

FCC PART 15.407
RSS-247, ISSUE 2, FEBRUARY 2017
DYNAMIC FREQUENCY SELECTION
TEST REPORT

For

Grandstream Networks, Inc.

126 Brookline Ave., 3rd Floor Boston, MA 02215, USA

FCC ID: YZZGWN7605
IC:11964A-GWN7605

Report Type: Original Report	Product Type: 802.11ac Wave-2 2×2:2 Wi-Fi Access Point
Report Number:	RSZ200312004-00A1
Report Date:	2020-04-13
Reviewed By:	Ivan Cao Assistant manager 
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TABLE OF CONTENTS

GENERAL INFORMATION.....	3
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	3
OBJECTIVE	3
TEST METHODOLOGY	3
TEST FACILITY	3
DECLARATIONS.....	3
SYSTEM TEST CONFIGURATION.....	5
DESCRIPTION OF TEST CONFIGURATION	5
EUT EXERCISE SOFTWARE	5
EQUIPMENT MODIFICATIONS	5
SUPPORT EQUIPMENT LIST AND DETAILS	5
EXTERNAL CABLE.....	5
SUMMARY OF TEST RESULTS	6
APPLICABLE STANDARDS.....	7
DFS REQUIREMENT	7
DFS MEASUREMENT SYSTEM.....	11
SYSTEM BLOCK DIAGRAM.....	11
CONDUCTED METHOD	12
RADIATED METHOD.....	13
TEST PROCEDURE	13
TEST RESULTS.....	14
DESCRIPTION OF EUT	14
TEST EQUIPMENT LIST AND DETAILS.....	14
RADAR WAVEFORM CALIBRATION	15
TEST ENVIRONMENTAL CONDITIONS	15
CHANNEL AVAILABILITY CHECK TIME (CAC)	21
TEST PROCEDURE	21
CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME	24
TEST PROCEDURE	24
TEST RESULTS	24
NON-OCCUPANCY PERIOD.....	27
TEST PROCEDURE	27
TEST RESULT	27
DETECTION BANDWIDTH.....	28
TEST PROCEDURE	28
TEST RESULT	29
STATISTICAL PERFORMANCE CHECK	33
BRIDGE AND/OR MESH MODE.....	127

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product Name:	802.11ac Wave-2 2×2:2 Wi-Fi Access Point
EUT Model:	GWN7605
Frequency Range	5150-5250 MHz; 5250-5350 MHz; 5470-5725 MHz, 5725-5850 MHz
Modulation Technique	OFDM
Rated Input Voltage:	DC 48V from PoE
Serial Number:	RSZ200312004-RFA1
EUT Received Date:	2020.4.2
EUT Received Status:	Good

Objective

This report is prepared on behalf of **Grandstream Networks, Inc.** in accordance with Part 2-Subpart J, Part 15-Subparts E of the Federal Communications Commission's rules, and RSS-247, Issue 2, February 2017 of the Innovation, Science and Economic Development Canada.

The objective is to determine compliance with Dynamic Frequency Selection (DFS) of the FCC Part 15, Subpart E, section 15.407 and and RSS-247, Issue 2, February 2017 of the Innovation, Science and Economic Development Canada.

Test Methodology

FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industry Area, Tangxia, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 897218, the FCC Designation No. : CN1220.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

Declarations

BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "Δ". Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

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This report may contain data that are not covered by the accreditation scope and shall be marked with an asterisk “★”.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The EUT was configured for testing in an engineering mode which was provided by the manufacturer.

EUT Exercise Software

The test was performed under: 'IPOP.exe', which was provided by the manufacturer.

Equipment Modifications

N/A

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Dell	Laptop	E6410	00426-OEM-8992662-00497
Dell	Laptop	PP11L	QDS-BRCM133

External Cable

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
RJ45	NO	NO	10	PoE	EUT
RJ45	NO	NO	2	Laptop	PoE

SUMMARY OF TEST RESULTS

The following result table represents the list of measurements required under the CFR §47 Part 15.407(h) and RSS-247, Issue 2, February 2017, KDB: 905462 D02 UNII DFS Compliance Procedures New Rules v02

Items	Description of Test	Result
Detection Bandwidth	UNII Detection Bandwidth	Compliance
Performance Requirements Check	Initial Channel Availability Check Time (CAC)	Compliance
	Radar Burst at the Beginning of the CAC	Compliance
	Radar Burst at the End of the CAC	Compliance
In-Service Monitoring	Channel Move Time	Compliance
	Channel Closing Transmission Time	Compliance
	Non-Occupancy Period	Compliance
Radar Detection	Statistical Performance Check	Compliance

APPLICABLE STANDARDS

DFS Requirement

CFR §47 Part 15.407(h)& RSS-247, Issue 2, February 2017

FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

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

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

Table 2: Applicability of DFS requirements during normal operation

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

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
<i>U-NII Detection Bandwidth and Statistical Performance Check</i>	All BW modes must be tested	Not required
<i>Channel Move Time and Channel Closing Transmission Time</i>	Test using widest BW mode available	Test using the widest BW mode available for the link
<i>All other tests</i>	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) 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: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

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

Table 4: DFS Response Requirement Values

Parameter	Value
<i>Non-occupancy period</i>	Minimum 30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U- NII 99% transmission power bandwidth. See Note 3.
Note 1: <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The <i>Channel Closing Transmission Time</i> is comprised of 200 milliseconds starting at the beginning of the <i>Channel Move Time</i> plus any additional intermittent control signals required to facilitate a <i>Channel</i> 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 <i>U-NII Detection Bandwidth</i> 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 5 – 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 5a	Roundup $\left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

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. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B.

For example if in Short Pulse Radar Type 1 Test B a PRI of 3066 usec is selected, the number of pulses

would be $\text{Roundup} \left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{3066} \right) \right\} = \text{Roundup} \{17.2\} = 18.$

Table 5a - Pulse Repetition Intervals Values for Test A

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

The aggregate is the average of the percentage of successful detections of Short Pulse Radar Types 1-4. For example, the following table indicates how to compute the aggregate of percentage of successful detections.

Radar Type	Number of Trials	Number of Successful Detections	Minimum Percentage of Successful Detection
1	35	29	82.9%
2	30	18	60%
3	30	27	90%
4	50	44	88%
Aggregate $(82.9\% + 60\% + 90\% + 88\%)/4 = 80.2\%$			

Table 6 – Long Pulse Radar Test Waveform

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

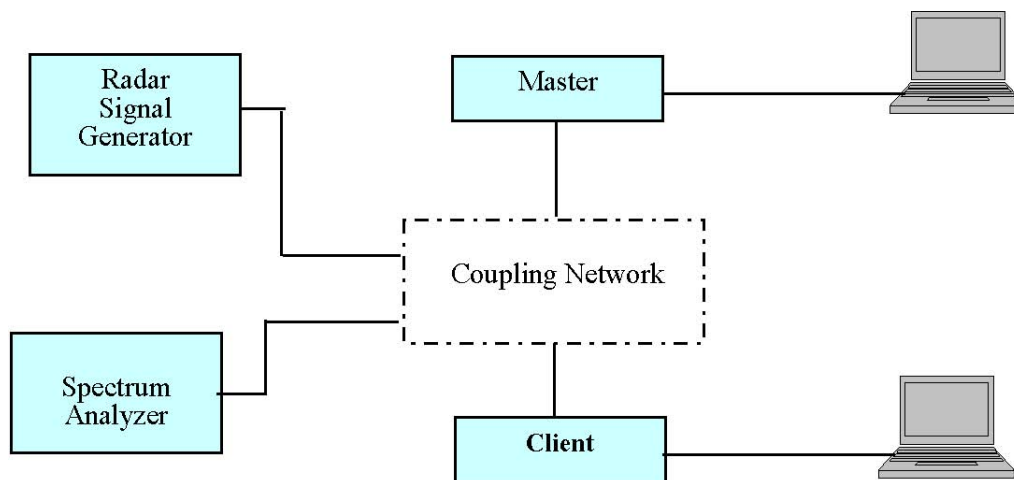
Table 7 – Frequency Hopping Radar Test Waveform

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

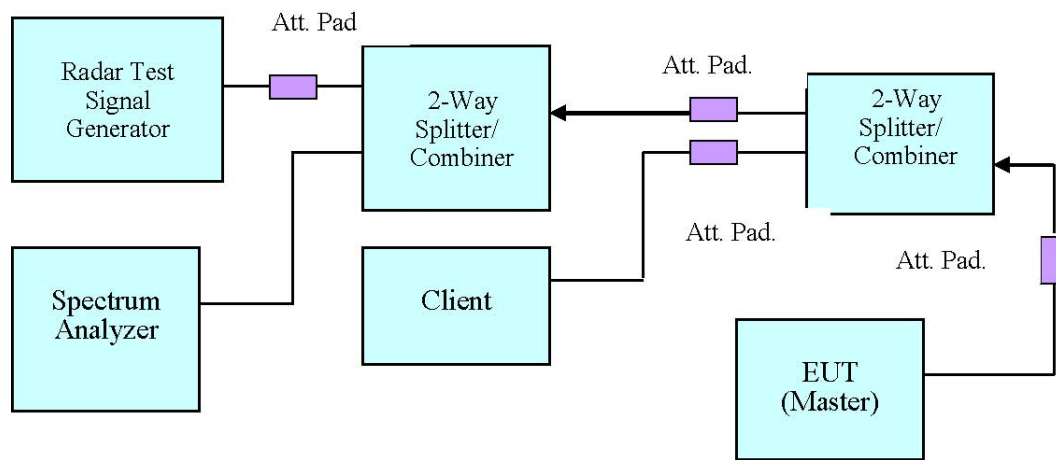
DFS Measurement System

BACL DFS measurement system consists of two subsystems: (1) The radar signal generating subsystem and (2) the traffic monitoring subsystem.

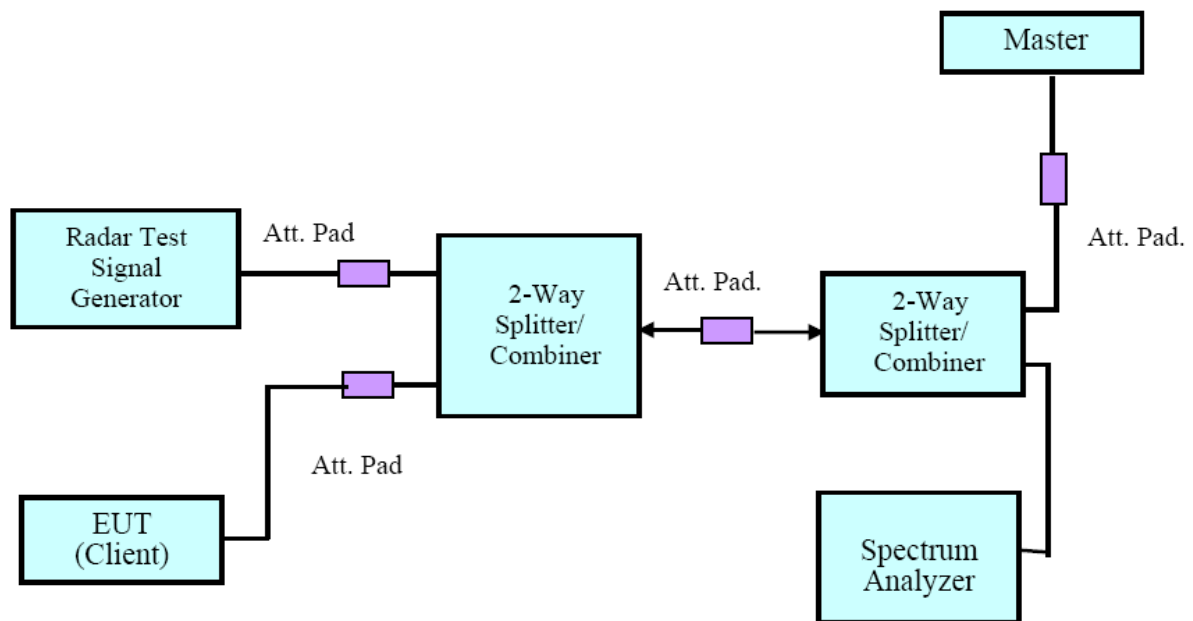
System Block Diagram



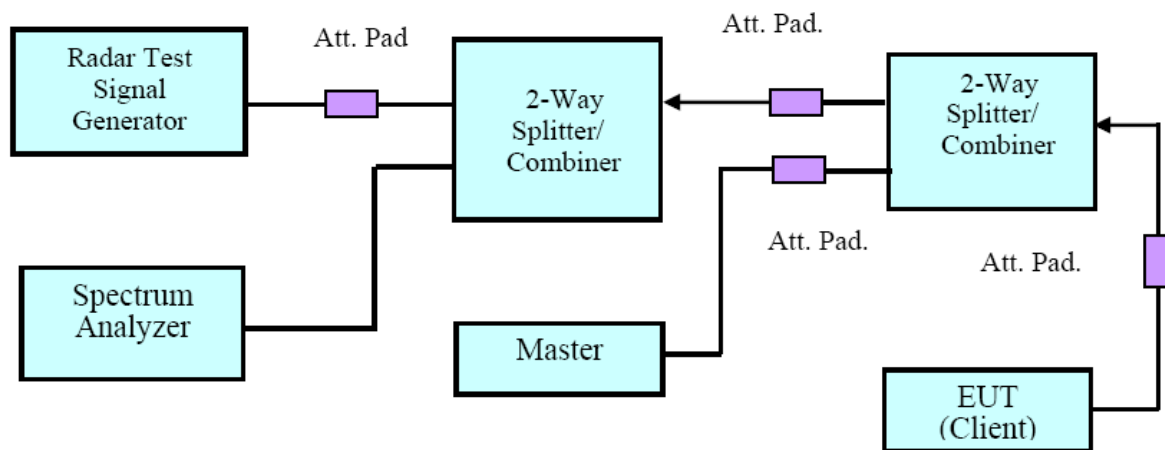
Conducted Method



Setup for Master with injection at the Master

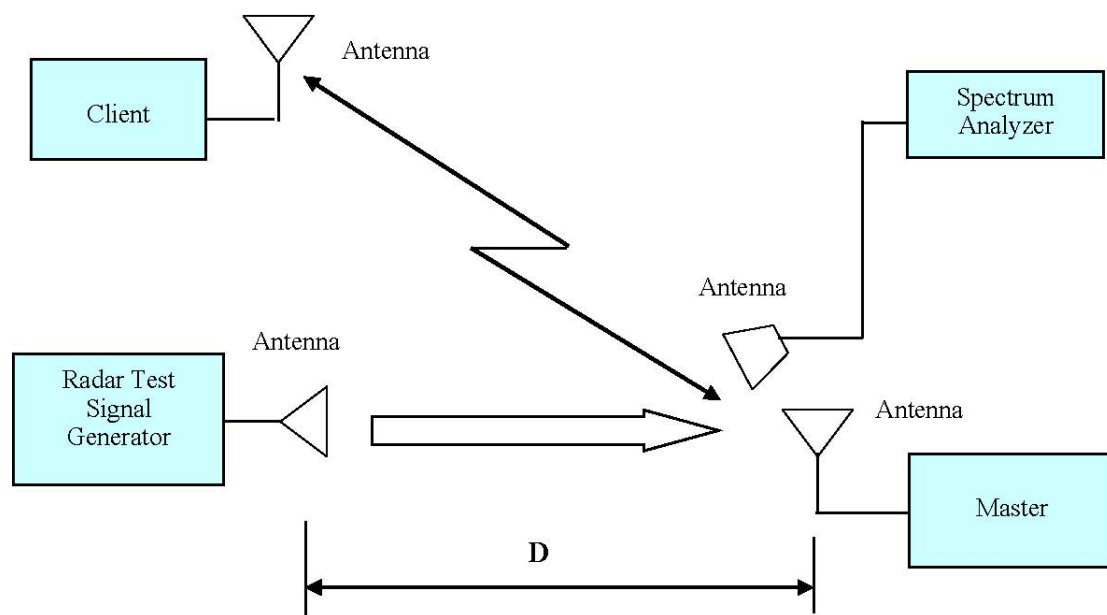


Setup for Client with injection at the Master



Setup for Client with injection at the Client

Radiated Method



Test Procedure

A spectrum analyzer is used as a monitor verifies that the EUT status including Channel Closing Transmission Time and Channel Move Time, and does not transmit on a Channel during the Non-Occupancy Period after the diction and Channel move. It is also used to monitor EUT transmissions during the Channel Availability Check Time.

TEST RESULTS

Description of EUT

The calibrated radiated DFS detection threshold level is set to -64 dBm is more stringent.

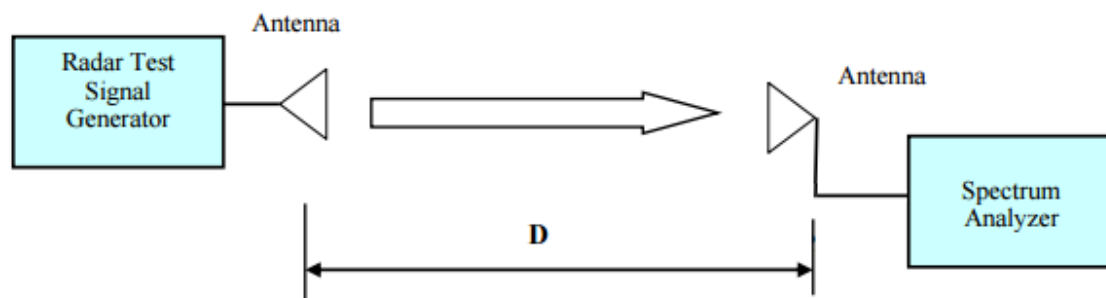
WLAN traffic is generated by streaming the video file TestFile.mpg, this file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. The file is streamed from the Access Point to the Client in full motion video mode using the media player with the V2.61 Codec package.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
National Instruments	NI PXI-1042 8-Slot chassis	PXI-1042	VOBX40FBD	N/A	N/A
National Instruments	Arbitrary Waveform Generator	PXI-5421	N/A	N/A	N/A
National Instruments	RF Upconverter	PXI-5610	N/A	N/A	N/A
ASCOR	Upconverter	AS-7202	N/A	N/A	N/A
Agilent	Spectrum Analyzer	E4440A	SG43360054	2019-05-09	2020-05-09
Ditorn	Splitter/Combiner	D3C4080	SN2244	N/A	N/A
TDK RF	Horn Antenna	HRN-0118	130 084	2018-10-12	2021-10-12
ETS LINDGREN	Horn Antenna	3115	000 527 35	2018-10-12	2021-10-12

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Radar Waveform Calibration



Radiated Calibration Setup Block Diagram

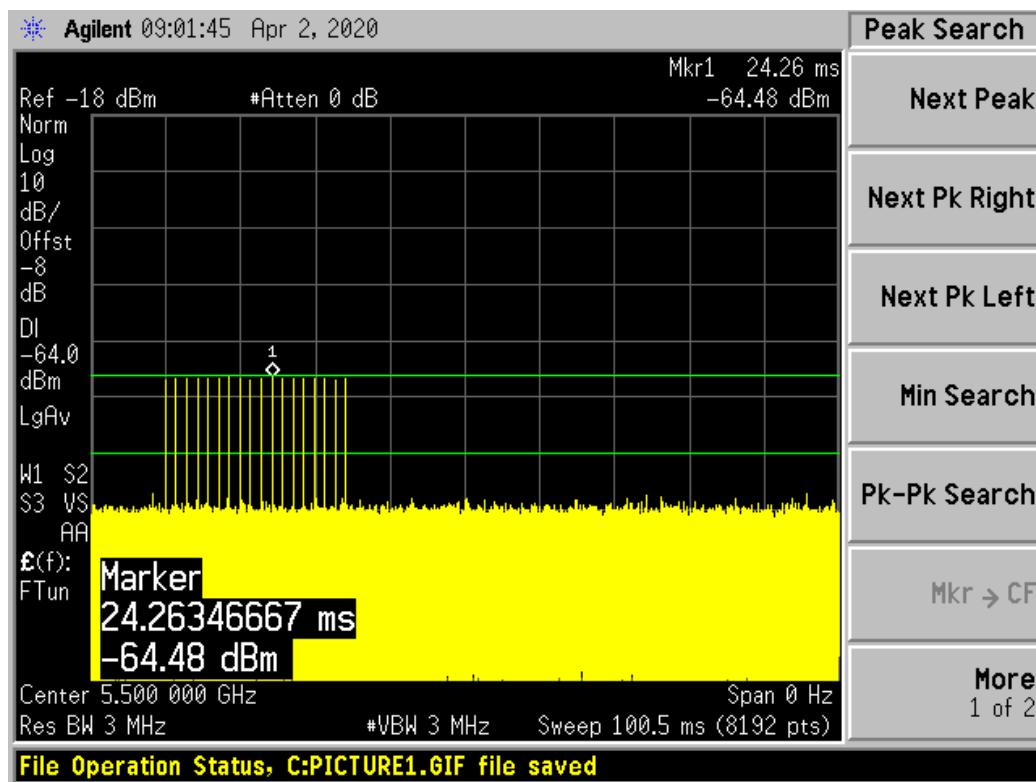
Test Environmental Conditions

Temperature:	22.8~23.4 °C
Relative Humidity:	35~59 %
ATM Pressure:	101.2 kPa
Tester:	Vern Shen
Test Date:	2020-04-02~2020-04-10

