

FCC PART 15.407
DYNAMIC FREQUENCY SELECTION
TEST REPORT

For

INGENICO

9 Avenue de la gare - Rovaltain TGV BP25156 26958 Valence Cedex 9, France

FCC ID: XKB-DX8BASEW2

Report Type: Original Report	Product Type: Smart POS Terminal BASE
Report Number:	XMDN210525-19225E-00C
Report Date:	2021-06-25
Reviewed By:	Ivan Cao Assistant Manager 
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Dongguan) No.12, Pulong East 1 st Road, Tangxia Town, Dongguan, Guangdong, China Tel: +86-769-86858888 Fax: +86-769-86858891 www.baclcorp.com.cn

TABLE OF CONTENTS

GENERAL INFORMATION.....	3
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	3
OBJECTIVE	3
TEST METHODOLOGY	3
TEST FACILITY	3
DECLARATIONS.....	4
SYSTEM TEST CONFIGURATION.....	5
DESCRIPTION OF TEST CONFIGURATION	5
EUT EXERCISE SOFTWARE	5
EQUIPMENT MODIFICATIONS	5
SUPPORT EQUIPMENT LIST AND DETAILS	5
EXTERNAL CABLE.....	5
SUMMARY OF TEST RESULTS	6
APPLICABLE STANDARDS.....	7
DFS REQUIREMENT	7
DFS MEASUREMENT SYSTEM.....	11
SYSTEM BLOCK DIAGRAM	11
CONDUCTED METHOD	12
RADIATED METHOD	13
TEST PROCEDURE	13
TEST RESULTS.....	14
DESCRIPTION OF EUT	14
TEST EQUIPMENT LIST AND DETAILS.....	14
RADAR WAVEFORM CALIBRATION	15
TEST ENVIRONMENTAL CONDITIONS	15
CHANNEL AVAILABILITY CHECK TIME (CAC)	20
TEST PROCEDURE	20
CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME	23
TEST PROCEDURE	23
TEST RESULTS	23
NON-OCCUPANCY PERIOD.....	26
TEST PROCEDURE	26
TEST RESULT	26
DETECTION BANDWIDTH.....	27
TEST PROCEDURE	27
TEST RESULT	27
STATISTICAL PERFORMANCE CHECK	31
BRIDGE AND/OR MESH MODE.....	126

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

EUT Name:		Smart POS Terminal BASE
EUT Model:		AXIUM DX8000-BASE-W2
FCC Operation Frequency:		5150-5250 MHz, 5250-5350 MHz, 5470-5725MHz, 5725-5850 MHz
Maximum Average Output Power (Conducted):		5150-5250 MHz:18.66 dBm 5250-5350 MHz:18.26 dBm 5470-5725MHz: 20.07 dBm 5725-5850 MHz: 18.25 dBm
Maximum Average Output Power (EIRP):		5150-5250 MHz: 22.86 dBm 5250-5350 MHz: 23.56 dBm 5470-5725MHz: 23.35 dBm 5725-5850 MHz: 21.15 dBm
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:		XMDN210525-19225E-RF-S1
EUT Received Date:		2021.05.18
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.

This report cannot be reproduced except in full, without prior written approval of the Company.

This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

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

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

EUT Exercise Software

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

Equipment Modifications

N/A

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Dell	Laptop	E6410	00426-OEM-8992662-00497
Dell	Laptop	E6410	00426-OEM-7854469-404555

External Cable

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
RJ45	NO	NO	10	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
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

Table 4: DFS Response Requirement Values

Parameter	Value
<i>Non-occupancy period</i>	Minimum 30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U- NII 99% transmission power bandwidth. See Note 3.
Note 1: <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The <i>Channel Closing Transmission Time</i> is comprised of 200 milliseconds starting at the beginning of the <i>Channel Move Time</i> plus any additional intermittent control signals required to facilitate a <i>Channel</i> move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the <i>U-NII Detection Bandwidth</i> detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

Table 5 – Short Pulse Radar Test Waveforms

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

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B.

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

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

Table 5a - Pulse Repetition Intervals Values for Test A

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

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

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

Table 6 – Long Pulse Radar Test Waveform

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

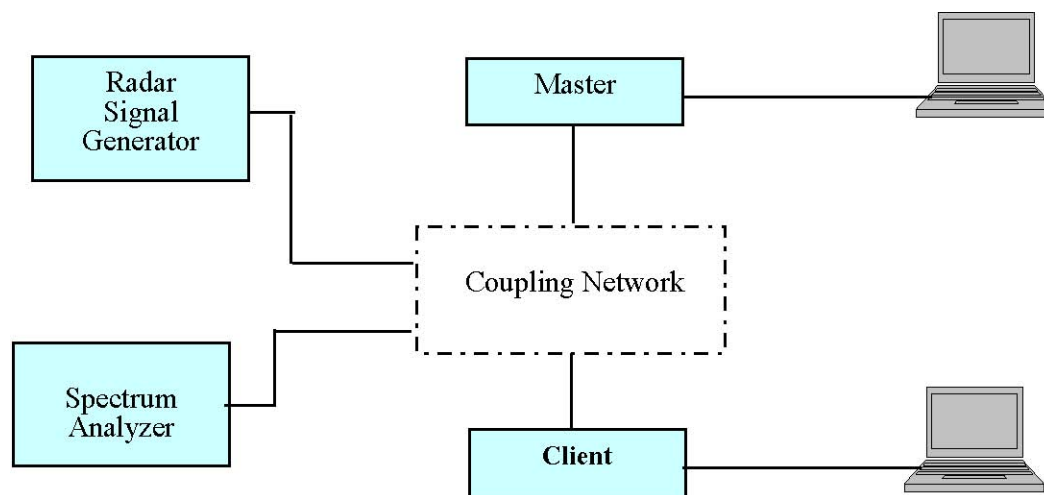
Table 7 – Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (μ sec)	PRI (μ sec)	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

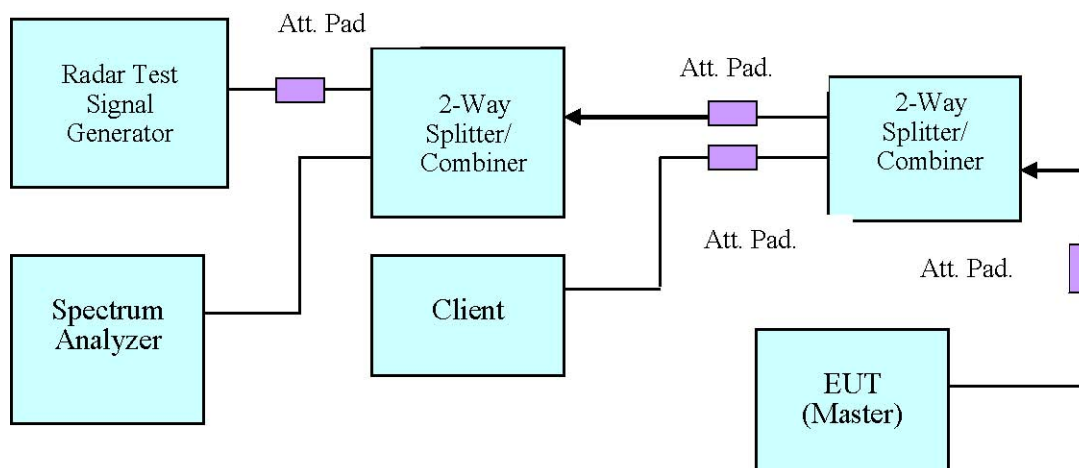
DFS Measurement System

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

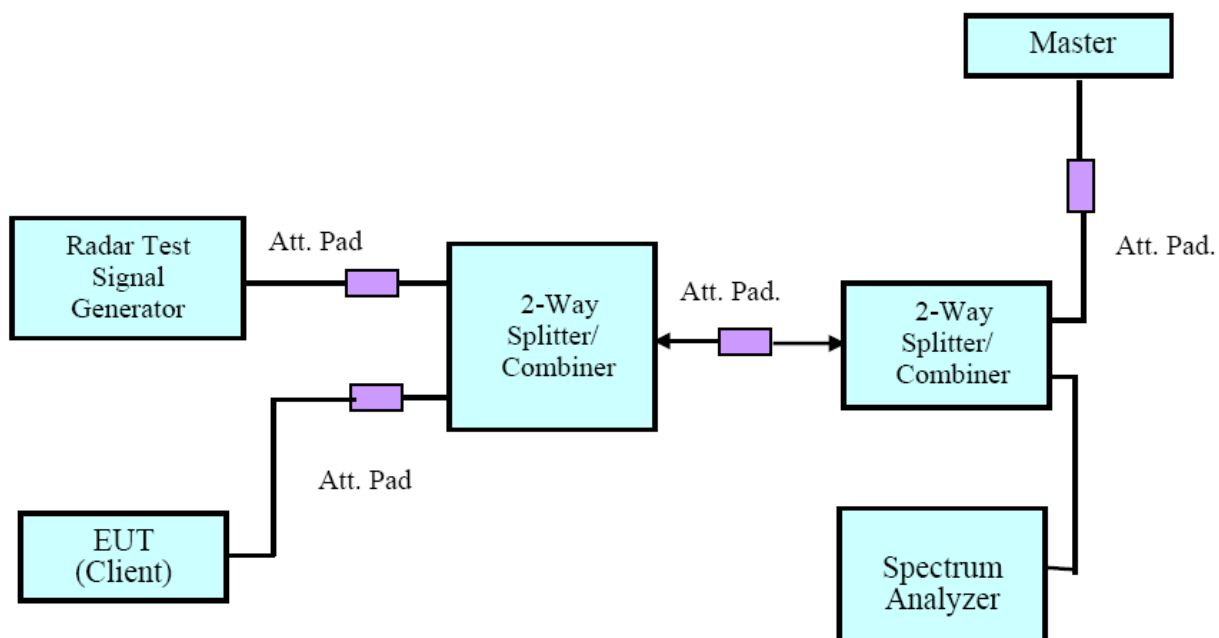
System Block Diagram



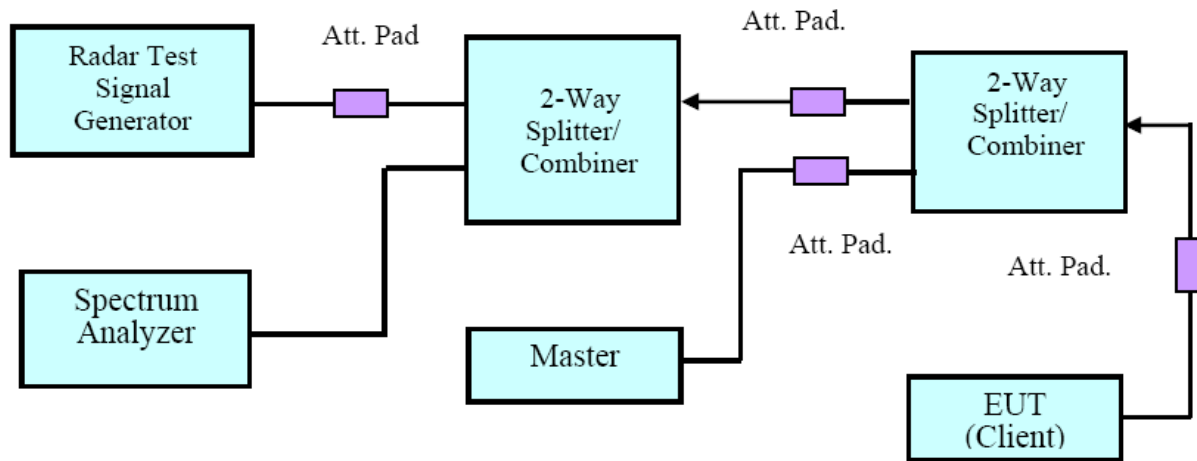
Conducted Method



Setup for Master with injection at the Master

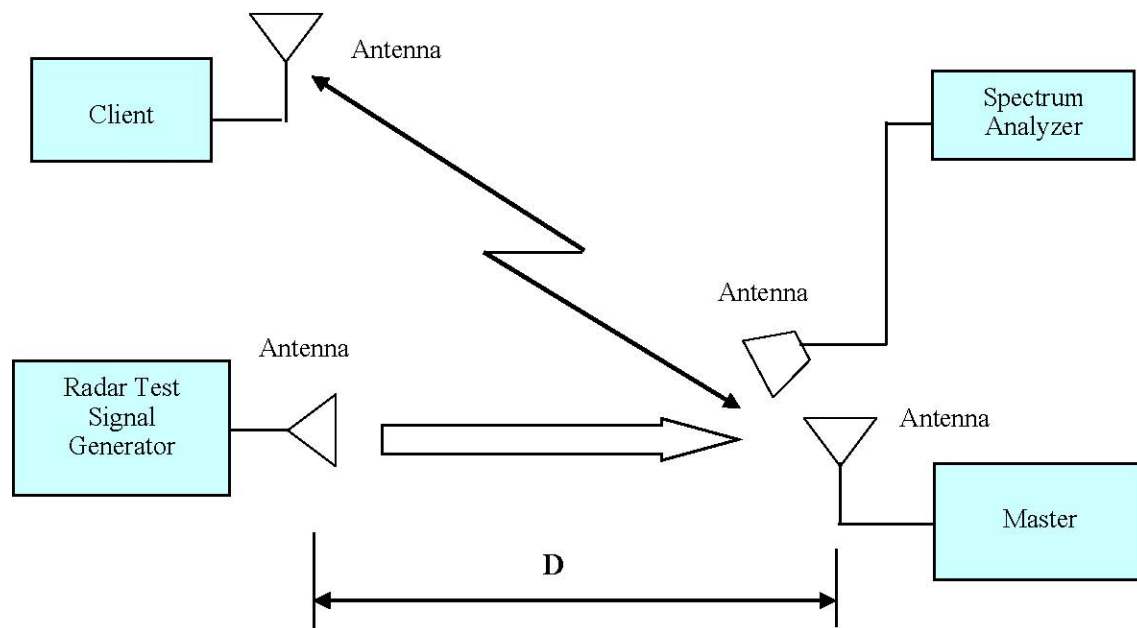


Setup for Client with injection at the Master



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 -64 dBm.

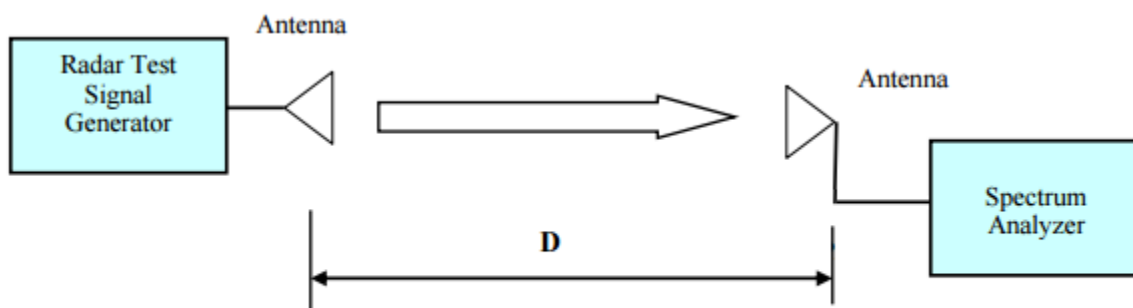
WLAN traffic is generated by streaming the video file TestFile.mpg, this file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. The file is streamed from the Access Point to the Client in full motion video mode using the media 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	SG43360054	2020-07-07	2021-07-07
Ditorn	Splitter/Combiner	D3C4080	SN2244	N/A	N/A
TDK RF	horn antenna	HRN-0118	130 084	2018-10-12	2021-10-12
ETS LINDGREN	horn antenna	3115	000 527 35	2018-10-12	2021-10-12

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

Radar Waveform Calibration



Radiated Calibration Setup Block Diagram

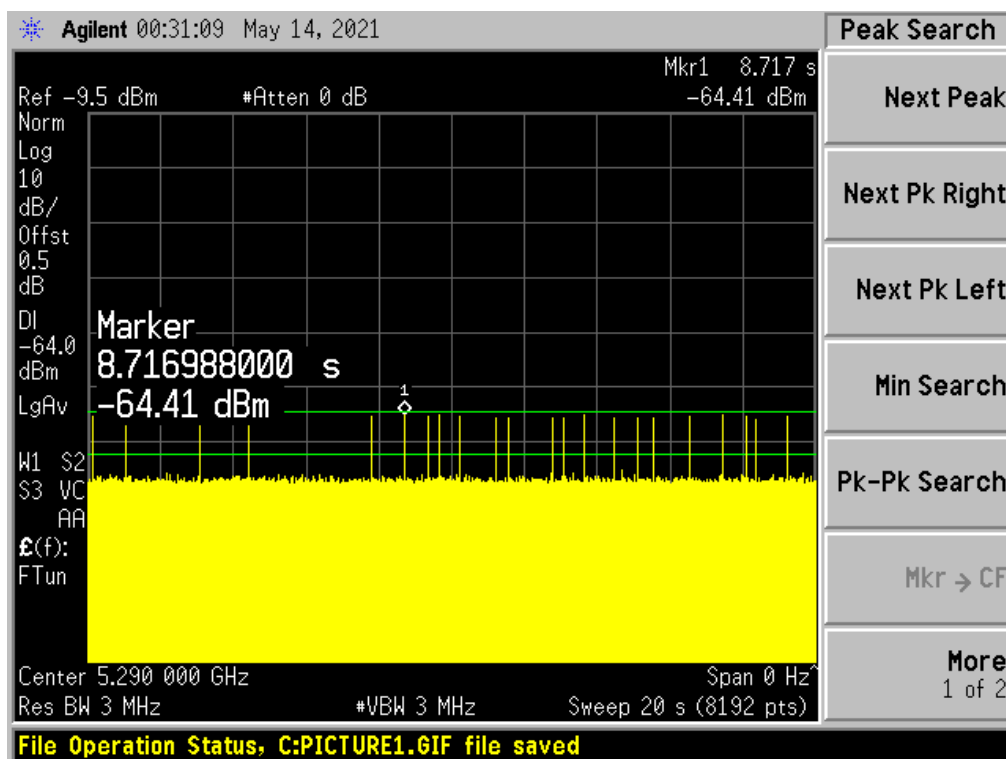
Test Environmental Conditions

Temperature:	28.4~28.7 °C
Relative Humidity:	47~49 %
ATM Pressure:	100.3 kPa
Tester:	Theshy Xie
Test Date:	2021-05-13~2021-05-14

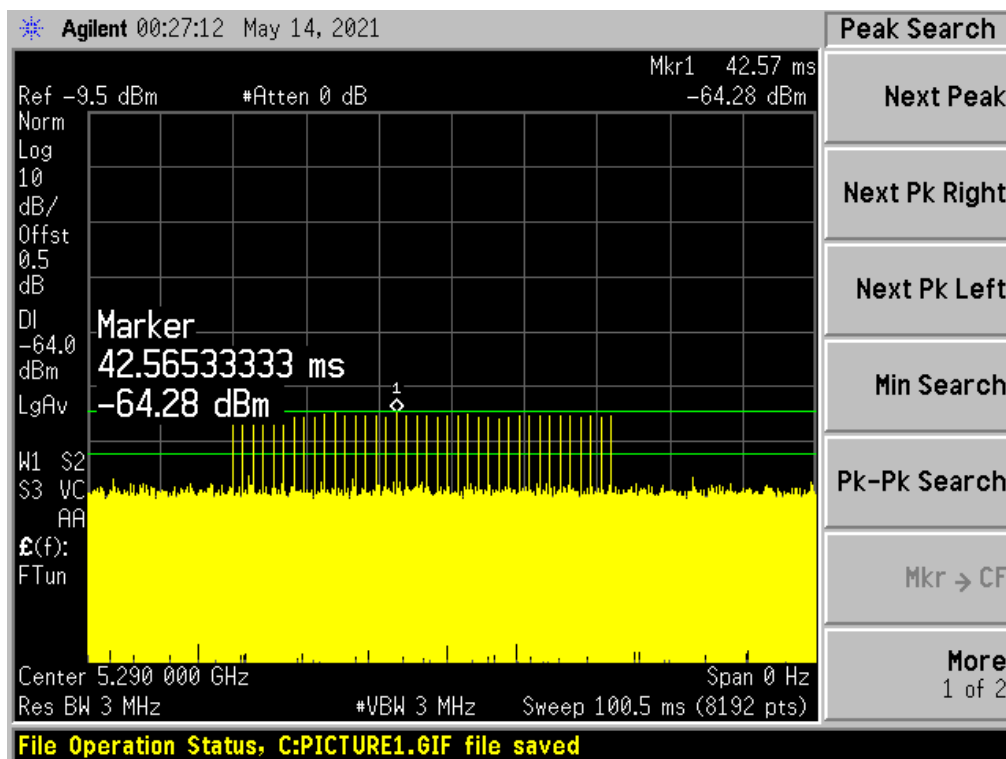
Plots of Radar Waveforms

5290 MHz:

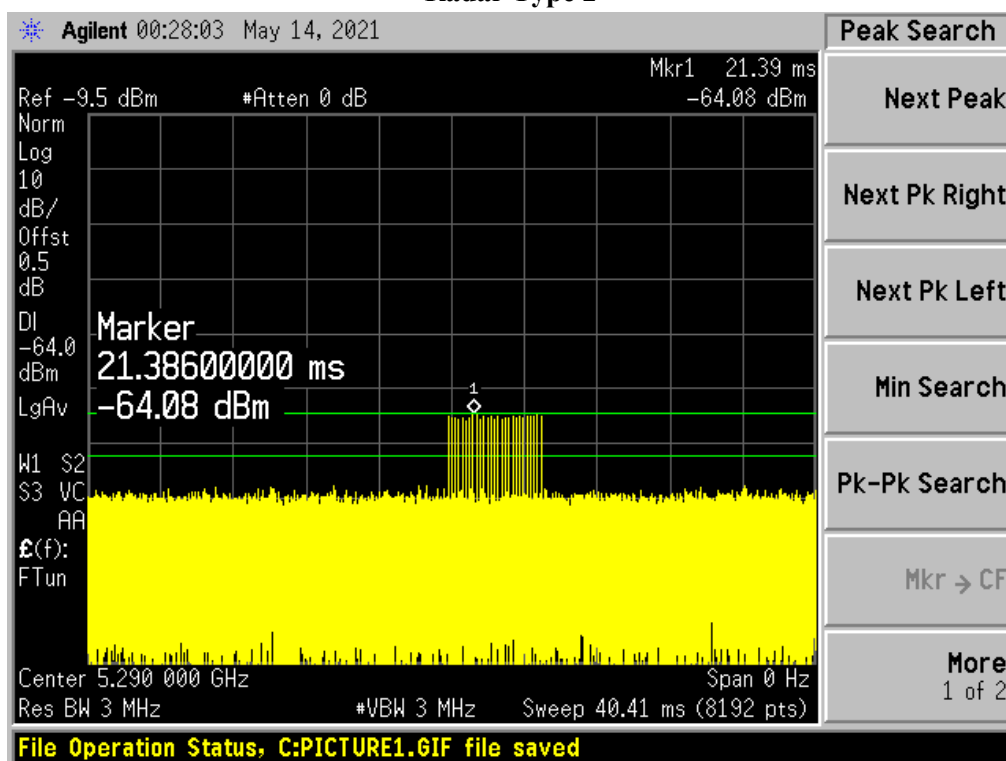
Radar Type 1A



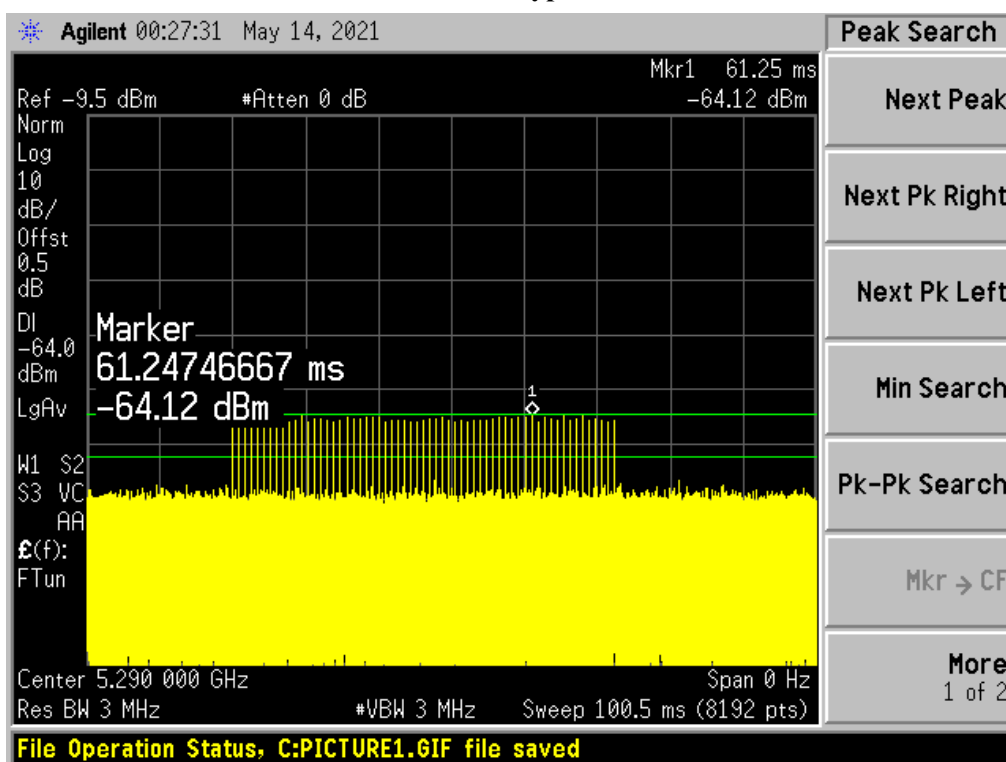
Radar Type 1B



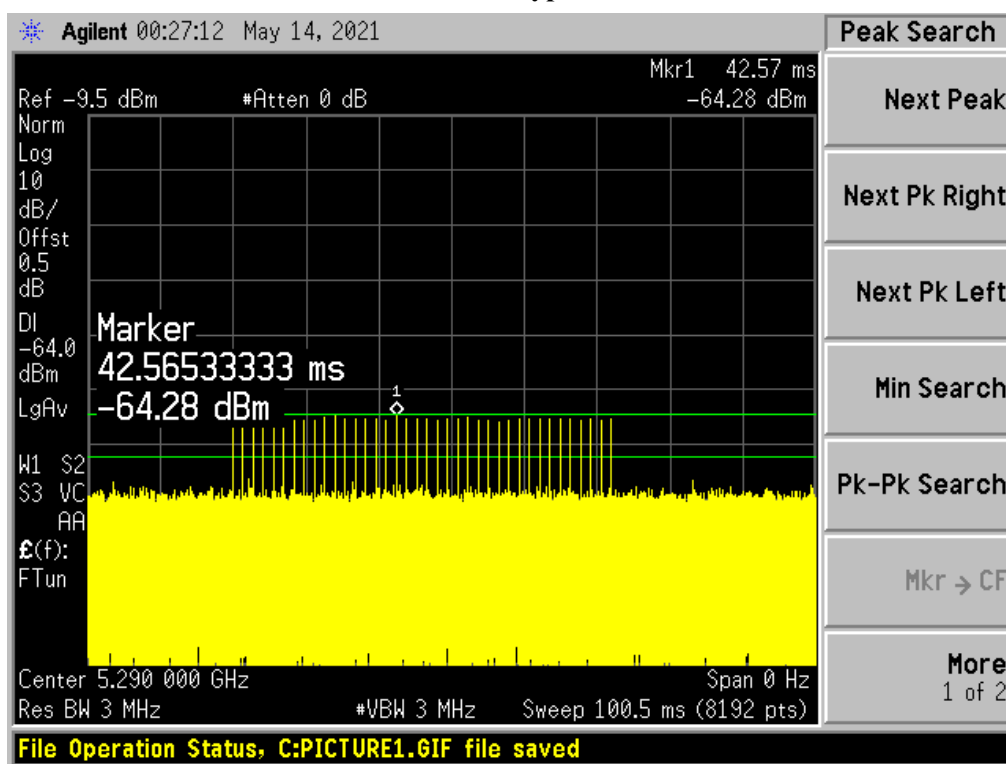
Radar Type 2



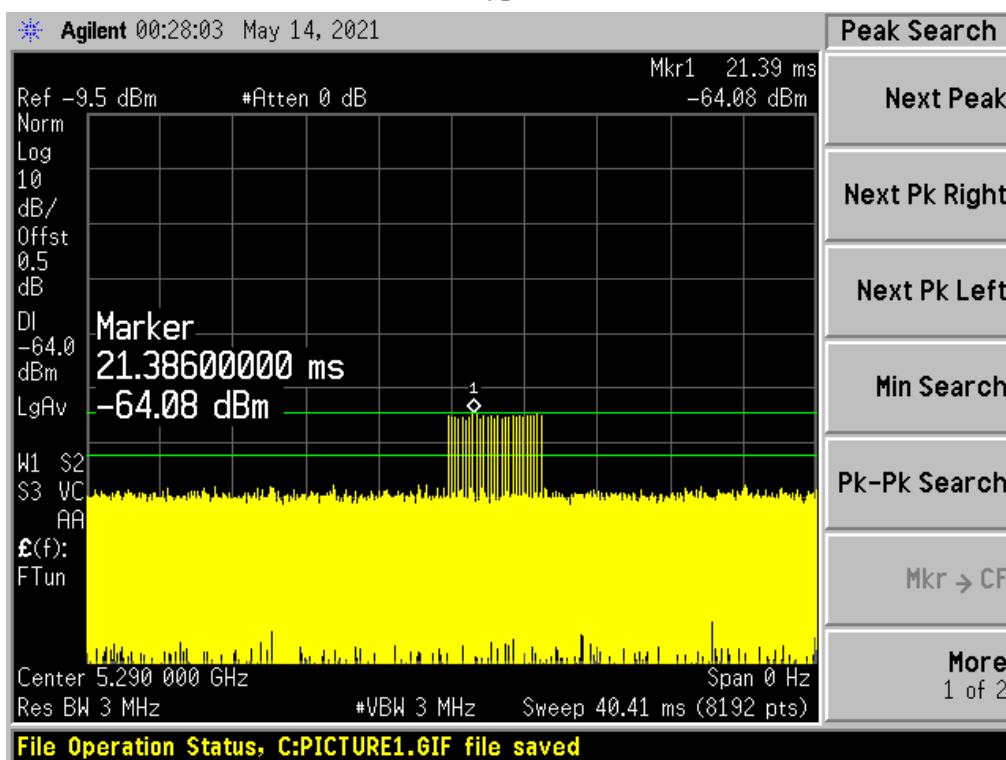
Radar Type 3



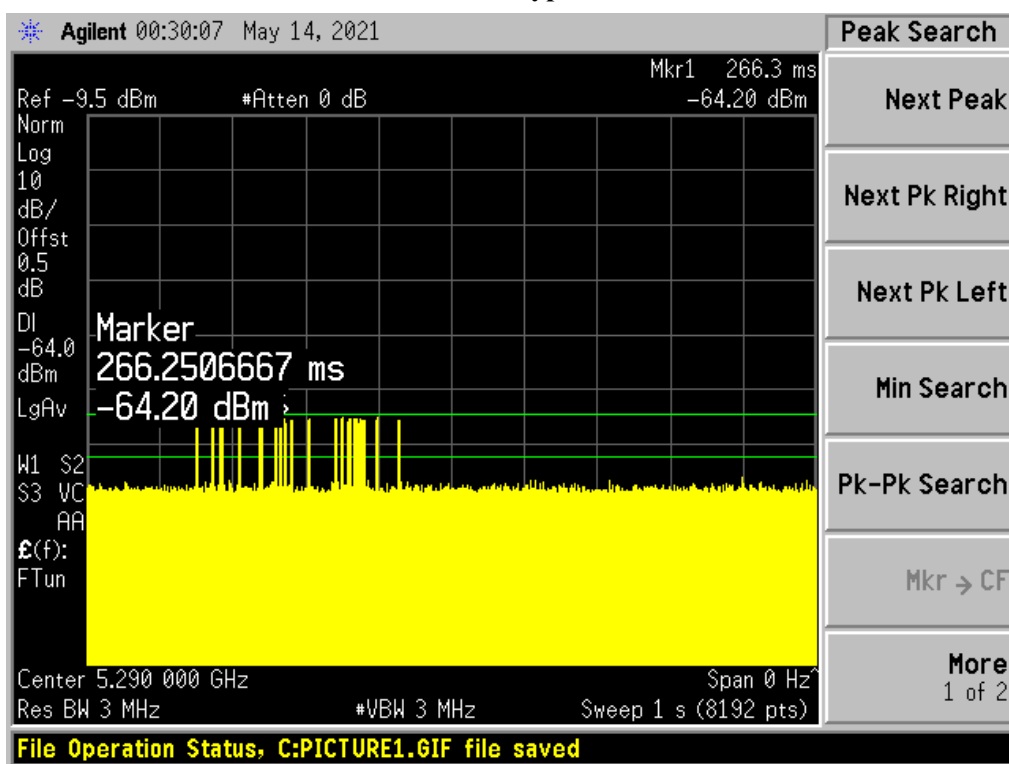
Radar Type 4



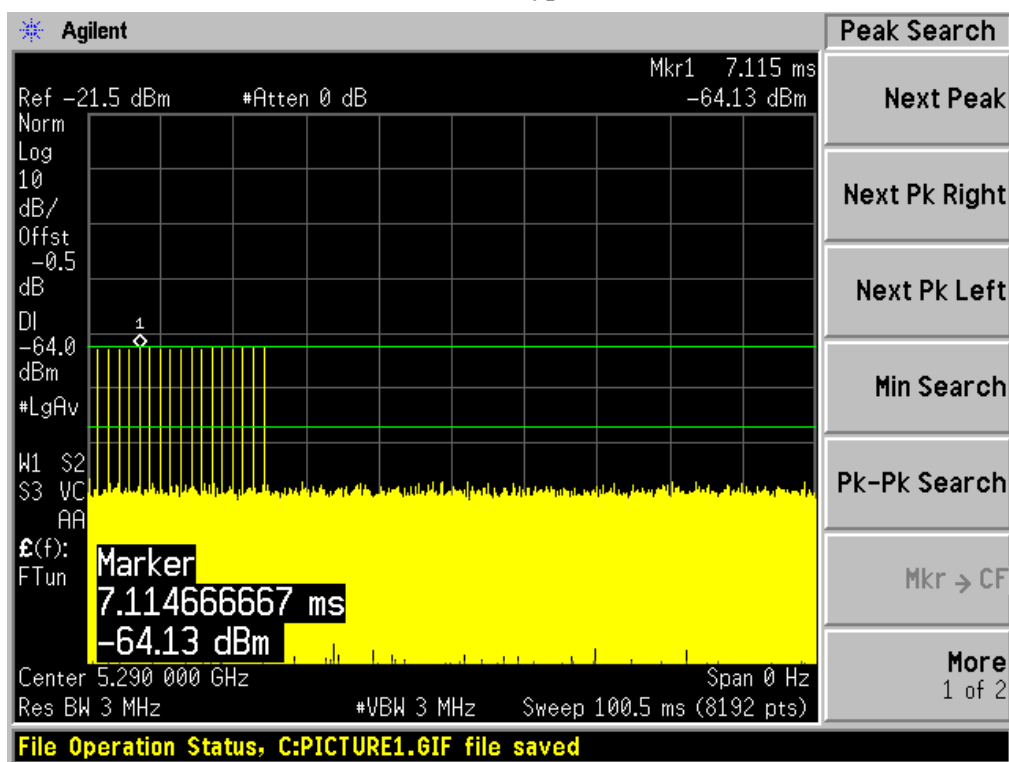
Radar Type 5 Case 1



Radar Type 6



Radar Type 0



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

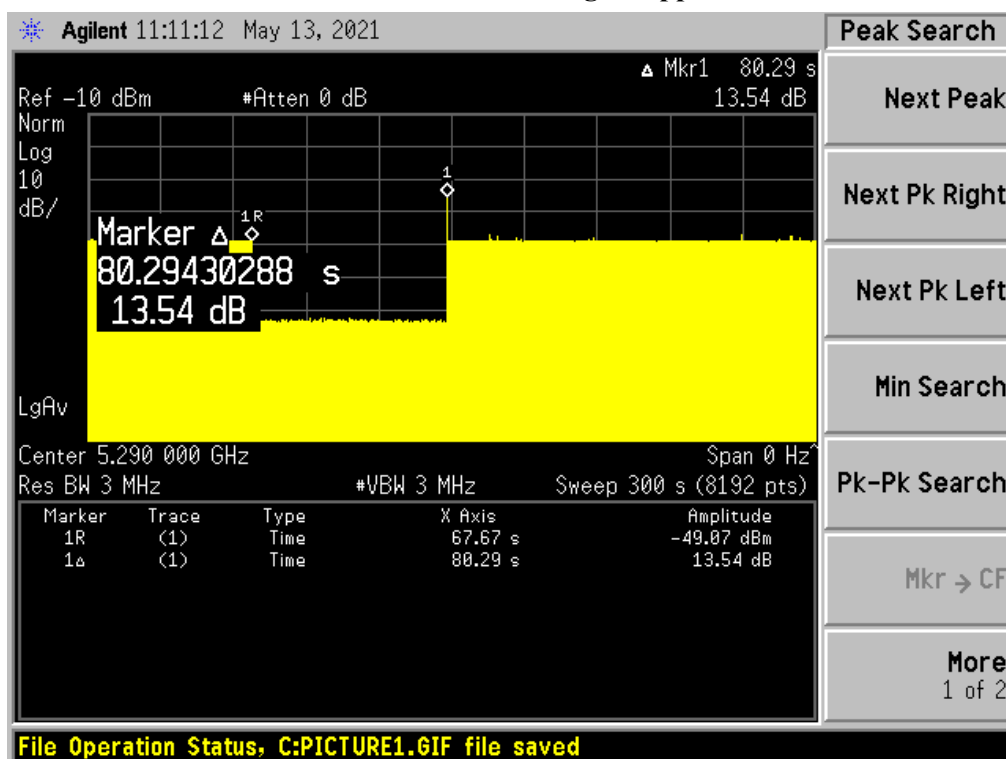
Test Frequency (MHz)	EUT initial Power-up cycle (Second)
5290	20.29

