



FCC PART 15.407
DYNAMIC FREQUENCY SELECTION
TEST REPORT

For

INGENICO

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FCC ID: XKB-EXMBASEW1


Report Type: Original Report	Product Type: Smart POS Terminal BASE
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

EUT Name:	Smart POS Terminal BASE
EUT Model:	AXIUM EX-MBASE-W1
Operation Frequency:	5180-5240 MHz (802.11a/n ht20/ac vht20) 5190-5230 MHz(802.11n ht40/ac vht40) 5210 MHz(802.11ac vht80) 5260-5320 MHz (802.11a/n ht20/ac vht20) 5270-5310 MHz(802.11n ht40/ac vht40) 5290 MHz(802.11ac vht80) 5500-5720 MHz (802.11a/n ht20/ac vht20) 5510-5710 MHz(802.11n ht40/ac vht40) 5530-5690 MHz(802.11ac vht80) 5745-5825 MHz (802.11a/n ht20/ac vht20) 5755-5795 MHz(802.11n ht40/ac vht40) 5775 MHz(802.11ac vht80)
Maximum Output Power (Conducted):	17.80 dBm/5.15-5.25GHz 17.55 dBm/5.25-5.35GHz 17.75 dBm/5.47-5.725GHz 17.81 dBm/5.725-5.85GHz
Maximum Output Power (EIRP):	20.12 dBm/5.15-5.25GHz 21.13 dBm/5.25-5.35GHz 21.10 dBm/5.47-5.725GHz 20.44 dBm/5.725-5.85GHz
Antenna Gain ▲:	2.32 dBi/5.15-5.25GHz 3.58 dBi/5.25-5.35GHz 3.35 dBi/5.47-5.725GHz 2.63 dBi/5.725-5.85GHz
Modulation Type:	OFDM
Rated Input Voltage:	DC 12V from Adapter
Adapter Information:	Model: PA-1041-81
	Input: 100V-240V~50/60Hz 1.2A
	Output: DC 12V 3.33A
Serial Number:	XMDN210621-24581E-RF-S1
EUT Received Date:	2021.06.21
EUT Received Status:	Good

Objective

This report is prepared on behalf of **INGENICO** in accordance with Part 2-Subpart J, Part 15-Subparts E of the Federal Communications Commission's rules.

The objective is to determine compliance with Dynamic Frequency Selection (DFS) of the FCC Part 15, Subpart E, section 15.407.

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.12, Pulong East 1st Road, Tangxia Town, 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 “▲”. 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.

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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: 'Iperf.exe', which was provided by the manufacturer.

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Dell	Laptop	E6410	00426-OEM-8992662-00497
Dell	Laptop	E6410	00426-OEM-7854469-404555
American Apple	iPhone	A1863	2017011606002400

External Cable

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
RJ45	NO	NO	1.2	EUT	Laptop

SUMMARY OF TEST RESULTS

The following result table represents the list of measurements required under the CFR §47 Part 15.407(h) 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)

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
<p>Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.</p> <p>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.</p> <p>Note 3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.</p>	

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.
<p>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.</p> <p>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.</p> <p>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.</p>	

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 Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

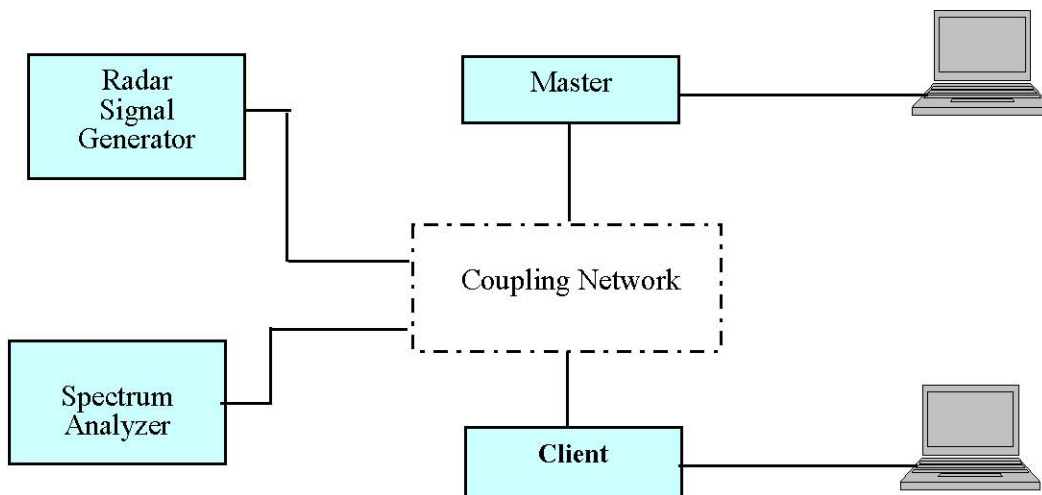
Table 7 – Frequency Hopping Radar Test Waveform

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

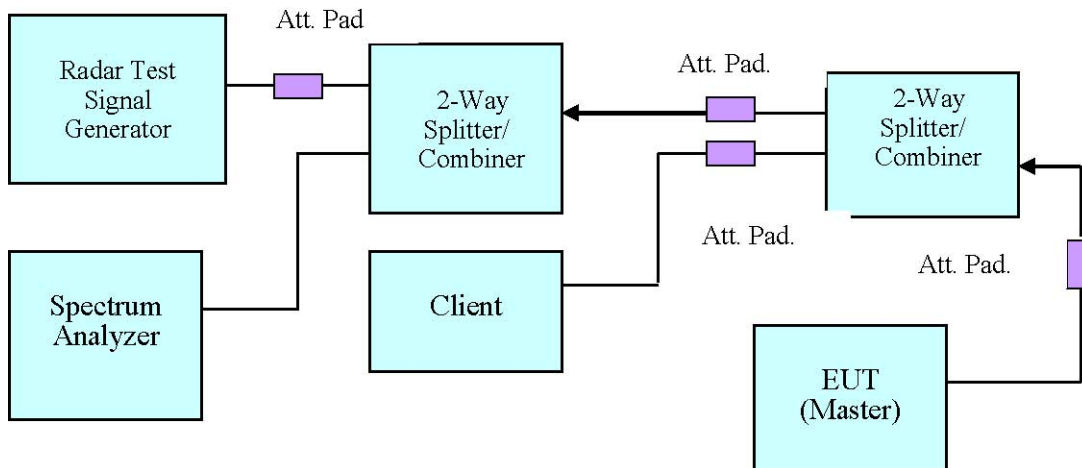
DFS Measurement System

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

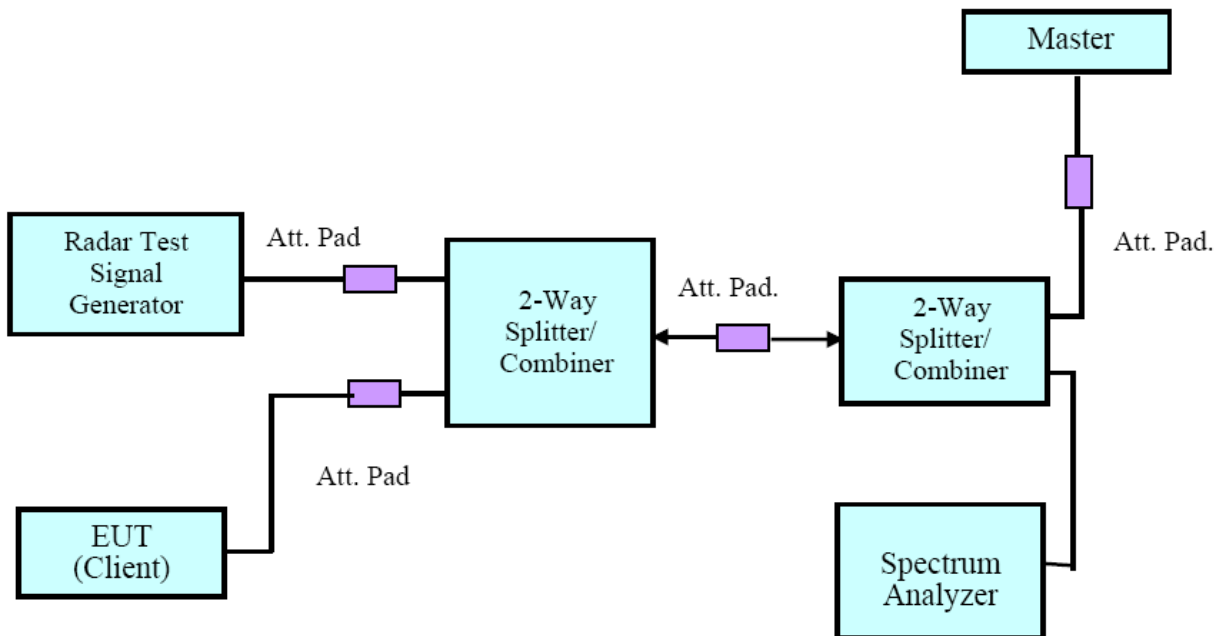
System Block Diagram



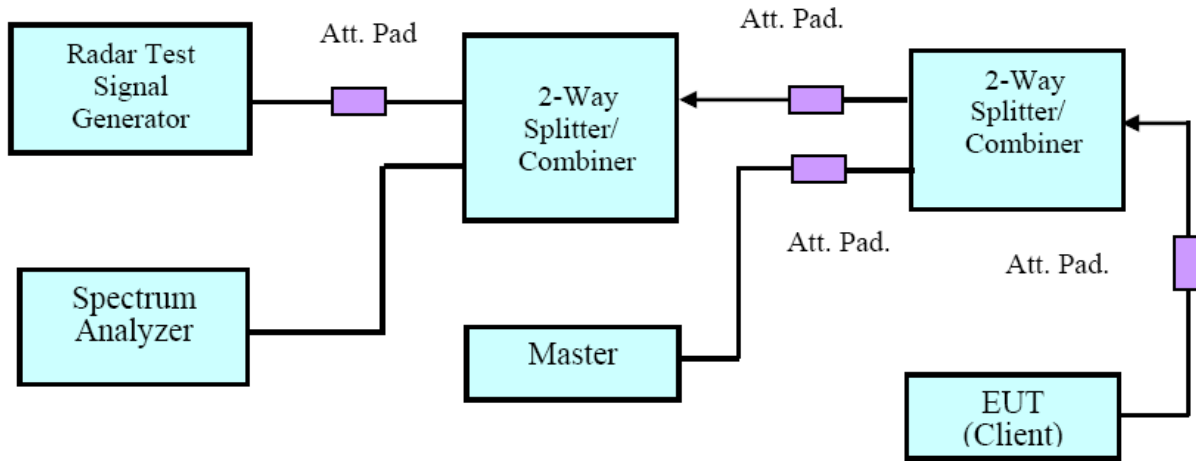
Conducted Method



Setup for Master with injection at the Master

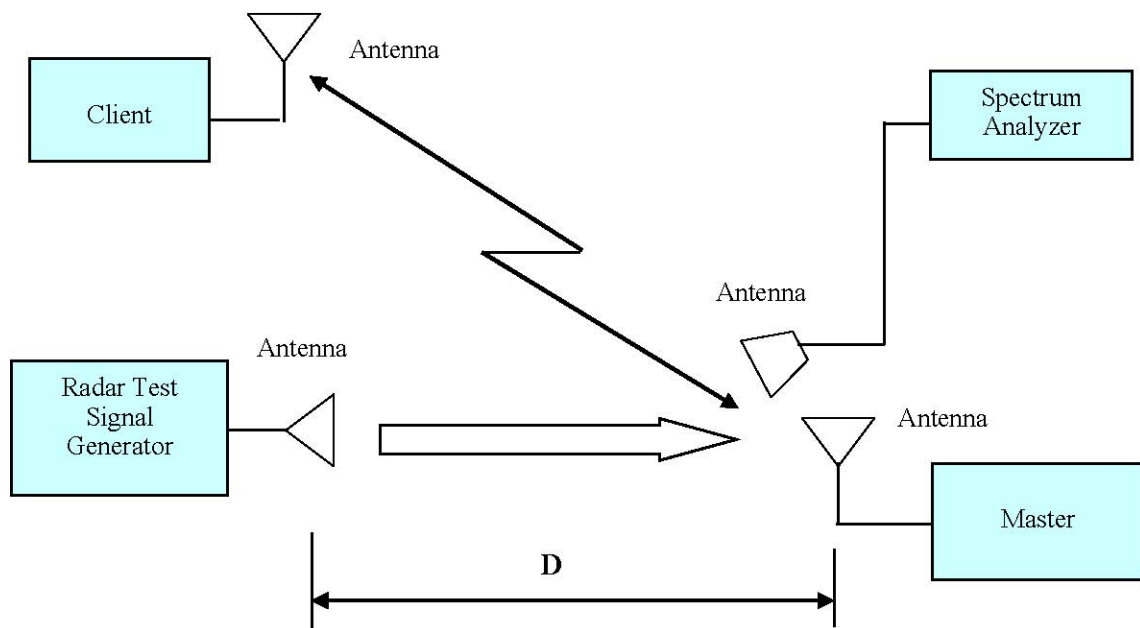


Setup for Client with injection at the Master



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 EUT EIRP < 23dBm, the calibrated radiated DFS detection threshold level is set to -62 dBm.

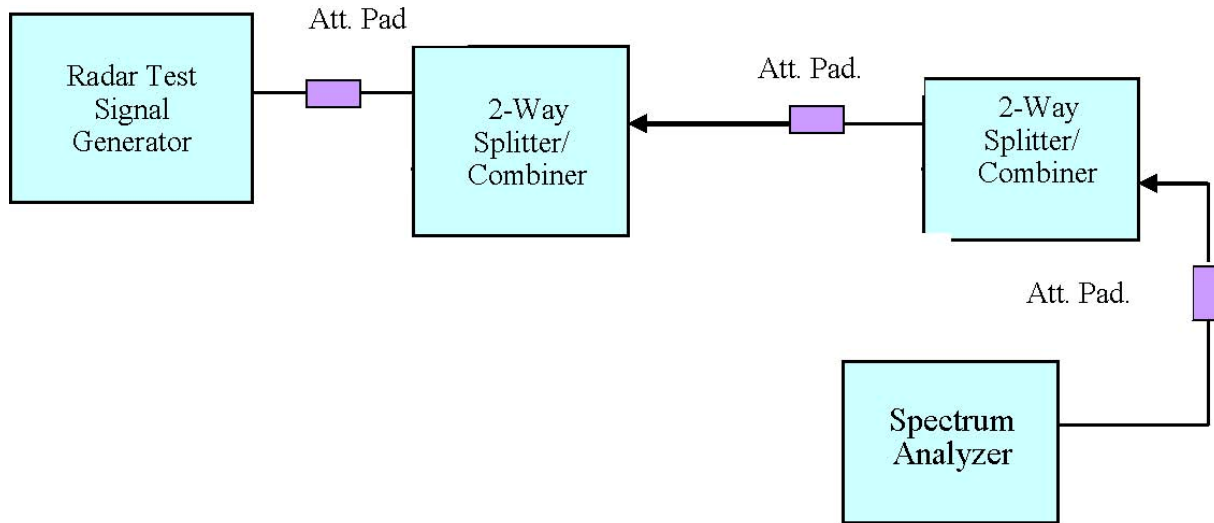
WLAN traffic is generated by streaming the video file TestFile.mpg, this file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. The file is streamed from the Access Point to the Client in full motion video mode using the media 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	MY44303352	2021-04-25	2022-04-24
Ditorn	Splitter/Combiner	D3C4080	SN2244	N/A	N/A

* **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



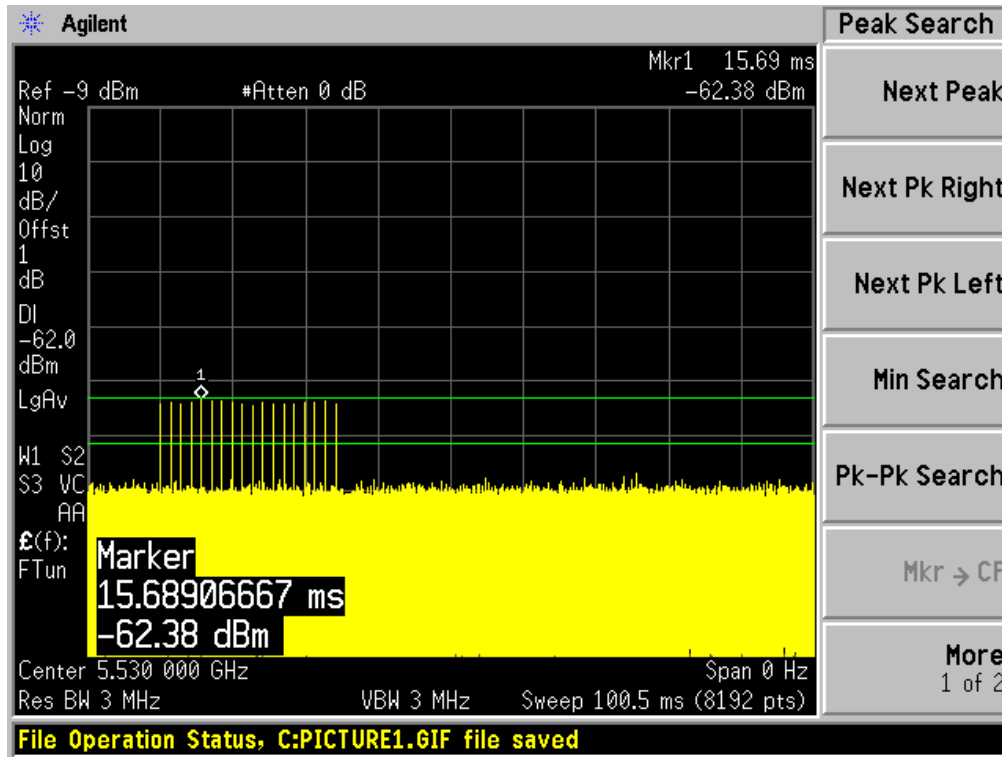
Test Environmental Conditions

Temperature:	25.4~28.7 °C
Relative Humidity:	43~49%
ATM Pressure:	100~100.5 kPa
Tester:	Theshy Xie
Test Date:	2021-07-14~2021-07-19