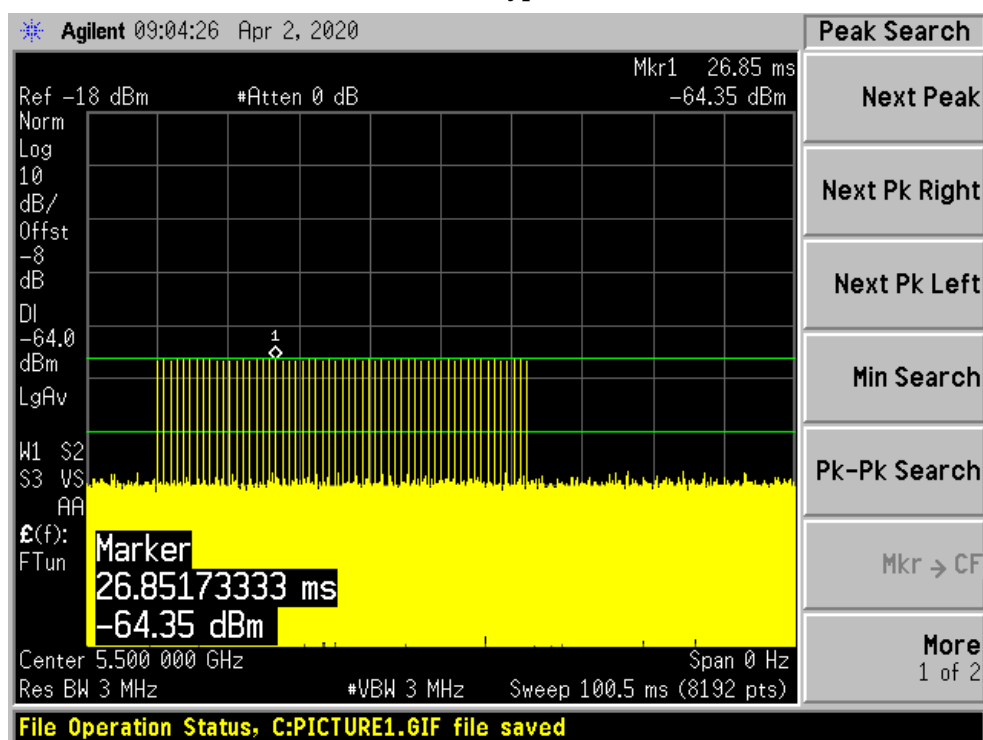
Plots of Radar Waveforms

5500 MHz:

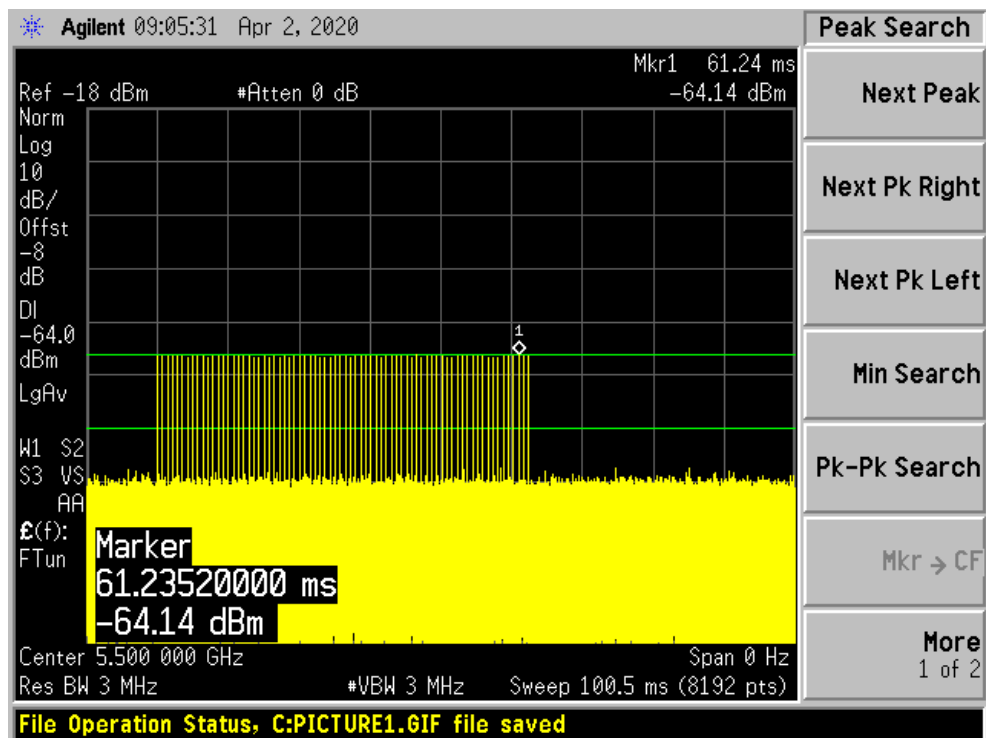
Radar Type 0



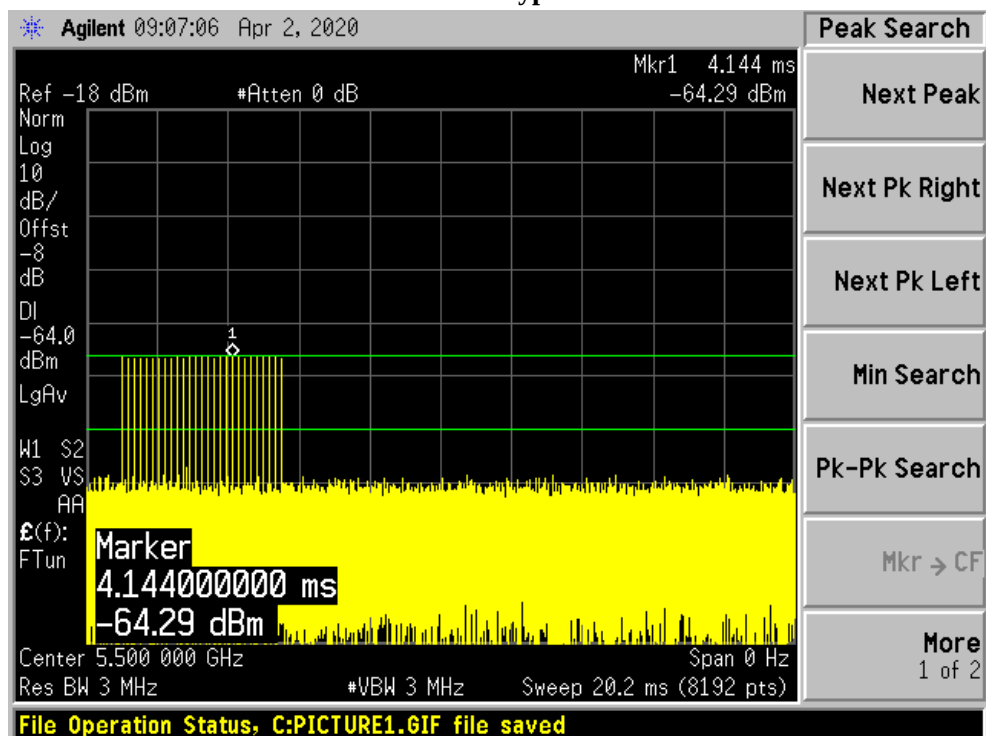
Radar Type 1A



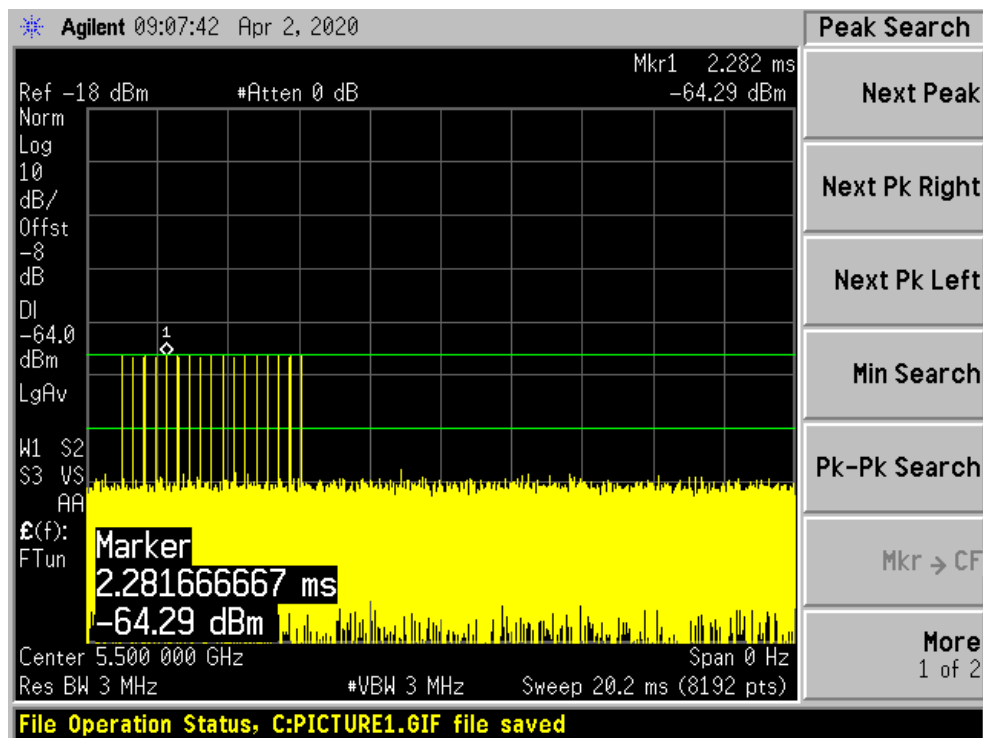
Radar Type 1B



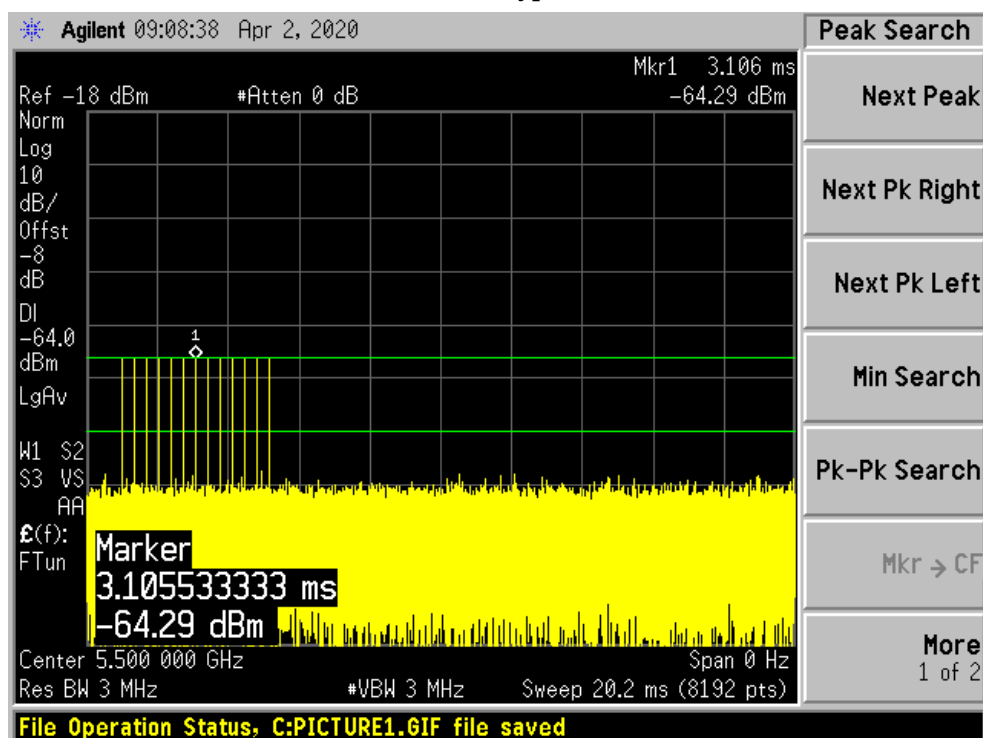
Radar Type 2



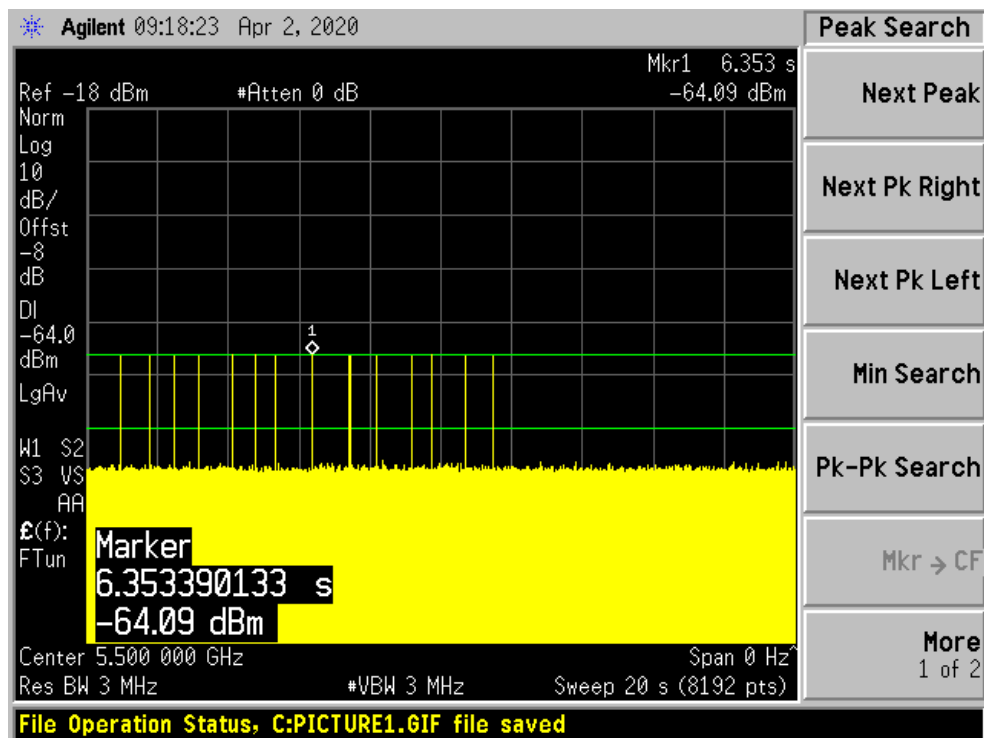
Radar Type 3



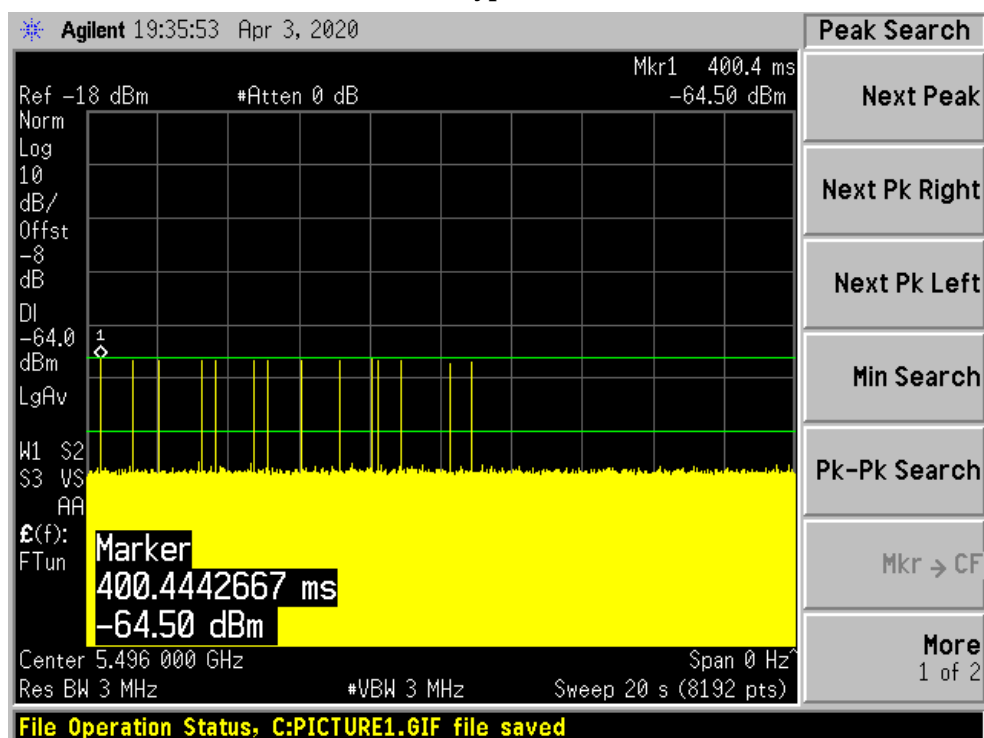
Radar Type 4



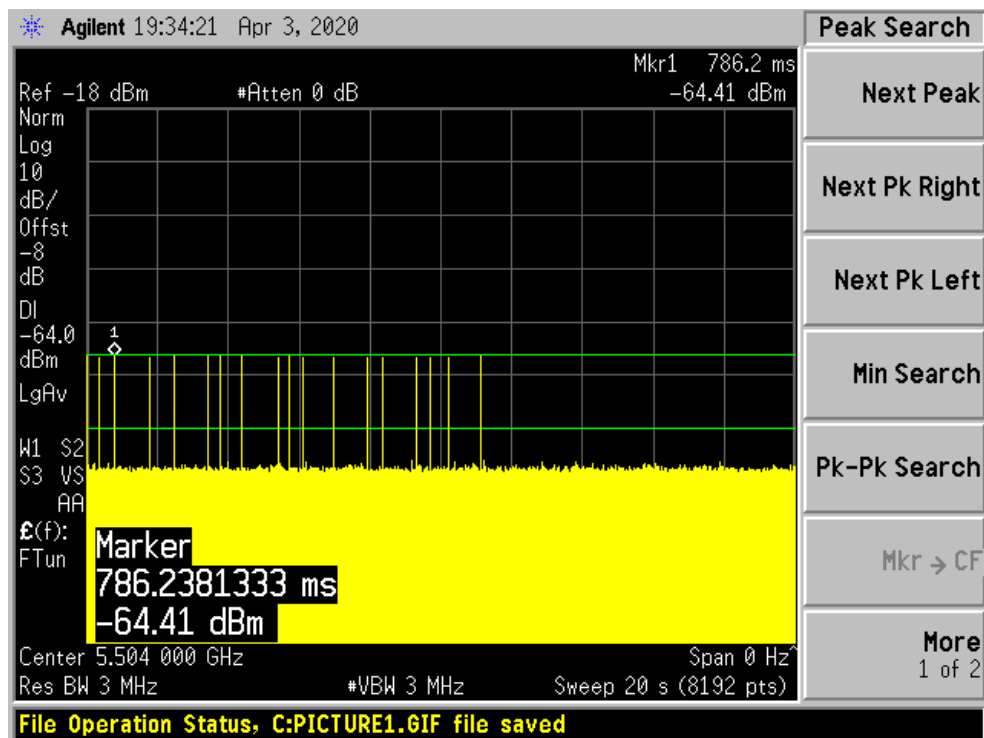
Radar Type 5 Case 1



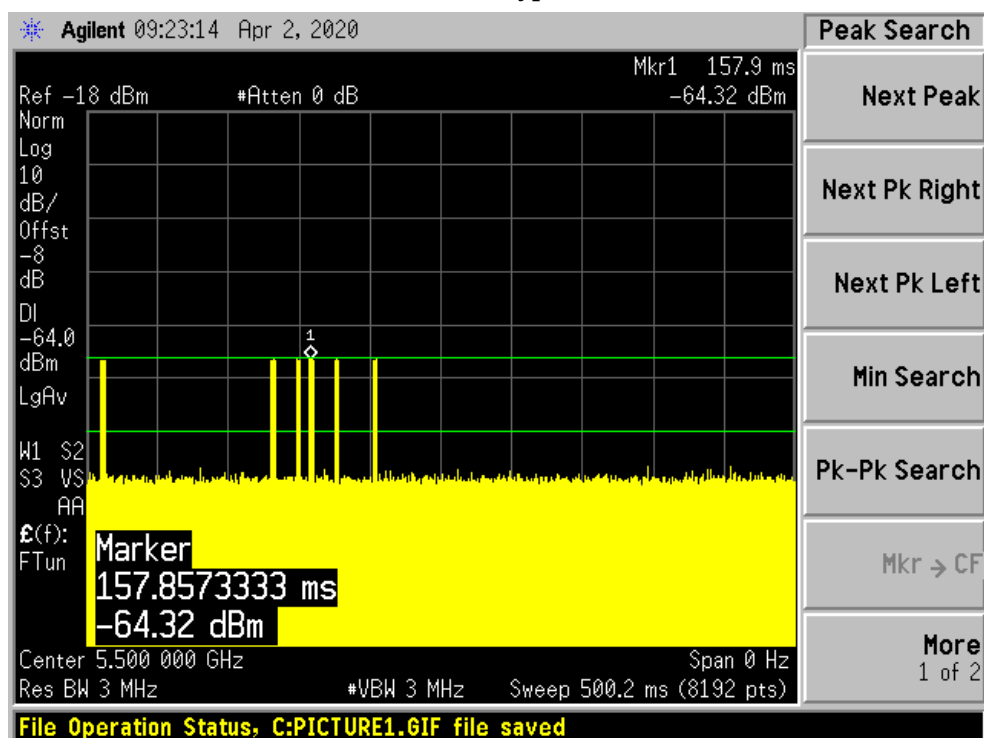
Radar Type 5 Case 2



Radar Type 5 Case 3



Radar Type 6



CHANNEL AVAILABILITY CHECK TIME (CAC)**Test Procedure**

- 1) Channel Availability Check Time (CAC)
- 2) With link established on channel, apply a radar signal within 0~6 seconds after the initial power-up period; monitor the transmissions on channel from the spectrum analyzer.
- 3) Reboot EUT, with a link established on channel, apply a radar signal within 54~60 seconds after the initial power-up period, and monitor the transmission on channel from the spectrum analyzer.

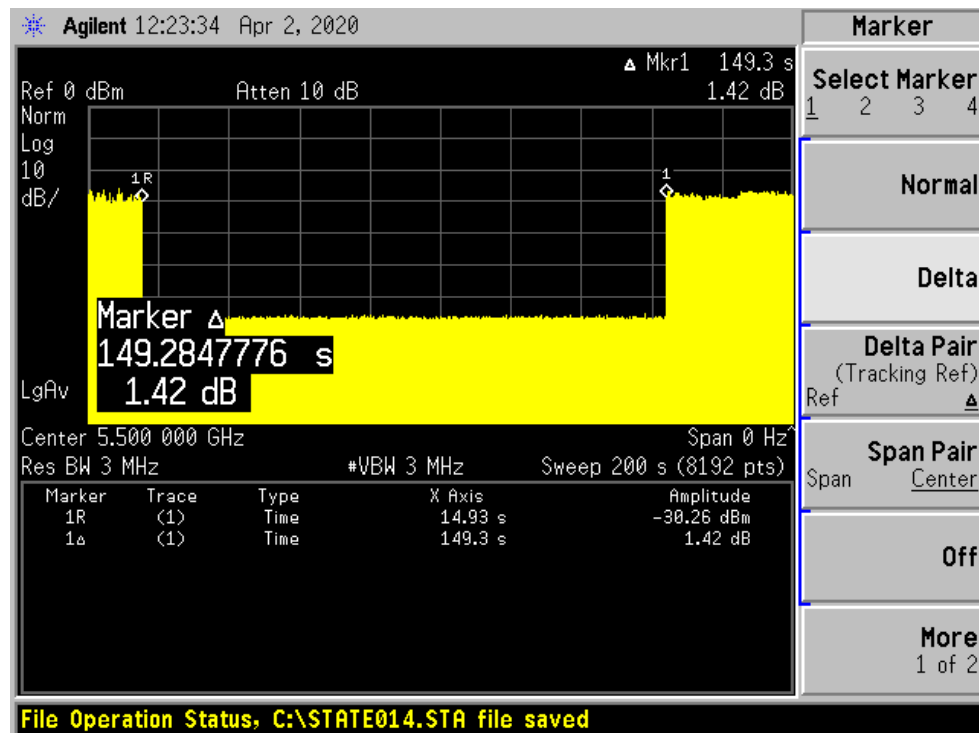
EUT Initial power-up Cycle Time

Test Frequency (MHz)	EUT initial Power-up cycle (Second)
5500	89.28

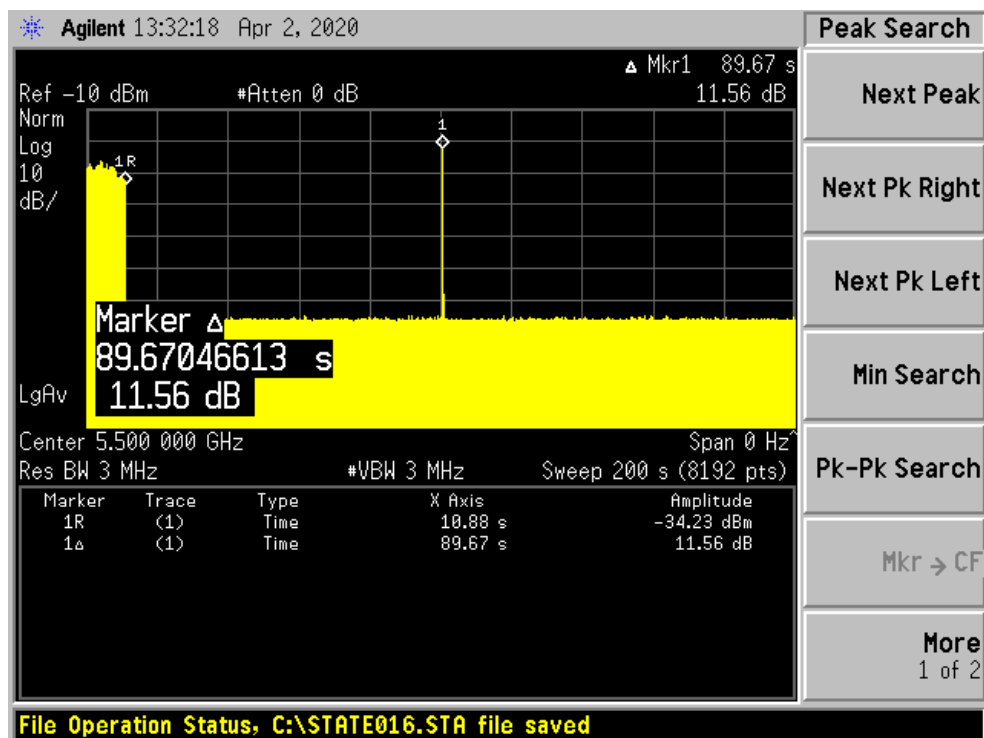
Results:

Timing of Radar Burst	Spectrum Analyzer Display
No Radar Triggered	Transmission begin after power-up cycle +60 seconds CAC
Within 6 seconds of the CAC starting	No transmission
Within the last 6 seconds of the CAC	No transmission

Please refer to the following plots.

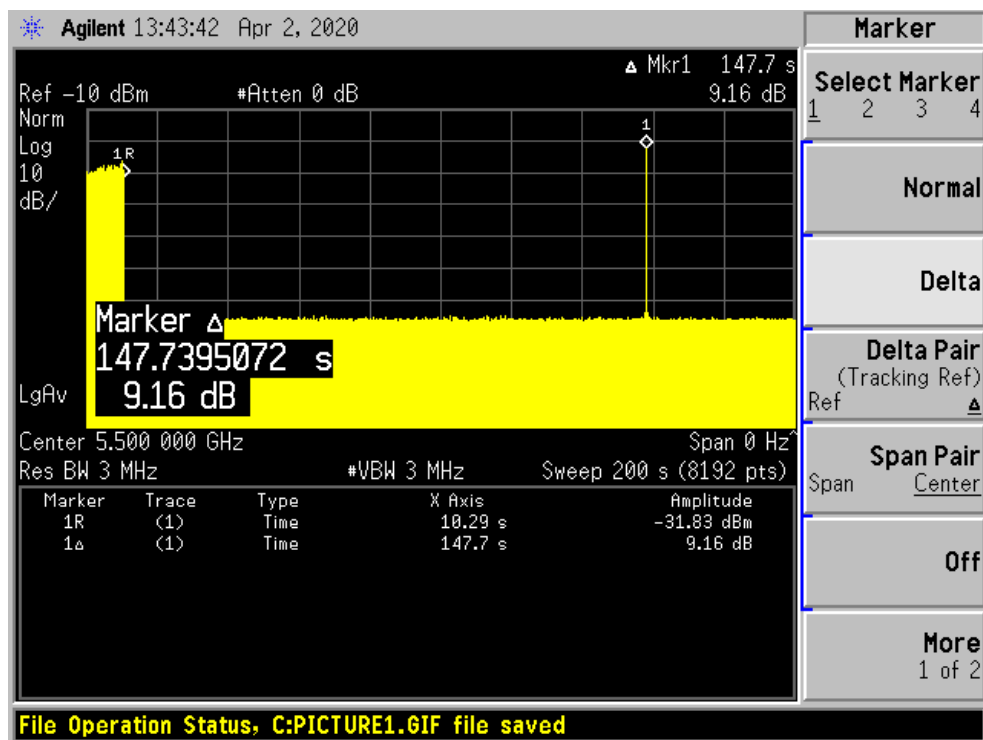
Plot of without Radar signal applied

Note: The power-up cycle is 89.28 seconds.

Plot of Radar signal applied within 6 seconds of start of CAC

No transmissions found after radar signal applied.

Plot of Radar signal applied at the end of 6 seconds of CAC



No transmissions found after radar signal applied.

CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME

Test Procedure

Perform type 0 short pulse radar waveform.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = $N \times \text{Dwell Time}$

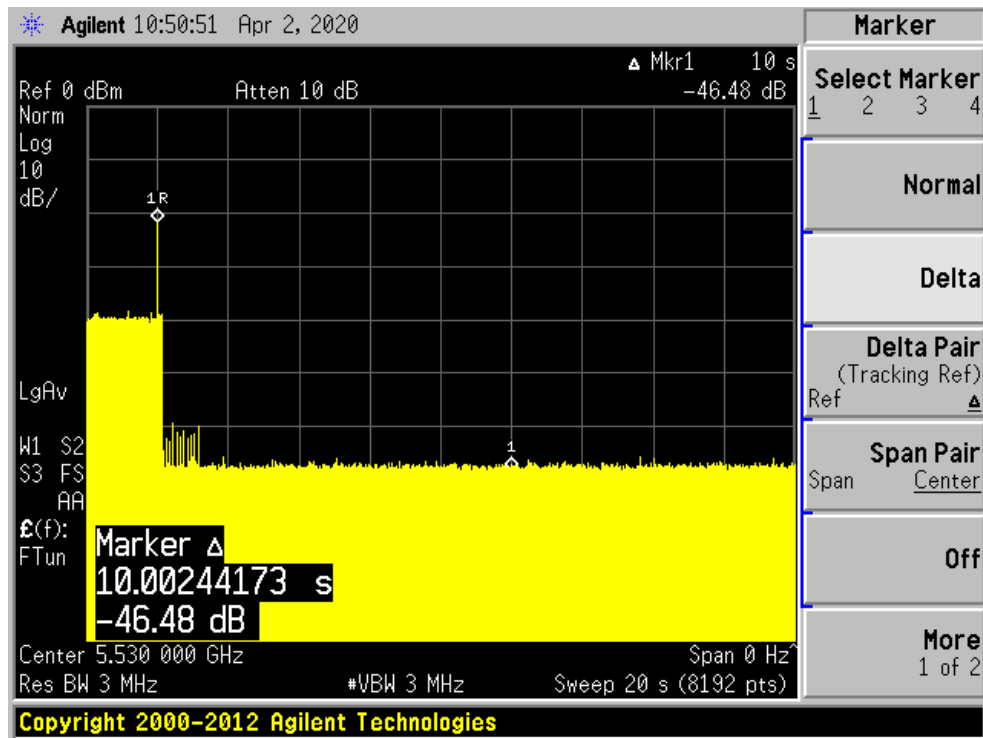
N is the number of spectrum analyzer bins showing a device transmission Dwell Time is the dwell time per bin (i.e. $\text{Dwell Time} = S/B$, S is the sweep time and B is the number of bin, i.e. 8192)

Test Results

Frequency (MHz)	Bandwidth (MHz)	Radar Type	Results
5530	80	Type 0	Compliant

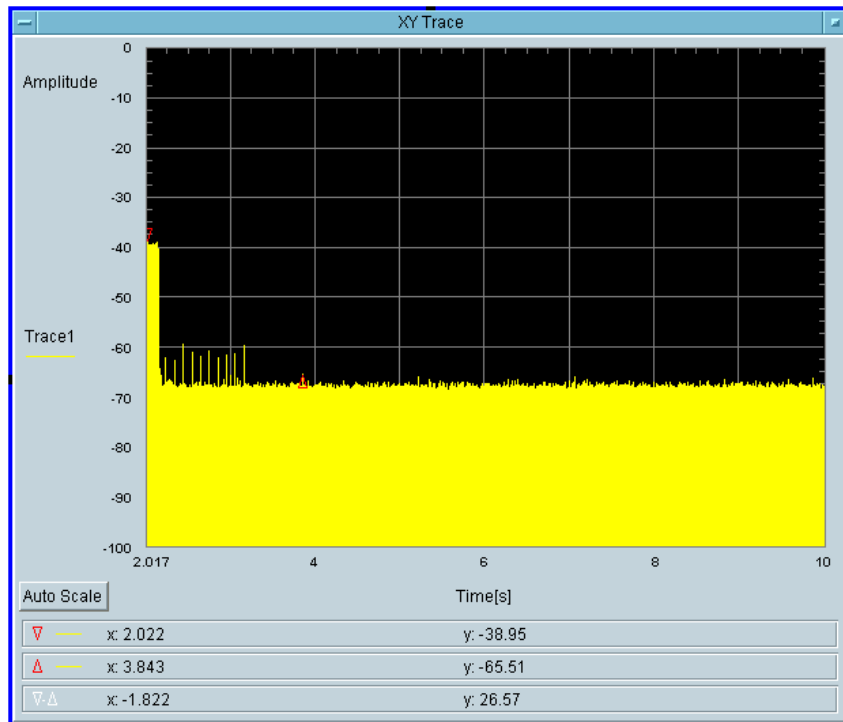
Please refer to the following tables and plots.

5530 MHz

Type 0 radar channel move time result:

Type 0 radar channel closing transmission time result:

Transmission After 200ms	Aggregate Transmission Time After 200ms Delay (ms)	Limit for Aggregate Transmission Time After 200ms Delay (ms)	Result
Yes	24.41	60	Pass



Total On Time [s]
95.22m

Total On Time After Delay [s]
24.41m

NON-OCCUPANCY PERIOD

Test Procedure

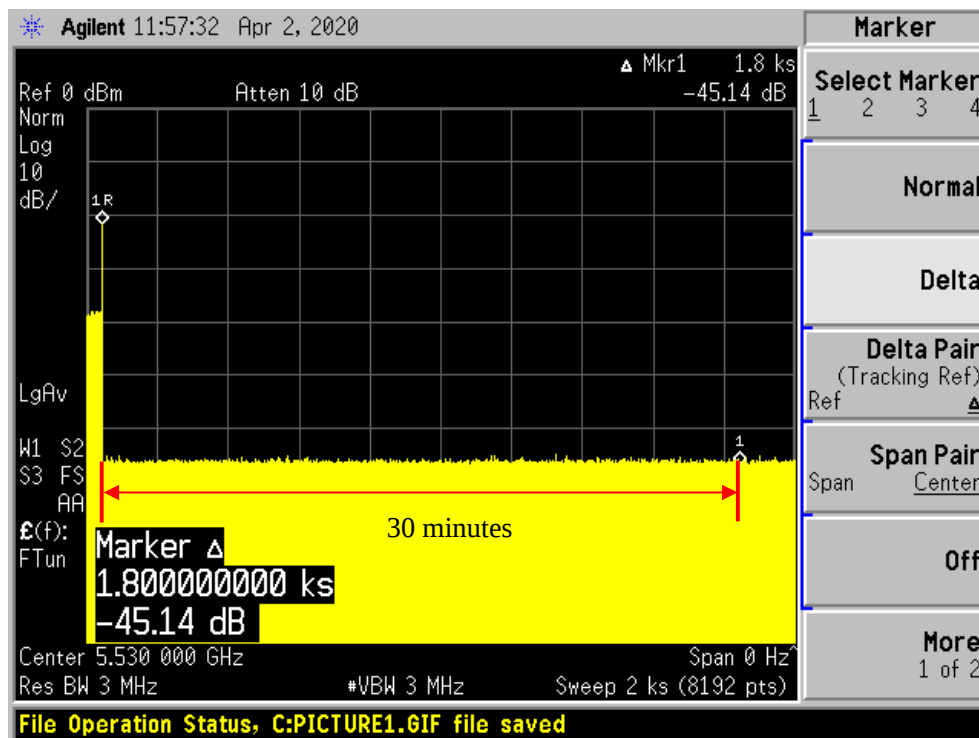
Measure the EUT for more than 30 minutes following the channel close/move time to verify that the EUT does not resume any transmissions on this channel. Provide one plot to demonstrate no transmission on the channel for the non-occupancy period (30 minutes observation time)

Test Result

Frequency(MHz)	Bandwidth (MHz)	Spectrum Analyzer Display
5530	80	No transmission within 30 minutes

Please refer to the following plots.

5530 MHz



DETECTION BANDWIDTH

Test Procedure

Performed with Type 0 radar waveforms

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 4**. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as F_H) at which detection is greater than or equal to the *U-NII Detection Bandwidth* criterion. Recording the detection rate at frequencies above F_H is not required to demonstrate compliance.

Starting at the center frequency of the UUT operating *Channel*, decrease 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 4**. Repeat this measurement in 1MHz steps at frequencies 5 MHz above where the detection rate begins to fall. Record the lowest frequency (denote as F_L) at which detection is greater than or equal to the *U-NII Detection Bandwidth* criterion. Recording the detection rate at frequencies below F_L is not required to demonstrate compliance.

The *U-NII Detection Bandwidth* is calculated as follows:

$$U-NII\ Detection\ Bandwidth = F_H - F_L$$

The *U-NII Detection Bandwidth* must meet the *U-NII Detection Bandwidth* criterion specified in **Table 4**. Otherwise, the UUT does not comply with DFS requirements. This is essential to ensure that the UUT is capable of detecting *Radar Waveforms* across the same frequency spectrum that contains the significant energy from the system. In the case that the *U-NII Detection Bandwidth* is greater than or equal to the 99 percent power bandwidth for the measured F_H and F_L , the test can be truncated and the *U-NII Detection Bandwidth* can be reported as the measured F_H and F_L .

Test Result

Frequency (MHz)	Bandwidth Systems (MHz)	F _L (MHz)	F _H (MHz)	Detection Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Minimum Limit	Result
5500	20	5490	5510	20	18.022	100%	Compliance
5510	40	5490	5530	40	36.604	100%	Compliance
5530	80	5490	5570	80	75.445	100%	Compliance

Please refer to the following tables and plots.

Results of Detection Bandwidth:

20MHz Bandwidth, EUT Frequency =5500MHz											
DFS Detection Trials (1 = Detected, 0 = No Detected)											
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490(F _L)	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 %
5510(F _H)	1	1	1	1	1	1	1	1	1	1	100 %
Detection Bandwidth = F _H – F _L = 5510-5490 = 20 MHz											
EUT 99% BW = 18.022 MHz;										Result: Pass	

40MHz Bandwidth, EUT Frequency = 5510 MHz											
DFS Detection Trials (1 = Detected, 0 = No Detected)											
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490(F_L)	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 %
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	1	1	1	1	1	1	1	1	1	1	100 %
5530(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
Detection Bandwidth = $F_H - F_L = 5530 - 5490 = 40$ MHz											
EUT 99% BW = 36.604 MHz;											Result: Pass

80MHz Bandwidth, EUT Frequency =5530 MHz											
DFS Detection Trials (1 = Detected, 0 = No Detected)											
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490(F _L)	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 %
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	1	1	1	1	1	1	1	1	1	1	100 %
5570(F _H)	1	1	1	1	1	1	1	1	1	1	100 %
Detection Bandwidth = F _H – F _L = 5570-5490 = 80 MHz											
EUT 99% BW =75.445 MHz;											Result: Pass

STATISTICAL PERFORMANCE CHECK

Procedure:

The steps below define the procedure to determine the minimum percentage of successful detection requirements found in **Tables 5-7** 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*).

- a) One frequency will be chosen from the *Operating Channels* of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands.
- b) In case the UUT is a U-NII device operating as a Client Device (with or without Radar Detection), a U-NII device operating as a Master Device will be used to allow the UUT (Client device) to Associate with the Master Device. In case the UUT is a Master Device, a U-NII device operating as a Client Device will be used and it is assumed that the Client will Associate with the UUT (Master). In both cases for conducted tests, the Radar Waveform generator will be connected to the Master Device. For radiated tests, the emissions of the Radar Waveform generator will be directed towards the Master Device. If the Master Device has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
- c) Stream the channel loading test file from the *Master Device* to the Client Device on the test *Channel* for the entire period of the test.
- d) At time T_0 the *Radar Waveform* generator sends the individual waveform for each of the Radar Types 1- 6 in **Tables 5-7**, at levels defined in **Table 3**, on the *Operating Channel*. An additional 1 dB is added to the radar test signal to ensure it is at or above the *DFS Detection Threshold*, accounting for equipment variations/errors.
- e) Observe the transmissions of the UUT at the end of the Burst on the *Operating Channel* for duration greater than 10 seconds for Radar Type 0 to ensure detection occurs.
- f) Observe the transmissions of the UUT 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.
- g) In case the UUT is a U-NII device operating as a *Client Device* with *In-Service Monitoring*, perform steps a) to f).