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

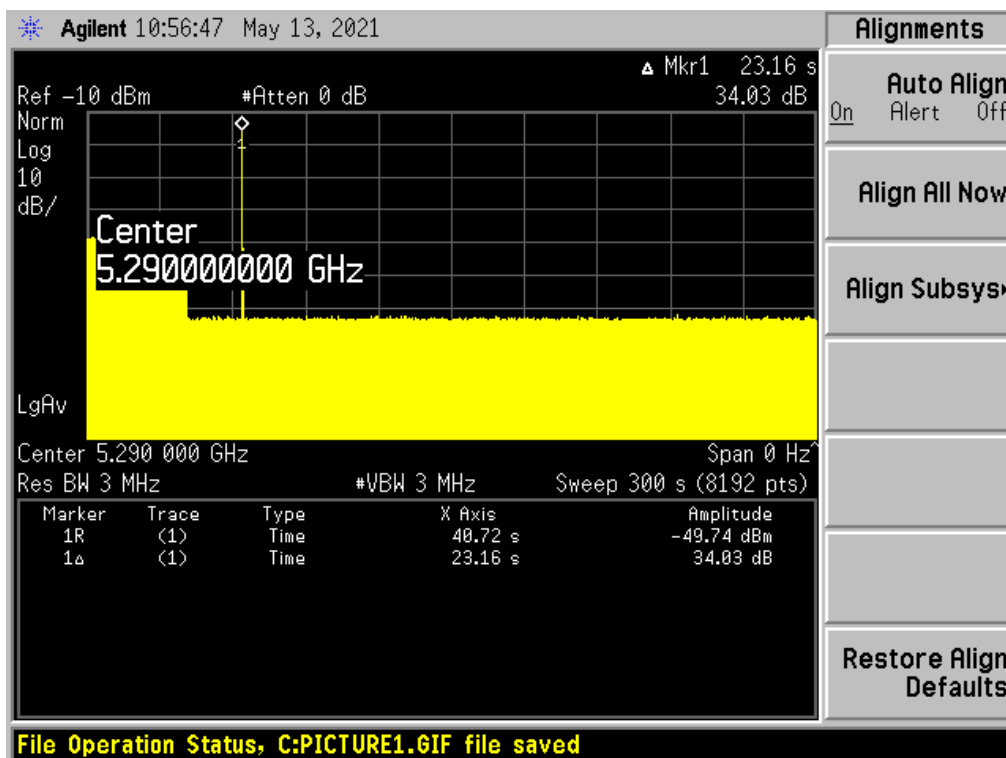
Please refer to the following plots.

Plot of without Radar signal applied

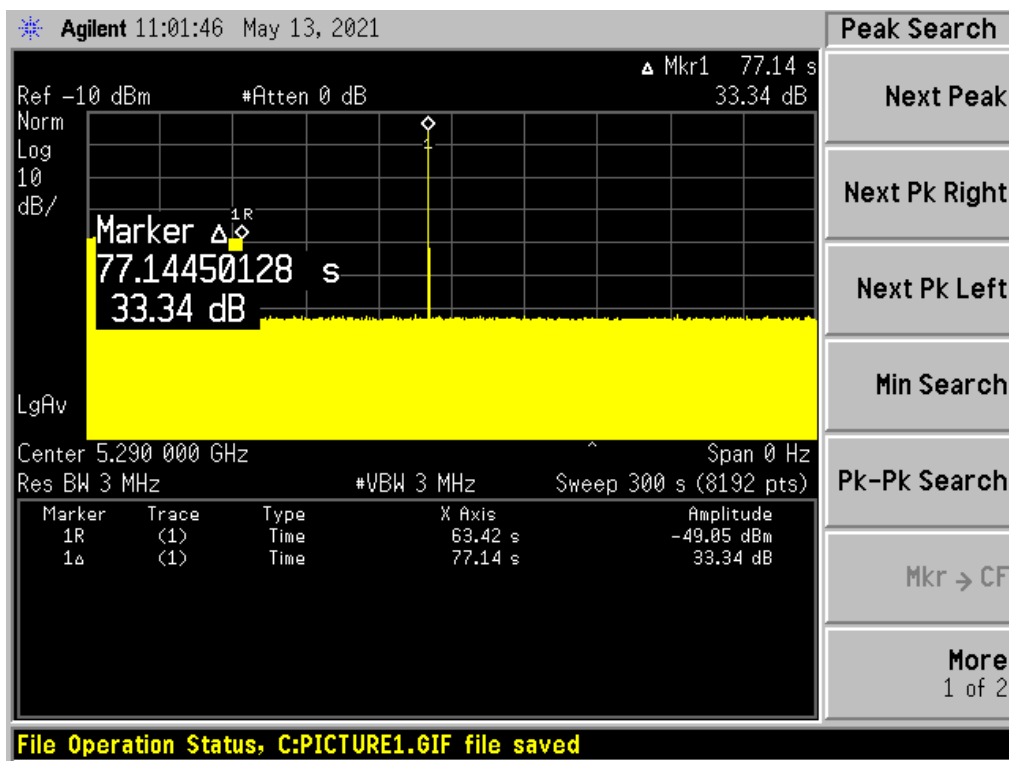


Note: The power-up cycle is 20.29 seconds.

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



No transmissions found after radar signal applied.

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

No transmissions found after radar signal applied.

CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME

Test Procedure

Perform type 0 short pulse radar waveform.

The aggregate channel closing transmission time is calculated as follows:

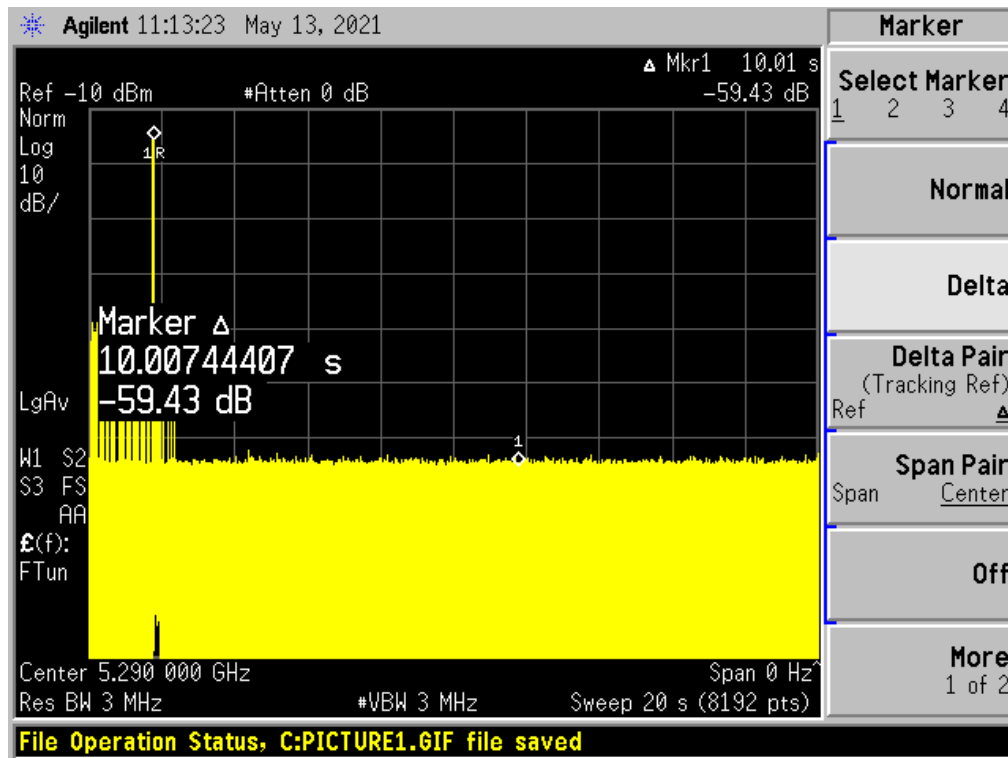
Aggregate Transmission Time = $N \times \text{Dwell Time}$

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

Test Results

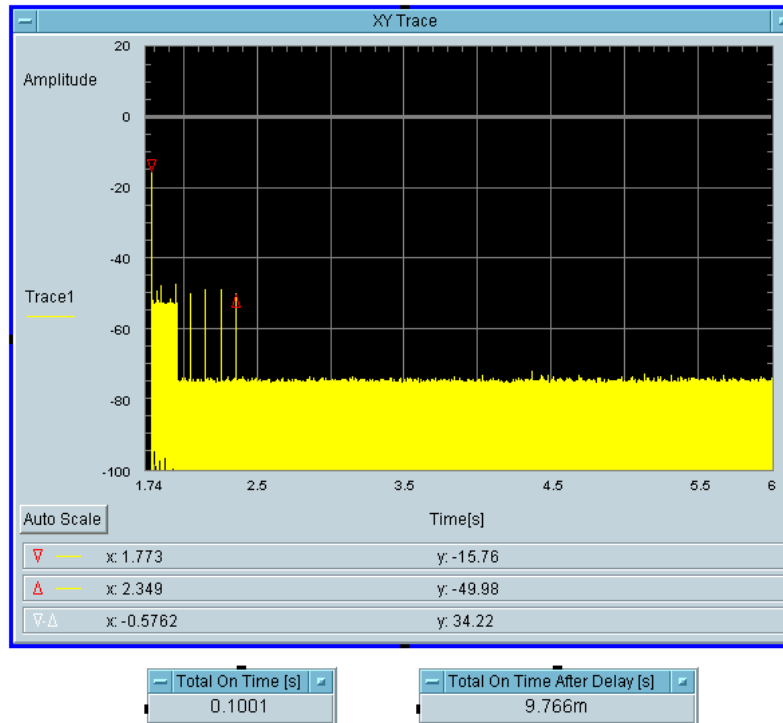
Frequency (MHz)	Bandwidth (MHz)	Radar Type	Results
5290	80	Type 0	Compliant

Please refer to the following tables and plots.

5290 MHzType 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



NON-OCCUPANCY PERIOD

Test Procedure

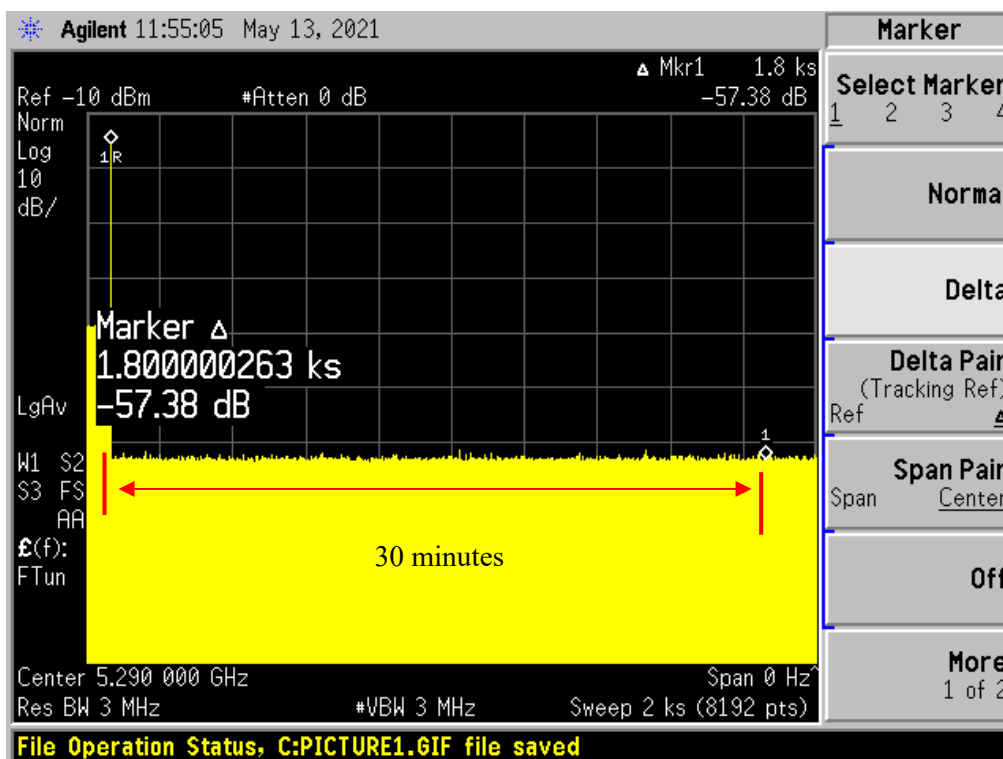
Measure the EUT for more than 30 minutes following the channel close/move time to verify that the EUT does not resume any transmissions on this channel. Provide one plot to demonstrate no transmission on the channel for the non-occupancy period (30 minutes observation time)

Test Result

Frequency(MHz)	Bandwidth (MHz)	Spectrum Analyzer Display
5290	80	No transmission within 30 minutes

Please refer to the following plots.

5290 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:

$$U\text{-NII Detection Bandwidth} = F_H - F_L$$

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
5260	20	5251	5269	18	17.645	100%	Compliance
5270	40	5251	5289	38	36.567	100%	Compliance
5290	80	5251	5329	78	75.050	100%	Compliance

Please refer to the following tables.

Results of Detection Bandwidth:

20MHz Bandwidth, EUT Frequency = 5260MHz											
DFS Detection Trials (1 = Detected, 0 = No Detected)											
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5251(F _L)	1	1	1	1	1	1	1	1	1	1	100 %
5252	1	1	1	1	1	1	1	1	1	1	100 %
5253	1	1	1	1	1	1	1	1	1	1	100 %
5254	1	1	1	1	1	1	1	1	1	1	100 %
5255	1	1	1	1	1	1	1	1	1	1	100 %
5260	1	1	1	1	1	1	1	1	1	1	100 %
5265	1	1	1	1	1	1	1	1	1	1	100 %
5266	1	1	1	1	1	1	1	1	1	1	100 %
5267	1	1	1	1	1	1	1	1	1	1	100 %
5268	1	1	1	1	1	1	1	1	0	1	90 %
5269(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
Detection Bandwidth = F _H – F _L = 5269-5251 = 18MHz											
EUT 99% BW = 17.645 MHz;											Result: Pass

40MHz Bandwidth, EUT Frequency = 5270 MHz											
DFS Detection Trials (1 = Detected, 0 = No Detected)											
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5251(F _L)	1	1	1	1	1	1	1	1	1	1	100 %
5252	1	1	1	1	1	1	1	1	1	1	100 %
5253	1	1	1	1	1	1	1	1	1	1	100 %
5254	1	1	1	1	1	1	1	1	1	1	100 %
5255	1	1	1	1	1	1	1	1	1	1	100 %
5260	1	1	1	1	1	1	1	1	1	1	100 %
5265	1	1	1	1	1	1	1	1	1	1	100 %
5270	1	1	1	1	1	1	1	1	1	1	100 %
5275	1	1	1	1	1	1	1	1	1	1	100 %
5280	1	1	1	1	1	1	1	1	1	1	100 %
5285	1	1	1	1	1	1	1	1	1	1	100 %
5286	1	1	1	1	1	1	1	1	1	1	100 %
5287	1	1	1	1	1	1	1	1	1	1	100 %
5288	1	1	1	1	1	1	1	1	1	1	100 %
5289(F _H)	1	1	1	1	1	1	1	1	1	0	90 %
Detection Bandwidth = F _H – F _L = 5289-5251 =38 MHz											
EUT 99% BW = 36.567 MHz;										Result: Pass	

80MHz Bandwidth, EUT Frequency = 5290 MHz											
DFS Detection Trials (1 = Detected, 0 = No Detected)											
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5251(F _L)	1	1	1	1	1	1	1	1	1	1	100 %
5252	1	1	1	1	1	1	1	1	1	1	100 %
5253	1	1	1	1	1	1	1	1	1	1	100 %
5254	1	1	1	1	1	1	1	1	1	1	100 %
5255	1	1	1	1	1	1	1	1	1	1	100 %
5260	1	1	1	1	1	1	1	1	1	1	100 %
5265	1	1	1	1	1	1	1	1	1	1	100 %
5270	1	1	1	1	1	1	1	1	1	1	100 %
5275	1	1	1	1	1	1	1	1	1	1	100 %
5280	1	1	1	1	1	1	1	1	1	1	100 %
5285	1	1	1	1	1	1	1	1	1	1	100 %
5290	1	1	1	1	1	1	1	1	1	1	100 %
5295	1	1	1	1	1	1	1	1	1	1	100 %
5300	1	1	1	1	1	1	1	1	1	1	100 %
5305	1	1	1	1	1	1	1	1	1	1	100 %
5310	1	1	1	1	1	1	1	1	1	1	100 %
5315	1	1	1	1	1	1	1	1	1	0	90 %
5320	1	1	1	1	1	1	1	1	1	1	100 %
5325	1	1	1	1	1	1	1	1	1	1	100 %
5326	1	1	1	1	1	1	1	1	1	1	100 %
5327	1	1	1	1	1	1	1	1	1	1	100 %
5328	1	1	1	1	1	1	1	1	1	1	100 %
5329(F _H)	1	1	1	1	1	1	1	1	1	1	100 %
Detection Bandwidth = F _H – F _L = 5329-5251 = 78 MHz											
EUT 99% BW = 75.050 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	96.7 %	60%	Pass
Type 3	30	100 %	60%	Pass
Type 4	30	100 %	60%	Pass
Aggregate(Type1 to 4)	120	99.17 %	80%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	100 %	70%	Pass

Please refer to the following statistical tables:

5260MHz**Radar Type 1A Statistical Performance**

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5260	70	1	758	1
2	5260	72	1	738	1
3	5260	59	1	898	1
4	5260	99	1	538	1
5	5260	61	1	878	1
6	5260	89	1	598	1
7	5260	92	1	578	1
8	5260	76	1	698	1
9	5260	95	1	558	1
10	5260	65	1	818	1
11	5260	63	1	838	1
12	5260	58	1	918	1
13	5260	83	1	638	1
14	5260	67	1	798	1
15	5260	74	1	718	1
Detection Percentage: 100 % (>60%)					

Radar Type 1B Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5260	50	1	1060	1
2	5260	40	1	1322	1
3	5260	19	1	2859	1
4	5260	40	1	1344	1
5	5260	30	1	1777	1
6	5260	25	1	2184	1
7	5260	18	1	2943	1
8	5260	29	1	1855	1
9	5260	25	1	2168	1
10	5260	18	1	3001	1
11	5260	19	1	2860	1
12	5260	21	1	2602	1
13	5260	35	1	1521	1
14	5260	20	1	2748	1
15	5260	46	1	1167	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	5260	28	3.6	210	1
2	5260	28	4.6	192	1
3	5260	24	3.4	215	1
4	5260	24	1.1	216	1
5	5260	29	2.7	228	1
6	5260	26	2.5	157	1
7	5260	24	2.9	153	1
8	5260	28	1	182	1
9	5260	26	4.6	208	1
10	5260	24	1.6	197	1
11	5260	26	2.6	223	1
12	5260	24	2.6	217	1
13	5260	24	4.8	196	1
14	5260	26	3.7	168	1
15	5260	26	3.4	176	1
16	5260	27	2.6	176	1
17	5260	29	3.5	203	1
18	5260	24	2.4	200	1
19	5260	27	3.6	175	1
20	5260	25	5	186	1
21	5260	24	4.9	190	1
22	5260	24	3.9	223	1
23	5260	27	1.5	199	1
24	5260	27	2.7	187	1
25	5260	29	1.5	193	1
26	5260	29	1.1	174	1
27	5260	27	3.3	166	1
28	5260	24	1.5	162	1
29	5260	29	3	222	1
30	5260	28	1.8	152	0
Detection Percentage: 96.7 % (>60%)					

Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5260	16	8.5	265	1
2	5260	17	6.2	289	1
3	5260	17	9	327	1
4	5260	18	8.4	494	1
5	5260	17	9.2	303	1
6	5260	18	6	257	1
7	5260	17	7.1	394	1
8	5260	18	9.1	300	1
9	5260	16	6.8	221	1
10	5260	17	9.7	244	1
11	5260	18	6	307	1
12	5260	17	9.2	342	1
13	5260	17	6.2	340	1
14	5260	18	8.3	246	1
15	5260	18	7.3	305	1
16	5260	17	6.4	468	1
17	5260	17	7.8	264	1
18	5260	16	9.2	357	1
19	5260	17	7.2	357	1
20	5260	17	7.9	457	1
21	5260	18	9.4	314	1
22	5260	17	8.7	223	1
23	5260	16	9.7	346	1
24	5260	18	8.9	418	1
25	5260	18	8.6	488	1
26	5260	17	7.4	344	1
27	5260	16	8.4	354	1
28	5260	17	6.1	421	1
29	5260	16	6.6	214	1
30	5260	17	8.9	414	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	5260	15	18.9	420	1
2	5260	14	19.5	354	1
3	5260	13	15.8	278	1
4	5260	16	15.6	269	1
5	5260	15	11.6	282	1
6	5260	15	13.7	274	1
7	5260	13	14.9	325	1
8	5260	12	12.4	359	1
9	5260	16	17.3	203	1
10	5260	13	13.4	480	1
11	5260	14	11.3	372	1
12	5260	15	12.6	355	1
13	5260	12	13	244	1
14	5260	15	18	415	1
15	5260	16	14.9	228	1
16	5260	15	17.9	424	1
17	5260	13	15.5	488	1
18	5260	14	17.7	462	1
19	5260	16	12	220	1
20	5260	14	14.4	472	1
21	5260	14	19.9	398	1
22	5260	15	12.3	294	1
23	5260	12	17.7	335	1
24	5260	14	18.6	273	1
25	5260	15	18.7	484	1
26	5260	12	17.7	279	1
27	5260	16	12.7	412	1
28	5260	16	16.9	472	1
29	5260	13	15.6	276	1
30	5260	12	16.9	442	1
Detection Percentage: 100 % (>60%)					

Radar Type 5 Case 1 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5260.0MHz)

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	6	94.4	1930		0.492512	1
1	2	6	57.6	1471		1.375677	
2	1	6	58			1.564254	
3	2	6	58.7	1888		2.514168	
4	3	6	51.2	1375	1870	2.938885	
5	1	6	53.6			4.178945	
6	1	6	93.7			4.611938	
7	3	6	87.5	1472	1643	5.120421	
8	2	6	75.7	1994		6.005846	
9	3	6	92.9	1164	1481	6.38093	
10	3	6	86.3	1362	1621	7.690192	
11	1	6	55.7			8.40886	
12	3	6	51.3	1828	1309	8.744802	
13	1	6	74.8			9.222315	
14	2	6	57.8	1834		10.550079	
15	2	6	62.4	1883		11.035598	
16	3	6	78.5	1575	1051	11.607760	

Statistics 2 (ChirpCenter Frequency: 5260.0 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	66.1			0.496181	1
1	3	14	74.8	1543	1507	1.416723	
2	2	14	64.6	1833		2.001412	
3	3	14	72.1	1277	1977	2.759398	
4	2	14	58.8	1366		3.6224	
5	1	14	89			3.984297	
6	2	14	67.3	1583		4.72063	
7	2	14	79.8	1435		5.471139	
8	2	14	81.1	1173		6.421721	
9	3	14	76.9	1570	1078	6.972378	
10	2	14	54.4	1145		7.615248	
11	2	14	92	1443		8.67823	
12	1	14	56.9			9.482738	
13	2	14	51.1	1913		9.762875	
14	3	14	73.5	1857	1024	10.825453	
15	1	14	61.4			11.687844	

Statistics 3 (ChirpCenter Frequency: 5260.0 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	86.2	1554		0.080153	1
1	1	11	76			0.816886	
2	2	11	52.1	1994		1.686164	
3	2	11	56.5	1241		2.843198	
4	2	11	89.5	1093		3.17633	
5	1	11	99.9			4.028309	
6	2	11	71.5	1208		4.672448	
7	1	11	89.6			5.947332	
8	3	11	79.6	1892	1969	6.152658	
9	1	11	71.2			6.751286	
10	3	11	52.2	1484	1696	7.766857	
11	2	11	80.7	1622		8.61194	
12	1	11	99.1			9.398522	
13	3	11	69.7	1404	1307	9.823581	
14	3	11	59.1	1083	1813	11.204577	
15	3	11	82.1	1713	1638	11.696983	

Statistics 4 (ChirpCenter Frequency: 5260.0 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	79.9			0.385274	1
1	3	11	86.4	1343	1157	1.209958	
2	2	11	68.3	1510		1.900875	
3	1	11	72.5			2.095895	
4	3	11	53.9	1959	1040	3.07209	
5	1	11	86.5			3.743809	
6	3	11	93.4	1849	1394	4.005841	
7	1	11	69.1			5.316422	
8	3	11	87.9	1763	1304	5.692243	
9	3	11	99	1183	1715	6.324884	
10	3	11	90.1	1744	1085	7.242923	
11	2	11	99.6	1619		7.981939	
12	1	11	54.4			8.616494	
13	3	11	65.4	1080	1206	8.962316	
14	1	11	78.7			9.660202	
15	2	11	86.2	1902		10.325818	
16	3	11	67.6	1938	1039	11.017198	
17	1	11	53.9			11.61119	

Statistics 5(ChirpCenter Frequency: 5260.0 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	62.7			0.690280	1
1	2	12	98.6	1874		1.498100	
2	1	12	97			2.468747	
3	3	12	90.7	1908	1765	3.773882	
4	3	12	93.4	1466	1086	4.310649	
5	2	12	50.2	1839		5.058121	
6	2	12	66.2	1599		6.920723	
7	2	12	78.3	1017		7.683462	
8	3	12	92.3	1572	1599	8.249238	
9	3	12	74.3	1757	1773	9.823446	
10	3	12	89.2	1250	1796	10.032410	
11	2	12	83.8	1178		11.323761	

Statistics 6 (ChirpCenter Frequency: 5260.0 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	62.2	1193		0.112806	1
1	2	14	57.1	1995		1.302560	
2	1	14	56.8			2.001142	
3	2	14	75.5	1255		2.814326	
4	2	14	55	1603		3.506126	
5	2	14	57.5	1343		4.831525	
6	3	14	81.9	1249	1794	5.204102	
7	2	14	93.9	1855		6.557536	
8	1	14	85.5			7.275206	
9	1	14	91.3			8.363458	
10	2	14	98.5	1166		8.735312	
11	2	14	98.1	1460		9.606714	
12	1	14	61.6			10.380832	
13	3	14	72.3	1877	1369	11.918329	

Statistics 7(ChirpCenter Frequency: 5260.0 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	59.9	1880		0.294528	1
1	2	16	71.3	1401		1.049552	
2	2	16	66.9	1430		1.270375	
3	3	16	91	1187	1927	2.016297	
4	3	16	74	1681	1862	2.602260	
5	2	16	54.7	1655		3.392148	
6	2	16	82.5	1777		3.691086	
7	1	16	95			4.686262	
8	1	16	52.4			5.305913	
9	1	16	88.3			5.613932	
10	3	16	84.4	1675	1212	6.245914	
11	1	16	53.6			6.827284	
12	2	16	66.2	1958		7.303454	
13	2	16	71.1	1186		7.935881	
14	2	16	76.1	1959		8.655965	
15	1	16	55.9			9.160173	
16	3	16	86.9	1255	1305	9.864248	
17	2	16	52.6	1975		10.556636	
18	3	16	94.9	1541	1907	10.934495	
19	3	16	53.4	1119	1685	11.972794	

Statistics 8 (ChirpCenter Frequency: 5260.0 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	54.2	1059		0.531724	1
1	2	11	92.8	1853		1.718230	
2	2	11	95.3	1454		2.501066	
3	1	11	87.4			3.558837	
4	3	11	66.1	1331	1223	4.442664	
5	2	11	85.5	1647		4.870559	
6	3	11	81.5	1878	1976	5.649807	
7	2	11	55.4	1710		6.910049	
8	2	11	59.2	1803		8.285714	
9	1	11	82.1			8.453952	
10	2	11	72.1	1379		9.387402	
11	1	11	77.4			10.977085	
12	3	11	51.6	1633	1969	11.549657	

Statistics 9 (ChirpCenter Frequency: 5260.0 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	89.5	1341		0.812132	1
1	1	14	69.5			1.793647	
2	1	14	74.7			2.475201	
3	2	14	75.1	1313		3.221444	
4	2	14	76.3	1322		4.332702	
5	2	14	72.7	1239		5.976202	
6	1	14	85.1			6.000756	
7	1	14	55.4			7.655537	
8	2	14	92.2	1787		8.725934	
9	3	14	94.4	1468	1578	9.922709	
10	1	14	99.5			10.775938	
11	1	14	76.1			11.446344	

