltd
Test Site Address	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)
MRT FCC Registration No.	291082
FCC Rule Part(s)	Part 15.407
Test Device Serial No.	N/A ☐ Production ☒ Pre-Production ☐ Engineering

Test Facility / Accreditations

1. MRT facility is a FCC registered (Reg. No. 291082) test facility with the site description report on file and is designated by the FCC as an Accredited Test Firm.
2. MRT facility is an IC registered (MRT Reg. No. 21723) test laboratory with the site description on file at Industry Canada.
3. MRT Lab is accredited to ISO 17025 by the Taiwan Accreditation Foundation (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC (Designation Number: TW3261), Industry Taiwan, EU and TELEC Rules.

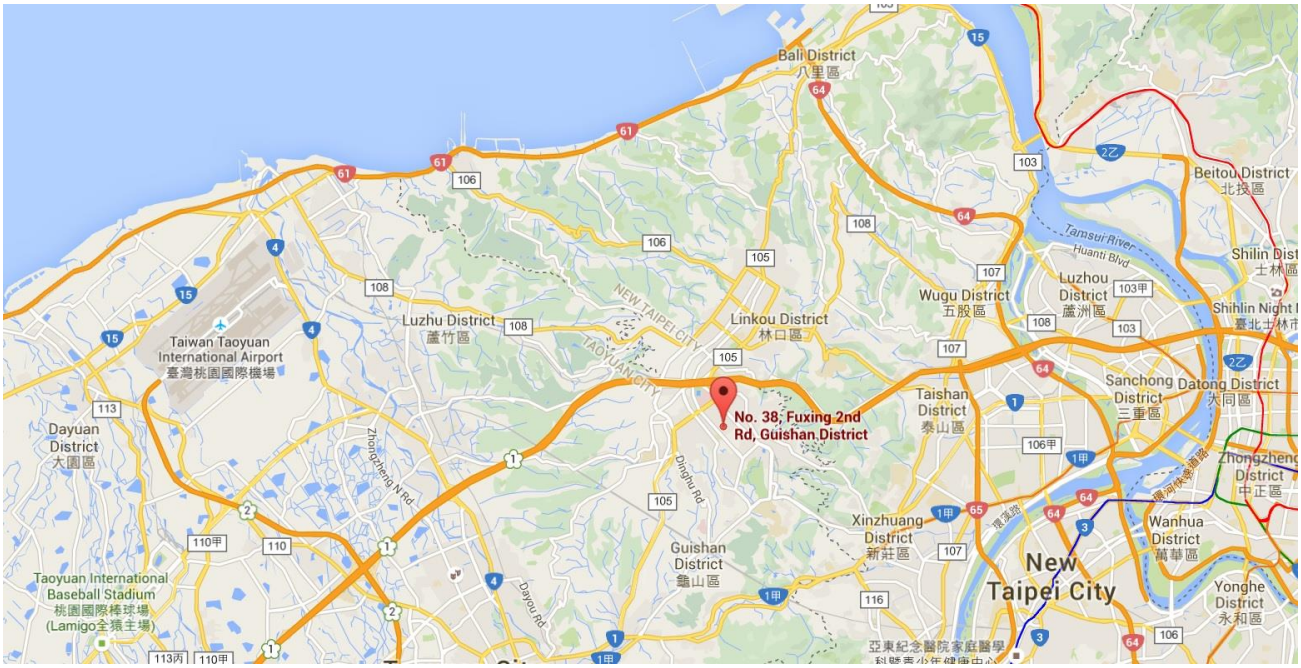
1. INTRODUCTION

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:	AC750 Wi-Fi Range Extender
Model No.:	RE205
Brand Name:	tp-link
Wi-Fi Specification:	802.11a/b/g/n/ac
Operating Mode:	Master, Client with Radar Detection
EUT Identification No.:	20210524Sample#05
Frequency Range:	**2.4GHz:** For 802.11b/g/n-HT20: 2412 ~ 2462 MHz For 802.11n-HT40: 2422 ~ 2452 MHz **5GHz:** For 802.11a/n-HT20/ac-VHT20: 5180~5240MHz, 5260~5320 MHz, 5500~5700MHz, 5745~5825MHz For 802.11n-HT40/ac-VHT40: 5190~5230MHz, 5270~5310 MHz,5510~5670MHz, 5755~5795MHz For 802.11ac-VHT80: 5210MHz, 5290MHz,5530MHz, 5610MHz, 5775MHz
Type of Modulation:	802.11b: DSSS 802.11a/g/n/ac: OFDM
TPC mechanism:	Support (Details refer to operational description)
Power-on cycle:	Requires 23.3 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. Operating Frequency and Channel List for this Report

802.11a/n-HT20/ac-VHT20

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

802.11n-HT40/ac-VHT40

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

802.11ac-VHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
58	5290 MHz	106	5530 MHz	122	5610 MHz

2.3. Description of Available Antennas

Antenna Type	Frequency Band (MHz)	T_X Paths	Max Antenna Gain (dBi)	CDD Directional Gain (dBi)	
				For Power	For PSD
Dipole Antenna	2412 ~ 2462	2	1	1	4.01
	5150 ~ 5850	1	1	--	--

Note 1: The EUT supports Cyclic Delay Diversity (CDD) mode at 802.11b/g/n, and CDD signals are correlated.

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

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

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

- For power measurements on IEEE 802.11 devices,

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

Note 2: All information declared by manufacturer.

2.4. Test Channels for this Report

Test Mode	Test Channel	Test Frequency
802.11ac-VHT20	100	5500 MHz
802.11ac-VHT40	102	5510 MHz
802.11ac-VHT80	106	5530 MHz

2.5. Test Mode

Test Mode	Mode 1: Operating under AP mode Mode 2: Operating under Client with Radar Detection Mode

2.6. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part15 Subpart E (Section 15.407 Section (h)(2))
- KDB 905462 D02v02
- KDB 905462 D04v01

3. DFS DETECTION THRESHOLDS AND RADAR TEST WAVEFORMS

3.1. Applicability

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

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

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

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

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

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

3.2. DFS Devices Requirements

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

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

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

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

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

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

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

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

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

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

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

Table 3-3: DFS Response Requirements

3.3. DFS Detection Threshold Values

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

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

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

3.4. Parameters of DFS Test Signals

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

Short Pulse Radar Test Waveforms

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

Table 3-5: Parameters for Short Pulse Radar Waveforms

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

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

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

Long Pulse Radar Test Waveform

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

Table 3-7: Parameters for Long Pulse Radar Waveforms

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

Frequency Hopping Radar Test Waveform

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

Table 3-8: Parameters for Frequency Hopping Radar Waveforms

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

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

3.5. Conducted Test Setup

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

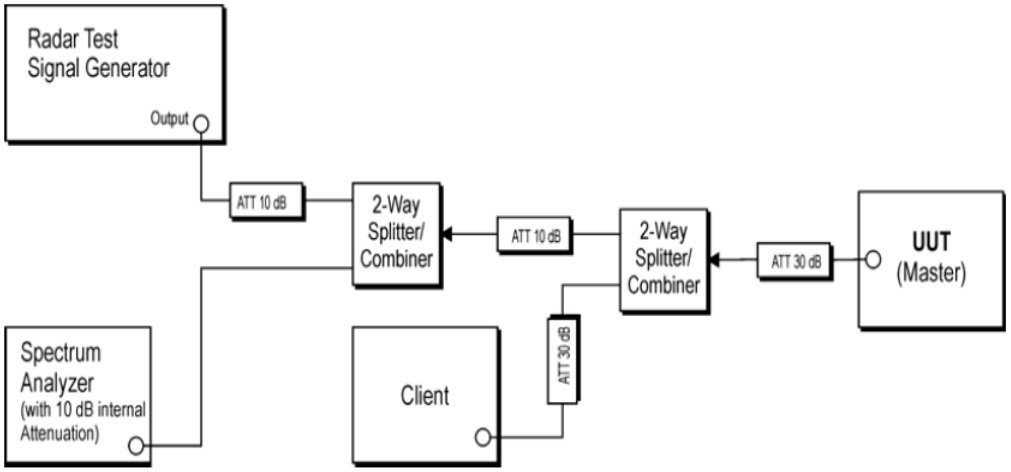


Figure 3-1: Conducted Test Setup where UUT is a Master and Radar Test Waveforms are injected into the Masters

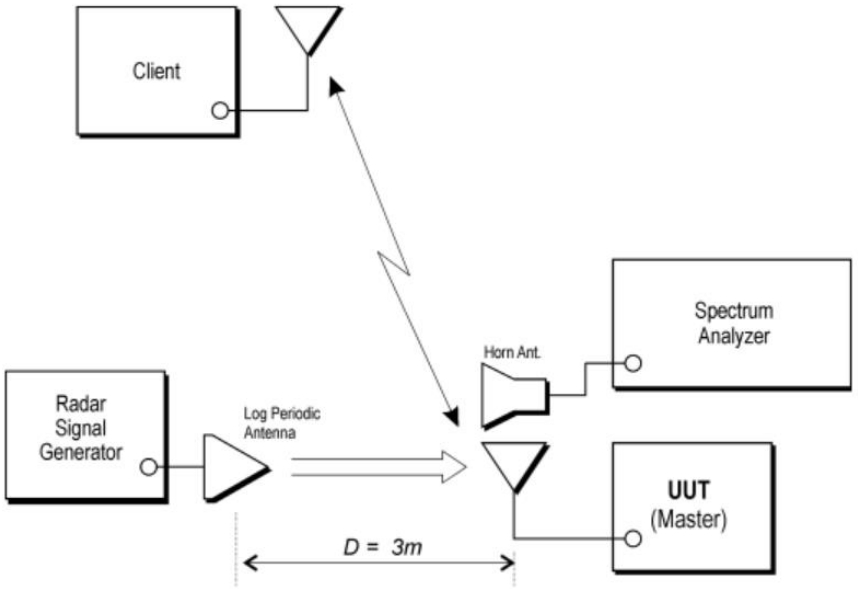


Figure 3-2: Radiated Test Setup where UUT is a Master and Radar Test Waveforms are injected into the UUT

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	2021/10/14
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2021/7/14
Signal Analyzer	R&S	FSV40	MRTTWA00007	1 year	2022/3/23
Vector Signal Generator	Keysight	N5182B	MRTTWA00010	1 year	2022/4/19
Combiner	WOKEN	0120A04208001S	MRTTWE00008	1 year	2021/9/18

Client Information

Instrument	Manufacturer	Type No.	Certification Number
Wi-Fi Module	Intel	AX200NGW	FCC ID: PD9AX200NG
AC750 Wi-Fi Range Extender	tp-link	RE205	FCC ID: 2AXJ4RE205V4

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.

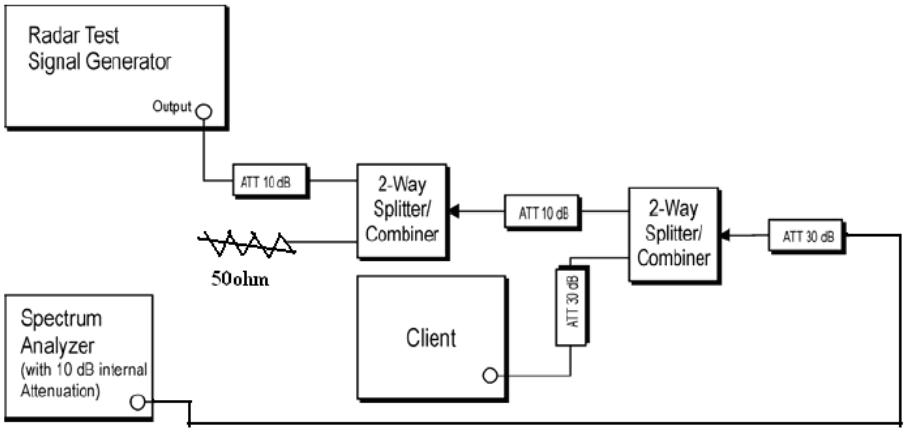


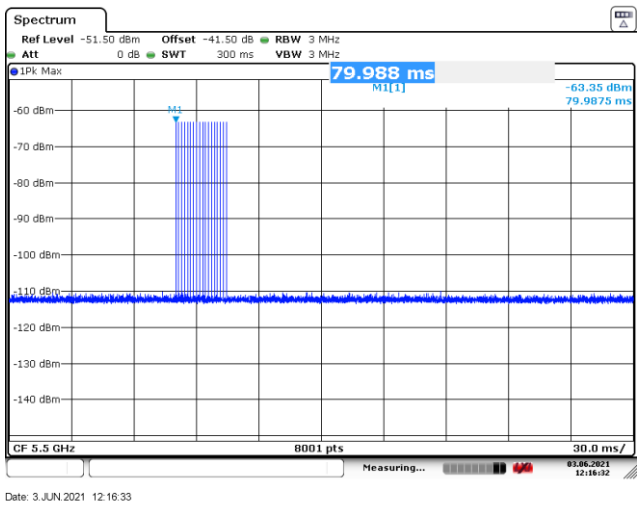
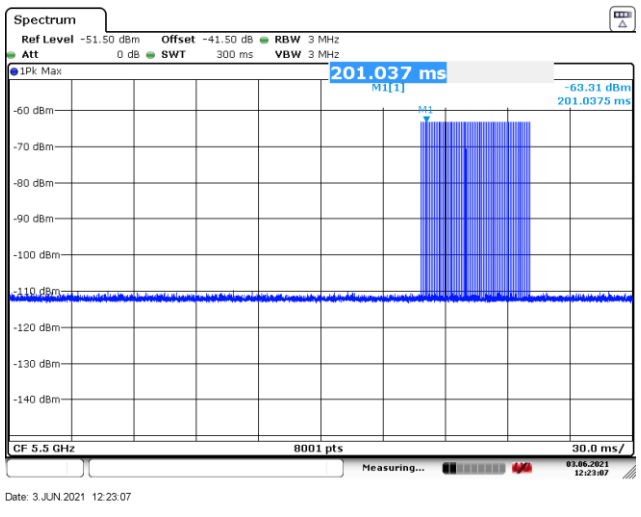
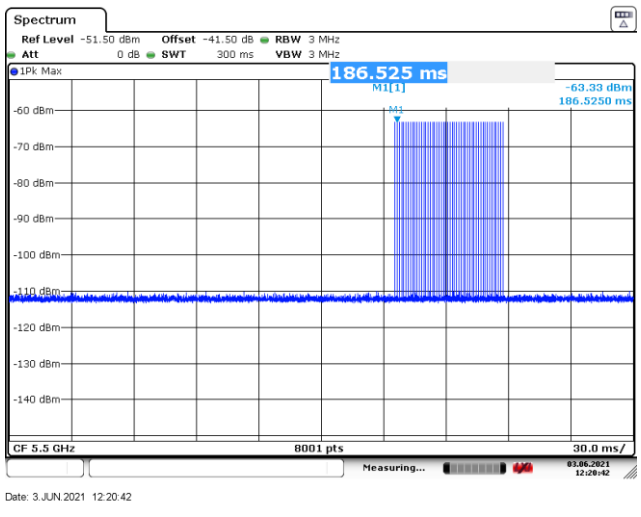
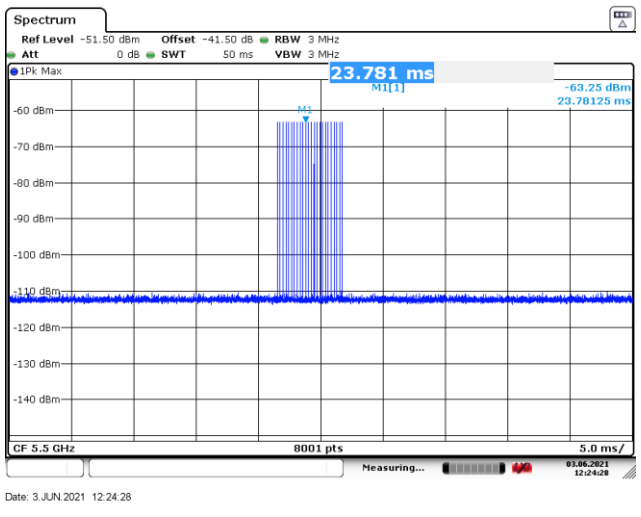
Figure 3-2: Conducted Test Setup

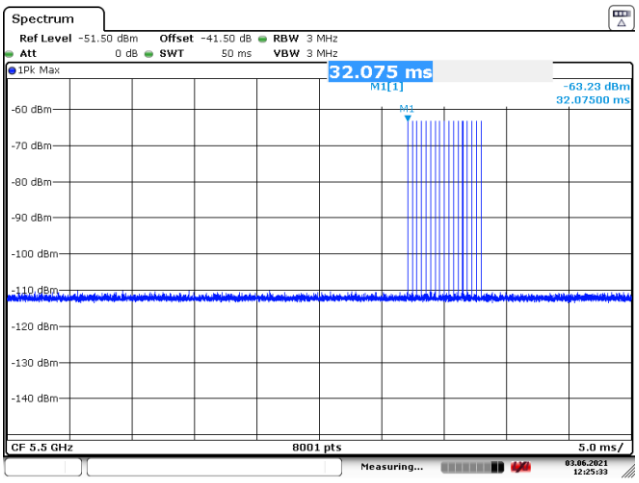
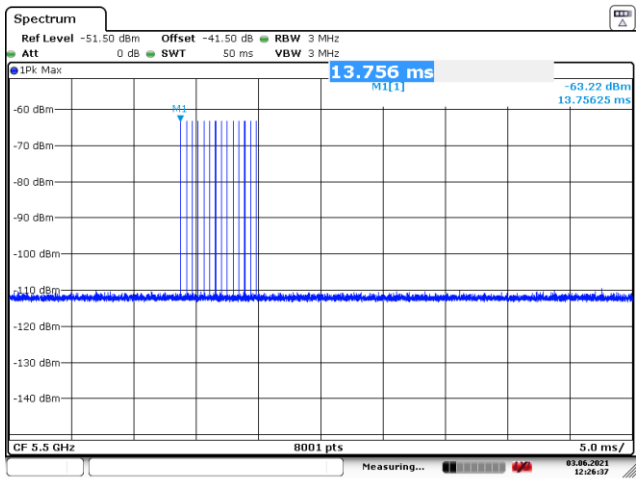
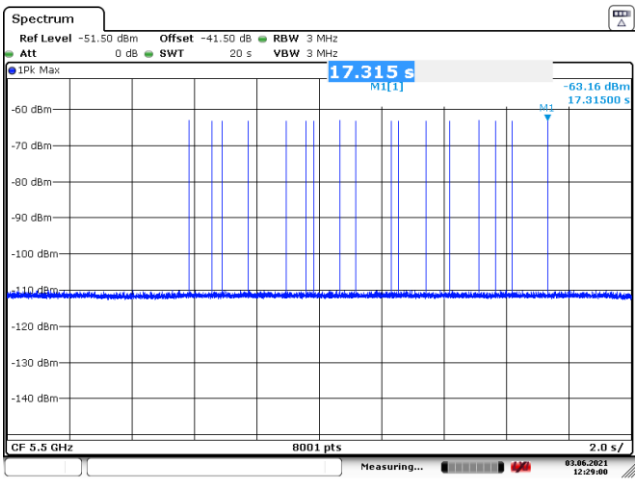
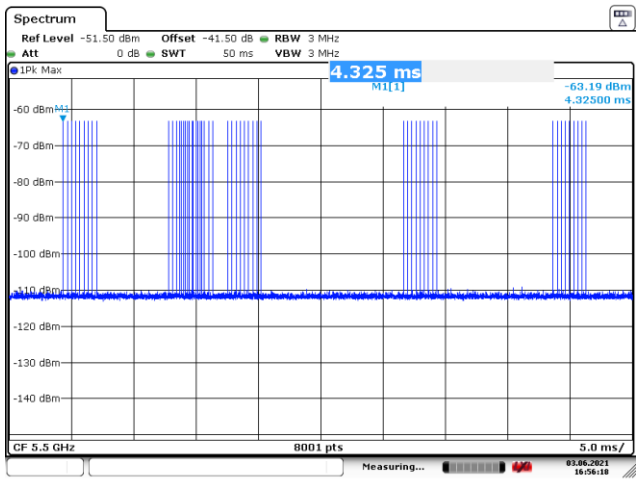
5.2.2. Calibration Procedure

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

5.2.3. Calibration Result

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/03
Test Item	Radar Waveform Calibration		

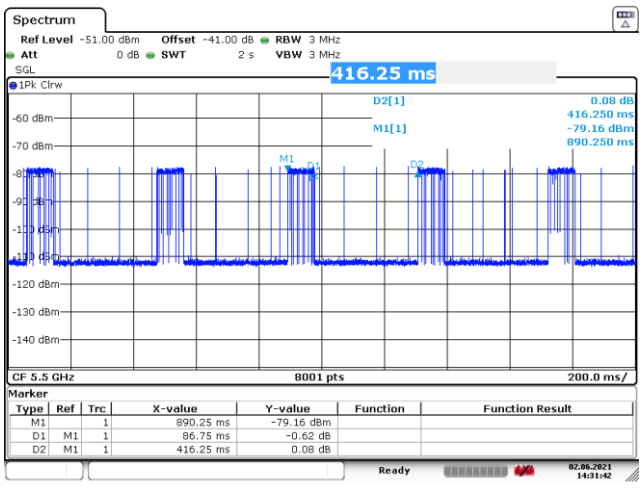
Radar #0	Radar #1 (Test A) PRI = 718us and the number of pulses = 74
	
Radar #1 (Test B) **PRI = 50ms and the number of pulses = 1056**	**Radar #2**
	

Radar #3	Radar #4
 Date: 3.JUN.2021 12:25:33	 Date: 3.JUN.2021 12:26:37
Radar #5	**Radar #6**
 Date: 3.JUN.2021 12:29:00	 Date: 3.JUN.2021 16:56:18

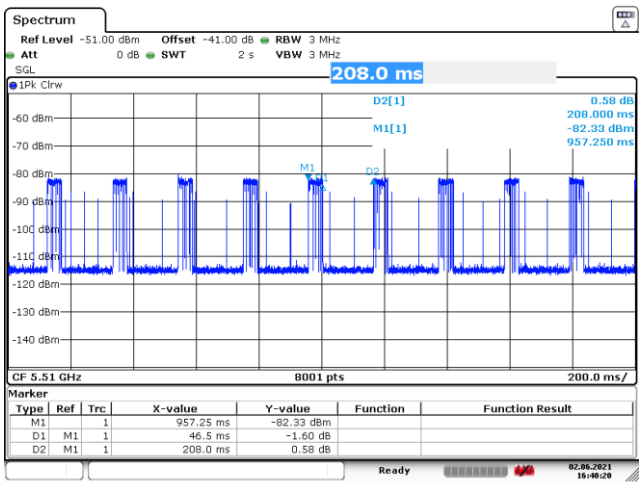
5.2.4. Channel Loading Test Result

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/02
Test Item	Channel Loading – Mode 1		

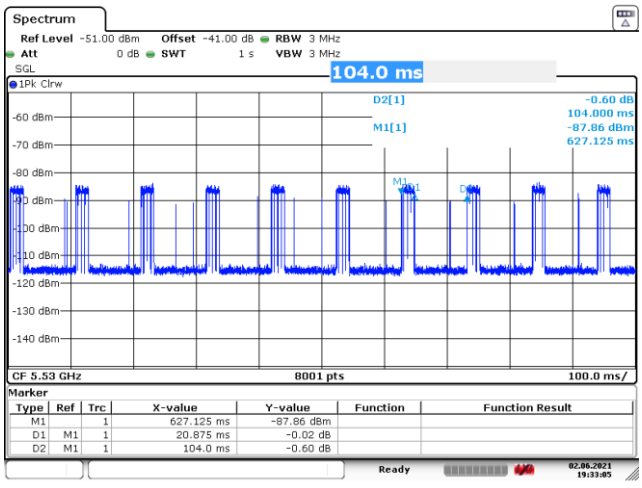
802.11ac-VHT20 (5500MHz)



802.11ac-VHT40 (5510MHz)



802.11ac-VHT80 (5530MHz)

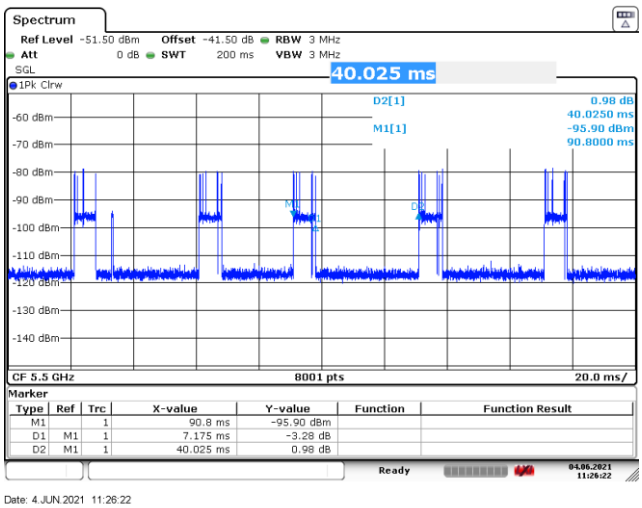


Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11ac-VHT20	5500 MHz	20.84%	≥ 17%	Pass
802.11ac-VHT40	5510 MHz	22.36%	≥ 17%	Pass
802.11ac-VHT80	5530 MHz	20.07%	≥ 17%	Pass

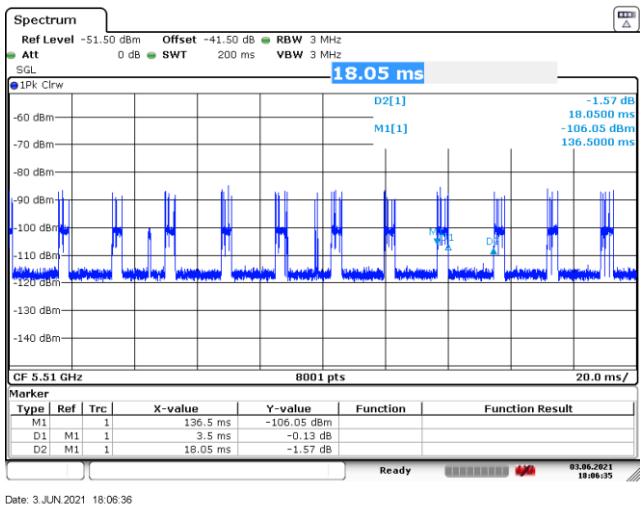
Note: System testing was performed with the designated iperf test file. This file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. Packet ratio = Time On / (Time On + Off Time).

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/04
Test Item	Channel Loading – Mode 2		

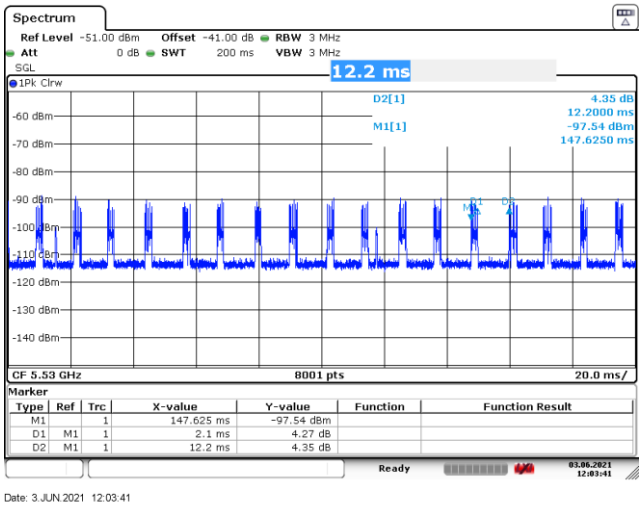
802.11ac-VHT20 (5500MHz)



802.11ac-VHT40 (5510MHz)



802.11ac-VHT80 (5530MHz)



Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11ac-VHT20	5500 MHz	17.93%	≥ 17%	Pass
802.11ac-VHT40	5510 MHz	19.39%	≥ 17%	Pass
802.11ac-VHT80	5530 MHz	17.21%	≥ 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	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/05
Test Item	Detection Bandwidth (802.11ac-VHT20 mode - 5500MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5490.4 FL	1	1	1	1	1	1	1	1	1	1	100%
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 17.93MHz. (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): 17.93MHz x 100% = 17.93MHz.