Result:**20MHz**

Radar SignalType	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1A	15	100%	60%	pass
Type 1B	15	100%	60%	pass
Type 2	30	90 %	60%	Pass
Type 3	30	80%	60%	Pass
Type 4	30	100%	60%	Pass
Aggregate (Type1 to 4)	30	92.5 %	80%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	100 %	70%	Pass

Please refer to the following statistical tables:

5500MHz**Radar Type 1A Statistical Performance**

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5500	61	1	878	1
2	5500	99	1	538	1
3	5500	89	1	598	1
4	5500	62	1	858	1
5	5500	78	1	678	1
6	5500	18	1	3066	1
7	5500	65	1	818	1
8	5500	57	1	938	1
9	5500	70	1	758	1
10	5500	58	1	918	1
11	5500	102	1	518	1
12	5500	95	1	558	1
13	5500	68	1	778	1
14	5500	92	1	578	1
15	5500	63	1	838	1
Detection Percentage: 100 % (>60%)					

Radar Type 1B Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5500	37	1	1461	1
2	5500	101	1	525	1
3	5500	25	1	2171	1
4	5500	18	1	3030	1
5	5500	35	1	1523	1
6	5500	26	1	2098	1
7	5500	26	1	2050	1
8	5500	23	1	2341	1
9	5500	21	1	2550	1
10	5500	23	1	2343	1
11	5500	31	1	1720	1
12	5500	34	1	1598	1
13	5500	18	1	2970	1
14	5500	38	1	1424	1
15	5500	30	1	1817	1
Detection Percentage: 100 % (>60%)					

Radar Type 2 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5500	29	2.7	171	1
2	5500	29	3.4	198	1
3	5500	29	1	174	0
4	5500	28	4.5	219	1
5	5500	26	4.5	204	1
6	5500	29	4.2	162	1
7	5500	25	3.2	225	1
8	5500	26	2.2	181	1
9	5500	24	4.3	200	1
10	5500	28	1.3	153	1
11	5500	23	4	211	1
12	5500	26	5	226	1
13	5500	24	3.2	154	1
14	5500	28	3.1	166	1
15	5500	24	3.4	153	1
16	5500	28	2.1	215	1
17	5500	23	4.1	187	1
18	5500	23	3	228	1
19	5500	23	2.2	180	1
20	5500	24	2.6	190	0
21	5500	26	4.4	221	1
22	5500	27	1.1	206	1
23	5500	29	2.7	201	1
24	5500	27	2.2	204	1
25	5500	23	2.1	220	1
26	5500	24	1.1	157	0
27	5500	25	3.8	189	1
28	5500	23	2.3	216	1
29	5500	29	4.3	173	1
30	5500	26	4.1	177	1
Detection Percentage: 90 % (>60%)					

Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5500	18	6.9	342	1
2	5500	17	9.2	475	1
3	5500	17	9.5	267	1
4	5500	18	10	292	1
5	5500	16	7.2	234	0
6	5500	17	7.9	445	1
7	5500	18	9.9	461	1
8	5500	16	9.3	307	1
9	5500	18	7.1	390	1
10	5500	17	9.8	474	1
11	5500	17	7.7	280	0
12	5500	16	7.4	361	1
13	5500	16	6.6	391	1
14	5500	16	8.6	306	1
15	5500	17	9.8	438	0
16	5500	16	9.1	499	1
17	5500	16	6.8	480	1
18	5500	16	6.2	290	1
19	5500	17	6.8	486	1
20	5500	18	8.1	272	0
21	5500	16	6.4	220	1
22	5500	17	6.9	347	1
23	5500	17	6.9	204	1
24	5500	16	8.9	283	1
25	5500	17	6.7	226	0
26	5500	16	7.5	290	1
27	5500	18	8.4	378	1
28	5500	17	6	277	1
29	5500	16	9.7	483	0
30	5500	17	8.3	467	1
Detection Percentage: 80 % (>60%)					

Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5500	16	17.9	402	1
2	5500	12	19.6	393	1
3	5500	14	19.8	278	1
4	5500	16	15.1	294	1
5	5500	14	11.9	339	1
6	5500	14	19.4	482	1
7	5500	16	17.6	320	1
8	5500	13	16	239	1
9	5500	14	18.2	438	1
10	5500	12	13.4	330	1
11	5500	14	13.2	335	1
12	5500	15	18.7	378	1
13	5500	12	18.1	332	1
14	5500	12	17.5	347	1
15	5500	15	14.9	407	1
16	5500	14	13	233	1
17	5500	14	11.6	388	1
18	5500	13	15.7	291	1
19	5500	13	17.3	251	1
20	5500	14	14.2	431	1
21	5500	16	17	244	1
22	5500	12	18.6	291	1
23	5500	15	12.4	418	1
24	5500	16	13.8	216	1
25	5500	13	11	296	1
26	5500	15	19.2	426	1
27	5500	14	19.5	426	1
28	5500	12	15.8	484	1
29	5500	15	15	483	1
30	5500	16	19.8	314	1
Detection Percentage: 100 % (>60%)					

Radar Type 5 Case 1 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5500.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	8	72.9	1337		0.000693	1
1	2	8	86.5	1461		1.104879	
2	3	8	74.4	1837	1816	1.428749	
3	3	8	60.4	1491	1916	2.779436	
4	1	8	62			3.288805	
5	3	8	58.8	1273	1618	4.216885	
6	2	8	66.3	1942		4.643851	
7	1	8	54			5.257102	
8	3	8	83.3	1230	1207	5.712157	
9	3	8	60.9	1008	1646	6.451766	
10	3	8	91.5	1845	1548	7.651721	
11	2	8	74.7	1051		8.330437	
12	2	8	80.2	1171		8.977471	
13	1	8	76			9.324101	
14	3	8	52	1911	1151	9.888631	
15	1	8	95.5			10.63781	
16	2	8	55.6	1411		11.86395	

Statistics 2 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	6	94.7	1289	1300	1.092759	1
1	3	6	96.4	1332	1140	1.801112	
2	1	6	72.9			2.672911	
3	2	6	76.1	1443		4.424924	
4	2	6	90.1	1720		6.205272	
5	2	6	62.3	1771		7.753294	
6	1	6	84.5			8.425572	
7	2	6	96.8	1444		9.705975	
8	1	6	80			11.11612	

Statistics 3 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	15	81.3	1843	1411	0.231423	1
1	2	15	83.3	1190		1.604315	
2	3	15	55.3	1631	1968	3.052474	
3	1	15	57.4			4.146217	
4	3	15	100	1808	1905	5.23275	
5	1	15	62.6			5.697464	
6	2	15	92.7	1216		7.440368	
7	1	15	68.7			7.642724	
8	3	15	96.1	1599	1172	8.925637	
9	1	15	84.4			10.53615	
10	1	15	63.6			11.14276	

Statistics 4 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	14	73.6	1858	1886	0.227619	1
1	2	14	91.7	1244		0.834236	
2	3	14	95	1558	1587	1.576176	
3	2	14	64.1	1384		2.291678	
4	2	14	80.1	1390		2.783834	
5	2	14	96.5	1014		3.205532	
6	2	14	83.2	1587		3.972397	
7	1	14	93.2			4.698839	
8	1	14	99.1			5.424472	
9	3	14	83.5	1022	1412	6.284866	
10	1	14	56.4			6.752661	
11	2	14	73.2	1004		6.973684	
12	2	14	84.7	1316		8.15372	
13	1	14	50.3			8.452665	
14	2	14	82.5	1430		9.299104	
15	3	14	92.7	1122	1649	9.593216	
16	2	14	89.2	1209		10.48943	
17	1	14	86.6			11.05967	
18	2	14	75.9	1429		11.371	

Statistics 5(ChirpCenter Frequency:5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	9	59.8			0.182704	1
1	3	9	50.9	1118	1005	0.820028	
2	1	9	50.1			1.802809	
3	3	9	76.6	1094	1910	2.348864	
4	1	9	50.2			2.653333	
5	2	9	76	1485		3.272437	
6	1	9	92			4.068286	
7	3	9	76	1548	1426	4.751474	
8	3	9	87.3	1446	1890	5.581162	
9	2	9	58.3	1931		5.977978	
10	1	9	55			6.562517	
11	2	9	95	1956		6.996496	
12	2	9	98.9	1605		7.981479	
13	2	9	87.3	1079		8.663318	
14	1	9	97.6			9.444392	
15	1	9	99.8			9.742501	
16	1	9	98.9			10.29138	
17	1	9	50.1			11.171	
18	2	9	97	1017		11.91144	

Statistics 6 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	14	88.6	1086		0.463011	1
1	2	14	72.8	1847		2.256845	
2	1	14	62.9			2.945672	
3	1	14	51.9			4.149158	
4	1	14	68.2			6.448087	
5	2	14	68.7	1296		7.119044	
6	2	14	50.5	1170		8.176704	
7	2	14	66.3	1359		10.59425	
8	2	14	93.9	1320		11.68633	

Statistics 7(ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	12	99.6			0.039333	1
1	2	12	64.8	1595		0.874013	
2	2	12	93.9	1251		2.052199	
3	2	12	82.8	1801		2.444862	
4	2	12	75.9	1927		3.703551	
5	3	12	78.8	1209	1179	3.932306	
6	3	12	63.6	1823	1653	4.853595	
7	2	12	89.2	1393		5.785739	
8	2	12	81.6	1556		6.595859	
9	2	12	96	1333		7.169993	
10	3	12	66.7	1866	1726	7.77687	
11	2	12	90.4	1711		8.466282	
12	2	12	79.8	1442		9.659736	
13	2	12	63.3	1091		10.46336	
14	2	12	86.9	1351		10.82602	
15	1	12	61.4			11.66841	

Statistics 8 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	6	77	1116		0.357006	1
1	3	6	87.4	1557	1394	1.078865	
2	1	6	97.3			1.53544	
3	1	6	64.5			2.465177	
4	1	6	58.4			3.086364	
5	2	6	93.6	1298		4.081604	
6	2	6	50.7	1139		4.270664	
7	1	6	93.1			5.005496	
8	2	6	78.4	1813		5.658436	
9	2	6	94	1088		6.827896	
10	1	6	62.4			7.249515	
11	1	6	64.7			8.175603	
12	3	6	78.2	1855	1717	9.089633	
13	2	6	73.4	1633		9.209322	
14	3	6	93.2	1542	1140	10.57504	
15	1	6	93.4			10.76972	
16	2	6	51.6	1195		11.84705	

Statistics 9 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	9	59.8	1771	1016	0.24831	1
1	1	9	69.5			0.987621	
2	1	9	90.1			2.364434	
3	2	9	89.4	1697		3.185984	
4	2	9	79.8	1198		3.433522	
5	2	9	63.4	1490		4.490796	
6	2	9	60.2	1226		5.469925	
7	2	9	90.3	1552		6.022081	
8	2	9	56.7	1266		7.152078	
9	1	9	70.7			7.386653	
10	1	9	91.3			8.414182	
11	2	9	73.7	1628		8.841376	
12	3	9	55.3	1164	1405	9.680588	
13	3	9	98.6	1283	1938	10.51891	
14	1	9	73.1			11.21437	

Statistics 10 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	14	76.5	1747		0.453188	1
1	2	14	93.2	1872		1.151987	
2	3	14	64.5	1079	1017	1.689208	
3	2	14	54.9	1287		2.644848	
4	2	14	99.5	1197		3.607596	
5	3	14	60.1	1997	1930	4.394812	
6	2	14	97.3	1023		4.998427	
7	1	14	98.5			5.470626	
8	2	14	60.2	1033		6.02037	
9	3	14	77.6	1869	1623	7.241835	
10	3	14	52.6	1018	1132	7.988839	
11	1	14	61.9			8.250789	
12	2	14	64.6	1127		9.580296	
13	2	14	53.1	1169		10.21577	
14	3	14	61	1706	1444	11.23107	
15	2	14	60.8	1631		11.86229	

Radar Type 5 Case 2 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5493.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	7	60.3			0.121379	1
1	2	7	51.5	1325		0.669163	
2	2	7	88.5	1614		1.293285	
3	1	7	99.7			1.977383	
4	1	7	64.9			3.118961	
5	1	7	96.1			3.431841	
6	1	7	93.5			4.316602	
7	1	7	66.7			4.95475	
8	2	7	96.2	1607		5.586777	
9	2	7	87.7	1622		5.85306	
10	3	7	84.1	1747	1853	6.911755	
11	2	7	60.3	1841		7.095847	
12	2	7	72.2	1449		7.932193	
13	2	7	52.3	1568		8.518127	
14	2	7	59.4	1644		9.01695	
15	3	7	62.5	1068	1340	9.955724	
16	3	7	86.4	1029	2000	10.72249	
17	2	7	84.2	1430		11.09576	
18	2	7	75.9	1223		11.75072	

Statistics 2 (ChirpCenter Frequency: 5493.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	8	61.7	1530		0.837066	1
1	3	8	97.4	1894	1167	1.3132	
2	2	8	66.8	1624		2.955711	
3	2	8	68.7	1264		4.142438	
4	2	8	79.8	1981		4.605148	
5	1	8	95.7			6.322111	
6	2	8	52.3	1884		7.114129	
7	3	8	77.4	1898	1878	7.861817	
8	3	8	60.4	1583	1808	9.602261	
9	3	8	82.3	1157	1855	9.968765	
10	2	8	86.8	1968		11.7907	

Statistics 3 (ChirpCenter Frequency: 5496.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	16	100			0.79709	1
1	3	16	87.5	1102	1551	1.456859	
2	3	16	69	1389	1020	2.121388	
3	3	16	89.7	1778	1440	3.033545	
4	1	16	96.3			4.419943	
5	3	16	78.8	1607	1515	5.159717	
6	1	16	58.9			6.695386	
7	1	16	58.7			7.779117	
8	2	16	93.7	1358		8.533704	
9	2	16	94	1216		9.296947	
10	3	16	70.9	1473	1701	10.39568	
11	2	16	60.7	1656		11.13161	

Statistics 4 (ChirpCenter Frequency: 5493.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	7	93.1	1353	1589	0.201716	1
1	3	7	68.7	1390	1994	0.861394	
2	2	7	52.7	1414		1.586838	
3	2	7	66.1	1843		2.005796	
4	1	7	62.4			2.650202	
5	1	7	97.7			3.653957	
6	1	7	56.1			4.320638	
7	2	7	84.1	1479		4.854992	
8	2	7	93.6	1429		5.443032	
9	3	7	67.5	1948	1437	5.856703	
10	1	7	87			6.703909	
11	2	7	65.1	1993		7.519703	
12	1	7	56.5			7.701872	
13	3	7	57.4	1742	1951	8.600535	
14	2	7	50.7	1309		9.256341	
15	2	7	58	1266		9.886969	
16	2	7	68.3	1838		10.59312	
17	1	7	50.6			10.88685	
18	2	7	95.1	1314		11.63529	

Statistics 5 (ChirpCenter Frequency: 5497.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	17	72.9	1029		0.510854	1
1	2	17	60.2	1981		1.264702	
2	2	17	98.6	1208		3.016108	
3	1	17	94.6			3.930013	
4	3	17	69.5	1823	1871	4.529885	
5	1	17	74.2			5.66629	
6	2	17	90.5	1172		7.119223	
7	3	17	55.9	1412	1261	8.47279	
8	3	17	63	1900	1284	9.551978	
9	3	17	79.9	1208	1109	10.36662	
10	2	17	51	1348		11.07298	

Statistics 6 (ChirpCenter Frequency: 5492.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	6	70.5			0.406446	1
1	3	6	67.6	1943	1703	1.204347	
2	2	6	92.8	1182		1.78567	
3	2	6	81.4	1421		1.949506	
4	3	6	99.2	1883	1454	3.145063	
5	2	6	53.1	1468		3.284671	
6	2	6	63.5	1728		4.227073	
7	3	6	59.8	1449	1572	4.4845	
8	2	6	86.2	1025		5.645259	
9	1	6	59.2			6.226214	
10	2	6	62.7	1769		6.535047	
11	2	6	97.8	1674		7.52243	
12	1	6	82.6			7.86159	
13	1	6	89.3			8.503067	
14	1	6	53.1			9.096705	
15	3	6	63.5	1809	1375	9.561125	
16	2	6	98.8	1489		10.15402	
17	1	6	79.6			10.96573	
18	2	6	96.9	1938		11.89186	

Statistics 7 (ChirpCenter Frequency: 5495.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
1	1	12	91.2			0.853039	1
2	2	12	71.8	1104		1.413335	
3	2	12	55.1	1546		2.554069	
4	2	12	67.7	1718		2.982289	
5	2	12	97.9	1818		4.520628	
6	3	12	61.4	1306	1336	4.761419	
7	1	12	98.8			5.638337	
8	1	12	58.4			6.907116	
9	2	12	95.5	1295		7.699802	
10	1	12	57.2			8.777828	
11	3	12	69	1625	1947	9.557137	
12	3	12	94.2	1894	1788	10.86105	

Statistics 8 (ChirpCenter Frequency: 5496.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	15	66.7	1499	1052	0.239281	1
1	2	15	86.8	1357		2.065757	
2	1	15	62.3			2.473877	
3	3	15	90.5	1579	1458	4.356187	
4	2	15	53.5	1982		4.781937	
5	2	15	54.5	1553		5.95059	
6	1	15	50.1			7.503573	
7	1	15	69.8			7.77733	
8	2	15	81.2	1086		9.041739	
9	1	15	78.4			10.31971	
10	2	15	76.9	1167		11.60439	

Statistics 9 (ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	9	61.7	1391		0.421087	1
1	3	9	62.7	1551	1007	1.379521	
2	1	9	85.8			2.090581	
3	1	9	78.5			2.502457	
4	3	9	52.9	1487	1097	3.375083	
5	2	9	71.4	1494		4.666197	
6	2	9	83.2	1324		4.888468	
7	1	9	78.8			5.844922	
8	2	9	53.9	1546		7.032507	
9	2	9	80.8	1845		7.594317	
10	2	9	91.1	1207		8.63748	
11	3	9	87.1	1978	1637	8.86614	
12	3	9	71.9	1292	1936	9.912992	
13	2	9	98	1440		10.64149	
14	1	9	52.5			11.63942	

Statistics 10 (ChirpCenter Frequency: 5495.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	13	67.9	1283		0.5516	1
1	2	13	62.5	1881		0.778678	
2	3	13	60.3	1213	1423	1.901407	
3	1	13	92.2			2.596293	
4	2	13	88.4	1955		3.02393	
5	2	13	96.1	1098		4.061801	
6	1	13	73.1			4.580478	
7	2	13	76.3	1613		5.076191	
8	3	13	95.8	1751	1785	5.939227	
9	3	13	59.6	1947	1617	6.558037	
10	3	13	54.3	1537	1185	7.319363	
11	2	13	60.1	1212		7.82826	
12	2	13	76.6	1884		9.107489	
13	1	13	74.2			9.613391	
14	1	13	72.8			10.24542	
15	3	13	61.5	1961	1555	10.99812	
16	1	13	64.4			11.45806	

Radar Type 5 Case 3 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5507.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	7	83.4			0.105238	1
1	2	7	64.3	1676		1.436017	
2	1	7	87			2.519972	
3	3	7	63.6	1592	1120	2.680662	
4	3	7	68.4	1796	1857	3.520343	
5	3	7	68.7	1437	1157	4.946293	
6	3	7	59.9	1812	1442	5.310553	
7	2	7	77.8	1395		6.551082	
8	3	7	75.3	1168	1106	7.514077	
9	3	7	83.7	1129	1065	7.960389	
10	3	7	65.3	1820	1029	9.115716	
11	2	7	81.1	1877		9.563288	
12	2	7	95.4	1050		10.38694	
13	2	7	53.4	1903		11.68674	

Statistics 2 (ChirpCenter Frequency: 5505.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	12	73.9	1877		0.665693	1
1	1	12	74.5			1.787281	
2	1	12	79.2			2.696673	
3	3	12	82.2	1326	1787	3.383449	
4	2	12	72.9	1369		4.133074	
5	1	12	85.1			5.595745	
6	1	12	65.6			6.022248	
7	3	12	87.2	1383	1342	7.749702	
8	2	12	88.2	1380		8.887122	
9	1	12	60.7			9.004272	
10	1	12	52.2			10.89199	
11	3	12	97.3	1752	1013	11.73553	

Statistics 3 (ChirpCenter Frequency: 5502.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	19	58.2	1680	1951	0.310211	1
1	2	19	79.9	1491		1.697627	
2	2	19	71.3	1062		2.419206	
3	2	19	86.3	1472		4.243017	
4	2	19	88.9	1990		4.471228	
5	3	19	71.4	1005	1823	6.286989	
6	2	19	57.4	1014		7.164625	
7	2	19	60.1	1591		8.360284	
8	2	19	80.6	1289		8.837499	
9	3	19	90.1	1290	1419	10.17238	
10	2	19	89.9	1096		11.14319	

Statistics 4 (ChirpCenter Frequency: 5503.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	18	90	1214		0.628799	1
1	2	18	57.3	1933		1.60381	
2	1	18	99.8			2.800944	
3	2	18	82.7	1788		3.697287	
4	2	18	59.8	1519		5.921075	
5	2	18	79.3	1208		6.816065	
6	3	18	63.9	1236	1952	7.748493	
7	2	18	79.4	1819		8.778753	
8	2	18	97.1	1988		10.48651	
9	2	18	89.3	1805		11.94434	

Statistics 5 (ChirpCenter Frequency: 5505.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	12	87.9	1192		0.13396	1
1	1	12	75.2			1.873774	
2	2	12	55.8	1474		2.717627	
3	2	12	92.1	1246		4.222276	
4	3	12	74.8	1480	1899	5.305461	
5	2	12	96	1741		5.595289	
6	3	12	99.3	1562	1585	7.128332	
7	3	12	73.6	1869	1562	7.746455	
8	2	12	64.9	1767		9.74021	
9	3	12	86.3	1517	1406	10.33947	
10	1	12	97.3			11.32294	

Statistics 6 (ChirpCenter Frequency: 5507.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	8	56.6	1569		0.693805	1
1	2	8	94.7	1115		1.665272	
2	2	8	97.1	1838		1.943299	
3	1	8	93.7			2.866668	
4	3	8	84.8	1757	1053	3.777222	
5	2	8	77.3	1720		4.991459	
6	3	8	76	1506	1157	5.320079	
7	2	8	70.7	1047		6.789463	
8	2	8	53.8	1730		7.658752	
9	1	8	68.1			7.80549	
10	1	8	67.6			8.935151	
11	3	8	95.7	1944	1512	9.748825	
12	1	8	55.4			11.11436	
13	2	8	66.7	1235		11.93008	

Statistics 7 (ChirpCenter Frequency: 5505.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	12	73.6	1203		0.96915	1
1	3	12	70.9	1899	1856	1.229212	
2	2	12	92.6	1771		2.561568	
3	3	12	97.2	1080	1331	3.380922	
4	1	12	69.5			4.350578	
5	2	12	58	1676		5.346302	
6	3	12	91.9	1247	1138	6.685992	
7	2	12	82.8	1814		7.809396	
8	2	12	55.1	1659		8.240602	
9	1	12	92.8			9.71791	
10	2	12	58.4	1140		10.80533	
11	2	12	79.9	1451		11.0643	

Statistics 8 (ChirpCenter Frequency: 5504.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	14	71.3	1554	1578	0.575981	1
1	2	14	57.8	1687		1.3673	
2	2	14	66	1547		1.760644	
3	3	14	50.7	1671	1477	2.649926	
4	1	14	93.4			3.443206	
5	3	14	75.3	1796	1424	3.839984	
6	3	14	68.2	1580	1572	4.516622	
7	2	14	92.4	1171		5.623231	
8	2	14	81.8	1637		6.251493	
9	3	14	62.8	1131	1093	6.815376	
10	2	14	72	1517		7.100779	
11	2	14	63.4	1460		8.207554	
12	1	14	59.3			8.691308	
13	3	14	72.2	1407	1961	9.693492	
14	1	14	62.1			9.984256	
15	3	14	77	1674	1690	10.72509	
16	2	14	70.6	1986		11.29717	

Statistics 9 (ChirpCenter Frequency: 5502.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	20	98.7			0.541677	1
1	2	20	79.6	1303		1.149025	
2	2	20	65.2	1049		2.96911	
3	2	20	83.8	1787		3.387991	
4	2	20	81.1	1623		4.096833	
5	2	20	95.5	1414		5.302118	
6	2	20	91.4	1626		6.403324	
7	2	20	75	1856		7.302125	
8	1	20	79.6			8.133715	
9	2	20	91.5	1269		9.081859	
10	3	20	98.6	1871	1054	10.63497	
11	3	20	56.3	1660	1012	11.78121	

Statistics 10 (ChirpCenter Frequency: 5503.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	18	67.9			0.528693	1
1	2	18	74.7	1423		1.060591	
2	1	18	83.9			1.522744	
3	1	18	57			2.846333	
4	2	18	62.5	1372		3.710681	
5	1	18	83.6			4.08263	
6	1	18	84.4			4.622815	
7	3	18	75.4	1326	1505	5.637153	
8	3	18	56.9	1437	1608	6.043694	
9	3	18	65.8	1688	1415	6.891546	
10	3	18	91.2	1104	1922	7.523094	
11	3	18	95.8	1588	1445	8.501343	
12	2	18	91.6	1047		9.411225	
13	2	18	93.7	1418		9.753767	
14	1	18	78.5			10.73502	
15	2	18	59	1712		11.85507	

Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)	Hopping Sequence (MHz)
1	5500	9	1	333	1	5381.0, 5669.0, 5471.0, 5253.0, 5651.0, 5353.0, 5465.0, 5619.0, 5391.0, 5515.0, 5502.0, 5518.0, 5308.0, 5354.0, 5679.0, 5643.0, 5695.0, 5646.0, 5374.0, 5306.0, 5493.0, 5590.0, 5516.0, 5698.0, 5530.0, 5304.0, 5454.0, 5303.0, 5507.0, 5499.0, 5451.0, 5615.0, 5523.0, 5259.0, 5283.0, 5653.0, 5645.0, 5556.0, 5330.0, 5691.0, 5280.0, 5626.0, 5438.0, 5331.0, 5713.0, 5667.0, 5341.0, 5575.0, 5707.0, 5367.0, 5596.0, 5269.0, 5311.0, 5360.0, 5595.0, 5296.0, 5597.0, 5254.0, 5624.0, 5406.0, 5294.0, 5257.0, 5722.0, 5313.0, 5368.0, 5309.0, 5275.0, 5574.0, 5570.0, 5386.0, 5621.0, 5715.0, 5278.0, 5562.0, 5416.0, 5712.0, 5463.0, 5277.0, 5491.0, 5659.0, 5708.0, 5690.0, 5393.0, 5501.0, 5421.0, 5591.0, 5528.0, 5678.0, 5262.0, 5670.0, 5652.0, 5588.0, 5356.0, 5498.0, 5392.0, 5427.0, 5628.0, 5511.0, 5302.0, 5632.0
2	5500	9	1	333	1	5393.0, 5518.0, 5529.0, 5265.0, 5499.0, 5439.0, 5587.0, 5453.0, 5419.0, 5425.0, 5354.0, 5487.0, 5531.0, 5451.0, 5669.0, 5282.0, 5287.0, 5675.0, 5710.0, 5355.0, 5563.0, 5693.0, 5566.0, 5510.0, 5402.0, 5509.0, 5299.0, 5590.0, 5410.0, 5436.0, 5429.0, 5530.0, 5540.0, 5454.0, 5649.0, 5613.0, 5673.0, 5512.0, 5338.0, 5309.0, 5588.0, 5678.0, 5568.0, 5267.0, 5386.0, 5307.0, 5314.0, 5471.0, 5694.0, 5458.0, 5496.0, 5690.0, 5358.0, 5406.0, 5508.0, 5641.0, 5500.0, 5524.0, 5716.0, 5433.0, 5424.0, 5473.0, 5329.0, 5586.0, 5644.0, 5372.0, 5581.0, 5342.0, 5516.0, 5411.0, 5414.0, 5498.0, 5422.0, 5567.0, 5330.0, 5627.0, 5620.0, 5259.0, 5262.0, 5455.0, 5285.0, 5577.0, 5536.0, 5409.0, 5680.0, 5700.0, 5691.0, 5457.0, 5442.0, 5486.0, 5668.0, 5427.0, 5459.0, 5275.0, 5676.0, 5268.0, 5607.0, 5359.0, 5371.0, 5521.0
3	5500	9	1	333	1	5318.0, 5263.0, 5355.0, 5300.0, 5553.0, 5590.0, 5606.0, 5684.0, 5723.0, 5411.0, 5535.0, 5436.0, 5631.0, 5281.0, 5269.0, 5524.0, 5400.0, 5347.0, 5530.0, 5540.0, 5478.0, 5272.0, 5323.0, 5630.0, 5317.0, 5613.0, 5608.0, 5511.0, 5461.0, 5415.0, 5361.0, 5672.0, 5499.0, 5289.0, 5698.0, 5360.0, 5597.0, 5402.0, 5554.0, 5610.0, 5464.0, 5305.0, 5495.0, 5406.0, 5409.0, 5339.0, 5425.0, 5682.0, 5486.0, 5380.0, 5431.0, 5712.0, 5423.0, 5473.0, 5573.0, 5531.0, 5376.0, 5574.0, 5579.0, 5595.0, 5250.0, 5258.0, 5256.0, 5548.0, 5686.0

						5346.0, 5452.0, 5420.0, 5594.0, 5558.0, 5572.0, 5492.0, 5429.0, 5592.0, 5593.0, 5283.0, 5526.0, 5713.0, 5476.0, 5674.0, 5601.0, 5426.0, 5582.0, 5482.0, 5536.0, 5688.0, 5575.0, 5367.0, 5487.0, 5501.0, 5430.0, 5653.0, 5458.0, 5513.0, 5459.0, 5424.0, 5356.0, 5381.0, 5707.0, 5453.0
4	5500	9	1	333	1	5586.0, 5665.0, 5633.0, 5476.0, 5323.0, 5502.0, 5452.0, 5416.0, 5293.0, 5568.0, 5583.0, 5472.0, 5262.0, 5355.0, 5282.0, 5463.0, 5636.0, 5634.0, 5477.0, 5708.0, 5290.0, 5504.0, 5281.0, 5597.0, 5394.0, 5618.0, 5667.0, 5691.0, 5315.0, 5653.0, 5546.0, 5526.0, 5528.0, 5512.0, 5361.0, 5345.0, 5454.0, 5418.0, 5651.0, 5390.0, 5660.0, 5461.0, 5520.0, 5450.0, 5297.0, 5377.0, 5724.0, 5578.0, 5256.0, 5671.0, 5343.0, 5479.0, 5548.0, 5674.0, 5270.0, 5253.0, 5484.0, 5250.0, 5593.0, 5524.0, 5488.0, 5570.0, 5648.0, 5617.0, 5252.0, 5254.0, 5362.0, 5307.0, 5415.0, 5613.0, 5350.0, 5659.0, 5487.0, 5260.0, 5643.0, 5565.0, 5493.0, 5356.0, 5569.0, 5382.0, 5334.0, 5296.0, 5684.0, 5336.0, 5395.0, 5533.0, 5689.0, 5591.0, 5564.0, 5288.0, 5610.0, 5694.0, 5518.0, 5587.0, 5692.0, 5531.0, 5495.0, 5664.0, 5340.0, 5499.0
5	5500	9	1	333	1	5356.0, 5314.0, 5457.0, 5715.0, 5489.0, 5648.0, 5491.0, 5583.0, 5262.0, 5354.0, 5431.0, 5709.0, 5588.0, 5318.0, 5535.0, 5496.0, 5438.0, 5428.0, 5672.0, 5472.0, 5579.0, 5422.0, 5254.0, 5721.0, 5399.0, 5427.0, 5626.0, 5630.0, 5287.0, 5327.0, 5562.0, 5260.0, 5335.0, 5402.0, 5465.0, 5593.0, 5387.0, 5669.0, 5398.0, 5632.0, 5596.0, 5437.0, 5716.0, 5384.0, 5635.0, 5642.0, 5634.0, 5323.0, 5693.0, 5538.0, 5691.0, 5505.0, 5290.0, 5349.0, 5451.0, 5481.0, 5474.0, 5321.0, 5425.0, 5603.0, 5371.0, 5565.0, 5647.0, 5619.0, 5631.0, 5295.0, 5278.0, 5381.0, 5490.0, 5426.0, 5313.0, 5607.0, 5353.0, 5419.0, 5434.0, 5339.0, 5554.0, 5685.0, 5364.0, 5654.0, 5518.0, 5552.0, 5265.0, 5476.0, 5301.0, 5703.0, 5412.0, 5440.0, 5636.0, 5346.0, 5268.0, 5487.0, 5430.0, 5286.0, 5724.0, 5608.0, 5373.0, 5347.0, 5544.0, 5515.0
6	5500	9	1	333	1	5712.0, 5289.0, 5620.0, 5418.0, 5393.0, 5310.0, 5572.0, 5255.0, 5515.0, 5585.0, 5256.0, 5490.0, 5402.0, 5701.0, 5636.0, 5576.0, 5494.0, 5554.0, 5274.0, 5651.0, 5545.0, 5454.0, 5503.0, 5318.0, 5706.0, 5456.0, 5523.0, 5601.0, 5654.0, 5257.0, 5579.0, 5628.0, 5473.0, 5612.0, 5369.0, 5462.0, 5632.0, 5616.0, 5368.0, 5305.0, 5488.0, 5707.0, 5296.0, 5372.0, 5658.0, 5430.0, 5586.0, 5607.0, 5491.0, 5583.0, 5276.0, 5367.0, 5261.0, 5449.0, 5253.0, 5301.0, 5458.0, 5464.0, 5647.0, 5675.0, 5416.0, 5363.0, 5475.0, 5550.0, 5385.0

