FCC PART 15.407(H)
RSS-210 ISSUE 8, DEC 2010
DYNAMIC FREQUENCY SELECTION
TEST AND MEASUREMENT REPORT

For

Ruckus Wireless, Inc.

350 West Java Drive,

Sunnyvale, CA 94089, USA

FCC ID: S9G-MPE5N33A
IC: 5912A-MPE5N33A

Report Type:	**Product Type:**
CIIPC	802.11 a/n Wireless Module

Test Engineers:	Ning Ma
Report Number:	R1110211-DFS Rev.
Report Date:	2012-10-15
Reviewed By:	Victor Zhang EMC/RF Lead
Prepared By:	Bay Area Compliance Laboratories Corp. 1274 Anvilwood Avenue, Sunnyvale, CA 94089, USA Tel: (408) 732-9162 Fax: (408) 732-9164

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	R1206071- DFS Rev.	CIIPC	2012-10-15

1 General Description

1.1 Product Description for Equipment under Test (EUT)

This test and measurement report was prepared on behalf of *Ruckus Wireless, Inc.*, and their product model: *MPE5N33A, with FCC ID S9G-MPE5N33A, IC: 5912A-MPE5N33A*, which will henceforth be referred to as the EUT (Equipment Under Test). The EUT is a dual band Wireless 802.11b/g/n wireless module.

1.2 Mechanical Description of EUT

The EUT measures approximately 20.5 cm (L) x 20.5 cm (W) x 5 cm (H) and weighs 0.991 kg.

The test data gathered are from typical production sample, serial number: 210 were provided by the manufacturer.

The WIFI modules with serial numbers: 114321113005 and 115121086007 were provided by the manufacturer.

1.3 Objective

This report is prepared on behalf of *Ruckus Wireless, Inc* in accordance with FCC CFR47 §15.407 (h), FCC 06-96 Appendix and RSS-210 Issue 8, Dec 2010.

The objective is to determine compliance with FCC and RSS rules for Non-Occupancy Period, DFS Detection Threshold, Channel Availability Check Time, Uniform Spreading U-NII Detection Bandwidth, Channel Closing Transmission Time, and Channel Move time for adding DFS band 5250-5350 MHz and 5475-5725 MHz.

1.4 Related Submittal(s)/Grant(s)

N/A

1.5 Test Methodology

FCC CFR 47 Part2, Part15.407 (h) and RSS 210 A9.3.

FCC 06-96 Appendix "COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5475-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION"

RSS-210 DFS for device operating in the bands 5250-5350 MHz, 5475-5725 MHz.

1.6 Test Facility

The test site used by BACL Corp. to collect radiated and conducted emissions measurement data is located at its facility in Sunnyvale, California, USA.

The test site at BACL Corp. has been fully described in reports submitted to the Federal Communication Commission (FCC) and Voluntary Control Council for Interference (VCCI). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 11 and December 10, 1997, and Article 8 of the VCCI regulations on December 25, 1997. The test site also complies with the test methods and procedures set forth in CISPR 22:2008 §10.4 for measurements below 1 GHz and §10.6 for measurements above 1 GHz as well as ANSI C63.4-2003, ANSI C63.4-2009, TIA/EIA-603 & CISPR 24:2010.

The Federal Communications Commission and Voluntary Control Council for Interference have the reports on file and they are listed under FCC registration number: 90464 and VCCI Registration No.: A-0027. The test site has been approved by the FCC and VCCI for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, BACL Corp. is an American Association for laboratory Accreditation (A2LA) accredited laboratory (Lab Code 3297-02). The current scope of accreditations can be found at

http://www.a2la.org/scopepdf/3297-02.pdf?CFID=1132286&CFTOKEN=e42a3240dac3f6ba-6DE17DCB-1851-9E57-477422F667031258&jsessionid=8430d44f1f47cf2996124343c704b367816b

2 EUT Antenna List

2.1 Antenna List

Manufacturer	Model	Gain
Ruckus	ZoneFlex 7982 Omni	3
Ruckus	Corfu Omni	3
MARS	ME-WE2458-3H	5
Laird	AT-0536-HP	5
Larson Antenna	AT-0636-VP	5
Ruckus	TBolts3	8
Ruckus	TBolts2	15
MARS	AT-1212-DP	12

3 EUT Test Configuration

3.1 Justification

The EUT was configured for testing according to FCC Part 15.407(H) and RSS 210 Standard.

3.2 EUT Exercise Software

The software used, Snoop version is 9.4.0.107, was provided by customer and verified by Ning Ma to comply with the standard requirements being tested against.

3.3 Equipment Modifications

N/A

3.4 Special Equipment

N/A

3.5 Local Support Equipment

Manufacturers	Description	Models	Serial Number
Dell	Laptop	Latitude E5420	CHZMLQ1

3.6 Power Supply List and Details

Manufacturer	Description	Model Numbers	Serial Numbers
Ruckus	Power Adapter	PA1060-480T1A125	-
Ruckus	POE	740-64157-001	104403256

3.7 EUT Internal Configuration

Manufacturer	Objects/Parts	Models	Series Numbers
Ruckus Wireless, Inc	Antenna Support Board	FAB 100-11203-001 REV A	115121080052
Ruckus Wireless, Inc	Main Board	ASM 120-11184-REV2	100-11184-001 Rev 2
Ruckus Wireless, Inc	Wifi Module	MPE2N33A	114321113005
Ruckus Wireless, Inc	Wifi Module	MPE2N33A	115121086007

3.8 External I/O Cabling List and AC Cord

Cable Description	Length (M)	From	To
RJ 45	< 1.0	Laptop	EUT

4 Summary of Test Results

The following result table represents the list of measurements required under the CFR47 §47 Part15.407 (h), FCC 06-96 and RSS 210.

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

Note: Corfu module same with Snoop dog module, and BACL added different antenna list into DFS report. Corfu DFS report can share with Snoop Dog data.

5 Applicable Standards

5.1 DFS Requirement

FCC CFR47 §15.407 (h), FCC 06-96 Appendix and RSS 210.

Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode		
	Master	**Client (Without radar detection)**	**Client (With radar detection)**
Non-Occupancy Period	Yes	Not Required	Yes
DFS Detection Threshold	Yes	Not Required	Yes
Channel Availability Check Time	Yes	Not Required	Not Required
Uniform Spreading	Yes	Not Required	Not Required
U-NII Detection Bandwidth	Yes	Not Required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master	**Client** (Without DFS)	**Client** (With DFS)
DFS Detection Threshold	Yes	Not Required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes

Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (See Notes 1 and 2)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 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.

Table 4: DFS Response requirement values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 80% of the UNII 99% transmission power bandwidth. See Note 3.

Note 1: The instant that the *Channel Move Time* and the *Channel Closing Transmission Time* begins is as follows:
- For the Short Pulse Radar Test Signals this instant is the end of the *Burst*.
- For the Frequency Hopping radar Test Signal, this instant is the end of the last radar *Burst* generated.
- For the Long Pulse Radar Test Signal this instant is the end of the 12 second period defining the *Radar Waveform*.

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

Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 1 is used and 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 (Microseconds)	PRI (Microseconds)	Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
1	1	1428	18	60%	30
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

Table 6: Long Pulse Radar Test Signal

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

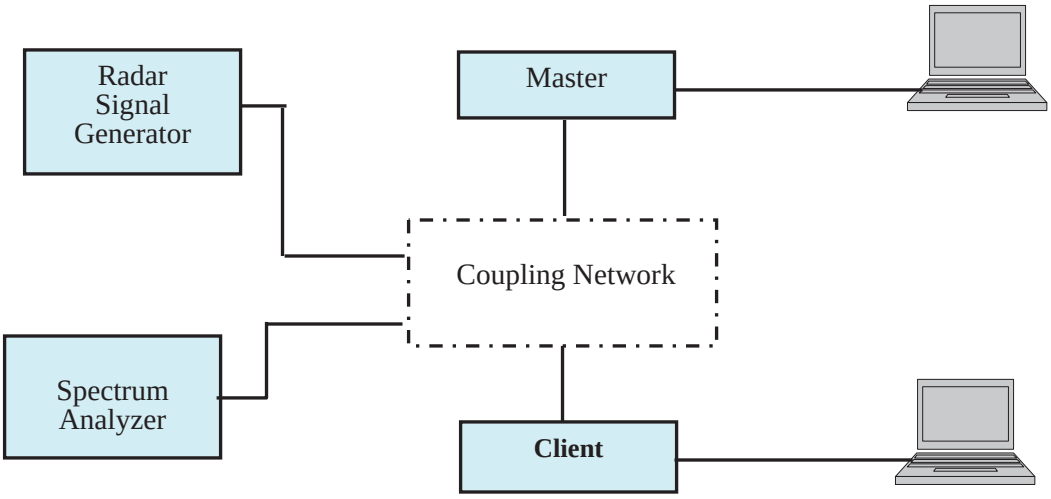
Table 7: Frequency Hopping Radar Test Signal

Radar Type	Pulse Width (usec)	PRI (usec)	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

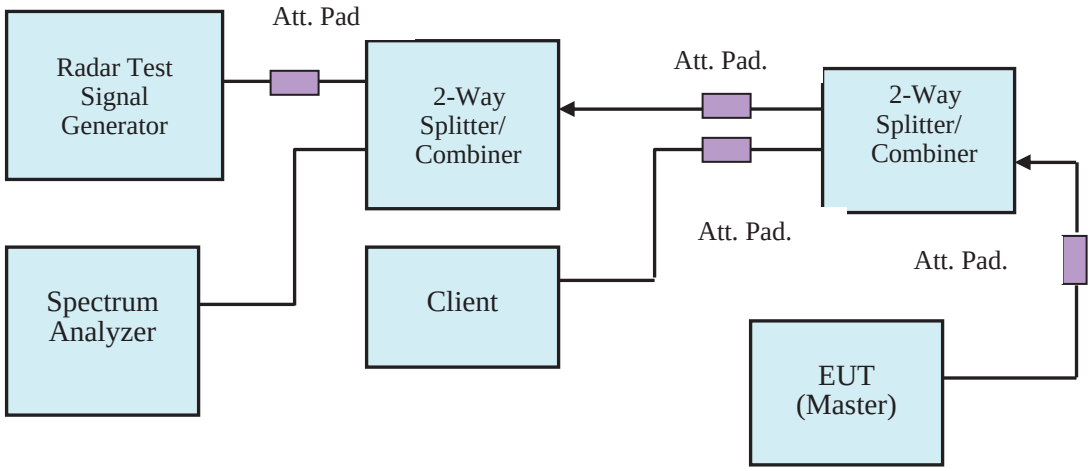
5.2 DFS Measurement System

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

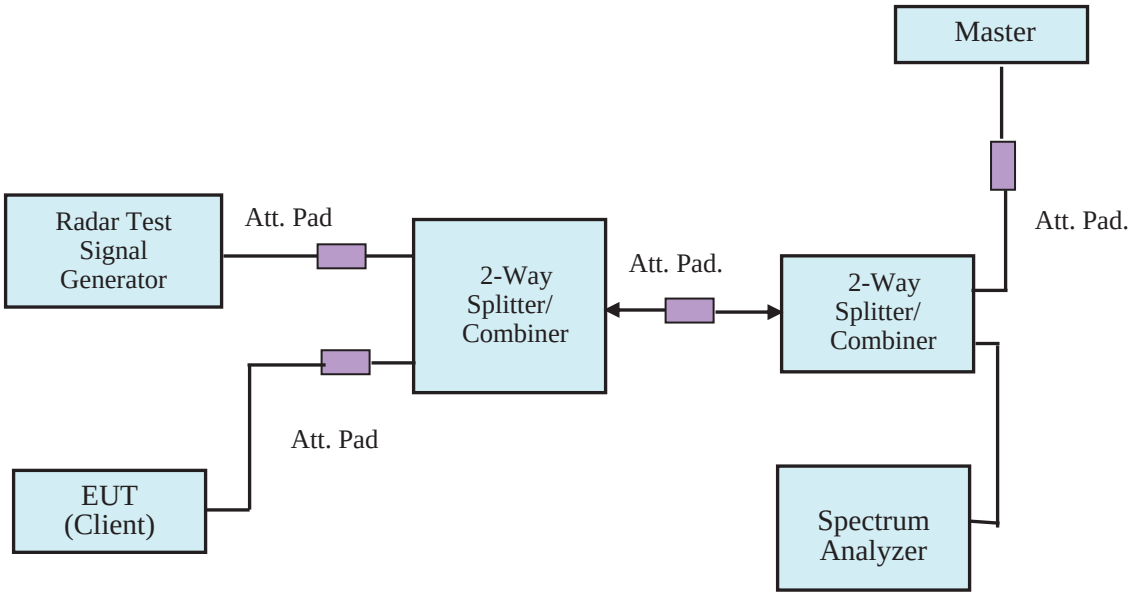
5.3 System Block Diagram



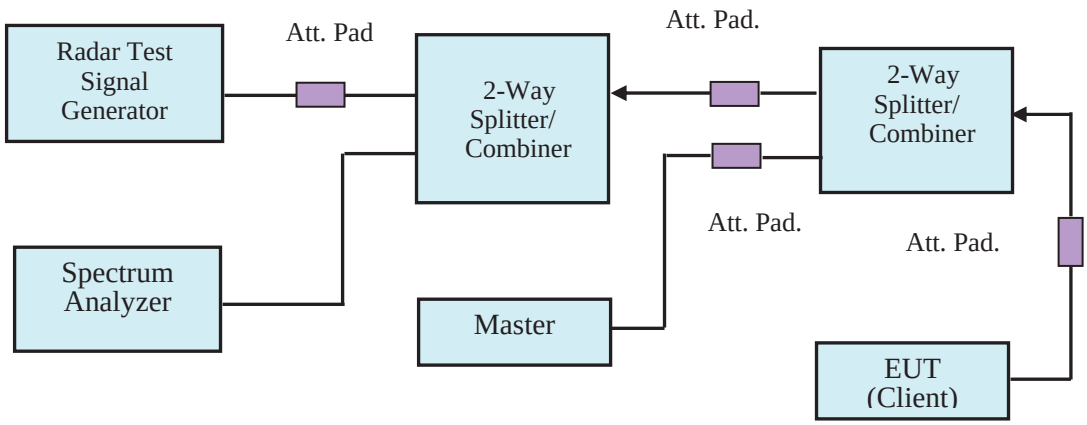
5.4 Conducted Method



Setup for Master with injection at the Master

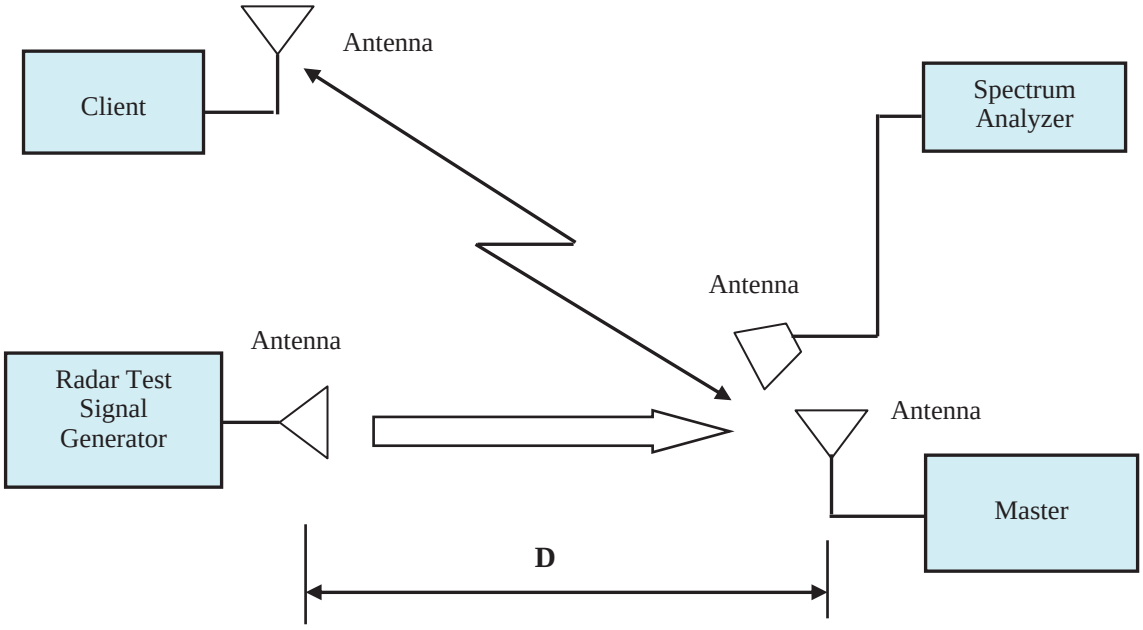


Setup for Client with injection at the Master



Setup for Client with injection at the Client

5.5 Radiated Method



5.6 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.

6 Test Result

6.1 Description of EUT

The EUT operates in 5230-5350 MHz and 5475-5725 MHz range.

The rated output power of EUT is <23 dBm (EIRP), Therefore the required interference threshold level is -62 dBm, the required radiated threshold at antenna port is -62 dBm.

The calibrated radiated DFS detection threshold level is set to -62 dBm.

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

Test result show that the EUT requires 26 seconds to complete its initial power-up cycle.

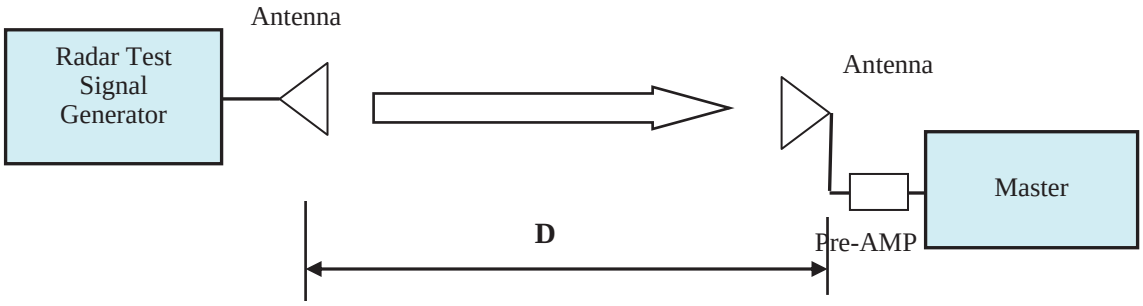
The EUT will not work on 5600-5650 MHz band.

6.2 Test Equipment List and Details

Equipment Descriptions	Manufacturers	Model Numbers	S/N
NI PXI-1042 8-Slot chassis	National Instruments	PXI-1042	V08X01EE1
Arbitrary Waveform Generator	National Instruments	PXI-5421	N/A
RF Upconverter	National Instruments	PXI-5610	N/A
Upconverter	ASCOR	AS-7206	n/A
Spectrum Analyzer	Agilent	E4440A	MY44303352
Pre-Amplifier	Avantek	2-8 GHz Lab AMP	218
Pre-Amplifier	Ducommun Technologies	ALN-09173030-01	990297-02
Splitter/Combiner	Mini-Circuits	2FSC-2-10G	0349
Splitter/Combiner	Narada	4326B-2	03514
Attenuator	MIDWest	290-30	N/A
Attenuator	Mini-Circuits	BW-S30W2	N/A

Statement of Traceability: **BACL Corp.** attests that all calibrations have been performed according to A2LA requirements, traceable to the NIST.

6.3 Radar Waveform Calibration



Radiated Calibration Setup Block Diagram

6.4 Test Environmental Conditions

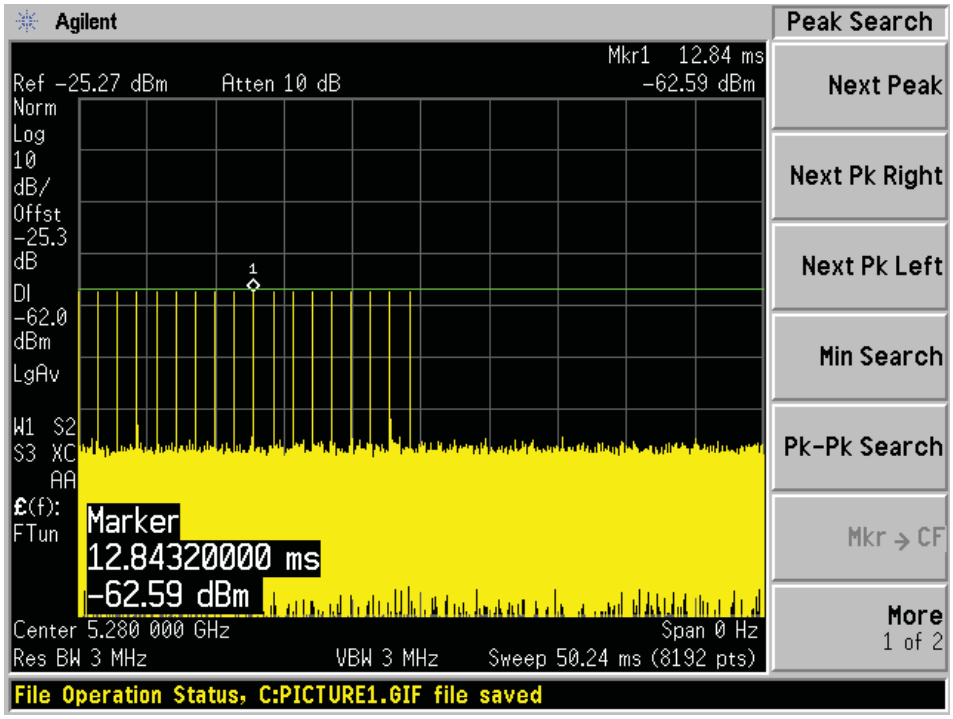
Temperature:	20-23 °C
Relative Humidity:	48%- 55%
ATM Pressure:	1015 mbar

The testing was performed by Ning Ma on 2012-03-19 in DFS Testing Site.

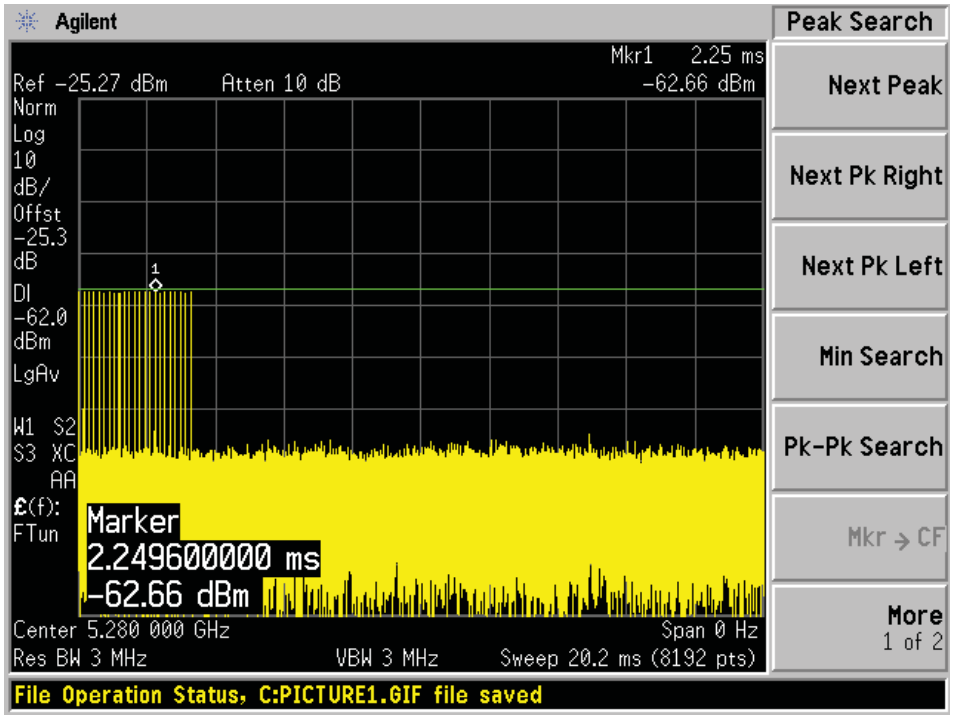
Plots of Radar Waveforms

5280 MHz

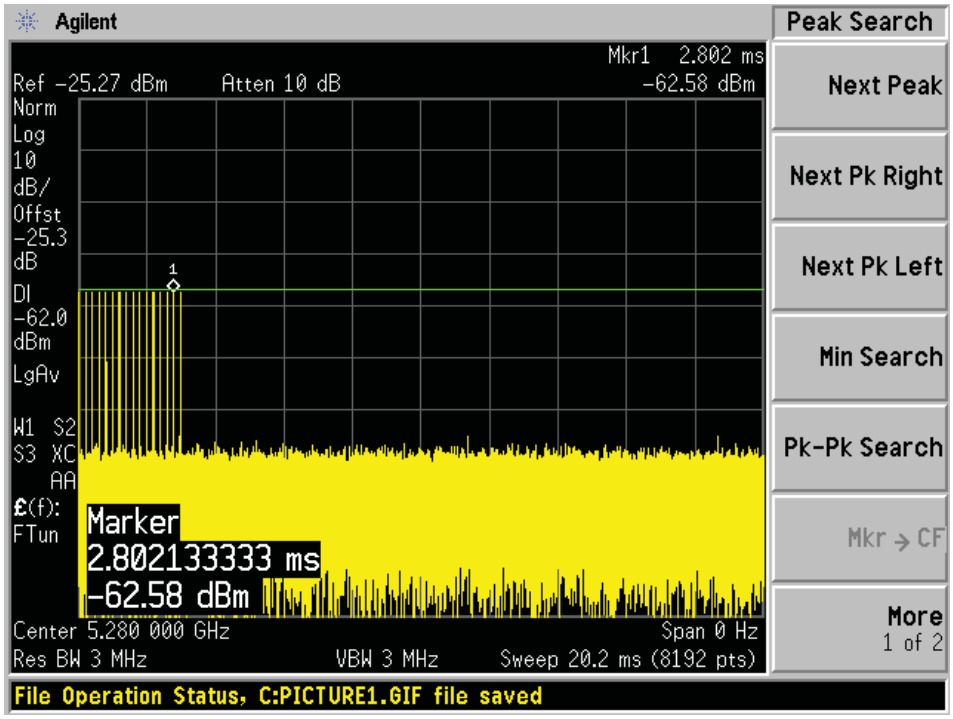
Radar Type 1



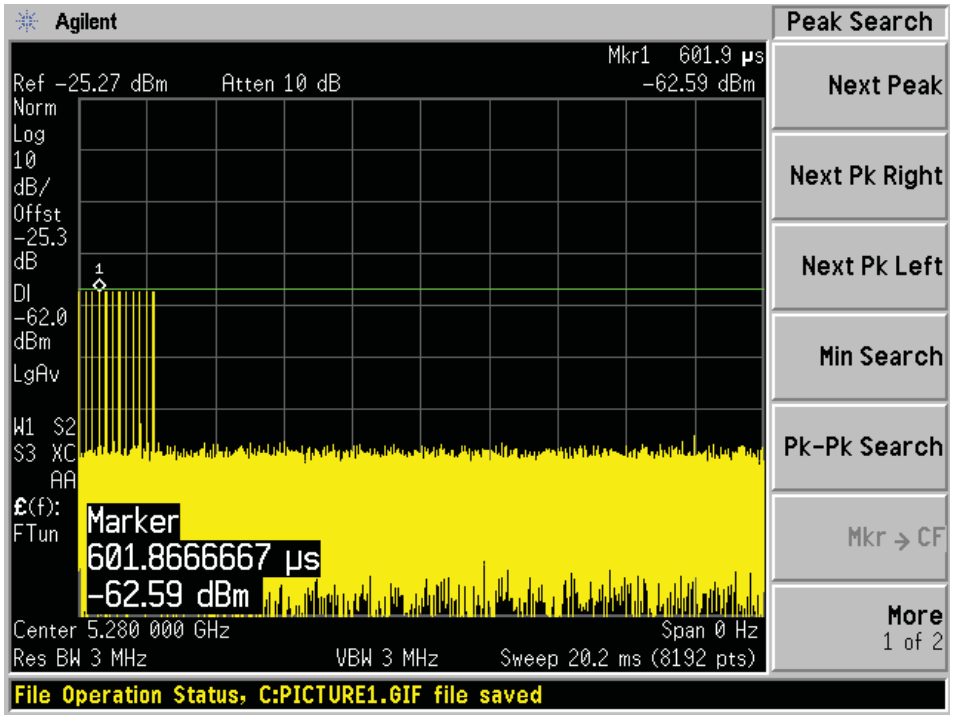
Radar Type 2



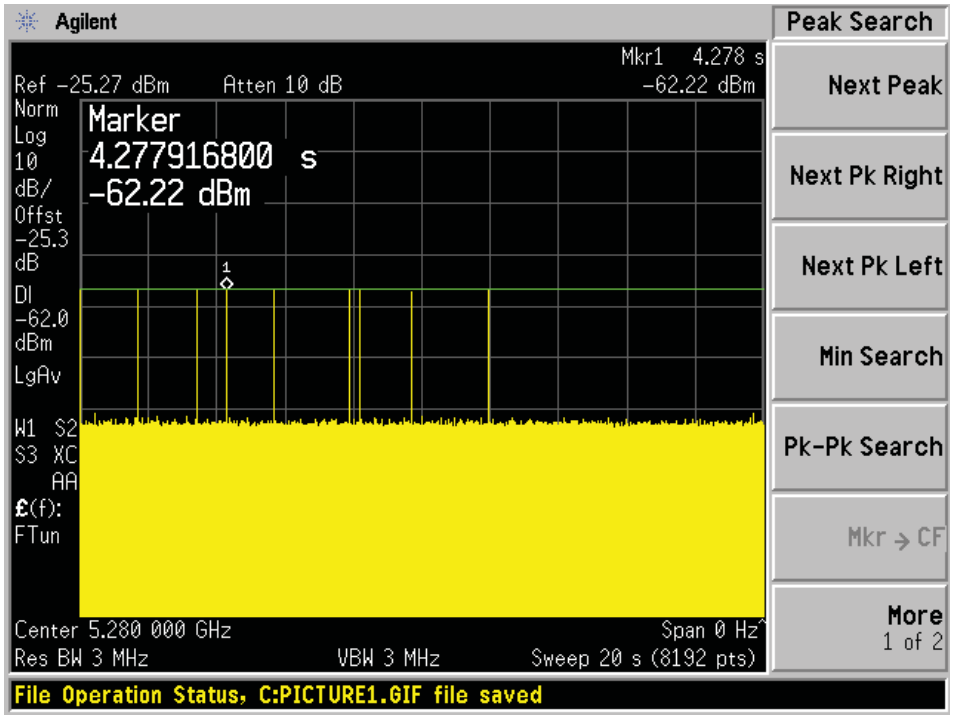
Radar Type 3



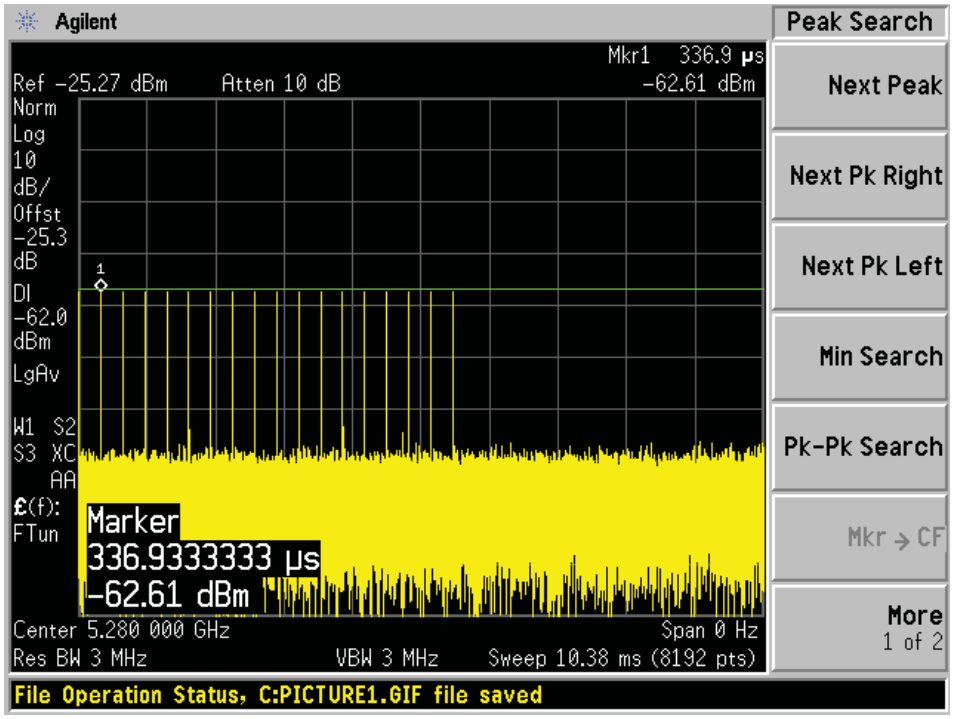
Radar Type 4



Radar Type 5

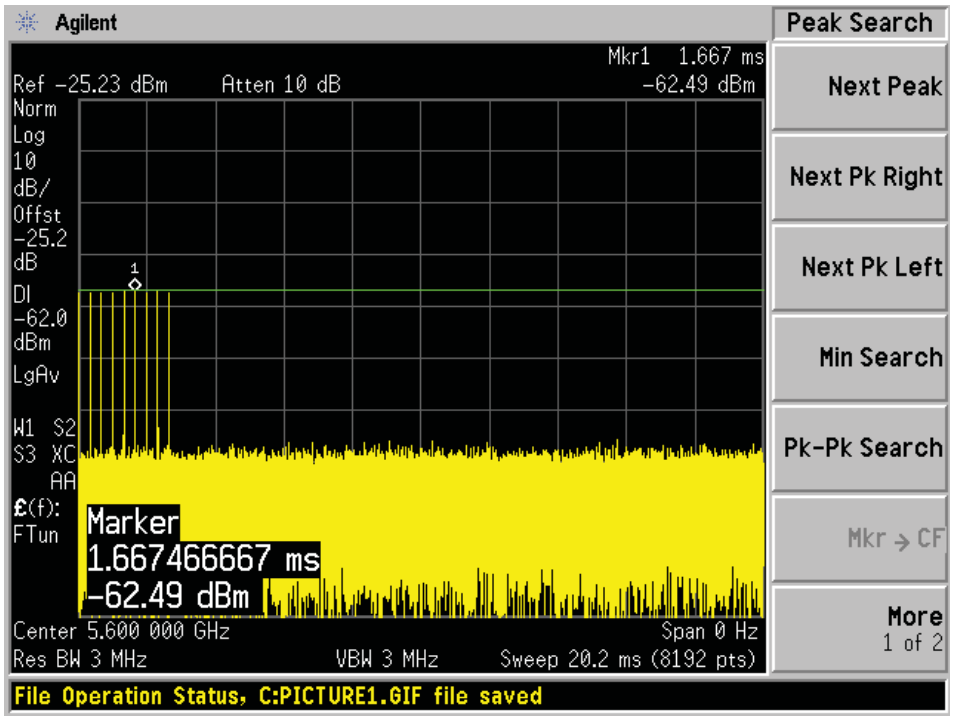


Radar Type 6

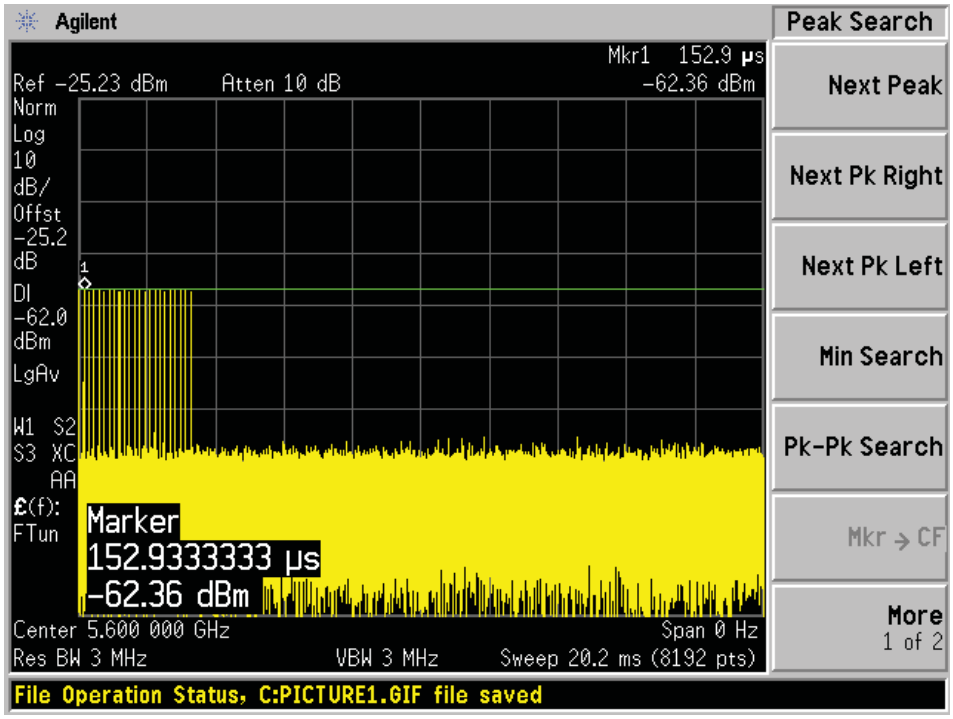


5600 MHz

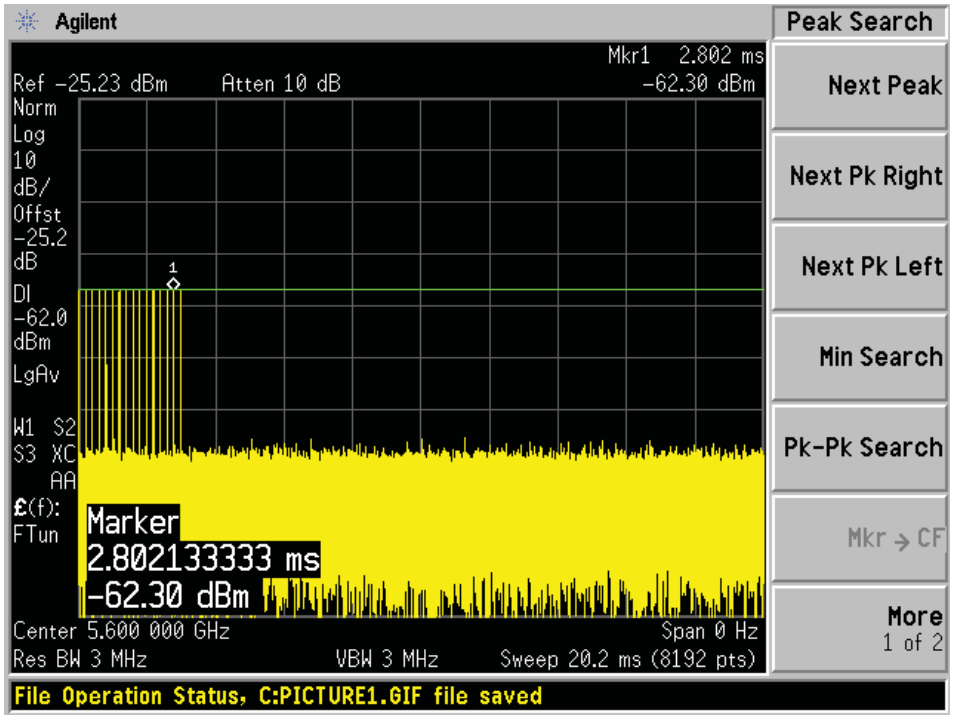
Radar Type 1



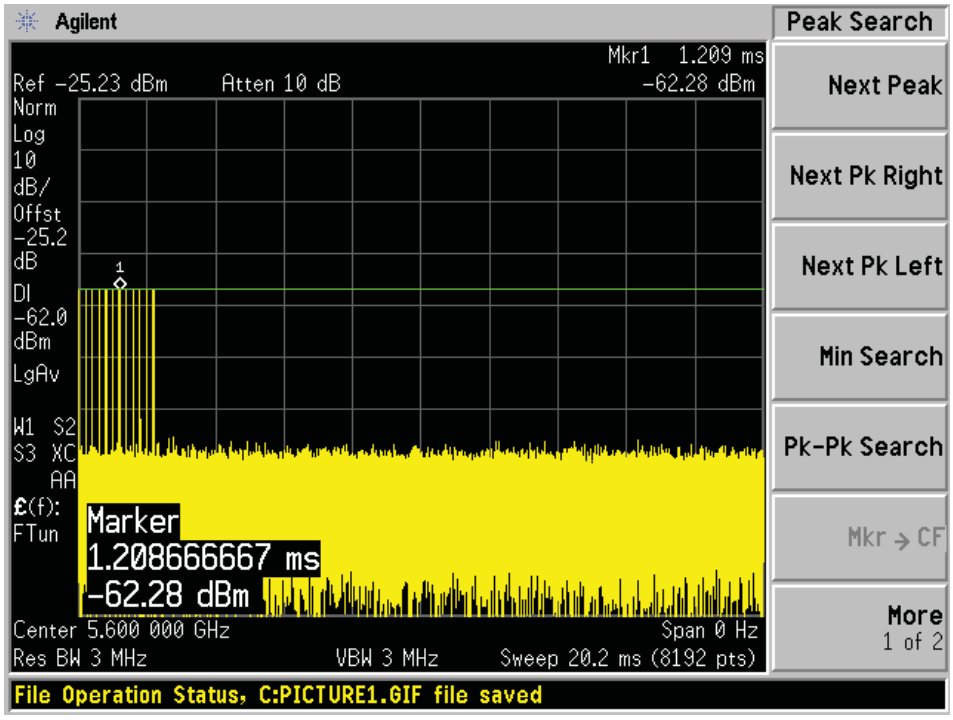
Radar Type 2



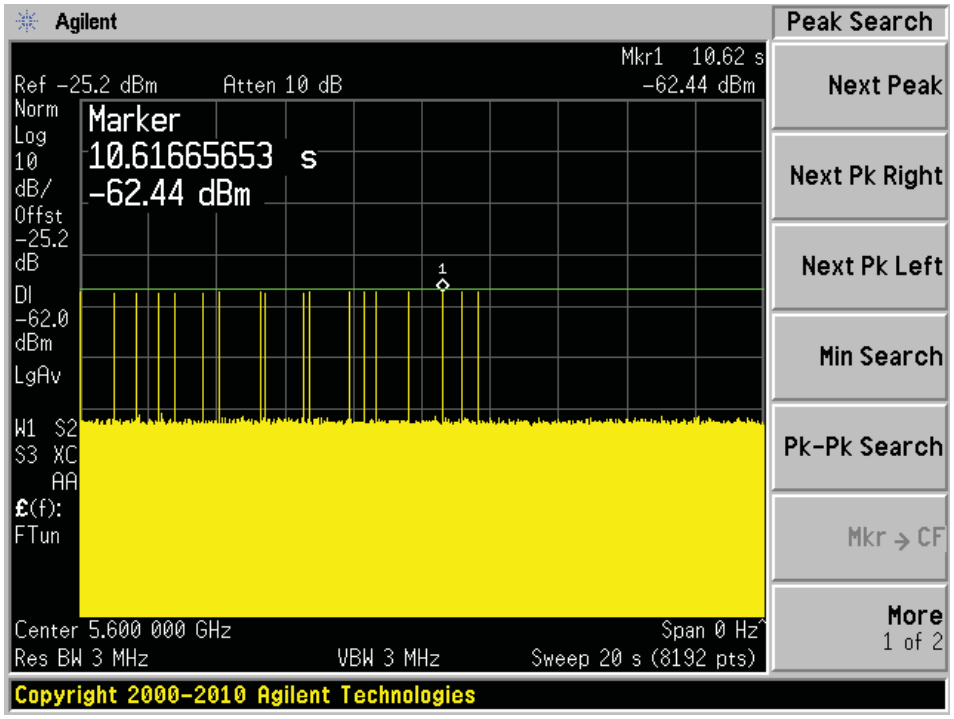
Radar Type 3



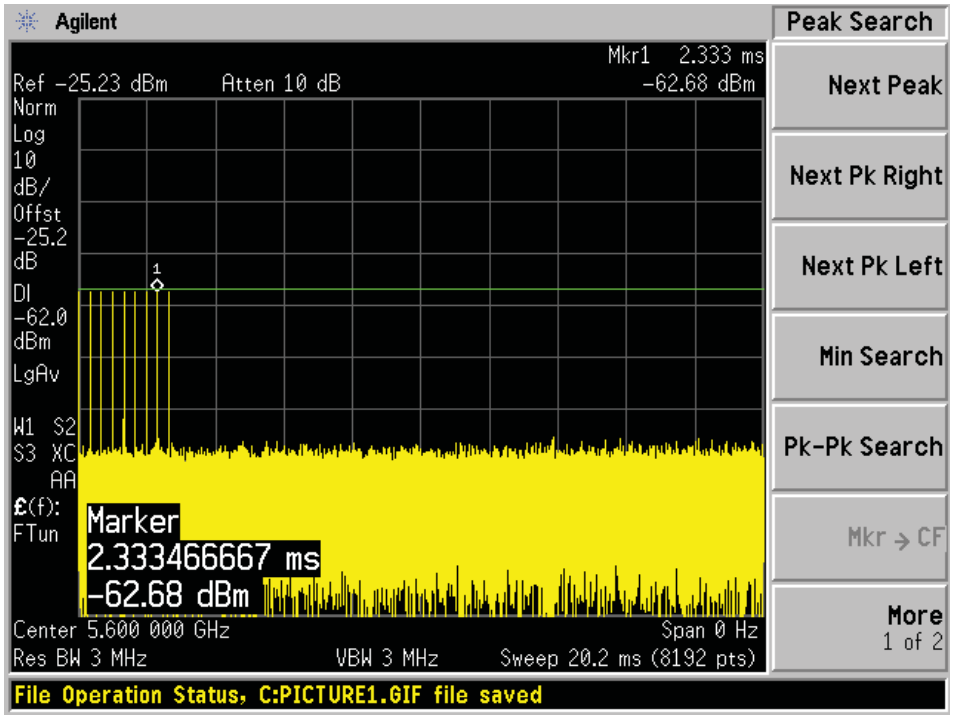
Radar Type 4



Radar Type 5



Radar Type 6



7 Channel Availability Check Time (CAC)

7.1 Test Procedure

1) Measure the initial power-up time of EUT.

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

5280 MHz and 5580 MHz Bandwidth 20 MHz

EUT initial Power-up cycle (Second)
26.02

5270 MHz and 5550 MHz Bandwidth 40 MHz

EUT initial Power-up cycle (Second)
26.02

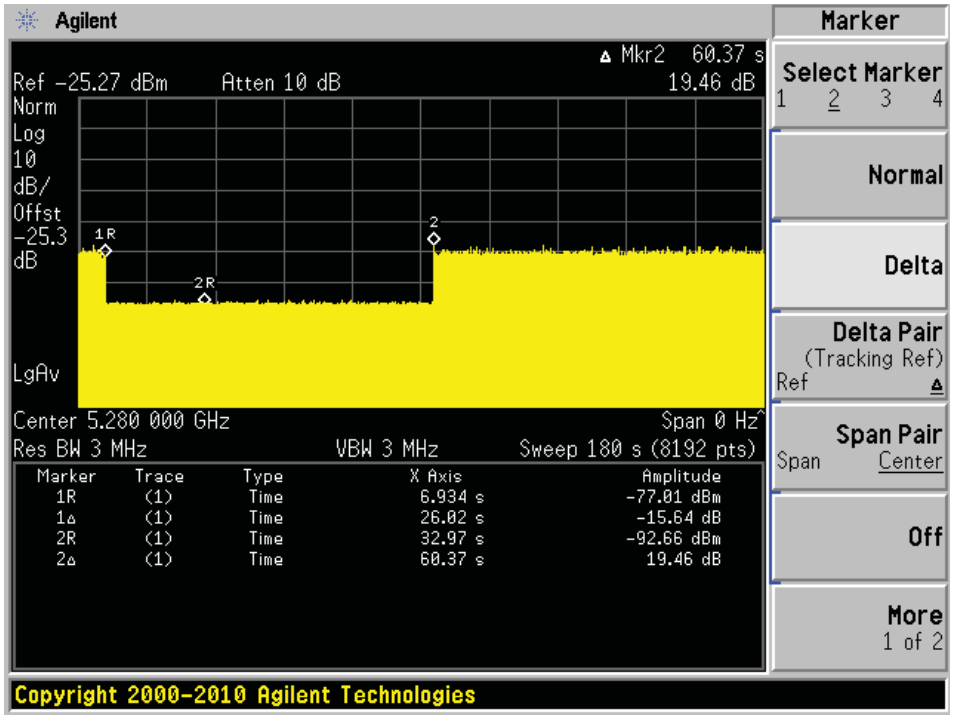
Results:

Timing of Radar Burst	Spectrum Analyzer Display
No Radar Triggered	Transmission begin after power-up cycle +60 seconds CAC
Within 2 seconds of the CAC starting	No transmission
Within the last 2 seconds of the CAC	No transmission

Please refer to the following plots.