Statistics 10 (ChirpCenter Frequency: 5260.0 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	66.2	1205		0.185301	1
1	2	12	70.6	1169		1.034968	
2	3	12	76	1029	1991	1.737042	
3	2	12	54.8	1561		2.157033	
4	2	12	71.9	1612		2.965448	
5	2	12	80.1	1153		3.843330	
6	2	12	53.8	1292		4.706029	
7	3	12	72.9	1307	1892	5.525813	
8	3	12	65.5	1736	1130	6.281911	
9	2	12	71.6	1496		6.546106	
10	2	12	73.1	1912		7.356488	
11	3	12	95.3	1854	1332	8.367367	
12	2	12	82.1	1058		8.773779	
13	2	12	99	1056		9.756994	
14	1	12	61.7			10.292637	
15	1	12	62.3			11.134888	
16	2	12	95	1765		11.874041	

Radar Type 5 Case 2 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5256.0 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	54.4	1523		0.516410	1
1	1	16	94.1			1.192800	
2	2	16	87.2	1707		1.778996	
3	3	16	95.9	1314	1241	2.440538	
4	2	16	58.7	1555		3.674324	
5	3	16	55.3	1611	1763	4.019740	
6	3	16	86.9	1330	1968	5.567209	
7	3	16	85.5	1032	1514	6.000510	
8	1	16	67.1			7.011656	
9	3	16	56.8	1428	1234	7.325305	
10	2	16	76.8	1255		8.337799	
11	2	16	71.4	1551		9.097045	
12	3	16	60.9	1549	1143	9.659955	
13	1	16	53.3			11.038835	
14	1	16	86.1			11.726933	

Statistics 2 (ChirpCenter Frequency: 5257.0 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	89.2			0.424813	1
1	2	17	75.1	1484		1.391408	
2	2	17	88.9	1343		3.345991	
3	2	17	56.4	1562		3.757751	
4	2	17	75.7	1060		5.768183	
5	3	17	95.3	1765	1270	6.051904	
6	2	17	60.4	1102		7.753200	
7	2	17	52.9	1413		9.138506	
8	2	17	70	1552		10.535330	
9	2	17	90.8	1684		11.330944	

Statistics 3 (ChirpCenter Frequency: 5258.0 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	81.1			0.407511	1
1	3	20	75.9	1343	1537	1.817696	
2	1	20	85			2.189174	
3	1	20	84.9			3.675336	
4	2	20	51.1	1596		5.423921	
5	2	20	71.8	1389		5.740859	
6	2	20	66.3	1536		7.079909	
7	2	20	74.7	1293		7.765403	
8	3	20	59.4	1094	1489	9.300798	
9	1	20	87.9			10.407198	
10	3	20	81.2	1844	1972	11.777972	

Statistics 4 (ChirpCenter Frequency: 5255.0 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	89			0.177877	1
1	2	12	74.6	1422		1.873446	
2	2	12	98.1	1781		2.593791	
3	2	12	94	1481		3.816260	
4	2	12	69.3	1816		4.574542	
5	2	12	77.6	1567		6.223460	
6	3	12	88.6	1038	1055	7.329739	
7	2	12	76.7	1416		8.021754	
8	2	12	62	1952		9.458900	
9	3	12	94.9	1530	1746	10.146331	
10	2	12	52.2	1047		11.216874	

Statistics 5 (ChirpCenter Frequency: 5258.0 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	81.8	1598		0.477352	1
1	3	19	59.7	1512	1001	1.059438	
2	3	19	90.1	1663	1869	1.835481	
3	2	19	70.7	1259		2.000752	
4	1	19	96.3			2.628766	
5	2	19	99.1	1461		3.742938	
6	2	19	66.9	1643		3.996353	
7	1	19	53.4			4.787987	
8	2	19	96.8	1102		5.237175	
9	2	19	51.1	1349		6.079421	
10	1	19	73			6.736006	
11	3	19	84.8	1136	1184	7.129138	
12	2	19	55	1337		8.172650	
13	2	19	75.9	1098		8.486749	
14	2	19	77.9	1559		9.162600	
15	3	19	89.1	1472	1367	9.517430	
16	2	19	83.8	1791		10.309300	
17	2	19	50.2	1756		10.832967	
18	1	19	50			11.914005	

Statistics 6 (ChirpCenter Frequency: 5254.0 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	85.7	1337		0.681244	1
1	2	10	69.2	1344		1.715990	
2	3	10	98.4	1227	1424	3.238202	
3	2	10	89.8	1478		4.069627	
4	2	10	57.8	1214		4.893999	
5	1	10	91.9			6.843211	
6	2	10	86.2	1864		8.054720	
7	2	10	87	1506		8.447212	
8	2	10	94.8	1976		10.043020	
9	2	10	64	1242		11.035715	

Statistics 7 (ChirpCenter Frequency: 5258.0 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	88.2	1798		0.892076	1
1	3	20	96.6	1462	1767	0.987943	
2	1	20	87.1			2.299950	
3	1	20	86.5			2.964398	
4	3	20	82.5	1541	1189	4.175658	
5	1	20	64.3			5.030775	
6	2	20	75.3	1388		5.711231	
7	1	20	54.6			7.360640	
8	3	20	79.6	1756	1598	7.678239	
9	2	20	86.8	1530		8.673752	
10	2	20	67.5	1591		9.373880	
11	3	20	70.4	1541	1388	10.697771	
12	2	20	61.5	1627		11.587180	

Statistics 8 (ChirpCenter Frequency: 5252.0 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	74.2	1716		0.499440	1
1	2	6	68.7	1972		0.993212	
2	2	6	58.7	1138		1.336511	
3	2	6	93.7	1193		2.483280	
4	3	6	76.6	1382	1864	3.135491	
5	2	6	93.6	1486		3.388084	
6	2	6	63.9	1052		4.150391	
7	3	6	66	1846	1927	5.319856	
8	2	6	63.2	1293		5.573730	
9	2	6	59.2	1070		6.488011	
10	1	6	50.5			6.877156	
11	2	6	55.8	1307		7.815775	
12	3	6	99.1	1614	1009	8.500437	
13	2	6	61.3	1166		9.274918	
14	2	6	90.3	1954		9.411291	
15	2	6	63.5	1408		10.234244	
16	2	6	89.3	1606		10.760098	
17	1	6	84.3			11.779309	

Statistics 9 (ChirpCenter Frequency: 5252.0 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	57.8	1582		0.140206	1
1	1	5	85.8			2.283025	
2	1	5	75.8			3.348205	
3	2	5	54.5	1399		4.154100	
4	2	5	80	1508		5.403606	
5	3	5	83.6	1027	1493	6.163293	
6	3	5	82.6	1549	1475	8.384066	
7	1	5	87.4			9.083963	
8	2	5	59.3	1646		9.692338	
9	1	5	64			11.786991	

Statistics 10 (ChirpCenter Frequency: 5256.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	15	73.5			0.319915	1
1	2	15	61.5	1864		1.074098	
2	3	15	95.9	1831	1274	1.439762	
3	3	15	89.3	1273	1345	2.674357	
4	2	15	93.9	1056		3.506901	
5	2	15	97.8	1390		4.216700	
6	1	15	98.7			4.252443	
7	2	15	86.3	1415		5.481733	
8	3	15	55.1	1749	1107	6.203882	
9	3	15	51.6	1244	1373	6.366771	
10	2	15	85.2	1015		7.560815	

Radar Type 5 Case 3 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5268.0 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	92.9	1057		0.347051	1
1	1	6	88.9			1.735096	
2	2	6	80.2	1389		2.903613	
3	2	6	88.6	1844		4.712830	
4	3	6	71.1	1949	1406	6.378067	
5	1	6	87			6.724039	
6	1	6	94.4			8.765875	
7	1	6	72.7			9.733623	
8	2	6	84.2	1586		11.364912	

Statistics 2 (ChirpCenter Frequency: 5264.0 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	74.9	1681		0.244779	1
1	2	16	57.7	1209		0.683361	
2	2	16	57.1	1438		1.743579	
3	3	16	97.6	1542	1997	2.177222	
4	2	16	91.6	1921		2.745618	
5	2	16	52.8	1922		3.504444	
6	2	16	55.2	1880		4.063628	
7	1	16	50.4			4.433811	
8	3	16	71.3	1697	1754	4.905548	
9	1	16	71.1			5.790125	
10	2	16	76.1	1554		6.387619	
11	3	16	61.3	1963	1258	6.833673	
12	2	16	57.4	1626		7.600840	
13	2	16	75.5	1682		8.194083	
14	2	16	85.3	1662		8.599623	
15	2	16	71.8	1848		9.361408	
16	2	16	56.8	1215		10.136192	
17	3	16	94.5	1638	1008	10.459491	
18	2	16	85.5	1157		10.882415	
19	2	16	99.7	1202		11.531305	

Statistics 3 (ChirpCenter Frequency: 5266.0 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	63.6	1918		0.055740	1
1	1	11	90.5			0.768838	
2	2	11	88.8	1822		1.380065	
3	2	11	75.6	1046		2.177037	
4	1	11	88			3.184410	
5	1	11	63.3			3.577016	
6	1	11	53.9			4.190425	
7	2	11	79	1355		4.810229	
8	1	11	83.4			5.858575	
9	1	11	60.1			6.046353	
10	1	11	73.4			7.041401	
11	1	11	68.8			7.354334	
12	1	11	72.4			8.278398	
13	2	11	96.5	1208		9.103521	
14	1	11	50.2			9.751347	
15	2	11	84.7	1201		10.244329	
16	3	11	83.7	1684	1068	11.061878	
17	2	11	56.4	1451		11.479572	

Statistics 4 (ChirpCenter Frequency: 5266.0 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	79.6	1125		0.406262	1
1	3	9	61.9	1411	1463	0.739749	
2	2	9	52.8	1888		1.741736	
3	3	9	62.5	1053	1326	2.287221	
4	3	9	73.3	1526	1578	3.078349	
5	2	9	76.5	1372		3.190613	
6	1	9	94.4			4.399745	
7	2	9	80.1	1449		5.041102	
8	2	9	92.7	1333		5.429955	
9	2	9	74.2	1579		5.697237	
10	2	9	61.6	1445		6.739793	
11	1	9	99.9			7.503324	
12	1	9	79.3			8.150306	
13	3	9	93.3	1101	1313	8.674324	
14	3	9	74.5	1991	1946	9.177475	
15	2	9	65.7	1086		10.062816	
16	3	9	87.4	1143	1408	10.243437	
17	2	9	58.5	1272		11.075591	
18	2	9	99.7	1134		11.774723	

Statistics 5 (ChirpCenter Frequency: 5263.0 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	76.6	1119		0.020831	1
1	1	18	95.8			1.002556	
2	1	18	56.1			2.209228	
3	1	18	80.7			3.109195	
4	3	18	91.5	1325	1341	4.142384	
5	2	18	91.7	1419		4.526040	
6	1	18	84.6			5.730307	
7	3	18	72.3	1739	1930	6.536869	
8	2	18	64.2	1736		7.139492	
9	2	18	86.3	1975		8.293694	
10	2	18	76.7	1792		8.878590	
11	2	18	73.5	1870		9.993337	
12	3	18	78.5	1800	1124	11.064819	
13	2	18	90.2	1386		11.311067	

Statistics 6 (ChirpCenter Frequency: 5267.0 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	71.5	1492		0.455605	1
1	1	8	64.9			1.324740	
2	3	8	88.1	1383	1759	1.379696	
3	3	8	56	1375	1523	2.346995	
4	1	8	76.6			2.803564	
5	3	8	70	1193	1425	3.866996	
6	3	8	71.9	1044	1922	4.067037	
7	3	8	74.9	1271	1355	5.311690	
8	1	8	84.3			5.686094	
9	3	8	66.9	1532	1081	6.012097	
10	2	8	51.5	1811		7.201336	
11	3	8	84.4	1556	1523	7.358120	
12	1	8	50.6			8.639404	
13	2	8	68.6	1449		9.080614	
14	2	8	79	1975		9.809515	
15	2	8	76.5	1473		10.227901	
16	2	8	86.7	1140		10.734873	
17	1	8	55.4			11.643768	

Statistics 7 (ChirpCenter Frequency: 5268.0 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	52.6	1514		0.135573	1
1	2	5	56	1520		1.199565	
2	3	5	71.6	1845	1587	1.995700	
3	1	5	83.1			2.894309	
4	3	5	56.8	1840	1455	3.174335	
5	1	5	76.9			4.438139	
6	3	5	70.7	1495	1508	4.687811	
7	3	5	97.9	1187	1165	5.784813	
8	3	5	78.7	1501	1897	6.384592	
9	3	5	74.6	1644	1910	7.146473	
10	3	5	64.9	1511	1589	8.037659	
11	1	5	65.3			8.375910	
12	3	5	92.5	1099	1215	9.647936	
13	3	5	56.2	1372	1361	9.832041	
14	2	5	99.3	1636		10.821287	
15	2	5	62.8	1102		11.277407	

Statistics 8 (ChirpCenter Frequency: 5264.0 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	90.4	1192		0.216270	1
1	1	14	85.4			1.058175	
2	3	14	81.2	1555	1707	1.625643	
3	3	14	97.2	1373	1720	2.003301	
4	1	14	74.3			3.103199	
5	2	14	94.6	1215		3.510320	
6	2	14	62.1	1404		4.353828	
7	2	14	54.9	1691		4.736217	
8	3	14	97.6	1741	1003	5.604464	
9	1	14	71.1			6.467479	
10	2	14	95	1391		6.906582	
11	2	14	78.5	1978		7.515953	
12	2	14	54.9	1654		8.371478	
13	2	14	76.4	1550		9.121536	
14	1	14	94.5			9.431697	
15	1	14	87.9			10.018771	
16	2	14	90.8	1519		11.325377	
17	2	14	87.6	1308		11.448264	

Statistics 9 (ChirpCenter Frequency: 5264.0 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	59.2	1365		0.073429	1
1	1	16	72.1			0.894252	
2	1	16	54.7			1.615480	
3	1	16	72.8			3.057282	
4	2	16	84.9	1341		3.863459	
5	2	16	82.5	1046		4.687573	
6	2	16	52.4	1028		4.947081	
7	3	16	76.6	1077	1511	6.327556	
8	2	16	83.7	1681		6.621959	
9	2	16	54.5	1585		7.361250	
10	2	16	70.9	1489		8.293675	
11	2	16	84.3	1925		9.511271	
12	3	16	82.7	1253	1604	10.058057	
13	2	16	63.7	1163		10.870612	
14	3	16	91.5	1092	1248	11.953308	

Statistics 10 (ChirpCenter Frequency: 5268.0 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	98.9			0.570655	1
1	1	6	58.3			1.707598	
2	2	6	92.2	1965		4.334917	
3	3	6	53.8	1820	1956	5.434892	
4	3	6	51.5	1006	1661	7.167013	
5	2	6	87	1110		8.699675	
6	2	6	50.4	1848		9.243237	
7	1	6	98.1			11.204200	

Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)	Hopping Sequence (MHz)
1	5260	9	1	333	1	5346.0, 5676.0, 5605.0, 5647.0, 5454.0, 5351.0, 5567.0, 5262.0, 5656.0, 5271.0, 5268.0, 5632.0, 5319.0, 5485.0, 5544.0, 5437.0, 5611.0, 5440.0, 5269.0, 5582.0, 5660.0, 5296.0, 5575.0, 5638.0, 5257.0, 5539.0, 5430.0, 5639.0, 5528.0, 5609.0, 5522.0, 5649.0, 5452.0, 5683.0, 5723.0, 5597.0, 5654.0, 5579.0, 5519.0, 5707.0, 5587.0, 5345.0, 5287.0, 5303.0, 5423.0, 5334.0, 5543.0, 5595.0, 5614.0, 5355.0, 5720.0, 5253.0, 5496.0, 5583.0, 5512.0, 5415.0, 5566.0, 5696.0, 5687.0, 5573.0, 5677.0, 5441.0, 5621.0, 5510.0, 5389.0, 5328.0, 5596.0, 5378.0, 5281.0, 5569.0, 5571.0, 5361.0, 5357.0, 5637.0, 5506.0, 5712.0, 5282.0, 5270.0, 5450.0, 5314.0, 5482.0, 5305.0, 5549.0, 5254.0, 5320.0, 5655.0, 5466.0, 5521.0, 5352.0, 5572.0, 5467.0, 5453.0, 5591.0, 5562.0, 5297.0, 5402.0, 5526.0, 5290.0, 5643.0, 5341.0
2	5260	9	1	333	1	5717.0, 5515.0, 5551.0, 5270.0, 5481.0, 5616.0, 5504.0, 5655.0, 5574.0, 5537.0, 5326.0, 5498.0, 5303.0, 5300.0, 5470.0, 5449.0, 5524.0, 5429.0, 5290.0, 5610.0, 5408.0, 5368.0, 5328.0, 5626.0, 5511.0, 5639.0, 5271.0, 5690.0, 5517.0, 5499.0, 5579.0, 5660.0, 5625.0, 5293.0, 5381.0, 5375.0, 5463.0, 5622.0, 5355.0, 5519.0, 5347.0, 5675.0, 5596.0, 5483.0, 5339.0, 5372.0, 5573.0, 5581.0, 5597.0, 5528.0, 5448.0, 5484.0, 5565.0, 5617.0, 5488.0, 5266.0, 5567.0, 5441.0, 5471.0, 5495.0, 5721.0, 5720.0, 5546.0, 5507.0, 5338.0, 5419.0, 5371.0, 5630.0, 5693.0, 5700.0, 5277.0, 5663.0, 5711.0, 5513.0, 5670.0, 5410.0, 5310.0, 5289.0, 5638.0, 5652.0, 5691.0, 5275.0, 5552.0, 5480.0, 5465.0, 5436.0, 5264.0, 5461.0, 5361.0, 5615.0, 5592.0, 5414.0, 5305.0, 5665.0, 5657.0, 5648.0, 5583.0, 5335.0, 5713.0, 5562.0
3	5260	9	1	333	1	5337.0, 5576.0, 5720.0, 5549.0, 5259.0, 5598.0, 5373.0, 5574.0, 5482.0, 5313.0, 5619.0, 5545.0, 5335.0, 5491.0, 5287.0, 5544.0, 5528.0, 5411.0, 5263.0, 5558.0, 5645.0, 5506.0, 5408.0, 5498.0, 5649.0, 5372.0, 5260.0, 5603.0, 5564.0, 5368.0, 5402.0, 5695.0, 5437.0, 5552.0, 5390.0, 5273.0, 5274.0, 5270.0, 5331.0, 5468.0, 5600.0, 5388.0, 5599.0, 5517.0, 5265.0, 5414.0, 5311.0, 5669.0, 5476.0, 5606.0, 5652.0, 5290.0, 5469.0, 5568.0, 5698.0, 5379.0, 5557.0, 5555.0, 5591.0, 5320.0, 5572.0, 5704.0, 5358.0, 5488.0, 5257.0

						5315.0, 5548.0, 5295.0, 5665.0, 5442.0, 5418.0, 5611.0, 5499.0, 5667.0, 5369.0, 5678.0, 5715.0, 5525.0, 5258.0, 5708.0, 5330.0, 5593.0, 5344.0, 5422.0, 5503.0, 5675.0, 5459.0, 5354.0, 5356.0, 5584.0, 5431.0, 5314.0, 5651.0, 5589.0, 5352.0, 5439.0, 5351.0, 5561.0, 5542.0, 5399.0
4	5260	9	1	333	1	5274.0, 5462.0, 5546.0, 5617.0, 5483.0, 5625.0, 5395.0, 5371.0, 5255.0, 5549.0, 5427.0, 5515.0, 5392.0, 5309.0, 5569.0, 5420.0, 5702.0, 5647.0, 5449.0, 5541.0, 5411.0, 5650.0, 5359.0, 5544.0, 5405.0, 5530.0, 5674.0, 5465.0, 5329.0, 5506.0, 5482.0, 5282.0, 5297.0, 5479.0, 5358.0, 5497.0, 5519.0, 5573.0, 5437.0, 5440.0, 5551.0, 5498.0, 5531.0, 5286.0, 5504.0, 5494.0, 5447.0, 5536.0, 5677.0, 5516.0, 5429.0, 5318.0, 5435.0, 5489.0, 5481.0, 5616.0, 5488.0, 5657.0, 5534.0, 5469.0, 5373.0, 5495.0, 5350.0, 5521.0, 5552.0, 5597.0, 5362.0, 5444.0, 5267.0, 5608.0, 5717.0, 5666.0, 5561.0, 5337.0, 5591.0, 5431.0, 5699.0, 5331.0, 5589.0, 5442.0, 5308.0, 5430.0, 5279.0, 5272.0, 5679.0, 5510.0, 5439.0, 5680.0, 5256.0, 5548.0, 5648.0, 5637.0, 5681.0, 5441.0, 5301.0, 5509.0, 5346.0, 5345.0, 5294.0, 5532.0
5	5260	9	1	333	1	5349.0, 5339.0, 5561.0, 5687.0, 5703.0, 5342.0, 5396.0, 5651.0, 5282.0, 5468.0, 5526.0, 5403.0, 5705.0, 5596.0, 5327.0, 5430.0, 5636.0, 5556.0, 5310.0, 5600.0, 5315.0, 5509.0, 5395.0, 5625.0, 5618.0, 5540.0, 5324.0, 5436.0, 5661.0, 5270.0, 5606.0, 5505.0, 5281.0, 5331.0, 5499.0, 5545.0, 5433.0, 5537.0, 5434.0, 5344.0, 5626.0, 5256.0, 5374.0, 5546.0, 5671.0, 5295.0, 5712.0, 5263.0, 5628.0, 5444.0, 5542.0, 5489.0, 5527.0, 5582.0, 5656.0, 5275.0, 5474.0, 5713.0, 5541.0, 5487.0, 5364.0, 5384.0, 5553.0, 5498.0, 5682.0, 5507.0, 5325.0, 5259.0, 5579.0, 5385.0, 5361.0, 5288.0, 5402.0, 5536.0, 5328.0, 5645.0, 5621.0, 5272.0, 5417.0, 5688.0, 5573.0, 5276.0, 5547.0, 5294.0, 5301.0, 5437.0, 5379.0, 5359.0, 5299.0, 5716.0, 5640.0, 5564.0, 5300.0, 5351.0, 5296.0, 5617.0, 5577.0, 5446.0, 5501.0, 5405.0
6	5260	9	1	333	1	5503.0, 5271.0, 5447.0, 5613.0, 5674.0, 5696.0, 5658.0, 5663.0, 5343.0, 5591.0, 5631.0, 5560.0, 5711.0, 5540.0, 5474.0, 5259.0, 5250.0, 5388.0, 5264.0, 5380.0, 5387.0, 5416.0, 5628.0, 5669.0, 5608.0, 5286.0, 5392.0, 5504.0, 5709.0, 5396.0, 5519.0, 5348.0, 5517.0, 5569.0, 5685.0, 5646.0, 5601.0, 5462.0, 5391.0, 5652.0, 5559.0, 5359.0, 5522.0, 5398.0, 5339.0, 5476.0, 5316.0, 5599.0, 5318.0, 5606.0, 5424.0, 5426.0, 5666.0, 5262.0, 5532.0, 5464.0, 5595.0, 5282.0, 5438.0, 5680.0, 5346.0, 5376.0, 5557.0, 5564.0, 5604.0,

						5589.0, 5551.0, 5362.0, 5506.0, 5275.0, 5402.0, 5295.0, 5433.0, 5389.0, 5400.0, 5338.0, 5494.0, 5291.0, 5473.0, 5690.0, 5417.0, 5648.0, 5673.0, 5539.0, 5289.0, 5541.0, 5446.0, 5315.0, 5287.0, 5257.0, 5627.0, 5603.0, 5668.0, 5529.0, 5452.0, 5667.0, 5705.0, 5598.0, 5671.0, 5456.0
7	5260	9	1	333	1	5688.0, 5284.0, 5596.0, 5523.0, 5304.0, 5326.0, 5661.0, 5617.0, 5683.0, 5668.0, 5307.0, 5405.0, 5447.0, 5704.0, 5513.0, 5559.0, 5593.0, 5684.0, 5665.0, 5716.0, 5271.0, 5605.0, 5301.0, 5297.0, 5577.0, 5693.0, 5377.0, 5667.0, 5331.0, 5459.0, 5631.0, 5552.0, 5389.0, 5348.0, 5383.0, 5434.0, 5508.0, 5467.0, 5355.0, 5563.0, 5263.0, 5590.0, 5346.0, 5368.0, 5380.0, 5415.0, 5305.0, 5360.0, 5545.0, 5511.0, 5277.0, 5347.0, 5623.0, 5649.0, 5664.0, 5495.0, 5705.0, 5432.0, 5595.0, 5420.0, 5352.0, 5564.0, 5424.0, 5712.0, 5501.0, 5687.0, 5403.0, 5571.0, 5589.0, 5637.0, 5604.0, 5315.0, 5414.0, 5333.0, 5581.0, 5603.0, 5258.0, 5703.0, 5583.0, 5657.0, 5547.0, 5516.0, 5659.0, 5619.0, 5454.0, 5361.0, 5597.0, 5561.0, 5638.0, 5505.0, 5587.0, 5275.0, 5531.0, 5256.0, 5548.0, 5266.0, 5496.0, 5537.0, 5289.0, 5650.0
8	5260	9	1	333	1	5389.0, 5582.0, 5686.0, 5581.0, 5650.0, 5623.0, 5417.0, 5412.0, 5384.0, 5709.0, 5297.0, 5697.0, 5644.0, 5263.0, 5568.0, 5476.0, 5480.0, 5343.0, 5631.0, 5585.0, 5612.0, 5692.0, 5259.0, 5336.0, 5256.0, 5284.0, 5280.0, 5493.0, 5316.0, 5295.0, 5566.0, 5448.0, 5654.0, 5366.0, 5533.0, 5589.0, 5477.0, 5402.0, 5567.0, 5365.0, 5525.0, 5649.0, 5415.0, 5670.0, 5294.0, 5510.0, 5420.0, 5479.0, 5602.0, 5481.0, 5457.0, 5601.0, 5547.0, 5604.0, 5675.0, 5398.0, 5463.0, 5577.0, 5682.0, 5636.0, 5268.0, 5668.0, 5371.0, 5580.0, 5311.0, 5425.0, 5618.0, 5680.0, 5436.0, 5513.0, 5373.0, 5372.0, 5597.0, 5544.0, 5413.0, 5440.0, 5578.0, 5716.0, 5388.0, 5574.0, 5617.0, 5576.0, 5694.0, 5265.0, 5262.0, 5486.0, 5337.0, 5553.0, 5546.0, 5584.0, 5387.0, 5342.0, 5531.0, 5276.0, 5344.0, 5640.0, 5277.0, 5702.0, 5610.0, 5554.0
9	5260	9	1	333	1	5286.0, 5447.0, 5701.0, 5449.0, 5274.0, 5475.0, 5325.0, 5322.0, 5321.0, 5563.0, 5418.0, 5567.0, 5611.0, 5461.0, 5502.0, 5466.0, 5320.0, 5261.0, 5512.0, 5376.0, 5639.0, 5602.0, 5283.0, 5455.0, 5508.0, 5698.0, 5343.0, 5282.0, 5490.0, 5305.0, 5722.0, 5596.0, 5303.0, 5696.0, 5415.0, 5546.0, 5493.0, 5625.0, 5291.0, 5465.0, 5270.0, 5710.0, 5470.0, 5590.0, 5309.0, 5569.0, 5293.0, 5674.0, 5388.0, 5371.0, 5452.0, 5585.0, 5287.0, 5426.0, 5382.0, 5579.0, 5713.0, 5629.0, 5298.0, 5340.0, 5342.0, 5689.0, 5489.0, 5686.0, 5631.0,

						5716.0, 5336.0, 5319.0, 5379.0, 5662.0, 5627.0, 5439.0, 5599.0, 5393.0, 5275.0, 5663.0, 5380.0, 5463.0, 5584.0, 5311.0, 5273.0, 5352.0, 5552.0, 5605.0, 5351.0, 5329.0, 5428.0, 5593.0, 5636.0, 5709.0, 5650.0, 5404.0, 5324.0, 5264.0, 5408.0, 5655.0, 5597.0, 5506.0, 5651.0, 5647.0
10	5260	9	1	333	1	5307.0, 5656.0, 5526.0, 5319.0, 5484.0, 5602.0, 5651.0, 5696.0, 5328.0, 5337.0, 5487.0, 5492.0, 5461.0, 5335.0, 5686.0, 5475.0, 5437.0, 5515.0, 5295.0, 5459.0, 5681.0, 5380.0, 5505.0, 5585.0, 5392.0, 5703.0, 5401.0, 5346.0, 5333.0, 5345.0, 5548.0, 5652.0, 5630.0, 5710.0, 5382.0, 5504.0, 5477.0, 5542.0, 5344.0, 5278.0, 5440.0, 5641.0, 5711.0, 5705.0, 5715.0, 5694.0, 5291.0, 5623.0, 5483.0, 5301.0, 5689.0, 5609.0, 5434.0, 5512.0, 5314.0, 5687.0, 5400.0, 5577.0, 5290.0, 5373.0, 5476.0, 5460.0, 5691.0, 5418.0, 5257.0, 5417.0, 5355.0, 5269.0, 5514.0, 5365.0, 5595.0, 5551.0, 5588.0, 5272.0, 5490.0, 5329.0, 5491.0, 5371.0, 5350.0, 5343.0, 5317.0, 5590.0, 5412.0, 5636.0, 5293.0, 5358.0, 5394.0, 5572.0, 5258.0, 5722.0, 5524.0, 5384.0, 5449.0, 5624.0, 5495.0, 5374.0, 5568.0, 5361.0, 5549.0, 5456.0
11	5260	9	1	333	1	5453.0, 5660.0, 5582.0, 5358.0, 5607.0, 5551.0, 5411.0, 5630.0, 5690.0, 5346.0, 5421.0, 5565.0, 5656.0, 5654.0, 5414.0, 5274.0, 5576.0, 5420.0, 5333.0, 5570.0, 5539.0, 5554.0, 5439.0, 5671.0, 5381.0, 5700.0, 5363.0, 5628.0, 5319.0, 5258.0, 5367.0, 5389.0, 5677.0, 5693.0, 5401.0, 5499.0, 5544.0, 5519.0, 5486.0, 5254.0, 5520.0, 5316.0, 5365.0, 5438.0, 5475.0, 5290.0, 5675.0, 5505.0, 5306.0, 5391.0, 5702.0, 5482.0, 5611.0, 5385.0, 5355.0, 5383.0, 5490.0, 5562.0, 5251.0, 5488.0, 5295.0, 5402.0, 5546.0, 5525.0, 5497.0, 5510.0, 5469.0, 5437.0, 5376.0, 5352.0, 5368.0, 5661.0, 5542.0, 5631.0, 5664.0, 5407.0, 5559.0, 5563.0, 5600.0, 5309.0, 5536.0, 5561.0, 5425.0, 5424.0, 5719.0, 5477.0, 5655.0, 5312.0, 5500.0, 5610.0, 5714.0, 5369.0, 5273.0, 5704.0, 5445.0, 5640.0, 5543.0, 5596.0, 5484.0, 5720.0
12	5260	9	1	333	1	5596.0, 5511.0, 5547.0, 5328.0, 5556.0, 5340.0, 5440.0, 5335.0, 5578.0, 5652.0, 5426.0, 5642.0, 5629.0, 5311.0, 5593.0, 5403.0, 5625.0, 5646.0, 5494.0, 5660.0, 5666.0, 5529.0, 5715.0, 5271.0, 5704.0, 5260.0, 5653.0, 5722.0, 5377.0, 5274.0, 5272.0, 5343.0, 5456.0, 5531.0, 5689.0, 5408.0, 5601.0, 5458.0, 5353.0, 5305.0, 5598.0, 5453.0, 5700.0, 5254.0, 5365.0, 5597.0, 5256.0, 5316.0, 5374.0, 5645.0, 5546.0, 5291.0, 5611.0, 5486.0, 5670.0, 5334.0, 5521.0, 5524.0, 5510.0, 5690.0, 5592.0, 5674.0, 5251.0, 5504.0, 5358.0