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/05
Test Item	Detection Bandwidth (802.11ac-VHT40 mode - 5510MHz)		

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

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5510MHz. The 99% channel bandwidth is 36.03MHz. (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): 36.03MHz x 100% = 36.03MHz.

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/05
Test Item	Detection Bandwidth (802.11ac-VHT80 mode - 5530MHz)		

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

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz. The 99% channel bandwidth is 75.38MHz. (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): 75.38MHz x 100% = 75.38MHz.

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.

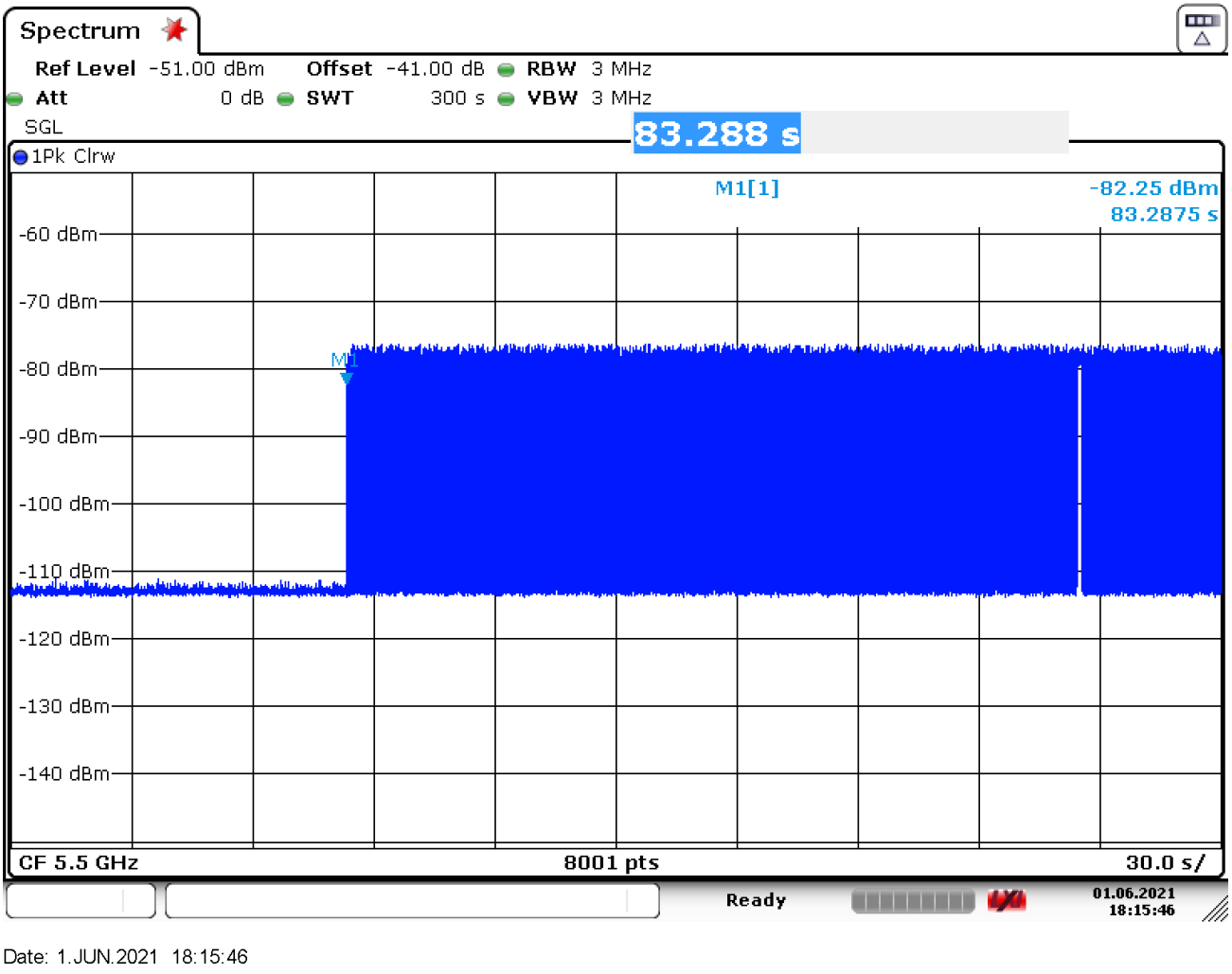
5.4.2. Test Procedure

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	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/01
Test Item	Initial Channel Availability Check Time (802.11ac-VHT20 mode - 5500MHz)		

Initial Channel Availability Check Time



Note: The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (23.3 sec). Initial beacons/data transmissions are indicated by marker 1 (83.3 sec).

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

5.5.1. Test Limit

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

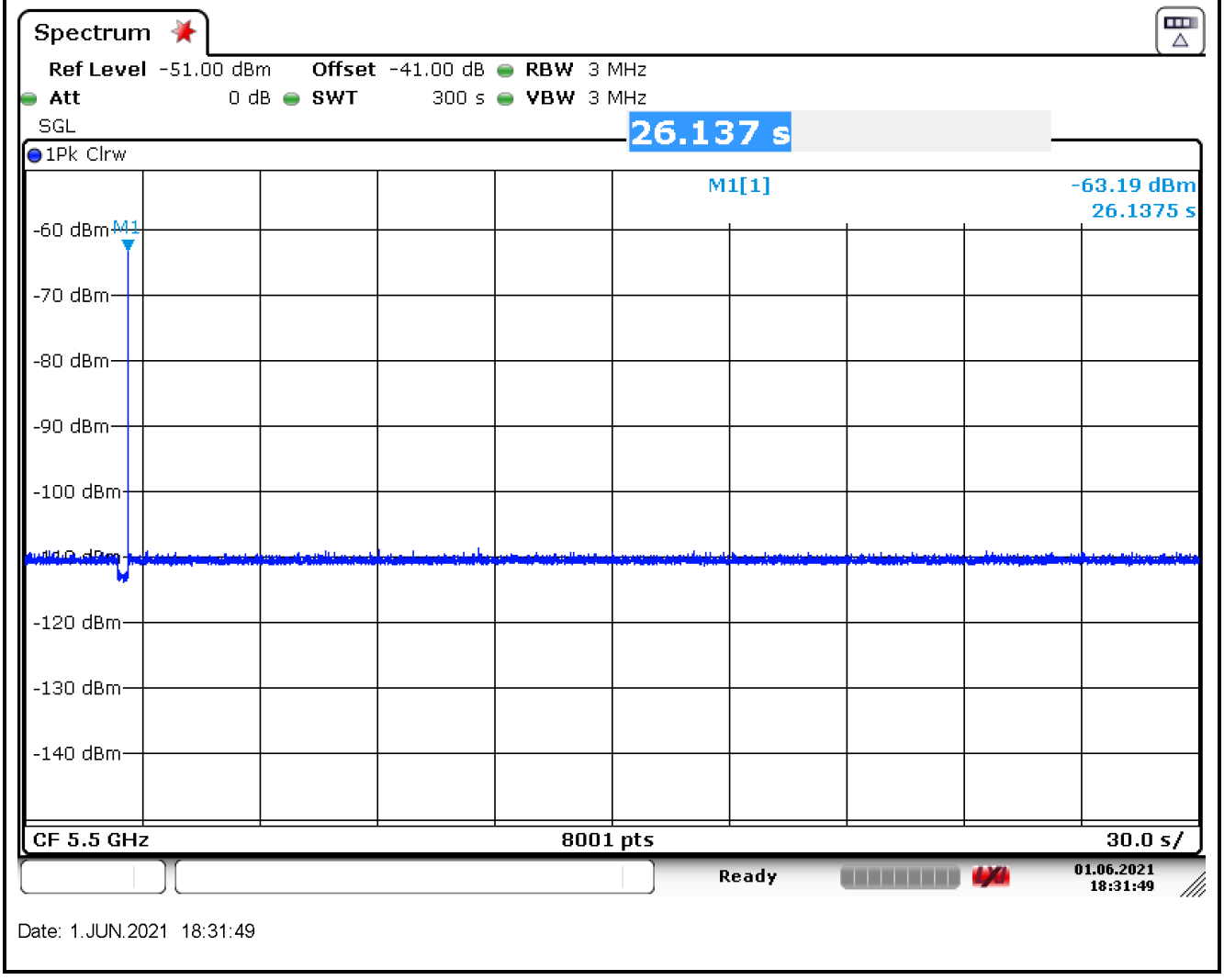
5.5.2. Test Procedure

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

5.5.3. Test Result

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/01
Test Item	Beginning of the Channel Availability Check Time (802.11ac-VHT20 mode - 5500MHz)		

Beginning of the Channel Availability Check Time



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

5.6.1. Test Limit

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

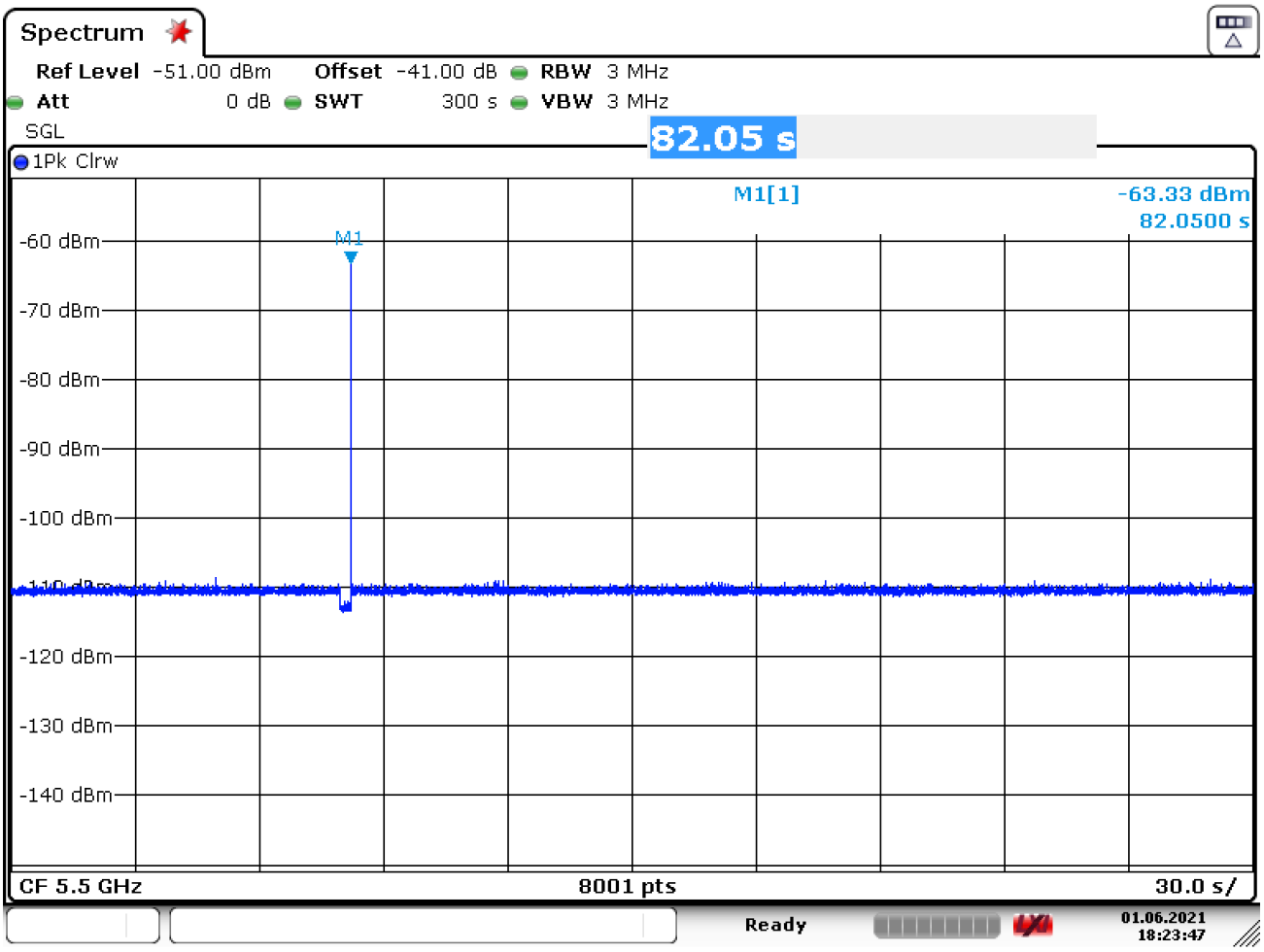
5.6.2. Test Procedure

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

5.6.3. Test Result

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/01
Test Item	End of the Channel Availability Check Time (802.11ac-VHT20 mode - 5500MHz)		

End of the Channel Availability Check Time



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

5.7.1. Test Limit

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

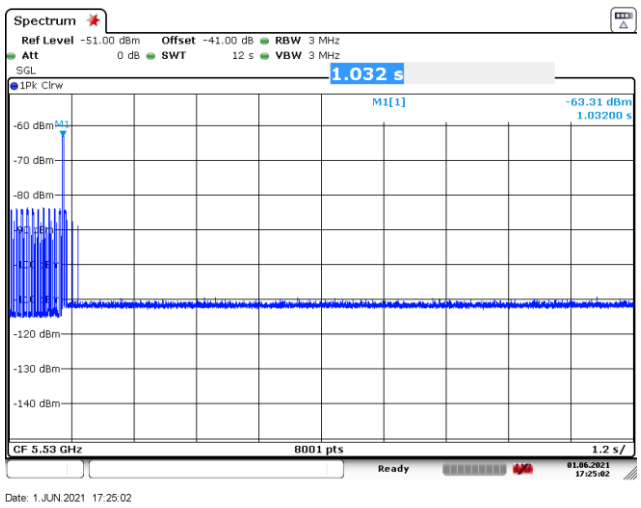
5.7.2. Test Procedure Used

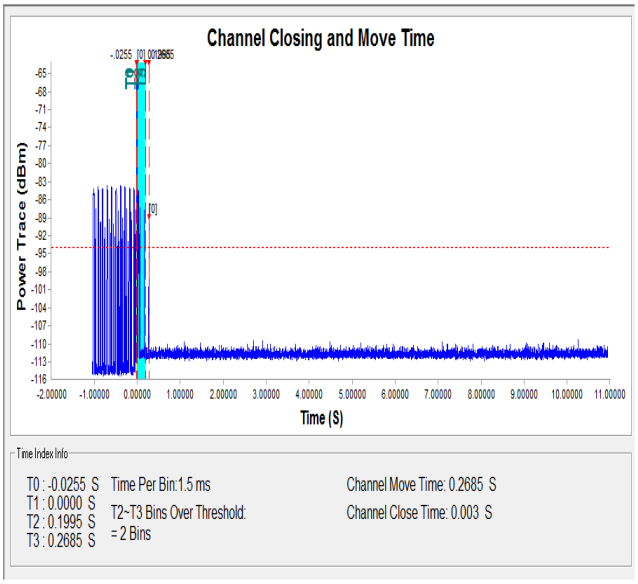
1. The test should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0.
2. When the radar burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device. A U-NII device operating as a Master Device will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

5.7.3. Test Result

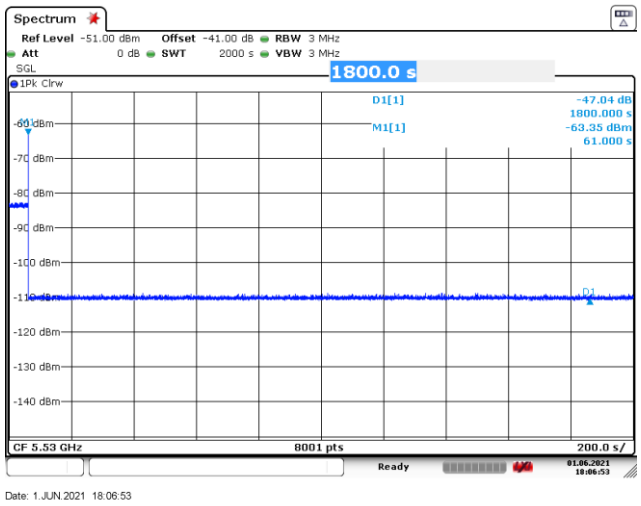
Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/01
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11ac-VHT80 mode - 5530MHz) – Mode 1		

Channel Move Time and Channel Closing Transmission Time





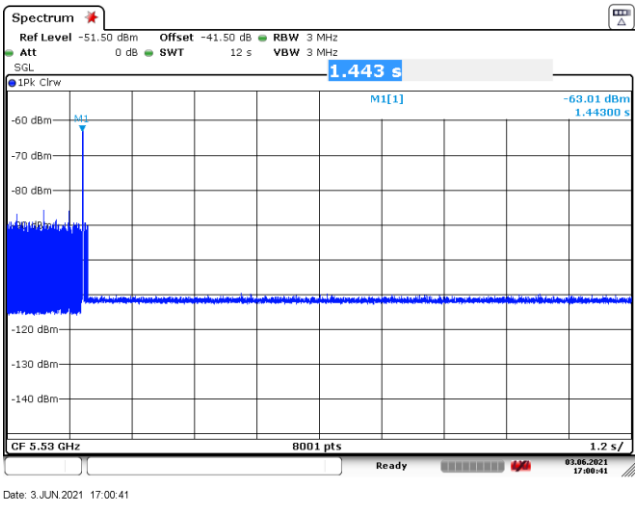
Non-Occupancy Period

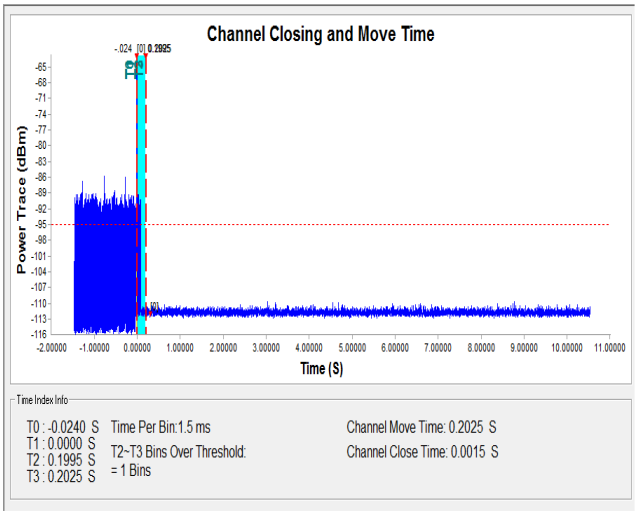


Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.269	<10s
Channel Closing Transmission Time (ms) (Note)	3ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30min
Note: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds period. The aggregate duration of control signals will not count quiet periods in between transmissions.		

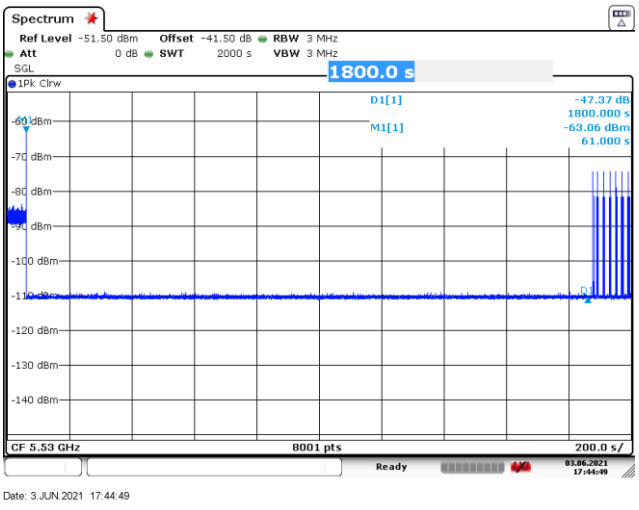
Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/03
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11ac-VHT80 mode - 5530MHz) – Mode 2		

Channel Move Time and Channel Closing Transmission Time





Non-Occupancy Period



Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.203	<10s
Channel Closing Transmission Time (ms) (Note)	1.5ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30min
Note: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds period. The aggregate duration of control signals will not count quiet periods in between transmissions.		

5.8. Statistical Performance Check Measurement

5.8.1. Test Limit

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

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

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

5.8.2. Test Procedure

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

5.8.3. Test Result

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/25
Test Item	Radar Statistical Performance Check (802.11ac-VHT20 – 5500MHz) – Mode 1		

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	738	72	1
2	5491	1	918	58	1
3	5492	1	658	81	1
4	5504	1	558	95	1
5	5493	1	758	70	0
6	5494	1	598	89	1
7	5495	1	638	83	1
8	5496	1	938	57	1
9	5502	1	538	98	1
10	5497	1	778	68	1
11	5498	1	818	65	1
12	5499	1	858	62	1
13	5509	1	578	92	1
14	5501	1	838	63	1
15	5509	1	698	76	1
16	5502	1	931	57	1
17	5503	1	2932	18	1
18	5504	1	2794	19	1
19	5493	1	1808	30	1
20	5505	1	2202	24	1
21	5506	1	1901	28	1
22	5506	1	1181	45	1
23	5508	1	2528	21	1
24	5507	1	1065	50	1
25	5508	1	2838	19	0
26	5500	1	663	80	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5509	1	1247	43	1
28	5507	1	2624	21	0
29	5496	1	1438	37	1
30	5509.6	1	1902	28	0
Detection Percentage (%)					86.7%

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	1.8	214	25	1
2	5491	2.9	222	29	1
3	5492	4.9	220	27	1
4	5504	1.6	228	27	0
5	5493	2.9	217	28	1
6	5494	1.1	180	26	1
7	5495	1.7	178	28	0
8	5496	4.3	182	26	1
9	5502	4.7	214	27	1
10	5497	2	189	28	1
11	5498	2.2	177	25	0
12	5499	1.8	206	28	1
13	5509	1.4	213	28	0
14	5501	4.4	200	28	1
15	5509	2.1	160	26	1
16	5502	5	191	23	1
17	5503	1.6	177	23	1
18	5504	2.6	228	23	1
19	5493	2.3	194	28	1
20	5505	1.2	179	24	0
21	5506	3	213	23	1
22	5506	3	159	24	1
23	5508	2	159	27	0
24	5507	1.8	198	28	1
25	5508	4	164	28	1
26	5500	2.1	160	28	1
27	5509	3	167	29	1
28	5507	4.9	169	29	1
29	5496	2	207	27	1
30	5509.6	2	153	28	1
Detection Percentage (%)					80.0%

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	6.3	470	16	0
2	5491	6.9	250	17	0
3	5492	9.6	206	17	1
4	5504	9.9	293	18	1
5	5493	7.5	214	16	0
6	5494	6.6	309	18	0
7	5495	9.4	471	16	1
8	5496	8.2	299	18	1
9	5502	9.6	245	18	1
10	5497	6.8	252	16	0
11	5498	7.7	221	18	1
12	5499	7	439	17	1
13	5509	9.3	332	16	0
14	5501	8.7	414	17	1
15	5509	6.9	245	17	1
16	5502	9.7	208	17	1
17	5503	8.5	305	16	0
18	5504	7	342	17	1
19	5493	9.3	413	18	1
20	5505	6.8	327	16	1
21	5506	10	386	17	1
22	5506	6.8	422	17	1
23	5508	7.2	311	16	1
24	5507	8.3	371	17	0
25	5508	9.7	311	17	1
26	5500	8.6	304	17	1
27	5509	9.9	443	17	1
28	5507	6.1	357	17	1
29	5496	8.3	439	17	1
30	5509.6	6.3	203	17	0
Detection Percentage (%)					70.0%

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	13	345	15.8	1
2	5491	13	243	19	1
3	5492	14	440	14.7	1
4	5504	15	212	18.3	1
5	5493	12	360	19	1
6	5494	16	489	15.3	1
7	5495	16	272	12.8	1
8	5496	13	408	13.8	1
9	5502	12	237	16.5	0
10	5497	13	219	11	1
11	5498	14	353	18	1
12	5499	16	452	16.6	1
13	5509	13	290	13.7	1
14	5501	14	303	19	1
15	5509	13	451	18.1	0
16	5502	13	258	13.4	1
17	5503	15	336	19.6	1
18	5504	15	433	16.9	1
19	5493	15	290	13	1
20	5505	12	280	13.2	1
21	5506	14	402	12.9	1
22	5506	15	319	15.1	1
23	5508	12	307	16.3	0
24	5507	12	462	14.7	1
25	5508	14	205	14.5	1
26	5500	14	222	12.6	1
27	5509	13	329	17.7	1
28	5507	15	373	12.8	1
29	5496	15	376	17.8	1
30	5509.6	14	446	18.1	0
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: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (86.7%+80%+70%+86.7%)/4 = 80.9% (>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	1	16	5496.8	1
2	5500	1	17	5495.2	1
3	5500	1	18	5494	1
4	5500	1	19	5493.2	1
5	5500	1	20	5497.2	1
6	5500	1	21	5501.6	1
7	5500	1	22	5502.4	1
8	5500	1	23	5507.6	0
9	5500	1	24	5506.4	1
10	5500	1	25	5505.2	1
11	5494.8	1	26	5505.6	1
12	5496.8	1	27	5507.2	0
13	5494.8	1	28	5506.8	1
14	5496.8	1	29	5505.6	1
15	5496	1	30	5504.8	0
Detection Percentage (%)					90.0%

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	3	76	16	1036	1628	637.317
2	2	50.8	16	1891		45.639
3	2	94.8	16	1247		210.327
4	2	57.2	16	1430		562.13
5	2	57.7	16	1650		377.323
6	1	80.2	16			418.047
7	2	95.2	16	1870		67.82
8	2	60.8	16	1004		320.923
9	1	85.2	16			571.487
10	2	77.5	16	1056		643.26
11	2	86.7	16	1976		130.003
12	2	87.7	16	1773		523.757
13	2	57.3	16	1765		570.15
14	2	93.8	16	1858		478.913
15	2	70.8	16	1362		193.247
16	1	98.5	16			507.9
17	2	97.2	16	1459		371.233
18	2	52.2	16	1720		409.867

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	1	80	12			107.776
2	2	61.7	12	1808		339.02
3	1	56.8	12			559.91
4	2	63.3	12	1648		1190.58
5	3	53.3	12	1038	1955	174.1
6	2	88.3	12	1323		1189.36
7	3	63.1	12	1115	1465	350.73
8	1	87.3	12			644.8

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	88.1	13	1926		188.393
2	2	52.2	13	1814		138.897
3	1	58.3	13			720.303
4	2	90.3	13	1942		119.68
5	1	70	13			1170.787
6	1	69.1	13			151.953
7	3	71.9	13	1146	1268	485.61
8	2	77.7	13	1964		1208.767
9	3	82.1	13	1729	1652	953.033