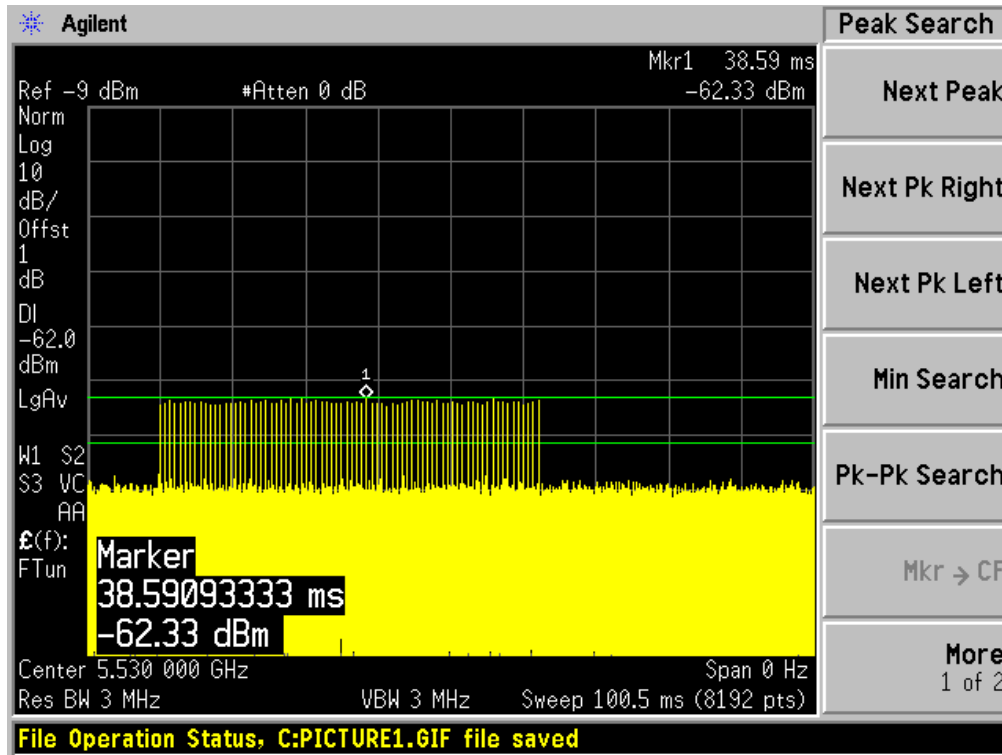
Plots of Radar Waveforms

5530 MHz:

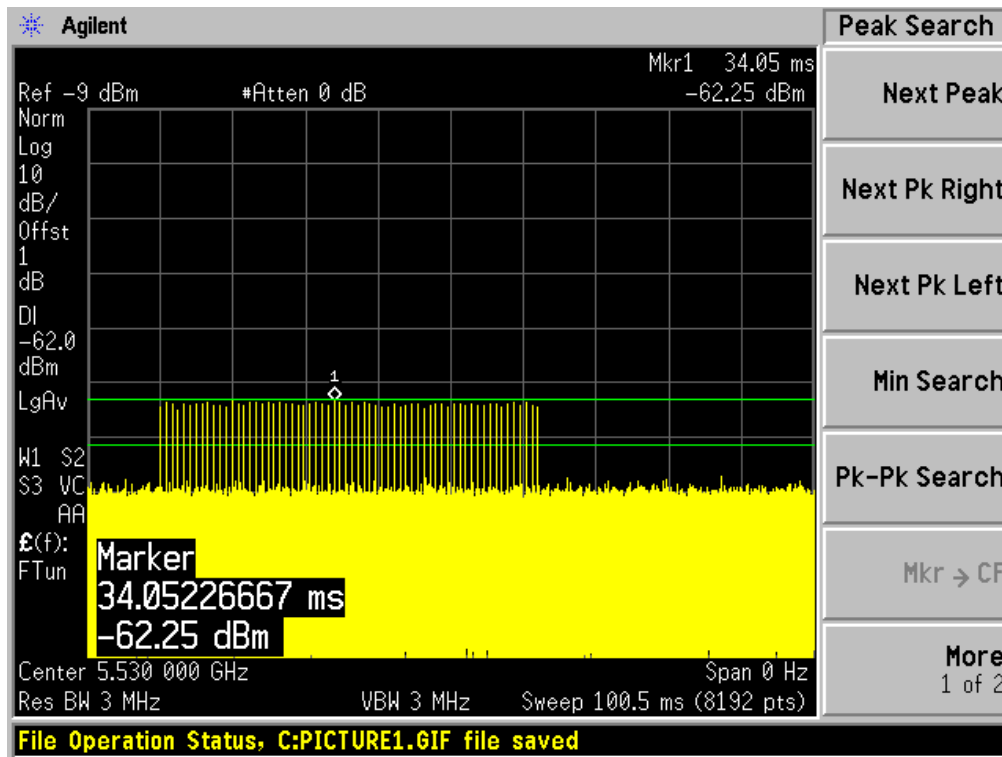
Radar Type 0



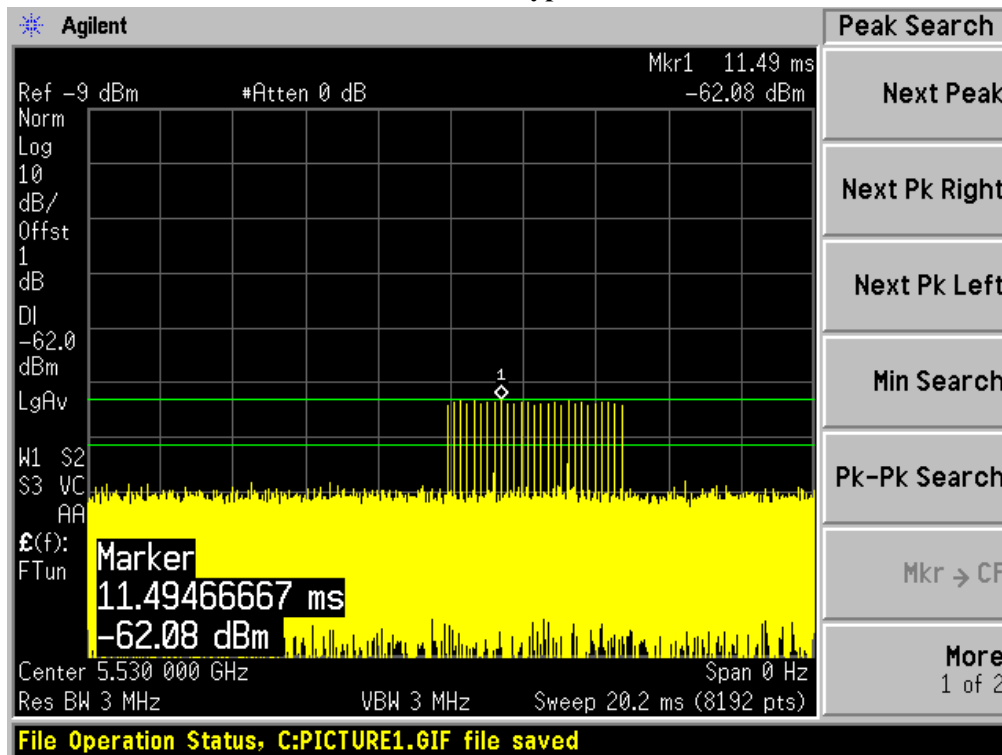
Radar Type 1A



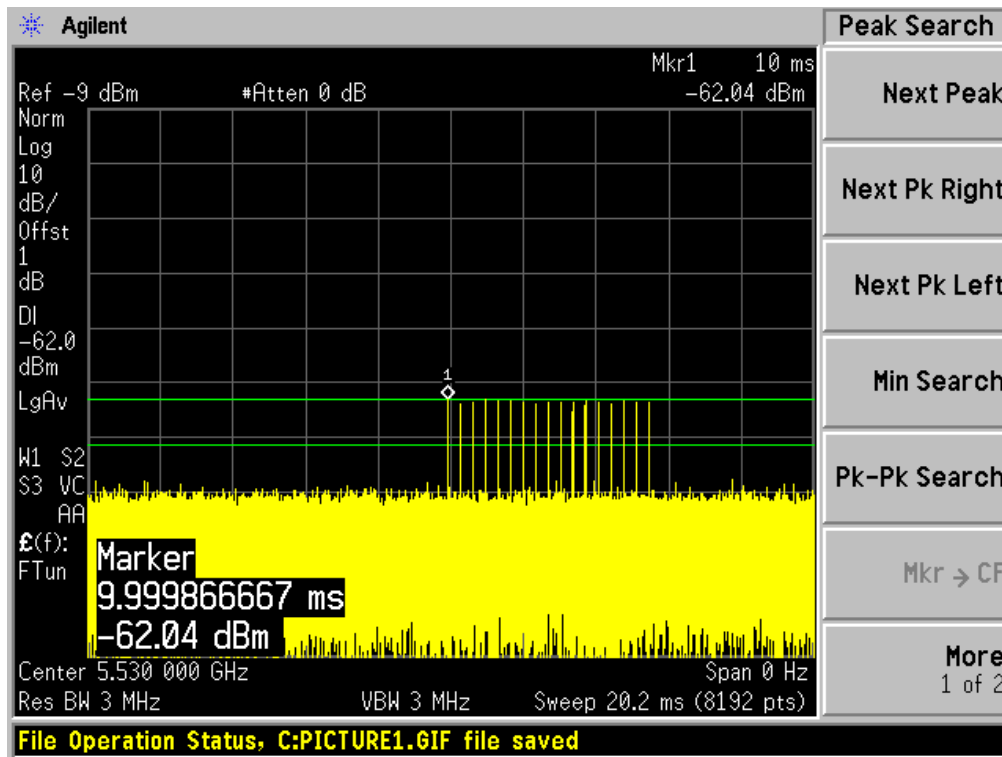
Radar Type 1B



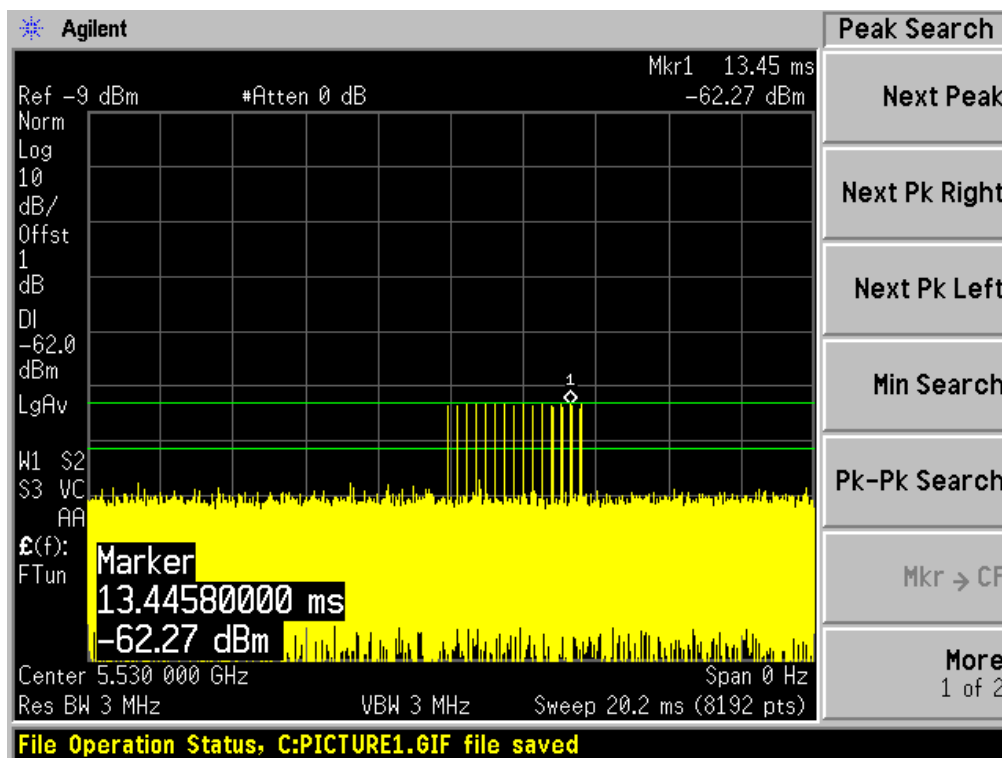
Radar Type 2



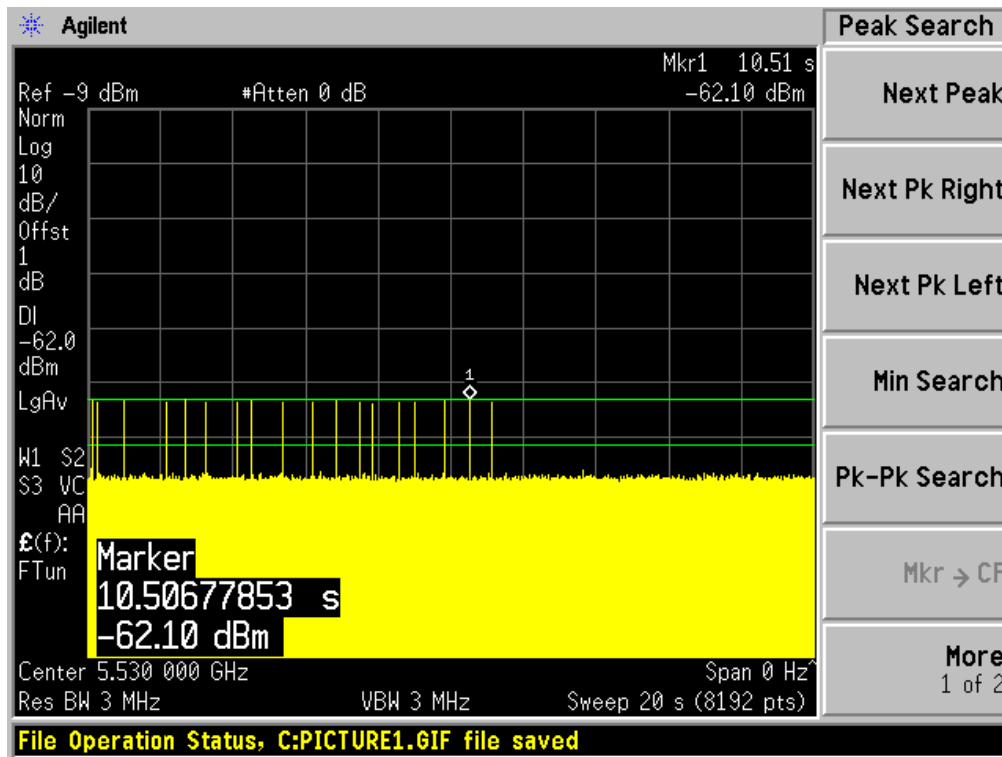
Radar Type 3



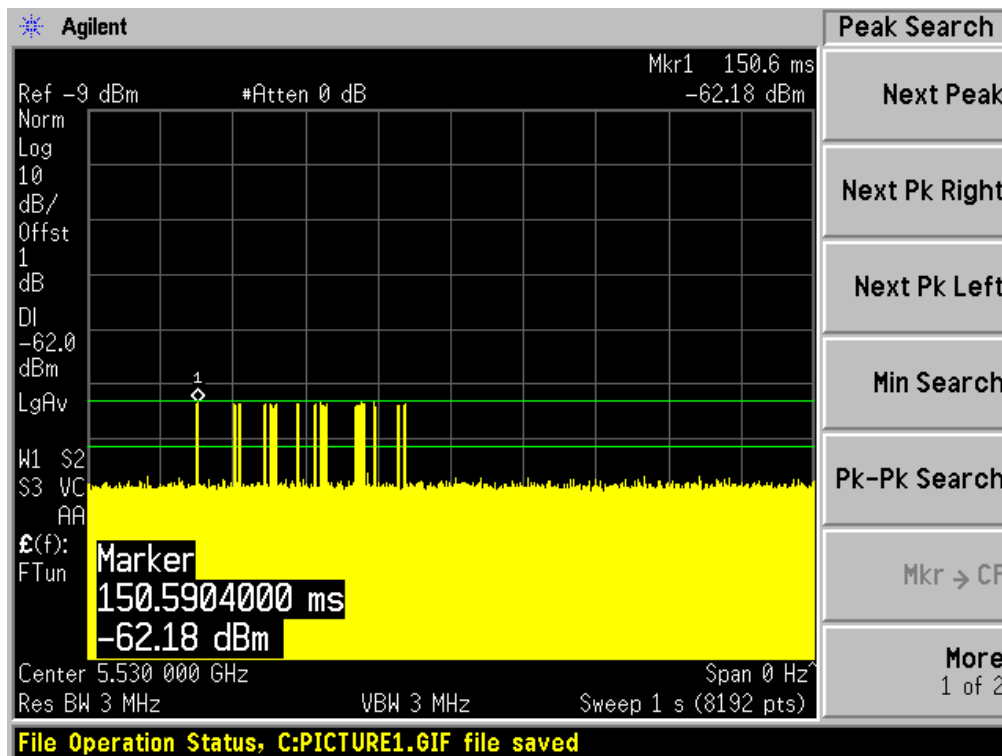
Radar Type 4



Radar Type 5 Case 1



Radar Type 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

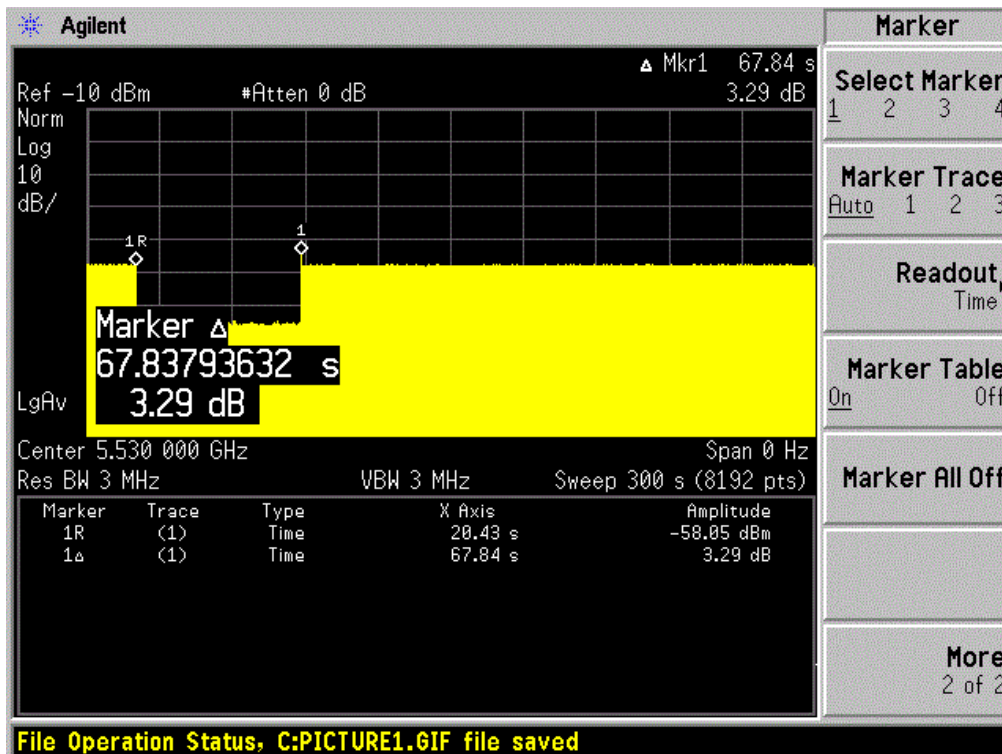
Test Frequency (MHz)	EUT initial Power-up cycle (Second)
5530	7.84

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

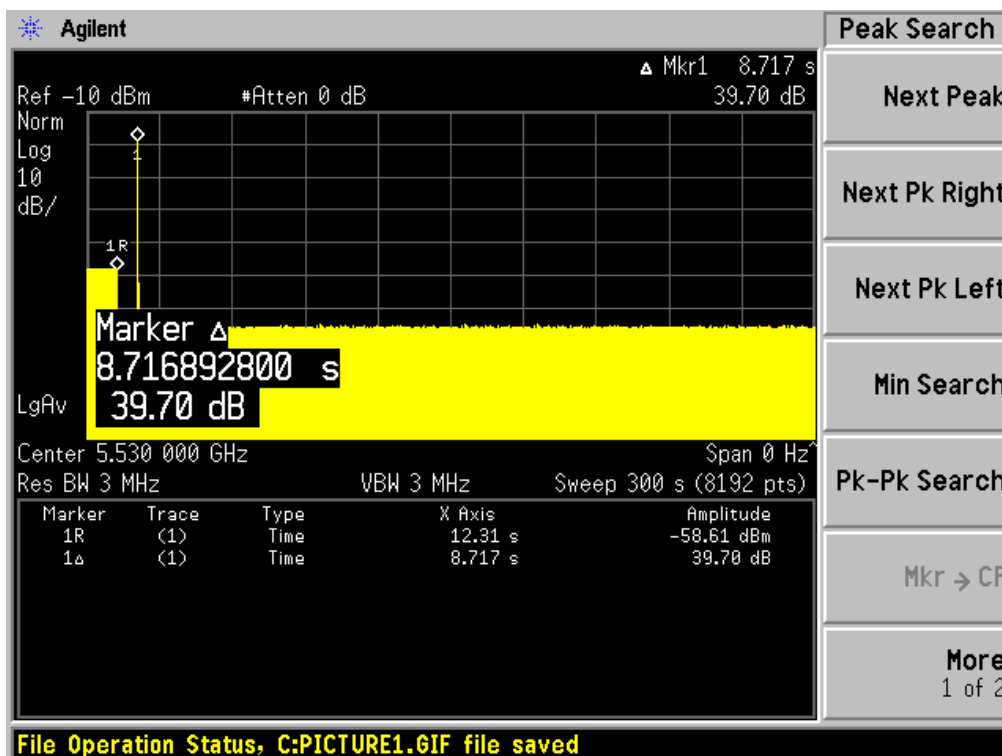
Please refer to the following plots.

Plot of without Radar signal applied



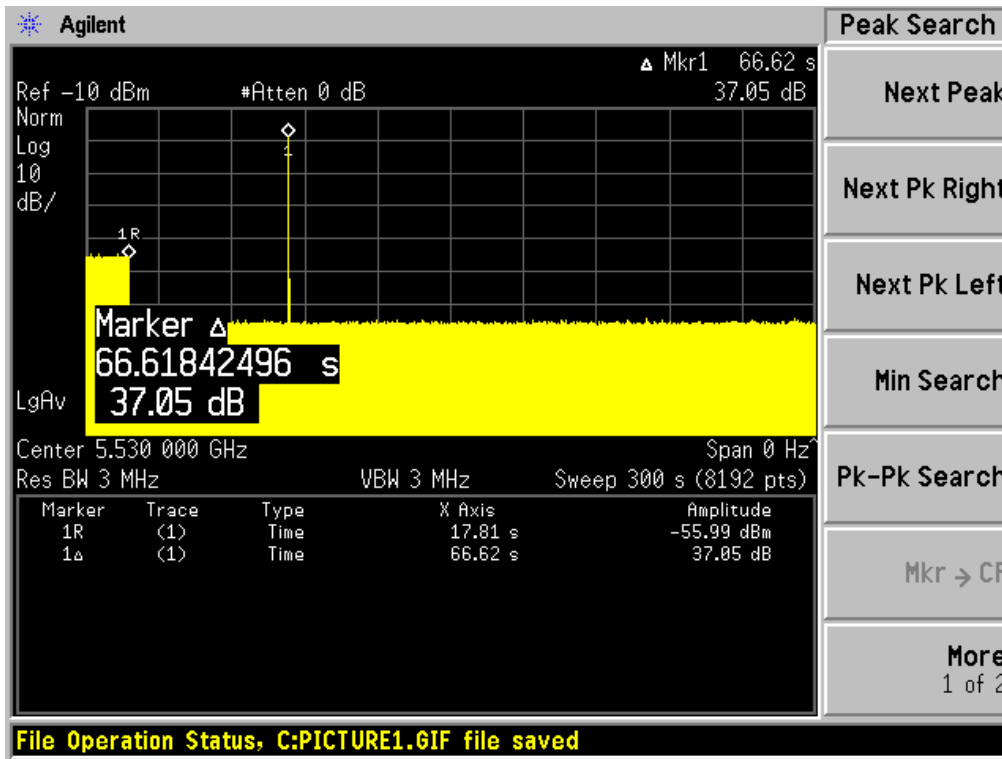
Note: The power-up cycle is 7.84 seconds.

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*Dwell Time

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

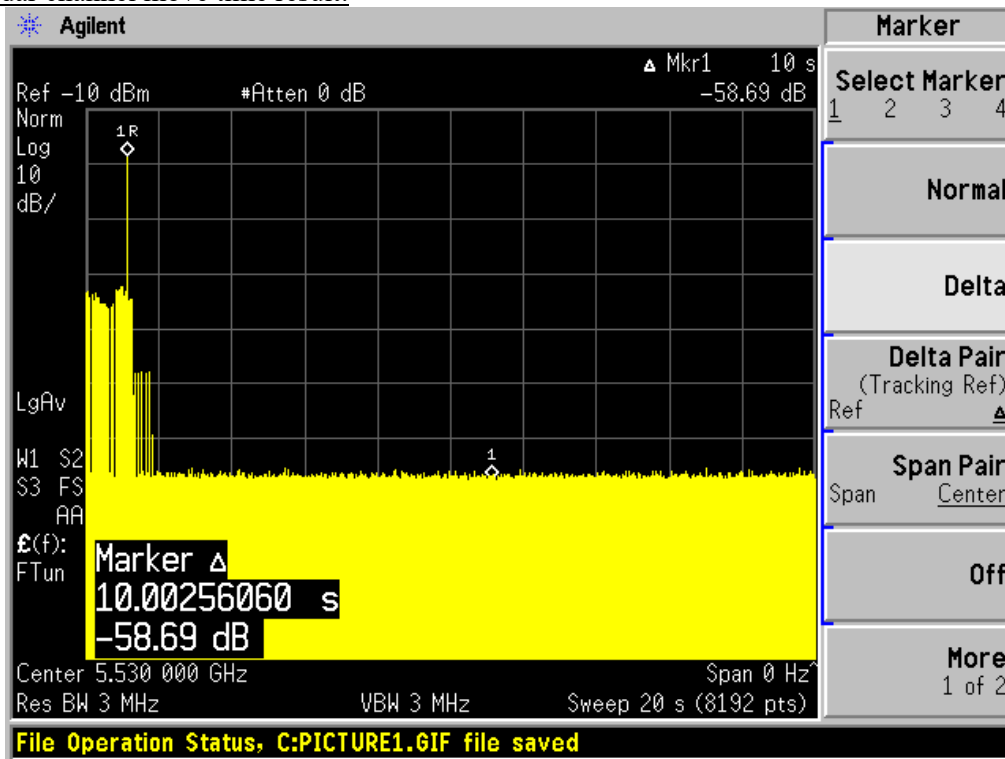
Test Results

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

Please refer to the following tables and plots.

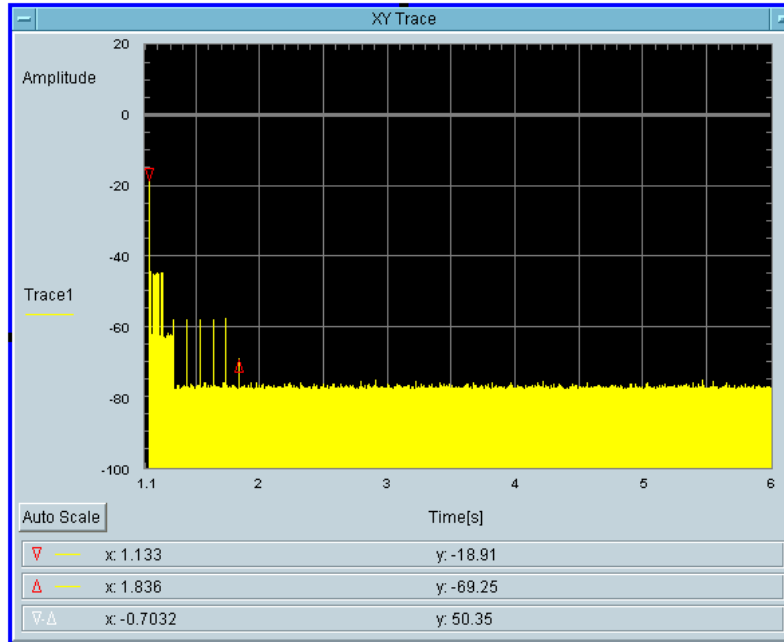
5530 MHz

Type 0 radar channel move time result:



Type0 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	9.766	60	Pass



Total On Time [s]
41.5m

Total On Time After Delay [s]
9.766m

NON-OCCUPANCY PERIOD

Test Procedure

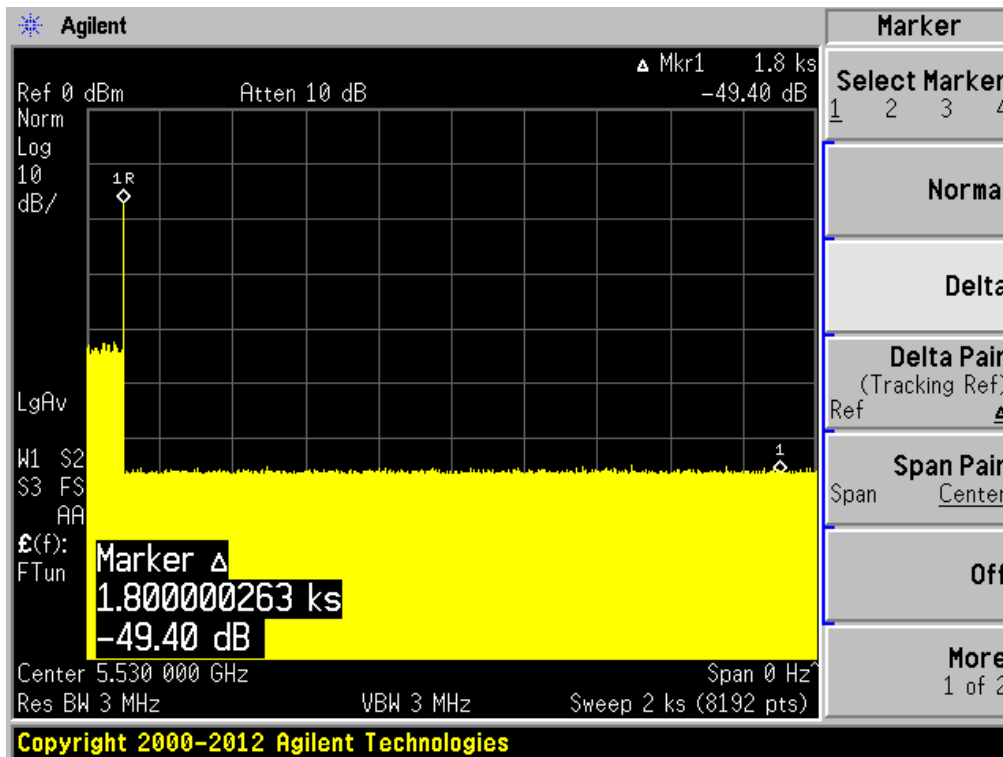
Measure the EUT for more than 30 minutes following the channel close/move time to verify that the EUT does not resume any transmissions on this channel. Provide one plot to demonstrate no transmission on the channel for the non-occupancy period (30 minutes observation time)

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	5491	5509	18	17.645	100%	Compliance
5510	40	5491	5529	38	37.046	100%	Compliance
5530	80	5490	5570	80	78.244	100%	Compliance

Please refer to the following tables.

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 (%)
5491(F _L)	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(F_H)	1	1	1	0	1	1	1	1	1	1	90 %
Detection Bandwidth = F _H - F _L = 5509-5491 = 18MHz											
EUT 99% BW = 17.645 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 (%)
5491(F_L)	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	0	1	90 %
5528	1	1	1	1	1	1	1	1	1	1	100 %
5529(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
Detection Bandwidth = F _H – F _L = 5529-5491 = 38 MHz											
EUT 99% BW = 37.046MHz;										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	0	90 %
5568	1	1	1	1	1	1	1	1	1	1	100 %
5569	1	1	1	1	1	1	1	1	1	0	90 %
5570 (F _H)	1	1	1	1	1	1	1	1	1	0	90 %
Detection Bandwidth = F_H – F_L =5570-5490=80 MHz											
EUT 99% BW = 78.244 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	93.3 %	60%	Pass
Type 3	30	86.7 %	60%	Pass
Type 4	30	100 %	60%	Pass
Aggregate(Type1 to 4)	120	95 %	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 (μ S)	PRI (μ s)	Detection (1:yes; 0:no)
1	5500	89	1	598	1
2	5500	78	1	678	1
3	5500	67	1	798	1
4	5500	62	1	858	1
5	5500	57	1	938	1
6	5500	63	1	838	1
7	5500	83	1	638	1
8	5500	72	1	738	1
9	5500	70	1	758	1
10	5500	81	1	658	1
11	5500	58	1	918	1
12	5500	59	1	898	1
13	5500	61	1	878	1
14	5500	95	1	558	1
15	5500	86	1	618	1
Detection Percentage: 100 % (>60%)					

Radar Type 1B Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μ S)	PRI (μ s)	Detection (1:yes; 0:no)
1	5500	25	1	2191	1
2	5500	29	1	1822	1
3	5500	54	1	979	1
4	5500	34	1	1557	1
5	5500	27	1	2008	1
6	5500	22	1	2444	1
7	5500	24	1	2288	1
8	5500	35	1	1547	1
9	5500	22	1	2502	1
10	5500	22	1	2485	1
11	5500	45	1	1173	1
12	5500	30	1	1793	1
13	5500	93	1	569	1
14	5500	25	1	2135	1
15	5500	27	1	1995	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	4.9	207	1
2	5500	24	4.9	200	1
3	5500	26	2.8	157	1
4	5500	27	1.9	150	1
5	5500	23	3.8	182	1
6	5500	24	3.1	150	1
7	5500	28	4.3	177	1
8	5500	28	2.1	190	1
9	5500	24	1.5	223	1
10	5500	25	3.3	161	1
11	5500	29	1.4	198	1
12	5500	26	1.6	208	1
13	5500	23	2.1	154	0
14	5500	25	2.7	204	1
15	5500	24	3.6	221	0
16	5500	26	1.3	200	1
17	5500	27	3.3	229	1
18	5500	29	2.1	156	1
19	5500	26	3.6	153	1
20	5500	27	1.6	160	1
21	5500	23	1	163	1
22	5500	28	1.5	162	1
23	5500	25	4.1	208	1
24	5500	29	2.1	151	1
25	5500	23	3.9	159	1
26	5500	27	1.2	161	1
27	5500	23	3.3	184	1
28	5500	25	4.4	205	1
29	5500	24	1.7	206	1
30	5500	24	4	216	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	5500	16	7.7	328	1
2	5500	16	6.2	321	1
3	5500	16	8.4	350	1
4	5500	18	6.3	230	1
5	5500	17	8.4	404	1
6	5500	18	9.3	269	1
7	5500	18	7.3	438	1
8	5500	18	9.7	264	1
9	5500	17	8.5	394	1
10	5500	17	7.4	273	1
11	5500	17	9.2	383	1
12	5500	16	9.3	217	1
13	5500	16	6	334	1
14	5500	17	7	381	1
15	5500	18	8.6	477	1
16	5500	18	6.8	233	0
17	5500	18	8.6	295	0
18	5500	16	8.1	478	1
19	5500	17	8.3	207	1
20	5500	17	6.6	453	1
21	5500	17	8.2	429	1
22	5500	17	6.7	341	1
23	5500	17	7.8	283	1
24	5500	18	9.4	338	1
25	5500	16	7.8	326	0
26	5500	16	9.4	469	0
27	5500	17	7.5	462	1
28	5500	18	9.4	475	1
29	5500	16	8	468	1
30	5500	16	6.9	342	1
Detection Percentage: 86.7 % (>60%)					

Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5500	13	18.9	478	1
2	5500	16	17.3	372	1
3	5500	14	20	311	1
4	5500	14	18.2	216	1
5	5500	15	15.1	300	1
6	5500	14	12	465	1
7	5500	12	11	302	1
8	5500	15	13.4	203	1
9	5500	13	13.5	323	1
10	5500	14	18.9	209	1
11	5500	14	13.3	434	1
12	5500	13	17.9	208	1
13	5500	14	11.1	229	1
14	5500	16	11.2	494	1
15	5500	16	18.1	379	1
16	5500	15	17.1	244	1
17	5500	12	13	331	1
18	5500	14	19.7	396	1
19	5500	16	12.7	214	1
20	5500	13	19.3	400	1
21	5500	12	19.5	461	1
22	5500	16	18.9	260	1
23	5500	12	11	452	1
24	5500	12	18	220	1
25	5500	16	13.4	353	1
26	5500	15	16.2	362	1
27	5500	12	15.3	256	1
28	5500	14	12.4	326	1
29	5500	14	14.9	411	1
30	5500	14	19.8	234	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	13	90.5	1420		0.579879	1
1	1	13	68.7			1.994778	
2	3	13	63.8	1124	1045	2.723086	
3	2	13	55.5	1222		3.579221	
4	2	13	71.7	1891		4.399046	
5	1	13	63.6			5.590643	
6	2	13	65.1	1951		6.965430	
7	2	13	85.2	1321		7.927419	
8	2	13	59.1	1196		8.080838	
9	2	13	65.7	1294		9.241299	
10	3	13	75.1	1168	1621	10.133383	
11	2	13	66.2	1533		11.200961	

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	2	12	90	1993		0.034338	1
1	2	12	62.6	1527		1.829474	
2	3	12	66.9	1666	1700	3.546574	
3	3	12	54.7	1658	1742	4.748642	
4	3	12	54.1	1905	1884	5.256715	
5	2	12	78.4	1980		6.282130	
6	2	12	64.5	1503		7.610775	
7	3	12	63	1283	1613	9.457427	
8	1	12	56.2			10.038924	
9	2	12	75.1	1211		11.154032	

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	2	12	70.2	1603		0.196688	1
1	2	12	74.5	1208		1.179358	
2	3	12	76.9	1029	1241	1.443463	
3	2	12	89.8	1005		2.116169	
4	2	12	73.4	1644		2.638929	
5	3	12	98.5	1590	1969	3.215655	
6	3	12	58.4	1829	1844	3.988154	
7	2	12	73.4	1336		5.017936	
8	3	12	63.5	1494	1139	5.580796	
9	2	12	79.9	1644		6.037504	
10	3	12	80.4	1315	1410	6.438976	
11	1	12	63.9			7.312784	
12	3	12	73.1	1576	1472	7.854191	
13	3	12	99.1	1689	1516	8.737913	
14	3	12	72.9	1474	1532	9.183436	
15	2	12	92.7	1581		9.602581	
16	3	12	72.7	1378	1986	10.447653	
17	1	12	53.9			11.089494	
18	2	12	51.7	1003		11.895272	

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	2	14	63.5	1923		0.193846	1
1	2	14	79.4	1975		1.056755	
2	2	14	56.6	1797		2.316605	
3	3	14	77.2	1026	1780	3.388150	
4	2	14	75.6	1481		3.840978	
5	3	14	64.1	1706	1854	4.493188	
6	1	14	93.6			5.840664	
7	3	14	78.9	1233	1649	6.619223	
8	2	14	53.1	1552		7.421579	
9	1	14	65			8.050572	
10	2	14	50.4	1763		9.106551	
11	1	14	77.6			9.724394	
12	3	14	52.6	1493	1005	10.304784	
13	1	14	56			11.315142	

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	10	58.9			0.146156	1
1	3	10	59.3	1106	1635	0.986913	
2	2	10	50	1171		1.951955	
3	2	10	73.2	1622		2.109260	
4	2	10	64.3	1176		3.151661	
5	3	10	69.6	1550	1340	3.625758	
6	2	10	53.8	1688		4.516249	
7	1	10	52.9			4.740538	
8	1	10	82.6			5.922891	
9	2	10	92.9	1289		6.390280	
10	2	10	67	1208		6.779790	
11	3	10	50.8	1206	1761	7.581011	
12	1	10	80.4			8.304206	
13	2	10	56.9	1599		8.882726	
14	2	10	64.8	1516		9.669576	
15	1	10	78.5			10.079875	
16	3	10	57.3	1131	1880	11.127177	
17	3	10	86.2	1662	1404	11.488908	