						5461.0, 5603.0, 5478.0, 5643.0, 5650.0, 5292.0, 5512.0, 5425.0, 5286.0, 5549.0, 5383.0, 5671.0, 5697.0, 5298.0, 5614.0, 5441.0, 5299.0, 5430.0, 5428.0, 5329.0, 5558.0, 5544.0, 5480.0, 5336.0, 5287.0, 5699.0, 5503.0, 5466.0, 5385.0, 5541.0, 5588.0, 5620.0, 5508.0, 5270.0, 5370.0
13	5260	9	1	333	1	5350.0, 5294.0, 5688.0, 5540.0, 5431.0, 5632.0, 5346.0, 5268.0, 5584.0, 5716.0, 5720.0, 5484.0, 5362.0, 5536.0, 5700.0, 5497.0, 5651.0, 5710.0, 5432.0, 5311.0, 5637.0, 5290.0, 5604.0, 5675.0, 5383.0, 5333.0, 5706.0, 5671.0, 5586.0, 5562.0, 5297.0, 5520.0, 5253.0, 5669.0, 5654.0, 5612.0, 5421.0, 5345.0, 5349.0, 5382.0, 5668.0, 5473.0, 5591.0, 5528.0, 5613.0, 5597.0, 5571.0, 5388.0, 5589.0, 5474.0, 5621.0, 5408.0, 5482.0, 5377.0, 5655.0, 5434.0, 5582.0, 5551.0, 5444.0, 5325.0, 5521.0, 5252.0, 5291.0, 5426.0, 5596.0, 5320.0, 5707.0, 5508.0, 5525.0, 5593.0, 5492.0, 5585.0, 5695.0, 5580.0, 5679.0, 5479.0, 5450.0, 5592.0, 5361.0, 5422.0, 5672.0, 5337.0, 5626.0, 5650.0, 5723.0, 5410.0, 5370.0, 5336.0, 5347.0, 5398.0, 5610.0, 5456.0, 5305.0, 5310.0, 5662.0, 5262.0, 5697.0, 5595.0, 5619.0, 5472.0
14	5260	9	1	333	1	5668.0, 5625.0, 5538.0, 5603.0, 5462.0, 5624.0, 5629.0, 5555.0, 5491.0, 5547.0, 5567.0, 5408.0, 5552.0, 5651.0, 5578.0, 5526.0, 5429.0, 5293.0, 5604.0, 5673.0, 5515.0, 5298.0, 5321.0, 5576.0, 5523.0, 5360.0, 5484.0, 5413.0, 5404.0, 5553.0, 5469.0, 5449.0, 5591.0, 5350.0, 5430.0, 5655.0, 5286.0, 5386.0, 5415.0, 5723.0, 5262.0, 5274.0, 5513.0, 5681.0, 5557.0, 5265.0, 5301.0, 5275.0, 5593.0, 5368.0, 5416.0, 5545.0, 5388.0, 5438.0, 5544.0, 5584.0, 5566.0, 5393.0, 5650.0, 5307.0, 5287.0, 5339.0, 5496.0, 5606.0, 5497.0, 5585.0, 5691.0, 5366.0, 5440.0, 5380.0, 5400.0, 5319.0, 5446.0, 5581.0, 5370.0, 5454.0, 5713.0, 5644.0, 5684.0, 5326.0, 5303.0, 5516.0, 5612.0, 5289.0, 5260.0, 5634.0, 5273.0, 5690.0, 5302.0, 5263.0, 5313.0, 5251.0, 5645.0, 5325.0, 5717.0, 5708.0, 5517.0, 5697.0, 5540.0, 5554.0
15	5260	9	1	333	1	5619.0, 5384.0, 5660.0, 5317.0, 5395.0, 5718.0, 5345.0, 5717.0, 5561.0, 5354.0, 5653.0, 5558.0, 5599.0, 5624.0, 5485.0, 5392.0, 5280.0, 5429.0, 5360.0, 5358.0, 5387.0, 5293.0, 5647.0, 5456.0, 5309.0, 5481.0, 5270.0, 5329.0, 5578.0, 5251.0, 5563.0, 5626.0, 5390.0, 5713.0, 5597.0, 5519.0, 5587.0, 5314.0, 5676.0, 5418.0, 5562.0, 5560.0, 5453.0, 5397.0, 5614.0, 5377.0, 5612.0, 5421.0, 5344.0, 5615.0, 5606.0, 5313.0, 5602.0, 5375.0, 5431.0, 5381.0, 5716.0, 5470.0, 5260.0, 5445.0, 5611.0, 5367.0, 5292.0, 5719.0, 5641.0,

						5622.0, 5539.0, 5487.0, 5569.0, 5349.0, 5478.0, 5341.0, 5505.0, 5416.0, 5698.0, 5256.0, 5443.0, 5364.0, 5691.0, 5513.0, 5475.0, 5402.0, 5350.0, 5373.0, 5638.0, 5296.0, 5504.0, 5556.0, 5359.0, 5634.0, 5408.0, 5462.0, 5361.0, 5398.0, 5621.0, 5310.0, 5715.0, 5570.0, 5585.0, 5259.0
16	5260	9	1	333	1	5559.0, 5651.0, 5285.0, 5524.0, 5316.0, 5510.0, 5553.0, 5695.0, 5466.0, 5324.0, 5613.0, 5635.0, 5250.0, 5312.0, 5290.0, 5328.0, 5363.0, 5259.0, 5566.0, 5388.0, 5394.0, 5335.0, 5682.0, 5463.0, 5374.0, 5476.0, 5361.0, 5501.0, 5633.0, 5699.0, 5402.0, 5404.0, 5607.0, 5592.0, 5308.0, 5348.0, 5370.0, 5632.0, 5355.0, 5522.0, 5260.0, 5291.0, 5562.0, 5256.0, 5389.0, 5704.0, 5366.0, 5717.0, 5251.0, 5375.0, 5267.0, 5701.0, 5332.0, 5614.0, 5318.0, 5369.0, 5313.0, 5604.0, 5268.0, 5398.0, 5520.0, 5585.0, 5517.0, 5697.0, 5685.0, 5606.0, 5516.0, 5540.0, 5570.0, 5483.0, 5630.0, 5477.0, 5498.0, 5624.0, 5567.0, 5678.0, 5569.0, 5422.0, 5502.0, 5572.0, 5277.0, 5496.0, 5341.0, 5492.0, 5273.0, 5665.0, 5368.0, 5264.0, 5283.0, 5301.0, 5440.0, 5622.0, 5418.0, 5505.0, 5618.0, 5288.0, 5445.0, 5637.0, 5365.0, 5306.0
17	5260	9	1	333	1	5513.0, 5723.0, 5561.0, 5606.0, 5539.0, 5525.0, 5588.0, 5646.0, 5592.0, 5333.0, 5600.0, 5301.0, 5357.0, 5402.0, 5700.0, 5680.0, 5565.0, 5697.0, 5628.0, 5292.0, 5277.0, 5661.0, 5327.0, 5633.0, 5673.0, 5308.0, 5255.0, 5483.0, 5366.0, 5475.0, 5331.0, 5582.0, 5408.0, 5269.0, 5397.0, 5310.0, 5649.0, 5445.0, 5422.0, 5710.0, 5317.0, 5602.0, 5430.0, 5421.0, 5350.0, 5396.0, 5325.0, 5526.0, 5557.0, 5589.0, 5472.0, 5254.0, 5449.0, 5564.0, 5295.0, 5670.0, 5306.0, 5689.0, 5427.0, 5426.0, 5276.0, 5457.0, 5502.0, 5573.0, 5256.0, 5531.0, 5337.0, 5552.0, 5401.0, 5660.0, 5380.0, 5471.0, 5488.0, 5303.0, 5545.0, 5578.0, 5549.0, 5652.0, 5514.0, 5371.0, 5572.0, 5658.0, 5361.0, 5598.0, 5252.0, 5538.0, 5305.0, 5522.0, 5718.0, 5690.0, 5571.0, 5713.0, 5320.0, 5548.0, 5566.0, 5447.0, 5694.0, 5499.0, 5493.0, 5681.0
18	5260	9	1	333	1	5567.0, 5324.0, 5644.0, 5303.0, 5343.0, 5468.0, 5427.0, 5684.0, 5290.0, 5276.0, 5322.0, 5569.0, 5341.0, 5275.0, 5464.0, 5477.0, 5367.0, 5705.0, 5349.0, 5374.0, 5608.0, 5565.0, 5461.0, 5377.0, 5558.0, 5499.0, 5361.0, 5261.0, 5444.0, 5625.0, 5483.0, 5292.0, 5505.0, 5658.0, 5389.0, 5279.0, 5252.0, 5385.0, 5257.0, 5651.0, 5647.0, 5503.0, 5699.0, 5683.0, 5614.0, 5306.0, 5525.0, 5488.0, 5599.0, 5551.0, 5544.0, 5664.0, 5309.0, 5256.0, 5536.0, 5454.0, 5521.0, 5541.0, 5317.0, 5546.0, 5700.0, 5655.0, 5482.0, 5572.0, 5362.0,

						5270.0, 5487.0, 5297.0, 5366.0, 5469.0, 5360.0, 5368.0, 5537.0, 5421.0, 5533.0, 5495.0, 5415.0, 5342.0, 5481.0, 5416.0, 5620.0, 5635.0, 5591.0, 5666.0, 5563.0, 5552.0, 5540.0, 5708.0, 5439.0, 5577.0, 5594.0, 5680.0, 5609.0, 5652.0, 5648.0, 5588.0, 5451.0, 5307.0, 5346.0, 5334.0
19	5260	9	1	333	1	5346.0, 5387.0, 5531.0, 5510.0, 5570.0, 5301.0, 5269.0, 5579.0, 5488.0, 5306.0, 5393.0, 5675.0, 5327.0, 5477.0, 5516.0, 5358.0, 5693.0, 5402.0, 5572.0, 5623.0, 5560.0, 5585.0, 5267.0, 5647.0, 5339.0, 5637.0, 5504.0, 5679.0, 5288.0, 5513.0, 5379.0, 5507.0, 5494.0, 5652.0, 5583.0, 5691.0, 5536.0, 5656.0, 5300.0, 5423.0, 5519.0, 5692.0, 5641.0, 5555.0, 5275.0, 5344.0, 5341.0, 5374.0, 5551.0, 5277.0, 5396.0, 5262.0, 5721.0, 5619.0, 5711.0, 5630.0, 5302.0, 5373.0, 5371.0, 5343.0, 5335.0, 5447.0, 5638.0, 5293.0, 5549.0, 5450.0, 5655.0, 5382.0, 5569.0, 5556.0, 5593.0, 5426.0, 5291.0, 5671.0, 5662.0, 5618.0, 5581.0, 5664.0, 5408.0, 5362.0, 5548.0, 5372.0, 5651.0, 5401.0, 5354.0, 5333.0, 5397.0, 5603.0, 5568.0, 5424.0, 5322.0, 5273.0, 5283.0, 5690.0, 5523.0, 5441.0, 5422.0, 5353.0, 5299.0, 5295.0
20	5260	9	1	333	1	5435.0, 5702.0, 5597.0, 5308.0, 5519.0, 5654.0, 5606.0, 5277.0, 5698.0, 5377.0, 5724.0, 5566.0, 5548.0, 5509.0, 5590.0, 5427.0, 5408.0, 5336.0, 5297.0, 5281.0, 5414.0, 5272.0, 5484.0, 5717.0, 5411.0, 5255.0, 5533.0, 5369.0, 5574.0, 5714.0, 5694.0, 5262.0, 5382.0, 5526.0, 5613.0, 5638.0, 5633.0, 5332.0, 5703.0, 5441.0, 5376.0, 5326.0, 5253.0, 5520.0, 5631.0, 5584.0, 5661.0, 5386.0, 5450.0, 5708.0, 5460.0, 5413.0, 5449.0, 5405.0, 5723.0, 5644.0, 5429.0, 5428.0, 5707.0, 5517.0, 5371.0, 5282.0, 5581.0, 5404.0, 5320.0, 5298.0, 5503.0, 5563.0, 5491.0, 5589.0, 5276.0, 5397.0, 5715.0, 5285.0, 5642.0, 5525.0, 5634.0, 5304.0, 5368.0, 5522.0, 5418.0, 5422.0, 5479.0, 5419.0, 5313.0, 5619.0, 5541.0, 5373.0, 5620.0, 5585.0, 5447.0, 5636.0, 5329.0, 5504.0, 5651.0, 5514.0, 5311.0, 5374.0, 5340.0, 5263.0
21	5260	9	1	333	1	5503.0, 5480.0, 5645.0, 5319.0, 5609.0, 5628.0, 5400.0, 5451.0, 5597.0, 5418.0, 5723.0, 5529.0, 5518.0, 5599.0, 5590.0, 5345.0, 5497.0, 5482.0, 5504.0, 5620.0, 5328.0, 5323.0, 5708.0, 5541.0, 5522.0, 5505.0, 5439.0, 5625.0, 5257.0, 5488.0, 5593.0, 5296.0, 5443.0, 5381.0, 5680.0, 5717.0, 5302.0, 5289.0, 5644.0, 5547.0, 5259.0, 5399.0, 5572.0, 5558.0, 5262.0, 5304.0, 5539.0, 5326.0, 5272.0, 5297.0, 5517.0, 5457.0, 5474.0, 5575.0, 5549.0, 5699.0, 5317.0, 5281.0, 5492.0, 5473.0, 5369.0, 5362.0, 5635.0, 5364.0, 5673.0

						5641.0, 5332.0, 5525.0, 5441.0, 5350.0, 5513.0, 5414.0, 5562.0, 5506.0, 5643.0, 5687.0, 5632.0, 5425.0, 5594.0, 5279.0, 5601.0, 5556.0, 5657.0, 5559.0, 5260.0, 5479.0, 5493.0, 5446.0, 5624.0, 5481.0, 5681.0, 5618.0, 5598.0, 5554.0, 5366.0, 5630.0, 5587.0, 5379.0, 5528.0, 5256.0
22	5260	9	1	333	1	5687.0, 5604.0, 5684.0, 5404.0, 5319.0, 5353.0, 5564.0, 5465.0, 5475.0, 5538.0, 5668.0, 5438.0, 5461.0, 5407.0, 5587.0, 5256.0, 5714.0, 5695.0, 5409.0, 5571.0, 5299.0, 5588.0, 5540.0, 5322.0, 5532.0, 5406.0, 5614.0, 5670.0, 5594.0, 5630.0, 5447.0, 5410.0, 5357.0, 5543.0, 5445.0, 5426.0, 5575.0, 5548.0, 5648.0, 5356.0, 5681.0, 5416.0, 5506.0, 5307.0, 5383.0, 5343.0, 5632.0, 5381.0, 5662.0, 5515.0, 5641.0, 5288.0, 5692.0, 5596.0, 5657.0, 5569.0, 5479.0, 5501.0, 5636.0, 5647.0, 5706.0, 5459.0, 5337.0, 5320.0, 5690.0, 5494.0, 5694.0, 5696.0, 5430.0, 5709.0, 5380.0, 5615.0, 5412.0, 5331.0, 5314.0, 5413.0, 5253.0, 5560.0, 5455.0, 5480.0, 5466.0, 5328.0, 5553.0, 5340.0, 5323.0, 5429.0, 5265.0, 5401.0, 5329.0, 5282.0, 5446.0, 5651.0, 5567.0, 5284.0, 5369.0, 5330.0, 5678.0, 5521.0, 5451.0, 5710.0
23	5260	9	1	333	1	5666.0, 5640.0, 5562.0, 5690.0, 5302.0, 5713.0, 5639.0, 5404.0, 5601.0, 5475.0, 5628.0, 5446.0, 5508.0, 5394.0, 5312.0, 5630.0, 5650.0, 5339.0, 5545.0, 5709.0, 5594.0, 5566.0, 5721.0, 5354.0, 5412.0, 5416.0, 5540.0, 5694.0, 5552.0, 5714.0, 5685.0, 5373.0, 5319.0, 5665.0, 5631.0, 5602.0, 5479.0, 5590.0, 5570.0, 5551.0, 5539.0, 5575.0, 5376.0, 5254.0, 5538.0, 5604.0, 5363.0, 5297.0, 5472.0, 5370.0, 5271.0, 5310.0, 5677.0, 5492.0, 5720.0, 5494.0, 5329.0, 5608.0, 5270.0, 5366.0, 5693.0, 5464.0, 5612.0, 5439.0, 5656.0, 5409.0, 5342.0, 5561.0, 5454.0, 5356.0, 5526.0, 5493.0, 5359.0, 5595.0, 5607.0, 5510.0, 5715.0, 5655.0, 5321.0, 5283.0, 5482.0, 5495.0, 5549.0, 5314.0, 5548.0, 5407.0, 5691.0, 5672.0, 5614.0, 5532.0, 5634.0, 5316.0, 5513.0, 5560.0, 5544.0, 5671.0, 5389.0, 5388.0, 5696.0, 5515.0
24	5260	9	1	333	1	5690.0, 5393.0, 5341.0, 5348.0, 5501.0, 5656.0, 5571.0, 5318.0, 5254.0, 5463.0, 5686.0, 5278.0, 5527.0, 5376.0, 5433.0, 5383.0, 5580.0, 5269.0, 5402.0, 5412.0, 5514.0, 5467.0, 5706.0, 5452.0, 5659.0, 5720.0, 5422.0, 5339.0, 5552.0, 5466.0, 5289.0, 5678.0, 5345.0, 5424.0, 5587.0, 5384.0, 5536.0, 5525.0, 5526.0, 5621.0, 5493.0, 5275.0, 5409.0, 5504.0, 5721.0, 5407.0, 5505.0, 5408.0, 5622.0, 5431.0, 5430.0, 5492.0, 5630.0, 5618.0, 5681.0, 5490.0, 5687.0, 5506.0, 5673.0, 5392.0, 5255.0, 5259.0, 5640.0, 5590.0, 5689.0

						5414.0, 5712.0, 5441.0, 5497.0, 5351.0, 5593.0, 5539.0, 5457.0, 5333.0, 5538.0, 5462.0, 5565.0, 5458.0, 5581.0, 5451.0, 5664.0, 5353.0, 5509.0, 5704.0, 5442.0, 5250.0, 5267.0, 5382.0, 5336.0, 5335.0, 5302.0, 5573.0, 5657.0, 5602.0, 5542.0, 5599.0, 5332.0, 5648.0, 5558.0, 5464.0
25	5260	9	1	333	1	5699.0, 5606.0, 5559.0, 5259.0, 5612.0, 5293.0, 5313.0, 5264.0, 5549.0, 5420.0, 5280.0, 5464.0, 5462.0, 5679.0, 5498.0, 5373.0, 5603.0, 5473.0, 5591.0, 5441.0, 5268.0, 5402.0, 5474.0, 5276.0, 5339.0, 5411.0, 5648.0, 5583.0, 5636.0, 5458.0, 5639.0, 5279.0, 5685.0, 5491.0, 5340.0, 5656.0, 5454.0, 5346.0, 5619.0, 5529.0, 5518.0, 5302.0, 5290.0, 5262.0, 5314.0, 5527.0, 5395.0, 5720.0, 5635.0, 5455.0, 5689.0, 5289.0, 5687.0, 5445.0, 5327.0, 5581.0, 5260.0, 5625.0, 5594.0, 5622.0, 5565.0, 5546.0, 5398.0, 5558.0, 5291.0, 5616.0, 5682.0, 5662.0, 5382.0, 5514.0, 5433.0, 5567.0, 5409.0, 5442.0, 5555.0, 5667.0, 5465.0, 5524.0, 5310.0, 5324.0, 5481.0, 5437.0, 5547.0, 5508.0, 5380.0, 5627.0, 5399.0, 5551.0, 5610.0, 5677.0, 5592.0, 5300.0, 5511.0, 5538.0, 5611.0, 5641.0, 5484.0, 5322.0, 5479.0, 5710.0
26	5260	9	1	333	1	5629.0, 5674.0, 5664.0, 5504.0, 5722.0, 5460.0, 5284.0, 5537.0, 5354.0, 5274.0, 5282.0, 5707.0, 5586.0, 5531.0, 5403.0, 5393.0, 5560.0, 5639.0, 5538.0, 5468.0, 5325.0, 5650.0, 5269.0, 5419.0, 5694.0, 5672.0, 5323.0, 5533.0, 5637.0, 5277.0, 5303.0, 5395.0, 5470.0, 5424.0, 5518.0, 5535.0, 5607.0, 5369.0, 5673.0, 5292.0, 5638.0, 5616.0, 5356.0, 5279.0, 5409.0, 5368.0, 5478.0, 5473.0, 5446.0, 5636.0, 5373.0, 5667.0, 5675.0, 5677.0, 5543.0, 5500.0, 5459.0, 5476.0, 5453.0, 5406.0, 5506.0, 5477.0, 5513.0, 5350.0, 5433.0, 5461.0, 5720.0, 5296.0, 5627.0, 5559.0, 5553.0, 5360.0, 5526.0, 5319.0, 5449.0, 5698.0, 5464.0, 5359.0, 5318.0, 5340.0, 5495.0, 5389.0, 5517.0, 5646.0, 5382.0, 5549.0, 5539.0, 5670.0, 5661.0, 5593.0, 5450.0, 5273.0, 5662.0, 5469.0, 5591.0, 5301.0, 5580.0, 5467.0, 5669.0, 5331.0
27	5260	9	1	333	1	5429.0, 5460.0, 5585.0, 5347.0, 5498.0, 5299.0, 5509.0, 5558.0, 5412.0, 5360.0, 5520.0, 5701.0, 5251.0, 5651.0, 5531.0, 5444.0, 5478.0, 5276.0, 5655.0, 5253.0, 5638.0, 5464.0, 5423.0, 5354.0, 5292.0, 5719.0, 5305.0, 5686.0, 5485.0, 5463.0, 5639.0, 5685.0, 5307.0, 5711.0, 5668.0, 5521.0, 5578.0, 5286.0, 5343.0, 5700.0, 5312.0, 5632.0, 5428.0, 5501.0, 5573.0, 5373.0, 5392.0, 5589.0, 5683.0, 5263.0, 5524.0, 5653.0, 5552.0, 5503.0, 5613.0, 5306.0, 5439.0, 5266.0, 5542.0, 5466.0, 5270.0, 5661.0, 5456.0, 5539.0, 5416.0,

						5504.0, 5408.0, 5310.0, 5317.0, 5612.0, 5595.0, 5635.0, 5455.0, 5413.0, 5572.0, 5450.0, 5474.0, 5325.0, 5583.0, 5320.0, 5706.0, 5301.0, 5391.0, 5601.0, 5669.0, 5712.0, 5634.0, 5362.0, 5436.0, 5346.0, 5666.0, 5419.0, 5581.0, 5398.0, 5723.0, 5533.0, 5377.0, 5659.0, 5708.0, 5516.0
28	5260	9	1	333	1	5364.0, 5580.0, 5379.0, 5692.0, 5678.0, 5447.0, 5267.0, 5652.0, 5467.0, 5414.0, 5717.0, 5516.0, 5691.0, 5398.0, 5459.0, 5378.0, 5385.0, 5334.0, 5643.0, 5314.0, 5480.0, 5506.0, 5349.0, 5389.0, 5657.0, 5471.0, 5626.0, 5623.0, 5594.0, 5347.0, 5283.0, 5302.0, 5339.0, 5595.0, 5618.0, 5296.0, 5250.0, 5393.0, 5592.0, 5400.0, 5338.0, 5365.0, 5342.0, 5422.0, 5586.0, 5632.0, 5275.0, 5358.0, 5711.0, 5317.0, 5653.0, 5538.0, 5641.0, 5481.0, 5470.0, 5415.0, 5262.0, 5276.0, 5515.0, 5395.0, 5501.0, 5390.0, 5435.0, 5405.0, 5719.0, 5332.0, 5386.0, 5565.0, 5439.0, 5313.0, 5662.0, 5634.0, 5323.0, 5496.0, 5721.0, 5426.0, 5292.0, 5477.0, 5509.0, 5541.0, 5616.0, 5651.0, 5449.0, 5663.0, 5341.0, 5500.0, 5491.0, 5658.0, 5319.0, 5428.0, 5478.0, 5689.0, 5407.0, 5660.0, 5546.0, 5441.0, 5413.0, 5579.0, 5677.0, 5587.0
29	5260	9	1	333	1	5265.0, 5331.0, 5292.0, 5549.0, 5688.0, 5561.0, 5312.0, 5496.0, 5258.0, 5519.0, 5686.0, 5419.0, 5583.0, 5704.0, 5386.0, 5271.0, 5392.0, 5362.0, 5635.0, 5592.0, 5456.0, 5438.0, 5559.0, 5535.0, 5516.0, 5488.0, 5468.0, 5515.0, 5600.0, 5684.0, 5620.0, 5548.0, 5354.0, 5618.0, 5379.0, 5497.0, 5482.0, 5722.0, 5400.0, 5660.0, 5605.0, 5283.0, 5609.0, 5544.0, 5278.0, 5315.0, 5295.0, 5336.0, 5692.0, 5553.0, 5533.0, 5431.0, 5396.0, 5574.0, 5606.0, 5260.0, 5601.0, 5435.0, 5478.0, 5626.0, 5465.0, 5582.0, 5555.0, 5325.0, 5477.0, 5662.0, 5674.0, 5543.0, 5608.0, 5487.0, 5480.0, 5298.0, 5577.0, 5575.0, 5471.0, 5550.0, 5630.0, 5290.0, 5308.0, 5664.0, 5332.0, 5528.0, 5627.0, 5719.0, 5507.0, 5654.0, 5461.0, 5457.0, 5536.0, 5388.0, 5382.0, 5694.0, 5568.0, 5691.0, 5585.0, 5524.0, 5364.0, 5470.0, 5479.0, 5318.0
30	5260	9	1	333	1	5682.0, 5551.0, 5676.0, 5310.0, 5667.0, 5713.0, 5528.0, 5267.0, 5693.0, 5501.0, 5462.0, 5712.0, 5579.0, 5557.0, 5651.0, 5260.0, 5489.0, 5291.0, 5420.0, 5540.0, 5472.0, 5511.0, 5518.0, 5373.0, 5323.0, 5544.0, 5319.0, 5720.0, 5416.0, 5466.0, 5333.0, 5715.0, 5374.0, 5330.0, 5561.0, 5422.0, 5390.0, 5316.0, 5490.0, 5486.0, 5645.0, 5679.0, 5686.0, 5606.0, 5371.0, 5400.0, 5473.0, 5719.0, 5506.0, 5405.0, 5602.0, 5721.0, 5432.0, 5598.0, 5562.0, 5474.0, 5394.0, 5673.0, 5375.0, 5461.0, 5252.0, 5327.0, 5467.0, 5378.0, 5256.0

						5354.0, 5488.0, 5563.0, 5460.0, 5441.0, 5337.0, 5363.0, 5656.0, 5265.0, 5320.0, 5604.0, 5484.0, 5263.0, 5633.0, 5639.0, 5548.0, 5395.0, 5346.0, 5641.0, 5529.0, 5278.0, 5661.0, 5335.0, 5636.0, 5387.0, 5366.0, 5262.0, 5623.0, 5470.0, 5583.0, 5303.0, 5647.0, 5519.0, 5300.0, 5492.0
--	--	--	--	--	--	--

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	100 %	60%	Pass
Type 3	30	100 %	60%	Pass
Type 4	30	100 %	60%	Pass
Aggregate (Type1 to 4)	120	100 %	80%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	100 %	70%	Pass

Please refer to the following statistical tables:

5270MHz:**Radar Type 1A Statistical Performance**

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5270	61	1	878	1
2	5270	59	1	898	1
3	5270	62	1	858	1
4	5270	83	1	638	1
5	5270	102	1	518	1
6	5270	67	1	798	1
7	5270	78	1	678	1
8	5270	99	1	538	1
9	5270	72	1	738	1
10	5270	65	1	818	1
11	5270	57	1	938	1
12	5270	92	1	578	1
13	5270	68	1	778	1
14	5270	76	1	698	1
15	5270	70	1	758	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	5270	21	1	2571	1
2	5270	65	1	822	1
3	5270	32	1	1701	1
4	5270	31	1	1744	1
5	5270	63	1	850	1
6	5270	41	1	1291	1
7	5270	20	1	2655	1
8	5270	21	1	2541	1
9	5270	40	1	1323	1
10	5270	26	1	2089	1
11	5270	21	1	2561	1
12	5270	43	1	1244	1
13	5270	20	1	2671	1
14	5270	25	1	2122	1
15	5270	34	1	1558	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	5270	23	3.1	161	1
2	5270	23	4.1	215	1
3	5270	23	2.1	209	1
4	5270	25	4.9	180	1
5	5270	23	1.4	197	1
6	5270	28	3.8	210	1
7	5270	29	3.2	175	1
8	5270	29	2.4	150	1
9	5270	28	2.1	225	1
10	5270	28	2.8	217	1
11	5270	27	3.5	156	1
12	5270	23	1.6	213	1
13	5270	23	2.8	195	1
14	5270	29	3.9	159	1
15	5270	23	3.8	222	1
16	5270	29	2.8	186	1
17	5270	23	3.8	203	1
18	5270	27	4.6	162	1
19	5270	26	2.7	214	1
20	5270	29	2.6	166	1
21	5270	28	4.6	203	1
22	5270	27	1.1	182	1
23	5270	29	5	226	1
24	5270	24	1.8	201	1
25	5270	26	5	202	1
26	5270	23	4.2	167	1
27	5270	23	3.9	227	1
28	5270	27	1.5	218	1
29	5270	28	4.5	198	1
30	5270	26	1	181	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	5270	18	7	450	1
2	5270	18	9.7	414	1
3	5270	18	6.9	241	1
4	5270	18	8.8	490	1
5	5270	16	7	255	1
6	5270	18	7.4	233	1
7	5270	17	8.7	223	1
8	5270	18	9.3	329	1
9	5270	17	6.8	245	1
10	5270	18	6.1	281	1
11	5270	16	8.9	213	1
12	5270	16	8.4	212	1
13	5270	18	9.4	349	1
14	5270	17	7.4	363	1
15	5270	16	6.7	284	1
16	5270	16	6.3	248	1
17	5270	18	7	246	1
18	5270	16	7.3	392	1
19	5270	16	9.4	319	1
20	5270	16	9	400	1
21	5270	16	6.9	340	
22	5270	18	6.4	480	1
23	5270	17	9.9	332	1
24	5270	16	9.6	378	1
25	5270	16	9.2	343	1
26	5270	16	8.2	459	1
27	5270	18	6.6	323	1
28	5270	18	8.9	354	1
29	5270	18	9.1	354	1
30	5270	17	7.6	309	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	5270	13	11.2	483	1
2	5270	16	12.2	463	1
3	5270	14	19.7	246	1
4	5270	13	17.1	220	1
5	5270	16	17.4	289	1
6	5270	13	14.2	399	1
7	5270	15	18.9	270	1
8	5270	13	19.3	256	1
9	5270	15	13.8	392	1
10	5270	13	18.8	468	1
11	5270	15	18.7	207	1
12	5270	12	13.4	401	1
13	5270	16	12	412	1
14	5270	15	13.4	242	1
15	5270	16	15.1	336	1
16	5270	14	15.2	348	1
17	5270	15	18.7	499	1
18	5270	15	16.3	328	1
19	5270	14	17.4	471	1
20	5270	13	13.6	258	1
21	5270	16	17.4	285	1
22	5270	14	16.2	231	1
23	5270	14	12.8	366	1
24	5270	14	15.4	395	1
25	5270	12	15.7	346	1
26	5270	13	16.3	324	1
27	5270	13	19.7	311	1
28	5270	15	17.2	491	1
29	5270	12	11.2	292	1
30	5270	16	16.2	283	1
Detection Percentage: 100 % (>60%)					

Radar Type 5 Case 1 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5270.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	5	52.2	1232		0.381742	1
1	2	5	73.1	1272		1.469042	
2	2	5	64.4	1055		2.059483	
3	3	5	67.2	1325	1245	2.637897	
4	1	5	77.8			3.227281	
5	2	5	79.3	1292		4.475554	
6	2	5	73.6	1979		4.967260	
7	2	5	50.7	1030		5.960115	
8	2	5	78.4	1238		6.276901	
9	3	5	67.2	1450	1786	6.860081	
10	2	5	55.8	1680		7.626999	
11	2	5	71.7	1413		8.453854	
12	2	5	81.2	1892		9.582481	
13	1	5	68.9			10.296486	
14	2	5	95	1546		11.135585	
15	3	5	76.6	1647	1151	11.992889	

Statistics 2 (ChirpCenter Frequency: 5270.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	12	81.2			0.640475	1
1	1	12	65.9			0.669585	
2	1	12	77			1.795297	
3	3	12	81.2	1004	1400	2.430934	
4	1	12	70.9			3.146082	
5	3	12	96.8	1663	1803	3.427229	
6	3	12	83	1561	1858	4.574092	
7	2	12	93.7	1738		4.855923	
8	1	12	88.7			5.450761	
9	2	12	53.7	1414		6.477262	
10	2	12	95.2	1269		7.240040	
11	3	12	65.3	1409	1763	7.819270	
12	1	12	93.6			8.582466	
13	3	12	61	1173	1314	8.741225	
14	1	12	98			9.742322	
15	3	12	96.2	1431	1680	10.428203	
16	2	12	86.4	1172		11.161540	
17	1	12	61.2			11.479962	

Statistics 3 (ChirpCenter Frequency: 5270.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	15	52.4	1087		0.707381	1
1	2	15	81.5	1499		1.397200	
2	2	15	85.1	1683		2.064441	
3	1	15	58.5			2.565269	
4	3	15	72.7	1341	1931	3.839937	
5	2	15	99.9	1490		4.531958	
6	1	15	58.2			4.981156	
7	1	15	51.9			6.244016	
8	2	15	86.2	1502		7.105482	
9	2	15	68.7	1543		7.394538	
10	2	15	71.9	1261		8.738825	
11	1	15	76.3			8.910736	
12	2	15	55.8	1769		10.006220	
13	2	15	80.8	1661		10.527757	
14	3	15	71.6	1029	1474	11.739507	

Statistics 4 (ChirpCenter Frequency: 5270.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	8	87.2	1244		0.501868	1
1	2	8	83.9	1781		2.271304	
2	1	8	88.3			3.820991	
3	2	8	99.7	1495		5.241711	
4	1	8	65.1			7.386467	
5	2	8	77.9	1634		8.994649	
6	2	8	50.8	1368		9.770179	
7	1	8	63.1			10.890442	

Statistics 5(ChirpCenter Frequency: 5270.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	15	59.2	1736	1455	0.321451	1
1	3	15	77.4	1299	1258	1.660841	
2	2	15	80.2	1724		1.774527	
3	2	15	59.8	1525		3.012764	
4	2	15	52	1428		4.119247	
5	2	15	50.5	1561		4.947856	
6	3	15	54.5	1406	1975	5.668745	
7	1	15	84.8			6.843164	
8	2	15	91.2	1158		7.012356	
9	2	15	72.8	1676		8.148734	
10	2	15	62.1	1052		8.696628	
11	2	15	72.5	1569		9.443910	
12	2	15	92.8	1812		10.324085	
13	3	15	97.8	1890	1607	11.596230	