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	2	64.6	12	1793		2.173
2	2	70.1	12	1164		115.96
3	3	73.5	12	1616	1728	206.13
4	1	66.5	12			979.84
5	3	53.2	12	1626	1832	706.82
6	3	68.2	12	1030	1884	823.84
7	3	77.7	12	1680	1071	962.41
8	1	67.1	12			126.08
9	1	90.3	12			70.57
10	3	89.3	12	1341	1892	685.94
11	1	88.4	12			368.2
12	1	99.6	12			489.6

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	3	88.5	17	1891	1947	458.185
2	2	68.9	17	1660		203.507
3	2	89.8	17	1777		345.462
4	3	57.8	17	1851	1679	113.613
5	2	95.3	17	1666		39.234
6	1	97.2	17			494.155
7	1	70.1	17			623.586
8	1	83.4	17			325.627
9	2	57	17	1806		329.808
10	2	64.1	17	1949		584.439
11	2	74.6	17	1926		54.461
12	3	76.3	17	1541	1019	247.172
13	2	99.9	17	1091		381.133
14	1	96.5	17			388.804
15	3	79.5	17	1761	1140	532.175
16	1	50.2	17			548.016
17	1	75.6	17			463.537
18	2	86.9	17	1109		404.258
19	2	99.1	17	1209		167.179

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	1	64.2	19			631.413
2	1	68.7	19			225.05
3	1	62.5	19			341.6
4	1	74	19			814.17
5	3	95.4	19	1711	1253	523.92
6	2	65.8	19	1721		872.5
7	3	74.9	19	1451	1538	210.92
8	3	94.5	19	1900	1107	991.4
9	2	87.5	19	1510		852.38
10	1	79.8	19			784.63
11	2	88.2	19	1270		370.7
12	3	70.7	19	1337	1017	52.8

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	3	79	13	1387	1037	328.071
2	3	56	13	1031	1883	537.561
3	2	86.6	13	1191		559.172
4	1	97.7	13			138.083
5	1	67.2	13			412.044
6	2	56.2	13	1025		94.825
7	2	58	13	1465		108.566
8	2	90.4	13	1326		479.767
9	3	66.4	13	1538	1950	26.398
10	2	81	13	1919		58.119
11	3	55.1	13	1422	1052	353.691
12	2	91.6	13	1946		32.382
13	3	89.6	13	1683	1554	277.333
14	3	97.2	13	1263	1601	230.164
15	3	57.7	13	1102	1212	598.445
16	3	53.2	13	1785	1928	440.416
17	1	82.6	13			538.337
18	2	82.7	13	1985		383.258
19	2	73.3	13	1162		82.779

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	2	88.5	5	1086		659.13
2	2	55.8	5	1881		773.121
3	2	63.4	5	1632		264.982
4	3	51	5	1560	1688	44.313
5	2	92.6	5	1971		851.954
6	2	79.5	5	1483		271.735
7	2	86.7	5	1203		505.835
8	1	59.2	5			212.106
9	1	79.2	5			5.637
10	2	56.1	5	1487		603.018
11	1	73.5	5			22.909

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	1	52.3	16			67.16
2	2	76.6	16	1509		707.16
3	2	92.7	16	1325		566.33
4	1	79.4	16			249
5	2	70.6	16	1425		1190.97
6	2	52.8	16	1082		843.89
7	1	77.8	16			427.29
8	2	74.7	16	1229		531.94
9	1	79.9	16			952.5
10	2	72.1	16	1528		151.8

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	78	7	1756		849.582
2	2	89.7	7	1899		130.553
3	3	84.4	7	1255	1695	234.896
4	2	81.9	7	1710		486.599
5	1	95.8	7			538.882
6	2	64.9	7	1520		595.745
7	2	70.3	7	1299		811.058
8	2	66.1	7	1571		689.652
9	1	71.8	7			353.235
10	2	70.4	7	1978		26.948
11	3	72.7	7	1807	1962	514.531
12	1	52.3	7			837.654
13	1	96.7	7			685.877

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	3	88.4	11	1587	1889	131.518
2	2	71.7	11	1554		209.147
3	1	62.6	11			598.164
4	3	70.3	11	1194	1781	469.841
5	2	69.2	11	1961		523.499
6	2	86.6	11	1242		467.516
7	1	85.4	11			220.653
8	2	62.6	11	1592		776.77
9	3	63.8	11	1772	1716	52.227
10	2	99.7	11	1271		86.364
11	1	64.6	11			92.401
12	2	85	11	1905		447.449
13	2	84.4	11	1971		644.086
14	3	60.5	11	1978	1904	337.143

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	2	89.4	16	1453		51.001
2	2	70.2	16	1512		1012.02
3	1	63.2	16			14.11
4	2	92.7	16	1201		679.72
5	2	73.8	16	1360		651.58
6	2	92.7	16	1004		213.5
7	2	55.8	16	1411		102.07
8	1	95.6	16			159.51
9	3	79	16	1176	1111	886.8
10	2	58.2	16	1128		1073.2

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	3	53.6	11	1234	1426	604.793
2	2	93.2	11	1705		232.453
3	2	58.3	11	1133		574.286
4	2	60.8	11	1273		155.629
5	2	92.2	11	1822		664.142
6	1	63	11			805.405
7	2	59.8	11	1734		707.718
8	3	78.9	11	1524	1408	200.322
9	2	92.6	11	1174		330.965
10	3	77.2	11	1664	1587	100.638
11	3	88.8	11	1909	1543	511.321
12	1	54.4	11			518.554
13	2	59.5	11	1047		695.077

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	2	71.2	16	1001		652.581
2	3	51.8	16	1251	1765	741.24
3	3	58.9	16	1326	1120	1205.32
4	3	83.7	16	1364	1703	94.18
5	2	80.8	16	1902		897.9
6	3	60.3	16	1013	1579	183.04
7	1	97.5	16			275.32
8	2	97.6	16	1039		407.4

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	94.6	14	1210	1338	282.684
2	2	79.3	14	1039		945.321
3	2	62.4	14	1074		775.862
4	3	91.7	14	1739	1579	389.683
5	3	88.1	14	1389	1150	989.654
6	2	74.9	14	1069		900.645
7	2	87.7	14	1256		760.855
8	1	65.4	14			862.926
9	1	56.9	14			18.057
10	1	57.7	14			211.618
11	1	98.9	14			936.209

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	58.7	16	1155		763.297
2	2	99.4	16	1704		512.2
3	3	89.7	16	1142	1586	790.71
4	3	92.1	16	1972	1112	279.34
5	1	78.9	16			678.68
6	2	85.9	16	1591		187.46
7	3	81.9	16	1854	1538	419.97
8	2	99.5	16	1507		738.53
9	1	84.3	16			162.31
10	1	74.4	16			454.37
11	2	94.2	16	1669		389.69
12	2	66.2	16	1950		48.94
13	2	54.4	16	1545		734
14	2	99.8	16	1374		177.7
15	2	77.3	16	1608		483.2

Type 5 Radar Waveform_17

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	92	12	1778		450.038
2	1	63.1	12			321.508
3	2	62.2	12	1461		289.285
4	3	91.2	12	1721	1929	601.603
5	3	64	12	1460	1962	61.851
6	2	93.8	12	1130		101.038
7	3	84.8	12	1024	1418	294.226
8	3	73.4	12	1980	1105	492.824
9	2	69.3	12	1988		602.891
10	2	89.5	12	1053		469.819
11	2	99.1	12	1344		317.496
12	2	68.3	12	1809		223.404
13	2	72.1	12	1658		248.932
14	2	53	12	1034		465.979
15	2	90	12	1692		295.347
16	3	79.7	12	1651	1002	227.065
17	1	96.1	12			454.182

Type 5 Radar Waveform_18

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	53.7	9			417.273
2	2	99	9	1832		66.734
3	2	50.4	9	1434		143.695
4	2	58.8	9	1776		136.883
5	3	85.4	9	1271	1796	283.871
6	1	81.6	9			500.978
7	1	86.9	9			15.146
8	3	55.1	9	1734	1343	197.034
9	2	79.8	9	1614		429.091
10	1	58.8	9			602.829
11	2	93.5	9	1830		245.356
12	2	65.5	9	1224		312.554
13	1	63.2	9			436.502
14	1	67.7	9			318.759
15	2	56.3	9	1229		98.707
16	1	64.6	9			372.665
17	2	54.4	9	1980		339.482

Type 5 Radar Waveform_19

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	75.6	7			516.497
2	2	70.9	7	1763		677.703
3	2	68.4	7	1886		722.286
4	1	83.9	7			384.189
5	1	50.7	7			574.822
6	1	70.6	7			670.855
7	3	59	7	1880	1306	364.788
8	3	51	7	1968	1512	327.362
9	2	95.5	7	1549		684.425
10	1	76.2	7			17.178
11	2	99.3	7	1457		733.071
12	2	53.7	7	1366		828.754
13	2	72.5	7	1149		115.877

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	3	64.4	17	1259	1497	93.052
2	3	56.7	17	1568	1721	108.024
3	2	81.2	17	1015		312.672
4	2	61.3	17	1972		428.473
5	2	70.2	17	1755		22.254
6	1	94.7	17			170.815
7	2	98	17	1051		223.556
8	2	89.5	17	1161		556.607
9	3	93.8	17	1661	1681	539.048
10	3	83.9	17	1932	1911	590.489
11	2	73	17	1916		35.651
12	2	58.7	17	1300		544.612
13	1	99.7	17			440.373
14	1	91.6	17			58.804
15	2	72.1	17	1162		580.125
16	2	90.2	17	1825		80.046
17	2	56.6	17	1231		257.937
18	2	79.9	17	1679		320.758
19	3	97.9	17	1185	1626	241.979

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	87.1	20	1225		712.669
2	2	96	20	1050		188.535
3	1	90	20			566.28
4	2	82.5	20	1430		709.48
5	2	82.1	20	1798		652.33
6	3	97.8	20	1466	1701	200.11
7	3	86.1	20	1025	1368	286.26
8	3	65.8	20	1937	1647	225.33
9	3	88.6	20	1519	1851	93.27
10	1	91.9	20			619.32
11	2	93.7	20	1436		558.2
12	2	98.3	20	1204		426.04
13	1	65.4	20			296.37
14	2	82.5	20	1974		360.9
15	2	83.2	20	1489		794

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	71.8	18	1858	1718	18.371
2	3	94.4	18	1770	1090	151.941
3	2	85.3	18	1752		362.702
4	2	87.5	18	1645		39.793
5	2	71.9	18	1915		703.944
6	3	88.8	18	1009	1264	86.555
7	1	58.9	18			210.945
8	3	90.5	18	1999	1235	246.936
9	1	73.7	18			980.087
10	2	53.5	18	1797		723.818
11	3	92.1	18	1828	1845	108.909

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	1	94.6	5			842.192
2	2	94.7	5	1558		382.71
3	1	69.8	5			708.82
4	1	94	5			500.33
5	1	79.5	5			820.63
6	2	79.9	5	1088		1114.31
7	1	94.7	5			695.37
8	3	96.2	5	1837	1248	963.47
9	1	89	5			316.63
10	2	78.2	5	1749		329.9

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	1	73	8			17.148
2	2	83.8	8	1426		588.808
3	1	87.2	8			38.085
4	3	75.5	8	1011	1307	510.713
5	2	80	8	1828		647.301
6	3	64.3	8	1555	1289	312.508
7	3	78.2	8	1841	1994	170.556
8	2	56.7	8	1844		3.514
9	3	87.5	8	1959	1144	35.491
10	1	81.3	8			496.859
11	1	77.8	8			256.186
12	2	84.6	8	1443		237.724
13	2	61.1	8	1162		429.832
14	1	76.5	8			219.329
15	1	85.7	8			499.647
16	2	51.2	8	1186		119.465
17	3	71.7	8	1107	1338	108.682

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	67.2	11	1556		100.434
2	3	88.1	11	1310	1500	4.524
3	2	51.4	11	1184		390.095
4	1	62.7	11			686.463
5	3	53.9	11	1012	1259	339.841
6	3	71.1	11	1953	1873	561.438
7	2	76.1	11	1269		590.346
8	3	79.6	11	1115	1028	493.544
9	3	64.1	11	1079	1879	20.081
10	1	80.4	11			408.039
11	3	68.7	11	1847	1192	102.766
12	2	58.2	11	1004		292.344
13	1	96.6	11			234.462
14	2	61.2	11	1590		18.349
15	1	96	11			315.747
16	3	76.7	11	1555	1205	509.465
17	2	92.2	11	1363		607.882

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	1	55.7	10			384.597
2	3	77	10	1084	1857	330.103
3	2	64.6	10	1032		322.406
4	2	59.3	10	1009		77.619
5	2	75.3	10	1746		898.872
6	2	95.7	10	1833		518.035
7	1	85.1	10			302.948
8	2	79.7	10	1174		355.502
9	2	74.6	10	1271		219.055
10	1	79.4	10			107.378
11	3	99.3	10	1926	1272	848.231
12	1	63.5	10			350.954
13	3	85.2	10	1808	1336	298.677

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	1	92.9	6			838.701
2	2	68.9	6	1956		361.84
3	3	96.5	6	1864	1316	735.27
4	2	77.3	6	1990		650.98
5	1	91.6	6			1133.85
6	2	84	6	1995		1115.94
7	2	55.7	6	1748		727.7
8	2	80.4	6	1268		682.8

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	1	72.2	7			911.574
2	2	60.9	7	1683		71.071
3	2	98.7	7	1225		564.096
4	2	79.9	7	1602		411.809
5	2	68.1	7	1222		416.872
6	3	95.1	7	1891	1095	72.335
7	2	71.5	7	1456		611.578
8	1	76.7	7			423.562
9	2	51.4	7	1673		289.925
10	1	95.2	7			164.028
11	2	90.2	7	1677		467.091
12	3	87.1	7	1072	1833	223.554
13	3	61.3	7	1690	1075	101.877

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	86.2	10	1512	1350	205.965
2	2	88.5	10	1906		421.423
3	3	97.7	10	1528	1499	551.536
4	2	69.2	10	1604		531.079
5	1	73.5	10			525.812
6	2	65.5	10	1902		911.095
7	2	63.2	10	1552		295.268
8	3	52.3	10	1460	1262	456.282
9	2	58.1	10	1046		745.215
10	1	84.5	10			117.068
11	2	61.4	10	1007		411.431
12	1	82.6	10			68.454
13	2	95.3	10	1240		1.577

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	1	65.6	12			889.118
2	1	61.3	12			1074.397
3	2	78.5	12	1592		23.433
4	3	63.5	12	1956	1947	901.76
5	1	96.2	12			1251.917
6	2	98.1	12	1291		599.033
7	2	65.7	12	1107		371.8
8	1	78	12			1027.867
9	2	96.2	12	1960		224.233

Radar Type 6 - Radar Statistical Performance

Trail #	1=Detection 0=No Detection	Trail #	1=Detection 0=No Detection
1	1	16	1
2	1	17	1
3	1	18	1
4	1	19	1
5	1	20	1
6	1	21	1
7	1	22	1
8	1	23	1
9	1	24	1
10	1	25	1
11	1	26	1
12	1	27	1
13	1	28	1
14	1	29	1
15	1	30	1
Detection Percentage (%)			100.0%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5495	27	18	5505	54
20	5499	60	23	5507	69
22	5506	66	30	5503	90
46	5509	138	44	5500	132
64	5505	192	48	5508	144
86	5500	258	68	5493	204
--	--	--	94	5497	282
--	--	--	99	5502	297

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
51	5508	153	43	5510	129
59	5500	177	59	5501	177
67	5491	201	--	--	--
98	5505	294	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
17	5496	51	22	5506	66
--	--	--	28	5490	84
--	--	--	29	5505	87
--	--	--	45	5508	135

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5507	63	37	5496	111
22	5506	66	39	5503	117
51	5492	153	82	5500	246
88	5494	264	91	5502	273

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5506	18	21	5494	63
8	5492	24	33	5490	99
38	5510	114	--	--	--
47	5490	141	--	--	--
64	5500	192	--	--	--
84	5498	252	--	--	--

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
4	5509	12	4	5495	12
13	5491	39	16	5504	48
71	5493	213	41	5492	123
--	--	--	70	5499	210

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5494	18	14	5506	42
40	5500	120	44	5490	132
72	5509	216	62	5496	186
73	5493	219	97	5505	291
89	5503	267	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
26	5506	78	20	5494	60
30	5498	90	29	5509	87
55	5496	165	67	5491	201
81	5492	243	81	5507	243
--	--	--	91	5497	273

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5503	39	8	5507	24
34	5507	102	58	5498	174
45	5504	135	85	5492	255
80	5491	240	94	5508	282
88	5498	264	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
22	5496	66	3	5506	9
84	5493	252	5	5498	15
85	5502	255	7	5501	21
86	5504	258	52	5510	156
--	--	--	77	5508	231
--	--	--	91	5503	273
--	--	--	93	5502	279
--	--	--	98	5507	294

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
31	5507	93	2	5504	6
41	5492	123	32	5495	96
42	5503	126	65	5501	195
55	5497	165	66	5498	198
84	5502	252	71	5494	213
93	5505	279	90	5502	270
--	--	--	96	5496	288

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
37	5500	111	23	5500	69
48	5492	144	86	5504	258
65	5501	195	97	5495	291
73	5508	219	--	--	--
80	5507	240	--	--	--
94	5503	282	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5504	42	3	5490	9
34	5501	102	7	5491	21
52	5493	156	29	5504	87
57	5500	171	31	5498	93
82	5499	246	43	5506	129
--	--	--	50	5496	150
--	--	--	65	5502	195

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5510	15	1	5502	3
66	5497	198	61	5501	183
67	5506	201	--	--	--
75	5498	225	--	--	--
99	5507	297	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
49	5502	147	19	5495	57
53	5506	159	20	5499	60
61	5491	183	87	5509	261
--	--	--	88	5502	264

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/25
Test Item	Radar Statistical Performance Check (802.11ac-VHT40 mode – 5510MHz) – Mode 1		

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	738	72	1
2	5529	1	898	59	1
3	5494	1	578	92	1
4	5499	1	838	63	1
5	5496	1	918	58	1
6	5498	1	758	70	1
7	5515	1	638	83	1
8	5500	1	598	89	1
9	5501	1	518	102	1
10	5503	1	658	81	1
11	5504	1	778	68	1
12	5526	1	938	57	1
13	5507	1	858	62	1
14	5508	1	618	86	1
15	5492	1	818	65	1
16	5511	1	2734	20	1
17	5512	1	560	95	1
18	5513	1	1648	32	1
19	5505	1	810	66	1
20	5516	1	671	79	1
21	5517	1	2225	24	1
22	5519	1	1612	33	1
23	5509	1	2303	23	1
24	5521	1	946	56	1
25	5522	1	741	72	1
26	5524	1	1107	48	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5525	1	2725	20	0
28	5495	1	867	61	1
29	5528	1	2827	19	0
30	5520	1	2432	22	1
Detection Percentage (%)					93.3%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	3.1	150	24	1
2	5529	2.6	185	25	1
3	5494	2.3	166	23	1
4	5499	1.9	201	25	1
5	5496	3.4	213	27	1
6	5498	4.7	186	28	1
7	5515	1	160	24	1
8	5500	2.4	186	29	0
9	5501	1.6	223	26	1
10	5503	4	218	23	1
11	5504	1.2	166	24	1
12	5526	3.4	195	23	0
13	5507	1.7	210	29	0
14	5508	1.3	216	25	1
15	5492	1.3	195	28	1
16	5511	4	204	28	1
17	5512	2.6	224	25	0
18	5513	4.8	171	28	1
19	5505	2	186	24	1
20	5516	3.9	207	27	1
21	5517	2	161	26	1
22	5519	2	211	24	1
23	5509	3.2	221	27	1
24	5521	1.3	206	25	1
25	5522	2.1	215	28	1
26	5524	1	167	25	1
27	5525	3.8	226	26	1
28	5495	1.3	161	29	0
29	5528	4.2	175	26	0
30	5520	3.7	165	24	1
Detection Percentage (%)					80.0%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	8.9	301	16	1
2	5529	8.6	244	16	1
3	5494	6	292	17	1
4	5499	8.8	483	16	0
5	5496	7.6	343	16	0
6	5498	7.6	499	17	0
7	5515	9.7	478	16	1
8	5500	9.5	396	17	1
9	5501	8.8	308	18	1
10	5503	9.4	375	18	0
11	5504	7.2	334	16	1
12	5526	8	239	16	1
13	5507	9.6	342	16	1
14	5508	7.3	347	17	1
15	5492	7	263	17	1
16	5511	7.4	309	18	1
17	5512	6.9	443	17	0
18	5513	9.2	500	18	1
19	5505	7.1	456	18	1
20	5516	6.5	349	17	1
21	5517	9.5	343	17	1
22	5519	7.6	450	18	1
23	5509	8.5	218	17	1
24	5521	7.8	341	16	1
25	5522	7.6	471	17	1
26	5524	6.4	427	17	0
27	5525	9.9	206	17	1
28	5495	7	327	17	1
29	5528	8.3	433	17	1
30	5520	6.5	438	17	0
Detection Percentage (%)					76.7%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	19.7	340	12	1
2	5529	15.7	324	15	1
3	5494	12.5	390	14	0
4	5499	15.9	212	16	1
5	5496	14.8	490	16	1
6	5498	16.7	491	13	1
7	5515	11.5	390	14	1
8	5500	15	359	14	0
9	5501	16.5	415	16	0
10	5503	14.9	368	15	1
11	5504	12.1	267	13	1
12	5526	13.9	413	15	1
13	5507	17.1	286	12	0
14	5508	11.3	399	14	1
15	5492	12.5	321	16	1
16	5511	12.9	280	13	1
17	5512	16.5	441	15	0
18	5513	15.5	251	14	1
19	5505	18.4	223	14	1
20	5516	12.3	382	14	0
21	5517	15	395	15	1
22	5519	19.4	275	14	1
23	5509	15.2	405	15	1
24	5521	13	322	15	1
25	5522	15.9	319	15	1
26	5524	11.9	229	14	0
27	5525	18	338	13	0
28	5495	15.7	457	13	1
29	5528	12.1	469	14	1
30	5520	17	370	15	1
Detection Percentage (%)					73.3%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (100%+73.3%+80%+80%)/4 = 83.3% (>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	5510	1	16	5497	1
2	5510	1	17	5494.2	1
3	5510	1	18	5493	1
4	5510	1	19	5495	1
5	5510	1	20	5497	1
6	5510	1	21	5525.4	1
7	5510	1	22	5521.8	1
8	5510	1	23	5526.6	1
9	5510	1	24	5526.6	1
10	5510	1	25	5522.2	1
11	5496.6	1	26	5523	1
12	5494.6	1	27	5522.6	1
13	5499	1	28	5523	1
14	5493.8	0	29	5525	1
15	5495.8	1	30	5523.4	1
Detection Percentage (%)					96.7%

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	2	72.6	15	1910		47.433
2	3	95.2	15	1573	1375	663.063
3	3	65	15	1049	1540	76.406
4	1	75.3	15			93.299
5	1	92.2	15			893.592
6	3	67.1	15	1961	1578	179.675
7	1	61.9	15			368.248
8	1	72.6	15			165.272
9	2	96.3	15	1402		789.605
10	3	73.9	15	1192	1921	772.458
11	1	69.8	15			493.121
12	1	84	15			733.054
13	2	59.4	15	1378		473.077

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	15	1394		176.658
2	2	50.8	15	1595		583.397
3	2	73.8	15	1111		1031.963
4	2	59	15	1041		83.02
5	2	52.4	15	1582		57.177
6	2	61.2	15	1632		806.293
7	3	86.1	15	1217	1596	1229.75
8	2	67.2	15	1499		87.767
9	2	59.5	15	1082		1265.833

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	84.6	18			105.552
2	3	63.2	18	1917	1189	109.89
3	2	64.8	18	1782		100.554
4	2	92.4	18	1202		424.681
5	2	62.1	18	1469		829.269
6	2	87.3	18	1216		86.246
7	2	64.6	18	1128		408.163
8	1	78.3	18			245.49
9	3	78.6	18	1477	1413	6.697
10	3	75.4	18	1913	1160	453.454
11	2	68.2	18	1175		258.541
12	3	90.4	18	1536	1905	794.029
13	1	57.3	18			196.386
14	2	69.9	18	1996		148.243

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	2	65.2	17	1149		83.514
2	2	74.9	17	1253		1224.607
3	2	59.4	17	1580		812.283
4	2	82.8	17	1913		759.55
5	3	58.3	17	1296	1519	858.257
6	2	58.8	17	1494		268.773
7	2	83.3	17	1186		1146.5
8	2	89.1	17	1502		295.127
9	1	62.9	17			474.033

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	1	76.8	14			21.661
2	2	74.9	14	1558		571.87
3	2	72.8	14	1716		383.63
4	1	67.3	14			209.34
5	1	87.7	14			483.11
6	1	91.7	14			334.97
7	2	50.5	14	1738		491.91
8	1	50.5	14			339.01
9	2	51.4	14	1217		44.1
10	1	70.7	14			20.07
11	1	91.8	14			53.22
12	3	70.8	14	1754	1115	228.93
13	3	65	14	1082	1671	462.77
14	3	66.5	14	1413	1453	316.77
15	1	90.5	14			333.88
16	2	79.6	14	1050		391.59
17	1	88.4	14			31.27
18	2	83	14	1820		292.4
19	1	92.2	14			531.9
20	2	70.9	14	1261		304.5

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	2	68.6	17	1826		752.107
2	2	54.7	17	1820		859.347
3	3	68.2	17	1285	1596	403.313
4	3	93.8	17	1037	1892	486.22
5	3	52.1	17	1948	1744	1254.027
6	2	55.6	17	1394		766.453
7	2	57.3	17	1366		24.26
8	2	69.7	17	1831		1055.267
9	2	98.6	17	1688		456.033

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	3	97.4	8	1463	1662	1076.01
2	2	68.6	8	1255		220.957
3	1	76.1	8			727.033
4	1	76.9	8			980.6
5	2	52.4	8	1621		1198.577
6	3	94.1	8	1231	1774	545.323
7	2	66.2	8	1885		107.08
8	2	56.6	8	1533		821.467
9	2	76.1	8	1399		616.633

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	62.2	11	1527	1659	92.86
2	3	83.1	11	1060	1330	142.34
3	2	72.8	11	1358		408.49
4	2	61.8	11	1478		658.78
5	1	50	11			317.8
6	3	51.1	11	1840	1909	927.2
7	3	63.6	11	1090	1214	449.78
8	1	51.4	11			612.83
9	1	92.4	11			75.98
10	3	83.4	11	1865	1476	698.55
11	1	72.1	11			148.9
12	3	52.3	11	1426	1920	452

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	1	76.9	19			1163.11
2	1	63.1	19			213.117
3	3	54.8	19	1536	1120	1169.163
4	1	85	19			1194.22
5	2	78.2	19	1963		116.117
6	1	93.7	19			1093.953
7	3	68.5	19	1281	1408	1263.46
8	3	62.5	19	1758	1466	318.647
9	1	82.3	19			445.133