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	11	88.1	1282		0.913875	1
1	1	11	95.8			1.365316	
2	3	11	85.6	1276	1330	2.473556	
3	3	11	58.4	1370	1821	3.339659	
4	1	11	78			4.573281	
5	2	11	99.2	1030		4.674066	
6	2	11	52.5	1537		5.630348	
7	2	11	72.7	1895		6.809212	
8	3	11	53.7	1792	1360	7.535463	
9	1	11	71.5			9.103365	
10	2	11	64.4	1430		9.963843	
11	3	11	69.2	1381	1953	10.735361	
12	2	11	89.9	1354		11.721252	

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	2	7	81	1240		0.406754	1
1	3	7	90.5	1233	1058	1.524990	
2	2	7	83	1819		2.532045	
3	2	7	54	1894		3.868333	
4	3	7	78.6	1356	1444	4.580418	
5	2	7	69.9	1631		5.987136	
6	3	7	84.9	1431	1646	6.772977	
7	3	7	97.1	1745	1777	7.195150	
8	2	7	75.9	1918		8.738678	
9	2	7	53.6	1223		9.810856	
10	2	7	63.3	1823		10.008555	
11	2	7	67	1413		11.839210	

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	1	7	56.4			0.315926	1
1	3	7	57.5	1566	1920	1.280044	
2	2	7	70.5	1718		1.950201	
3	2	7	62.3	1533		2.639172	
4	1	7	83.9			3.464460	
5	1	7	86.5			3.603576	
6	1	7	67			4.618404	
7	2	7	72.6	1512		5.286445	
8	2	7	58	1629		6.345281	
9	1	7	89.9			6.987844	
10	1	7	59.9			7.103306	
11	2	7	60.3	1825		8.259459	
12	2	7	94.8	1634		8.889939	
13	2	7	54.1	1493		9.829735	
14	2	7	97.8	1795		10.357697	
15	2	7	98.1	1259		11.146609	
16	3	7	63.7	1123	1075	11.840750	

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	2	13	96.7	1588		0.481045	1
1	3	13	77.3	1921	1360	0.694217	
2	2	13	65	1914		1.422456	
3	2	13	80.2	1378		2.291950	
4	2	13	52	1311		2.813305	
5	1	13	96.8			3.431784	
6	3	13	54.7	1396	1326	4.267915	
7	3	13	66.3	1436	1204	4.842370	
8	2	13	63	1636		5.366932	
9	2	13	84.1	1375		6.221121	
10	3	13	81.4	1941	1615	6.690730	
11	3	13	95.2	1403	1130	7.015900	
12	2	13	59.2	1756		7.827192	
13	2	13	89.3	1095		8.667262	
14	2	13	75.9	1044		9.270622	
15	2	13	83.1	1075		9.682467	
16	1	13	96.2			10.692064	
17	1	13	53.4			11.082386	
18	1	13	72.3			11.618374	

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	9	95.9	1250		0.429814	1
1	2	9	57.4	1491		0.991590	
2	3	9	98.5	1709	1888	1.775692	
3	2	9	73.2	1704		2.067996	
4	2	9	68.7	1901		3.207347	
5	1	9	80.3			3.870452	
6	2	9	64.7	1271		4.329050	
7	3	9	86.6	1251	1543	5.129288	
8	3	9	75.7	1415	1257	5.593550	
9	3	9	59.6	1632	1509	6.235267	
10	3	9	89.6	1212	1425	6.834403	
11	2	9	81.1	1086		7.433827	
12	2	9	60.3	1986		8.458907	
13	1	9	70.7			9.104046	
14	3	9	52.9	1967	1414	9.467864	
15	3	9	91.7	1545	1079	10.644085	
16	1	9	96.8			10.694896	
17	1	9	92.5			11.399397	

Radar Type 5 Case 2 Statistical Performance

Statistics 1 (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	3	13	73.1	1773	1305	0.434372	1
1	1	13	65.1			0.958967	
2	3	13	56.6	1112	1104	1.559616	
3	2	13	57.2	1274		2.206489	
4	1	13	88.4			2.993358	
5	3	13	51.3	1207	1504	3.463248	
6	3	13	52.4	1951	1499	4.029693	
7	2	13	95.4	1672		4.611341	
8	2	13	66.1	1178		5.220890	
9	2	13	95.4	1612		5.529467	
10	2	13	78.8	1919		6.061507	
11	2	13	87.5	1095		6.617415	
12	1	13	84.1			7.685611	
13	2	13	86.8	1598		8.359998	
14	1	13	73.4			8.911651	
15	3	13	53.9	1949	1706	9.274612	
16	2	13	93.8	1203		9.774816	
17	3	13	70.1	1514	1796	10.694504	
18	2	13	61.2	1104		11.112908	
19	2	13	68	1213		11.954994	

Statistics 2 (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	3	18	90.6	1199	1161	0.101965	1
1	3	18	61.8	1154	1808	1.951339	
2	2	18	94.8	1732		2.167030	
3	2	18	73.4	1456		3.739357	
4	1	18	50.3			4.893304	
5	3	18	66	1862	1610	5.194886	
6	2	18	96.7	1648		6.621589	
7	2	18	87.5	1581		7.811088	
8	2	18	77.6	1820		8.427990	
9	2	18	71.8	1535		9.234832	
10	2	18	55.8	1032		10.324819	
11	2	18	51.2	1674		11.956725	

Statistics 3 (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	7	69	1361		0.009829	1
1	1	7	56.4			0.952213	
2	2	7	57.4	1368		1.676275	
3	1	7	62.2			2.141484	
4	2	7	80	1747		2.910225	
5	2	7	95.4	1865		3.486135	
6	2	7	83.5	1362		3.626016	
7	3	7	79.1	1054	1197	4.773278	
8	2	7	55.4	1840		5.088466	
9	2	7	87.4	1801		5.670240	
10	1	7	78.5			6.134068	
11	3	7	51.7	1894	1811	6.700117	
12	1	7	87.8			7.315089	
13	1	7	72			8.259020	
14	3	7	96.9	1032	1628	8.454010	
15	2	7	62.9	1031		9.070301	
16	1	7	73.6			10.175165	
17	2	7	76.5	1993		10.387616	
18	2	7	66.3	1493		11.214428	
19	1	7	88.2			11.447267	

Statistics 4 (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	93	1676		0.833954	1
1	2	12	78.7	1915		1.852885	
2	2	12	66.3	1687		2.731808	
3	2	12	70.1	1098		3.671602	
4	2	12	55.6	1232		5.402793	
5	1	12	55.9			6.245882	
6	1	12	61.3			7.372641	
7	2	12	74.7	1873		7.827361	
8	3	12	75.3	1036	1359	9.026751	
9	1	12	58.7			9.959660	
10	1	12	72.6			11.212493	

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	81	1546		0.133486	1
1	1	17	61			0.743119	
2	2	17	85.9	1608		1.859990	
3	2	17	74	1172		2.065168	
4	1	17	50.5			2.628422	
5	1	17	85.1			3.460942	
6	1	17	53.5			3.962333	
7	3	17	99.9	1503	1549	4.942479	
8	1	17	63.8			5.248252	
9	2	17	93.7	1982		6.051670	
10	2	17	71	1545		6.585500	
11	3	17	57.8	1649	1819	7.443448	
12	3	17	80.5	1310	1954	8.098903	
13	2	17	66.2	1952		8.259054	
14	3	17	76.6	1892	1169	9.156385	
15	2	17	79.8	1967		10.057724	
16	2	17	94.5	1134		10.432181	
17	1	17	93			10.790136	
18	3	17	86.2	1199	1184	11.452970	

Statistics 6 (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	15	99.9	1514		0.543116	1
1	2	15	62.8	1977		1.604450	
2	2	15	69.2	1849		2.333935	
3	2	15	88.6	1236		3.542985	
4	2	15	98.7	1563		4.611409	
5	2	15	68.3	1298		6.473506	
6	1	15	71.3			7.265063	
7	1	15	58.9			8.109632	
8	1	15	64.7			9.339630	
9	3	15	70	1963	1488	10.583322	
10	2	15	94.5	1861		11.489317	

Statistics 7 (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	16	50.4	1994	1953	0.601052	1
1	2	16	57.3	1405		0.963152	
2	2	16	64.7	1059		2.077547	
3	1	16	85.4			2.743429	
4	3	16	67.7	1512	1297	3.499310	
5	2	16	83.5	1769		4.078021	
6	3	16	88	1464	1755	5.096323	
7	2	16	85.8	1505		5.895108	
8	3	16	50.6	1362	1826	6.336046	
9	3	16	83.2	1246	1171	7.232473	
10	2	16	71.9	1705		7.628376	
11	3	16	65.3	1648	1985	8.675967	
12	1	16	92.3			9.326896	
13	2	16	86.3	1969		10.256781	
14	2	16	97.9	1438		10.955830	
15	3	16	83.4	1262	1339	11.765942	

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	2	16	77.9	1996		0.570738	1
1	1	16	80.1			0.846250	
2	2	16	84.4	1197		1.842199	
3	1	16	77.4			1.901026	
4	2	16	95.1	1357		2.612799	
5	3	16	97.7	1156	1402	3.532909	
6	1	16	91.8			3.838545	
7	2	16	85.6	1981		4.522366	
8	2	16	96.9	1642		5.542598	
9	2	16	75.7	1580		6.009346	
10	3	16	94.2	1767	1502	6.854827	
11	2	16	78.9	1616		7.476623	
12	3	16	84.8	1698	1304	7.612641	
13	2	16	73.8	1328		8.348380	
14	2	16	72.3	1253		9.154839	
15	2	16	76.4	1505		9.950978	
16	1	16	62.1			10.282926	
17	1	16	87.8			11.218925	
18	1	16	52.9			11.577621	

Statistics 9 (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	50.2	1262	1895	0.525377	1
1	1	15	84.4			2.545049	
2	2	15	89.1	1842		3.831683	
3	1	15	89.7			4.601256	
4	2	15	59.7	1739		5.788304	
5	2	15	74.5	1607		7.637948	
6	2	15	66.7	1571		8.672751	
7	3	15	62.2	1795	1026	9.385624	
8	2	15	98.1	1613		11.637973	

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	20	70.8	1675	1222	0.546166	1
1	1	20	84.6			0.777993	
2	3	20	96.7	1905	1314	1.323365	
3	2	20	63.4	1619		2.436247	
4	3	20	88.5	1798	1468	2.584720	
5	1	20	77.8			3.510398	
6	1	20	69.3			4.228814	
7	3	20	69.8	1081	1336	4.593510	
8	2	20	85.6	1056		5.361339	
9	3	20	84	1325	1538	5.827911	
10	3	20	95.5	1009	1179	6.363247	
11	1	20	52.1			7.254304	
12	3	20	77.2	1106	1928	7.808948	
13	1	20	61.2			8.324569	
14	1	20	71.3			9.379698	
15	3	20	58.8	1799	1311	9.705526	
16	2	20	76.8	1705		10.489070	
17	2	20	55.6	1231		11.119213	
18	1	20	68.7			11.761972	

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	2	7	85.5	1211		0.127439	1
1	2	7	66.8	1693		1.000293	
2	2	7	82.4	1104		1.777915	
3	1	7	90.6			2.305895	
4	3	7	57	1541	1349	2.951089	
5	1	7	62.9			3.341714	
6	1	7	57.9			4.238489	
7	2	7	93.6	1772		4.816885	
8	3	7	73.8	1550	1264	5.341753	
9	2	7	99	1839		6.128969	
10	2	7	57.7	1514		6.518903	
11	1	7	77.1			7.344100	
12	3	7	84.3	1315	1829	7.846303	
13	3	7	56.7	1357	1847	8.422102	
14	3	7	53.7	1657	1343	9.351217	
15	2	7	55.4	1446		9.904034	
16	1	7	86.4			10.512860	
17	2	7	56	1167		11.231601	
18	2	7	56.3	1680		11.631576	

Statistics 2 (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	17	57.1	1676		0.244223	1
1	3	17	64.8	1424	1705	1.377126	
2	2	17	60.1	1989		2.925540	
3	1	17	64.7			3.091399	
4	2	17	51	1299		4.113749	
5	1	17	53.3			5.329904	
6	1	17	54.8			6.805769	
7	2	17	86.5	1494		7.142530	
8	1	17	89.3			8.063156	
9	3	17	95.2	1019	1711	9.891875	
10	2	17	98.7	1038		10.773458	
11	2	17	94.6	1862		11.423343	

Statistics 3 (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	3	12	75.5	1375	1504	0.718436	1
1	3	12	52.7	1230	1189	0.988383	
2	1	12	55.5			2.627320	
3	1	12	74.8			2.882968	
4	2	12	97.1	1909		4.498375	
5	3	12	61.7	1205	1899	5.334806	
6	2	12	62.6	1619		6.420587	
7	2	12	77.5	1775		6.468584	
8	2	12	74.4	1214		7.451650	
9	3	12	51.7	1563	1446	8.855089	
10	1	12	85.2			10.124701	
11	2	12	81.2	1374		10.941071	
12	1	12	53.3			11.575916	

Statistics 4 (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	13	58	1096		0.353835	1
1	2	13	51.4	1778		1.930945	
2	1	13	76.3			3.389727	
3	2	13	55.7	1214		4.624555	
4	2	13	84.6	1381		5.532433	
5	1	13	53			7.480900	
6	1	13	91.1			8.219718	
7	1	13	96.5			10.635972	
8	1	13	87.1			11.162706	

Statistics 5 (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	62.4			0.511666	1
1	2	18	72.9	1830		1.654779	
2	1	18	57.8			2.661209	
3	2	18	52.2	1766		4.541991	
4	1	18	93.4			5.728232	
5	3	18	64	1122	1782	7.180157	
6	2	18	92	1161		7.546724	
7	1	18	55.6			9.444573	
8	1	18	64.6			10.506108	
9	2	18	88.5	1980		11.638314	

Statistics 6 (ChirpCenter Frequency: 5506.0 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	95.9	1573		0.192866	1
1	1	11	93.4			1.046429	
2	3	11	85	1627	1031	2.089440	
3	2	11	95.7	1225		2.280127	
4	2	11	64.8	1611		3.412247	
5	3	11	52.5	1855	1631	3.640469	
6	2	11	52.7	1331		4.902477	
7	3	11	74.6	1001	1602	4.942973	
8	1	11	95			6.139944	
9	1	11	97			6.597262	
10	2	11	61.7	1721		7.396941	
11	1	11	52.1			8.462973	
12	2	11	78.8	1374		8.700458	
13	3	11	53.8	1002	1940	9.390409	
14	3	11	70.5	1042	1190	10.514233	
15	2	11	74.6	1097		10.728515	
16	1	11	63.9			11.804080	

Statistics 7 (ChirpCenter Frequency: 5506.0 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	67.9	1496		0.189144	1
1	2	9	56.5	1953		1.215826	
2	1	9	66.3			1.755309	
3	1	9	83.6			2.378299	
4	1	9	77.7			2.672434	
5	2	9	81.1	1737		3.954415	
6	2	9	69.9	1891		4.436861	
7	3	9	86.7	1972	1692	4.735343	
8	2	9	94.9	1558		5.903059	
9	2	9	50.7	1205		6.319656	
10	1	9	66.9			7.187038	
11	2	9	73.7	1587		7.752955	
12	2	9	87.8	1711		8.638307	
13	3	9	99.6	1680	1319	9.300959	
14	1	9	58.3			9.516897	
15	3	9	52.2	1668	1059	10.507008	
16	2	9	95.5	1940		11.247341	
17	2	9	87.5	1051		11.514288	

Statistics 8 (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	2	19	56.5	1189		0.300812	1
1	1	19	66.2			1.520373	
2	2	19	81.7	1135		1.946341	
3	1	19	93.6			2.823464	
4	2	19	85.3	1609		3.982949	
5	2	19	94.9	1943		5.051012	
6	1	19	86.3			5.683655	
7	1	19	98.6			6.470871	
8	2	19	58.6	1373		7.522038	
9	1	19	71			7.795652	
10	1	19	78.7			9.297781	
11	3	19	79.9	1930	1828	10.148744	
12	1	19	87.8			11.008003	
13	2	19	71.8	1442		11.784587	

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	2	19	65.4	1326		1.180066	1
1	1	19	73.6			2.568317	
2	2	19	58.3	1537		3.692749	
3	2	19	50.5	1822		5.184964	
4	1	19	59.7			5.623064	
5	1	19	57.2			7.529585	
6	2	19	71.5	1266		8.565986	
7	3	19	81.1	1796	1445	10.356508	
8	1	19	97.1			11.839721	

Statistics 10 (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	13	75.9	1822		0.556215	1
1	2	13	75.4	1997		1.112947	
2	1	13	50.9			1.391982	
3	2	13	77.7	1488		2.327076	
4	3	13	82.2	1270	1142	3.238873	
5	3	13	79	1177	1541	3.507701	
6	3	13	64.3	1816	1124	4.652686	
7	1	13	70.3			4.905800	
8	1	13	50.5			5.853216	
9	3	13	58.1	1109	1401	6.636470	
10	3	13	86.3	1717	1957	6.833669	
11	2	13	70.2	1702		7.506671	
12	2	13	63.5	1568		8.268016	
13	1	13	96.8			8.908467	
14	2	13	61.9	1262		9.432370	
15	3	13	60.5	1616	1925	10.269259	
16	2	13	78.3	1737		10.993916	
17	1	13	68.7			11.425300	

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	5683.0, 5347.0, 5579.0, 5269.0, 5422.0, 5300.0, 5567.0, 5486.0, 5354.0, 5525.0, 5519.0, 5317.0, 5500.0, 5460.0, 5382.0, 5540.0, 5622.0, 5258.0, 5558.0, 5386.0, 5466.0, 5720.0, 5286.0, 5506.0, 5423.0, 5270.0, 5433.0, 5392.0, 5297.0, 5697.0, 5388.0, 5418.0, 5417.0, 5718.0, 5421.0, 5261.0, 5676.0, 5649.0, 5459.0, 5251.0, 5505.0, 5372.0, 5257.0, 5389.0, 5364.0, 5282.0, 5408.0, 5275.0, 5471.0, 5510.0, 5699.0, 5627.0, 5295.0, 5252.0, 5442.0, 5572.0, 5489.0, 5431.0, 5276.0, 5648.0, 5609.0, 5436.0, 5360.0, 5702.0, 5705.0, 5529.0, 5407.0, 5644.0, 5654.0, 5268.0, 5530.0, 5607.0, 5395.0, 5514.0, 5478.0, 5483.0, 5264.0, 5278.0, 5349.0, 5369.0, 5415.0, 5531.0, 5273.0, 5485.0, 5708.0, 5593.0, 5496.0, 5577.0, 5617.0, 5320.0, 5618.0, 5301.0, 5664.0, 5330.0, 5454.0, 5303.0, 5455.0, 5477.0, 5637.0, 5657.0
2	5500	9	1	333	1	5573.0, 5619.0, 5543.0, 5460.0, 5401.0, 5629.0, 5396.0, 5356.0, 5724.0, 5500.0, 5517.0, 5330.0, 5355.0, 5301.0, 5711.0, 5465.0, 5318.0, 5522.0, 5405.0, 5488.0, 5291.0, 5486.0, 5588.0, 5404.0, 5524.0, 5403.0, 5640.0, 5621.0, 5669.0, 5478.0, 5343.0, 5699.0, 5719.0, 5667.0, 5484.0, 5682.0, 5438.0, 5564.0, 5260.0, 5716.0, 5600.0, 5299.0, 5389.0, 5477.0, 5563.0, 5538.0, 5553.0, 5261.0, 5715.0, 5443.0, 5521.0, 5402.0, 5276.0, 5645.0, 5528.0, 5644.0, 5354.0, 5325.0, 5534.0, 5542.0, 5673.0, 5526.0, 5613.0, 5556.0, 5287.0, 5469.0, 5280.0, 5414.0, 5677.0, 5692.0, 5572.0, 5518.0, 5660.0, 5601.0, 5497.0, 5647.0, 5589.0, 5566.0, 5347.0, 5274.0, 5671.0, 5481.0, 5697.0, 5651.0, 5576.0, 5529.0, 5351.0, 5695.0, 5577.0, 5475.0, 5275.0, 5551.0, 5579.0, 5666.0, 5603.0, 5288.0, 5597.0, 5282.0, 5298.0, 5472.0
3	5500	9	1	333	1	5441.0, 5543.0, 5503.0, 5353.0, 5613.0, 5607.0, 5571.0, 5669.0, 5698.0, 5277.0, 5688.0, 5560.0, 5661.0, 5262.0, 5564.0, 5401.0, 5486.0, 5541.0, 5302.0, 5420.0, 5549.0, 5346.0, 5697.0, 5715.0, 5689.0, 5362.0, 5322.0, 5443.0, 5280.0, 5412.0, 5392.0, 5276.0, 5368.0, 5423.0, 5710.0, 5618.0, 5512.0, 5532.0, 5313.0, 5499.0, 5681.0, 5320.0, 5566.0, 5290.0, 5663.0, 5533.0, 5670.0, 5653.0, 5476.0, 5469.0, 5544.0, 5540.0, 5690.0, 5701.0, 5498.0, 5317.0, 5417.0, 5514.0, 5316.0, 5426.0, 5328.0, 5721.0, 5568.0, 5490.0, 5647.0

						5451.0, 5683.0, 5414.0, 5536.0, 5502.0, 5491.0, 5585.0, 5621.0, 5390.0, 5305.0, 5554.0, 5587.0, 5342.0, 5402.0, 5671.0, 5667.0, 5421.0, 5489.0, 5365.0, 5552.0, 5304.0, 5496.0, 5665.0, 5409.0, 5631.0, 5467.0, 5593.0, 5254.0, 5429.0, 5250.0, 5569.0, 5513.0, 5562.0, 5282.0, 5270.0
4	5500	9	1	333	1	5550.0, 5414.0, 5500.0, 5325.0, 5400.0, 5541.0, 5366.0, 5609.0, 5659.0, 5363.0, 5302.0, 5265.0, 5303.0, 5438.0, 5526.0, 5485.0, 5684.0, 5632.0, 5524.0, 5256.0, 5580.0, 5282.0, 5352.0, 5422.0, 5636.0, 5503.0, 5294.0, 5549.0, 5611.0, 5567.0, 5417.0, 5403.0, 5335.0, 5655.0, 5337.0, 5675.0, 5656.0, 5427.0, 5538.0, 5472.0, 5391.0, 5251.0, 5255.0, 5488.0, 5502.0, 5320.0, 5326.0, 5554.0, 5419.0, 5424.0, 5447.0, 5568.0, 5287.0, 5621.0, 5267.0, 5292.0, 5511.0, 5682.0, 5270.0, 5381.0, 5476.0, 5638.0, 5593.0, 5451.0, 5283.0, 5434.0, 5654.0, 5661.0, 5660.0, 5484.0, 5672.0, 5285.0, 5540.0, 5331.0, 5418.0, 5532.0, 5328.0, 5254.0, 5420.0, 5431.0, 5696.0, 5380.0, 5498.0, 5375.0, 5688.0, 5338.0, 5583.0, 5508.0, 5382.0, 5336.0, 5647.0, 5571.0, 5312.0, 5304.0, 5691.0, 5387.0, 5362.0, 5668.0, 5397.0, 5351.0
5	5500	9	1	333	1	5482.0, 5675.0, 5519.0, 5679.0, 5457.0, 5267.0, 5260.0, 5433.0, 5522.0, 5451.0, 5621.0, 5334.0, 5465.0, 5617.0, 5521.0, 5275.0, 5312.0, 5333.0, 5498.0, 5570.0, 5286.0, 5472.0, 5548.0, 5502.0, 5353.0, 5577.0, 5628.0, 5338.0, 5337.0, 5442.0, 5654.0, 5313.0, 5389.0, 5584.0, 5402.0, 5406.0, 5605.0, 5377.0, 5588.0, 5480.0, 5446.0, 5458.0, 5378.0, 5597.0, 5700.0, 5355.0, 5643.0, 5489.0, 5659.0, 5673.0, 5360.0, 5435.0, 5269.0, 5722.0, 5524.0, 5640.0, 5368.0, 5603.0, 5490.0, 5383.0, 5438.0, 5297.0, 5704.0, 5274.0, 5434.0, 5478.0, 5713.0, 5641.0, 5651.0, 5340.0, 5491.0, 5395.0, 5443.0, 5587.0, 5394.0, 5568.0, 5418.0, 5251.0, 5470.0, 5511.0, 5469.0, 5305.0, 5496.0, 5545.0, 5380.0, 5416.0, 5601.0, 5468.0, 5516.0, 5271.0, 5662.0, 5356.0, 5411.0, 5349.0, 5637.0, 5307.0, 5289.0, 5266.0, 5421.0, 5644.0
6	5500	9	1	333	1	5484.0, 5407.0, 5531.0, 5261.0, 5557.0, 5385.0, 5275.0, 5553.0, 5260.0, 5687.0, 5538.0, 5295.0, 5334.0, 5353.0, 5605.0, 5696.0, 5294.0, 5481.0, 5675.0, 5351.0, 5422.0, 5713.0, 5714.0, 5650.0, 5592.0, 5522.0, 5643.0, 5720.0, 5389.0, 5700.0, 5559.0, 5601.0, 5607.0, 5370.0, 5418.0, 5495.0, 5552.0, 5606.0, 5717.0, 5521.0, 5430.0, 5475.0, 5263.0, 5702.0, 5279.0, 5352.0, 5491.0, 5697.0, 5308.0, 5576.0, 5649.0, 5268.0, 5404.0, 5386.0, 5316.0, 5666.0, 5519.0, 5499.0, 5530.0, 5411.0, 5432.0, 5358.0, 5455.0, 5701.0, 5420.0,

						5362.0, 5277.0, 5622.0, 5310.0, 5518.0, 5454.0, 5465.0, 5417.0, 5497.0, 5496.0, 5457.0, 5597.0, 5698.0, 5539.0, 5303.0, 5450.0, 5459.0, 5655.0, 5409.0, 5706.0, 5563.0, 5301.0, 5274.0, 5314.0, 5307.0, 5344.0, 5573.0, 5290.0, 5523.0, 5339.0, 5278.0, 5662.0, 5399.0, 5632.0, 5617.0
7	5500	9	1	333	1	5422.0, 5366.0, 5719.0, 5701.0, 5344.0, 5484.0, 5284.0, 5676.0, 5336.0, 5552.0, 5650.0, 5300.0, 5512.0, 5585.0, 5455.0, 5648.0, 5683.0, 5272.0, 5685.0, 5717.0, 5257.0, 5459.0, 5345.0, 5351.0, 5578.0, 5311.0, 5291.0, 5296.0, 5514.0, 5557.0, 5542.0, 5402.0, 5525.0, 5604.0, 5566.0, 5642.0, 5482.0, 5393.0, 5654.0, 5546.0, 5390.0, 5341.0, 5326.0, 5417.0, 5375.0, 5256.0, 5382.0, 5513.0, 5339.0, 5601.0, 5474.0, 5613.0, 5438.0, 5592.0, 5308.0, 5253.0, 5304.0, 5593.0, 5316.0, 5657.0, 5579.0, 5262.0, 5582.0, 5711.0, 5571.0, 5545.0, 5608.0, 5250.0, 5320.0, 5716.0, 5379.0, 5454.0, 5428.0, 5294.0, 5255.0, 5427.0, 5357.0, 5475.0, 5378.0, 5597.0, 5697.0, 5699.0, 5421.0, 5544.0, 5583.0, 5472.0, 5668.0, 5641.0, 5538.0, 5622.0, 5543.0, 5464.0, 5630.0, 5261.0, 5573.0, 5414.0, 5667.0, 5347.0, 5553.0, 5497.0
8	5500	9	1	333	1	5309.0, 5589.0, 5606.0, 5557.0, 5553.0, 5469.0, 5351.0, 5619.0, 5529.0, 5443.0, 5526.0, 5665.0, 5691.0, 5454.0, 5268.0, 5399.0, 5564.0, 5549.0, 5534.0, 5673.0, 5251.0, 5442.0, 5617.0, 5333.0, 5419.0, 5396.0, 5429.0, 5581.0, 5667.0, 5315.0, 5692.0, 5300.0, 5364.0, 5431.0, 5260.0, 5661.0, 5361.0, 5346.0, 5256.0, 5582.0, 5486.0, 5517.0, 5540.0, 5610.0, 5354.0, 5293.0, 5630.0, 5252.0, 5368.0, 5411.0, 5273.0, 5697.0, 5414.0, 5321.0, 5524.0, 5463.0, 5263.0, 5597.0, 5340.0, 5326.0, 5328.0, 5389.0, 5403.0, 5658.0, 5323.0, 5695.0, 5690.0, 5393.0, 5639.0, 5530.0, 5545.0, 5541.0, 5518.0, 5681.0, 5287.0, 5409.0, 5401.0, 5689.0, 5292.0, 5388.0, 5294.0, 5709.0, 5591.0, 5570.0, 5546.0, 5477.0, 5668.0, 5436.0, 5685.0, 5702.0, 5283.0, 5286.0, 5513.0, 5356.0, 5684.0, 5457.0, 5421.0, 5369.0, 5574.0, 5507.0
9	5500	9	1	333	1	5660.0, 5477.0, 5458.0, 5417.0, 5381.0, 5266.0, 5474.0, 5350.0, 5433.0, 5587.0, 5588.0, 5396.0, 5651.0, 5410.0, 5536.0, 5654.0, 5289.0, 5393.0, 5510.0, 5412.0, 5595.0, 5648.0, 5337.0, 5555.0, 5332.0, 5641.0, 5701.0, 5623.0, 5629.0, 5386.0, 5271.0, 5584.0, 5330.0, 5572.0, 5251.0, 5453.0, 5527.0, 5409.0, 5637.0, 5301.0, 5452.0, 5479.0, 5634.0, 5353.0, 5687.0, 5702.0, 5387.0, 5440.0, 5399.0, 5544.0, 5329.0, 5343.0, 5507.0, 5304.0, 5680.0, 5608.0, 5722.0, 5497.0, 5539.0, 5581.0, 5676.0, 5568.0, 5441.0, 5708.0, 5496.0