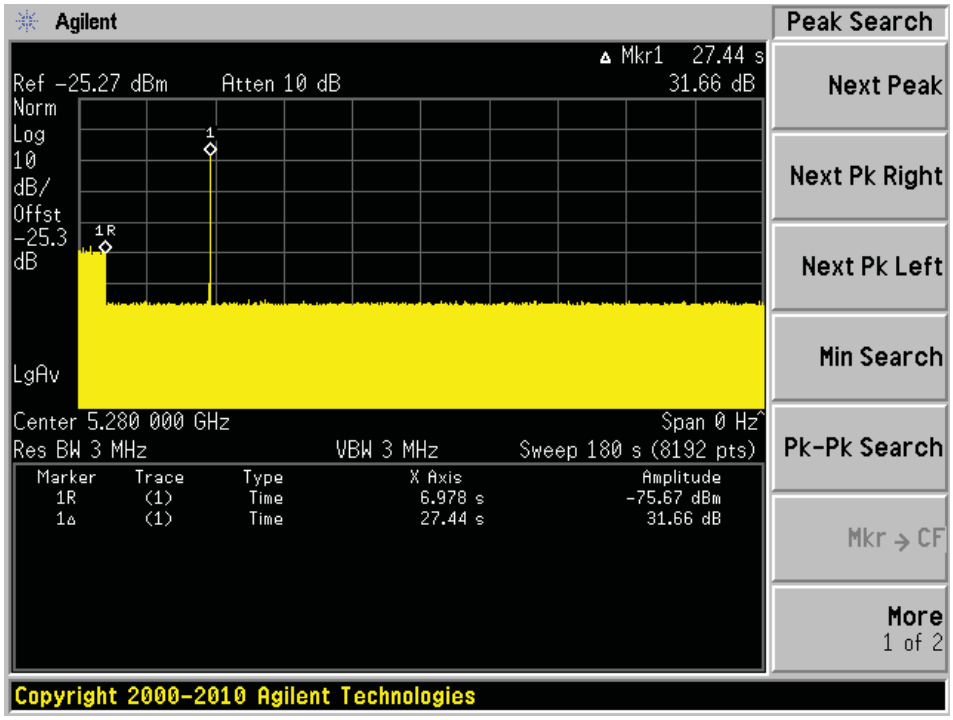
5280 MHZ Bandwidth 20 MHz

Plot of without Radar signal applied



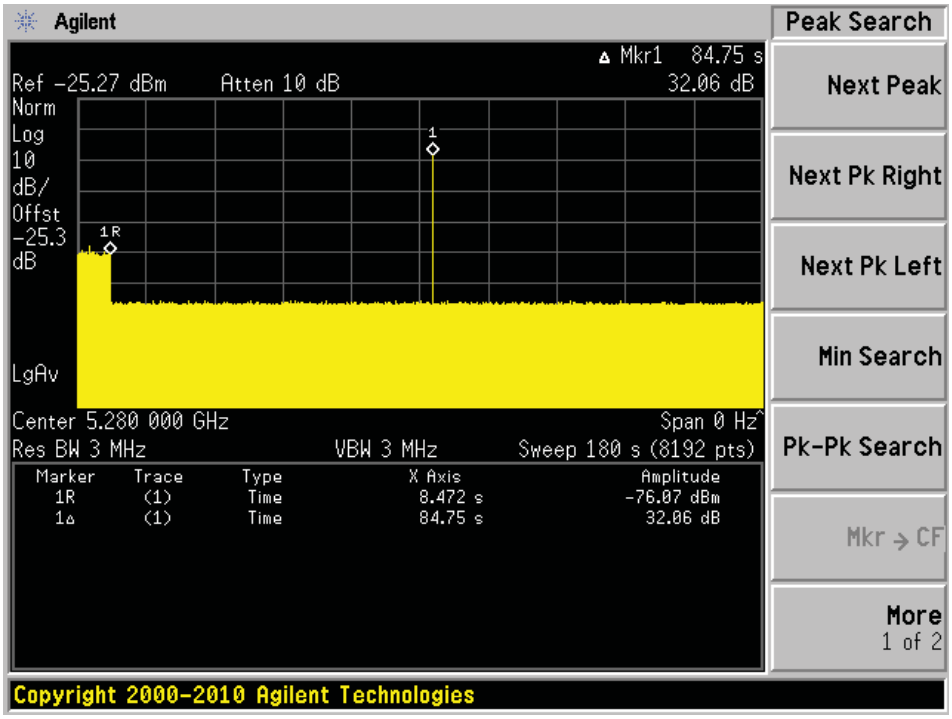
Note: The power-up cycle is 26.02 seconds.

Plot of Radar signal applied within 2 seconds of start of CAC



No transmissions found after radar signal applied.

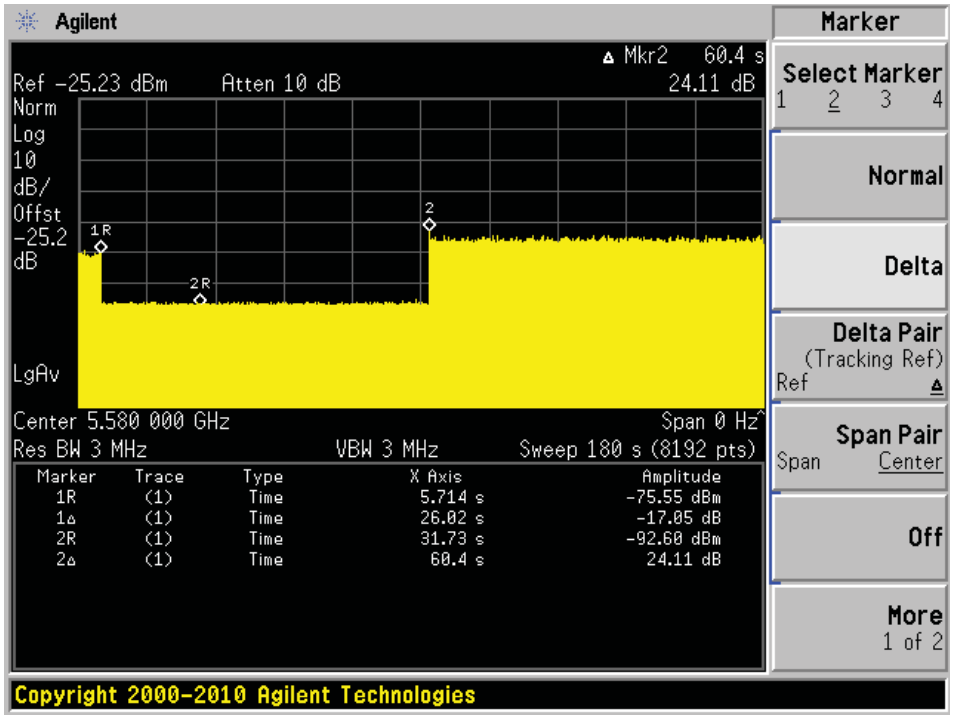
Plot of Radar signal applied at the end of 2 seconds of CAC



No transmissions found after radar signal applied.

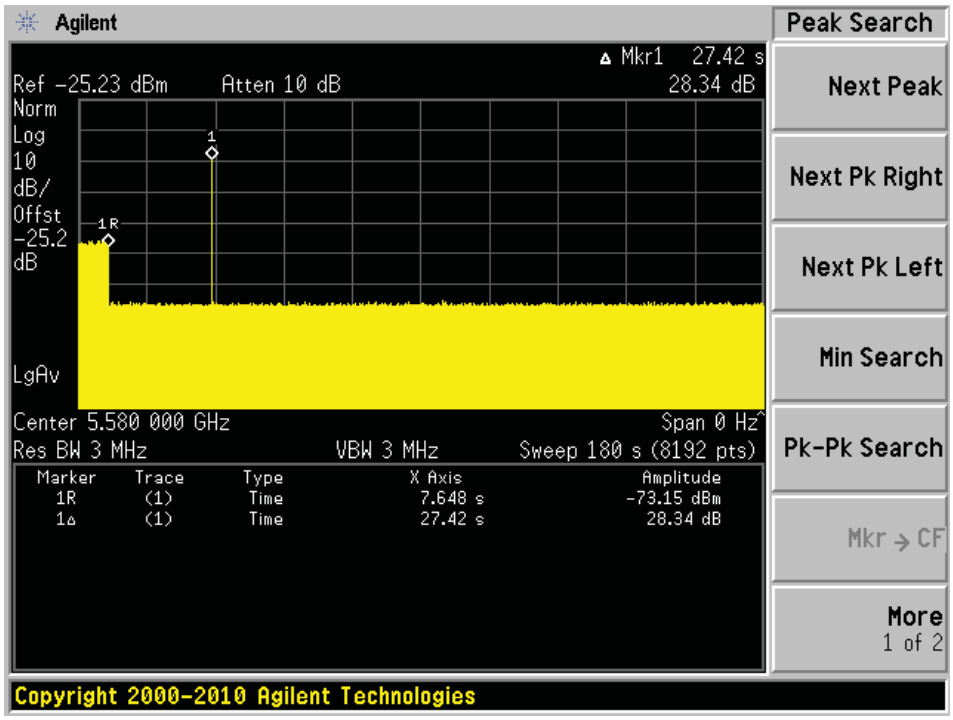
5580 MHZ Bandwidth 20 MHz

Plot of without Radar signal applied



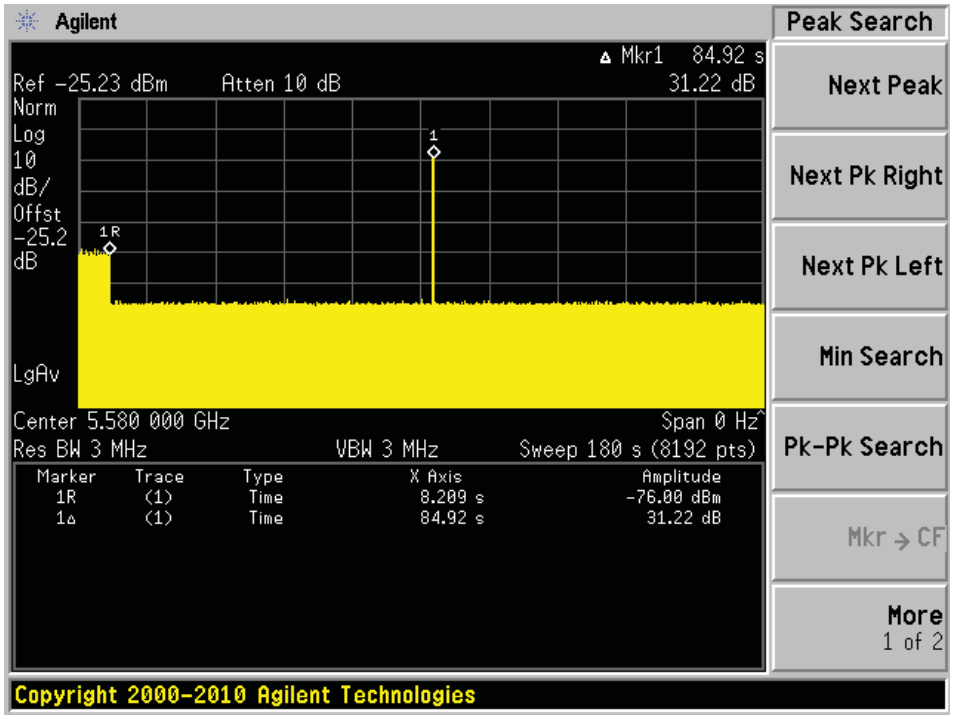
Note: The power-up cycle is 26.02 seconds

Plot of Radar signal applied within 2 seconds of start of CAC



No transmissions found after radar signal applied.

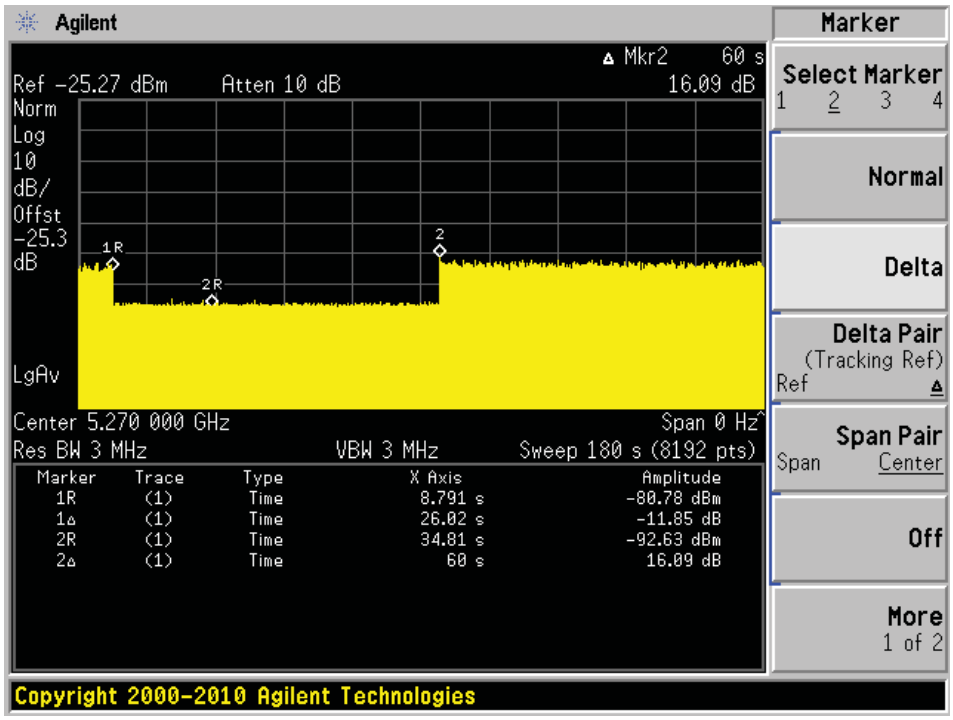
Plot of Radar signal applied at the end of 2 seconds of CAC



No transmissions found after radar signal applied.

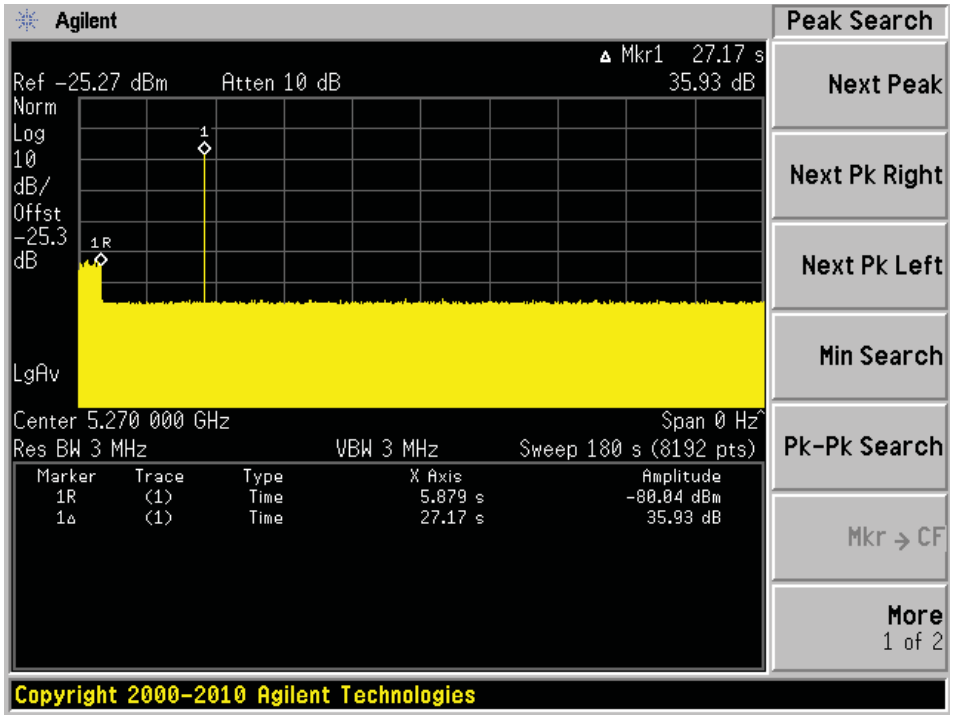
5270 MHZ Bandwidth 40 MHz

Plot of without Radar signal applied



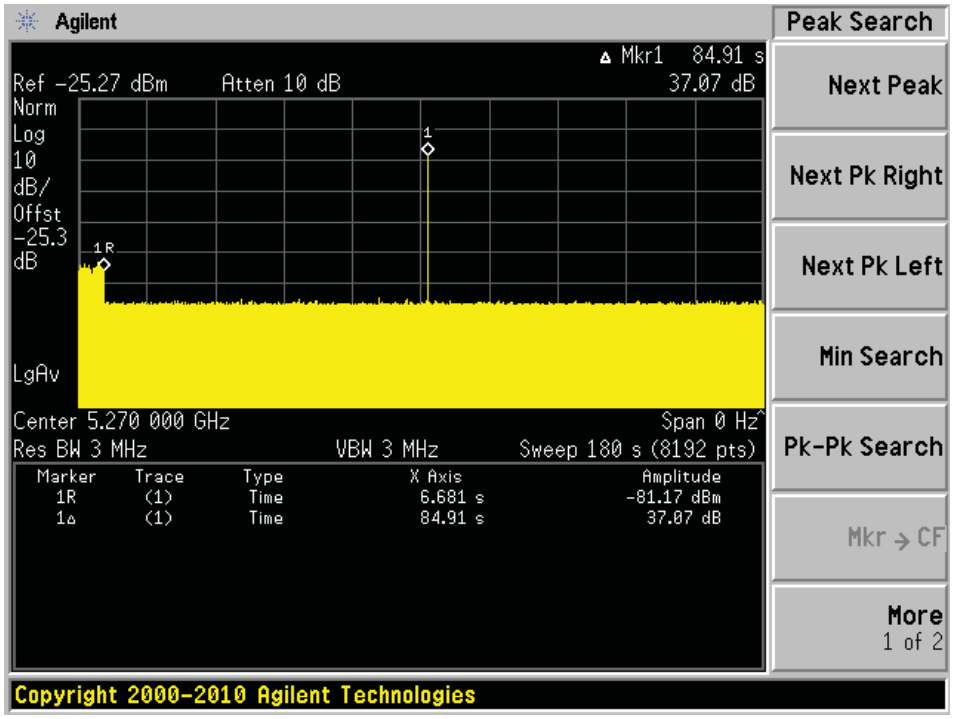
Note: The power-up cycle is 26.02 seconds.

Plot of Radar signal applied within 2 seconds of start of CAC



No transmissions found after radar signal applied.

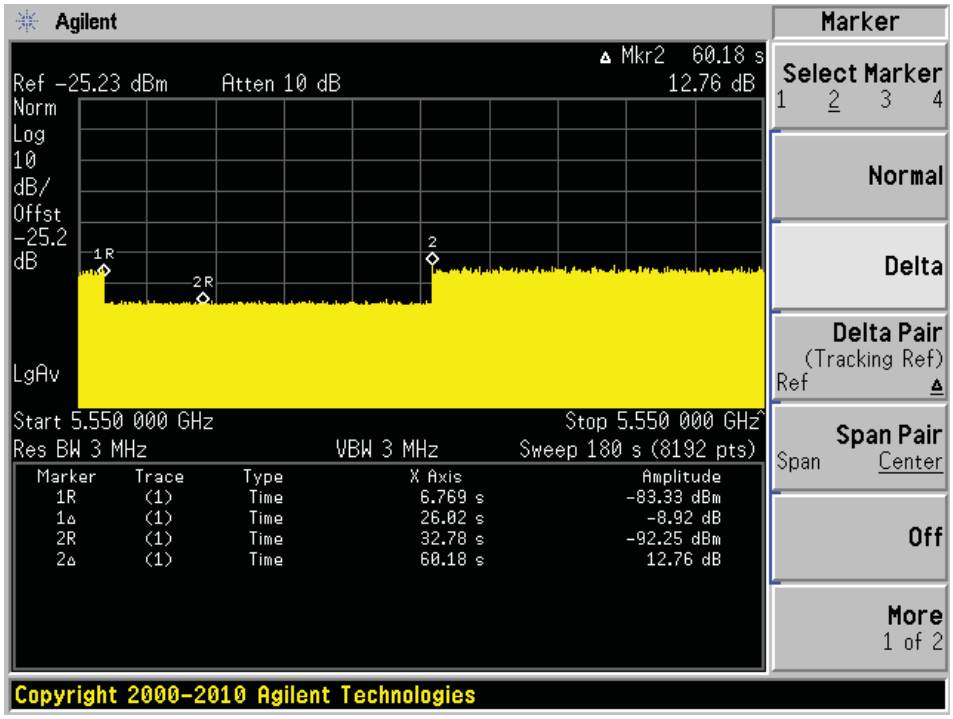
Plot of Radar signal applied at the end of 2 seconds of CAC



No transmissions found after radar signal applied.

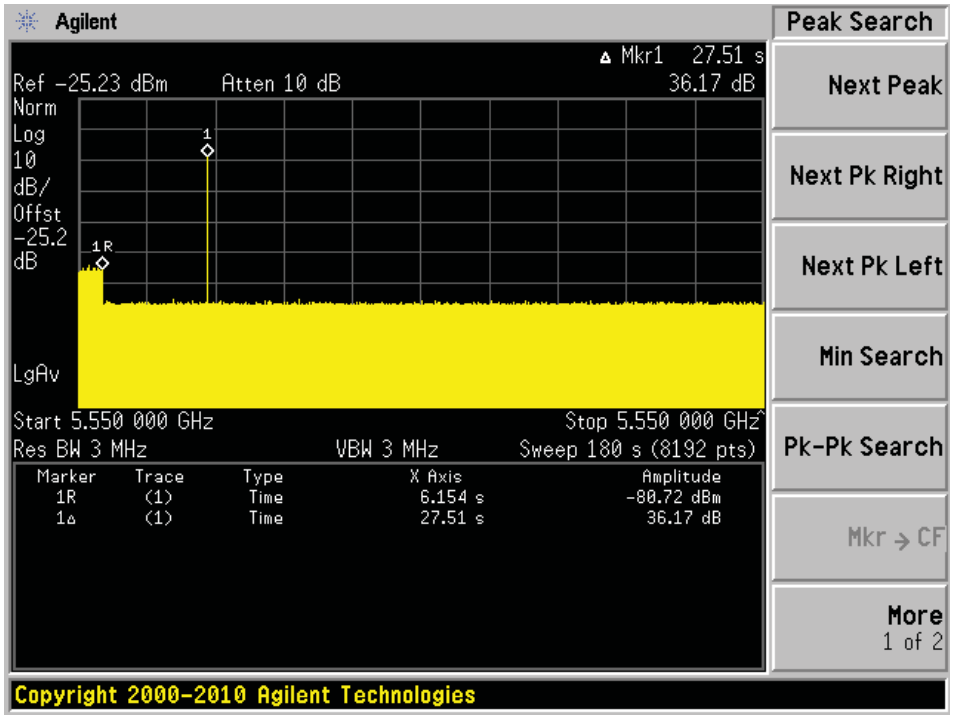
5550 MHZ Bandwidth 40 MHz

Plot of without Radar signal applied



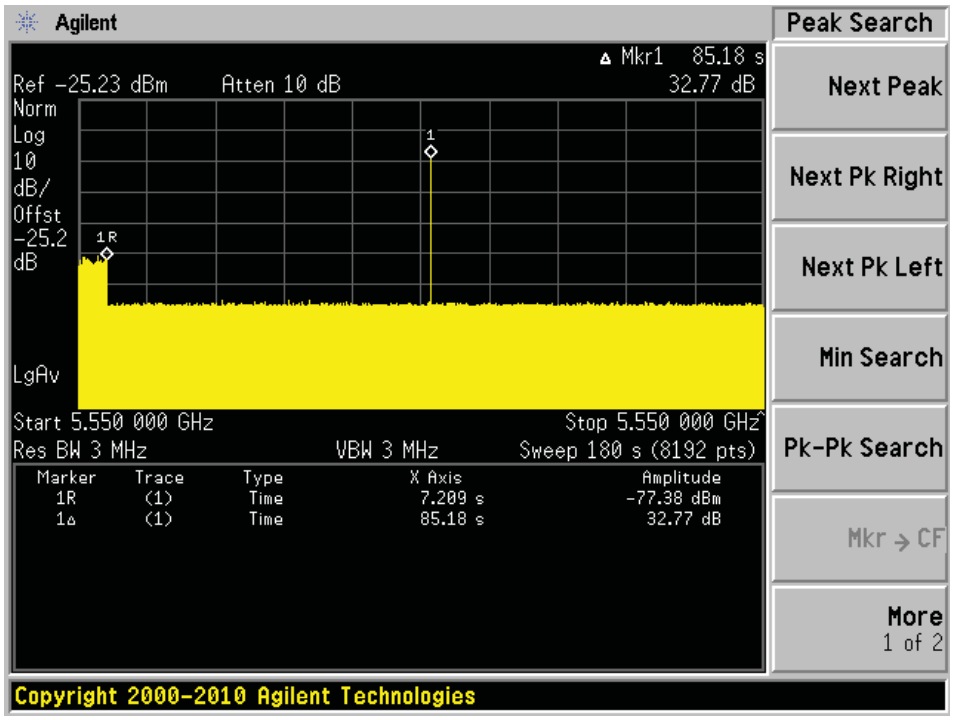
Note: The power-up cycle is 26.02 seconds.

Plot of Radar signal applied within 2 seconds of start of CAC



No transmissions found after radar signal applied.

Plot of Radar signal applied at the end of 2 seconds of CAC



No transmissions found after radar signal applied.

8 Channel Move Time and Channel Closing Transmission Time

8.1 Test Procedure

Perform one of the type1 to type 4 short pulse radar waveform, BACL use type 1 radar signal, repeat using a long pulse radar type5 waveform.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = N * Dwell Time

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

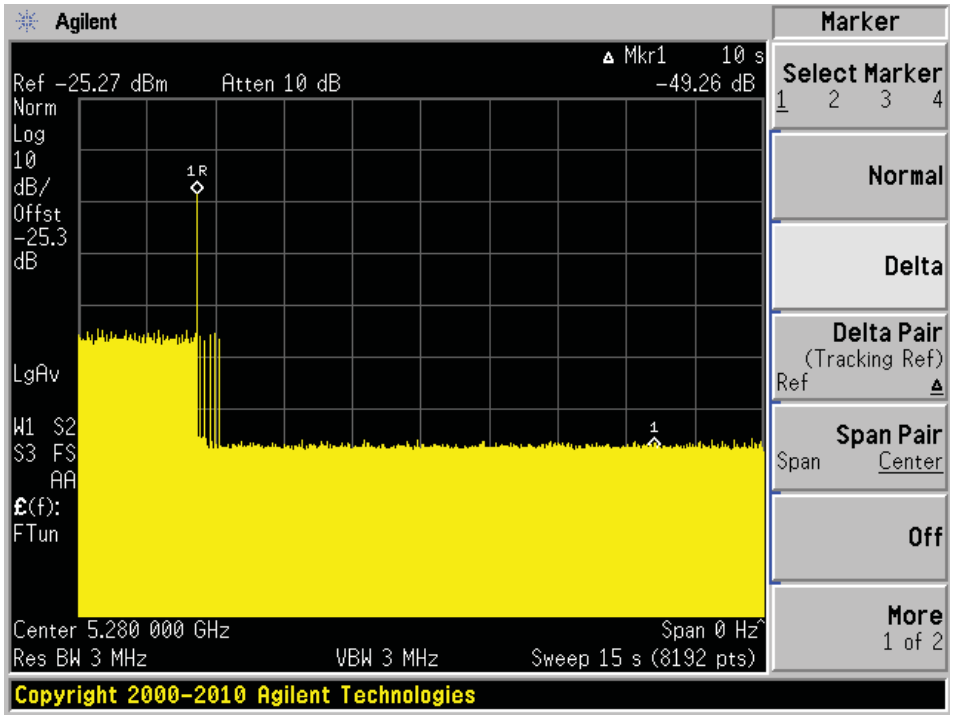
8.2 Test Results

Frequency (MHz)	Bandwidth (MHz)	Radar Type	Results
5280	20	Type 1	Compliant
		Type 5	Compliant
5580	20	Type 1	Compliant
		Type 5	Compliant
5270	40	Type 1	Compliant
		Type 5	Compliant
5550	40	Type 1	Compliant
		Type 5	Compliant

Please refer to the following tables and plots.

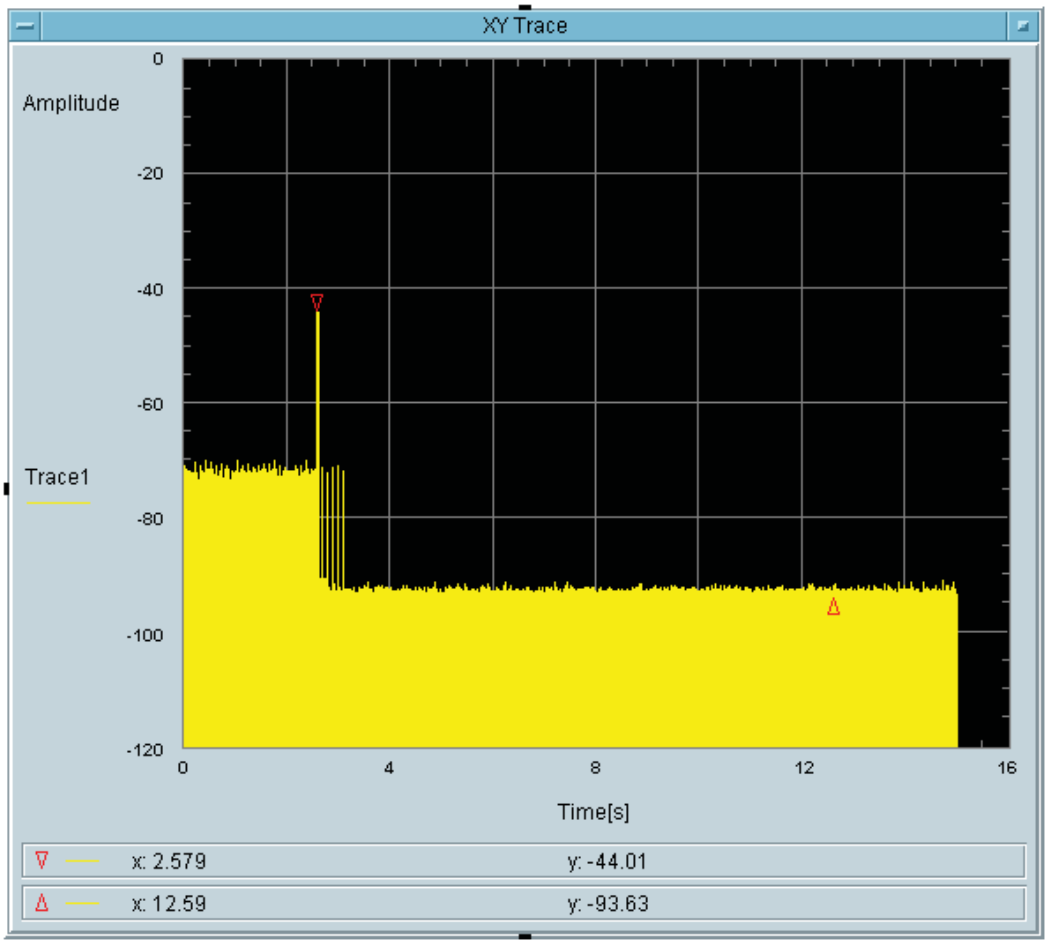
5280 MHz Bandwidth 20 MHz

Type 1 radar channel move time result:



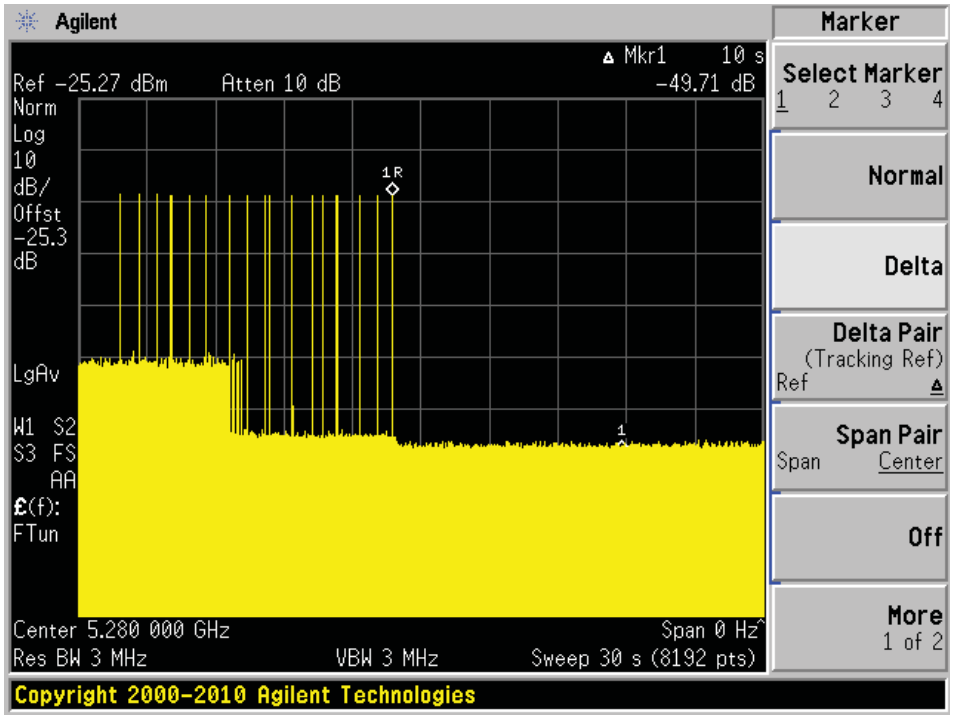
Type1 radar channel closing transmission time result:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
5.493	60	54.507



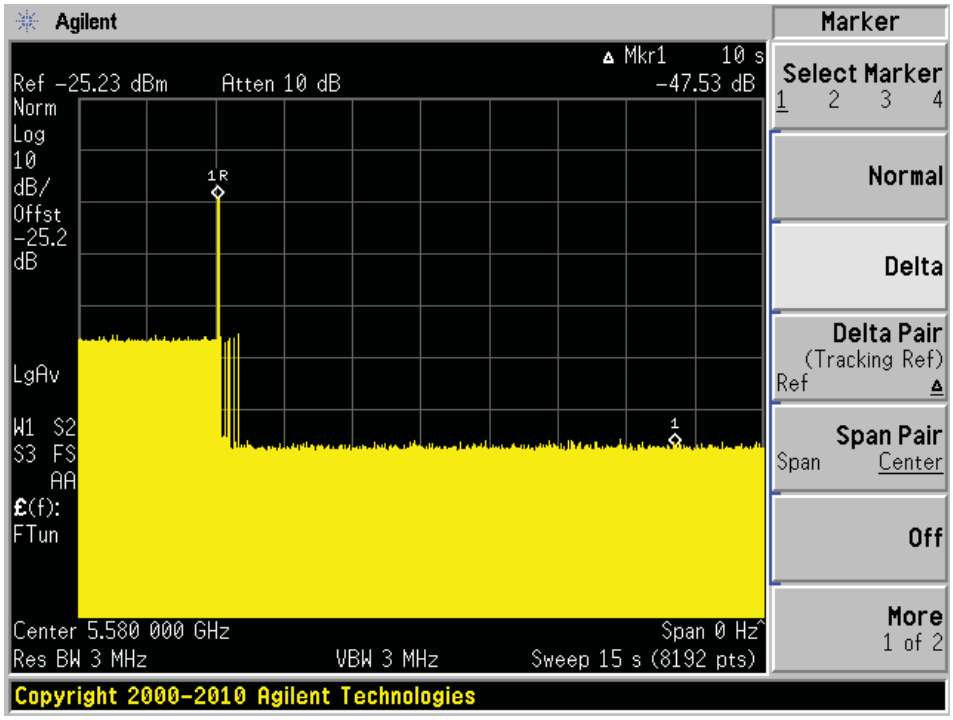
Type 5 radar channel move time result:

The traffic ceases period to the end of the radar waveform, therefore it also ceases period to 10 seconds after of the end of the radar waveform.



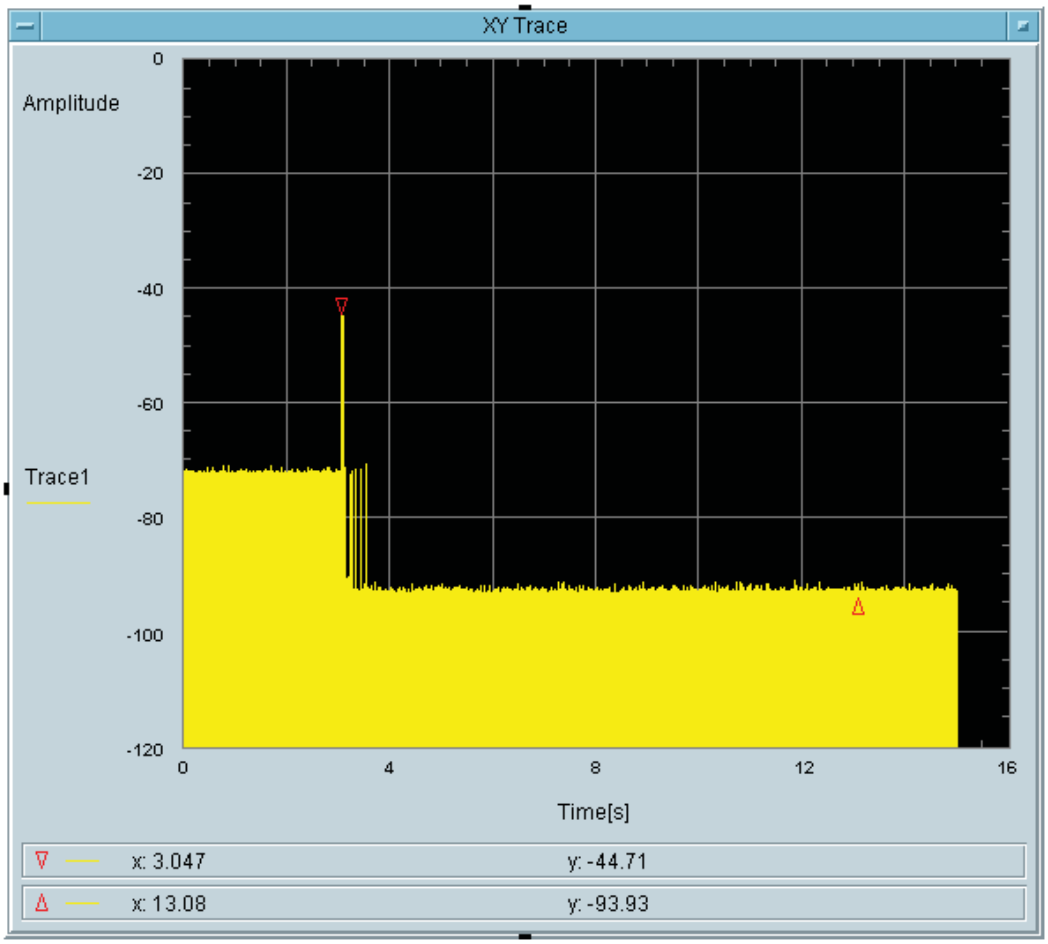
5580 MHz Bandwidth 20 MHz

Type 1 radar channel move time result:



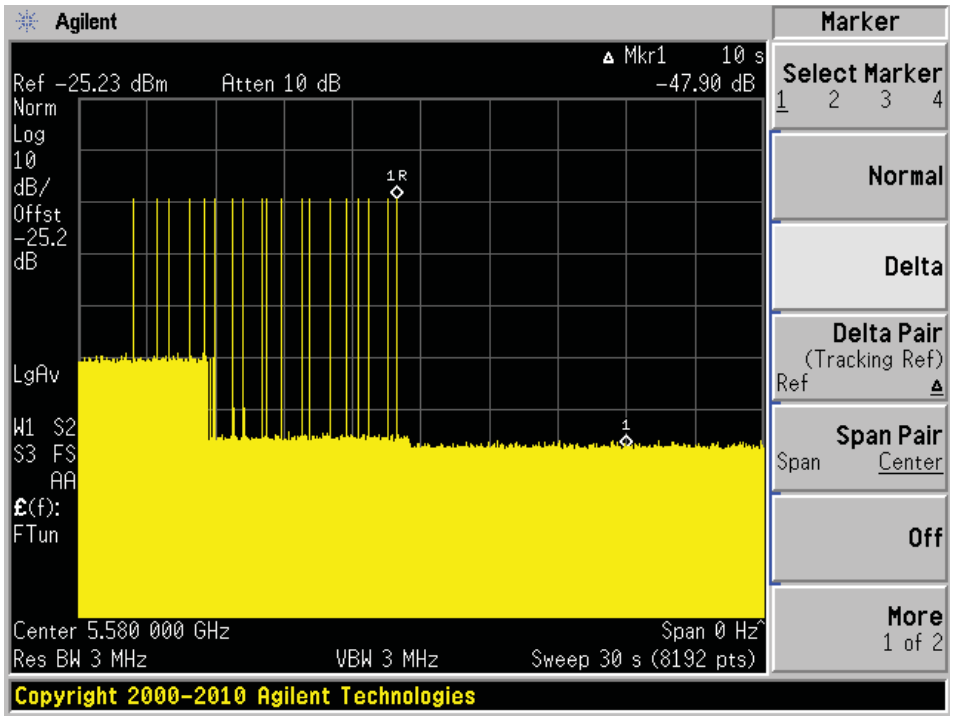
Type1 radar channel closing transmission time result:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
5.493	60	54.507



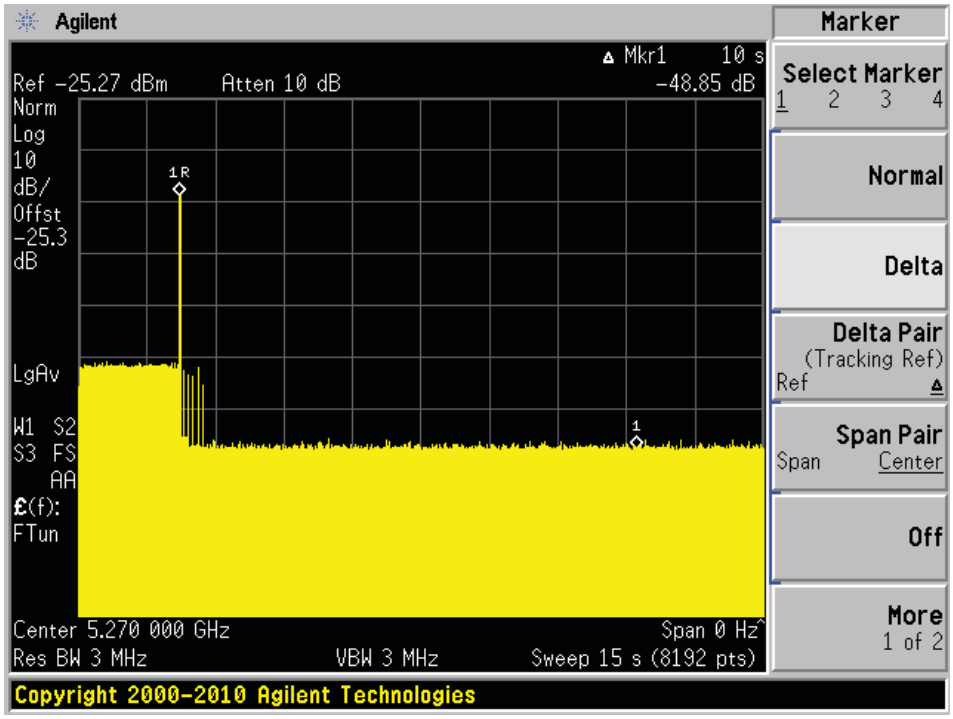
Type 5 radar channel move time result:

The traffic ceases period to the end of the radar waveform, therefore it also ceases period to 10 seconds after of the end of the radar waveform.



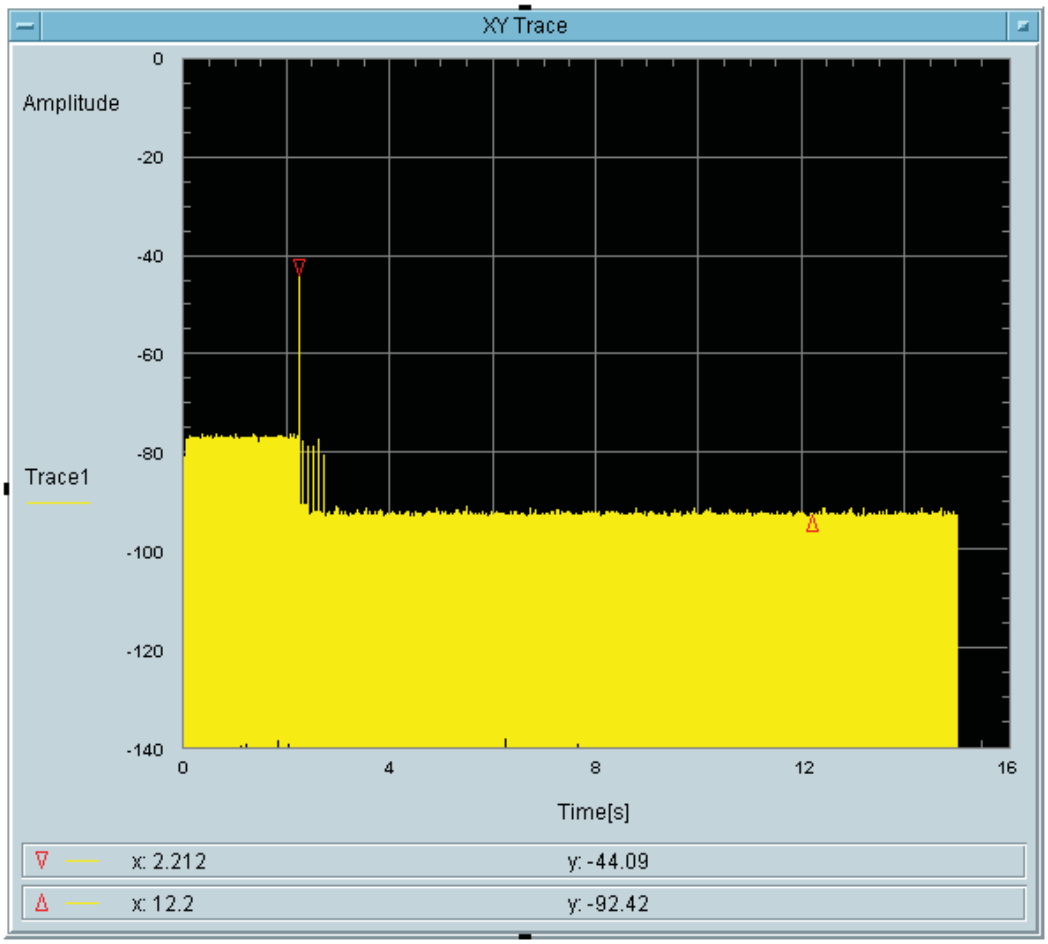
5270 MHz Bandwidth 40 MHz

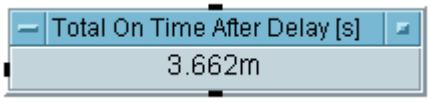
Type 1 radar channel move time result:



Type1 radar channel closing transmission time result:

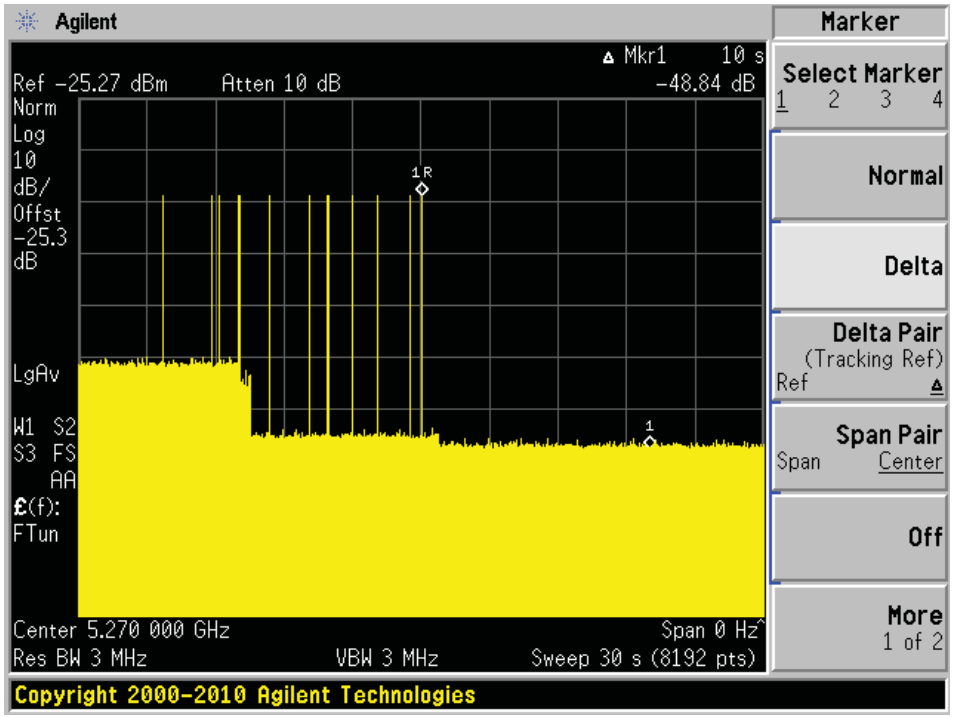
Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
3.662	60	56.338





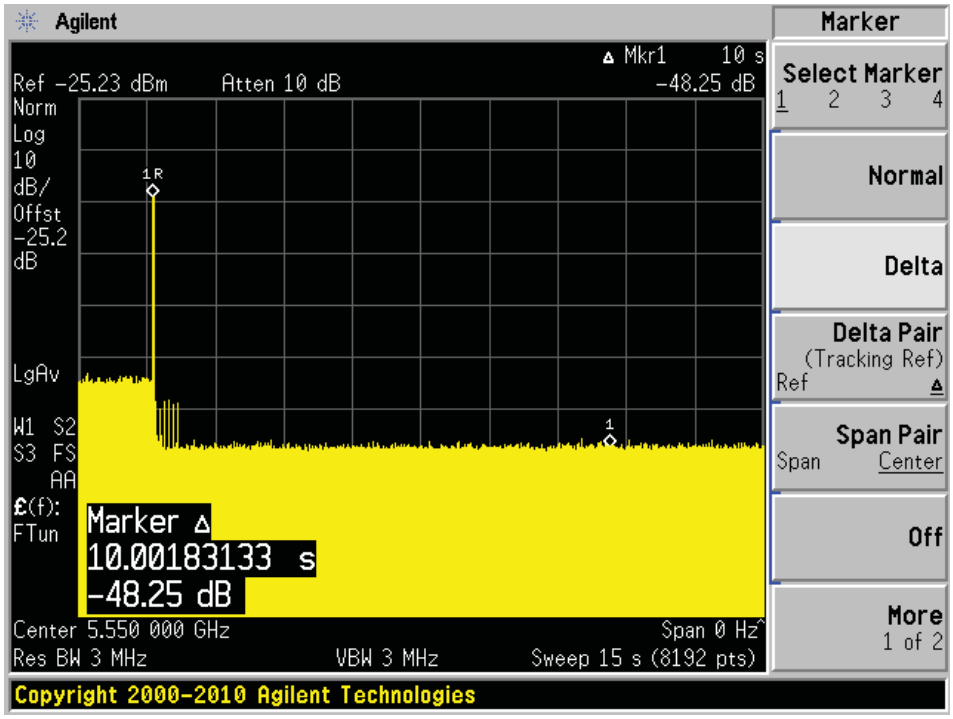
Type 5 radar channel move time result:

The traffic ceases period to the end of the radar waveform, therefore it also ceases period to 10 seconds after of the end of the radar waveform.