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	1	76.5	15			542.152
2	2	53.7	15	1643		687.258
3	3	98.2	15	1102	1142	62.625
4	3	67.2	15	1144	1944	553.643
5	3	97.4	15	1652	1477	322.321
6	2	53.7	15	1061		528.378
7	1	69.3	15			368.296
8	2	94.7	15	1488		48.094
9	1	57.7	15			366.381
10	1	63.1	15			645.559
11	3	84.1	15	1992	1226	356.066
12	2	65.4	15	1874		353.014
13	3	64.7	15	1376	1193	623.362
14	2	74	15	1016		526.619
15	1	83.1	15			290.847
16	2	96.3	15	1641		295.465
17	2	57.6	15	1960		471.882

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	1	86.1	14			156.319
2	2	59.9	14	1542		258.517
3	3	74	14	1049	1600	59.784
4	2	98.2	14	1403		521.251
5	2	86.8	14	1020		195.039
6	3	71.9	14	1358	1667	734.056
7	3	71.5	14	1349	1418	826.883
8	2	81.9	14	1985		672.74
9	1	96.8	14			23.957
10	2	95.5	14	1347		440.964
11	2	83.8	14	1330		816.601
12	2	55	14	1423		760.629
13	2	62.5	14	1002		173.286
14	1	79.8	14			506.543

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	2	91.6	9	1374		43.794
2	2	90	9	1237		729.88
3	1	52.2	9			141.89
4	2	92.7	9	1483		170.99
5	1	56.4	9			638.54
6	1	76.3	9			323.16
7	2	94.5	9	1549		290.57
8	2	76.8	9	1743		506.68
9	3	99.6	9	1124	1591	466.14
10	2	79.9	9	1903		626.31
11	2	54.8	9	1600		414.96
12	2	78.9	9	1542		530.76
13	1	80.9	9			141.77
14	1	55	9			450.3
15	2	51.7	9	1724		628.9
16	1	96.8	9			78.5

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	73.7	20	1958		446.345
2	2	68.9	20	1611		751.5
3	3	85.7	20	1914	1412	439.58
4	3	84.9	20	1276	1701	145.17
5	2	90.3	20	1959		75.38
6	2	87	20	1153		78.22
7	3	50.6	20	1786	1955	493.87
8	2	64	20	1776		695.09
9	2	98.3	20	1811		434.37
10	1	57.5	20			5.12
11	2	71.8	20	1882		756.92
12	2	94.3	20	1062		272.03
13	2	72.7	20	1495		397
14	2	52.2	20	1551		335.7
15	1	72.9	20			647.9

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	2	70.9	7	1921		666.035
2	2	98.4	7	1652		437.741
3	1	66.3	7			453.342
4	1	80.5	7			1053.443
5	2	91.8	7	1978		484.994
6	2	96.2	7	1231		83.925
7	1	91.3	7			14.075
8	2	57.4	7	1140		146.646
9	2	96	7	1371		58.527
10	1	74.8	7			528.318
11	1	50.6	7			174.009

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	2	90.7	12	1504		42.584
2	2	68.9	12	1948		357.831
3	1	88.3	12			13.122
4	1	64.7	12			1080.023
5	2	53.1	12	1979		533.704
6	1	84	12			868.885
7	3	66.1	12	1767	1499	776.445
8	2	96	12	1664		805.886
9	1	59.1	12			618.747
10	1	86.1	12			717.018
11	2	71.1	12	1403		1008.809

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	15	1540		509.618
2	2	81.8	15	1142		575.24
3	2	75	15	1931		351.65
4	2	70.8	15	1750		312.55
5	3	69.4	15	1040	1056	374.73
6	3	95.2	15	1523	1458	73.26
7	1	59	15			159.79
8	2	92.8	15	1121		686.74
9	1	75	15			32.3
10	2	98.9	15	1250		416.59
11	2	73.8	15	1316		35.32
12	3	92.3	15	1994	1989	736.19
13	1	76.3	15			528.1
14	2	87.3	15	1430		477.1
15	2	83.5	15	1679		124.8

Type 5 Radar Waveform_17

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	65.3	8	1178		476.809
2	3	90.6	8	1946	1763	161.565
3	2	87.3	8	1726		719.3
4	2	88.1	8	1833		769.18
5	2	88.3	8	1920		516.89
6	2	60.8	8	1798		320.31
7	3	71.8	8	2000	1454	124.47
8	1	93.5	8			336.74
9	2	71.6	8	1683		403.26
10	3	63.7	8	1985	1126	721.87
11	2	65.7	8	1945		756.48
12	2	60.5	8	1740		324.36
13	2	71.7	8	1007		466.8
14	2	52.3	8	1645		607.4
15	2	65.7	8	1327		757.7

Type 5 Radar Waveform_18

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	90.3	5	1661		282.404
2	2	66	5	1753		223.477
3	2	72.8	5	1263		627.644
4	1	88.3	5			304.921
5	2	77	5	1512		735.759
6	2	61.1	5	1605		113.836
7	1	63.1	5			340.593
8	1	99.7	5			651.75
9	2	69.2	5	1552		442.537
10	1	87.7	5			303.494
11	1	51.4	5			153.571
12	3	77.2	5	1211	1237	641.929
13	2	85	5	1280		599.586
14	2	55.1	5	1070		453.243

Type 5 Radar Waveform_19

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	61.3	10	1543	1992	378.174
2	3	86.7	10	1159	1612	547.36
3	2	72.5	10	1036		353.51
4	3	72.1	10	1382	1929	556.99
5	3	85.4	10	1960	1805	46.99
6	2	60.5	10	1385		475.71
7	2	68.4	10	1805		66.67
8	3	77.8	10	1171	1348	559.04
9	3	90	10	1195	1636	590.31
10	2	53.2	10	1795		211.2
11	1	60.8	10			287.54
12	2	64.8	10	1211		271.67
13	1	50.8	10			88.64
14	2	56.4	10	1311		198.73
15	2	73.8	10	1128		398.23
16	1	58.1	10			234.44
17	1	72.5	10			64.98
18	1	52.9	10			97.6
19	2	76.4	10	1327		34
20	2	91.8	10	1036		450.3

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	1	63.5	15			77.051
2	1	64.7	15			177.336
3	2	67	15	1464		358.627
4	1	50.5	15			272.9
5	2	76.4	15	1700		26.063
6	2	57.2	15	1470		74.647
7	3	62.8	15	1503	1459	207.75
8	1	57.5	15			155.383
9	1	88	15			318.117
10	1	68.7	15			502.05
11	2	74.8	15	1878		187.383
12	1	52.7	15			443.597
13	2	94.8	15	1746		460.88
14	3	93.6	15	1416	1835	352.163
15	2	70.4	15	1747		73.697
16	2	92.9	15	1929		227.6
17	2	51.7	15	1015		413.133
18	2	74	15	1043		574.567

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	77	9	1599		985.631
2	2	99.9	9	1142		981.251
3	1	75.3	9			509.882
4	1	92.7	9			560.923
5	2	68.9	9	1655		591.514
6	2	62.3	9	1465		76.655
7	2	86.2	9	1512		611.595
8	2	57.8	9	1406		524.616
9	2	81.7	9	1557		489.187
10	3	53.8	9	1526	1609	783.818
11	3	83.8	9	1060	1523	376.909

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	2	97.5	18	1809		388.89
2	1	83	18			326.795
3	2	65.1	18	1986		548.46
4	2	88.1	18	1552		444.63
5	2	87.6	18	1350		171.17
6	2	92.5	18	1466		272.44
7	2	64.2	18	1938		165.54
8	1	98.9	18			135.25
9	2	92.7	18	1743		406.27
10	2	95.7	18	1050		71.41
11	1	87.8	18			75.25
12	2	96.2	18	1763		396.89
13	3	64.7	18	1926	1201	28.96
14	3	76.5	18	1454	1480	193.08
15	2	92.8	18	1124		309.4
16	1	83	18			299.23
17	2	72.5	18	1611		130.49
18	3	74.9	18	1828	1481	590.5
19	3	88.6	18	1024	1497	528
20	1	90.3	18			368.4

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	92.8	6	1269		1466.58
2	2	61.7	6	1135		1404.47
3	2	83.2	6	1458		293.25
4	1	99.6	6			776.93
5	1	92.3	6			667.7
6	2	78.2	6	1320		967.25
7	1	80.7	6			338.56
8	2	63.3	6	1781		1262.1

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	3	96.2	6	1979	1318	112.888
2	2	58.1	6	1216		603.498
3	3	55.3	6	1802	1534	696.025
4	1	98.6	6			167.133
5	1	79.9	6			355.161
6	1	88.5	6			221.258
7	3	70.9	6	1912	1970	189.556
8	1	79.4	6			437.484
9	2	95.7	6	1277		38.421
10	2	72.9	6	1682		230.069
11	2	84.8	6	1462		619.436
12	2	53.2	6	1942		633.724
13	2	80.6	6	1035		647.512
14	2	77.2	6	1308		34.689
15	2	68.9	6	1061		660.047
16	3	50.9	6	1803	1667	266.765
17	2	78.6	6	1615		559.882

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	99.5	17	1140		229.448
2	2	65.9	17	1465		207.638
3	3	55.9	17	1007	1415	463.422
4	2	99.2	17	1830		35.693
5	2	78.5	17	1855		409.744
6	1	82.9	17			120.355
7	3	67.4	17	1626	1697	74.496
8	3	74.3	17	1026	1412	28.007
9	1	84.5	17			532.518
10	2	60.2	17	1224		465.439
11	2	97.9	17	1003		119.961
12	3	53.5	17	1895	1167	412.412
13	2	73.5	17	1709		121.863
14	1	69	17			551.864
15	1	70.1	17			575.805
16	2	81.9	17	1501		187.466
17	1	88.5	17			244.537
18	2	91.1	17	1625		528.958
19	2	68.5	17	1199		624.479

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	3	53.2	15	1089	1773	783.403
2	3	85.9	15	1732	1372	643.57
3	1	81.1	15			1186.81
4	2	80.5	15	1092		1091.47
5	2	54.5	15	1935		73.45
6	2	73	15	1768		1070.33
7	2	81.5	15	1571		575.52
8	1	61.6	15			648.81
9	1	55.8	15			1067.9
10	2	65.7	15	1714		529.5

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	2	62.2	16	1412		214.205
2	2	57.4	16	1926		451.81
3	1	89.7	16			66.22
4	2	61.7	16	1939		959.82
5	2	64.6	16	1324		481.2
6	1	55.6	16			972.98
7	1	55.9	16			804.69
8	2	53.1	16	1379		873.32
9	3	55.7	16	1552	1153	860.74
10	1	77.6	16			362.16
11	1	59.5	16			596.7
12	2	90.1	16	1182		11.9

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	2	60.5	15	1874		304.98
2	3	53.8	15	1159	1937	630.473
3	3	60.3	15	1488	1951	227.906
4	2	87.2	15	1123		173.809
5	3	55	15	1449	1524	735.862
6	3	60.1	15	1266	1786	565.115
7	2	98.2	15	1051		107.318
8	2	71.9	15	1610		678.092
9	2	88.9	15	1559		477.055
10	2	58.4	15	1335		638.428
11	2	50.4	15	1810		369.441
12	1	75.3	15			547.154
13	3	95.9	15	1940	1239	404.577

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	2	97.8	10	1453		645.917
2	1	52.6	10			742.05
3	3	82.7	10	1722	1065	357.91
4	2	59.8	10	1704		611.71
5	2	75.5	10	1221		450.08
6	1	71.5	10			78.13
7	2	69.1	10	1612		330.8
8	1	88.5	10			288.64
9	1	63.8	10			552.45
10	3	80.2	10	1238	1199	141.51
11	2	93.4	10	1496		579.79
12	1	96.4	10			648.34
13	2	70.2	10	1198		328.47
14	3	77.2	10	1307	1958	256
15	3	75.9	10	1821	1144	41.4

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	80.9	14	1468		766.679
2	2	54.3	14	1764		96.913
3	1	91.9	14			833.704
4	2	98.7	14	1618		146.051
5	3	56.6	14	1337	1735	472.749
6	3	53.8	14	1216	1937	29.606
7	2	92.6	14	1142		94.453
8	3	77.2	14	1777	1964	293.26
9	2	70.9	14	1169		578.437
10	1	66.4	14			562.204
11	2	83.4	14	1640		302.871
12	2	51.6	14	1397		417.569
13	2	88	14	1147		479.186
14	1	84.2	14			780.843

Radar Type 6 - Radar Statistical Performance

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

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5524	9	3	5491	9
36	5505	108	16	5496	48
47	5499	141	17	5522	51
64	5507	192	20	5510	60
83	5495	249	36	5514	108
100	5501	300	37	5509	111
--	--	--	46	5500	138
--	--	--	51	5527	153
--	--	--	63	5517	189
--	--	--	84	5498	252

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5501	6	5	5502	15
4	5511	12	18	5498	54
34	5516	102	29	5521	87
40	5494	120	63	5493	189
46	5495	138	99	5513	297
62	5520	186	--	--	--
82	5507	246	--	--	--
84	5508	252	--	--	--
95	5492	285	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5530	30	2	5508	6
12	5497	36	29	5520	87
33	5499	99	47	5522	141
57	5527	171	49	5496	147
65	5512	195	57	5529	171
74	5493	222	61	5516	183
78	5528	234	69	5504	207
79	5513	237	85	5513	255
82	5506	246	87	5515	261
100	5498	300	95	5502	285

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5498	63	1	5499	3
22	5515	66	2	5512	6
26	5494	78	12	5519	36
34	5528	102	17	5523	51
44	5513	132	26	5528	78
50	5522	150	42	5517	126
51	5520	153	59	5497	177
61	5497	183	91	5524	273
76	5507	228	93	5516	279
96	5502	288	--	--	--

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5499	18	2	5503	6
11	5501	33	19	5517	57
21	5529	63	51	5494	153
31	5525	93	52	5512	156
32	5520	96	62	5520	186
39	5512	117	75	5515	225
47	5508	141	91	5504	273
50	5514	150	--	--	--
54	5492	162	--	--	--
59	5526	177	--	--	--
87	5522	261	--	--	--

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
64	5509	192	8	5525	24
73	5500	219	23	5517	69
80	5492	240	27	5499	81
82	5490	246	36	5495	108
85	5501	255	39	5521	117
89	5520	267	50	5492	150
99	5510	297	51	5505	153
--	--	--	77	5508	231
--	--	--	88	5527	264
--	--	--	92	5524	276
--	--	--	95	5512	285

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5505	30	4	5501	12
36	5523	108	39	5528	117
48	5501	144	45	5499	135
79	5522	237	54	5511	162
--	--	--	68	5492	204
--	--	--	77	5496	231

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5528	9	4	5490	12
31	5497	93	11	5492	33
40	5496	120	14	5499	42
42	5509	126	16	5502	48
51	5525	153	45	5525	135
54	5514	162	49	5507	147
59	5492	177	50	5527	150
72	5512	216	89	5523	267
73	5508	219	90	5501	270
75	5515	225	95	5524	285
84	5521	252	--	--	--
86	5524	258	--	--	--
100	5503	300	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
16	5510	48	19	5523	57
36	5520	108	24	5502	72
39	5493	117	44	5504	132
40	5499	120	49	5490	147
50	5526	150	54	5514	162
59	5495	177	56	5501	168
89	5525	267	70	5527	210
96	5503	288	85	5519	255
98	5507	294	89	5528	267
100	5530	300	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5515	12	5	5522	15
7	5516	21	10	5503	30
23	5493	69	20	5519	60
40	5530	120	54	5511	162
45	5499	135	63	5525	189
46	5511	138	65	5491	195
76	5505	228	--	--	--
92	5517	276	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5493	24	14	5520	42
17	5497	51	19	5503	57
26	5492	78	23	5515	69
36	5526	108	48	5522	144
46	5517	138	65	5530	195
75	5502	225	74	5524	222
84	5503	252	82	5516	246
91	5519	273	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5493	12	4	5514	12
8	5520	24	5	5528	15
10	5505	30	11	5512	33
25	5529	75	51	5510	153
32	5509	96	56	5502	168
37	5525	111	60	5504	180
42	5497	126	76	5508	228
43	5518	129	78	5527	234
45	5498	135	85	5529	255
50	5512	150	86	5525	258
63	5490	189	--	--	--
88	5517	264	--	--	--
98	5511	294	--	--	--
100	5527	300	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
18	5494	54	1	5493	3
29	5530	87	8	5526	24
41	5498	123	19	5522	57
45	5505	135	25	5498	75
53	5527	159	30	5500	90
55	5508	165	38	5499	114
56	5523	168	53	5496	159
61	5524	183	68	5505	204
92	5512	276	74	5494	222
99	5511	297	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5518	9	6	5523	18
7	5522	21	9	5507	27
28	5510	84	19	5499	57
48	5498	144	54	5498	162
69	5527	207	56	5492	168
--	--	--	71	5515	213

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
12	5492	36	10	5525	30
13	5505	39	17	5492	51
30	5499	90	22	5520	66
72	5516	216	32	5490	96
78	5504	234	43	5526	129
--	--	--	69	5512	207
--	--	--	73	5496	219
--	--	--	76	5498	228
--	--	--	82	5511	246
--	--	--	85	5501	255
--	--	--	89	5515	267
--	--	--	94	5523	282
--	--	--	97	5509	291

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/02
Test Item	Radar Statistical Performance Check (802.11ac-VHT80 mode – 5530MHz) – Mode 1		

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	698	76	1
2	5510	1	718	74	1
3	5496	1	778	68	1
4	5499	1	578	92	1
5	5494	1	818	65	1
6	5504	1	918	58	1
7	5507	1	898	59	1
8	5566	1	638	83	1
9	5513	1	798	67	1
10	5556	1	878	61	1
11	5518	1	738	72	1
12	5521	1	938	57	0
13	5537	1	558	95	1
14	5526	1	538	98	1
15	5529	1	618	86	1
16	5558	1	1351	40	1
17	5534	1	1582	34	0
18	5550	1	954	56	1
19	5539	1	820	65	1
20	5502	1	2842	19	1
21	5545	1	2653	20	1
22	5547	1	2117	25	1
23	5542	1	849	63	1
24	5553	1	1988	27	1
25	5515	1	1678	32	1
26	5523	1	1266	42	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5561	1	2655	20	1
28	5564	1	1838	29	1
29	5531	1	1194	45	1
30	5569	1	1053	51	1
Detection Percentage (%)					93.3%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	2.5	190	24	1
2	5510	2	189	25	1
3	5496	2.9	228	23	0
4	5499	2.4	193	29	1
5	5494	2.8	211	24	0
6	5504	1.4	154	25	1
7	5507	4.1	164	23	1
8	5566	3.1	191	28	1
9	5513	2.4	185	23	1
10	5556	5	154	29	1
11	5518	2.8	164	23	1
12	5521	3.6	203	26	1
13	5537	2.2	196	26	1
14	5526	2.1	182	24	1
15	5529	2.8	225	26	1
16	5558	3.6	198	28	1
17	5534	4.6	182	27	1
18	5550	3.8	208	28	1
19	5539	4.6	230	26	1
20	5502	3.3	178	27	1
21	5545	1.1	195	25	1
22	5547	4.1	219	24	1
23	5542	3	159	27	1
24	5553	1.7	203	27	1
25	5515	1.9	155	25	1
26	5523	2.2	165	28	1
27	5561	4.1	155	29	1
28	5564	2.8	189	24	1
29	5531	2.3	230	23	1
30	5569	2.6	197	24	0
Detection Percentage (%)					90.0%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	9.3	391	16	1
2	5510	9.9	320	17	1
3	5496	9.8	301	16	1
4	5499	7.3	321	17	0
5	5494	8.8	264	16	1
6	5504	8.8	351	17	1
7	5507	8.5	262	17	1
8	5566	8.9	204	18	0
9	5513	8	468	16	1
10	5556	8.4	306	17	1
11	5518	8.2	249	17	1
12	5521	7.8	418	17	1
13	5537	8.8	425	18	1
14	5526	9.1	228	18	1
15	5529	6.9	449	17	1
16	5558	9.9	298	17	1
17	5534	7.8	385	16	1
18	5550	7.5	202	16	1
19	5539	6.5	461	16	0
20	5502	9.7	256	17	0
21	5545	7.5	334	16	1
22	5547	6.3	339	17	1
23	5542	6.9	356	17	1
24	5553	8.5	416	16	1
25	5515	9.9	229	18	1
26	5523	9.5	419	16	1
27	5561	7.2	221	17	1
28	5564	8.2	473	17	1
29	5531	8.8	259	17	1
30	5569	8.2	289	16	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	12.3	361	15	1
2	5510	12.2	441	14	1
3	5496	16.7	239	14	0
4	5499	13.7	287	12	1
5	5494	16.9	375	13	0
6	5504	13.6	465	12	1
7	5507	12	388	14	0
8	5566	16.9	319	15	1
9	5513	16.9	472	12	1
10	5556	18.7	241	15	0
11	5518	18.7	270	14	1
12	5521	19.6	272	14	1
13	5537	19.8	279	14	1
14	5526	14.8	320	14	1
15	5529	12.6	319	14	0
16	5558	12.9	427	16	1
17	5534	16.3	254	15	0
18	5550	19.4	426	13	1
19	5539	12.2	339	15	1
20	5502	13.6	278	14	0
21	5545	17.9	445	14	1
22	5547	16.2	332	13	1
23	5542	14.4	492	12	1
24	5553	17.8	307	15	0
25	5515	11.2	415	14	1
26	5523	11	255	15	1
27	5561	15	352	14	0
28	5564	14.1	429	15	1
29	5531	11.4	491	16	0
30	5569	19.8	358	14	1
Detection Percentage (%)					66.7%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (96.7%+96.7%+73.3%+90%)/4 = 89.2% (>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	1	16	5497.8	1
2	5530	1	17	5497.4	1
3	5530	1	18	5498.2	1
4	5530	1	19	5497.8	1
5	5530	1	20	5497.4	1
6	5530	1	21	5563	1
7	5530	1	22	5561.8	1
8	5530	1	23	5567	1
9	5530	1	24	5561.4	1
10	5530	1	25	5563	1
11	5497.8	1	26	5561	1
12	5494.2	1	27	5564.6	1
13	5499	1	28	5563	1
14	5498.6	1	29	5564.2	1
15	5497.4	1	30	5561.4	1
Detection Percentage (%)					100.0%

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	2	91.1	19	1449		591.236
2	2	95.1	19	1464		515.17
3	2	72.7	19	1754		586.29
4	3	78.6	19	1437	1956	556.16
5	2	58.9	19	1242		308.43
6	2	61.9	19	1414		417.37
7	2	53.7	19	1533		65.2
8	2	86.6	19	1420		334.98
9	2	65.4	19	1947		463.97
10	2	98.8	19	1103		732.63
11	3	70.4	19	1860	1581	603.36
12	2	67.3	19	1836		163.95
13	2	90.7	19	1845		281.58
14	2	98.6	19	1085		145.1
15	2	98.1	19	1939		227.2

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	1	94.1	13			304.225
2	2	98.6	13	1759		537.787
3	1	57.5	13			799.384
4	2	78.5	13	1083		313.331
5	1	84.5	13			574.079
6	2	50.4	13	1699		422.426
7	1	54.2	13			802.613
8	1	63.9	13			594.66
9	2	54.1	13	1468		452.337
10	1	64.5	13			22.964
11	2	61.4	13	1459		100.431
12	1	71.8	13			642.429
13	3	58.6	13	1270	1128	150.986
14	2	66.5	13	1610		123.043

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	90.9	11	1401		421.198
2	2	94.4	11	1581		560.59
3	2	64	11	1290		6.86
4	3	76.8	11	1475	1687	453.01
5	2	50.1	11	1185		681.35
6	2	58.9	11	1265		111.44
7	2	90.2	11	1803		237.35
8	2	89.2	11	1041		541.51
9	3	71.4	11	1705	1721	673.5
10	3	98.4	11	1501	1898	812.4

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	2	66	10	1740		494.394
2	2	79	10	1389		379.791
3	2	74.5	10	1849		211.762
4	1	51.7	10			520.633
5	3	74.8	10	1916	1699	58.024
6	3	81.6	10	1727	1732	46.325
7	2	65.2	10	1466		192.396
8	2	52.2	10	1516		592.747
9	3	72.1	10	1066	1931	355.568
10	2	77.7	10	1362		497.479
11	3	84.3	10	1945	1860	220.711
12	2	90.3	10	1252		43.862
13	2	60.2	10	1793		460.823
14	1	75.1	10			159.974
15	2	75.6	10	1766		287.835
16	1	72.9	10			348.606
17	1	97.2	10			160.737
18	1	67.2	10			494.558
19	2	56.2	10	1352		490.079

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	71.1	15	1723		451.086
2	2	70.4	15	1803		162.721
3	3	54.8	15	1824	1605	236.472
4	1	63.6	15			377.413
5	2	60.8	15	1865		159.484
6	1	70.6	15			442.015
7	2	50.6	15	1512		358.036
8	2	56.6	15	1375		20.067
9	2	64.5	15	1702		137.048
10	2	65.3	15	1198		27.449
11	2	51	15	1061		94.551
12	1	61.6	15			98.422
13	1	92	15			472.733
14	2	87.3	15	1880		461.624
15	2	77	15	1377		429.025
16	3	99.3	15	1211	1976	110.746
17	2	78.1	15	1824		468.137
18	3	98.3	15	1694	1994	296.058
19	1	65.8	15			266.079

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	2	96.2	13	1030		192.937
2	1	59.8	13			650.493
3	2	86.9	13	1031		396.556
4	2	97.8	13	1035		217.289
5	2	93.2	13	1154		732.392
6	1	73.9	13			378.375
7	1	67.8	13			409.558
8	2	95	13	1919		49.462
9	2	55.2	13	1676		192.895
10	3	88.8	13	1709	1668	894.808
11	1	96.2	13			778.831
12	3	99.7	13	1000	1624	366.454
13	3	63.9	13	1197	1589	910.677

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	3	82.4	18	1357	1286	132.761
2	1	80.3	18			796.73
3	1	59.2	18			473.09
4	2	81.8	18	1908		712.93
5	2	99	18	1573		1021.59
6	3	60.5	18	1825	1843	1173.53
7	3	66.1	18	1547	1920	1038.1
8	1	69.7	18			116.7

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	2	51.8	18	1799		692.671
2	1	72.2	18			470.507
3	2	89.8	18	1459		230.344
4	3	63.3	18	1126	1680	817.261
5	2	63.3	18	1870		537.679
6	2	65.7	18	1082		351.516
7	2	67.2	18	1058		304.313
8	2	73.3	18	1821		164.07
9	2	80.2	18	1646		373.337
10	3	80.4	18	1801	1341	393.294
11	3	60.3	18	1367	1718	110.301
12	2	56.4	18	1393		423.449
13	2	76.5	18	1528		240.886
14	1	86.1	18			325.543

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	3	71	6	1545	1161	201.894
2	3	61.6	6	1607	1372	562.3
3	3	87.2	6	1451	1163	454.73
4	2	57.3	6	1217		356.97
5	3	82	6	1064	1716	242.52
6	2	98.1	6	1319		654.36
7	3	62.2	6	1618	1443	237.4
8	1	99.5	6			475.03
9	2	84.6	6	1838		65.45
10	3	50	6	1961	1859	271.8
11	1	89.2	6			422.22
12	1	73	6			586.19
13	2	63.6	6	1914		441.96
14	2	96.8	6	1724		689.4
15	2	85.4	6	1624		581.5
16	3	66.4	6	1579	1852	205.5