						5685.0, 5557.0, 5359.0, 5705.0, 5295.0, 5512.0, 5408.0, 5614.0, 5664.0, 5577.0, 5534.0, 5421.0, 5567.0, 5556.0, 5591.0, 5308.0, 5543.0, 5696.0, 5689.0, 5533.0, 5373.0, 5402.0, 5391.0, 5677.0, 5454.0, 5297.0, 5423.0, 5428.0, 5357.0, 5682.0, 5508.0, 5566.0, 5401.0, 5724.0, 5517.0
10	5500	9	1	333	1	5602.0, 5253.0, 5407.0, 5648.0, 5446.0, 5519.0, 5501.0, 5398.0, 5587.0, 5558.0, 5711.0, 5412.0, 5676.0, 5547.0, 5383.0, 5653.0, 5544.0, 5525.0, 5618.0, 5352.0, 5586.0, 5319.0, 5510.0, 5444.0, 5678.0, 5563.0, 5482.0, 5484.0, 5662.0, 5378.0, 5635.0, 5604.0, 5712.0, 5555.0, 5615.0, 5328.0, 5686.0, 5413.0, 5573.0, 5614.0, 5322.0, 5380.0, 5626.0, 5684.0, 5606.0, 5531.0, 5270.0, 5367.0, 5457.0, 5277.0, 5527.0, 5356.0, 5264.0, 5291.0, 5682.0, 5698.0, 5705.0, 5255.0, 5330.0, 5334.0, 5577.0, 5535.0, 5507.0, 5500.0, 5608.0, 5397.0, 5459.0, 5663.0, 5702.0, 5302.0, 5599.0, 5374.0, 5517.0, 5713.0, 5263.0, 5582.0, 5294.0, 5562.0, 5404.0, 5574.0, 5368.0, 5714.0, 5580.0, 5617.0, 5410.0, 5269.0, 5697.0, 5432.0, 5254.0, 5369.0, 5475.0, 5276.0, 5436.0, 5421.0, 5308.0, 5571.0, 5359.0, 5722.0, 5633.0, 5271.0
11	5500	9	1	333	1	5536.0, 5353.0, 5299.0, 5429.0, 5482.0, 5679.0, 5326.0, 5586.0, 5382.0, 5277.0, 5560.0, 5465.0, 5384.0, 5422.0, 5651.0, 5552.0, 5381.0, 5365.0, 5398.0, 5370.0, 5500.0, 5302.0, 5450.0, 5720.0, 5363.0, 5699.0, 5252.0, 5587.0, 5378.0, 5319.0, 5476.0, 5396.0, 5492.0, 5437.0, 5286.0, 5541.0, 5362.0, 5287.0, 5410.0, 5700.0, 5723.0, 5612.0, 5436.0, 5703.0, 5478.0, 5312.0, 5468.0, 5696.0, 5576.0, 5409.0, 5412.0, 5690.0, 5385.0, 5376.0, 5406.0, 5611.0, 5254.0, 5331.0, 5627.0, 5461.0, 5514.0, 5603.0, 5460.0, 5580.0, 5251.0, 5292.0, 5275.0, 5717.0, 5490.0, 5582.0, 5666.0, 5568.0, 5635.0, 5417.0, 5634.0, 5554.0, 5399.0, 5722.0, 5280.0, 5607.0, 5356.0, 5447.0, 5337.0, 5633.0, 5285.0, 5631.0, 5389.0, 5498.0, 5408.0, 5270.0, 5657.0, 5704.0, 5671.0, 5332.0, 5551.0, 5686.0, 5661.0, 5573.0, 5590.0, 5383.0
12	5500	9	1	333	1	5547.0, 5724.0, 5704.0, 5275.0, 5645.0, 5552.0, 5255.0, 5687.0, 5286.0, 5505.0, 5555.0, 5702.0, 5563.0, 5379.0, 5359.0, 5325.0, 5458.0, 5554.0, 5558.0, 5523.0, 5672.0, 5465.0, 5301.0, 5529.0, 5533.0, 5333.0, 5666.0, 5320.0, 5358.0, 5422.0, 5535.0, 5630.0, 5539.0, 5574.0, 5595.0, 5678.0, 5444.0, 5454.0, 5420.0, 5377.0, 5322.0, 5277.0, 5598.0, 5428.0, 5553.0, 5721.0, 5439.0, 5305.0, 5383.0, 5388.0, 5438.0, 5633.0, 5610.0, 5715.0, 5328.0, 5489.0, 5663.0, 5499.0, 5393.0, 5361.0, 5425.0, 5609.0, 5345.0, 5703.0, 5481.0

						5415.0, 5559.0, 5356.0, 5711.0, 5675.0, 5706.0, 5669.0, 5660.0, 5309.0, 5583.0, 5585.0, 5623.0, 5679.0, 5638.0, 5284.0, 5581.0, 5659.0, 5267.0, 5590.0, 5461.0, 5716.0, 5560.0, 5584.0, 5291.0, 5448.0, 5705.0, 5640.0, 5432.0, 5718.0, 5434.0, 5366.0, 5400.0, 5524.0, 5714.0, 5657.0
13	5500	9	1	333	1	5538.0, 5264.0, 5280.0, 5551.0, 5615.0, 5362.0, 5655.0, 5507.0, 5250.0, 5470.0, 5324.0, 5310.0, 5573.0, 5584.0, 5684.0, 5600.0, 5404.0, 5360.0, 5371.0, 5266.0, 5273.0, 5460.0, 5339.0, 5556.0, 5627.0, 5708.0, 5297.0, 5650.0, 5348.0, 5408.0, 5283.0, 5383.0, 5505.0, 5598.0, 5563.0, 5469.0, 5565.0, 5594.0, 5510.0, 5445.0, 5621.0, 5539.0, 5580.0, 5595.0, 5446.0, 5268.0, 5372.0, 5512.0, 5306.0, 5331.0, 5602.0, 5364.0, 5450.0, 5427.0, 5620.0, 5407.0, 5433.0, 5702.0, 5416.0, 5688.0, 5652.0, 5710.0, 5591.0, 5691.0, 5272.0, 5401.0, 5642.0, 5617.0, 5477.0, 5498.0, 5426.0, 5356.0, 5395.0, 5455.0, 5302.0, 5315.0, 5330.0, 5649.0, 5497.0, 5639.0, 5448.0, 5474.0, 5370.0, 5680.0, 5453.0, 5542.0, 5392.0, 5651.0, 5318.0, 5532.0, 5547.0, 5625.0, 5465.0, 5373.0, 5671.0, 5557.0, 5456.0, 5321.0, 5718.0, 5381.0
14	5500	9	1	333	1	5605.0, 5539.0, 5604.0, 5306.0, 5264.0, 5356.0, 5512.0, 5528.0, 5642.0, 5635.0, 5252.0, 5428.0, 5399.0, 5294.0, 5720.0, 5552.0, 5661.0, 5337.0, 5714.0, 5509.0, 5592.0, 5573.0, 5281.0, 5477.0, 5670.0, 5441.0, 5613.0, 5386.0, 5436.0, 5557.0, 5704.0, 5628.0, 5575.0, 5322.0, 5388.0, 5559.0, 5717.0, 5279.0, 5699.0, 5384.0, 5496.0, 5320.0, 5486.0, 5533.0, 5569.0, 5383.0, 5333.0, 5677.0, 5303.0, 5684.0, 5445.0, 5469.0, 5588.0, 5416.0, 5314.0, 5676.0, 5305.0, 5411.0, 5339.0, 5268.0, 5482.0, 5484.0, 5348.0, 5611.0, 5372.0, 5460.0, 5719.0, 5289.0, 5724.0, 5324.0, 5422.0, 5594.0, 5672.0, 5414.0, 5307.0, 5443.0, 5288.0, 5595.0, 5387.0, 5598.0, 5662.0, 5250.0, 5258.0, 5669.0, 5286.0, 5644.0, 5373.0, 5478.0, 5522.0, 5710.0, 5336.0, 5455.0, 5412.0, 5263.0, 5520.0, 5599.0, 5378.0, 5459.0, 5519.0, 5515.0
15	5500	9	1	333	1	5650.0, 5344.0, 5330.0, 5376.0, 5673.0, 5543.0, 5290.0, 5668.0, 5489.0, 5261.0, 5670.0, 5641.0, 5438.0, 5546.0, 5357.0, 5378.0, 5652.0, 5497.0, 5523.0, 5416.0, 5582.0, 5597.0, 5444.0, 5356.0, 5704.0, 5672.0, 5402.0, 5656.0, 5703.0, 5714.0, 5340.0, 5626.0, 5370.0, 5669.0, 5579.0, 5648.0, 5600.0, 5710.0, 5282.0, 5274.0, 5545.0, 5253.0, 5404.0, 5390.0, 5603.0, 5676.0, 5622.0, 5639.0, 5679.0, 5443.0, 5301.0, 5316.0, 5354.0, 5377.0, 5615.0, 5637.0, 5281.0, 5307.0, 5286.0, 5616.0, 5533.0, 5423.0, 5570.0, 5681.0, 5649.0

						5359.0, 5520.0, 5445.0, 5391.0, 5358.0, 5587.0, 5469.0, 5393.0, 5654.0, 5542.0, 5515.0, 5531.0, 5268.0, 5429.0, 5426.0, 5604.0, 5553.0, 5537.0, 5519.0, 5385.0, 5474.0, 5388.0, 5371.0, 5492.0, 5326.0, 5634.0, 5457.0, 5609.0, 5695.0, 5379.0, 5381.0, 5558.0, 5406.0, 5395.0, 5339.0
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17	5500	9	1	333	1	5487.0, 5425.0, 5417.0, 5515.0, 5712.0, 5646.0, 5673.0, 5462.0, 5317.0, 5400.0, 5485.0, 5385.0, 5328.0, 5411.0, 5311.0, 5253.0, 5651.0, 5692.0, 5507.0, 5392.0, 5357.0, 5615.0, 5450.0, 5577.0, 5593.0, 5546.0, 5610.0, 5445.0, 5471.0, 5525.0, 5520.0, 5502.0, 5700.0, 5276.0, 5320.0, 5382.0, 5434.0, 5429.0, 5616.0, 5350.0, 5354.0, 5488.0, 5314.0, 5491.0, 5396.0, 5426.0, 5659.0, 5697.0, 5636.0, 5514.0, 5694.0, 5531.0, 5543.0, 5710.0, 5714.0, 5360.0, 5501.0, 5345.0, 5325.0, 5614.0, 5269.0, 5704.0, 5286.0, 5594.0, 5663.0, 5524.0, 5442.0, 5435.0, 5331.0, 5275.0, 5353.0, 5679.0, 5407.0, 5587.0, 5657.0, 5650.0, 5570.0, 5719.0, 5334.0, 5658.0, 5711.0, 5278.0, 5684.0, 5260.0, 5606.0, 5545.0, 5463.0, 5573.0, 5627.0, 5685.0, 5326.0, 5683.0, 5536.0, 5635.0, 5274.0, 5540.0, 5348.0, 5551.0, 5478.0, 5433.0
18	5500	9	1	333	1	5422.0, 5440.0, 5354.0, 5655.0, 5302.0, 5626.0, 5683.0, 5720.0, 5558.0, 5374.0, 5684.0, 5569.0, 5568.0, 5316.0, 5259.0, 5712.0, 5524.0, 5710.0, 5514.0, 5594.0, 5484.0, 5652.0, 5556.0, 5343.0, 5389.0, 5617.0, 5384.0, 5479.0, 5376.0, 5532.0, 5471.0, 5253.0, 5462.0, 5280.0, 5597.0, 5293.0, 5392.0, 5319.0, 5344.0, 5297.0, 5365.0, 5446.0, 5325.0, 5554.0, 5519.0, 5547.0, 5670.0, 5315.0, 5642.0, 5335.0, 5517.0, 5544.0, 5637.0, 5528.0, 5671.0, 5363.0, 5562.0, 5666.0, 5601.0, 5455.0, 5542.0, 5314.0, 5326.0, 5502.0, 5346.0,

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29	5500	9	1	333	1	5555.0, 5485.0, 5444.0, 5713.0, 5638.0, 5571.0, 5285.0, 5619.0, 5543.0, 5361.0, 5473.0, 5581.0, 5591.0, 5418.0, 5607.0, 5298.0, 5366.0, 5708.0, 5678.0, 5455.0, 5490.0, 5561.0, 5402.0, 5493.0, 5687.0, 5542.0, 5308.0, 5336.0, 5404.0, 5452.0, 5503.0, 5584.0, 5676.0, 5274.0, 5255.0, 5288.0, 5406.0, 5269.0, 5332.0, 5650.0, 5627.0, 5711.0, 5417.0, 5622.0, 5281.0, 5549.0, 5603.0, 5371.0, 5506.0, 5436.0, 5700.0, 5593.0, 5714.0, 5328.0, 5441.0, 5605.0, 5468.0, 5275.0, 5307.0, 5386.0, 5413.0, 5509.0, 5440.0, 5450.0, 5477.0, 5675.0, 5647.0, 5367.0, 5535.0, 5483.0, 5262.0, 5384.0, 5346.0, 5600.0, 5457.0, 5390.0, 5532.0, 5652.0, 5617.0, 5405.0, 5655.0, 5266.0, 5434.0, 5691.0, 5527.0, 5305.0, 5358.0, 5407.0, 5362.0, 5501.0, 5672.0, 5669.0, 5641.0, 5333.0, 5623.0, 5546.0, 5310.0, 5510.0, 5374.0, 5347.0
30	5500	9	1	333	1	5613.0, 5300.0, 5602.0, 5550.0, 5707.0, 5303.0, 5260.0, 5712.0, 5285.0, 5460.0, 5348.0, 5407.0, 5603.0, 5576.0, 5721.0, 5710.0, 5313.0, 5572.0, 5377.0, 5397.0, 5660.0, 5701.0, 5455.0, 5711.0, 5250.0, 5545.0, 5600.0, 5295.0, 5431.0, 5718.0, 5699.0, 5309.0, 5674.0, 5487.0, 5639.0, 5689.0, 5390.0, 5358.0, 5720.0, 5494.0, 5481.0, 5559.0, 5548.0, 5562.0, 5357.0, 5540.0, 5369.0, 5578.0, 5492.0, 5253.0, 5519.0, 5320.0, 5483.0, 5388.0, 5705.0, 5292.0, 5269.0, 5288.0, 5282.0, 5344.0, 5591.0, 5342.0, 5466.0, 5585.0, 5525.0

						5534.0, 5667.0, 5268.0, 5294.0, 5632.0, 5262.0, 5324.0, 5654.0, 5658.0, 5634.0, 5297.0, 5426.0, 5517.0, 5719.0, 5560.0, 5456.0, 5535.0, 5408.0, 5368.0, 5286.0, 5641.0, 5440.0, 5291.0, 5270.0, 5516.0, 5553.0, 5508.0, 5609.0, 5529.0, 5723.0, 5362.0, 5579.0, 5314.0, 5493.0, 5259.0
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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	90 %	60%	Pass
Type 3	30	100 %	60%	Pass
Type 4	30	100 %	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:

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

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5510	83	1	638	1
2	5510	81	1	658	1
3	5510	65	1	818	1
4	5510	68	1	778	1
5	5510	62	1	858	1
6	5510	95	1	558	1
7	5510	67	1	798	1
8	5510	59	1	898	1
9	5510	89	1	598	1
10	5510	92	1	578	1
11	5510	78	1	678	1
12	5510	70	1	758	1
13	5510	63	1	838	1
14	5510	72	1	738	1
15	5510	61	1	878	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	2619	1
2	5510	22	1	2463	1
3	5510	55	1	960	1
4	5510	56	1	944	1
5	5510	61	1	876	1
6	5510	24	1	2288	1
7	5510	54	1	990	1
8	5510	68	1	784	1
9	5510	21	1	2631	1
10	5510	94	1	562	1
11	5510	21	1	2584	1
12	5510	29	1	1852	1
13	5510	36	1	1492	1
14	5510	22	1	2401	1
15	5510	34	1	1597	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	24	1.5	187	1
2	5510	26	1.9	165	1
3	5510	27	3.4	155	1
4	5510	24	2.3	153	1
5	5510	28	1.2	221	1
6	5510	27	3.5	156	1
7	5510	23	1.8	167	1
8	5510	28	1.6	199	1
9	5510	26	4	151	1
10	5510	28	3.2	203	1
11	5510	26	3	182	1
12	5510	29	1.5	177	1
13	5510	29	4.8	185	1
14	5510	23	1.8	173	1
15	5510	23	3.6	210	1
16	5510	24	2.4	194	1
17	5510	23	2.3	168	1
18	5510	25	1.2	200	1
19	5510	26	3.6	183	1
20	5510	23	3.3	191	1
21	5510	23	4.3	158	1
22	5510	26	3.8	212	1
23	5510	29	4.7	188	0
24	5510	28	2.7	163	0
25	5510	24	3.9	170	0
26	5510	29	2.5	219	1
27	5510	29	1.4	195	1
28	5510	27	3.4	170	1
29	5510	28	2.3	151	1
30	5510	25	2	157	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	5510	17	9.8	491	1
2	5510	17	8.4	202	1
3	5510	17	6.7	202	1
4	5510	17	9.7	385	1
5	5510	18	7.1	335	1
6	5510	18	9.4	488	1
7	5510	18	6.4	309	1
8	5510	18	9.5	280	1
9	5510	16	9.5	287	1
10	5510	16	7.3	206	1
11	5510	16	8.4	459	1
12	5510	18	8	343	1
13	5510	18	9.3	453	1
14	5510	16	7.5	397	1
15	5510	18	9.5	480	1
16	5510	18	7.6	214	1
17	5510	18	9.9	351	1
18	5510	18	9.5	371	1
19	5510	18	6.3	240	1
20	5510	17	7.3	202	1
21	5510	16	7.6	249	1
22	5510	18	9.4	201	1
23	5510	18	8.7	497	1
24	5510	16	8.5	493	1
25	5510	18	8.2	384	1
26	5510	18	7.7	430	1
27	5510	17	8.8	259	1
28	5510	17	7.1	229	1
29	5510	18	8.2	288	1
30	5510	16	6	323	1
Detection Percentage: 100 % (>60%)					

Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5510	16	14.9	452	1
2	5510	13	15.4	463	1
3	5510	13	15.7	387	1
4	5510	14	14.3	366	1
5	5510	15	18.3	215	1
6	5510	12	20	231	1
7	5510	16	19.9	308	1
8	5510	13	11.4	493	1
9	5510	12	13.7	283	1
10	5510	15	14.9	415	1
11	5510	13	14.2	217	1
12	5510	16	15.9	240	1
13	5510	15	17.1	270	1
14	5510	12	15.2	258	1
15	5510	15	16.1	487	1
16	5510	12	13.6	397	1
17	5510	15	17.1	234	1
18	5510	16	18.8	279	1
19	5510	16	14.5	475	1
20	5510	12	15.3	490	1
21	5510	13	16	369	1
22	5510	15	13	305	1
23	5510	14	19.7	223	1
24	5510	14	11.3	348	1
25	5510	15	17.6	500	1
26	5510	16	16.4	205	1
27	5510	13	12.8	462	1
28	5510	16	19.2	302	1
29	5510	14	16.6	362	1
30	5510	15	19	442	1
Detection Percentage: 100 % (>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	10	59.6	1673	1961	0.256910	1
1	2	10	61.7	1739		1.358818	
2	2	10	75	1597		1.424903	
3	2	10	81.6	1250		2.305416	
4	3	10	87.8	1193	1368	3.445800	
5	2	10	93.6	1726		3.841184	
6	2	10	58.1	1975		4.796602	
7	2	10	71.2	1381		5.189090	
8	2	10	91.7	1471		6.027699	
9	1	10	79.8			7.051544	
10	2	10	92.8	1016		7.376338	
11	1	10	86.5			8.403535	
12	3	10	74.9	1869	1998	9.112636	
13	1	10	84.9			9.223642	
14	2	10	68.9	1827		10.091618	
15	3	10	74	1415	1484	10.885597	
16	3	10	83.8	1470	1172	11.722049	

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	1	7	90.2			0.108342	1
1	1	7	65.3			0.905427	
2	1	7	67.6			1.415134	
3	1	7	98.3			2.581099	
4	1	7	60.2			2.947037	
5	2	7	52.1	1123		3.545539	
6	1	7	59.9			4.230900	
7	3	7	50.7	1593	1001	4.916626	
8	2	7	75.6	1561		5.725127	
9	1	7	72.2			6.555562	
10	2	7	58.7	1278		6.714761	
11	2	7	97.5	1516		7.609676	
12	3	7	55.2	1145	1876	8.363910	
13	1	7	57.9			8.761274	
14	2	7	98.5	1876		9.442810	
15	2	7	89.6	1180		10.070696	
16	2	7	90.2	1248		10.756650	
17	3	7	79.7	1439	1246	11.877314	

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	3	10	86.9	1493	1057	0.164466	1
1	2	10	78.6	1341		1.920401	
2	3	10	65.2	1280	1448	3.006880	
3	3	10	53.5	1372	1644	3.489136	
4	3	10	81	1427	1971	4.978913	
5	3	10	75.4	1072	1974	5.843972	
6	3	10	62.5	1337	1475	7.487222	
7	2	10	67.5	1396		8.017826	
8	2	10	54.9	1905		9.091781	
9	3	10	96.5	1871	1582	10.310102	
10	2	10	93.7	1190		11.295323	

Statistics 4 (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	8	80.9	1610	1752	0.635746	1
1	2	8	58.2	1198		1.275539	
2	3	8	57.3	1418	1930	2.066448	
3	2	8	53.5	1931		2.472417	
4	1	8	53.3			3.511718	
5	2	8	80	1001		3.889903	
6	3	8	97.1	1656	1063	4.508652	
7	2	8	90	1886		5.362152	
8	1	8	73.9			6.076199	
9	2	8	91.7	1744		7.428240	
10	3	8	98.4	1262	1221	7.828332	
11	2	8	83.1	1619		8.680774	
12	2	8	58	1931		9.401337	
13	3	8	51.8	1311	1443	10.009623	
14	3	8	61.4	1227	1945	10.948518	
15	1	8	62			11.314720	

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	1	10	60.5			0.223928	1
1	2	10	81.1	1753		0.903836	
2	3	10	64.9	1884	1082	1.575014	
3	2	10	70.1	1138		2.042477	
4	2	10	86.1	1276		2.431939	
5	2	10	92.1	1834		3.485147	
6	1	10	58			4.057249	
7	2	10	54.9	1231		4.280972	
8	2	10	97.5	1675		5.154387	
9	2	10	92.1	1130		5.619614	
10	2	10	63.1	1143		6.004296	
11	2	10	83.4	1744		6.893343	
12	2	10	92.1	1028		7.777172	
13	1	10	60.5			8.332874	
14	1	10	62.6			8.891705	
15	1	10	81.6			9.160002	
16	2	10	83.2	1574		9.837169	
17	3	10	62.2	1682	1063	10.544143	
18	2	10	80	1002		11.252953	
19	2	10	73.3	1873		11.737935	

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	1	14	76.2			0.060975	1
1	2	14	60.6	1792		1.133360	
2	1	14	98.6			2.839832	
3	2	14	79.5	1441		3.718132	
4	3	14	83.1	1470	1726	4.563841	
5	2	14	92.4	1575		5.694536	
6	2	14	52.1	1154		6.410190	
7	3	14	60.8	1095	1758	7.763043	
8	1	14	75.2			8.515588	
9	1	14	84.8			9.772914	
10	3	14	61.6	1361	1641	10.521145	
11	2	14	74.2	1850		11.326059	

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	1	10	86.8			0.974522	1
1	2	10	70.9	1873		1.970072	
2	3	10	61.2	1467	1720	2.722409	
3	2	10	81.4	1827		3.369433	
4	2	10	51.8	1624		4.130892	
5	1	10	80.6			5.786685	
6	2	10	66.4	1523		6.459976	
7	2	10	70.7	1649		7.356759	
8	3	10	54.4	1804	1682	8.394693	
9	1	10	95.3			9.234016	
10	2	10	63	1585		10.658532	
11	3	10	54.6	1690	1151	11.555870	

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	3	15	88.5	1769	1630	0.548168	1
1	1	15	93.8			1.303597	
2	2	15	65.1	1823		1.661392	
3	1	15	87.1			2.270420	
4	1	15	63.5			3.055401	
5	3	15	94.9	1595	1828	3.804465	
6	3	15	95.4	1402	1282	4.479162	
7	2	15	61.1	1053		5.619304	
8	3	15	78	1290	1860	6.240334	
9	1	15	67.2			6.423617	
10	3	15	98.4	1226	1920	7.733173	
11	1	15	65.8			7.848858	
12	2	15	99.6	1020		8.519052	
13	3	15	73.3	1889	1878	9.820403	
14	2	15	87.4	1548		10.459969	
15	2	15	93.4	1083		10.797987	
16	2	15	74.4	1747		11.840602	

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	1	12	70.2			0.757501	1
1	2	12	58.5	1808		2.101033	
2	3	12	72	1552	1088	3.069789	
3	1	12	63.3			5.991530	
4	2	12	55.9	1014		6.036536	
5	2	12	88.4	1646		8.849640	
6	2	12	54	1529		9.925104	
7	3	12	63.1	1264	1201	10.740606	

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	5	71.5	1010		0.002978	1
1	1	5	65.4			1.581739	
2	1	5	78.6			3.446218	
3	3	5	80.2	1960	1372	4.362478	
4	3	5	63.9	1303	1089	5.360767	
5	1	5	75.6			6.389198	
6	2	5	66.4	1416		7.546472	
7	1	5	81.2			8.555751	
8	1	5	53			10.760839	
9	2	5	81.6	1281		11.139381	

Radar Type 5 Case 2 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5498.0MHz)

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	19	75.7			0.369593	1
1	2	19	79.9	1617		1.012609	
2	3	19	67.7	1427	1643	1.624881	
3	3	19	79	1694	1588	2.652616	
4	3	19	70.7	1734	1654	3.369677	
5	3	19	96	1658	1003	3.855855	
6	3	19	67.8	1176	1355	4.991923	
7	2	19	58.4	1510		5.890605	
8	1	19	55.9			6.629218	
9	2	19	67.4	1182		7.089284	
10	3	19	64.2	1770	1853	8.049265	
11	2	19	85.4	1184		8.948782	
12	3	19	93.7	1926	1026	9.558773	
13	3	19	51.6	1108	1724	10.198313	
14	3	19	54.5	1553	1995	10.637142	
15	2	19	86.1	1325		11.992524	

Statistics 2 (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	11	73.7			0.470743	1
1	3	11	64.6	1896	1861	1.478842	
2	1	11	76.4			2.462617	
3	1	11	86			3.333458	
4	3	11	94	1714	1557	4.641109	
5	2	11	89.7	1257		5.982778	
6	2	11	90.3	1338		6.835071	
7	2	11	100	1939		7.421153	
8	1	11	54.6			8.317564	
9	2	11	83.2	1345		9.684316	
10	3	11	76.9	1073	1254	10.197028	
11	2	11	67.8	1014		11.636117	

Statistics 3 (ChirpCenter Frequency: 5498.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μ S)	Pulse 1-2 spacing(μ S)	Pulse 2-3 spacing(μ S)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	20	95.6	1177	1169	0.887848	1
1	1	20	64.1			1.125664	
2	3	20	63.2	1074	1011	2.274582	
3	1	20	82.4			3.414388	
4	3	20	80.6	1613	1629	5.179230	
5	1	20	78.2			5.675284	
6	3	20	83.1	1588	1704	7.416560	
7	2	20	63.1	1806		8.376769	
8	1	20	78.1			9.149855	
9	2	20	74.4	1210		9.981142	
10	1	20	78.8			11.581901	

Statistics 4 (ChirpCenter Frequency: 5497.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μ S)	Pulse 1-2 spacing(μ S)	Pulse 2-3 spacing(μ S)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	17	74.8	1718	1346	1.001346	1
1	2	17	71.9	1984		2.274379	
2	2	17	78.8	1037		3.263085	
3	2	17	62	1362		4.928878	
4	2	17	65.1	1901		6.161060	
5	3	17	59.9	1303	1881	6.910707	
6	2	17	76.5	1016		8.846665	
7	1	17	96.1			9.699402	
8	1	17	74.9			11.681838	