						5535.0, 5598.0, 5315.0, 5684.0, 5421.0, 5624.0, 5619.0, 5268.0, 5424.0, 5697.0, 5622.0, 5389.0, 5556.0, 5265.0, 5281.0, 5674.0, 5533.0, 5374.0, 5292.0, 5549.0, 5273.0, 5691.0, 5269.0, 5509.0, 5564.0, 5677.0, 5387.0, 5306.0, 5713.0, 5547.0, 5435.0, 5520.0, 5557.0, 5469.0, 5698.0
7	5500	9	1	333	1	5562.0, 5558.0, 5522.0, 5297.0, 5720.0, 5318.0, 5439.0, 5580.0, 5293.0, 5357.0, 5538.0, 5705.0, 5613.0, 5458.0, 5447.0, 5347.0, 5597.0, 5288.0, 5250.0, 5389.0, 5563.0, 5401.0, 5638.0, 5435.0, 5589.0, 5280.0, 5391.0, 5510.0, 5258.0, 5461.0, 5337.0, 5512.0, 5433.0, 5505.0, 5302.0, 5715.0, 5630.0, 5292.0, 5257.0, 5668.0, 5575.0, 5460.0, 5633.0, 5696.0, 5682.0, 5476.0, 5514.0, 5586.0, 5473.0, 5405.0, 5605.0, 5708.0, 5631.0, 5411.0, 5380.0, 5253.0, 5265.0, 5724.0, 5328.0, 5578.0, 5513.0, 5659.0, 5556.0, 5554.0, 5523.0, 5482.0, 5263.0, 5358.0, 5704.0, 5718.0, 5428.0, 5584.0, 5703.0, 5443.0, 5381.0, 5363.0, 5331.0, 5308.0, 5600.0, 5618.0, 5349.0, 5262.0, 5409.0, 5496.0, 5364.0, 5339.0, 5408.0, 5441.0, 5384.0, 5606.0, 5643.0, 5628.0, 5329.0, 5642.0, 5686.0, 5649.0, 5282.0, 5324.0, 5706.0, 5572.0
8	5500	9	1	333	1	5476.0, 5608.0, 5428.0, 5502.0, 5684.0, 5636.0, 5580.0, 5614.0, 5368.0, 5450.0, 5387.0, 5656.0, 5639.0, 5361.0, 5706.0, 5365.0, 5469.0, 5259.0, 5421.0, 5712.0, 5356.0, 5498.0, 5688.0, 5588.0, 5423.0, 5442.0, 5612.0, 5637.0, 5520.0, 5286.0, 5473.0, 5465.0, 5538.0, 5352.0, 5270.0, 5309.0, 5515.0, 5333.0, 5353.0, 5489.0, 5570.0, 5537.0, 5593.0, 5372.0, 5518.0, 5366.0, 5530.0, 5496.0, 5326.0, 5562.0, 5267.0, 5457.0, 5486.0, 5594.0, 5569.0, 5437.0, 5275.0, 5341.0, 5679.0, 5410.0, 5390.0, 5579.0, 5705.0, 5319.0, 5701.0, 5492.0, 5384.0, 5370.0, 5577.0, 5334.0, 5589.0, 5702.0, 5658.0, 5316.0, 5609.0, 5479.0, 5272.0, 5625.0, 5427.0, 5522.0, 5274.0, 5467.0, 5560.0, 5582.0, 5638.0, 5683.0, 5314.0, 5719.0, 5514.0, 5396.0, 5541.0, 5377.0, 5573.0, 5649.0, 5627.0, 5453.0, 5601.0, 5358.0, 5500.0, 5472.0
9	5500	9	1	333	1	5390.0, 5478.0, 5486.0, 5641.0, 5545.0, 5276.0, 5696.0, 5568.0, 5686.0, 5432.0, 5321.0, 5331.0, 5581.0, 5552.0, 5496.0, 5685.0, 5479.0, 5655.0, 5434.0, 5487.0, 5261.0, 5385.0, 5635.0, 5653.0, 5614.0, 5498.0, 5557.0, 5401.0, 5596.0, 5671.0, 5493.0, 5569.0, 5332.0, 5460.0, 5710.0, 5470.0, 5514.0, 5591.0, 5287.0, 5427.0, 5463.0, 5527.0, 5503.0, 5418.0, 5268.0, 5565.0, 5717.0, 5521.0, 5715.0, 5513.0, 5507.0, 5266.0, 5623.0, 5502.0, 5582.0, 5695.0, 5281.0, 5723.0, 5311.0, 5563.0, 5411.0, 5462.0, 5258.0, 5357.0, 5499.0,

						5399.0, 5405.0, 5379.0, 5570.0, 5656.0, 5506.0, 5468.0, 5692.0, 5679.0, 5604.0, 5424.0, 5687.0, 5335.0, 5517.0, 5698.0, 5391.0, 5325.0, 5381.0, 5275.0, 5352.0, 5561.0, 5512.0, 5589.0, 5273.0, 5721.0, 5292.0, 5567.0, 5607.0, 5406.0, 5368.0, 5285.0, 5488.0, 5673.0, 5599.0, 5366.0
10	5500	9	1	333	1	5475.0, 5340.0, 5697.0, 5550.0, 5587.0, 5527.0, 5461.0, 5270.0, 5406.0, 5516.0, 5468.0, 5666.0, 5255.0, 5377.0, 5353.0, 5332.0, 5645.0, 5626.0, 5458.0, 5341.0, 5281.0, 5451.0, 5342.0, 5633.0, 5426.0, 5595.0, 5251.0, 5611.0, 5530.0, 5507.0, 5552.0, 5711.0, 5569.0, 5649.0, 5380.0, 5581.0, 5304.0, 5471.0, 5501.0, 5481.0, 5631.0, 5668.0, 5634.0, 5396.0, 5535.0, 5602.0, 5624.0, 5268.0, 5647.0, 5455.0, 5291.0, 5677.0, 5614.0, 5443.0, 5546.0, 5423.0, 5416.0, 5713.0, 5434.0, 5533.0, 5548.0, 5499.0, 5289.0, 5669.0, 5709.0, 5442.0, 5459.0, 5718.0, 5708.0, 5338.0, 5383.0, 5582.0, 5625.0, 5599.0, 5328.0, 5479.0, 5307.0, 5653.0, 5267.0, 5286.0, 5473.0, 5305.0, 5655.0, 5404.0, 5646.0, 5656.0, 5537.0, 5705.0, 5403.0, 5486.0, 5330.0, 5695.0, 5407.0, 5506.0, 5559.0, 5472.0, 5623.0, 5589.0, 5630.0, 5438.0
11	5500	9	1	333	1	5685.0, 5557.0, 5693.0, 5360.0, 5493.0, 5449.0, 5294.0, 5388.0, 5488.0, 5518.0, 5512.0, 5399.0, 5684.0, 5471.0, 5279.0, 5452.0, 5658.0, 5350.0, 5479.0, 5656.0, 5648.0, 5630.0, 5293.0, 5581.0, 5371.0, 5423.0, 5574.0, 5698.0, 5608.0, 5426.0, 5546.0, 5544.0, 5375.0, 5285.0, 5282.0, 5298.0, 5618.0, 5397.0, 5674.0, 5411.0, 5425.0, 5271.0, 5598.0, 5625.0, 5692.0, 5469.0, 5256.0, 5376.0, 5403.0, 5646.0, 5585.0, 5370.0, 5418.0, 5420.0, 5467.0, 5527.0, 5468.0, 5640.0, 5673.0, 5593.0, 5349.0, 5540.0, 5393.0, 5332.0, 5534.0, 5550.0, 5354.0, 5671.0, 5292.0, 5392.0, 5631.0, 5485.0, 5508.0, 5688.0, 5434.0, 5447.0, 5384.0, 5348.0, 5343.0, 5605.0, 5582.0, 5500.0, 5686.0, 5619.0, 5606.0, 5651.0, 5714.0, 5458.0, 5667.0, 5379.0, 5457.0, 5491.0, 5267.0, 5696.0, 5474.0, 5335.0, 5655.0, 5351.0, 5492.0, 5543.0
12	5500	9	1	333	1	5318.0, 5519.0, 5358.0, 5709.0, 5407.0, 5614.0, 5314.0, 5293.0, 5577.0, 5583.0, 5354.0, 5578.0, 5334.0, 5630.0, 5380.0, 5272.0, 5691.0, 5543.0, 5289.0, 5392.0, 5674.0, 5527.0, 5706.0, 5683.0, 5482.0, 5619.0, 5694.0, 5484.0, 5540.0, 5323.0, 5393.0, 5598.0, 5671.0, 5480.0, 5641.0, 5521.0, 5628.0, 5400.0, 5401.0, 5325.0, 5705.0, 5269.0, 5645.0, 5490.0, 5345.0, 5347.0, 5445.0, 5658.0, 5475.0, 5557.0, 5568.0, 5567.0, 5267.0, 5254.0, 5478.0, 5472.0, 5390.0, 5636.0, 5714.0, 5471.0, 5417.0, 5655.0, 5654.0, 5320.0, 5310.0,

						5341.0, 5371.0, 5599.0, 5682.0, 5382.0, 5414.0, 5344.0, 5301.0, 5257.0, 5702.0, 5669.0, 5428.0, 5721.0, 5455.0, 5700.0, 5251.0, 5280.0, 5649.0, 5622.0, 5321.0, 5362.0, 5707.0, 5564.0, 5434.0, 5296.0, 5556.0, 5326.0, 5429.0, 5290.0, 5634.0, 5469.0, 5412.0, 5535.0, 5524.0, 5322.0
13	5500	9	1	333	1	5260.0, 5632.0, 5364.0, 5477.0, 5572.0, 5518.0, 5420.0, 5610.0, 5719.0, 5329.0, 5261.0, 5569.0, 5543.0, 5451.0, 5657.0, 5604.0, 5289.0, 5553.0, 5294.0, 5488.0, 5464.0, 5615.0, 5620.0, 5589.0, 5297.0, 5663.0, 5633.0, 5402.0, 5282.0, 5496.0, 5432.0, 5662.0, 5407.0, 5713.0, 5328.0, 5408.0, 5680.0, 5580.0, 5664.0, 5709.0, 5423.0, 5252.0, 5437.0, 5548.0, 5435.0, 5577.0, 5693.0, 5644.0, 5546.0, 5636.0, 5416.0, 5692.0, 5596.0, 5614.0, 5411.0, 5475.0, 5263.0, 5535.0, 5607.0, 5318.0, 5612.0, 5392.0, 5697.0, 5509.0, 5259.0, 5560.0, 5558.0, 5525.0, 5288.0, 5532.0, 5382.0, 5457.0, 5511.0, 5352.0, 5404.0, 5550.0, 5482.0, 5325.0, 5366.0, 5315.0, 5456.0, 5544.0, 5333.0, 5385.0, 5684.0, 5628.0, 5539.0, 5593.0, 5389.0, 5361.0, 5627.0, 5634.0, 5332.0, 5365.0, 5513.0, 5514.0, 5412.0, 5458.0, 5557.0, 5660.0
14	5500	9	1	333	1	5686.0, 5660.0, 5312.0, 5659.0, 5667.0, 5444.0, 5457.0, 5535.0, 5707.0, 5382.0, 5338.0, 5613.0, 5491.0, 5532.0, 5347.0, 5526.0, 5566.0, 5465.0, 5426.0, 5533.0, 5608.0, 5691.0, 5577.0, 5253.0, 5482.0, 5605.0, 5381.0, 5336.0, 5630.0, 5715.0, 5302.0, 5717.0, 5516.0, 5515.0, 5393.0, 5276.0, 5395.0, 5479.0, 5581.0, 5522.0, 5371.0, 5260.0, 5254.0, 5562.0, 5333.0, 5545.0, 5549.0, 5591.0, 5433.0, 5642.0, 5323.0, 5529.0, 5586.0, 5317.0, 5416.0, 5499.0, 5593.0, 5488.0, 5280.0, 5504.0, 5454.0, 5365.0, 5456.0, 5332.0, 5294.0, 5468.0, 5390.0, 5263.0, 5451.0, 5600.0, 5694.0, 5699.0, 5556.0, 5440.0, 5259.0, 5563.0, 5612.0, 5599.0, 5420.0, 5303.0, 5661.0, 5486.0, 5498.0, 5459.0, 5633.0, 5461.0, 5295.0, 5697.0, 5626.0, 5406.0, 5300.0, 5357.0, 5503.0, 5435.0, 5517.0, 5460.0, 5315.0, 5483.0, 5384.0, 5651.0
15	5500	9	1	333	1	5590.0, 5538.0, 5614.0, 5485.0, 5622.0, 5461.0, 5308.0, 5269.0, 5301.0, 5724.0, 5362.0, 5611.0, 5502.0, 5679.0, 5634.0, 5691.0, 5446.0, 5702.0, 5483.0, 5302.0, 5505.0, 5416.0, 5427.0, 5609.0, 5630.0, 5600.0, 5442.0, 5385.0, 5641.0, 5503.0, 5540.0, 5651.0, 5624.0, 5257.0, 5543.0, 5474.0, 5620.0, 5451.0, 5476.0, 5706.0, 5595.0, 5261.0, 5510.0, 5376.0, 5589.0, 5377.0, 5396.0, 5270.0, 5417.0, 5488.0, 5675.0, 5354.0, 5444.0, 5714.0, 5722.0, 5493.0, 5673.0, 5273.0, 5556.0, 5333.0, 5697.0, 5604.0, 5625.0, 5662.0, 5363.0,

						5272.0, 5544.0, 5312.0, 5435.0, 5677.0, 5262.0, 5599.0, 5629.0, 5531.0, 5520.0, 5704.0, 5511.0, 5469.0, 5349.0, 5373.0, 5470.0, 5465.0, 5390.0, 5636.0, 5359.0, 5364.0, 5458.0, 5393.0, 5409.0, 5612.0, 5394.0, 5434.0, 5666.0, 5388.0, 5475.0, 5610.0, 5432.0, 5298.0, 5701.0, 5613.0
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29	5500	9	1	333	1	5488.0, 5691.0, 5669.0, 5261.0, 5435.0, 5427.0, 5288.0, 5720.0, 5493.0, 5577.0, 5526.0, 5406.0, 5394.0, 5360.0, 5276.0, 5256.0, 5636.0, 5710.0, 5457.0, 5676.0, 5352.0, 5494.0, 5642.0, 5266.0, 5369.0, 5516.0, 5408.0, 5551.0, 5560.0, 5258.0, 5682.0, 5586.0, 5268.0, 5316.0, 5418.0, 5251.0, 5508.0, 5345.0, 5532.0, 5339.0, 5473.0, 5426.0, 5340.0, 5501.0, 5453.0, 5655.0, 5499.0, 5647.0, 5566.0, 5649.0, 5614.0, 5277.0, 5623.0, 5662.0, 5329.0, 5619.0, 5278.0, 5536.0, 5717.0, 5548.0, 5572.0, 5253.0, 5311.0, 5324.0, 5438.0, 5668.0, 5466.0, 5393.0, 5506.0, 5347.0, 5582.0, 5293.0, 5312.0, 5542.0, 5294.0, 5469.0, 5267.0, 5403.0, 5446.0, 5349.0, 5448.0, 5695.0, 5563.0, 5450.0, 5600.0, 5603.0, 5511.0, 5552.0, 5477.0, 5698.0, 5509.0, 5666.0, 5424.0, 5527.0, 5437.0, 5341.0, 5398.0, 5584.0, 5270.0, 5496.0
30	5500	9	1	333	1	5478.0, 5502.0, 5687.0, 5565.0, 5410.0, 5276.0, 5327.0, 5691.0, 5310.0, 5350.0, 5572.0, 5633.0, 5339.0, 5665.0, 5662.0, 5668.0, 5601.0, 5693.0, 5670.0, 5544.0, 5347.0, 5521.0, 5280.0, 5599.0, 5602.0, 5395.0, 5577.0, 5632.0, 5254.0, 5371.0, 5608.0, 5580.0, 5304.0, 5497.0, 5639.0, 5324.0, 5341.0, 5649.0, 5718.0, 5457.0, 5720.0, 5309.0, 5403.0, 5437.0, 5420.0, 5292.0, 5486.0, 5656.0, 5452.0, 5681.0, 5262.0, 5320.0, 5525.0, 5609.0, 5709.0, 5642.0, 5505.0, 5396.0, 5418.0, 5398.0, 5560.0, 5650.0, 5690.0, 5306.0, 5422.0,

						5634.0, 5428.0, 5296.0, 5354.0, 5567.0, 5429.0, 5644.0, 5530.0, 5442.0, 5617.0, 5562.0, 5591.0, 5362.0, 5600.0, 5523.0, 5368.0, 5574.0, 5288.0, 5407.0, 5680.0, 5604.0, 5415.0, 5556.0, 5686.0, 5319.0, 5569.0, 5450.0, 5458.0, 5659.0, 5301.0, 5454.0, 5671.0, 5598.0, 5653.0, 5459.0
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40MHz

Radar SignalType	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1A	15	100%	60%	pass
Type 1B	15	100%	60%	pass
Type 2	30	93.33 %	60%	Pass
Type 3	30	86.67%	60%	Pass
Type 4	30	83.33 %	60%	Pass
Aggregate(Type1 to 4)	120	90.83%	80%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	100 %	70%	Pass

Please refer to the following statistical tables:

5510MHz**Radar Type 1A Statistical Performance**

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5510	62	1	858	1
2	5510	78	1	678	1
3	5510	92	1	578	1
4	5510	65	1	818	1
5	5510	95	1	558	1
6	5510	81	1	658	1
7	5510	67	1	798	1
8	5510	63	1	838	1
9	5510	83	1	638	1
10	5510	99	1	538	1
11	5510	68	1	778	1
12	5510	76	1	698	1
13	5510	70	1	758	1
14	5510	59	1	898	1
15	5510	102	1	518	1
Detection Percentage: 100 % (>60%)					

Radar Type 1B Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5510	21	1	2558	1
2	5510	22	1	2487	1
3	5510	39	1	1359	1
4	5510	23	1	2308	1
5	5510	23	1	2330	1
6	5510	27	1	1988	1
7	5510	99	1	537	1
8	5510	44	1	1220	1
9	5510	18	1	2975	1
10	5510	44	1	1225	1
11	5510	20	1	2720	1
12	5510	23	1	2345	1
13	5510	37	1	1440	1
14	5510	29	1	1864	1
15	5510	18	1	2964	1
Detection Percentage: 100 % (>60%)					

Radar Type 2 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5510	26	3.4	196	1
2	5510	27	4.9	210	1
3	5510	28	1.7	176	1
4	5510	25	3.8	159	1
5	5510	24	4.6	197	0
6	5510	29	3	187	1
7	5510	25	4.8	157	1
8	5510	24	2.3	230	1
9	5510	29	2.9	168	1
10	5510	25	2	206	1
11	5510	24	1.3	159	1
12	5510	27	1	210	1
13	5510	25	4.6	152	0
14	5510	28	2.2	181	1
15	5510	26	3.2	158	1
16	5510	29	4.6	225	1
17	5510	23	2.6	206	1
18	5510	23	4.5	188	1
19	5510	23	3.6	160	1
20	5510	26	1.2	210	1
21	5510	23	4.7	174	1
22	5510	26	4.6	179	1
23	5510	27	2.9	215	1
24	5510	24	4.2	176	1
25	5510	25	2.9	157	1
26	5510	28	2.7	190	1
27	5510	25	3.9	209	1
28	5510	26	1.6	222	1
29	5510	26	1.6	156	1
30	5510	28	2	185	1
Detection Percentage: 93.3 % (>60%)					

Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5510	16	9.2	366	1
2	5510	16	9.3	384	1
3	5510	17	9.2	307	1
4	5510	18	9.3	441	1
5	5510	16	6.8	296	0
6	5510	17	9.2	442	1
7	5510	16	7.3	491	1
8	5510	17	9.1	390	1
9	5510	18	7.1	365	1
10	5510	16	7.5	418	1
11	5510	18	9.9	416	1
12	5510	17	6.6	419	0
13	5510	17	9.4	293	1
14	5510	18	10	261	1
15	5510	18	6.1	491	1
16	5510	16	9.9	396	0
17	5510	16	8.5	297	1
18	5510	17	7.6	419	1
19	5510	17	6.8	465	1
20	5510	18	9.8	228	1
21	5510	16	9.3	472	1
22	5510	17	8.3	365	1
23	5510	17	6.2	382	1
24	5510	16	6.3	210	1
25	5510	16	7.2	307	1
26	5510	18	9.2	450	1
27	5510	18	8.9	493	1
28	5510	18	7	271	1
29	5510	16	8.5	311	1
30	5510	16	6.2	441	1
31	5510	18	9.3	430	0
Detection Percentage: 87.1 % (>60%)					

Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5510	13	18.7	474	1
2	5510	14	18.5	297	1
3	5510	14	19.5	256	1
4	5510	13	17	339	0
5	5510	16	13.2	468	1
6	5510	12	15.1	243	1
7	5510	14	17.4	302	1
8	5510	14	18.1	382	0
9	5510	16	15.8	224	1
10	5510	12	14.5	319	1
11	5510	14	19.1	419	1
12	5510	16	16.8	200	1
13	5510	15	15.7	452	1
14	5510	14	19.9	321	1
15	5510	16	15	290	1
16	5510	14	12.3	431	1
17	5510	12	13.6	356	0
18	5510	16	15.6	323	1
19	5510	15	19.1	208	1
20	5510	14	19.9	354	1
21	5510	16	14.7	314	0
22	5510	13	11	497	1
23	5510	15	19.4	291	1
24	5510	15	15.5	474	1
25	5510	12	12.1	477	0
26	5510	12	14.5	323	1
27	5510	12	15	436	1
28	5510	16	18.5	309	1
29	5510	15	18.9	356	1
30	5510	15	15	296	1
Detection Percentage: 83.33 % (>60%)					

Radar Type 5 Case 1 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5510.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	14	83.1	1067	1336	0.744584	1
1	2	14	50.1	1602		1.670488	
2	3	14	73.3	1471	1268	3.19327	
3	3	14	78	1732	1673	3.66744	
4	3	14	53.4	1744	1989	4.457576	
5	2	14	85.3	1755		5.941327	
6	3	14	66.7	1854	1142	6.56321	
7	1	14	72			7.815089	
8	2	14	88.2	1442		9.392808	
9	3	14	96.9	1122	1277	10.24792	
10	2	14	73.2	1650		11.38359	

Statistics 2 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	10	62.8	1937		0.143747	1
1	2	10	82.3	1113		1.220381	
2	2	10	70.3	1298		1.570201	
3	2	10	76.7	1561		2.273224	
4	2	10	65.3	1084		2.563205	
5	2	10	57.2	1053		3.498316	
6	2	10	87.9	1840		4.202595	
7	2	10	89.9	1818		4.995143	
8	2	10	54.1	1696		5.394284	
9	3	10	96.1	1854	1121	6.085843	
10	3	10	60.3	1271	1068	6.660532	
11	1	10	82.2			7.560042	
12	3	10	88.6	1254	1300	7.785005	
13	2	10	75.8	1837		8.307569	
14	3	10	88.1	1453	1062	8.897053	
15	2	10	93.2	1858		9.903292	
16	2	10	83.4	1179		10.46719	
17	1	10	77.2			11.30999	
18	3	10	88.7	1148	1701	11.97463	

Statistics 3 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	15	85.4			0.69511	1
1	3	15	62	1525	1424	1.776057	
2	1	15	57			4.15723	
3	3	15	65.2	1870	1306	5.792049	
4	3	15	87.4	1990	1060	6.979337	
5	3	15	80.5	1373	1203	8.927206	
6	3	15	99.1	1561	1170	9.532681	
7	1	15	68.3			10.51713	

Statistics 4 (ChirpCenter Frequency: 5270.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	15	78.3	1549		0.163997	1
1	2	15	63	1593		1.600895	
2	1	15	69.6			3.08217	
3	2	15	93	1612		4.21423	
4	1	15	58.7			6.601916	
5	2	15	86.2	1251		7.711107	
6	2	15	86.6	1376		9.217655	
7	1	15	83.5			9.642436	
8	1	15	67.4			11.29852	

Statistics 5(ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	13	92.1	1597		0.385316	1
1	2	13	98.4	1772		0.943244	
2	2	13	65.7	1196		1.871721	
3	2	13	78.9	1598		2.906397	
4	3	13	78	1526	1823	3.491187	
5	3	13	66.2	1940	1781	4.390391	
6	2	13	50.5	1337		4.746135	
7	3	13	61.4	1309	1780	5.271783	
8	2	13	99.4	1650		6.110342	
9	1	13	82.2			6.77009	
10	2	13	60.2	1553		8.110115	
11	2	13	99.4	1372		8.801202	
12	2	13	82.2	1905		9.399172	
13	1	13	56.3			10.49554	
14	2	13	69.8	1804		11.21352	
15	1	13	69.2			11.25039	

Statistics 6 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	8	98	1987		0.577188	1
1	2	8	86.8	1994		1.269751	
2	2	8	98.4	1692		2.092833	
3	2	8	70.3	1098		2.806852	
4	2	8	77.2	1013		4.529703	
5	3	8	96.1	1205	1781	5.251693	
6	2	8	62.6	1544		6.437523	
7	2	8	78.4	1251		6.866406	
8	2	8	76.9	1564		8.174184	
9	1	8	69.6			8.571534	
10	2	8	56.9	1945		9.967022	
11	3	8	67.5	1263	1327	10.37573	
12	3	8	55.6	1121	1817	11.6589	

Statistics 7(ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	6	92.6	1160	1582	0.055617	1
1	2	6	51.4	1931		1.539052	
2	1	6	93.6			2.940079	
3	2	6	58.2	1146		4.238944	
4	1	6	62.1			5.09633	
5	2	6	73.6	1369		6.24628	
6	2	6	55.8	1375		7.397572	
7	3	6	85.1	1347	1342	8.64128	
8	3	6	50.5	1260	1053	8.823107	
9	2	6	75.4	1374		10.58734	
10	2	6	69.4	1897		11.77179	

Statistics 8 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	12	94	1387		0.664779	1
1	2	12	67.4	1968		1.44101	
2	2	12	79.5	1341		2.874475	
3	2	12	67.3	1567		4.122774	
4	2	12	81.6	1962		5.321044	
5	2	12	71.7	1536		6.376328	
6	2	12	74	1887		6.715222	
7	1	12	89.8			7.731526	
8	1	12	67.4			9.581737	
9	3	12	51.9	1640	1972	10.58182	
10	2	12	57.8	1709		11.81832	

Statistics 9 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	9	71.5	1117		0.374455	1
1	3	9	70.4	1679	1212	2.160381	
2	2	9	78.9	1839		2.192831	
3	2	9	75.5	1038		3.656681	
4	2	9	51.3	1058		5.05325	
5	3	9	62.2	1818	1954	5.722578	
6	2	9	73.2	1293		7.597233	
7	2	9	56.1	1234		7.824072	
8	2	9	53.2	1197		8.731307	
9	1	9	51.2			10.28174	
10	1	9	61.3			11.80301	

Statistics 10 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	11	97.6	1685		0.955449	1
1	3	11	95.1	1916	1070	1.576769	
2	3	11	83.2	1441	1196	2.528659	
3	2	11	77.5	1978		3.828035	
4	1	11	74.2			4.112088	
5	2	11	55.1	1014		5.351046	
6	2	11	84	1261		6.101213	
7	2	11	69.9	1773		7.512012	
8	2	11	67.9	1179		8.09833	
9	2	11	92.6	1856		9.345584	
10	2	11	64.8	1862		10.96668	
11	2	11	99.4	1957		11.80394	

Radar Type 5 Case 2 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	10	73.4	1328		0.471676	1
1	3	10	82.6	1912	1687	0.95383	
2	3	10	99.3	1034	1284	1.558415	
3	3	10	85.7	1785	2000	2.210439	
4	2	10	80.7	1500		3.188213	
5	3	10	50.7	1607	1661	3.734645	
6	1	10	75.3			4.600176	
7	3	10	59	1115	1560	5.285985	
8	2	10	73.7	1403		6.114525	
9	2	10	82.2	1388		6.814262	
10	1	10	76.4			7.352768	
11	1	10	82.6			8.017422	
12	3	10	82.3	1838	1870	8.915851	
13	2	10	59.4	1266		9.546786	
14	1	10	50.8			10.14896	
15	2	10	55.2	1409		10.84711	
16	1	10	62.5			11.37516	

Statistics 2 (ChirpCenter Frequency: 5496.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	14	77.4	1938		0.916277	1
1	3	14	79.8	1232	1772	1.310506	
2	2	14	82.4	1918		2.783353	
3	1	14	92.4			4.372308	
4	3	14	57.6	1658	1407	5.82176	
5	2	14	73.8	1763		6.553473	
6	1	14	77.9			8.090132	
7	3	14	55.4	1948	1872	9.041249	
8	2	14	53	1002		10.09159	
9	2	14	85.8	1333		11.75274	

Statistics 3 (ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	11	88.1	1210		0.581375	1
1	2	11	77.1	1632		1.062135	
2	3	11	73.6	1306	1346	1.795433	
3	2	11	81.1	1064		2.118868	
4	2	11	65.1	1316		3.283102	
5	3	11	64.5	1355	1680	3.807087	
6	2	11	73	1055		4.357048	
7	2	11	80	1053		5.219065	
8	2	11	70.8	1861		6.310303	
9	3	11	93.2	1116	1280	6.87447	
10	2	11	63.1	1209		7.078373	
11	3	11	80.6	1218	1246	7.954167	
12	1	11	91.5			8.976722	
13	2	11	96.5	1633		9.556845	
14	2	11	83	1824		10.55156	
15	2	11	87.3	1380		10.59606	
16	2	11	60.9	1939		11.48778	

Statistics 4 (ChirpCenter Frequency: 5493.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	8	77.8	1382		0.20865	1
1	3	8	68.1	1928	1211	1.495479	
2	2	8	54.2	1951		2.406237	
3	1	8	70.1			3.368269	
4	2	8	55.7	1519		5.435939	
5	2	8	98.9	1581		6.386766	
6	3	8	71	1552	1422	7.198698	
7	3	8	72.2	1805	1383	8.359926	
8	1	8	77.1			8.991891	
9	3	8	83.9	1908	1411	10.32687	
10	2	8	83.6	1368		11.85916	