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	1	76.5	7			451.397
2	1	94.7	7			81.223
3	2	67	7	1656		470.677
4	1	57.8	7			130.28
5	1	87.9	7			45.673
6	3	67.9	7	1509	1385	593.377
7	2	70.9	7	1780		80.45
8	2	58.4	7	1991		195.613
9	3	87.6	7	1456	1782	325.717
10	2	55.3	7	1879		395.34
11	2	82.9	7	1535		628.373
12	2	73.3	7	1577		15.727
13	1	91.4	7			336.72
14	2	71.3	7	1906		211.033
15	3	70.3	7	1724	1165	639.007
16	1	54.5	7			285
17	3	51.6	7	1283	1069	518.733
18	1	84.3	7			617.767

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	83	17	1546		221.376
2	1	67.9	17			381.498
3	1	72.7	17			106.865
4	2	78.6	17	1866		301.103
5	3	82.5	17	1368	1851	478.501
6	1	50.8	17			577.858
7	2	86.3	17	1704		69.226
8	2	70.3	17	1669		7.494
9	1	76.7	17			29.911
10	2	95.2	17	1409		609.139
11	2	79.7	17	1056		236.036
12	3	88	17	1979	1597	595.104
13	3	89.4	17	1529	1790	284.332
14	1	84.5	17			401.159
15	3	82.9	17	1068	1462	543.747
16	1	98.7	17			103.965
17	2	56.6	17	1788		43.982

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	2	96.2	8	1412		585.072
2	2	56.7	8	1641		562.16
3	3	92.6	8	1842	1369	252.54
4	1	77.1	8			338.14
5	2	74.6	8	1588		669.39
6	2	81.7	8	1555		114.43
7	1	60.1	8			383.27
8	2	85.2	8	1612		646.71
9	1	58.4	8			175.73
10	2	81.1	8	1805		392.32
11	2	87.9	8	1260		322.03
12	2	66.4	8	1754		183.72
13	3	53.6	8	1526	1607	318.59
14	3	77.2	8	1943	1819	527.9
15	2	80.4	8	1747		279.7
16	1	80.9	8			188.4

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	98	20	1118		1242.72
2	3	56.2	20	1115	1697	1163.427
3	2	74.9	20	1062		875.623
4	1	84.8	20			917.83
5	2	85.1	20	1363		553.607
6	3	73.6	20	1417	1296	858.453
7	3	81.8	20	1978	1797	255.63
8	1	64.5	20			143.407
9	2	63	20	1623		692.133

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	64	19			804.146
2	3	82.7	19	1693	1368	675.55
3	1	91.9	19			118.1
4	1	97.1	19			838.59
5	1	62.9	19			640.45
6	1	62.3	19			266.36
7	3	73.8	19	1256	1595	962.48
8	3	99.6	19	1757	1694	298.93
9	2	50	19	1236		759.66
10	3	84.7	19	1267	1651	29.86
11	2	88.3	19	1680		114.7
12	2	84.2	19	1772		321.1

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	2	59.1	16	1359		182.463
2	2	60.4	16	1989		528.71
3	2	57.2	16	1109		435.48
4	3	75.6	16	1708	1433	78.69
5	2	62.8	16	1149		626.29
6	3	83	16	1637	1624	773.63
7	2	80	16	1383		83.14
8	1	55.2	16			298.16
9	2	60.3	16	1362		368.03
10	2	66.3	16	1070		762.58
11	1	68.9	16			301.87
12	2	100	16	1336		452.49
13	2	59	16	1015		762.7
14	3	79	16	1441	1481	229.6
15	2	71.6	16	1676		608.8

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	70.8	17	1994		310.91
2	2	99.6	17	1432		537.46
3	3	93.4	17	1147	1386	21.71
4	1	99.5	17			169.11
5	2	77.6	17	1457		545.75
6	2	64.5	17	1195		486.66
7	2	77.5	17	1544		405.09
8	2	91.4	17	1146		41.2
9	1	50.9	17			185.59
10	2	50.2	17	1130		317.25
11	1	55.2	17			132.36
12	1	53	17			34.18
13	2	51	17	1938		63.65
14	3	61.1	17	1340	1656	414.74
15	1	98.2	17			441.26
16	1	71.1	17			419.03
17	3	64	17	1049	1017	53.46
18	2	95.7	17	1593		15.4
19	1	92.3	17			163
20	3	53.3	17	1158	1051	345.8

Type 5 Radar Waveform_17

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	65.8	16	1051	1038	583.892
2	2	96.7	16	1769		538.73
3	3	51.4	16	1782	1761	60.28
4	2	98	16	1148		342.82
5	1	68.3	16			87.34
6	3	91.7	16	1915	1970	218.22
7	2	72	16	1777		467.24
8	1	81	16			263.5
9	2	60.1	16	1353		388.64
10	2	59.2	16	1726		526.53
11	3	72.8	16	1698	1784	504.01
12	2	76.2	16	1474		281.97
13	2	54.4	16	1789		156.19
14	1	74.3	16			564.65
15	3	80.5	16	1952	1493	532.54
16	3	93.2	16	1281	1487	413.26
17	2	71.2	16	1633		180.86
18	2	91.8	16	1263		181.5
19	3	86.6	16	1827	1833	469
20	2	76.6	16	1287		79.7

Type 5 Radar Waveform_18

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	71.6	18			221.918
2	3	72.5	18	1216	1539	535.947
3	3	66.2	18	1240	1441	102.614
4	3	76.9	18	1872	1628	111.271
5	3	63.8	18	1107	1784	549.909
6	2	69.9	18	1157		473.346
7	1	60.6	18			354.063
8	3	79.4	18	1016	1108	313.96
9	1	66.1	18			249.257
10	2	89.5	18	1718		16.854
11	2	60.2	18	1811		709.401
12	3	56.3	18	1204	1777	133.919
13	2	93.1	18	1867		129.186
14	2	51.9	18	1296		21.643

Type 5 Radar Waveform_19

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	88.7	17	1353		596.627
2	1	60.4	17			603.22
3	1	83.2	17			389.66
4	2	54.7	17	1634		602.67
5	3	77.3	17	1981	1945	741.38
6	3	85.5	17	1429	1753	687.12
7	3	89.7	17	1928	1817	350.12
8	2	55.4	17	1609		11.23
9	2	93.2	17	1470		231.19
10	2	61	17	1090		466.07
11	2	86.3	17	1909		721.89
12	1	74.2	17			539.48
13	2	66.2	17	1835		369.76
14	3	62.3	17	1120	1377	75.53
15	3	58.8	17	1214	1747	105.6
16	1	90.3	17			129

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	57.3	16	1744		838.977
2	1	77.4	16			567.003
3	1	73.1	16			793.846
4	2	82.6	16	1860		39.579
5	2	76.9	16	1187		450.972
6	1	97.4	16			901.835
7	2	68.1	16	1835		378.468
8	3	74.8	16	1691	1157	494.452
9	2	89.1	16	1743		577.905
10	3	59.9	16	1631	1019	681.668
11	1	95.1	16			550.481
12	2	96.3	16	1779		179.354
13	2	90.5	16	1879		286.677

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	72.2	15	1449		589.705
2	1	66.3	15			342.343
3	2	65.4	15	1973		568.147
4	2	60.2	15	1317		591.02
5	2	80.2	15	1429		367.453
6	1	96.9	15			453.417
7	3	61.3	15	1951	1493	283.91
8	2	60.9	15	1529		637.463
9	1	54.3	15			123.697
10	3	87.7	15	1052	1272	302.01
11	3	58.7	15	1059	1653	52.713
12	3	96.6	15	1063	1489	346.997
13	2	53.4	15	1828		547.16
14	1	69	15			271.813
15	2	66.8	15	1622		120.857
16	2	88.1	15	1990		536.2
17	2	66.4	15	1233		364.533
18	2	60.6	15	1682		88.767

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	76.4	18	1827	1933	120.912
2	2	51.6	18	1245		405.31
3	1	99.8	18			240.31
4	2	52	18	1654		324.27
5	1	77.3	18			593.91
6	3	72.9	18	1158	1016	712.02
7	2	85.4	18	1284		490.82
8	2	94.5	18	1954		124.67
9	2	68.1	18	1525		150.48
10	1	54.2	18			631.25
11	2	97.6	18	1771		94.31
12	1	85.5	18			59.31
13	3	94.2	18	1953	1452	736.3
14	1	80.6	18			461
15	1	58.1	18			276.4
16	1	80.4	18			507.5

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	68.3	5	1898	1310	322.396
2	2	83.1	5	1915		518.718
3	2	61.1	5	1219		392.715
4	2	99.4	5	1281		374.333
5	1	95.9	5			183.331
6	2	97.8	5	1163		457.038
7	2	99.1	5	1160		509.736
8	3	89.4	5	1144	1565	94.604
9	1	96.2	5			661.631
10	3	55.4	5	1796	1590	382.739
11	3	83.2	5	1826	1355	335.936
12	2	99.5	5	1441		424.094
13	3	69.7	5	1295	1155	190.492
14	2	97	5	1144		215.439
15	3	78	5	1377	1955	574.447
16	2	80.2	5	1180		479.665
17	3	53.1	5	1165	1446	102.082

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	3	86	19	1322	1125	314.003
2	3	51	19	1635	1754	280.38
3	2	83.5	19	1911		687.97
4	2	97.7	19	1515		741.53
5	3	54.7	19	1097	1483	782.71
6	1	54.2	19			120.89
7	3	96.2	19	1879	1387	783.03
8	2	55.8	19	1425		235.78
9	3	67.7	19	1320	1098	53.08
10	2	55.2	19	1663		556.07
11	3	70.6	19	1008	1725	437.92
12	3	74.4	19	1291	1540	759.87
13	2	50.4	19	1786		571.7
14	1	80.1	19			457.7
15	2	70.9	19	1160		291.5

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	73.5	15	1508		561.02
2	1	64.5	15			994.17
3	3	73	15	1146	1162	1043.8
4	3	64.9	15	1265	1724	343.3
5	3	53.3	15	1830	1692	133.73
6	2	76	15	1768		811.72
7	3	76.4	15	1531	1388	262.31
8	2	97.4	15	1585		916.57
9	2	53.8	15	1856		690.8
10	2	86.6	15	1970		1074.6

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	1	99.2	20			209.313
2	2	78.1	20	1307		603.307
3	3	74.4	20	1933	1336	312.174
4	3	99.4	20	1600	1077	236.811
5	2	83.5	20	1846		694.829
6	2	97.7	20	1067		573.186
7	1	64.2	20			605.343
8	2	68.7	20	1827		751.97
9	3	86.8	20	1256	1110	784.157
10	2	59	20	1910		461.724
11	3	68.9	20	1654	1926	294.411
12	3	51.9	20	1702	1806	567.249
13	2	76.2	20	1493		569.886
14	1	71.1	20			138.143

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	1	62.6	11			296.672
2	3	64.9	11	1989	1286	534.487
3	3	70.1	11	1807	1264	851.004
4	1	97.9	11			553.751
5	1	84.2	11			396.159
6	3	98.2	11	1205	1521	584.196
7	2	62.5	11	1014		824.573
8	2	79.1	11	1164		11.68
9	1	53.5	11			70.807
10	3	51	11	1918	1524	578.074
11	1	59.4	11			754.901
12	3	71	11	1449	1691	390.089
13	2	53.5	11	1186		841.386
14	3	91.8	11	1848	1511	212.043

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	2	62.6	15	1895		661.789
2	1	81.5	15			158.293
3	2	70.4	15	1773		310.606
4	1	62.5	15			355.879
5	3	56.6	15	1345	1250	848.802
6	3	72.8	15	1335	1248	837.515
7	2	97.7	15	1819		199.998
8	1	71.1	15			892.722
9	2	98.5	15	1751		265.945
10	1	79.7	15			388.648
11	3	62.3	15	1929	1109	135.991
12	2	64	15	1547		731.654
13	2	85.2	15	1644		688.077

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	1	68.4	12			623.817
2	3	96.5	12	1617	1405	85.824
3	2	89.2	12	1490		462.122
4	3	91.2	12	1144	1668	185.253
5	3	89.4	12	1667	1063	103.044
6	3	56.1	12	1783	1815	133.435
7	2	99.4	12	1954		264.866
8	2	98.4	12	1655		324.427
9	1	60.4	12			407.618
10	2	83.5	12	1313		336.089
11	2	77.3	12	1554		429.221
12	1	72	12			275.572
13	2	71.3	12	1246		298.993
14	2	65	12	1551		396.684
15	2	98.1	12	1131		454.325
16	2	82	12	1751		410.456
17	2	63.6	12	1302		73.437
18	2	87.1	12	1447		281.158
19	1	80.9	12			22.079

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	1	86.9	19			595.092
2	3	55.2	19	1097	1420	1154.877
3	2	99.6	19	1028		366.143
4	2	93.6	19	1677		1323.43
5	1	98.9	19			923.027
6	3	79.2	19	1902	1946	748.533
7	3	92.6	19	1437	1913	1072.4
8	2	66.7	19	1208		381.777
9	2	86.4	19	1719		1253.633

Radar Type 6 - Radar Statistical Performance

Trail #	1=Detection 0=No Detection	Trail #	1=Detection 0=No Detection
1	1	16	1
2	1	17	1
3	1	18	1
4	1	19	1
5	1	20	1
6	1	21	1
7	1	22	1
8	1	23	1
9	1	24	1
10	1	25	1
11	1	26	1
12	1	27	1
13	1	28	1
14	1	29	1
15	1	30	1
	Detection Percentage (%)		100.0%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5504	18	8	5504	24
11	5568	33	10	5490	30
12	5516	36	11	5499	33
16	5509	48	17	5507	51
18	5551	54	24	5525	72
21	5547	63	26	5552	78
42	5522	126	37	5532	111
46	5524	138	39	5550	117
47	5526	141	42	5570	126
50	5564	150	46	5567	138
52	5541	156	64	5561	192
54	5503	162	68	5508	204
72	5530	216	71	5555	213
73	5497	219	72	5502	216
75	5548	225	89	5556	267
77	5534	231	90	5513	270
82	5501	246	97	5519	291
88	5493	264	--	--	--
92	5491	276	--	--	--
98	5542	294	--	--	--
99	5517	297	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5494	6	2	5568	6
5	5527	15	7	5539	21
6	5533	18	18	5561	54
8	5554	24	20	5517	60
17	5536	51	46	5526	138
18	5534	54	51	5499	153
19	5522	57	52	5491	156
24	5506	72	57	5531	171
25	5530	75	62	5569	186
33	5497	99	66	5518	198
54	5510	162	75	5504	225
64	5535	192	76	5547	228
65	5553	195	77	5528	231
69	5555	207	79	5493	237
83	5515	249	85	5533	255
86	5491	258	--	--	--
90	5539	270	--	--	--
91	5548	273	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5541	6	1	5537	3
7	5510	21	3	5540	9
14	5556	42	8	5490	24
20	5500	60	9	5507	27
27	5534	81	14	5557	42
36	5490	108	16	5563	48
46	5564	138	17	5514	51
54	5498	162	26	5530	78
56	5537	168	28	5509	84
73	5566	219	31	5558	93
77	5531	231	44	5501	132
78	5508	234	52	5524	156
87	5561	261	61	5536	183
98	5550	294	62	5502	186
--	--	--	68	5515	204
--	--	--	80	5539	240
--	--	--	82	5532	246
--	--	--	84	5498	252

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5543	6	2	5538	6
6	5509	18	9	5569	27
12	5507	36	15	5554	45
15	5528	45	19	5522	57
34	5525	102	20	5514	60
56	5492	168	23	5504	69
65	5493	195	26	5524	78
67	5518	201	27	5523	81
72	5503	216	28	5507	84
74	5568	222	32	5492	96
80	5560	240	37	5491	111
82	5526	246	43	5519	129
88	5490	264	45	5563	135
98	5565	294	49	5515	147
--	--	--	50	5543	150
--	--	--	52	5500	156
--	--	--	55	5553	165
--	--	--	60	5499	180
--	--	--	61	5501	183
--	--	--	69	5498	207
--	--	--	70	5490	210
--	--	--	78	5511	234
--	--	--	86	5529	258
--	--	--	87	5546	261
--	--	--	91	5525	273
--	--	--	99	5570	297

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5502	6	3	5550	9
10	5545	30	18	5509	54
11	5568	33	21	5567	63
30	5505	90	24	5494	72
39	5559	117	29	5539	87
45	5491	135	33	5549	99
46	5524	138	34	5493	102
49	5531	147	35	5501	105
50	5563	150	55	5506	165
55	5550	165	59	5561	177
63	5490	189	73	5513	219
74	5567	222	76	5537	228
89	5521	267	77	5558	231
94	5525	282	83	5516	249
95	5536	285	--	--	--

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5494	18	3	5533	9
7	5539	21	7	5564	21
8	5567	24	9	5504	27
22	5560	66	11	5501	33
26	5502	78	17	5547	51
37	5542	111	21	5531	63
40	5557	120	30	5502	90
56	5522	168	37	5538	111
58	5505	174	41	5555	123
72	5512	216	42	5570	126
85	5498	255	46	5529	138
93	5543	279	49	5508	147
--	--	--	67	5544	201
--	--	--	72	5552	216
--	--	--	73	5548	219
--	--	--	83	5565	249
--	--	--	86	5554	258
--	--	--	87	5536	261
--	--	--	93	5507	279
--	--	--	98	5505	294

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5541	3	10	5526	30
5	5563	15	15	5523	45
6	5508	18	16	5512	48
14	5537	42	21	5538	63
15	5526	45	23	5534	69
16	5556	48	26	5506	78
24	5545	72	27	5552	81
26	5538	78	32	5539	96
30	5565	90	39	5497	117
34	5531	102	41	5546	123
35	5569	105	42	5566	126
58	5492	174	48	5535	144
61	5564	183	56	5522	168
66	5536	198	57	5570	171
68	5514	204	59	5514	177
79	5518	237	68	5515	204
85	5519	255	71	5494	213
86	5502	258	74	5530	222
89	5523	267	76	5541	228
95	5567	285	86	5498	258
96	5506	288	88	5554	264

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5563	21	4	5532	12
15	5546	45	5	5526	15
17	5541	51	20	5523	60
21	5502	63	21	5501	63
22	5560	66	24	5502	72
28	5567	84	27	5552	81
39	5536	117	48	5496	144
40	5529	120	50	5535	150
43	5491	129	52	5530	156
45	5533	135	59	5517	177
51	5500	153	68	5505	204
55	5534	165	71	5520	213
69	5499	207	83	5540	249
82	5531	246	89	5528	267
84	5524	252	98	5536	294
85	5497	255	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5509	6	11	5504	33
17	5539	51	17	5524	51
20	5537	60	27	5516	81
33	5570	99	29	5546	87
40	5502	120	52	5505	156
41	5545	123	56	5508	168
50	5492	150	57	5525	171
62	5560	186	58	5536	174
66	5530	198	59	5568	177
67	5501	201	60	5539	180
69	5504	207	66	5514	198
72	5523	216	83	5498	249
73	5536	219	87	5566	261
80	5512	240	93	5532	279
86	5498	258	96	5535	288
87	5543	261	--	--	--
95	5529	285	--	--	--
100	5518	300	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5570	15	3	5505	9
7	5569	21	10	5565	30
10	5553	30	11	5501	33
15	5516	45	14	5506	42
22	5537	66	17	5568	51
25	5549	75	18	5539	54
35	5509	105	32	5528	96
36	5556	108	36	5507	108
44	5512	132	39	5566	117
46	5547	138	57	5569	171
49	5496	147	62	5541	186
50	5565	150	65	5538	195
51	5546	153	81	5494	243
53	5543	159	88	5490	264
55	5495	165	91	5551	273
56	5566	168	93	5527	279
58	5508	174	100	5504	300
61	5563	183	--	--	--
63	5515	189	--	--	--
68	5502	204	--	--	--
69	5498	207	--	--	--
70	5528	210	--	--	--
74	5561	222	--	--	--
77	5507	231	--	--	--
84	5552	252	--	--	--
100	5529	300	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5533	3	15	5496	45
15	5520	45	16	5503	48
24	5536	72	18	5493	54
32	5506	96	21	5546	63
41	5495	123	36	5498	108
46	5499	138	44	5518	132
52	5494	156	45	5539	135
53	5505	159	48	5530	144
56	5527	168	52	5559	156
59	5559	177	57	5501	171
60	5492	180	63	5557	189
64	5502	192	64	5504	192
70	5519	210	70	5533	210
79	5539	237	73	5508	219
82	5569	246	76	5568	228
93	5535	279	82	5555	246
97	5526	291	85	5547	255
--	--	--	87	5570	261
--	--	--	90	5536	270
--	--	--	92	5544	276
--	--	--	98	5538	294

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
20	5491	60	1	5561	3
22	5503	66	6	5504	18
33	5512	99	24	5546	72
35	5537	105	25	5498	75
43	5558	129	27	5539	81
44	5522	132	31	5556	93
51	5533	153	32	5542	96
52	5506	156	33	5508	99
62	5553	186	34	5543	102
65	5566	195	36	5553	108
66	5502	198	37	5500	111
68	5568	204	41	5568	123
71	5525	213	57	5518	171
74	5508	222	64	5522	192
77	5541	231	67	5540	201
85	5509	255	73	5515	219
90	5549	270	80	5499	240
95	5531	285	82	5526	246
96	5529	288	83	5495	249
97	5559	291	86	5565	258
--	--	--	94	5503	282
--	--	--	100	5507	300

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5552	9	8	5515	24
13	5570	39	9	5514	27
15	5497	45	10	5490	30
18	5522	54	14	5558	42
19	5513	57	16	5548	48
20	5503	60	23	5561	69
29	5491	87	30	5560	90
38	5567	114	33	5528	99
43	5543	129	43	5536	129
56	5511	168	44	5506	132
61	5547	183	47	5562	141
74	5502	222	53	5557	159
75	5550	225	68	5517	204
84	5516	252	69	5541	207
85	5546	255	73	5534	219
96	5545	288	77	5523	231
98	5495	294	78	5552	234
--	--	--	80	5550	240
--	--	--	83	5546	249
--	--	--	88	5516	264
--	--	--	89	5544	267
--	--	--	91	5493	273
--	--	--	93	5545	279
--	--	--	96	5526	288
--	--	--	97	5556	291

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5516	27		5503	27
12	5500	36	10	5508	30
13	5528	39	13	5505	39
16	5494	48	20	5551	60
20	5523	60	26	5550	78
23	5547	69	34	5498	102
25	5562	75	36	5522	108
35	5525	105	46	5495	138
39	5543	117	49	5529	147
40	5538	120	51	5535	153
49	5533	147	54	5562	162
51	5551	153	56	5542	168
52	5501	156	75	5540	225
55	5550	165	86	5546	258
56	5503	168	88	5545	264
57	5557	171	94	5543	282
68	5502	204	100	5560	300
73	5553	219	--	--	--
76	5531	228	--	--	--
81	5517	243	--	--	--
86	5527	258	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5534	6	3	5491	9
11	5496	33	4	5497	12
17	5548	51	5	5532	15
27	5517	81	6	5502	18
35	5546	105	7	5567	21
38	5560	114	24	5530	72
44	5542	132	30	5556	90
49	5519	147	44	5536	132
53	5495	159	48	5544	144
56	5493	168	49	5560	147
64	5537	192	54	5535	162
66	5541	198	64	5540	192
68	5507	204	65	5517	195
70	5559	210	66	5554	198
82	5547	246	67	5537	201
83	5503	249	74	5534	222
98	5513	294	76	5499	228
--	--	--	78	5494	234
--	--	--	83	5555	249
--	--	--	85	5516	255
--	--	--	92	5506	276

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/05
Test Item	Radar Statistical Performance Check (802.11ac-VHT20 – 5500MHz) - Mode 2		

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	718	74	1
2	5491	1	938	57	1
3	5506	1	658	81	1
4	5493	1	638	83	1
5	5504	1	778	68	1
6	5494	1	618	86	1
7	5495	1	818	65	1
8	5496	1	578	92	1
9	5492	1	538	98	1
10	5497	1	898	59	0
11	5508	1	858	62	1
12	5509	1	3066	18	1
13	5499	1	518	102	1
14	5498	1	798	67	1
15	5500	1	558	95	1
16	5503	1	1171	46	1
17	5501	1	2851	19	1
18	5502	1	1633	33	1
19	5500	1	1975	27	1
20	5504	1	1119	48	0
21	5493	1	2914	19	1
22	5505	1	1491	36	1
23	5498	1	1455	37	1
24	5506	1	2824	19	1
25	5507	1	2522	21	1
26	5501	1	1546	35	0

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5508	1	592	90	1
28	5496	1	1457	37	1
29	5502	1	2974	18	1
30	5509.6	1	2799	19	1
Detection Percentage (%)					90.0%

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	3.5	200	24	1
2	5491	2.3	202	27	1
3	5506	1.7	166	23	1
4	5493	3.7	157	26	1
5	5504	1.8	223	27	1
6	5494	3.3	208	26	1
7	5495	1.1	151	29	1
8	5496	4.4	172	25	1
9	5492	3.6	175	28	1
10	5497	1.6	163	24	1
11	5508	1.9	229	29	1
12	5509	1	177	26	1
13	5499	3.5	159	25	0
14	5498	2.2	151	27	1
15	5500	2.4	207	27	1
16	5503	2.4	158	28	1
17	5501	1.2	193	23	0
18	5502	2.1	169	25	0
19	5500	4.8	219	24	1
20	5504	5	211	25	1
21	5493	4.1	157	26	1
22	5505	2.7	227	24	1
23	5498	4	160	28	1
24	5506	3.4	211	26	1
25	5507	1.3	226	25	1
26	5501	3.9	169	23	1
27	5508	3.7	199	26	1
28	5496	1.7	204	27	1
29	5502	3.2	208	25	1
30	5509.6	4.5	197	24	1
Detection Percentage (%)					90.0%

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	9.2	236	16	1
2	5491	8.4	496	18	1
3	5506	6.6	252	18	1
4	5493	7.3	325	16	1
5	5504	6.3	369	18	1
6	5494	9.8	336	17	1
7	5495	7.7	391	18	1
8	5496	9.2	328	16	0
9	5492	6.1	411	17	1
10	5497	10	479	17	1
11	5508	6.9	470	17	1
12	5509	6.4	415	16	1
13	5499	7	272	17	1
14	5498	8.8	285	17	1
15	5500	9.2	203	17	1
16	5503	8	489	17	1
17	5501	9.6	261	16	1
18	5502	7	408	17	1
19	5500	7.3	483	17	1
20	5504	8.7	297	17	1
21	5493	7.7	453	18	1
22	5505	7.3	406	17	1
23	5498	9.4	261	18	1
24	5506	6.8	302	18	1
25	5507	8.7	378	18	1
26	5501	8.6	454	16	1
27	5508	8.1	440	18	1
28	5496	8	291	17	1
29	5502	6.6	303	17	1
30	5509.6	9.4	299	17	1
Detection Percentage (%)					96.7%