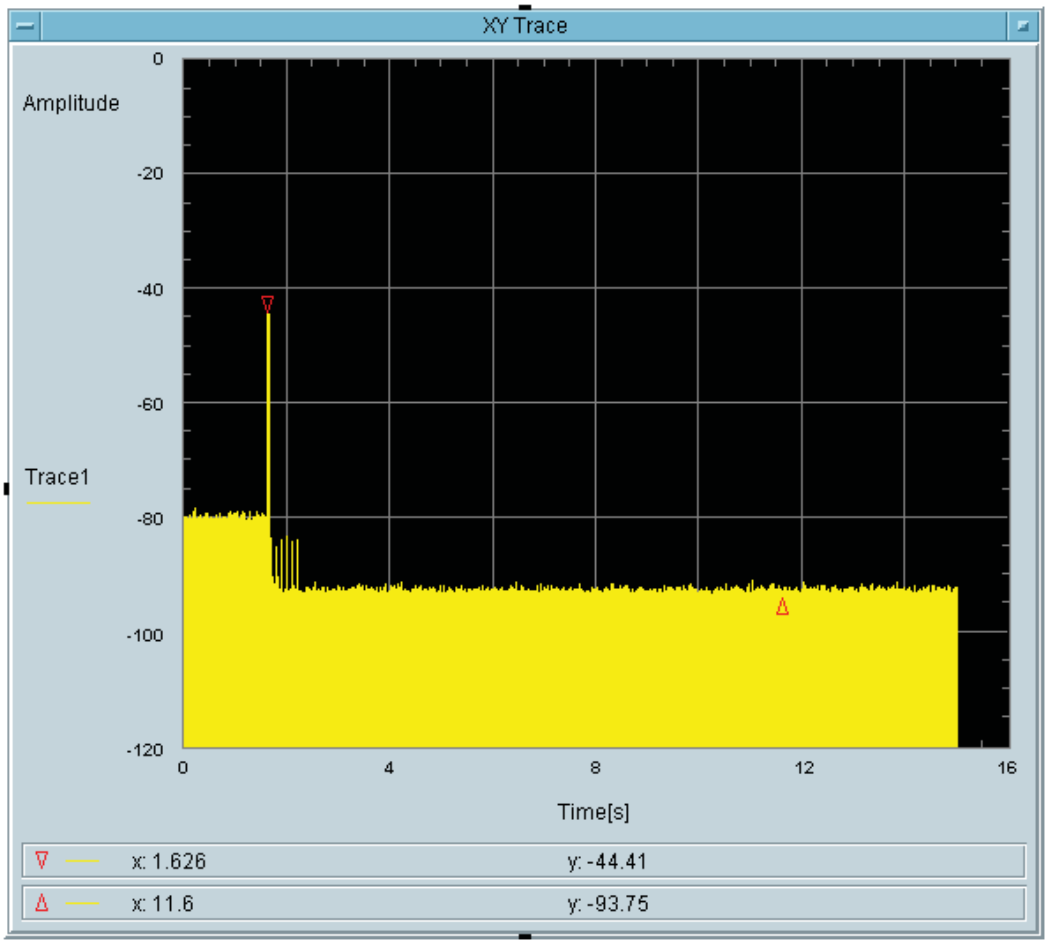
5550 MHz Bandwidth 40 MHz

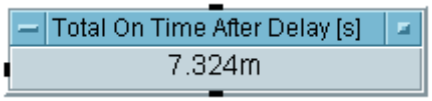
Type 1 radar channel move time result:



Type1 radar channel closing transmission time result:

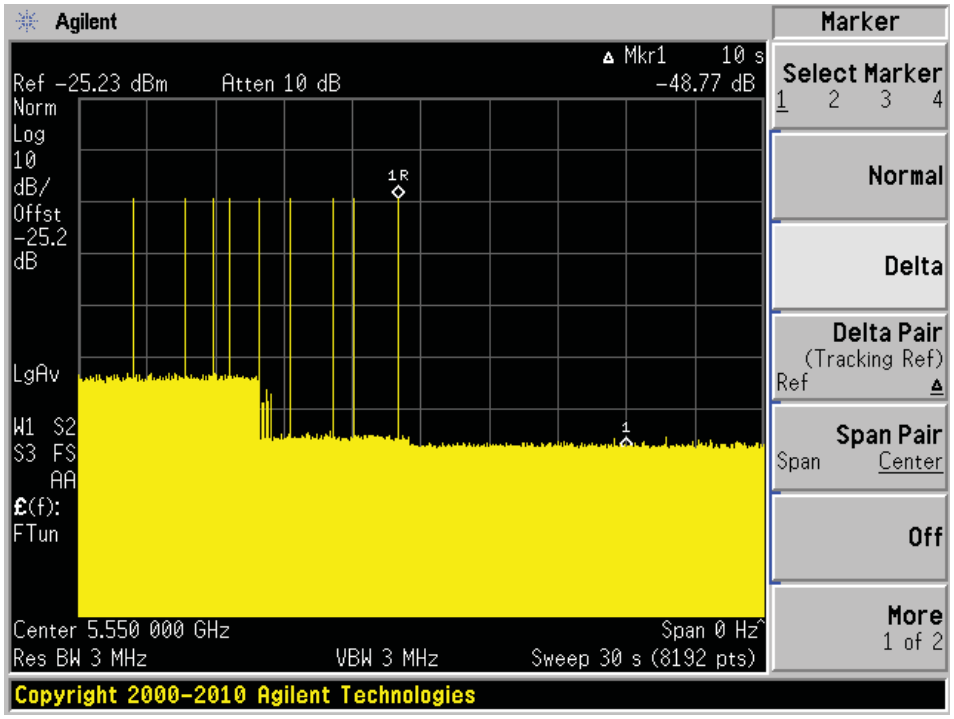
Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
7.324	60	52.676





Type 5 radar channel move time result:

The traffic ceases period to the end of the radar waveform, therefore it also ceases period to 10 seconds after of the end of the radar waveform.



9 Non-Occupancy Period

9.1 Test Procedure

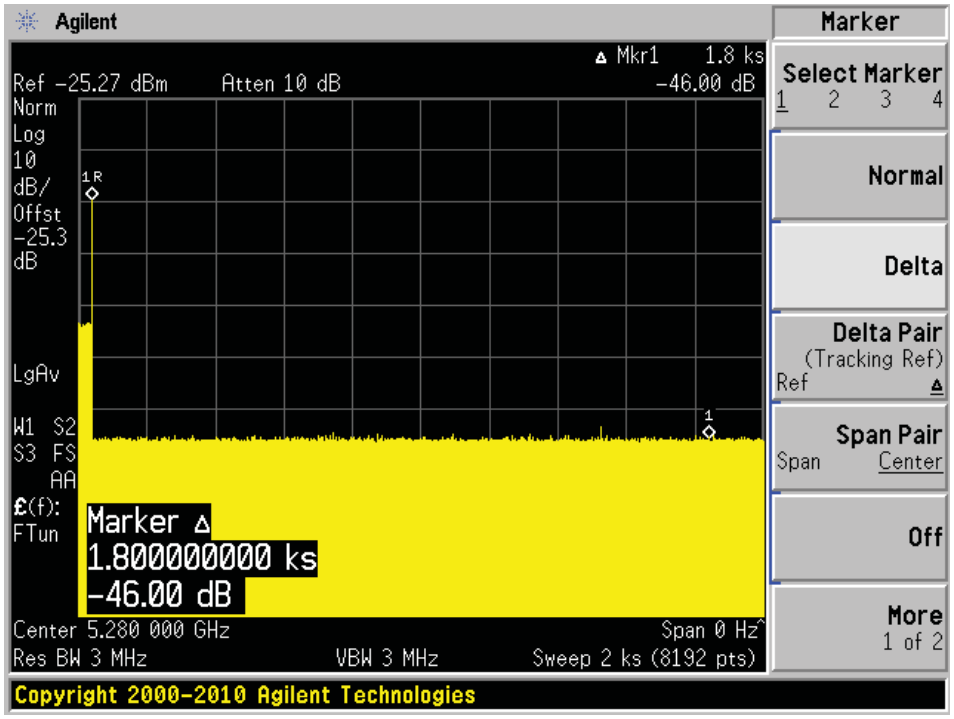
Measure the EUT for more than 30 minutes following the channel close/move time to very that the EUT does not resume any transmissions on this channel. Provide one plot to demonstrate no transmission on the channel for the non-occupancy period (30 minutes observation time)

9.2 Results

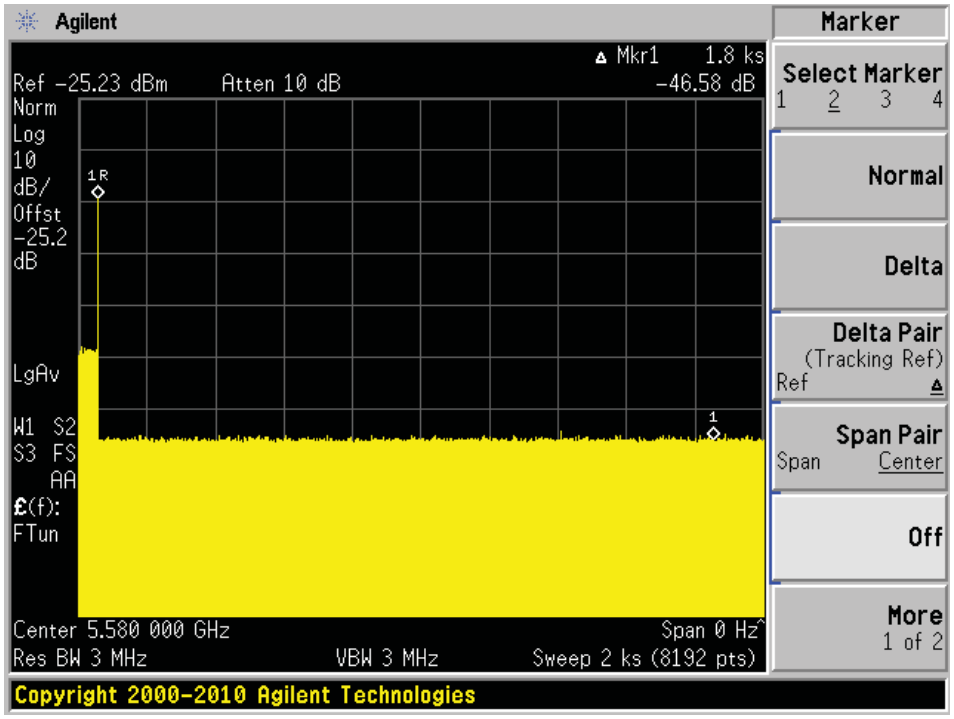
Frequency (MHz)	Bandwidth (MHz)	Spectrum Analyzer Display
5280	20	No transmission within 30 minutes
5580	20	No transmission within 30 minutes
5270	40	No transmission within 30 minutes
5550	40	No transmission within 30 minutes

Please refer to the following plots.

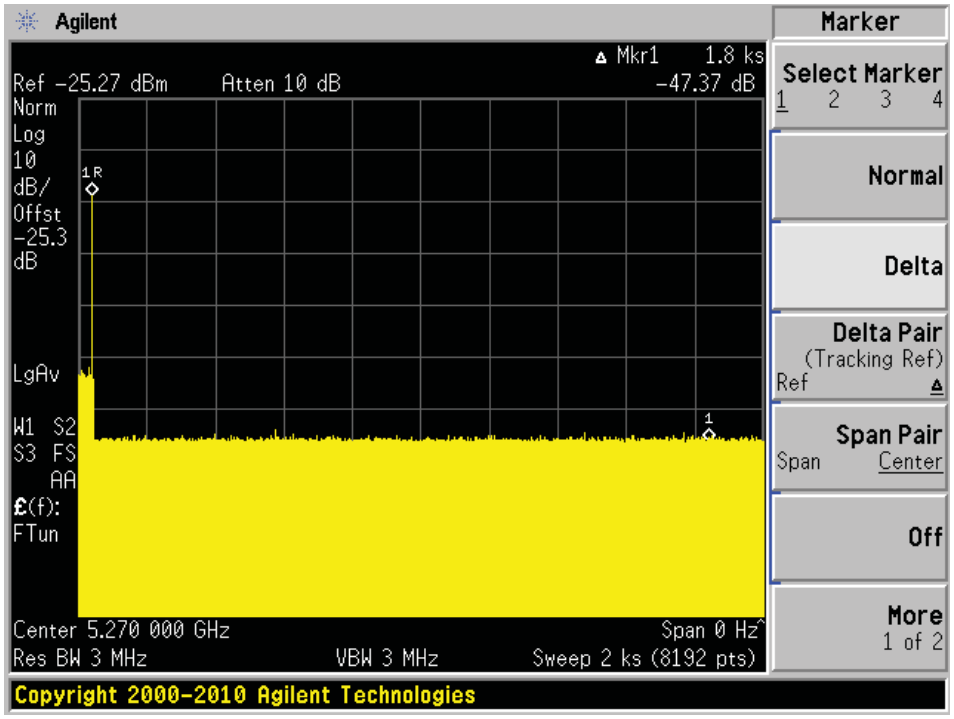
5280 MHz Bandwidth 20 MHz



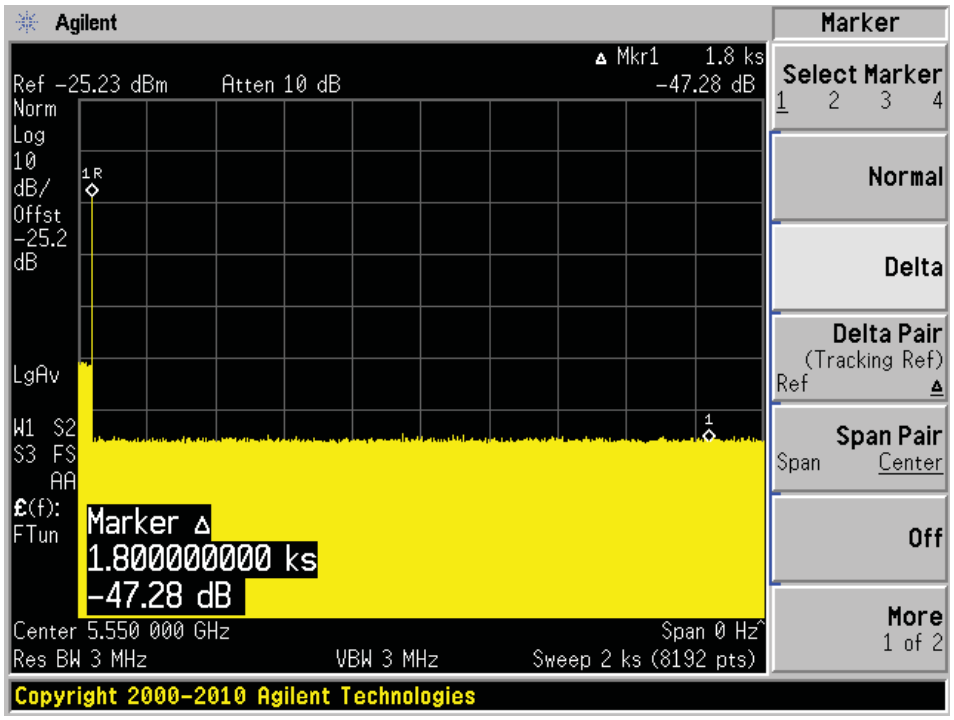
5580 MHz Bandwidth 20 MHz



5270 MHz Bandwidth 40 MHz



5550 MHz Bandwidth 40 MHz



10 Detection Bandwidth

10.1 Procedure

Performed with any one of the short pulse radar waveforms (type 1, 2, 3 or 4)

Start with radar generator frequency set to the center of the channel (Fc)
Perform at least 10 trials and confirm at least 90% detected
Increment radar generator frequency by 1 MHz and repeat
Perform at least 10 trials and confirm at least 90% detected
Continue incrementing the radar frequency until detection rate falls below 90%

Starting at Fc - 1 MHz, repeat the process, this time decrementing the radar frequency by 1 MHz

F_L is the lowest frequency at which detection was 80% or better
F_H is the highest frequency at which detection was 80% or better

UNII Detection Bandwidth = F_H - F_L

10.2 Results

Frequency (MHz)	F_L (MHz)	F_H (MHz)	Detection Bandwidth (MHz)	Minimum Limit	Result
5280	5270	5290	20	80%	Compliance
5580	5569	5591	20	80%	Compliance
5270	5249	5291	40	80%	Compliance
5550	5529	5571	40	80%	Compliance

Please refer to the following tables and plots.

Results of Detection Bandwidth:

EUT Frequency = 5280 MHz											
DFS Detection Trials (1 = Detected, 0 = No Detected)											
Radar Frequency (MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5270(F_L)	1	0	0	1	1	1	1	0	0	0	50 %
5271	1	0	1	1	1	1	1	1	1	1	90 %
5272	1	1	1	1	1	1	1	1	1	1	100 %
5273	1	1	1	1	1	1	1	1	1	1	100 %
5274	1	1	1	1	1	1	1	1	1	1	100 %
5275	1	1	1	1	1	1	1	1	1	1	100 %
5276	1	1	1	1	1	1	1	1	1	1	100 %
5277	1	1	1	1	1	1	1	1	1	1	100 %
5278	1	1	1	1	1	1	1	1	1	1	100 %
5279	1	1	1	1	1	1	1	1	1	1	100 %
5280(Fc)	1	1	1	1	1	1	1	1	1	1	100 %
5281	1	1	1	1	1	1	1	1	1	1	100 %
5282	1	1	1	1	1	1	1	1	1	1	100 %
5283	1	1	1	1	1	1	1	1	1	1	100 %
5284	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	1	1	1	1	1	1	1	1	1	1	100 %
5290(F_H)	1	1	1	1	1	1	1	0	0	0	70 %
Result: Pass											

EUT Frequency = 5580 MHz											
DFS Detection Trials (1 = Detected, Blank = No Detected)											
Radar Frequency (MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5569(F_L)	0	0	0	1	0	0	0	0	0	0	10 %
5570	1	1	1	1	1	1	1	1	1	1	100 %
5571	1	1	1	1	1	1	1	1	1	1	100 %
5572	1	1	1	1	1	1	1	1	1	1	100 %
5573	1	1	1	1	1	1	1	1	1	1	100 %
5574	1	1	1	1	1	1	1	1	1	1	100 %
5575	1	1	1	1	1	1	1	1	1	1	100 %
5576	1	1	1	1	1	1	1	1	1	1	100 %
5577	1	1	1	1	1	1	1	1	1	1	100 %
5578	1	1	1	1	1	1	1	1	1	1	100 %
5579	1	1	1	1	1	1	1	1	1	1	100 %
5580 (Fc)	1	1	1	1	1	1	1	1	1	1	100 %
5581	1	1	1	1	1	1	1	1	1	1	100 %
5582	1	1	1	1	1	1	1	1	1	1	100 %
5583	1	1	1	1	1	1	1	1	1	1	100 %
5584	1	1	1	1	1	1	1	1	1	1	100 %
5585	1	1	1	1	1	1	1	1	1	1	100 %
5586	1	1	1	1	1	1	1	1	1	1	100 %
5587	1	1	1	1	1	1	1	1	1	1	100 %
5588	1	1	1	1	1	1	1	1	1	1	100 %
5589	1	1	1	1	1	1	1	1	1	1	100 %
5590	0	0	0	0	0	0	0	0	0	0	0 %
5591(F_H)	0	0	0	0	0	1	0	0	0	0	10 %
Result: Pass											

EUT Frequency = 5270 MHz											
DFS Detection Trials (1 = Detected, Blank = No Detected)											
Radar Frequency (MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5249(F_L)	0	0	0	0	0	0	0	0	0	0	0 %
5250	1	1	1	1	1	1	1	1	1	1	100 %
5252	1	1	1	1	1	1	1	1	1	1	100 %
5254	1	1	1	1	1	1	1	1	1	1	100 %
5256	1	1	1	1	1	1	1	1	1	1	100 %
5258	1	1	1	1	1	1	1	1	1	1	100 %
5260	1	1	1	1	1	1	1	1	1	1	100 %
5262	1	1	1	1	1	1	1	1	1	1	100 %
5264	1	1	1	1	1	1	1	1	1	1	100 %
5266	1	1	1	1	1	1	1	1	1	1	100 %
5268	1	1	1	1	1	1	1	1	1	1	100 %
5270(Fc)	1	1	1	1	1	1	1	1	1	1	100 %
5272	1	1	1	1	1	1	1	1	1	1	100 %
5274	1	1	1	1	1	1	1	1	1	1	100 %
5276	1	1	1	1	1	1	1	1	1	1	100 %
5278	1	1	1	1	1	1	1	1	1	1	100 %
5280	1	1	1	1	1	1	1	1	1	1	100 %
5282	1	1	1	1	1	1	1	1	1	1	100 %
5284	1	1	1	1	1	1	1	1	1	1	100 %
5286	1	1	1	1	1	1	1	1	1	1	100 %
5288	1	1	1	1	1	1	1	1	1	1	100 %
5290	1	1	1	1	1	1	1	1	1	1	100 %
5291(F_H)	0	0	0	0	0	0	0	0	0	0	0 %
Result: Pass											

EUT Frequency = 5550 MHz											
DFS Detection Trials (1 = Detected, Blank = No Detected)											
Radar Frequency (MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5529(F_L)	0	0	0	0	0	0	0	0	0	0	0 %
5530	1	1	1	1	1	1	1	1	1	1	100 %
5532	1	1	1	1	1	1	1	1	1	1	100 %
5534	1	1	1	1	1	1	1	1	1	1	100 %
5536	1	1	1	1	1	1	1	1	1	1	100 %
5538	1	1	1	1	1	1	1	1	1	1	100 %
5540	1	1	1	1	1	1	1	1	1	1	100 %
5542	1	1	1	1	1	1	1	1	1	1	100 %
5544	1	1	1	1	1	1	1	1	1	1	100 %
5546	1	1	1	1	1	1	1	1	1	1	100 %
5548	1	1	1	1	1	1	1	1	1	1	100 %
5550 (Fc)	1	1	1	1	1	1	1	1	1	1	100 %
5552	1	1	1	1	1	1	1	1	1	1	100 %
5554	1	1	1	1	1	1	1	1	1	1	100 %
5556	1	1	1	1	1	1	1	1	1	1	100 %
5558	1	1	1	1	1	1	1	1	1	1	100 %
5560	1	1	1	1	1	1	1	1	1	1	100 %
5562	1	1	1	1	1	1	1	1	1	1	100 %
5564	1	1	1	1	1	1	1	1	1	1	100 %
5566	1	1	1	1	1	1	1	1	1	1	100 %
5568	1	1	1	1	1	1	1	1	1	1	100 %
5570	1	1	1	1	1	1	1	1	1	1	100 %
5571(F_H)	0	0	0	0	0	0	0	0	0	0	0 %
Result: Pass											

10.3 Radar Detection

Procedure:

Stream MPEG file from master to slave
Generate radar waveform
Record whether or not the waveform was detected
At least 30 trials are applied for each radar type
For radar types with randomized parameters, each trial uses a unique waveform
Perform with each of the radar types 1-6

Confirm that the detection rate for each radar type meets the minimum requirement
Type 1, 2, 3, 4: 60% each
Type 5: 80%
Type 6: 70%
Confirm that the mean of the rates for radar types 1 through 4 meets the requirement of 80%

$$\text{Detection Ratio} = \frac{\text{Total Waveform Detections}}{\text{Total Waveform Trials}} \times 100$$

Result:

20MHz

5280 MHz

Radar Signal Type	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1	30	100 %	60%	Pass
Type 2	30	100 %	60%	Pass
Type 3	30	93.3 %	60%	Pass
Type 4	30	83.3 %	60%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	100 %	70%	Pass

Please refer to the following statistical tables:

5280 MHz

Table-1 Radar Type 1 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5280	18	1	1428	1
2	5280	18	1	1428	1
3	5280	18	1	1428	1
4	5280	18	1	1428	1
5	5280	18	1	1428	1
6	5280	18	1	1428	1
7	5280	18	1	1428	1
8	5280	18	1	1428	1
9	5280	18	1	1428	1
10	5280	18	1	1428	1
11	5280	18	1	1428	1
12	5280	18	1	1428	1
13	5280	18	1	1428	1
14	5280	18	1	1428	1
15	5280	18	1	1428	1
16	5280	18	1	1428	1
17	5280	18	1	1428	1
18	5280	18	1	1428	1
19	5280	18	1	1428	1
20	5280	18	1	1428	1
21	5280	18	1	1428	1
22	5280	18	1	1428	1
23	5280	18	1	1428	1
24	5280	18	1	1428	1
25	5280	18	1	1428	1
26	5280	18	1	1428	1
27	5280	18	1	1428	1
28	5280	18	1	1428	1
29	5280	18	1	1428	1
30	5280	18	1	1428	1
Detection Percentage: 100 % (>60%)					

Table-2 Radar Type 2 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5280	25	4	174	1
2	5280	24	2.2	156	1
3	5280	26	3	152	1
4	5280	28	3.8	186	1
5	5280	23	3.3	224	1
6	5280	28	4.4	164	1
7	5280	27	3.1	155	1
8	5280	29	1.5	165	1
9	5280	27	4	213	1
10	5280	24	2.1	176	1
11	5280	28	2.8	162	1
12	5280	24	1.5	179	1
13	5280	26	4.5	176	1
14	5280	24	3.6	225	1
15	5280	26	2.6	194	1
16	5280	24	3.8	167	1
17	5280	26	2.2	193	1
18	5280	29	4.3	220	1
19	5280	27	2.7	155	1
20	5280	28	1.5	205	1
21	5280	29	1.1	150	1
22	5280	24	1.7	175	1
23	5280	26	2.7	163	1
24	5280	26	4.4	160	1
25	5280	23	5	225	1
26	5280	23	4.2	216	1
27	5280	23	2	165	1
28	5280	26	2.2	177	1
29	5280	24	2.1	175	1
30	5280	27	1.8	182	1
Detection Percentage: 100 % (>60%)					

Table-3 Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5280	16	7.5	246	1
2	5280	17	9.4	300	1
3	5280	16	10	333	0
4	5280	16	8.6	292	1
5	5280	16	6.1	489	1
6	5280	16	7.3	351	1
7	5280	17	6.3	208	1
8	5280	18	9.6	336	1
9	5280	17	8.7	347	1
10	5280	17	9.4	486	1
11	5280	17	6.2	408	1
12	5280	17	7.9	318	1
13	5280	16	9.2	498	1
14	5280	18	7.2	240	1
15	5280	18	7.1	332	1
16	5280	17	7.7	280	1
17	5280	18	9.8	320	0
18	5280	18	7.5	278	1
19	5280	16	6.3	339	1
20	5280	16	8.2	334	1
21	5280	16	9.6	306	1
22	5280	17	8.6	222	1
23	5280	16	8.5	287	1
24	5280	18	8.1	265	1
25	5280	16	8.5	334	1
26	5280	18	8.9	348	1
27	5280	16	9.7	276	1
28	5280	17	8.5	217	1
29	5280	17	6.4	368	1
30	5280	16	9.2	257	1
Detection Percentage: 93.3 % (>60%)					

Table-4 Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5280	16	15.7	405	0
2	5280	15	18	460	1
3	5280	12	16.9	443	1
4	5280	12	14.6	258	1
5	5280	15	13.4	499	0
6	5280	16	17.4	208	1
7	5280	14	16.8	400	1
8	5280	14	12.5	244	1
9	5280	13	19.9	308	0
10	5280	16	14.3	269	1
11	5280	12	18.7	244	1
12	5280	12	15.7	409	1
13	5280	12	12.4	350	1
14	5280	15	12.4	474	1
15	5280	16	19	341	1
16	5280	15	14.3	240	1
17	5280	15	13.6	227	1
18	5280	13	12	317	0
19	5280	12	13.8	462	1
20	5280	16	12.2	383	1
21	5280	16	16.1	397	0
22	5280	13	14.7	486	1
23	5280	14	13	304	1
24	5280	14	11.6	378	1
25	5280	15	15.9	308	1
26	5280	16	14.2	330	1
27	5280	12	19.4	430	1
28	5280	12	18.6	476	1
29	5280	16	14.3	376	1
30	5280	15	14.9	292	1
Detection Percentage: 83.3 % (>60%)					

Table-5 Radar Type 5 Statistical Performance

Bin5 Statistics 1

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	16	76.8	1822		0.397981	
1	2	14	61	1981		1.525268	
2	3	14	82.4	1760	1727	2.224045	
3	2	14	60.7	1999		2.685306	
4	2	15	50.8	1032		3.460033	
5	2	13	53.7	1548		4.416796	
6	2	14	66.7	1133		5.189941	
7	2	17	99.9	1702		6.32418	1
8	1	11	92.8			6.879113	
9	3	8	75	1309	1206	7.972786	
10	1	9	93.3			8.318392	
11	2	15	83.3	1127		8.843916	
12	3	16	72.8	1407	1185	9.982798	
13	1	14	78.3			11.05722	
14	2	6	66.7	1170		11.69761	

Bin5 Statistics 2

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	10	50.5	1239	1748	0.579844	
1	1	13	91.1			0.748753	
2	3	13	56.4	1228	1662	1.770335	
3	1	6	99.4			2.385324	
4	2	13	99.9	1782		2.496755	
5	2	8	98.6	1528		3.26581	
6	2	8	69.8	1840		3.654189	
7	2	11	96.5	1533		4.248838	
8	1	5	83.4			5.14828	
9	2	14	65.9	1720		5.898158	
10	3	15	53.9	1852	1090	6.400353	1
11	3	15	67.6	1175	1541	7.145741	
12	2	14	73.7	1128		7.667384	
13	2	8	52.3	1665		7.835242	
14	1	18	92.3			8.506931	
15	1	13	91.9			9.086739	
16	2	11	92.9	1642		10.01776	
17	2	20	66.7	1182		10.56427	
18	2	11	67.7	1725		11.27991	
19	3	8	87	1160	1786	11.59402	

Bin5 Statistics 3

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	13	89.8	1890		0.592766	
1	3	9	97.9	1758	1091	1.159711	
2	2	14	54.9	1634		1.874739	
3	2	6	86.3	1076		2.535783	
4	1	12	66.3			2.759354	
5	2	16	56.2	1680		3.55905	
6	3	11	82.5	1585	1854	4.502354	
7	2	19	59.9	1399		5.119922	
8	1	17	59.9			5.918374	
9	1	9	69.1			6.329228	1
10	2	17	99.7	1986		7.139397	
11	2	7	51.7	1716		7.453239	
12	2	6	87.4	1223		8.575947	
13	1	18	95.2			9.008791	
14	3	20	83	1298	1469	9.700031	
15	3	6	61.8	1602	1002	10.52501	
16	3	19	92.1	1649	1385	10.72534	
17	2	11	91.4	1268		11.59431	

Bin5 Statistics 4

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	16	73.4	1208	1466	0.319188	
1	2	17	99.3	1017		1.574906	
2	2	19	82.3	1453		2.26722	
3	3	15	56.7	1135	1943	2.831006	
4	3	8	62.6	1181	1149	4.518288	
5	1	13	79.5			5.184627	
6	2	8	55.3	1478		6.098461	1
7	2	20	73.1	1485		6.663423	
8	2	11	86.2	1078		7.96498	
9	1	5	85.9			8.914478	
10	3	11	75.1	1737	1170	9.309747	
11	3	17	58.5	1426	1735	10.22709	
12	2	11	74.9	1817		11.4784	

Bin5 Statistics 5

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	10	58.3	1997	1311	1.169007	
1	2	10	76.4	1528		2.276774	
2	3	16	56.1	1586	1494	3.915104	
3	2	10	94.8	1704		4.992988	
4	2	9	74.6	1177		5.459147	1
5	2	10	54.7	1548		7.68229	
6	3	15	74.9	1063	1857	8.429731	
7	2	11	51.4	1825		10.16413	
8	2	14	54.5	1042		11.30048	

Bin5 Statistics 6

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	14	74.5	1262	1934	0.464608	
1	3	10	85.5	1999	1822	1.369324	
2	2	17	90.2	1627		2.045492	
3	2	16	93.5	1957		2.336741	
4	3	13	52.4	1727	1909	2.900675	
5	2	15	94.1	1747		3.603527	
6	3	17	76.2	1581	1337	4.322147	
7	2	16	62.3	1263		5.029825	
8	2	19	96.9	1423		5.868757	1
9	3	15	62.3	1943	1920	6.982132	
10	2	20	64.5	1239		7.255775	
11	3	11	87.2	1252	1678	8.403875	
12	3	20	84.7	1802	1050	9.034748	
13	3	10	95.3	1570	1093	9.58945	
14	2	11	69.3	1309		10.41415	
15	1	11	77.6			11.23084	
16	2	16	83.3	1538		11.63895	

Bin5 Statistics 7

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	9	66.6			0.247617	
1	3	16	98.2	1053	1524	1.439325	
2	2	11	89.6	1486		2.490577	
3	2	17	63.3	1114		3.767646	
4	2	6	70	1749		5.217833	
5	2	19	89	1559		5.596152	1
6	1	16	55.8			6.996208	
7	1	13	60.8			8.431561	
8	1	16	74.9			9.437367	
9	3	14	58.3	1479	1592	10.07323	
10	3	9	76.8	1190	1276	11.98232	

Bin5 Statistics 8

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	6	86.8	1024		0.238678	
1	1	17	87.9			0.984888	
2	2	8	91	1578		2.057218	
3	1	11	94.2			2.994841	
4	1	18	77.6			3.300801	
5	2	10	74.6	1973		4.382619	
6	2	12	87.1	1326		5.218969	
7	2	15	96.5	1706		5.899363	
8	1	13	50.9			6.476001	1
9	1	15	86.1			6.872788	
10	2	11	93.4	1218		7.576717	
11	2	6	87.1	1088		8.82082	
12	3	7	72	1925	1714	9.259003	
13	2	13	88.8	1661		9.992432	
14	2	14	68.3	1608		11.23746	
15	1	19	52.3			11.53264	

Bin5 Statistics 9

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	17	72.1	1563		0.119595	1
1	2	19	74.8	1772		1.954248	
2	1	7	72.5			2.003755	
3	2	11	81.8	1958		3.456103	
4	3	6	57.3	1051	1818	4.527948	
5	1	12	68.6			5.065139	
6	2	16	75.2	1149		6.261019	
7	3	19	51.5	1825	1348	7.668191	
8	1	14	52.8			8.671643	
9	2	10	53.9	1878		9.235924	
10	3	17	87.3	1825	1053	10.64499	
11	2	9	86	1707		11.4928	

Bin5 Statistics 10

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	17	85.8	1244	1891	0.121549	1
1	2	7	78.8	1069		1.131111	
2	3	13	62.1	1058	1181	1.857155	
3	2	7	92.9	1072		2.642035	
4	3	19	84.4	1393	1187	3.68467	
5	2	15	55.9	1170		4.863399	
6	2	7	67.6	1543		5.148304	
7	3	11	92.3	1082	1339	6.711179	
8	1	10	78.1			7.089569	
9	3	19	67.8	1249	1768	8.550916	
10	2	18	72.8	1280		8.8418	
11	1	6	59.5			10.11314	
12	3	14	53	1542	1240	10.53819	
13	1	10	70.3			11.9155	

Bin5 Statistics 11

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	6	82.8			0.148082	
1	2	19	87	1737		0.893067	
2	3	14	51.9	1384	1609	2.106662	
3	3	8	59.4	1096	1127	2.455539	
4	3	9	50.3	1565	1341	3.266814	
5	1	18	85.9			4.208554	
6	3	9	82.3	1963	1761	4.309003	
7	2	13	89	1517		5.636663	
8	1	18	81.8			5.827593	1
9	1	6	53			6.821731	
10	1	5	56.6			7.274503	
11	3	16	83.8	1964	1358	8.006746	
12	1	14	58.6			8.812857	
13	2	17	65.6	1003		9.656515	
14	2	12	92.7	1340		10.30919	
15	1	10	91.5			10.71444	
16	1	10	78.2			11.45516	

Bin5 Statistics 12

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	9	57.1	1808		0.488249	
1	3	14	85.5	1072	1730	0.671671	
2	2	8	75.5	1795		1.977155	
3	2	5	64.1	1777		2.340711	
4	2	20	65.8	1955		2.924166	
5	3	16	66.1	1321	1863	3.381371	
6	3	9	99	1017	1824	4.359772	
7	2	15	52.1	1990		5.140108	
8	2	8	67.4	1865		5.418672	
9	2	14	91.6	1807		6.166055	1
10	2	6	97.1	1368		7.185038	
11	2	8	97.5	1317		7.401851	
12	2	5	94.1	1230		8.309008	
13	3	6	51.6	1216	1575	8.915566	
14	2	20	63	1767		9.57133	
15	2	20	91.8	1978		10.37021	
16	3	14	66.3	1648	1284	10.78632	
17	3	18	62.2	1002	1384	11.93291	

Bin5 Statistics 13

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	12	80.8			0.19184	
1	1	16	75.8			1.279845	
2	1	16	79.3			2.590748	
3	1	15	72.3			3.826079	
4	2	14	65.3	1689		5.393761	
5	2	17	84.1	1285		5.85025	1
6	2	13	53.1	1321		7.588703	
7	2	10	82.8	1102		7.772674	
8	2	10	62.8	1197		9.748623	
9	1	12	95.2			10.26462	
10	2	20	63.2	1234		11.25069	

Bin5 Statistics 14

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	17	52.1	1268		0.959833	
1	2	14	79.1	1971		1.921262	
2	2	20	81.1	1444		3.584761	
3	3	12	90.2	1921	1552	4.192836	
4	2	17	85.8	1819		5.672768	
5	3	9	65.7	1458	1782	6.244668	1
6	2	13	89.1	1713		7.925868	
7	1	15	70.1			9.008433	
8	1	16	74.8			10.37624	
9	3	10	86	1810	1728	11.4574	

Bin5 Statistics 15

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	16	56			0.332189	
1	1	10	69			1.774134	
2	3	13	92.5	1162	1215	2.203146	
3	2	7	84.5	1569		3.005697	
4	2	13	58.7	1418		4.268555	
5	2	16	65.4	1353		5.250109	
6	2	10	84.4	1297		6.318891	1
7	3	14	85.3	1559	1161	6.543033	
8	2	19	55	1016		7.690702	
9	3	15	73.5	1756	1352	8.398785	
10	3	9	95.5	1074	1037	9.638739	
11	2	8	70	1261		10.87448	
12	3	14	78	1869	1549	11.53771	

Bin5 Statistics 16

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	18	80	1290		0.679171	
1	2	12	71.5	1592		1.995455	
2	3	5	83.7	1901	1923	2.474285	
3	2	11	75.2	1633		4.358341	
4	2	10	57	1286		5.934392	
5	1	16	60.3			6.34118	1
6	2	15	50.5	1998		7.632809	
7	2	8	50.7	1371		8.812157	
8	2	20	68.9	1581		10.71577	
9	2	12	50.5	1189		10.88122	

Bin5 Statistics 17

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	17	62.5			0.961661	1
1	2	14	79.3	1187		1.728088	
2	1	11	55.1			2.28841	
3	3	10	83.9	1146	1925	3.711392	
4	3	17	87.9	1297	1296	4.714646	
5	2	17	80.1	1345		5.892302	
6	3	10	97.1	1403	1181	6.791184	
7	2	10	68.9	1150		7.243678	
8	1	8	51.2			8.675464	
9	1	17	78.7			9.144429	
10	1	9	81.6			10.76223	
11	3	18	90	1648	1347	11.08872	

Bin5 Statistics 18

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	6	76.8	1623	1398	0.342352	1
1	1	10	86.4			1.480958	
2	3	17	60.4	1469	1890	1.855809	
3	1	7	57.8			2.91116	
4	3	18	52.9	1705	1010	3.227874	
5	3	11	82.2	1655	1080	4.204923	
6	1	9	100			5.178	
7	1	9	54.5			6.242661	
8	3	13	80.3	1195	1381	6.795292	
9	1	6	60.9			7.965632	
10	1	17	61.9			8.656209	
11	2	14	96.8	1443		9.167285	
12	3	16	72.8	1169	1202	9.665443	
13	2	19	76.8	1767		10.68062	
14	2	17	86.1	1803		11.63975	

Bin5 Statistics 19

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	15	99	1760		0.313857	
1	1	14	60.4			1.371503	
2	2	13	87.7	1350		2.145989	
3	2	15	82.1	1324		2.528054	
4	2	17	59.5	1990		3.04863	
5	3	12	63.2	1788	1051	4.24972	
6	3	12	91.5	1242	1370	4.873415	
7	2	10	72	1825		5.615868	
8	2	18	76.1	1451		6.410375	1
9	3	16	99.9	1465	1090	7.172169	
10	2	19	78.2	1120		7.820844	
11	1	7	95.7			8.42819	
12	3	9	69.1	1769	1343	9.61158	
13	1	11	99.9			10.05113	
14	1	20	57.2			10.90857	
15	1	6	79.3			11.42216	

Bin5 Statistics 20

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	16	82	1396		0.011204	
1	1	15	96.1			0.971346	
2	2	13	51.2	1553		2.309197	
3	1	12	90.7			3.14365	
4	2	15	80.6	1784		3.684674	
5	1	18	66.6			4.350243	
6	2	10	99.6	1708		4.846478	
7	1	12	88.8			6.374248	1
8	1	13	86.9			6.919694	
9	3	12	86.5	1138	1890	7.205959	
10	2	18	58	1382		8.143296	
11	2	16	80	1328		9.241376	
12	1	9	80.3			10.28798	
13	2	17	72.3	1799		10.69612	
14	1	18	68.8			11.88261	

Bin5 Statistics 21

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	17	61.6	1055	1049	0.074228	1
1	1	17	66			1.096532	
2	3	8	50	1529	1861	1.819518	
3	2	14	90.8	1409		2.549751	
4	2	11	78.3	1571		3.233261	
5	3	8	69.5	1184	1891	4.231668	
6	2	15	74.9	1961		5.105227	
7	2	9	63	1147		5.652813	
8	2	10	63	1351		6.087732	
9	1	16	94.3			7.109412	
10	3	13	89.8	1221	1789	7.655538	
11	2	10	90.2	1778		8.743894	
12	2	9	52.3	1770		9.671287	
13	2	10	91.7	1117		10.02639	
14	2	20	65.5	1155		10.54048	
15	2	10	83.8	1995		11.34572	

Bin5 Statistics 22

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	14	91.5	1631		0.257952	1
1	1	10	51.7			1.471463	
2	2	13	62.1	1257		2.125972	
3	2	12	87.4	1443		3.238849	
4	2	20	65.5	1493		4.332911	
5	1	17	86.7			4.629743	
6	2	16	69.7	1369		6.393451	
7	3	14	78	1802	1464	6.643219	
8	3	11	65.6	1940	1662	8.187528	
9	3	7	67.7	1312	1902	8.356512	
10	1	9	98			10.09246	
11	3	19	54.9	1023	1236	10.32845	
12	1	18	74			11.3451	

Bin5 Statistics 23

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	15	77.2	1386		0.409757	
1	2	8	97.3	1960		1.248572	
2	1	10	75.1			1.527473	
3	2	12	90.5	1673		2.291968	
4	1	19	63.9			2.55945	
5	1	9	78.1			3.761951	
6	2	11	52.9	1093		4.325516	
7	2	12	81.3	1647		4.818294	
8	2	13	68.4	1102		5.517715	
9	2	17	61.1	1481		6.224139	1
10	2	14	75	1678		6.447815	
11	3	18	64.2	1560	1743	7.091185	
12	2	16	70.3	1088		7.861155	
13	2	19	55.9	1643		8.490696	
14	2	17	76.5	1804		9.417919	
15	2	6	86.6	1470		9.559065	
16	2	17	97.3	1913		10.56316	
17	3	19	95.8	1086	1665	10.75326	
18	3	5	75.5	1719	1912	11.75762	

Bin5 Statistics 24

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	7	93.3	1830		0.438002	
1	2	14	56.6	1033		1.298563	
2	3	17	78.6	1597	1150	1.777954	
3	2	14	55.8	1391		2.920097	
4	1	16	74			4.100416	
5	2	19	88.1	1665		4.407597	
6	1	18	73.1			5.309511	
7	2	11	92.7	1140		6.021463	1
8	1	9	65.6			7.182514	
9	2	20	91.6	1807		8.5502	
10	3	13	93.1	1109	1354	8.929878	
11	3	11	65.9	1937	1821	9.977411	
12	1	15	72.2			10.40655	
13	3	18	78.7	1426	1466	11.45388	

Bin5 Statistics 25

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	11	58.2	1309		0.214108	
1	2	19	60.8	1501		0.716727	
2	2	8	59	1907		1.683636	
3	3	9	85.9	1968	1631	2.261016	
4	3	9	74.9	1832	1310	2.507768	
5	2	17	68	1026		3.331573	
6	2	7	63.5	1957		4.04889	
7	3	11	95.2	1837	1351	4.667609	
8	1	12	57.4			4.948898	
9	3	15	95.1	1390	1561	5.61476	1
10	3	18	92.7	1725	1682	6.19976	
11	2	18	80.1	1987		7.101305	
12	2	14	60.2	1033		7.312888	
13	2	14	74.1	1711		8.212382	
14	1	20	86.4			8.723642	
15	2	9	84.3	1227		9.320102	
16	3	6	89.8	1140	1452	9.844592	
17	1	9	71.3			10.32898	
18	2	9	73.3	1757		11.2615	
19	3	8	79.1	1322	1045	11.81761	

Bin5 Statistics 26

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	11	73.3	1206	1401	0.02808	1
1	1	8	75.5			0.90083	
2	1	8	64.9			2.394951	
3	1	8	84.7			3.376883	
4	2	6	80.5	1741		4.193227	
5	2	6	55.9	1240		4.527382	
6	3	11	95.5	1993	1611	5.614662	
7	3	15	57.4	1007	1041	6.480608	
8	2	15	59.2	1561		7.11642	
9	3	10	89.3	1194	1548	8.241765	
10	3	13	84.1	1173	1817	9.158328	
11	2	7	57.1	1736		10.13048	
12	3	6	97.7	1035	1654	10.56527	
13	3	14	62.2	1998	1381	11.80716	

Bin5 Statistics 27

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	12	81.5	1249		0.756036	1
1	2	19	77.6	1797		1.129862	
2	2	14	72.3	1967		2.141217	
3	2	17	91.4	1471		2.638332	
4	1	14	87.9			4.180578	
5	2	12	91.7	1278		4.375146	
6	3	20	95.6	1555	1939	5.750298	
7	3	19	73.2	1980	1688	6.468584	
8	3	16	77.7	1109	1222	6.871187	
9	3	5	90.5	1809	1952	8.444187	
10	2	8	56.1	1641		9.014951	
11	2	19	64.7	1995		9.538713	
12	2	9	80.1	1135		10.65412	
13	3	13	81.5	1603	1805	11.43816	

Bin5 Statistics 28

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	14	54.3	1029		1.044174	1
1	1	19	94			2.212074	
2	2	15	80	1230		3.516451	
3	2	6	72.2	1012		3.751473	
4	2	8	89.7	1547		5.110893	
5	2	10	88.1	1570		6.53697	
6	1	8	96.2			7.64247	
7	3	18	78.8	1152	1834	9.375021	
8	2	9	66.2	1975		9.813552	
9	3	9	81.1	1579	1693	10.82739	

Bin5 Statistics 29

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	12	77.7	1577	1123	0.652054	1
1	3	7	92.2	1292	1769	2.551203	
2	1	15	75.3			3.97466	
3	3	8	61	1219	1625	5.046969	
4	3	15	88.6	1890	1813	5.374341	
5	1	10	61.4			7.806495	
6	2	13	82.5	1840		8.010258	
7	1	18	64			10.62084	
8	3	14	99.4	1304	1144	11.24255	

Bin5 Statistics 30

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	17	75.4	1272		0.784557	
1	3	17	58.7	1088	1007	1.138101	
2	2	15	93.8	1925		2.200315	
3	3	8	78	1743	1043	2.921993	
4	3	6	54	1862	1729	3.869682	
5	3	6	64.5	1051	1115	4.823902	
6	3	9	90	1882	1693	5.97757	1
7	1	19	85.5			7.3679	
8	1	13	76.5			7.591995	
9	2	13	55.2	1566		9.084776	
10	3	14	52.2	1714	1990	9.653982	
11	2	14	54.8	1148		10.29162	
12	1	17	70.8			11.39755	