Statistics 5(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	2	6	62.9	1444		1.404982	1
1	2	6	84.5	1843		1.563447	
2	2	6	83.7	1717		3.528175	
3	3	6	82.6	1856	1776	5.490672	
4	2	6	93.7	1047		6.749526	
5	2	6	89.2	1332		7.968944	
6	2	6	75.1	1771		9.545188	
7	2	6	74.9	1462		11.141024	

Statistics 6 (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	90.6	1331		0.058649	1
1	2	8	88.3	1829		1.714172	
2	2	8	72.8	1102		2.754406	
3	3	8	99.5	1900	1759	4.032708	
4	3	8	78.5	1101	1090	5.151627	
5	2	8	78.9	1736		6.178936	
6	3	8	85.4	1811	1111	7.348863	
7	2	8	93.8	1435		7.658491	
8	1	8	69.3			9.778220	
9	2	8	59.5	1207		9.990597	
10	1	8	65.6			11.903731	

Statistics 7(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	79.9			0.398467	1
1	1	6	80.7			1.580143	
2	1	6	66.9			2.224311	
3	2	6	93.1	1932		3.344229	
4	1	6	89			3.556786	
5	1	6	70.1			4.970239	
6	1	6	94.6			5.458321	
7	1	6	59.6			6.374443	
8	2	6	88.5	1537		7.272760	
9	1	6	89.8			7.992545	
10	3	6	83	1490	1726	8.781325	
11	1	6	91.6			10.268319	
12	3	6	85.5	1329	1859	10.294187	
13	2	6	51	1949		11.312360	

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	11	79.8	1938	1011	0.405207	1
1	2	11	58.7	1321		1.472572	
2	2	11	52.6	1544		3.052765	
3	2	11	74.4	1054		3.757111	
4	1	11	66.8			4.599513	
5	3	11	85.2	1890	1545	5.655641	
6	1	11	89.8			6.964000	
7	2	11	72.5	1430		7.918550	
8	3	11	81.8	1890	1109	8.992338	
9	1	11	74.2			10.731206	
10	3	11	71.7	1830	1978	11.228389	

Statistics 9 (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)
1	1	7	65.5			0.876730	1
2	1	7	61			1.591686	
3	2	7	90	1223		2.937224	
4	1	7	90.5			3.700996	
5	2	7	74.1	1765		5.138571	
6	2	7	73.5	1139		6.290605	
7	2	7	89.2	1037		8.192940	
8	2	7	77.8	1164		9.430449	
9	2	7	91.6	1386		10.574167	

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	1	13	95.4			0.896114	1
1	1	13	71.7			1.566926	
2	1	13	92.9			2.647959	
3	1	13	53.6			3.202143	
4	2	13	64.2	1219		4.896475	
5	2	13	82.6	1155		5.308658	
6	1	13	52.2			6.202852	
7	2	13	92.7	1338		7.684581	
8	2	13	92.4	1581		8.871937	
9	3	13	92.2	1892	1246	9.980826	
10	2	13	89.8	1818		10.908202	
11	3	13	62.3	1256	1547	11.041326	

Radar Type 5 Case 3 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5522.0MHz)

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	19	68.9	1345	1937	0.298872	1
1	1	19	58.7			0.692763	
2	2	19	96.6	1930		1.710661	
3	2	19	63.8	1295		2.097386	
4	3	19	90.8	1217	1745	3.174582	
5	2	19	89.2	1882		3.849747	
6	2	19	85.6	1589		4.605085	
7	3	19	99.2	1610	1583	5.044863	
8	2	19	67.7	1426		5.335896	
9	2	19	84.4	1995		6.157912	
10	1	19	74			6.791185	
11	2	19	56.4	1432		7.452831	
12	2	19	82.7	1307		8.149788	
13	2	19	73.5	1991		8.784695	
14	2	19	81.5	1312		9.790130	
15	2	19	51.7	1558		10.341497	
16	3	19	52.2	1332	1599	11.100510	
17	2	19	61.4	1732		11.683097	

Statistics 2 (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	10	83.7			0.067020	1
1	2	10	57.2	1764		0.845010	
2	2	10	81.5	1830		1.605236	
3	2	10	61.6	1737		2.101495	
4	2	10	71	1423		2.658989	
5	2	10	62.5	1259		3.565206	
6	1	10	55.3			3.669524	
7	2	10	94.9	1425		4.721080	
8	2	10	98.9	1473		5.291635	
9	3	10	56.7	1520	1718	5.794801	
10	2	10	77	1107		6.407700	
11	1	10	92			7.152088	
12	2	10	97.5	1614		7.674108	
13	2	10	95.6	1949		8.072818	
14	2	10	99.3	1061		8.823577	
15	1	10	64.3			9.554883	
16	3	10	97.3	1400	1744	9.649424	
17	1	10	58.3			10.667591	
18	2	10	67	1956		10.899627	
19	1	10	57.1			11.703051	

Statistics 3 (ChirpCenter Frequency: 5527.0 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	8	99.4			0.519912	1
1	3	8	91.2	1691	1861	0.647237	
2	2	8	71.1	1037		1.555634	
3	2	8	94.4	1788		1.996836	
4	1	8	95.1			2.735276	
5	1	8	67.9			3.468567	
6	2	8	58.1	1283		4.197081	
7	2	8	70.3	1723		4.516555	
8	1	8	65.8			5.303524	
9	2	8	54.6	1681		6.303927	
10	2	8	73	1671		6.833857	
11	2	8	72.6	1462		7.551817	
12	3	8	53.9	1388	1462	7.711299	
13	1	8	75.7			8.270616	
14	1	8	75			8.980116	
15	2	8	87.6	1171		9.835442	
16	3	8	84.9	1677	1322	10.562558	
17	2	8	74.6	1230		11.119883	
18	3	8	66.2	1584	1257	11.443668	

Statistics 4 (ChirpCenter Frequency: 5522.0 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	20	84.6	1067		0.229223	1
1	2	20	97.5	1562		2.006436	
2	2	20	75.3	1578		2.283261	
3	1	20	71.3			4.028796	
4	2	20	95.6	1362		4.638323	
5	2	20	55.2	1599		6.129638	
6	3	20	97.9	1047	1142	7.018093	
7	1	20	62.5			8.481690	
8	3	20	85.5	1944	1459	9.242524	
9	1	20	68.9			10.548020	
10	2	20	97.5	1106		11.285393	

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	2	16	58.3	1549		0.382370	1
1	1	16	56.5			1.272575	
2	2	16	71.4	1345		2.731697	
3	2	16	97.9	1964		3.695220	
4	1	16	61.2			5.383137	
5	1	16	79.4			6.277939	
6	2	16	80.7	1697		6.940798	
7	1	16	65.7			8.449220	
8	3	16	54.2	1307	1235	9.643340	
9	2	16	93.3	1608		10.597845	
10	2	16	67	1387		11.889182	

Statistics 6 (ChirpCenter Frequency: 5525.0 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	53.6	1114		0.589242	1
1	2	12	65.5	1460		1.174032	
2	1	12	68.2			2.450638	
3	2	12	89.7	1645		3.572435	
4	1	12	96			5.442723	
5	3	12	86	1270	1735	6.380698	
6	3	12	87.8	1129	1163	7.198748	
7	2	12	69.7	1592		8.538965	
8	3	12	81.8	1945	1456	9.740927	
9	3	12	50.4	1436	1189	10.150623	
10	2	12	53.2	1978		11.789057	

Statistics 7(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	3	15	57.9	1626	1561	0.617343	1
1	2	15	73.5	1356		0.976141	
2	2	15	97.3	1403		1.757779	
3	3	15	59	1352	1168	2.346793	
4	2	15	72.1	1117		3.050668	
5	2	15	95.3	1997		3.939721	
6	2	15	73.7	1460		4.625295	
7	2	15	88.4	1919		5.541856	
8	2	15	93.2	1011		5.857236	
9	3	15	94.5	1999	1443	6.504683	
10	2	15	53.8	1517		7.549987	
11	2	15	73.9	1758		8.458529	
12	2	15	70.5	1685		8.728224	
13	2	15	85.9	1693		9.516913	
14	3	15	79.5	1513	1768	10.567207	
15	2	15	96.4	1233		10.852368	
16	3	15	80.6	1651	1819	11.629493	

Statistics 8 (ChirpCenter Frequency: 5527.0 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	50.5	1388		0.384386	1
1	2	7	75.2	1917		1.174119	
2	2	7	68.2	1495		1.922901	
3	1	7	89.1			2.211626	
4	2	7	83.5	1046		3.465404	
5	1	7	66.5			3.716693	
6	3	7	83.4	1516	1812	4.882371	
7	1	7	67.6			5.469306	
8	1	7	75.5			6.028972	
9	1	7	84.9			6.423671	
10	2	7	72.2	1053		7.165671	
11	1	7	50.4			8.221065	
12	2	7	93.7	1907		9.030243	
13	1	7	52.4			9.319166	
14	1	7	57.5			10.211636	
15	2	7	97.6	1595		10.772528	
16	1	7	95.2			11.764261	

Statistics 9 (ChirpCenter Frequency: 5527.0 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	78.1	1383		0.981269	1
1	1	8	57.3			2.067151	
2	1	8	70.8			3.450754	
3	1	8	66.3			3.623043	
4	2	8	65.3	1718		5.732432	
5	2	8	66.6	1690		6.606132	
6	2	8	67.7	1352		7.293068	
7	1	8	56.6			9.113335	
8	1	8	85.6			10.084281	
9	2	8	58.7	1314		11.646357	

Statistics 10 (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	11	86.8			0.378035	1
1	2	11	77.8	1590		0.881652	
2	3	11	69.4	1096	1502	1.704949	
3	3	11	90	1284	1499	2.436936	
4	1	11	56.7			3.088212	
5	3	11	61.9	1865	1544	3.848168	
6	3	11	73.7	1581	1182	4.933062	
7	3	11	60.1	1948	1652	4.958300	
8	2	11	82.1	1924		5.994498	
9	2	11	57.4	1247		6.527965	
10	3	11	55.6	1796	1384	7.546601	
11	2	11	88.7	1049		8.337303	
12	2	11	59.7	1734		8.499047	
13	3	11	86.3	1344	1545	9.548390	
14	2	11	76.1	1319		9.970023	
15	2	11	82.6	1965		10.682416	
16	2	11	66.7	1434		11.565119	

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	5600.0, 5617.0, 5322.0, 5523.0, 5543.0, 5325.0, 5411.0, 5569.0, 5348.0, 5438.0, 5463.0, 5425.0, 5517.0, 5564.0, 5329.0, 5638.0, 5643.0, 5257.0, 5445.0, 5574.0, 5573.0, 5404.0, 5701.0, 5507.0, 5285.0, 5598.0, 5254.0, 5512.0, 5568.0, 5373.0, 5648.0, 5277.0, 5442.0, 5559.0, 5724.0, 5297.0, 5581.0, 5400.0, 5291.0, 5396.0, 5544.0, 5706.0, 5651.0, 5498.0, 5675.0, 5680.0, 5681.0, 5508.0, 5279.0, 5529.0, 5342.0, 5340.0, 5253.0, 5281.0, 5692.0, 5610.0, 5494.0, 5332.0, 5263.0, 5466.0, 5655.0, 5461.0, 5715.0, 5711.0, 5370.0, 5721.0, 5252.0, 5255.0, 5592.0, 5539.0, 5278.0, 5645.0, 5720.0, 5686.0, 5286.0, 5491.0, 5613.0, 5451.0, 5572.0, 5632.0, 5397.0, 5687.0, 5590.0, 5259.0, 5571.0, 5395.0, 5708.0, 5390.0, 5658.0, 5576.0, 5644.0, 5689.0, 5697.0, 5485.0, 5434.0, 5330.0, 5337.0, 5343.0, 5410.0, 5296.0
2	5510	9	1	333	1	5459.0, 5582.0, 5514.0, 5678.0, 5381.0, 5663.0, 5504.0, 5564.0, 5382.0, 5301.0, 5351.0, 5622.0, 5272.0, 5295.0, 5675.0, 5506.0, 5500.0, 5457.0, 5303.0, 5438.0, 5609.0, 5421.0, 5289.0, 5397.0, 5275.0, 5682.0, 5681.0, 5571.0, 5354.0, 5649.0, 5606.0, 5698.0, 5692.0, 5584.0, 5471.0, 5444.0, 5304.0, 5591.0, 5720.0, 5394.0, 5518.0, 5629.0, 5566.0, 5640.0, 5691.0, 5319.0, 5291.0, 5365.0, 5286.0, 5573.0, 5337.0, 5376.0, 5327.0, 5575.0, 5637.0, 5433.0, 5668.0, 5552.0, 5669.0, 5613.0, 5338.0, 5673.0, 5485.0, 5529.0, 5476.0, 5475.0, 5412.0, 5674.0, 5642.0, 5409.0, 5715.0, 5278.0, 5419.0, 5439.0, 5463.0, 5696.0, 5527.0, 5639.0, 5259.0, 5270.0, 5411.0, 5531.0, 5538.0, 5701.0, 5254.0, 5358.0, 5407.0, 5340.0, 5521.0, 5294.0, 5399.0, 5477.0, 5343.0, 5660.0, 5592.0, 5443.0, 5404.0, 5535.0, 5395.0, 5282.0
3	5510	9	1	333	1	5380.0, 5399.0, 5467.0, 5574.0, 5628.0, 5477.0, 5654.0, 5715.0, 5349.0, 5489.0, 5301.0, 5711.0, 5518.0, 5293.0, 5623.0, 5676.0, 5251.0, 5398.0, 5323.0, 5423.0, 5402.0, 5476.0, 5478.0, 5259.0, 5283.0, 5507.0, 5548.0, 5378.0, 5657.0, 5319.0, 5696.0, 5470.0, 5436.0, 5403.0, 5666.0, 5675.0, 5272.0, 5418.0, 5678.0, 5604.0, 5635.0, 5606.0, 5369.0, 5602.0, 5320.0, 5310.0, 5577.0, 5261.0, 5439.0, 5631.0, 5434.0, 5381.0, 5472.0, 5371.0, 5271.0, 5404.0, 5641.0, 5600.0, 5626.0, 5400.0, 5697.0, 5684.0, 5639.0, 5377.0, 5264.0

						5582.0, 5660.0, 5443.0, 5560.0, 5525.0, 5535.0, 5290.0, 5413.0, 5527.0, 5313.0, 5690.0, 5503.0, 5457.0, 5493.0, 5407.0, 5663.0, 5488.0, 5374.0, 5299.0, 5302.0, 5266.0, 5720.0, 5336.0, 5524.0, 5509.0, 5688.0, 5517.0, 5718.0, 5437.0, 5483.0, 5671.0, 5540.0, 5406.0, 5291.0, 5265.0
4	5510	9	1	333	1	5583.0, 5360.0, 5423.0, 5695.0, 5489.0, 5560.0, 5724.0, 5455.0, 5369.0, 5485.0, 5256.0, 5585.0, 5429.0, 5564.0, 5436.0, 5544.0, 5284.0, 5281.0, 5651.0, 5308.0, 5466.0, 5676.0, 5332.0, 5432.0, 5377.0, 5273.0, 5633.0, 5480.0, 5682.0, 5348.0, 5252.0, 5681.0, 5647.0, 5529.0, 5673.0, 5700.0, 5534.0, 5592.0, 5614.0, 5654.0, 5535.0, 5382.0, 5708.0, 5481.0, 5693.0, 5410.0, 5674.0, 5530.0, 5565.0, 5671.0, 5628.0, 5652.0, 5720.0, 5683.0, 5672.0, 5279.0, 5556.0, 5411.0, 5337.0, 5573.0, 5550.0, 5492.0, 5472.0, 5508.0, 5474.0, 5540.0, 5626.0, 5664.0, 5698.0, 5692.0, 5569.0, 5420.0, 5306.0, 5488.0, 5595.0, 5311.0, 5516.0, 5716.0, 5718.0, 5648.0, 5324.0, 5636.0, 5426.0, 5414.0, 5398.0, 5567.0, 5425.0, 5630.0, 5403.0, 5251.0, 5527.0, 5504.0, 5525.0, 5290.0, 5355.0, 5624.0, 5552.0, 5356.0, 5686.0, 5694.0
5	5510	9	1	333	1	5538.0, 5474.0, 5699.0, 5626.0, 5422.0, 5642.0, 5309.0, 5522.0, 5409.0, 5636.0, 5647.0, 5262.0, 5293.0, 5658.0, 5337.0, 5632.0, 5490.0, 5659.0, 5604.0, 5392.0, 5326.0, 5622.0, 5548.0, 5401.0, 5465.0, 5532.0, 5349.0, 5404.0, 5546.0, 5531.0, 5399.0, 5560.0, 5684.0, 5637.0, 5535.0, 5640.0, 5354.0, 5440.0, 5500.0, 5516.0, 5534.0, 5528.0, 5279.0, 5370.0, 5278.0, 5372.0, 5649.0, 5635.0, 5680.0, 5562.0, 5486.0, 5574.0, 5669.0, 5672.0, 5537.0, 5344.0, 5371.0, 5467.0, 5429.0, 5331.0, 5383.0, 5375.0, 5255.0, 5498.0, 5340.0, 5452.0, 5263.0, 5426.0, 5540.0, 5558.0, 5674.0, 5355.0, 5707.0, 5533.0, 5376.0, 5491.0, 5333.0, 5652.0, 5570.0, 5573.0, 5330.0, 5497.0, 5336.0, 5289.0, 5406.0, 5613.0, 5347.0, 5660.0, 5398.0, 5434.0, 5668.0, 5611.0, 5690.0, 5665.0, 5324.0, 5530.0, 5612.0, 5580.0, 5682.0, 5717.0
6	5510	9	1	333	1	5444.0, 5556.0, 5522.0, 5327.0, 5492.0, 5610.0, 5344.0, 5488.0, 5486.0, 5409.0, 5566.0, 5560.0, 5450.0, 5579.0, 5348.0, 5262.0, 5596.0, 5533.0, 5270.0, 5580.0, 5498.0, 5641.0, 5350.0, 5632.0, 5279.0, 5526.0, 5407.0, 5669.0, 5406.0, 5616.0, 5501.0, 5263.0, 5490.0, 5428.0, 5396.0, 5483.0, 5343.0, 5584.0, 5362.0, 5313.0, 5417.0, 5285.0, 5438.0, 5720.0, 5581.0, 5646.0, 5395.0, 5647.0, 5404.0, 5445.0, 5557.0, 5595.0, 5534.0, 5264.0, 5408.0, 5434.0, 5455.0, 5300.0, 5722.0, 5502.0, 5476.0, 5681.0, 5392.0, 5447.0, 5665.0

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7	5510	9	1	333	1	5277.0, 5396.0, 5666.0, 5640.0, 5692.0, 5386.0, 5617.0, 5542.0, 5287.0, 5472.0, 5624.0, 5534.0, 5489.0, 5576.0, 5293.0, 5603.0, 5437.0, 5412.0, 5531.0, 5337.0, 5375.0, 5341.0, 5458.0, 5608.0, 5273.0, 5342.0, 5654.0, 5495.0, 5704.0, 5517.0, 5589.0, 5368.0, 5557.0, 5612.0, 5463.0, 5496.0, 5615.0, 5554.0, 5456.0, 5703.0, 5466.0, 5358.0, 5543.0, 5327.0, 5307.0, 5699.0, 5448.0, 5420.0, 5309.0, 5289.0, 5645.0, 5686.0, 5445.0, 5284.0, 5690.0, 5493.0, 5476.0, 5638.0, 5647.0, 5474.0, 5383.0, 5670.0, 5377.0, 5318.0, 5716.0, 5334.0, 5290.0, 5578.0, 5370.0, 5392.0, 5722.0, 5391.0, 5359.0, 5336.0, 5682.0, 5530.0, 5390.0, 5478.0, 5259.0, 5352.0, 5498.0, 5297.0, 5513.0, 5671.0, 5453.0, 5430.0, 5332.0, 5667.0, 5310.0, 5674.0, 5366.0, 5614.0, 5288.0, 5414.0, 5329.0, 5504.0, 5627.0, 5591.0, 5315.0, 5605.0
8	5510	9	1	333	1	5594.0, 5662.0, 5440.0, 5619.0, 5384.0, 5291.0, 5640.0, 5295.0, 5282.0, 5527.0, 5257.0, 5340.0, 5504.0, 5464.0, 5548.0, 5540.0, 5410.0, 5419.0, 5719.0, 5502.0, 5677.0, 5638.0, 5698.0, 5372.0, 5624.0, 5357.0, 5583.0, 5444.0, 5718.0, 5571.0, 5366.0, 5578.0, 5605.0, 5534.0, 5456.0, 5488.0, 5565.0, 5591.0, 5531.0, 5479.0, 5388.0, 5477.0, 5536.0, 5616.0, 5491.0, 5561.0, 5409.0, 5543.0, 5375.0, 5465.0, 5674.0, 5526.0, 5264.0, 5513.0, 5645.0, 5639.0, 5695.0, 5492.0, 5642.0, 5521.0, 5452.0, 5559.0, 5684.0, 5598.0, 5317.0, 5364.0, 5487.0, 5575.0, 5367.0, 5254.0, 5329.0, 5382.0, 5533.0, 5723.0, 5339.0, 5700.0, 5318.0, 5556.0, 5425.0, 5703.0, 5266.0, 5503.0, 5420.0, 5713.0, 5588.0, 5614.0, 5621.0, 5373.0, 5563.0, 5550.0, 5463.0, 5612.0, 5560.0, 5525.0, 5275.0, 5380.0, 5557.0, 5292.0, 5549.0, 5595.0
9	5510	9	1	333	1	5671.0, 5287.0, 5275.0, 5385.0, 5515.0, 5501.0, 5566.0, 5378.0, 5396.0, 5332.0, 5253.0, 5448.0, 5503.0, 5646.0, 5290.0, 5617.0, 5708.0, 5591.0, 5587.0, 5636.0, 5458.0, 5422.0, 5388.0, 5430.0, 5329.0, 5714.0, 5545.0, 5377.0, 5574.0, 5536.0, 5598.0, 5293.0, 5374.0, 5363.0, 5495.0, 5260.0, 5660.0, 5280.0, 5285.0, 5451.0, 5498.0, 5471.0, 5576.0, 5630.0, 5619.0, 5511.0, 5305.0, 5555.0, 5603.0, 5426.0, 5271.0, 5424.0, 5279.0, 5362.0, 5713.0, 5392.0, 5366.0, 5532.0, 5618.0, 5406.0, 5434.0, 5661.0, 5258.0, 5367.0, 5629.0

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10	5510	9	1	333	1	5634.0, 5549.0, 5640.0, 5516.0, 5459.0, 5714.0, 5471.0, 5681.0, 5478.0, 5588.0, 5604.0, 5568.0, 5534.0, 5677.0, 5336.0, 5309.0, 5542.0, 5639.0, 5405.0, 5700.0, 5514.0, 5591.0, 5584.0, 5497.0, 5598.0, 5503.0, 5331.0, 5564.0, 5290.0, 5489.0, 5291.0, 5416.0, 5697.0, 5359.0, 5284.0, 5703.0, 5288.0, 5417.0, 5724.0, 5498.0, 5462.0, 5517.0, 5317.0, 5553.0, 5570.0, 5373.0, 5433.0, 5342.0, 5692.0, 5267.0, 5273.0, 5580.0, 5574.0, 5327.0, 5685.0, 5694.0, 5510.0, 5357.0, 5661.0, 5531.0, 5506.0, 5699.0, 5275.0, 5299.0, 5308.0, 5390.0, 5655.0, 5653.0, 5662.0, 5379.0, 5366.0, 5303.0, 5383.0, 5457.0, 5343.0, 5488.0, 5358.0, 5679.0, 5559.0, 5543.0, 5544.0, 5619.0, 5527.0, 5592.0, 5280.0, 5443.0, 5465.0, 5629.0, 5509.0, 5532.0, 5292.0, 5511.0, 5319.0, 5512.0, 5411.0, 5298.0, 5540.0, 5351.0, 5668.0, 5382.0
11	5510	9	1	333	1	5430.0, 5711.0, 5412.0, 5607.0, 5395.0, 5422.0, 5403.0, 5400.0, 5401.0, 5564.0, 5376.0, 5373.0, 5432.0, 5332.0, 5346.0, 5704.0, 5542.0, 5394.0, 5541.0, 5479.0, 5646.0, 5719.0, 5438.0, 5354.0, 5314.0, 5628.0, 5603.0, 5532.0, 5325.0, 5562.0, 5483.0, 5389.0, 5303.0, 5486.0, 5521.0, 5316.0, 5464.0, 5287.0, 5710.0, 5695.0, 5572.0, 5549.0, 5372.0, 5606.0, 5495.0, 5497.0, 5345.0, 5675.0, 5574.0, 5487.0, 5419.0, 5375.0, 5396.0, 5717.0, 5677.0, 5386.0, 5508.0, 5512.0, 5265.0, 5339.0, 5334.0, 5707.0, 5621.0, 5694.0, 5696.0, 5385.0, 5689.0, 5616.0, 5424.0, 5309.0, 5362.0, 5645.0, 5338.0, 5353.0, 5581.0, 5533.0, 5515.0, 5470.0, 5671.0, 5456.0, 5322.0, 5682.0, 5693.0, 5700.0, 5357.0, 5680.0, 5476.0, 5350.0, 5282.0, 5520.0, 5612.0, 5306.0, 5588.0, 5347.0, 5713.0, 5256.0, 5360.0, 5407.0, 5258.0, 5270.0
12	5510	9	1	333	1	5583.0, 5457.0, 5493.0, 5403.0, 5554.0, 5354.0, 5655.0, 5567.0, 5298.0, 5584.0, 5462.0, 5469.0, 5649.0, 5464.0, 5484.0, 5368.0, 5352.0, 5673.0, 5480.0, 5291.0, 5689.0, 5585.0, 5627.0, 5712.0, 5597.0, 5612.0, 5538.0, 5491.0, 5508.0, 5445.0, 5333.0, 5610.0, 5435.0, 5468.0, 5323.0, 5438.0, 5489.0, 5691.0, 5623.0, 5510.0, 5511.0, 5656.0, 5620.0, 5579.0, 5724.0, 5407.0, 5450.0, 5638.0, 5539.0, 5286.0, 5553.0, 5580.0, 5300.0, 5518.0, 5648.0, 5548.0, 5452.0, 5381.0, 5650.0, 5575.0, 5264.0, 5498.0, 5392.0, 5280.0, 5595.0

						5660.0, 5283.0, 5362.0, 5444.0, 5412.0, 5587.0, 5273.0, 5261.0, 5425.0, 5629.0, 5305.0, 5665.0, 5437.0, 5504.0, 5640.0, 5357.0, 5494.0, 5686.0, 5683.0, 5684.0, 5345.0, 5609.0, 5633.0, 5258.0, 5720.0, 5423.0, 5694.0, 5447.0, 5339.0, 5570.0, 5657.0, 5377.0, 5476.0, 5582.0, 5564.0
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17	5510	9	1	333	1	5313.0, 5353.0, 5479.0, 5294.0, 5468.0, 5300.0, 5337.0, 5290.0, 5284.0, 5697.0, 5257.0, 5492.0, 5568.0, 5668.0, 5487.0, 5454.0, 5548.0, 5331.0, 5365.0, 5489.0, 5579.0, 5461.0, 5553.0, 5425.0, 5335.0, 5493.0, 5419.0, 5367.0, 5403.0, 5402.0, 5462.0, 5574.0, 5634.0, 5557.0, 5350.0, 5649.0, 5287.0, 5682.0, 5440.0, 5354.0, 5455.0, 5368.0, 5509.0, 5459.0, 5288.0, 5348.0, 5679.0, 5314.0, 5251.0, 5630.0, 5648.0, 5705.0, 5435.0, 5686.0, 5255.0, 5602.0, 5572.0, 5703.0, 5413.0, 5577.0, 5706.0, 5561.0, 5476.0, 5656.0, 5551.0, 5387.0, 5340.0, 5517.0, 5594.0, 5370.0, 5644.0, 5532.0, 5646.0, 5521.0, 5342.0, 5385.0, 5664.0, 5268.0, 5490.0, 5626.0, 5396.0, 5495.0, 5569.0, 5428.0, 5580.0, 5599.0, 5484.0, 5450.0, 5639.0, 5566.0, 5528.0, 5720.0, 5530.0, 5632.0, 5448.0, 5486.0, 5685.0, 5647.0, 5437.0, 5465.0
18	5510	9	1	333	1	5581.0, 5530.0, 5270.0, 5552.0, 5720.0, 5317.0, 5428.0, 5711.0, 5376.0, 5389.0, 5472.0, 5496.0, 5419.0, 5674.0, 5675.0, 5536.0, 5263.0, 5550.0, 5718.0, 5296.0, 5441.0, 5290.0, 5299.0, 5326.0, 5498.0, 5416.0, 5319.0, 5700.0, 5529.0, 5251.0, 5491.0, 5658.0, 5351.0, 5564.0, 5519.0, 5264.0, 5642.0, 5332.0, 5518.0, 5500.0, 5653.0, 5390.0, 5413.0, 5554.0, 5316.0, 5417.0, 5657.0, 5439.0, 5505.0, 5685.0, 5598.0, 5324.0, 5482.0, 5699.0, 5672.0, 5508.0, 5502.0, 5422.0, 5381.0, 5605.0, 5320.0, 5603.0, 5579.0, 5456.0, 5306.0