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	12.9	453	13	1
2	5491	19.4	358	13	0
3	5506	11.3	292	15	0
4	5493	18.6	291	12	1
5	5504	15.4	411	15	1
6	5494	13.3	418	12	1
7	5495	15.4	292	15	1
8	5496	17.6	387	14	1
9	5492	15.7	326	14	1
10	5497	18.9	479	15	1
11	5508	19.4	304	15	0
12	5509	11.6	305	15	1
13	5499	16.9	427	13	1
14	5498	11.1	486	13	0
15	5500	17.1	270	12	1
16	5503	15.9	317	13	1
17	5501	12.3	307	15	0
18	5502	15.8	427	15	0
19	5500	12.4	421	14	1
20	5504	11	475	12	1
21	5493	19.2	243	14	1
22	5505	15.9	280	15	1
23	5498	12.7	323	13	1
24	5506	13.8	373	15	1
25	5507	16.9	470	16	1
26	5501	18.8	368	16	1
27	5508	16.1	436	13	1
28	5496	19.6	449	15	1
29	5502	18.9	456	15	0
30	5509.6	18.4	361	14	0
Detection Percentage (%)					73.3%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (96.7%+73.3%+80%+70%)/4 = 80% (= 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	1	16	5496	1
2	5500	1	17	5494.4	1
3	5500	1	18	5493.6	1
4	5500	1	19	5498.4	1
5	5500	1	20	5494.8	1
6	5500	1	21	5507.2	1
7	5500	1	22	5502	1
8	5500	1	23	5506	1
9	5500	1	24	5503.2	1
10	5500	1	25	5507.6	1
11	5496.4	1	26	5503.2	1
12	5492.4	1	27	5504.4	1
13	5494.4	1	28	5505.2	1
14	5493.2	1	29	5502	0
15	5495.6	1	30	5504	1
Detection Percentage (%)					96.7%

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	2	81.5	9	1832		407.446
2	2	51	9	1547		410.047
3	2	86.9	9	1860		614.414
4	1	52.8	9			187.441
5	2	67	9	1079		514.009
6	1	85.9	9			527.336
7	2	63.7	9	1937		406.023
8	2	69.6	9	1116		43.59
9	2	94.5	9	1977		720.687
10	2	86.5	9	1373		307.154
11	2	99.8	9	1515		328.241
12	3	58.5	9	1995	1259	592.629
13	2	99.9	9	1020		518.786
14	3	65.3	9	1730	1160	349.443

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	3	78.2	13	1087	1118	347.163
2	1	57.3	13			86.657
3	3	84.6	13	1380	1673	816.274
4	1	52.9	13			654.521
5	2	89.7	13	1936		392.139
6	2	66.1	13	1128		793.466
7	1	83.7	13			687.973
8	1	65.9	13			128.63
9	3	81.5	13	1527	1890	254.887
10	2	79.2	13	1269		763.924
11	2	95.6	13	1617		324.841
12	2	68.5	13	1943		847.529
13	2	73	13	1489		790.986
14	3	80.2	13	1920	1660	130.643

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	80	20			677.27
2	3	86.2	20	1909	1219	90.842
3	3	86.3	20	1132	1593	644.304
4	3	88.4	20	1962	1770	195.691
5	3	74.3	20	1612	1611	574.039
6	2	82.4	20	1819		805.786
7	3	58.9	20	1976	1759	829.253
8	2	79.6	20	1447		745.09
9	2	94.2	20	1577		161.687
10	2	72.1	20	1887		146.514
11	3	66.7	20	1053	1360	247.521
12	3	92.8	20	1753	1068	494.659
13	2	53.9	20	1136		612.286
14	2	55.1	20	1755		62.643

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	2	97.6	17	1304		468.789
2	2	80.7	17	1156		500.51
3	2	88.5	17	1151		597.91
4	1	61.5	17			690.12
5	2	52.2	17	1789		969.4
6	2	65.3	17	1218		600.6
7	1	51.9	17			865.73
8	2	66.9	17	1360		858.75
9	2	53	17	1271		921.65
10	1	68.1	17			406.69
11	3	93.8	17	1045	1466	990.8
12	3	78.1	17	1512	1032	101.6

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	3	64.1	9	1838	1085	362.939
2	3	94.5	9	1127	1717	109.563
3	2	99.9	9	1475		602.542
4	2	68.2	9	1000		516.733
5	2	98.4	9	1464		305.824
6	2	73.5	9	1307		203.335
7	2	94.7	9	1404		414.566
8	2	83.5	9	1087		16.887
9	1	73	9			34.358
10	2	88.5	9	1825		289.839
11	3	78.5	9	1674	1810	96.841
12	1	88.5	9			67.612
13	1	98.8	9			234.433
14	3	66.3	9	1370	1440	325.344
15	3	75.4	9	1309	1410	433.285
16	3	96	9	1661	1716	9.656
17	1	62.8	9			363.637
18	3	96.9	9	1126	1169	255.358
19	1	84.6	9			376.379

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	2	97.2	16	1353		818.2
2	2	78	16	1444		704.501
3	3	94.8	16	1507	1249	1054.572
4	2	83.3	16	1370		953.463
5	3	88.6	16	1131	1014	748.114
6	1	65.5	16			257.825
7	1	98.9	16			401.195
8	2	64.6	16	1653		783.216
9	1	94.9	16			672.387
10	2	71.8	16	1374		445.918
11	2	68.1	16	1882		434.909

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	1	85.2	18			168.408
2	2	97.9	18	1605		654.39
3	2	50.6	18	1339		173.41
4	2	51.5	18	1517		634.43
5	2	78.8	18	1852		304.15
6	2	70.3	18	1538		7.07
7	2	53.7	18	1453		164.73
8	3	91.5	18	1598	1807	541.58
9	2	91	18	1515		583.52
10	2	52.1	18	1027		74.44
11	2	54.9	18	1037		766.86
12	1	94.3	18			334.37
13	3	71.8	18	1131	1139	406.3
14	3	70.7	18	1163	1466	348
15	2	53.8	18	1051		19.1

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	89.2	13			1183.32
2	2	93.2	13	1373		1210.537
3	1	52	13			84.873
4	1	82.9	13			174.14
5	1	79.3	13			440.277
6	2	94.4	13	1843		1107.943
7	3	99.7	13	1546	1179	786.41
8	2	70.1	13	1945		877.567
9	2	92.4	13	1007		768.733

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	1	95.4	17			373.742
2	3	84.5	17	1869	1002	100.32
3	3	78.4	17	1534	1855	405.75
4	3	55.5	17	1024	1104	340.79
5	3	63.8	17	1623	1098	940.5
6	2	99.4	17	1600		712.07
7	2	96.7	17	1643		26.34
8	1	62.5	17			389.25
9	2	55.8	17	1665		1089.8
10	2	59.7	17	1990		202.7

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	1	94.7	10			106.716
2	2	90.2	10	1651		302.423
3	2	81.5	10	1572		449.516
4	2	56	10	1748		662.659
5	2	52.9	10	1889		516.002
6	2	88.5	10	1632		886.435
7	2	59.4	10	1752		552.438
8	2	79.3	10	1769		267.742
9	2	50.5	10	1117		671.135
10	1	61.3	10			756.328
11	2	59	10	1770		759.031
12	3	69.9	10	1345	1515	361.754
13	1	51.6	10			472.077

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	99.1	15	1756		652.117
2	3	90.2	15	1690	1956	615.43
3	2	98.7	15	1433		971.93
4	2	99.7	15	1671		414.1
5	2	85.6	15	1923		88.72
6	2	86.1	15	1658		639.01
7	2	71.3	15	1451		558.73
8	1	60.8	15			947.85
9	2	80.6	15	1167		272.15
10	2	75.8	15	1185		472.32
11	2	73.6	15	1394		446.9
12	1	62.6	15			557.7

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	3	53.4	5	1919	1709	77.351
2	3	90.8	5	1425	1483	764.09
3	1	98.4	5			463.52
4	2	77.5	5	1797		798.63
5	1	85.4	5			199.31
6	1	61.4	5			413.19
7	2	83.3	5	1016		213.84
8	2	70.4	5	1874		624.87
9	3	78.9	5	1987	1482	654.2
10	3	73	5	1482	1912	1084.8

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	72	10	1684		14.941
2	2	75.9	10	1272		246.82
3	2	88.2	10	1798		173.4
4	2	90	10	1068		423.1
5	2	77.4	10	1855		653.22
6	2	50.1	10	1158		424.31
7	2	61.1	10	1198		801.29
8	2	97.5	10	1993		196.39
9	2	76.9	10	1036		942.18
10	3	87.1	10	1555	1758	451.04
11	2	57.4	10	1693		979
12	2	65.8	10	1303		858.4

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	2	87.2	7	1023		520.55
2	3	85.5	7	1375	1292	679.527
3	1	81.4	7			737.194
4	1	53.1	7			596.181
5	2	71.9	7	1385		236.809
6	2	79	7	1934		401.566
7	2	71.1	7	1299		239.673
8	2	52	7	1906		324.48
9	3	50.9	7	1966	1916	199.377
10	1	64	7			678.994
11	1	63.3	7			701.831
12	1	70.5	7			492.259
13	1	93	7			117.186
14	2	90.4	7	1803		529.843

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	74.1	13	1138	1716	697.931
2	2	98.1	13	1571		591
3	2	53.2	13	1775		335.59
4	1	91.8	13			180.14
5	2	61.8	13	1134		629.12
6	2	97.4	13	1675		463.1
7	3	79.1	13	1666	1311	83.9
8	1	62.9	13			334.91
9	2	78.9	13	1655		564.49
10	3	81.4	13	1142	1836	688.18
11	2	55.3	13	1546		444.73
12	2	88.4	13	1648		297.9
13	2	74.3	13	1437		395.56
14	3	55.1	13	1167	1952	285.6
15	3	76.8	13	1388	1288	596.4
16	2	62.5	13	1114		669.9

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	82.4	14	1735		640.491
2	2	89	14	1472		561.301
3	2	57.3	14	1870		317.792
4	1	73.2	14			218.853
5	3	82.3	14	1008	1060	9.084
6	2	71.6	14	1648		240.775
7	2	96.3	14	1570		825.685
8	2	69.9	14	1340		89.176
9	1	69.6	14			73.087
10	3	83.1	14	1034	1438	846.918
11	2	99.1	14	1678		1064.909

Type 5 Radar Waveform_17

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	59.5	10	1210		175.958
2	2	72.9	10	1140		580.151
3	3	83	10	1047	1528	259.242
4	2	93.1	10	1642		510.783
5	3	77.4	10	1043	1858	290.524
6	3	81.2	10	1046	1486	681.145
7	3	60.9	10	1811	1068	762.945
8	2	64.6	10	1457		256.416
9	2	71.4	10	1047		543.227
10	2	85	10	1501		455.018
11	2	58.4	10	1955		1049.409

Type 5 Radar Waveform_18

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	93.1	8	1346	1984	520.32
2	2	69	8	1231		459.477
3	2	66.1	8	1469		253.373
4	2	66.4	8	1329		61.14
5	3	83	8	1281	1370	452.907
6	1	69	8			1252.813
7	2	69.8	8	1371		355.1
8	1	79.5	8			73.747
9	3	58.6	8	1117	1950	1287.733

Type 5 Radar Waveform_19

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	87.2	20	1281		437.147
2	1	68.9	20			162.06
3	1	67.7	20			103.32
4	1	79.1	20			189.71
5	1	59.2	20			769.87
6	2	52.9	20	1031		692.48
7	2	84.8	20	1585		229.67
8	1	58.9	20			1058.7

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	96.6	11	1126		544.128
2	1	95.6	11			318.608
3	3	81.7	11	1083	1758	646.685
4	1	53.2	11			456.203
5	3	54.5	11	1163	1477	301.531
6	2	77.9	11	1265		249.368
7	3	56.2	11	1265	1832	130.726
8	1	60.7	11			484.504
9	3	54.6	11	1851	1527	652.951
10	3	55.7	11	1055	1742	482.669
11	2	99.4	11	1872		318.496
12	3	81.2	11	1360	1518	584.334
13	1	81.8	11			227.462
14	2	87.8	11	1768		274.319
15	3	60.4	11	1344	1190	182.747
16	2	82.6	11	1186		40.365
17	2	80.1	11	1612		548.682

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	1	97.4	6			623.026
2	2	91.7	6	1337		380.031
3	2	62.8	6	1985		379.862
4	1	85.5	6			121.643
5	1	74	6			323.914
6	2	54.5	6	1554		113.285
7	3	64	6	1425	1718	213.916
8	1	68.4	6			89.847
9	2	88.1	6	1667		304.898
10	2	86.6	6	1387		38.209
11	3	81.6	6	1182	1179	150.731
12	3	80.9	6	1244	1458	265.212
13	3	87.8	6	1726	1135	236.413
14	2	94.4	6	1434		508.954
15	2	50.1	6	1742		125.145
16	3	70	6	1682	1513	389.296
17	2	53.3	6	1814		361.237
18	2	86.1	6	1271		105.958
19	2	78.5	6	1460		623.679

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	71.4	19	1322	1205	995.687
2	2	93.1	19	1435		855.7
3	2	84.7	19	1920		694.63
4	2	92.6	19	1326		923.18
5	2	92.9	19	1176		940.89
6	2	97.6	19	1002		120.25
7	2	94.5	19	1144		850.24
8	2	59.7	19	1576		183

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	57	9	1835		8.064
2	3	73.7	9	1507	1243	130.407
3	2	59.5	9	1670		374.624
4	3	70	9	1889	1253	613.771
5	2	51.1	9	1412		301.969
6	3	87.5	9	1110	1697	396.586
7	2	67.6	9	1333		727.973
8	2	50.3	9	1620		756.94
9	2	97.1	9	1735		115.477
10	1	81.3	9			781.554
11	1	87	9			371.421
12	1	96.1	9			720.329
13	3	71	9	1516	1097	443.686
14	1	88.5	9			245.643

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	56.8	16	1055		341.53
2	1	58.6	16			331.83
3	3	50.3	16	1525	1990	477.64
4	2	61.3	16	1931		652.43
5	1	74.9	16			205.81
6	2	87.3	16	1001		325.94
7	1	63.1	16			6.21
8	3	93.4	16	1640	1310	383.54
9	1	81	16			286.92
10	3	50.2	16	1653	1373	388.87
11	2	51.4	16	1032		193.03
12	2	77	16	1346		720.1
13	2	75.4	16	1948		682.06
14	2	92.8	16	1411		549.1
15	1	71.6	16			530
16	3	70.8	16	1660	1383	194

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	78.1	5	1861		644.735
2	1	51.1	5			253.273
3	2	68.7	5	1539		899.986
4	2	73.1	5	1420		195.999
5	3	59.4	5	1011	1116	571.482
6	3	93.1	5	1524	1725	654.165
7	2	89.6	5	1942		25.238
8	2	99.1	5	1641		591.482
9	2	88.5	5	1698		21.535
10	3	85.7	5	1095	1128	765.108
11	1	56.7	5			534.981
12	1	88.3	5			45.654
13	2	99.8	5	1891		671.577

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	1	59.7	16			140.822
2	3	86	16	1267	1289	641.28
3	3	96.7	16	1124	1514	240.86
4	2	97.6	16	1055		20.98
5	1	68.9	16			588.92
6	1	79.3	16			286.23
7	3	54.2	16	1387	1255	136.63
8	2	54.7	16	1345		74.21
9	2	99.9	16	1473		219.67
10	1	76	16			61.48
11	3	52.1	16	1554	1329	504.03
12	1	99.1	16			388.16
13	2	93.4	16	1891		277.61
14	2	91.1	16	1638		596.5
15	1	89.2	16			438.7
16	2	71.6	16	1181		660.4

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	89.4	13	1665	1873	864.639
2	3	78.3	13	1023	1157	80.28
3	2	75.1	13	1394		920.64
4	1	52	13			692.21
5	2	82.7	13	1553		291.34
6	2	82.4	13	1588		840.83
7	1	92.3	13			837.72
8	1	84.8	13			27.99
9	3	86.9	13	1299	1434	327.82
10	2	54.7	13	1866		699.86
11	2	67.6	13	1113		729.9
12	1	70.1	13			130

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	2	98.7	11	1855		396.4
2	2	56.7	11	1142		428.127
3	1	86	11			190.554
4	1	50.1	11			328.411
5	1	92	11			527.769
6	2	69.8	11	1356		721.216
7	2	85.6	11	1500		140.013
8	2	76.1	11	1256		81.47
9	2	72	11	1339		611.897
10	1	64.8	11			271.734
11	2	73.6	11	1242		452.611
12	2	68	11	1021		845.729
13	2	50.3	11	1937		835.886
14	2	59.1	11	1205		603.843

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	2	89	19	1842		110.326
2	2	98.5	19	1486		691.9
3	2	97.3	19	1506		680.9
4	1	73.3	19			266.34
5	2	92.8	19	1529		14.51
6	3	95.8	19	1195	1717	778.41
7	3	93.5	19	1526	1396	217.73
8	1	97.8	19			208.39
9	2	95.2	19	1721		203.55
10	1	64.5	19			926.4

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	3	84.3	14	1720	1992	714.745
2	3	51.6	14	1689	1005	1145.267
3	2	57.2	14	1648		457.323
4	3	53.1	14	1116	1118	233.84
5	2	60.6	14	1206		1095.797
6	2	90.3	14	1649		481.143
7	2	55.1	14	1015		1074.15
8	2	83.4	14	1223		1172.667
9	2	88	14	1855		1189.333

Radar Type 6 - Radar Statistical Performance

Trail #	1=Detection 0=No Detection	Trail #	1=Detection 0=No Detection
1	1	16	1
2	1	17	1
3	1	18	1
4	1	19	1
5	1	20	1
6	1	21	0
7	1	22	1
8	1	23	1
9	1	24	1
10	1	25	1
11	1	26	1
12	1	27	1
13	1	28	1
14	1	29	1
15	1	30	1
Detection Percentage (%)			96.7%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
28	5510	84	1	5502	3
47	5494	141	8	5494	24
60	5501	180	13	5493	39
78	5497	234	42	5490	126
83	5503	249	48	5497	144
89	5507	267	67	5506	201
--	--	--	73	5491	219
--	--	--	83	5498	249
--	--	--	93	5500	279

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
53	5493	159	23	5490	69
63	5510	189	37	5493	111
71	5498	213	53	5506	159
--	--	--	88	5504	264

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5506	21	8	5491	24
21	5509	63	36	5499	108
34	5497	102	37	5504	111
56	5501	168	83	5500	249
88	5490	264	98	5506	294

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5496	9	2	5509	6
12	5497	36	28	5496	84
22	5499	66	31	5508	93
69	5509	207	44	5492	132
88	5510	264	52	5491	156
--	--	--	64	5495	192

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5492	9	1	5493	3
17	5495	51	14	5494	42
37	5498	111	59	5504	177
55	5491	165	--	--	--
93	5494	279	--	--	--

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
2	5499	6	39	5490	117
5	5496	15	53	5491	159
38	5501	114	--	--	--
56	5503	168	--	--	--
63	5495	189	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
44	5496	132	4	5500	12
62	5498	186	42	5510	126
67	5495	201	44	5490	132
73	5507	219	66	5492	198
95	5505	285	76	5506	228
99	5494	297	87	5502	261

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
28	5506	84	1	5501	3
39	5496	117	28	5504	84
75	5507	225	36	5490	108
79	5508	237	56	5495	168
81	5491	243	83	5497	249

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
73	5504	219	39	5506	117
77	5503	231	79	5499	237
81	5506	243	87	5498	261
--	--	--	100	5509	300

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5491	63	17	5507	51
22	5501	66	22	5508	66
38	5504	114	65	5497	195
46	5502	138	66	5503	198
71	5500	213	--	--	--
73	5510	219	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
43	5510	129	28	5510	84
--	--	--	30	5498	90
--	--	--	41	5499	123
--	--	--	48	5507	144
--	--	--	73	5492	219
--	--	--	78	5490	234

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5503	6	48	5490	144
18	5492	54	94	5493	282
24	5501	72	--	--	--
36	5497	108	--	--	--
64	5493	192	--	--	--
78	5500	234	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
39	5497	117	43	5495	129
48	5506	144	45	5491	135
80	5505	240	59	5493	177
84	5495	252	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
51	5491	153	61	5498	183
--	--	--	76	5510	228
--	--	--	77	5491	231
--	--	--	83	5496	249

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5491	24	11	5505	33
16	5499	48	20	5504	60
56	5510	168	46	5501	138
58	5498	174	64	5503	192
59	5500	177	71	5494	213
78	5495	234	72	5493	216
--	--	--	84	5491	252

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/05
Test Item	Radar Statistical Performance Check (802.11ac-VHT40 mode – 5510MHz) – Mode 2		

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	818	65	1
2	5492	1	618	86	1
3	5516	1	838	63	1
4	5495	1	678	78	1
5	5521	1	778	68	1
6	5498	1	518	102	1
7	5499	1	878	61	1
8	5494	1	898	59	1
9	5504	1	3066	18	1
10	5506	1	578	92	1
11	5525	1	738	72	1
12	5510	1	658	81	1
13	5512	1	698	76	1
14	5528	1	938	57	1
15	5529	1	558	95	1
16	5518	1	2718	20	1
17	5517	1	1814	30	1
18	5514	1	2642	20	1
19	5519	1	2023	27	1
20	5520	1	1803	30	1
21	5496	1	1204	44	1
22	5522	1	2907	19	1
23	5501	1	1866	29	1
24	5524	1	2250	24	1
25	5523	1	2376	23	1
26	5526	1	2861	19	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5527	1	948	56	1
28	5508	1	1973	27	1
29	5515	1	2128	25	1
30	5529	1	1958	27	1
Detection Percentage (%)					100.0%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	3.3	158	24	1
2	5492	3.1	187	23	0
3	5516	3.4	150	29	1
4	5495	2.2	215	23	1
5	5521	2.1	200	23	0
6	5498	1.7	207	25	1
7	5499	4.8	175	24	1
8	5494	3.9	190	26	0
9	5504	3.7	200	23	1
10	5506	2.8	203	29	1
11	5525	2.9	175	26	1
12	5510	2.7	205	28	1
13	5512	2.2	219	25	1
14	5528	4.5	205	28	1
15	5529	4.6	216	24	1
16	5518	4.6	204	25	1
17	5517	2.7	163	28	1
18	5514	4.3	193	25	1
19	5519	1.9	185	27	1
20	5520	1.3	217	24	1
21	5496	3	215	25	0
22	5522	3.3	199	24	1
23	5501	4.8	184	27	1
24	5524	4.5	217	24	1
25	5523	2.9	213	26	1
26	5526	4	227	29	0
27	5527	2.4	181	24	0
28	5508	2.3	168	28	1
29	5515	4.8	209	26	1
30	5529	2.4	185	24	0
Detection Percentage (%)					76.7%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	9.5	430	18	1
2	5492	6.3	316	18	1
3	5516	8.7	231	17	1
4	5495	7	354	17	1
5	5521	8.6	295	17	1
6	5498	9	250	17	1
7	5499	6	283	17	0
8	5494	6.4	488	17	1
9	5504	9.5	426	17	1
10	5506	6.2	368	17	1
11	5525	8.3	362	16	1
12	5510	6.9	339	18	1
13	5512	6.9	242	17	1
14	5528	6.3	384	18	1
15	5529	7.9	227	17	1
16	5518	8.6	299	17	1
17	5517	7.6	253	16	0
18	5514	7.3	433	16	1
19	5519	7.8	494	17	1
20	5520	8.9	244	17	0
21	5496	8.7	342	16	1
22	5522	7.9	428	18	0
23	5501	6.1	492	18	0
24	5524	6.9	222	17	1
25	5523	7.5	240	17	1
26	5526	6.7	395	17	1
27	5527	8.1	203	16	0
28	5508	9.1	342	18	1
29	5515	9.3	297	18	1
30	5529	9.6	238	17	1
Detection Percentage (%)					80.0%

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	275	13	1
2	5492	16.7	364	16	1
3	5516	19.4	247	15	1
4	5495	14.9	327	15	1
5	5521	17.8	365	14	1
6	5498	11.4	273	16	1
7	5499	11.8	436	14	1
8	5494	14.7	252	14	1
9	5504	18.4	423	14	0
10	5506	13.2	435	14	1
11	5525	19.5	201	14	1
12	5510	12.7	232	15	0
13	5512	17	476	14	1
14	5528	15.8	489	16	0
15	5529	12.8	450	14	1
16	5518	12.1	210	14	1
17	5517	11.9	276	14	1
18	5514	14.3	221	15	0
19	5519	13	312	14	1
20	5520	20	204	12	1
21	5496	12.7	240	13	1
22	5522	11.7	484	14	1
23	5501	16.7	256	14	0
24	5524	11	223	15	1
25	5523	18.2	442	13	1
26	5526	14.1	274	13	1
27	5527	11.4	486	15	1
28	5508	17.9	483	15	1
29	5515	11.1	280	14	1
30	5529	15.2	385	13	1
Detection Percentage (%)					83.3%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (100%+80%+93.3%+76.7%)/4 = 87.5% (>80%)

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5510	1	5496.2	5497.4	1
2	5510	1	5497.4	5496.2	1
3	5510	1	5499.0	5498.6	1
4	5510	1	5498.2	5495.4	1
5	5510	1	5494.6	5493.4	1
6	5510	1	5526.2	5525.8	1
7	5510	1	5524.6	5526.2	1
8	5510	1	5526.2	5525	1
9	5510	1	5523.8	5521.4	1
10	5510	1	5523.8	5522.6	0
11	5497.8	1	5525.0	5521.4	1
12	5495	1	5523.0	5521.8	1
13	5497.4	1	5524.2	5525.8	1
14	5495	0	5526.2	5525	1
15	5493	1	5525.8	5525.8	1
Detection Percentage (%)					93.3%

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	2	94.4	8	1519		754.475
2	1	62.9	8			439.177
3	1	74	8			775.353
4	3	73	8	1274	1626	405.42
5	1	67.3	8			604.567
6	2	55.4	8	1948		605.963
7	2	89	8	1098		1033.15
8	1	98.1	8			353.397
9	1	86.3	8			127.533

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	3	53.7	14	1906	1396	175.113
2	2	98.5	14	1952		222.165
3	3	54.2	14	1621	1650	315.067
4	2	93.3	14	1821		448.82
5	1	86.4	14			0.283
6	2	83.9	14	1963		129.987
7	2	63.7	14	1581		246.72
8	2	76.1	14	1150		49.133
9	3	82.5	14	1792	1624	404.557
10	3	60	14	1397	1441	519.23
11	1	93.7	14			24.313
12	2	98.9	14	1876		501.047
13	3	90.1	14	1415	1275	628.51
14	2	90.7	14	1437		402.403
15	2	72.1	14	1379		59.607
16	2	63.2	14	1035		222.5
17	2	92.8	14	1816		592.733
18	2	65.9	14	1697		2.667

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	73.9	15	1444		159.542
2	2	54	15	1463		474.497
3	2	61.3	15	1330		375.574
4	1	74.5	15			835.331
5	2	95.8	15	1599		147.629
6	1	63.6	15			438.016
7	2	65.3	15	1142		661.723
8	2	53.8	15	1158		412.62
9	2	75.2	15	1399		554.857
10	2	66.6	15	1583		742.344
11	2	53.7	15	1532		599.271
12	3	59	15	1046	1216	808.029
13	1	68.2	15			11.086
14	2	89.6	15	1963		846.343

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	2	100	18	1690		168.034
2	3	87.9	18	1848	1229	297.34
3	2	97.5	18	1516		1052.68
4	1	59.2	18			961.84
5	1	64.8	18			549.25
6	2	80.3	18	1321		1032.98
7	2	74.3	18	1679		1079.83
8	3	67.3	18	1151	1475	1106.48
9	2	76.4	18	1811		285.7
10	2	69.4	18	1559		413