Table-6 Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)	Hopping Sequence
1	5280	9	1	333	1	5428.0, 5537.0, 5716.0, 5598.0, 5665.0, 5380.0, 5700.0, 5283.0, 5656.0, 5543.0, 5353.0, 5584.0, 5583.0, 5371.0, 5620.0, 5424.0, 5257.0, 5614.0, 5423.0, 5577.0, 5404.0, 5676.0, 5482.0, 5281.0, 5718.0, 5641.0, 5494.0, 5308.0, 5541.0, 5499.0, 5510.0, 5659.0, 5337.0, 5326.0, 5502.0, 5399.0, 5396.0, 5329.0, 5497.0, 5412.0, 5449.0, 5358.0, 5354.0, 5331.0, 5291.0, 5402.0, 5675.0, 5338.0, 5476.0, 5597.0, 5563.0, 5627.0, 5633.0, 5492.0, 5595.0, 5528.0, 5474.0, 5264.0, 5276.0, 5525.0, 5566.0, 5698.0, 5618.0, 5279.0, 5364.0, 5430.0, 5570.0, 5378.0, 5256.0, 5585.0, 5414.0, 5484.0, 5504.0, 5713.0, 5316.0, 5265.0, 5690.0, 5471.0, 5379.0, 5576.0, 5600.0, 5472.0, 5477.0, 5444.0, 5720.0, 5411.0, 5407.0, 5590.0, 5538.0, 5441.0, 5714.0, 5571.0, 5609.0, 5682.0, 5344.0, 5531.0, 5670.0, 5369.0, 5363.0, 5610.0 (number of hits: 2)
2	5280	9	1	333	1	5579.0, 5492.0, 5509.0, 5401.0, 5632.0, 5499.0, 5318.0, 5647.0, 5448.0, 5363.0, 5272.0, 5268.0, 5333.0, 5653.0, 5273.0, 5432.0, 5293.0, 5644.0, 5373.0, 5297.0, 5336.0, 5587.0, 5407.0, 5279.0, 5569.0, 5698.0, 5345.0, 5364.0, 5420.0, 5608.0, 5645.0, 5290.0, 5590.0, 5702.0, 5559.0, 5259.0, 5711.0, 5335.0, 5308.0, 5351.0, 5348.0, 5378.0, 5681.0, 5441.0, 5522.0, 5543.0, 5302.0, 5534.0, 5658.0, 5427.0, 5280.0, 5530.0, 5465.0, 5505.0, 5573.0, 5655.0, 5258.0, 5596.0, 5488.0, 5696.0, 5375.0, 5589.0, 5478.0, 5680.0, 5524.0, 5303.0, 5691.0, 5276.0, 5429.0, 5356.0, 5482.0, 5707.0, 5468.0, 5400.0, 5340.0, 5583.0, 5519.0, 5584.0, 5415.0, 5301.0, 5602.0, 5607.0, 5656.0, 5532.0, 5703.0, 5381.0, 5572.0, 5595.0, 5518.0, 5289.0, 5331.0, 5549.0, 5690.0, 5640.0, 5358.0, 5385.0, 5450.0, 5561.0, 5592.0, 5567.0 (number of hits: 8)
3	5280	9	1	333	1	5469.0, 5350.0, 5373.0, 5513.0, 5517.0, 5258.0, 5331.0, 5441.0, 5691.0, 5281.0, 5507.0, 5459.0, 5424.0, 5569.0, 5419.0, 5440.0, 5476.0, 5518.0, 5660.0, 5414.0, 5438.0, 5604.0, 5519.0, 5670.0, 5381.0, 5339.0, 5522.0, 5508.0, 5529.0, 5524.0, 5706.0, 5554.0, 5652.0, 5493.0, 5667.0, 5622.0, 5347.0, 5549.0, 5359.0, 5665.0, 5613.0, 5337.0, 5263.0, 5330.0, 5328.0, 5270.0, 5601.0, 5509.0, 5692.0, 5264.0, 5551.0, 5659.0, 5661.0, 5673.0, 5394.0, 5413.0, 5329.0, 5400.0, 5528.0, 5318.0,

						5376.0, 5267.0, 5580.0, 5436.0, 5603.0, 5544.0, 5458.0, 5471.0, 5679.0, 5457.0, 5680.0, 5581.0, 5564.0, 5361.0, 5276.0, 5444.0, 5383.0, 5411.0, 5612.0, 5326.0, 5686.0, 5682.0, 5630.0, 5306.0, 5701.0, 5566.0, 5559.0, 5710.0, 5584.0, 5448.0, 5288.0, 5314.0, 5664.0, 5353.0, 5662.0, 5368.0, 5572.0, 5525.0, 5446.0, 5606.0 (number of hits: 3)
4	5280	9	1	333	1	5398.0, 5363.0, 5640.0, 5263.0, 5590.0, 5341.0, 5303.0, 5390.0, 5429.0, 5583.0, 5639.0, 5471.0, 5302.0, 5700.0, 5644.0, 5457.0, 5307.0, 5369.0, 5456.0, 5605.0, 5518.0, 5365.0, 5652.0, 5554.0, 5342.0, 5529.0, 5497.0, 5670.0, 5539.0, 5467.0, 5332.0, 5495.0, 5430.0, 5294.0, 5475.0, 5688.0, 5415.0, 5690.0, 5553.0, 5677.0, 5293.0, 5560.0, 5266.0, 5717.0, 5295.0, 5336.0, 5587.0, 5623.0, 5574.0, 5288.0, 5446.0, 5490.0, 5721.0, 5657.0, 5535.0, 5481.0, 5345.0, 5526.0, 5527.0, 5313.0, 5413.0, 5297.0, 5335.0, 5592.0, 5251.0, 5577.0, 5447.0, 5257.0, 5712.0, 5483.0, 5520.0, 5331.0, 5631.0, 5659.0, 5647.0, 5611.0, 5382.0, 5496.0, 5635.0, 5485.0, 5479.0, 5285.0, 5542.0, 5300.0, 5289.0, 5664.0, 5376.0, 5544.0, 5355.0, 5550.0, 5338.0, 5685.0, 5412.0, 5409.0, 5551.0, 5705.0, 5561.0, 5337.0, 5532.0, 5710.0 (number of hits: 12)
5	5280	9	1	333	1	5567.0, 5589.0, 5531.0, 5396.0, 5622.0, 5641.0, 5692.0, 5494.0, 5293.0, 5301.0, 5391.0, 5650.0, 5713.0, 5618.0, 5258.0, 5716.0, 5402.0, 5709.0, 5647.0, 5429.0, 5532.0, 5476.0, 5273.0, 5711.0, 5442.0, 5506.0, 5335.0, 5475.0, 5276.0, 5375.0, 5466.0, 5409.0, 5509.0, 5688.0, 5663.0, 5408.0, 5315.0, 5587.0, 5254.0, 5296.0, 5700.0, 5581.0, 5457.0, 5596.0, 5479.0, 5550.0, 5703.0, 5252.0, 5313.0, 5707.0, 5432.0, 5520.0, 5609.0, 5718.0, 5460.0, 5303.0, 5366.0, 5483.0, 5642.0, 5478.0, 5522.0, 5450.0, 5714.0, 5324.0, 5436.0, 5580.0, 5556.0, 5560.0, 5473.0, 5326.0, 5552.0, 5634.0, 5530.0, 5612.0, 5304.0, 5657.0, 5414.0, 5570.0, 5468.0, 5431.0, 5398.0, 5690.0, 5614.0, 5706.0, 5631.0, 5611.0, 5395.0, 5430.0, 5279.0, 5490.0, 5433.0, 5370.0, 5359.0, 5253.0, 5388.0, 5569.0, 5551.0, 5451.0, 5617.0, 5667.0 (number of hits: 6)
6	5280	9	1	333	1	5539.0, 5355.0, 5612.0, 5503.0, 5648.0, 5258.0, 5628.0, 5486.0, 5627.0, 5575.0, 5319.0, 5677.0, 5459.0, 5584.0, 5701.0, 5474.0, 5464.0, 5656.0, 5465.0, 5631.0, 5528.0, 5629.0, 5462.0, 5506.0, 5540.0, 5454.0, 5618.0, 5551.0, 5320.0, 5322.0, 5478.0, 5422.0, 5657.0, 5315.0, 5608.0, 5617.0, 5709.0, 5574.0, 5603.0, 5338.0, 5642.0, 5563.0, 5565.0, 5646.0, 5513.0,

						5472.0, 5661.0, 5276.0, 5667.0, 5550.0, 5600.0, 5455.0, 5650.0, 5469.0, 5435.0, 5449.0, 5334.0, 5532.0, 5324.0, 5316.0, 5723.0, 5654.0, 5710.0, 5662.0, 5293.0, 5372.0, 5389.0, 5570.0, 5496.0, 5277.0, 5364.0, 5274.0, 5302.0, 5279.0, 5544.0, 5560.0, 5479.0, 5466.0, 5446.0, 5292.0, 5453.0, 5327.0, 5640.0, 5385.0, 5488.0, 5383.0, 5533.0, 5294.0, 5634.0, 5705.0, 5722.0, 5649.0, 5582.0, 5682.0, 5684.0, 5720.0, 5420.0, 5593.0, 5357.0, 5495.0 (number of hits: 4)
7	5280	9	1	333	1	5405.0, 5432.0, 5588.0, 5641.0, 5291.0, 5398.0, 5253.0, 5274.0, 5692.0, 5283.0, 5470.0, 5411.0, 5512.0, 5360.0, 5430.0, 5528.0, 5300.0, 5429.0, 5559.0, 5493.0, 5674.0, 5330.0, 5570.0, 5446.0, 5639.0, 5605.0, 5307.0, 5722.0, 5716.0, 5659.0, 5578.0, 5357.0, 5504.0, 5568.0, 5548.0, 5529.0, 5555.0, 5634.0, 5600.0, 5657.0, 5545.0, 5598.0, 5433.0, 5456.0, 5609.0, 5284.0, 5361.0, 5268.0, 5266.0, 5525.0, 5304.0, 5428.0, 5710.0, 5386.0, 5437.0, 5526.0, 5644.0, 5369.0, 5623.0, 5406.0, 5337.0, 5426.0, 5450.0, 5317.0, 5382.0, 5711.0, 5691.0, 5444.0, 5276.0, 5401.0, 5391.0, 5507.0, 5329.0, 5630.0, 5506.0, 5315.0, 5517.0, 5500.0, 5320.0, 5672.0, 5687.0, 5435.0, 5425.0, 5353.0, 5402.0, 5383.0, 5328.0, 5631.0, 5326.0, 5561.0, 5714.0, 5427.0, 5558.0, 5638.0, 5592.0, 5335.0, 5718.0, 5388.0, 5647.0, 5594.0 (number of hits: 4)
8	5280	9	1	333	1	5616.0, 5419.0, 5478.0, 5659.0, 5502.0, 5439.0, 5352.0, 5714.0, 5279.0, 5604.0, 5278.0, 5540.0, 5549.0, 5652.0, 5578.0, 5665.0, 5282.0, 5266.0, 5473.0, 5525.0, 5388.0, 5393.0, 5640.0, 5513.0, 5620.0, 5355.0, 5483.0, 5470.0, 5687.0, 5542.0, 5699.0, 5705.0, 5453.0, 5254.0, 5457.0, 5445.0, 5461.0, 5324.0, 5374.0, 5275.0, 5342.0, 5447.0, 5635.0, 5430.0, 5561.0, 5657.0, 5546.0, 5674.0, 5621.0, 5258.0, 5505.0, 5568.0, 5524.0, 5623.0, 5521.0, 5456.0, 5551.0, 5594.0, 5360.0, 5264.0, 5708.0, 5465.0, 5718.0, 5637.0, 5318.0, 5613.0, 5296.0, 5516.0, 5707.0, 5420.0, 5671.0, 5392.0, 5448.0, 5467.0, 5373.0, 5469.0, 5541.0, 5313.0, 5378.0, 5582.0, 5397.0, 5421.0, 5398.0, 5458.0, 5696.0, 5293.0, 5441.0, 5697.0, 5429.0, 5485.0, 5366.0, 5518.0, 5416.0, 5307.0, 5255.0, 5683.0, 5653.0, 5385.0, 5401.0, 5592.0 (number of hits: 4)
9	5280	9	1	333	1	5314.0, 5403.0, 5311.0, 5275.0, 5469.0, 5335.0, 5484.0, 5447.0, 5632.0, 5493.0, 5524.0, 5510.0, 5473.0, 5353.0, 5593.0, 5409.0, 5584.0, 5607.0, 5320.0, 5540.0, 5467.0, 5672.0, 5465.0, 5269.0, 5671.0, 5284.0, 5368.0, 5290.0, 5683.0, 5260.0,

						5646.0, 5549.0, 5582.0, 5626.0, 5328.0, 5383.0, 5442.0, 5435.0, 5461.0, 5452.0, 5297.0, 5537.0, 5346.0, 5268.0, 5670.0, 5508.0, 5279.0, 5682.0, 5300.0, 5460.0, 5327.0, 5513.0, 5667.0, 5492.0, 5610.0, 5349.0, 5379.0, 5560.0, 5702.0, 5312.0, 5515.0, 5402.0, 5675.0, 5325.0, 5639.0, 5282.0, 5567.0, 5694.0, 5503.0, 5653.0, 5420.0, 5377.0, 5413.0, 5273.0, 5457.0, 5608.0, 5375.0, 5385.0, 5471.0, 5310.0, 5486.0, 5662.0, 5366.0, 5266.0, 5301.0, 5638.0, 5686.0, 5648.0, 5656.0, 5364.0, 5506.0, 5488.0, 5711.0, 5399.0, 5274.0, 5603.0, 5589.0, 5649.0, 5629.0, 5261.0 (number of hits: 8)
10	5280	9	1	333	1	5664.0, 5624.0, 5503.0, 5498.0, 5587.0, 5641.0, 5632.0, 5375.0, 5306.0, 5569.0, 5717.0, 5552.0, 5338.0, 5570.0, 5266.0, 5365.0, 5264.0, 5418.0, 5652.0, 5254.0, 5464.0, 5532.0, 5447.0, 5549.0, 5544.0, 5567.0, 5505.0, 5275.0, 5617.0, 5698.0, 5483.0, 5674.0, 5713.0, 5285.0, 5350.0, 5654.0, 5647.0, 5697.0, 5594.0, 5255.0, 5572.0, 5499.0, 5461.0, 5339.0, 5433.0, 5370.0, 5658.0, 5459.0, 5600.0, 5397.0, 5417.0, 5281.0, 5653.0, 5681.0, 5554.0, 5337.0, 5585.0, 5560.0, 5598.0, 5377.0, 5253.0, 5347.0, 5715.0, 5382.0, 5295.0, 5358.0, 5289.0, 5701.0, 5553.0, 5293.0, 5601.0, 5487.0, 5640.0, 5557.0, 5694.0, 5471.0, 5301.0, 5287.0, 5646.0, 5304.0, 5710.0, 5296.0, 5522.0, 5545.0, 5712.0, 5564.0, 5415.0, 5348.0, 5344.0, 5421.0, 5723.0, 5378.0, 5665.0, 5292.0, 5489.0, 5315.0, 5332.0, 5408.0, 5355.0, 5591.0 (number of hits: 10)
11	5280	9	1	333	1	5417.0, 5656.0, 5364.0, 5374.0, 5466.0, 5520.0, 5547.0, 5560.0, 5571.0, 5267.0, 5518.0, 5708.0, 5679.0, 5447.0, 5596.0, 5554.0, 5503.0, 5649.0, 5680.0, 5347.0, 5652.0, 5642.0, 5323.0, 5479.0, 5350.0, 5619.0, 5399.0, 5425.0, 5326.0, 5264.0, 5497.0, 5322.0, 5511.0, 5343.0, 5519.0, 5635.0, 5531.0, 5667.0, 5450.0, 5290.0, 5300.0, 5568.0, 5344.0, 5628.0, 5452.0, 5299.0, 5579.0, 5722.0, 5412.0, 5311.0, 5317.0, 5702.0, 5485.0, 5600.0, 5470.0, 5434.0, 5367.0, 5268.0, 5422.0, 5377.0, 5442.0, 5411.0, 5705.0, 5496.0, 5636.0, 5533.0, 5369.0, 5701.0, 5402.0, 5673.0, 5404.0, 5439.0, 5397.0, 5283.0, 5400.0, 5380.0, 5506.0, 5594.0, 5686.0, 5629.0, 5413.0, 5314.0, 5532.0, 5559.0, 5426.0, 5544.0, 5494.0, 5424.0, 5307.0, 5444.0, 5653.0, 5319.0, 5296.0, 5720.0, 5512.0, 5336.0, 5407.0, 5634.0, 5304.0, 5513.0 (number of hits: 8)
12	5280	9	1	333	1	5397.0, 5447.0, 5492.0, 5657.0, 5581.0, 5279.0, 5331.0, 5450.0, 5265.0, 5619.0, 5650.0, 5394.0, 5313.0, 5261.0, 5263.0,

						5649.0, 5590.0, 5285.0, 5557.0, 5311.0, 5295.0, 5502.0, 5486.0, 5638.0, 5321.0, 5661.0, 5409.0, 5423.0, 5596.0, 5287.0, 5626.0, 5401.0, 5481.0, 5528.0, 5702.0, 5384.0, 5663.0, 5715.0, 5693.0, 5365.0, 5688.0, 5694.0, 5367.0, 5275.0, 5491.0, 5417.0, 5330.0, 5288.0, 5366.0, 5318.0, 5443.0, 5503.0, 5455.0, 5665.0, 5713.0, 5306.0, 5566.0, 5386.0, 5636.0, 5593.0, 5674.0, 5545.0, 5669.0, 5587.0, 5594.0, 5721.0, 5381.0, 5518.0, 5446.0, 5546.0, 5508.0, 5291.0, 5268.0, 5314.0, 5698.0, 5374.0, 5273.0, 5570.0, 5608.0, 5456.0, 5393.0, 5690.0, 5686.0, 5603.0, 5432.0, 5549.0, 5588.0, 5476.0, 5516.0, 5340.0, 5459.0, 5353.0, 5652.0, 5475.0, 5290.0, 5711.0, 5569.0, 5668.0, 5537.0, 5412.0 (number of hits: 10)
13	5280	9	1	333	1	5573.0, 5718.0, 5280.0, 5713.0, 5409.0, 5298.0, 5720.0, 5362.0, 5404.0, 5526.0, 5649.0, 5710.0, 5674.0, 5593.0, 5620.0, 5694.0, 5270.0, 5274.0, 5281.0, 5701.0, 5312.0, 5483.0, 5669.0, 5635.0, 5458.0, 5429.0, 5254.0, 5591.0, 5285.0, 5650.0, 5497.0, 5638.0, 5577.0, 5666.0, 5319.0, 5410.0, 5485.0, 5314.0, 5590.0, 5369.0, 5717.0, 5419.0, 5602.0, 5308.0, 5351.0, 5671.0, 5570.0, 5525.0, 5278.0, 5472.0, 5287.0, 5302.0, 5323.0, 5442.0, 5263.0, 5398.0, 5506.0, 5664.0, 5608.0, 5515.0, 5387.0, 5622.0, 5545.0, 5698.0, 5330.0, 5425.0, 5504.0, 5347.0, 5644.0, 5693.0, 5484.0, 5335.0, 5468.0, 5329.0, 5503.0, 5498.0, 5672.0, 5719.0, 5407.0, 5440.0, 5291.0, 5661.0, 5368.0, 5411.0, 5328.0, 5524.0, 5636.0, 5327.0, 5643.0, 5441.0, 5431.0, 5277.0, 5311.0, 5588.0, 5606.0, 5689.0, 5301.0, 5432.0, 5436.0, 5675.0 (number of hits: 10)
14	5280	9	1	333	1	5644.0, 5523.0, 5559.0, 5287.0, 5396.0, 5721.0, 5708.0, 5671.0, 5386.0, 5304.0, 5672.0, 5379.0, 5553.0, 5512.0, 5431.0, 5297.0, 5382.0, 5703.0, 5409.0, 5539.0, 5653.0, 5277.0, 5275.0, 5623.0, 5707.0, 5657.0, 5676.0, 5709.0, 5583.0, 5580.0, 5646.0, 5561.0, 5459.0, 5524.0, 5636.0, 5483.0, 5347.0, 5706.0, 5525.0, 5491.0, 5266.0, 5397.0, 5641.0, 5489.0, 5494.0, 5507.0, 5465.0, 5617.0, 5496.0, 5569.0, 5661.0, 5461.0, 5656.0, 5564.0, 5467.0, 5269.0, 5565.0, 5662.0, 5626.0, 5588.0, 5568.0, 5724.0, 5314.0, 5433.0, 5271.0, 5333.0, 5723.0, 5678.0, 5282.0, 5684.0, 5388.0, 5484.0, 5348.0, 5720.0, 5532.0, 5363.0, 5557.0, 5695.0, 5705.0, 5299.0, 5466.0, 5345.0, 5596.0, 5537.0, 5332.0, 5546.0, 5437.0, 5335.0, 5439.0, 5527.0, 5476.0, 5356.0, 5324.0, 5645.0, 5254.0, 5670.0, 5696.0, 5570.0, 5289.0, 5354.0 (number of hits: 6)

15	5280	9	1	333	1	5559.0, 5504.0, 5523.0, 5426.0, 5722.0, 5635.0, 5271.0, 5364.0, 5417.0, 5421.0, 5661.0, 5485.0, 5654.0, 5547.0, 5591.0, 5512.0, 5611.0, 5491.0, 5626.0, 5693.0, 5304.0, 5399.0, 5407.0, 5601.0, 5254.0, 5348.0, 5702.0, 5669.0, 5354.0, 5327.0, 5632.0, 5650.0, 5439.0, 5418.0, 5561.0, 5455.0, 5285.0, 5549.0, 5717.0, 5370.0, 5607.0, 5552.0, 5388.0, 5653.0, 5424.0, 5306.0, 5436.0, 5262.0, 5554.0, 5515.0, 5578.0, 5718.0, 5572.0, 5605.0, 5474.0, 5614.0, 5551.0, 5366.0, 5385.0, 5694.0, 5345.0, 5379.0, 5329.0, 5584.0, 5517.0, 5686.0, 5566.0, 5700.0, 5648.0, 5695.0, 5277.0, 5284.0, 5396.0, 5356.0, 5461.0, 5544.0, 5397.0, 5528.0, 5569.0, 5347.0, 5313.0, 5334.0, 5490.0, 5464.0, 5630.0, 5684.0, 5427.0, 5624.0, 5638.0, 5604.0, 5656.0, 5625.0, 5525.0, 5255.0, 5698.0, 5251.0, 5706.0, 5675.0, 5470.0, 5299.0 (number of hits: 5)
16	5280	9	1	333	1	5708.0, 5687.0, 5352.0, 5565.0, 5703.0, 5344.0, 5275.0, 5645.0, 5317.0, 5537.0, 5561.0, 5480.0, 5414.0, 5456.0, 5261.0, 5665.0, 5289.0, 5539.0, 5682.0, 5358.0, 5382.0, 5452.0, 5424.0, 5405.0, 5683.0, 5710.0, 5482.0, 5466.0, 5341.0, 5390.0, 5635.0, 5620.0, 5408.0, 5501.0, 5284.0, 5534.0, 5576.0, 5512.0, 5398.0, 5445.0, 5483.0, 5581.0, 5698.0, 5415.0, 5484.0, 5410.0, 5510.0, 5268.0, 5386.0, 5351.0, 5495.0, 5458.0, 5280.0, 5549.0, 5474.0, 5470.0, 5652.0, 5278.0, 5690.0, 5252.0, 5277.0, 5444.0, 5315.0, 5591.0, 5560.0, 5556.0, 5670.0, 5593.0, 5318.0, 5296.0, 5524.0, 5439.0, 5514.0, 5689.0, 5691.0, 5446.0, 5337.0, 5345.0, 5506.0, 5476.0, 5511.0, 5328.0, 5433.0, 5608.0, 5589.0, 5493.0, 5400.0, 5721.0, 5253.0, 5417.0, 5420.0, 5677.0, 5384.0, 5429.0, 5299.0, 5627.0, 5518.0, 5306.0, 5574.0, 5353.0 (number of hits: 4)
17	5280	9	1	333	1	5595.0, 5300.0, 5655.0, 5322.0, 5431.0, 5676.0, 5331.0, 5665.0, 5270.0, 5285.0, 5495.0, 5348.0, 5608.0, 5510.0, 5299.0, 5357.0, 5373.0, 5489.0, 5562.0, 5537.0, 5430.0, 5520.0, 5652.0, 5617.0, 5634.0, 5372.0, 5643.0, 5327.0, 5274.0, 5341.0, 5666.0, 5536.0, 5324.0, 5711.0, 5400.0, 5557.0, 5561.0, 5377.0, 5695.0, 5428.0, 5405.0, 5685.0, 5540.0, 5704.0, 5291.0, 5468.0, 5723.0, 5523.0, 5475.0, 5653.0, 5402.0, 5251.0, 5442.0, 5424.0, 5716.0, 5693.0, 5668.0, 5664.0, 5472.0, 5516.0, 5701.0, 5369.0, 5397.0, 5583.0, 5316.0, 5715.0, 5545.0, 5528.0, 5604.0, 5582.0, 5601.0, 5688.0, 5529.0, 5474.0, 5323.0, 5326.0, 5438.0, 5376.0, 5661.0, 5635.0, 5342.0, 5419.0, 5345.0, 5533.0, 5284.0, 5393.0, 5312.0, 5705.0, 5669.0, 5360.0,

						5627.0, 5253.0, 5278.0, 5690.0, 5370.0, 5425.0, 5619.0, 5412.0, 5394.0, 5455.0 (number of hits: 5)
18	5280	9	1	333	1	5282.0, 5490.0, 5508.0, 5714.0, 5314.0, 5278.0, 5542.0, 5318.0, 5415.0, 5541.0, 5313.0, 5642.0, 5607.0, 5483.0, 5492.0, 5632.0, 5616.0, 5319.0, 5339.0, 5501.0, 5618.0, 5704.0, 5664.0, 5647.0, 5367.0, 5640.0, 5489.0, 5624.0, 5717.0, 5335.0, 5353.0, 5604.0, 5719.0, 5596.0, 5251.0, 5364.0, 5680.0, 5567.0, 5721.0, 5393.0, 5563.0, 5404.0, 5591.0, 5338.0, 5627.0, 5397.0, 5344.0, 5328.0, 5351.0, 5646.0, 5374.0, 5326.0, 5670.0, 5291.0, 5511.0, 5509.0, 5559.0, 5435.0, 5386.0, 5343.0, 5701.0, 5512.0, 5309.0, 5578.0, 5590.0, 5611.0, 5366.0, 5347.0, 5434.0, 5500.0, 5363.0, 5391.0, 5620.0, 5329.0, 5651.0, 5633.0, 5446.0, 5476.0, 5598.0, 5494.0, 5635.0, 5619.0, 5637.0, 5514.0, 5301.0, 5473.0, 5687.0, 5369.0, 5706.0, 5420.0, 5565.0, 5610.0, 5292.0, 5622.0, 5699.0, 5368.0, 5537.0, 5294.0, 5534.0, 5568.0 (number of hits: 7)
19	5280	9	1	333	1	5635.0, 5631.0, 5402.0, 5554.0, 5439.0, 5623.0, 5262.0, 5251.0, 5469.0, 5530.0, 5505.0, 5511.0, 5540.0, 5346.0, 5468.0, 5256.0, 5559.0, 5538.0, 5664.0, 5427.0, 5464.0, 5451.0, 5316.0, 5334.0, 5475.0, 5690.0, 5300.0, 5466.0, 5685.0, 5536.0, 5611.0, 5394.0, 5686.0, 5648.0, 5263.0, 5602.0, 5563.0, 5574.0, 5366.0, 5689.0, 5268.0, 5716.0, 5688.0, 5653.0, 5608.0, 5272.0, 5320.0, 5308.0, 5694.0, 5393.0, 5338.0, 5714.0, 5441.0, 5447.0, 5672.0, 5288.0, 5488.0, 5483.0, 5420.0, 5295.0, 5606.0, 5710.0, 5368.0, 5292.0, 5444.0, 5379.0, 5533.0, 5406.0, 5518.0, 5515.0, 5332.0, 5491.0, 5485.0, 5618.0, 5471.0, 5313.0, 5706.0, 5353.0, 5527.0, 5431.0, 5392.0, 5470.0, 5596.0, 5702.0, 5481.0, 5283.0, 5344.0, 5637.0, 5438.0, 5546.0, 5345.0, 5640.0, 5516.0, 5595.0, 5673.0, 5589.0, 5497.0, 5436.0, 5628.0, 5328.0 (number of hits: 6)
20	5280	9	1	333	1	5558.0, 5676.0, 5678.0, 5269.0, 5528.0, 5559.0, 5462.0, 5604.0, 5624.0, 5687.0, 5701.0, 5291.0, 5617.0, 5415.0, 5658.0, 5271.0, 5412.0, 5549.0, 5509.0, 5408.0, 5567.0, 5379.0, 5691.0, 5279.0, 5347.0, 5404.0, 5656.0, 5400.0, 5430.0, 5283.0, 5375.0, 5498.0, 5323.0, 5568.0, 5251.0, 5708.0, 5433.0, 5477.0, 5364.0, 5674.0, 5556.0, 5660.0, 5551.0, 5719.0, 5329.0, 5627.0, 5563.0, 5333.0, 5416.0, 5366.0, 5707.0, 5475.0, 5335.0, 5466.0, 5390.0, 5407.0, 5274.0, 5253.0, 5484.0, 5516.0, 5593.0, 5544.0, 5284.0, 5502.0, 5494.0, 5357.0, 5380.0, 5518.0, 5361.0, 5587.0, 5654.0, 5582.0, 5519.0, 5489.0, 5616.0,

						5306.0, 5490.0, 5345.0, 5328.0, 5697.0, 5432.0, 5571.0, 5513.0, 5320.0, 5463.0, 5459.0, 5405.0, 5584.0, 5605.0, 5450.0, 5694.0, 5445.0, 5613.0, 5282.0, 5560.0, 5326.0, 5598.0, 5723.0, 5435.0, 5446.0 (number of hits: 2)
21	5280	9	1	333	1	5432.0, 5501.0, 5597.0, 5362.0, 5382.0, 5284.0, 5577.0, 5296.0, 5301.0, 5386.0, 5647.0, 5251.0, 5314.0, 5632.0, 5401.0, 5309.0, 5340.0, 5620.0, 5402.0, 5330.0, 5326.0, 5701.0, 5459.0, 5365.0, 5390.0, 5265.0, 5452.0, 5490.0, 5439.0, 5559.0, 5322.0, 5464.0, 5660.0, 5360.0, 5640.0, 5574.0, 5671.0, 5300.0, 5312.0, 5280.0, 5718.0, 5645.0, 5587.0, 5267.0, 5553.0, 5695.0, 5480.0, 5294.0, 5668.0, 5324.0, 5508.0, 5485.0, 5646.0, 5657.0, 5651.0, 5573.0, 5404.0, 5272.0, 5681.0, 5449.0, 5513.0, 5611.0, 5448.0, 5517.0, 5454.0, 5478.0, 5262.0, 5339.0, 5289.0, 5283.0, 5473.0, 5305.0, 5608.0, 5612.0, 5500.0, 5453.0, 5585.0, 5551.0, 5543.0, 5369.0, 5441.0, 5672.0, 5341.0, 5389.0, 5399.0, 5307.0, 5321.0, 5380.0, 5351.0, 5719.0, 5446.0, 5354.0, 5505.0, 5531.0, 5709.0, 5626.0, 5586.0, 5461.0, 5567.0, 5711.0 (number of hits: 10)
22	5280	9	1	333	1	5331.0, 5619.0, 5306.0, 5416.0, 5631.0, 5388.0, 5658.0, 5701.0, 5468.0, 5438.0, 5255.0, 5380.0, 5635.0, 5437.0, 5283.0, 5294.0, 5538.0, 5695.0, 5674.0, 5284.0, 5508.0, 5250.0, 5558.0, 5396.0, 5526.0, 5551.0, 5431.0, 5509.0, 5519.0, 5475.0, 5258.0, 5512.0, 5369.0, 5346.0, 5662.0, 5399.0, 5648.0, 5644.0, 5517.0, 5378.0, 5629.0, 5498.0, 5709.0, 5420.0, 5510.0, 5327.0, 5304.0, 5652.0, 5377.0, 5579.0, 5347.0, 5672.0, 5376.0, 5443.0, 5453.0, 5684.0, 5395.0, 5602.0, 5714.0, 5650.0, 5406.0, 5507.0, 5721.0, 5434.0, 5514.0, 5628.0, 5598.0, 5591.0, 5381.0, 5576.0, 5342.0, 5633.0, 5606.0, 5348.0, 5384.0, 5458.0, 5702.0, 5471.0, 5299.0, 5715.0, 5666.0, 5692.0, 5436.0, 5286.0, 5281.0, 5544.0, 5462.0, 5465.0, 5338.0, 5574.0, 5425.0, 5657.0, 5670.0, 5545.0, 5460.0, 5638.0, 5645.0, 5621.0, 5697.0, 5351.0 (number of hits: 5)
23	5280	9	1	333	1	5586.0, 5372.0, 5374.0, 5684.0, 5700.0, 5345.0, 5688.0, 5407.0, 5659.0, 5471.0, 5274.0, 5378.0, 5675.0, 5537.0, 5555.0, 5683.0, 5315.0, 5536.0, 5388.0, 5686.0, 5570.0, 5556.0, 5332.0, 5507.0, 5275.0, 5571.0, 5520.0, 5703.0, 5693.0, 5657.0, 5608.0, 5607.0, 5446.0, 5361.0, 5394.0, 5355.0, 5635.0, 5398.0, 5255.0, 5366.0, 5404.0, 5415.0, 5539.0, 5400.0, 5365.0, 5321.0, 5353.0, 5326.0, 5439.0, 5692.0, 5673.0, 5324.0, 5437.0, 5363.0, 5572.0, 5441.0, 5269.0, 5594.0, 5663.0, 5697.0,

						5474.0, 5307.0, 5576.0, 5424.0, 5587.0, 5469.0, 5480.0, 5664.0, 5476.0, 5640.0, 5263.0, 5701.0, 5262.0, 5690.0, 5348.0, 5508.0, 5709.0, 5547.0, 5670.0, 5714.0, 5718.0, 5383.0, 5333.0, 5532.0, 5356.0, 5310.0, 5450.0, 5526.0, 5723.0, 5578.0, 5564.0, 5599.0, 5338.0, 5308.0, 5566.0, 5412.0, 5642.0, 5277.0, 5583.0, 5651.0 (number of hits: 3)
24	5280	9	1	333	1	5423.0, 5551.0, 5324.0, 5414.0, 5483.0, 5284.0, 5276.0, 5579.0, 5676.0, 5683.0, 5388.0, 5707.0, 5298.0, 5569.0, 5500.0, 5345.0, 5636.0, 5595.0, 5342.0, 5343.0, 5251.0, 5479.0, 5706.0, 5291.0, 5670.0, 5476.0, 5519.0, 5254.0, 5607.0, 5687.0, 5629.0, 5487.0, 5558.0, 5674.0, 5554.0, 5720.0, 5605.0, 5336.0, 5632.0, 5406.0, 5399.0, 5258.0, 5567.0, 5583.0, 5387.0, 5266.0, 5295.0, 5678.0, 5408.0, 5644.0, 5469.0, 5631.0, 5571.0, 5704.0, 5474.0, 5724.0, 5497.0, 5304.0, 5662.0, 5643.0, 5413.0, 5584.0, 5546.0, 5694.0, 5316.0, 5443.0, 5713.0, 5560.0, 5502.0, 5521.0, 5283.0, 5710.0, 5412.0, 5311.0, 5356.0, 5420.0, 5331.0, 5299.0, 5335.0, 5568.0, 5610.0, 5371.0, 5664.0, 5405.0, 5285.0, 5533.0, 5541.0, 5294.0, 5353.0, 5306.0, 5535.0, 5665.0, 5454.0, 5691.0, 5714.0, 5312.0, 5297.0, 5340.0, 5494.0, 5582.0 (number of hits: 11)
25	5280	9	1	333	1	5422.0, 5407.0, 5593.0, 5594.0, 5360.0, 5628.0, 5284.0, 5683.0, 5638.0, 5372.0, 5337.0, 5484.0, 5332.0, 5715.0, 5373.0, 5294.0, 5620.0, 5312.0, 5644.0, 5625.0, 5282.0, 5293.0, 5260.0, 5632.0, 5583.0, 5458.0, 5430.0, 5599.0, 5390.0, 5437.0, 5713.0, 5547.0, 5368.0, 5531.0, 5507.0, 5591.0, 5717.0, 5338.0, 5256.0, 5302.0, 5326.0, 5376.0, 5567.0, 5589.0, 5656.0, 5575.0, 5661.0, 5270.0, 5349.0, 5579.0, 5441.0, 5692.0, 5613.0, 5705.0, 5292.0, 5285.0, 5455.0, 5568.0, 5433.0, 5467.0, 5340.0, 5498.0, 5427.0, 5482.0, 5391.0, 5363.0, 5386.0, 5719.0, 5549.0, 5459.0, 5477.0, 5543.0, 5577.0, 5446.0, 5280.0, 5398.0, 5288.0, 5333.0, 5298.0, 5496.0, 5409.0, 5435.0, 5566.0, 5694.0, 5463.0, 5626.0, 5522.0, 5588.0, 5276.0, 5445.0, 5310.0, 5541.0, 5647.0, 5370.0, 5457.0, 5643.0, 5490.0, 5281.0, 5324.0, 5465.0 (number of hits: 9)
26	5280	9	1	333	1	5439.0, 5448.0, 5540.0, 5511.0, 5668.0, 5275.0, 5643.0, 5301.0, 5679.0, 5391.0, 5503.0, 5688.0, 5436.0, 5389.0, 5367.0, 5480.0, 5620.0, 5339.0, 5325.0, 5568.0, 5597.0, 5279.0, 5338.0, 5346.0, 5456.0, 5424.0, 5258.0, 5491.0, 5387.0, 5554.0, 5561.0, 5355.0, 5583.0, 5661.0, 5266.0, 5332.0, 5493.0, 5330.0, 5604.0, 5488.0, 5265.0, 5628.0, 5427.0, 5277.0, 5531.0,

						5449.0, 5546.0, 5507.0, 5423.0, 5695.0, 5629.0, 5535.0, 5608.0, 5343.0, 5586.0, 5333.0, 5478.0, 5288.0, 5442.0, 5419.0, 5542.0, 5571.0, 5475.0, 5590.0, 5444.0, 5610.0, 5719.0, 5621.0, 5251.0, 5454.0, 5497.0, 5284.0, 5336.0, 5639.0, 5683.0, 5289.0, 5303.0, 5300.0, 5519.0, 5438.0, 5494.0, 5372.0, 5404.0, 5399.0, 5516.0, 5304.0, 5566.0, 5460.0, 5721.0, 5446.0, 5536.0, 5709.0, 5677.0, 5619.0, 5416.0, 5253.0, 5353.0, 5552.0, 5587.0, 5431.0 (number of hits: 6)
27	5280	9	1	333	1	5360.0, 5573.0, 5270.0, 5442.0, 5294.0, 5383.0, 5330.0, 5279.0, 5375.0, 5365.0, 5459.0, 5340.0, 5618.0, 5451.0, 5717.0, 5629.0, 5450.0, 5594.0, 5569.0, 5486.0, 5549.0, 5619.0, 5334.0, 5565.0, 5437.0, 5406.0, 5516.0, 5563.0, 5721.0, 5687.0, 5333.0, 5641.0, 5430.0, 5679.0, 5288.0, 5401.0, 5469.0, 5623.0, 5550.0, 5564.0, 5380.0, 5506.0, 5598.0, 5500.0, 5586.0, 5422.0, 5672.0, 5304.0, 5653.0, 5651.0, 5632.0, 5331.0, 5507.0, 5363.0, 5393.0, 5457.0, 5476.0, 5386.0, 5373.0, 5645.0, 5578.0, 5387.0, 5592.0, 5410.0, 5278.0, 5665.0, 5461.0, 5684.0, 5302.0, 5551.0, 5356.0, 5314.0, 5601.0, 5613.0, 5602.0, 5431.0, 5366.0, 5495.0, 5515.0, 5636.0, 5355.0, 5481.0, 5537.0, 5608.0, 5353.0, 5272.0, 5633.0, 5677.0, 5418.0, 5480.0, 5580.0, 5525.0, 5379.0, 5577.0, 5554.0, 5376.0, 5468.0, 5508.0, 5361.0, 5519.0 (number of hits: 5)
28	5280	9	1	333	1	5339.0, 5701.0, 5459.0, 5395.0, 5686.0, 5584.0, 5283.0, 5657.0, 5563.0, 5372.0, 5289.0, 5471.0, 5583.0, 5432.0, 5333.0, 5342.0, 5457.0, 5488.0, 5450.0, 5520.0, 5384.0, 5647.0, 5370.0, 5652.0, 5467.0, 5623.0, 5643.0, 5573.0, 5492.0, 5407.0, 5642.0, 5501.0, 5309.0, 5451.0, 5518.0, 5306.0, 5662.0, 5412.0, 5607.0, 5434.0, 5585.0, 5633.0, 5324.0, 5591.0, 5465.0, 5717.0, 5441.0, 5674.0, 5295.0, 5668.0, 5529.0, 5310.0, 5367.0, 5707.0, 5509.0, 5671.0, 5714.0, 5722.0, 5490.0, 5610.0, 5721.0, 5379.0, 5562.0, 5443.0, 5338.0, 5388.0, 5653.0, 5716.0, 5587.0, 5474.0, 5603.0, 5251.0, 5337.0, 5272.0, 5265.0, 5301.0, 5710.0, 5393.0, 5275.0, 5616.0, 5330.0, 5586.0, 5588.0, 5304.0, 5422.0, 5298.0, 5625.0, 5519.0, 5723.0, 5499.0, 5470.0, 5550.0, 5484.0, 5517.0, 5285.0, 5264.0, 5691.0, 5681.0, 5473.0, 5485.0 (number of hits: 9)
29	5280	9	1	333	1	5566.0, 5470.0, 5317.0, 5252.0, 5381.0, 5529.0, 5688.0, 5299.0, 5544.0, 5401.0, 5250.0, 5365.0, 5614.0, 5372.0, 5376.0, 5326.0, 5637.0, 5392.0, 5677.0, 5479.0, 5400.0, 5695.0, 5704.0, 5443.0, 5600.0, 5496.0, 5465.0, 5502.0, 5485.0, 5354.0,

						5303.0, 5417.0, 5432.0, 5374.0, 5403.0, 5552.0, 5488.0, 5721.0, 5517.0, 5360.0, 5594.0, 5254.0, 5278.0, 5591.0, 5510.0, 5487.0, 5482.0, 5598.0, 5664.0, 5353.0, 5489.0, 5446.0, 5588.0, 5286.0, 5263.0, 5682.0, 5280.0, 5408.0, 5685.0, 5662.0, 5609.0, 5541.0, 5385.0, 5494.0, 5384.0, 5646.0, 5638.0, 5604.0, 5389.0, 5461.0, 5285.0, 5710.0, 5495.0, 5516.0, 5553.0, 5592.0, 5605.0, 5356.0, 5347.0, 5627.0, 5671.0, 5301.0, 5411.0, 5368.0, 5363.0, 5712.0, 5357.0, 5468.0, 5633.0, 5506.0, 5499.0, 5398.0, 5570.0, 5377.0, 5708.0, 5654.0, 5388.0, 5413.0, 5275.0, 5358.0 (number of hits: 5)
30	5280	9	1	333	1	5342.0, 5662.0, 5490.0, 5393.0, 5530.0, 5436.0, 5329.0, 5686.0, 5692.0, 5563.0, 5259.0, 5539.0, 5400.0, 5252.0, 5568.0, 5523.0, 5554.0, 5715.0, 5484.0, 5402.0, 5561.0, 5286.0, 5449.0, 5676.0, 5456.0, 5333.0, 5314.0, 5283.0, 5407.0, 5614.0, 5689.0, 5367.0, 5389.0, 5336.0, 5506.0, 5322.0, 5674.0, 5464.0, 5461.0, 5261.0, 5371.0, 5318.0, 5634.0, 5366.0, 5479.0, 5269.0, 5649.0, 5648.0, 5425.0, 5304.0, 5669.0, 5260.0, 5271.0, 5412.0, 5404.0, 5525.0, 5276.0, 5640.0, 5528.0, 5642.0, 5398.0, 5723.0, 5408.0, 5599.0, 5722.0, 5500.0, 5589.0, 5409.0, 5531.0, 5386.0, 5446.0, 5475.0, 5410.0, 5424.0, 5657.0, 5298.0, 5280.0, 5705.0, 5678.0, 5707.0, 5320.0, 5647.0, 5444.0, 5663.0, 5605.0, 5504.0, 5319.0, 5527.0, 5507.0, 5430.0, 5487.0, 5432.0, 5351.0, 5616.0, 5572.0, 5308.0, 5718.0, 5341.0, 5682.0, 5290.0 (number of hits: 6)

5580 MHz

Radar Signal Type	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1	30	100 %	60%	Pass
Type 2	30	90 %	60%	Pass
Type 3	30	96.7 %	60%	Pass
Type 4	30	90 %	60%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	100 %	70%	Pass

Please refer to the following statistical tables:

Table-1 Radar Type 1 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5580	18	1	1428	1
2	5580	18	1	1428	1
3	5580	18	1	1428	1
4	5580	18	1	1428	1
5	5580	18	1	1428	1
6	5580	18	1	1428	1
7	5580	18	1	1428	1
8	5580	18	1	1428	1
9	5580	18	1	1428	1
10	5580	18	1	1428	1
11	5580	18	1	1428	1
12	5580	18	1	1428	1
13	5580	18	1	1428	1
14	5580	18	1	1428	1
15	5580	18	1	1428	1
16	5580	18	1	1428	1
17	5580	18	1	1428	1
18	5580	18	1	1428	1
19	5580	18	1	1428	1
20	5580	18	1	1428	1
21	5580	18	1	1428	1
22	5580	18	1	1428	1
23	5580	18	1	1428	1
24	5580	18	1	1428	1
25	5580	18	1	1428	1
26	5580	18	1	1428	1
27	5580	18	1	1428	1
28	5580	18	1	1428	1
29	5580	18	1	1428	1
30	5580	18	1	1428	1
Detection Percentage: 100 % (>60%)					

Table-2 Radar Type 2 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5580	25	3.7	192	1
2	5580	25	3.8	168	1
3	5580	26	2.2	196	1
4	5580	28	2.6	202	1
5	5580	27	2.6	229	1
6	5580	23	1.9	186	0
7	5580	23	4.4	185	1
8	5580	24	1.3	182	1
9	5580	23	1.8	220	1
10	5580	26	1.4	176	1
11	5580	23	2.3	154	1
12	5580	26	3.3	218	1
13	5580	23	1.4	204	0
14	5580	29	3.8	198	1
15	5580	24	1.4	155	1
16	5580	24	2.2	209	1
17	5580	28	3.8	206	1
18	5580	26	3.8	154	1
19	5580	26	1.7	176	1
20	5580	29	1.5	176	1
21	5580	23	3.5	172	1
22	5580	29	4.9	185	1
23	5580	24	1.1	227	1
24	5580	28	1.6	229	1
25	5580	26	3.3	176	1
26	5580	28	4	167	1
27	5580	25	4.7	167	0
28	5580	24	4.8	171	1
29	5580	25	2.1	205	1
30	5580	25	4.1	185	1
Detection Percentage: 90% (>60%)					

Table-3 Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5580	17	7.4	378	1
2	5580	16	7.3	416	1
3	5580	18	9.7	465	1
4	5580	17	9	389	1
5	5580	17	7.6	444	1
6	5580	18	6	452	1
7	5580	16	7.6	399	1
8	5580	18	8.2	440	1
9	5580	16	9.6	235	1
10	5580	16	7.9	375	1
11	5580	17	6.4	299	1
12	5580	18	7.5	310	1
13	5580	17	9.3	448	1
14	5580	16	9.4	217	1
15	5580	17	7	346	1
16	5580	17	8.2	243	1
17	5580	18	9	253	0
18	5580	17	7	236	1
19	5580	16	6.5	416	1
20	5580	18	8.8	275	1
21	5580	17	6.2	470	1
22	5580	18	7.3	294	1
23	5580	17	6.9	351	1
24	5580	18	7.1	359	1
25	5580	16	9.5	225	1
26	5580	16	8.4	415	1
27	5580	17	6.4	418	1
28	5580	17	9.4	305	1
29	5580	17	7.1	353	1
30	5580	17	7.7	242	1
Detection Percentage: 96.7 % (>60%)					

Table-4 Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5580	13	11.4	439	0
2	5580	12	18.6	433	1
3	5580	14	19.6	448	0
4	5580	13	17.4	275	1
5	5580	12	14.1	418	1
6	5580	14	20	471	1
7	5580	15	12.7	413	1
8	5580	14	18.4	367	1
9	5580	15	17.6	262	1
10	5580	13	19.4	414	1
11	5580	13	12.6	376	1
12	5580	13	18.2	397	1
13	5580	16	13.2	252	1
14	5580	12	18.2	441	1
15	5580	14	19.6	420	1
16	5580	12	17.4	327	1
17	5580	16	18.4	455	1
18	5580	15	12.9	387	1
19	5580	16	13.8	235	1
20	5580	13	15.2	473	1
21	5580	16	12.6	211	1
22	5580	12	12.7	322	0
23	5580	15	17.2	493	1
24	5580	13	17.3	261	1
25	5580	14	18.9	302	1
26	5580	15	18.6	231	1
27	5580	12	16.1	318	1
28	5580	14	19.7	492	1
29	5580	13	13.8	315	1
30	5580	12	17	284	1
Detection Percentage: 90 % (>60%)					

Table-5 Radar Type 5 Statistical Performance

Bin5 Statistics 1

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	7	96.5	1886	1955	0.131788	
1	2	13	78.9	1946		1.710497	
2	3	10	71.3	1761	1797	2.422051	
3	2	14	72.3	1180		4.141748	
4	1	6	85.6			5.223017	
5	3	7	89.9	1944	1758	6.459717	1
6	2	16	76.9	1836		7.617356	
7	1	19	97.2			8.686681	
8	2	11	72.5	1441		9.194006	
9	2	15	56.5	1570		10.69827	
10	2	14	54.2	1615		11.44391	