						5532.0, 5493.0, 5303.0, 5414.0, 5665.0, 5386.0, 5427.0, 5708.0, 5371.0, 5676.0, 5425.0, 5302.0, 5261.0, 5684.0, 5600.0, 5265.0, 5723.0, 5486.0, 5433.0, 5721.0, 5328.0, 5520.0, 5370.0, 5495.0, 5361.0, 5383.0, 5398.0, 5522.0, 5499.0, 5591.0, 5646.0, 5352.0, 5556.0, 5476.0, 5252.0
19	5510	9	1	333	1	5538.0, 5470.0, 5533.0, 5612.0, 5647.0, 5691.0, 5468.0, 5464.0, 5569.0, 5637.0, 5579.0, 5553.0, 5645.0, 5378.0, 5543.0, 5678.0, 5383.0, 5273.0, 5348.0, 5621.0, 5484.0, 5270.0, 5681.0, 5710.0, 5664.0, 5416.0, 5419.0, 5354.0, 5650.0, 5436.0, 5446.0, 5256.0, 5658.0, 5627.0, 5297.0, 5583.0, 5528.0, 5314.0, 5268.0, 5475.0, 5333.0, 5713.0, 5326.0, 5547.0, 5493.0, 5567.0, 5339.0, 5283.0, 5604.0, 5655.0, 5327.0, 5508.0, 5350.0, 5353.0, 5615.0, 5479.0, 5563.0, 5686.0, 5680.0, 5699.0, 5642.0, 5660.0, 5351.0, 5631.0, 5319.0, 5321.0, 5310.0, 5349.0, 5437.0, 5347.0, 5284.0, 5432.0, 5524.0, 5503.0, 5469.0, 5518.0, 5252.0, 5546.0, 5274.0, 5646.0, 5491.0, 5661.0, 5669.0, 5292.0, 5392.0, 5709.0, 5369.0, 5668.0, 5704.0, 5476.0, 5291.0, 5609.0, 5359.0, 5698.0, 5625.0, 5358.0, 5460.0, 5520.0, 5261.0, 5384.0
20	5510	9	1	333	1	5523.0, 5549.0, 5383.0, 5583.0, 5462.0, 5426.0, 5563.0, 5546.0, 5409.0, 5554.0, 5428.0, 5708.0, 5547.0, 5448.0, 5277.0, 5394.0, 5674.0, 5689.0, 5540.0, 5534.0, 5259.0, 5593.0, 5361.0, 5659.0, 5381.0, 5251.0, 5661.0, 5673.0, 5287.0, 5506.0, 5542.0, 5621.0, 5418.0, 5619.0, 5636.0, 5329.0, 5705.0, 5316.0, 5552.0, 5468.0, 5270.0, 5254.0, 5315.0, 5656.0, 5682.0, 5396.0, 5535.0, 5695.0, 5655.0, 5559.0, 5289.0, 5579.0, 5561.0, 5594.0, 5487.0, 5562.0, 5406.0, 5321.0, 5712.0, 5377.0, 5645.0, 5638.0, 5355.0, 5445.0, 5342.0, 5283.0, 5330.0, 5397.0, 5577.0, 5684.0, 5255.0, 5613.0, 5624.0, 5678.0, 5416.0, 5264.0, 5290.0, 5284.0, 5338.0, 5301.0, 5520.0, 5537.0, 5500.0, 5354.0, 5436.0, 5387.0, 5574.0, 5625.0, 5435.0, 5654.0, 5279.0, 5390.0, 5627.0, 5308.0, 5599.0, 5402.0, 5372.0, 5407.0, 5389.0, 5694.0
21	5510	9	1	333	1	5423.0, 5677.0, 5650.0, 5278.0, 5473.0, 5297.0, 5591.0, 5277.0, 5684.0, 5467.0, 5263.0, 5491.0, 5647.0, 5592.0, 5663.0, 5359.0, 5365.0, 5320.0, 5560.0, 5517.0, 5361.0, 5629.0, 5427.0, 5426.0, 5541.0, 5394.0, 5610.0, 5455.0, 5463.0, 5528.0, 5483.0, 5549.0, 5715.0, 5289.0, 5596.0, 5428.0, 5580.0, 5316.0, 5339.0, 5341.0, 5706.0, 5720.0, 5393.0, 5312.0, 5566.0, 5656.0, 5645.0, 5683.0, 5575.0, 5457.0, 5674.0, 5657.0, 5259.0, 5567.0, 5668.0, 5542.0, 5377.0, 5332.0, 5669.0, 5478.0, 5688.0, 5608.0, 5355.0, 5622.0, 5405.0

						5523.0, 5723.0, 5251.0, 5609.0, 5487.0, 5512.0, 5333.0, 5581.0, 5538.0, 5460.0, 5318.0, 5439.0, 5271.0, 5358.0, 5535.0, 5400.0, 5343.0, 5458.0, 5395.0, 5392.0, 5544.0, 5477.0, 5417.0, 5555.0, 5449.0, 5687.0, 5613.0, 5327.0, 5401.0, 5337.0, 5264.0, 5660.0, 5672.0, 5260.0, 5636.0
22	5510	9	1	333	1	5675.0, 5314.0, 5427.0, 5436.0, 5301.0, 5569.0, 5548.0, 5639.0, 5583.0, 5561.0, 5273.0, 5355.0, 5391.0, 5359.0, 5487.0, 5275.0, 5262.0, 5683.0, 5619.0, 5335.0, 5459.0, 5352.0, 5465.0, 5567.0, 5344.0, 5286.0, 5556.0, 5554.0, 5266.0, 5686.0, 5598.0, 5279.0, 5379.0, 5447.0, 5537.0, 5713.0, 5474.0, 5356.0, 5709.0, 5254.0, 5609.0, 5330.0, 5624.0, 5440.0, 5285.0, 5549.0, 5514.0, 5637.0, 5425.0, 5251.0, 5284.0, 5646.0, 5640.0, 5277.0, 5528.0, 5428.0, 5454.0, 5699.0, 5552.0, 5697.0, 5560.0, 5694.0, 5720.0, 5469.0, 5397.0, 5473.0, 5481.0, 5621.0, 5510.0, 5660.0, 5559.0, 5464.0, 5363.0, 5453.0, 5575.0, 5695.0, 5320.0, 5550.0, 5634.0, 5387.0, 5448.0, 5328.0, 5396.0, 5600.0, 5592.0, 5289.0, 5584.0, 5341.0, 5332.0, 5678.0, 5673.0, 5278.0, 5458.0, 5511.0, 5636.0, 5649.0, 5700.0, 5376.0, 5292.0, 5264.0
23	5510	9	1	333	1	5711.0, 5614.0, 5404.0, 5449.0, 5321.0, 5651.0, 5699.0, 5415.0, 5685.0, 5285.0, 5513.0, 5653.0, 5356.0, 5439.0, 5641.0, 5305.0, 5565.0, 5608.0, 5409.0, 5316.0, 5327.0, 5498.0, 5401.0, 5631.0, 5381.0, 5511.0, 5340.0, 5595.0, 5624.0, 5325.0, 5358.0, 5260.0, 5500.0, 5485.0, 5522.0, 5604.0, 5678.0, 5270.0, 5615.0, 5369.0, 5570.0, 5462.0, 5688.0, 5527.0, 5304.0, 5473.0, 5534.0, 5700.0, 5267.0, 5696.0, 5512.0, 5400.0, 5645.0, 5317.0, 5554.0, 5670.0, 5659.0, 5330.0, 5284.0, 5461.0, 5690.0, 5541.0, 5294.0, 5425.0, 5691.0, 5663.0, 5621.0, 5559.0, 5341.0, 5263.0, 5435.0, 5507.0, 5343.0, 5590.0, 5605.0, 5662.0, 5514.0, 5480.0, 5569.0, 5407.0, 5326.0, 5320.0, 5366.0, 5466.0, 5468.0, 5654.0, 5506.0, 5564.0, 5698.0, 5291.0, 5257.0, 5561.0, 5311.0, 5499.0, 5503.0, 5459.0, 5472.0, 5491.0, 5393.0, 5354.0
24	5510	9	1	333	1	5483.0, 5454.0, 5573.0, 5618.0, 5557.0, 5362.0, 5622.0, 5270.0, 5276.0, 5612.0, 5650.0, 5712.0, 5569.0, 5693.0, 5424.0, 5450.0, 5279.0, 5283.0, 5396.0, 5461.0, 5500.0, 5543.0, 5379.0, 5296.0, 5288.0, 5538.0, 5522.0, 5412.0, 5491.0, 5714.0, 5374.0, 5696.0, 5551.0, 5293.0, 5333.0, 5687.0, 5366.0, 5265.0, 5475.0, 5720.0, 5322.0, 5425.0, 5418.0, 5675.0, 5588.0, 5542.0, 5654.0, 5408.0, 5611.0, 5508.0, 5644.0, 5616.0, 5478.0, 5271.0, 5617.0, 5254.0, 5324.0, 5496.0, 5260.0, 5400.0, 5357.0, 5691.0, 5709.0, 5580.0, 5540.0

						5468.0, 5704.0, 5330.0, 5320.0, 5303.0, 5701.0, 5710.0, 5559.0, 5339.0, 5682.0, 5606.0, 5613.0, 5274.0, 5355.0, 5345.0, 5649.0, 5392.0, 5486.0, 5364.0, 5358.0, 5662.0, 5262.0, 5455.0, 5539.0, 5658.0, 5432.0, 5666.0, 5572.0, 5397.0, 5297.0, 5307.0, 5255.0, 5530.0, 5449.0, 5256.0
25	5510	9	1	333	1	5505.0, 5629.0, 5482.0, 5699.0, 5475.0, 5682.0, 5561.0, 5291.0, 5346.0, 5370.0, 5338.0, 5462.0, 5543.0, 5681.0, 5305.0, 5375.0, 5463.0, 5492.0, 5660.0, 5647.0, 5446.0, 5595.0, 5263.0, 5567.0, 5677.0, 5340.0, 5417.0, 5679.0, 5545.0, 5536.0, 5369.0, 5292.0, 5500.0, 5685.0, 5700.0, 5470.0, 5343.0, 5443.0, 5250.0, 5420.0, 5671.0, 5330.0, 5556.0, 5384.0, 5439.0, 5353.0, 5300.0, 5339.0, 5464.0, 5704.0, 5262.0, 5520.0, 5337.0, 5333.0, 5644.0, 5705.0, 5572.0, 5438.0, 5383.0, 5607.0, 5455.0, 5358.0, 5274.0, 5562.0, 5601.0, 5275.0, 5272.0, 5267.0, 5617.0, 5371.0, 5538.0, 5406.0, 5508.0, 5694.0, 5429.0, 5593.0, 5422.0, 5477.0, 5368.0, 5605.0, 5723.0, 5667.0, 5476.0, 5287.0, 5703.0, 5378.0, 5393.0, 5280.0, 5490.0, 5662.0, 5285.0, 5415.0, 5689.0, 5258.0, 5559.0, 5331.0, 5433.0, 5479.0, 5461.0, 5367.0
26	5510	9	1	333	1	5641.0, 5621.0, 5338.0, 5381.0, 5583.0, 5599.0, 5430.0, 5495.0, 5461.0, 5448.0, 5660.0, 5618.0, 5256.0, 5600.0, 5496.0, 5350.0, 5597.0, 5370.0, 5565.0, 5627.0, 5486.0, 5313.0, 5475.0, 5551.0, 5684.0, 5422.0, 5404.0, 5705.0, 5384.0, 5509.0, 5699.0, 5661.0, 5514.0, 5398.0, 5716.0, 5348.0, 5431.0, 5371.0, 5466.0, 5703.0, 5442.0, 5591.0, 5360.0, 5573.0, 5271.0, 5601.0, 5411.0, 5326.0, 5674.0, 5523.0, 5412.0, 5482.0, 5605.0, 5724.0, 5366.0, 5450.0, 5372.0, 5265.0, 5314.0, 5552.0, 5458.0, 5252.0, 5497.0, 5456.0, 5455.0, 5571.0, 5434.0, 5465.0, 5355.0, 5251.0, 5558.0, 5473.0, 5364.0, 5409.0, 5656.0, 5440.0, 5257.0, 5672.0, 5561.0, 5659.0, 5555.0, 5263.0, 5653.0, 5563.0, 5668.0, 5559.0, 5560.0, 5417.0, 5470.0, 5279.0, 5609.0, 5336.0, 5693.0, 5546.0, 5388.0, 5389.0, 5619.0, 5566.0, 5402.0, 5517.0
27	5510	9	1	333	1	5390.0, 5501.0, 5389.0, 5336.0, 5603.0, 5669.0, 5255.0, 5348.0, 5468.0, 5343.0, 5479.0, 5445.0, 5679.0, 5386.0, 5638.0, 5274.0, 5372.0, 5269.0, 5689.0, 5263.0, 5444.0, 5267.0, 5577.0, 5723.0, 5416.0, 5319.0, 5446.0, 5407.0, 5667.0, 5706.0, 5545.0, 5621.0, 5316.0, 5473.0, 5392.0, 5335.0, 5631.0, 5541.0, 5458.0, 5463.0, 5339.0, 5682.0, 5409.0, 5298.0, 5327.0, 5553.0, 5659.0, 5356.0, 5271.0, 5395.0, 5471.0, 5564.0, 5582.0, 5531.0, 5357.0, 5435.0, 5399.0, 5282.0, 5312.0, 5502.0, 5431.0, 5657.0, 5636.0, 5430.0, 5341.0,

						5420.0, 5351.0, 5397.0, 5680.0, 5402.0, 5362.0, 5601.0, 5580.0, 5696.0, 5702.0, 5514.0, 5323.0, 5668.0, 5364.0, 5403.0, 5315.0, 5449.0, 5375.0, 5257.0, 5518.0, 5480.0, 5711.0, 5448.0, 5408.0, 5523.0, 5297.0, 5277.0, 5703.0, 5377.0, 5666.0, 5329.0, 5685.0, 5442.0, 5691.0, 5474.0
28	5510	9	1	333	1	5694.0, 5504.0, 5690.0, 5490.0, 5280.0, 5366.0, 5696.0, 5663.0, 5680.0, 5257.0, 5700.0, 5636.0, 5400.0, 5712.0, 5379.0, 5452.0, 5344.0, 5463.0, 5318.0, 5449.0, 5524.0, 5483.0, 5472.0, 5573.0, 5645.0, 5530.0, 5279.0, 5337.0, 5277.0, 5493.0, 5556.0, 5583.0, 5518.0, 5353.0, 5512.0, 5552.0, 5588.0, 5406.0, 5609.0, 5525.0, 5356.0, 5457.0, 5619.0, 5648.0, 5473.0, 5478.0, 5532.0, 5507.0, 5349.0, 5313.0, 5500.0, 5505.0, 5304.0, 5535.0, 5419.0, 5516.0, 5434.0, 5354.0, 5436.0, 5685.0, 5416.0, 5691.0, 5466.0, 5328.0, 5260.0, 5501.0, 5675.0, 5288.0, 5362.0, 5704.0, 5325.0, 5699.0, 5326.0, 5705.0, 5433.0, 5420.0, 5697.0, 5476.0, 5502.0, 5616.0, 5499.0, 5287.0, 5655.0, 5384.0, 5641.0, 5541.0, 5515.0, 5561.0, 5578.0, 5437.0, 5428.0, 5582.0, 5706.0, 5373.0, 5514.0, 5558.0, 5506.0, 5687.0, 5465.0, 5630.0
29	5510	9	1	333	1	5426.0, 5451.0, 5494.0, 5464.0, 5561.0, 5448.0, 5456.0, 5461.0, 5332.0, 5638.0, 5648.0, 5621.0, 5714.0, 5685.0, 5413.0, 5593.0, 5287.0, 5379.0, 5568.0, 5716.0, 5691.0, 5289.0, 5474.0, 5311.0, 5322.0, 5412.0, 5487.0, 5381.0, 5524.0, 5258.0, 5718.0, 5455.0, 5304.0, 5352.0, 5588.0, 5543.0, 5595.0, 5645.0, 5317.0, 5559.0, 5300.0, 5253.0, 5526.0, 5715.0, 5535.0, 5550.0, 5697.0, 5477.0, 5355.0, 5690.0, 5506.0, 5594.0, 5409.0, 5467.0, 5335.0, 5654.0, 5585.0, 5346.0, 5449.0, 5331.0, 5460.0, 5542.0, 5710.0, 5302.0, 5530.0, 5437.0, 5489.0, 5569.0, 5325.0, 5673.0, 5635.0, 5373.0, 5667.0, 5327.0, 5713.0, 5517.0, 5567.0, 5580.0, 5704.0, 5418.0, 5314.0, 5576.0, 5492.0, 5371.0, 5353.0, 5458.0, 5296.0, 5363.0, 5251.0, 5469.0, 5415.0, 5446.0, 5484.0, 5507.0, 5393.0, 5479.0, 5389.0, 5627.0, 5362.0, 5707.0
30	5510	9	1	333	1	5559.0, 5357.0, 5513.0, 5310.0, 5535.0, 5429.0, 5266.0, 5627.0, 5469.0, 5505.0, 5541.0, 5527.0, 5277.0, 5605.0, 5712.0, 5483.0, 5497.0, 5638.0, 5452.0, 5384.0, 5354.0, 5464.0, 5645.0, 5478.0, 5475.0, 5546.0, 5369.0, 5599.0, 5257.0, 5476.0, 5362.0, 5632.0, 5664.0, 5577.0, 5319.0, 5689.0, 5597.0, 5449.0, 5647.0, 5270.0, 5467.0, 5607.0, 5375.0, 5492.0, 5634.0, 5662.0, 5405.0, 5663.0, 5650.0, 5613.0, 5396.0, 5553.0, 5276.0, 5275.0, 5263.0, 5395.0, 5562.0, 5303.0, 5417.0, 5328.0, 5418.0, 5350.0, 5352.0, 5281.0, 5629.0

						5317.0, 5554.0, 5308.0, 5394.0, 5335.0, 5688.0, 5465.0, 5561.0, 5264.0, 5593.0, 5494.0, 5462.0, 5533.0, 5421.0, 5411.0, 5639.0, 5528.0, 5351.0, 5569.0, 5551.0, 5284.0, 5583.0, 5321.0, 5342.0, 5656.0, 5624.0, 5644.0, 5487.0, 5322.0, 5312.0, 5297.0, 5291.0, 5271.0, 5678.0, 5537.0
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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	93.3%	60%	Pass
Type 4	30	100 %	60%	Pass
Aggregate(Type1 to 4)	120	98.3%	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 (μ S)	PRI (μ s)	Detection (1:yes; 0:no)
1	5530	86	1	618	1
2	5530	76	1	698	1
3	5530	62	1	858	1
4	5530	61	1	878	1
5	5530	89	1	598	1
6	5530	70	1	758	1
7	5530	59	1	898	1
8	5530	78	1	678	1
9	5530	57	1	938	1
10	5530	63	1	838	1
11	5530	74	1	718	1
12	5530	65	1	818	1
13	5530	102	1	518	1
14	5530	72	1	738	1
15	5530	67	1	798	1
Detection Percentage: 100% (>60%)					

Radar Type 1B Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μ S)	PRI (μ s)	Detection (1:yes; 0:no)
1	5530	31	1	1724	1
2	5530	39	1	1356	1
3	5530	20	1	2714	1
4	5530	33	1	1645	1
5	5530	25	1	2113	1
6	5530	46	1	1171	1
7	5530	33	1	1618	1
8	5530	95	1	557	1
9	5530	22	1	2411	1
10	5530	21	1	2608	1
11	5530	96	1	551	1
12	5530	29	1	1823	1
13	5530	19	1	2875	1
14	5530	31	1	1727	1
15	5530	38	1	1424	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	28	2	207	1
2	5530	24	3.4	202	1
3	5530	24	1.3	173	1
4	5530	28	3	178	1
5	5530	25	2.7	152	1
6	5530	29	4.8	174	1
7	5530	29	1.5	170	1
8	5530	23	3.2	229	1
9	5530	23	4.7	179	1
10	5530	27	1	169	1
11	5530	24	4.2	216	1
12	5530	26	4.3	151	1
13	5530	23	2.7	173	1
14	5530	25	2.7	229	1
15	5530	27	3.2	197	1
16	5530	26	1	177	1
17	5530	26	1.2	212	1
18	5530	25	3.9	157	1
19	5530	24	3.4	212	1
20	5530	27	4.8	194	1
21	5530	24	4.8	228	1
22	5530	28	5	171	1
23	5530	23	5	207	1
24	5530	28	2.3	184	1
25	5530	26	3.4	193	1
26	5530	23	1.9	186	1
27	5530	27	3.4	229	1
28	5530	29	3.2	172	1
29	5530	25	2.2	200	1
30	5530	28	2	207	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	9.4	478	1
2	5530	18	8	319	1
3	5530	18	8.8	243	1
4	5530	18	6.6	226	1
5	5530	16	7.3	445	1
6	5530	17	9.9	229	1
7	5530	16	9.8	235	1
8	5530	17	7.7	352	1
9	5530	16	6.5	464	1
10	5530	18	7.4	386	1
11	5530	17	7.8	390	1
12	5530	18	6.1	217	1
13	5530	16	7.5	311	1
14	5530	16	9.6	499	1
15	5530	16	7.4	499	1
16	5530	18	6	413	1
17	5530	18	9.3	288	1
18	5530	17	9	247	1
19	5530	17	6.9	413	1
20	5530	17	7	384	1
21	5530	17	10	464	1
22	5530	16	6.3	417	1
23	5530	18	8.9	329	1
24	5530	17	7.1	215	1
25	5530	17	9.8	241	1
26	5530	17	8.2	321	1
27	5530	18	6	400	1
28	5530	17	7.7	397	1
29	5530	16	8.3	208	0
30	5530	18	7.1	211	0
Detection Percentage: 93.3 % (>60%)					

Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5530	16	19.5	306	1
2	5530	16	19.1	236	1
3	5530	14	17.8	203	1
4	5530	14	15.7	207	1
5	5530	14	12.9	423	1
6	5530	13	15.2	309	1
7	5530	15	18.8	463	1
8	5530	15	16.4	208	1
9	5530	16	15.3	408	1
10	5530	14	16.1	464	1
11	5530	15	19.9	445	1
12	5530	16	18.8	446	1
13	5530	12	18	219	1
14	5530	12	18.9	314	1
15	5530	16	11.1	491	1
16	5530	16	18.4	377	1
17	5530	16	11.4	448	1
18	5530	13	18.5	340	1
19	5530	13	14.7	482	1
20	5530	16	11.7	462	1
21	5530	12	19.8	411	1
22	5530	13	13.1	283	1
23	5530	14	15.9	384	1
24	5530	16	18.9	432	1
25	5530	15	12	302	1
26	5530	15	14.6	370	1
27	5530	15	13.6	243	1
28	5530	14	14.3	494	1
29	5530	14	18.2	263	1
30	5530	13	11.4	214	1
Detection Percentage: 100 % (>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	1	12	93			0.078689	1
1	3	12	94.1	1388	1116	1.083322	
2	2	12	64.2	1254		2.233223	
3	2	12	55	1719		3.092081	
4	2	12	85.9	1313		3.569449	
5	2	12	63	1714		4.361974	
6	1	12	63.3			5.638617	
7	3	12	92	1316	1759	6.315394	
8	1	12	57.2			7.679331	
9	2	12	93.9	1812		8.479367	
10	2	12	88.4	1828		9.398064	
11	2	12	63.6	1863		9.817568	
12	2	12	67.5	1264		10.637729	
13	2	12	70.6	1369		11.759015	

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	2	13	87.2	1701		0.771182	1
1	1	13	90.9			0.949647	
2	3	13	69.6	1160	1831	2.344003	
3	1	13	59.3			3.339580	
4	2	13	83.4	1539		4.087878	
5	2	13	67.6	1115		5.088420	
6	1	13	83.1			5.739019	
7	3	13	90.6	1347	1740	6.407730	
8	3	13	59.9	1379	1943	6.969098	
9	2	13	75.6	1499		7.885583	
10	1	13	86.4			9.281423	
11	1	13	63.8			9.621519	
12	2	13	61.9	1550		10.523806	
13	3	13	71	1552	1670	11.877108	

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	5	61.8	1350		0.444376	1
1	2	5	52.3	1986		1.244025	
2	2	5	65.8	1329		1.829840	
3	2	5	58	1470		1.925477	
4	1	5	90.8			2.978145	
5	2	5	57.6	1291		3.193153	
6	1	5	91.6			4.063279	
7	1	5	84.2			4.435055	
8	2	5	81.1	1483		5.391814	
9	1	5	86.2			5.729140	
10	2	5	81.7	1736		6.479243	
11	2	5	66.6	1404		7.148608	
12	1	5	62.5			7.579339	
13	1	5	65.8			8.543845	
14	1	5	68.5			9.107883	
15	3	5	88.9	1127	1689	9.653892	
16	3	5	68	1572	1757	10.718710	
17	3	5	94	1247	1621	11.063614	
18	3	5	52.8	1694	1577	11.856197	

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	3	16	54.7	1062	1390	0.294487	1
1	2	16	84.5	1875		1.329824	
2	2	16	67.3	1332		2.197300	
3	2	16	59.4	1750		2.516891	
4	2	16	62.5	1581		3.092142	
5	2	16	53.5	1458		3.987533	
6	3	16	59	1782	1194	5.063432	
7	2	16	90.6	1404		5.529539	
8	2	16	97.3	1971		6.622451	
9	1	16	61.7			7.246249	
10	2	16	78.6	1929		8.008028	
11	3	16	91.5	1237	1872	8.920547	
12	2	16	55.7	1160		9.299177	
13	1	16	71.3			10.095686	
14	2	16	84.7	1628		11.058239	
15	3	16	59.3	1699	1084	11.894279	

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	1	7	81.4			1.204266	1
1	3	7	54	1365	1552	2.450005	
2	1	7	70.4			3.960188	
3	1	7	83.8			4.763357	
4	1	7	64.1			6.475253	
5	1	7	82.8			7.068819	
6	2	7	61.1	1266		9.074487	
7	3	7	63.7	1016	1720	9.506381	
8	2	7	61.8	1013		10.690747	

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	8	95.5	1477		0.621197	1
1	2	8	54.1	1886		0.633164	
2	2	8	98.4	1874		1.379937	
3	3	8	63.2	1814	1911	2.067668	
4	2	8	86.9	1048		2.777627	
5	2	8	92.1	1658		3.198131	
6	1	8	73.3			3.920846	
7	1	8	84.4			4.868678	
8	1	8	61.7			5.666543	
9	2	8	59.9	1575		6.094486	
10	3	8	57.3	1129	1490	6.924595	
11	2	8	61.7	1394		7.515310	
12	1	8	97.3			7.595708	
13	2	8	73.9	1651		8.677690	
14	1	8	65.1			8.843915	
15	2	8	54.8	1354		9.756977	
16	2	8	51.5	1936		10.483088	
17	2	8	72.1	1313		11.009324	
18	3	8	71	1533	1008	11.622801	

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	1	10	92			0.970733	1
1	3	10	64.6	1473	1425	1.451211	
2	2	10	84.2	1108		2.231622	
3	1	10	86.3			3.464043	
4	2	10	87.5	1952		5.031512	
5	2	10	56.2	1178		6.066684	
6	1	10	56.6			6.913694	
7	3	10	83.6	1450	1759	8.248115	
8	1	10	90.2			9.727875	
9	1	10	97.5			9.828461	
10	1	10	90.6			11.354936	

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	58.8	1505	1451	0.654543	1
1	1	8	69			1.478321	
2	3	8	84.1	1109	1500	1.959252	
3	3	8	55.9	1770	1171	2.834363	
4	3	8	97	1034	1273	4.089461	
5	2	8	93.1	1975		4.782160	
6	2	8	54.2	1082		5.893560	
7	3	8	51.1	1812	1936	6.624390	
8	1	8	93.4			7.573489	
9	2	8	52.6	1859		7.993633	
10	1	8	50.4			8.746727	
11	3	8	88.6	1830	1708	9.436704	
12	2	8	64.9	1612		10.311827	
13	2	8	93.3	1615		11.505810	

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	10	75.8	1608		0.625237	1
1	1	10	58			0.646407	
2	2	10	70.5	1828		1.472636	
3	1	10	78.8			2.387188	
4	2	10	58.8	1750		2.751189	
5	1	10	78.2			3.239026	
6	3	10	79.1	1140	1456	4.312544	
7	3	10	51.8	1396	1358	4.858328	
8	1	10	59.4			5.107144	
9	2	10	61.7	1419		6.141328	
10	2	10	80.3	1407		6.765042	
11	2	10	94.3	1879		7.149204	
12	3	10	76.4	1482	1993	7.815652	
13	3	10	94.7	1841	1392	8.399687	
14	1	10	99.4			8.907195	
15	2	10	96.6	1886		9.552281	
16	3	10	51.8	1656	1763	10.332708	
17	2	10	88.3	1865		10.806543	
18	2	10	52	1790		11.383690	