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	1	93.8	6			40.889
2	2	99.6	6	1554		172.971
3	3	98.6	6	1441	1688	545.055
4	1	83.8	6			3.523
5	2	52.4	6	1837		180.371
6	1	53.1	6			108.218
7	3	56.3	6	1313	1041	547.076
8	3	87.8	6	1319	1904	543.544
9	2	95.9	6	1928		362.361
10	2	64.9	6	1237		309.249
11	2	75.8	6	1004		78.856
12	2	79.3	6	1876		330.184
13	2	81	6	1009		130.872
14	2	75.2	6	1545		651.169
15	2	95.8	6	1566		565.947
16	1	87.4	6			462.765
17	2	55.3	6	1291		192.782

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	1	54.5	16			399.443
2	3	65.6	16	1134	1993	981.661
3	2	67.5	16	1946		590.292
4	2	85.3	16	2000		632.063
5	3	62.3	16	1286	1051	915.984
6	3	84.8	16	1192	1717	412.385
7	1	98.5	16			171.435
8	2	80.5	16	1586		914.866
9	1	80.4	16			557.917
10	1	68.1	16			973.918
11	2	58.2	16	1384		532.509

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	78.9	17	1327		681.048
2	1	64.3	17			272.49
3	3	56.5	17	1782	1675	9.03
4	3	72.1	17	1279	1712	32.45
5	3	61.2	17	1487	1034	495.45
6	2	61.5	17	1402		489.35
7	1	73	17			375.7
8	2	63	17	1326		786.28
9	1	53.1	17			390.51
10	2	51.1	17	1435		125.67
11	1	73.9	17			521.34
12	3	78.5	17	1748	1537	147.04
13	3	74.4	17	1091	1359	574.7
14	1	72.6	17			434
15	2	83	17	1415		306.3

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	62.3	12	1136	1281	616.907
2	2	62.5	12	1579		352.737
3	1	74.4	12			785.584
4	1	90.4	12			93.631
5	3	72.7	12	1256	1583	29.519
6	2	73.3	12	1224		105.616
7	2	94.6	12	1569		60.513
8	3	58.3	12	1403	1369	213.95
9	2	50.9	12	1280		74.267
10	2	55.8	12	1925		546.374
11	2	86.1	12	1358		272.641
12	3	90.7	12	1172	1590	315.899
13	3	60.6	12	1852	1211	325.686
14	1	51.2	12			707.943

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	52.1	18	1002		519.966
2	1	73.9	18			70.83
3	2	83.3	18	1216		514.617
4	2	93	18	1926		608.31
5	1	76.6	18			343.783
6	2	80.6	18	1617		417.167
7	2	50.8	18	1613		637.26
8	2	62.2	18	1119		416.553
9	2	52.6	18	1155		596.997
10	2	94.9	18	1203		374.08
11	1	83.5	18			568.363
12	2	72.6	18	1962		366.847
13	2	71	18	1154		245.71
14	1	80.4	18			199.353
15	3	72.9	18	1962	1622	124.197
16	2	86	18	1061		532.7
17	2	60.4	18	1800		347.333
18	1	80	18			177.067

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	68.1	6	1652		743.201
2	2	59.8	6	1237		233.568
3	2	76.2	6	1760		365.61
4	1	56.8	6			128.04
5	3	59.1	6	1473	1911	544.53
6	2	85.5	6	1075		55.36
7	2	99.6	6	1666		359.96
8	3	62.3	6	1260	1636	393.17
9	1	69	6			730.55
10	2	51.3	6	1129		54.58
11	2	63.8	6	1957		363.81
12	2	67.9	6	1790		291.65
13	2	64.3	6	1976		265.95
14	2	86.2	6	1129		456.4
15	2	93.6	6	1624		235.6
16	2	81.4	6	1919		50

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	79.4	17	1277		15.235
2	2	97.6	17	1325		612.193
3	1	97.1	17			849.526
4	2	81.9	17	1577		137.809
5	2	83.5	17	1924		277.722
6	1	88.1	17			475.345
7	1	70	17			535.038
8	2	96.8	17	1587		777.012
9	2	65	17	1465		596.425
10	1	79.9	17			397.388
11	3	87.4	17	1924	1879	198.681
12	2	59.7	17	1070		145.954
13	1	88.9	17			83.577

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	2	51.4	10	1284		229.255
2	2	72.2	10	1593		242.93
3	2	54.9	10	1623		285.49
4	3	97.9	10	1279	1329	299.8
5	2	93.9	10	1238		688.25
6	3	70.4	10	1393	1709	307.77
7	3	94.2	10	1307	1630	464.94
8	1	83.1	10			678.26
9	2	72.7	10	1909		624.11
10	3	88.7	10	1094	1060	719.3
11	1	75.9	10			313.98
12	1	97.2	10			310.41
13	2	91.8	10	1657		425
14	2	58.9	10	1831		12.2
15	1	95.9	10			135.1

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	3	58.2	16	1909	1342	159.554
2	3	69.9	16	1619	1794	322.05
3	2	70.3	16	1245		619.4
4	1	52.3	16			798.04
5	1	89	16			157
6	2	88.7	16	1905		75.6
7	3	79.5	16	1364	1912	700.63
8	2	78.2	16	1215		247.97
9	1	54.2	16			31.43
10	2	87.7	16	1484		127.7
11	1	81.2	16			503.1
12	2	68.7	16	1392		109.5

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	2	63.6	10	1801		59.449
2	3	64.7	10	1925	1019	799.977
3	2	89.5	10	1424		248.953
4	1	56.1	10			903.9
5	2	96.2	10	1961		159.847
6	2	83.2	10	1456		519.413
7	2	57.1	10	1992		29.44
8	2	76.4	10	1587		935.867
9	1	77.3	10			99.533

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	2	50.5	5	1497		114.054
2	1	87.2	5			589.243
3	2	61.9	5	1672		74.537
4	2	78.5	5	1305		421.08
5	1	77.3	5			174.213
6	1	72.9	5			546.177
7	2	89.1	5	1627		606.13
8	2	91.7	5	1378		330.263
9	2	99.3	5	1291		229.077
10	2	54.7	5	1040		474.93
11	2	93.7	5	1508		311.153
12	1	57.5	5			300.137
13	1	94.4	5			545.92
14	1	76.1	5			78.053
15	2	55.4	5	1968		470.117
16	1	80.4	5			262.6
17	2	93.1	5	1130		114.433
18	2	96.9	5	1710		595.767

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	54.2	16	1313		497.344
2	2	98.6	16	1619		196.388
3	2	79.8	16	1799		484.502
4	2	97.1	16	1334		350.113
5	1	86.7	16			226.854
6	3	76.2	16	1349	1242	182.195
7	3	96.3	16	1686	1291	189.516
8	2	79.2	16	1327		50.827
9	3	68.6	16	1942	1554	391.198
10	3	70.8	16	1709	1316	398.109
11	1	77.1	16			510.801
12	3	79.6	16	1345	1769	532.782
13	2	69.3	16	1906		557.823
14	2	70.6	16	1057		82.584
15	2	82.4	16	1912		99.085
16	3	98.3	16	1729	1053	294.836
17	2	85.7	16	1458		392.837
18	2	50.6	16	1748		485.058
19	2	90.6	16	1314		9.579

Type 5 Radar Waveform_17

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	72.5	13			294.797
2	3	91.5	13	1349	1349	323.31
3	3	81.5	13	1004	1288	223.05
4	3	70.4	13	1467	1537	537.38
5	2	59.8	13	1505		91.37
6	2	60.9	13	1967		223.89
7	2	90.9	13	1615		104.33
8	2	82.4	13	1876		614.71
9	1	64.1	13			109
10	1	68.2	13			255.74
11	2	76.2	13	1063		705.38
12	2	89.8	13	1820		217.85
13	1	83.2	13			478.29
14	2	91.7	13	1128		310.2
15	2	60.3	13	1040		592.9
16	1	60.7	13			52.7

Type 5 Radar Waveform_18

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	75.9	19	1903		693.639
2	1	86.1	19			492.268
3	3	88	19	1934	1175	259.055
4	2	55.1	19	1972		79.973
5	2	55.9	19	1658		225.391
6	3	50.2	19	1029	1143	538.728
7	1	52.6	19			590.456
8	2	99	19	1935		11.864
9	1	90.5	19			256.761
10	3	72.7	19	1816	1160	429.619
11	3	72.7	19	1743	1129	500.246
12	3	67.4	19	1045	1047	24.324
13	3	86.9	19	1597	1701	285.302
14	1	56.8	19			198.099
15	3	91	19	1713	1996	37.417
16	3	86.1	19	1652	1550	209.065
17	2	95.1	19	1070		185.882

Type 5 Radar Waveform_19

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	78.9	11	1386		186.471
2	1	52.3	11			568.663
3	1	85.2	11			907.266
4	2	66.2	11	1744		377.859
5	2	51.2	11	1600		857.512
6	2	70.7	11	1370		29.035
7	1	85.4	11			213.538
8	3	97.3	11	1588	1722	395.962
9	3	58.7	11	1076	1061	401.315
10	2	85.2	11	1863		523.858
11	2	78	11	1832		364.471
12	1	76.5	11			816.154
13	2	52.8	11	1210		725.877

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	1	61.7	6			1327.31
2	1	57.6	6			979.247
3	2	79.1	6	1021		520.063
4	3	79.1	6	1750	1066	162.98
5	3	72.2	6	1385	1746	705.757
6	2	60.7	6	1783		1156.383
7	3	80.5	6	1940	1678	913.67
8	2	57.1	6	1844		520.797
9	2	86.3	6	1034		1106.633

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	78.6	8	1618		424.646
2	2	98.5	8	1294		1268.347
3	3	58.6	8	1203	1265	589.493
4	1	67.7	8			304.32
5	2	97	8	1370		270.867
6	3	66.3	8	1549	1773	857.073
7	2	55.8	8	1164		184.06
8	2	85.4	8	1484		323.947
9	2	88.9	8	1454		828.133

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	2	94.8	7	1025		446.148
2	3	56.2	7	1881	1867	552.201
3	3	53.4	7	1804	1822	555.732
4	1	59.5	7			424.183
5	2	59.2	7	1012		555.054
6	2	77.7	7	1876		213.255
7	2	76.4	7	1294		332.506
8	1	56.6	7			493.637
9	2	55.6	7	1644		435.848
10	3	63.6	7	1055	1812	484.019
11	2	82.9	7	1145		11.841
12	1	91.6	7			230.432
13	2	61.3	7	1362		435.883
14	2	95	7	1629		433.754
15	3	72.1	7	1797	1861	358.325
16	2	61.1	7	1938		361.496
17	2	71.3	7	1749		352.537
18	2	75.9	7	1336		152.658
19	2	64.9	7	1935		607.979

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	83.4	10	1478		765.615
2	2	84.4	10	1472		516.42
3	2	92.8	10	1702		874.73
4	2	72.8	10	1648		806.78
5	1	99.7	10			334.61
6	3	50.3	10	1256	1451	227.79
7	1	58	10			455.68
8	2	71.8	10	1538		252.35
9	2	84.2	10	1232		444.69
10	3	51.8	10	1853	1169	4.22
11	3	96.6	10	1243	1311	157.5
12	2	56.4	10	1817		581.6

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	1	68	19			304.113
2	3	79.5	19	1634	1068	214.29
3	2	57.2	19	1842		128.76
4	2	51.2	19	1297		790.52
5	2	93	19	1886		221.2
6	2	65.1	19	1487		625.25
7	1	90	19			630.89
8	2	74.6	19	1588		15.81
9	3	76.1	19	1016	1011	662.08
10	3	51	19	1872	1779	239.23
11	2	73.5	19	1275		659.92
12	2	64	19	1549		632.19
13	1	91.4	19			350.35
14	1	76.9	19			145.3
15	1	54.2	19			736.6

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	1	94.9	16			1267.08
2	1	76.1	16			610.06
3	2	57.2	16	1495		1078.5
4	1	53.2	16			1095.33
5	2	76.3	16	1234		51.07
6	3	54.1	16	1164	1983	1405.81
7	1	61.8	16			1346.8
8	2	68.5	16	1211		102.9

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	70.6	19	1858		458.511
2	1	51.1	19			83.541
3	1	94.5	19			614.29
4	3	79.2	19	1574	1358	722.72
5	1	63.2	19			639.32
6	2	60.6	19	1074		591.35
7	2	57.9	19	1511		128.56
8	3	60.4	19	1587	1373	375.33
9	3	64.3	19	1929	1882	555.33
10	2	69.9	19	1611		329.61
11	3	50.8	19	1798	1869	610.21
12	2	79.2	19	1859		55.49
13	2	88.2	19	1996		554.33
14	3	76.5	19	1573	1464	30.91
15	1	78	19			737.6
16	1	56.8	19			73.5

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	2	60.8	18	1690		342.196
2	2	71.7	18	1267		484.157
3	1	56.5	18			189.754
4	2	86.1	18	1134		253.121
5	2	79.8	18	1808		467.649
6	3	66.7	18	1782	1272	206.066
7	1	64.1	18			568.183
8	1	75.6	18			151.06
9	1	88.8	18			415.027
10	2	77.1	18	1906		372.184
11	3	59.6	18	1652	1656	327.801
12	2	96.7	18	1878		194.439
13	2	87.3	18	1607		160.486
14	2	81.2	18	1772		92.343

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	2	87.1	8	1878		104.812
2	3	85.7	8	1693	1588	285.943
3	2	86.9	8	1989		114.287
4	3	54.9	8	1865	1497	85.38
5	3	71.4	8	1125	1555	389.103
6	3	72.3	8	1189	1523	321.177
7	1	94	8			320.03
8	1	58.8	8			502.883
9	1	79.5	8			649.977
10	1	53.5	8			460.33
11	2	92.9	8	1234		620.343
12	2	63.4	8	1004		335.277
13	2	80.8	8	1951		202.85
14	1	87.6	8			12.613
15	2	87.1	8	1271		381.837
16	2	68.9	8	1260		208.1
17	3	83.5	8	1229	1504	98.233
18	2	92.3	8	1523		296.467

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	1	79.1	10			278.552
2	3	61.1	10	1343	1510	612.52
3	2	82.4	10	1435		403.65
4	2	91	10	1777		532.6
5	3	87.2	10	1643	1113	112.28
6	2	52.1	10	1914		49.39
7	3	82.7	10	1673	1857	30.64
8	2	62.3	10	1979		537.58
9	2	62.4	10	1608		4.73
10	2	69.3	10	1223		606.08
11	2	79.3	10	1947		690.5
12	3	52.1	10	1407	1412	892.4

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	83.8	8	1057		471.717
2	2	89.9	8	1264		371.237
3	2	67.8	8	1633		335.674
4	1	64.7	8			262.811
5	2	69.3	8	1898		578.139
6	2	88.6	8	1587		773.956
7	2	65.6	8	1125		6.923
8	1	60.5	8			361.73
9	2	57.2	8	1098		471.437
10	2	95.5	8	1890		143.824
11	3	71.4	8	1901	1931	615.091
12	1	64.8	8			272.969
13	2	95.7	8	1005		274.686
14	3	61.3	8	1046	1984	563.843

Radar Type 6 - Radar Statistical Performance

Trail #	1=Detection 0=No Detection	Trail #	1=Detection 0=No Detection
1	1	16	1
2	1	17	1
3	1	18	1
4	1	19	1
5	1	20	1
6	1	21	1
7	1	22	1
8	1	23	1
9	1	24	1
10	1	25	1
11	1	26	1
12	1	27	1
13	1	28	1
14	1	29	1
15	1	30	1
Detection Percentage (%)			100.0%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5496	9	6	5517	18
7	5502	21	12	5491	36
11	5508	33	22	5494	66
16	5494	48	41	5524	123
22	5507	66	42	5515	126
30	5518	90	66	5503	198
34	5526	102	70	5520	210
37	5490	111	73	5530	219
39	5503	117	76	5513	228
46	5511	138	84	5526	252
47	5500	141	100	5522	300
53	5495	159	--	--	--
67	5517	201	--	--	--
87	5512	261	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5494	18	9	5519	27
11	5523	33	14	5500	42
24	5515	72	29	5502	87
29	5501	87	30	5524	90
38	5519	114	34	5496	102
43	5495	129	36	5491	108
57	5525	171	46	5520	138
59	5527	177	58	5494	174
66	5491	198	59	5514	177
75	5502	225	60	5501	180
84	5526	252	61	5518	183
88	5524	264	83	5495	249
96	5498	288	99	5507	297

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5513	30	6	5501	18
27	5522	81	8	5497	24
38	5494	114	21	5527	63
41	5503	123	29	5517	87
45	5506	135	63	5508	189
50	5525	150	64	5514	192
62	5497	186	68	5500	204
78	5519	234	98	5510	294

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5525	24	3	5506	9
10	5513	30	4	5509	12
22	5499	66	12	5511	36
51	5530	153	25	5514	75
73	5501	219	26	5505	78
89	5506	267	29	5501	87

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
61	5512	183	14	5497	42
65	5492	195	15	5506	45
66	5502	198	37	5493	111
67	5528	201	49	5521	147
68	5493	204	52	5500	156
84	5501	252	65	5499	195
91	5504	273	68	5492	204
99	5520	297	80	5529	240
--	--	--	100	5518	300

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5519	30	18	5494	54
14	5496	42	30	5510	90
16	5507	48	64	5523	192
20	5512	60	67	5505	201
50	5518	150	80	5501	240
55	5524	165	90	5503	270
73	5497	219	--	--	--
76	5498	228	--	--	--
94	5493	282	--	--	--
95	5509	285	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
46	5521	138	17	5500	51
55	5495	165	31	5510	93
64	5491	192	40	5524	120
70	5502	210	45	5520	135
75	5523	225	54	5492	162
87	5493	261	56	5498	168
99	5504	297	58	5496	174
--	--	--	71	5490	213
--	--	--	80	5522	240
--	--	--	85	5501	255
--	--	--	90	5509	270
--	--	--	93	5508	279
--	--	--	95	5502	285

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5516	21	16	5493	48
15	5510	45	17	5512	51
38	5522	114	30	5498	90
39	5530	117	31	5495	93
40	5525	120	41	5521	123
53	5519	159	59	5506	177
54	5502	162	78	5528	234
78	5517	234	96	5505	288
79	5494	237	--	--	--
96	5495	288	--	--	--
100	5497	300	--	--	--

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5509	33	1	5527	3
23	5516	69	3	5522	9
24	5503	72	6	5512	18
36	5492	108	7	5505	21
44	5507	132	30	5519	90
51	5515	153	43	5515	129
73	5525	219	76	5518	228
74	5517	222	80	5523	240
78	5514	234	92	5517	276
94	5522	282	93	5501	279
98	5526	294	96	5499	288

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5508	15	3	5522	9
7	5497	21	32	5525	96
51	5512	153	36	5510	108
58	5499	174	41	5520	123
65	5495	195	57	5521	171
85	5492	255	67	5530	201
93	5493	279	70	5517	210
97	5522	291	84	5501	252
--	--	--	94	5505	282

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5508	18	6	5516	18
35	5518	105	15	5529	45
38	5490	114	23	5507	69
52	5494	156	27	5521	81
54	5503	162	30	5517	90
56	5497	168	32	5493	96
64	5509	192	48	5524	144
65	5514	195	60	5505	180
71	5499	213	61	5491	183
75	5505	225	63	5509	189
98	5492	294	67	5515	201
100	5501	300	92	5508	276

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5528	27	1	5529	3
16	5521	48	34	5528	102
25	5506	75	52	5518	156
47	5529	141	63	5493	189
51	5525	153	65	5516	195
63	5508	189	69	5509	207
68	5503	204	71	5522	213
69	5511	207	90	5490	270
81	5526	243	--	--	--
87	5501	261	--	--	--
88	5497	264	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5515	12	10	5513	30
15	5507	45	22	5530	66
32	5525	96	44	5525	132
38	5493	114	67	5506	201
67	5496	201	68	5517	204
75	5518	225	69	5493	207
76	5521	228	70	5497	210
77	5526	231	74	5494	222
78	5505	234	99	5507	297

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5491	3	30	5494	90
3	5524	9	31	5502	93
4	5494	12	55	5523	165
20	5517	60	57	5499	171
22	5493	66	60	5498	180
27	5527	81	71	5515	213
49	5529	147	87	5510	261
51	5506	153	90	5505	270
66	5501	198	92	5525	276
69	5496	207	--	--	--
74	5500	222	--	--	--
79	5508	237	--	--	--
96	5518	288	--	--	--
97	5516	291	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
27	5500	81	13	5492	39
30	5507	90	31	5494	93
42	5517	126	43	5491	129
52	5502	156	47	5513	141
53	5503	159	52	5520	156
65	5523	195	56	5515	168
67	5520	201	70	5521	210
91	5499	273	72	5518	216
--	--	--	83	5503	249
--	--	--	87	5517	261
--	--	--	88	5505	264
--	--	--	99	5497	297

Product	AC750 Wi-Fi Range Extender	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2021/06/05
Test Item	Radar Statistical Performance Check (802.11ac-VHT80 mode – 5530MHz) – Mode 2		

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	718	74	1
2	5520	1	538	98	1
3	5496	1	838	63	1
4	5504	1	758	70	1
5	5502	1	918	58	1
6	5494	1	598	89	1
7	5507	1	898	59	1
8	5510	1	3066	18	1
9	5555	1	578	92	1
10	5515	1	818	65	1
11	5517	1	558	95	1
12	5549	1	678	78	1
13	5522	1	698	76	1
14	5538	1	798	67	1
15	5527	1	658	81	1
16	5513	1	1921	28	1
17	5532	1	570	93	1
18	5535	1	896	59	1
19	5561	1	3063	18	1
20	5541	1	569	93	1
21	5544	1	1735	31	1
22	5546	1	2124	25	1
23	5567	1	2531	21	1
24	5552	1	719	74	1
25	5499	1	669	79	1
26	5558	1	1944	28	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5530	1	718	50	1
28	5564	1	538	79	1
29	5525	1	838	26	1
30	5569	1	758	67	1
Detection Percentage (%)					100.0%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1.4	227	24	1
2	5520	1.2	208	28	0
3	5496	2.2	224	26	1
4	5504	1.8	216	23	0
5	5502	2.7	194	24	1
6	5494	4.8	156	29	1
7	5507	1.3	205	23	1
8	5510	1.9	157	25	1
9	5555	3.2	150	29	1
10	5515	3.7	230	29	1
11	5517	2.8	161	27	1
12	5549	2.5	201	26	1
13	5522	4.5	155	28	1
14	5538	4.1	172	27	1
15	5527	4.9	176	27	0
16	5513	1.9	168	27	1
17	5532	1	221	28	0
18	5535	2	150	24	0
19	5561	3.1	215	24	1
20	5541	3.7	175	25	0
21	5544	3.1	222	28	1
22	5546	1.1	219	25	0
23	5567	3.4	204	24	1
24	5552	3.8	210	25	1
25	5499	4.3	175	29	1
26	5558	3.3	229	25	0
27	5530	1.6	222	28	1
28	5564	1.6	229	25	1
29	5525	4.2	219	27	1
30	5569	1.1	182	27	1
Detection Percentage (%)					73.3%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	7.9	368	17	1
2	5520	6.8	454	17	1
3	5496	7.5	473	18	1
4	5504	7.3	325	17	1
5	5502	6.2	233	18	0
6	5494	6.6	472	16	1
7	5507	6.4	315	17	1
8	5510	9.6	283	16	1
9	5555	10	305	18	0
10	5515	7.8	447	17	1
11	5517	8	216	17	1
12	5549	8.6	298	18	0
13	5522	6.3	467	17	1
14	5538	8.7	490	18	1
15	5527	6.2	466	16	1
16	5513	9.2	487	17	1
17	5532	6	229	17	1
18	5535	8.1	331	16	1
19	5561	9.6	308	18	1
20	5541	8	202	16	1
21	5544	9.5	257	17	0
22	5546	8	401	17	1
23	5567	9.8	210	17	1
24	5552	8.6	218	17	0
25	5499	7	416	17	1
26	5558	8.3	303	17	1
27	5530	6.5	206	17	0
28	5564	9.6	318	16	1
29	5525	8.3	478	17	1
30	5569	7.9	326	18	0
Detection Percentage (%)					76.7%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	12.3	467	14	1
2	5520	19.9	451	13	0
3	5496	13.7	481	15	1
4	5504	17.4	257	12	0
5	5502	11.3	472	13	1
6	5494	11.6	333	13	1
7	5507	16	299	14	1
8	5510	15.4	276	15	1
9	5555	13.1	381	15	1
10	5515	15.2	328	15	0
11	5517	11.6	479	16	1
12	5549	11.7	427	12	1
13	5522	18.6	351	13	0
14	5538	17	491	12	1
15	5527	18.4	398	14	1
16	5513	13.6	263	13	1
17	5532	17.9	474	14	0
18	5535	11.6	423	13	0
19	5561	17.7	434	14	1
20	5541	15.3	283	12	1
21	5544	20	246	14	1
22	5546	15.5	239	16	0
23	5567	18.5	232	15	1
24	5552	12.6	253	14	1
25	5499	11.3	293	13	1
26	5558	14.5	240	15	0
27	5530	13.4	362	14	1
28	5564	18.2	236	14	1
29	5525	17.1	375	14	0
30	5569	14.3	286	16	1
Detection Percentage (%)					70.0%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows: $\frac{P_d1+P_d2+P_d3+P_d4}{4}$ = (90%+86.7%+86.7%+80%)/4 = 85.9% (>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	1	16	5495.8	1
2	5530	1	17	5494.2	1
3	5530	1	18	5498.2	1
4	5530	1	19	5494.6	1
5	5530	1	20	5494.2	1
6	5530	1	21	5565.8	1
7	5530	1	22	5566.6	1
8	5530	0	23	5563.4	1
9	5530	1	24	5561.8	1
10	5530	1	25	5561.4	1
11	5496.6	1	26	5567	1
12	5493.8	1	27	5564.6	1
13	5497.8	1	28	5563	1
14	5494.2	1	29	5563.8	1
15	5499	1	30	5567	1
Detection Percentage (%)					96.7%

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	2	67.9	5	1175		366.203
2	1	94.2	5			396.098
3	2	91.2	5	1164		7.835
4	1	77.6	5			148.063
5	3	50.4	5	1474	1530	656.171
6	2	84.7	5	1148		585.078
7	3	91.2	5	1518	1881	123.946
8	2	50.1	5	1559		253.664
9	3	96	5	1774	1828	58.971
10	2	62.6	5	1331		479.379
11	2	83.6	5	1929		13.616
12	2	81.3	5	1667		189.064
13	3	96	5	1275	1594	241.122
14	3	80.7	5	1619	1715	481.269
15	1	61.1	5			291.347
16	1	72.2	5			136.965
17	3	59.8	5	1483	1325	555.082

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	83	5	1260		106.651
2	2	81.9	5	1154		461.02
3	3	61.7	5	1453	1154	265.63
4	2	86.7	5	1984		774.03
5	2	83.4	5	1456		426.11
6	2	71.8	5	1061		428.82
7	1	62.4	5			965
8	2	87.3	5	1444		772.77
9	2	61.4	5	1666		1062.9
10	2	69.5	5	1762		966.9