Bin5 Statistics 2

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	18	63.2			0.564219	
1	1	8	84			1.010866	
2	2	5	96.9	1554		2.30892	
3	2	16	75.4	1756		3.002976	
4	2	14	68.8	1655		4.549452	
5	2	12	60.4	1729		5.475212	1
6	2	14	57.4	1736		6.535883	
7	1	15	61.2			7.147967	
8	3	14	64.5	1735	1572	8.129506	
9	3	18	85.8	1363	1708	9.705237	
10	3	12	69.6	1190	1067	10.81894	
11	2	13	76	1330		11.02982	

Bin5 Statistics 3

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	14	60	1346		0.08586	
1	2	8	96.3	1851		2.403412	
2	2	7	73.4	1715		3.488985	
3	3	8	54.3	1563	1790	4.430165	
4	3	6	55.9	1378	1860	5.408264	1
5	2	19	78	1599		6.699027	
6	2	10	87.5	1748		9.068948	
7	2	18	90.9	1810		9.929674	
8	1	9	67			10.90992	

Bin5 Statistics 4

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	18	55.5	1529		0.419077	
1	3	6	52.3	1599	1139	1.110568	
2	3	11	92.3	1943	1568	1.476562	
3	2	13	59.4	1282		2.148749	
4	2	19	84.5	1885		2.888541	
5	1	17	69.2			3.75511	
6	1	15	62.6			4.134831	
7	2	10	62.9	1256		4.909623	
8	1	14	50.6			5.157312	
9	2	7	55.5	1630		6.237831	1
10	2	7	56.5	1141		6.790041	
11	1	8	63.2			7.511419	
12	1	19	73.1			8.115371	
13	2	6	52.2	1931		8.811376	
14	2	6	79.4	1694		8.915116	
15	2	12	73	1944		10.02651	
16	3	16	79.3	1561	1415	10.50436	
17	3	7	70.9	1196	1041	11.30619	
18	1	19	61.1			11.54904	

Bin5 Statistics 5

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	19	93.5	1515		0.698148	
1	1	19	79.4			0.909704	
2	2	11	93.7	1274		1.958585	
3	3	19	50.4	1179	1791	2.651791	
4	2	13	69.3	1550		3.426544	
5	1	9	90.4			4.410788	
6	2	10	80.2	1792		5.137554	
7	2	19	70.9	1649		5.904866	
8	3	17	59.8	1788	1259	6.678764	1
9	2	8	76.8	1193		6.759626	
10	3	15	79.6	1249	1046	8.117501	
11	1	7	80.7			8.275432	
12	1	6	80.1			9.267095	
13	2	14	68.1	1153		9.861421	
14	3	15	55.8	1464	1565	10.86556	
15	2	16	87.9	1363		11.35245	

Bin5 Statistics 6

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	10	78.9	1776	1922	0.258354	
1	2	19	79.7	1849		0.91455	
2	3	11	57.7	1776	1457	2.17783	
3	3	10	76.1	1178	1126	2.670288	
4	2	16	86.4	1214		3.421971	
5	1	14	87.7			4.111167	
6	1	7	58.4			4.863402	
7	2	8	86.9	1245		6.061063	1
8	1	17	57.7			6.491394	
9	1	12	86.7			7.459023	
10	2	12	70.3	1602		8.401002	
11	2	13	77	1578		9.0701	
12	3	9	96.5	1789	1750	9.829544	
13	1	12	50.7			10.40514	
14	2	16	95.5	1959		11.31468	

Bin5 Statistics 7

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	17	97	1975	1542	0.697747	1
1	2	19	67.1	1317		1.218611	
2	3	10	76.3	1803	1494	3.441916	
3	2	13	57	1360		4.148937	
4	3	11	74.4	1100	1950	4.846106	
5	3	15	56.1	1073	1855	6.095775	
6	3	12	62.9	1417	1211	7.67034	
7	2	15	67.3	1238		8.879568	
8	3	5	55.2	1676	1196	9.799453	
9	2	17	74.3	1724		11.68238	

Bin5 Statistics 8

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	10	61.1	1922		0.478394	1
1	2	15	91.1	1159		1.360857	
2	3	8	60.5	1712	1277	1.659455	
3	2	14	81.6	1854		2.792704	
4	1	17	59			3.150186	
5	2	13	61.2	1554		4.00641	
6	2	16	60.9	1527		4.271735	
7	1	20	83.6			5.106452	
8	2	18	81	1167		6.101917	
9	2	11	76	1819		6.748108	
10	2	9	56.5	1960		7.386652	
11	2	16	80	1270		8.167007	
12	1	14	84.6			9.118338	
13	2	11	74.7	1688		9.369669	
14	1	11	71.2			10.24682	
15	1	6	78.9			10.7686	
16	3	9	62.6	1019	1722	11.9372	

Bin5 Statistics 9

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	19	54.4	1869	1709	0.204844	
1	2	15	70.5	1935		0.723111	
2	3	14	53	1940	1174	1.885827	
3	2	14	50.1	1358		2.058549	
4	3	6	69.4	1161	1116	3.097695	
5	2	11	56.4	1282		3.219706	
6	2	9	94.2	1387		4.136244	
7	2	18	91.4	1747		4.92468	
8	3	17	95.8	1331	1880	5.360124	
9	1	14	79			5.697357	1
10	2	15	66.4	1353		6.739378	
11	2	8	50.6	1359		7.527452	
12	2	10	93.1	1551		8.001647	
13	2	18	88.9	1823		8.814193	
14	2	18	97.8	1596		9.293351	
15	2	16	66.8	1884		9.948731	
16	2	20	95.1	1911		10.28279	
17	2	15	96.3	1276		11.24446	
18	2	15	79.9	1021		11.60917	

Bin5 Statistics 10

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	8	64.7	1560	1328	0.409694	
1	2	16	61.4	1919		1.05292	
2	1	19	61.1			2.349908	
3	3	10	71.9	1325	1228	3.045287	
4	2	13	65	1856		3.583645	
5	1	15	64.9			4.137267	
6	1	18	79.1			5.420104	
7	3	5	73	1368	1168	6.328741	1
8	2	14	87	1469		7.088814	
9	2	16	77.4	1713		7.393869	
10	1	10	77.1			8.260852	
11	1	6	76.8			8.993828	
12	2	16	98.3	1850		9.661268	
13	2	19	57.4	1974		10.59087	
14	2	8	82.7	1828		11.79493	

Bin5 Statistics 11

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	14	77.7			0.024672	1
1	3	13	80.5	1893	1807	1.35429	
2	2	18	60.8	1296		2.394475	
3	1	13	88.1			2.719003	
4	1	13	99.7			3.561502	
5	2	7	69	1883		4.91124	
6	1	18	66.2			5.764839	
7	3	14	62.8	1389	1362	6.353338	
8	3	11	90.4	1138	1259	6.914826	
9	3	13	59	1651	1230	7.991453	
10	3	9	96.3	1692	1584	9.419677	
11	2	19	62.9	1927		9.783814	
12	2	10	51.5	1507		10.60524	
13	2	14	64	1140		11.77828	

Bin5 Statistics 12

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	5	62.8	1159	1640	1.309521	1
1	3	14	82.8	1552	1179	1.623656	
2	3	10	89.9	1425	1182	4.311126	
3	3	5	77.6	1341	1782	5.684211	
4	2	10	59.5	1997		6.138149	
5	3	6	68.2	1884	1134	7.693025	
6	1	10	71.2			10.07281	
7	1	8	56.3			11.18755	

Bin5 Statistics 13

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	16	69.3	1826		0.203204	
1	1	13	80.4			1.086024	
2	2	17	81.3	1363		1.660997	
3	2	20	80.8	1317		2.115062	
4	3	19	69.4	1111	1092	2.609597	
5	2	18	79.4	1018		3.204885	
6	1	12	56.5			3.711615	
7	3	10	52.4	1618	1861	4.616614	
8	2	12	83.6	1345		5.053957	
9	3	15	75.9	1896	1993	5.419384	1
10	2	16	94	1355		6.322986	
11	2	6	92.7	1472		7.14651	
12	2	8	77.8	1052		7.701152	
13	1	17	90.5			8.190831	
14	2	10	81.7	1010		8.703222	
15	1	15	53.1			9.523778	
16	2	11	54.6	1956		10.1619	
17	2	15	51.1	1539		10.32187	
18	2	8	87.4	1591		10.94116	
19	2	14	60.8	1787		11.76057	

Bin5 Statistics 14

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	13	94.6	1699		0.077599	
1	3	10	51.3	1476	1310	0.929681	
2	2	7	59.9	1369		1.744214	
3	1	7	55.9			2.341645	
4	3	18	83	1067	1172	2.43932	
5	2	11	77.1	1357		3.059874	
6	2	16	98.2	1717		3.708519	
7	2	8	83.5	1580		4.242916	
8	2	12	57.7	1603		5.110604	
9	3	5	89.5	1633	1722	5.909408	1
10	2	6	68.2	1063		6.362718	
11	3	11	81.7	1508	1255	6.654882	
12	2	16	59.7	1591		7.422202	
13	2	8	77.5	1612		7.849416	
14	1	16	69.7			8.818603	
15	2	6	83.2	1074		9.416479	
16	1	14	95			9.869736	
17	2	12	71.2	1071		10.62273	
18	1	14	70.1			11.35528	
19	3	8	52.8	1455	1484	11.61719	

Bin5 Statistics 15

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	6	66.2	1173	1653	0.718832	
1	2	17	80.3	1549		2.105875	
2	1	18	74.8			3.308079	
3	1	13	54.8			4.749415	
4	1	6	55.7			6.189133	1
5	2	16	85.1	1940		7.429395	
6	1	16	69.8			8.983752	
7	3	20	74.4	1986	1353	9.380984	
8	1	17	82			11.2841	

Bin5 Statistics 16

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	6	79.9	1694	1502	0.79281	1
1	3	14	50.4	1188	1604	1.126295	
2	2	8	71.5	1005		1.765709	
3	3	16	92.8	1651	1035	2.715846	
4	1	11	64.5			3.820262	
5	3	17	72.2	1727	1475	4.967226	
6	3	18	56.4	1482	1308	5.290761	
7	1	15	83.2			6.301754	
8	3	8	57.4	1154	1179	7.565322	
9	3	11	52.7	1985	1061	7.758209	
10	1	6	54.9			9.388136	
11	2	16	51	1146		9.813936	
12	2	14	66.1	1742		10.29057	
13	2	8	62.3	1766		11.92972	

Bin5 Statistics 17

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	6	99.4	1431		0.379912	
1	2	8	80.3	1800		0.796582	
2	2	15	60.8	1055		1.336126	
3	1	15	62			2.096106	
4	1	13	86.3			2.50802	
5	1	12	86.4			3.041304	
6	2	11	73	1566		3.735691	
7	1	14	96.3			4.432353	
8	3	12	54.2	1472	1907	5.392465	
9	1	8	72.5			5.90234	1
10	2	12	86.5	1000		6.474455	
11	3	9	83.6	1580	1854	6.952952	
12	2	10	64.8	1185		7.730511	
13	2	14	81.3	1481		8.299514	
14	3	12	61.1	1942	1562	8.911129	
15	2	14	63.2	1942		9.576217	
16	2	10	55.3	1276		10.19066	
17	1	19	56			10.77662	
18	2	13	82.1	1348		10.89641	
19	2	10	72.4	1103		11.53622	

Bin5 Statistics 18

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	14	57.4	1062	1896	0.728402	1
1	2	7	68.8	1867		0.788679	
2	2	6	88.5	1392		1.607383	
3	1	16	96.8			2.380005	
4	3	15	50.2	1085	1491	3.134802	
5	1	9	60.3			3.946676	
6	3	11	93.6	1612	1347	5.148645	
7	2	14	99.4	1272		5.764361	
8	2	6	97.4	1814		6.671898	
9	2	9	99.9	1745		7.043887	
10	2	20	82.6	1276		7.866675	
11	2	17	66	1422		8.360072	
12	3	17	65.9	1902	1398	9.19295	
13	3	18	65.8	1180	1500	9.773986	
14	1	7	89.2			10.90632	
15	2	16	55.6	1957		11.2816	

Bin5 Statistics 19

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	6	74.6	1162		0.047462	
1	2	12	97	1531		0.716922	
2	1	11	82.5			1.465011	
3	1	5	84.6			2.329351	
4	3	8	95.3	1865	1933	3.024701	
5	3	6	68.4	1954	1266	3.346352	
6	2	6	76.6	1756		4.308838	
7	3	9	81.8	1858	1965	4.836021	
8	2	11	96	1984		5.438454	
9	1	5	87			5.894699	1
10	2	17	73.1	1183		6.871938	
11	2	9	83.5	1969		7.375893	
12	2	6	97.6	1066		7.745421	
13	1	17	68.8			8.749099	
14	2	16	93	1386		8.87633	
15	2	7	92.8	1679		9.839543	
16	2	10	95	1254		10.51261	
17	3	7	61.1	1821	1306	10.87848	
18	1	11	73			11.49535	

Bin5 Statistics 20

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	18	93.5			0.769287	
1	2	19	52.1	1723		1.57663	
2	2	19	86.7	1747		2.996565	
3	2	10	56.5	1778		4.527644	
4	1	19	86.3			5.773993	1
5	3	11	76.7	1633	1256	6.62444	
6	1	16	91.9			7.37418	
7	2	8	58	1795		8.69554	
8	3	11	81.3	1851	1536	10.08689	
9	2	11	86.4	1250		11.37897	

Bin5 Statistics 21

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	8	84.4	1105		0.785555	1
1	2	13	83.5	1672		1.23851	
2	2	8	92.7	1178		2.640744	
3	3	12	83.9	1987	1130	3.726718	
4	2	6	93	1667		4.980404	
5	2	12	59	1944		6.176495	
6	1	5	69.1			6.921165	
7	3	12	65.7	1239	1078	7.954659	
8	1	12	94.2			9.205726	
9	2	10	82.9	1939		10.06896	
10	2	16	78.1	1675		11.16805	

Bin5 Statistics 22

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	13	85.3	1861		0.307083	1
1	2	12	79.1	1636		1.801471	
2	2	18	50.6	1128		3.138593	
3	2	12	72.7	1806		4.401385	
4	2	11	63.9	1084		5.179415	
5	3	20	97.9	1794	1281	6.763483	
6	3	16	79.4	1479	1013	7.44657	
7	2	9	74.6	1962		9.030064	
8	1	11	80.8			10.32388	
9	1	20	88.6			11.9609	

Bin5 Statistics 23

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	20	94.6	1394		0.499724	
1	2	8	82.4	1473		1.315847	
2	2	20	89.2	1747		2.366942	
3	1	13	66.7			2.633515	
4	2	15	74.1	1294		3.616582	
5	2	16	67.6	1690		4.326145	
6	1	15	76.1			4.88599	
7	2	11	96.5	1666		5.656547	1
8	1	19	80.7			6.494419	
9	2	17	64.6	1946		7.95918	
10	2	13	54.2	1298		8.044026	
11	2	18	87	1194		8.940485	
12	2	11	94.4	1633		10.21133	
13	2	7	97.4	1753		10.85562	
14	3	6	66.4	1730	1001	11.54432	

Bin5 Statistics 24

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	11	87.7	1306		0.374608	
1	1	18	87.6			1.088944	
2	3	15	75.2	1773	1774	1.723302	
3	3	20	55.9	1121	1679	2.575646	
4	1	7	73.1			3.469876	
5	2	19	97.6	1257		3.900251	
6	2	8	81.7	1546		4.616805	
7	2	16	98.5	1201		5.59934	
8	2	17	99.7	1842		6.029713	1
9	3	20	89.9	1485	1934	6.448458	
10	3	12	50.9	1169	1276	7.444275	
11	3	12	50.3	1464	1671	7.822055	
12	2	8	55.4	1517		9.021545	
13	3	9	89.8	1344	1637	9.624121	
14	3	12	69.9	1952	1392	10.13146	
15	2	19	51.9	1045		10.95842	
16	2	6	68	1496		11.43871	

Bin5 Statistics 25

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	12	66.6	1168		0.253927	
1	2	14	67.6	1364		1.078776	
2	1	19	50.2			2.358466	
3	2	16	58.4	1253		3.174921	
4	2	10	59.5	1514		4.379897	
5	1	8	88.9			5.754335	1
6	2	17	65.8	1008		6.094191	
7	3	20	60.4	1428	1873	7.811115	
8	3	20	72.2	1329	1666	8.62444	
9	2	20	78	1184		9.41296	
10	2	16	92.8	1093		10.33597	
11	2	6	84.9	1644		11.96097	

Bin5 Statistics 26

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	18	87.4	1224	1571	0.39605	1
1	3	18	97.9	1913	1076	1.446328	
2	2	6	86.4	1016		2.84332	
3	2	15	90.4	1464		3.747178	
4	1	8	78.7			4.673261	
5	2	12	96	1370		5.123945	
6	2	9	54.9	1696		6.740104	
7	1	18	59.6			7.606748	
8	2	5	88.4	1301		8.509392	
9	2	9	65.5	1084		9.510166	
10	3	11	52.2	1860	1437	10.04835	
11	2	6	63.2	1565		11.06415	

Bin5 Statistics 27

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	8	91.3	1449		0.29802	1
1	1	8	56.3			1.190509	
2	1	5	68.5			1.667285	
3	1	18	96.9			2.07303	
4	2	19	65.4	1701		2.641189	
5	3	9	99	1103	1060	3.294134	
6	1	12	91.3			4.320933	
7	1	13	57.4			4.854113	
8	2	12	58.3	1769		5.53121	
9	2	6	84.2	1350		5.994509	
10	1	12	64.8			6.616214	
11	2	6	94.2	1607		7.231559	
12	3	19	89.7	1187	1209	8.006503	
13	3	12	83.3	1597	1816	8.461714	
14	3	17	68.2	1792	1734	9.461374	
15	2	6	95	1877		9.907421	
16	2	6	75.2	1474		10.2511	
17	3	19	83.8	1323	1860	11.26541	
18	2	6	70.3	1710		11.57936	

Bin5 Statistics 28

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	17	74.6			0.113863	
1	3	12	84.3	1972	1534	1.142278	
2	1	18	77			1.643358	
3	2	16	93.7	1559		2.151008	
4	2	19	76.8	1283		3.47717	
5	1	16	73.4			3.595749	
6	2	14	68.1	1994		4.421649	
7	2	14	70.4	1526		5.174409	
8	2	14	87.3	1486		5.864833	1
9	2	6	86.5	1986		6.875509	
10	1	12	80.7			7.452333	
11	3	9	53	1100	1927	8.26854	
12	2	9	89.3	1719		8.532593	
13	1	7	82.3			9.283372	
14	2	7	73.1	1661		10.00141	
15	3	10	66.1	1853	1297	11.26143	
16	1	9	97.1			11.39245	

Bin5 Statistics 29

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	17	77.2	1880		0.075808	
1	1	6	68.8			1.115034	
2	2	12	68.3	1531		1.683587	
3	2	11	68.3	1093		2.974091	
4	2	11	97.8	1123		3.73607	
5	2	10	79.7	1520		4.262762	
6	2	12	84.1	1840		4.903291	
7	2	9	61.2	1445		5.408103	
8	2	9	82.9	1459		6.489277	1
9	1	9	78.4			7.367873	
10	2	16	56.9	1809		7.929716	
11	2	15	83.3	1832		8.320437	
12	3	8	77.5	1507	1751	9.726572	
13	1	12	77.3			10.29177	
14	2	20	58.5	1205		10.75903	
15	2	8	70.7	1333		11.29965	

Bin5 Statistics 30

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	16	60.8	1075		0.196408	1
1	2	13	56.5	1297		0.796832	
2	1	14	76			2.112515	
3	3	15	59.2	1438	1048	2.418091	
4	1	13	71.5			3.13164	
5	2	9	64.6	1635		3.875868	
6	2	15	92.6	1910		4.96509	
7	3	8	77.7	1475	1284	5.617718	
8	2	19	50.1	1436		6.2127	
9	1	8	67.3			7.332185	
10	2	11	52.2	1305		7.794899	
11	3	8	86.4	1584	1737	8.894599	
12	2	12	83.5	1513		9.620455	
13	2	19	96.2	1610		10.42038	
14	2	18	69.5	1066		10.92565	
15	3	17	85.3	1985	1783	11.27461	

Table-6 Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)	Hopping Sequence
1	5580	9	1	333	1	5427.0, 5463.0, 5548.0, 5309.0, 5363.0, 5409.0, 5680.0, 5384.0, 5313.0, 5341.0, 5696.0, 5428.0, 5584.0, 5412.0, 5454.0, 5471.0, 5495.0, 5399.0, 5337.0, 5555.0, 5464.0, 5429.0, 5675.0, 5257.0, 5359.0, 5315.0, 5353.0, 5620.0, 5534.0, 5645.0, 5486.0, 5340.0, 5350.0, 5458.0, 5564.0, 5515.0, 5633.0, 5344.0, 5390.0, 5378.0, 5552.0, 5407.0, 5387.0, 5421.0, 5566.0, 5595.0, 5468.0, 5634.0, 5410.0, 5497.0, 5589.0, 5304.0, 5499.0, 5712.0, 5621.0, 5652.0, 5343.0, 5613.0, 5356.0, 5594.0, 5459.0, 5663.0, 5316.0, 5425.0, 5523.0, 5286.0, 5520.0, 5550.0, 5513.0, 5647.0, 5526.0, 5541.0, 5306.0, 5510.0, 5380.0, 5661.0, 5491.0, 5565.0, 5345.0, 5346.0, 5408.0, 5281.0, 5651.0, 5392.0, 5689.0, 5490.0, 5447.0, 5395.0, 5681.0, 5255.0, 5368.0, 5605.0, 5636.0, 5401.0, 5494.0, 5455.0, 5559.0, 5334.0, 5706.0, 5321.0 (number of hits: 5)
2	5580	9	1	333	1	5401.0, 5488.0, 5447.0, 5598.0, 5618.0, 5565.0, 5309.0, 5356.0, 5277.0, 5613.0, 5535.0, 5451.0, 5700.0, 5273.0, 5542.0, 5625.0, 5404.0, 5386.0, 5574.0, 5348.0, 5481.0, 5476.0, 5325.0, 5684.0, 5518.0, 5424.0, 5628.0, 5678.0, 5313.0, 5305.0, 5365.0, 5285.0, 5294.0, 5342.0, 5364.0, 5666.0, 5534.0, 5391.0, 5298.0, 5368.0, 5396.0, 5445.0, 5323.0, 5262.0, 5369.0, 5554.0, 5310.0, 5665.0, 5562.0, 5597.0, 5557.0, 5718.0, 5575.0, 5397.0, 5626.0, 5622.0, 5497.0, 5653.0, 5702.0, 5706.0, 5547.0, 5345.0, 5337.0, 5442.0, 5319.0, 5635.0, 5459.0, 5604.0, 5324.0, 5570.0, 5271.0, 5703.0, 5536.0, 5576.0, 5429.0, 5425.0, 5605.0, 5444.0, 5343.0, 5610.0, 5463.0, 5633.0, 5566.0, 5281.0, 5486.0, 5428.0, 5480.0, 5627.0, 5549.0, 5682.0, 5600.0, 5443.0, 5571.0, 5672.0, 5594.0, 5663.0, 5307.0, 5335.0, 5321.0, 5332.0 (number of hits: 8)
3	5580	9	1	333	1	5572.0, 5543.0, 5521.0, 5628.0, 5534.0, 5474.0, 5718.0, 5624.0, 5254.0, 5261.0, 5419.0, 5325.0, 5324.0, 5680.0, 5480.0, 5267.0, 5446.0, 5259.0, 5392.0, 5283.0, 5720.0, 5516.0, 5263.0, 5443.0, 5368.0, 5354.0, 5644.0, 5439.0, 5661.0, 5528.0, 5456.0, 5444.0, 5492.0, 5531.0, 5320.0, 5636.0, 5607.0, 5669.0, 5416.0, 5461.0, 5462.0, 5477.0, 5257.0, 5681.0, 5538.0, 5614.0, 5658.0, 5550.0, 5509.0, 5526.0, 5610.0, 5488.0, 5436.0, 5721.0, 5715.0,

						5556.0, 5376.0, 5716.0, 5585.0, 5413.0, 5594.0, 5689.0, 5706.0, 5369.0, 5683.0, 5286.0, 5491.0, 5260.0, 5404.0, 5357.0, 5586.0, 5704.0, 5539.0, 5701.0, 5326.0, 5652.0, 5296.0, 5685.0, 5520.0, 5473.0, 5415.0, 5666.0, 5280.0, 5577.0, 5601.0, 5449.0, 5489.0, 5375.0, 5265.0, 5518.0, 5584.0, 5361.0, 5353.0, 5567.0, 5649.0, 5537.0, 5665.0, 5605.0, 5470.0, 5722.0 (number of hits: 2)
4	5580	9	1	333	1	5507.0, 5368.0, 5382.0, 5721.0, 5446.0, 5606.0, 5650.0, 5687.0, 5502.0, 5661.0, 5581.0, 5349.0, 5704.0, 5435.0, 5374.0, 5706.0, 5481.0, 5522.0, 5631.0, 5712.0, 5669.0, 5353.0, 5372.0, 5622.0, 5697.0, 5618.0, 5396.0, 5597.0, 5643.0, 5278.0, 5357.0, 5344.0, 5648.0, 5688.0, 5460.0, 5598.0, 5670.0, 5365.0, 5666.0, 5348.0, 5577.0, 5370.0, 5635.0, 5667.0, 5681.0, 5331.0, 5636.0, 5572.0, 5411.0, 5609.0, 5303.0, 5397.0, 5660.0, 5567.0, 5653.0, 5695.0, 5651.0, 5535.0, 5552.0, 5619.0, 5590.0, 5656.0, 5543.0, 5623.0, 5659.0, 5339.0, 5525.0, 5352.0, 5315.0, 5311.0, 5683.0, 5268.0, 5287.0, 5642.0, 5404.0, 5328.0, 5616.0, 5391.0, 5264.0, 5657.0, 5284.0, 5523.0, 5505.0, 5386.0, 5612.0, 5347.0, 5675.0, 5534.0, 5413.0, 5610.0, 5330.0, 5678.0, 5338.0, 5587.0, 5529.0, 5594.0, 5425.0, 5629.0, 5539.0, 5444.0 (number of hits: 3)
5	5580	9	1	333	1	5338.0, 5511.0, 5325.0, 5483.0, 5579.0, 5314.0, 5573.0, 5305.0, 5294.0, 5633.0, 5412.0, 5501.0, 5343.0, 5348.0, 5635.0, 5407.0, 5512.0, 5491.0, 5515.0, 5435.0, 5530.0, 5274.0, 5262.0, 5502.0, 5489.0, 5625.0, 5440.0, 5639.0, 5585.0, 5664.0, 5456.0, 5721.0, 5393.0, 5618.0, 5351.0, 5476.0, 5451.0, 5266.0, 5276.0, 5486.0, 5457.0, 5594.0, 5410.0, 5438.0, 5350.0, 5413.0, 5278.0, 5306.0, 5458.0, 5356.0, 5447.0, 5526.0, 5632.0, 5582.0, 5683.0, 5389.0, 5285.0, 5259.0, 5271.0, 5694.0, 5629.0, 5359.0, 5670.0, 5310.0, 5624.0, 5460.0, 5505.0, 5370.0, 5297.0, 5700.0, 5424.0, 5542.0, 5723.0, 5710.0, 5250.0, 5513.0, 5487.0, 5372.0, 5649.0, 5464.0, 5503.0, 5517.0, 5660.0, 5514.0, 5339.0, 5681.0, 5601.0, 5429.0, 5280.0, 5371.0, 5627.0, 5268.0, 5545.0, 5516.0, 5532.0, 5564.0, 5621.0, 5399.0, 5628.0, 5720.0 (number of hits: 7)
6	5580	9	1	333	1	5669.0, 5573.0, 5579.0, 5610.0, 5667.0, 5298.0, 5580.0, 5411.0, 5418.0, 5719.0, 5683.0, 5326.0, 5270.0, 5398.0, 5589.0, 5328.0, 5615.0, 5666.0, 5407.0, 5452.0, 5521.0, 5307.0, 5317.0, 5363.0, 5585.0, 5602.0, 5611.0, 5715.0, 5494.0, 5498.0, 5524.0, 5454.0, 5415.0, 5534.0, 5721.0, 5532.0, 5717.0, 5512.0, 5540.0, 5520.0,

						5416.0, 5308.0, 5563.0, 5429.0, 5451.0, 5362.0, 5590.0, 5679.0, 5335.0, 5592.0, 5259.0, 5528.0, 5447.0, 5692.0, 5280.0, 5504.0, 5364.0, 5555.0, 5599.0, 5284.0, 5544.0, 5324.0, 5576.0, 5677.0, 5378.0, 5456.0, 5531.0, 5330.0, 5431.0, 5453.0, 5373.0, 5276.0, 5375.0, 5583.0, 5645.0, 5621.0, 5650.0, 5696.0, 5697.0, 5289.0, 5340.0, 5594.0, 5500.0, 5465.0, 5638.0, 5513.0, 5525.0, 5269.0, 5567.0, 5470.0, 5300.0, 5459.0, 5641.0, 5385.0, 5428.0, 5312.0, 5643.0, 5624.0, 5633.0, 5409.0 (number of hits: 6)
7	5580	9	1	333	1	5608.0, 5417.0, 5395.0, 5268.0, 5382.0, 5693.0, 5265.0, 5531.0, 5467.0, 5280.0, 5260.0, 5341.0, 5657.0, 5711.0, 5714.0, 5481.0, 5503.0, 5289.0, 5705.0, 5456.0, 5529.0, 5318.0, 5507.0, 5527.0, 5358.0, 5487.0, 5637.0, 5648.0, 5514.0, 5584.0, 5298.0, 5453.0, 5489.0, 5440.0, 5606.0, 5554.0, 5671.0, 5484.0, 5454.0, 5627.0, 5464.0, 5305.0, 5591.0, 5665.0, 5390.0, 5715.0, 5572.0, 5302.0, 5412.0, 5389.0, 5718.0, 5520.0, 5306.0, 5721.0, 5483.0, 5569.0, 5601.0, 5546.0, 5538.0, 5668.0, 5595.0, 5516.0, 5472.0, 5399.0, 5373.0, 5681.0, 5340.0, 5696.0, 5477.0, 5692.0, 5684.0, 5365.0, 5262.0, 5264.0, 5430.0, 5504.0, 5607.0, 5501.0, 5588.0, 5273.0, 5552.0, 5707.0, 5445.0, 5307.0, 5623.0, 5577.0, 5286.0, 5299.0, 5476.0, 5690.0, 5557.0, 5540.0, 5479.0, 5435.0, 5662.0, 5563.0, 5455.0, 5539.0, 5442.0, 5448.0 (number of hits: 8)
8	5580	9	1	333	1	5419.0, 5584.0, 5591.0, 5553.0, 5509.0, 5549.0, 5667.0, 5625.0, 5531.0, 5497.0, 5678.0, 5307.0, 5666.0, 5611.0, 5714.0, 5566.0, 5312.0, 5282.0, 5397.0, 5703.0, 5279.0, 5548.0, 5408.0, 5391.0, 5519.0, 5659.0, 5352.0, 5595.0, 5291.0, 5655.0, 5596.0, 5467.0, 5637.0, 5299.0, 5530.0, 5700.0, 5539.0, 5407.0, 5403.0, 5390.0, 5715.0, 5457.0, 5556.0, 5471.0, 5704.0, 5568.0, 5460.0, 5646.0, 5699.0, 5529.0, 5618.0, 5324.0, 5501.0, 5402.0, 5506.0, 5619.0, 5598.0, 5480.0, 5283.0, 5438.0, 5278.0, 5351.0, 5572.0, 5464.0, 5514.0, 5487.0, 5644.0, 5426.0, 5510.0, 5435.0, 5569.0, 5459.0, 5477.0, 5489.0, 5380.0, 5710.0, 5446.0, 5712.0, 5639.0, 5401.0, 5458.0, 5275.0, 5313.0, 5552.0, 5252.0, 5378.0, 5395.0, 5701.0, 5271.0, 5621.0, 5628.0, 5453.0, 5286.0, 5515.0, 5616.0, 5651.0, 5361.0, 5672.0, 5670.0, 5573.0 (number of hits: 6)
9	5580	9	1	333	1	5443.0, 5705.0, 5505.0, 5446.0, 5633.0, 5326.0, 5441.0, 5533.0, 5669.0, 5300.0, 5316.0, 5526.0, 5417.0, 5678.0, 5330.0, 5629.0, 5475.0, 5635.0, 5413.0, 5593.0, 5643.0, 5554.0, 5648.0, 5340.0, 5470.0,

						5604.0, 5465.0, 5344.0, 5312.0, 5607.0, 5458.0, 5398.0, 5381.0, 5384.0, 5601.0, 5691.0, 5723.0, 5638.0, 5393.0, 5573.0, 5317.0, 5427.0, 5466.0, 5359.0, 5545.0, 5329.0, 5599.0, 5617.0, 5600.0, 5476.0, 5616.0, 5304.0, 5685.0, 5502.0, 5677.0, 5414.0, 5358.0, 5342.0, 5388.0, 5523.0, 5336.0, 5453.0, 5649.0, 5484.0, 5713.0, 5308.0, 5706.0, 5594.0, 5492.0, 5497.0, 5448.0, 5274.0, 5544.0, 5255.0, 5699.0, 5331.0, 5259.0, 5380.0, 5425.0, 5666.0, 5345.0, 5636.0, 5457.0, 5288.0, 5319.0, 5507.0, 5318.0, 5311.0, 5320.0, 5509.0, 5667.0, 5602.0, 5392.0, 5437.0, 5515.0, 5716.0, 5618.0, 5665.0, 5534.0, 5377.0 (number of hits: 6)
10	5580	9	1	333	1	5614.0, 5306.0, 5337.0, 5692.0, 5511.0, 5681.0, 5462.0, 5440.0, 5647.0, 5518.0, 5379.0, 5579.0, 5323.0, 5568.0, 5564.0, 5469.0, 5291.0, 5474.0, 5468.0, 5303.0, 5538.0, 5417.0, 5398.0, 5439.0, 5587.0, 5302.0, 5502.0, 5561.0, 5418.0, 5619.0, 5477.0, 5369.0, 5604.0, 5457.0, 5678.0, 5594.0, 5528.0, 5287.0, 5359.0, 5467.0, 5516.0, 5642.0, 5484.0, 5534.0, 5361.0, 5413.0, 5422.0, 5574.0, 5336.0, 5660.0, 5669.0, 5260.0, 5298.0, 5609.0, 5293.0, 5589.0, 5532.0, 5613.0, 5392.0, 5453.0, 5472.0, 5513.0, 5533.0, 5560.0, 5416.0, 5699.0, 5539.0, 5437.0, 5565.0, 5625.0, 5284.0, 5654.0, 5714.0, 5464.0, 5548.0, 5492.0, 5552.0, 5562.0, 5363.0, 5507.0, 5250.0, 5637.0, 5339.0, 5661.0, 5400.0, 5451.0, 5670.0, 5346.0, 5500.0, 5399.0, 5599.0, 5473.0, 5573.0, 5328.0, 5689.0, 5588.0, 5356.0, 5310.0, 5370.0, 5716.0 (number of hits: 8)
11	5580	9	1	333	1	5710.0, 5494.0, 5359.0, 5708.0, 5443.0, 5389.0, 5678.0, 5650.0, 5365.0, 5643.0, 5534.0, 5671.0, 5715.0, 5320.0, 5632.0, 5345.0, 5372.0, 5647.0, 5373.0, 5267.0, 5377.0, 5410.0, 5264.0, 5560.0, 5314.0, 5705.0, 5366.0, 5369.0, 5378.0, 5520.0, 5397.0, 5316.0, 5713.0, 5556.0, 5269.0, 5393.0, 5636.0, 5395.0, 5666.0, 5477.0, 5459.0, 5655.0, 5676.0, 5641.0, 5546.0, 5618.0, 5421.0, 5693.0, 5524.0, 5324.0, 5595.0, 5663.0, 5412.0, 5533.0, 5333.0, 5709.0, 5686.0, 5386.0, 5539.0, 5449.0, 5649.0, 5355.0, 5540.0, 5382.0, 5644.0, 5482.0, 5400.0, 5531.0, 5334.0, 5384.0, 5404.0, 5466.0, 5563.0, 5327.0, 5371.0, 5437.0, 5621.0, 5411.0, 5349.0, 5442.0, 5331.0, 5266.0, 5590.0, 5514.0, 5597.0, 5440.0, 5460.0, 5562.0, 5321.0, 5480.0, 5300.0, 5512.0, 5681.0, 5302.0, 5275.0, 5323.0, 5488.0, 5261.0, 5436.0, 5585.0 (number of hits: 3)
12	5580	9	1	333	1	5557.0, 5279.0, 5698.0, 5469.0, 5465.0, 5638.0, 5666.0, 5588.0, 5459.0, 5641.0,

						5627.0, 5678.0, 5478.0, 5556.0, 5276.0, 5273.0, 5272.0, 5317.0, 5603.0, 5561.0, 5291.0, 5591.0, 5699.0, 5592.0, 5506.0, 5611.0, 5440.0, 5318.0, 5364.0, 5257.0, 5390.0, 5625.0, 5464.0, 5286.0, 5710.0, 5290.0, 5460.0, 5360.0, 5660.0, 5427.0, 5426.0, 5429.0, 5329.0, 5448.0, 5613.0, 5493.0, 5632.0, 5675.0, 5562.0, 5577.0, 5681.0, 5656.0, 5579.0, 5444.0, 5450.0, 5696.0, 5346.0, 5388.0, 5334.0, 5482.0, 5350.0, 5651.0, 5328.0, 5495.0, 5560.0, 5575.0, 5616.0, 5264.0, 5365.0, 5601.0, 5258.0, 5717.0, 5355.0, 5518.0, 5393.0, 5483.0, 5612.0, 5430.0, 5576.0, 5304.0, 5547.0, 5392.0, 5522.0, 5659.0, 5250.0, 5379.0, 5590.0, 5327.0, 5700.0, 5565.0, 5428.0, 5569.0, 5314.0, 5667.0, 5385.0, 5295.0, 5425.0, 5715.0, 5403.0, 5283.0 (number of hits: 6)
13	5580	9	1	333	1	5427.0, 5606.0, 5253.0, 5602.0, 5497.0, 5336.0, 5663.0, 5420.0, 5314.0, 5404.0, 5576.0, 5468.0, 5701.0, 5649.0, 5544.0, 5380.0, 5704.0, 5395.0, 5299.0, 5303.0, 5683.0, 5255.0, 5715.0, 5265.0, 5626.0, 5282.0, 5535.0, 5718.0, 5366.0, 5337.0, 5555.0, 5385.0, 5509.0, 5551.0, 5678.0, 5330.0, 5496.0, 5262.0, 5526.0, 5473.0, 5333.0, 5590.0, 5711.0, 5682.0, 5656.0, 5647.0, 5354.0, 5527.0, 5658.0, 5293.0, 5369.0, 5640.0, 5597.0, 5359.0, 5401.0, 5517.0, 5305.0, 5584.0, 5436.0, 5371.0, 5263.0, 5549.0, 5582.0, 5355.0, 5675.0, 5532.0, 5464.0, 5523.0, 5677.0, 5360.0, 5341.0, 5329.0, 5465.0, 5591.0, 5287.0, 5457.0, 5357.0, 5585.0, 5254.0, 5498.0, 5500.0, 5627.0, 5425.0, 5327.0, 5382.0, 5259.0, 5512.0, 5350.0, 5268.0, 5573.0, 5577.0, 5340.0, 5424.0, 5561.0, 5518.0, 5511.0, 5586.0, 5721.0, 5533.0, 5654.0 (number of hits: 6)
14	5580	9	1	333	1	5546.0, 5502.0, 5524.0, 5391.0, 5682.0, 5312.0, 5493.0, 5585.0, 5627.0, 5389.0, 5542.0, 5491.0, 5376.0, 5706.0, 5632.0, 5642.0, 5336.0, 5618.0, 5616.0, 5463.0, 5701.0, 5574.0, 5420.0, 5635.0, 5357.0, 5526.0, 5461.0, 5708.0, 5660.0, 5423.0, 5465.0, 5254.0, 5489.0, 5624.0, 5690.0, 5267.0, 5501.0, 5289.0, 5280.0, 5395.0, 5612.0, 5702.0, 5634.0, 5666.0, 5677.0, 5595.0, 5599.0, 5697.0, 5444.0, 5696.0, 5623.0, 5577.0, 5449.0, 5636.0, 5416.0, 5669.0, 5640.0, 5326.0, 5663.0, 5387.0, 5428.0, 5362.0, 5562.0, 5459.0, 5646.0, 5340.0, 5426.0, 5396.0, 5275.0, 5530.0, 5311.0, 5352.0, 5559.0, 5393.0, 5353.0, 5613.0, 5583.0, 5272.0, 5351.0, 5596.0, 5320.0, 5713.0, 5262.0, 5597.0, 5545.0, 5716.0, 5402.0, 5486.0, 5604.0, 5674.0, 5688.0, 5415.0, 5276.0, 5288.0, 5518.0, 5404.0, 5385.0, 5540.0, 5284.0, 5529.0

						(number of hits: 4)
15	5580	9	1	333	1	5309.0, 5381.0, 5689.0, 5374.0, 5613.0, 5287.0, 5491.0, 5620.0, 5543.0, 5278.0, 5642.0, 5378.0, 5301.0, 5612.0, 5276.0, 5353.0, 5386.0, 5367.0, 5711.0, 5332.0, 5676.0, 5313.0, 5510.0, 5433.0, 5446.0, 5390.0, 5506.0, 5678.0, 5699.0, 5701.0, 5377.0, 5312.0, 5414.0, 5527.0, 5648.0, 5692.0, 5455.0, 5255.0, 5666.0, 5434.0, 5358.0, 5568.0, 5583.0, 5582.0, 5608.0, 5457.0, 5340.0, 5718.0, 5429.0, 5531.0, 5634.0, 5569.0, 5639.0, 5607.0, 5361.0, 5264.0, 5717.0, 5253.0, 5658.0, 5261.0, 5254.0, 5722.0, 5325.0, 5611.0, 5409.0, 5266.0, 5709.0, 5476.0, 5438.0, 5318.0, 5719.0, 5697.0, 5316.0, 5410.0, 5587.0, 5545.0, 5295.0, 5723.0, 5291.0, 5440.0, 5622.0, 5342.0, 5518.0, 5344.0, 5484.0, 5458.0, 5562.0, 5529.0, 5461.0, 5300.0, 5280.0, 5424.0, 5430.0, 5671.0, 5297.0, 5326.0, 5579.0, 5574.0, 5305.0, 5603.0 (number of hits: 10)
16	5580	9	1	333	1	5661.0, 5329.0, 5642.0, 5310.0, 5483.0, 5492.0, 5577.0, 5621.0, 5510.0, 5425.0, 5685.0, 5711.0, 5704.0, 5637.0, 5268.0, 5326.0, 5499.0, 5694.0, 5654.0, 5347.0, 5460.0, 5696.0, 5401.0, 5528.0, 5569.0, 5314.0, 5652.0, 5705.0, 5567.0, 5527.0, 5296.0, 5340.0, 5611.0, 5545.0, 5294.0, 5467.0, 5473.0, 5700.0, 5352.0, 5603.0, 5561.0, 5430.0, 5716.0, 5592.0, 5254.0, 5402.0, 5623.0, 5505.0, 5389.0, 5674.0, 5535.0, 5551.0, 5570.0, 5332.0, 5394.0, 5562.0, 5684.0, 5357.0, 5619.0, 5717.0, 5714.0, 5633.0, 5285.0, 5382.0, 5719.0, 5319.0, 5454.0, 5432.0, 5396.0, 5587.0, 5601.0, 5546.0, 5631.0, 5683.0, 5530.0, 5423.0, 5703.0, 5493.0, 5650.0, 5305.0, 5708.0, 5638.0, 5615.0, 5279.0, 5602.0, 5610.0, 5677.0, 5379.0, 5515.0, 5429.0, 5323.0, 5579.0, 5400.0, 5306.0, 5372.0, 5511.0, 5648.0, 5687.0, 5261.0, 5409.0 (number of hits: 7)
17	5580	9	1	333	1	5270.0, 5501.0, 5277.0, 5518.0, 5507.0, 5545.0, 5367.0, 5698.0, 5574.0, 5648.0, 5295.0, 5320.0, 5422.0, 5635.0, 5255.0, 5586.0, 5263.0, 5416.0, 5381.0, 5685.0, 5628.0, 5697.0, 5514.0, 5316.0, 5546.0, 5663.0, 5440.0, 5314.0, 5655.0, 5555.0, 5560.0, 5439.0, 5548.0, 5304.0, 5576.0, 5489.0, 5374.0, 5388.0, 5499.0, 5337.0, 5641.0, 5664.0, 5712.0, 5283.0, 5432.0, 5561.0, 5540.0, 5642.0, 5654.0, 5563.0, 5253.0, 5502.0, 5451.0, 5652.0, 5538.0, 5479.0, 5318.0, 5259.0, 5379.0, 5681.0, 5363.0, 5531.0, 5454.0, 5288.0, 5455.0, 5339.0, 5674.0, 5610.0, 5632.0, 5375.0, 5535.0, 5480.0, 5650.0, 5417.0, 5276.0, 5433.0, 5286.0, 5481.0, 5335.0, 5449.0, 5400.0, 5640.0, 5659.0, 5347.0, 5637.0,

						5266.0, 5348.0, 5702.0, 5667.0, 5340.0, 5406.0, 5622.0, 5383.0, 5380.0, 5645.0, 5677.0, 5393.0, 5617.0, 5324.0, 5657.0 (number of hits: 5)
18	5580	9	1	333	1	5657.0, 5607.0, 5465.0, 5673.0, 5303.0, 5406.0, 5711.0, 5563.0, 5582.0, 5543.0, 5530.0, 5629.0, 5415.0, 5473.0, 5684.0, 5662.0, 5606.0, 5463.0, 5454.0, 5650.0, 5431.0, 5460.0, 5671.0, 5579.0, 5636.0, 5315.0, 5597.0, 5487.0, 5472.0, 5514.0, 5430.0, 5613.0, 5561.0, 5572.0, 5452.0, 5640.0, 5570.0, 5663.0, 5449.0, 5638.0, 5421.0, 5409.0, 5637.0, 5598.0, 5591.0, 5455.0, 5478.0, 5447.0, 5496.0, 5316.0, 5471.0, 5353.0, 5392.0, 5620.0, 5380.0, 5374.0, 5311.0, 5417.0, 5721.0, 5716.0, 5439.0, 5451.0, 5442.0, 5448.0, 5333.0, 5631.0, 5693.0, 5422.0, 5276.0, 5282.0, 5474.0, 5676.0, 5445.0, 5281.0, 5628.0, 5687.0, 5480.0, 5361.0, 5254.0, 5585.0, 5557.0, 5255.0, 5717.0, 5391.0, 5550.0, 5551.0, 5674.0, 5618.0, 5337.0, 5594.0, 5285.0, 5401.0, 5645.0, 5476.0, 5290.0, 5432.0, 5695.0, 5334.0, 5308.0, 5706.0 (number of hits: 5)
19	5580	9	1	333	1	5351.0, 5696.0, 5479.0, 5362.0, 5541.0, 5426.0, 5375.0, 5519.0, 5658.0, 5605.0, 5322.0, 5697.0, 5677.0, 5262.0, 5376.0, 5454.0, 5511.0, 5356.0, 5396.0, 5264.0, 5332.0, 5439.0, 5573.0, 5272.0, 5435.0, 5717.0, 5344.0, 5282.0, 5343.0, 5537.0, 5269.0, 5472.0, 5555.0, 5348.0, 5496.0, 5312.0, 5615.0, 5515.0, 5444.0, 5307.0, 5267.0, 5299.0, 5335.0, 5431.0, 5469.0, 5401.0, 5564.0, 5259.0, 5316.0, 5613.0, 5514.0, 5676.0, 5263.0, 5639.0, 5320.0, 5446.0, 5534.0, 5441.0, 5265.0, 5403.0, 5386.0, 5586.0, 5471.0, 5355.0, 5577.0, 5557.0, 5455.0, 5693.0, 5617.0, 5505.0, 5330.0, 5358.0, 5504.0, 5492.0, 5495.0, 5268.0, 5425.0, 5410.0, 5616.0, 5255.0, 5497.0, 5699.0, 5575.0, 5328.0, 5648.0, 5657.0, 5527.0, 5637.0, 5650.0, 5279.0, 5445.0, 5619.0, 5612.0, 5524.0, 5692.0, 5600.0, 5407.0, 5595.0, 5462.0, 5510.0 (number of hits: 3)
20	5580	9	1	333	1	5691.0, 5528.0, 5545.0, 5344.0, 5455.0, 5319.0, 5323.0, 5543.0, 5564.0, 5349.0, 5522.0, 5439.0, 5546.0, 5452.0, 5486.0, 5362.0, 5604.0, 5557.0, 5711.0, 5274.0, 5402.0, 5289.0, 5260.0, 5596.0, 5352.0, 5538.0, 5405.0, 5680.0, 5312.0, 5410.0, 5409.0, 5622.0, 5690.0, 5390.0, 5397.0, 5435.0, 5385.0, 5611.0, 5540.0, 5702.0, 5693.0, 5556.0, 5468.0, 5589.0, 5520.0, 5383.0, 5621.0, 5501.0, 5494.0, 5706.0, 5675.0, 5325.0, 5683.0, 5334.0, 5386.0, 5529.0, 5503.0, 5371.0, 5281.0, 5324.0, 5480.0, 5617.0, 5508.0, 5354.0, 5454.0, 5264.0, 5424.0, 5541.0, 5305.0, 5509.0,