Statistics 6 (ChirpCenter Frequency: 5270.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	6	94.6	1437		0.777609	1
1	3	6	89.1	1931	1024	1.467733	
2	3	6	53.9	1422	1062	2.102368	
3	1	6	58.2			3.934402	
4	3	6	75.9	1723	1061	4.940198	
5	1	6	82.4			5.073076	
6	2	6	79.6	1682		6.345130	
7	2	6	57.8	1263		7.740592	
8	1	6	78.4			8.901869	
9	1	6	58.3			9.680202	
10	2	6	86	1917		10.589298	
11	2	6	90.5	1505		11.504423	

Statistics 7(ChirpCenter Frequency: 5270.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	8	86.7	1824	1772	0.749964	1
1	2	8	71.1	1425		0.937339	
2	2	8	74.7	1355		2.010822	
3	3	8	83.2	1495	1142	3.339939	
4	2	8	65.3	1219		4.240699	
5	1	8	52.2			4.760178	
6	2	8	56.8	1039		6.110499	
7	1	8	94.6			7.246669	
8	2	8	76.6	1752		7.620071	
9	3	8	84.7	1516	1576	8.973849	
10	2	8	93.2	1305		9.974997	
11	1	8	65.8			10.985256	
12	2	8	80	1625		11.149353	

Statistics 8 (ChirpCenter Frequency: 5270.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	8	85.8	1710		0.633395	1
1	2	8	99.9	1826		1.444381	
2	1	8	58.8			1.621886	
3	1	8	60.6			2.620792	
4	2	8	94.8	1989		3.266521	
5	2	8	90.7	1914		4.586693	
6	2	8	83.6	1116		5.249302	
7	1	8	63.6			6.115152	
8	2	8	95.9	1736		6.939134	
9	3	8	71.4	1644	1969	7.681918	
10	2	8	66.6	1519		8.409084	
11	1	8	85.4			9.164865	
12	1	8	59.1			10.048795	
13	2	8	79.1	1240		10.502169	
14	2	8	74.8	1399		11.432674	

Statistics 9 (ChirpCenter Frequency: 5270.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	6	95.9	1905		0.577078	1
1	2	6	64.6	1259		1.030294	
2	2	6	72.5	1438		2.142635	
3	2	6	89.8	1839		3.038245	
4	3	6	63.8	1457	1432	3.365381	
5	2	6	84.7	1603		4.579486	
6	2	6	76.1	1148		5.155447	
7	3	6	55.9	1521	1474	5.861107	
8	2	6	62.6	1838		6.818695	
9	3	6	76.9	1783	1939	7.787821	
10	2	6	62.4	1522		8.238145	
11	2	6	91.2	1160		8.961962	
12	2	6	95.6	1483		9.960088	
13	2	6	60.3	1324		10.429355	
14	2	6	85.4	1496		11.907701	

Statistics 10 (ChirpCenter Frequency: 5270.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	13	88.1			0.198030	1
1	3	13	82.3	1519	1424	1.072257	
2	2	13	83.5	1584		1.623745	
3	2	13	73.4	1300		2.068624	
4	1	13	52.3			2.966547	
5	2	13	66.4	1143		3.228861	
6	1	13	62.5			4.244571	
7	3	13	53.4	1662	1136	4.927119	
8	1	13	62.4			5.174626	
9	3	13	93.7	1087	1944	5.874005	
10	3	13	89.5	1756	1615	6.332848	
11	1	13	77.4			7.220346	
12	1	13	83.5			8.161530	
13	2	13	81.3	1844		8.247447	
14	1	13	81			9.127953	
15	3	13	74.5	1215	1308	9.720009	
16	1	13	100			10.571539	
17	1	13	84.2			10.960514	
18	2	13	65.5	1710		11.561799	

Radar Type 5 Case 2 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5252.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	5	56.6	1359		0.292379	1
1	2	5	63.9	1137		1.112614	
2	3	5	58.8	1702	1748	1.359648	
3	2	5	79.9	1345		2.281489	
4	3	5	69.2	1525	1892	2.636498	
5	2	5	93.8	1729		3.531805	
6	3	5	73.1	1656	1694	3.987898	
7	3	5	56.8	1268	1674	4.482195	
8	2	5	73.7	1533		5.604941	
9	2	5	69.5	1135		6.002452	
10	2	5	50.1	1689		6.477428	
11	1	5	55.4			7.057657	
12	3	5	99.1	1825	1221	8.116067	
13	2	5	78.1	1449		8.404373	
14	2	5	55.8	1439		9.079337	
15	2	5	58.3	1849		9.641445	
16	2	5	75.8	1628		10.463479	
17	1	5	99.8			10.910592	
18	2	5	67.8	1737		11.811726	

Statistics 2 (ChirpCenter Frequency: 5252.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	5	56.9			0.583551	1
1	2	5	66.6	1267		1.020688	
2	3	5	61.8	1909	1414	1.433650	
3	2	5	72.2	1592		1.806641	
4	2	5	88.1	1650		2.746855	
5	2	5	95.5	1540		3.554429	
6	1	5	59.5			3.756002	
7	3	5	69	1393	1242	4.433501	
8	1	5	51.9			4.800038	
9	1	5	89.9			5.904077	
10	2	5	52	1915		6.357138	
11	2	5	54.5	1826		6.930561	
12	2	5	94.8	1474		7.278829	
13	2	5	80.6	1163		8.387296	
14	2	5	50.3	1694		8.786103	
15	2	5	74.6	1493		9.166966	
16	2	5	97	1047		10.190633	
17	3	5	90.3	1272	1803	10.594679	
18	2	5	66.2	1510		11.385895	
19	1	5	61			11.418613	

Statistics 3 (ChirpCenter Frequency: 5258.0 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	73.4			0.714599	1
1	1	20	95.4			1.499031	
2	3	20	72.7	1700	1838	1.939346	
3	2	20	66.6	1202		2.457734	
4	1	20	65.4			3.464758	
5	1	20	78.6			4.553367	
6	3	20	89.5	1645	1380	4.985268	
7	1	20	59.4			5.772072	
8	1	20	67.9			6.751694	
9	2	20	50.1	1450		7.653165	
10	1	20	91.6			8.489696	
11	3	20	69.9	1643	1125	8.921757	
12	1	20	72.2			9.897726	
13	2	20	85.5	1782		10.809900	
14	3	20	57.2	1297	1189	11.374879	

Statistics 4 (ChirpCenter Frequency: 5257.0 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	85.3			0.862300	1
1	2	18	72	1080		1.519383	
2	2	18	87.3	1008		2.134305	
3	3	18	53.3	1428	1887	3.045875	
4	3	18	99.5	1398	1157	4.174079	
5	1	18	50.1			5.496211	
6	2	18	84.8	1411		6.471961	
7	2	18	69.5	1973		7.456817	
8	1	18	94.2			8.422491	
9	3	18	91.6	1134	1479	9.584311	
10	2	18	55.6	1304		10.097408	
11	2	18	56.9	1431		11.621837	

Statistics 5(ChirpCenter Frequency: 5253.0 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	62.4			0.003898	1
1	3	7	81.2	1523	1464	2.709271	
2	1	7	55.3			4.336329	
3	2	7	66.1	1395		4.503124	
4	2	7	84.5	1484		6.151489	
5	2	7	57	1364		8.963622	
6	3	7	73.9	1374	1910	9.553857	
7	3	7	76.8	1047	1621	11.227699	

Statistics 6 (ChirpCenter Frequency: 5252.0 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	65.5	1238	1107	0.005474	1
1	1	6	64.7			1.394247	
2	2	6	87.6	1485		2.355050	
3	3	6	52.8	1803	1335	2.673283	
4	2	6	79.6	1759		3.365849	
5	3	6	56.8	1340	1208	4.556822	
6	2	6	70.6	1530		5.356950	
7	2	6	55.9	1646		6.220072	
8	2	6	87.2	1463		6.474778	
9	2	6	84.3	1704		7.758546	
10	1	6	73.8			8.558606	
11	1	6	62.4			9.584397	
12	1	6	64			9.935129	
13	3	6	69.4	1239	1204	10.658581	
14	2	6	50.2	1586		11.702904	

Statistics 7(ChirpCenter Frequency: 5256.0 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	58.4	1259		0.690712	1
1	2	14	51.4	1909		1.502087	
2	2	14	89.3	1686		2.031056	
3	1	14	85.3			3.443545	
4	2	14	56.3	1213		4.264092	
5	1	14	75.6			5.504006	
6	3	14	51	1303	1604	5.600086	
7	1	14	85.1			6.618065	
8	1	14	82.5			7.926200	
9	2	14	72.9	1490		8.984298	
10	3	14	72.5	1057	1303	9.378058	
11	1	14	85.5			11.072642	
12	1	14	69.8			11.874015	

Statistics 8 (ChirpCenter Frequency: 5252.0 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	63.6	1198		0.633450	1
1	2	5	99	1362		1.287399	
2	1	5	63.5			1.479443	
3	2	5	63.5	1170		2.151821	
4	1	5	83.8			2.824950	
5	2	5	81.2	1243		4.207469	
6	2	5	71.6	1769		4.477278	
7	1	5	78			5.140771	
8	1	5	55.7			6.065433	
9	2	5	98.3	1764		7.050603	
10	2	5	60.2	1268		7.549537	
11	1	5	89.8			8.070468	
12	1	5	89.5			8.736502	
13	2	5	99.6	1005		9.596592	
14	3	5	52.2	1599	1993	10.180172	
15	2	5	91.6	1216		10.632020	
16	2	5	77.3	1018		11.786753	

Statistics 9 (ChirpCenter Frequency: 5255.0 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	2	13	57.3	1500		0.584355	1
2	2	13	83.4	1078		1.224707	
3	3	13	82	1577	1894	1.682315	
4	2	13	66.1	1928		2.410146	
5	3	13	59.5	1530	1671	3.051849	
6	1	13	92.4			3.664164	
7	2	13	95.8	1165		4.400673	
8	1	13	74.4			5.239066	
9	1	13	55.1			5.863899	
10	1	13	100			6.535562	
11	3	13	98.8	1689	1651	7.492247	
12	3	13	70.5	1874	1112	8.019140	
13	2	13	76.7	1458		9.140795	
14	2	13	65	1271		9.715055	
15	1	13	63.4			10.486554	
16	2	13	61.4	1123		11.140770	

Statistics 10 (ChirpCenter Frequency: 5257.0 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	17	85.9	1188	1013	0.531810	1
1	1	17	82.3			1.304127	
2	2	17	72.9	1623		2.640100	
3	2	17	90.1	1169		3.254142	
4	2	17	98	1624		4.205326	
5	1	17	69.7			5.473459	
6	2	17	70	1426		6.350938	
7	1	17	68.9			6.648124	
8	2	17	90.2	1716		7.767833	
9	2	17	93.3	1894		8.985960	
10	3	17	56.4	1993	1725	9.454855	
11	3	17	76	1754	1799	10.645188	
12	1	17	66.7			11.699714	

Radar Type 5 Case 3 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5282.0MHz)

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	89.9	1284	1688	0.117273	1
1	2	19	65.8	1451		1.012177	
2	2	19	79.3	1018		1.716366	
3	2	19	58	1564		2.526046	
4	3	19	63.8	1561	1931	3.404580	
5	2	19	62.5	1597		4.207004	
6	2	19	88.9	1376		4.496268	
7	3	19	62.6	1178	1485	5.406057	
8	2	19	84.9	1491		5.915122	
9	2	19	50.9	1572		6.901320	
10	3	19	85.4	1530	1767	7.134033	
11	2	19	95	1252		8.455149	
12	2	19	85.9	1057		8.820164	
13	1	19	87.3			9.478335	
14	2	19	96.8	1155		10.239034	
15	3	19	63.2	1585	1565	10.665393	
16	2	19	71	1602		11.881708	

Statistics 2 (ChirpCenter Frequency: 5285.0 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	75.9	1679		0.435861	1
1	3	12	73.2	1025	1586	2.511424	
2	1	12	73			3.439177	
3	3	12	83.6	1712	1311	4.717833	
4	2	12	88.6	1304		5.963353	
5	2	12	63.2	1815		7.953393	
6	2	12	51.2	1990		9.118730	
7	2	12	85	1795		10.584907	
8	3	12	80.3	1896	1199	10.771686	

Statistics 3 (ChirpCenter Frequency: 5285.0 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	60.9	1910		0.506745	1
1	1	13	73.7			1.151308	
2	1	13	82.4			1.733538	
3	3	13	93.2	1046	1686	2.409338	
4	1	13	78.6			2.825695	
5	2	13	61.2	1771		3.477173	
6	2	13	76.8	1589		4.057438	
7	3	13	54.7	1545	1350	4.475124	
8	2	13	71.8	1007		5.544034	
9	2	13	75.5	1012		5.990968	
10	2	13	84.5	1948		6.806130	
11	2	13	74.8	1190		7.476781	
12	1	13	96.5			8.129293	
13	2	13	54.1	1007		8.697611	
14	2	13	55.7	1528		9.066787	
15	3	13	81.9	1541	1836	10.041910	
16	2	13	89.2	1639		10.262781	
17	3	13	83.4	1436	1795	10.779987	
18	2	13	71	1667		11.757447	

Statistics 4 (ChirpCenter Frequency: 5286.0 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	75.7	1306		0.072378	1
1	3	10	58.5	1548	1798	0.941374	
2	3	10	90.8	1298	1435	1.564017	
3	2	10	99.8	1185		2.463300	
4	1	10	85.7			3.487301	
5	1	10	71.5			4.282037	
6	2	10	55.4	1346		4.917477	
7	3	10	96.5	1313	1557	5.668937	
8	2	10	87.6	1719		6.006336	
9	2	10	93.7	1750		6.804400	
10	1	10	88.3			7.847572	
11	3	10	59.3	1483	1747	8.756138	
12	1	10	88.9			9.143534	
13	2	10	67	1843		9.848042	
14	2	10	91.4	1729		10.670091	
15	2	10	86.9	1285		11.590505	

Statistics 5(ChirpCenter Frequency: 5286.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	11	97.7	1343		0.153785	1
1	1	11	70.6			1.272198	
2	2	11	76.6	1694		1.871546	
3	2	11	50.6	1836		2.575041	
4	2	11	60.8	1266		3.411291	
5	1	11	63.2			3.534291	
6	2	11	87.1	1094		4.455271	
7	3	11	98.1	1318	1046	5.015691	
8	2	11	64.2	1922		6.009899	
9	2	11	87	1001		6.880294	
10	2	11	65.5	1027		7.143529	
11	2	11	94.1	1838		8.128947	
12	2	11	62	1319		8.620596	
13	2	11	76	1042		9.307645	
14	2	11	57.1	1377		10.312303	
15	2	11	90.9	1349		10.599126	
16	3	11	90.2	1563	1735	11.617572	

Statistics 6 (ChirpCenter Frequency: 5284.0 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	55.1	1141	1939	0.007272	1
1	2	15	70	1203		1.278151	
2	1	15	89.5			3.317237	
3	2	15	54.1	1315		4.047806	
4	2	15	52.4	1509		4.893115	
5	2	15	83.1	1797		6.003424	
6	2	15	78	1091		7.595591	
7	3	15	72.4	1728	1061	9.305154	
8	2	15	53	1968		10.084552	
9	1	15	98.8			11.715033	

Statistics 7(ChirpCenter Frequency: 5283.0 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	94.9	1928		0.521558	1
1	2	18	64.5	1132		1.842590	
2	1	18	93.4			2.552015	
3	1	18	92.8			3.524968	
4	2	18	99.8	1763		4.423700	
5	2	18	84.3	1668		5.668879	
6	1	18	84.2			6.385921	
7	2	18	81.8	1119		7.663507	
8	3	18	71.1	1300	1300	8.211510	
9	1	18	72.9			9.636661	
10	2	18	70.9	1317		10.247284	
11	2	18	81.1	1969		11.001951	

Statistics 8 (ChirpCenter Frequency: 5283.0 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	77.4	1421		0.468711	1
1	2	18	95.9	1273		1.349200	
2	3	18	95.5	1790	1170	3.347039	
3	2	18	93.1	1554		4.585681	
4	1	18	95.2			5.716173	
5	2	18	88.4	1679		6.774115	
6	2	18	77.8	1699		8.279965	
7	1	18	56.1			9.143772	
8	2	18	93.2	1890		10.620911	
9	3	18	59.1	1259	1926	11.549016	

Statistics 9 (ChirpCenter Frequency: 5284.0 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	79.4	1181		0.032309	1
1	2	14	98.6	1342		1.069420	
2	1	14	93.5			1.886557	
3	1	14	52.9			2.478827	
4	3	14	64	1163	1690	2.595937	
5	2	14	54.6	1702		3.265201	
6	2	14	81.1	1198		4.133259	
7	2	14	85	1297		4.628645	
8	2	14	88	1322		5.237388	
9	3	14	60.6	1462	1342	5.743908	
10	2	14	74.9	1066		6.557184	
11	2	14	88.3	1741		7.450924	
12	2	14	99	1909		8.069274	
13	2	14	76.1	1750		8.781229	
14	2	14	63.9	1046		9.149678	
15	1	14	76.9			10.046641	
16	2	14	58.5	1128		10.313296	
17	2	14	88.3	1873		10.936740	
18	1	14	62.5			11.577162	

Statistics 10 (ChirpCenter Frequency: 5284.0 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	70.9			0.075971	1
1	1	14	98.8			2.343163	
2	3	14	98	1558	1643	2.700876	
3	2	14	57.2	1612		4.073719	
4	3	14	58.8	1367	1272	5.958963	
5	1	14	74.9			6.097573	
6	3	14	56.1	1373	1068	7.547338	
7	1	14	93.1			8.598091	
8	2	14	89.7	1855		10.240180	
9	3	14	92.3	1916	1343	10.838178	

Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)	Hopping Sequence (MHz)
1	5270	9	1	333	1	5553.0, 5588.0, 5369.0, 5300.0, 5718.0, 5391.0, 5292.0, 5549.0, 5367.0, 5336.0, 5276.0, 5522.0, 5480.0, 5643.0, 5684.0, 5497.0, 5696.0, 5595.0, 5562.0, 5698.0, 5490.0, 5468.0, 5501.0, 5389.0, 5689.0, 5441.0, 5267.0, 5583.0, 5351.0, 5568.0, 5250.0, 5322.0, 5287.0, 5539.0, 5578.0, 5329.0, 5474.0, 5262.0, 5415.0, 5563.0, 5371.0, 5409.0, 5619.0, 5510.0, 5610.0, 5546.0, 5353.0, 5310.0, 5720.0, 5380.0, 5532.0, 5281.0, 5414.0, 5511.0, 5265.0, 5666.0, 5444.0, 5452.0, 5620.0, 5519.0, 5574.0, 5366.0, 5436.0, 5581.0, 5301.0, 5673.0, 5633.0, 5660.0, 5556.0, 5483.0, 5672.0, 5356.0, 5259.0, 5587.0, 5374.0, 5385.0, 5596.0, 5269.0, 5379.0, 5290.0, 5514.0, 5253.0, 5717.0, 5453.0, 5632.0, 5462.0, 5617.0, 5635.0, 5472.0, 5647.0, 5388.0, 5707.0, 5688.0, 5711.0, 5399.0, 5333.0, 5378.0, 5420.0, 5350.0, 5520.0
2	5270	9	1	333	1	5412.0, 5685.0, 5391.0, 5297.0, 5395.0, 5718.0, 5398.0, 5554.0, 5715.0, 5677.0, 5544.0, 5386.0, 5502.0, 5426.0, 5525.0, 5604.0, 5372.0, 5505.0, 5436.0, 5579.0, 5605.0, 5720.0, 5598.0, 5449.0, 5609.0, 5580.0, 5396.0, 5457.0, 5462.0, 5709.0, 5475.0, 5276.0, 5625.0, 5454.0, 5567.0, 5330.0, 5599.0, 5543.0, 5507.0, 5524.0, 5642.0, 5509.0, 5261.0, 5711.0, 5313.0, 5577.0, 5692.0, 5335.0, 5587.0, 5568.0, 5453.0, 5455.0, 5378.0, 5702.0, 5448.0, 5310.0, 5612.0, 5341.0, 5503.0, 5616.0, 5315.0, 5664.0, 5483.0, 5479.0, 5345.0, 5688.0, 5354.0, 5710.0, 5450.0, 5668.0, 5287.0, 5389.0, 5552.0, 5262.0, 5698.0, 5622.0, 5556.0, 5278.0, 5305.0, 5421.0, 5327.0, 5570.0, 5468.0, 5508.0, 5404.0, 5571.0, 5325.0, 5699.0, 5596.0, 5578.0, 5439.0, 5493.0, 5540.0, 5384.0, 5338.0, 5250.0, 5537.0, 5301.0, 5427.0, 5303.0
3	5270	9	1	333	1	5504.0, 5457.0, 5602.0, 5715.0, 5412.0, 5499.0, 5658.0, 5543.0, 5322.0, 5315.0, 5619.0, 5462.0, 5571.0, 5417.0, 5494.0, 5675.0, 5638.0, 5608.0, 5437.0, 5585.0, 5288.0, 5507.0, 5682.0, 5268.0, 5711.0, 5495.0, 5392.0, 5310.0, 5691.0, 5635.0, 5463.0, 5594.0, 5265.0, 5357.0, 5455.0, 5281.0, 5431.0, 5372.0, 5296.0, 5374.0, 5505.0, 5536.0, 5450.0, 5699.0, 5648.0, 5454.0, 5425.0, 5700.0, 5607.0, 5365.0, 5400.0, 5294.0, 5527.0, 5259.0, 5606.0, 5518.0, 5482.0, 5468.0, 5724.0, 5256.0, 5520.0, 5449.0, 5531.0, 5348.0, 5653.0

						5522.0, 5429.0, 5402.0, 5273.0, 5465.0, 5456.0, 5424.0, 5480.0, 5587.0, 5387.0, 5624.0, 5275.0, 5378.0, 5530.0, 5561.0, 5446.0, 5580.0, 5693.0, 5266.0, 5384.0, 5709.0, 5397.0, 5592.0, 5643.0, 5448.0, 5655.0, 5299.0, 5253.0, 5570.0, 5544.0, 5637.0, 5645.0, 5596.0, 5557.0, 5439.0
4	5270	9	1	333	1	5549.0, 5363.0, 5288.0, 5712.0, 5696.0, 5501.0, 5706.0, 5306.0, 5267.0, 5513.0, 5653.0, 5422.0, 5435.0, 5678.0, 5409.0, 5691.0, 5432.0, 5297.0, 5597.0, 5658.0, 5308.0, 5452.0, 5527.0, 5714.0, 5415.0, 5504.0, 5388.0, 5509.0, 5461.0, 5428.0, 5302.0, 5717.0, 5473.0, 5510.0, 5451.0, 5423.0, 5468.0, 5401.0, 5602.0, 5711.0, 5309.0, 5723.0, 5416.0, 5404.0, 5341.0, 5366.0, 5496.0, 5433.0, 5610.0, 5344.0, 5571.0, 5316.0, 5707.0, 5315.0, 5436.0, 5287.0, 5629.0, 5688.0, 5531.0, 5301.0, 5611.0, 5546.0, 5367.0, 5255.0, 5503.0, 5577.0, 5582.0, 5311.0, 5618.0, 5686.0, 5699.0, 5327.0, 5701.0, 5713.0, 5716.0, 5281.0, 5631.0, 5620.0, 5644.0, 5704.0, 5381.0, 5523.0, 5330.0, 5654.0, 5483.0, 5646.0, 5604.0, 5591.0, 5621.0, 5290.0, 5425.0, 5324.0, 5619.0, 5687.0, 5516.0, 5333.0, 5647.0, 5347.0, 5705.0, 5274.0
5	5270	9	1	333	1	5384.0, 5348.0, 5696.0, 5454.0, 5262.0, 5555.0, 5533.0, 5705.0, 5558.0, 5391.0, 5403.0, 5507.0, 5614.0, 5438.0, 5611.0, 5420.0, 5336.0, 5282.0, 5450.0, 5590.0, 5343.0, 5390.0, 5710.0, 5598.0, 5409.0, 5648.0, 5371.0, 5542.0, 5514.0, 5389.0, 5385.0, 5603.0, 5339.0, 5692.0, 5693.0, 5372.0, 5493.0, 5406.0, 5416.0, 5701.0, 5631.0, 5435.0, 5665.0, 5622.0, 5596.0, 5505.0, 5402.0, 5552.0, 5370.0, 5277.0, 5645.0, 5553.0, 5383.0, 5323.0, 5379.0, 5463.0, 5653.0, 5408.0, 5650.0, 5332.0, 5639.0, 5432.0, 5428.0, 5315.0, 5291.0, 5271.0, 5352.0, 5718.0, 5341.0, 5642.0, 5417.0, 5571.0, 5667.0, 5528.0, 5698.0, 5269.0, 5472.0, 5324.0, 5588.0, 5452.0, 5398.0, 5423.0, 5266.0, 5457.0, 5405.0, 5359.0, 5295.0, 5334.0, 5711.0, 5442.0, 5702.0, 5419.0, 5494.0, 5306.0, 5675.0, 5377.0, 5302.0, 5490.0, 5516.0, 5268.0
6	5270	9	1	333	1	5621.0, 5701.0, 5608.0, 5390.0, 5616.0, 5694.0, 5632.0, 5274.0, 5565.0, 5336.0, 5719.0, 5582.0, 5368.0, 5614.0, 5412.0, 5481.0, 5276.0, 5540.0, 5516.0, 5338.0, 5714.0, 5634.0, 5362.0, 5511.0, 5590.0, 5674.0, 5300.0, 5387.0, 5600.0, 5575.0, 5397.0, 5654.0, 5680.0, 5331.0, 5672.0, 5431.0, 5538.0, 5560.0, 5624.0, 5570.0, 5258.0, 5662.0, 5550.0, 5365.0, 5476.0, 5360.0, 5711.0, 5712.0, 5707.0, 5465.0, 5653.0, 5253.0, 5697.0, 5551.0, 5529.0, 5286.0, 5350.0, 5422.0, 5589.0, 5626.0, 5267.0, 5699.0, 5500.0, 5418.0, 5585.0

						5358.0, 5399.0, 5625.0, 5309.0, 5433.0, 5564.0, 5454.0, 5686.0, 5458.0, 5473.0, 5627.0, 5346.0, 5532.0, 5664.0, 5523.0, 5479.0, 5427.0, 5554.0, 5283.0, 5499.0, 5514.0, 5252.0, 5410.0, 5557.0, 5505.0, 5593.0, 5539.0, 5607.0, 5305.0, 5663.0, 5386.0, 5306.0, 5449.0, 5683.0, 5669.0
7	5270	9	1	333	1	5503.0, 5443.0, 5428.0, 5551.0, 5722.0, 5531.0, 5442.0, 5536.0, 5554.0, 5351.0, 5388.0, 5492.0, 5669.0, 5703.0, 5639.0, 5414.0, 5620.0, 5721.0, 5323.0, 5322.0, 5367.0, 5694.0, 5522.0, 5461.0, 5498.0, 5690.0, 5582.0, 5310.0, 5432.0, 5647.0, 5475.0, 5609.0, 5261.0, 5426.0, 5396.0, 5705.0, 5478.0, 5423.0, 5429.0, 5601.0, 5652.0, 5285.0, 5290.0, 5273.0, 5452.0, 5567.0, 5674.0, 5337.0, 5720.0, 5573.0, 5302.0, 5260.0, 5336.0, 5470.0, 5354.0, 5604.0, 5464.0, 5453.0, 5314.0, 5558.0, 5683.0, 5511.0, 5691.0, 5308.0, 5450.0, 5300.0, 5295.0, 5577.0, 5641.0, 5467.0, 5707.0, 5320.0, 5570.0, 5376.0, 5534.0, 5568.0, 5626.0, 5670.0, 5267.0, 5504.0, 5646.0, 5654.0, 5345.0, 5617.0, 5717.0, 5693.0, 5347.0, 5579.0, 5403.0, 5482.0, 5437.0, 5381.0, 5589.0, 5451.0, 5584.0, 5486.0, 5422.0, 5630.0, 5315.0, 5399.0
8	5270	9	1	333	1	5284.0, 5373.0, 5364.0, 5393.0, 5626.0, 5420.0, 5325.0, 5327.0, 5298.0, 5406.0, 5481.0, 5274.0, 5669.0, 5546.0, 5495.0, 5407.0, 5510.0, 5548.0, 5389.0, 5700.0, 5484.0, 5620.0, 5412.0, 5442.0, 5582.0, 5497.0, 5316.0, 5416.0, 5403.0, 5267.0, 5487.0, 5259.0, 5721.0, 5621.0, 5461.0, 5558.0, 5478.0, 5719.0, 5507.0, 5485.0, 5377.0, 5638.0, 5682.0, 5707.0, 5367.0, 5580.0, 5278.0, 5448.0, 5625.0, 5559.0, 5270.0, 5427.0, 5672.0, 5311.0, 5386.0, 5329.0, 5611.0, 5453.0, 5341.0, 5319.0, 5627.0, 5394.0, 5275.0, 5594.0, 5310.0, 5349.0, 5560.0, 5398.0, 5387.0, 5524.0, 5512.0, 5447.0, 5633.0, 5419.0, 5556.0, 5609.0, 5256.0, 5536.0, 5589.0, 5717.0, 5438.0, 5711.0, 5273.0, 5391.0, 5571.0, 5320.0, 5643.0, 5308.0, 5679.0, 5581.0, 5692.0, 5553.0, 5650.0, 5253.0, 5281.0, 5635.0, 5525.0, 5449.0, 5286.0, 5303.0
9	5270	9	1	333	1	5495.0, 5663.0, 5270.0, 5524.0, 5262.0, 5722.0, 5606.0, 5341.0, 5429.0, 5685.0, 5398.0, 5683.0, 5684.0, 5564.0, 5395.0, 5697.0, 5544.0, 5306.0, 5252.0, 5694.0, 5254.0, 5689.0, 5512.0, 5381.0, 5615.0, 5466.0, 5651.0, 5627.0, 5625.0, 5583.0, 5434.0, 5682.0, 5547.0, 5602.0, 5670.0, 5345.0, 5340.0, 5275.0, 5372.0, 5324.0, 5385.0, 5608.0, 5445.0, 5674.0, 5257.0, 5592.0, 5342.0, 5570.0, 5315.0, 5392.0, 5598.0, 5501.0, 5451.0, 5331.0, 5299.0, 5305.0, 5700.0, 5574.0, 5549.0, 5655.0, 5332.0, 5462.0, 5300.0, 5672.0, 5359.0

						5703.0, 5322.0, 5548.0, 5649.0, 5507.0, 5336.0, 5486.0, 5552.0, 5476.0, 5405.0, 5444.0, 5499.0, 5294.0, 5594.0, 5367.0, 5614.0, 5474.0, 5255.0, 5716.0, 5688.0, 5370.0, 5355.0, 5296.0, 5563.0, 5280.0, 5545.0, 5687.0, 5330.0, 5291.0, 5679.0, 5531.0, 5377.0, 5442.0, 5660.0, 5521.0
10	5270	9	1	333	1	5604.0, 5443.0, 5527.0, 5469.0, 5348.0, 5645.0, 5650.0, 5501.0, 5366.0, 5353.0, 5312.0, 5580.0, 5468.0, 5647.0, 5718.0, 5407.0, 5358.0, 5424.0, 5428.0, 5511.0, 5386.0, 5452.0, 5253.0, 5471.0, 5260.0, 5686.0, 5416.0, 5291.0, 5295.0, 5304.0, 5579.0, 5377.0, 5585.0, 5405.0, 5326.0, 5410.0, 5268.0, 5318.0, 5294.0, 5290.0, 5682.0, 5634.0, 5275.0, 5421.0, 5504.0, 5616.0, 5337.0, 5722.0, 5397.0, 5565.0, 5610.0, 5420.0, 5352.0, 5486.0, 5630.0, 5554.0, 5441.0, 5367.0, 5641.0, 5328.0, 5362.0, 5481.0, 5516.0, 5697.0, 5721.0, 5463.0, 5402.0, 5455.0, 5621.0, 5323.0, 5296.0, 5696.0, 5693.0, 5553.0, 5380.0, 5251.0, 5476.0, 5315.0, 5365.0, 5660.0, 5577.0, 5564.0, 5422.0, 5642.0, 5657.0, 5307.0, 5324.0, 5437.0, 5677.0, 5522.0, 5479.0, 5427.0, 5347.0, 5656.0, 5532.0, 5583.0, 5653.0, 5598.0, 5588.0, 5446.0
11	5270	9	1	333	1	5424.0, 5502.0, 5475.0, 5577.0, 5317.0, 5296.0, 5389.0, 5529.0, 5575.0, 5489.0, 5694.0, 5411.0, 5613.0, 5396.0, 5608.0, 5442.0, 5431.0, 5493.0, 5704.0, 5711.0, 5278.0, 5452.0, 5715.0, 5660.0, 5430.0, 5545.0, 5703.0, 5454.0, 5415.0, 5519.0, 5541.0, 5287.0, 5680.0, 5437.0, 5690.0, 5439.0, 5347.0, 5460.0, 5467.0, 5652.0, 5506.0, 5607.0, 5425.0, 5470.0, 5684.0, 5579.0, 5402.0, 5486.0, 5663.0, 5302.0, 5264.0, 5420.0, 5274.0, 5257.0, 5261.0, 5650.0, 5671.0, 5635.0, 5593.0, 5354.0, 5528.0, 5542.0, 5661.0, 5414.0, 5384.0, 5290.0, 5543.0, 5674.0, 5298.0, 5677.0, 5517.0, 5629.0, 5656.0, 5534.0, 5440.0, 5669.0, 5627.0, 5681.0, 5500.0, 5637.0, 5688.0, 5342.0, 5436.0, 5455.0, 5324.0, 5358.0, 5492.0, 5465.0, 5536.0, 5406.0, 5405.0, 5569.0, 5308.0, 5319.0, 5646.0, 5666.0, 5360.0, 5707.0, 5379.0, 5710.0
12	5270	9	1	333	1	5253.0, 5413.0, 5637.0, 5273.0, 5426.0, 5439.0, 5528.0, 5440.0, 5647.0, 5668.0, 5263.0, 5287.0, 5648.0, 5506.0, 5291.0, 5435.0, 5412.0, 5384.0, 5293.0, 5702.0, 5584.0, 5438.0, 5650.0, 5305.0, 5427.0, 5351.0, 5266.0, 5444.0, 5356.0, 5575.0, 5336.0, 5480.0, 5432.0, 5645.0, 5527.0, 5294.0, 5608.0, 5390.0, 5420.0, 5313.0, 5262.0, 5364.0, 5655.0, 5284.0, 5545.0, 5392.0, 5547.0, 5551.0, 5397.0, 5403.0, 5552.0, 5714.0, 5462.0, 5614.0, 5593.0, 5537.0, 5682.0, 5456.0, 5303.0, 5644.0, 5604.0, 5407.0, 5474.0, 5566.0, 5317.0,