Statistics 5 (ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	10	50.5			0.654512	1
1	1	10	51.2			1.961581	
2	2	10	72.4	1426		2.439829	
3	2	10	89.3	1529		4.060055	
4	3	10	89.8	1253	1203	5.632852	
5	1	10	55.1			6.04699	
6	1	10	53.2			7.814147	
7	2	10	69.3	1385		9.391619	
8	2	10	65.7	1944		10.49344	
9	2	10	96	1547		11.85602	

Statistics 6 (ChirpCenter Frequency: 5492.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	6	94.4	1569	1535	0.431382	1
1	3	6	56.6	1929	1197	1.128351	
2	2	6	96.5	1065		1.641369	
3	2	6	88	1704		2.817452	
4	3	6	93	1643	1532	3.173533	
5	2	6	50.9	1779		3.81639	
6	3	6	86.2	1186	1202	4.403336	
7	3	6	90.7	1062	1926	5.226772	
8	2	6	77.2	1131		6.135449	
9	2	6	92.1	1051		6.464383	
10	3	6	76.4	1987	1655	7.320508	
11	2	6	80.6	1684		8.460644	
12	2	6	58.7	1418		9.151978	
13	2	6	98	1388		9.608178	
14	3	6	74.2	1526	1598	10.0519	
15	2	6	64.4	1470		10.69088	
16	2	6	50	1411		11.4481	

Statistics 7 (ChirpCenter Frequency: 5493.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(uS)	Pulse 2-3 spacing(uS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	8	60.1	1617		0.456838	1
1	1	8	64.5			1.595514	
2	3	8	75.5	1573	1424	2.238637	
3	2	8	54	1394		2.872818	
4	2	8	65.8	1270		3.529654	
5	3	8	92.1	1423	1394	4.909509	
6	2	8	60	1603		5.524796	
7	3	8	90.8	1620	1797	6.456211	
8	1	8	51.8			7.50861	
9	1	8	62.5			8.545253	
10	1	8	82.9			9.261738	
11	2	8	55.7	1187		9.812561	
12	3	8	52.2	1683	1704	10.80951	
13	2	8	52	1388		11.3743	

Statistics 8 (ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	10	89.3	1616	1073	0.445442	1
1	2	10	74.8	1283		1.223248	
2	2	10	96.7	1253		1.329971	
3	2	10	76.4	1533		1.968959	
4	1	10	92.7			2.984619	
5	3	10	99	1061	1268	3.260195	
6	1	10	54.3			4.222794	
7	2	10	68.4	1218		4.576842	
8	2	10	88.3	1179		5.138791	
9	2	10	58.5	1089		6.092701	
10	2	10	80.6	1536		6.403113	
11	1	10	81.3			7.004494	
12	3	10	79.3	1859	1380	7.635054	
13	3	10	61.5	1804	1821	8.247479	
14	2	10	74.1	1794		8.852941	
15	2	10	54.2	1802		9.634195	
16	3	10	51.3	1058	1371	10.39997	
17	1	10	60.5			11.24095	
18	3	10	61.6	1426	1315	11.62163	

Statistics 9 (ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	10	83.2	1752	1075	0.212946	1
1	3	10	62.9	1971	1029	1.853203	
2	2	10	82	1127		3.145018	
3	2	10	75.8	1217		4.497683	
4	1	10	88.1			5.771827	
5	2	10	81.8	1815		6.972952	
6	2	10	76.5	1635		7.221465	
7	1	10	70.5			9.24387	
8	1	10	70.6			9.773212	
9	1	10	69.2			10.88833	

Statistics 10 (ChirpCenter Frequency: 5497.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	18	97.1			0.282618	1
1	2	18	76.1	1662		1.258091	
2	2	18	85.1	1245		2.840891	
3	2	18	94.9	1825		3.769265	
4	2	18	74.2	1533		5.796189	
5	2	18	87.9	1391		6.071938	
6	3	18	98.8	1284	1885	8.15	
7	2	18	65.5	1522		9.360664	
8	3	18	99.7	1733	1269	10.53346	
9	2	18	51.4	1414		11.21126	

Radar Type 5 Case 3 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5526.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	9	82.3			0.38594	1
1	2	9	72.9	1197		0.89335	
2	2	9	52.3	1172		1.268719	
3	1	9	82			1.984793	
4	1	9	60.6			2.530626	
5	2	9	51.1	1711		3.324304	
6	2	9	76.9	1777		4.228689	
7	2	9	92	1405		4.637757	
8	2	9	97.4	1488		5.387611	
9	2	9	58.8	1130		6.028753	
10	3	9	90.2	1412	1678	6.553343	
11	1	9	82.5			7.137669	
12	2	9	61.5	1988		7.951998	
13	2	9	74.1	1049		8.362543	
14	2	9	64.7	1232		9.315359	
15	1	9	51.7			9.972578	
16	1	9	82.9			10.27683	
17	3	9	56.8	1623	1874	10.92935	
18	2	9	90.8	1639		11.65724	

Statistics 2 (ChirpCenter Frequency: 5524.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	14	96.7	1841		0.445432	1
1	2	14	92.2	1228		1.088979	
2	1	14	97.4			2.756197	
3	1	14	81			2.907017	
4	2	14	61	1523		4.013129	
5	1	14	69.1			4.812812	
6	3	14	95.6	1008	1323	5.719961	
7	2	14	79.1	1781		7.018884	
8	1	14	62			7.458887	
9	1	14	88.2			8.339546	
10	2	14	65.8	1527		9.754723	
11	3	14	97.5	1525	1791	10.50707	
12	2	14	95	1369		11.26416	

Statistics 3 (ChirpCenter Frequency: 5523.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	18	72.3			0.156337	1
1	2	18	55.6	1185		1.320064	
2	2	18	88.8	1381		1.762841	
3	2	18	56	1282		2.467654	
4	2	18	76	1984		3.016518	
5	2	18	68.3	1038		4.351962	
6	1	18	97.4			5.146211	
7	1	18	65.6			5.385455	
8	1	18	70.3			6.138827	
9	1	18	68.9			7.313041	
10	2	18	61.9	1063		7.883705	
11	2	18	66.9	1834		8.7403	
12	1	18	63.8			9.399357	
13	3	18	57.5	1930	1190	9.925409	
14	1	18	76.9			10.74812	
15	2	18	66.7	1440		11.29202	

Statistics 4 (ChirpCenter Frequency: 5526.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	11	90.5	1066	1198	0.088452	1
1	1	11	75.8			1.106918	
2	1	11	81.2			1.735085	
3	3	11	64.7	1544	1591	2.481941	
4	2	11	56.2	1431		3.374517	
5	2	11	67.8	1116		4.070914	
6	3	11	64.3	1070	1805	4.764961	
7	1	11	66.9			5.299237	
8	3	11	63.5	1447	1847	6.692607	
9	2	11	75.9	1433		7.317579	
10	2	11	62.7	1465		7.673158	
11	2	11	51.4	1136		8.490691	
12	3	11	90.8	1912	1396	9.090653	
13	2	11	90.9	1454		10.0616	
14	2	11	96.2	1206		10.84516	
15	1	11	93.8			11.27838	

Statistics 5 (ChirpCenter Frequency: 5524.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	15	53.3			0.215275	1
1	2	15	57.7	1112		1.05063	
2	3	15	82.9	1922	1845	2.256357	
3	3	15	80.8	1301	1985	3.043643	
4	3	15	92.1	1301	1071	4.26395	
5	2	15	86.2	1756		5.098509	
6	3	15	56.3	1300	1530	5.789866	
7	2	15	96	1267		6.512614	
8	1	15	63.1			6.991775	
9	3	15	79.7	1609	1403	8.454391	
10	2	15	63.4	1865		8.613809	
11	3	15	67.2	1043	1003	10.03836	
12	3	15	68.9	1744	1241	10.8789	
13	2	15	88.9	1144		11.85967	

Statistics 6 (ChirpCenter Frequency: 5523.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	18	62	1243		0.516808	1
1	3	18	89.7	1986	1207	1.121085	
2	1	18	65.6			3.162836	
3	1	18	75			3.69241	
4	2	18	53.2	1165		4.820788	
5	2	18	57	1026		5.498791	
6	3	18	77.2	1898	1065	7.06906	
7	2	18	91.8	1560		8.329689	
8	1	18	89.7			9.339324	
9	2	18	57.4	1052		10.75795	
10	2	18	84.3	1662		10.91916	

Statistics 7 (ChirpCenter Frequency: 5526.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	10	90.8	1178		0.843688	1
1	2	10	74.7	1705		1.900795	
2	2	10	54.8	1570		3.107185	
3	1	10	63.9			5.427456	
4	2	10	56.8	1534		7.075307	
5	2	10	55.7	1650		8.049553	
6	3	10	57.9	1160	1777	9.531327	
7	2	10	50	1639		11.52031	

Statistics 8 (ChirpCenter Frequency: 5524.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	14	92.5			0.56086	1
1	1	14	90.5			1.288454	
2	2	14	86.5	1470		2.474453	
3	1	14	53.7			2.942955	
4	2	14	92.2	1457		3.507132	
5	2	14	72.5	1889		4.488505	
6	2	14	56.1	1495		5.791992	
7	1	14	88.4			6.469233	
8	3	14	63	1254	1281	7.355391	
9	3	14	52.7	1602	1481	8.503866	
10	3	14	77.9	1822	1018	8.625741	
11	2	14	82	1944		9.522143	
12	2	14	63.9	1053		10.76324	
13	1	14	76.3			11.16652	

Statistics 9 (ChirpCenter Frequency: 5528.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	5	60.8			0.643646	1
1	2	5	61	1976		2.010613	
2	1	5	80.6			2.843702	
3	3	5	95.4	1548	1431	3.819029	
4	1	5	90.5			4.431051	
5	1	5	66.7			5.478428	
6	2	5	82.6	1965		7.46517	
7	2	5	57.3	1834		8.222419	
8	2	5	55.8	1874		9.617074	
9	2	5	64.3	1995		10.46669	
10	2	5	81.4	1244		11.4146	

Statistics 10 (ChirpCenter Frequency: 5528.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	6	81.3	1274		0.159193	1
1	2	6	98.3	1662		0.705345	
2	3	6	52.5	1362	1920	1.667554	
3	2	6	69	1626		2.378414	
4	2	6	58.6	1935		3.050608	
5	1	6	89.9			3.710874	
6	2	6	82.7	1546		4.111799	
7	2	6	66.6	1769		4.953848	
8	2	6	89.7	1913		5.442557	
9	2	6	60.2	1501		6.263142	
10	1	6	96.1			6.936919	
11	3	6	50.8	1771	1228	7.345738	
12	2	6	87	1728		8.050308	
13	3	6	58.1	1088	1785	8.730379	
14	2	6	94.2	1465		9.357627	
15	3	6	94.3	1154	1108	10.01884	
16	2	6	69.2	1561		10.2452	
17	3	6	58.8	1168	1902	11.36113	
18	2	6	54.4	1143		11.63332	

Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)	Hopping Sequence (MHz)
1	5510	9	1	333	1	5329.0, 5553.0, 5394.0, 5652.0, 5465.0, 5656.0, 5513.0, 5509.0, 5334.0, 5659.0, 5358.0, 5603.0, 5372.0, 5366.0, 5587.0, 5262.0, 5477.0, 5264.0, 5595.0, 5642.0, 5454.0, 5684.0, 5346.0, 5318.0, 5415.0, 5375.0, 5716.0, 5452.0, 5272.0, 5520.0, 5441.0, 5539.0, 5584.0, 5406.0, 5496.0, 5686.0, 5670.0, 5660.0, 5700.0, 5290.0, 5261.0, 5420.0, 5543.0, 5505.0, 5717.0, 5522.0, 5361.0, 5710.0, 5721.0, 5598.0, 5330.0, 5355.0, 5362.0, 5437.0, 5396.0, 5313.0, 5672.0, 5703.0, 5411.0, 5314.0, 5609.0, 5494.0, 5289.0, 5536.0, 5491.0, 5671.0, 5569.0, 5308.0, 5347.0, 5373.0, 5484.0, 5722.0, 5611.0, 5504.0, 5250.0, 5719.0, 5370.0, 5471.0, 5306.0, 5523.0, 5321.0, 5276.0, 5400.0, 5683.0, 5337.0, 5285.0, 5364.0, 5556.0, 5312.0, 5343.0, 5688.0, 5488.0, 5566.0, 5675.0, 5535.0, 5540.0, 5591.0, 5691.0, 5524.0, 5436.0
2	5510	9	1	333	1	5691.0, 5414.0, 5264.0, 5262.0, 5485.0, 5539.0, 5637.0, 5702.0, 5682.0, 5252.0, 5583.0, 5639.0, 5419.0, 5358.0, 5380.0, 5634.0, 5441.0, 5514.0, 5313.0, 5406.0, 5627.0, 5366.0, 5706.0, 5670.0, 5628.0, 5395.0, 5517.0, 5612.0, 5549.0, 5568.0, 5321.0, 5663.0, 5573.0, 5574.0, 5703.0, 5367.0, 5676.0, 5640.0, 5527.0, 5635.0, 5294.0, 5610.0, 5701.0, 5632.0, 5719.0, 5629.0, 5591.0, 5604.0, 5606.0, 5709.0, 5483.0, 5339.0, 5704.0, 5705.0, 5642.0, 5510.0, 5433.0, 5526.0, 5500.0, 5436.0, 5718.0, 5490.0, 5720.0, 5652.0, 5400.0, 5494.0, 5559.0, 5723.0, 5611.0, 5398.0, 5662.0, 5461.0, 5426.0, 5651.0, 5328.0, 5589.0, 5417.0, 5571.0, 5641.0, 5653.0, 5413.0, 5484.0, 5277.0, 5508.0, 5357.0, 5716.0, 5714.0, 5454.0, 5511.0, 5536.0, 5435.0, 5587.0, 5476.0, 5538.0, 5261.0, 5374.0, 5364.0, 5650.0, 5578.0, 5349.0
3	5510	9	1	333	1	5353.0, 5615.0, 5708.0, 5309.0, 5486.0, 5626.0, 5336.0, 5572.0, 5412.0, 5566.0, 5492.0, 5407.0, 5712.0, 5321.0, 5723.0, 5273.0, 5342.0, 5597.0, 5397.0, 5523.0, 5520.0, 5638.0, 5296.0, 5265.0, 5297.0, 5623.0, 5654.0, 5424.0, 5274.0, 5517.0, 5279.0, 5525.0, 5651.0, 5408.0, 5720.0, 5607.0, 5522.0, 5699.0, 5612.0, 5558.0, 5519.0, 5555.0, 5620.0, 5488.0, 5718.0, 5590.0, 5276.0, 5543.0, 5546.0, 5592.0, 5706.0, 5350.0, 5266.0, 5302.0, 5629.0, 5311.0, 5315.0, 5630.0, 5604.0, 5678.0, 5652.0, 5319.0, 5463.0, 5507.0, 5710.0

						5348.0, 5582.0, 5502.0, 5562.0, 5564.0, 5563.0, 5658.0, 5280.0, 5679.0, 5356.0, 5601.0, 5446.0, 5585.0, 5657.0, 5643.0, 5380.0, 5441.0, 5593.0, 5364.0, 5327.0, 5552.0, 5539.0, 5677.0, 5461.0, 5375.0, 5670.0, 5366.0, 5331.0, 5433.0, 5531.0, 5436.0, 5639.0, 5452.0, 5676.0, 5381.0
4	5510	9	1	333	1	5640.0, 5296.0, 5286.0, 5506.0, 5353.0, 5261.0, 5627.0, 5704.0, 5427.0, 5648.0, 5691.0, 5550.0, 5288.0, 5502.0, 5556.0, 5328.0, 5418.0, 5460.0, 5271.0, 5366.0, 5354.0, 5332.0, 5707.0, 5686.0, 5557.0, 5513.0, 5621.0, 5524.0, 5289.0, 5551.0, 5451.0, 5381.0, 5565.0, 5392.0, 5357.0, 5547.0, 5634.0, 5391.0, 5469.0, 5298.0, 5608.0, 5486.0, 5395.0, 5714.0, 5585.0, 5515.0, 5485.0, 5537.0, 5394.0, 5441.0, 5371.0, 5463.0, 5387.0, 5584.0, 5587.0, 5402.0, 5367.0, 5651.0, 5476.0, 5382.0, 5342.0, 5272.0, 5600.0, 5314.0, 5566.0, 5716.0, 5333.0, 5421.0, 5339.0, 5338.0, 5318.0, 5685.0, 5653.0, 5702.0, 5266.0, 5384.0, 5680.0, 5571.0, 5636.0, 5303.0, 5582.0, 5664.0, 5259.0, 5437.0, 5390.0, 5604.0, 5310.0, 5661.0, 5436.0, 5301.0, 5444.0, 5379.0, 5279.0, 5359.0, 5674.0, 5481.0, 5696.0, 5504.0, 5457.0, 5597.0
5	5510	9	1	333	1	5498.0, 5638.0, 5355.0, 5340.0, 5440.0, 5478.0, 5686.0, 5589.0, 5563.0, 5251.0, 5461.0, 5275.0, 5434.0, 5510.0, 5559.0, 5252.0, 5491.0, 5610.0, 5317.0, 5616.0, 5483.0, 5471.0, 5598.0, 5380.0, 5273.0, 5522.0, 5411.0, 5647.0, 5632.0, 5397.0, 5468.0, 5462.0, 5602.0, 5664.0, 5284.0, 5286.0, 5619.0, 5279.0, 5313.0, 5435.0, 5623.0, 5636.0, 5595.0, 5572.0, 5347.0, 5326.0, 5315.0, 5558.0, 5373.0, 5351.0, 5597.0, 5361.0, 5492.0, 5448.0, 5414.0, 5666.0, 5443.0, 5437.0, 5469.0, 5618.0, 5316.0, 5369.0, 5582.0, 5287.0, 5403.0, 5529.0, 5312.0, 5532.0, 5428.0, 5299.0, 5319.0, 5531.0, 5683.0, 5698.0, 5606.0, 5342.0, 5288.0, 5484.0, 5272.0, 5703.0, 5270.0, 5285.0, 5568.0, 5477.0, 5575.0, 5446.0, 5646.0, 5321.0, 5530.0, 5390.0, 5301.0, 5692.0, 5588.0, 5255.0, 5365.0, 5291.0, 5334.0, 5300.0, 5271.0, 5504.0
6	5510	9	1	333	1	5376.0, 5632.0, 5507.0, 5619.0, 5302.0, 5715.0, 5485.0, 5278.0, 5616.0, 5671.0, 5305.0, 5681.0, 5501.0, 5360.0, 5595.0, 5322.0, 5581.0, 5532.0, 5274.0, 5585.0, 5640.0, 5407.0, 5336.0, 5369.0, 5316.0, 5335.0, 5468.0, 5546.0, 5395.0, 5398.0, 5572.0, 5574.0, 5508.0, 5421.0, 5689.0, 5267.0, 5534.0, 5491.0, 5490.0, 5504.0, 5399.0, 5252.0, 5600.0, 5439.0, 5542.0, 5684.0, 5570.0, 5480.0, 5414.0, 5577.0, 5617.0, 5281.0, 5556.0, 5651.0, 5404.0, 5411.0, 5624.0, 5543.0, 5686.0, 5514.0, 5615.0, 5260.0, 5582.0, 5283.0, 5406.0

						5408.0, 5393.0, 5466.0, 5583.0, 5413.0, 5589.0, 5528.0, 5645.0, 5298.0, 5261.0, 5679.0, 5516.0, 5654.0, 5403.0, 5486.0, 5461.0, 5590.0, 5668.0, 5429.0, 5703.0, 5634.0, 5290.0, 5667.0, 5511.0, 5377.0, 5382.0, 5473.0, 5579.0, 5275.0, 5345.0, 5612.0, 5629.0, 5359.0, 5592.0, 5308.0
7	5510	9	1	333	1	5593.0, 5334.0, 5630.0, 5704.0, 5589.0, 5613.0, 5414.0, 5583.0, 5413.0, 5660.0, 5696.0, 5387.0, 5529.0, 5460.0, 5284.0, 5433.0, 5510.0, 5315.0, 5585.0, 5649.0, 5667.0, 5403.0, 5361.0, 5566.0, 5369.0, 5370.0, 5429.0, 5360.0, 5274.0, 5709.0, 5640.0, 5590.0, 5532.0, 5320.0, 5354.0, 5473.0, 5279.0, 5705.0, 5682.0, 5632.0, 5662.0, 5374.0, 5467.0, 5293.0, 5365.0, 5468.0, 5398.0, 5672.0, 5524.0, 5527.0, 5505.0, 5278.0, 5266.0, 5664.0, 5489.0, 5516.0, 5471.0, 5495.0, 5653.0, 5573.0, 5350.0, 5496.0, 5353.0, 5610.0, 5328.0, 5674.0, 5717.0, 5646.0, 5609.0, 5463.0, 5310.0, 5586.0, 5502.0, 5564.0, 5639.0, 5569.0, 5722.0, 5259.0, 5612.0, 5325.0, 5466.0, 5673.0, 5265.0, 5372.0, 5444.0, 5331.0, 5417.0, 5526.0, 5700.0, 5701.0, 5366.0, 5579.0, 5619.0, 5462.0, 5415.0, 5528.0, 5323.0, 5391.0, 5335.0, 5394.0
8	5510	9	1	333	1	5296.0, 5354.0, 5431.0, 5317.0, 5373.0, 5342.0, 5542.0, 5695.0, 5497.0, 5469.0, 5638.0, 5507.0, 5705.0, 5495.0, 5566.0, 5516.0, 5434.0, 5414.0, 5442.0, 5339.0, 5578.0, 5308.0, 5691.0, 5359.0, 5479.0, 5701.0, 5606.0, 5290.0, 5529.0, 5267.0, 5541.0, 5415.0, 5549.0, 5575.0, 5623.0, 5367.0, 5483.0, 5633.0, 5693.0, 5531.0, 5581.0, 5548.0, 5453.0, 5565.0, 5362.0, 5285.0, 5379.0, 5271.0, 5621.0, 5608.0, 5272.0, 5257.0, 5508.0, 5424.0, 5692.0, 5546.0, 5438.0, 5569.0, 5665.0, 5352.0, 5334.0, 5547.0, 5545.0, 5616.0, 5604.0, 5391.0, 5673.0, 5396.0, 5476.0, 5615.0, 5304.0, 5387.0, 5446.0, 5712.0, 5688.0, 5677.0, 5636.0, 5289.0, 5326.0, 5306.0, 5376.0, 5628.0, 5525.0, 5593.0, 5372.0, 5262.0, 5540.0, 5404.0, 5461.0, 5634.0, 5275.0, 5451.0, 5522.0, 5261.0, 5539.0, 5720.0, 5639.0, 5330.0, 5294.0, 5590.0
9	5510	9	1	333	1	5712.0, 5407.0, 5378.0, 5487.0, 5517.0, 5575.0, 5613.0, 5558.0, 5548.0, 5268.0, 5628.0, 5428.0, 5665.0, 5719.0, 5544.0, 5279.0, 5507.0, 5496.0, 5695.0, 5376.0, 5583.0, 5593.0, 5579.0, 5297.0, 5602.0, 5414.0, 5617.0, 5500.0, 5585.0, 5675.0, 5310.0, 5663.0, 5715.0, 5591.0, 5316.0, 5344.0, 5257.0, 5435.0, 5270.0, 5409.0, 5262.0, 5483.0, 5530.0, 5672.0, 5645.0, 5605.0, 5693.0, 5606.0, 5708.0, 5648.0, 5298.0, 5594.0, 5375.0, 5476.0, 5588.0, 5696.0, 5253.0, 5674.0, 5501.0, 5710.0, 5395.0, 5315.0, 5590.0, 5386.0, 5403.0

						5312.0, 5259.0, 5682.0, 5554.0, 5636.0, 5392.0, 5532.0, 5565.0, 5669.0, 5614.0, 5647.0, 5620.0, 5293.0, 5295.0, 5480.0, 5580.0, 5721.0, 5535.0, 5471.0, 5301.0, 5391.0, 5324.0, 5691.0, 5692.0, 5300.0, 5479.0, 5355.0, 5299.0, 5561.0, 5666.0, 5353.0, 5281.0, 5540.0, 5573.0, 5413.0
10	5510	9	1	333	1	5676.0, 5572.0, 5351.0, 5266.0, 5631.0, 5712.0, 5582.0, 5600.0, 5642.0, 5622.0, 5288.0, 5590.0, 5396.0, 5598.0, 5643.0, 5662.0, 5623.0, 5526.0, 5308.0, 5557.0, 5617.0, 5606.0, 5718.0, 5564.0, 5597.0, 5707.0, 5281.0, 5403.0, 5313.0, 5664.0, 5415.0, 5689.0, 5367.0, 5696.0, 5620.0, 5423.0, 5250.0, 5711.0, 5307.0, 5720.0, 5539.0, 5416.0, 5472.0, 5430.0, 5633.0, 5706.0, 5343.0, 5478.0, 5408.0, 5518.0, 5544.0, 5477.0, 5551.0, 5709.0, 5591.0, 5379.0, 5270.0, 5549.0, 5465.0, 5608.0, 5666.0, 5381.0, 5630.0, 5434.0, 5460.0, 5545.0, 5543.0, 5325.0, 5634.0, 5616.0, 5335.0, 5668.0, 5264.0, 5464.0, 5452.0, 5693.0, 5426.0, 5410.0, 5277.0, 5654.0, 5562.0, 5708.0, 5282.0, 5405.0, 5402.0, 5366.0, 5376.0, 5619.0, 5607.0, 5501.0, 5636.0, 5310.0, 5354.0, 5688.0, 5595.0, 5644.0, 5322.0, 5411.0, 5613.0, 5305.0
11	5510	9	1	333	1	5427.0, 5586.0, 5367.0, 5512.0, 5717.0, 5318.0, 5625.0, 5296.0, 5669.0, 5332.0, 5329.0, 5687.0, 5709.0, 5418.0, 5315.0, 5570.0, 5321.0, 5695.0, 5532.0, 5340.0, 5646.0, 5504.0, 5261.0, 5257.0, 5615.0, 5380.0, 5421.0, 5429.0, 5451.0, 5538.0, 5483.0, 5499.0, 5525.0, 5457.0, 5575.0, 5680.0, 5382.0, 5369.0, 5277.0, 5310.0, 5508.0, 5434.0, 5471.0, 5658.0, 5298.0, 5555.0, 5710.0, 5527.0, 5496.0, 5313.0, 5342.0, 5460.0, 5672.0, 5468.0, 5319.0, 5704.0, 5390.0, 5530.0, 5662.0, 5553.0, 5556.0, 5643.0, 5706.0, 5360.0, 5307.0, 5661.0, 5260.0, 5632.0, 5436.0, 5268.0, 5481.0, 5383.0, 5355.0, 5718.0, 5366.0, 5641.0, 5391.0, 5265.0, 5624.0, 5564.0, 5446.0, 5470.0, 5609.0, 5545.0, 5685.0, 5362.0, 5631.0, 5422.0, 5716.0, 5344.0, 5712.0, 5323.0, 5543.0, 5693.0, 5274.0, 5271.0, 5510.0, 5411.0, 5550.0, 5663.0
12	5510	9	1	333	1	5359.0, 5473.0, 5269.0, 5668.0, 5520.0, 5460.0, 5469.0, 5718.0, 5261.0, 5663.0, 5396.0, 5611.0, 5553.0, 5266.0, 5335.0, 5452.0, 5651.0, 5299.0, 5694.0, 5627.0, 5312.0, 5555.0, 5265.0, 5450.0, 5410.0, 5703.0, 5720.0, 5722.0, 5599.0, 5519.0, 5254.0, 5608.0, 5619.0, 5329.0, 5666.0, 5391.0, 5541.0, 5515.0, 5585.0, 5645.0, 5368.0, 5591.0, 5251.0, 5441.0, 5416.0, 5603.0, 5276.0, 5698.0, 5486.0, 5297.0, 5260.0, 5293.0, 5350.0, 5547.0, 5331.0, 5285.0, 5370.0, 5513.0, 5313.0, 5510.0, 5389.0, 5620.0, 5606.0, 5580.0, 5459.0,

						5378.0, 5550.0, 5636.0, 5648.0, 5530.0, 5361.0, 5418.0, 5433.0, 5527.0, 5449.0, 5669.0, 5411.0, 5455.0, 5507.0, 5625.0, 5594.0, 5388.0, 5355.0, 5322.0, 5697.0, 5357.0, 5467.0, 5402.0, 5333.0, 5696.0, 5659.0, 5310.0, 5445.0, 5600.0, 5270.0, 5341.0, 5338.0, 5349.0, 5373.0, 5592.0
13	5510	9	1	333	1	5544.0, 5417.0, 5665.0, 5539.0, 5616.0, 5405.0, 5406.0, 5672.0, 5361.0, 5314.0, 5720.0, 5381.0, 5486.0, 5704.0, 5695.0, 5319.0, 5304.0, 5664.0, 5584.0, 5545.0, 5442.0, 5705.0, 5321.0, 5693.0, 5505.0, 5698.0, 5362.0, 5262.0, 5449.0, 5371.0, 5427.0, 5668.0, 5413.0, 5431.0, 5615.0, 5303.0, 5385.0, 5284.0, 5550.0, 5480.0, 5437.0, 5592.0, 5638.0, 5508.0, 5681.0, 5472.0, 5355.0, 5436.0, 5535.0, 5529.0, 5552.0, 5528.0, 5637.0, 5337.0, 5656.0, 5421.0, 5342.0, 5561.0, 5600.0, 5497.0, 5460.0, 5547.0, 5661.0, 5344.0, 5380.0, 5617.0, 5457.0, 5386.0, 5471.0, 5634.0, 5328.0, 5292.0, 5322.0, 5648.0, 5441.0, 5595.0, 5475.0, 5408.0, 5379.0, 5682.0, 5498.0, 5603.0, 5504.0, 5639.0, 5492.0, 5554.0, 5398.0, 5706.0, 5502.0, 5696.0, 5643.0, 5641.0, 5474.0, 5507.0, 5401.0, 5624.0, 5412.0, 5432.0, 5579.0, 5589.0
14	5510	9	1	333	1	5664.0, 5395.0, 5701.0, 5657.0, 5588.0, 5570.0, 5617.0, 5717.0, 5627.0, 5389.0, 5716.0, 5586.0, 5347.0, 5416.0, 5364.0, 5352.0, 5601.0, 5510.0, 5469.0, 5680.0, 5691.0, 5356.0, 5462.0, 5360.0, 5527.0, 5390.0, 5398.0, 5367.0, 5674.0, 5372.0, 5421.0, 5381.0, 5346.0, 5556.0, 5670.0, 5579.0, 5322.0, 5260.0, 5314.0, 5495.0, 5536.0, 5399.0, 5519.0, 5624.0, 5374.0, 5443.0, 5336.0, 5708.0, 5385.0, 5361.0, 5563.0, 5681.0, 5418.0, 5719.0, 5543.0, 5658.0, 5435.0, 5299.0, 5327.0, 5489.0, 5320.0, 5584.0, 5546.0, 5330.0, 5718.0, 5447.0, 5607.0, 5446.0, 5566.0, 5545.0, 5531.0, 5596.0, 5642.0, 5576.0, 5632.0, 5258.0, 5477.0, 5650.0, 5436.0, 5450.0, 5466.0, 5592.0, 5578.0, 5673.0, 5521.0, 5523.0, 5487.0, 5700.0, 5355.0, 5457.0, 5429.0, 5604.0, 5383.0, 5471.0, 5652.0, 5332.0, 5445.0, 5663.0, 5591.0, 5651.0
15	5510	9	1	333	1	5526.0, 5255.0, 5482.0, 5568.0, 5680.0, 5559.0, 5625.0, 5570.0, 5565.0, 5363.0, 5278.0, 5653.0, 5603.0, 5254.0, 5606.0, 5268.0, 5496.0, 5295.0, 5395.0, 5309.0, 5488.0, 5422.0, 5473.0, 5420.0, 5505.0, 5658.0, 5349.0, 5433.0, 5325.0, 5407.0, 5463.0, 5541.0, 5655.0, 5513.0, 5683.0, 5685.0, 5304.0, 5623.0, 5478.0, 5520.0, 5670.0, 5275.0, 5306.0, 5301.0, 5572.0, 5716.0, 5534.0, 5641.0, 5525.0, 5558.0, 5376.0, 5616.0, 5355.0, 5284.0, 5460.0, 5317.0, 5584.0, 5634.0, 5410.0, 5270.0, 5342.0, 5687.0, 5598.0, 5490.0, 5536.0,