						5704.0, 5552.0, 5610.0, 5656.0, 5608.0, 5472.0, 5377.0, 5700.0, 5637.0, 5602.0, 5606.0, 5548.0, 5536.0, 5269.0, 5434.0, 5583.0, 5663.0, 5483.0, 5330.0, 5629.0, 5477.0, 5674.0, 5341.0, 5569.0, 5682.0, 5308.0, 5328.0, 5599.0, 5657.0, 5598.0 (number of hits: 4)
21	5580	9	1	333	1	5631.0, 5390.0, 5444.0, 5331.0, 5651.0, 5412.0, 5358.0, 5303.0, 5475.0, 5624.0, 5313.0, 5523.0, 5352.0, 5644.0, 5609.0, 5540.0, 5536.0, 5549.0, 5596.0, 5612.0, 5608.0, 5486.0, 5341.0, 5720.0, 5392.0, 5367.0, 5511.0, 5723.0, 5256.0, 5477.0, 5318.0, 5713.0, 5592.0, 5516.0, 5674.0, 5450.0, 5302.0, 5497.0, 5575.0, 5507.0, 5279.0, 5696.0, 5682.0, 5684.0, 5676.0, 5259.0, 5369.0, 5283.0, 5641.0, 5278.0, 5273.0, 5362.0, 5626.0, 5505.0, 5667.0, 5468.0, 5493.0, 5347.0, 5668.0, 5648.0, 5416.0, 5461.0, 5628.0, 5327.0, 5263.0, 5722.0, 5642.0, 5473.0, 5339.0, 5564.0, 5557.0, 5431.0, 5404.0, 5328.0, 5688.0, 5518.0, 5673.0, 5345.0, 5391.0, 5252.0, 5561.0, 5459.0, 5439.0, 5708.0, 5671.0, 5602.0, 5335.0, 5501.0, 5640.0, 5307.0, 5534.0, 5707.0, 5267.0, 5487.0, 5300.0, 5472.0, 5662.0, 5479.0, 5338.0, 5380.0 (number of hits: 5)
22	5580	9	1	333	1	5256.0, 5283.0, 5412.0, 5695.0, 5423.0, 5427.0, 5616.0, 5636.0, 5619.0, 5378.0, 5463.0, 5686.0, 5601.0, 5457.0, 5275.0, 5287.0, 5434.0, 5344.0, 5572.0, 5701.0, 5565.0, 5498.0, 5495.0, 5395.0, 5461.0, 5676.0, 5456.0, 5471.0, 5318.0, 5551.0, 5646.0, 5454.0, 5607.0, 5292.0, 5386.0, 5660.0, 5553.0, 5286.0, 5449.0, 5483.0, 5257.0, 5255.0, 5645.0, 5671.0, 5526.0, 5527.0, 5655.0, 5429.0, 5487.0, 5492.0, 5653.0, 5556.0, 5288.0, 5586.0, 5464.0, 5419.0, 5599.0, 5444.0, 5690.0, 5596.0, 5513.0, 5691.0, 5440.0, 5305.0, 5484.0, 5258.0, 5598.0, 5591.0, 5402.0, 5707.0, 5356.0, 5382.0, 5475.0, 5466.0, 5512.0, 5534.0, 5600.0, 5403.0, 5361.0, 5552.0, 5576.0, 5296.0, 5571.0, 5605.0, 5274.0, 5627.0, 5404.0, 5372.0, 5525.0, 5652.0, 5577.0, 5614.0, 5455.0, 5678.0, 5698.0, 5330.0, 5279.0, 5503.0, 5347.0, 5680.0 (number of hits: 6)
23	5580	9	1	333	1	5569.0, 5374.0, 5265.0, 5547.0, 5589.0, 5296.0, 5473.0, 5679.0, 5260.0, 5665.0, 5717.0, 5470.0, 5517.0, 5681.0, 5721.0, 5516.0, 5657.0, 5616.0, 5501.0, 5494.0, 5480.0, 5695.0, 5588.0, 5693.0, 5691.0, 5483.0, 5274.0, 5636.0, 5295.0, 5316.0, 5271.0, 5364.0, 5491.0, 5511.0, 5285.0, 5701.0, 5645.0, 5638.0, 5677.0, 5467.0, 5578.0, 5337.0, 5431.0, 5662.0, 5624.0, 5503.0, 5633.0, 5377.0, 5282.0, 5305.0, 5339.0, 5716.0, 5570.0, 5510.0, 5653.0,

						5435.0, 5513.0, 5411.0, 5458.0, 5456.0, 5686.0, 5425.0, 5619.0, 5598.0, 5397.0, 5307.0, 5384.0, 5715.0, 5270.0, 5646.0, 5476.0, 5332.0, 5452.0, 5348.0, 5487.0, 5252.0, 5302.0, 5461.0, 5401.0, 5477.0, 5441.0, 5711.0, 5630.0, 5508.0, 5313.0, 5406.0, 5635.0, 5551.0, 5263.0, 5593.0, 5641.0, 5287.0, 5324.0, 5317.0, 5429.0, 5621.0, 5353.0, 5532.0, 5667.0, 5709.0 (number of hits: 8)
24	5580	9	1	333	1	5303.0, 5401.0, 5381.0, 5563.0, 5273.0, 5620.0, 5682.0, 5426.0, 5546.0, 5464.0, 5528.0, 5577.0, 5556.0, 5640.0, 5437.0, 5501.0, 5695.0, 5327.0, 5668.0, 5550.0, 5635.0, 5707.0, 5413.0, 5700.0, 5439.0, 5369.0, 5505.0, 5297.0, 5487.0, 5649.0, 5678.0, 5427.0, 5601.0, 5642.0, 5542.0, 5611.0, 5287.0, 5502.0, 5521.0, 5466.0, 5480.0, 5344.0, 5565.0, 5712.0, 5631.0, 5538.0, 5347.0, 5639.0, 5536.0, 5329.0, 5625.0, 5405.0, 5570.0, 5614.0, 5518.0, 5306.0, 5407.0, 5621.0, 5578.0, 5568.0, 5719.0, 5630.0, 5415.0, 5390.0, 5430.0, 5477.0, 5374.0, 5275.0, 5613.0, 5680.0, 5662.0, 5608.0, 5422.0, 5290.0, 5294.0, 5372.0, 5259.0, 5267.0, 5397.0, 5255.0, 5638.0, 5342.0, 5633.0, 5688.0, 5452.0, 5455.0, 5341.0, 5251.0, 5674.0, 5447.0, 5385.0, 5337.0, 5671.0, 5360.0, 5586.0, 5263.0, 5529.0, 5409.0, 5300.0, 5699.0 (number of hits: 7)
25	5580	9	1	333	1	5693.0, 5505.0, 5386.0, 5587.0, 5485.0, 5303.0, 5692.0, 5696.0, 5457.0, 5338.0, 5255.0, 5683.0, 5298.0, 5541.0, 5656.0, 5320.0, 5402.0, 5384.0, 5626.0, 5549.0, 5559.0, 5438.0, 5638.0, 5528.0, 5484.0, 5269.0, 5572.0, 5570.0, 5535.0, 5259.0, 5443.0, 5425.0, 5316.0, 5593.0, 5662.0, 5323.0, 5704.0, 5534.0, 5446.0, 5621.0, 5362.0, 5660.0, 5614.0, 5532.0, 5474.0, 5510.0, 5357.0, 5603.0, 5309.0, 5411.0, 5522.0, 5312.0, 5552.0, 5469.0, 5414.0, 5324.0, 5398.0, 5636.0, 5508.0, 5291.0, 5634.0, 5327.0, 5538.0, 5582.0, 5329.0, 5284.0, 5272.0, 5607.0, 5281.0, 5334.0, 5688.0, 5542.0, 5432.0, 5325.0, 5461.0, 5489.0, 5365.0, 5619.0, 5431.0, 5518.0, 5483.0, 5698.0, 5721.0, 5639.0, 5399.0, 5314.0, 5306.0, 5318.0, 5481.0, 5261.0, 5588.0, 5610.0, 5262.0, 5533.0, 5506.0, 5586.0, 5286.0, 5449.0, 5412.0, 5360.0 (number of hits: 8)
26	5580	9	1	333	1	5320.0, 5631.0, 5412.0, 5298.0, 5429.0, 5308.0, 5418.0, 5462.0, 5456.0, 5280.0, 5495.0, 5270.0, 5719.0, 5505.0, 5269.0, 5473.0, 5661.0, 5324.0, 5331.0, 5372.0, 5315.0, 5680.0, 5393.0, 5252.0, 5512.0, 5357.0, 5282.0, 5425.0, 5617.0, 5527.0, 5714.0, 5368.0, 5675.0, 5316.0, 5684.0, 5612.0, 5655.0, 5281.0, 5312.0, 5400.0,

						5273.0, 5577.0, 5452.0, 5325.0, 5646.0, 5627.0, 5453.0, 5681.0, 5625.0, 5497.0, 5649.0, 5529.0, 5286.0, 5493.0, 5445.0, 5253.0, 5362.0, 5571.0, 5448.0, 5441.0, 5323.0, 5397.0, 5364.0, 5421.0, 5424.0, 5584.0, 5588.0, 5259.0, 5373.0, 5345.0, 5355.0, 5415.0, 5533.0, 5660.0, 5550.0, 5518.0, 5299.0, 5578.0, 5509.0, 5712.0, 5676.0, 5582.0, 5275.0, 5507.0, 5307.0, 5300.0, 5623.0, 5689.0, 5411.0, 5302.0, 5515.0, 5277.0, 5566.0, 5352.0, 5538.0, 5459.0, 5583.0, 5534.0, 5654.0, 5579.0 (number of hits: 8)
27	5580	9	1	333	1	5583.0, 5495.0, 5520.0, 5255.0, 5307.0, 5328.0, 5288.0, 5611.0, 5331.0, 5458.0, 5686.0, 5476.0, 5617.0, 5490.0, 5436.0, 5616.0, 5445.0, 5536.0, 5456.0, 5309.0, 5711.0, 5271.0, 5515.0, 5480.0, 5390.0, 5689.0, 5551.0, 5266.0, 5352.0, 5285.0, 5402.0, 5301.0, 5498.0, 5724.0, 5459.0, 5632.0, 5337.0, 5514.0, 5370.0, 5376.0, 5534.0, 5474.0, 5368.0, 5526.0, 5547.0, 5372.0, 5300.0, 5332.0, 5538.0, 5566.0, 5642.0, 5511.0, 5374.0, 5466.0, 5394.0, 5666.0, 5618.0, 5451.0, 5321.0, 5685.0, 5646.0, 5717.0, 5410.0, 5364.0, 5353.0, 5630.0, 5715.0, 5591.0, 5362.0, 5610.0, 5651.0, 5564.0, 5596.0, 5572.0, 5620.0, 5657.0, 5323.0, 5404.0, 5654.0, 5537.0, 5708.0, 5473.0, 5292.0, 5626.0, 5663.0, 5532.0, 5437.0, 5397.0, 5680.0, 5615.0, 5268.0, 5639.0, 5517.0, 5351.0, 5427.0, 5670.0, 5426.0, 5561.0, 5701.0, 5678.0 (number of hits: 7)
28	5580	9	1	333	1	5302.0, 5666.0, 5415.0, 5612.0, 5719.0, 5516.0, 5284.0, 5332.0, 5479.0, 5498.0, 5669.0, 5261.0, 5702.0, 5323.0, 5570.0, 5464.0, 5300.0, 5566.0, 5627.0, 5504.0, 5252.0, 5534.0, 5678.0, 5293.0, 5697.0, 5280.0, 5354.0, 5433.0, 5296.0, 5388.0, 5443.0, 5425.0, 5587.0, 5648.0, 5613.0, 5250.0, 5476.0, 5664.0, 5310.0, 5471.0, 5608.0, 5438.0, 5641.0, 5657.0, 5444.0, 5396.0, 5576.0, 5617.0, 5549.0, 5615.0, 5313.0, 5555.0, 5671.0, 5357.0, 5267.0, 5435.0, 5636.0, 5637.0, 5540.0, 5495.0, 5626.0, 5701.0, 5513.0, 5273.0, 5529.0, 5305.0, 5391.0, 5693.0, 5259.0, 5286.0, 5468.0, 5483.0, 5379.0, 5639.0, 5605.0, 5458.0, 5264.0, 5481.0, 5571.0, 5474.0, 5633.0, 5597.0, 5320.0, 5512.0, 5673.0, 5527.0, 5526.0, 5265.0, 5374.0, 5441.0, 5717.0, 5383.0, 5682.0, 5369.0, 5674.0, 5487.0, 5452.0, 5716.0, 5500.0, 5382.0 (number of hits: 8)
29	5580	9	1	333	1	5539.0, 5689.0, 5259.0, 5364.0, 5637.0, 5713.0, 5489.0, 5549.0, 5260.0, 5723.0, 5481.0, 5660.0, 5531.0, 5386.0, 5357.0, 5295.0, 5255.0, 5297.0, 5480.0, 5583.0, 5699.0, 5616.0, 5267.0, 5673.0, 5366.0,

						5405.0, 5356.0, 5588.0, 5367.0, 5624.0, 5329.0, 5694.0, 5336.0, 5275.0, 5585.0, 5457.0, 5413.0, 5406.0, 5483.0, 5668.0, 5280.0, 5452.0, 5305.0, 5705.0, 5568.0, 5253.0, 5551.0, 5296.0, 5687.0, 5721.0, 5534.0, 5561.0, 5343.0, 5590.0, 5667.0, 5615.0, 5469.0, 5355.0, 5562.0, 5639.0, 5461.0, 5474.0, 5554.0, 5330.0, 5352.0, 5574.0, 5649.0, 5581.0, 5579.0, 5443.0, 5500.0, 5528.0, 5404.0, 5319.0, 5714.0, 5572.0, 5675.0, 5707.0, 5358.0, 5303.0, 5647.0, 5518.0, 5570.0, 5676.0, 5621.0, 5391.0, 5447.0, 5486.0, 5323.0, 5618.0, 5560.0, 5515.0, 5459.0, 5580.0, 5304.0, 5556.0, 5691.0, 5276.0, 5547.0, 5688.0 (number of hits: 6)
30	5580	9	1	333	1	5686.0, 5351.0, 5441.0, 5259.0, 5473.0, 5255.0, 5474.0, 5627.0, 5337.0, 5289.0, 5464.0, 5315.0, 5372.0, 5538.0, 5411.0, 5460.0, 5444.0, 5713.0, 5673.0, 5620.0, 5581.0, 5272.0, 5364.0, 5303.0, 5426.0, 5383.0, 5405.0, 5528.0, 5481.0, 5648.0, 5597.0, 5269.0, 5307.0, 5339.0, 5641.0, 5592.0, 5346.0, 5403.0, 5618.0, 5342.0, 5278.0, 5451.0, 5437.0, 5504.0, 5268.0, 5615.0, 5374.0, 5711.0, 5469.0, 5328.0, 5525.0, 5454.0, 5276.0, 5584.0, 5407.0, 5540.0, 5452.0, 5309.0, 5449.0, 5265.0, 5696.0, 5642.0, 5518.0, 5549.0, 5572.0, 5503.0, 5284.0, 5301.0, 5396.0, 5486.0, 5560.0, 5587.0, 5335.0, 5484.0, 5675.0, 5357.0, 5409.0, 5534.0, 5363.0, 5448.0, 5258.0, 5352.0, 5398.0, 5712.0, 5358.0, 5447.0, 5401.0, 5283.0, 5293.0, 5610.0, 5579.0, 5476.0, 5490.0, 5539.0, 5355.0, 5640.0, 5478.0, 5601.0, 5253.0, 5350.0 (number of hits: 6)

40MHz

5270 MHz

Radar Signal Type	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1	30	96.7 %	60%	Pass
Type 2	30	93.5 %	60%	Pass
Type 3	30	90.0 %	60%	Pass
Type 4	30	83.3 %	60%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	96.7 %	70%	Pass

Please refer to the following statistical tables:

5270MHz

Table-1 Radar Type 1 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5270	18	1	1428	1
2	5270	18	1	1428	1
3	5270	18	1	1428	1
4	5270	18	1	1428	1
5	5270	18	1	1428	1
6	5270	18	1	1428	1
7	5270	18	1	1428	1
8	5270	18	1	1428	1
9	5270	18	1	1428	1
10	5270	18	1	1428	1
11	5270	18	1	1428	1
12	5270	18	1	1428	1
13	5270	18	1	1428	1
14	5270	18	1	1428	1
15	5270	18	1	1428	1
16	5270	18	1	1428	1
17	5270	18	1	1428	1
18	5270	18	1	1428	1
19	5270	18	1	1428	1
20	5270	18	1	1428	1
21	5270	18	1	1428	1
22	5270	18	1	1428	1
23	5270	18	1	1428	1
24	5270	18	1	1428	1
25	5270	18	1	1428	0
26	5270	18	1	1428	1
27	5270	18	1	1428	1
28	5270	18	1	1428	1
29	5270	18	1	1428	1
30	5270	18	1	1428	1
Detection Percentage: 96.7 % (>60%)					

Table-2 Radar Type 2 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5270	27	1.8	204	1
2	5270	28	3.6	201	0
3	5270	25	5	162	1
4	5270	29	1.7	170	1
5	5270	24	3.5	152	1
6	5270	29	1.1	170	1
7	5270	25	1.4	176	1
8	5270	23	4.3	213	1
9	5270	23	3.6	213	0
10	5270	29	1.6	195	1
11	5270	29	1.8	205	1
12	5270	25	4.8	194	1
13	5270	23	1.4	187	1
14	5270	27	4.4	211	1
15	5270	24	1.3	228	1
16	5270	27	1.6	221	1
17	5270	28	4.8	178	1
18	5270	26	2.7	175	1
19	5270	26	4.9	229	1
20	5270	27	4.5	223	1
21	5270	25	1	159	1
22	5270	28	1.1	221	1
23	5270	29	4.2	176	1
24	5270	23	2.2	210	1
25	5270	27	1.8	199	1
26	5270	28	3.7	209	1
27	5270	28	3.1	189	1
28	5270	23	3.8	166	1
29	5270	28	4	210	1
30	5270	26	3.7	156	1
Detection Percentage: 93.5 % (>60%)					

Table-3 Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5270	16	9.1	308	1
2	5270	16	9.9	205	1
3	5270	18	10	315	1
4	5270	16	7.1	405	1
5	5270	18	9.7	342	1
6	5270	18	7.8	230	1
7	5270	17	9.2	203	1
8	5270	17	6.8	215	1
9	5270	18	7.6	208	0
10	5270	16	7.8	380	1
11	5270	16	6.4	435	1
12	5270	18	8.8	415	1
13	5270	18	8.9	331	0
14	5270	16	6.5	284	1
15	5270	17	7.1	355	1
16	5270	17	6.2	446	1
17	5270	16	7.9	288	1
18	5270	18	8.6	232	0
19	5270	17	10	329	1
20	5270	18	7.1	238	1
21	5270	17	7.9	235	1
22	5270	17	7.6	365	1
23	5270	16	8.1	382	1
24	5270	18	8.3	215	1
25	5270	16	7.5	377	1
26	5270	18	9.7	386	1
27	5270	18	8.7	465	1
28	5270	18	9.4	433	1
29	5270	16	8.1	417	1
30	5270	17	9.8	390	1
Detection Percentage: 90.0 % (>60%)					

Table-4 Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5270	16	17.1	455	1
2	5270	15	15.2	284	1
3	5270	16	20	445	0
4	5270	13	13.1	364	1
5	5270	15	16.2	309	1
6	5270	15	16.5	438	1
7	5270	12	18.2	313	1
8	5270	13	11.8	288	1
9	5270	12	13.3	484	1
10	5270	13	14.1	260	1
11	5270	12	17.5	343	1
12	5270	16	17.5	288	0
13	5270	14	17.6	229	1
14	5270	12	19.5	415	1
15	5270	12	19.2	392	1
16	5270	14	15.4	221	1
17	5270	16	13.7	462	1
18	5270	12	14	269	1
19	5270	14	12.8	335	0
20	5270	16	11.2	484	1
21	5270	16	18.4	443	1
22	5270	12	12.8	371	1
23	5270	13	11.4	347	0
24	5270	16	17.7	491	1
25	5270	14	13.8	367	1
26	5270	12	11	343	1
27	5270	16	18.2	338	1
28	5270	15	11.6	200	0
29	5270	14	13.6	334	1
30	5270	16	16.9	219	1
Detection Percentage: 83.3 % (>60%)					

Table-5 Radar Type 5 Statistical Performance

Bin5 Statistics 1

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	11	93.4	1673		0.460838	
1	2	17	54.2	1470		0.802379	
2	1	9	65.2			1.436855	
3	1	12	56.4			2.143368	
4	3	16	92.3	1639	1544	3.129344	
5	2	18	60.2	1988		3.490211	
6	2	10	60	1596		4.147835	
7	2	19	76.5	1290		4.712159	
8	2	5	58.2	1615		5.32222	
9	1	19	80.9			5.920041	1
10	1	18	74.6			6.914237	
11	2	10	98.4	1445		7.431799	
12	1	13	98			7.582073	
13	1	11	59.2			8.535247	
14	2	18	78	1710		9.466176	
15	2	13	73.8	1618		9.591722	
16	3	8	64.9	1064	1117	10.63704	
17	2	8	90	1414		11.03725	
18	2	10	60	1589		11.74702	

Bin5 Statistics 2

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	19	81.7	1257		0.516948	
1	2	17	80.1	1617		0.769574	
2	3	8	89	1796	1704	2.122289	
3	2	8	96.3	1337		2.390949	
4	2	7	82.7	1598		3.477278	
5	2	13	88.5	1734		4.06763	
6	2	6	58.1	1437		4.639257	
7	2	7	91.6	1173		5.636734	1
8	1	14	72			6.51835	
9	1	13	67.2			7.45144	
10	2	10	71.1	1472		8.029502	
11	1	8	73.1			8.759522	
12	1	7	51.7			9.303102	
13	2	6	94.6	1699		10.02839	
14	1	12	72.9			10.81109	
15	3	19	56.6	1564	1776	11.29526	

Bin5 Statistics 3

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	9	75.3	1085		0.0588	
1	2	6	69.4	1643		0.8426	
2	3	12	94.2	1628	1318	1.92796	
3	1	8	59.4			2.93325	
4	3	7	78.3	1465	1170	3.65384	
5	1	13	68.8			4.17699	
6	3	7	80.3	1257	1364	5.37405	
7	2	14	50.1	1485		6.35147	1
8	2	10	58.1	1036		6.58659	
9	2	10	72.6	1163		7.6173	
10	1	13	61.1			8.23686	
11	1	8	61.1			8.95109	
12	2	16	92.6	1699		10.1901	
13	3	8	51.7	1475	1328	10.5313	
14	3	6	50.1	1840	1372	11.5048	

Bin5 Statistics 4

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	11	52.7	1682		0.36698	
1	2	19	64.8	1783		1.15378	
2	1	8	54.3			1.73639	
3	3	19	95	1374	1096	2.78181	
4	3	12	68.1	1138	1134	2.84746	
5	2	9	84.6	1136		4.07313	
6	3	6	94.1	1347	1616	4.92249	
7	2	18	97.7	1675		5.4159	
8	2	7	66.1	1835		5.92544	1
9	3	11	68.8	1686	1322	6.55228	
10	3	17	78.4	1939	1947	7.57965	
11	1	8	63.3			8.44537	
12	2	19	84.1	1305		8.66092	
13	2	13	93.7	1164		9.37169	
14	3	6	98	1247	1880	10.1373	
15	1	8	73.5			10.703	
16	2	16	68.5	1892		11.6139	

Bin5 Statistics 5

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	17	61			0.33257	
1	3	20	86.8	1377	1749	1.29071	
2	2	19	54.8	1662		1.77385	
3	2	18	95.2	1596		2.89723	
4	3	8	61.8	1572	1399	3.68014	
5	3	6	66.2	1901	1323	4.17537	
6	3	6	66.3	1709	1017	5.11263	
7	2	16	59.4	1835		5.4103	
8	2	15	62.4	1999		6.65317	1
9	3	17	55.7	1806	1484	7.15093	
10	1	13	90.7			7.76851	
11	1	15	60.8			8.97156	
12	1	13	70.8			9.15371	
13	1	16	94.9			10.496	
14	2	18	63.2	1992		11.0068	
15	2	14	73.3	1746		11.6769	

Bin5 Statistics 6

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	7	88.6			0.09488	1
1	2	17	63.1	1809		1.14062	
2	2	7	90.7	1670		1.60899	
3	3	17	94.6	1698	1795	2.2693	
4	3	20	99.6	1006	1280	2.92416	
5	2	6	60.1	1560		3.44595	
6	2	19	89.2	1440		4.22907	
7	3	5	96.4	1872	1712	5.21629	
8	2	12	78.8	1073		5.60588	
9	2	18	70.7	1127		6.58965	
10	3	8	81.9	1939	1770	7.24448	
11	2	6	96.6	1395		7.95859	
12	3	7	85.7	1645	1071	8.22498	
13	1	8	66.2			8.7684	
14	2	19	95.3	1670		9.54734	
15	2	17	64.2	1479		10.2853	
16	2	6	73	1160		10.8658	
17	1	9	79.6			11.5103	

Bin5 Statistics 7

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	13	93.9			0.17935	1
1	3	11	97.4	1821	1244	1.40276	
2	2	8	78.9	1990		2.47695	
3	2	12	65.8	1082		3.31055	
4	1	5	76.1			4.49871	
5	2	16	71.4	1446		5.48498	
6	2	9	78.3	1765		6.49641	
7	1	6	65.8			7.54091	
8	2	7	93	1600		8.47103	
9	3	6	70.9	1904	1339	9.47184	
10	3	11	70.7	1369	1756	10.1994	
11	2	15	94.8	1980		11.8679	

Bin5 Statistics 8

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	14	83.1	1735		0.23932	
1	1	15	84.7			0.87407	
2	2	17	94.1	1294		1.97772	
3	1	16	96.4			2.63197	
4	3	7	89.4	1570	1687	2.95125	
5	2	17	56.5	1955		3.74091	
6	2	18	83	1563		4.05143	
7	1	11	62.1			5.19444	
8	1	5	80.7			5.38688	
9	1	16	54.5			6.43298	1
10	2	8	82.9	1176		6.96785	
11	1	9	65.7			7.53586	
12	1	8	76.9			8.50535	
13	1	15	68.9			9.05231	
14	3	13	78.4	1319	1454	9.82085	
15	2	13	78.2	1594		10.1671	
16	1	10	93.3			10.8711	
17	2	7	87.9	1036		11.8617	

Bin5 Statistics 9

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	11	83.8	1145		0.408894	
1	2	14	73.7	1492		1.40203	
2	1	7	65.9			2.007695	
3	3	9	90.3	1880	1007	2.471952	
4	1	9	83.9			3.976768	
5	3	15	82.5	1030	1799	4.400741	
6	2	11	92.5	1625		5.453002	
7	1	16	51.8			6.377644	1
8	2	16	85.4	1579		6.73916	
9	3	19	71.8	1746	1256	7.290162	
10	2	7	59.9	1795		8.48487	
11	1	13	52.2			9.358163	
12	1	17	58.2			10.36374	
13	1	9	50.6			10.52079	
14	2	20	76	1770		11.2738	

Bin5 Statistics 10

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	18	83.5	1678		0.095164	1
1	2	13	74.5	1576		1.468933	
2	3	18	62.7	1149	1373	2.337728	
3	1	15	59.1			2.606006	
4	2	20	60.7	1819		3.227289	
5	1	15	66.7			4.493756	
6	2	14	82.2	1061		5.552378	
7	3	9	81.6	1555	1292	5.610138	
8	2	8	63.3	1063		6.908967	
9	2	6	79	1614		7.947479	
10	1	14	84.1			8.792994	
11	1	15	88.9			8.878261	
12	2	7	89.5	1927		10.14681	
13	3	10	68.9	1108	1726	10.49771	
14	2	18	71.6	1333		11.77341	

Bin5 Statistics 11

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	16	64.9	1767		0.360623	1
1	1	14	50.3			1.18139	
2	2	16	65.5	1627		2.204046	
3	2	17	88.9	1966		2.92308	
4	1	20	75.4			3.678572	
5	2	9	88.6	1434		4.806863	
6	1	8	51.9			5.46758	
7	2	5	86.1	1583		6.411187	
8	1	16	76.5			7.653993	
9	1	5	87			8.535196	
10	3	13	80.6	1372	1693	8.803611	
11	2	18	56.4	1795		9.916987	
12	1	5	90.1			10.663363	
13	2	16	51.3	1853		11.904838	

Bin5 Statistics 12

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	9	99.2	1133		0.389814	
1	1	10	83.4			0.986865	
2	2	16	68.7	1213		1.418693	
3	2	12	83.3	1572		2.791867	
4	3	6	70.5	1123	1237	3.441624	
5	3	10	93.9	1693	1037	4.224479	
6	2	14	52.4	1435		4.381786	
7	2	6	69.8	1790		5.364576	
8	1	14	52.2			5.758706	1
9	3	8	97.2	1257	1344	7.024883	
10	1	10	77.3			7.307388	
11	3	10	53.9	1598	1153	8.265597	
12	3	12	85.5	1598	1324	8.805662	
13	2	19	53.4	1723		9.35308	
14	1	6	71.7			10.181702	
15	1	6	77.8			11.074058	
16	3	11	70.3	1201	1572	11.856892	

Bin5 Statistics 13

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	11	63.8	1097		0.416005	
1	2	15	91.6	1009		1.166471	
2	2	13	65.4	1292		1.485369	
3	1	17	71.8			2.094929	
4	3	8	94.7	1558	1124	2.538138	
5	1	7	72.3			3.068822	
6	2	11	71.4	1375		4.117454	
7	2	6	59.2	1784		4.360332	
8	2	10	77.9	1707		4.815342	
9	2	11	66.1	1641		5.404739	
10	3	15	88.2	1045	1244	6.347174	1
11	1	10	52.7			6.651201	
12	3	12	73.3	1801	1613	7.307641	
13	2	6	97.9	1395		8.206878	
14	1	5	52.6			8.600544	
15	1	7	54.2			9.367598	
16	2	8	57	1769		9.860944	
17	2	14	98.9	1454		10.677406	
18	2	19	51.5	1975		11.049924	
19	3	17	89.5	1426	1537	11.796397	

Bin5 Statistics 14

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	5	91.6	1431		0.608431	
1	1	7	70.8			1.501974	
2	3	13	79.3	1081	1475	2.644311	
3	3	16	93.1	1905	1103	2.985712	
4	1	5	70			4.554888	
5	1	6	80.6			4.622747	
6	2	5	88.4	1725		5.880248	1
7	2	6	69.3	1048		6.979654	
8	1	17	81.4			7.580068	
9	2	12	84.6	1961		8.501969	
10	3	9	87.8	1714	1188	9.716969	
11	1	10	67.9			10.987591	
12	3	16	97.1	1252	1061	11.73088	

Bin5 Statistics 15

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	18	64.1	1115		0.813828	
1	3	7	67.7	1092	1291	1.706798	
2	2	5	99.9	1366		3.043302	
3	2	13	59.7	1990		4.808432	
4	2	16	51.3	1638		5.727796	1
5	2	19	95.1	1697		7.605044	
6	3	14	54.7	1365	1148	8.591025	
7	1	10	51.2			10.333606	
8	2	7	66.7	1443		11.197331	

Bin5 Statistics 16

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	18	95.1	1566	1106	0.47893	
1	3	6	66.4	1700	1477	1.103134	
2	2	16	53.8	1824		2.105022	
3	2	6	79.2	1272		2.225349	
4	2	14	94.1	1139		2.840898	
5	2	13	64.3	1353		3.97528	
6	2	9	94.9	1975		4.494906	
7	3	15	85.7	1783	1460	5.385329	
8	3	15	78.3	1643	1793	6.233167	1
9	3	6	64.7	1134	1324	6.934939	
10	1	19	50.8			7.658142	
11	3	19	66.8	1364	1221	8.013961	
12	2	9	84.2	1054		8.600596	
13	2	8	55.3	1453		9.713005	
14	3	12	52.5	1575	1790	10.432996	
15	1	6	69.3			11.189321	
16	2	7	75.3	1528		11.808855	

Bin5 Statistics 17

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	16	93.2			0.362434	1
1	3	7	71	1712	1080	2.066079	
2	3	7	79.5	1275	1885	3.330194	
3	1	7	88.7			4.443877	
4	1	8	55.8			5.664535	
5	1	14	96.3			7.102813	
6	3	13	71.9	1193	1709	7.301285	
7	1	16	85.5			8.857389	
8	3	16	91.9	1911	1101	9.973074	
9	2	19	71	1426		11.325851	

Bin5 Statistics 18

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	11	97.9	1827	1840	0.948431	
1	2	10	84.9	1666		2.033431	
2	2	13	88.1	1928		3.228492	
3	1	10	80.8			4.261346	
4	2	19	59.1	1244		5.767105	1
5	1	11	62.9			7.640526	
6	3	8	64.3	1347	1197	8.874604	
7	2	17	59.1	1699		9.748229	
8	1	10	82.2			11.409988	

Bin5 Statistics 19

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	12	59.7	1789		0.104059	
1	3	18	78.9	1963	1626	1.274468	
2	2	11	83.5	1629		1.512201	
3	2	8	81.5	1047		2.641038	
4	1	11	94.1			3.391788	
5	2	13	54.1	1309		3.962118	
6	2	17	89.4	1342		4.583182	
7	2	19	62.3	1712		5.098975	
8	2	17	67.5	1518		5.749165	1
9	1	8	97.2			6.509858	
10	1	13	84.6			7.063343	
11	2	14	97.2	1094		7.795492	
12	1	13	84.2			8.720116	
13	2	11	96	1504		9.682713	
14	2	19	96.3	1729		10.207538	
15	1	16	74.3			10.987374	
16	1	6	52.2			11.583217	

Bin5 Statistics 20

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	10	79.5	1709		0.425517	1
1	2	13	53.1	1178		1.261217	
2	1	8	70.7			2.740067	
3	2	14	95.2	1688		3.662219	
4	2	13	75.9	1682		5.459943	
5	2	18	88.6	1206		6.995163	
6	3	17	81.8	1123	1974	8.377147	
7	3	6	59.6	1768	1236	9.412399	
8	3	11	62.2	1265	1027	10.651048	
9	1	11	62.8			11.073355	

Bin5 Statistics 21

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	16	92.5			0.232689	1
1	2	14	86.1	1404		0.933328	
2	1	19	56.6			1.965103	
3	3	8	99.7	1376	1694	2.535159	
4	2	12	88.2	1009		3.277529	
5	2	14	63.3	1693		4.061996	
6	2	20	53.1	1748		4.613993	
7	2	6	59.3	1662		5.119513	
8	3	16	81.5	1525	1344	6.099142	
9	3	10	86.2	1720	1884	6.379977	
10	3	10	60.8	1048	1522	7.217507	
11	3	14	94.2	1689	1545	7.865691	
12	1	15	59.5			8.808355	
13	2	12	64.6	1912		9.207158	
14	3	6	90.5	1579	1234	10.467831	
15	3	6	69.7	1551	1137	11.258667	
16	2	12	52.7	1975		11.585578	

Bin5 Statistics 22

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	8	90.1	1927	1342	0.055662	1
1	2	5	72.6	1305		1.049971	
2	2	19	71.2	1301		2.261152	
3	2	15	91.8	1024		2.83465	
4	2	10	93.8	1261		4.273467	
5	1	15	92			5.058783	
6	2	12	82.8	1565		5.948818	
7	2	14	84.3	1286		6.525333	
8	2	13	88.6	1250		6.903337	
9	1	8	50.5			7.97586	
10	1	9	93.3			8.802262	
11	2	10	96.9	1594		10.204855	
12	2	9	55.3	1270		10.771473	
13	2	8	80.2	1720		11.608597	

Bin5 Statistics 23

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	9	91.6	1352		0.508213	
1	2	9	66.2	1890		1.112176	
2	2	12	82.5	1888		1.694634	
3	2	16	95.4	1452		2.196815	
4	2	7	84.1	1227		2.802387	
5	2	16	97.1	1622		3.551604	
6	2	7	72.4	1794		4.255748	
7	1	8	93.4			4.94401	
8	3	15	68.2	1159	1683	5.241451	
9	3	5	60.6	1951	1722	5.946001	1
10	2	18	77.7	1275		6.834352	
11	2	14	94.2	1698		7.170239	
12	3	12	79.5	1244	1569	7.837944	
13	2	12	86.9	1309		8.514755	
14	1	7	81.2			9.23827	
15	2	7	71.8	1618		9.793213	
16	2	9	86.3	1224		10.331231	
17	1	11	63			11.154503	
18	3	6	79.4	1014	1719	11.506394	

Bin5 Statistics 24

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	6	93.9			0.744516	1
1	3	18	75.4	1087	1201	0.895005	
2	1	7	80.3			2.187274	
3	1	15	64.1			2.476783	
4	1	13	84.6			3.544145	
5	1	13	70.6			4.262199	
6	2	12	78.6	1936		4.762784	
7	2	6	93.9	1995		5.555372	
8	2	12	58.3	1269		6.623225	
9	3	13	85.3	1901	1972	7.409554	
10	1	13	55			7.849204	
11	2	12	70.1	1388		8.955375	
12	2	19	62.2	1218		9.282447	
13	2	7	57.8	1309		10.354253	
14	2	9	53.4	1156		11.129303	
15	3	8	70.7	1709	1225	11.576779	

Bin5 Statistics 25

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	17	74	1115		0.915103	1
1	2	11	99.3	1565		1.32183	
2	3	9	56.3	1457	1966	3.243231	
3	2	9	76.5	1883		3.570724	
4	3	9	98	1778	1876	4.832366	
5	2	15	96	1612		5.844193	
6	1	5	66.6			7.288033	
7	2	12	93.3	1191		7.853049	
8	2	19	50.7	1995		9.499534	
9	3	11	82.4	1150	1585	10.518143	
10	2	14	72.7	1592		10.931381	

Bin5 Statistics 26

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	19	96.1			0.119659	1
1	2	12	76.6	1254		0.973591	
2	1	14	54.9			1.794009	
3	1	9	86.1			2.269885	
4	2	19	99.6	1671		2.5063	
5	2	20	63.8	1154		3.235407	
6	1	9	77.2			3.931665	
7	2	7	63.9	1716		4.642676	
8	2	10	51.9	1215		5.228323	
9	2	13	82.9	1285		5.506239	
10	2	13	88.8	1981		6.439174	
11	2	11	100	1252		6.809689	
12	2	9	93.4	1093		7.527727	
13	3	5	57.6	1785	1280	7.910234	
14	3	8	87.1	1343	1061	8.450221	
15	3	15	78.4	1485	1771	9.188572	
16	2	13	71.3	1657		9.842876	
17	2	15	65.2	1110		10.295797	
18	2	16	63.2	1038		11.089561	
19	1	12	51			11.828786	

Bin5 Statistics 27

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	10	99.3	1085	1314	0.65962	1
1	2	6	84.3	1051		1.177343	
2	1	8	69.2			2.050407	
3	2	11	83.6	1259		3.249795	
4	2	7	58.7	1109		4.530633	
5	2	13	75	1991		5.722912	
6	2	10	60.2	1314		6.444629	
7	2	10	86.2	1622		7.147769	
8	2	7	52.5	1998		8.564491	
9	2	14	52.3	1759		9.282102	
10	3	15	85.1	1208	1877	10.831596	
11	2	9	99.6	1068		11.10036	

Bin5 Statistics 28

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	7	69.5	1540		0.401067	1
1	1	10	65.9			0.987028	
2	2	8	58.9	1189		1.369755	
3	2	9	91.4	1800		2.623293	
4	2	13	56.4	1834		2.97709	
5	2	20	74.5	1813		3.747413	
6	2	19	61.5	1476		4.471124	
7	3	6	52.7	1143	1154	5.246366	
8	1	9	89.7			5.373008	
9	3	18	99.7	1280	1815	6.623985	
10	2	8	86.1	1558		7.024686	
11	1	8	95.8			7.892793	
12	3	16	53.8	1378	1347	8.298428	
13	2	14	76.9	1742		8.9515	
14	2	13	76	1593		9.747946	
15	2	16	74.9	1971		10.535234	
16	2	13	72.1	1512		11.031893	
17	1	15	61.8			11.611957	

Bin5 Statistics 29

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	14	62.9	1982	1684	0.209472	1
1	3	17	83.2	1278	1037	1.097058	
2	2	17	87.5	1879		2.458735	
3	2	19	68.6	1839		3.765173	
4	2	11	79.6	1182		4.10936	
5	1	6	80.4			5.678966	
6	2	8	80	1782		6.112486	
7	2	14	73.6	1356		7.556874	
8	1	12	75.8			8.725573	
9	1	14	65.4			9.79686	
10	2	13	76.5	1147		10.655422	
11	1	13	91.4			11.209774	

Bin5 Statistics 30

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	20	50.4			0.370158	
1	2	19	50.7	1964		0.796055	
2	2	15	50.3	1847		1.396694	
3	2	13	64.5	1679		2.050652	
4	3	20	54.8	1235	1793	2.681714	
5	2	9	60	1762		3.403041	
6	2	19	77.4	1486		4.384467	
7	2	18	62.1	1110		4.817006	
8	1	18	80.8			5.221906	
9	2	14	71.2	1618		5.955152	1
10	1	14	82.8			6.786119	
11	2	12	65.1	1209		7.511745	
12	1	16	79.9			7.600033	
13	2	11	83.7	1500		8.534129	
14	2	15	81.7	1234		9.311163	
15	2	15	84.1	1246		10.099061	
16	2	14	82.2	1574		10.351063	
17	3	14	84.5	1012	1884	11.280112	
18	2	11	91.8	1240		11.80227	

Table-6 Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)	Hopping Sequence
1	5270	9	1	333	1	5326.0, 5363.0, 5296.0, 5466.0, 5389.0, 5698.0, 5607.0, 5373.0, 5613.0, 5550.0, 5369.0, 5325.0, 5272.0, 5715.0, 5531.0, 5255.0, 5434.0, 5506.0, 5323.0, 5572.0, 5693.0, 5598.0, 5365.0, 5376.0, 5367.0, 5405.0, 5654.0, 5314.0, 5522.0, 5477.0, 5564.0, 5358.0, 5703.0, 5301.0, 5559.0, 5343.0, 5511.0, 5593.0, 5280.0, 5279.0, 5555.0, 5322.0, 5386.0, 5664.0, 5496.0, 5277.0, 5362.0, 5341.0, 5633.0, 5502.0, 5612.0, 5295.0, 5498.0, 5346.0, 5344.0, 5569.0, 5291.0, 5636.0, 5356.0, 5560.0, 5571.0, 5368.0, 5689.0, 5419.0, 5648.0, 5646.0, 5635.0, 5649.0, 5450.0, 5487.0, 5454.0, 5308.0, 5462.0, 5678.0, 5720.0, 5261.0, 5541.0, 5370.0, 5699.0, 5359.0, 5384.0, 5461.0, 5590.0, 5696.0, 5439.0, 5625.0, 5596.0, 5289.0, 5545.0, 5494.0, 5406.0, 5688.0, 5515.0, 5702.0, 5723.0, 5391.0, 5449.0, 5347.0, 5417.0, 5570.0 (number of hits: 7)
2	5270	9	1	333	1	5604.0, 5378.0, 5582.0, 5345.0, 5430.0, 5314.0, 5306.0, 5250.0, 5385.0, 5271.0, 5367.0, 5617.0, 5387.0, 5707.0, 5618.0, 5522.0, 5506.0, 5479.0, 5313.0, 5409.0, 5354.0, 5608.0, 5716.0, 5524.0, 5659.0, 5557.0, 5568.0, 5567.0, 5258.0, 5435.0, 5689.0, 5405.0, 5380.0, 5690.0, 5410.0, 5331.0, 5290.0, 5384.0, 5420.0, 5396.0, 5649.0, 5321.0, 5548.0, 5615.0, 5276.0, 5395.0, 5552.0, 5462.0, 5473.0, 5453.0, 5348.0, 5488.0, 5318.0, 5478.0, 5695.0, 5464.0, 5504.0, 5319.0, 5550.0, 5574.0, 5722.0, 5544.0, 5512.0, 5252.0, 5294.0, 5611.0, 5317.0, 5341.0, 5563.0, 5629.0, 5620.0, 5423.0, 5391.0, 5374.0, 5513.0, 5342.0, 5556.0, 5300.0, 5694.0, 5683.0, 5350.0, 5558.0, 5628.0, 5398.0, 5344.0, 5668.0, 5545.0, 5256.0, 5571.0, 5723.0, 5353.0, 5551.0, 5291.0, 5638.0, 5652.0, 5528.0, 5492.0, 5414.0, 5595.0, 5692.0 (number of hits: 7)
3	5270	9	1	333	1	5464.0, 5547.0, 5527.0, 5390.0, 5284.0, 5494.0, 5477.0, 5716.0, 5665.0, 5448.0, 5657.0, 5599.0, 5567.0, 5296.0, 5569.0, 5269.0, 5577.0, 5281.0, 5631.0, 5499.0, 5474.0, 5373.0, 5590.0, 5566.0, 5460.0, 5632.0, 5291.0, 5573.0, 5442.0, 5662.0, 5420.0, 5536.0, 5549.0, 5251.0, 5257.0, 5516.0, 5295.0, 5397.0, 5534.0, 5368.0, 5428.0, 5692.0, 5515.0, 5388.0, 5335.0,

						5346.0, 5465.0, 5502.0, 5600.0, 5591.0, 5422.0, 5289.0, 5399.0, 5627.0, 5634.0, 5303.0, 5342.0, 5483.0, 5664.0, 5711.0, 5391.0, 5486.0, 5405.0, 5262.0, 5682.0, 5439.0, 5398.0, 5524.0, 5723.0, 5484.0, 5532.0, 5259.0, 5609.0, 5293.0, 5659.0, 5327.0, 5416.0, 5623.0, 5505.0, 5438.0, 5475.0, 5325.0, 5548.0, 5489.0, 5450.0, 5592.0, 5473.0, 5630.0, 5354.0, 5642.0, 5635.0, 5381.0, 5380.0, 5425.0, 5713.0, 5561.0, 5382.0, 5367.0, 5482.0, 5526.0 (number of hits: 6)
4	5270	9	1	333	1	5624.0, 5583.0, 5258.0, 5296.0, 5617.0, 5614.0, 5373.0, 5556.0, 5659.0, 5706.0, 5337.0, 5306.0, 5631.0, 5497.0, 5620.0, 5412.0, 5543.0, 5406.0, 5639.0, 5476.0, 5713.0, 5329.0, 5335.0, 5338.0, 5569.0, 5405.0, 5447.0, 5391.0, 5370.0, 5595.0, 5287.0, 5403.0, 5301.0, 5545.0, 5288.0, 5571.0, 5276.0, 5697.0, 5612.0, 5692.0, 5453.0, 5290.0, 5596.0, 5572.0, 5701.0, 5660.0, 5364.0, 5558.0, 5439.0, 5591.0, 5473.0, 5633.0, 5621.0, 5592.0, 5452.0, 5314.0, 5599.0, 5615.0, 5459.0, 5708.0, 5606.0, 5573.0, 5286.0, 5423.0, 5481.0, 5687.0, 5354.0, 5547.0, 5420.0, 5610.0, 5480.0, 5553.0, 5351.0, 5457.0, 5530.0, 5593.0, 5642.0, 5451.0, 5649.0, 5656.0, 5684.0, 5486.0, 5375.0, 5601.0, 5352.0, 5399.0, 5678.0, 5440.0, 5260.0, 5525.0, 5724.0, 5285.0, 5654.0, 5546.0, 5619.0, 5377.0, 5519.0, 5472.0, 5709.0, 5386.0 (number of hits: 9)
5	5270	9	1	333	1	5450.0, 5312.0, 5317.0, 5313.0, 5520.0, 5345.0, 5554.0, 5497.0, 5617.0, 5455.0, 5427.0, 5593.0, 5406.0, 5578.0, 5475.0, 5704.0, 5515.0, 5331.0, 5273.0, 5649.0, 5530.0, 5508.0, 5510.0, 5423.0, 5360.0, 5425.0, 5320.0, 5323.0, 5626.0, 5642.0, 5586.0, 5428.0, 5384.0, 5396.0, 5691.0, 5408.0, 5438.0, 5627.0, 5310.0, 5657.0, 5546.0, 5361.0, 5540.0, 5631.0, 5694.0, 5670.0, 5293.0, 5375.0, 5632.0, 5654.0, 5491.0, 5470.0, 5367.0, 5675.0, 5478.0, 5411.0, 5415.0, 5601.0, 5254.0, 5352.0, 5344.0, 5527.0, 5547.0, 5337.0, 5521.0, 5271.0, 5514.0, 5457.0, 5431.0, 5652.0, 5371.0, 5495.0, 5275.0, 5327.0, 5409.0, 5374.0, 5703.0, 5702.0, 5633.0, 5519.0, 5391.0, 5334.0, 5435.0, 5295.0, 5484.0, 5576.0, 5584.0, 5575.0, 5395.0, 5335.0, 5487.0, 5628.0, 5641.0, 5296.0, 5255.0, 5545.0, 5613.0, 5426.0, 5571.0, 5663.0 (number of hits: 6)
6	5270	9	1	333	1	5295.0, 5350.0, 5552.0, 5635.0, 5537.0, 5654.0, 5513.0, 5498.0, 5649.0, 5563.0, 5290.0, 5607.0, 5573.0, 5454.0, 5581.0,