						5708.0, 5466.0, 5304.0, 5505.0, 5471.0, 5307.0, 5579.0, 5260.0, 5723.0, 5556.0, 5282.0, 5574.0, 5335.0, 5377.0, 5603.0, 5298.0, 5497.0, 5535.0, 5470.0, 5719.0, 5634.0, 5630.0, 5481.0, 5530.0, 5463.0, 5588.0, 5676.0, 5538.0, 5345.0, 5385.0, 5334.0, 5270.0, 5491.0, 5607.0, 5653.0
13	5270	9	1	333	1	5602.0, 5309.0, 5325.0, 5452.0, 5399.0, 5273.0, 5501.0, 5271.0, 5409.0, 5608.0, 5489.0, 5319.0, 5315.0, 5615.0, 5723.0, 5590.0, 5295.0, 5298.0, 5290.0, 5685.0, 5702.0, 5440.0, 5450.0, 5430.0, 5441.0, 5668.0, 5280.0, 5456.0, 5623.0, 5717.0, 5323.0, 5390.0, 5277.0, 5564.0, 5647.0, 5537.0, 5718.0, 5697.0, 5422.0, 5481.0, 5677.0, 5541.0, 5645.0, 5304.0, 5521.0, 5482.0, 5679.0, 5684.0, 5437.0, 5381.0, 5572.0, 5363.0, 5483.0, 5285.0, 5536.0, 5367.0, 5386.0, 5543.0, 5691.0, 5434.0, 5625.0, 5404.0, 5442.0, 5394.0, 5328.0, 5607.0, 5529.0, 5343.0, 5378.0, 5721.0, 5490.0, 5401.0, 5339.0, 5346.0, 5508.0, 5299.0, 5487.0, 5540.0, 5513.0, 5595.0, 5334.0, 5269.0, 5635.0, 5497.0, 5272.0, 5261.0, 5526.0, 5605.0, 5478.0, 5682.0, 5692.0, 5350.0, 5316.0, 5658.0, 5397.0, 5514.0, 5639.0, 5622.0, 5411.0, 5260.0
14	5270	9	1	333	1	5358.0, 5307.0, 5475.0, 5645.0, 5417.0, 5367.0, 5474.0, 5428.0, 5606.0, 5442.0, 5541.0, 5274.0, 5517.0, 5521.0, 5718.0, 5544.0, 5721.0, 5453.0, 5505.0, 5507.0, 5695.0, 5324.0, 5685.0, 5317.0, 5716.0, 5555.0, 5539.0, 5534.0, 5651.0, 5327.0, 5697.0, 5329.0, 5251.0, 5524.0, 5620.0, 5393.0, 5289.0, 5392.0, 5440.0, 5490.0, 5712.0, 5609.0, 5514.0, 5280.0, 5560.0, 5290.0, 5269.0, 5273.0, 5382.0, 5676.0, 5637.0, 5518.0, 5355.0, 5259.0, 5277.0, 5684.0, 5665.0, 5408.0, 5657.0, 5573.0, 5391.0, 5529.0, 5333.0, 5551.0, 5457.0, 5644.0, 5443.0, 5690.0, 5494.0, 5694.0, 5498.0, 5594.0, 5493.0, 5400.0, 5610.0, 5703.0, 5350.0, 5422.0, 5377.0, 5601.0, 5593.0, 5617.0, 5480.0, 5338.0, 5488.0, 5359.0, 5486.0, 5638.0, 5489.0, 5564.0, 5561.0, 5485.0, 5587.0, 5478.0, 5265.0, 5700.0, 5462.0, 5272.0, 5291.0, 5569.0
15	5270	9	1	333	1	5301.0, 5699.0, 5352.0, 5714.0, 5457.0, 5389.0, 5598.0, 5597.0, 5459.0, 5325.0, 5586.0, 5419.0, 5398.0, 5280.0, 5409.0, 5659.0, 5543.0, 5418.0, 5332.0, 5465.0, 5687.0, 5610.0, 5453.0, 5455.0, 5654.0, 5643.0, 5387.0, 5410.0, 5488.0, 5561.0, 5519.0, 5328.0, 5499.0, 5386.0, 5493.0, 5479.0, 5359.0, 5515.0, 5547.0, 5454.0, 5577.0, 5704.0, 5300.0, 5572.0, 5689.0, 5262.0, 5482.0, 5635.0, 5345.0, 5464.0, 5492.0, 5293.0, 5258.0, 5566.0, 5633.0, 5371.0, 5366.0, 5719.0, 5376.0, 5372.0, 5449.0, 5257.0, 5503.0, 5286.0, 5691.0,

						5299.0, 5690.0, 5291.0, 5342.0, 5375.0, 5502.0, 5475.0, 5388.0, 5490.0, 5414.0, 5614.0, 5500.0, 5444.0, 5652.0, 5424.0, 5305.0, 5535.0, 5608.0, 5404.0, 5289.0, 5694.0, 5339.0, 5255.0, 5288.0, 5406.0, 5252.0, 5287.0, 5679.0, 5284.0, 5346.0, 5326.0, 5295.0, 5675.0, 5512.0, 5440.0
16	5270	9	1	333	1	5661.0, 5515.0, 5598.0, 5595.0, 5293.0, 5483.0, 5634.0, 5477.0, 5353.0, 5267.0, 5274.0, 5452.0, 5552.0, 5632.0, 5417.0, 5665.0, 5496.0, 5576.0, 5663.0, 5347.0, 5720.0, 5530.0, 5318.0, 5263.0, 5362.0, 5667.0, 5638.0, 5356.0, 5723.0, 5257.0, 5276.0, 5709.0, 5507.0, 5393.0, 5668.0, 5300.0, 5601.0, 5572.0, 5504.0, 5303.0, 5368.0, 5451.0, 5694.0, 5508.0, 5266.0, 5671.0, 5386.0, 5348.0, 5502.0, 5378.0, 5722.0, 5269.0, 5690.0, 5708.0, 5322.0, 5542.0, 5253.0, 5420.0, 5296.0, 5659.0, 5377.0, 5509.0, 5541.0, 5264.0, 5547.0, 5609.0, 5529.0, 5688.0, 5495.0, 5485.0, 5498.0, 5706.0, 5532.0, 5425.0, 5585.0, 5396.0, 5387.0, 5580.0, 5351.0, 5480.0, 5486.0, 5403.0, 5577.0, 5644.0, 5376.0, 5346.0, 5584.0, 5558.0, 5442.0, 5645.0, 5339.0, 5370.0, 5288.0, 5489.0, 5553.0, 5586.0, 5271.0, 5712.0, 5379.0, 5629.0
17	5270	9	1	333	1	5642.0, 5344.0, 5437.0, 5343.0, 5377.0, 5360.0, 5463.0, 5263.0, 5572.0, 5617.0, 5500.0, 5285.0, 5366.0, 5548.0, 5671.0, 5724.0, 5517.0, 5714.0, 5649.0, 5722.0, 5279.0, 5433.0, 5518.0, 5425.0, 5474.0, 5537.0, 5675.0, 5680.0, 5696.0, 5260.0, 5317.0, 5692.0, 5532.0, 5708.0, 5338.0, 5476.0, 5720.0, 5673.0, 5399.0, 5528.0, 5648.0, 5467.0, 5710.0, 5327.0, 5316.0, 5582.0, 5679.0, 5388.0, 5560.0, 5709.0, 5330.0, 5282.0, 5387.0, 5355.0, 5670.0, 5449.0, 5332.0, 5458.0, 5405.0, 5574.0, 5426.0, 5640.0, 5443.0, 5535.0, 5510.0, 5566.0, 5678.0, 5631.0, 5520.0, 5651.0, 5262.0, 5543.0, 5601.0, 5364.0, 5609.0, 5599.0, 5429.0, 5391.0, 5514.0, 5367.0, 5485.0, 5447.0, 5653.0, 5498.0, 5270.0, 5440.0, 5489.0, 5636.0, 5705.0, 5376.0, 5676.0, 5358.0, 5325.0, 5628.0, 5292.0, 5361.0, 5568.0, 5368.0, 5545.0, 5690.0
18	5270	9	1	333	1	5511.0, 5490.0, 5538.0, 5455.0, 5674.0, 5424.0, 5329.0, 5404.0, 5370.0, 5513.0, 5259.0, 5437.0, 5574.0, 5476.0, 5305.0, 5686.0, 5518.0, 5362.0, 5475.0, 5488.0, 5536.0, 5615.0, 5340.0, 5435.0, 5379.0, 5285.0, 5450.0, 5398.0, 5365.0, 5478.0, 5661.0, 5427.0, 5690.0, 5373.0, 5462.0, 5541.0, 5694.0, 5397.0, 5349.0, 5516.0, 5313.0, 5662.0, 5284.0, 5461.0, 5417.0, 5650.0, 5545.0, 5670.0, 5707.0, 5589.0, 5530.0, 5502.0, 5431.0, 5559.0, 5618.0, 5381.0, 5324.0, 5604.0, 5330.0, 5429.0, 5395.0, 5436.0, 5564.0, 5347.0, 5494.0

						5312.0, 5445.0, 5299.0, 5576.0, 5592.0, 5535.0, 5441.0, 5651.0, 5452.0, 5378.0, 5322.0, 5344.0, 5685.0, 5598.0, 5595.0, 5325.0, 5332.0, 5480.0, 5648.0, 5357.0, 5274.0, 5681.0, 5540.0, 5411.0, 5320.0, 5556.0, 5385.0, 5715.0, 5560.0, 5354.0, 5691.0, 5278.0, 5573.0, 5334.0, 5375.0
19	5270	9	1	333	1	5334.0, 5527.0, 5357.0, 5509.0, 5265.0, 5548.0, 5387.0, 5371.0, 5395.0, 5266.0, 5595.0, 5327.0, 5291.0, 5533.0, 5348.0, 5478.0, 5337.0, 5598.0, 5459.0, 5684.0, 5703.0, 5702.0, 5551.0, 5397.0, 5449.0, 5556.0, 5293.0, 5414.0, 5691.0, 5711.0, 5661.0, 5366.0, 5439.0, 5555.0, 5609.0, 5462.0, 5484.0, 5504.0, 5637.0, 5339.0, 5290.0, 5568.0, 5519.0, 5296.0, 5615.0, 5524.0, 5696.0, 5295.0, 5322.0, 5539.0, 5388.0, 5571.0, 5396.0, 5721.0, 5277.0, 5420.0, 5331.0, 5492.0, 5645.0, 5717.0, 5316.0, 5251.0, 5273.0, 5417.0, 5552.0, 5451.0, 5523.0, 5497.0, 5491.0, 5611.0, 5430.0, 5349.0, 5391.0, 5399.0, 5680.0, 5515.0, 5619.0, 5386.0, 5355.0, 5616.0, 5408.0, 5338.0, 5252.0, 5667.0, 5381.0, 5546.0, 5340.0, 5367.0, 5483.0, 5712.0, 5656.0, 5638.0, 5306.0, 5722.0, 5475.0, 5476.0, 5268.0, 5382.0, 5373.0, 5350.0
20	5270	9	1	333	1	5510.0, 5644.0, 5437.0, 5667.0, 5329.0, 5669.0, 5466.0, 5282.0, 5514.0, 5649.0, 5634.0, 5512.0, 5670.0, 5643.0, 5342.0, 5444.0, 5615.0, 5708.0, 5393.0, 5711.0, 5695.0, 5276.0, 5384.0, 5360.0, 5353.0, 5498.0, 5593.0, 5507.0, 5668.0, 5357.0, 5648.0, 5575.0, 5364.0, 5272.0, 5682.0, 5637.0, 5552.0, 5436.0, 5685.0, 5714.0, 5666.0, 5679.0, 5700.0, 5589.0, 5484.0, 5300.0, 5603.0, 5560.0, 5259.0, 5361.0, 5379.0, 5469.0, 5396.0, 5296.0, 5596.0, 5706.0, 5578.0, 5309.0, 5316.0, 5540.0, 5441.0, 5487.0, 5447.0, 5536.0, 5576.0, 5534.0, 5359.0, 5690.0, 5481.0, 5467.0, 5645.0, 5689.0, 5348.0, 5427.0, 5588.0, 5453.0, 5551.0, 5676.0, 5542.0, 5545.0, 5608.0, 5460.0, 5333.0, 5620.0, 5590.0, 5410.0, 5672.0, 5657.0, 5449.0, 5607.0, 5463.0, 5580.0, 5559.0, 5639.0, 5541.0, 5494.0, 5582.0, 5356.0, 5320.0, 5586.0
21	5270	9	1	333	1	5289.0, 5560.0, 5615.0, 5703.0, 5546.0, 5344.0, 5444.0, 5721.0, 5635.0, 5377.0, 5484.0, 5630.0, 5634.0, 5521.0, 5478.0, 5638.0, 5575.0, 5652.0, 5487.0, 5266.0, 5439.0, 5710.0, 5323.0, 5263.0, 5608.0, 5688.0, 5507.0, 5406.0, 5545.0, 5304.0, 5432.0, 5375.0, 5450.0, 5559.0, 5691.0, 5580.0, 5497.0, 5723.0, 5397.0, 5563.0, 5412.0, 5538.0, 5619.0, 5457.0, 5576.0, 5660.0, 5424.0, 5380.0, 5668.0, 5297.0, 5431.0, 5381.0, 5657.0, 5534.0, 5640.0, 5268.0, 5669.0, 5578.0, 5568.0, 5405.0, 5613.0, 5433.0, 5607.0, 5324.0, 5265.0

						5629.0, 5532.0, 5670.0, 5274.0, 5535.0, 5687.0, 5419.0, 5722.0, 5252.0, 5345.0, 5666.0, 5529.0, 5369.0, 5310.0, 5628.0, 5596.0, 5610.0, 5280.0, 5604.0, 5456.0, 5594.0, 5277.0, 5600.0, 5494.0, 5485.0, 5548.0, 5387.0, 5388.0, 5708.0, 5686.0, 5321.0, 5312.0, 5358.0, 5665.0, 5662.0
22	5270	9	1	333	1	5630.0, 5642.0, 5296.0, 5515.0, 5394.0, 5281.0, 5392.0, 5715.0, 5291.0, 5283.0, 5254.0, 5351.0, 5531.0, 5519.0, 5453.0, 5370.0, 5421.0, 5427.0, 5612.0, 5313.0, 5611.0, 5321.0, 5691.0, 5353.0, 5402.0, 5304.0, 5487.0, 5306.0, 5694.0, 5658.0, 5290.0, 5315.0, 5701.0, 5582.0, 5666.0, 5584.0, 5541.0, 5301.0, 5716.0, 5547.0, 5699.0, 5330.0, 5339.0, 5443.0, 5378.0, 5314.0, 5435.0, 5462.0, 5357.0, 5360.0, 5340.0, 5276.0, 5571.0, 5583.0, 5518.0, 5493.0, 5576.0, 5415.0, 5310.0, 5441.0, 5529.0, 5651.0, 5545.0, 5459.0, 5481.0, 5723.0, 5332.0, 5657.0, 5372.0, 5364.0, 5329.0, 5386.0, 5581.0, 5274.0, 5480.0, 5437.0, 5526.0, 5681.0, 5564.0, 5546.0, 5685.0, 5501.0, 5675.0, 5605.0, 5689.0, 5492.0, 5506.0, 5368.0, 5406.0, 5432.0, 5445.0, 5433.0, 5408.0, 5371.0, 5390.0, 5264.0, 5295.0, 5369.0, 5511.0, 5491.0
23	5270	9	1	333	1	5606.0, 5458.0, 5611.0, 5318.0, 5434.0, 5690.0, 5479.0, 5251.0, 5347.0, 5620.0, 5529.0, 5558.0, 5520.0, 5266.0, 5638.0, 5694.0, 5288.0, 5301.0, 5440.0, 5709.0, 5390.0, 5710.0, 5566.0, 5383.0, 5398.0, 5614.0, 5358.0, 5475.0, 5696.0, 5650.0, 5418.0, 5384.0, 5450.0, 5368.0, 5363.0, 5554.0, 5392.0, 5644.0, 5538.0, 5360.0, 5356.0, 5501.0, 5494.0, 5702.0, 5377.0, 5452.0, 5681.0, 5476.0, 5382.0, 5519.0, 5609.0, 5337.0, 5587.0, 5428.0, 5701.0, 5252.0, 5438.0, 5495.0, 5506.0, 5500.0, 5304.0, 5276.0, 5514.0, 5412.0, 5292.0, 5546.0, 5601.0, 5608.0, 5405.0, 5683.0, 5580.0, 5463.0, 5264.0, 5308.0, 5454.0, 5364.0, 5317.0, 5505.0, 5539.0, 5521.0, 5715.0, 5517.0, 5504.0, 5692.0, 5328.0, 5544.0, 5448.0, 5451.0, 5344.0, 5285.0, 5439.0, 5399.0, 5556.0, 5711.0, 5274.0, 5320.0, 5371.0, 5455.0, 5324.0, 5524.0
24	5270	9	1	333	1	5403.0, 5607.0, 5550.0, 5288.0, 5611.0, 5523.0, 5326.0, 5382.0, 5629.0, 5530.0, 5451.0, 5500.0, 5404.0, 5320.0, 5506.0, 5630.0, 5270.0, 5559.0, 5364.0, 5504.0, 5516.0, 5650.0, 5610.0, 5421.0, 5395.0, 5293.0, 5330.0, 5370.0, 5501.0, 5399.0, 5353.0, 5358.0, 5531.0, 5649.0, 5519.0, 5475.0, 5653.0, 5296.0, 5338.0, 5484.0, 5637.0, 5470.0, 5612.0, 5664.0, 5471.0, 5431.0, 5359.0, 5290.0, 5334.0, 5257.0, 5449.0, 5460.0, 5540.0, 5305.0, 5621.0, 5721.0, 5455.0, 5304.0, 5698.0, 5276.0, 5411.0, 5552.0, 5256.0, 5679.0, 5636.0,

						5499.0, 5688.0, 5581.0, 5324.0, 5322.0, 5655.0, 5640.0, 5657.0, 5567.0, 5656.0, 5534.0, 5476.0, 5368.0, 5711.0, 5285.0, 5614.0, 5566.0, 5459.0, 5369.0, 5439.0, 5514.0, 5522.0, 5430.0, 5347.0, 5660.0, 5298.0, 5642.0, 5494.0, 5292.0, 5456.0, 5410.0, 5389.0, 5328.0, 5603.0, 5686.0
25	5270	9	1	333	1	5345.0, 5324.0, 5297.0, 5414.0, 5604.0, 5497.0, 5615.0, 5569.0, 5459.0, 5363.0, 5472.0, 5618.0, 5502.0, 5263.0, 5593.0, 5475.0, 5400.0, 5341.0, 5403.0, 5669.0, 5659.0, 5362.0, 5688.0, 5333.0, 5503.0, 5411.0, 5483.0, 5425.0, 5586.0, 5691.0, 5377.0, 5535.0, 5674.0, 5642.0, 5489.0, 5534.0, 5367.0, 5358.0, 5594.0, 5384.0, 5645.0, 5319.0, 5631.0, 5578.0, 5451.0, 5686.0, 5648.0, 5349.0, 5536.0, 5708.0, 5449.0, 5668.0, 5532.0, 5575.0, 5315.0, 5599.0, 5550.0, 5273.0, 5587.0, 5545.0, 5682.0, 5420.0, 5510.0, 5617.0, 5677.0, 5627.0, 5380.0, 5355.0, 5654.0, 5667.0, 5646.0, 5253.0, 5292.0, 5390.0, 5361.0, 5520.0, 5433.0, 5541.0, 5493.0, 5716.0, 5321.0, 5323.0, 5389.0, 5487.0, 5612.0, 5697.0, 5582.0, 5516.0, 5413.0, 5287.0, 5442.0, 5277.0, 5676.0, 5718.0, 5295.0, 5299.0, 5471.0, 5633.0, 5330.0, 5251.0
26	5270	9	1	333	1	5704.0, 5379.0, 5406.0, 5353.0, 5613.0, 5484.0, 5450.0, 5403.0, 5690.0, 5268.0, 5668.0, 5487.0, 5471.0, 5508.0, 5343.0, 5686.0, 5529.0, 5711.0, 5583.0, 5427.0, 5477.0, 5335.0, 5456.0, 5318.0, 5404.0, 5360.0, 5444.0, 5589.0, 5544.0, 5426.0, 5399.0, 5328.0, 5255.0, 5347.0, 5276.0, 5545.0, 5470.0, 5663.0, 5707.0, 5593.0, 5609.0, 5461.0, 5376.0, 5584.0, 5451.0, 5317.0, 5478.0, 5530.0, 5440.0, 5594.0, 5464.0, 5367.0, 5323.0, 5263.0, 5696.0, 5527.0, 5365.0, 5722.0, 5298.0, 5331.0, 5250.0, 5501.0, 5302.0, 5473.0, 5587.0, 5588.0, 5264.0, 5475.0, 5653.0, 5395.0, 5654.0, 5698.0, 5657.0, 5714.0, 5438.0, 5639.0, 5350.0, 5640.0, 5265.0, 5414.0, 5553.0, 5556.0, 5661.0, 5256.0, 5603.0, 5355.0, 5468.0, 5334.0, 5538.0, 5439.0, 5333.0, 5684.0, 5400.0, 5320.0, 5638.0, 5293.0, 5503.0, 5292.0, 5629.0, 5525.0
27	5270	9	1	333	1	5673.0, 5428.0, 5462.0, 5331.0, 5559.0, 5676.0, 5706.0, 5346.0, 5344.0, 5427.0, 5603.0, 5552.0, 5632.0, 5392.0, 5538.0, 5328.0, 5469.0, 5368.0, 5680.0, 5418.0, 5639.0, 5643.0, 5279.0, 5645.0, 5612.0, 5483.0, 5598.0, 5362.0, 5267.0, 5294.0, 5692.0, 5568.0, 5574.0, 5311.0, 5251.0, 5665.0, 5439.0, 5319.0, 5259.0, 5585.0, 5278.0, 5488.0, 5641.0, 5497.0, 5648.0, 5661.0, 5591.0, 5482.0, 5652.0, 5276.0, 5671.0, 5329.0, 5515.0, 5304.0, 5528.0, 5723.0, 5425.0, 5300.0, 5345.0, 5551.0, 5399.0, 5511.0, 5608.0, 5448.0, 5627.0,

						5663.0, 5589.0, 5595.0, 5260.0, 5458.0, 5701.0, 5707.0, 5336.0, 5555.0, 5352.0, 5341.0, 5265.0, 5487.0, 5357.0, 5452.0, 5332.0, 5713.0, 5468.0, 5473.0, 5413.0, 5318.0, 5712.0, 5631.0, 5263.0, 5677.0, 5704.0, 5323.0, 5621.0, 5629.0, 5266.0, 5714.0, 5519.0, 5380.0, 5423.0, 5503.0
28	5270	9	1	333	1	5367.0, 5510.0, 5619.0, 5411.0, 5384.0, 5549.0, 5636.0, 5365.0, 5443.0, 5671.0, 5667.0, 5417.0, 5280.0, 5442.0, 5668.0, 5723.0, 5507.0, 5449.0, 5662.0, 5571.0, 5301.0, 5404.0, 5435.0, 5464.0, 5673.0, 5452.0, 5645.0, 5348.0, 5602.0, 5631.0, 5462.0, 5647.0, 5707.0, 5316.0, 5532.0, 5403.0, 5325.0, 5397.0, 5600.0, 5618.0, 5620.0, 5533.0, 5389.0, 5458.0, 5692.0, 5296.0, 5682.0, 5308.0, 5721.0, 5639.0, 5590.0, 5554.0, 5366.0, 5342.0, 5393.0, 5606.0, 5697.0, 5324.0, 5410.0, 5720.0, 5670.0, 5288.0, 5336.0, 5669.0, 5271.0, 5469.0, 5430.0, 5576.0, 5253.0, 5497.0, 5321.0, 5566.0, 5428.0, 5540.0, 5466.0, 5375.0, 5494.0, 5491.0, 5267.0, 5663.0, 5467.0, 5476.0, 5656.0, 5370.0, 5487.0, 5283.0, 5572.0, 5694.0, 5628.0, 5277.0, 5364.0, 5440.0, 5450.0, 5693.0, 5537.0, 5360.0, 5527.0, 5320.0, 5259.0, 5561.0
29	5270	9	1	333	1	5396.0, 5583.0, 5646.0, 5487.0, 5307.0, 5497.0, 5398.0, 5551.0, 5607.0, 5421.0, 5619.0, 5327.0, 5347.0, 5393.0, 5537.0, 5659.0, 5657.0, 5460.0, 5565.0, 5423.0, 5681.0, 5604.0, 5495.0, 5559.0, 5342.0, 5434.0, 5262.0, 5260.0, 5287.0, 5413.0, 5285.0, 5485.0, 5403.0, 5686.0, 5664.0, 5638.0, 5275.0, 5352.0, 5429.0, 5457.0, 5348.0, 5563.0, 5294.0, 5381.0, 5284.0, 5520.0, 5707.0, 5652.0, 5570.0, 5410.0, 5373.0, 5412.0, 5372.0, 5678.0, 5500.0, 5564.0, 5654.0, 5608.0, 5418.0, 5325.0, 5459.0, 5506.0, 5480.0, 5591.0, 5680.0, 5334.0, 5674.0, 5518.0, 5542.0, 5431.0, 5324.0, 5703.0, 5371.0, 5449.0, 5320.0, 5626.0, 5556.0, 5314.0, 5401.0, 5663.0, 5548.0, 5318.0, 5468.0, 5622.0, 5317.0, 5508.0, 5596.0, 5715.0, 5701.0, 5524.0, 5494.0, 5709.0, 5698.0, 5490.0, 5509.0, 5505.0, 5621.0, 5296.0, 5355.0, 5588.0
30	5270	9	1	333	1	5442.0, 5419.0, 5628.0, 5593.0, 5349.0, 5494.0, 5329.0, 5624.0, 5723.0, 5637.0, 5621.0, 5499.0, 5667.0, 5345.0, 5474.0, 5436.0, 5715.0, 5362.0, 5681.0, 5367.0, 5286.0, 5678.0, 5716.0, 5507.0, 5321.0, 5379.0, 5415.0, 5376.0, 5581.0, 5256.0, 5569.0, 5416.0, 5564.0, 5392.0, 5253.0, 5396.0, 5663.0, 5685.0, 5459.0, 5368.0, 5453.0, 5662.0, 5500.0, 5279.0, 5457.0, 5484.0, 5511.0, 5604.0, 5473.0, 5522.0, 5358.0, 5671.0, 5360.0, 5372.0, 5338.0, 5480.0, 5580.0, 5405.0, 5658.0, 5439.0, 5717.0, 5528.0, 5538.0, 5656.0, 5566.0,

						5398.0, 5534.0, 5313.0, 5315.0, 5303.0, 5299.0, 5679.0, 5537.0, 5501.0, 5412.0, 5260.0, 5539.0, 5613.0, 5287.0, 5579.0, 5479.0, 5543.0, 5711.0, 5346.0, 5651.0, 5649.0, 5508.0, 5549.0, 5390.0, 5482.0, 5697.0, 5523.0, 5399.0, 5619.0, 5572.0, 5444.0, 5272.0, 5655.0, 5441.0, 5627.0
--	--	--	--	--	--	--

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	100 %	60%	Pass
Type 4	30	100 %	60%	Pass
Aggregate(Type1 to 4)	120	100 %	80%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	100 %	70%	Pass

Please refer to the following statistical tables:

5290MHz**Radar Type 1A Statistical Performance**

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5290	74	1	718	1
2	5290	81	1	658	1
3	5290	78	1	678	1
4	5290	68	1	778	1
5	5290	99	1	538	1
6	5290	63	1	838	1
7	5290	58	1	918	1
8	5290	83	1	638	1
9	5290	95	1	558	1
10	5290	89	1	598	1
11	5290	86	1	618	1
12	5290	70	1	758	1
13	5290	61	1	878	1
14	5290	92	1	578	1
15	5290	67	1	798	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	5290	22	1	2425	1
2	5290	26	1	2065	1
3	5290	66	1	807	1
4	5290	22	1	2399	1
5	5290	20	1	2674	1
6	5290	23	1	2381	1
7	5290	26	1	2061	1
8	5290	52	1	1015	1
9	5290	20	1	2733	1
10	5290	22	1	2508	1
11	5290	57	1	927	1
12	5290	78	1	684	1
13	5290	24	1	2258	1
14	5290	27	1	1996	1
15	5290	40	1	1325	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	5290	25	3.1	194	1
2	5290	27	2.1	189	1
3	5290	28	3.9	166	1
4	5290	27	4	153	1
5	5290	26	3	203	1
6	5290	26	2.7	222	1
7	5290	26	1.7	168	1
8	5290	26	4.3	186	1
9	5290	24	3.8	157	1
10	5290	26	2.9	201	1
11	5290	26	1.8	219	1
12	5290	26	2.2	230	1
13	5290	24	3.7	180	1
14	5290	27	1.2	189	1
15	5290	28	1.1	224	1
16	5290	27	3.3	187	1
17	5290	23	3.4	163	1
18	5290	24	1.1	177	1
19	5290	26	2.7	151	1
20	5290	25	3.8	157	1
21	5290	28	2.8	211	1
22	5290	24	4.6	190	1
23	5290	24	3.9	172	1
24	5290	24	1.2	158	1
25	5290	23	2.6	201	1
26	5290	27	1.6	226	1
27	5290	28	2.6	155	1
28	5290	24	3.4	204	1
29	5290	27	4.8	169	1
30	5290	26	2.6	178	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	5290	18	6	471	1
2	5290	16	9.3	409	1
3	5290	17	8.7	321	1
4	5290	16	9	280	1
5	5290	16	6.7	331	1
6	5290	17	6.7	436	1
7	5290	18	9.3	277	1
8	5290	17	9.9	483	1
9	5290	16	6	234	1
10	5290	17	10	304	1
11	5290	18	9.4	309	1
12	5290	18	6.8	261	1
13	5290	17	9.1	366	1
14	5290	17	6.3	387	1
15	5290	17	9.8	354	1
16	5290	18	6.4	249	1
17	5290	16	6.8	243	1
18	5290	18	6.7	204	1
19	5290	17	9.4	239	1
20	5290	16	6.9	485	1
21	5290	17	9.5	448	1
22	5290	17	7.1	254	1
23	5290	16	8.3	461	1
24	5290	16	8	405	1
25	5290	16	7.1	244	1
26	5290	18	8.8	394	1
27	5290	18	9.5	362	1
28	5290	18	7.5	227	1
29	5290	17	8.4	331	1
30	5290	18	8.6	388	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	5290	12	19.8	339	1
2	5290	16	17.1	346	1
3	5290	12	18.8	228	1
4	5290	13	13.1	424	1
5	5290	16	15.6	392	1
6	5290	15	12.7	495	1
7	5290	16	14.9	433	1
8	5290	15	16.7	235	1
9	5290	13	18.1	448	1
10	5290	15	17.3	206	1
11	5290	14	12.3	477	1
12	5290	15	11.7	396	1
13	5290	14	13.2	227	1
14	5290	14	12	269	1
15	5290	12	14.8	385	1
16	5290	14	13.1	356	1
17	5290	15	18.6	301	1
18	5290	13	19.9	376	1
19	5290	14	12.9	457	1
20	5290	15	15.5	254	1
21	5290	12	13.7	494	1
22	5290	16	18.8	264	1
23	5290	14	18.7	449	1
24	5290	16	15.9	285	1
25	5290	13	12.6	444	1
26	5290	16	14.7	341	1
27	5290	14	15.9	389	1
28	5290	12	19.1	477	1
29	5290	12	14.7	297	1
30	5290	14	12.8	401	1
Detection Percentage: 100 % (>60%)					

Radar Type 5 Case 1 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5290.0MHz)