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	3	62.9	7	1714	1313	448.042
2	3	60.1	7	1646	1863	261.386
3	2	68	7	1552		276.877
4	3	62.6	7	1471	1089	239.82
5	1	81.6	7			510.023
6	2	75.9	7	1457		557.877
7	1	73.8	7			333.17
8	1	51.4	7			317.683
9	2	50.8	7	1518		312.207
10	2	66.1	7	1301		467.36
11	3	76	7	1107	1795	565.313
12	2	82.2	7	1298		393.257
13	1	73.3	7			357.52
14	2	65.1	7	1544		521.323
15	2	58.6	7	1034		18.307
16	3	61.2	7	1258	1514	75.6
17	2	79	7	1811		645.933
18	1	63.4	7			591.467

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	59.9	12	1679	1337	578.245
2	2	91.2	12	1912		618.38
3	3	77.9	12	1886	1501	734.6
4	2	76.6	12	1494		686.48
5	2	67.6	12	1968		285.6
6	3	83	12	1176	1066	14.58
7	2	64.7	12	1225		672.77
8	2	77.1	12	1893		69.89
9	2	51.8	12	1914		348.97
10	2	83.9	12	1193		364.94
11	1	62.8	12			615.52
12	3	66.2	12	1376	1870	391.59
13	2	93.5	12	1384		443.21
14	2	90.7	12	1889		426
15	2	77.3	12	1645		127.5
16	3	74.9	12	1284	1780	17.7

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	3	56.6	19	1929	1001	243.436
2	3	86	19	1820	1834	220.43
3	1	87.1	19			62.41
4	1	62.8	19			75.32
5	2	77.7	19	1894		523.81
6	3	73.6	19	1659	1446	577.09
7	1	67.9	19			726.22
8	3	92.8	19	1002	1433	657.6
9	2	76.2	19	1836		335.9
10	1	74.5	19			639.94
11	2	94.3	19	1049		52.78
12	1	83.4	19			81.96
13	2	78.4	19	1811		251.44
14	3	70	19	1677	1448	412.3
15	2	94.3	19	1722		125.7

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	1	53.2	12			131.868
2	2	81.6	12	1641		425.001
3	3	52.7	12	1212	1531	361.192
4	2	51.6	12	1722		43.833
5	1	59	12			145.614
6	3	97.8	12	1806	1809	147.375
7	2	81.9	12	1462		553.556
8	2	95.6	12	1271		422.547
9	3	98.9	12	1524	1242	520.358
10	2	73.1	12	1079		129.669
11	2	80.9	12	1749		574.941
12	2	91.3	12	1078		323.372
13	1	73.2	12			150.263
14	2	86.9	12	1072		241.644
15	2	75	12	1010		6.545
16	1	64.6	12			581.216
17	2	66.3	12	1839		162.737
18	2	65.6	12	1723		180.758
19	2	93.4	12	1511		329.079

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	1	54.5	16			139.748
2	2	85	16	1351		651.663
3	2	74.8	16	1986		379.506
4	1	77.3	16			124.849
5	2	93.6	16	1396		770.152
6	3	85.4	16	1875	1242	747.945
7	3	55	16	1886	1588	130.028
8	2	62	16	1591		722.412
9	2	72.8	16	1425		435.745
10	2	94.4	16	1571		568.618
11	3	58.4	16	1142	1208	593.161
12	3	78.9	16	1881	1150	596.554
13	2	61.6	16	1992		728.777

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	2	77	9	1596		258.443
2	1	73.1	9			397.491
3	3	81.6	9	1147	1716	424.682
4	3	79.4	9	1850	1180	598.013
5	2	90.3	9	1293		408.954
6	1	96.7	9			501.965
7	1	57.6	9			981.415
8	2	75.4	9	1096		993.626
9	2	57.1	9	1779		862.307
10	2	95.4	9	1523		660.018
11	2	50.3	9	1111		121.209

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	1	64	16			216.91
2	1	64.5	16			601.791
3	2	52.5	16	1695		231.352
4	2	75.2	16	1880		388.033
5	3	79.9	16	1263	1447	124.394
6	1	77	16			447.215
7	2	85.6	16	1398		541.266
8	1	74	16			559.127
9	1	82.9	16			102.048
10	2	53.4	16	1249		53.549
11	2	73.2	16	1991		541.141
12	3	87.5	16	1309	1583	597.582
13	3	85.3	16	1640	1283	321.913
14	3	62.1	16	1746	1852	33.794
15	1	57.9	16			615.085
16	2	84.4	16	1130		387.606
17	3	97	16	1458	1738	25.137
18	2	66.1	16	1071		216.558
19	1	89.1	16			343.879

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	57.1	17	1146		309.266
2	2	61.6	17	1259		94.673
3	2	68.7	17	1544		189.677
4	2	80.8	17	1679		310.25
5	2	80.4	17	1978		526.143
6	3	51.4	17	1006	1962	498.787
7	2	57.2	17	1991		357.04
8	2	99.4	17	1027		585.933
9	3	76.2	17	1320	1611	557.637
10	2	67.8	17	1212		621.79
11	3	72.1	17	1440	1134	637.673
12	3	61.3	17	1393	1096	459.117
13	3	96.1	17	1150	1966	117.1
14	3	91.6	17	1710	1416	200.013
15	1	53.7	17			351.967
16	2	62.1	17	1229		203.4
17	2	93.3	17	1081		501.533
18	2	70.5	17	1758		331.967

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	71.1	14	1745		134.147
2	2	93.7	14	1176		986.37
3	2	66.4	14	1654		1045.71
4	2	57.5	14	1229		116.62
5	2	82.1	14	1988		327.11
6	2	89.3	14	1512		1034.97
7	2	50.1	14	1421		260.34
8	1	61.3	14			478.06
9	1	83	14			472
10	3	54.6	14	1288	1972	1133

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	99.5	7			755.239
2	3	83.2	7	1692	1084	6.21
3	3	71.2	7	1498	1578	79.01
4	2	80.7	7	1402		837.08
5	1	52.6	7			590.95
6	3	89.6	7	1696	1101	616.23
7	1	54	7			499.56
8	3	51.9	7	1572	1903	638.99
9	3	84.9	7	1953	1313	485.15
10	2	59.3	7	1115		50.51
11	3	69.6	7	1671	1073	608
12	1	51.4	7			290.4

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	1	73.4	17			426.412
2	2	62.3	17	1314		414.44
3	3	55.8	17	1137	1472	375.41
4	1	99.9	17			370.73
5	2	69.1	17	1516		336.59
6	3	55.2	17	1339	1714	161.68
7	2	55.3	17	1407		43.13
8	3	65.4	17	1542	1929	19.96
9	3	79.3	17	1836	1428	136.04
10	2	86.1	17	1175		474.59
11	1	68.5	17			379.27
12	3	60.5	17	1024	1885	233.21
13	2	56.5	17	1152		215.02
14	2	72.1	17	1190		347.9
15	2	95	17	1824		402.9
16	3	78.6	17	1116	1294	369.82
17	1	97.8	17			323.4
18	2	82.5	17	1936		336.4
19	1	63.9	17			371.6
20	3	74	17	1512	1992	225.9

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	2	51.8	8	1085		365.218
2	3	63.6	8	1641	1344	374.52
3	2	89.7	8	1651		146.33
4	2	81	8	1948		729.35
5	2	99.4	8	1997		406.75
6	1	94.9	8			212.63
7	2	88.2	8	1048		675.1
8	2	96.1	8	1224		274.27
9	2	53.7	8	1608		144.58
10	1	71.9	8			900.85
11	2	85.4	8	1058		313.6
12	2	86.9	8	1903		320.1

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	1	75.8	20			328.248
2	2	67	20	1791		465.021
3	1	51.6	20			472.392
4	2	60.9	20	1276		407.753
5	1	79.1	20			84.574
6	2	74.1	20	1399		19.125
7	1	94.4	20			15.836
8	2	55	20	1873		324.597
9	2	99.3	20	1897		591.838
10	3	91.4	20	1763	1817	583.269
11	1	75.6	20			114.611
12	2	70.9	20	1626		19.852
13	1	72.7	20			376.233
14	2	82.9	20	1260		539.024
15	2	91.7	20	1766		572.425
16	2	85.3	20	1671		364.036
17	2	75.4	20	1613		292.637
18	3	80	20	1449	1053	556.058
19	2	75.9	20	1800		504.679

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	3	86.7	12	1896	1417	255.904
2	2	52.8	12	1710		103.603
3	2	98.3	12	1425		559.066
4	1	64.8	12			308.499
5	3	54.8	12	1857	1966	24.262
6	3	83	12	1038	1593	816.635
7	3	96.9	12	1799	1377	858.348
8	1	92.4	12			696.562
9	2	90.2	12	1130		196.435
10	2	61.7	12	1408		783.978
11	2	50.7	12	1658		64.781
12	2	62.6	12	1906		771.654
13	2	57.2	12	1094		902.677

Type 5 Radar Waveform_17

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	99.9	8			702.614
2	1	59.5	8			277.857
3	2	82.7	8	1470		609.264
4	3	79.8	8	1126	1012	600.201
5	2	64.3	8	1125		453.029
6	2	92.9	8	1466		808.446
7	2	97.4	8	1081		343.983
8	3	98.2	8	1567	1814	507.35
9	2	99.2	8	1912		97.977
10	2	99.4	8	1015		755.254
11	3	55.7	8	1242	1059	777.931
12	3	61.4	8	1874	1719	187.609
13	3	51.2	8	1769	1365	702.886
14	3	51.2	8	1675	1334	783.843

Type 5 Radar Waveform_18

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	61.8	18	1964		554.82
2	2	90.9	18	1494		466.827
3	3	82.5	18	1855	1456	549.444
4	2	81.1	18	1263		234.561
5	3	52.5	18	1965	1000	54.429
6	2	66.9	18	1987		850.616
7	2	53.1	18	1696		760.593
8	2	92.2	18	1822		610.56
9	2	50.2	18	1931		183.307
10	3	98.5	18	1348	1941	139.324
11	3	78.1	18	1494	1988	421.651
12	2	53.7	18	1539		243.149
13	1	97.3	18			3.786
14	2	58.9	18	1039		627.243

Type 5 Radar Waveform_19

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	99.6	9			274.731
2	2	95.8	9	1359		22.951
3	1	67.4	9			734.03
4	2	61.7	9	1016		576.97
5	1	69.2	9			623.93
6	3	68.4	9	1383	1921	150.14
7	3	79.8	9	1868	1270	599.8
8	3	94.9	9	1066	1292	289.11
9	2	90.8	9	1419		459.99
10	2	97.8	9	1945		766.27
11	3	88.6	9	1747	1281	423.98
12	2	71.1	9	1566		251.82
13	2	74.9	9	1651		23.75
14	3	69	9	1102	1637	341.4
15	2	93.5	9	1107		411.5

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	3	86.4	8	1376	1939	180.259
2	2	79.2	8	1914		186.933
3	2	65.6	8	1387		643.846
4	1	52.8	8			68.369
5	2	53.3	8	1360		201.472
6	2	95.5	8	1012		344.735
7	2	53.9	8	1029		735.088
8	1	80.5	8			789.432
9	2	93.4	8	1443		630.265
10	1	66.8	8			514.928
11	1	68	8			185.411
12	1	91.6	8			767.254
13	2	56.8	8	1174		147.577

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	1	53.9	8			239.383
2	2	76	8	1897		653.133
3	2	62	8	1200		491.827
4	2	69.6	8	1932		59.69
5	3	64.1	8	1905	1810	307.633
6	3	68.7	8	1768	1853	155.757
7	1	54.8	8			420.14
8	3	87.6	8	1873	1794	285.423
9	3	75.5	8	1340	1293	606.157
10	1	70.2	8			199.87
11	2	55.9	8	1848		115.763
12	1	69.7	8			274.277
13	1	68.8	8			292.21
14	1	88.9	8			201.373
15	2	85.6	8	1261		200.037
16	2	53.9	8	1449		486.6
17	3	79.2	8	1703	1979	463.733
18	2	92.8	8	1534		633.167

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	1	71	6			617.599
2	2	99.7	6	1127		222.557
3	2	64.5	6	1727		415.224
4	3	93.3	6	1132	1431	370.691
5	1	59.3	6			408.369
6	3	90	6	1543	1690	257.046
7	3	59.6	6	1445	1865	564.713
8	1	71.9	6			8.95
9	2	87.6	6	1952		727.447
10	1	50.1	6			273.024
11	2	67.5	6	1183		849.941
12	2	82.4	6	1405		64.769
13	2	95.2	6	1897		335.686
14	3	55.3	6	1046	1392	138.343

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	1	64.5	14			627.111
2	2	72.8	14	1820		15.807
3	3	51	14	1955	1962	1242.863
4	2	82.4	14	1888		810.06
5	2	63.7	14	1106		520.657
6	2	52.8	14	1581		999.263
7	1	87.5	14			111.53
8	1	68.3	14			1158.567
9	3	82.4	14	1983	1585	581.333

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	1	88	18			435.105
2	2	54.5	18	1402		218.18
3	3	56.2	18	1188	1126	409.91
4	2	85.5	18	1298		337.27
5	3	64.1	18	1924	1712	378.15
6	3	73.9	18	1206	1393	707.42
7	2	52.7	18	1023		683.26
8	1	78.3	18			731.08
9	3	86.7	18	1816	1021	449.72
10	2	98.7	18	1977		484.1
11	2	91	18	1286		266.52
12	1	99.7	18			195.34
13	2	90.5	18	1769		748.7
14	1	81.2	18			239.6
15	3	73.5	18	1909	1627	399

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	1	73.1	19			346.838
2	2	81.6	19	1737		697.798
3	3	71.6	19	1070	1516	613.395
4	2	66.2	19	1982		118.193
5	2	99.1	19	1235		223.901
6	1	53.3	19			403.468
7	2	88.7	19	1430		573.526
8	2	81.3	19	1999		683.334
9	1	91.2	19			656.181
10	2	77.5	19	1673		34.989
11	2	79.8	19	1851		526.776
12	2	69.9	19	1665		606.304
13	2	85.3	19	1845		592.572
14	2	71.5	19	1611		371.659
15	3	76.3	19	1573	1854	318.447
16	3	91	19	1957	1413	463.165
17	2	58	19	1035		532.582

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	3	87.3	5	1278	1246	134.045
2	1	99.5	5			118.803
3	2	93.7	5	1877		468.51
4	1	87.5	5			549.9
5	3	92.3	5	1822	1912	336.6
6	2	98.9	5	1050		112.27
7	1	84.7	5			430.12
8	1	73.2	5			482.68
9	3	51.1	5	1647	1309	93.25
10	2	55.6	5	1855		243.28
11	1	69.4	5			598.05
12	2	85.6	5	1168		730.47
13	2	80.3	5	1322		495.26
14	2	78.5	5	1791		439.2
15	3	55.2	5	1348	1962	535.6
16	2	91	5	1854		742.6

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	1	86	11			79.628
2	3	83.6	11	1861	1261	969.657
3	3	65.6	11	1495	1646	67.503
4	1	70.4	11			737.22
5	3	64.8	11	1776	1620	728.907
6	1	72.8	11			337.163
7	1	67.4	11			697.81
8	3	65.1	11	1882	1187	921.267
9	1	81.5	11			312.933

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	2	63.9	15	1280		183.095
2	1	64.1	15			479.79
3	3	81.4	15	1151	1678	234.95
4	2	92.5	15	1137		362.86
5	3	82.1	15	1491	1507	382.18
6	3	64.1	15	1765	1235	354.8
7	2	60.1	15	1009		481.9
8	2	76.4	15	1149		289.85
9	2	50.6	15	1384		309.88
10	2	87.9	15	1049		392.2
11	1	76.4	15			290.16
12	1	90.9	15			13.33
13	2	59.8	15	1784		378.32
14	3	98.3	15	1712	1288	194.64
15	2	73	15	1432		338.49
16	2	63.6	15	1037		507.28
17	3	99	15	1756	1503	188.1
18	2	71.1	15	1389		467.7
19	2	58.8	15	1039		92
20	3	75.9	15	1786	1762	276.9

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	2	70.9	13	1935		1269.91
2	2	52	13	1367		1175.2
3	2	61.3	13	1039		992.54
4	1	66.1	13			872.14
5	2	85.7	13	1742		54.33
6	3	55.2	13	1546	1085	1109.13
7	2	84.6	13	1649		381.88
8	1	71.3	13			835.3

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	55.1	5	1617		735.805
2	2	98.3	5	1323		528.533
3	3	80.2	5	1299	1217	888.956
4	1	88.8	5			119.399
5	1	75.6	5			293.602
6	1	69.6	5			436.115
7	2	66.9	5	1993		361.298
8	2	78.1	5	1265		759.182
9	1	57.9	5			747.645
10	1	54.2	5			5.688
11	1	69.3	5			352.271
12	2	99.1	5	1792		378.754
13	3	75.6	5	1910	1240	144.977

Radar Type 6 - Radar Statistical Performance

Trail #	1=Detection 0=No Detection	Trail #	1=Detection 0=No Detection
1	1	16	1
2	1	17	1
3	1	18	1
4	1	19	1
5	1	20	1
6	1	21	1
7	1	22	1
8	1	23	1
9	1	24	1
10	1	25	1
11	1	26	1
12	1	27	1
13	1	28	1
14	1	29	1
15	1	30	1
Detection Percentage (%)			100.0%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5491	12	3	5560	9
9	5544	27	7	5532	21
16	5497	48	8	5565	24
17	5534	51	11	5527	33
28	5528	84	12	5492	36
29	5560	87	15	5548	45
30	5549	90	19	5558	57
38	5524	114	20	5545	60
41	5565	123	27	5546	81
42	5567	126	33	5490	99
46	5548	138	39	5534	117
47	5532	141	42	5498	126
57	5564	171	43	5520	129
70	5507	210	46	5553	138
72	5540	216	69	5549	207
76	5529	228	70	5519	210
85	5566	255	75	5493	225
96	5537	288	77	5505	231
--	--	--	83	5551	249
--	--	--	85	5499	255
--	--	--	88	5516	264
--	--	--	95	5541	285
--	--	--	100	5521	300

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5522	15	2	5526	6
15	5562	45	20	5548	60
33	5540	99	23	5508	69
40	5561	120	25	5558	75
42	5555	126	32	5552	96
51	5546	153	35	5560	105
60	5496	180	38	5543	114
65	5563	195	39	5512	117
75	5551	225	45	5556	135
78	5519	234	71	5569	213
81	5490	243	76	5507	228
83	5500	249	82	5531	246
96	5512	288	89	5564	267
98	5544	294	91	5494	273
--	--	--	97	5514	291

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5503	24	11	5562	33
20	5569	60	22	5515	66
29	5539	87	26	5516	78
32	5491	96	36	5570	108
34	5515	102	39	5535	117
35	5535	105	44	5508	132
37	5531	111	49	5503	147
42	5565	126	54	5505	162
47	5547	141	55	5497	165
49	5555	147	60	5495	180
56	5521	168	65	5557	195
76	5522	228	66	5512	198
78	5512	234	68	5541	204
80	5497	240	75	5567	225
81	5560	243	78	5501	234
83	5500	249	81	5531	243
96	5551	288	89	5511	267
--	--	--	91	5568	273
--	--	--	93	5556	279

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5499	9	2	5513	6
15	5542	45	13	5548	39
25	5549	75	19	5501	57
28	5536	84	26	5493	78
30	5495	90	34	5516	102
31	5527	93	35	5569	105
38	5544	114	36	5553	108
42	5551	126	39	5549	117
44	5559	132	54	5500	162
45	5519	135	57	5564	171
49	5555	147	68	5550	204
56	5518	168	71	5535	213
65	5558	195	73	5559	219
71	5508	213	75	5523	225
72	5541	216	84	5531	252
74	5560	222	93	5498	279
75	5545	225	96	5555	288
77	5530	231	98	5556	294
79	5563	237	99	5566	297

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5564	9	1	5546	3
7	5503	21	3	5509	9
32	5548	96	5	5550	15
37	5517	111	7	5507	21
38	5546	114	9	5522	27
48	5509	144	12	5563	36
49	5496	147	15	5535	45
72	5510	216	17	5495	51
74	5539	222	26	5505	78
75	5506	225	44	5513	132
78	5501	234	45	5558	135
82	5543	246	52	5512	156
84	5541	252	72	5518	216
91	5521	273	77	5493	231
95	5525	285	82	5529	246
--	--	--	90	5542	270
--	--	--	92	5533	276

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
15	5555	45	6	5526	18
36	5531	108	15	5522	45
37	5565	111	29	5538	87
43	5518	129	38	5490	114
46	5564	138	43	5528	129
47	5538	141	45	5549	135
57	5546	171	51	5505	153
64	5515	192	64	5519	192
81	5558	243	66	5532	198
84	5553	252	67	5504	201
92	5498	276	73	5570	219
93	5522	279	79	5529	237
--	--	--	80	5569	240
--	--	--	85	5554	255
--	--	--	86	5500	258
--	--	--	92	5541	276
--	--	--	93	5536	279
--	--	--	96	5494	288
--	--	--	97	5517	291

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5495	9	1	5511	3
5	5541	15	6	5532	18
6	5540	18	10	5497	30
14	5546	42	17	5565	51
18	5496	54	28	5538	84
20	5520	60	30	5512	90
25	5561	75	38	5513	114
27	5507	81	41	5561	123
30	5537	90	47	5537	141
32	5534	96	53	5516	159
37	5539	111	56	5549	168
38	5518	114	63	5519	189
50	5494	150	64	5496	192
63	5516	189	71	5541	213
67	5522	201	96	5494	288
71	5564	213	--	--	--
76	5568	228	--	--	--
77	5529	231	--	--	--
78	5509	234	--	--	--
79	5514	237	--	--	--
80	5500	240	--	--	--
84	5526	252	--	--	--
93	5511	279	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5490	12	9	5536	27
5	5550	15	15	5494	45
13	5512	39	16	5560	48
21	5513	63	20	5551	60
25	5565	75	22	5491	66
42	5503	126	25	5500	75
44	5555	132	27	5525	81
45	5523	135	32	5554	96
47	5556	141	42	5515	126
50	5494	150	43	5540	129
54	5506	162	44	5537	132
65	5515	195	47	5499	141
66	5539	198	49	5545	147
70	5532	210	54	5567	162
82	5538	246	63	5498	189
84	5536	252	65	5526	195
87	5500	261	66	5544	198
91	5524	273	69	5558	207
93	5564	279	89	5502	267
--	--	--	94	5495	282

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5498	9	2	5546	6
4	5524	12	10	5533	30
6	5492	18	18	5539	54
15	5513	45	20	5523	60
27	5543	81	21	5514	63
28	5552	84	32	5537	96
32	5538	96	35	5547	105
36	5495	108	53	5548	159
37	5544	111	58	5490	174
38	5542	114	61	5497	183
39	5500	117	70	5536	210
40	5511	120	71	5504	213
41	5560	123	73	5493	219
42	5539	126	93	5549	279
48	5530	144	95	5500	285
51	5516	153	99	5516	297
53	5557	159	--	--	--
56	5554	168	--	--	--
60	5531	180	--	--	--
70	5536	210	--	--	--
74	5545	222	--	--	--
75	5517	225	--	--	--
90	5548	270	--	--	--
92	5540	276	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5561	42	1	5563	3
22	5512	66	14	5557	42
36	5534	108	23	5528	69
37	5553	111	29	5495	87
39	5501	117	36	5548	108
54	5538	162	37	5518	111
58	5559	174	43	5555	129
59	5503	177	50	5541	150
62	5563	186	60	5538	180
69	5502	207	65	5546	195
71	5490	213	66	5490	198
75	5491	225	68	5558	204
81	5500	243	93	5491	279
87	5542	261	97	5516	291
89	5505	267	--	--	--
95	5515	285	--	--	--

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5527	3	8	5504	24
4	5526	12	10	5541	30
15	5515	45	15	5535	45
16	5528	48	23	5497	69
25	5505	75	25	5494	75
30	5519	90	26	5553	78
34	5495	102	30	5521	90
47	5540	141	52	5559	156
50	5520	150	80	5539	240
58	5552	174	81	5545	243
63	5516	189	83	5547	249
75	5554	225	85	5550	255
81	5551	243	86	5517	258
83	5531	249	94	5532	282
85	5537	255	96	5540	288
94	5533	282	--	--	--
95	5529	285	--	--	--
98	5522	294	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5534	12	3	5544	9
5	5525	15	5	5552	15
18	5546	54	6	5545	18
20	5493	60	14	5563	42
25	5549	75	15	5514	45
34	5508	102	16	5558	48
35	5524	105	25	5502	75
36	5526	108	29	5554	87
45	5537	135	33	5546	99
55	5528	165	44	5541	132
56	5563	168	49	5556	147
73	5496	219	50	5531	150
82	5492	246	55	5498	165
83	5522	249	77	5515	231
89	5503	267	79	5569	237
95	5533	285	87	5567	261
97	5550	291	88	5551	264
100	5542	300	89	5523	267
--	--	--	92	5559	276
--	--	--	100	5505	300

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5535	9	3	5522	9
7	5544	21	6	5535	18
17	5525	51	7	5531	21
19	5532	57	10	5557	30
30	5513	90	11	5519	33
33	5557	99	12	5539	36
38	5539	114	13	5568	39
44	5568	132	23	5541	69
50	5556	150	24	5496	72
54	5530	162	27	5553	81
56	5491	168	32	5543	96
57	5511	171	33	5517	99
59	5547	177	37	5491	111
60	5541	180	38	5498	114
78	5517	234	39	5563	117
80	5526	240	41	5552	123
87	5500	261	43	5528	129
88	5495	264	63	5559	189
99	5538	297	67	5542	201
100	5520	300	70	5547	210
--	--	--	74	5493	222
--	--	--	84	5515	252
--	--	--	85	5537	255
--	--	--	93	5569	279
--	--	--	97	5508	291

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5491	21	4	5499	12
36	5563	108	10	5545	30
37	5546	111	15	5540	45
43	5553	129	24	5497	72
51	5552	153	25	5534	75
64	5570	192	32	5558	96
67	5493	201	46	5548	138
71	5496	213	50	5504	150
84	5503	252	54	5503	162
90	5544	270	62	5564	186
--	--	--	63	5544	189
--	--	--	65	5524	195
--	--	--	66	5502	198
--	--	--	69	5526	207
--	--	--	71	5523	213
--	--	--	73	5535	219
--	--	--	74	5538	222
--	--	--	76	5546	228
--	--	--	80	5537	240
--	--	--	83	5565	249
--	--	--	92	5559	276
--	--	--	93	5532	279
--	--	--	99	5518	297

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5494	6	15	5524	45
5	5540	15	17	5509	51
15	5570	45	18	5552	54
18	5558	54	22	5494	66
19	5554	57	24	5563	72
28	5493	84	35	5520	105
29	5547	87	36	5499	108
34	5505	102	38	5508	114
46	5559	138	46	5522	138
47	5497	141	55	5567	165
50	5496	150	58	5515	174
62	5557	186	61	5495	183
66	5538	198	66	5506	198
73	5517	219	73	5504	219
77	5492	231	79	5553	237
87	5560	261	95	5542	285
92	5525	276			
95	5515	285			

6. CONCLUSION

The data collected relate only the item(s) tested and show that the device is in compliance with Part 15E of the FCC Rules.

The End

Appendix A - Test Setup Photograph

Refer to “ 2105TW0002-Setup Photo” file.

Appendix B - External Photograph

Refer to “ 2105TW0002-External Photo” file.

Appendix C - Internal Photograph

Refer to “ 2105TW0002-Internal Photo” file.