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	3	7	80.3	1087	1840	0.145852	1
1	3	7	55.3	1389	1191	1.976038	
2	3	7	82.5	1908	1414	2.705303	
3	2	7	93.4	1198		3.556156	
4	2	7	56.5	1487		4.155254	
5	3	7	75.9	1757	1322	5.336717	
6	2	7	83.3	1781		6.543717	
7	2	7	82	1044		7.598524	
8	1	7	61.3			8.694577	
9	3	7	65.2	1333	1010	9.618648	
10	2	7	82.5	1411		10.448053	
11	3	7	61.1	1797	1672	11.647843	

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	3	11	69.1	1533	1352	0.173572	1
1	3	11	66.3	1040	1452	1.008198	
2	1	11	58.5			1.417913	
3	2	11	94.8	1889		2.346518	
4	3	11	89.6	1029	1381	2.837494	
5	2	11	53	1093		3.847378	
6	1	11	88.8			4.238200	
7	2	11	78.5	1508		4.881890	
8	2	11	67.9	1633		5.722791	
9	2	11	92.2	1602		6.125295	
10	3	11	77.5	1643	1069	6.951014	
11	2	11	99.2	1359		7.783420	
12	2	11	91.7	1555		8.072964	
13	1	11	98.4			8.821012	
14	2	11	53.1	1418		9.948651	
15	2	11	80	1822		10.401652	
16	2	11	84.8	1303		11.287177	
17	1	11	89			11.877905	

Statistics 2 (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	57.5			0.235558	1
1	2	10	84.5	1207		2.273829	
2	1	10	52			2.975339	
3	2	10	76.5	1985		4.125537	
4	1	10	62.2			5.228648	
5	3	10	53.4	1394	1598	6.000741	
6	3	10	69.1	1115	1192	8.318564	
7	2	10	75.8	1417		8.646678	
8	3	10	74.3	1670	1147	10.381823	
9	3	10	64.9	1883	1248	11.294806	

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	2	16	92	1266		0.620363	1
1	2	16	50.4	1748		1.270800	
2	2	16	54.3	1584		2.424194	
3	2	16	96.3	1813		2.797355	
4	2	16	52.4	1679		4.021533	
5	1	16	54.9			5.146324	
6	2	16	54.7	1833		6.104382	
7	1	16	69.5			7.320816	
8	2	16	60.8	1043		7.754037	
9	3	16	86.9	1765	1958	8.969637	
10	3	16	82.8	1514	1454	9.317871	
11	2	16	66.3	1658		10.880037	
12	3	16	66.3	1392	1868	11.285711	

Statistics 4 (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	15	54.4	1429		0.640010	1
1	3	15	52.3	1743	1902	0.838383	
2	3	15	62.4	1493	1261	1.425287	
3	2	15	68.3	1378		2.299112	
4	2	15	74.5	1521		3.289355	
5	1	15	90.1			3.616310	
6	2	15	93.6	1537		4.564041	
7	3	15	91	1427	1478	4.969147	
8	2	15	53.9	1126		5.843244	
9	3	15	63.6	1238	1464	6.964979	
10	2	15	52.3	1360		7.337711	
11	2	15	72.2	1573		7.923260	
12	3	15	65.1	1082	1525	8.520845	
13	2	15	54.9	1945		9.453263	
14	1	15	72			10.160407	
15	1	15	58.7			10.844611	
16	2	15	78.5	1689		11.505233	

Statistics 5 (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	2	6	66.7	1029		0.416628	1
1	2	6	85.6	1036		1.444719	
2	1	6	80.3			2.954070	
3	2	6	91.3	1341		4.030224	
4	3	6	57.5	1901	1125	5.214790	
5	2	6	75.1	1272		5.529674	
6	3	6	64.2	1896	1910	6.943451	
7	3	6	70.7	1577	1809	7.801685	
8	2	6	66.5	1889		9.303168	
9	3	6	99	1995	1686	10.633093	
10	1	6	59.5			11.729789	

Statistics 6 (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	51.1	1700		0.846142	1
1	3	13	91.2	1747	1113	1.967594	
2	2	13	96.8	1958		2.864473	
3	3	13	66.6	1902	1094	4.244035	
4	2	13	55.5	1586		5.876691	
5	2	13	89.6	1188		7.470553	
6	1	13	77.5			8.141709	
7	2	13	89.8	1591		9.848359	
8	2	13	73.7	1278		11.151126	

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)
0	2	13	65.7	1727		1.184692	1
1	2	13	80.3	1802		1.886027	
2	2	13	62	1356		2.542587	
3	1	13	66.3			4.492278	
4	3	13	97.6	1618	1898	5.182184	
5	2	13	68.5	1040		6.063832	
6	2	13	77.2	1808		8.152530	
7	2	13	65.6	1416		9.351459	
8	2	13	57.8	1169		10.587237	
9	1	13	53.7			11.059594	

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	2	15	87.2	1249		0.875425	1
1	1	15	83.4			1.692043	
2	1	15	82.6			2.537326	
3	3	15	90.5	1600	1008	2.964380	
4	2	15	89.2	1630		3.964956	
5	3	15	53	1373	1642	4.850399	
6	3	15	72.5	1848	1740	6.293703	
7	1	15	91			6.652016	
8	2	15	60.6	1818		7.577111	
9	2	15	96.9	1167		8.734575	
10	3	15	92.4	1007	1120	9.669372	
11	1	15	59.5			10.732505	
12	2	15	94.6	1402		11.409777	

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	1	19	63.9			0.208701	1
1	2	19	82.3	1796		0.807177	
2	2	19	57.2	1275		1.562529	
3	2	19	64.1	1728		2.065263	
4	1	19	99.3			3.089773	
5	3	19	60.5	1176	1566	3.160359	
6	2	19	87.3	1931		4.081552	
7	2	19	64.9	1103		4.919943	
8	1	19	54.8			5.482188	
9	3	19	52.7	1068	1620	5.994483	
10	1	19	69.9			6.877426	
11	3	19	99.4	1727	1196	7.028626	
12	2	19	82.8	1855		7.953606	
13	2	19	84.2	1635		8.832446	
14	2	19	98.9	1913		9.029924	
15	1	19	53.8			10.064023	
16	1	19	90.4			10.254516	
17	3	19	78.3	1161	1394	11.251206	
18	2	19	50.3	1520		11.917768	

Statistics 10 (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	9	67.6			0.011116	1
1	2	9	93.9	1197		2.210492	
2	2	9	85.5	1700		3.366371	
3	2	9	95	1743		4.651971	
4	1	9	69.6			5.047563	
5	1	9	94.6			6.890973	
6	3	9	72.7	1880	1520	7.627100	
7	2	9	67.8	1806		9.524231	
8	2	9	80	1543		10.301581	
9	1	9	96.5			11.970633	

Radar Type 5 Case 3 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5563.0 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	90.9			0.709309	1
1	2	18	73.5	1002		1.20202	
2	2	18	67.2	1225		2.102791	
3	2	18	73.3	1333		2.571527	
4	1	18	92.4			3.649542	
5	2	18	54.9	1686		4.239065	
6	2	18	73.7	1298		4.927811	
7	1	18	79.1			5.883024	
8	2	18	58.3	1635		6.881924	
9	2	18	89.9	1814		7.726232	
10	2	18	86.3	1311		8.48249	
11	2	18	67.7	1457		9.328098	
12	3	18	98.7	1346	1104	9.869498	
13	3	18	97	1426	1528	10.40973	
14	2	18	97.5	1292		11.97087	

Statistics 2 (ChirpCenter Frequency: 5563.0 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	17	58.2			0.49043	1
1	2	17	80	1705		1.118653	
2	1	17	69.8			2.181984	
3	2	17	69.7	1070		3.811338	
4	2	17	54.8	1619		5.180589	
5	2	17	87.8	1493		5.508099	
6	2	17	61.9	1313		6.757083	
7	3	17	77.5	1528	1677	8.496813	
8	1	17	84.9			9.24025	
9	2	17	81.4	1901		10.11713	
10	2	17	84.2	1000		11.96609	

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	11	73.3	1412		0.107773	1
1	3	11	70	1416	1750	1.943929	
2	2	11	71	1434		2.056182	
3	1	11	54.3			3.894008	
4	2	11	94.9	1576		4.936269	
5	1	11	80.9			5.064917	
6	2	11	83.9	1783		6.80316	
7	1	11	86.7			7.886393	
8	1	11	90.2			8.961054	
9	2	11	57.4	1737		9.186977	
10	2	11	55.5	1915		10.02317	
11	2	11	76.2	1377		11.62321	

Statistics 4 (ChirpCenter Frequency: 5568.0 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	86.4	1195	1248	0.479926	1
1	1	6	88.8			1.408278	
2	1	6	88.2			1.723561	
3	3	6	88.4	1376	1544	2.42002	
4	2	6	71.7	1695		3.261002	
5	3	6	81.2	1900	1064	4.675747	
6	2	6	71	1004		5.48003	
7	2	6	89.4	1798		6.184818	
8	2	6	88.5	1099		7.029317	
9	2	6	88.1	1852		7.759452	
10	3	6	57	1207	1019	8.028723	
11	2	6	59.4	1093		8.94912	
12	3	6	76.3	1209	1958	9.871656	
13	2	6	51.2	1140		10.93208	
14	3	6	94.4	1189	1294	11.56445	

Statistics 5 (ChirpCenter Frequency: 5563.0 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	79.9	1901		0.449164	1
1	2	18	56	1621		0.765609	
2	2	18	56.9	1660		1.958661	
3	2	18	88.6	1690		2.421268	
4	3	18	59.7	1076	1779	2.893076	
5	2	18	62.7	1644		3.704845	
6	2	18	65.6	1774		4.078917	
7	1	18	56.8			4.717659	
8	2	18	54.8	1627		5.896522	
9	1	18	69.4			6.603612	
10	1	18	88.7			6.876127	
11	3	18	52.2	1518	1963	7.529614	
12	3	18	76.9	1157	1012	8.055577	
13	1	18	69.1			9.221628	
14	3	18	59.7	1015	1456	9.438126	
15	1	18	98.8			10.11309	
16	1	18	88			11.29202	
17	3	18	91.3	1825	1884	11.39255	

Statistics 6 (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	11	85.4	1312		0.691222	1
1	2	11	56.8	1712		1.621076	
2	3	11	70.5	1803	1524	2.256279	
3	3	11	51.2	1908	1807	2.823749	
4	2	11	81.4	1992		3.996282	
5	2	11	79.5	1232		5.473497	
6	2	11	83	1798		6.133676	
7	1	11	56.8			7.292597	
8	2	11	90.3	1602		7.729226	
9	2	11	73.3	1090		8.551174	
10	3	11	63.4	1153	1820	9.94353	
11	2	11	64	1611		10.17749	
12	1	11	75.6			11.75404	

Statistics 7 (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	16	66.7	1385		1.113577	1
1	2	16	95.5	1594		1.493049	
2	3	16	97.3	1379	1387	3.341525	
3	2	16	51.7	1989		4.739702	
4	3	16	58	1000	1345	5.51778	
5	1	16	98.2			6.612262	
6	1	16	54.8			7.956433	
7	2	16	54.5	1506		8.421861	
8	3	16	72.6	1141	1452	10.45279	
9	1	16	62.3			11.16735	

Statistics 8 (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	78.2	1522		0.385185	1
1	1	14	98			1.200401	
2	2	14	69.4	1916		1.547478	
3	2	14	81	1809		2.957204	
4	2	14	54.5	1971		3.29041	
5	3	14	68.8	1063	1512	3.843675	
6	2	14	98.3	1031		5.128944	
7	3	14	51.4	1868	1999	5.562389	
8	2	14	98.8	1904		6.537978	
9	3	14	59.7	1209	1183	7.093055	
10	3	14	60.3	1525	1773	7.865631	
11	2	14	52.9	1879		8.689799	
12	1	14	79.7			9.672465	
13	2	14	55.8	1319		10.02729	
14	1	14	98.6			11.08855	
15	2	14	97.8	1644		11.79593	

Statistics 9 (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	20	63.7			0.103268	1
1	2	20	67	1839		1.412862	
2	2	20	95.3	1672		1.971611	
3	3	20	58.1	1729	1047	2.630568	
4	1	20	58.6			3.792496	
5	2	20	92.8	1127		4.25085	
6	2	20	81.7	1634		5.399854	
7	3	20	65.6	1334	1430	5.916387	
8	2	20	87.3	1232		7.165899	
9	2	20	63.1	1571		7.926261	
10	2	20	77.8	1762		8.265687	
11	3	20	51.5	1907	1427	9.525631	
12	2	20	83	1917		9.966748	
13	3	20	97	1677	1297	11.03325	
14	3	20	95.4	1105	1468	11.32302	

Statistics 10 (ChirpCenter Frequency: 5563.0 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	54.2	1504		1.42851	1
1	3	18	67.1	1592	1106	2.941092	
2	1	18	53.7			3.054207	
3	2	18	50.4	1681		4.577059	
4	1	18	56			6.44403	
5	2	18	90	1682		8.373655	
6	3	18	90.1	1107	1407	9.986604	
7	2	18	68.6	1782		10.88772	

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	5614.0, 5495.0, 5423.0, 5485.0, 5278.0, 5310.0, 5386.0, 5684.0, 5253.0, 5308.0, 5417.0, 5284.0, 5296.0, 5286.0, 5537.0, 5576.0, 5349.0, 5461.0, 5640.0, 5506.0, 5716.0, 5569.0, 5558.0, 5318.0, 5497.0, 5362.0, 5639.0, 5690.0, 5712.0, 5294.0, 5605.0, 5367.0, 5636.0, 5710.0, 5259.0, 5479.0, 5320.0, 5399.0, 5674.0, 5425.0, 5439.0, 5600.0, 5416.0, 5623.0, 5701.0, 5519.0, 5287.0, 5696.0, 5667.0, 5669.0, 5269.0, 5513.0, 5592.0, 5380.0, 5688.0, 5535.0, 5643.0, 5496.0, 5622.0, 5572.0, 5659.0, 5413.0, 5504.0, 5624.0, 5335.0, 5427.0, 5516.0, 5459.0, 5711.0, 5350.0, 5262.0, 5487.0, 5524.0, 5446.0, 5280.0, 5579.0, 5598.0, 5311.0, 5705.0, 5478.0, 5433.0, 5664.0, 5302.0, 5613.0, 5385.0, 5654.0, 5317.0, 5568.0, 5330.0, 5641.0, 5656.0, 5620.0, 5663.0, 5396.0, 5681.0, 5321.0, 5542.0, 5597.0, 5499.0, 5699.0
2	5530	9	1	333	1	5451.0, 5541.0, 5364.0, 5346.0, 5253.0, 5378.0, 5686.0, 5404.0, 5448.0, 5455.0, 5468.0, 5405.0, 5564.0, 5305.0, 5464.0, 5590.0, 5594.0, 5539.0, 5409.0, 5525.0, 5465.0, 5431.0, 5597.0, 5582.0, 5328.0, 5515.0, 5422.0, 5414.0, 5592.0, 5485.0, 5707.0, 5476.0, 5411.0, 5533.0, 5359.0, 5254.0, 5708.0, 5667.0, 5676.0, 5624.0, 5442.0, 5511.0, 5415.0, 5321.0, 5573.0, 5368.0, 5432.0, 5623.0, 5388.0, 5556.0, 5487.0, 5569.0, 5649.0, 5413.0, 5380.0, 5344.0, 5288.0, 5554.0, 5393.0, 5395.0, 5534.0, 5591.0, 5508.0, 5579.0, 5279.0, 5609.0, 5502.0, 5562.0, 5370.0, 5712.0, 5681.0, 5470.0, 5456.0, 5331.0, 5345.0, 5486.0, 5723.0, 5391.0, 5648.0, 5402.0, 5333.0, 5695.0, 5563.0, 5481.0, 5612.0, 5290.0, 5424.0, 5295.0, 5449.0, 5700.0, 5545.0, 5583.0, 5680.0, 5544.0, 5257.0, 5298.0, 5461.0, 5349.0, 5318.0, 5428.0
3	5530	9	1	333	1	5283.0, 5521.0, 5386.0, 5333.0, 5697.0, 5707.0, 5511.0, 5324.0, 5717.0, 5594.0, 5458.0, 5409.0, 5414.0, 5597.0, 5252.0, 5257.0, 5541.0, 5355.0, 5686.0, 5403.0, 5433.0, 5682.0, 5391.0, 5547.0, 5566.0, 5667.0, 5332.0, 5471.0, 5499.0, 5424.0, 5674.0, 5615.0, 5287.0, 5624.0, 5383.0, 5679.0, 5569.0, 5418.0, 5361.0, 5668.0, 5492.0, 5619.0, 5481.0, 5387.0, 5634.0, 5507.0, 5339.0, 5455.0, 5448.0, 5530.0, 5271.0, 5691.0, 5454.0, 5603.0, 5253.0, 5371.0, 5614.0, 5299.0, 5274.0, 5543.0, 5607.0, 5398.0, 5673.0, 5370.0, 5534.0, 5313.0, 5388.0, 5295.0, 5305.0, 5250.0

						5599.0, 5319.0, 5623.0, 5426.0, 5335.0, 5467.0, 5577.0, 5500.0, 5434.0, 5346.0, 5493.0, 5367.0, 5429.0, 5460.0, 5436.0, 5690.0, 5304.0, 5661.0, 5662.0, 5583.0, 5378.0, 5318.0, 5260.0, 5630.0, 5540.0, 5625.0, 5432.0, 5658.0, 5538.0, 5637.0
4	5530	9	1	333	1	5401.0, 5630.0, 5291.0, 5625.0, 5572.0, 5518.0, 5438.0, 5415.0, 5608.0, 5447.0, 5665.0, 5443.0, 5540.0, 5611.0, 5311.0, 5494.0, 5403.0, 5622.0, 5396.0, 5338.0, 5281.0, 5688.0, 5320.0, 5472.0, 5593.0, 5444.0, 5497.0, 5557.0, 5431.0, 5532.0, 5504.0, 5391.0, 5426.0, 5333.0, 5366.0, 5489.0, 5451.0, 5652.0, 5412.0, 5624.0, 5506.0, 5279.0, 5395.0, 5482.0, 5697.0, 5400.0, 5357.0, 5289.0, 5535.0, 5378.0, 5565.0, 5690.0, 5421.0, 5703.0, 5678.0, 5402.0, 5456.0, 5509.0, 5441.0, 5381.0, 5491.0, 5564.0, 5708.0, 5282.0, 5332.0, 5566.0, 5672.0, 5296.0, 5439.0, 5631.0, 5435.0, 5368.0, 5479.0, 5386.0, 5559.0, 5307.0, 5649.0, 5589.0, 5459.0, 5278.0, 5531.0, 5264.0, 5394.0, 5662.0, 5553.0, 5404.0, 5342.0, 5721.0, 5356.0, 5496.0, 5376.0, 5309.0, 5577.0, 5595.0, 5324.0, 5336.0, 5476.0, 5527.0, 5714.0, 5578.0
5	5530	9	1	333	1	5259.0, 5258.0, 5254.0, 5255.0, 5568.0, 5367.0, 5642.0, 5359.0, 5368.0, 5701.0, 5708.0, 5514.0, 5394.0, 5383.0, 5455.0, 5257.0, 5379.0, 5305.0, 5513.0, 5289.0, 5251.0, 5658.0, 5280.0, 5290.0, 5303.0, 5283.0, 5323.0, 5298.0, 5505.0, 5373.0, 5361.0, 5653.0, 5575.0, 5452.0, 5364.0, 5572.0, 5261.0, 5536.0, 5389.0, 5321.0, 5516.0, 5650.0, 5611.0, 5633.0, 5287.0, 5682.0, 5434.0, 5502.0, 5346.0, 5325.0, 5478.0, 5676.0, 5489.0, 5313.0, 5335.0, 5613.0, 5324.0, 5490.0, 5260.0, 5573.0, 5350.0, 5384.0, 5529.0, 5607.0, 5339.0, 5256.0, 5525.0, 5351.0, 5343.0, 5344.0, 5581.0, 5418.0, 5312.0, 5616.0, 5330.0, 5578.0, 5442.0, 5404.0, 5681.0, 5626.0, 5296.0, 5422.0, 5599.0, 5451.0, 5717.0, 5546.0, 5401.0, 5555.0, 5286.0, 5411.0, 5454.0, 5253.0, 5362.0, 5612.0, 5309.0, 5623.0, 5274.0, 5318.0, 5267.0, 5380.0
6	5530	9	1	333	1	5490.0, 5410.0, 5607.0, 5407.0, 5455.0, 5584.0, 5517.0, 5340.0, 5321.0, 5250.0, 5628.0, 5371.0, 5284.0, 5387.0, 5689.0, 5325.0, 5537.0, 5422.0, 5271.0, 5396.0, 5605.0, 5540.0, 5589.0, 5566.0, 5437.0, 5683.0, 5655.0, 5472.0, 5563.0, 5614.0, 5597.0, 5580.0, 5609.0, 5266.0, 5264.0, 5384.0, 5438.0, 5408.0, 5286.0, 5577.0, 5280.0, 5586.0, 5431.0, 5355.0, 5660.0, 5303.0, 5534.0, 5351.0, 5478.0, 5635.0, 5512.0, 5354.0, 5530.0, 5548.0, 5654.0, 5610.0, 5338.0, 5545.0, 5560.0, 5513.0, 5328.0, 5254.0, 5711.0, 5415.0, 5507.0, 5483.0, 5696.0, 5645.0, 5315.0, 5616.0,

						5573.0, 5617.0, 5390.0, 5430.0, 5694.0, 5404.0, 5424.0, 5255.0, 5637.0, 5579.0, 5688.0, 5571.0, 5561.0, 5575.0, 5311.0, 5703.0, 5675.0, 5542.0, 5287.0, 5357.0, 5298.0, 5716.0, 5604.0, 5533.0, 5391.0, 5509.0, 5552.0, 5549.0, 5459.0, 5631.0
7	5530	9	1	333	1	5384.0, 5656.0, 5410.0, 5658.0, 5318.0, 5499.0, 5422.0, 5416.0, 5640.0, 5259.0, 5395.0, 5426.0, 5584.0, 5432.0, 5276.0, 5392.0, 5488.0, 5544.0, 5512.0, 5370.0, 5434.0, 5524.0, 5443.0, 5367.0, 5724.0, 5575.0, 5260.0, 5590.0, 5518.0, 5517.0, 5621.0, 5496.0, 5393.0, 5442.0, 5628.0, 5435.0, 5405.0, 5622.0, 5363.0, 5444.0, 5486.0, 5346.0, 5428.0, 5412.0, 5420.0, 5603.0, 5504.0, 5497.0, 5340.0, 5313.0, 5623.0, 5570.0, 5300.0, 5563.0, 5322.0, 5602.0, 5334.0, 5550.0, 5287.0, 5535.0, 5398.0, 5369.0, 5433.0, 5459.0, 5565.0, 5262.0, 5427.0, 5700.0, 5652.0, 5391.0, 5681.0, 5678.0, 5258.0, 5349.0, 5290.0, 5467.0, 5694.0, 5396.0, 5498.0, 5547.0, 5653.0, 5473.0, 5654.0, 5548.0, 5361.0, 5581.0, 5366.0, 5402.0, 5723.0, 5399.0, 5476.0, 5296.0, 5513.0, 5686.0, 5487.0, 5446.0, 5568.0, 5635.0, 5306.0, 5291.0
8	5530	9	1	333	1	5714.0, 5584.0, 5522.0, 5518.0, 5307.0, 5530.0, 5566.0, 5421.0, 5445.0, 5349.0, 5390.0, 5442.0, 5391.0, 5386.0, 5721.0, 5439.0, 5477.0, 5283.0, 5385.0, 5326.0, 5351.0, 5379.0, 5255.0, 5720.0, 5489.0, 5662.0, 5544.0, 5422.0, 5328.0, 5595.0, 5443.0, 5340.0, 5701.0, 5310.0, 5585.0, 5533.0, 5284.0, 5476.0, 5520.0, 5676.0, 5306.0, 5403.0, 5638.0, 5254.0, 5289.0, 5557.0, 5460.0, 5472.0, 5429.0, 5455.0, 5678.0, 5655.0, 5671.0, 5686.0, 5617.0, 5707.0, 5383.0, 5409.0, 5646.0, 5458.0, 5546.0, 5337.0, 5334.0, 5397.0, 5432.0, 5279.0, 5534.0, 5663.0, 5370.0, 5677.0, 5639.0, 5388.0, 5541.0, 5374.0, 5281.0, 5511.0, 5722.0, 5517.0, 5640.0, 5615.0, 5626.0, 5570.0, 5545.0, 5325.0, 5376.0, 5583.0, 5664.0, 5292.0, 5346.0, 5661.0, 5471.0, 5266.0, 5688.0, 5601.0, 5634.0, 5618.0, 5265.0, 5426.0, 5399.0, 5685.0
9	5530	9	1	333	1	5657.0, 5436.0, 5562.0, 5689.0, 5638.0, 5648.0, 5351.0, 5422.0, 5679.0, 5585.0, 5337.0, 5467.0, 5363.0, 5302.0, 5271.0, 5423.0, 5527.0, 5523.0, 5533.0, 5410.0, 5600.0, 5286.0, 5501.0, 5498.0, 5486.0, 5340.0, 5384.0, 5580.0, 5269.0, 5262.0, 5708.0, 5551.0, 5260.0, 5376.0, 5524.0, 5400.0, 5681.0, 5480.0, 5383.0, 5520.0, 5347.0, 5687.0, 5415.0, 5266.0, 5293.0, 5674.0, 5382.0, 5267.0, 5288.0, 5434.0, 5596.0, 5319.0, 5547.0, 5452.0, 5446.0, 5259.0, 5255.0, 5352.0, 5258.0, 5545.0, 5455.0, 5695.0, 5387.0, 5463.0, 5346.0, 5566.0, 5460.0, 5291.0, 5582.0, 5513.0,

						5647.0, 5592.0, 5268.0, 5558.0, 5285.0, 5627.0, 5276.0, 5408.0, 5546.0, 5491.0, 5622.0, 5332.0, 5650.0, 5601.0, 5325.0, 5678.0, 5393.0, 5666.0, 5697.0, 5388.0, 5432.0, 5712.0, 5280.0, 5252.0, 5505.0, 5317.0, 5344.0, 5316.0, 5257.0, 5507.0
10	5530	9	1	333	1	5700.0, 5319.0, 5397.0, 5323.0, 5606.0, 5276.0, 5383.0, 5507.0, 5292.0, 5315.0, 5487.0, 5609.0, 5573.0, 5259.0, 5396.0, 5385.0, 5348.0, 5668.0, 5601.0, 5288.0, 5313.0, 5670.0, 5277.0, 5634.0, 5482.0, 5361.0, 5643.0, 5284.0, 5533.0, 5635.0, 5467.0, 5478.0, 5338.0, 5525.0, 5535.0, 5322.0, 5381.0, 5560.0, 5424.0, 5367.0, 5458.0, 5433.0, 5614.0, 5598.0, 5715.0, 5326.0, 5684.0, 5481.0, 5563.0, 5395.0, 5464.0, 5674.0, 5580.0, 5496.0, 5639.0, 5335.0, 5554.0, 5268.0, 5392.0, 5390.0, 5488.0, 5466.0, 5314.0, 5561.0, 5698.0, 5401.0, 5536.0, 5417.0, 5355.0, 5475.0, 5473.0, 5562.0, 5521.0, 5629.0, 5273.0, 5406.0, 5523.0, 5402.0, 5710.0, 5435.0, 5490.0, 5706.0, 5549.0, 5405.0, 5512.0, 5550.0, 5672.0, 5559.0, 5461.0, 5531.0, 5430.0, 5719.0, 5539.0, 5714.0, 5331.0, 5403.0, 5568.0, 5354.0, 5500.0, 5662.0
11	5530	9	1	333	1	5485.0, 5713.0, 5456.0, 5579.0, 5337.0, 5347.0, 5463.0, 5455.0, 5488.0, 5273.0, 5527.0, 5305.0, 5487.0, 5261.0, 5580.0, 5521.0, 5355.0, 5427.0, 5600.0, 5561.0, 5542.0, 5296.0, 5392.0, 5717.0, 5692.0, 5457.0, 5637.0, 5346.0, 5477.0, 5602.0, 5499.0, 5385.0, 5412.0, 5468.0, 5264.0, 5484.0, 5532.0, 5696.0, 5680.0, 5702.0, 5276.0, 5293.0, 5469.0, 5537.0, 5357.0, 5300.0, 5374.0, 5493.0, 5589.0, 5562.0, 5326.0, 5406.0, 5297.0, 5318.0, 5294.0, 5660.0, 5617.0, 5420.0, 5700.0, 5289.0, 5394.0, 5445.0, 5632.0, 5679.0, 5593.0, 5645.0, 5536.0, 5411.0, 5473.0, 5438.0, 5533.0, 5423.0, 5629.0, 5440.0, 5508.0, 5530.0, 5515.0, 5341.0, 5505.0, 5274.0, 5336.0, 5489.0, 5342.0, 5703.0, 5642.0, 5603.0, 5681.0, 5491.0, 5529.0, 5644.0, 5282.0, 5262.0, 5634.0, 5635.0, 5361.0, 5256.0, 5666.0, 5281.0, 5461.0, 5335.0
12	5530	9	1	333	1	5555.0, 5369.0, 5457.0, 5674.0, 5274.0, 5530.0, 5516.0, 5382.0, 5685.0, 5396.0, 5701.0, 5668.0, 5421.0, 5278.0, 5402.0, 5412.0, 5541.0, 5527.0, 5614.0, 5277.0, 5271.0, 5365.0, 5589.0, 5266.0, 5349.0, 5558.0, 5659.0, 5359.0, 5487.0, 5377.0, 5643.0, 5593.0, 5565.0, 5609.0, 5664.0, 5298.0, 5262.0, 5385.0, 5497.0, 5652.0, 5715.0, 5339.0, 5518.0, 5344.0, 5588.0, 5493.0, 5534.0, 5362.0, 5290.0, 5597.0, 5469.0, 5363.0, 5263.0, 5269.0, 5594.0, 5296.0, 5454.0, 5628.0, 5373.0, 5686.0, 5546.0, 5608.0, 5323.0, 5415.0, 5318.0, 5666.0, 5322.0, 5465.0, 5499.0, 5475.0,