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	11	72.2	1037	1164	0.145372	1
1	2	11	99.3	1131		2.222185	
2	2	11	76.5	1146		3.527624	
3	2	11	88.6	1631		4.434714	
4	2	11	71	1620		5.580783	
5	1	11	72.2			6.144645	
6	3	11	60.6	1494	1865	7.980887	
7	1	11	75.1			8.872787	
8	3	11	82.9	1168	1753	9.942064	
9	2	11	79.3	1688		11.014238	

Statistics 2 (ChirpCenter Frequency: 5290.0 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	63	1177	1526	0.267051	1
1	2	8	60.3	1532		1.785692	
2	3	8	59.3	1521	1704	2.849403	
3	2	8	50.2	1271		4.383376	
4	2	8	75.1	1392		5.561806	
5	3	8	70.1	1622	1502	6.376123	
6	2	8	83.8	1077		7.899093	
7	3	8	97.3	1383	1587	8.853910	
8	1	8	55.6			9.921267	
9	2	8	58.2	1652		10.929398	

Statistics 3 (ChirpCenter Frequency: 5290.0 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	85.4	1176		0.430741	1
1	2	6	88.1	1023		1.017690	
2	3	6	70.1	1861	1701	1.483963	
3	3	6	67.8	1811	1375	2.360427	
4	2	6	82.9	1416		2.878952	
5	3	6	82.8	1528	1280	3.459371	
6	1	6	77.9			3.860986	
7	2	6	83.8	1093		4.410449	
8	1	6	68.9			5.373664	
9	1	6	82.2			5.935732	
10	1	6	52			6.173960	
11	2	6	50.5	1406		6.697935	
12	2	6	76.8	1715		7.742495	
13	2	6	50.8	1581		7.993988	
14	1	6	74.9			8.547721	
15	3	6	68.6	1036	1359	9.523739	
16	1	6	79.1			10.132994	
17	2	6	56	1330		10.550908	
18	3	6	52.8	1772	1446	11.217425	
19	2	6	72.3	1560		11.783477	

Statistics 4 (ChirpCenter Frequency: 5290.0 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	64.8	1459		1.245164	1
1	1	16	86.5			2.041554	
2	3	16	86.2	1747	1642	3.713348	
3	2	16	72.9	1377		4.419220	
4	1	16	83.9			5.678036	
5	2	16	54.5	1778		7.476559	
6	3	16	57.8	1371	1906	8.127456	
7	3	16	89	1663	1472	9.596191	
8	2	16	73.9	1290		10.844265	

Statistics 5(ChirpCenter Frequency: 5290.0 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	76.7	1510		1.074843	1
1	1	7	74.7			1.943471	
2	1	7	80.6			3.106502	
3	3	7	67.3	1406	1881	4.422855	
4	2	7	66.7	1300		6.070146	
5	2	7	84.1	1623		7.604836	
6	2	7	55	1099		8.237906	
7	2	7	84.3	1284		9.683577	
8	3	7	55.4	1295	1154	11.220974	

Statistics 6 (ChirpCenter Frequency: 5290.0 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	82.8	1739		0.236972	1
1	3	15	87	1387	1553	0.810856	
2	2	15	65.7	1216		1.775421	
3	1	15	67.5			2.533737	
4	2	15	68.8	1253		3.200800	
5	2	15	62.6	1777		4.014855	
6	2	15	79.6	1229		4.927902	
7	2	15	86.4	1208		5.136848	
8	2	15	94.7	1352		5.818313	
9	3	15	76.9	1451	1949	6.992977	
10	3	15	50.9	1476	1853	7.353568	
11	1	15	75.5			7.983167	
12	1	15	95.9			9.066028	
13	2	15	95.4	1591		9.325701	
14	3	15	58.9	1388	1522	10.494152	
15	2	15	89.3	1769		11.059592	
16	2	15	73.4	1024		11.885562	

Statistics 7(ChirpCenter Frequency: 5290.0 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	83.8	1459		0.356995	1
1	3	14	92.8	1959	1612	1.559955	
2	1	14	64.5			2.689367	
3	3	14	73	1359	1909	3.341112	
4	2	14	58.7	1356		4.268596	
5	1	14	91.4			5.071237	
6	2	14	86.2	1372		6.443021	
7	1	14	61.2			6.900885	
8	3	14	52.7	1879	1299	7.996049	
9	2	14	81.8	1837		8.669520	
10	1	14	66.6			9.352762	
11	1	14	86.8			10.406822	
12	2	14	52.6	1583		11.247558	

Statistics 8 (ChirpCenter Frequency: 5290.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	8	77.1	1545		0.381921	1
1	2	8	75.8	1920		0.656191	
2	2	8	91.7	1356		1.853806	
3	2	8	75.9	1152		2.500529	
4	3	8	79.1	1284	1375	2.674483	
5	2	8	72.3	1400		3.410649	
6	2	8	82.7	1926		3.852241	
7	2	8	89.6	1471		4.464439	
8	2	8	67.5	1404		5.193094	
9	1	8	74.5			6.001057	
10	2	8	57.3	1928		6.606216	
11	1	8	84.6			7.113868	
12	3	8	97.8	1045	1017	7.842823	
13	1	8	59			8.806844	
14	1	8	84.6			9.466484	
15	1	8	60.4			9.812582	
16	1	8	63			10.615082	
17	3	8	58.6	1298	1575	11.147874	
18	3	8	95.5	1798	1212	11.457923	

Statistics 9 (ChirpCenter Frequency: 5290.0 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	62.5	1110		0.695934	1
1	2	15	68.6	1571		1.226854	
2	2	15	75.8	1745		2.473127	
3	2	15	75.1	1782		2.827750	
4	2	15	85.8	1451		3.945013	
5	1	15	71.4			4.918445	
6	2	15	76	1664		5.654707	
7	2	15	74.1	1497		6.804356	
8	3	15	79.7	1014	1005	7.477577	
9	1	15	97.7			8.520620	
10	3	15	77.4	1408	1260	8.955090	
11	3	15	81.4	1252	1805	9.624688	
12	2	15	60.8	1139		10.902660	
13	2	15	83	1580		11.730877	

Statistics 10 (ChirpCenter Frequency: 5290.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	16	87.8			0.731281	1
1	1	16	75.2			1.085211	
2	1	16	53.3			2.128361	
3	2	16	73.2	1480		2.760670	
4	1	16	52.4			3.344010	
5	3	16	86.7	1520	1241	4.014813	
6	1	16	89.3			4.863550	
7	2	16	89	1715		6.267071	
8	1	16	58.4			6.707047	
9	2	16	54.7	1966		7.604429	
10	3	16	95.7	1641	1456	8.663056	
11	1	16	95.8			9.337448	
12	2	16	92.6	1454		10.152368	
13	1	16	66.7			10.408869	
14	3	16	95.3	1334	1822	11.583826	

Radar Type 5 Case 2 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5254.0 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	70.4	1151		0.032882	1
1	3	10	65.7	1844	1329	2.228871	
2	1	10	79.9			2.980179	
3	1	10	94.9			4.227075	
4	3	10	72.2	1268	1114	5.154741	
5	1	10	73.4			6.207080	
6	2	10	84	1902		7.218824	
7	2	10	50.6	1366		9.028506	
8	3	10	66.3	1971	1023	10.149922	
9	2	10	58.8	1004		11.055597	

Statistics 2 (ChirpCenter Frequency: 5258.0 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	76.5	1972		0.601960	1
1	3	19	91.1	1156	1593	0.759774	
2	2	19	61.9	1271		1.953385	
3	1	19	60			2.591776	
4	2	19	53.4	1266		2.829439	
5	2	19	53.6	1851		3.459966	
6	3	19	50.9	1949	1465	4.308508	
7	1	19	99.2			4.809667	
8	2	19	59.7	1971		5.630702	
9	3	19	72.5	1056	1716	6.409963	
10	2	19	78.3	1839		7.073703	
11	3	19	63.8	1023	1522	7.850173	
12	1	19	85.5			8.323945	
13	2	19	87.4	1544		9.213525	
14	1	19	95.8			9.432535	
15	3	19	52.6	1135	1493	10.346778	
16	1	19	84.4			11.225089	
17	2	19	70.1	1569		11.373112	

Statistics 3 (ChirpCenter Frequency: 5257.0 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	75	1408		0.496255	1
1	2	17	53.8	1914		1.378531	
2	2	17	82.6	1896		2.023054	
3	2	17	67.1	1991		2.948869	
4	2	17	61.1	1493		4.071717	
5	3	17	53.7	1130	1079	4.829114	
6	1	17	71.8			5.535463	
7	2	17	51.7	1616		6.335361	
8	1	17	78.2			7.023992	
9	3	17	90.1	1397	1140	8.363528	
10	1	17	91.7			9.177011	
11	1	17	73.8			9.776620	
12	3	17	57.7	1790	1953	10.671031	
13	2	17	78.6	1873		11.901991	

Statistics 4 (ChirpCenter Frequency: 5254.0 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	91.2	1671		0.501636	1
1	3	11	70.3	1707	1015	0.899539	
2	2	11	66	1015		1.471971	
3	2	11	63.4	1136		2.201637	
4	2	11	78.8	1722		2.439470	
5	3	11	64.9	1431	1619	3.425995	
6	2	11	99.4	1775		3.737277	
7	1	11	85			4.419383	
8	1	11	79.7			5.061886	
9	2	11	93.5	1295		5.658685	
10	2	11	55.2	1898		6.303256	
11	2	11	94.8	1850		7.004700	
12	1	11	72.5			7.548596	
13	3	11	93.1	1475	1065	8.388952	
14	2	11	80	1868		8.492739	
15	3	11	55.3	1007	1353	9.252754	
16	2	11	65.7	1830		10.116858	
17	2	11	86.9	1661		10.598534	
18	3	11	100	1565	1484	11.370985	
19	2	11	94.8	1594		11.677911	

Statistics 5 (ChirpCenter Frequency: 5255.0 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	56	1135		0.844593	1
1	2	12	72.5	1876		1.777009	
2	2	12	74.8	1334		2.337700	
3	2	12	83.4	1647		3.209043	
4	1	12	60.7			3.709929	
5	2	12	72	1523		4.697245	
6	3	12	63.9	1489	1477	5.794951	
7	2	12	59.3	1819		6.588975	
8	2	12	93.3	1296		8.264865	
9	2	12	57.9	1925		9.184580	
10	3	12	91.4	1045	1734	9.733854	
11	1	12	85			10.625743	
12	3	12	63.9	1313	1667	11.204729	

Statistics 6 (ChirpCenter Frequency: 5257.0 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	60.4	1264		0.091750	1
1	1	18	71.5			0.691062	
2	1	18	78.4			1.643309	
3	3	18	93	1039	1030	2.017604	
4	2	18	79.7	1788		3.215106	
5	2	18	57.1	1923		3.871128	
6	2	18	92	1448		4.306067	
7	3	18	62.8	1853	1874	5.075452	
8	2	18	95.8	1800		5.677676	
9	2	18	70.3	1999		6.412335	
10	1	18	90.5			7.304739	
11	2	18	64.4	1839		7.980231	
12	1	18	79.3			8.183800	
13	2	18	69.9	1117		8.828035	
14	1	18	51.1			9.733442	
15	3	18	95.8	1469	1707	10.184225	
16	3	18	90.9	1333	1811	11.090667	
17	1	18	50.9			11.916847	

Statistics 7 (ChirpCenter Frequency: 5257.0 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	60.6	1713		0.389416	1
1	2	18	54.8	1314		1.039699	
2	2	18	98.4	1040		1.468017	
3	2	18	93.7	1589		2.720109	
4	1	18	93.1			3.016553	
5	3	18	51	1347	1641	3.746254	
6	3	18	67.5	1220	1217	4.806261	
7	1	18	53.6			5.475051	
8	3	18	97.6	1235	1019	5.861936	
9	2	18	69	1481		6.789849	
10	2	18	89.6	1201		7.445318	
11	2	18	73.7	1945		8.017908	
12	2	18	64.5	1639		8.764602	
13	2	18	96.6	1497		9.577882	
14	3	18	65.7	1753	1616	10.521847	
15	2	18	67.9	1138		11.222374	
16	3	18	88.1	1572	1993	11.373156	

Statistics 8 (ChirpCenter Frequency: 5254.0 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	1422		0.566131	1
1	2	11	90.2	1446		1.116315	
2	1	11	76.4			1.503374	
3	2	11	73.1	1157		2.581627	
4	2	11	67.2	1914		2.679284	
5	2	11	91.6	1817		3.403640	
6	2	11	84	1505		4.540682	
7	3	11	86.7	1718	1732	5.088626	
8	2	11	95.5	1984		5.905534	
9	3	11	82.2	1990	1717	6.129707	
10	2	11	93	1068		6.810512	
11	3	11	58.6	1114	1148	7.659319	
12	3	11	62	1560	1986	8.073732	
13	1	11	96.2			9.231277	
14	2	11	50.6	1841		9.843551	
15	1	11	99.5			10.411712	
16	3	11	89.2	1676	1784	10.943330	
17	3	11	57.9	1275	1809	11.540687	

Statistics 9 (ChirpCenter Frequency: 5254.0 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	59.3			0.319674	1
1	3	11	88.8	1805	1228	1.202867	
2	2	11	94.3	1772		1.889490	
3	3	11	72.5	1177	1916	2.238599	
4	2	11	87	1409		3.404187	
5	1	11	56			3.867382	
6	1	11	80.8			4.715677	
7	1	11	69.1			5.407232	
8	3	11	63.5	1763	1959	5.898785	
9	2	11	91.4	1423		6.766259	
10	1	11	63			7.611180	
11	3	11	68	1653	1490	8.077894	
12	2	11	86.2	1930		8.564078	
13	2	11	68.9	1269		9.849851	
14	1	11	66.8			10.029055	
15	3	11	54.4	1591	1441	10.831841	
16	2	11	75.1	1388		11.461924	

Statistics 10 (ChirpCenter Frequency: 5257.0 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	57.2	1867	1573	0.077622	1
1	2	18	93.3	1288		1.890362	
2	3	18	94.6	1752	1959	2.818685	
3	2	18	96.3	1664		4.079452	
4	2	18	55	1922		5.058557	
5	1	18	95.1			5.928348	
6	3	18	73.4	1301	1636	7.560841	
7	2	18	50.6	1710		7.784780	
8	2	18	66.3	1736		9.478897	
9	1	18	78.6			10.337235	
10	2	18	59.8	1533		11.502849	

Radar Type 5 Case 3 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5323.0 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	61.2			0.535952	1
1	3	17	90	1157	1767	1.339530	
2	1	17	61			2.496528	
3	2	17	53	1189		2.722081	
4	1	17	82.8			4.057424	
5	3	17	54.5	1708	1090	4.770919	
6	2	17	77.5	1681		5.939691	
7	1	17	92.3			6.741842	
8	3	17	74.6	1610	1523	7.519248	
9	3	17	88.7	1722	1719	8.293530	
10	3	17	84.4	1976	1129	9.187843	
11	1	17	78.3			10.146945	
12	3	17	65.6	1719	1226	10.648206	
13	3	17	50.6	1472	1612	11.958549	

Statistics 2 (ChirpCenter Frequency: 5327.0 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	76.1	1740		0.052215	1
1	2	7	62.9	1645		0.949636	
2	1	7	51.7			1.629067	
3	2	7	86.4	1744		2.918130	
4	1	7	60.1			3.959459	
5	2	7	61.4	1427		4.365858	
6	1	7	50.7			4.955691	
7	2	7	87.7	1177		5.735714	
8	3	7	86.9	1929	1878	6.963554	
9	3	7	51	1157	1243	7.250425	
10	2	7	78.3	1283		8.549073	
11	2	7	69.5	1187		8.805872	
12	2	7	58.1	1994		9.847539	
13	2	7	83.3	1067		11.034088	
14	1	7	53.7			11.686493	

Statistics 3 (ChirpCenter Frequency: 5326.0 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	67.3	1899		0.842303	1
1	2	9	90.7	1645		2.042948	
2	3	9	87.9	1626	1394	2.620742	
3	2	9	64	1311		4.604039	
4	3	9	52.6	1609	1695	5.296109	
5	1	9	80.6			6.918648	
6	2	9	85	1448		7.842677	
7	1	9	77.5			9.454013	
8	3	9	94.6	1778	1835	10.015851	
9	3	9	80.1	1557	1631	11.310616	

Statistics 4 (ChirpCenter Frequency: 5324.0 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	57.3	1540		0.140748	1
1	2	15	81.3	1553		1.236123	
2	3	15	79.7	1940	1096	2.201317	
3	2	15	70	1714		3.402933	
4	1	15	73.1			4.056739	
5	3	15	88.4	1210	1299	5.107856	
6	3	15	96.8	1282	1507	5.976903	
7	2	15	76	1376		7.200569	
8	3	15	78.8	1303	1532	8.038220	
9	3	15	79.3	1475	1917	8.766076	
10	3	15	82	1138	1929	9.971088	
11	2	15	88.8	1006		10.498272	
12	3	15	79.8	1564	1361	11.086834	

Statistics 5 (ChirpCenter Frequency: 5323.0 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	17	53	1781	1582	0.051468	1
1	2	17	58.2	1426		1.019534	
2	2	17	78	1220		1.660337	
3	2	17	81.2	1513		2.154113	
4	3	17	57.1	1733	1024	2.842657	
5	2	17	95.3	1859		3.063208	
6	1	17	64.8			4.171309	
7	3	17	81.9	1563	1950	4.547449	
8	1	17	83.5			5.388994	
9	3	17	65.4	1874	1815	5.405253	
10	1	17	84.4			6.500056	
11	3	17	89.2	1986	1048	7.170255	
12	1	17	53.2			7.650868	
13	1	17	86.7			8.274656	
14	3	17	98.3	1008	1657	8.459641	
15	2	17	50	1784		9.234283	
16	3	17	85.5	1689	1026	10.186402	
17	2	17	61.7	1982		10.592128	
18	3	17	57.1	1247	1962	10.849913	
19	2	17	51	1568		11.835924	

Statistics 6 (ChirpCenter Frequency: 5322.0 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	78.7	1798		0.659383	1
1	2	19	84	1483		1.169093	
2	2	19	59.3	1428		1.885653	
3	3	19	58.5	1726	1349	2.078390	
4	2	19	70.5	1672		3.082891	
5	2	19	99.1	1113		3.677721	
6	2	19	87.4	1621		4.198140	
7	2	19	93.6	1498		4.691032	
8	1	19	82.8			5.644975	
9	3	19	56.9	1791	1730	6.413071	
10	2	19	92	1106		7.302873	
11	2	19	62.9	1785		7.989235	
12	1	19	57			8.245916	
13	2	19	64	1841		8.939549	
14	2	19	74.2	1935		9.961387	
15	1	19	93.7			10.564950	
16	1	19	68.3			11.047251	
17	1	19	77.3			11.348658	

Statistics 7 (ChirpCenter Frequency: 5326.0 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	53.8	1357		0.224342	1
1	3	10	78.7	1124	1308	1.256869	
2	2	10	50	1795		1.627604	
3	3	10	97.1	1897	1154	2.958547	
4	2	10	83.1	1435		3.434202	
5	2	10	67.9	1911		4.137867	
6	2	10	89.3	1696		4.957198	
7	2	10	51.4	1933		5.854573	
8	3	10	64.6	1734	1867	6.171058	
9	1	10	54.2			7.012458	
10	2	10	63.1	1234		7.583177	
11	2	10	96.1	1732		8.568417	
12	3	10	87.2	1807	1061	9.597081	
13	3	10	94.7	1755	1240	10.052978	
14	2	10	97.8	1305		10.820814	
15	1	10	87.5			11.800589	

Statistics 8 (ChirpCenter Frequency: 5323.0 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	82.3	1078	1316	0.421554	1
1	2	18	99.4	1214		0.969724	
2	1	18	97.7			1.716050	
3	1	18	55.1			2.707254	
4	2	18	74.4	1162		3.361142	
5	2	18	58.8	1850		4.059166	
6	3	18	89.5	1703	1188	5.299112	
7	1	18	93.7			6.235297	
8	1	18	59.4			6.700976	
9	2	18	73	1969		7.763445	
10	2	18	68.2	1267		8.628890	
11	2	18	72.1	1008		9.165597	
12	2	18	75.5	1706		9.621671	
13	2	18	87.3	1312		10.899054	
14	1	18	50			11.406134	

Statistics 9 (ChirpCenter Frequency: 5327.0 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	51.3	1593		0.506377	1
1	3	7	89.8	1848	1071	0.874438	
2	2	7	54.9	1722		2.040644	
3	2	7	52	1947		3.300462	
4	2	7	78.9	1578		4.019155	
5	3	7	62.7	1128	1479	4.344039	
6	1	7	66.4			5.515634	
7	2	7	68	1182		6.283383	
8	2	7	90.7	1363		7.602173	
9	1	7	69			7.766471	
10	2	7	54.4	1925		9.362435	
11	2	7	93.4	1200		9.619097	
12	3	7	61.8	1309	1339	10.514290	
13	3	7	51.8	1377	1631	11.910106	

Statistics 10 (ChirpCenter Frequency: 5327.0 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	67.7	1814		0.533438	1
1	2	8	88.6	1111		1.463714	
2	2	8	83.8	1589		2.044855	
3	2	8	93.6	1986		3.867631	
4	3	8	55.5	1657	1081	4.392073	
5	1	8	53.8			5.346336	
6	3	8	50.2	1904	1443	6.504068	
7	2	8	60	1903		7.804002	
8	1	8	57.6			8.577787	
9	3	8	59.3	1565	1881	9.768697	
10	1	8	54.9			10.417840	
11	2	8	57.6	1143		11.911694	

Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)	Hopping Sequence (MHz)
1	5290	9	1	333	1	5307.0, 5688.0, 5327.0, 5271.0, 5309.0, 5663.0, 5276.0, 5607.0, 5642.0, 5597.0, 5574.0, 5324.0, 5407.0, 5310.0, 5700.0, 5651.0, 5714.0, 5709.0, 5527.0, 5491.0, 5507.0, 5386.0, 5529.0, 5722.0, 5715.0, 5605.0, 5655.0, 5473.0, 5339.0, 5312.0, 5718.0, 5660.0, 5482.0, 5286.0, 5644.0, 5289.0, 5532.0, 5536.0, 5595.0, 5382.0, 5502.0, 5439.0, 5413.0, 5451.0, 5260.0, 5330.0, 5427.0, 5541.0, 5540.0, 5576.0, 5633.0, 5478.0, 5408.0, 5341.0, 5488.0, 5535.0, 5329.0, 5628.0, 5292.0, 5581.0, 5514.0, 5359.0, 5293.0, 5431.0, 5342.0, 5575.0, 5420.0, 5683.0, 5643.0, 5690.0, 5579.0, 5452.0, 5580.0, 5447.0, 5721.0, 5284.0, 5623.0, 5393.0, 5318.0, 5573.0, 5392.0, 5585.0, 5583.0, 5706.0, 5510.0, 5666.0, 5376.0, 5294.0, 5632.0, 5283.0, 5675.0, 5696.0, 5626.0, 5716.0, 5471.0, 5313.0, 5456.0, 5311.0, 5435.0, 5554.0
2	5290	9	1	333	1	5487.0, 5524.0, 5342.0, 5460.0, 5396.0, 5336.0, 5532.0, 5656.0, 5619.0, 5511.0, 5470.0, 5271.0, 5722.0, 5538.0, 5589.0, 5281.0, 5654.0, 5623.0, 5519.0, 5438.0, 5257.0, 5292.0, 5387.0, 5326.0, 5672.0, 5260.0, 5594.0, 5512.0, 5489.0, 5486.0, 5474.0, 5709.0, 5359.0, 5446.0, 5687.0, 5497.0, 5653.0, 5377.0, 5610.0, 5314.0, 5554.0, 5496.0, 5608.0, 5437.0, 5317.0, 5615.0, 5299.0, 5329.0, 5644.0, 5553.0, 5369.0, 5705.0, 5688.0, 5565.0, 5549.0, 5458.0, 5635.0, 5525.0, 5323.0, 5279.0, 5702.0, 5665.0, 5379.0, 5328.0, 5533.0, 5278.0, 5374.0, 5673.0, 5339.0, 5477.0, 5626.0, 5418.0, 5518.0, 5467.0, 5611.0, 5577.0, 5698.0, 5622.0, 5263.0, 5560.0, 5475.0, 5320.0, 5426.0, 5718.0, 5719.0, 5613.0, 5316.0, 5352.0, 5442.0, 5341.0, 5540.0, 5406.0, 5539.0, 5595.0, 5381.0, 5436.0, 5579.0, 5356.0, 5694.0, 5637.0
3	5290	9	1	333	1	5524.0, 5302.0, 5468.0, 5500.0, 5447.0, 5424.0, 5584.0, 5259.0, 5454.0, 5377.0, 5660.0, 5288.0, 5667.0, 5345.0, 5337.0, 5474.0, 5381.0, 5344.0, 5472.0, 5450.0, 5436.0, 5255.0, 5421.0, 5364.0, 5655.0, 5558.0, 5456.0, 5438.0, 5358.0, 5252.0, 5360.0, 5342.0, 5590.0, 5588.0, 5444.0, 5449.0, 5703.0, 5368.0, 5585.0, 5483.0, 5555.0, 5533.0, 5608.0, 5332.0, 5316.0, 5679.0, 5702.0, 5413.0, 5685.0, 5303.0, 5418.0, 5674.0, 5416.0, 5554.0, 5482.0, 5669.0, 5716.0, 5527.0, 5639.0, 5271.0, 5653.0, 5681.0, 5400.0, 5666.0, 5354.0, 5323.0, 5388.0, 5495.0, 5631.0, 5497.0,

						5280.0, 5548.0, 5645.0, 5704.0, 5577.0, 5567.0, 5310.0, 5451.0, 5371.0, 5294.0, 5297.0, 5713.0, 5389.0, 5722.0, 5607.0, 5528.0, 5257.0, 5592.0, 5363.0, 5493.0, 5460.0, 5598.0, 5312.0, 5695.0, 5599.0, 5630.0, 5309.0, 5512.0, 5719.0, 5507.0
4	5290	9	1	333	1	5610.0, 5359.0, 5416.0, 5703.0, 5714.0, 5536.0, 5251.0, 5461.0, 5297.0, 5310.0, 5491.0, 5472.0, 5647.0, 5506.0, 5600.0, 5304.0, 5489.0, 5278.0, 5343.0, 5263.0, 5531.0, 5375.0, 5433.0, 5367.0, 5357.0, 5485.0, 5510.0, 5592.0, 5354.0, 5305.0, 5663.0, 5521.0, 5515.0, 5445.0, 5601.0, 5474.0, 5715.0, 5638.0, 5518.0, 5540.0, 5450.0, 5255.0, 5477.0, 5326.0, 5523.0, 5545.0, 5504.0, 5454.0, 5321.0, 5467.0, 5517.0, 5262.0, 5606.0, 5329.0, 5273.0, 5371.0, 5587.0, 5311.0, 5452.0, 5599.0, 5639.0, 5469.0, 5580.0, 5512.0, 5579.0, 5324.0, 5257.0, 5622.0, 5722.0, 5655.0, 5692.0, 5628.0, 5269.0, 5538.0, 5444.0, 5281.0, 5636.0, 5589.0, 5401.0, 5695.0, 5389.0, 5275.0, 5644.0, 5724.0, 5340.0, 5558.0, 5653.0, 5486.0, 5274.0, 5494.0, 5537.0, 5277.0, 5706.0, 5313.0, 5519.0, 5605.0, 5328.0, 5429.0, 5405.0, 5588.0
5	5290	9	1	333	1	5268.0, 5375.0, 5721.0, 5683.0, 5362.0, 5704.0, 5723.0, 5567.0, 5570.0, 5467.0, 5460.0, 5625.0, 5488.0, 5651.0, 5282.0, 5640.0, 5661.0, 5538.0, 5679.0, 5459.0, 5510.0, 5444.0, 5674.0, 5338.0, 5502.0, 5395.0, 5681.0, 5553.0, 5531.0, 5436.0, 5556.0, 5627.0, 5699.0, 5326.0, 5347.0, 5563.0, 5387.0, 5452.0, 5260.0, 5569.0, 5407.0, 5315.0, 5648.0, 5714.0, 5559.0, 5363.0, 5291.0, 5695.0, 5265.0, 5654.0, 5697.0, 5657.0, 5523.0, 5443.0, 5401.0, 5427.0, 5489.0, 5455.0, 5635.0, 5267.0, 5280.0, 5255.0, 5416.0, 5398.0, 5311.0, 5271.0, 5314.0, 5354.0, 5672.0, 5585.0, 5435.0, 5542.0, 5497.0, 5580.0, 5383.0, 5576.0, 5328.0, 5591.0, 5514.0, 5477.0, 5320.0, 5701.0, 5453.0, 5339.0, 5557.0, 5571.0, 5586.0, 5285.0, 5579.0, 5712.0, 5554.0, 5336.0, 5660.0, 5432.0, 5613.0, 5441.0, 5472.0, 5288.0, 5677.0, 5658.0
6	5290	9	1	333	1	5572.0, 5670.0, 5681.0, 5452.0, 5281.0, 5631.0, 5377.0, 5451.0, 5381.0, 5369.0, 5486.0, 5432.0, 5721.0, 5289.0, 5472.0, 5539.0, 5250.0, 5484.0, 5625.0, 5459.0, 5552.0, 5701.0, 5603.0, 5506.0, 5643.0, 5466.0, 5502.0, 5283.0, 5482.0, 5304.0, 5582.0, 5511.0, 5655.0, 5282.0, 5428.0, 5666.0, 5563.0, 5271.0, 5647.0, 5618.0, 5696.0, 5413.0, 5462.0, 5700.0, 5412.0, 5560.0, 5303.0, 5454.0, 5609.0, 5523.0, 5559.0, 5542.0, 5390.0, 5296.0, 5478.0, 5718.0, 5257.0, 5690.0, 5458.0, 5543.0, 5457.0, 5601.0, 5370.0, 5521.0, 5266.0, 5674.0, 5396.0, 5391.0, 5672.0, 5437.0

						5583.0, 5527.0, 5483.0, 5553.0, 5263.0, 5367.0, 5626.0, 5323.0, 5720.0, 5683.0, 5372.0, 5508.0, 5702.0, 5634.0, 5644.0, 5659.0, 5588.0, 5605.0, 5385.0, 5663.0, 5347.0, 5558.0, 5630.0, 5460.0, 5491.0, 5295.0, 5476.0, 5577.0, 5525.0, 5265.0
7	5290	9	1	333	1	5555.0, 5588.0, 5546.0, 5524.0, 5578.0, 5416.0, 5461.0, 5579.0, 5439.0, 5267.0, 5698.0, 5330.0, 5476.0, 5710.0, 5600.0, 5334.0, 5281.0, 5422.0, 5508.0, 5452.0, 5255.0, 5620.0, 5447.0, 5398.0, 5448.0, 5484.0, 5453.0, 5564.0, 5678.0, 5375.0, 5400.0, 5258.0, 5714.0, 5487.0, 5265.0, 5284.0, 5583.0, 5639.0, 5553.0, 5478.0, 5573.0, 5504.0, 5708.0, 5317.0, 5683.0, 5680.0, 5618.0, 5602.0, 5359.0, 5690.0, 5337.0, 5348.0, 5450.0, 5662.0, 5318.0, 5273.0, 5541.0, 5635.0, 5322.0, 5390.0, 5561.0, 5689.0, 5465.0, 5483.0, 5667.0, 5366.0, 5457.0, 5418.0, 5652.0, 5404.0, 5630.0, 5632.0, 5623.0, 5634.0, 5477.0, 5263.0, 5643.0, 5313.0, 5372.0, 5713.0, 5485.0, 5420.0, 5344.0, 5305.0, 5328.0, 5256.0, 5542.0, 5530.0, 5306.0, 5288.0, 5380.0, 5394.0, 5534.0, 5403.0, 5470.0, 5266.0, 5387.0, 5650.0, 5277.0, 5364.0
8	5290	9	1	333	1	5497.0, 5303.0, 5461.0, 5412.0, 5260.0, 5624.0, 5343.0, 5483.0, 5271.0, 5339.0, 5252.0, 5348.0, 5579.0, 5392.0, 5477.0, 5561.0, 5590.0, 5629.0, 5257.0, 5417.0, 5389.0, 5557.0, 5525.0, 5688.0, 5559.0, 5556.0, 5667.0, 5690.0, 5528.0, 5321.0, 5602.0, 5262.0, 5519.0, 5560.0, 5549.0, 5584.0, 5513.0, 5509.0, 5506.0, 5704.0, 5329.0, 5671.0, 5469.0, 5410.0, 5604.0, 5451.0, 5714.0, 5614.0, 5478.0, 5258.0, 5393.0, 5372.0, 5464.0, 5502.0, 5437.0, 5510.0, 5534.0, 5558.0, 5572.0, 5268.0, 5450.0, 5696.0, 5414.0, 5653.0, 5407.0, 5616.0, 5583.0, 5543.0, 5390.0, 5367.0, 5684.0, 5637.0, 5364.0, 5357.0, 5467.0, 5679.0, 5359.0, 5698.0, 5462.0, 5369.0, 5607.0, 5717.0, 5512.0, 5665.0, 5423.0, 5701.0, 5645.0, 5552.0, 5391.0, 5570.0, 5332.0, 5433.0, 5422.0, 5337.0, 5436.0, 5354.0, 5499.0, 5365.0, 5396.0, 5538.0
9	5290	9	1	333	1	5680.0, 5408.0, 5421.0, 5673.0, 5395.0, 5503.0, 5475.0, 5302.0, 5371.0, 5578.0, 5672.0, 5412.0, 5460.0, 5410.0, 5335.0, 5491.0, 5433.0, 5265.0, 5387.0, 5670.0, 5544.0, 5314.0, 5401.0, 5368.0, 5710.0, 5298.0, 5256.0, 5319.0, 5331.0, 5299.0, 5323.0, 5558.0, 5281.0, 5356.0, 5454.0, 5284.0, 5406.0, 5502.0, 5269.0, 5523.0, 5458.0, 5593.0, 5553.0, 5393.0, 5509.0, 5325.0, 5447.0, 5588.0, 5714.0, 5646.0, 5468.0, 5568.0, 5358.0, 5359.0, 5297.0, 5443.0, 5492.0, 5473.0, 5471.0, 5715.0, 5288.0, 5413.0, 5482.0, 5470.0, 5318.0, 5693.0, 5394.0, 5574.0, 5315.0, 5551.0