						5274.0, 5461.0, 5551.0, 5617.0, 5351.0, 5495.0, 5673.0, 5512.0, 5694.0, 5524.0, 5560.0, 5519.0, 5605.0, 5272.0, 5373.0, 5297.0, 5720.0, 5398.0, 5310.0, 5307.0, 5546.0, 5334.0, 5531.0, 5253.0, 5448.0, 5431.0, 5504.0, 5445.0, 5582.0, 5432.0, 5690.0, 5449.0, 5664.0, 5347.0, 5262.0
16	5510	9	1	333	1	5392.0, 5578.0, 5255.0, 5254.0, 5652.0, 5495.0, 5251.0, 5440.0, 5711.0, 5677.0, 5508.0, 5279.0, 5650.0, 5286.0, 5574.0, 5271.0, 5590.0, 5417.0, 5265.0, 5317.0, 5550.0, 5302.0, 5303.0, 5312.0, 5430.0, 5600.0, 5480.0, 5624.0, 5501.0, 5515.0, 5661.0, 5593.0, 5462.0, 5718.0, 5706.0, 5667.0, 5560.0, 5425.0, 5647.0, 5463.0, 5594.0, 5507.0, 5556.0, 5660.0, 5568.0, 5532.0, 5446.0, 5702.0, 5517.0, 5282.0, 5724.0, 5333.0, 5456.0, 5410.0, 5499.0, 5420.0, 5364.0, 5580.0, 5398.0, 5496.0, 5614.0, 5649.0, 5419.0, 5547.0, 5379.0, 5415.0, 5309.0, 5681.0, 5313.0, 5678.0, 5393.0, 5698.0, 5611.0, 5332.0, 5576.0, 5445.0, 5338.0, 5400.0, 5328.0, 5293.0, 5403.0, 5602.0, 5516.0, 5693.0, 5696.0, 5373.0, 5289.0, 5391.0, 5575.0, 5533.0, 5340.0, 5346.0, 5485.0, 5539.0, 5675.0, 5538.0, 5701.0, 5275.0, 5452.0, 5387.0
17	5510	9	1	333	1	5301.0, 5605.0, 5575.0, 5450.0, 5612.0, 5684.0, 5720.0, 5474.0, 5273.0, 5654.0, 5699.0, 5369.0, 5410.0, 5601.0, 5513.0, 5663.0, 5619.0, 5344.0, 5403.0, 5418.0, 5462.0, 5359.0, 5404.0, 5392.0, 5332.0, 5543.0, 5506.0, 5302.0, 5625.0, 5264.0, 5608.0, 5660.0, 5315.0, 5710.0, 5421.0, 5622.0, 5714.0, 5521.0, 5471.0, 5533.0, 5342.0, 5341.0, 5268.0, 5669.0, 5705.0, 5544.0, 5549.0, 5385.0, 5258.0, 5626.0, 5661.0, 5711.0, 5597.0, 5427.0, 5602.0, 5675.0, 5650.0, 5374.0, 5400.0, 5457.0, 5490.0, 5542.0, 5466.0, 5581.0, 5333.0, 5548.0, 5413.0, 5609.0, 5624.0, 5296.0, 5678.0, 5560.0, 5263.0, 5348.0, 5606.0, 5355.0, 5489.0, 5256.0, 5592.0, 5460.0, 5524.0, 5539.0, 5550.0, 5594.0, 5330.0, 5260.0, 5345.0, 5414.0, 5540.0, 5468.0, 5455.0, 5647.0, 5576.0, 5579.0, 5717.0, 5334.0, 5713.0, 5300.0, 5371.0, 5340.0
18	5510	9	1	333	1	5344.0, 5312.0, 5289.0, 5713.0, 5394.0, 5304.0, 5552.0, 5361.0, 5331.0, 5452.0, 5659.0, 5366.0, 5256.0, 5349.0, 5300.0, 5619.0, 5567.0, 5341.0, 5533.0, 5414.0, 5334.0, 5553.0, 5255.0, 5395.0, 5535.0, 5308.0, 5652.0, 5581.0, 5715.0, 5462.0, 5653.0, 5346.0, 5443.0, 5435.0, 5505.0, 5388.0, 5273.0, 5271.0, 5448.0, 5272.0, 5457.0, 5691.0, 5392.0, 5436.0, 5613.0, 5281.0, 5409.0, 5590.0, 5469.0, 5424.0, 5723.0, 5545.0, 5716.0, 5421.0, 5451.0, 5527.0, 5440.0, 5294.0, 5518.0, 5362.0, 5631.0, 5276.0, 5587.0, 5628.0, 5385.0

						5484.0, 5656.0, 5252.0, 5502.0, 5363.0, 5513.0, 5456.0, 5360.0, 5615.0, 5332.0, 5347.0, 5379.0, 5258.0, 5343.0, 5643.0, 5549.0, 5649.0, 5396.0, 5688.0, 5568.0, 5287.0, 5336.0, 5500.0, 5706.0, 5434.0, 5309.0, 5274.0, 5523.0, 5673.0, 5705.0, 5391.0, 5563.0, 5724.0, 5575.0, 5402.0
19	5510	9	1	333	1	5563.0, 5684.0, 5337.0, 5341.0, 5412.0, 5493.0, 5589.0, 5605.0, 5687.0, 5653.0, 5617.0, 5722.0, 5668.0, 5457.0, 5586.0, 5531.0, 5406.0, 5499.0, 5376.0, 5639.0, 5352.0, 5681.0, 5282.0, 5666.0, 5513.0, 5615.0, 5538.0, 5439.0, 5335.0, 5566.0, 5600.0, 5650.0, 5546.0, 5379.0, 5479.0, 5375.0, 5721.0, 5368.0, 5380.0, 5661.0, 5356.0, 5485.0, 5429.0, 5631.0, 5396.0, 5265.0, 5690.0, 5274.0, 5451.0, 5536.0, 5309.0, 5348.0, 5333.0, 5271.0, 5310.0, 5427.0, 5528.0, 5473.0, 5431.0, 5311.0, 5355.0, 5402.0, 5553.0, 5503.0, 5696.0, 5590.0, 5403.0, 5336.0, 5667.0, 5389.0, 5557.0, 5477.0, 5698.0, 5587.0, 5483.0, 5659.0, 5718.0, 5534.0, 5264.0, 5435.0, 5417.0, 5502.0, 5629.0, 5494.0, 5270.0, 5395.0, 5688.0, 5593.0, 5425.0, 5712.0, 5547.0, 5578.0, 5255.0, 5365.0, 5693.0, 5545.0, 5432.0, 5353.0, 5253.0, 5329.0
20	5510	9	1	333	1	5344.0, 5305.0, 5429.0, 5295.0, 5296.0, 5393.0, 5283.0, 5257.0, 5455.0, 5463.0, 5569.0, 5601.0, 5581.0, 5673.0, 5681.0, 5392.0, 5588.0, 5460.0, 5258.0, 5624.0, 5603.0, 5349.0, 5378.0, 5677.0, 5339.0, 5579.0, 5484.0, 5494.0, 5663.0, 5489.0, 5557.0, 5504.0, 5529.0, 5622.0, 5365.0, 5350.0, 5572.0, 5346.0, 5525.0, 5704.0, 5444.0, 5408.0, 5308.0, 5714.0, 5626.0, 5421.0, 5419.0, 5509.0, 5434.0, 5396.0, 5359.0, 5367.0, 5279.0, 5646.0, 5298.0, 5303.0, 5722.0, 5584.0, 5330.0, 5615.0, 5511.0, 5466.0, 5288.0, 5448.0, 5320.0, 5481.0, 5387.0, 5536.0, 5662.0, 5275.0, 5666.0, 5568.0, 5292.0, 5437.0, 5353.0, 5599.0, 5530.0, 5383.0, 5286.0, 5471.0, 5272.0, 5721.0, 5688.0, 5318.0, 5452.0, 5583.0, 5332.0, 5678.0, 5485.0, 5641.0, 5700.0, 5685.0, 5528.0, 5478.0, 5590.0, 5713.0, 5473.0, 5648.0, 5487.0, 5291.0
21	5510	9	1	333	1	5648.0, 5587.0, 5352.0, 5287.0, 5689.0, 5638.0, 5389.0, 5678.0, 5409.0, 5418.0, 5685.0, 5434.0, 5564.0, 5339.0, 5623.0, 5527.0, 5500.0, 5561.0, 5281.0, 5717.0, 5514.0, 5393.0, 5616.0, 5323.0, 5579.0, 5496.0, 5491.0, 5528.0, 5443.0, 5258.0, 5533.0, 5624.0, 5702.0, 5517.0, 5448.0, 5560.0, 5411.0, 5632.0, 5366.0, 5431.0, 5559.0, 5478.0, 5297.0, 5450.0, 5525.0, 5493.0, 5470.0, 5670.0, 5384.0, 5412.0, 5282.0, 5672.0, 5572.0, 5349.0, 5699.0, 5584.0, 5553.0, 5483.0, 5404.0, 5455.0, 5592.0, 5251.0, 5309.0, 5645.0, 5353.0

						5414.0, 5392.0, 5585.0, 5690.0, 5428.0, 5487.0, 5601.0, 5432.0, 5565.0, 5254.0, 5608.0, 5494.0, 5286.0, 5440.0, 5356.0, 5515.0, 5438.0, 5703.0, 5317.0, 5582.0, 5458.0, 5545.0, 5556.0, 5519.0, 5605.0, 5338.0, 5541.0, 5327.0, 5444.0, 5651.0, 5329.0, 5586.0, 5396.0, 5646.0, 5663.0
22	5510	9	1	333	1	5360.0, 5540.0, 5582.0, 5660.0, 5670.0, 5517.0, 5565.0, 5261.0, 5720.0, 5628.0, 5524.0, 5505.0, 5673.0, 5370.0, 5335.0, 5537.0, 5533.0, 5265.0, 5714.0, 5358.0, 5604.0, 5611.0, 5395.0, 5529.0, 5597.0, 5286.0, 5593.0, 5400.0, 5526.0, 5351.0, 5460.0, 5342.0, 5559.0, 5527.0, 5547.0, 5393.0, 5550.0, 5564.0, 5257.0, 5408.0, 5487.0, 5542.0, 5409.0, 5678.0, 5627.0, 5515.0, 5281.0, 5264.0, 5339.0, 5701.0, 5274.0, 5391.0, 5442.0, 5390.0, 5623.0, 5302.0, 5446.0, 5482.0, 5324.0, 5259.0, 5477.0, 5569.0, 5664.0, 5616.0, 5474.0, 5544.0, 5417.0, 5372.0, 5620.0, 5271.0, 5510.0, 5578.0, 5634.0, 5337.0, 5579.0, 5676.0, 5683.0, 5253.0, 5340.0, 5675.0, 5397.0, 5576.0, 5667.0, 5401.0, 5665.0, 5355.0, 5313.0, 5504.0, 5405.0, 5307.0, 5330.0, 5382.0, 5426.0, 5583.0, 5323.0, 5549.0, 5396.0, 5334.0, 5645.0, 5724.0
23	5510	9	1	333	1	5582.0, 5425.0, 5619.0, 5468.0, 5640.0, 5502.0, 5599.0, 5283.0, 5633.0, 5519.0, 5373.0, 5478.0, 5642.0, 5653.0, 5598.0, 5655.0, 5529.0, 5654.0, 5617.0, 5331.0, 5390.0, 5344.0, 5480.0, 5680.0, 5524.0, 5610.0, 5609.0, 5316.0, 5695.0, 5307.0, 5641.0, 5368.0, 5650.0, 5347.0, 5313.0, 5266.0, 5273.0, 5589.0, 5262.0, 5312.0, 5636.0, 5333.0, 5336.0, 5696.0, 5429.0, 5354.0, 5462.0, 5351.0, 5470.0, 5415.0, 5688.0, 5443.0, 5635.0, 5322.0, 5723.0, 5442.0, 5689.0, 5363.0, 5664.0, 5545.0, 5486.0, 5585.0, 5413.0, 5499.0, 5482.0, 5467.0, 5525.0, 5531.0, 5364.0, 5601.0, 5463.0, 5558.0, 5703.0, 5299.0, 5285.0, 5548.0, 5315.0, 5721.0, 5666.0, 5561.0, 5623.0, 5682.0, 5705.0, 5327.0, 5294.0, 5498.0, 5274.0, 5440.0, 5588.0, 5393.0, 5448.0, 5362.0, 5564.0, 5338.0, 5377.0, 5578.0, 5516.0, 5286.0, 5521.0, 5309.0
24	5510	9	1	333	1	5558.0, 5713.0, 5320.0, 5286.0, 5561.0, 5705.0, 5472.0, 5422.0, 5458.0, 5601.0, 5655.0, 5444.0, 5479.0, 5404.0, 5567.0, 5548.0, 5310.0, 5361.0, 5417.0, 5504.0, 5338.0, 5698.0, 5316.0, 5251.0, 5413.0, 5668.0, 5520.0, 5609.0, 5620.0, 5426.0, 5682.0, 5385.0, 5579.0, 5634.0, 5471.0, 5623.0, 5474.0, 5624.0, 5400.0, 5562.0, 5720.0, 5254.0, 5590.0, 5275.0, 5284.0, 5425.0, 5531.0, 5658.0, 5615.0, 5337.0, 5507.0, 5371.0, 5294.0, 5306.0, 5382.0, 5612.0, 5365.0, 5285.0, 5604.0, 5512.0, 5279.0, 5517.0, 5388.0, 5591.0, 5603.0

						5602.0, 5394.0, 5641.0, 5438.0, 5702.0, 5492.0, 5270.0, 5299.0, 5265.0, 5372.0, 5424.0, 5266.0, 5691.0, 5608.0, 5271.0, 5341.0, 5409.0, 5565.0, 5587.0, 5687.0, 5311.0, 5346.0, 5435.0, 5366.0, 5597.0, 5359.0, 5651.0, 5600.0, 5596.0, 5395.0, 5264.0, 5510.0, 5626.0, 5516.0, 5613.0
25	5510	9	1	333	1	5556.0, 5358.0, 5544.0, 5559.0, 5526.0, 5685.0, 5428.0, 5654.0, 5683.0, 5372.0, 5408.0, 5471.0, 5270.0, 5647.0, 5384.0, 5445.0, 5641.0, 5362.0, 5680.0, 5416.0, 5348.0, 5602.0, 5690.0, 5484.0, 5309.0, 5552.0, 5584.0, 5299.0, 5347.0, 5693.0, 5375.0, 5444.0, 5545.0, 5519.0, 5452.0, 5485.0, 5407.0, 5339.0, 5424.0, 5468.0, 5264.0, 5460.0, 5598.0, 5632.0, 5626.0, 5324.0, 5634.0, 5614.0, 5557.0, 5645.0, 5332.0, 5254.0, 5590.0, 5463.0, 5293.0, 5357.0, 5285.0, 5517.0, 5480.0, 5506.0, 5511.0, 5446.0, 5343.0, 5623.0, 5630.0, 5306.0, 5335.0, 5710.0, 5699.0, 5569.0, 5399.0, 5482.0, 5423.0, 5426.0, 5605.0, 5477.0, 5546.0, 5723.0, 5561.0, 5442.0, 5600.0, 5597.0, 5406.0, 5503.0, 5720.0, 5564.0, 5608.0, 5252.0, 5289.0, 5261.0, 5691.0, 5469.0, 5366.0, 5660.0, 5287.0, 5705.0, 5676.0, 5684.0, 5516.0, 5367.0
26	5510	9	1	333	1	5614.0, 5457.0, 5415.0, 5261.0, 5344.0, 5466.0, 5574.0, 5418.0, 5468.0, 5358.0, 5679.0, 5507.0, 5438.0, 5583.0, 5630.0, 5299.0, 5579.0, 5700.0, 5302.0, 5498.0, 5329.0, 5694.0, 5683.0, 5386.0, 5575.0, 5513.0, 5667.0, 5619.0, 5460.0, 5310.0, 5288.0, 5372.0, 5397.0, 5594.0, 5429.0, 5387.0, 5708.0, 5390.0, 5306.0, 5455.0, 5521.0, 5581.0, 5379.0, 5611.0, 5701.0, 5255.0, 5253.0, 5613.0, 5474.0, 5556.0, 5517.0, 5618.0, 5319.0, 5366.0, 5690.0, 5449.0, 5410.0, 5394.0, 5658.0, 5547.0, 5321.0, 5305.0, 5654.0, 5264.0, 5723.0, 5343.0, 5465.0, 5375.0, 5536.0, 5382.0, 5424.0, 5339.0, 5684.0, 5633.0, 5662.0, 5469.0, 5591.0, 5563.0, 5443.0, 5467.0, 5490.0, 5470.0, 5380.0, 5546.0, 5419.0, 5480.0, 5401.0, 5304.0, 5352.0, 5628.0, 5616.0, 5349.0, 5686.0, 5433.0, 5533.0, 5532.0, 5715.0, 5649.0, 5520.0, 5356.0
27	5510	9	1	333	1	5539.0, 5522.0, 5592.0, 5329.0, 5724.0, 5344.0, 5310.0, 5717.0, 5569.0, 5525.0, 5531.0, 5669.0, 5459.0, 5316.0, 5368.0, 5704.0, 5713.0, 5721.0, 5572.0, 5343.0, 5325.0, 5356.0, 5631.0, 5542.0, 5690.0, 5272.0, 5566.0, 5564.0, 5251.0, 5285.0, 5382.0, 5357.0, 5360.0, 5279.0, 5492.0, 5276.0, 5666.0, 5358.0, 5283.0, 5658.0, 5315.0, 5481.0, 5334.0, 5476.0, 5289.0, 5527.0, 5544.0, 5363.0, 5268.0, 5529.0, 5596.0, 5570.0, 5346.0, 5653.0, 5576.0, 5286.0, 5645.0, 5623.0, 5600.0, 5296.0, 5626.0, 5342.0, 5528.0, 5391.0, 5613.0

						5628.0, 5392.0, 5465.0, 5447.0, 5449.0, 5712.0, 5431.0, 5561.0, 5362.0, 5617.0, 5707.0, 5302.0, 5588.0, 5383.0, 5578.0, 5337.0, 5404.0, 5366.0, 5440.0, 5300.0, 5442.0, 5555.0, 5532.0, 5381.0, 5716.0, 5253.0, 5659.0, 5648.0, 5627.0, 5615.0, 5303.0, 5620.0, 5262.0, 5359.0, 5636.0
28	5510	9	1	333	1	5269.0, 5709.0, 5441.0, 5306.0, 5666.0, 5261.0, 5442.0, 5598.0, 5352.0, 5486.0, 5648.0, 5314.0, 5659.0, 5722.0, 5715.0, 5300.0, 5301.0, 5378.0, 5311.0, 5695.0, 5353.0, 5623.0, 5481.0, 5604.0, 5537.0, 5286.0, 5567.0, 5534.0, 5630.0, 5671.0, 5677.0, 5268.0, 5634.0, 5529.0, 5631.0, 5341.0, 5672.0, 5614.0, 5685.0, 5390.0, 5650.0, 5277.0, 5437.0, 5606.0, 5645.0, 5663.0, 5464.0, 5555.0, 5444.0, 5388.0, 5547.0, 5259.0, 5466.0, 5584.0, 5387.0, 5463.0, 5682.0, 5499.0, 5330.0, 5635.0, 5309.0, 5368.0, 5675.0, 5456.0, 5707.0, 5449.0, 5457.0, 5408.0, 5406.0, 5410.0, 5586.0, 5374.0, 5624.0, 5380.0, 5258.0, 5518.0, 5545.0, 5402.0, 5262.0, 5435.0, 5532.0, 5417.0, 5319.0, 5321.0, 5283.0, 5701.0, 5536.0, 5594.0, 5603.0, 5662.0, 5552.0, 5454.0, 5702.0, 5323.0, 5591.0, 5601.0, 5599.0, 5723.0, 5524.0, 5592.0
29	5510	9	1	333	1	5260.0, 5504.0, 5266.0, 5603.0, 5331.0, 5665.0, 5620.0, 5657.0, 5716.0, 5480.0, 5574.0, 5512.0, 5636.0, 5290.0, 5314.0, 5427.0, 5565.0, 5354.0, 5492.0, 5385.0, 5660.0, 5648.0, 5453.0, 5379.0, 5343.0, 5324.0, 5691.0, 5284.0, 5325.0, 5673.0, 5578.0, 5646.0, 5577.0, 5690.0, 5713.0, 5478.0, 5366.0, 5622.0, 5444.0, 5639.0, 5584.0, 5559.0, 5468.0, 5618.0, 5571.0, 5305.0, 5432.0, 5718.0, 5391.0, 5268.0, 5605.0, 5398.0, 5442.0, 5658.0, 5298.0, 5709.0, 5406.0, 5307.0, 5310.0, 5720.0, 5696.0, 5532.0, 5545.0, 5509.0, 5482.0, 5631.0, 5380.0, 5638.0, 5367.0, 5599.0, 5558.0, 5311.0, 5488.0, 5495.0, 5369.0, 5628.0, 5580.0, 5390.0, 5703.0, 5695.0, 5664.0, 5662.0, 5702.0, 5259.0, 5472.0, 5651.0, 5685.0, 5655.0, 5411.0, 5373.0, 5604.0, 5415.0, 5576.0, 5257.0, 5342.0, 5330.0, 5704.0, 5455.0, 5674.0, 5494.0
30	5510	9	1	333	1	5501.0, 5266.0, 5333.0, 5326.0, 5323.0, 5332.0, 5699.0, 5358.0, 5513.0, 5540.0, 5251.0, 5551.0, 5689.0, 5301.0, 5720.0, 5488.0, 5416.0, 5267.0, 5252.0, 5615.0, 5291.0, 5721.0, 5497.0, 5273.0, 5723.0, 5536.0, 5627.0, 5381.0, 5366.0, 5255.0, 5471.0, 5402.0, 5414.0, 5401.0, 5669.0, 5702.0, 5638.0, 5670.0, 5684.0, 5365.0, 5703.0, 5507.0, 5261.0, 5558.0, 5586.0, 5663.0, 5424.0, 5498.0, 5284.0, 5553.0, 5565.0, 5356.0, 5452.0, 5372.0, 5518.0, 5375.0, 5629.0, 5262.0, 5413.0, 5563.0, 5541.0, 5667.0, 5309.0, 5462.0, 5547.0,

						5384.0, 5479.0, 5655.0, 5439.0, 5687.0, 5509.0, 5557.0, 5544.0, 5531.0, 5295.0, 5489.0, 5431.0, 5466.0, 5610.0, 5276.0, 5537.0, 5502.0, 5396.0, 5665.0, 5532.0, 5535.0, 5367.0, 5661.0, 5415.0, 5679.0, 5382.0, 5600.0, 5611.0, 5449.0, 5430.0, 5282.0, 5678.0, 5694.0, 5473.0, 5523.0
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80MHz

Radar SignalType	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1A	15	100%	60%	pass
Type 1B	15	100%	60%	pass
Type 2	30	100 %	60%	Pass
Type 3	30	96.7 %	60%	Pass
Type 4	30	93.3%	60%	Pass
Aggregate(Type1 to 4)	120	97.5 %	80%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	100 %	70%	Pass

Please refer to the following statistical tables:

5530MHz**Radar Type 1A Statistical Performance**

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5530	62	1	858	1
2	5530	83	1	638	1
3	5530	86	1	618	1
4	5530	81	1	658	1
5	5530	59	1	898	1
6	5530	61	1	878	1
7	5530	63	1	838	1
8	5530	99	1	538	1
9	5530	65	1	818	1
10	5530	57	1	938	1
11	5530	102	1	518	1
12	5530	67	1	798	1
13	5530	70	1	758	1
14	5530	58	1	918	1
15	5530	74	1	718	1
Detection Percentage: 100 % (>60%)					

Radar Type 1B Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5530	52	1	1033	1
2	5530	18	1	3014	1
3	5530	22	1	2504	1
4	5530	57	1	929	1
5	5530	24	1	2268	1
6	5530	48	1	1119	1
7	5530	24	1	2213	1
8	5530	30	1	1788	1
9	5530	40	1	1324	1
10	5530	26	1	2057	1
11	5530	22	1	2503	1
12	5530	23	1	2314	1
13	5530	90	1	593	1
14	5530	37	1	1440	1
15	5530	33	1	1640	1
Detection Percentage: 100 % (>60%)					

Radar Type 2 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5530	29	2.7	223	1
2	5530	28	2.8	173	1
3	5530	24	3.5	206	1
4	5530	27	4.7	218	1
5	5530	24	1.1	194	1
6	5530	28	4.9	152	1
7	5530	23	3.1	171	1
8	5530	25	4.2	157	1
9	5530	28	1.9	176	1
10	5530	23	1.4	198	1
11	5530	26	2.2	201	1
12	5530	25	3.9	202	1
13	5530	24	3.7	157	1
14	5530	27	4.9	212	1
15	5530	27	3.7	177	1
16	5530	26	1.3	189	1
17	5530	29	1	168	1
18	5530	29	3.2	220	1
19	5530	26	2.6	197	1
20	5530	23	3	192	1
21	5530	28	4.9	172	1
22	5530	27	2.5	188	1
23	5530	29	2.7	171	1
24	5530	29	4.2	155	1
25	5530	29	4.6	184	1
26	5530	26	2.5	187	1
27	5530	25	3.2	218	1
28	5530	28	2	180	1
29	5530	26	4.1	154	1
30	5530	28	5	193	1
Detection Percentage: 100 % (>60%)					

Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5530	16	8.7	497	1
2	5530	18	6.7	378	1
3	5530	18	8.1	405	1
4	5530	17	6.8	270	1
5	5530	18	9.7	230	1
6	5530	17	6.3	390	1
7	5530	17	8.2	350	1
8	5530	18	7.3	415	1
9	5530	16	7.5	330	1
10	5530	18	8.5	353	1
11	5530	18	8.1	281	1
12	5530	17	9	368	1
13	5530	17	7.4	236	1
14	5530	18	8.4	310	1
15	5530	17	9.4	277	1
16	5530	17	6.8	256	1
17	5530	16	9	379	1
18	5530	16	7.4	283	1
19	5530	16	6.4	220	1
20	5530	16	9.2	237	1
21	5530	17	6.1	481	1
22	5530	18	8.6	328	1
23	5530	18	7	412	1
24	5530	17	6.6	230	1
25	5530	17	8.5	303	1
26	5530	17	8.4	269	1
27	5530	18	9.3	272	0
28	5530	18	6.5	462	1
29	5530	17	6.8	460	1
30	5530	17	10	483	1
Detection Percentage: 96.7 % (>60%)					

Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5530	13	18.9	499	1
2	5530	15	19.2	432	1
3	5530	16	16.1	329	1
4	5530	12	12.9	458	1
5	5530	16	14.3	345	1
6	5530	13	11.2	487	1
7	5530	12	12.3	265	1
8	5530	16	16.3	300	1
9	5530	15	12.8	492	1
10	5530	13	19.8	339	1
11	5530	12	16.6	257	1
12	5530	16	14.9	403	1
13	5530	13	19.8	397	1
14	5530	15	16.5	204	1
15	5530	13	11	255	1
16	5530	14	15.5	316	1
17	5530	14	13.7	317	0
18	5530	15	15.7	380	1
19	5530	15	14	490	1
20	5530	15	16.4	412	1
21	5530	13	11.3	465	1
22	5530	13	11.4	451	1
23	5530	13	20	403	1
24	5530	14	17.7	243	0
25	5530	15	16.4	366	1
26	5530	16	13.9	275	1
27	5530	15	20	458	1
28	5530	14	12.7	202	1
29	5530	15	12	336	1
30	5530	14	15.1	328	1
Detection Percentage: 93.3 % (>60%)					

Radar Type 5 Case 1 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5530.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	14	69.5	1453		0.431296	1
1	1	14	52			0.927508	
2	2	14	62.3	1095		1.581715	
3	2	14	91.6	1119		2.253972	
4	2	14	66.2	1439		3.301649	
5	2	14	65.1	1955		3.893407	
6	2	14	74.1	1567		4.886346	
7	2	14	60.6	1604		5.515192	
8	3	14	52.1	1417	1087	5.699689	
9	2	14	55.5	1075		6.854616	
10	3	14	59.8	1213	1191	7.418551	
11	2	14	89.9	1371		8.207554	
12	1	14	87.8			8.849389	
13	2	14	63.1	1197		9.482278	
14	3	14	97.1	1435	1746	10.42364	
15	2	14	51	1400		10.65255	
16	3	14	71.8	1071	1800	11.96208	

Statistics 2 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	9	72.5			0.518581	1
1	2	9	64.8	1381		1.080094	
2	1	9	56.5			1.204968	
3	2	9	59.2	1488		2.062527	
4	3	9	55	1248	1108	2.578737	
5	1	9	60			3.386319	
6	2	9	93.7	1774		4.09301	
7	2	9	78.1	1363		4.5219	
8	1	9	72.5			5.204045	
9	1	9	86.1			5.593624	
10	3	9	69.6	1786	1554	6.321554	
11	3	9	75.1	1084	1651	6.777324	
12	2	9	54.9	1285		7.690614	
13	2	9	86.2	1647		8.301332	
14	3	9	87.9	1037	1749	8.634305	
15	1	9	61.4			9.221928	
16	2	9	78.9	1616		10.18912	
17	2	9	66.9	1489		10.48336	
18	1	9	87.5			11.1617	
19	1	9	65.5			11.52462	

Statistics 3 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	12	94.6	1699		0.262217	1
1	2	12	50.5	1059		0.973487	
2	3	12	83.4	1118	1204	1.68828	
3	3	12	79.6	1013	1995	2.515371	
4	2	12	90.9	1520		3.99423	
5	3	12	52.7	1429	1456	4.746879	
6	2	12	57.9	1532		4.830414	
7	2	12	70.8	1999		6.123136	
8	3	12	57.4	1558	1137	7.036008	
9	2	12	98.2	1009		7.515802	
10	2	12	68.1	1497		8.40207	
11	1	12	98.1			9.004864	
12	2	12	95	1759		10.07983	
13	1	12	70.5			10.94563	
14	1	12	85.3			11.53619	

Statistics 4 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	13	93.1	1098		0.041482	1
1	1	13	90.3			0.906233	
2	1	13	77.6			1.598533	
3	2	13	78.8	1713		2.156292	
4	2	13	56.4	1621		3.132554	
5	2	13	71.1	1732		4.144294	
6	1	13	60.8			4.716246	
7	3	13	63.5	1301	1619	5.432494	
8	1	13	73.9			6.067588	
9	2	13	80.6	1244		6.928168	
10	3	13	96	1373	1475	7.170707	
11	3	13	96.4	1915	1673	8.399842	
12	1	13	67.6			8.651629	
13	2	13	82.1	1740		9.847821	
14	2	13	58.6	1955		10.01929	
15	1	13	74.5			11.17551	
16	1	13	55			11.77245	

Statistics 5(ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	7	89.3	1757		0.159481	1
1	2	7	92.4	1110		1.046278	
2	2	7	84.3	1598		2.024741	
3	1	7	83.7			2.74324	
4	2	7	54.5	1461		3.275903	
5	2	7	67.9	1406		4.182771	
6	2	7	68	1026		4.887909	
7	3	7	64.6	1720	1282	5.702512	
8	2	7	59.8	1127		6.478515	
9	2	7	56.9	1303		7.964828	
10	1	7	81.7			8.120283	
11	1	7	55.5			9.333452	
12	3	7	53.4	1216	1235	9.824831	
13	2	7	90.8	1706		10.82702	
14	2	7	86.6	1782		11.41003	