						5565.0, 5631.0, 5480.0, 5310.0, 5448.0, 5564.0, 5288.0, 5708.0, 5668.0, 5685.0, 5396.0, 5322.0, 5319.0, 5406.0, 5313.0, 5560.0, 5409.0, 5644.0, 5521.0, 5285.0, 5403.0, 5263.0, 5695.0, 5556.0, 5592.0, 5327.0, 5328.0, 5670.0, 5686.0, 5541.0, 5509.0, 5606.0, 5346.0, 5580.0, 5713.0, 5461.0, 5375.0, 5437.0, 5497.0, 5404.0, 5424.0, 5496.0, 5500.0, 5427.0, 5337.0, 5425.0, 5630.0, 5551.0, 5659.0, 5435.0, 5493.0, 5459.0, 5683.0, 5287.0, 5332.0, 5344.0, 5616.0, 5619.0, 5321.0, 5362.0, 5373.0, 5489.0, 5469.0, 5442.0, 5546.0, 5371.0, 5569.0, 5299.0, 5622.0, 5426.0, 5440.0, 5445.0, 5289.0, 5648.0, 5492.0, 5317.0, 5567.0, 5639.0, 5559.0, 5479.0, 5625.0, 5707.0, 5291.0, 5590.0, 5267.0 (number of hits: 10)
7	5270	9	1	333	1	5526.0, 5302.0, 5478.0, 5289.0, 5561.0, 5543.0, 5325.0, 5559.0, 5714.0, 5490.0, 5435.0, 5592.0, 5524.0, 5539.0, 5586.0, 5462.0, 5459.0, 5414.0, 5700.0, 5366.0, 5673.0, 5510.0, 5513.0, 5553.0, 5464.0, 5391.0, 5698.0, 5639.0, 5566.0, 5345.0, 5318.0, 5537.0, 5467.0, 5713.0, 5408.0, 5682.0, 5548.0, 5287.0, 5552.0, 5567.0, 5595.0, 5577.0, 5316.0, 5363.0, 5599.0, 5312.0, 5722.0, 5264.0, 5267.0, 5520.0, 5613.0, 5463.0, 5646.0, 5400.0, 5365.0, 5283.0, 5379.0, 5273.0, 5499.0, 5584.0, 5440.0, 5431.0, 5715.0, 5438.0, 5253.0, 5306.0, 5484.0, 5447.0, 5622.0, 5401.0, 5500.0, 5512.0, 5551.0, 5692.0, 5371.0, 5351.0, 5550.0, 5251.0, 5374.0, 5280.0, 5348.0, 5666.0, 5688.0, 5443.0, 5335.0, 5690.0, 5493.0, 5627.0, 5610.0, 5657.0, 5617.0, 5496.0, 5340.0, 5676.0, 5286.0, 5486.0, 5623.0, 5686.0, 5525.0, 5278.0 (number of hits: 6)
8	5270	9	1	333	1	5380.0, 5449.0, 5442.0, 5495.0, 5398.0, 5252.0, 5404.0, 5273.0, 5251.0, 5304.0, 5557.0, 5319.0, 5487.0, 5426.0, 5669.0, 5270.0, 5317.0, 5397.0, 5503.0, 5585.0, 5351.0, 5482.0, 5438.0, 5473.0, 5653.0, 5268.0, 5491.0, 5647.0, 5339.0, 5470.0, 5341.0, 5690.0, 5484.0, 5582.0, 5528.0, 5301.0, 5544.0, 5331.0, 5565.0, 5575.0, 5505.0, 5578.0, 5316.0, 5266.0, 5376.0, 5265.0, 5361.0, 5637.0, 5618.0, 5646.0, 5529.0, 5559.0, 5502.0, 5348.0, 5512.0, 5292.0, 5267.0, 5634.0, 5627.0, 5384.0, 5400.0, 5723.0, 5706.0, 5406.0, 5342.0, 5686.0, 5536.0, 5486.0, 5269.0, 5514.0, 5535.0, 5480.0, 5636.0, 5663.0, 5353.0, 5333.0, 5716.0, 5474.0, 5702.0, 5458.0, 5640.0, 5306.0, 5392.0, 5312.0, 5347.0, 5454.0, 5614.0, 5595.0, 5711.0, 5652.0,

						5340.0, 5437.0, 5493.0, 5537.0, 5307.0, 5641.0, 5689.0, 5660.0, 5586.0, 5363.0 (number of hits: 6)
9	5270	9	1	333	1	5257.0, 5260.0, 5636.0, 5648.0, 5432.0, 5264.0, 5343.0, 5579.0, 5635.0, 5395.0, 5597.0, 5696.0, 5317.0, 5426.0, 5571.0, 5502.0, 5686.0, 5261.0, 5620.0, 5572.0, 5546.0, 5438.0, 5442.0, 5419.0, 5460.0, 5316.0, 5503.0, 5473.0, 5299.0, 5366.0, 5417.0, 5527.0, 5641.0, 5291.0, 5393.0, 5323.0, 5434.0, 5591.0, 5644.0, 5665.0, 5379.0, 5285.0, 5463.0, 5610.0, 5331.0, 5329.0, 5352.0, 5501.0, 5266.0, 5468.0, 5506.0, 5592.0, 5321.0, 5327.0, 5497.0, 5577.0, 5358.0, 5362.0, 5639.0, 5614.0, 5270.0, 5512.0, 5272.0, 5707.0, 5328.0, 5449.0, 5360.0, 5493.0, 5632.0, 5599.0, 5415.0, 5341.0, 5690.0, 5428.0, 5541.0, 5605.0, 5629.0, 5723.0, 5692.0, 5567.0, 5306.0, 5385.0, 5363.0, 5263.0, 5369.0, 5271.0, 5652.0, 5712.0, 5662.0, 5505.0, 5309.0, 5698.0, 5643.0, 5667.0, 5330.0, 5414.0, 5483.0, 5337.0, 5500.0, 5376.0 (number of hits: 5)
10	5270	9	1	333	1	5412.0, 5561.0, 5357.0, 5523.0, 5555.0, 5492.0, 5635.0, 5487.0, 5433.0, 5702.0, 5470.0, 5407.0, 5707.0, 5291.0, 5503.0, 5568.0, 5255.0, 5385.0, 5334.0, 5483.0, 5458.0, 5434.0, 5383.0, 5425.0, 5549.0, 5374.0, 5609.0, 5290.0, 5724.0, 5432.0, 5658.0, 5539.0, 5381.0, 5721.0, 5354.0, 5376.0, 5652.0, 5573.0, 5645.0, 5319.0, 5266.0, 5590.0, 5720.0, 5278.0, 5622.0, 5525.0, 5682.0, 5289.0, 5361.0, 5678.0, 5632.0, 5596.0, 5263.0, 5559.0, 5485.0, 5617.0, 5444.0, 5634.0, 5705.0, 5690.0, 5431.0, 5330.0, 5300.0, 5394.0, 5455.0, 5518.0, 5512.0, 5250.0, 5519.0, 5606.0, 5708.0, 5576.0, 5666.0, 5627.0, 5353.0, 5588.0, 5601.0, 5438.0, 5550.0, 5598.0, 5644.0, 5566.0, 5423.0, 5565.0, 5418.0, 5481.0, 5476.0, 5672.0, 5583.0, 5547.0, 5604.0, 5363.0, 5614.0, 5274.0, 5450.0, 5369.0, 5258.0, 5579.0, 5452.0, 5464.0 (number of hits: 4)
11	5270	9	1	333	1	5429.0, 5666.0, 5574.0, 5567.0, 5377.0, 5693.0, 5685.0, 5379.0, 5684.0, 5324.0, 5552.0, 5621.0, 5485.0, 5262.0, 5672.0, 5588.0, 5521.0, 5465.0, 5480.0, 5560.0, 5287.0, 5636.0, 5714.0, 5523.0, 5678.0, 5457.0, 5549.0, 5479.0, 5348.0, 5441.0, 5557.0, 5464.0, 5524.0, 5369.0, 5683.0, 5537.0, 5623.0, 5677.0, 5556.0, 5643.0, 5341.0, 5328.0, 5578.0, 5629.0, 5518.0, 5670.0, 5336.0, 5326.0, 5344.0, 5301.0, 5634.0, 5251.0, 5356.0, 5383.0, 5594.0, 5367.0, 5587.0, 5667.0, 5294.0, 5687.0,

						5696.0, 5664.0, 5502.0, 5252.0, 5352.0, 5659.0, 5603.0, 5365.0, 5408.0, 5604.0, 5568.0, 5520.0, 5427.0, 5263.0, 5428.0, 5649.0, 5562.0, 5319.0, 5361.0, 5330.0, 5462.0, 5505.0, 5285.0, 5525.0, 5572.0, 5589.0, 5275.0, 5445.0, 5349.0, 5695.0, 5400.0, 5676.0, 5545.0, 5482.0, 5698.0, 5658.0, 5585.0, 5308.0, 5281.0, 5631.0 (number of hits: 5)
12	5270	9	1	333	1	5467.0, 5656.0, 5331.0, 5440.0, 5253.0, 5279.0, 5638.0, 5479.0, 5678.0, 5472.0, 5663.0, 5261.0, 5563.0, 5538.0, 5361.0, 5557.0, 5288.0, 5607.0, 5624.0, 5664.0, 5330.0, 5384.0, 5294.0, 5716.0, 5346.0, 5459.0, 5604.0, 5616.0, 5431.0, 5284.0, 5527.0, 5260.0, 5618.0, 5364.0, 5706.0, 5264.0, 5420.0, 5627.0, 5316.0, 5509.0, 5642.0, 5456.0, 5276.0, 5712.0, 5569.0, 5298.0, 5715.0, 5285.0, 5632.0, 5308.0, 5704.0, 5409.0, 5599.0, 5357.0, 5339.0, 5451.0, 5447.0, 5674.0, 5320.0, 5333.0, 5450.0, 5469.0, 5417.0, 5721.0, 5633.0, 5498.0, 5560.0, 5307.0, 5675.0, 5363.0, 5561.0, 5478.0, 5389.0, 5406.0, 5541.0, 5291.0, 5594.0, 5312.0, 5613.0, 5385.0, 5486.0, 5703.0, 5513.0, 5660.0, 5437.0, 5622.0, 5670.0, 5443.0, 5444.0, 5303.0, 5455.0, 5521.0, 5504.0, 5691.0, 5414.0, 5411.0, 5332.0, 5529.0, 5685.0, 5572.0 (number of hits: 9)
13	5270	9	1	333	1	5561.0, 5494.0, 5591.0, 5435.0, 5568.0, 5570.0, 5633.0, 5636.0, 5443.0, 5299.0, 5416.0, 5707.0, 5469.0, 5392.0, 5635.0, 5473.0, 5507.0, 5674.0, 5652.0, 5582.0, 5264.0, 5306.0, 5366.0, 5362.0, 5575.0, 5313.0, 5436.0, 5488.0, 5440.0, 5706.0, 5311.0, 5529.0, 5498.0, 5261.0, 5520.0, 5307.0, 5694.0, 5683.0, 5549.0, 5305.0, 5257.0, 5651.0, 5658.0, 5657.0, 5552.0, 5368.0, 5546.0, 5423.0, 5678.0, 5698.0, 5594.0, 5660.0, 5386.0, 5338.0, 5601.0, 5556.0, 5415.0, 5685.0, 5547.0, 5274.0, 5447.0, 5301.0, 5664.0, 5460.0, 5505.0, 5514.0, 5420.0, 5548.0, 5290.0, 5335.0, 5276.0, 5516.0, 5501.0, 5665.0, 5595.0, 5454.0, 5667.0, 5330.0, 5624.0, 5541.0, 5278.0, 5266.0, 5634.0, 5296.0, 5655.0, 5382.0, 5427.0, 5414.0, 5320.0, 5491.0, 5314.0, 5399.0, 5379.0, 5352.0, 5554.0, 5302.0, 5312.0, 5493.0, 5446.0, 5621.0 (number of hits: 12)
14	5270	9	1	333	1	5273.0, 5513.0, 5298.0, 5611.0, 5265.0, 5698.0, 5458.0, 5547.0, 5657.0, 5404.0, 5361.0, 5492.0, 5335.0, 5447.0, 5319.0, 5495.0, 5566.0, 5269.0, 5722.0, 5478.0, 5604.0, 5355.0, 5557.0, 5407.0, 5452.0, 5316.0, 5467.0, 5324.0, 5353.0, 5667.0,

						5441.0, 5315.0, 5560.0, 5461.0, 5564.0, 5550.0, 5266.0, 5476.0, 5661.0, 5649.0, 5475.0, 5578.0, 5697.0, 5618.0, 5510.0, 5519.0, 5545.0, 5539.0, 5408.0, 5420.0, 5443.0, 5614.0, 5693.0, 5494.0, 5263.0, 5433.0, 5576.0, 5466.0, 5418.0, 5278.0, 5568.0, 5606.0, 5305.0, 5347.0, 5565.0, 5284.0, 5422.0, 5293.0, 5285.0, 5647.0, 5592.0, 5703.0, 5377.0, 5665.0, 5723.0, 5570.0, 5279.0, 5658.0, 5310.0, 5720.0, 5503.0, 5595.0, 5393.0, 5289.0, 5585.0, 5646.0, 5538.0, 5436.0, 5491.0, 5607.0, 5463.0, 5425.0, 5376.0, 5424.0, 5520.0, 5718.0, 5371.0, 5648.0, 5552.0, 5329.0 (number of hits: 6)
15	5270	9	1	333		
16	5270	9	1	333	1	5296.0, 5569.0, 5358.0, 5551.0, 5402.0, 5707.0, 5302.0, 5709.0, 5325.0, 5531.0, 5479.0, 5695.0, 5600.0, 5497.0, 5596.0, 5666.0, 5351.0, 5309.0, 5647.0, 5425.0, 5566.0, 5310.0, 5438.0, 5376.0, 5486.0, 5679.0, 5349.0, 5689.0, 5466.0, 5261.0, 5645.0, 5432.0, 5414.0, 5523.0, 5503.0, 5269.0, 5554.0, 5555.0, 5413.0, 5390.0, 5720.0, 5452.0, 5618.0, 5308.0, 5396.0, 5653.0, 5281.0, 5643.0, 5451.0, 5421.0, 5387.0, 5399.0, 5693.0, 5687.0, 5509.0, 5613.0, 5342.0, 5542.0, 5626.0, 5374.0, 5277.0, 5667.0, 5717.0, 5660.0, 5364.0, 5290.0, 5590.0, 5594.0, 5518.0, 5649.0, 5671.0, 5446.0, 5714.0, 5534.0, 5668.0, 5312.0, 5294.0, 5350.0, 5537.0, 5591.0, 5260.0, 5681.0, 5336.0, 5694.0, 5581.0, 5437.0, 5657.0, 5289.0, 5526.0, 5557.0, 5644.0, 5455.0, 5305.0, 5379.0, 5409.0, 5279.0, 5538.0, 5385.0, 5599.0, 5360.0 (number of hits: 10)
17	5270	9	1	333	1	5705.0, 5694.0, 5318.0, 5354.0, 5698.0, 5715.0, 5504.0, 5711.0, 5624.0, 5284.0, 5257.0, 5366.0, 5648.0, 5609.0, 5548.0, 5447.0, 5642.0, 5496.0, 5589.0, 5572.0, 5684.0, 5539.0, 5409.0, 5585.0, 5312.0, 5691.0, 5335.0, 5395.0, 5688.0, 5460.0, 5370.0, 5449.0, 5367.0, 5583.0, 5378.0, 5287.0, 5659.0, 5646.0, 5402.0, 5279.0, 5320.0, 5309.0, 5663.0, 5404.0, 5398.0, 5606.0, 5538.0, 5557.0, 5425.0, 5401.0, 5575.0, 5394.0, 5626.0, 5473.0, 5455.0, 5299.0, 5673.0, 5471.0, 5527.0, 5487.0, 5616.0, 5482.0, 5553.0, 5661.0, 5427.0, 5533.0, 5521.0, 5696.0, 5313.0, 5695.0, 5633.0, 5442.0, 5623.0, 5563.0, 5264.0, 5655.0, 5341.0, 5463.0, 5568.0, 5723.0, 5316.0, 5457.0, 5641.0, 5467.0, 5532.0, 5393.0, 5619.0, 5339.0, 5545.0, 5550.0, 5590.0, 5386.0, 5441.0, 5488.0, 5302.0, 5430.0, 5499.0, 5297.0, 5649.0, 5333.0

						(number of hits: 7)
18	5270	9	1	333	1	5534.0, 5623.0, 5620.0, 5713.0, 5303.0, 5673.0, 5315.0, 5537.0, 5386.0, 5598.0, 5646.0, 5453.0, 5528.0, 5583.0, 5296.0, 5597.0, 5429.0, 5591.0, 5427.0, 5622.0, 5707.0, 5412.0, 5632.0, 5506.0, 5631.0, 5256.0, 5501.0, 5353.0, 5445.0, 5455.0, 5647.0, 5311.0, 5467.0, 5442.0, 5293.0, 5404.0, 5469.0, 5639.0, 5708.0, 5430.0, 5490.0, 5625.0, 5306.0, 5596.0, 5323.0, 5582.0, 5557.0, 5423.0, 5388.0, 5473.0, 5392.0, 5342.0, 5668.0, 5587.0, 5576.0, 5663.0, 5484.0, 5344.0, 5456.0, 5687.0, 5437.0, 5669.0, 5588.0, 5554.0, 5562.0, 5422.0, 5512.0, 5281.0, 5593.0, 5706.0, 5682.0, 5580.0, 5286.0, 5474.0, 5661.0, 5394.0, 5701.0, 5425.0, 5544.0, 5462.0, 5330.0, 5292.0, 5716.0, 5508.0, 5287.0, 5487.0, 5355.0, 5257.0, 5698.0, 5636.0, 5454.0, 5689.0, 5650.0, 5672.0, 5567.0, 5612.0, 5289.0, 5391.0, 5495.0, 5572.0 (number of hits: 9)
19	5270	9	1	333	1	5417.0, 5617.0, 5510.0, 5354.0, 5313.0, 5433.0, 5703.0, 5518.0, 5422.0, 5534.0, 5343.0, 5335.0, 5724.0, 5269.0, 5506.0, 5683.0, 5552.0, 5434.0, 5711.0, 5449.0, 5411.0, 5690.0, 5487.0, 5469.0, 5459.0, 5505.0, 5544.0, 5308.0, 5409.0, 5473.0, 5488.0, 5642.0, 5535.0, 5443.0, 5360.0, 5716.0, 5453.0, 5364.0, 5290.0, 5378.0, 5345.0, 5385.0, 5456.0, 5509.0, 5431.0, 5429.0, 5470.0, 5454.0, 5279.0, 5397.0, 5687.0, 5496.0, 5435.0, 5379.0, 5656.0, 5348.0, 5474.0, 5403.0, 5557.0, 5261.0, 5465.0, 5597.0, 5563.0, 5483.0, 5609.0, 5661.0, 5543.0, 5697.0, 5424.0, 5349.0, 5317.0, 5271.0, 5276.0, 5255.0, 5664.0, 5268.0, 5307.0, 5603.0, 5389.0, 5440.0, 5421.0, 5466.0, 5455.0, 5460.0, 5607.0, 5698.0, 5322.0, 5346.0, 5720.0, 5352.0, 5526.0, 5507.0, 5601.0, 5410.0, 5457.0, 5373.0, 5555.0, 5704.0, 5357.0, 5646.0 (number of hits: 4)
20	5270	9	1	333	1	5660.0, 5695.0, 5595.0, 5659.0, 5664.0, 5253.0, 5619.0, 5645.0, 5374.0, 5520.0, 5521.0, 5308.0, 5337.0, 5458.0, 5625.0, 5316.0, 5442.0, 5336.0, 5529.0, 5708.0, 5416.0, 5623.0, 5274.0, 5460.0, 5533.0, 5588.0, 5449.0, 5415.0, 5701.0, 5382.0, 5490.0, 5402.0, 5425.0, 5505.0, 5289.0, 5500.0, 5669.0, 5646.0, 5314.0, 5568.0, 5514.0, 5581.0, 5353.0, 5611.0, 5679.0, 5499.0, 5286.0, 5614.0, 5271.0, 5670.0, 5417.0, 5530.0, 5585.0, 5410.0, 5395.0, 5264.0, 5287.0, 5473.0, 5637.0, 5615.0, 5696.0, 5622.0, 5345.0, 5355.0, 5549.0, 5535.0, 5255.0, 5534.0, 5407.0, 5578.0,

						5386.0, 5488.0, 5661.0, 5525.0, 5482.0, 5263.0, 5440.0, 5654.0, 5363.0, 5285.0, 5583.0, 5352.0, 5311.0, 5467.0, 5563.0, 5470.0, 5690.0, 5481.0, 5564.0, 5290.0, 5584.0, 5392.0, 5299.0, 5291.0, 5385.0, 5693.0, 5273.0, 5612.0, 5331.0, 5408.0 (number of hits: 10)
21	5270	9	1	333	1	5425.0, 5256.0, 5399.0, 5714.0, 5517.0, 5416.0, 5398.0, 5528.0, 5455.0, 5606.0, 5430.0, 5393.0, 5561.0, 5576.0, 5372.0, 5509.0, 5719.0, 5376.0, 5672.0, 5673.0, 5294.0, 5596.0, 5363.0, 5359.0, 5676.0, 5522.0, 5669.0, 5571.0, 5702.0, 5641.0, 5553.0, 5423.0, 5400.0, 5267.0, 5524.0, 5462.0, 5708.0, 5650.0, 5497.0, 5621.0, 5402.0, 5634.0, 5459.0, 5337.0, 5591.0, 5631.0, 5311.0, 5293.0, 5260.0, 5458.0, 5406.0, 5415.0, 5463.0, 5417.0, 5364.0, 5484.0, 5345.0, 5296.0, 5405.0, 5327.0, 5446.0, 5480.0, 5651.0, 5611.0, 5562.0, 5443.0, 5682.0, 5318.0, 5263.0, 5394.0, 5550.0, 5594.0, 5418.0, 5649.0, 5604.0, 5360.0, 5419.0, 5255.0, 5264.0, 5632.0, 5686.0, 5609.0, 5511.0, 5287.0, 5460.0, 5321.0, 5285.0, 5633.0, 5492.0, 5303.0, 5382.0, 5315.0, 5289.0, 5259.0, 5700.0, 5333.0, 5723.0, 5403.0, 5547.0, 5580.0 (number of hits: 8)
22	5270	9	1	333	1	5544.0, 5549.0, 5688.0, 5489.0, 5534.0, 5391.0, 5464.0, 5699.0, 5408.0, 5686.0, 5285.0, 5301.0, 5526.0, 5640.0, 5383.0, 5378.0, 5473.0, 5309.0, 5698.0, 5705.0, 5665.0, 5525.0, 5334.0, 5425.0, 5384.0, 5375.0, 5480.0, 5331.0, 5315.0, 5679.0, 5646.0, 5600.0, 5281.0, 5541.0, 5497.0, 5250.0, 5347.0, 5642.0, 5601.0, 5507.0, 5697.0, 5650.0, 5454.0, 5571.0, 5289.0, 5594.0, 5342.0, 5499.0, 5400.0, 5626.0, 5707.0, 5660.0, 5638.0, 5476.0, 5360.0, 5510.0, 5369.0, 5540.0, 5435.0, 5339.0, 5367.0, 5588.0, 5491.0, 5530.0, 5298.0, 5652.0, 5684.0, 5716.0, 5363.0, 5414.0, 5270.0, 5353.0, 5381.0, 5648.0, 5387.0, 5685.0, 5517.0, 5502.0, 5276.0, 5590.0, 5656.0, 5267.0, 5521.0, 5442.0, 5623.0, 5528.0, 5427.0, 5689.0, 5345.0, 5393.0, 5713.0, 5293.0, 5611.0, 5329.0, 5516.0, 5624.0, 5433.0, 5265.0, 5450.0, 5258.0 (number of hits: 6)
23	5270	9	1	333	1	5649.0, 5699.0, 5367.0, 5444.0, 5713.0, 5330.0, 5544.0, 5554.0, 5427.0, 5289.0, 5534.0, 5392.0, 5692.0, 5546.0, 5608.0, 5537.0, 5652.0, 5459.0, 5366.0, 5687.0, 5321.0, 5309.0, 5402.0, 5275.0, 5440.0, 5710.0, 5659.0, 5698.0, 5567.0, 5592.0, 5499.0, 5575.0, 5700.0, 5636.0, 5270.0, 5291.0, 5332.0, 5376.0, 5598.0, 5471.0,

						5423.0, 5388.0, 5334.0, 5384.0, 5296.0, 5654.0, 5391.0, 5358.0, 5328.0, 5268.0, 5466.0, 5274.0, 5415.0, 5400.0, 5535.0, 5495.0, 5724.0, 5627.0, 5506.0, 5251.0, 5488.0, 5359.0, 5714.0, 5313.0, 5639.0, 5480.0, 5422.0, 5485.0, 5704.0, 5340.0, 5633.0, 5398.0, 5656.0, 5445.0, 5374.0, 5522.0, 5378.0, 5579.0, 5386.0, 5299.0, 5549.0, 5483.0, 5542.0, 5389.0, 5553.0, 5258.0, 5650.0, 5590.0, 5578.0, 5300.0, 5641.0, 5271.0, 5644.0, 5583.0, 5462.0, 5382.0, 5722.0, 5520.0, 5435.0, 5721.0 (number of hits: 7)
24	5270	9	1	333	1	5269.0, 5468.0, 5708.0, 5718.0, 5661.0, 5594.0, 5711.0, 5419.0, 5486.0, 5449.0, 5465.0, 5607.0, 5493.0, 5724.0, 5339.0, 5430.0, 5611.0, 5597.0, 5620.0, 5546.0, 5416.0, 5446.0, 5535.0, 5650.0, 5307.0, 5437.0, 5315.0, 5489.0, 5549.0, 5379.0, 5267.0, 5592.0, 5257.0, 5318.0, 5342.0, 5647.0, 5413.0, 5380.0, 5276.0, 5509.0, 5415.0, 5713.0, 5398.0, 5310.0, 5635.0, 5367.0, 5507.0, 5388.0, 5694.0, 5308.0, 5432.0, 5422.0, 5544.0, 5309.0, 5329.0, 5478.0, 5420.0, 5529.0, 5346.0, 5631.0, 5287.0, 5340.0, 5349.0, 5353.0, 5664.0, 5485.0, 5455.0, 5700.0, 5639.0, 5687.0, 5392.0, 5598.0, 5521.0, 5451.0, 5259.0, 5672.0, 5681.0, 5691.0, 5298.0, 5645.0, 5345.0, 5670.0, 5512.0, 5423.0, 5676.0, 5625.0, 5609.0, 5399.0, 5511.0, 5686.0, 5548.0, 5462.0, 5320.0, 5313.0, 5404.0, 5335.0, 5316.0, 5277.0, 5426.0, 5716.0 (number of hits: 7)
25	5270	9	1	333	1	5363.0, 5417.0, 5667.0, 5526.0, 5669.0, 5640.0, 5471.0, 5428.0, 5531.0, 5280.0, 5256.0, 5277.0, 5618.0, 5721.0, 5696.0, 5309.0, 5297.0, 5547.0, 5715.0, 5552.0, 5390.0, 5330.0, 5630.0, 5546.0, 5688.0, 5639.0, 5501.0, 5334.0, 5562.0, 5300.0, 5515.0, 5549.0, 5383.0, 5518.0, 5476.0, 5402.0, 5612.0, 5413.0, 5264.0, 5474.0, 5427.0, 5288.0, 5554.0, 5593.0, 5695.0, 5257.0, 5255.0, 5724.0, 5295.0, 5624.0, 5673.0, 5644.0, 5292.0, 5569.0, 5341.0, 5662.0, 5568.0, 5703.0, 5368.0, 5418.0, 5404.0, 5617.0, 5326.0, 5438.0, 5420.0, 5456.0, 5419.0, 5504.0, 5296.0, 5423.0, 5355.0, 5590.0, 5318.0, 5622.0, 5259.0, 5567.0, 5668.0, 5339.0, 5470.0, 5373.0, 5606.0, 5706.0, 5542.0, 5521.0, 5321.0, 5672.0, 5342.0, 5472.0, 5463.0, 5283.0, 5319.0, 5403.0, 5589.0, 5462.0, 5635.0, 5649.0, 5718.0, 5444.0, 5598.0, 5353.0 (number of hits: 7)
26	5270	9	1	333	1	5642.0, 5324.0, 5367.0, 5698.0, 5687.0, 5659.0, 5612.0, 5438.0, 5530.0, 5694.0,

						5634.0, 5620.0, 5475.0, 5309.0, 5461.0, 5548.0, 5402.0, 5647.0, 5451.0, 5515.0, 5262.0, 5722.0, 5408.0, 5546.0, 5277.0, 5627.0, 5584.0, 5484.0, 5387.0, 5478.0, 5556.0, 5503.0, 5452.0, 5398.0, 5251.0, 5364.0, 5664.0, 5598.0, 5307.0, 5671.0, 5374.0, 5621.0, 5441.0, 5638.0, 5368.0, 5632.0, 5330.0, 5386.0, 5440.0, 5255.0, 5520.0, 5403.0, 5414.0, 5391.0, 5299.0, 5493.0, 5558.0, 5257.0, 5600.0, 5663.0, 5494.0, 5422.0, 5594.0, 5350.0, 5468.0, 5381.0, 5544.0, 5384.0, 5454.0, 5394.0, 5607.0, 5648.0, 5549.0, 5326.0, 5706.0, 5526.0, 5510.0, 5336.0, 5449.0, 5496.0, 5616.0, 5498.0, 5709.0, 5693.0, 5724.0, 5270.0, 5445.0, 5407.0, 5456.0, 5610.0, 5360.0, 5471.0, 5547.0, 5358.0, 5497.0, 5611.0, 5593.0, 5397.0, 5389.0, 5269.0 (number of hits: 3)
27	5270	9	1	333	1	5356.0, 5448.0, 5268.0, 5386.0, 5379.0, 5313.0, 5539.0, 5256.0, 5375.0, 5398.0, 5439.0, 5614.0, 5467.0, 5652.0, 5701.0, 5385.0, 5427.0, 5606.0, 5410.0, 5483.0, 5457.0, 5502.0, 5523.0, 5250.0, 5509.0, 5289.0, 5562.0, 5559.0, 5260.0, 5517.0, 5649.0, 5340.0, 5363.0, 5578.0, 5275.0, 5271.0, 5526.0, 5301.0, 5548.0, 5707.0, 5634.0, 5330.0, 5688.0, 5657.0, 5341.0, 5500.0, 5581.0, 5468.0, 5278.0, 5529.0, 5552.0, 5336.0, 5351.0, 5269.0, 5609.0, 5475.0, 5266.0, 5399.0, 5574.0, 5528.0, 5298.0, 5381.0, 5292.0, 5436.0, 5667.0, 5454.0, 5662.0, 5510.0, 5337.0, 5438.0, 5480.0, 5394.0, 5544.0, 5515.0, 5530.0, 5518.0, 5478.0, 5432.0, 5572.0, 5321.0, 5395.0, 5326.0, 5422.0, 5430.0, 5655.0, 5604.0, 5335.0, 5665.0, 5628.0, 5353.0, 5637.0, 5592.0, 5303.0, 5571.0, 5698.0, 5558.0, 5598.0, 5382.0, 5560.0, 5319.0 (number of hits: 6)
28	5270	9	1	333	1	5703.0, 5370.0, 5496.0, 5620.0, 5504.0, 5523.0, 5699.0, 5404.0, 5544.0, 5363.0, 5619.0, 5477.0, 5284.0, 5571.0, 5268.0, 5266.0, 5344.0, 5362.0, 5387.0, 5570.0, 5670.0, 5469.0, 5341.0, 5531.0, 5614.0, 5594.0, 5690.0, 5583.0, 5671.0, 5688.0, 5626.0, 5316.0, 5383.0, 5579.0, 5394.0, 5333.0, 5442.0, 5347.0, 5250.0, 5714.0, 5534.0, 5692.0, 5470.0, 5560.0, 5371.0, 5622.0, 5618.0, 5342.0, 5258.0, 5343.0, 5252.0, 5596.0, 5287.0, 5562.0, 5701.0, 5711.0, 5283.0, 5493.0, 5599.0, 5386.0, 5449.0, 5380.0, 5348.0, 5660.0, 5280.0, 5607.0, 5521.0, 5709.0, 5641.0, 5662.0, 5461.0, 5542.0, 5297.0, 5625.0, 5303.0, 5291.0, 5630.0, 5552.0, 5471.0, 5458.0, 5434.0, 5402.0, 5376.0, 5676.0, 5382.0,

						5520.0, 5416.0, 5385.0, 5529.0, 5412.0, 5435.0, 5540.0, 5659.0, 5507.0, 5516.0, 5422.0, 5610.0, 5539.0, 5450.0, 5445.0 (number of hits: 4)
29	5270	9	1	333	1	5510.0, 5260.0, 5384.0, 5578.0, 5366.0, 5614.0, 5638.0, 5338.0, 5307.0, 5326.0, 5337.0, 5440.0, 5347.0, 5328.0, 5464.0, 5401.0, 5679.0, 5569.0, 5416.0, 5320.0, 5576.0, 5506.0, 5424.0, 5422.0, 5693.0, 5612.0, 5441.0, 5636.0, 5315.0, 5414.0, 5627.0, 5333.0, 5492.0, 5293.0, 5658.0, 5399.0, 5343.0, 5618.0, 5572.0, 5323.0, 5699.0, 5575.0, 5600.0, 5380.0, 5631.0, 5687.0, 5577.0, 5302.0, 5507.0, 5712.0, 5652.0, 5427.0, 5591.0, 5582.0, 5473.0, 5487.0, 5629.0, 5540.0, 5523.0, 5703.0, 5452.0, 5294.0, 5529.0, 5553.0, 5501.0, 5351.0, 5327.0, 5423.0, 5579.0, 5254.0, 5665.0, 5256.0, 5446.0, 5332.0, 5297.0, 5622.0, 5276.0, 5277.0, 5516.0, 5684.0, 5264.0, 5257.0, 5496.0, 5274.0, 5468.0, 5702.0, 5603.0, 5429.0, 5493.0, 5273.0, 5268.0, 5613.0, 5625.0, 5438.0, 5319.0, 5470.0, 5659.0, 5544.0, 5357.0, 5445.0 (number of hits: 5)
30	5270	9	1	333	1	5306.0, 5424.0, 5666.0, 5700.0, 5338.0, 5355.0, 5516.0, 5413.0, 5271.0, 5719.0, 5421.0, 5437.0, 5268.0, 5486.0, 5467.0, 5626.0, 5370.0, 5381.0, 5400.0, 5363.0, 5601.0, 5542.0, 5710.0, 5694.0, 5718.0, 5507.0, 5317.0, 5481.0, 5619.0, 5483.0, 5348.0, 5450.0, 5598.0, 5640.0, 5492.0, 5527.0, 5564.0, 5406.0, 5660.0, 5703.0, 5597.0, 5305.0, 5466.0, 5510.0, 5630.0, 5588.0, 5464.0, 5617.0, 5278.0, 5344.0, 5490.0, 5339.0, 5553.0, 5333.0, 5395.0, 5572.0, 5341.0, 5606.0, 5533.0, 5497.0, 5573.0, 5384.0, 5580.0, 5310.0, 5446.0, 5532.0, 5599.0, 5426.0, 5505.0, 5529.0, 5592.0, 5398.0, 5286.0, 5374.0, 5462.0, 5299.0, 5436.0, 5584.0, 5403.0, 5521.0, 5365.0, 5351.0, 5585.0, 5340.0, 5316.0, 5664.0, 5579.0, 5312.0, 5552.0, 5656.0, 5287.0, 5663.0, 5250.0, 5457.0, 5343.0, 5720.0, 5428.0, 5460.0, 5609.0, 5297.0 (number of hits: 8)

5550 MHz

Radar Signal Type	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1	30	90 %	60%	Pass
Type 2	30	93.3 %	60%	Pass
Type 3	30	96.7 %	60%	Pass
Type 4	30	96.7 %	60%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	90 %	70%	Pass

Please refer to the following statistical tables:

Table-1 Radar Type 1 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5550	18	1	1428	1
2	5550	18	1	1428	1
3	5550	18	1	1428	0
4	5550	18	1	1428	1
5	5550	18	1	1428	1
6	5550	18	1	1428	1
7	5550	18	1	1428	1
8	5550	18	1	1428	1
9	5550	18	1	1428	1
10	5550	18	1	1428	1
11	5550	18	1	1428	1
12	5550	18	1	1428	1
13	5550	18	1	1428	1
14	5550	18	1	1428	1
15	5550	18	1	1428	1
16	5550	18	1	1428	1
17	5550	18	1	1428	1
18	5550	18	1	1428	1
19	5550	18	1	1428	0
20	5550	18	1	1428	1
21	5550	18	1	1428	1
22	5550	18	1	1428	1
23	5550	18	1	1428	1
24	5550	18	1	1428	1
25	5550	18	1	1428	0
26	5550	18	1	1428	1
27	5550	18	1	1428	1
28	5550	18	1	1428	1
29	5550	18	1	1428	1
30	5550	18	1	1428	1
Detection Percentage: 90.0 % (>60%)					

Table-2 Radar Type 2 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5550	24	2.6	169	1
2	5550	23	2.6	205	1
3	5550	28	4.9	161	1
4	5550	25	4.8	182	1
5	5550	29	3.6	219	0
6	5550	28	4.1	212	1
7	5550	24	3.9	188	1
8	5550	25	2.8	195	1
9	5550	28	1.6	183	1
10	5550	23	2.5	210	1
11	5550	27	1.4	179	1
12	5550	26	3.5	220	1
13	5550	24	2.4	176	1
14	5550	26	3.4	157	1
15	5550	24	2.9	170	1
16	5550	26	4.2	198	1
17	5550	24	2.9	203	1
18	5550	27	4.6	173	1
19	5550	29	1.6	192	1
20	5550	27	1.2	170	1
21	5550	27	5	209	1
22	5550	25	3.5	195	1
23	5550	27	2.3	154	1
24	5550	25	5	200	0
25	5550	27	4.2	211	1
26	5550	26	2.1	177	1
27	5550	27	3.7	181	1
28	5550	26	2.9	180	1
29	5550	26	2.5	167	1
30	5550	26	4.6	203	1
Detection Percentage: 93.3 % (>60%)					

Table-3 Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5550	17	8.1	322	1
2	5550	17	7.6	373	1
3	5550	18	6.4	452	1
4	5550	17	6.1	352	1
5	5550	16	7.3	349	1
6	5550	17	10	479	1
7	5550	17	6.9	278	1
8	5550	17	7.1	354	1
9	5550	16	8.3	381	1
10	5550	17	8.8	291	1
11	5550	18	8.8	483	1
12	5550	18	8.1	213	0
13	5550	16	9.5	423	1
14	5550	18	8.4	329	1
15	5550	17	6	393	1
16	5550	16	9.2	349	1
17	5550	17	6.3	327	1
18	5550	17	10	309	1
19	5550	18	6.5	453	1
20	5550	18	8.9	277	1
21	5550	18	9	465	1
22	5550	17	9	246	1
23	5550	16	6.4	449	1
24	5550	18	8.4	472	1
25	5550	16	9.6	354	1
26	5550	16	7.5	250	1
27	5550	18	7.2	260	1
28	5550	17	7.9	335	1
29	5550	16	6.7	491	1
30	5550	18	6.4	213	1
Detection Percentage: 96.7 % (>60%)					

Table-4 Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5550	15	12.3	201	1
2	5550	15	15.9	493	1
3	5550	14	11.9	384	1
4	5550	12	12.9	445	1
5	5550	16	19.7	427	1
6	5550	13	14.4	415	1
7	5550	13	17.5	342	1
8	5550	12	13.8	295	1
9	5550	15	15.9	313	1
10	5550	13	17.5	404	1
11	5550	12	18.6	246	1
12	5550	14	20	228	1
13	5550	14	11.5	288	1
14	5550	15	18.2	216	1
15	5550	13	17.4	218	1
16	5550	15	16.3	412	1
17	5550	14	15.2	352	1
18	5550	15	16.5	407	1
19	5550	14	19.5	487	1
20	5550	15	18.1	460	1
21	5550	13	13.6	298	0
22	5550	16	11.2	455	1
23	5550	12	12.3	471	1
24	5550	15	12.1	409	1
25	5550	15	18.1	270	1
26	5550	12	12.1	298	1
27	5550	16	16.7	426	1
28	5550	13	17.8	293	1
29	5550	14	15.7	220	1
30	5550	15	13.4	283	1
Detection Percentage: 96.7 % (>60%)					

Table-5 Radar Type 5 Statistical Performance

Bin5 Statistics 1

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	8	57.1	1264		0.896542	1
1	1	9	85.5			1.020828	
2	3	13	75.6	1584	1212	2.008515	
3	1	18	55.1			3.894479	
4	2	9	55.4	1535		4.454996	
5	2	11	95.6	1615		5.843891	
6	3	14	84.3	1196	1820	6.089102	
7	2	18	95.3	1704		7.782861	
8	2	17	91.3	1742		8.895409	
9	2	15	55.1	1616		9.478816	
10	1	17	59.6			10.164118	
11	3	16	97.6	1573	1437	11.035267	

Bin5 Statistics 2

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	14	81.9	1792	1638	0.116555	1
1	2	14	94.3	1696		1.7577	
2	3	12	66.3	1505	1794	2.273219	
3	1	13	90.8			3.174449	
4	1	12	51.4			4.943174	
5	3	12	70.5	1991	1635	5.746592	
6	2	15	65.4	1881		6.318709	
7	3	6	62.8	1664	1562	7.675133	
8	2	9	63.2	1185		8.736569	
9	3	13	63.8	1049	1464	9.471867	
10	2	20	81.3	1722		10.451569	
11	2	6	88.6	1698		11.013433	

Bin5 Statistics 3

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	5	80.8	1032		0.732008	1
1	3	11	61	1776	1180	1.415868	
2	2	18	73.7	1798		2.460103	
3	2	8	55.2	1393		4.109217	
4	2	13	59.7	1103		5.018012	
5	2	7	96.6	1947		6.866468	
6	1	20	78.3			7.605575	
7	3	11	99	1208	1417	9.576435	
8	2	12	94.6	1541		10.292086	
9	2	18	91.9	1140		11.516534	

Bin5 Statistics 4

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	15	56.4	1045	1702	0.343343	1
1	2	9	75.9	1689		1.380122	
2	1	18	63.8			1.678546	
3	2	11	60.2	1785		2.251506	
4	1	20	62.2			2.948828	
5	2	20	54.9	1452		4.229631	
6	1	17	79.6			4.570378	
7	3	6	53.3	1630	1074	5.435224	
8	2	15	52.6	1292		6.233007	
9	2	7	82.6	1044		6.981743	
10	1	14	95.7			7.393435	
11	2	16	77	1360		8.411855	
12	2	17	97.7	1173		8.762503	
13	2	18	73.3	1054		9.397102	
14	3	14	50.2	1135	1836	10.242391	
15	2	8	70.7	1395		11.161716	
16	2	13	94.9	1948		11.543183	

Bin5 Statistics 5

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	10	54.3	1323		0.542045	1
1	2	16	71.6	1783		1.525702	
2	2	6	61.7	1544		2.755233	
3	1	9	62.5			4.914304	
4	2	13	58	1974		5.949385	
5	1	12	99.1			7.031639	
6	2	14	75	1332		9.313454	
7	3	5	70.6	1174	1894	10.603704	
8	3	6	68.5	1643	1018	11.476855	

Bin5 Statistics 6

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	19	88.8	1443		0.17834	1
1	3	8	58.8	1693	1195	0.91888	
2	2	13	71.8	1486		1.565483	
3	2	6	84.1	1001		1.894869	
4	2	6	85.2	1514		2.564282	
5	2	6	85.2	1800		3.00598	
6	3	7	56.6	1913	1456	3.659125	
7	2	9	67.4	1297		4.771363	
8	1	15	59.7			5.121363	
9	3	18	95.7	1767	1010	5.71084	
10	2	18	96	1234		6.211786	
11	2	19	64.3	1053		6.96388	
12	2	18	78.8	1727		7.6322	
13	2	6	72.3	1164		8.182811	
14	2	18	55.7	1125		8.779281	
15	1	15	86.1			9.38557	
16	3	16	87.2	1116	1817	9.691321	
17	3	18	72.1	1137	1138	10.566964	
18	1	14	62.4			10.891085	
19	1	9	86.8			11.752513	

Bin5 Statistics 7

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	17	64.9	1822		0.583758	
1	1	12	75.7			1.37158	
2	2	18	51.5	1992		2.383038	
3	2	8	63.3	1073		2.627386	
4	2	16	57.4	1663		3.249917	
5	2	14	89.9	1789		4.702838	
6	2	13	73.3	1888		5.348316	
7	2	13	94	1629		5.752881	1
8	1	18	69.5			6.890301	
9	3	14	89.3	1483	1234	7.591578	
10	2	12	57.2	1195		8.47786	
11	1	19	73.7			9.103988	
12	2	12	78.2	1739		10.212218	
13	3	16	80.5	1585	1704	10.495389	
14	2	17	60.7	1785		11.577613	

Bin5 Statistics 8

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	15	87.8	1321		0.369843	
1	2	14	86.3	1722		1.117703	
2	2	17	68.8	1568		1.31347	
3	2	18	93.8	1024		2.105301	
4	2	15	95.7	1910		2.886206	
5	1	17	60.1			3.272811	
6	1	20	62.3			4.377942	
7	2	9	87.5	1319		4.931411	
8	1	18	73.3			5.066331	
9	3	7	88.7	1258	1392	5.85514	1
10	2	19	72.9	1897		6.930777	
11	3	16	51.7	1319	1027	7.545252	
12	1	10	78.5			8.163694	
13	2	13	69.6	1595		8.259663	
14	2	14	71.7	1442		9.31122	
15	3	6	99.8	1959	1896	9.972526	
16	1	12	86			10.619101	
17	3	10	67	1220	1114	10.858077	
18	2	15	92.8	1594		11.524729	

Bin5 Statistics 9

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	10	86.2	1268	1706	0.838539	
1	1	7	64.3			1.480271	
2	1	8	56.4			2.055457	
3	1	14	80			2.870431	
4	2	13	52.1	1715		4.009173	
5	3	15	86.5	1325	1414	4.815172	
6	3	9	86	1778	1029	5.957582	1
7	3	11	53.8	1282	1408	6.676751	
8	3	18	80.9	1952	1718	7.599521	
9	1	13	62			8.776736	
10	2	9	95.1	1302		9.936621	
11	1	15	52.4			10.32388	
12	1	16	50.8			11.792856	

Bin5 Statistics 10

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	15	76.7	1068	1790	0.990332	1
1	2	14	98.5	1082		1.883535	
2	1	14	69.7			2.745458	
3	3	11	67.7	1726	1391	3.169963	
4	2	13	53.9	1787		4.928816	
5	2	9	68.3	1015		5.349509	
6	1	16	88.1			6.577664	
7	3	17	77	1084	1419	7.263032	
8	2	17	62.9	1419		8.384065	
9	3	19	95.1	1331	1688	9.126969	
10	1	12	80.3			10.314065	
11	1	9	71.3			11.242237	

Bin5 Statistics 11

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	18	68.6			0.657077	1
1	1	11	95.8			0.774412	
2	1	19	92.7			1.841839	
3	2	19	63.3	1909		2.402341	
4	2	18	89.8	1667		2.917248	
5	3	9	61.6	1751	1839	3.84329	
6	2	6	60.3	1674		4.737945	
7	3	15	68.9	1288	1784	5.086967	
8	2	12	79.6	1430		6.126754	
9	2	9	78.1	1797		7.007846	
10	2	10	68.7	1190		7.610794	
11	2	8	87.8	1919		7.926245	
12	2	15	72.1	1844		8.777065	
13	2	11	83.5	1958		9.315467	
14	2	13	79.4	1553		10.573637	
15	1	13	96.4			11.180309	
16	2	14	52.1	1819		11.424645	

Bin5 Statistics 12

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	8	59.5	1625	1777	0.87712	1
1	2	15	78	1781		1.271543	
2	2	10	99.8	1386		2.835157	
3	3	6	67.5	1937	1168	3.795561	
4	1	17	80			4.377206	
5	2	8	89.5	1974		5.148244	
6	3	14	76.5	1767	1163	6.463678	
7	3	12	74.5	1590	1897	7.422701	
8	2	13	77.3	1373		8.38418	
9	3	18	88.6	1172	1408	9.319206	
10	2	8	55.8	1684		10.703419	
11	2	11	75.9	1424		11.925763	

Bin5 Statistics 13

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	11	75.1	1530	1499	0.665964	1
1	3	12	62.9	1085	1927	1.164452	
2	2	11	68.5	1016		2.641795	
3	2	15	94.4	1325		3.331634	
4	1	7	64.3			4.313556	
5	2	14	82.7	1522		4.828409	
6	3	17	64.8	1758	1819	5.576156	
7	2	10	84.2	1820		6.869756	
8	2	15	73.4	1365		8.264202	
9	1	9	69.5			8.918187	
10	2	16	88.3	1974		9.620759	
11	1	8	74.7			10.828522	
12	2	19	95.8	1629		11.851787	

Bin5 Statistics 14

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	17	86.2	1975	1511	0.926858	1
1	2	7	50.4	1879		1.212139	
2	2	14	73.6	1755		2.24606	
3	2	7	94.4	1979		3.375525	
4	2	19	95.7	1085		4.830202	
5	2	11	56.8	1093		5.663677	
6	3	9	74	1049	1425	6.485488	
7	3	10	63.7	1459	1011	7.051945	
8	1	14	96.9			8.892704	
9	1	19	52.7			9.504975	
10	1	9	51.3			10.840561	
11	3	8	52	1752	1592	11.834178	

Bin5 Statistics 15

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	5	96.4			0.609979	1
1	1	16	95.6			1.266361	
2	1	6	85.2			2.403186	
3	3	10	60.6	1561	1430	3.144507	
4	2	17	66.2	1131		3.998976	
5	3	14	56.4	1377	1635	4.847248	
6	3	19	78.1	1448	1949	5.266435	
7	3	15	64.8	1820	1241	6.295262	
8	1	14	83.2			7.650552	
9	1	17	74.3			7.720621	
10	3	9	69.7	1944	1663	9.299232	
11	1	17	78.5			10.280725	
12	1	12	78.4			10.857339	
13	1	6	58.2			11.981323	