						5352.0, 5334.0, 5309.0, 5420.0, 5700.0, 5555.0, 5579.0, 5650.0, 5594.0, 5709.0, 5602.0, 5606.0, 5372.0, 5280.0, 5549.0, 5676.0, 5583.0, 5707.0, 5654.0, 5510.0, 5631.0, 5580.0, 5688.0, 5362.0, 5272.0, 5259.0, 5349.0, 5664.0, 5476.0, 5385.0
10	5290	9	1	333	1	5530.0, 5605.0, 5255.0, 5590.0, 5653.0, 5570.0, 5454.0, 5656.0, 5265.0, 5406.0, 5647.0, 5684.0, 5442.0, 5540.0, 5378.0, 5579.0, 5678.0, 5529.0, 5372.0, 5537.0, 5337.0, 5502.0, 5679.0, 5535.0, 5721.0, 5264.0, 5384.0, 5548.0, 5663.0, 5652.0, 5367.0, 5479.0, 5373.0, 5456.0, 5697.0, 5370.0, 5450.0, 5400.0, 5524.0, 5714.0, 5641.0, 5515.0, 5587.0, 5711.0, 5312.0, 5469.0, 5436.0, 5412.0, 5560.0, 5482.0, 5601.0, 5266.0, 5567.0, 5463.0, 5588.0, 5357.0, 5342.0, 5474.0, 5428.0, 5499.0, 5580.0, 5578.0, 5533.0, 5573.0, 5507.0, 5318.0, 5709.0, 5615.0, 5399.0, 5381.0, 5263.0, 5632.0, 5398.0, 5675.0, 5518.0, 5396.0, 5415.0, 5443.0, 5276.0, 5395.0, 5390.0, 5651.0, 5648.0, 5410.0, 5661.0, 5439.0, 5609.0, 5420.0, 5404.0, 5480.0, 5299.0, 5616.0, 5432.0, 5453.0, 5317.0, 5508.0, 5460.0, 5665.0, 5698.0, 5288.0
11	5290	9	1	333	1	5609.0, 5688.0, 5375.0, 5494.0, 5615.0, 5628.0, 5694.0, 5569.0, 5578.0, 5334.0, 5646.0, 5707.0, 5341.0, 5447.0, 5495.0, 5677.0, 5580.0, 5313.0, 5473.0, 5643.0, 5397.0, 5463.0, 5593.0, 5423.0, 5368.0, 5377.0, 5319.0, 5418.0, 5700.0, 5605.0, 5310.0, 5712.0, 5503.0, 5471.0, 5617.0, 5654.0, 5587.0, 5431.0, 5353.0, 5604.0, 5433.0, 5485.0, 5497.0, 5690.0, 5530.0, 5602.0, 5281.0, 5273.0, 5636.0, 5276.0, 5596.0, 5328.0, 5614.0, 5590.0, 5480.0, 5713.0, 5666.0, 5298.0, 5265.0, 5439.0, 5598.0, 5253.0, 5383.0, 5256.0, 5403.0, 5363.0, 5571.0, 5675.0, 5347.0, 5283.0, 5680.0, 5332.0, 5269.0, 5518.0, 5607.0, 5356.0, 5642.0, 5513.0, 5558.0, 5272.0, 5691.0, 5443.0, 5450.0, 5670.0, 5453.0, 5460.0, 5538.0, 5421.0, 5537.0, 5415.0, 5376.0, 5481.0, 5399.0, 5718.0, 5335.0, 5671.0, 5586.0, 5286.0, 5505.0, 5410.0
12	5290	9	1	333	1	5532.0, 5275.0, 5467.0, 5694.0, 5478.0, 5689.0, 5720.0, 5567.0, 5610.0, 5423.0, 5369.0, 5343.0, 5526.0, 5254.0, 5287.0, 5547.0, 5574.0, 5321.0, 5553.0, 5558.0, 5339.0, 5387.0, 5571.0, 5706.0, 5523.0, 5620.0, 5303.0, 5566.0, 5322.0, 5712.0, 5316.0, 5342.0, 5412.0, 5416.0, 5319.0, 5455.0, 5686.0, 5607.0, 5579.0, 5255.0, 5335.0, 5360.0, 5257.0, 5595.0, 5545.0, 5625.0, 5716.0, 5658.0, 5426.0, 5590.0, 5383.0, 5475.0, 5589.0, 5508.0, 5583.0, 5509.0, 5713.0, 5505.0, 5531.0, 5365.0, 5648.0, 5283.0, 5488.0, 5311.0, 5581.0, 5378.0, 5544.0, 5530.0, 5432.0, 5409.0,

						5263.0, 5384.0, 5253.0, 5446.0, 5468.0, 5616.0, 5580.0, 5422.0, 5402.0, 5667.0, 5613.0, 5640.0, 5296.0, 5635.0, 5629.0, 5366.0, 5516.0, 5646.0, 5394.0, 5690.0, 5459.0, 5278.0, 5259.0, 5498.0, 5380.0, 5683.0, 5654.0, 5681.0, 5525.0, 5615.0
13	5290	9	1	333	1	5701.0, 5452.0, 5543.0, 5613.0, 5554.0, 5600.0, 5484.0, 5535.0, 5336.0, 5628.0, 5721.0, 5285.0, 5357.0, 5650.0, 5519.0, 5256.0, 5612.0, 5431.0, 5665.0, 5349.0, 5319.0, 5286.0, 5497.0, 5670.0, 5339.0, 5359.0, 5587.0, 5422.0, 5609.0, 5608.0, 5688.0, 5312.0, 5421.0, 5617.0, 5309.0, 5317.0, 5366.0, 5335.0, 5282.0, 5258.0, 5383.0, 5488.0, 5622.0, 5290.0, 5523.0, 5561.0, 5560.0, 5555.0, 5671.0, 5375.0, 5308.0, 5281.0, 5542.0, 5651.0, 5586.0, 5292.0, 5566.0, 5567.0, 5467.0, 5363.0, 5595.0, 5377.0, 5464.0, 5271.0, 5368.0, 5511.0, 5660.0, 5530.0, 5262.0, 5717.0, 5373.0, 5451.0, 5491.0, 5496.0, 5311.0, 5669.0, 5596.0, 5507.0, 5571.0, 5374.0, 5385.0, 5693.0, 5607.0, 5345.0, 5626.0, 5405.0, 5559.0, 5386.0, 5583.0, 5365.0, 5338.0, 5718.0, 5685.0, 5521.0, 5288.0, 5294.0, 5533.0, 5713.0, 5376.0, 5396.0
14	5290	9	1	333	1	5609.0, 5392.0, 5340.0, 5464.0, 5449.0, 5537.0, 5318.0, 5722.0, 5356.0, 5707.0, 5389.0, 5376.0, 5445.0, 5297.0, 5548.0, 5654.0, 5558.0, 5509.0, 5294.0, 5269.0, 5379.0, 5311.0, 5648.0, 5448.0, 5357.0, 5471.0, 5493.0, 5501.0, 5315.0, 5375.0, 5645.0, 5317.0, 5593.0, 5341.0, 5333.0, 5495.0, 5562.0, 5513.0, 5682.0, 5685.0, 5460.0, 5581.0, 5320.0, 5442.0, 5543.0, 5296.0, 5577.0, 5690.0, 5377.0, 5693.0, 5611.0, 5482.0, 5572.0, 5520.0, 5674.0, 5332.0, 5594.0, 5638.0, 5595.0, 5446.0, 5355.0, 5458.0, 5374.0, 5585.0, 5574.0, 5691.0, 5666.0, 5546.0, 5288.0, 5669.0, 5511.0, 5273.0, 5561.0, 5489.0, 5450.0, 5540.0, 5384.0, 5459.0, 5256.0, 5571.0, 5451.0, 5400.0, 5647.0, 5326.0, 5650.0, 5430.0, 5289.0, 5433.0, 5456.0, 5623.0, 5535.0, 5349.0, 5538.0, 5476.0, 5694.0, 5518.0, 5502.0, 5424.0, 5678.0, 5426.0
15	5290	9	1	333	1	5610.0, 5362.0, 5711.0, 5251.0, 5564.0, 5531.0, 5563.0, 5505.0, 5668.0, 5449.0, 5641.0, 5524.0, 5697.0, 5713.0, 5601.0, 5432.0, 5448.0, 5425.0, 5289.0, 5252.0, 5386.0, 5385.0, 5686.0, 5705.0, 5486.0, 5407.0, 5721.0, 5290.0, 5536.0, 5506.0, 5657.0, 5699.0, 5487.0, 5419.0, 5608.0, 5330.0, 5287.0, 5578.0, 5587.0, 5295.0, 5367.0, 5358.0, 5560.0, 5435.0, 5572.0, 5443.0, 5307.0, 5709.0, 5319.0, 5408.0, 5340.0, 5723.0, 5286.0, 5334.0, 5342.0, 5426.0, 5542.0, 5353.0, 5300.0, 5598.0, 5298.0, 5424.0, 5292.0, 5261.0, 5400.0, 5639.0, 5477.0, 5516.0, 5497.0, 5359.0,

						5510.0, 5293.0, 5455.0, 5613.0, 5281.0, 5541.0, 5283.0, 5310.0, 5364.0, 5635.0, 5370.0, 5501.0, 5664.0, 5444.0, 5326.0, 5316.0, 5355.0, 5406.0, 5476.0, 5253.0, 5522.0, 5618.0, 5652.0, 5537.0, 5387.0, 5371.0, 5384.0, 5647.0, 5493.0, 5470.0
16	5290	9	1	333	1	5504.0, 5552.0, 5429.0, 5501.0, 5717.0, 5386.0, 5520.0, 5337.0, 5328.0, 5464.0, 5660.0, 5288.0, 5355.0, 5686.0, 5672.0, 5568.0, 5260.0, 5479.0, 5304.0, 5582.0, 5396.0, 5560.0, 5692.0, 5394.0, 5379.0, 5346.0, 5300.0, 5531.0, 5442.0, 5382.0, 5448.0, 5670.0, 5393.0, 5707.0, 5540.0, 5469.0, 5689.0, 5533.0, 5435.0, 5644.0, 5601.0, 5363.0, 5597.0, 5287.0, 5477.0, 5430.0, 5645.0, 5437.0, 5265.0, 5515.0, 5319.0, 5600.0, 5523.0, 5324.0, 5301.0, 5614.0, 5282.0, 5462.0, 5559.0, 5635.0, 5620.0, 5446.0, 5701.0, 5423.0, 5342.0, 5587.0, 5375.0, 5543.0, 5667.0, 5514.0, 5273.0, 5705.0, 5607.0, 5719.0, 5447.0, 5275.0, 5593.0, 5314.0, 5431.0, 5397.0, 5366.0, 5436.0, 5315.0, 5455.0, 5621.0, 5255.0, 5359.0, 5465.0, 5438.0, 5268.0, 5389.0, 5399.0, 5416.0, 5656.0, 5327.0, 5407.0, 5307.0, 5391.0, 5558.0, 5309.0
17	5290	9	1	333	1	5259.0, 5430.0, 5356.0, 5364.0, 5322.0, 5443.0, 5426.0, 5411.0, 5599.0, 5697.0, 5351.0, 5445.0, 5683.0, 5548.0, 5493.0, 5454.0, 5455.0, 5428.0, 5276.0, 5553.0, 5414.0, 5693.0, 5334.0, 5562.0, 5611.0, 5332.0, 5690.0, 5299.0, 5717.0, 5537.0, 5600.0, 5343.0, 5558.0, 5373.0, 5660.0, 5490.0, 5673.0, 5489.0, 5505.0, 5704.0, 5503.0, 5485.0, 5474.0, 5267.0, 5515.0, 5468.0, 5435.0, 5510.0, 5707.0, 5530.0, 5385.0, 5568.0, 5626.0, 5608.0, 5557.0, 5624.0, 5297.0, 5446.0, 5691.0, 5661.0, 5353.0, 5368.0, 5418.0, 5425.0, 5387.0, 5620.0, 5616.0, 5636.0, 5284.0, 5333.0, 5256.0, 5452.0, 5533.0, 5613.0, 5311.0, 5520.0, 5375.0, 5588.0, 5671.0, 5466.0, 5659.0, 5656.0, 5531.0, 5630.0, 5640.0, 5516.0, 5544.0, 5397.0, 5724.0, 5341.0, 5522.0, 5694.0, 5266.0, 5700.0, 5687.0, 5386.0, 5409.0, 5415.0, 5405.0, 5585.0
18	5290	9	1	333	1	5614.0, 5460.0, 5348.0, 5654.0, 5267.0, 5446.0, 5694.0, 5591.0, 5376.0, 5441.0, 5298.0, 5521.0, 5501.0, 5271.0, 5292.0, 5640.0, 5583.0, 5360.0, 5504.0, 5339.0, 5704.0, 5331.0, 5490.0, 5481.0, 5661.0, 5527.0, 5359.0, 5332.0, 5393.0, 5697.0, 5374.0, 5299.0, 5700.0, 5596.0, 5645.0, 5673.0, 5443.0, 5400.0, 5540.0, 5698.0, 5712.0, 5621.0, 5430.0, 5669.0, 5667.0, 5367.0, 5592.0, 5349.0, 5525.0, 5637.0, 5307.0, 5324.0, 5266.0, 5418.0, 5681.0, 5537.0, 5724.0, 5709.0, 5456.0, 5499.0, 5464.0, 5320.0, 5258.0, 5362.0, 5272.0, 5571.0, 5389.0, 5555.0, 5289.0, 5401.0,

						5390.0, 5533.0, 5475.0, 5314.0, 5580.0, 5295.0, 5547.0, 5604.0, 5553.0, 5409.0, 5566.0, 5682.0, 5437.0, 5705.0, 5303.0, 5286.0, 5708.0, 5468.0, 5386.0, 5510.0, 5487.0, 5301.0, 5567.0, 5516.0, 5385.0, 5419.0, 5275.0, 5480.0, 5720.0, 5538.0
19	5290	9	1	333	1	5504.0, 5586.0, 5678.0, 5546.0, 5611.0, 5602.0, 5277.0, 5656.0, 5679.0, 5719.0, 5256.0, 5624.0, 5388.0, 5338.0, 5677.0, 5273.0, 5413.0, 5527.0, 5336.0, 5664.0, 5423.0, 5389.0, 5477.0, 5284.0, 5286.0, 5675.0, 5287.0, 5584.0, 5493.0, 5381.0, 5271.0, 5345.0, 5379.0, 5394.0, 5344.0, 5561.0, 5422.0, 5324.0, 5564.0, 5531.0, 5299.0, 5544.0, 5250.0, 5439.0, 5387.0, 5674.0, 5503.0, 5361.0, 5263.0, 5452.0, 5597.0, 5580.0, 5711.0, 5356.0, 5395.0, 5402.0, 5593.0, 5592.0, 5577.0, 5579.0, 5549.0, 5460.0, 5309.0, 5591.0, 5506.0, 5642.0, 5491.0, 5554.0, 5341.0, 5525.0, 5717.0, 5261.0, 5380.0, 5698.0, 5601.0, 5346.0, 5459.0, 5609.0, 5393.0, 5694.0, 5450.0, 5421.0, 5255.0, 5659.0, 5697.0, 5435.0, 5665.0, 5353.0, 5328.0, 5318.0, 5654.0, 5443.0, 5453.0, 5690.0, 5448.0, 5339.0, 5723.0, 5375.0, 5401.0, 5483.0
20	5290	9	1	333	1	5621.0, 5354.0, 5575.0, 5328.0, 5407.0, 5684.0, 5585.0, 5569.0, 5320.0, 5450.0, 5302.0, 5419.0, 5488.0, 5362.0, 5386.0, 5558.0, 5654.0, 5658.0, 5337.0, 5251.0, 5425.0, 5303.0, 5606.0, 5717.0, 5329.0, 5584.0, 5255.0, 5478.0, 5573.0, 5332.0, 5550.0, 5446.0, 5666.0, 5622.0, 5517.0, 5343.0, 5510.0, 5489.0, 5718.0, 5388.0, 5609.0, 5505.0, 5287.0, 5571.0, 5507.0, 5646.0, 5333.0, 5258.0, 5495.0, 5432.0, 5574.0, 5710.0, 5601.0, 5697.0, 5460.0, 5457.0, 5353.0, 5674.0, 5591.0, 5395.0, 5593.0, 5295.0, 5481.0, 5686.0, 5641.0, 5307.0, 5698.0, 5416.0, 5277.0, 5474.0, 5471.0, 5360.0, 5546.0, 5542.0, 5314.0, 5648.0, 5458.0, 5583.0, 5572.0, 5282.0, 5350.0, 5479.0, 5651.0, 5557.0, 5719.0, 5628.0, 5643.0, 5564.0, 5431.0, 5404.0, 5396.0, 5296.0, 5549.0, 5436.0, 5670.0, 5660.0, 5637.0, 5476.0, 5580.0, 5636.0
21	5290	9	1	333	1	5387.0, 5414.0, 5516.0, 5641.0, 5681.0, 5413.0, 5331.0, 5436.0, 5682.0, 5455.0, 5567.0, 5635.0, 5609.0, 5627.0, 5326.0, 5439.0, 5446.0, 5262.0, 5418.0, 5647.0, 5634.0, 5688.0, 5670.0, 5368.0, 5311.0, 5632.0, 5689.0, 5607.0, 5324.0, 5594.0, 5696.0, 5564.0, 5343.0, 5550.0, 5600.0, 5481.0, 5474.0, 5655.0, 5505.0, 5426.0, 5716.0, 5553.0, 5341.0, 5488.0, 5506.0, 5614.0, 5587.0, 5625.0, 5407.0, 5374.0, 5347.0, 5367.0, 5392.0, 5269.0, 5375.0, 5617.0, 5676.0, 5646.0, 5334.0, 5386.0, 5451.0, 5698.0, 5371.0, 5639.0, 5404.0, 5565.0, 5563.0, 5526.0, 5590.0, 5292.0,

						5648.0, 5555.0, 5286.0, 5287.0, 5660.0, 5541.0, 5277.0, 5674.0, 5422.0, 5377.0, 5328.0, 5533.0, 5476.0, 5265.0, 5366.0, 5361.0, 5417.0, 5566.0, 5626.0, 5427.0, 5256.0, 5314.0, 5369.0, 5581.0, 5597.0, 5290.0, 5479.0, 5517.0, 5551.0, 5435.0
22	5290	9	1	333	1	5293.0, 5682.0, 5484.0, 5492.0, 5635.0, 5579.0, 5485.0, 5295.0, 5643.0, 5306.0, 5280.0, 5569.0, 5535.0, 5303.0, 5445.0, 5699.0, 5305.0, 5703.0, 5640.0, 5670.0, 5374.0, 5595.0, 5607.0, 5572.0, 5576.0, 5627.0, 5544.0, 5353.0, 5633.0, 5285.0, 5660.0, 5603.0, 5574.0, 5564.0, 5546.0, 5337.0, 5463.0, 5376.0, 5511.0, 5328.0, 5358.0, 5417.0, 5364.0, 5555.0, 5390.0, 5613.0, 5500.0, 5573.0, 5549.0, 5320.0, 5360.0, 5282.0, 5701.0, 5723.0, 5649.0, 5683.0, 5551.0, 5520.0, 5552.0, 5267.0, 5653.0, 5483.0, 5587.0, 5480.0, 5663.0, 5506.0, 5662.0, 5418.0, 5533.0, 5444.0, 5399.0, 5373.0, 5490.0, 5580.0, 5625.0, 5346.0, 5706.0, 5634.0, 5690.0, 5477.0, 5264.0, 5354.0, 5349.0, 5513.0, 5416.0, 5467.0, 5448.0, 5342.0, 5430.0, 5570.0, 5271.0, 5577.0, 5609.0, 5259.0, 5428.0, 5515.0, 5608.0, 5309.0, 5434.0, 5523.0
23	5290	9	1	333	1	5300.0, 5469.0, 5362.0, 5690.0, 5341.0, 5642.0, 5256.0, 5560.0, 5681.0, 5464.0, 5365.0, 5536.0, 5355.0, 5654.0, 5376.0, 5567.0, 5427.0, 5475.0, 5391.0, 5546.0, 5639.0, 5551.0, 5657.0, 5299.0, 5535.0, 5283.0, 5675.0, 5284.0, 5250.0, 5261.0, 5527.0, 5422.0, 5483.0, 5596.0, 5429.0, 5581.0, 5573.0, 5645.0, 5254.0, 5622.0, 5705.0, 5655.0, 5279.0, 5593.0, 5579.0, 5436.0, 5600.0, 5315.0, 5664.0, 5517.0, 5367.0, 5686.0, 5532.0, 5519.0, 5389.0, 5323.0, 5321.0, 5416.0, 5456.0, 5277.0, 5723.0, 5628.0, 5668.0, 5615.0, 5313.0, 5616.0, 5298.0, 5674.0, 5309.0, 5621.0, 5340.0, 5463.0, 5282.0, 5494.0, 5332.0, 5524.0, 5435.0, 5406.0, 5692.0, 5443.0, 5558.0, 5602.0, 5455.0, 5564.0, 5308.0, 5260.0, 5438.0, 5396.0, 5576.0, 5294.0, 5695.0, 5408.0, 5542.0, 5565.0, 5400.0, 5417.0, 5597.0, 5434.0, 5513.0, 5402.0
24	5290	9	1	333	1	5498.0, 5280.0, 5374.0, 5668.0, 5305.0, 5485.0, 5720.0, 5491.0, 5361.0, 5262.0, 5680.0, 5382.0, 5459.0, 5552.0, 5472.0, 5581.0, 5375.0, 5612.0, 5571.0, 5520.0, 5719.0, 5333.0, 5591.0, 5276.0, 5672.0, 5358.0, 5350.0, 5600.0, 5363.0, 5644.0, 5467.0, 5436.0, 5451.0, 5685.0, 5432.0, 5670.0, 5660.0, 5620.0, 5543.0, 5683.0, 5506.0, 5535.0, 5471.0, 5674.0, 5293.0, 5721.0, 5329.0, 5250.0, 5676.0, 5558.0, 5366.0, 5253.0, 5483.0, 5576.0, 5413.0, 5584.0, 5551.0, 5492.0, 5307.0, 5352.0, 5298.0, 5480.0, 5403.0, 5314.0, 5539.0, 5311.0, 5650.0, 5643.0, 5469.0, 5662.0,

						5722.0, 5266.0, 5306.0, 5340.0, 5606.0, 5715.0, 5585.0, 5608.0, 5391.0, 5399.0, 5412.0, 5416.0, 5476.0, 5401.0, 5534.0, 5633.0, 5699.0, 5708.0, 5577.0, 5404.0, 5711.0, 5264.0, 5310.0, 5486.0, 5624.0, 5355.0, 5508.0, 5511.0, 5597.0, 5610.0
25	5290	9	1	333	1	5557.0, 5697.0, 5374.0, 5523.0, 5429.0, 5389.0, 5369.0, 5723.0, 5567.0, 5424.0, 5406.0, 5440.0, 5460.0, 5405.0, 5653.0, 5433.0, 5577.0, 5543.0, 5585.0, 5475.0, 5273.0, 5412.0, 5427.0, 5346.0, 5407.0, 5342.0, 5394.0, 5423.0, 5597.0, 5693.0, 5350.0, 5694.0, 5559.0, 5425.0, 5562.0, 5315.0, 5684.0, 5713.0, 5573.0, 5582.0, 5366.0, 5580.0, 5710.0, 5257.0, 5282.0, 5263.0, 5402.0, 5448.0, 5280.0, 5627.0, 5323.0, 5377.0, 5446.0, 5385.0, 5512.0, 5434.0, 5681.0, 5603.0, 5494.0, 5595.0, 5471.0, 5334.0, 5480.0, 5705.0, 5641.0, 5393.0, 5436.0, 5294.0, 5472.0, 5455.0, 5508.0, 5511.0, 5408.0, 5288.0, 5692.0, 5534.0, 5719.0, 5673.0, 5360.0, 5636.0, 5492.0, 5463.0, 5665.0, 5297.0, 5526.0, 5398.0, 5302.0, 5253.0, 5320.0, 5541.0, 5672.0, 5570.0, 5290.0, 5453.0, 5262.0, 5413.0, 5345.0, 5522.0, 5644.0, 5535.0
26	5290	9	1	333	1	5557.0, 5694.0, 5381.0, 5547.0, 5453.0, 5480.0, 5699.0, 5403.0, 5269.0, 5604.0, 5312.0, 5611.0, 5397.0, 5423.0, 5271.0, 5277.0, 5338.0, 5477.0, 5483.0, 5355.0, 5265.0, 5420.0, 5686.0, 5502.0, 5458.0, 5427.0, 5653.0, 5460.0, 5342.0, 5661.0, 5467.0, 5605.0, 5466.0, 5432.0, 5335.0, 5583.0, 5615.0, 5643.0, 5411.0, 5696.0, 5680.0, 5337.0, 5450.0, 5398.0, 5329.0, 5499.0, 5703.0, 5695.0, 5558.0, 5507.0, 5299.0, 5419.0, 5716.0, 5513.0, 5275.0, 5258.0, 5288.0, 5321.0, 5438.0, 5549.0, 5317.0, 5646.0, 5619.0, 5428.0, 5332.0, 5315.0, 5665.0, 5352.0, 5565.0, 5598.0, 5268.0, 5531.0, 5298.0, 5486.0, 5402.0, 5667.0, 5662.0, 5476.0, 5525.0, 5550.0, 5628.0, 5464.0, 5330.0, 5431.0, 5579.0, 5635.0, 5379.0, 5601.0, 5451.0, 5369.0, 5663.0, 5606.0, 5553.0, 5697.0, 5430.0, 5678.0, 5626.0, 5481.0, 5281.0, 5439.0
27	5290	9	1	333	1	5534.0, 5508.0, 5609.0, 5524.0, 5523.0, 5388.0, 5321.0, 5450.0, 5270.0, 5359.0, 5328.0, 5608.0, 5490.0, 5461.0, 5472.0, 5583.0, 5262.0, 5395.0, 5701.0, 5285.0, 5620.0, 5441.0, 5391.0, 5364.0, 5304.0, 5520.0, 5594.0, 5695.0, 5323.0, 5723.0, 5502.0, 5324.0, 5478.0, 5384.0, 5259.0, 5428.0, 5642.0, 5393.0, 5708.0, 5658.0, 5279.0, 5512.0, 5473.0, 5659.0, 5650.0, 5484.0, 5331.0, 5681.0, 5322.0, 5632.0, 5435.0, 5362.0, 5531.0, 5456.0, 5602.0, 5626.0, 5445.0, 5606.0, 5411.0, 5654.0, 5556.0, 5386.0, 5482.0, 5560.0, 5706.0, 5705.0, 5467.0, 5648.0, 5615.0, 5479.0

						5409.0, 5354.0, 5586.0, 5400.0, 5447.0, 5463.0, 5584.0, 5423.0, 5367.0, 5599.0, 5582.0, 5697.0, 5405.0, 5444.0, 5451.0, 5552.0, 5607.0, 5311.0, 5345.0, 5253.0, 5529.0, 5414.0, 5634.0, 5640.0, 5711.0, 5314.0, 5381.0, 5468.0, 5375.0, 5722.0
28	5290	9	1	333	1	5698.0, 5519.0, 5338.0, 5667.0, 5491.0, 5706.0, 5696.0, 5509.0, 5403.0, 5430.0, 5522.0, 5302.0, 5469.0, 5450.0, 5435.0, 5628.0, 5309.0, 5323.0, 5590.0, 5714.0, 5690.0, 5270.0, 5721.0, 5339.0, 5441.0, 5488.0, 5291.0, 5626.0, 5551.0, 5664.0, 5561.0, 5385.0, 5497.0, 5261.0, 5411.0, 5544.0, 5457.0, 5460.0, 5368.0, 5421.0, 5324.0, 5480.0, 5605.0, 5260.0, 5485.0, 5600.0, 5431.0, 5507.0, 5566.0, 5297.0, 5684.0, 5663.0, 5679.0, 5470.0, 5715.0, 5693.0, 5702.0, 5380.0, 5528.0, 5647.0, 5407.0, 5720.0, 5621.0, 5356.0, 5422.0, 5434.0, 5462.0, 5452.0, 5336.0, 5467.0, 5494.0, 5716.0, 5711.0, 5477.0, 5361.0, 5530.0, 5581.0, 5545.0, 5613.0, 5543.0, 5316.0, 5670.0, 5342.0, 5343.0, 5558.0, 5618.0, 5365.0, 5394.0, 5254.0, 5565.0, 5651.0, 5282.0, 5609.0, 5659.0, 5370.0, 5307.0, 5681.0, 5443.0, 5433.0, 5468.0
29	5290	9	1	333	1	5699.0, 5485.0, 5510.0, 5646.0, 5688.0, 5284.0, 5650.0, 5305.0, 5590.0, 5319.0, 5464.0, 5311.0, 5423.0, 5644.0, 5414.0, 5629.0, 5432.0, 5695.0, 5437.0, 5486.0, 5461.0, 5677.0, 5701.0, 5276.0, 5543.0, 5352.0, 5398.0, 5572.0, 5491.0, 5470.0, 5529.0, 5449.0, 5634.0, 5295.0, 5474.0, 5250.0, 5447.0, 5271.0, 5413.0, 5514.0, 5345.0, 5360.0, 5708.0, 5365.0, 5653.0, 5406.0, 5299.0, 5598.0, 5306.0, 5558.0, 5643.0, 5325.0, 5283.0, 5681.0, 5719.0, 5710.0, 5622.0, 5296.0, 5263.0, 5363.0, 5605.0, 5499.0, 5651.0, 5670.0, 5661.0, 5419.0, 5287.0, 5318.0, 5458.0, 5342.0, 5596.0, 5337.0, 5327.0, 5548.0, 5616.0, 5451.0, 5262.0, 5426.0, 5669.0, 5417.0, 5471.0, 5297.0, 5610.0, 5439.0, 5593.0, 5530.0, 5533.0, 5387.0, 5627.0, 5328.0, 5660.0, 5691.0, 5565.0, 5456.0, 5341.0, 5465.0, 5662.0, 5351.0, 5636.0, 5692.0
30	5290	9	1	333	1	5508.0, 5656.0, 5541.0, 5388.0, 5563.0, 5588.0, 5270.0, 5337.0, 5576.0, 5540.0, 5400.0, 5660.0, 5269.0, 5517.0, 5653.0, 5343.0, 5593.0, 5581.0, 5578.0, 5355.0, 5626.0, 5399.0, 5302.0, 5582.0, 5487.0, 5359.0, 5685.0, 5641.0, 5486.0, 5530.0, 5435.0, 5430.0, 5511.0, 5710.0, 5334.0, 5624.0, 5484.0, 5321.0, 5675.0, 5427.0, 5611.0, 5283.0, 5552.0, 5268.0, 5425.0, 5371.0, 5342.0, 5284.0, 5720.0, 5504.0, 5324.0, 5561.0, 5667.0, 5557.0, 5721.0, 5439.0, 5610.0, 5292.0, 5455.0, 5514.0, 5281.0, 5263.0, 5418.0, 5690.0, 5686.0, 5407.0, 5555.0, 5277.0, 5421.0, 5698.0,

						5474.0, 5691.0, 5527.0, 5638.0, 5348.0, 5628.0, 5688.0, 5584.0, 5637.0, 5456.0, 5648.0, 5658.0, 5389.0, 5313.0, 5451.0, 5503.0, 5339.0, 5373.0, 5586.0, 5414.0, 5352.0, 5254.0, 5680.0, 5623.0, 5356.0, 5311.0, 5457.0, 5391.0, 5290.0, 5604.0
--	--	--	--	--	--	---

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.

Radar Type 2 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5290	26	2.8	172	0
2	5290	23	4	198	1
3	5290	25	3.8	153	0
4	5290	27	3.6	196	1
5	5290	25	4.7	165	0
6	5290	23	1.9	220	1
7	5290	24	3.3	213	1
8	5290	27	2	210	1
9	5290	29	4.8	154	1
10	5290	23	4.3	181	1
11	5290	26	4.5	205	1
12	5290	29	1.3	195	0
13	5290	27	4.2	221	1
14	5290	25	2	177	1
15	5290	28	3.4	165	1
16	5290	26	3	209	1
17	5290	26	3.4	191	1
18	5290	27	1.8	217	0
19	5290	27	2.7	153	1
20	5290	23	3.8	224	0
21	5290	29	1.1	180	1
22	5290	26	1.8	163	1
23	5290	27	3.8	223	1
24	5290	28	2.8	213	1
25	5290	24	2	174	1
26	5290	23	4	178	1
27	5290	29	2.2	218	1
28	5290	23	2.9	197	1
29	5290	24	1.5	218	1
30	5290	28	4.7	222	1
Detection Percentage: 80 % (>60%)					

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