Statistics 6 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	9	81.6	1622		0.951814	1
1	2	9	66.9	1710		1.462215	
2	1	9	69.3			2.821408	
3	2	9	81.2	1363		4.02866	
4	2	9	76.1	1865		4.963735	
5	3	9	61.8	1872	1052	6.503602	
6	2	9	94.9	1804		8.280177	
7	3	9	52.7	1295	1336	9.164112	
8	3	9	66.4	1997	1405	9.914146	
9	3	9	69.4	1213	1913	11.75536	

Statistics 7(ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	8	60.1	1743		0.422879	1
1	1	8	64.5			1.142847	
2	2	8	50.1	1734		1.991915	
3	2	8	99.4	1737		2.400889	
4	2	8	55.9	1061		3.560057	
5	3	8	56.3	1033	1582	4.521102	
6	3	8	86.7	1657	1227	5.427198	
7	2	8	100	1140		5.879429	
8	2	8	71.3	1790		6.472472	
9	1	8	93.9			7.353773	
10	2	8	68.8	1456		8.792879	
11	2	8	57.2	1807		9.581008	
12	2	8	92.8	1976		10.18972	
13	3	8	80.3	1621	1853	10.62499	
14	1	8	99.7			11.42324	

Statistics 8 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	8	62.9	1373	1835	0.692897	1
1	3	8	59.3	1367	1841	1.203038	
2	2	8	75.6	1808		1.958804	
3	2	8	89.2	1160		2.391834	
4	1	8	92.7			3.19053	
5	3	8	52.3	1873	1252	3.631697	
6	2	8	89	1202		4.845269	
7	2	8	72.5	1873		5.414047	
8	3	8	87.4	1336	1014	6.13686	
9	1	8	76.3			6.538344	
10	2	8	59.5	1659		7.470567	
11	2	8	59.3	1629		8.125724	
12	3	8	67.5	1009	1164	8.947806	
13	3	8	72.4	1472	1526	9.86432	
14	1	8	92.3			10.41154	
15	2	8	50.6	1585		11.2889	
16	2	8	77.4	1002		11.59895	

Statistics 9 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	9	84.4	1887		0.123772	1
1	3	9	53.1	1048	1450	1.006048	
2	2	9	91.1	1836		1.580366	
3	1	9	98.1			2.577501	
4	2	9	70.8	1848		3.464621	
5	2	9	88.8	1554		4.224387	
6	2	9	79.4	1326		4.417311	
7	3	9	94.5	1940	1000	4.988369	
8	2	9	69.7	1877		6.338649	
9	2	9	97.4	1709		6.837538	
10	3	9	59.4	1670	1816	7.601576	
11	2	9	64.8	1898		8.074282	
12	1	9	58.3			9.15278	
13	1	9	83.8			9.395607	
14	2	9	60.6	1356		9.998449	
15	1	9	53.6			10.69677	
16	2	9	50.1	1030		11.76121	

Statistics 10 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	15	75	1440		0.400133	1
1	3	15	81.5	1670	1076	1.064701	
2	3	15	72	1068	1108	2.094432	
3	3	15	97.3	1490	1064	2.95928	
4	1	15	51.7			3.364734	
5	3	15	54.6	1722	1147	4.339859	
6	2	15	60.3	1272		5.019533	
7	2	15	50.8	1077		5.653311	
8	2	15	51.6	1557		6.47205	
9	1	15	99.9			7.198756	
10	2	15	83.5	1339		7.844713	
11	2	15	96.7	1935		8.756721	
12	2	15	88.3	1640		9.090157	
13	1	15	90			10.20748	
14	1	15	90.4			10.56959	
15	1	15	67.3			11.68809	

Radar Type 5 Case 2 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5492.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	5	56.5	1962		0.008938	1
1	1	5	94.2			1.61833	
2	3	5	55.3	1301	1733	2.017197	
3	3	5	98.5	1798	1925	2.615725	
4	2	5	90.8	1845		3.662777	
5	3	5	97.4	1299	1055	5.030413	
6	2	5	79.1	1817		5.152918	
7	2	5	84	1135		6.366544	
8	2	5	53	1969		7.346867	
9	2	5	54.4	1922		8.014319	
10	2	5	67.6	1764		8.798788	
11	2	5	93.8	1726		9.586148	
12	2	5	89	1903		10.69442	
13	2	5	98.8	1333		11.74279	

Statistics 2 (ChirpCenter Frequency: 5496.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	16	86.2	1808		0.664321	1
1	1	16	50.4			1.487029	
2	1	16	81.7			2.550663	
3	1	16	80.9			3.604213	
4	2	16	63.6	1551		4.251832	
5	2	16	67.4	1441		5.151863	
6	3	16	92.3	1908	1038	6.617559	
7	2	16	77.7	1296		7.494678	
8	2	16	51.8	1784		8.887936	
9	2	16	97.4	1812		9.507169	
10	3	16	54.4	1178	1039	10.92076	
11	2	16	94.3	1530		11.50317	

Statistics 3 (ChirpCenter Frequency: 5497.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	18	61.9			0.503554	1
1	3	18	51.4	1133	1957	1.745562	
2	3	18	75.4	1466	1649	2.34056	
3	1	18	87.2			3.193181	
4	2	18	76.2	1954		4.279334	
5	2	18	77.9	1034		5.567179	
6	3	18	74.6	1800	1723	6.325388	
7	3	18	92.3	1604	1262	7.558533	
8	2	18	94.9	1971		8.310084	
9	1	18	92.2			9.481688	
10	1	18	80.4			10.69958	
11	1	18	83.6			11.25724	

Statistics 4 (ChirpCenter Frequency: 5492.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	6	72.1	1174	1249	0.648873	1
1	2	6	84.1	1074		2.199693	
2	1	6	74.9			3.332727	
3	1	6	72.1			4.523336	
4	2	6	50.6	1593		7.364814	
5	2	6	83.8	1459		7.604226	
6	2	6	54.1	1555		10.45367	
7	2	6	64.9	1142		11.13955	

Statistics 5(ChirpCenter Frequency: 5495.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	12	94.2	1110		0.503048	1
1	1	12	93.3			1.542742	
2	1	12	58.9			2.443379	
3	1	12	59.3			4.021406	
4	1	12	86.4			4.426721	
5	2	12	68.7	1808		5.955214	
6	2	12	66.2	1002		7.237796	
7	3	12	60.6	1228	1922	8.308308	
8	2	12	54.3	1722		9.567759	
9	1	12	68.8			10.19512	
10	3	12	77.6	1288	1285	11.84522	

Statistics 6 (ChirpCenter Frequency: 5497.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	18	58.3	1578		0.091729	1
1	2	18	97.6	1721		1.442182	
2	3	18	94.2	1293	1757	1.677441	
3	1	18	89.5			2.510905	
4	1	18	99.9			3.455253	
5	3	18	93.2	1658	1855	4.514324	
6	3	18	98.3	1984	1281	4.972975	
7	2	18	65.1	1279		6.199142	
8	2	18	85.4	1954		6.575982	
9	2	18	71.5	1180		7.622799	
10	3	18	57.9	1404	1411	8.62531	
11	3	18	92.9	1595	1391	9.079112	
12	1	18	81.7			10.21363	
13	2	18	79.5	1802		11.15045	
14	2	18	92.4	1524		11.56605	

Statistics 7(ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	11	93.1	1777		0.139326	1
1	2	11	74	1365		1.686247	
2	2	11	57.7	1356		2.029903	
3	2	11	69.1	1961		3.020206	
4	2	11	76.8	1243		3.522866	
5	2	11	95.8	1558		4.859789	
6	2	11	74.4	1377		5.82188	
7	3	11	64.6	1241	1620	6.664397	
8	2	11	71.3	1570		6.875553	
9	3	11	97.3	1348	1573	8.43958	
10	2	11	73.7	1586		8.940032	
11	2	11	86.2	1660		9.763489	
12	3	11	96.1	1690	1074	10.49002	
13	1	11	81.1			11.55112	

Statistics 8 (ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	11	65.7	1073		0.414691	1
1	2	11	90.8	1255		1.019929	
2	2	11	75.1	1167		1.783203	
3	2	11	79.6	1208		2.186546	
4	3	11	92.6	1346	1713	3.341122	
5	1	11	58.8			4.097263	
6	3	11	98.7	1428	1576	4.585372	
7	1	11	70.9			5.314584	
8	2	11	92	1448		6.032327	
9	3	11	69.2	1282	1316	6.678479	
10	2	11	63.1	1394		7.145133	
11	3	11	58.5	1978	1611	8.342174	
12	2	11	97.2	1557		8.89887	
13	2	11	64.7	1742		9.308792	
14	2	11	95.1	1711		10.1744	
15	3	11	77.9	1753	1063	10.95855	
16	3	11	81	1143	1019	11.69541	

Statistics 9 (ChirpCenter Frequency: 5498.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	19	86.9	1421		0.498657	1
1	2	19	75.6	1164		1.067364	
2	3	19	80.6	1976	1417	2.263756	
3	2	19	59	1720		3.486766	
4	3	19	90.5	1111	1585	4.94683	
5	2	19	78.3	1199		5.427905	
6	2	19	56.6	1885		6.649278	
7	2	19	52.3	1670		7.006653	
8	2	19	55.7	1318		8.423098	
9	1	19	74.9			9.688214	
10	2	19	95.6	1264		10.49714	
11	1	19	100			11.84014	

Statistics 10 (ChirpCenter Frequency: 5498.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	19	83	1232	1872	0.66096	1
1	2	19	78.3	1905		1.231271	
2	1	19	72.7			2.540857	
3	2	19	91.3	1911		3.380535	
4	2	19	53.8	1095		4.893959	
5	2	19	66.2	1135		5.422466	
6	1	19	74.3			6.112672	
7	2	19	60.9	1385		7.221429	
8	2	19	66.2	1666		8.786024	
9	1	19	88			9.487521	
10	1	19	67.8			10.31653	
11	3	19	95.9	1355	1796	11.96969	

Radar Type 5 Case 3 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5568.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	6	96.2			0.336385	1
1	3	6	72.3	1580	1016	1.240837	
2	2	6	79	1499		3.049244	
3	1	6	81.6			3.920654	
4	2	6	86.9	1412		5.10317	
5	2	6	81.7	1853		5.67204	
6	2	6	54.9	1733		7.285668	
7	1	6	58.4			8.196885	
8	1	6	94.5			9.239628	
9	1	6	63.3			10.7354	
10	2	6	71.9	1538		11.33754	

Statistics 2 (ChirpCenter Frequency: 5566.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	9	67.5			0.277875	1
1	3	9	66.8	1893	1334	1.33308	
2	2	9	95.3	1609		2.785175	
3	2	9	57.3	1474		3.638339	
4	1	9	60.9			4.624834	
5	2	9	93.9	1019		5.771293	
6	2	9	78.7	1248		6.696843	
7	2	9	63	1237		7.036001	
8	2	9	98.1	1484		8.035563	
9	1	9	70.2			9.848083	
10	3	9	75.2	1848	1867	10.46009	
11	3	9	88.5	1726	1118	11.8585	

Statistics 3 (ChirpCenter Frequency: 5566.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	10	68.4	1743		0.533821	1
1	3	10	76.6	1960	1559	1.141298	
2	2	10	84.2	1844		1.822006	
3	3	10	90.6	1383	1171	2.574202	
4	2	10	91.2	1011		3.314933	
5	2	10	62.5	1626		4.119903	
6	3	10	97.1	1623	1437	4.345962	
7	2	10	74.1	1989		5.329819	
8	2	10	83	1078		6.243306	
9	3	10	98.4	1470	1903	6.877535	
10	2	10	89.9	1089		7.698478	
11	2	10	79.6	1577		8.078858	
12	2	10	97.8	1871		8.948549	
13	2	10	88.8	1015		9.411869	
14	3	10	92.8	1434	1226	10.18359	
15	2	10	92.5	1652		10.79968	
16	2	10	73.4	1374		11.34168	

Statistics 4 (ChirpCenter Frequency: 5566.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	9	70.7			0.538877	1
1	1	9	61.6			1.19579	
2	1	9	78			2.256275	
3	1	9	97.3			3.190175	
4	1	9	64.7			4.562978	
5	1	9	85.4			5.618169	
6	1	9	96.8			6.197291	
7	3	9	86.1	1172	1722	7.767407	
8	2	9	97.4	1052		8.972352	
9	2	9	82	1853		9.296498	
10	1	9	96			10.15945	
11	3	9	67.9	1154	1558	11.96176	

Statistics 5(ChirpCenter Frequency: 5566.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	10	61	1717	1111	0.318067	1
1	2	10	54.4	1360		1.250826	
2	3	10	70.1	1936	1035	1.469765	
3	2	10	67.1	1848		2.427557	
4	3	10	76.4	1427	1407	3.041427	
5	2	10	70.1	1149		3.342975	
6	3	10	95.9	1563	1496	4.161828	
7	1	10	54.7			4.989842	
8	2	10	56	1675		5.966685	
9	1	10	59.4			6.475071	
10	1	10	56.1			6.731098	
11	3	10	54.1	1530	1763	7.700801	
12	1	10	93.2			8.19936	
13	3	10	82.4	1298	1195	9.062199	
14	1	10	83			9.916276	
15	3	10	51	1274	1337	10.19305	
16	2	10	81.2	1776		11.02282	
17	2	10	73.5	1521		11.96616	

Statistics 6 (ChirpCenter Frequency: 5564.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	14	82.1	1989		0.065456	1
1	3	14	79.5	1742	1829	1.149826	
2	2	14	74.5	1745		2.605906	
3	2	14	98.4	1056		3.469372	
4	1	14	67.2			4.186754	
5	1	14	81.9			5.237662	
6	3	14	93.1	1562	1358	6.243728	
7	1	14	67			7.29581	
8	3	14	83.1	1313	1102	7.764771	
9	2	14	66.5	1696		9.213815	
10	1	14	61.9			9.730171	
11	2	14	91	1734		10.8462	
12	3	14	54	1556	1973	11.93862	

Statistics 7(ChirpCenter Frequency: 5562.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	19	59.3			0.388299	1
1	2	19	55.7	1807		1.254539	
2	2	19	57.5	1273		1.632669	
3	1	19	98.6			2.308371	
4	2	19	91.9	1541		2.712898	
5	1	19	58			3.348917	
6	2	19	90.1	1049		4.305847	
7	1	19	60.2			4.901995	
8	2	19	73	1822		5.886336	
9	2	19	58.7	1603		6.383946	
10	1	19	70.3			6.79618	
11	2	19	52.9	1953		7.889997	
12	2	19	99.6	1134		8.037254	
13	3	19	83.7	1109	1200	8.676953	
14	2	19	66.7	1491		9.506049	
15	3	19	82.2	1098	1315	10.0824	
16	2	19	77.1	1295		11.12683	
17	2	19	62.3	1580		11.52647	

Statistics 8 (ChirpCenter Frequency: 5567.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	8	96.1	1351		0.350502	1
1	2	8	80.1	1257		1.178808	
2	2	8	54.4	1180		2.394575	
3	3	8	71.3	1654	1880	2.939369	
4	1	8	85.2			3.731919	
5	2	8	64.3	1533		5.022605	
6	1	8	73.2			5.92558	
7	3	8	91.7	1529	1531	6.874977	
8	3	8	58.7	1480	1746	7.758119	
9	2	8	57.7	1599		8.714879	
10	1	8	80.1			9.536892	
11	3	8	53.2	1079	1372	10.37116	
12	2	8	92.8	1965		11.78449	

Statistics 9 (ChirpCenter Frequency: 5564.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	14	76.5	1508		0.374819	1
1	3	14	59.1	1277	1713	1.063586	
2	3	14	98.5	1121	1858	1.63023	
3	2	14	92.3	1022		1.96077	
4	3	14	69.3	1868	1691	2.646496	
5	2	14	64.9	1330		3.380974	
6	3	14	83.6	1945	1969	4.289237	
7	1	14	56.6			4.820569	
8	3	14	77.5	1528	1387	5.223806	
9	3	14	69.7	1104	1189	5.776077	
10	3	14	55.5	1709	1231	6.540034	
11	3	14	94.8	1490	1153	7.157182	
12	2	14	80.8	1617		8.134228	
13	2	14	75	1227		8.639427	
14	2	14	92.8	1526		9.126619	
15	3	14	76.8	1710	1992	9.526985	
16	2	14	83.6	1251		10.34406	
17	2	14	83.1	1737		11.25486	
18	2	14	57.7	1457		11.61224	

Statistics 10 (ChirpCenter Frequency: 5564.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	14	70.1	1486	1165	0.088125	1
1	2	14	57.5	1796		1.075903	
2	3	14	86.4	1906	1927	2.202035	
3	1	14	80.3			3.065154	
4	3	14	58.4	1969	1114	4.344107	
5	2	14	93.8	1874		5.51706	
6	2	14	85	1647		6.379542	
7	3	14	71.3	1751	1148	7.150265	
8	1	14	69.4			7.457679	
9	1	14	63.6			8.738706	
10	3	14	77.2	1810	1978	9.394457	
11	1	14	65.3			10.8195	
12	2	14	87.6	1865		11.14961	

Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)	Hopping Sequence (MHz)
1	5530	9	1	333	1	5592.0, 5692.0, 5250.0, 5415.0, 5674.0, 5261.0, 5490.0, 5366.0, 5359.0, 5268.0, 5506.0, 5468.0, 5321.0, 5292.0, 5545.0, 5356.0, 5294.0, 5504.0, 5634.0, 5345.0, 5557.0, 5581.0, 5302.0, 5658.0, 5569.0, 5596.0, 5654.0, 5270.0, 5655.0, 5500.0, 5683.0, 5514.0, 5582.0, 5620.0, 5443.0, 5526.0, 5297.0, 5465.0, 5469.0, 5393.0, 5512.0, 5546.0, 5710.0, 5320.0, 5332.0, 5479.0, 5438.0, 5257.0, 5534.0, 5360.0, 5307.0, 5262.0, 5699.0, 5411.0, 5260.0, 5338.0, 5712.0, 5513.0, 5325.0, 5714.0, 5431.0, 5449.0, 5553.0, 5405.0, 5392.0, 5444.0, 5303.0, 5702.0, 5619.0, 5547.0, 5510.0, 5521.0, 5322.0, 5703.0, 5459.0, 5446.0, 5499.0, 5448.0, 5355.0, 5687.0, 5583.0, 5584.0, 5691.0, 5633.0, 5588.0, 5707.0, 5362.0, 5387.0, 5342.0, 5560.0, 5454.0, 5288.0, 5608.0, 5306.0, 5663.0, 5273.0, 5713.0, 5595.0, 5563.0, 5645.0
2	5530	9	1	333	1	5548.0, 5355.0, 5575.0, 5672.0, 5390.0, 5702.0, 5578.0, 5266.0, 5460.0, 5307.0, 5602.0, 5317.0, 5439.0, 5350.0, 5547.0, 5605.0, 5582.0, 5517.0, 5262.0, 5400.0, 5530.0, 5592.0, 5689.0, 5392.0, 5641.0, 5385.0, 5631.0, 5412.0, 5409.0, 5713.0, 5488.0, 5404.0, 5325.0, 5623.0, 5595.0, 5683.0, 5461.0, 5504.0, 5531.0, 5565.0, 5374.0, 5281.0, 5686.0, 5382.0, 5666.0, 5334.0, 5354.0, 5292.0, 5660.0, 5682.0, 5372.0, 5549.0, 5684.0, 5349.0, 5510.0, 5507.0, 5640.0, 5436.0, 5297.0, 5345.0, 5606.0, 5312.0, 5413.0, 5272.0, 5573.0, 5527.0, 5703.0, 5395.0, 5451.0, 5261.0, 5427.0, 5711.0, 5560.0, 5455.0, 5459.0, 5508.0, 5692.0, 5636.0, 5416.0, 5478.0, 5570.0, 5351.0, 5414.0, 5661.0, 5657.0, 5285.0, 5384.0, 5415.0, 5645.0, 5286.0, 5474.0, 5491.0, 5269.0, 5366.0, 5554.0, 5486.0, 5483.0, 5300.0, 5658.0, 5718.0
3	5530	9	1	333	1	5321.0, 5693.0, 5679.0, 5708.0, 5465.0, 5384.0, 5699.0, 5525.0, 5676.0, 5590.0, 5674.0, 5522.0, 5537.0, 5507.0, 5717.0, 5441.0, 5526.0, 5354.0, 5378.0, 5434.0, 5556.0, 5544.0, 5281.0, 5570.0, 5323.0, 5530.0, 5322.0, 5583.0, 5491.0, 5332.0, 5616.0, 5387.0, 5671.0, 5546.0, 5346.0, 5422.0, 5259.0, 5448.0, 5667.0, 5510.0, 5427.0, 5661.0, 5680.0, 5395.0, 5369.0, 5297.0, 5512.0, 5316.0, 5632.0, 5697.0, 5529.0, 5389.0, 5271.0, 5689.0, 5604.0, 5268.0, 5478.0, 5460.0, 5319.0, 5476.0, 5550.0, 5651.0, 5581.0, 5602.0, 5621.0,

						5617.0, 5484.0, 5684.0, 5575.0, 5634.0, 5363.0, 5721.0, 5723.0, 5368.0, 5365.0, 5690.0, 5406.0, 5552.0, 5584.0, 5488.0, 5377.0, 5446.0, 5655.0, 5678.0, 5670.0, 5696.0, 5706.0, 5337.0, 5435.0, 5719.0, 5327.0, 5264.0, 5490.0, 5412.0, 5451.0, 5356.0, 5439.0, 5458.0, 5682.0, 5258.0
4	5530	9	1	333	1	5387.0, 5405.0, 5511.0, 5657.0, 5638.0, 5663.0, 5281.0, 5647.0, 5269.0, 5428.0, 5304.0, 5654.0, 5385.0, 5395.0, 5295.0, 5563.0, 5571.0, 5661.0, 5690.0, 5294.0, 5262.0, 5557.0, 5606.0, 5488.0, 5409.0, 5545.0, 5628.0, 5686.0, 5344.0, 5583.0, 5445.0, 5285.0, 5374.0, 5714.0, 5598.0, 5335.0, 5412.0, 5597.0, 5471.0, 5667.0, 5341.0, 5524.0, 5700.0, 5433.0, 5522.0, 5288.0, 5315.0, 5483.0, 5599.0, 5393.0, 5351.0, 5596.0, 5416.0, 5349.0, 5499.0, 5448.0, 5432.0, 5652.0, 5630.0, 5699.0, 5537.0, 5484.0, 5673.0, 5350.0, 5494.0, 5554.0, 5515.0, 5410.0, 5635.0, 5585.0, 5444.0, 5611.0, 5400.0, 5278.0, 5715.0, 5482.0, 5650.0, 5257.0, 5359.0, 5426.0, 5703.0, 5518.0, 5424.0, 5573.0, 5525.0, 5594.0, 5578.0, 5407.0, 5411.0, 5675.0, 5514.0, 5314.0, 5509.0, 5629.0, 5556.0, 5434.0, 5274.0, 5491.0, 5682.0, 5372.0
5	5530	9	1	333	1	5656.0, 5274.0, 5432.0, 5592.0, 5298.0, 5429.0, 5578.0, 5565.0, 5329.0, 5652.0, 5445.0, 5577.0, 5267.0, 5643.0, 5530.0, 5635.0, 5591.0, 5696.0, 5350.0, 5500.0, 5263.0, 5596.0, 5658.0, 5291.0, 5501.0, 5368.0, 5593.0, 5620.0, 5338.0, 5290.0, 5583.0, 5283.0, 5705.0, 5625.0, 5510.0, 5692.0, 5418.0, 5650.0, 5484.0, 5675.0, 5400.0, 5466.0, 5614.0, 5610.0, 5373.0, 5568.0, 5321.0, 5495.0, 5694.0, 5707.0, 5340.0, 5258.0, 5646.0, 5255.0, 5454.0, 5715.0, 5518.0, 5479.0, 5680.0, 5645.0, 5588.0, 5437.0, 5490.0, 5483.0, 5525.0, 5293.0, 5597.0, 5362.0, 5309.0, 5630.0, 5531.0, 5286.0, 5345.0, 5644.0, 5666.0, 5623.0, 5522.0, 5702.0, 5313.0, 5523.0, 5586.0, 5390.0, 5609.0, 5636.0, 5403.0, 5678.0, 5474.0, 5664.0, 5408.0, 5307.0, 5722.0, 5494.0, 5450.0, 5708.0, 5342.0, 5691.0, 5616.0, 5384.0, 5287.0, 5515.0
6	5530	9	1	333	1	5705.0, 5601.0, 5443.0, 5698.0, 5462.0, 5393.0, 5591.0, 5654.0, 5502.0, 5612.0, 5339.0, 5691.0, 5310.0, 5332.0, 5585.0, 5586.0, 5577.0, 5556.0, 5412.0, 5431.0, 5719.0, 5293.0, 5384.0, 5382.0, 5670.0, 5372.0, 5559.0, 5295.0, 5360.0, 5319.0, 5284.0, 5539.0, 5392.0, 5626.0, 5298.0, 5655.0, 5404.0, 5442.0, 5571.0, 5305.0, 5575.0, 5643.0, 5631.0, 5492.0, 5513.0, 5606.0, 5342.0, 5276.0, 5376.0, 5683.0, 5476.0, 5307.0, 5637.0, 5614.0, 5387.0, 5528.0, 5485.0, 5660.0, 5486.0, 5497.0, 5639.0, 5300.0, 5608.0, 5568.0, 5357.0,

						5417.0, 5447.0, 5455.0, 5316.0, 5600.0, 5672.0, 5709.0, 5523.0, 5275.0, 5482.0, 5666.0, 5508.0, 5551.0, 5713.0, 5477.0, 5646.0, 5682.0, 5652.0, 5318.0, 5420.0, 5402.0, 5426.0, 5389.0, 5445.0, 5580.0, 5321.0, 5422.0, 5533.0, 5676.0, 5262.0, 5469.0, 5303.0, 5369.0, 5602.0, 5688.0
7	5530	9	1	333	1	5667.0, 5706.0, 5291.0, 5664.0, 5423.0, 5723.0, 5573.0, 5603.0, 5403.0, 5449.0, 5689.0, 5553.0, 5414.0, 5580.0, 5722.0, 5455.0, 5690.0, 5516.0, 5709.0, 5373.0, 5450.0, 5284.0, 5311.0, 5627.0, 5296.0, 5367.0, 5395.0, 5464.0, 5314.0, 5602.0, 5610.0, 5659.0, 5350.0, 5514.0, 5263.0, 5324.0, 5390.0, 5340.0, 5598.0, 5462.0, 5471.0, 5415.0, 5420.0, 5538.0, 5648.0, 5605.0, 5539.0, 5456.0, 5428.0, 5309.0, 5560.0, 5500.0, 5488.0, 5684.0, 5623.0, 5546.0, 5439.0, 5454.0, 5407.0, 5724.0, 5496.0, 5398.0, 5275.0, 5537.0, 5344.0, 5639.0, 5581.0, 5470.0, 5624.0, 5626.0, 5297.0, 5357.0, 5493.0, 5687.0, 5273.0, 5426.0, 5489.0, 5391.0, 5374.0, 5705.0, 5363.0, 5504.0, 5682.0, 5272.0, 5397.0, 5292.0, 5469.0, 5484.0, 5585.0, 5310.0, 5536.0, 5490.0, 5680.0, 5461.0, 5465.0, 5685.0, 5290.0, 5406.0, 5657.0, 5599.0
8	5530	9	1	333	1	5675.0, 5613.0, 5343.0, 5595.0, 5397.0, 5416.0, 5714.0, 5313.0, 5676.0, 5336.0, 5592.0, 5256.0, 5471.0, 5345.0, 5582.0, 5516.0, 5591.0, 5330.0, 5369.0, 5449.0, 5281.0, 5287.0, 5295.0, 5274.0, 5403.0, 5519.0, 5350.0, 5283.0, 5510.0, 5657.0, 5723.0, 5401.0, 5415.0, 5486.0, 5541.0, 5604.0, 5356.0, 5637.0, 5251.0, 5431.0, 5378.0, 5444.0, 5417.0, 5338.0, 5374.0, 5365.0, 5642.0, 5544.0, 5300.0, 5459.0, 5387.0, 5495.0, 5655.0, 5709.0, 5293.0, 5705.0, 5487.0, 5624.0, 5557.0, 5335.0, 5523.0, 5698.0, 5480.0, 5467.0, 5549.0, 5344.0, 5297.0, 5352.0, 5547.0, 5670.0, 5322.0, 5386.0, 5632.0, 5315.0, 5259.0, 5423.0, 5638.0, 5607.0, 5511.0, 5478.0, 5411.0, 5569.0, 5647.0, 5375.0, 5669.0, 5452.0, 5412.0, 5612.0, 5650.0, 5324.0, 5454.0, 5552.0, 5644.0, 5307.0, 5524.0, 5355.0, 5620.0, 5515.0, 5455.0, 5571.0
9	5530	9	1	333	1	5490.0, 5658.0, 5584.0, 5708.0, 5429.0, 5683.0, 5647.0, 5507.0, 5477.0, 5619.0, 5622.0, 5269.0, 5630.0, 5305.0, 5688.0, 5657.0, 5297.0, 5508.0, 5663.0, 5457.0, 5518.0, 5648.0, 5258.0, 5705.0, 5610.0, 5302.0, 5417.0, 5505.0, 5280.0, 5714.0, 5396.0, 5671.0, 5564.0, 5433.0, 5462.0, 5650.0, 5451.0, 5500.0, 5523.0, 5672.0, 5654.0, 5629.0, 5645.0, 5267.0, 5554.0, 5534.0, 5668.0, 5599.0, 5309.0, 5578.0, 5522.0, 5514.0, 5402.0, 5475.0, 5359.0, 5644.0, 5525.0, 5466.0, 5589.0, 5527.0, 5605.0, 5532.0, 5511.0, 5583.0, 5278.0