Bin5 Statistics 16

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	5	85.9			0.626965	1
1	2	9	95.6	1898		1.771558	
2	1	18	64.3			2.539168	
3	2	13	71.4	1543		3.76545	
4	2	10	87.8	1737		5.385442	
5	1	20	65.4			6.235157	
6	2	13	66	1599		7.052576	
7	3	9	81	1721	1534	8.415307	
8	1	16	95.3			9.618997	
9	2	20	95	1304		9.906333	
10	2	19	67.3	1971		11.757236	

Bin5 Statistics 17

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	13	86.7			0.366324	1
1	1	6	89.9			0.764423	
2	3	8	80.1	1620	1821	1.50425	
3	1	19	76.5			2.466662	
4	1	7	91			3.457142	
5	3	17	56.1	1025	1139	3.659455	
6	2	8	68.2	1292		4.637329	
7	2	20	80.9	1593		5.391436	
8	2	13	58.4	1774		6.182187	
9	3	17	54.1	1843	1334	6.426584	
10	3	19	57.9	1043	1767	7.230986	
11	2	18	61.3	1804		8.262924	
12	1	8	82.6			8.67597	
13	2	9	51.3	1200		9.452829	
14	1	19	87.1			9.962772	
15	2	12	75.9	1900		10.897686	
16	3	13	94.6	1533	1693	11.557816	

Bin5 Statistics 18

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	12	50.3	1739		1.424744	1
1	2	5	66.8	1193		1.554391	
2	1	10	96.9			3.169357	
3	1	12	89.5			5.794292	
4	1	10	70.4			6.0218	
5	3	7	65.9	1046	1888	8.594251	
6	1	12	85.7			10.023412	
7	2	18	83.2	1908		11.610422	

Bin5 Statistics 19

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	5	93.6	1139	1873	1.014637	1
1	2	9	87	1654		1.808768	
2	3	9	51.1	1274	1924	2.478238	
3	3	16	79	1818	1532	3.761594	
4	1	7	63.5			5.204091	
5	3	7	66.1	1923	1336	6.199362	
6	2	15	91.9	1137		8.158596	
7	2	16	60.4	1178		8.967771	
8	2	18	66.4	1435		10.429427	
9	2	15	63.2	1499		11.15042	

Bin5 Statistics 20

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	8	75.1	1018	1405	0.116832	
1	2	19	84.2	1545		1.390122	
2	2	12	72.2	1278		1.471976	
3	2	13	52	1992		2.555671	
4	2	12	90.8	1800		3.39235	
5	3	15	84	1750	1137	3.886446	
6	2	20	74.5	1845		4.677018	
7	2	12	96.6	1137		5.101448	
8	3	19	76.4	1288	1262	6.068418	1
9	2	10	72.3	1470		7.025101	
10	2	10	77.8	1925		7.216945	
11	3	11	65.5	1123	1201	8.038524	
12	3	10	71.6	1571	1575	8.50047	
13	2	16	93.1	1264		9.187744	
14	3	11	97.8	1055	1849	10.227665	
15	2	18	58.5	1699		10.766654	
16	1	20	85.4			11.690393	

Bin5 Statistics 21

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	11	83.8	1751		0.203598	
1	2	14	73	1693		1.659403	
2	2	16	60.7	1006		3.247897	
3	2	16	54.4	1145		3.499822	
4	2	8	65	1709		4.583586	
5	2	15	56.2	1974		5.491159	1
6	2	6	72	1153		6.870086	
7	2	7	54.9	1774		7.672822	
8	3	9	98.1	1450	1480	9.167502	
9	3	5	77	1436	1382	10.88785	
10	3	6	51.7	1105	1804	10.922263	

Bin5 Statistics 22

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	10	53.2	1551		0.249668	
1	2	15	82.4	1048		2.018921	
2	1	14	90.5			2.757771	
3	2	6	86.1	1661		3.511258	
4	2	11	59.2	1142		5.215693	
5	2	7	60.5	1046		6.30078	1
6	2	17	69.9	1889		6.592821	
7	2	9	52.5	1449		8.234427	
8	1	17	72.9			8.779748	
9	2	8	56.5	1417		10.169943	
10	1	10	62.6			11.09973	

Bin5 Statistics 23

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
	1	13	92.3			0.774505	1
1	3	13	88.7	1876	1597	1.333206	
2	3	8	81.4	1097	1668	2.312395	
3	2	16	85.2	1320		3.369678	
4	1	11	62.6			3.698023	
5	1	7	91.9			4.37237	
6	2	11	87.3	1994		5.317055	
7	2	7	96.6	1430		6.195605	
8	2	18	52.2	1579		7.52984	
9	3	8	81.8	1022	1774	8.475569	
10	1	12	87.6			8.893489	
11	2	19	69.4	1591		9.90086	
12	2	7	95.8	1651		11.012058	
13	2	14	54.3	1593		11.975658	

Bin5 Statistics 24

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	9	83.7	1315		0.780533	1
1	2	6	97.2	1073		1.357162	
2	3	7	53.7	1137	1430	3.499567	
3	2	11	92	1582		4.247007	
4	1	6	71.2			6.632976	
5	3	15	90.3	1014	1709	6.935749	
6	1	11	52.4			9.176515	
7	2	17	92.6	1230		9.701829	
8	3	15	61.8	1091	1133	11.303406	

Bin5 Statistics 25

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	9	95.3			0.13339	
1	1	11	83.7			0.629942	
2	2	5	56.3	1442		1.716083	
3	2	16	80.1	1914		1.817912	
4	3	18	50.5	1202	1931	2.788705	
5	3	12	71.9	1387	1326	3.313704	
6	1	10	77.6			3.60868	
7	2	12	69.2	1614		4.461028	
8	3	19	53.2	1712	1617	5.071603	
9	2	14	67.5	1652		5.497101	1
10	2	14	84.6	1607		6.567004	
11	2	9	64.5	1261		7.045703	
12	2	19	70.3	1314		7.295769	
13	3	12	58.1	1364	1563	8.089092	
14	1	18	74.4			8.725396	
15	2	10	51.3	1853		9.356421	
16	3	7	77.3	1104	1947	10.119379	
17	2	14	79.6	1695		10.233305	
18	2	15	74.9	1484		10.963443	
19	2	20	87.6	1119		11.875939	

Bin5 Statistics 26

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	9	56.8	1733	1822	0.038896	
1	2	19	52.1	1008		1.247014	
2	2	16	76.4	1121		2.03641	
3	1	15	67.3			3.109141	
4	2	19	86.1	1998		3.208046	
5	2	17	74.9	1119		4.650682	
6	3	6	87.5	1182	1119	4.942775	
7	3	12	88.7	1524	1593	5.676047	1
8	2	14	51.5	1560		7.170698	
9	1	9	81.4			7.270002	
10	2	19	64	1635		8.157181	
11	1	20	68.9			9.417061	
12	2	6	54.6	1851		9.661236	
13	1	13	93.8			10.99817	
14	2	5	73.1	1275		11.559065	

Bin5 Statistics 27

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	14	52.3			0.170934	
1	3	13	56.4	1262	1474	1.274533	
2	2	14	78.7	1162		1.766319	
3	2	9	72.6	1709		2.818391	
4	2	6	78.2	1784		3.605043	
5	2	15	93.3	1448		4.440393	
6	3	14	66.9	1157	1999	5.158849	
7	2	11	51.1	1333		5.405712	
8	2	5	72.1	1779		6.431455	1
9	2	5	94.3	1915		7.268817	
10	1	18	59.3			7.501841	
11	2	11	91	1864		8.953564	
12	2	5	60	1275		9.570775	
13	3	12	50.2	1660	1219	9.997702	
14	2	16	74.3	1586		10.788653	
15	2	9	84.3	1515		11.740017	

Bin5 Statistics 28

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	15	67.4	1739	1135	1.120689	1
1	3	9	93.8	1631	1368	1.89086	
2	2	18	70.7	1915		2.826712	
3	2	14	89.3	1415		4.15889	
4	2	18	69.8	1809		5.464128	
5	2	13	94.2	1944		6.872572	
6	2	9	59.6	1069		8.216095	
7	2	17	65.7	1203		9.196392	
8	2	15	55.9	1431		10.338703	
9	2	14	86.4	1141		11.328476	

Bin5 Statistics 29

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	14	82.2			0.361362	1
1	2	20	63.2	1420		1.336956	
2	1	9	91.3			1.826723	
3	2	11	55.5	1431		2.321318	
4	2	14	60.9	1495		2.940408	
5	3	6	76.6	1543	1042	4.082251	
6	3	8	94.4	1490	1401	4.749943	
7	1	18	94.4			5.397279	
8	1	6	72.5			6.212568	
9	3	8	73.1	1479	1498	6.37397	
10	2	19	76.7	1590		7.309752	
11	3	6	84.2	1066	1056	8.077479	
12	2	20	78	1509		9.061078	
13	2	18	97.1	1380		9.784792	
14	1	18	85.6			10.015067	
15	2	7	87.2	1142		10.96451	
16	1	19	78.4			11.722691	

Bin5 Statistics 30

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	7	64.9	1931		0.60385	
1	2	7	83.9	1336		1.510003	
2	1	17	74.5			2.064136	
3	2	14	53.4	1546		3.078914	
4	2	7	98.5	1502		4.221317	
5	1	13	80.7			5.006076	
6	2	7	92.5	1762		5.771322	1
7	2	12	75.3	1660		6.843464	
8	2	19	99.5	1201		7.5145	
9	3	13	74.9	1127	1650	8.780262	
10	2	10	52.7	1814		9.36581	
11	2	15	97.1	1645		10.640159	
12	2	19	54.1	1612		11.193742	

Table-6 Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)	Hopping Sequence
1	5550	9	1	333	1	5449.0, 5288.0, 5561.0, 5352.0, 5348.0, 5446.0, 5264.0, 5685.0, 5526.0, 5290.0, 5603.0, 5704.0, 5523.0, 5292.0, 5385.0, 5709.0, 5664.0, 5372.0, 5648.0, 5695.0, 5712.0, 5713.0, 5667.0, 5340.0, 5346.0, 5652.0, 5296.0, 5615.0, 5634.0, 5497.0, 5636.0, 5428.0, 5411.0, 5455.0, 5552.0, 5657.0, 5276.0, 5538.0, 5358.0, 5311.0, 5481.0, 5582.0, 5717.0, 5606.0, 5527.0, 5399.0, 5281.0, 5337.0, 5592.0, 5599.0, 5607.0, 5423.0, 5351.0, 5586.0, 5402.0, 5303.0, 5451.0, 5533.0, 5460.0, 5623.0, 5638.0, 5316.0, 5391.0, 5355.0, 5488.0, 5373.0, 5363.0, 5662.0, 5254.0, 5361.0, 5629.0, 5619.0, 5548.0, 5410.0, 5489.0, 5441.0, 5581.0, 5357.0, 5322.0, 5412.0, 5453.0, 5396.0, 5703.0, 5683.0, 5362.0, 5345.0, 5404.0, 5397.0, 5366.0, 5261.0, 5556.0, 5642.0, 5492.0, 5593.0, 5384.0, 5506.0, 5721.0, 5285.0, 5394.0, 5551.0 (number of hits: 7)
2	5550	9	1	333	1	5387.0, 5540.0, 5421.0, 5547.0, 5331.0, 5498.0, 5259.0, 5448.0, 5378.0, 5617.0, 5509.0, 5327.0, 5576.0, 5481.0, 5676.0, 5295.0, 5446.0, 5337.0, 5595.0, 5537.0, 5604.0, 5315.0, 5486.0, 5301.0, 5631.0, 5534.0, 5289.0, 5558.0, 5673.0, 5603.0, 5602.0, 5358.0, 5252.0, 5691.0, 5425.0, 5516.0, 5408.0, 5720.0, 5629.0, 5565.0, 5538.0, 5592.0, 5517.0, 5651.0, 5428.0, 5423.0, 5723.0, 5581.0, 5262.0, 5424.0, 5668.0, 5518.0, 5556.0, 5313.0, 5569.0, 5464.0, 5681.0, 5692.0, 5254.0, 5333.0, 5554.0, 5401.0, 5255.0, 5455.0, 5666.0, 5644.0, 5391.0, 5454.0, 5451.0, 5549.0, 5616.0, 5532.0, 5382.0, 5672.0, 5311.0, 5591.0, 5279.0, 5371.0, 5307.0, 5605.0, 5320.0, 5344.0, 5531.0, 5398.0, 5643.0, 5469.0, 5563.0, 5621.0, 5687.0, 5528.0, 5304.0, 5468.0, 5510.0, 5695.0, 5713.0, 5288.0, 5355.0, 5716.0, 5444.0, 5525.0 (number of hits: 8)
3	5550	9	1	333	1	5369.0, 5704.0, 5255.0, 5669.0, 5365.0, 5631.0, 5320.0, 5592.0, 5714.0, 5507.0, 5541.0, 5391.0, 5673.0, 5510.0, 5509.0, 5379.0, 5302.0, 5429.0, 5321.0, 5543.0, 5290.0, 5410.0, 5684.0, 5463.0, 5462.0, 5389.0, 5413.0, 5647.0, 5696.0, 5455.0, 5601.0, 5361.0, 5492.0, 5378.0, 5466.0, 5359.0, 5350.0, 5719.0, 5629.0, 5685.0, 5415.0, 5349.0, 5336.0, 5556.0, 5550.0,

						5624.0, 5608.0, 5401.0, 5328.0, 5707.0, 5699.0, 5521.0, 5716.0, 5366.0, 5518.0, 5654.0, 5422.0, 5616.0, 5296.0, 5261.0, 5595.0, 5570.0, 5558.0, 5385.0, 5686.0, 5553.0, 5461.0, 5515.0, 5636.0, 5383.0, 5307.0, 5615.0, 5353.0, 5676.0, 5524.0, 5639.0, 5312.0, 5467.0, 5715.0, 5339.0, 5632.0, 5663.0, 5502.0, 5591.0, 5478.0, 5614.0, 5600.0, 5287.0, 5258.0, 5419.0, 5382.0, 5613.0, 5598.0, 5402.0, 5325.0, 5453.0, 5442.0, 5529.0, 5538.0, 5268.0 (number of hits: 6)
4	5550	9	1	333	1	5568.0, 5425.0, 5559.0, 5510.0, 5633.0, 5408.0, 5305.0, 5539.0, 5393.0, 5577.0, 5627.0, 5452.0, 5554.0, 5611.0, 5669.0, 5265.0, 5637.0, 5588.0, 5346.0, 5354.0, 5427.0, 5299.0, 5476.0, 5444.0, 5550.0, 5678.0, 5590.0, 5638.0, 5632.0, 5419.0, 5495.0, 5337.0, 5686.0, 5705.0, 5360.0, 5614.0, 5710.0, 5424.0, 5507.0, 5664.0, 5255.0, 5304.0, 5446.0, 5534.0, 5665.0, 5254.0, 5267.0, 5487.0, 5657.0, 5276.0, 5383.0, 5301.0, 5396.0, 5592.0, 5473.0, 5572.0, 5392.0, 5690.0, 5410.0, 5331.0, 5562.0, 5280.0, 5688.0, 5569.0, 5455.0, 5432.0, 5511.0, 5438.0, 5679.0, 5684.0, 5468.0, 5350.0, 5553.0, 5694.0, 5639.0, 5702.0, 5449.0, 5421.0, 5650.0, 5464.0, 5328.0, 5333.0, 5537.0, 5475.0, 5262.0, 5515.0, 5401.0, 5604.0, 5312.0, 5339.0, 5307.0, 5574.0, 5629.0, 5291.0, 5525.0, 5654.0, 5533.0, 5428.0, 5494.0, 5279.0 (number of hits: 7)
5	5550	9	1	333	1	5330.0, 5497.0, 5688.0, 5453.0, 5286.0, 5571.0, 5568.0, 5648.0, 5539.0, 5411.0, 5616.0, 5461.0, 5644.0, 5695.0, 5585.0, 5408.0, 5291.0, 5279.0, 5540.0, 5352.0, 5314.0, 5375.0, 5370.0, 5674.0, 5391.0, 5664.0, 5458.0, 5319.0, 5382.0, 5398.0, 5656.0, 5551.0, 5516.0, 5581.0, 5542.0, 5658.0, 5609.0, 5508.0, 5271.0, 5530.0, 5504.0, 5537.0, 5390.0, 5513.0, 5720.0, 5435.0, 5501.0, 5463.0, 5643.0, 5306.0, 5509.0, 5592.0, 5438.0, 5621.0, 5565.0, 5495.0, 5545.0, 5622.0, 5275.0, 5521.0, 5264.0, 5373.0, 5302.0, 5659.0, 5367.0, 5316.0, 5377.0, 5534.0, 5261.0, 5460.0, 5480.0, 5492.0, 5519.0, 5284.0, 5358.0, 5298.0, 5673.0, 5262.0, 5417.0, 5577.0, 5413.0, 5482.0, 5389.0, 5430.0, 5474.0, 5472.0, 5520.0, 5706.0, 5564.0, 5718.0, 5651.0, 5407.0, 5292.0, 5336.0, 5645.0, 5422.0, 5573.0, 5263.0, 5392.0, 5529.0 (number of hits: 7)
6	5550	9	1	333	1	5306.0, 5594.0, 5396.0, 5462.0, 5623.0, 5485.0, 5399.0, 5529.0, 5375.0, 5397.0, 5464.0, 5672.0, 5439.0, 5376.0, 5417.0,

						5404.0, 5552.0, 5266.0, 5290.0, 5445.0, 5275.0, 5449.0, 5450.0, 5615.0, 5331.0, 5463.0, 5452.0, 5329.0, 5572.0, 5504.0, 5685.0, 5567.0, 5268.0, 5356.0, 5646.0, 5364.0, 5455.0, 5561.0, 5705.0, 5493.0, 5498.0, 5586.0, 5395.0, 5260.0, 5606.0, 5669.0, 5256.0, 5589.0, 5423.0, 5480.0, 5712.0, 5492.0, 5525.0, 5551.0, 5535.0, 5325.0, 5378.0, 5490.0, 5590.0, 5340.0, 5346.0, 5301.0, 5363.0, 5706.0, 5484.0, 5310.0, 5360.0, 5385.0, 5495.0, 5289.0, 5680.0, 5515.0, 5499.0, 5409.0, 5627.0, 5272.0, 5657.0, 5678.0, 5554.0, 5654.0, 5436.0, 5645.0, 5601.0, 5607.0, 5632.0, 5324.0, 5334.0, 5582.0, 5440.0, 5542.0, 5426.0, 5332.0, 5547.0, 5690.0, 5585.0, 5352.0, 5357.0, 5461.0, 5368.0, 5281.0 (number of hits: 5)
7	5550	9	1	333	1	5466.0, 5639.0, 5274.0, 5613.0, 5507.0, 5457.0, 5591.0, 5417.0, 5450.0, 5275.0, 5623.0, 5327.0, 5355.0, 5397.0, 5356.0, 5311.0, 5549.0, 5703.0, 5319.0, 5646.0, 5481.0, 5509.0, 5266.0, 5640.0, 5416.0, 5621.0, 5511.0, 5310.0, 5372.0, 5331.0, 5346.0, 5567.0, 5609.0, 5649.0, 5304.0, 5602.0, 5685.0, 5519.0, 5568.0, 5448.0, 5411.0, 5347.0, 5475.0, 5523.0, 5615.0, 5440.0, 5307.0, 5527.0, 5277.0, 5328.0, 5357.0, 5666.0, 5303.0, 5389.0, 5426.0, 5430.0, 5263.0, 5542.0, 5437.0, 5681.0, 5308.0, 5577.0, 5343.0, 5402.0, 5606.0, 5641.0, 5565.0, 5251.0, 5441.0, 5643.0, 5473.0, 5414.0, 5697.0, 5379.0, 5536.0, 5452.0, 5667.0, 5505.0, 5617.0, 5723.0, 5554.0, 5469.0, 5367.0, 5419.0, 5598.0, 5453.0, 5368.0, 5305.0, 5471.0, 5256.0, 5712.0, 5574.0, 5720.0, 5352.0, 5502.0, 5318.0, 5396.0, 5648.0, 5573.0, 5280.0 (number of hits: 7)
8	5550	9	1	333	1	5653.0, 5386.0, 5408.0, 5486.0, 5705.0, 5454.0, 5574.0, 5250.0, 5444.0, 5360.0, 5267.0, 5474.0, 5538.0, 5357.0, 5603.0, 5614.0, 5269.0, 5543.0, 5505.0, 5665.0, 5281.0, 5354.0, 5334.0, 5426.0, 5660.0, 5571.0, 5585.0, 5721.0, 5706.0, 5694.0, 5511.0, 5446.0, 5364.0, 5491.0, 5332.0, 5534.0, 5717.0, 5422.0, 5510.0, 5702.0, 5383.0, 5631.0, 5271.0, 5372.0, 5723.0, 5524.0, 5652.0, 5584.0, 5259.0, 5630.0, 5460.0, 5495.0, 5457.0, 5302.0, 5427.0, 5376.0, 5277.0, 5629.0, 5551.0, 5290.0, 5288.0, 5503.0, 5287.0, 5409.0, 5384.0, 5326.0, 5294.0, 5298.0, 5548.0, 5439.0, 5577.0, 5688.0, 5438.0, 5261.0, 5659.0, 5587.0, 5689.0, 5523.0, 5299.0, 5522.0, 5390.0, 5658.0, 5670.0, 5418.0, 5542.0, 5622.0, 5283.0, 5397.0, 5494.0, 5699.0,

						5532.0, 5317.0, 5419.0, 5508.0, 5358.0, 5363.0, 5329.0, 5272.0, 5515.0, 5333.0 (number of hits: 7)
9	5550	9	1	333	1	5617.0, 5408.0, 5389.0, 5476.0, 5648.0, 5713.0, 5679.0, 5602.0, 5441.0, 5629.0, 5397.0, 5642.0, 5610.0, 5688.0, 5337.0, 5398.0, 5551.0, 5597.0, 5507.0, 5405.0, 5438.0, 5288.0, 5558.0, 5269.0, 5546.0, 5592.0, 5717.0, 5436.0, 5358.0, 5696.0, 5607.0, 5352.0, 5687.0, 5301.0, 5666.0, 5624.0, 5613.0, 5709.0, 5311.0, 5657.0, 5445.0, 5579.0, 5417.0, 5649.0, 5529.0, 5523.0, 5714.0, 5343.0, 5682.0, 5512.0, 5354.0, 5433.0, 5537.0, 5415.0, 5577.0, 5478.0, 5557.0, 5379.0, 5394.0, 5711.0, 5428.0, 5296.0, 5581.0, 5493.0, 5676.0, 5564.0, 5605.0, 5595.0, 5384.0, 5650.0, 5312.0, 5422.0, 5362.0, 5251.0, 5353.0, 5695.0, 5643.0, 5277.0, 5349.0, 5262.0, 5698.0, 5281.0, 5435.0, 5594.0, 5400.0, 5521.0, 5454.0, 5290.0, 5322.0, 5596.0, 5323.0, 5272.0, 5371.0, 5491.0, 5276.0, 5399.0, 5498.0, 5587.0, 5645.0, 5532.0 (number of hits: 6)
10	5550	9	1	333	1	5643.0, 5455.0, 5710.0, 5541.0, 5599.0, 5291.0, 5465.0, 5429.0, 5656.0, 5341.0, 5367.0, 5426.0, 5584.0, 5438.0, 5547.0, 5706.0, 5279.0, 5664.0, 5432.0, 5512.0, 5323.0, 5264.0, 5404.0, 5521.0, 5366.0, 5475.0, 5407.0, 5480.0, 5305.0, 5572.0, 5481.0, 5391.0, 5518.0, 5582.0, 5695.0, 5348.0, 5520.0, 5447.0, 5668.0, 5571.0, 5550.0, 5434.0, 5419.0, 5360.0, 5642.0, 5319.0, 5672.0, 5483.0, 5461.0, 5623.0, 5325.0, 5415.0, 5683.0, 5696.0, 5514.0, 5268.0, 5700.0, 5542.0, 5485.0, 5507.0, 5630.0, 5337.0, 5402.0, 5552.0, 5589.0, 5343.0, 5513.0, 5358.0, 5496.0, 5681.0, 5527.0, 5503.0, 5602.0, 5585.0, 5329.0, 5525.0, 5711.0, 5660.0, 5389.0, 5448.0, 5281.0, 5354.0, 5524.0, 5565.0, 5613.0, 5612.0, 5369.0, 5560.0, 5409.0, 5723.0, 5283.0, 5314.0, 5486.0, 5657.0, 5372.0, 5619.0, 5316.0, 5624.0, 5272.0, 5428.0 (number of hits: 3)
11	5550	9	1	333	1	5634.0, 5652.0, 5250.0, 5702.0, 5655.0, 5521.0, 5504.0, 5422.0, 5722.0, 5688.0, 5299.0, 5591.0, 5693.0, 5569.0, 5484.0, 5644.0, 5526.0, 5429.0, 5376.0, 5605.0, 5336.0, 5360.0, 5346.0, 5292.0, 5628.0, 5337.0, 5673.0, 5386.0, 5323.0, 5259.0, 5613.0, 5375.0, 5492.0, 5328.0, 5447.0, 5403.0, 5266.0, 5520.0, 5715.0, 5410.0, 5385.0, 5342.0, 5294.0, 5393.0, 5380.0, 5453.0, 5547.0, 5677.0, 5362.0, 5454.0, 5377.0, 5267.0, 5586.0, 5477.0, 5404.0, 5698.0, 5615.0, 5575.0, 5563.0, 5531.0,

						5689.0, 5465.0, 5268.0, 5319.0, 5600.0, 5274.0, 5557.0, 5537.0, 5481.0, 5608.0, 5511.0, 5333.0, 5497.0, 5318.0, 5353.0, 5621.0, 5313.0, 5629.0, 5719.0, 5472.0, 5705.0, 5635.0, 5388.0, 5527.0, 5468.0, 5632.0, 5653.0, 5306.0, 5361.0, 5541.0, 5542.0, 5279.0, 5483.0, 5501.0, 5378.0, 5551.0, 5505.0, 5707.0, 5487.0, 5589.0 (number of hits: 5)
12	5550	9	1	333	1	5705.0, 5472.0, 5514.0, 5680.0, 5649.0, 5528.0, 5419.0, 5623.0, 5564.0, 5561.0, 5266.0, 5459.0, 5576.0, 5594.0, 5703.0, 5650.0, 5624.0, 5599.0, 5478.0, 5625.0, 5716.0, 5563.0, 5319.0, 5253.0, 5252.0, 5615.0, 5327.0, 5631.0, 5476.0, 5694.0, 5722.0, 5550.0, 5634.0, 5644.0, 5704.0, 5611.0, 5455.0, 5277.0, 5268.0, 5527.0, 5335.0, 5400.0, 5328.0, 5606.0, 5572.0, 5367.0, 5691.0, 5580.0, 5418.0, 5250.0, 5485.0, 5263.0, 5461.0, 5554.0, 5645.0, 5329.0, 5355.0, 5508.0, 5641.0, 5706.0, 5597.0, 5505.0, 5350.0, 5428.0, 5651.0, 5270.0, 5443.0, 5562.0, 5496.0, 5688.0, 5541.0, 5549.0, 5345.0, 5294.0, 5262.0, 5595.0, 5474.0, 5416.0, 5577.0, 5497.0, 5439.0, 5264.0, 5678.0, 5590.0, 5412.0, 5426.0, 5658.0, 5507.0, 5447.0, 5492.0, 5654.0, 5583.0, 5388.0, 5326.0, 5664.0, 5579.0, 5287.0, 5425.0, 5336.0, 5441.0 (number of hits: 2)
13	5550	9	1	333	1	5653.0, 5341.0, 5386.0, 5384.0, 5318.0, 5445.0, 5478.0, 5604.0, 5570.0, 5544.0, 5369.0, 5431.0, 5366.0, 5673.0, 5273.0, 5439.0, 5643.0, 5466.0, 5315.0, 5644.0, 5430.0, 5463.0, 5598.0, 5615.0, 5414.0, 5616.0, 5482.0, 5391.0, 5555.0, 5327.0, 5429.0, 5624.0, 5348.0, 5674.0, 5675.0, 5497.0, 5427.0, 5367.0, 5586.0, 5479.0, 5550.0, 5538.0, 5566.0, 5300.0, 5499.0, 5457.0, 5634.0, 5637.0, 5350.0, 5657.0, 5488.0, 5665.0, 5711.0, 5393.0, 5543.0, 5465.0, 5387.0, 5695.0, 5688.0, 5704.0, 5596.0, 5480.0, 5474.0, 5487.0, 5485.0, 5363.0, 5295.0, 5340.0, 5527.0, 5262.0, 5290.0, 5392.0, 5686.0, 5503.0, 5385.0, 5702.0, 5365.0, 5574.0, 5338.0, 5690.0, 5646.0, 5413.0, 5325.0, 5706.0, 5276.0, 5531.0, 5623.0, 5326.0, 5322.0, 5525.0, 5352.0, 5530.0, 5404.0, 5281.0, 5713.0, 5619.0, 5677.0, 5678.0, 5272.0, 5608.0 (number of hits: 3)
14	5550	9	1	333	1	5616.0, 5376.0, 5317.0, 5706.0, 5307.0, 5611.0, 5575.0, 5498.0, 5369.0, 5640.0, 5300.0, 5346.0, 5358.0, 5589.0, 5337.0, 5523.0, 5680.0, 5425.0, 5372.0, 5266.0, 5490.0, 5581.0, 5483.0, 5466.0, 5590.0, 5261.0, 5696.0, 5391.0, 5454.0, 5649.0,

						5402.0, 5651.0, 5580.0, 5392.0, 5658.0, 5576.0, 5357.0, 5605.0, 5253.0, 5607.0, 5320.0, 5348.0, 5641.0, 5599.0, 5571.0, 5524.0, 5522.0, 5481.0, 5257.0, 5430.0, 5606.0, 5530.0, 5585.0, 5603.0, 5508.0, 5377.0, 5495.0, 5578.0, 5665.0, 5389.0, 5406.0, 5405.0, 5324.0, 5403.0, 5509.0, 5418.0, 5272.0, 5407.0, 5532.0, 5271.0, 5531.0, 5409.0, 5510.0, 5703.0, 5427.0, 5275.0, 5595.0, 5511.0, 5634.0, 5322.0, 5491.0, 5682.0, 5521.0, 5673.0, 5671.0, 5630.0, 5693.0, 5675.0, 5542.0, 5516.0, 5460.0, 5457.0, 5496.0, 5644.0, 5626.0, 5273.0, 5484.0, 5455.0, 5623.0, 5289.0 (number of hits: 3)
15	5550	9	1	333	1	5352.0, 5342.0, 5416.0, 5284.0, 5288.0, 5681.0, 5714.0, 5374.0, 5589.0, 5355.0, 5480.0, 5264.0, 5571.0, 5553.0, 5692.0, 5310.0, 5298.0, 5658.0, 5511.0, 5447.0, 5253.0, 5430.0, 5650.0, 5373.0, 5257.0, 5499.0, 5554.0, 5493.0, 5436.0, 5637.0, 5473.0, 5512.0, 5556.0, 5517.0, 5702.0, 5670.0, 5642.0, 5686.0, 5478.0, 5406.0, 5594.0, 5708.0, 5319.0, 5400.0, 5423.0, 5422.0, 5372.0, 5667.0, 5624.0, 5472.0, 5690.0, 5300.0, 5326.0, 5433.0, 5520.0, 5475.0, 5697.0, 5418.0, 5505.0, 5331.0, 5474.0, 5606.0, 5501.0, 5270.0, 5603.0, 5460.0, 5251.0, 5274.0, 5529.0, 5295.0, 5498.0, 5645.0, 5593.0, 5560.0, 5370.0, 5660.0, 5547.0, 5550.0, 5301.0, 5409.0, 5384.0, 5407.0, 5678.0, 5432.0, 5283.0, 5315.0, 5696.0, 5489.0, 5371.0, 5417.0, 5581.0, 5268.0, 5292.0, 5317.0, 5679.0, 5592.0, 5412.0, 5391.0, 5290.0, 5258.0 (number of hits: 8)
16	5550	9	1	333	1	5692.0, 5590.0, 5252.0, 5258.0, 5287.0, 5640.0, 5516.0, 5316.0, 5415.0, 5305.0, 5450.0, 5368.0, 5534.0, 5374.0, 5623.0, 5408.0, 5717.0, 5440.0, 5648.0, 5307.0, 5630.0, 5314.0, 5292.0, 5366.0, 5626.0, 5614.0, 5447.0, 5637.0, 5268.0, 5468.0, 5403.0, 5300.0, 5260.0, 5604.0, 5617.0, 5599.0, 5388.0, 5707.0, 5437.0, 5715.0, 5539.0, 5418.0, 5547.0, 5526.0, 5311.0, 5354.0, 5482.0, 5560.0, 5351.0, 5522.0, 5697.0, 5486.0, 5686.0, 5363.0, 5633.0, 5453.0, 5618.0, 5572.0, 5615.0, 5267.0, 5253.0, 5457.0, 5293.0, 5565.0, 5455.0, 5318.0, 5721.0, 5652.0, 5423.0, 5667.0, 5302.0, 5561.0, 5494.0, 5589.0, 5554.0, 5606.0, 5657.0, 5376.0, 5689.0, 5682.0, 5533.0, 5390.0, 5546.0, 5634.0, 5336.0, 5452.0, 5639.0, 5532.0, 5659.0, 5603.0, 5556.0, 5296.0, 5527.0, 5705.0, 5619.0, 5481.0, 5328.0, 5399.0, 5419.0, 5716.0 (number of hits: 10)

17	5550	9	1	333		
18	5550	9	1	333		
19	5550	9	1	333	1	5673.0, 5721.0, 5697.0, 5686.0, 5400.0, 5437.0, 5637.0, 5412.0, 5441.0, 5564.0, 5651.0, 5422.0, 5557.0, 5539.0, 5668.0, 5655.0, 5405.0, 5447.0, 5274.0, 5530.0, 5372.0, 5566.0, 5430.0, 5720.0, 5571.0, 5311.0, 5467.0, 5541.0, 5403.0, 5518.0, 5351.0, 5616.0, 5450.0, 5462.0, 5468.0, 5609.0, 5646.0, 5516.0, 5382.0, 5617.0, 5702.0, 5537.0, 5563.0, 5389.0, 5625.0, 5687.0, 5515.0, 5619.0, 5501.0, 5361.0, 5528.0, 5417.0, 5482.0, 5449.0, 5709.0, 5685.0, 5701.0, 5652.0, 5670.0, 5272.0, 5374.0, 5283.0, 5340.0, 5282.0, 5573.0, 5420.0, 5324.0, 5589.0, 5322.0, 5384.0, 5279.0, 5683.0, 5413.0, 5375.0, 5684.0, 5676.0, 5346.0, 5627.0, 5570.0, 5703.0, 5507.0, 5629.0, 5713.0, 5380.0, 5614.0, 5662.0, 5271.0, 5556.0, 5429.0, 5715.0, 5378.0, 5309.0, 5674.0, 5296.0, 5475.0, 5689.0, 5452.0, 5588.0, 5560.0, 5561.0 (number of hits: 3)
20	5550	9	1	333	1	5459.0, 5660.0, 5448.0, 5567.0, 5423.0, 5370.0, 5311.0, 5528.0, 5597.0, 5275.0, 5661.0, 5351.0, 5602.0, 5634.0, 5570.0, 5360.0, 5688.0, 5639.0, 5724.0, 5558.0, 5651.0, 5382.0, 5332.0, 5613.0, 5390.0, 5460.0, 5259.0, 5575.0, 5362.0, 5501.0, 5716.0, 5449.0, 5645.0, 5710.0, 5482.0, 5717.0, 5674.0, 5691.0, 5441.0, 5395.0, 5524.0, 5375.0, 5569.0, 5640.0, 5667.0, 5666.0, 5566.0, 5655.0, 5383.0, 5429.0, 5494.0, 5680.0, 5711.0, 5517.0, 5444.0, 5663.0, 5343.0, 5328.0, 5552.0, 5389.0, 5706.0, 5536.0, 5631.0, 5410.0, 5406.0, 5452.0, 5565.0, 5263.0, 5664.0, 5443.0, 5718.0, 5322.0, 5630.0, 5365.0, 5637.0, 5488.0, 5340.0, 5282.0, 5405.0, 5659.0, 5418.0, 5321.0, 5401.0, 5668.0, 5574.0, 5593.0, 5531.0, 5416.0, 5291.0, 5461.0, 5693.0, 5526.0, 5348.0, 5563.0, 5354.0, 5681.0, 5270.0, 5534.0, 5537.0, 5560.0 (number of hits: 2)
21	5550	9	1	333	1	5481.0, 5424.0, 5356.0, 5330.0, 5690.0, 5706.0, 5670.0, 5519.0, 5694.0, 5500.0, 5681.0, 5667.0, 5598.0, 5711.0, 5443.0, 5468.0, 5483.0, 5712.0, 5582.0, 5488.0, 5435.0, 5476.0, 5674.0, 5509.0, 5402.0, 5693.0, 5395.0, 5266.0, 5472.0, 5320.0, 5657.0, 5337.0, 5340.0, 5313.0, 5251.0, 5633.0, 5541.0, 5328.0, 5409.0, 5564.0, 5608.0, 5478.0, 5630.0, 5719.0, 5397.0, 5619.0, 5606.0, 5442.0, 5491.0, 5610.0, 5654.0, 5722.0, 5264.0, 5436.0, 5517.0, 5272.0, 5713.0, 5359.0, 5263.0, 5379.0, 5570.0, 5557.0, 5427.0, 5430.0, 5440.0,

						5696.0, 5452.0, 5410.0, 5262.0, 5587.0, 5715.0, 5653.0, 5612.0, 5710.0, 5548.0, 5572.0, 5333.0, 5544.0, 5516.0, 5540.0, 5364.0, 5668.0, 5403.0, 5311.0, 5499.0, 5270.0, 5287.0, 5650.0, 5393.0, 5645.0, 5308.0, 5447.0, 5480.0, 5400.0, 5329.0, 5253.0, 5646.0, 5662.0, 5691.0, 5362.0 (number of hits: 4)
22	5550	9	1	333	1	5613.0, 5487.0, 5602.0, 5367.0, 5592.0, 5637.0, 5397.0, 5498.0, 5393.0, 5517.0, 5695.0, 5266.0, 5564.0, 5528.0, 5449.0, 5605.0, 5469.0, 5258.0, 5522.0, 5688.0, 5678.0, 5533.0, 5677.0, 5418.0, 5609.0, 5617.0, 5297.0, 5468.0, 5477.0, 5499.0, 5317.0, 5330.0, 5427.0, 5687.0, 5655.0, 5326.0, 5610.0, 5404.0, 5549.0, 5671.0, 5583.0, 5371.0, 5651.0, 5649.0, 5256.0, 5298.0, 5573.0, 5333.0, 5452.0, 5546.0, 5447.0, 5554.0, 5673.0, 5331.0, 5644.0, 5259.0, 5556.0, 5504.0, 5381.0, 5486.0, 5440.0, 5316.0, 5307.0, 5484.0, 5463.0, 5618.0, 5491.0, 5489.0, 5401.0, 5621.0, 5321.0, 5608.0, 5536.0, 5496.0, 5510.0, 5531.0, 5715.0, 5274.0, 5710.0, 5714.0, 5254.0, 5579.0, 5405.0, 5693.0, 5300.0, 5494.0, 5684.0, 5607.0, 5377.0, 5630.0, 5280.0, 5346.0, 5598.0, 5271.0, 5665.0, 5336.0, 5578.0, 5334.0, 5543.0, 5335.0 (number of hits: 4)
23	5550	9	1	333	1	5432.0, 5515.0, 5287.0, 5252.0, 5634.0, 5565.0, 5491.0, 5439.0, 5325.0, 5286.0, 5612.0, 5526.0, 5263.0, 5288.0, 5319.0, 5489.0, 5547.0, 5700.0, 5280.0, 5324.0, 5711.0, 5603.0, 5376.0, 5720.0, 5651.0, 5537.0, 5425.0, 5577.0, 5364.0, 5712.0, 5492.0, 5503.0, 5290.0, 5278.0, 5715.0, 5390.0, 5475.0, 5457.0, 5384.0, 5262.0, 5552.0, 5315.0, 5519.0, 5331.0, 5717.0, 5417.0, 5355.0, 5299.0, 5392.0, 5549.0, 5479.0, 5466.0, 5356.0, 5357.0, 5643.0, 5642.0, 5452.0, 5505.0, 5309.0, 5693.0, 5302.0, 5363.0, 5405.0, 5570.0, 5346.0, 5347.0, 5507.0, 5692.0, 5295.0, 5560.0, 5553.0, 5593.0, 5605.0, 5551.0, 5427.0, 5638.0, 5404.0, 5459.0, 5509.0, 5358.0, 5599.0, 5415.0, 5644.0, 5538.0, 5270.0, 5531.0, 5571.0, 5621.0, 5481.0, 5541.0, 5455.0, 5606.0, 5562.0, 5269.0, 5708.0, 5395.0, 5665.0, 5676.0, 5618.0, 5580.0 (number of hits: 8)
24	5550	9	1	333	1	5413.0, 5305.0, 5313.0, 5673.0, 5353.0, 5665.0, 5488.0, 5563.0, 5335.0, 5470.0, 5644.0, 5257.0, 5510.0, 5272.0, 5568.0, 5385.0, 5634.0, 5539.0, 5393.0, 5262.0, 5469.0, 5717.0, 5552.0, 5431.0, 5579.0, 5253.0, 5693.0, 5703.0, 5565.0, 5687.0, 5723.0, 5529.0, 5344.0, 5626.0, 5629.0,

						5471.0, 5681.0, 5323.0, 5376.0, 5396.0, 5625.0, 5495.0, 5271.0, 5554.0, 5363.0, 5593.0, 5342.0, 5252.0, 5516.0, 5570.0, 5343.0, 5704.0, 5614.0, 5320.0, 5395.0, 5592.0, 5427.0, 5316.0, 5417.0, 5522.0, 5331.0, 5712.0, 5669.0, 5646.0, 5680.0, 5589.0, 5543.0, 5533.0, 5535.0, 5439.0, 5601.0, 5642.0, 5330.0, 5337.0, 5645.0, 5574.0, 5399.0, 5390.0, 5432.0, 5483.0, 5708.0, 5643.0, 5420.0, 5608.0, 5307.0, 5605.0, 5615.0, 5288.0, 5379.0, 5352.0, 5489.0, 5309.0, 5356.0, 5707.0, 5720.0, 5496.0, 5454.0, 5695.0, 5594.0, 5556.0 (number of hits: 5)
25	5550	9	1	333	1	5587.0, 5480.0, 5534.0, 5638.0, 5299.0, 5639.0, 5572.0, 5389.0, 5541.0, 5477.0, 5429.0, 5615.0, 5588.0, 5329.0, 5570.0, 5283.0, 5584.0, 5458.0, 5364.0, 5657.0, 5271.0, 5664.0, 5716.0, 5602.0, 5675.0, 5260.0, 5552.0, 5300.0, 5347.0, 5396.0, 5501.0, 5667.0, 5376.0, 5407.0, 5654.0, 5705.0, 5327.0, 5275.0, 5598.0, 5495.0, 5440.0, 5409.0, 5503.0, 5317.0, 5419.0, 5382.0, 5601.0, 5592.0, 5297.0, 5641.0, 5719.0, 5261.0, 5330.0, 5704.0, 5267.0, 5295.0, 5668.0, 5548.0, 5685.0, 5460.0, 5671.0, 5713.0, 5490.0, 5421.0, 5543.0, 5467.0, 5269.0, 5465.0, 5342.0, 5491.0, 5325.0, 5507.0, 5706.0, 5479.0, 5425.0, 5412.0, 5468.0, 5326.0, 5423.0, 5390.0, 5650.0, 5624.0, 5361.0, 5633.0, 5689.0, 5714.0, 5626.0, 5504.0, 5684.0, 5318.0, 5319.0, 5579.0, 5618.0, 5663.0, 5314.0, 5609.0, 5392.0, 5642.0, 5316.0, 5510.0 (number of hits: 5)
26	5550	9	1	333		
27	5550	9	1	333	1	5428.0, 5441.0, 5275.0, 5299.0, 5526.0, 5380.0, 5285.0, 5269.0, 5271.0, 5646.0, 5678.0, 5408.0, 5536.0, 5629.0, 5294.0, 5522.0, 5570.0, 5587.0, 5633.0, 5398.0, 5375.0, 5469.0, 5669.0, 5691.0, 5319.0, 5604.0, 5563.0, 5552.0, 5601.0, 5582.0, 5586.0, 5268.0, 5280.0, 5653.0, 5283.0, 5699.0, 5336.0, 5276.0, 5259.0, 5422.0, 5643.0, 5491.0, 5660.0, 5588.0, 5579.0, 5467.0, 5609.0, 5454.0, 5393.0, 5284.0, 5519.0, 5472.0, 5495.0, 5616.0, 5349.0, 5382.0, 5648.0, 5488.0, 5385.0, 5456.0, 5666.0, 5403.0, 5667.0, 5493.0, 5698.0, 5429.0, 5281.0, 5650.0, 5598.0, 5252.0, 5498.0, 5458.0, 5670.0, 5663.0, 5528.0, 5508.0, 5685.0, 5721.0, 5368.0, 5575.0, 5566.0, 5420.0, 5445.0, 5446.0, 5496.0, 5514.0, 5505.0, 5318.0, 5346.0, 5511.0, 5384.0, 5702.0, 5260.0, 5626.0, 5515.0, 5497.0, 5671.0, 5405.0, 5500.0, 5656.0 (number of hits: 3)

28	5550	9	1	333	1	5585.0, 5422.0, 5546.0, 5465.0, 5529.0, 5583.0, 5406.0, 5350.0, 5466.0, 5526.0, 5517.0, 5642.0, 5541.0, 5306.0, 5709.0, 5264.0, 5302.0, 5256.0, 5314.0, 5563.0, 5622.0, 5487.0, 5293.0, 5570.0, 5389.0, 5564.0, 5468.0, 5524.0, 5645.0, 5390.0, 5608.0, 5289.0, 5426.0, 5323.0, 5569.0, 5670.0, 5282.0, 5385.0, 5561.0, 5677.0, 5362.0, 5705.0, 5267.0, 5552.0, 5294.0, 5265.0, 5581.0, 5380.0, 5650.0, 5609.0, 5258.0, 5477.0, 5434.0, 5503.0, 5413.0, 5451.0, 5394.0, 5614.0, 5704.0, 5488.0, 5681.0, 5701.0, 5499.0, 5408.0, 5613.0, 5461.0, 5334.0, 5418.0, 5494.0, 5326.0, 5554.0, 5464.0, 5550.0, 5252.0, 5593.0, 5421.0, 5590.0, 5663.0, 5574.0, 5659.0, 5438.0, 5527.0, 5687.0, 5549.0, 5513.0, 5348.0, 5502.0, 5637.0, 5375.0, 5442.0, 5661.0, 5445.0, 5542.0, 5416.0, 5430.0, 5565.0, 5576.0, 5278.0, 5440.0, 5467.0 (number of hits: 6)
29	5550	9	1	333	1	5539.0, 5328.0, 5377.0, 5510.0, 5565.0, 5687.0, 5513.0, 5405.0, 5306.0, 5488.0, 5593.0, 5499.0, 5527.0, 5496.0, 5502.0, 5701.0, 5638.0, 5503.0, 5601.0, 5616.0, 5626.0, 5505.0, 5258.0, 5261.0, 5253.0, 5582.0, 5404.0, 5265.0, 5300.0, 5635.0, 5656.0, 5633.0, 5369.0, 5354.0, 5416.0, 5696.0, 5360.0, 5477.0, 5474.0, 5381.0, 5468.0, 5511.0, 5289.0, 5464.0, 5461.0, 5661.0, 5711.0, 5430.0, 5690.0, 5667.0, 5431.0, 5678.0, 5642.0, 5423.0, 5619.0, 5675.0, 5263.0, 5342.0, 5532.0, 5708.0, 5374.0, 5439.0, 5482.0, 5715.0, 5350.0, 5610.0, 5643.0, 5417.0, 5657.0, 5671.0, 5604.0, 5267.0, 5556.0, 5506.0, 5375.0, 5347.0, 5371.0, 5327.0, 5424.0, 5492.0, 5326.0, 5493.0, 5256.0, 5548.0, 5680.0, 5572.0, 5586.0, 5471.0, 5470.0, 5597.0, 5396.0, 5457.0, 5554.0, 5466.0, 5421.0, 5297.0, 5720.0, 5435.0, 5414.0, 5526.0 (number of hits: 4)
30	5550	9	1	333	1	5610.0, 5614.0, 5280.0, 5564.0, 5423.0, 5490.0, 5516.0, 5396.0, 5324.0, 5661.0, 5565.0, 5492.0, 5432.0, 5329.0, 5628.0, 5292.0, 5279.0, 5720.0, 5380.0, 5514.0, 5639.0, 5294.0, 5256.0, 5549.0, 5580.0, 5266.0, 5714.0, 5570.0, 5599.0, 5368.0, 5392.0, 5535.0, 5293.0, 5531.0, 5642.0, 5334.0, 5696.0, 5474.0, 5694.0, 5484.0, 5616.0, 5592.0, 5261.0, 5587.0, 5658.0, 5718.0, 5496.0, 5569.0, 5374.0, 5518.0, 5665.0, 5271.0, 5586.0, 5319.0, 5497.0, 5609.0, 5528.0, 5312.0, 5622.0, 5641.0, 5617.0, 5310.0, 5621.0, 5540.0, 5449.0, 5322.0, 5656.0, 5405.0, 5417.0, 5597.0, 5600.0, 5710.0, 5506.0, 5338.0, 5673.0,

						5425.0, 5653.0, 5275.0, 5387.0, 5551.0, 5634.0, 5510.0, 5603.0, 5623.0, 5620.0, 5418.0, 5359.0, 5451.0, 5676.0, 5350.0, 5693.0, 5624.0, 5254.0, 5341.0, 5532.0, 5563.0, 5295.0, 5568.0, 5274.0, 5517.0 (number of hits: 6)