						5678.0, 5471.0, 5658.0, 5514.0, 5395.0, 5316.0, 5449.0, 5683.0, 5328.0, 5357.0, 5679.0, 5591.0, 5539.0, 5371.0, 5587.0, 5388.0, 5531.0, 5717.0, 5315.0, 5650.0, 5687.0, 5633.0, 5282.0, 5697.0, 5646.0, 5331.0, 5538.0, 5502.0, 5498.0, 5367.0
13	5530	9	1	333	1	5342.0, 5607.0, 5698.0, 5493.0, 5262.0, 5669.0, 5516.0, 5552.0, 5432.0, 5317.0, 5296.0, 5479.0, 5419.0, 5503.0, 5721.0, 5664.0, 5548.0, 5471.0, 5402.0, 5312.0, 5488.0, 5654.0, 5591.0, 5679.0, 5259.0, 5311.0, 5403.0, 5506.0, 5584.0, 5446.0, 5613.0, 5704.0, 5574.0, 5377.0, 5284.0, 5511.0, 5524.0, 5489.0, 5697.0, 5614.0, 5630.0, 5602.0, 5590.0, 5331.0, 5462.0, 5430.0, 5491.0, 5448.0, 5341.0, 5609.0, 5529.0, 5256.0, 5703.0, 5575.0, 5450.0, 5492.0, 5505.0, 5655.0, 5300.0, 5442.0, 5361.0, 5318.0, 5280.0, 5416.0, 5336.0, 5362.0, 5287.0, 5472.0, 5582.0, 5355.0, 5412.0, 5400.0, 5644.0, 5474.0, 5555.0, 5299.0, 5623.0, 5360.0, 5423.0, 5538.0, 5272.0, 5622.0, 5292.0, 5657.0, 5401.0, 5265.0, 5600.0, 5513.0, 5596.0, 5435.0, 5418.0, 5486.0, 5546.0, 5480.0, 5676.0, 5496.0, 5367.0, 5271.0, 5261.0, 5595.0
14	5530	9	1	333	1	5335.0, 5704.0, 5501.0, 5411.0, 5702.0, 5281.0, 5356.0, 5609.0, 5655.0, 5470.0, 5610.0, 5439.0, 5283.0, 5469.0, 5385.0, 5479.0, 5376.0, 5359.0, 5259.0, 5549.0, 5718.0, 5510.0, 5677.0, 5689.0, 5604.0, 5622.0, 5269.0, 5396.0, 5585.0, 5637.0, 5310.0, 5686.0, 5340.0, 5272.0, 5253.0, 5509.0, 5447.0, 5642.0, 5345.0, 5344.0, 5417.0, 5500.0, 5712.0, 5252.0, 5715.0, 5639.0, 5518.0, 5348.0, 5664.0, 5707.0, 5600.0, 5636.0, 5676.0, 5260.0, 5605.0, 5397.0, 5434.0, 5606.0, 5524.0, 5692.0, 5688.0, 5295.0, 5616.0, 5597.0, 5503.0, 5557.0, 5296.0, 5630.0, 5499.0, 5593.0, 5596.0, 5701.0, 5647.0, 5268.0, 5302.0, 5403.0, 5540.0, 5275.0, 5430.0, 5391.0, 5544.0, 5662.0, 5321.0, 5556.0, 5668.0, 5426.0, 5307.0, 5660.0, 5342.0, 5393.0, 5617.0, 5565.0, 5297.0, 5646.0, 5669.0, 5666.0, 5608.0, 5370.0, 5621.0, 5722.0
15	5530	9	1	333	1	5646.0, 5251.0, 5508.0, 5269.0, 5620.0, 5655.0, 5590.0, 5596.0, 5693.0, 5486.0, 5579.0, 5534.0, 5556.0, 5563.0, 5345.0, 5521.0, 5495.0, 5663.0, 5672.0, 5543.0, 5572.0, 5412.0, 5283.0, 5314.0, 5421.0, 5513.0, 5472.0, 5642.0, 5365.0, 5414.0, 5565.0, 5528.0, 5668.0, 5721.0, 5625.0, 5622.0, 5378.0, 5347.0, 5509.0, 5324.0, 5623.0, 5295.0, 5342.0, 5388.0, 5407.0, 5444.0, 5282.0, 5331.0, 5273.0, 5466.0, 5582.0, 5688.0, 5305.0, 5536.0, 5284.0, 5257.0, 5281.0, 5656.0, 5322.0, 5591.0, 5573.0, 5558.0, 5539.0, 5644.0, 5674.0, 5355.0, 5308.0, 5670.0, 5603.0, 5662.0,

						5418.0, 5408.0, 5457.0, 5609.0, 5615.0, 5554.0, 5504.0, 5715.0, 5581.0, 5461.0, 5617.0, 5312.0, 5719.0, 5552.0, 5618.0, 5555.0, 5368.0, 5527.0, 5701.0, 5385.0, 5561.0, 5490.0, 5679.0, 5468.0, 5429.0, 5606.0, 5380.0, 5334.0, 5702.0, 5643.0
16	5530	9	1	333	1	5531.0, 5480.0, 5650.0, 5558.0, 5352.0, 5293.0, 5589.0, 5319.0, 5382.0, 5266.0, 5562.0, 5585.0, 5307.0, 5475.0, 5567.0, 5373.0, 5311.0, 5628.0, 5316.0, 5692.0, 5500.0, 5631.0, 5492.0, 5610.0, 5393.0, 5663.0, 5625.0, 5468.0, 5282.0, 5341.0, 5454.0, 5465.0, 5450.0, 5388.0, 5611.0, 5626.0, 5310.0, 5600.0, 5326.0, 5682.0, 5519.0, 5713.0, 5489.0, 5325.0, 5253.0, 5463.0, 5543.0, 5723.0, 5314.0, 5602.0, 5347.0, 5286.0, 5565.0, 5553.0, 5376.0, 5460.0, 5719.0, 5496.0, 5685.0, 5424.0, 5354.0, 5649.0, 5613.0, 5273.0, 5703.0, 5652.0, 5605.0, 5621.0, 5309.0, 5634.0, 5256.0, 5561.0, 5359.0, 5716.0, 5659.0, 5372.0, 5617.0, 5324.0, 5704.0, 5361.0, 5619.0, 5321.0, 5367.0, 5681.0, 5517.0, 5668.0, 5477.0, 5581.0, 5686.0, 5453.0, 5306.0, 5577.0, 5423.0, 5383.0, 5624.0, 5457.0, 5509.0, 5524.0, 5340.0, 5548.0
17	5530	9	1	333	1	5344.0, 5532.0, 5674.0, 5488.0, 5479.0, 5607.0, 5422.0, 5464.0, 5691.0, 5574.0, 5296.0, 5474.0, 5508.0, 5503.0, 5596.0, 5496.0, 5463.0, 5623.0, 5619.0, 5285.0, 5693.0, 5700.0, 5627.0, 5448.0, 5330.0, 5679.0, 5257.0, 5286.0, 5468.0, 5304.0, 5695.0, 5512.0, 5546.0, 5692.0, 5625.0, 5664.0, 5453.0, 5366.0, 5637.0, 5533.0, 5287.0, 5565.0, 5485.0, 5370.0, 5598.0, 5588.0, 5553.0, 5384.0, 5482.0, 5534.0, 5677.0, 5601.0, 5523.0, 5563.0, 5394.0, 5501.0, 5562.0, 5408.0, 5611.0, 5589.0, 5425.0, 5495.0, 5672.0, 5428.0, 5522.0, 5591.0, 5634.0, 5275.0, 5707.0, 5688.0, 5676.0, 5620.0, 5290.0, 5657.0, 5469.0, 5371.0, 5261.0, 5263.0, 5379.0, 5659.0, 5458.0, 5375.0, 5382.0, 5316.0, 5413.0, 5444.0, 5354.0, 5697.0, 5690.0, 5645.0, 5455.0, 5462.0, 5650.0, 5526.0, 5335.0, 5497.0, 5723.0, 5545.0, 5642.0, 5402.0
18	5530	9	1	333	1	5681.0, 5563.0, 5476.0, 5616.0, 5467.0, 5512.0, 5310.0, 5624.0, 5503.0, 5382.0, 5365.0, 5301.0, 5320.0, 5376.0, 5385.0, 5587.0, 5402.0, 5648.0, 5513.0, 5416.0, 5528.0, 5548.0, 5454.0, 5429.0, 5724.0, 5695.0, 5468.0, 5403.0, 5543.0, 5555.0, 5577.0, 5716.0, 5604.0, 5581.0, 5362.0, 5580.0, 5330.0, 5672.0, 5414.0, 5483.0, 5569.0, 5499.0, 5449.0, 5388.0, 5425.0, 5686.0, 5446.0, 5370.0, 5663.0, 5652.0, 5453.0, 5350.0, 5560.0, 5271.0, 5439.0, 5426.0, 5690.0, 5688.0, 5309.0, 5533.0, 5315.0, 5484.0, 5395.0, 5280.0, 5264.0, 5487.0, 5316.0, 5461.0, 5578.0, 5463.0,

						5266.0, 5469.0, 5532.0, 5424.0, 5680.0, 5337.0, 5559.0, 5721.0, 5572.0, 5691.0, 5696.0, 5693.0, 5658.0, 5286.0, 5562.0, 5573.0, 5462.0, 5311.0, 5254.0, 5450.0, 5565.0, 5519.0, 5706.0, 5369.0, 5367.0, 5252.0, 5657.0, 5323.0, 5475.0, 5349.0
19	5530	9	1	333	1	5405.0, 5547.0, 5483.0, 5385.0, 5423.0, 5716.0, 5362.0, 5608.0, 5347.0, 5715.0, 5332.0, 5657.0, 5544.0, 5475.0, 5487.0, 5656.0, 5529.0, 5417.0, 5331.0, 5351.0, 5468.0, 5419.0, 5616.0, 5573.0, 5506.0, 5534.0, 5271.0, 5704.0, 5320.0, 5369.0, 5532.0, 5343.0, 5489.0, 5297.0, 5283.0, 5710.0, 5629.0, 5723.0, 5277.0, 5491.0, 5253.0, 5613.0, 5486.0, 5307.0, 5494.0, 5394.0, 5280.0, 5516.0, 5250.0, 5633.0, 5519.0, 5660.0, 5661.0, 5571.0, 5285.0, 5299.0, 5622.0, 5290.0, 5664.0, 5658.0, 5327.0, 5655.0, 5641.0, 5507.0, 5261.0, 5594.0, 5639.0, 5496.0, 5281.0, 5564.0, 5318.0, 5640.0, 5345.0, 5619.0, 5326.0, 5644.0, 5536.0, 5404.0, 5292.0, 5393.0, 5321.0, 5579.0, 5678.0, 5667.0, 5692.0, 5562.0, 5432.0, 5288.0, 5357.0, 5595.0, 5490.0, 5481.0, 5522.0, 5497.0, 5703.0, 5500.0, 5651.0, 5370.0, 5473.0, 5505.0
20	5530	9	1	333	1	5564.0, 5636.0, 5622.0, 5644.0, 5476.0, 5274.0, 5392.0, 5711.0, 5290.0, 5368.0, 5384.0, 5424.0, 5620.0, 5343.0, 5462.0, 5535.0, 5653.0, 5316.0, 5417.0, 5313.0, 5311.0, 5590.0, 5505.0, 5407.0, 5404.0, 5601.0, 5557.0, 5398.0, 5303.0, 5570.0, 5326.0, 5467.0, 5538.0, 5366.0, 5317.0, 5614.0, 5402.0, 5328.0, 5683.0, 5645.0, 5647.0, 5375.0, 5528.0, 5463.0, 5722.0, 5252.0, 5478.0, 5691.0, 5344.0, 5378.0, 5568.0, 5553.0, 5649.0, 5446.0, 5539.0, 5715.0, 5391.0, 5502.0, 5390.0, 5412.0, 5597.0, 5405.0, 5584.0, 5474.0, 5262.0, 5529.0, 5606.0, 5706.0, 5572.0, 5607.0, 5383.0, 5678.0, 5555.0, 5695.0, 5432.0, 5449.0, 5253.0, 5556.0, 5485.0, 5486.0, 5559.0, 5357.0, 5280.0, 5415.0, 5719.0, 5533.0, 5579.0, 5623.0, 5480.0, 5255.0, 5524.0, 5503.0, 5414.0, 5297.0, 5351.0, 5481.0, 5338.0, 5497.0, 5468.0, 5713.0
21	5530	9	1	333	1	5262.0, 5275.0, 5576.0, 5525.0, 5582.0, 5699.0, 5256.0, 5429.0, 5719.0, 5512.0, 5360.0, 5401.0, 5661.0, 5507.0, 5609.0, 5430.0, 5367.0, 5481.0, 5627.0, 5476.0, 5570.0, 5712.0, 5302.0, 5329.0, 5499.0, 5690.0, 5320.0, 5488.0, 5669.0, 5285.0, 5642.0, 5342.0, 5532.0, 5702.0, 5597.0, 5255.0, 5375.0, 5663.0, 5434.0, 5330.0, 5708.0, 5366.0, 5454.0, 5440.0, 5307.0, 5287.0, 5641.0, 5590.0, 5572.0, 5354.0, 5464.0, 5392.0, 5473.0, 5599.0, 5501.0, 5706.0, 5673.0, 5704.0, 5377.0, 5695.0, 5283.0, 5310.0, 5386.0, 5593.0, 5462.0, 5603.0, 5629.0, 5608.0, 5496.0, 5482.0,

						5347.0, 5542.0, 5463.0, 5553.0, 5422.0, 5432.0, 5556.0, 5448.0, 5679.0, 5504.0, 5421.0, 5615.0, 5258.0, 5511.0, 5676.0, 5394.0, 5413.0, 5445.0, 5587.0, 5380.0, 5450.0, 5471.0, 5502.0, 5447.0, 5328.0, 5604.0, 5423.0, 5327.0, 5433.0, 5431.0
22	5530	9	1	333	1	5494.0, 5681.0, 5671.0, 5251.0, 5345.0, 5683.0, 5592.0, 5407.0, 5424.0, 5547.0, 5704.0, 5609.0, 5270.0, 5368.0, 5719.0, 5720.0, 5627.0, 5389.0, 5493.0, 5403.0, 5259.0, 5492.0, 5267.0, 5605.0, 5323.0, 5537.0, 5377.0, 5438.0, 5288.0, 5526.0, 5271.0, 5446.0, 5544.0, 5516.0, 5619.0, 5520.0, 5431.0, 5617.0, 5311.0, 5328.0, 5668.0, 5258.0, 5642.0, 5392.0, 5325.0, 5351.0, 5381.0, 5658.0, 5341.0, 5506.0, 5636.0, 5326.0, 5589.0, 5652.0, 5511.0, 5593.0, 5434.0, 5567.0, 5675.0, 5538.0, 5705.0, 5306.0, 5699.0, 5709.0, 5383.0, 5447.0, 5571.0, 5484.0, 5302.0, 5644.0, 5401.0, 5285.0, 5590.0, 5366.0, 5404.0, 5413.0, 5669.0, 5505.0, 5679.0, 5471.0, 5268.0, 5458.0, 5527.0, 5599.0, 5390.0, 5405.0, 5344.0, 5265.0, 5357.0, 5645.0, 5512.0, 5528.0, 5676.0, 5634.0, 5686.0, 5715.0, 5442.0, 5454.0, 5290.0, 5333.0
23	5530	9	1	333	1	5698.0, 5421.0, 5302.0, 5500.0, 5704.0, 5316.0, 5522.0, 5345.0, 5383.0, 5569.0, 5532.0, 5423.0, 5357.0, 5684.0, 5372.0, 5715.0, 5376.0, 5293.0, 5286.0, 5661.0, 5578.0, 5354.0, 5627.0, 5620.0, 5396.0, 5539.0, 5451.0, 5394.0, 5454.0, 5641.0, 5443.0, 5365.0, 5492.0, 5552.0, 5479.0, 5664.0, 5426.0, 5431.0, 5706.0, 5494.0, 5462.0, 5623.0, 5720.0, 5309.0, 5387.0, 5470.0, 5257.0, 5598.0, 5411.0, 5525.0, 5660.0, 5273.0, 5588.0, 5467.0, 5531.0, 5610.0, 5702.0, 5461.0, 5458.0, 5353.0, 5722.0, 5626.0, 5584.0, 5612.0, 5708.0, 5565.0, 5417.0, 5355.0, 5562.0, 5687.0, 5446.0, 5340.0, 5546.0, 5260.0, 5297.0, 5419.0, 5367.0, 5625.0, 5280.0, 5351.0, 5375.0, 5682.0, 5549.0, 5547.0, 5657.0, 5476.0, 5296.0, 5410.0, 5436.0, 5651.0, 5571.0, 5593.0, 5699.0, 5368.0, 5259.0, 5668.0, 5336.0, 5490.0, 5649.0, 5342.0
24	5530	9	1	333	1	5602.0, 5584.0, 5722.0, 5681.0, 5367.0, 5724.0, 5677.0, 5430.0, 5532.0, 5317.0, 5484.0, 5597.0, 5353.0, 5542.0, 5327.0, 5338.0, 5501.0, 5451.0, 5363.0, 5425.0, 5636.0, 5654.0, 5629.0, 5513.0, 5260.0, 5662.0, 5314.0, 5640.0, 5329.0, 5700.0, 5652.0, 5428.0, 5301.0, 5490.0, 5534.0, 5683.0, 5572.0, 5285.0, 5385.0, 5716.0, 5399.0, 5376.0, 5408.0, 5311.0, 5543.0, 5570.0, 5627.0, 5587.0, 5519.0, 5564.0, 5268.0, 5568.0, 5359.0, 5689.0, 5709.0, 5379.0, 5479.0, 5443.0, 5653.0, 5686.0, 5623.0, 5562.0, 5635.0, 5369.0, 5339.0, 5523.0, 5548.0, 5340.0, 5412.0, 5462.0,

						5284.0, 5414.0, 5502.0, 5585.0, 5481.0, 5531.0, 5272.0, 5598.0, 5586.0, 5576.0, 5358.0, 5675.0, 5546.0, 5663.0, 5555.0, 5305.0, 5426.0, 5540.0, 5420.0, 5498.0, 5596.0, 5607.0, 5337.0, 5463.0, 5261.0, 5690.0, 5672.0, 5396.0, 5703.0, 5400.0
25	5530	9	1	333	1	5421.0, 5352.0, 5425.0, 5361.0, 5612.0, 5265.0, 5424.0, 5623.0, 5435.0, 5368.0, 5657.0, 5650.0, 5402.0, 5395.0, 5302.0, 5682.0, 5597.0, 5620.0, 5717.0, 5483.0, 5391.0, 5252.0, 5322.0, 5696.0, 5296.0, 5271.0, 5611.0, 5652.0, 5519.0, 5571.0, 5376.0, 5375.0, 5422.0, 5373.0, 5538.0, 5724.0, 5512.0, 5524.0, 5319.0, 5681.0, 5299.0, 5384.0, 5699.0, 5367.0, 5592.0, 5460.0, 5705.0, 5572.0, 5453.0, 5342.0, 5525.0, 5259.0, 5281.0, 5405.0, 5412.0, 5282.0, 5491.0, 5398.0, 5399.0, 5289.0, 5493.0, 5290.0, 5594.0, 5362.0, 5658.0, 5336.0, 5680.0, 5487.0, 5536.0, 5300.0, 5270.0, 5438.0, 5544.0, 5403.0, 5548.0, 5411.0, 5703.0, 5326.0, 5450.0, 5477.0, 5638.0, 5381.0, 5445.0, 5645.0, 5516.0, 5280.0, 5436.0, 5501.0, 5588.0, 5369.0, 5678.0, 5383.0, 5451.0, 5567.0, 5409.0, 5587.0, 5511.0, 5692.0, 5505.0, 5268.0
26	5530	9	1	333	1	5714.0, 5684.0, 5673.0, 5701.0, 5349.0, 5384.0, 5257.0, 5647.0, 5358.0, 5466.0, 5508.0, 5273.0, 5393.0, 5519.0, 5620.0, 5562.0, 5331.0, 5665.0, 5313.0, 5623.0, 5484.0, 5666.0, 5707.0, 5395.0, 5505.0, 5439.0, 5706.0, 5487.0, 5436.0, 5280.0, 5380.0, 5560.0, 5634.0, 5470.0, 5458.0, 5513.0, 5659.0, 5536.0, 5633.0, 5272.0, 5642.0, 5302.0, 5424.0, 5723.0, 5342.0, 5461.0, 5441.0, 5712.0, 5545.0, 5645.0, 5454.0, 5716.0, 5561.0, 5614.0, 5330.0, 5369.0, 5297.0, 5256.0, 5564.0, 5540.0, 5269.0, 5283.0, 5341.0, 5652.0, 5398.0, 5362.0, 5352.0, 5655.0, 5724.0, 5593.0, 5489.0, 5566.0, 5605.0, 5416.0, 5698.0, 5274.0, 5711.0, 5278.0, 5532.0, 5495.0, 5279.0, 5658.0, 5446.0, 5253.0, 5287.0, 5431.0, 5432.0, 5413.0, 5261.0, 5332.0, 5308.0, 5569.0, 5626.0, 5438.0, 5681.0, 5557.0, 5465.0, 5493.0, 5300.0, 5480.0
27	5530	9	1	333	1	5268.0, 5309.0, 5357.0, 5706.0, 5580.0, 5591.0, 5686.0, 5385.0, 5611.0, 5535.0, 5644.0, 5387.0, 5670.0, 5556.0, 5664.0, 5509.0, 5613.0, 5652.0, 5442.0, 5602.0, 5597.0, 5716.0, 5282.0, 5336.0, 5678.0, 5675.0, 5379.0, 5505.0, 5353.0, 5687.0, 5334.0, 5722.0, 5593.0, 5337.0, 5592.0, 5380.0, 5601.0, 5698.0, 5623.0, 5635.0, 5473.0, 5399.0, 5312.0, 5444.0, 5567.0, 5669.0, 5649.0, 5538.0, 5265.0, 5370.0, 5643.0, 5572.0, 5684.0, 5452.0, 5663.0, 5329.0, 5691.0, 5569.0, 5430.0, 5566.0, 5427.0, 5554.0, 5688.0, 5307.0, 5574.0, 5323.0, 5661.0, 5677.0, 5696.0, 5362.0,

						5616.0, 5333.0, 5281.0, 5453.0, 5474.0, 5540.0, 5633.0, 5404.0, 5527.0, 5391.0, 5375.0, 5609.0, 5619.0, 5557.0, 5463.0, 5553.0, 5516.0, 5534.0, 5406.0, 5405.0, 5365.0, 5302.0, 5342.0, 5703.0, 5679.0, 5610.0, 5376.0, 5528.0, 5443.0, 5694.0
28	5530	9	1	333	1	5633.0, 5323.0, 5292.0, 5286.0, 5705.0, 5364.0, 5433.0, 5627.0, 5722.0, 5360.0, 5393.0, 5401.0, 5626.0, 5692.0, 5547.0, 5501.0, 5529.0, 5335.0, 5377.0, 5604.0, 5441.0, 5465.0, 5428.0, 5495.0, 5338.0, 5514.0, 5403.0, 5490.0, 5308.0, 5283.0, 5699.0, 5326.0, 5425.0, 5709.0, 5260.0, 5459.0, 5596.0, 5472.0, 5520.0, 5359.0, 5542.0, 5351.0, 5635.0, 5497.0, 5448.0, 5714.0, 5525.0, 5551.0, 5666.0, 5667.0, 5631.0, 5333.0, 5659.0, 5528.0, 5486.0, 5254.0, 5331.0, 5418.0, 5402.0, 5483.0, 5597.0, 5554.0, 5534.0, 5421.0, 5526.0, 5685.0, 5606.0, 5419.0, 5654.0, 5322.0, 5447.0, 5679.0, 5456.0, 5375.0, 5354.0, 5668.0, 5352.0, 5394.0, 5427.0, 5318.0, 5556.0, 5550.0, 5474.0, 5665.0, 5344.0, 5643.0, 5446.0, 5539.0, 5590.0, 5350.0, 5320.0, 5453.0, 5284.0, 5316.0, 5707.0, 5559.0, 5413.0, 5363.0, 5385.0, 5396.0
29	5530	9	1	333	1	5318.0, 5699.0, 5481.0, 5326.0, 5463.0, 5279.0, 5419.0, 5325.0, 5582.0, 5523.0, 5378.0, 5377.0, 5664.0, 5573.0, 5267.0, 5634.0, 5273.0, 5611.0, 5444.0, 5566.0, 5693.0, 5475.0, 5389.0, 5584.0, 5606.0, 5644.0, 5503.0, 5628.0, 5528.0, 5695.0, 5706.0, 5538.0, 5472.0, 5703.0, 5268.0, 5564.0, 5310.0, 5323.0, 5266.0, 5288.0, 5569.0, 5301.0, 5681.0, 5688.0, 5609.0, 5322.0, 5450.0, 5470.0, 5614.0, 5696.0, 5416.0, 5352.0, 5436.0, 5557.0, 5282.0, 5430.0, 5541.0, 5658.0, 5559.0, 5613.0, 5708.0, 5423.0, 5671.0, 5374.0, 5486.0, 5722.0, 5327.0, 5420.0, 5694.0, 5604.0, 5496.0, 5381.0, 5677.0, 5369.0, 5594.0, 5580.0, 5647.0, 5467.0, 5405.0, 5663.0, 5665.0, 5306.0, 5590.0, 5576.0, 5328.0, 5334.0, 5551.0, 5668.0, 5324.0, 5626.0, 5686.0, 5464.0, 5622.0, 5371.0, 5438.0, 5617.0, 5401.0, 5514.0, 5285.0, 5621.0
30	5530	9	1	333	1	5539.0, 5581.0, 5698.0, 5634.0, 5631.0, 5508.0, 5700.0, 5434.0, 5350.0, 5415.0, 5402.0, 5258.0, 5478.0, 5546.0, 5292.0, 5405.0, 5515.0, 5315.0, 5697.0, 5406.0, 5412.0, 5718.0, 5494.0, 5704.0, 5570.0, 5458.0, 5712.0, 5442.0, 5632.0, 5684.0, 5607.0, 5372.0, 5287.0, 5665.0, 5451.0, 5318.0, 5560.0, 5690.0, 5534.0, 5469.0, 5713.0, 5487.0, 5291.0, 5370.0, 5341.0, 5321.0, 5481.0, 5663.0, 5503.0, 5364.0, 5263.0, 5348.0, 5313.0, 5443.0, 5495.0, 5324.0, 5578.0, 5447.0, 5436.0, 5293.0, 5591.0, 5656.0, 5283.0, 5359.0, 5408.0, 5717.0, 5418.0, 5437.0, 5435.0, 5692.0

						5509.0, 5683.0, 5274.0, 5679.0, 5257.0, 5643.0, 5453.0, 5476.0, 5721.0, 5702.0, 5346.0, 5311.0, 5644.0, 5384.0, 5590.0, 5369.0, 5693.0, 5358.0, 5433.0, 5689.0, 5281.0, 5498.0, 5500.0, 5522.0, 5492.0, 5604.0, 5556.0, 5674.0, 5594.0, 5651.0
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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:

Test Mode: Bridge

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	23	1.5	176	1
2	5530	29	4.1	170	1
3	5530	26	4.3	210	1
4	5530	25	1.4	214	1
5	5530	29	4.5	197	1
6	5530	24	3.7	157	1
7	5530	28	2	158	1
8	5530	29	3.8	219	1
9	5530	24	1.3	192	1
10	5530	23	2.3	159	1
11	5530	28	2.2	174	1
12	5530	24	1.4	174	1
13	5530	29	1.4	181	1
14	5530	23	2.4	227	1
15	5530	25	4.8	197	1
16	5530	29	1.5	181	1
17	5530	25	2.9	196	0
18	5530	29	3.1	167	1
19	5530	29	1	221	1
20	5530	26	4.6	189	1
21	5530	27	1	225	0
22	5530	27	1.9	187	0
23	5530	29	1.6	183	0
24	5530	24	1.3	165	1
25	5530	26	1.6	175	1
26	5530	26	1.6	153	1
27	5530	26	4.6	218	1
28	5530	27	3.4	171	1
29	5530	23	1.1	191	1
30	5530	26	3.4	170	1
Detection Percentage: 86.7 % (>60%)					

******* END OF REPORT *******