						5455.0, 5329.0, 5470.0, 5600.0, 5643.0, 5415.0, 5680.0, 5281.0, 5295.0, 5531.0, 5641.0, 5268.0, 5292.0, 5317.0, 5371.0, 5426.0, 5283.0, 5257.0, 5693.0, 5341.0, 5381.0, 5533.0, 5421.0, 5289.0, 5561.0, 5596.0, 5356.0, 5308.0, 5310.0, 5721.0, 5400.0, 5287.0, 5343.0, 5570.0, 5634.0
10	5530	9	1	333	1	5372.0, 5698.0, 5718.0, 5579.0, 5466.0, 5435.0, 5513.0, 5630.0, 5284.0, 5377.0, 5533.0, 5635.0, 5257.0, 5297.0, 5649.0, 5255.0, 5529.0, 5587.0, 5265.0, 5475.0, 5656.0, 5722.0, 5459.0, 5454.0, 5326.0, 5662.0, 5336.0, 5633.0, 5421.0, 5498.0, 5315.0, 5427.0, 5401.0, 5574.0, 5411.0, 5478.0, 5446.0, 5455.0, 5441.0, 5670.0, 5306.0, 5486.0, 5554.0, 5564.0, 5548.0, 5544.0, 5605.0, 5611.0, 5323.0, 5503.0, 5366.0, 5353.0, 5679.0, 5451.0, 5412.0, 5332.0, 5319.0, 5490.0, 5657.0, 5425.0, 5702.0, 5258.0, 5647.0, 5299.0, 5560.0, 5614.0, 5468.0, 5287.0, 5256.0, 5358.0, 5634.0, 5474.0, 5713.0, 5293.0, 5322.0, 5320.0, 5691.0, 5325.0, 5648.0, 5565.0, 5660.0, 5346.0, 5589.0, 5361.0, 5524.0, 5602.0, 5665.0, 5628.0, 5707.0, 5680.0, 5712.0, 5557.0, 5547.0, 5426.0, 5684.0, 5526.0, 5388.0, 5458.0, 5577.0, 5607.0
11	5530	9	1	333	1	5334.0, 5572.0, 5535.0, 5474.0, 5435.0, 5488.0, 5676.0, 5434.0, 5530.0, 5371.0, 5682.0, 5266.0, 5689.0, 5722.0, 5273.0, 5363.0, 5341.0, 5540.0, 5546.0, 5583.0, 5524.0, 5468.0, 5507.0, 5384.0, 5697.0, 5592.0, 5318.0, 5694.0, 5710.0, 5700.0, 5526.0, 5442.0, 5337.0, 5307.0, 5660.0, 5525.0, 5411.0, 5633.0, 5604.0, 5380.0, 5621.0, 5330.0, 5357.0, 5707.0, 5285.0, 5324.0, 5721.0, 5447.0, 5529.0, 5456.0, 5569.0, 5558.0, 5452.0, 5584.0, 5687.0, 5393.0, 5352.0, 5576.0, 5665.0, 5567.0, 5632.0, 5580.0, 5556.0, 5275.0, 5711.0, 5503.0, 5520.0, 5568.0, 5597.0, 5381.0, 5389.0, 5629.0, 5523.0, 5505.0, 5534.0, 5550.0, 5422.0, 5494.0, 5267.0, 5344.0, 5449.0, 5254.0, 5405.0, 5679.0, 5325.0, 5279.0, 5601.0, 5343.0, 5437.0, 5446.0, 5351.0, 5614.0, 5570.0, 5615.0, 5552.0, 5688.0, 5706.0, 5301.0, 5663.0, 5640.0
12	5530	9	1	333	1	5519.0, 5646.0, 5601.0, 5555.0, 5682.0, 5622.0, 5613.0, 5496.0, 5465.0, 5717.0, 5368.0, 5684.0, 5460.0, 5596.0, 5495.0, 5520.0, 5548.0, 5327.0, 5532.0, 5643.0, 5618.0, 5697.0, 5671.0, 5260.0, 5511.0, 5383.0, 5431.0, 5346.0, 5539.0, 5633.0, 5421.0, 5369.0, 5545.0, 5295.0, 5339.0, 5269.0, 5693.0, 5392.0, 5482.0, 5343.0, 5712.0, 5265.0, 5716.0, 5721.0, 5487.0, 5680.0, 5289.0, 5268.0, 5610.0, 5366.0, 5600.0, 5353.0, 5463.0, 5623.0, 5390.0, 5481.0, 5348.0, 5350.0, 5309.0, 5517.0, 5634.0, 5423.0, 5492.0, 5330.0, 5473.0,

						5435.0, 5434.0, 5688.0, 5276.0, 5382.0, 5510.0, 5636.0, 5580.0, 5252.0, 5328.0, 5318.0, 5661.0, 5333.0, 5666.0, 5437.0, 5594.0, 5722.0, 5530.0, 5447.0, 5398.0, 5454.0, 5351.0, 5338.0, 5370.0, 5637.0, 5702.0, 5311.0, 5414.0, 5518.0, 5564.0, 5336.0, 5576.0, 5614.0, 5418.0, 5687.0
13	5530	9	1	333	1	5722.0, 5311.0, 5488.0, 5333.0, 5624.0, 5347.0, 5368.0, 5403.0, 5600.0, 5277.0, 5313.0, 5340.0, 5665.0, 5551.0, 5478.0, 5693.0, 5614.0, 5408.0, 5285.0, 5537.0, 5493.0, 5373.0, 5718.0, 5695.0, 5342.0, 5638.0, 5410.0, 5475.0, 5421.0, 5318.0, 5552.0, 5712.0, 5621.0, 5365.0, 5418.0, 5575.0, 5567.0, 5579.0, 5505.0, 5448.0, 5513.0, 5271.0, 5324.0, 5262.0, 5435.0, 5396.0, 5637.0, 5669.0, 5259.0, 5383.0, 5361.0, 5707.0, 5509.0, 5397.0, 5458.0, 5495.0, 5522.0, 5294.0, 5658.0, 5645.0, 5375.0, 5592.0, 5584.0, 5582.0, 5467.0, 5659.0, 5351.0, 5553.0, 5563.0, 5504.0, 5444.0, 5415.0, 5641.0, 5708.0, 5371.0, 5653.0, 5429.0, 5321.0, 5449.0, 5394.0, 5275.0, 5267.0, 5515.0, 5554.0, 5379.0, 5432.0, 5433.0, 5306.0, 5437.0, 5473.0, 5544.0, 5280.0, 5255.0, 5251.0, 5679.0, 5492.0, 5650.0, 5447.0, 5491.0, 5520.0
14	5530	9	1	333	1	5566.0, 5504.0, 5702.0, 5311.0, 5391.0, 5348.0, 5406.0, 5553.0, 5664.0, 5526.0, 5627.0, 5662.0, 5267.0, 5689.0, 5459.0, 5716.0, 5460.0, 5288.0, 5723.0, 5673.0, 5315.0, 5411.0, 5704.0, 5363.0, 5354.0, 5659.0, 5357.0, 5593.0, 5584.0, 5721.0, 5718.0, 5692.0, 5601.0, 5617.0, 5420.0, 5532.0, 5278.0, 5705.0, 5385.0, 5263.0, 5323.0, 5438.0, 5297.0, 5479.0, 5290.0, 5337.0, 5653.0, 5270.0, 5427.0, 5710.0, 5416.0, 5559.0, 5492.0, 5549.0, 5572.0, 5637.0, 5394.0, 5266.0, 5509.0, 5562.0, 5567.0, 5474.0, 5296.0, 5299.0, 5516.0, 5691.0, 5466.0, 5484.0, 5597.0, 5661.0, 5408.0, 5685.0, 5570.0, 5707.0, 5518.0, 5588.0, 5271.0, 5605.0, 5717.0, 5603.0, 5380.0, 5429.0, 5303.0, 5611.0, 5522.0, 5476.0, 5571.0, 5269.0, 5650.0, 5672.0, 5693.0, 5310.0, 5358.0, 5252.0, 5556.0, 5548.0, 5419.0, 5482.0, 5586.0, 5461.0
15	5530	9	1	333	1	5652.0, 5437.0, 5328.0, 5402.0, 5691.0, 5681.0, 5533.0, 5388.0, 5532.0, 5472.0, 5311.0, 5588.0, 5434.0, 5394.0, 5577.0, 5504.0, 5721.0, 5329.0, 5281.0, 5381.0, 5284.0, 5470.0, 5452.0, 5292.0, 5430.0, 5458.0, 5687.0, 5546.0, 5390.0, 5530.0, 5508.0, 5435.0, 5684.0, 5262.0, 5521.0, 5407.0, 5258.0, 5658.0, 5580.0, 5444.0, 5560.0, 5602.0, 5494.0, 5377.0, 5276.0, 5357.0, 5324.0, 5474.0, 5507.0, 5286.0, 5385.0, 5586.0, 5656.0, 5514.0, 5603.0, 5679.0, 5400.0, 5592.0, 5498.0, 5344.0, 5674.0, 5253.0, 5443.0, 5675.0, 5619.0

						5481.0, 5415.0, 5285.0, 5310.0, 5712.0, 5573.0, 5622.0, 5610.0, 5593.0, 5375.0, 5582.0, 5408.0, 5517.0, 5392.0, 5529.0, 5509.0, 5626.0, 5540.0, 5455.0, 5538.0, 5312.0, 5528.0, 5631.0, 5707.0, 5255.0, 5723.0, 5462.0, 5359.0, 5625.0, 5487.0, 5605.0, 5267.0, 5340.0, 5463.0, 5314.0
16	5530	9	1	333	1	5499.0, 5421.0, 5493.0, 5495.0, 5263.0, 5628.0, 5460.0, 5615.0, 5345.0, 5672.0, 5393.0, 5462.0, 5659.0, 5319.0, 5351.0, 5309.0, 5340.0, 5268.0, 5266.0, 5369.0, 5430.0, 5536.0, 5459.0, 5419.0, 5486.0, 5688.0, 5375.0, 5254.0, 5414.0, 5381.0, 5315.0, 5666.0, 5431.0, 5258.0, 5719.0, 5501.0, 5502.0, 5548.0, 5377.0, 5387.0, 5625.0, 5707.0, 5379.0, 5436.0, 5336.0, 5601.0, 5521.0, 5549.0, 5588.0, 5452.0, 5575.0, 5489.0, 5443.0, 5417.0, 5307.0, 5330.0, 5584.0, 5534.0, 5684.0, 5366.0, 5485.0, 5602.0, 5670.0, 5715.0, 5538.0, 5667.0, 5371.0, 5346.0, 5682.0, 5448.0, 5256.0, 5479.0, 5416.0, 5270.0, 5435.0, 5663.0, 5422.0, 5482.0, 5454.0, 5396.0, 5467.0, 5339.0, 5289.0, 5427.0, 5568.0, 5438.0, 5578.0, 5526.0, 5545.0, 5645.0, 5262.0, 5275.0, 5612.0, 5274.0, 5614.0, 5409.0, 5537.0, 5326.0, 5420.0, 5580.0
17	5530	9	1	333	1	5607.0, 5644.0, 5677.0, 5553.0, 5461.0, 5498.0, 5263.0, 5481.0, 5477.0, 5422.0, 5506.0, 5722.0, 5442.0, 5681.0, 5429.0, 5282.0, 5267.0, 5332.0, 5474.0, 5661.0, 5255.0, 5431.0, 5384.0, 5454.0, 5545.0, 5524.0, 5659.0, 5256.0, 5518.0, 5308.0, 5676.0, 5273.0, 5293.0, 5550.0, 5531.0, 5357.0, 5599.0, 5564.0, 5392.0, 5565.0, 5303.0, 5612.0, 5373.0, 5653.0, 5277.0, 5465.0, 5333.0, 5278.0, 5672.0, 5385.0, 5449.0, 5317.0, 5690.0, 5691.0, 5502.0, 5296.0, 5615.0, 5626.0, 5503.0, 5330.0, 5472.0, 5597.0, 5688.0, 5258.0, 5300.0, 5560.0, 5475.0, 5268.0, 5537.0, 5654.0, 5719.0, 5271.0, 5711.0, 5342.0, 5338.0, 5504.0, 5345.0, 5576.0, 5637.0, 5460.0, 5464.0, 5482.0, 5298.0, 5595.0, 5610.0, 5467.0, 5573.0, 5353.0, 5291.0, 5578.0, 5480.0, 5634.0, 5695.0, 5580.0, 5558.0, 5470.0, 5505.0, 5555.0, 5588.0, 5381.0
18	5530	9	1	333	1	5357.0, 5347.0, 5510.0, 5650.0, 5606.0, 5263.0, 5616.0, 5297.0, 5372.0, 5648.0, 5706.0, 5394.0, 5679.0, 5589.0, 5553.0, 5528.0, 5547.0, 5444.0, 5687.0, 5551.0, 5582.0, 5466.0, 5703.0, 5688.0, 5517.0, 5596.0, 5608.0, 5512.0, 5721.0, 5600.0, 5362.0, 5598.0, 5367.0, 5356.0, 5502.0, 5322.0, 5290.0, 5455.0, 5477.0, 5670.0, 5470.0, 5438.0, 5617.0, 5556.0, 5330.0, 5287.0, 5627.0, 5402.0, 5642.0, 5611.0, 5327.0, 5558.0, 5531.0, 5336.0, 5306.0, 5693.0, 5469.0, 5527.0, 5489.0, 5521.0, 5575.0, 5634.0, 5516.0, 5343.0, 5615.0

						5350.0, 5311.0, 5289.0, 5594.0, 5408.0, 5578.0, 5546.0, 5269.0, 5341.0, 5697.0, 5573.0, 5332.0, 5567.0, 5540.0, 5300.0, 5379.0, 5545.0, 5461.0, 5314.0, 5318.0, 5609.0, 5346.0, 5686.0, 5669.0, 5333.0, 5590.0, 5359.0, 5485.0, 5339.0, 5312.0, 5571.0, 5452.0, 5304.0, 5640.0, 5619.0
19	5530	9	1	333	1	5604.0, 5562.0, 5312.0, 5676.0, 5648.0, 5525.0, 5655.0, 5252.0, 5509.0, 5428.0, 5402.0, 5568.0, 5651.0, 5601.0, 5691.0, 5416.0, 5439.0, 5586.0, 5593.0, 5263.0, 5723.0, 5629.0, 5300.0, 5424.0, 5375.0, 5590.0, 5401.0, 5496.0, 5339.0, 5625.0, 5282.0, 5301.0, 5468.0, 5693.0, 5462.0, 5583.0, 5534.0, 5571.0, 5536.0, 5624.0, 5540.0, 5532.0, 5431.0, 5558.0, 5461.0, 5380.0, 5345.0, 5486.0, 5423.0, 5609.0, 5650.0, 5673.0, 5302.0, 5497.0, 5314.0, 5644.0, 5678.0, 5404.0, 5626.0, 5298.0, 5417.0, 5506.0, 5471.0, 5307.0, 5281.0, 5382.0, 5690.0, 5257.0, 5400.0, 5618.0, 5565.0, 5434.0, 5406.0, 5547.0, 5662.0, 5318.0, 5702.0, 5611.0, 5449.0, 5659.0, 5419.0, 5272.0, 5296.0, 5597.0, 5671.0, 5361.0, 5347.0, 5698.0, 5415.0, 5511.0, 5387.0, 5588.0, 5255.0, 5284.0, 5324.0, 5687.0, 5329.0, 5502.0, 5470.0, 5336.0
20	5530	9	1	333	1	5695.0, 5341.0, 5264.0, 5373.0, 5318.0, 5710.0, 5620.0, 5362.0, 5516.0, 5291.0, 5589.0, 5278.0, 5288.0, 5273.0, 5524.0, 5377.0, 5712.0, 5416.0, 5309.0, 5644.0, 5262.0, 5484.0, 5414.0, 5384.0, 5388.0, 5432.0, 5538.0, 5502.0, 5624.0, 5639.0, 5654.0, 5527.0, 5699.0, 5592.0, 5447.0, 5483.0, 5415.0, 5458.0, 5550.0, 5419.0, 5575.0, 5614.0, 5471.0, 5409.0, 5520.0, 5587.0, 5667.0, 5268.0, 5679.0, 5279.0, 5675.0, 5412.0, 5313.0, 5351.0, 5299.0, 5625.0, 5375.0, 5604.0, 5398.0, 5389.0, 5685.0, 5400.0, 5623.0, 5482.0, 5280.0, 5479.0, 5436.0, 5597.0, 5658.0, 5374.0, 5304.0, 5526.0, 5556.0, 5345.0, 5669.0, 5357.0, 5348.0, 5319.0, 5258.0, 5363.0, 5476.0, 5645.0, 5503.0, 5510.0, 5256.0, 5652.0, 5686.0, 5507.0, 5612.0, 5281.0, 5522.0, 5621.0, 5314.0, 5417.0, 5462.0, 5472.0, 5655.0, 5549.0, 5543.0, 5263.0
21	5530	9	1	333	1	5367.0, 5549.0, 5309.0, 5377.0, 5687.0, 5445.0, 5602.0, 5520.0, 5258.0, 5614.0, 5392.0, 5464.0, 5294.0, 5625.0, 5677.0, 5512.0, 5455.0, 5574.0, 5605.0, 5420.0, 5517.0, 5502.0, 5697.0, 5626.0, 5440.0, 5262.0, 5366.0, 5397.0, 5600.0, 5568.0, 5667.0, 5586.0, 5330.0, 5335.0, 5547.0, 5616.0, 5617.0, 5448.0, 5478.0, 5292.0, 5582.0, 5650.0, 5715.0, 5413.0, 5622.0, 5545.0, 5712.0, 5604.0, 5449.0, 5443.0, 5713.0, 5556.0, 5474.0, 5501.0, 5450.0, 5286.0, 5665.0, 5671.0, 5282.0, 5271.0, 5708.0, 5630.0, 5643.0, 5511.0, 5426.0,

						5338.0, 5390.0, 5268.0, 5287.0, 5576.0, 5655.0, 5456.0, 5477.0, 5447.0, 5277.0, 5419.0, 5669.0, 5274.0, 5495.0, 5263.0, 5423.0, 5459.0, 5596.0, 5538.0, 5575.0, 5703.0, 5305.0, 5699.0, 5666.0, 5523.0, 5590.0, 5403.0, 5580.0, 5473.0, 5452.0, 5546.0, 5672.0, 5382.0, 5485.0, 5572.0
22	5530	9	1	333	1	5698.0, 5588.0, 5701.0, 5667.0, 5342.0, 5285.0, 5310.0, 5517.0, 5707.0, 5721.0, 5417.0, 5516.0, 5369.0, 5490.0, 5370.0, 5344.0, 5660.0, 5674.0, 5457.0, 5361.0, 5510.0, 5313.0, 5605.0, 5483.0, 5258.0, 5299.0, 5673.0, 5372.0, 5656.0, 5359.0, 5545.0, 5571.0, 5391.0, 5276.0, 5330.0, 5559.0, 5606.0, 5699.0, 5508.0, 5491.0, 5715.0, 5470.0, 5534.0, 5582.0, 5466.0, 5399.0, 5648.0, 5461.0, 5535.0, 5400.0, 5687.0, 5544.0, 5433.0, 5653.0, 5414.0, 5686.0, 5636.0, 5522.0, 5558.0, 5280.0, 5569.0, 5303.0, 5383.0, 5706.0, 5279.0, 5275.0, 5335.0, 5386.0, 5543.0, 5406.0, 5460.0, 5255.0, 5475.0, 5367.0, 5624.0, 5305.0, 5507.0, 5550.0, 5454.0, 5688.0, 5607.0, 5566.0, 5645.0, 5646.0, 5632.0, 5575.0, 5531.0, 5319.0, 5472.0, 5682.0, 5447.0, 5440.0, 5675.0, 5428.0, 5365.0, 5430.0, 5415.0, 5720.0, 5424.0, 5405.0
23	5530	9	1	333	1	5603.0, 5455.0, 5273.0, 5521.0, 5594.0, 5261.0, 5650.0, 5282.0, 5531.0, 5601.0, 5645.0, 5387.0, 5454.0, 5399.0, 5465.0, 5690.0, 5462.0, 5348.0, 5380.0, 5489.0, 5383.0, 5509.0, 5366.0, 5707.0, 5568.0, 5339.0, 5639.0, 5564.0, 5634.0, 5467.0, 5474.0, 5389.0, 5491.0, 5486.0, 5416.0, 5394.0, 5264.0, 5530.0, 5321.0, 5477.0, 5404.0, 5576.0, 5680.0, 5604.0, 5265.0, 5677.0, 5355.0, 5579.0, 5336.0, 5662.0, 5665.0, 5651.0, 5429.0, 5378.0, 5361.0, 5566.0, 5578.0, 5483.0, 5624.0, 5330.0, 5403.0, 5587.0, 5488.0, 5630.0, 5653.0, 5710.0, 5563.0, 5463.0, 5371.0, 5498.0, 5648.0, 5345.0, 5565.0, 5257.0, 5556.0, 5446.0, 5508.0, 5506.0, 5299.0, 5600.0, 5670.0, 5322.0, 5349.0, 5519.0, 5500.0, 5418.0, 5503.0, 5276.0, 5681.0, 5405.0, 5502.0, 5673.0, 5326.0, 5252.0, 5376.0, 5362.0, 5266.0, 5334.0, 5586.0, 5427.0
24	5530	9	1	333	1	5595.0, 5316.0, 5716.0, 5705.0, 5393.0, 5347.0, 5340.0, 5581.0, 5349.0, 5493.0, 5547.0, 5646.0, 5474.0, 5509.0, 5409.0, 5503.0, 5676.0, 5413.0, 5668.0, 5258.0, 5537.0, 5470.0, 5292.0, 5511.0, 5583.0, 5653.0, 5319.0, 5606.0, 5462.0, 5520.0, 5254.0, 5411.0, 5398.0, 5571.0, 5605.0, 5623.0, 5514.0, 5276.0, 5523.0, 5529.0, 5438.0, 5706.0, 5256.0, 5373.0, 5696.0, 5433.0, 5674.0, 5602.0, 5331.0, 5387.0, 5487.0, 5478.0, 5263.0, 5311.0, 5615.0, 5443.0, 5664.0, 5302.0, 5288.0, 5291.0, 5396.0, 5528.0, 5279.0, 5454.0, 5699.0,

						5482.0, 5542.0, 5715.0, 5401.0, 5434.0, 5539.0, 5685.0, 5692.0, 5634.0, 5704.0, 5631.0, 5587.0, 5633.0, 5359.0, 5637.0, 5272.0, 5416.0, 5723.0, 5671.0, 5383.0, 5513.0, 5342.0, 5508.0, 5648.0, 5599.0, 5282.0, 5345.0, 5368.0, 5450.0, 5672.0, 5550.0, 5707.0, 5476.0, 5362.0, 5627.0
25	5530	9	1	333	1	5345.0, 5296.0, 5707.0, 5562.0, 5571.0, 5666.0, 5421.0, 5512.0, 5618.0, 5617.0, 5347.0, 5582.0, 5404.0, 5277.0, 5417.0, 5373.0, 5701.0, 5637.0, 5430.0, 5349.0, 5270.0, 5449.0, 5261.0, 5287.0, 5567.0, 5393.0, 5686.0, 5265.0, 5372.0, 5702.0, 5450.0, 5452.0, 5428.0, 5413.0, 5681.0, 5661.0, 5352.0, 5310.0, 5271.0, 5406.0, 5324.0, 5329.0, 5680.0, 5451.0, 5281.0, 5630.0, 5545.0, 5515.0, 5466.0, 5668.0, 5322.0, 5509.0, 5528.0, 5608.0, 5259.0, 5694.0, 5626.0, 5425.0, 5440.0, 5551.0, 5676.0, 5387.0, 5600.0, 5446.0, 5490.0, 5262.0, 5494.0, 5560.0, 5299.0, 5654.0, 5460.0, 5286.0, 5679.0, 5318.0, 5411.0, 5534.0, 5659.0, 5696.0, 5570.0, 5596.0, 5307.0, 5258.0, 5614.0, 5506.0, 5678.0, 5712.0, 5722.0, 5579.0, 5436.0, 5363.0, 5464.0, 5498.0, 5442.0, 5563.0, 5539.0, 5405.0, 5519.0, 5263.0, 5400.0, 5252.0
26	5530	9	1	333	1	5282.0, 5342.0, 5522.0, 5469.0, 5578.0, 5363.0, 5675.0, 5373.0, 5632.0, 5674.0, 5630.0, 5529.0, 5405.0, 5352.0, 5690.0, 5396.0, 5699.0, 5329.0, 5698.0, 5253.0, 5717.0, 5333.0, 5503.0, 5351.0, 5605.0, 5345.0, 5470.0, 5542.0, 5426.0, 5693.0, 5595.0, 5647.0, 5524.0, 5380.0, 5593.0, 5509.0, 5302.0, 5335.0, 5451.0, 5483.0, 5696.0, 5523.0, 5558.0, 5459.0, 5315.0, 5664.0, 5261.0, 5491.0, 5384.0, 5254.0, 5684.0, 5401.0, 5407.0, 5437.0, 5573.0, 5386.0, 5610.0, 5723.0, 5710.0, 5716.0, 5495.0, 5304.0, 5650.0, 5265.0, 5287.0, 5487.0, 5421.0, 5583.0, 5603.0, 5422.0, 5694.0, 5360.0, 5365.0, 5688.0, 5580.0, 5576.0, 5514.0, 5307.0, 5507.0, 5702.0, 5435.0, 5489.0, 5374.0, 5340.0, 5560.0, 5403.0, 5312.0, 5341.0, 5428.0, 5476.0, 5532.0, 5263.0, 5468.0, 5452.0, 5416.0, 5461.0, 5309.0, 5586.0, 5399.0, 5446.0
27	5530	9	1	333	1	5707.0, 5458.0, 5556.0, 5315.0, 5506.0, 5448.0, 5436.0, 5675.0, 5721.0, 5254.0, 5583.0, 5462.0, 5643.0, 5651.0, 5679.0, 5716.0, 5336.0, 5652.0, 5646.0, 5455.0, 5340.0, 5388.0, 5504.0, 5553.0, 5256.0, 5628.0, 5527.0, 5470.0, 5382.0, 5521.0, 5429.0, 5524.0, 5641.0, 5344.0, 5265.0, 5468.0, 5314.0, 5367.0, 5528.0, 5288.0, 5434.0, 5296.0, 5285.0, 5711.0, 5250.0, 5449.0, 5394.0, 5687.0, 5407.0, 5358.0, 5523.0, 5719.0, 5712.0, 5578.0, 5565.0, 5317.0, 5475.0, 5608.0, 5699.0, 5659.0, 5501.0, 5530.0, 5339.0, 5611.0, 5588.0

						5585.0, 5278.0, 5262.0, 5602.0, 5689.0, 5596.0, 5697.0, 5670.0, 5398.0, 5342.0, 5445.0, 5639.0, 5581.0, 5705.0, 5380.0, 5489.0, 5517.0, 5440.0, 5334.0, 5484.0, 5467.0, 5405.0, 5664.0, 5673.0, 5280.0, 5547.0, 5303.0, 5366.0, 5509.0, 5545.0, 5312.0, 5387.0, 5348.0, 5536.0, 5593.0
28	5530	9	1	333	1	5601.0, 5360.0, 5669.0, 5551.0, 5592.0, 5273.0, 5637.0, 5606.0, 5576.0, 5505.0, 5403.0, 5686.0, 5522.0, 5252.0, 5526.0, 5458.0, 5674.0, 5465.0, 5570.0, 5390.0, 5297.0, 5325.0, 5632.0, 5700.0, 5643.0, 5419.0, 5416.0, 5546.0, 5377.0, 5469.0, 5480.0, 5499.0, 5587.0, 5679.0, 5665.0, 5701.0, 5352.0, 5514.0, 5545.0, 5509.0, 5433.0, 5512.0, 5313.0, 5629.0, 5715.0, 5639.0, 5557.0, 5410.0, 5683.0, 5657.0, 5361.0, 5710.0, 5542.0, 5430.0, 5337.0, 5298.0, 5720.0, 5568.0, 5567.0, 5623.0, 5444.0, 5704.0, 5489.0, 5598.0, 5396.0, 5375.0, 5365.0, 5510.0, 5705.0, 5339.0, 5624.0, 5473.0, 5603.0, 5594.0, 5348.0, 5372.0, 5671.0, 5389.0, 5519.0, 5696.0, 5274.0, 5527.0, 5490.0, 5602.0, 5309.0, 5564.0, 5682.0, 5695.0, 5405.0, 5605.0, 5516.0, 5655.0, 5642.0, 5659.0, 5326.0, 5335.0, 5370.0, 5364.0, 5427.0, 5452.0
29	5530	9	1	333	1	5359.0, 5539.0, 5660.0, 5336.0, 5508.0, 5435.0, 5657.0, 5637.0, 5511.0, 5530.0, 5462.0, 5398.0, 5302.0, 5558.0, 5502.0, 5583.0, 5515.0, 5402.0, 5535.0, 5353.0, 5286.0, 5332.0, 5543.0, 5607.0, 5403.0, 5397.0, 5675.0, 5414.0, 5513.0, 5453.0, 5360.0, 5713.0, 5668.0, 5255.0, 5589.0, 5612.0, 5554.0, 5355.0, 5427.0, 5411.0, 5621.0, 5441.0, 5364.0, 5504.0, 5596.0, 5326.0, 5717.0, 5298.0, 5578.0, 5591.0, 5546.0, 5331.0, 5577.0, 5320.0, 5448.0, 5627.0, 5590.0, 5256.0, 5640.0, 5400.0, 5259.0, 5573.0, 5278.0, 5312.0, 5486.0, 5277.0, 5382.0, 5307.0, 5594.0, 5440.0, 5351.0, 5595.0, 5318.0, 5415.0, 5641.0, 5358.0, 5254.0, 5673.0, 5474.0, 5702.0, 5565.0, 5340.0, 5722.0, 5518.0, 5266.0, 5464.0, 5656.0, 5316.0, 5680.0, 5484.0, 5661.0, 5258.0, 5563.0, 5396.0, 5509.0, 5619.0, 5688.0, 5310.0, 5282.0, 5698.0
30	5530	9	1	333	1	5686.0, 5293.0, 5498.0, 5399.0, 5324.0, 5594.0, 5435.0, 5367.0, 5475.0, 5674.0, 5269.0, 5353.0, 5285.0, 5396.0, 5260.0, 5422.0, 5640.0, 5469.0, 5465.0, 5412.0, 5707.0, 5486.0, 5359.0, 5612.0, 5497.0, 5543.0, 5650.0, 5295.0, 5660.0, 5591.0, 5711.0, 5300.0, 5631.0, 5348.0, 5549.0, 5606.0, 5670.0, 5530.0, 5403.0, 5337.0, 5651.0, 5338.0, 5529.0, 5301.0, 5589.0, 5560.0, 5312.0, 5715.0, 5615.0, 5270.0, 5587.0, 5506.0, 5416.0, 5645.0, 5458.0, 5609.0, 5700.0, 5386.0, 5384.0, 5305.0, 5710.0, 5281.0, 5461.0, 5452.0, 5704.0

						5339.0, 5478.0, 5449.0, 5454.0, 5518.0, 5695.0, 5395.0, 5259.0, 5601.0, 5638.0, 5541.0, 5444.0, 5656.0, 5272.0, 5283.0, 5605.0, 5417.0, 5569.0, 5436.0, 5597.0, 5492.0, 5426.0, 5317.0, 5583.0, 5538.0, 5265.0, 5334.0, 5627.0, 5344.0, 5411.0, 5388.0, 5599.0, 5643.0, 5723.0, 5366.0
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BRIDGE AND/OR MESH MODE

Test Standard:

Networks Access Points with Bridge and/or MESH modes of operation are permitted to operate in the DFS bands but must employ a DFS function. The functionality of the Bridge mode as specified in §15.403(a) must be validated in the DFS test report. Devices operating as relays where they act as master and client must also employ DFS function for the master. The method used to validate the functionality must be documented and validation data must be documented. Bridge mode can be validated by performing a test statistical performance check (Section 7.8.4) on any one of the radar types. This is an abbreviated test to verify DFS functionality. MESH mode operational methodology must be submitted in the application for certification for evaluation by the FCC.

Test Result:

Compliance, please refer the the below data.

5530MHz**Radar Type 2 Statistical Performance**

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5530	29	4.2	155	1
2	5530	29	4.6	184	1
3	5530	23	3	192	1
4	5530	28	4.9	172	1
5	5530	27	2.5	188	1
6	5530	29	2.7	171	1
7	5530	24	3.5	206	1
8	5530	27	4.7	218	1
9	5530	24	1.1	194	1
10	5530	23	1.4	198	1
11	5530	26	2.2	201	1
12	5530	25	3.9	202	1
13	5530	24	3.7	157	1
14	5530	27	4.9	212	1
15	5530	27	3.7	177	1
16	5530	26	1.3	189	1
17	5530	29	1	168	1
18	5530	29	3.2	220	1
19	5530	26	2.6	197	1
20	5530	23	3.1	171	1
21	5530	25	4.2	157	1
22	5530	28	1.9	176	1
23	5530	29	2.7	223	1
24	5530	28	5	193	1
25	5530	26	2.5	187	1
26	5530	25	3.2	218	1
27	5530	28	2	180	1
28	5530	26	4.1	154	1
29	5530	28	2.8	173	1
30	5530	27	3.7	177	1
Detection Percentage: 100 % (>60%)					

Directions

1. The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report.
2. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
3. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.
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******* END OF REPORT *******